

# **„VPLYV HLUKU Z PREVÁDZKY Oblúková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ NA OKOLIE“**

## **HLUKOVÁ ŠTÚDIA**

HS\_19\_37



November 2019

|                                                                                  |           |
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## Použité symboly a skratky

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| $L_{Aeq}$           | ekvivalentná hladina hluku [dB]                                                      |
| $L_{Aeq, 1h}$       | 1 hodinová ekvivalentná hladina hluku [dB]                                           |
| $L_{Amax, 1h}$      | 1 hodinová maximálna hladina hluku [dB]                                              |
| $L_{Aeq,p}$         | prípustná ekvivalentná hladina hluku [dB]                                            |
| $M1, M2, \dots, Mn$ | meracie miesta                                                                       |
| $V1, V2, \dots, Vn$ | výpočtové body, v ktorých bola posudzovaná akustická situácia                        |
| $L_{dvn}$           | hlukový indikátor vo vonkajšom prostredí, pre celkové obťažovanie hlukom [dB]        |
| $L_d$               | hlukový indikátor vo vonkajšom prostredí pre obťažovanie hlukom pre denný čas [dB]   |
| $L_v$               | hlukový indikátor vo vonkajšom prostredí pre obťažovanie hlukom pre večerný čas [dB] |
| $L_n$               | hlukový indikátor vo vonkajšom prostredí pre obťažovanie hlukom pre nočný čas [dB]   |
| $L_{AR}$            | posudzovaná hladina A zvuku [dB]                                                     |
| $L_{AT}$            | dĺhodobá priemerná hladina akustického tlaku [dB]                                    |
| $L_C$               | hladina C zvuku [dB]                                                                 |
| $L_{Cmax}$          | maximálna hladina C zvuku [dB]                                                       |
| $L_{Ceq}$           | ekvivalentná hladina C zvuku [dB]                                                    |
| $L_{Cpeak,T}$       | vrcholová hladina C akustického tlaku [dB]                                           |
| $L_E$               | hladina zvukovej expozície [dB]                                                      |
| $L_{EQ}$            | integrovaná ekvivalentná hladina akustického tlaku [dB]                              |
| $L_{Fmax}$          | maximálna hladina zvuku pri časovej konštante FAST [dB]                              |
| $L_G$               | hladina G infrazvuku [dB]                                                            |
| $L_{Geq}$           | ekvivalentná hladina G infrazvuku [dB]                                               |
| $L_i$               | hladina akustického tlaku i-tom frekvenčnom pásme [dB]                               |
| $L_{MAX}$           | maximálna hladina akustického tlaku [dB]                                             |
| $L_{MIN}$           | minimálna hladina akustického tlaku [dB]                                             |
| $L_{ou}$            | hladina ultrazvuku [dB]                                                              |
| $L_{peak}$          | maximálna vrcholová hladina [dB]                                                     |
| $L_{poz}$           | hluk pozadia [dB]                                                                    |
| $L_{WA}$            | hladina akustického výkonu [dB]                                                      |

## 1. Predmet hlukovej štúdie

Predmetom hlukovej štúdie je posúdenie hlukových pomerov v lokalite počas prevádzky „Oblúčovej haly - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ“ na najbližšie chránené objekty. Akustickú situáciu vo vonkajších priestoroch územia posudzujeme v zmysle zákona NR SR č. 355/2007 Z.z. o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov a vyhlášky MZ SR č. 549/2007 Z.z., ktorou sa ustanovujú podrobnosti o prípustných hodnotách hluku, infrazvuku a vibrácií a o požiadavkách na objektivizáciu hluku, infrazvuku a vibrácií v životnom prostredí a novely vyhlášky MZ 237/2009, ktorou sa mení a dopĺňa vyhláška MZ SR č. 549/2007 Z.z., ktorou sa ustanovujú podrobnosti o prípustných hodnotách hluku, infrazvuku a vibrácií a o požiadavkách na objektivizáciu hluku, infrazvuku a vibrácií v životnom prostredí.

## 2. Podklady

- [1] projektová dokumentácia, situácia riešeného územia; pôdorysy, polohopis výškopis riešeného územia, katastrálne mapy
- [2] vyhláška MZ SR č. 549/2007 a súvisiace právne predpisy
- [3] vyhláška MZ SR č. 237/2009 Z.z., ktorou sa mení a dopĺňa vyhláška Ministerstva zdravotníctva Slovenskej republiky č. 549/2007 Z.z., ktorou sa ustanovujú podrobnosti o prípustných hodnotách hluku, infrazvuku a vibrácií a o požiadavkách na objektivizáciu hluku, infrazvuku a vibrácií
- [4] metodické usmernenie Hlavného hygienika OHŽP-7197/2009, na zabezpečenie jednotného postupu regionálnych úradov verejného zdravotníctva pri uplatňovaní prípustných hodnôt určujúcich veličín hluku vo vonkajšom prostredí pri hodnotení hluku z dopravy na pozemných komunikáciách a vodných plochách vrátane miestnej hromadnej dopravy
- [5] zákon 355/2007 Z. z. o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov
- [6] program CADNA\_A, ver. 3.7.123, Datakustik, Mnichov, vlastník licencie AUDITOR s.r.o. hardvérový kľúč č. 4335
- [7] STN ISO 1996-1,2 Akustika - Opis, meranie a posudzovanie hluku vo vonkajšom prostredí časť 1 a 2
- [8] STN 73 0532 január 2013, Akustika - Hodnotenie zvukovo izolačných vlastností budov a stavebných konštrukcií – Požiadavky
- [9] priame krátkodobé kalibračné meranie hluku v území
- [10] literatúra z oblasti stavebnej akustiky
- [11] rokovanie so zadávateľom

## 3. Všeobecné údaje

### 3.1. Identifikačné údaje stavby:

|                |                                                  |
|----------------|--------------------------------------------------|
| Názov stavby:  | Oblúčová hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ |
| Miesto stavby: | Malá Trňa                                        |
| Číslo parcely: | 197                                              |
| Investor:      | AMDT AGRO s.r.o., SNP 250/75, 076 03 Hraň        |

Predpokladaný čas prevádzky denne od 06:00 do 22:00 hodiny. Vyhradené budú 2 parkovacie státa pre návštevníkov.



Obrázok 1.: Situácia širších vzťahov



Obrázok 2.: Umiestnenie posudzovaného objektu v rámci obce



Obrázok 3.: Plánované umiestnenie stavby

Obrázok 4.: Posudzovaný objekt a miesto kalibračného merania  hluku

### 3-2- Plánované umiestnenie stavby

Navrhovaná stavba sa nachádza v katastrálnom území Malá Trňa, na parcele číslo 197. Navrhovaný objekt pozostáva z oblúkového segmentu firmy Hupro, zo severnej strany murovaným zázemím a zo západnej strany prístreškom pre poľnohospodárske stroje. V blízkosti pozemku sa nachádzajú rozvody inžinierskych sietí, na ktoré bude stavba napojená (voda, kanalizácia a elektrická energia). Užívateľom a prevádzkovateľom bude investor - AMDT AGRO s.r.o., SNP 250/75, 076 03 Hraň.

**3.3. Urbanistické riešenie, architektonické riešenie**

Pozemok je na novostavbu oblúkovej haly vhodný, nakoľko sa nachádza na konci obce, sú tu vybudované inžinierske siete a taktiež napojenie na komunikačnú sieť obce. Vstup na pozemok bude zo západnej strany, kde sa bude nachádzať spevnená plocha a parkovacie miesta pre osobné automobily. Pred oblúkovou halou bude drevený prístrešok pre poľnohospodárske stroje. Vstup do oblúkovej haly bude zo západnej strany a to cez dvojité rolovacie vráta. Na severnej strane oblúkovej haly bude vybudované zázemie s predajňou, šatňou, wc a kotolňou na tuhé palivo peletky biomasa s odťahom spalín cez strechu.

**3.4. Členenie stavby**

- SO 01 Oblúková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ
- SO 02 Predajňa, sociálne zariadenia a kotolňa
- SO 03 Prístrešok pre poľnohospodárske stroje
- SO 04 Spevnená plocha a oplôtenie
- SO 05 Vodovodná a kanalizačná prípojka
- SO 06 Elektrická prípojka

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| <b>SO 01</b>              | <b>Oblúková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ</b> |
| Zastavaná plocha          | 381,90 m <sup>2</sup>                                   |
| Úžitková plocha           | 340,90 m <sup>2</sup>                                   |
| Obostavaný priestor       | 2150,00 m <sup>3</sup>                                  |
| Svetlá výška prízemí      | Od 2,60 m po 7,20 m                                     |
| Konštrukčná výška prízemí | 7,50 m                                                  |
| Výška oblúka              | 7,50 m                                                  |
| Výška odkvapu             | 1,25 m                                                  |
| Krytina                   | Segment firmy Hupro                                     |
| <b>SO 02</b>              | <b>Predajňa, sociálne zariadenia a kotolňa</b>          |
| Zastavaná plocha          | 42,92 m <sup>2</sup>                                    |
| Úžitková plocha           | 35,24 m <sup>2</sup>                                    |
| Obostavaný priestor       | 125,00 m <sup>3</sup>                                   |
| Svetlá výška prízemí      | 2,50 m                                                  |
| Konštrukčná výška prízemí | 2,82 m                                                  |
| Výška hrebeňa             | 3,52 m                                                  |
| Výška odkvapu             | 2,52 m                                                  |
| Sklon strechy             | 10°                                                     |
| Krytina                   | Trapézový plech                                         |
| <b>SO 03</b>              | <b>Prístrešok pre poľnohospodárske stroje</b>           |
| Plocha                    | 139,20 m <sup>2</sup>                                   |
| Svetlá výška prízemí      | Od 3,00 po 3,80 m                                       |
| Konštrukčná výška prízemí | Od 3,20 po 4,00 m                                       |
| Výška hrebeňa             | 4,00 m                                                  |
| Výška odkvapu             | 3,00 m                                                  |
| Sklon strechy             | 10°                                                     |
| Krytina                   | Trapézový plech                                         |

|                          |                                                                                                                                 |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>SO 04</b>             | <b>Spevnená plocha a oplotenie</b>                                                                                              |
| Plocha                   | 270 m <sup>2</sup>                                                                                                              |
| Materiál                 | Cestný betón                                                                                                                    |
| Dĺžka predného oplotenia | 30,0 m                                                                                                                          |
| Materiál                 | Murovaný plotové tvárnice                                                                                                       |
| Popis :                  | - 2x elektrické posuvné brány                                                                                                   |
| Dĺžka oplotenia          | 89,0 m                                                                                                                          |
| Materiál                 | Poplastované štvorhranné pletivo PVC                                                                                            |
| Popis :                  | Poplastované štvorhranné pletivo PVC s. 2000 mm, 2,5 mm s malými okami 50 x 50 mm - RAL 6005, Poplastované stĺpiky výšky 2,50 m |

|                              |                                                                         |
|------------------------------|-------------------------------------------------------------------------|
| <b>SO 05</b>                 | <b>Vodovodná a kanalizačná prípojka</b>                                 |
| Dĺžka prípojky - vodovodná   | 9,30 m od bodu napojenia po vodomer 14.60 m od vodomera po objekt č. 02 |
| Materiál prípojky            | PEHD D 32                                                               |
| Dĺžka prípojky - kanalizačná | 14,70 m                                                                 |
| Materiál prípojky            | PVC DN 150/D 160/                                                       |

|                   |                            |
|-------------------|----------------------------|
| <b>SO 06</b>      | <b>Elektrická prípojka</b> |
| Dĺžka prípojky    | 16.50 m                    |
| Materiál prípojky | PEHD D 32                  |

### 3.5. Konštrukčné riešenie

#### 3.5.1. SO 01- Oblúčková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ

Oblúčková hala bude zakladaná na betónovom základe šírky 0.6m a hĺbky 1,2 m od terénu a betónových tvárnicach položených na šírku hr. 500 mm do výšky 1,25 m od terénu. Obvod základovej konštrukcie bude zateplený minerálnou vlnou hrúbky 100 mm. Oblúčkové segmenty budú zateplené a dodané firmou Hupro. V oblúčkových segmentoch sa budú nachádzať presvetľovacie pásy. Severná a južná strana oblúčkovej haly bude pozostávať zo sendvičového systému Hupro hrúbky 300 mm zateplený. V severnej a južnej stene oblúčkovej haly budú presvetľovacie otvory na okná. Vstup do oblúčkovej haly bude zo západnej strany a to cez dvojce roľovacie vráta o šírke a výške 3m. Podlaha bude pancierová podlaha hr. 100 mm.

#### 3.5.2. SO 02- Predajňa, sociálne zariadenia a kotolňa

Objekt bude zakladaný na betónovom základe šírky 0,5m a hĺbky 1,2 m od terénu a betónových tvárnicach hrúbky 300 mm. Nosné obvodové múrivo bude Ytong hrúbky 300 mm so zateplením - minerálna vlna hr. 150 mm. Stavebný objekt 02 bude pozostávať z predajne, šatni, wc a kotolňou na tuhé palivo peletky biomasa. Strop bude tvorený krovom pultovej strechy so zateplením minerálnou vlnou o hrúbke 320 mm. Strešná krytina bude trapézový plech.

#### 3.5.3. SO 03- Prístrešok pre poľnohospodárske stroje

Bude zakladaný na pätkách a drevený stĺpov. Bude slúžiť ako prístrešok pre poľnohospodárske stroje. Krov bude sedlový (krokvy a klieštiny) a krytina bude trapézový plech.

**3.5.4. SO 04- Spevnená plocha a oplatenie**

Okolité spevnená plocha v areáli bude z cestného betónu o ploche 270 m<sup>2</sup>. Oplatenie areálu bude pozostávať z predného murovaného plotu s 2x elektrickými posuvnými bránami o celkovej dĺžke 30 m a z oplatenia poplastovaných stĺpikov výšky 2,50 m a poplastovaného štvorhranného pletiva o dĺžke 89 m.

**3.5.5. SO 05- Vodovodná a kanalizačná prípojka**

Prívod vody je navrhovaný vodovodným rozvodom PEHD DN 32, z navrhovanej vodomernej šachty umiestnenej za oplatením pozemku. Meranie - vodomer je umiestnený vo vodomernej šachte. Prívod vody z verejného rozvodu na pozemok odberateľa je navrhovaný - 9,30 m od bodu napojenia po vodomer a 14,60 m od vodomeru po objekt č. 02. Odkanalizovanie objektu je navrhovaným rozvodom PVC DN 160, ktorý sa napojí do verejnej kanalizácie z navrhovanej kanalizačnej šachty umiestnenej za oplatením pozemku. Dĺžka prípojky 14,70 m.

**3.5.6. SO 06- Elektrická prípojka**

Napojenie objektu na el. energiu bude z jestvujúceho elektrického stĺpa na pozemku investora do zeme. Elektromer bude umiestnený v oplatení. Elektrický rozvod bude káblom AYKY, uloženým v zemi. Dĺžka prípojky 16,5 m.

**4. Riešenie dopravy, pripojenie na dopravný systém, statická doprava**

Pre prístup k pozemku majiteľa slúži jestvujúca, obojsmerná, asfaltová miestna komunikácia, ktorá sa v strede obce napája na cestu III. triedy číslo CK3680, pôvodné číslo CK 55314.

Napojenie pozemku je riešené navrhovanými dvoma novými vjazdmi na dvor pozemku, kde sa bude nachádzať spevnená plocha pre 6 osobných áut s prístupovou komunikáciou.

**4.1. Popis hlukovej situácie**

Riešená oblasť sa nachádza v tichej časti na konci obce a prakticky bez pravidelnej dopravy. Riešeným územím vedie iba miestna cesta s občasným prejazdom osobných áut k vinohradom.

**4.2. Meranie hluku na posudzovanom území**

Vzhľadom na to, že neboli poskytnuté žiadne podklady o doprave v okolí, bolo potrebné tieto údaje zistiť priamym meraním ekvivalentných hladín A zvuku a odčítaním intenzity dopravy. Priame kalibračné merania hluku v predmetnej oblasti sa uskutočnilo na ulici Kráľovka aj so sčítaním dopravy v dňa 6.11.2019 (deň), aj so sčítaním dopravy. Nameraná ekvivalentná hladina A zvuku slúži na porovnanie súladu vypočítanej hodnoty s nameranou. Výsledky kalibračných meraní boli použité ako kalibračné vstupy do matematického modelu (hlukovej mapy) záujmového územia a na zistenie súčasných imisií hluku v záujmovom území.

**Tab.: Intenzita dopravy stanovená priamym sčítaním. (6. 11.2019)**

**Tab. 1. Intenzita dopravy stanovená priamym sčítaním na ulici Kráľovka (6. 11.2019)**

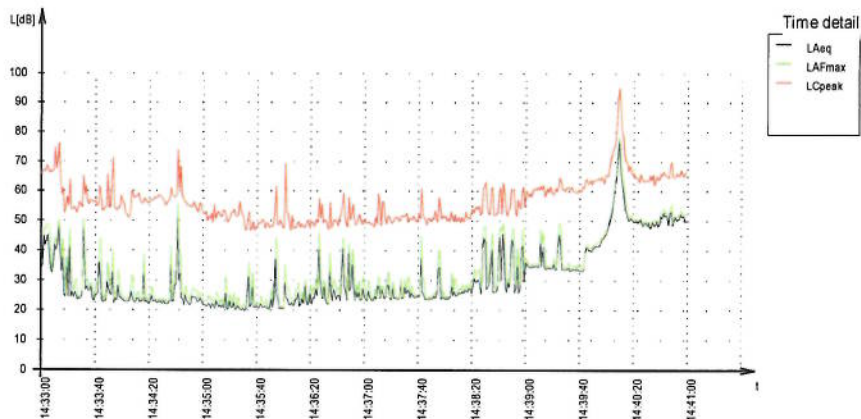
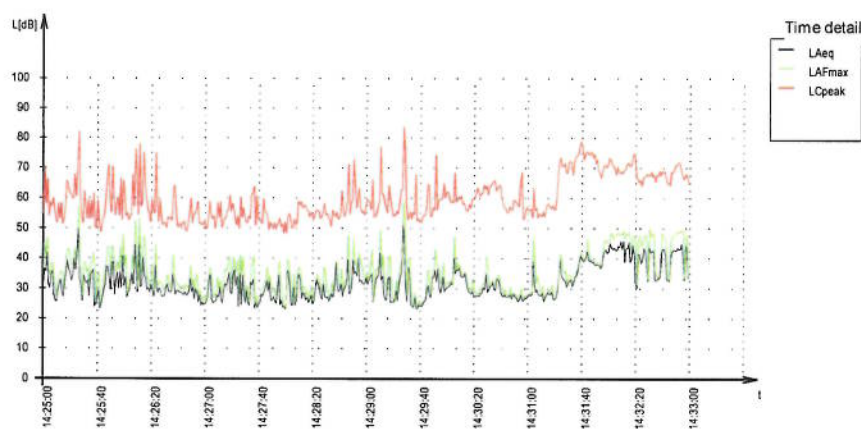
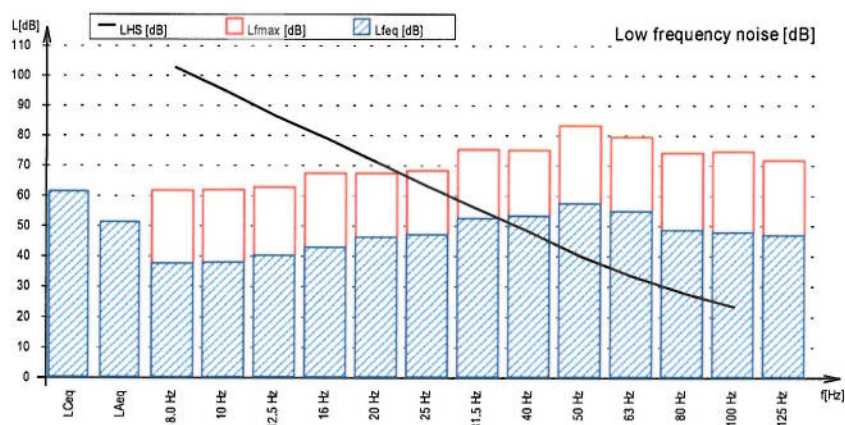
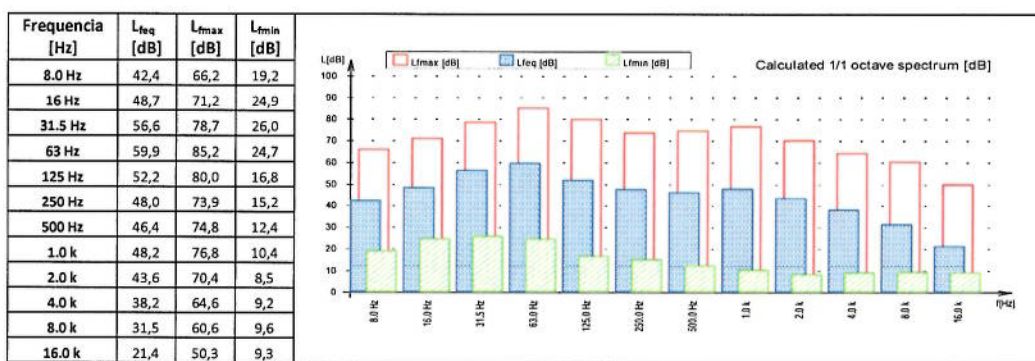
|          |     | Čas<br>merania | T | A | O  | M |
|----------|-----|----------------|---|---|----|---|
| Kráľovka | Deň | 14:25 – 14:55  | 1 | 0 | 6  | 0 |
| Kráľovka | Deň | 14:03 – 14:34  | 0 | 0 | 8  | 0 |
| Kráľovka | Deň | 14:53 – 15:51  | 0 | 0 | 13 | 0 |

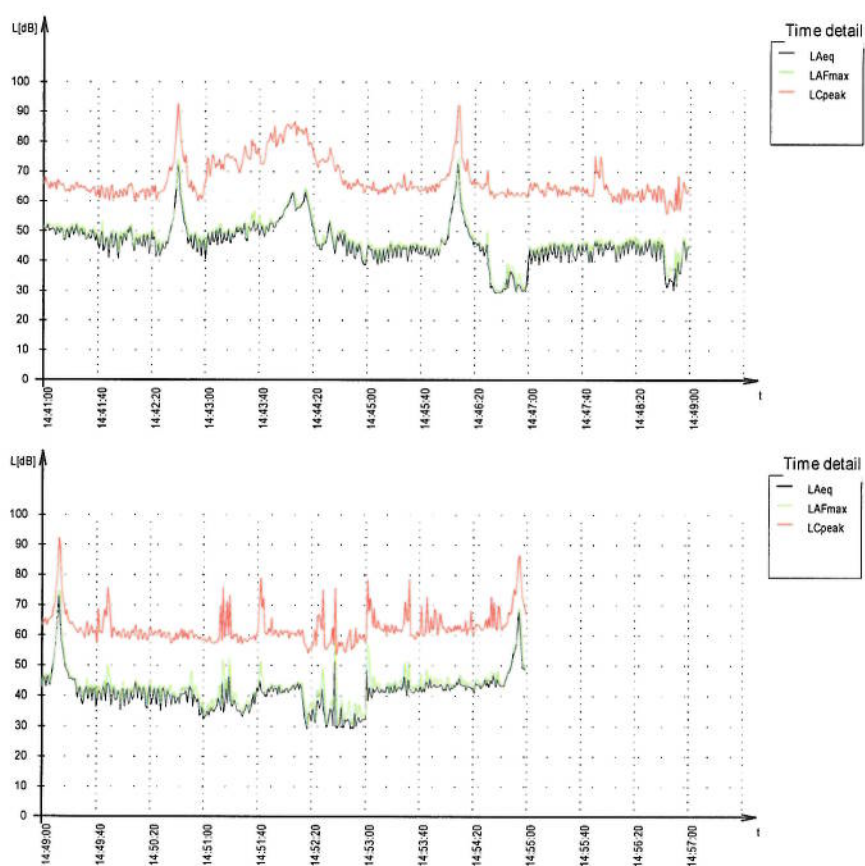
|   |   |                                       |
|---|---|---------------------------------------|
| T | - | nákladné automobily a privesy         |
| A | - | autobusy                              |
| O | - | osobné a dodávkové automobily         |
| M | - | motocykle                             |
| S | - | súčet všetkých automobilov a privesov |

rana 9 Celkom 29

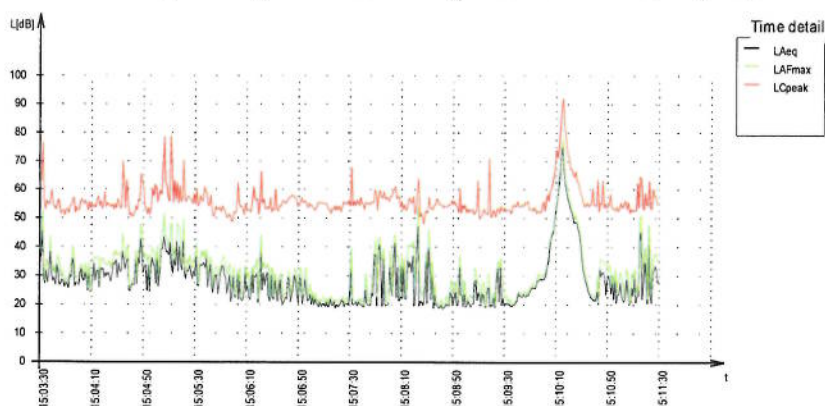
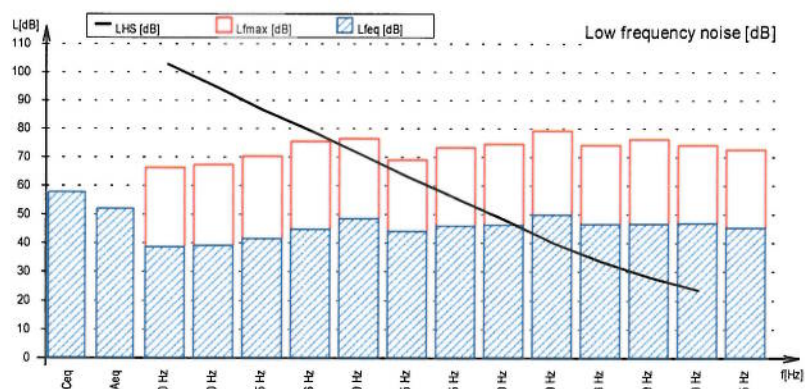
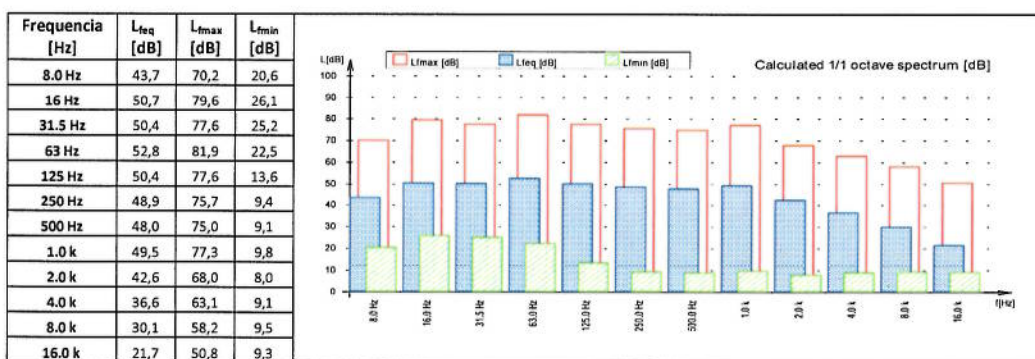
| <b>AUDITOR s.r.o.</b><br>Olivová 13, 040 01 Košice<br>IČO: 44 005 032, DIČ: 2022554820<br>Tel.: +421 911 141 158                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       | <b>Záznam z merania hluku</b><br>vo vonkajšom prostredí<br><b>19_37 0001</b>                                                                                                                                                                         |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
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| <b>Zákazník:</b> AMDT AGRO s.r.o., SNP 250/75, 076 03 Hraň                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | <b>Miesto merania:</b> Malá Trňa, ul. Kráľovka 24/158                                                                                                                                                                                                |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <b>Prevádzka:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | <b>Umiestnenie mikrofónu:</b> vo výške 150 cm, na statíve, na okraji cesty 4 m od rodinného domu na ulici Kráľovka č 24/158 a bol pevne spojený s hlukomerom.                                                                                        |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <b>Činnosť zdroja:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       | <b>Prístroj:</b> NOR 118                                                                                                                                                                                                                             |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| Doprava a celkový hluk na ulici Kráľovka oproti miestu plánovanej výstavby. Počas merania prešlo 6 osobných áut a jeden traktor. V susednej záhrade cca 70 metrov kosenie motorovou kosačkou.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | <b>Parametre prostredia</b><br><b>Začiatok merania:</b> 6.11.2019 14:25:00<br><b>Dĺžka merania :</b> 0:30:0.0<br><b>Dĺžka periódy:</b> 0:0:1.0<br><b>Teplota:</b> 10°C<br><b>Tlak:</b> 1004 hPa<br><b>Vlhkosť:</b> 81 %<br><b>Vietor:</b> bezvietrie |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <b>Namerané akustické parametre</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |                                                                                                                                                                                                                                                      |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| File: F:\HLUK\HLUK_2019\19_37_TRNA\MERANIA\191106\NOR118_7847439_191106_0001.NBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |                                                                                                                                                                                                                                                      |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <table border="1"> <thead> <tr> <th>Deskriptor</th> <th>Level [dB]</th> <th>Deskriptor</th> <th>Level [dB]</th> <th>Percentile</th> <th>Level [dB]</th> </tr> </thead> <tbody> <tr> <td>L<sub>Aeq</sub></td> <td>51,4</td> <td>L<sub>Ceq</sub></td> <td>61,6</td> <td>L 0,1</td> <td>73,8</td> </tr> <tr> <td>L<sub>A1eq</sub></td> <td>-</td> <td>L<sub>C1max</sub></td> <td>85,7</td> <td>L 1</td> <td>62,4</td> </tr> <tr> <td>L<sub>Afmax</sub></td> <td>78,7</td> <td>L<sub>Cpeak</sub></td> <td>95,3</td> <td>L 5</td> <td>52,0</td> </tr> <tr> <td>L<sub>Afmin</sub></td> <td>19,2</td> <td>L<sub>Zeq</sub></td> <td>-</td> <td>L 10</td> <td>49,4</td> </tr> <tr> <td>L<sub>Ceq-L<sub>Aeq</sub></sub></td> <td>10,1</td> <td>L<sub>Zfmax</sub></td> <td>-</td> <td>L 50</td> <td>37,0</td> </tr> <tr> <td>L<sub>Zeq-L<sub>Aeq</sub></sub></td> <td>-</td> <td>L<sub>Zpeak</sub></td> <td>-</td> <td>L 90</td> <td>23,9</td> </tr> <tr> <td></td> <td></td> <td>L<sub>A1(TMS)</sub></td> <td>-</td> <td>L 95</td> <td>22,5</td> </tr> <tr> <td></td> <td></td> <td>L<sub>A1(TMS)</sub></td> <td>-</td> <td>L 99</td> <td>20,5</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Deskriptor            | Level [dB]                                                                                                                                                                                                                                           | Deskriptor             | Level [dB]             | Percentile             | Level [dB] | L <sub>Aeq</sub> | 51,4 | L <sub>Ceq</sub> | 61,6  | L 0,1 | 73,8 | L <sub>A1eq</sub> | -    | L <sub>C1max</sub> | 85,7 | L 1  | 62,4 | L <sub>Afmax</sub> | 78,7  | L <sub>Cpeak</sub> | 95,3 | L 5  | 52,0 | L <sub>Afmin</sub> | 19,2 | L <sub>Zeq</sub> | -    | L 10 | 49,4  | L <sub>Ceq-L<sub>Aeq</sub></sub> | 10,1 | L <sub>Zfmax</sub> | -    | L 50 | 37,0 | L <sub>Zeq-L<sub>Aeq</sub></sub> | -    | L <sub>Zpeak</sub> | -   | L 90   | 23,9 |      |      | L <sub>A1(TMS)</sub> | -    | L 95 | 22,5 |      |      | L <sub>A1(TMS)</sub> | -    | L 99 | 20,5 |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| Deskriptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Level [dB]            | Deskriptor                                                                                                                                                                                                                                           | Level [dB]             | Percentile             | Level [dB]             |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 51,4                  | L <sub>Ceq</sub>                                                                                                                                                                                                                                     | 61,6                   | L 0,1                  | 73,8                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>A1eq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -                     | L <sub>C1max</sub>                                                                                                                                                                                                                                   | 85,7                   | L 1                    | 62,4                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>Afmax</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 78,7                  | L <sub>Cpeak</sub>                                                                                                                                                                                                                                   | 95,3                   | L 5                    | 52,0                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>Afmin</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 19,2                  | L <sub>Zeq</sub>                                                                                                                                                                                                                                     | -                      | L 10                   | 49,4                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>Ceq-L<sub>Aeq</sub></sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10,1                  | L <sub>Zfmax</sub>                                                                                                                                                                                                                                   | -                      | L 50                   | 37,0                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| L <sub>Zeq-L<sub>Aeq</sub></sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | -                     | L <sub>Zpeak</sub>                                                                                                                                                                                                                                   | -                      | L 90                   | 23,9                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | L <sub>A1(TMS)</sub>                                                                                                                                                                                                                                 | -                      | L 95                   | 22,5                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | L <sub>A1(TMS)</sub>                                                                                                                                                                                                                                 | -                      | L 99                   | 20,5                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <table border="1"> <thead> <tr> <th>Frekvencia [Hz]</th> <th>L<sub>feq</sub> [dB]</th> <th>L<sub>fmax</sub> [dB]</th> <th>L<sub>fmin</sub> [dB]</th> <th>L<sub>Afeq</sub> [dB]</th> </tr> </thead> <tbody> <tr><td>6.3Hz</td><td>37,0</td><td>60,2</td><td>11,8</td><td>-48,4</td></tr> <tr><td>8.0Hz</td><td>37,8</td><td>61,8</td><td>11,7</td><td>-40,0</td></tr> <tr><td>10Hz</td><td>38,1</td><td>62,0</td><td>17,3</td><td>-32,3</td></tr> <tr><td>12.5Hz</td><td>40,3</td><td>62,9</td><td>18,3</td><td>-23,1</td></tr> <tr><td>16Hz</td><td>43,1</td><td>67,5</td><td>20,9</td><td>-13,6</td></tr> <tr><td>20Hz</td><td>46,4</td><td>67,5</td><td>20,6</td><td>-4,1</td></tr> <tr><td>25Hz</td><td>47,2</td><td>68,3</td><td>22,1</td><td>2,5</td></tr> <tr><td>31.5Hz</td><td>52,7</td><td>75,4</td><td>20,6</td><td>13,3</td></tr> <tr><td>40Hz</td><td>53,5</td><td>75,2</td><td>20,7</td><td>18,9</td></tr> <tr><td>50Hz</td><td>57,6</td><td>83,4</td><td>21,9</td><td>27,4</td></tr> <tr><td>63Hz</td><td>55,0</td><td>79,6</td><td>20,2</td><td>28,8</td></tr> <tr><td>80Hz</td><td>48,8</td><td>74,3</td><td>15,4</td><td>26,3</td></tr> <tr><td>100Hz</td><td>48,0</td><td>74,7</td><td>12,9</td><td>28,9</td></tr> <tr><td>125Hz</td><td>47,1</td><td>71,8</td><td>12,2</td><td>31,0</td></tr> <tr><td>160Hz</td><td>47,0</td><td>77,5</td><td>10,8</td><td>33,6</td></tr> <tr><td>200Hz</td><td>44,8</td><td>71,2</td><td>11,6</td><td>33,9</td></tr> <tr><td>250Hz</td><td>43,0</td><td>68,7</td><td>9,8</td><td>34,4</td></tr> <tr><td>315Hz</td><td>40,9</td><td>65,8</td><td>9,7</td><td>34,3</td></tr> <tr><td>400Hz</td><td>41,0</td><td>68,5</td><td>7,6</td><td>36,2</td></tr> <tr><td>500Hz</td><td>41,8</td><td>69,7</td><td>7,6</td><td>38,6</td></tr> <tr><td>630Hz</td><td>42,2</td><td>71,4</td><td>7,9</td><td>40,3</td></tr> <tr><td>800Hz</td><td>44,3</td><td>73,8</td><td>6,6</td><td>43,5</td></tr> <tr><td>1.0 k</td><td>43,7</td><td>72,0</td><td>5,8</td><td>43,7</td></tr> <tr><td>1.25 k</td><td>42,0</td><td>69,3</td><td>4,3</td><td>42,6</td></tr> <tr><td>1.6 k</td><td>40,2</td><td>67,1</td><td>3,8</td><td>41,2</td></tr> <tr><td>2.0 k</td><td>38,5</td><td>65,8</td><td>3,7</td><td>39,7</td></tr> <tr><td>2.5 k</td><td>37,3</td><td>63,1</td><td>3,6</td><td>38,6</td></tr> <tr><td>3.15 k</td><td>35,1</td><td>61,6</td><td>3,9</td><td>36,3</td></tr> <tr><td>4.0 k</td><td>33,0</td><td>59,0</td><td>4,4</td><td>34,0</td></tr> <tr><td>5.0 k</td><td>31,4</td><td>58,0</td><td>5,0</td><td>31,9</td></tr> <tr><td>6.3 k</td><td>28,8</td><td>55,7</td><td>4,6</td><td>28,7</td></tr> <tr><td>8.0 k</td><td>26,6</td><td>58,0</td><td>4,8</td><td>25,5</td></tr> <tr><td>10.0 k</td><td>23,0</td><td>51,7</td><td>5,0</td><td>20,5</td></tr> <tr><td>12.5 k</td><td>19,1</td><td>46,9</td><td>4,7</td><td>14,8</td></tr> <tr><td>16.0 k</td><td>16,0</td><td>45,9</td><td>4,5</td><td>9,4</td></tr> <tr><td>20.0 k</td><td>12,3</td><td>42,8</td><td>4,4</td><td>3,0</td></tr> </tbody> </table> | Frekvencia [Hz]       | L <sub>feq</sub> [dB]                                                                                                                                                                                                                                | L <sub>fmax</sub> [dB] | L <sub>fmin</sub> [dB] | L <sub>Afeq</sub> [dB] | 6.3Hz      | 37,0             | 60,2 | 11,8             | -48,4 | 8.0Hz | 37,8 | 61,8              | 11,7 | -40,0              | 10Hz | 38,1 | 62,0 | 17,3               | -32,3 | 12.5Hz             | 40,3 | 62,9 | 18,3 | -23,1              | 16Hz | 43,1             | 67,5 | 20,9 | -13,6 | 20Hz                             | 46,4 | 67,5               | 20,6 | -4,1 | 25Hz | 47,2                             | 68,3 | 22,1               | 2,5 | 31.5Hz | 52,7 | 75,4 | 20,6 | 13,3                 | 40Hz | 53,5 | 75,2 | 20,7 | 18,9 | 50Hz                 | 57,6 | 83,4 | 21,9 | 27,4 | 63Hz | 55,0 | 79,6 | 20,2 | 28,8 | 80Hz | 48,8 | 74,3 | 15,4 | 26,3 | 100Hz | 48,0 | 74,7 | 12,9 | 28,9 | 125Hz | 47,1 | 71,8 | 12,2 | 31,0 | 160Hz | 47,0 | 77,5 | 10,8 | 33,6 | 200Hz | 44,8 | 71,2 | 11,6 | 33,9 | 250Hz | 43,0 | 68,7 | 9,8 | 34,4 | 315Hz | 40,9 | 65,8 | 9,7 | 34,3 | 400Hz | 41,0 | 68,5 | 7,6 | 36,2 | 500Hz | 41,8 | 69,7 | 7,6 | 38,6 | 630Hz | 42,2 | 71,4 | 7,9 | 40,3 | 800Hz | 44,3 | 73,8 | 6,6 | 43,5 | 1.0 k | 43,7 | 72,0 | 5,8 | 43,7 | 1.25 k | 42,0 | 69,3 | 4,3 | 42,6 | 1.6 k | 40,2 | 67,1 | 3,8 | 41,2 | 2.0 k | 38,5 | 65,8 | 3,7 | 39,7 | 2.5 k | 37,3 | 63,1 | 3,6 | 38,6 | 3.15 k | 35,1 | 61,6 | 3,9 | 36,3 | 4.0 k | 33,0 | 59,0 | 4,4 | 34,0 | 5.0 k | 31,4 | 58,0 | 5,0 | 31,9 | 6.3 k | 28,8 | 55,7 | 4,6 | 28,7 | 8.0 k | 26,6 | 58,0 | 4,8 | 25,5 | 10.0 k | 23,0 | 51,7 | 5,0 | 20,5 | 12.5 k | 19,1 | 46,9 | 4,7 | 14,8 | 16.0 k | 16,0 | 45,9 | 4,5 | 9,4 | 20.0 k | 12,3 | 42,8 | 4,4 | 3,0 |  |  |
| Frekvencia [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | L <sub>feq</sub> [dB] | L <sub>fmax</sub> [dB]                                                                                                                                                                                                                               | L <sub>fmin</sub> [dB] | L <sub>Afeq</sub> [dB] |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 6.3Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 37,0                  | 60,2                                                                                                                                                                                                                                                 | 11,8                   | -48,4                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 8.0Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 37,8                  | 61,8                                                                                                                                                                                                                                                 | 11,7                   | -40,0                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 10Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 38,1                  | 62,0                                                                                                                                                                                                                                                 | 17,3                   | -32,3                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 12.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 40,3                  | 62,9                                                                                                                                                                                                                                                 | 18,3                   | -23,1                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 16Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 43,1                  | 67,5                                                                                                                                                                                                                                                 | 20,9                   | -13,6                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 20Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 46,4                  | 67,5                                                                                                                                                                                                                                                 | 20,6                   | -4,1                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 25Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 47,2                  | 68,3                                                                                                                                                                                                                                                 | 22,1                   | 2,5                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 31.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 52,7                  | 75,4                                                                                                                                                                                                                                                 | 20,6                   | 13,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 40Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 53,5                  | 75,2                                                                                                                                                                                                                                                 | 20,7                   | 18,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 50Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 57,6                  | 83,4                                                                                                                                                                                                                                                 | 21,9                   | 27,4                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 55,0                  | 79,6                                                                                                                                                                                                                                                 | 20,2                   | 28,8                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 80Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 48,8                  | 74,3                                                                                                                                                                                                                                                 | 15,4                   | 26,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 100Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 48,0                  | 74,7                                                                                                                                                                                                                                                 | 12,9                   | 28,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 125Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 47,1                  | 71,8                                                                                                                                                                                                                                                 | 12,2                   | 31,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 160Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 47,0                  | 77,5                                                                                                                                                                                                                                                 | 10,8                   | 33,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 200Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 44,8                  | 71,2                                                                                                                                                                                                                                                 | 11,6                   | 33,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 250Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 43,0                  | 68,7                                                                                                                                                                                                                                                 | 9,8                    | 34,4                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 315Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 40,9                  | 65,8                                                                                                                                                                                                                                                 | 9,7                    | 34,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 400Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 41,0                  | 68,5                                                                                                                                                                                                                                                 | 7,6                    | 36,2                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 500Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 41,8                  | 69,7                                                                                                                                                                                                                                                 | 7,6                    | 38,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 630Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 42,2                  | 71,4                                                                                                                                                                                                                                                 | 7,9                    | 40,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 800Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 44,3                  | 73,8                                                                                                                                                                                                                                                 | 6,6                    | 43,5                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 1.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 43,7                  | 72,0                                                                                                                                                                                                                                                 | 5,8                    | 43,7                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 1.25 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 42,0                  | 69,3                                                                                                                                                                                                                                                 | 4,3                    | 42,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 1.6 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 40,2                  | 67,1                                                                                                                                                                                                                                                 | 3,8                    | 41,2                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 2.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 38,5                  | 65,8                                                                                                                                                                                                                                                 | 3,7                    | 39,7                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 2.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 37,3                  | 63,1                                                                                                                                                                                                                                                 | 3,6                    | 38,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 3.15 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 35,1                  | 61,6                                                                                                                                                                                                                                                 | 3,9                    | 36,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 4.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 33,0                  | 59,0                                                                                                                                                                                                                                                 | 4,4                    | 34,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 5.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 31,4                  | 58,0                                                                                                                                                                                                                                                 | 5,0                    | 31,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 6.3 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 28,8                  | 55,7                                                                                                                                                                                                                                                 | 4,6                    | 28,7                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 8.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 26,6                  | 58,0                                                                                                                                                                                                                                                 | 4,8                    | 25,5                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 10.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 23,0                  | 51,7                                                                                                                                                                                                                                                 | 5,0                    | 20,5                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 12.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 19,1                  | 46,9                                                                                                                                                                                                                                                 | 4,7                    | 14,8                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 16.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16,0                  | 45,9                                                                                                                                                                                                                                                 | 4,5                    | 9,4                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 20.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 12,3                  | 42,8                                                                                                                                                                                                                                                 | 4,4                    | 3,0                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                                                                                                                                                                                                                                                      |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                                                                                                                                                                                                                                                      |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| <b>Dátum vyhodnotenia</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       | <b>Vyhodnotil, meral:</b>                                                                                                                                                                                                                            |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |
| 11. novembra 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | Prof. MVDr. Ján Venglovský, PhD                                                                                                                                                                                                                      |                        |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                  |      |                    |      |      |      |                                  |      |                    |     |        |      |      |      |                      |      |      |      |      |      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |

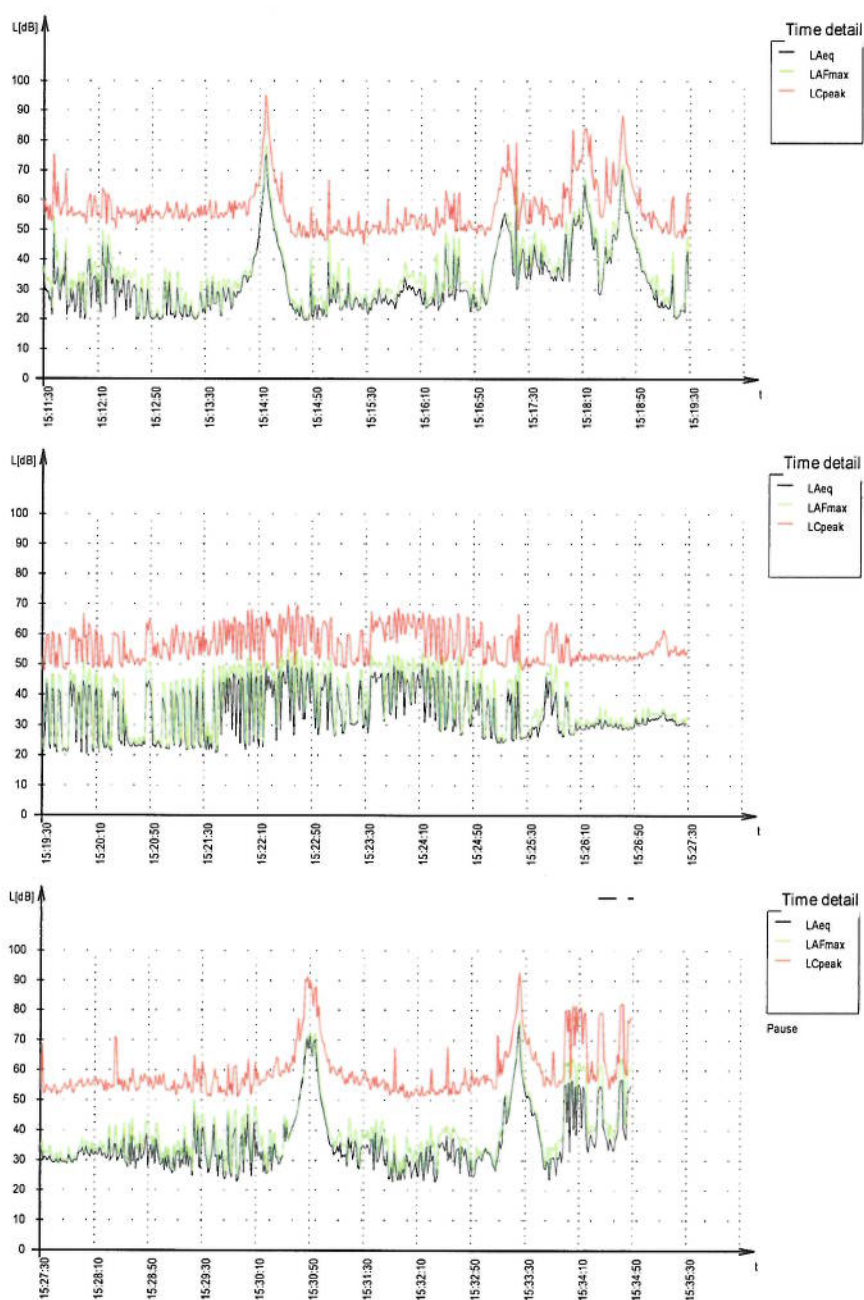
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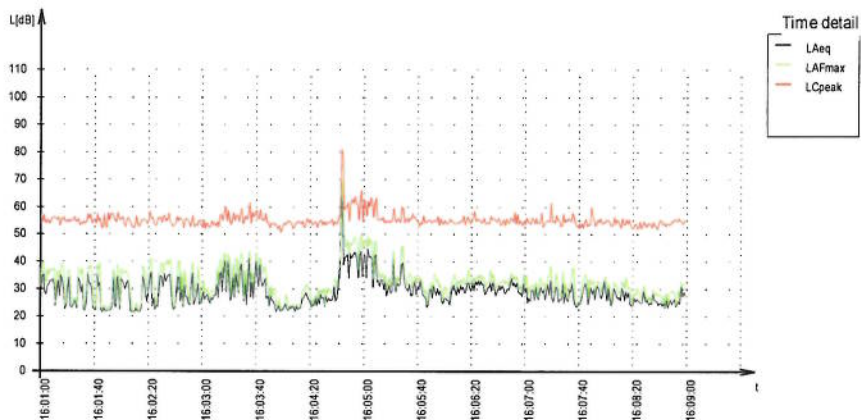
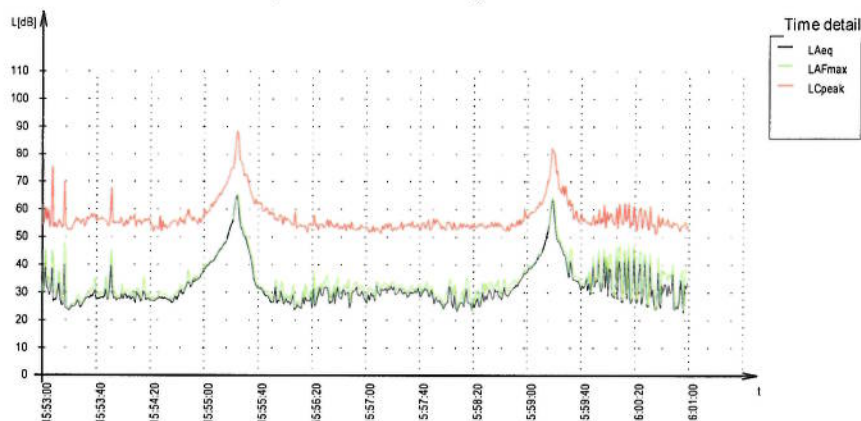
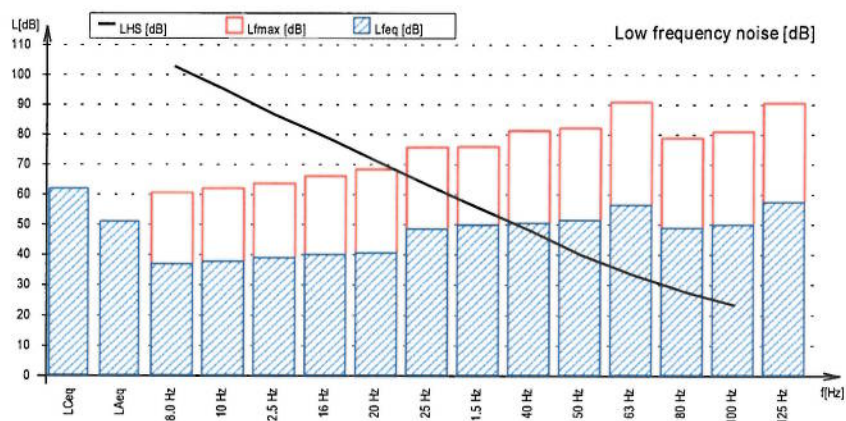
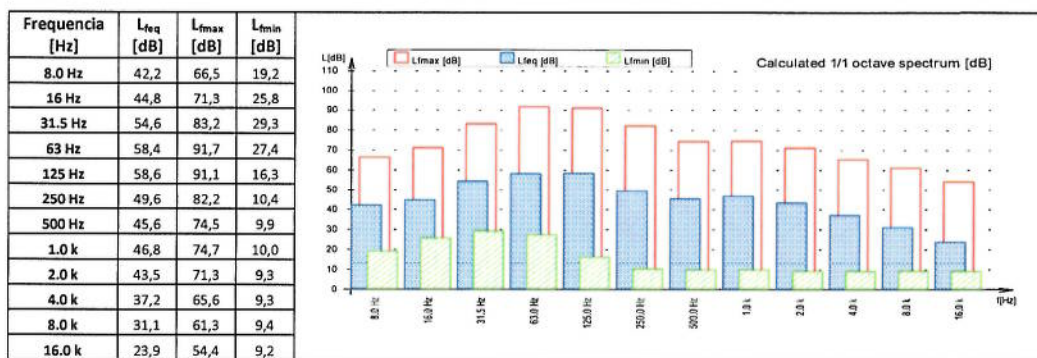


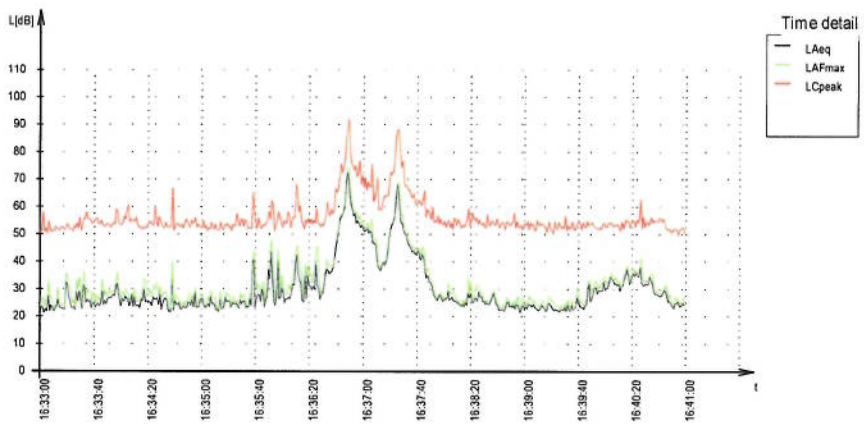
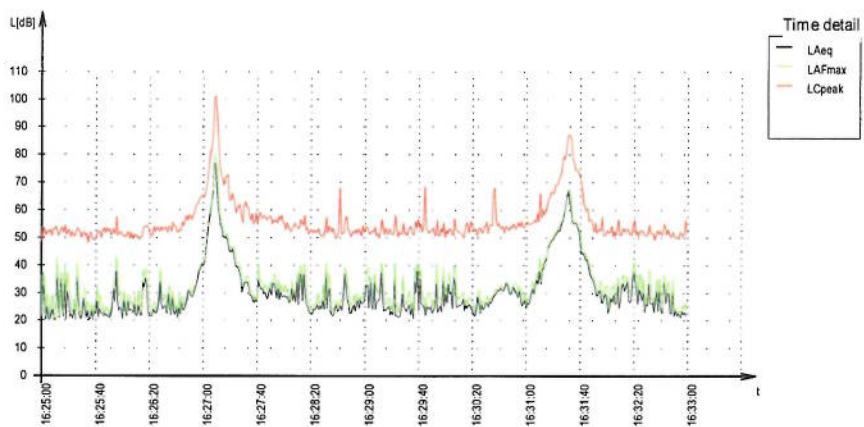
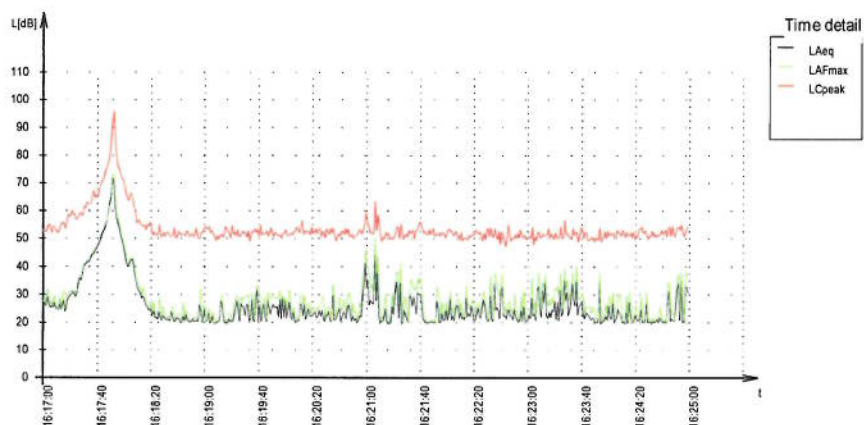
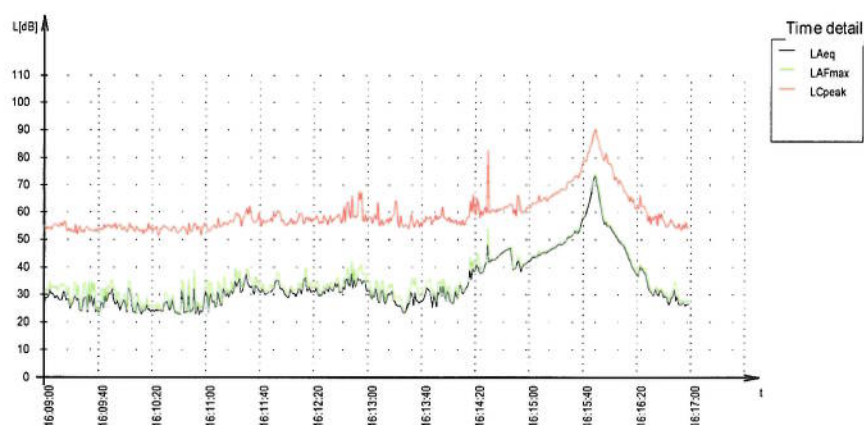
| <b>AUDITOR s.r.o.</b><br>Olivová 13, 040 01 Košice<br>IČO: 44 005 032, DIČ: 2022554820<br>Tel.: +421 911 141 158                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       | <b>Záznam z merania hluku</b><br>vo vonkajšom prostredí<br><b>19_37 0002</b>                                                                                  |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
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| <b>Zákazník:</b> AMDT AGRO s.r.o., SNP 250/75, 076 03 Hraň                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | <b>Miesto merania:</b> Malá Trňa, ul. Kráľovka 24/158                                                                                                         |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| <b>Prevádzka:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | <b>Umiestnenie mikrofónu:</b> vo výške 150 cm, na statíve, na okraji cesty 4 m od rodinného domu na ulici Kráľovka č 24/158 a bol pevne spojený s hlukomerom. |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| <b>Činnosť zdroja:</b> Doprava a celkový hluk na ulici Kráľovka oproti miestu plánovanej výstavby. Počas merania prešlo 8 osobných áut                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       | <b>Prístroj:</b> NOR 118                                                                                                                                      | <b>Parametre prostredia</b>                                                                       |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | <b>Začiatok merania:</b> 6.11.2019<br><b>Dĺžka merania :</b> 14:03:30<br><b>Dĺžka periódy:</b> 0:31:3.0                                                       | <b>Teplota:</b> 10°C<br><b>Tlak:</b> 1004 hPa<br><b>Vlhkosť:</b> 81 %<br><b>Vietor:</b> bezvetrie |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| <b>Namerané akustické parametre</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                                                                                                                                               |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| File: F:\HLUK\HLUK_2019\19_37_TRNA\MERANIA\191106\W0118_7847439_191106_0002.NBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                               |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| <table border="1"> <thead> <tr> <th>Deskriptor</th> <th>Level [dB]</th> <th>Deskriptor</th> <th>Level [dB]</th> <th>Percentile</th> <th>Level [dB]</th> </tr> </thead> <tbody> <tr> <td>L<sub>Aeq</sub></td> <td>52,1</td> <td>L<sub>Ceq</sub></td> <td>57,7</td> <td>L 0,1</td> <td>75,2</td> </tr> <tr> <td>L<sub>Aleq</sub></td> <td>-</td> <td>L<sub>Cfmax</sub></td> <td>83,7</td> <td>L 1</td> <td>64,6</td> </tr> <tr> <td>L<sub>Afmax</sub></td> <td>78,5</td> <td>L<sub>Cpeak</sub></td> <td>95,5</td> <td>L 5</td> <td>50,8</td> </tr> <tr> <td>L<sub>Afmin</sub></td> <td>18,0</td> <td>L<sub>Zeq</sub></td> <td>-</td> <td>L 10</td> <td>45,4</td> </tr> <tr> <td>L<sub>Ceq</sub>-L<sub>Aeq</sub></td> <td>5,7</td> <td>L<sub>Zfmax</sub></td> <td>-</td> <td>L 50</td> <td>29,5</td> </tr> <tr> <td>L<sub>Zeq</sub>-L<sub>Aeq</sub></td> <td>-</td> <td>L<sub>Zfmin</sub></td> <td>-</td> <td>L 90</td> <td>21,2</td> </tr> <tr> <td></td> <td></td> <td>L<sub>Af</sub>(TMS)</td> <td>-</td> <td>L 95</td> <td>20,1</td> </tr> <tr> <td></td> <td></td> <td>L<sub>Ai</sub>(TMS)</td> <td>-</td> <td>L 99</td> <td>19,1</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Deskriptor            | Level [dB]                                                                                                                                                    | Deskriptor                                                                                        | Level [dB]             | Percentile             | Level [dB] | L <sub>Aeq</sub> | 52,1 | L <sub>Ceq</sub> | 57,7  | L 0,1 | 75,2 | L <sub>Aleq</sub> | -    | L <sub>Cfmax</sub> | 83,7 | L 1  | 64,6 | L <sub>Afmax</sub> | 78,5  | L <sub>Cpeak</sub> | 95,5 | L 5  | 50,8 | L <sub>Afmin</sub> | 18,0 | L <sub>Zeq</sub> | -    | L 10 | 45,4  | L <sub>Ceq</sub> -L <sub>Aeq</sub> | 5,7  | L <sub>Zfmax</sub> | -    | L 50 | 29,5 | L <sub>Zeq</sub> -L <sub>Aeq</sub> | -    | L <sub>Zfmin</sub> | -    | L 90   | 21,2 |      |      | L <sub>Af</sub> (TMS) | -    | L 95 | 20,1 |      |      | L <sub>Ai</sub> (TMS) | -    | L 99 | 19,1 |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| Deskriptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Level [dB]            | Deskriptor                                                                                                                                                    | Level [dB]                                                                                        | Percentile             | Level [dB]             |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 52,1                  | L <sub>Ceq</sub>                                                                                                                                              | 57,7                                                                                              | L 0,1                  | 75,2                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Aleq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -                     | L <sub>Cfmax</sub>                                                                                                                                            | 83,7                                                                                              | L 1                    | 64,6                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Afmax</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 78,5                  | L <sub>Cpeak</sub>                                                                                                                                            | 95,5                                                                                              | L 5                    | 50,8                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Afmin</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 18,0                  | L <sub>Zeq</sub>                                                                                                                                              | -                                                                                                 | L 10                   | 45,4                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Ceq</sub> -L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5,7                   | L <sub>Zfmax</sub>                                                                                                                                            | -                                                                                                 | L 50                   | 29,5                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| L <sub>Zeq</sub> -L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -                     | L <sub>Zfmin</sub>                                                                                                                                            | -                                                                                                 | L 90                   | 21,2                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | L <sub>Af</sub> (TMS)                                                                                                                                         | -                                                                                                 | L 95                   | 20,1                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | L <sub>Ai</sub> (TMS)                                                                                                                                         | -                                                                                                 | L 99                   | 19,1                   |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| <table border="1"> <thead> <tr> <th>Frekvencia [Hz]</th> <th>L<sub>feq</sub> [dB]</th> <th>L<sub>fmax</sub> [dB]</th> <th>L<sub>fmin</sub> [dB]</th> <th>L<sub>Afeq</sub> [dB]</th> </tr> </thead> <tbody> <tr><td>6.3Hz</td><td>38,8</td><td>58,7</td><td>13,9</td><td>-46,6</td></tr> <tr><td>8.0Hz</td><td>38,7</td><td>66,3</td><td>13,9</td><td>-39,1</td></tr> <tr><td>10Hz</td><td>39,2</td><td>67,3</td><td>18,2</td><td>-31,2</td></tr> <tr><td>12.5Hz</td><td>41,5</td><td>70,3</td><td>18,1</td><td>-21,9</td></tr> <tr><td>16Hz</td><td>44,8</td><td>75,5</td><td>21,4</td><td>-11,9</td></tr> <tr><td>20Hz</td><td>48,6</td><td>76,4</td><td>23,0</td><td>-1,9</td></tr> <tr><td>25Hz</td><td>44,2</td><td>69,0</td><td>20,4</td><td>-0,5</td></tr> <tr><td>31.5Hz</td><td>46,0</td><td>73,3</td><td>21,8</td><td>6,6</td></tr> <tr><td>40Hz</td><td>46,3</td><td>74,6</td><td>18,4</td><td>11,7</td></tr> <tr><td>50Hz</td><td>50,0</td><td>79,3</td><td>20,3</td><td>19,8</td></tr> <tr><td>63Hz</td><td>46,6</td><td>74,3</td><td>17,3</td><td>20,4</td></tr> <tr><td>80Hz</td><td>46,8</td><td>76,2</td><td>12,0</td><td>24,3</td></tr> <tr><td>100Hz</td><td>47,0</td><td>74,2</td><td>11,0</td><td>27,9</td></tr> <tr><td>125Hz</td><td>45,4</td><td>72,6</td><td>8,2</td><td>29,3</td></tr> <tr><td>160Hz</td><td>43,7</td><td>71,2</td><td>5,6</td><td>30,3</td></tr> <tr><td>200Hz</td><td>44,4</td><td>71,7</td><td>5,4</td><td>33,5</td></tr> <tr><td>250Hz</td><td>44,6</td><td>70,9</td><td>4,4</td><td>36,0</td></tr> <tr><td>315Hz</td><td>43,2</td><td>70,1</td><td>4,1</td><td>36,6</td></tr> <tr><td>400Hz</td><td>42,4</td><td>68,4</td><td>3,7</td><td>37,6</td></tr> <tr><td>500Hz</td><td>43,1</td><td>70,6</td><td>3,9</td><td>39,9</td></tr> <tr><td>630Hz</td><td>44,1</td><td>71,1</td><td>5,2</td><td>42,2</td></tr> <tr><td>800Hz</td><td>45,9</td><td>74,0</td><td>5,8</td><td>45,1</td></tr> <tr><td>1.0 k</td><td>45,1</td><td>73,2</td><td>5,1</td><td>45,1</td></tr> <tr><td>1.25 k</td><td>42,4</td><td>68,4</td><td>4,0</td><td>43,0</td></tr> <tr><td>1.6 k</td><td>40,0</td><td>64,9</td><td>3,1</td><td>41,0</td></tr> <tr><td>2.0 k</td><td>37,2</td><td>63,0</td><td>3,4</td><td>38,4</td></tr> <tr><td>2.5 k</td><td>34,6</td><td>60,9</td><td>3,2</td><td>35,9</td></tr> <tr><td>3.15 k</td><td>33,4</td><td>59,6</td><td>3,7</td><td>34,6</td></tr> <tr><td>4.0 k</td><td>31,7</td><td>58,1</td><td>4,5</td><td>32,7</td></tr> <tr><td>5.0 k</td><td>29,8</td><td>56,9</td><td>4,8</td><td>30,3</td></tr> <tr><td>6.3 k</td><td>27,1</td><td>54,7</td><td>4,6</td><td>27,0</td></tr> <tr><td>8.0 k</td><td>25,2</td><td>53,8</td><td>4,9</td><td>24,1</td></tr> <tr><td>10.0 k</td><td>22,4</td><td>51,2</td><td>4,8</td><td>19,9</td></tr> <tr><td>12.5 k</td><td>19,5</td><td>48,3</td><td>4,7</td><td>15,2</td></tr> <tr><td>16.0 k</td><td>16,3</td><td>45,2</td><td>4,5</td><td>9,7</td></tr> <tr><td>20.0 k</td><td>12,1</td><td>42,8</td><td>4,4</td><td>2,8</td></tr> </tbody> </table> | Frekvencia [Hz]       | L <sub>feq</sub> [dB]                                                                                                                                         | L <sub>fmax</sub> [dB]                                                                            | L <sub>fmin</sub> [dB] | L <sub>Afeq</sub> [dB] | 6.3Hz      | 38,8             | 58,7 | 13,9             | -46,6 | 8.0Hz | 38,7 | 66,3              | 13,9 | -39,1              | 10Hz | 39,2 | 67,3 | 18,2               | -31,2 | 12.5Hz             | 41,5 | 70,3 | 18,1 | -21,9              | 16Hz | 44,8             | 75,5 | 21,4 | -11,9 | 20Hz                               | 48,6 | 76,4               | 23,0 | -1,9 | 25Hz | 44,2                               | 69,0 | 20,4               | -0,5 | 31.5Hz | 46,0 | 73,3 | 21,8 | 6,6                   | 40Hz | 46,3 | 74,6 | 18,4 | 11,7 | 50Hz                  | 50,0 | 79,3 | 20,3 | 19,8 | 63Hz | 46,6 | 74,3 | 17,3 | 20,4 | 80Hz | 46,8 | 76,2 | 12,0 | 24,3 | 100Hz | 47,0 | 74,2 | 11,0 | 27,9 | 125Hz | 45,4 | 72,6 | 8,2 | 29,3 | 160Hz | 43,7 | 71,2 | 5,6 | 30,3 | 200Hz | 44,4 | 71,7 | 5,4 | 33,5 | 250Hz | 44,6 | 70,9 | 4,4 | 36,0 | 315Hz | 43,2 | 70,1 | 4,1 | 36,6 | 400Hz | 42,4 | 68,4 | 3,7 | 37,6 | 500Hz | 43,1 | 70,6 | 3,9 | 39,9 | 630Hz | 44,1 | 71,1 | 5,2 | 42,2 | 800Hz | 45,9 | 74,0 | 5,8 | 45,1 | 1.0 k | 45,1 | 73,2 | 5,1 | 45,1 | 1.25 k | 42,4 | 68,4 | 4,0 | 43,0 | 1.6 k | 40,0 | 64,9 | 3,1 | 41,0 | 2.0 k | 37,2 | 63,0 | 3,4 | 38,4 | 2.5 k | 34,6 | 60,9 | 3,2 | 35,9 | 3.15 k | 33,4 | 59,6 | 3,7 | 34,6 | 4.0 k | 31,7 | 58,1 | 4,5 | 32,7 | 5.0 k | 29,8 | 56,9 | 4,8 | 30,3 | 6.3 k | 27,1 | 54,7 | 4,6 | 27,0 | 8.0 k | 25,2 | 53,8 | 4,9 | 24,1 | 10.0 k | 22,4 | 51,2 | 4,8 | 19,9 | 12.5 k | 19,5 | 48,3 | 4,7 | 15,2 | 16.0 k | 16,3 | 45,2 | 4,5 | 9,7 | 20.0 k | 12,1 | 42,8 | 4,4 | 2,8 |  |  |  |
| Frekvencia [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | L <sub>feq</sub> [dB] | L <sub>fmax</sub> [dB]                                                                                                                                        | L <sub>fmin</sub> [dB]                                                                            | L <sub>Afeq</sub> [dB] |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 6.3Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 38,8                  | 58,7                                                                                                                                                          | 13,9                                                                                              | -46,6                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 8.0Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 38,7                  | 66,3                                                                                                                                                          | 13,9                                                                                              | -39,1                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 10Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 39,2                  | 67,3                                                                                                                                                          | 18,2                                                                                              | -31,2                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 12.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 41,5                  | 70,3                                                                                                                                                          | 18,1                                                                                              | -21,9                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 16Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 44,8                  | 75,5                                                                                                                                                          | 21,4                                                                                              | -11,9                  |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 20Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 48,6                  | 76,4                                                                                                                                                          | 23,0                                                                                              | -1,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 25Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 44,2                  | 69,0                                                                                                                                                          | 20,4                                                                                              | -0,5                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 31.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 46,0                  | 73,3                                                                                                                                                          | 21,8                                                                                              | 6,6                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 40Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 46,3                  | 74,6                                                                                                                                                          | 18,4                                                                                              | 11,7                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 50Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 50,0                  | 79,3                                                                                                                                                          | 20,3                                                                                              | 19,8                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 46,6                  | 74,3                                                                                                                                                          | 17,3                                                                                              | 20,4                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 80Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 46,8                  | 76,2                                                                                                                                                          | 12,0                                                                                              | 24,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 100Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 47,0                  | 74,2                                                                                                                                                          | 11,0                                                                                              | 27,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 125Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45,4                  | 72,6                                                                                                                                                          | 8,2                                                                                               | 29,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 160Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 43,7                  | 71,2                                                                                                                                                          | 5,6                                                                                               | 30,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 200Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 44,4                  | 71,7                                                                                                                                                          | 5,4                                                                                               | 33,5                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 250Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 44,6                  | 70,9                                                                                                                                                          | 4,4                                                                                               | 36,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 315Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 43,2                  | 70,1                                                                                                                                                          | 4,1                                                                                               | 36,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 400Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 42,4                  | 68,4                                                                                                                                                          | 3,7                                                                                               | 37,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 500Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 43,1                  | 70,6                                                                                                                                                          | 3,9                                                                                               | 39,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 630Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 44,1                  | 71,1                                                                                                                                                          | 5,2                                                                                               | 42,2                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 800Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45,9                  | 74,0                                                                                                                                                          | 5,8                                                                                               | 45,1                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 1.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45,1                  | 73,2                                                                                                                                                          | 5,1                                                                                               | 45,1                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 1.25 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 42,4                  | 68,4                                                                                                                                                          | 4,0                                                                                               | 43,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 1.6 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40,0                  | 64,9                                                                                                                                                          | 3,1                                                                                               | 41,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 2.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 37,2                  | 63,0                                                                                                                                                          | 3,4                                                                                               | 38,4                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 2.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 34,6                  | 60,9                                                                                                                                                          | 3,2                                                                                               | 35,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 3.15 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 33,4                  | 59,6                                                                                                                                                          | 3,7                                                                                               | 34,6                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 4.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 31,7                  | 58,1                                                                                                                                                          | 4,5                                                                                               | 32,7                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 5.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 29,8                  | 56,9                                                                                                                                                          | 4,8                                                                                               | 30,3                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 6.3 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 27,1                  | 54,7                                                                                                                                                          | 4,6                                                                                               | 27,0                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 8.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 25,2                  | 53,8                                                                                                                                                          | 4,9                                                                                               | 24,1                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 10.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 22,4                  | 51,2                                                                                                                                                          | 4,8                                                                                               | 19,9                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 12.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19,5                  | 48,3                                                                                                                                                          | 4,7                                                                                               | 15,2                   |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 16.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 16,3                  | 45,2                                                                                                                                                          | 4,5                                                                                               | 9,7                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 20.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 12,1                  | 42,8                                                                                                                                                          | 4,4                                                                                               | 2,8                    |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
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| <b>Dátum vyhodnotenia</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       | <b>Vyhodnotil, meral:</b>                                                                                                                                     |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |
| 11. novembra 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | Prof. MVDr. Ján Venglovský, PhD                                                                                                                               |                                                                                                   |                        |                        |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |      |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |      |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |        |      |      |     |     |  |  |  |

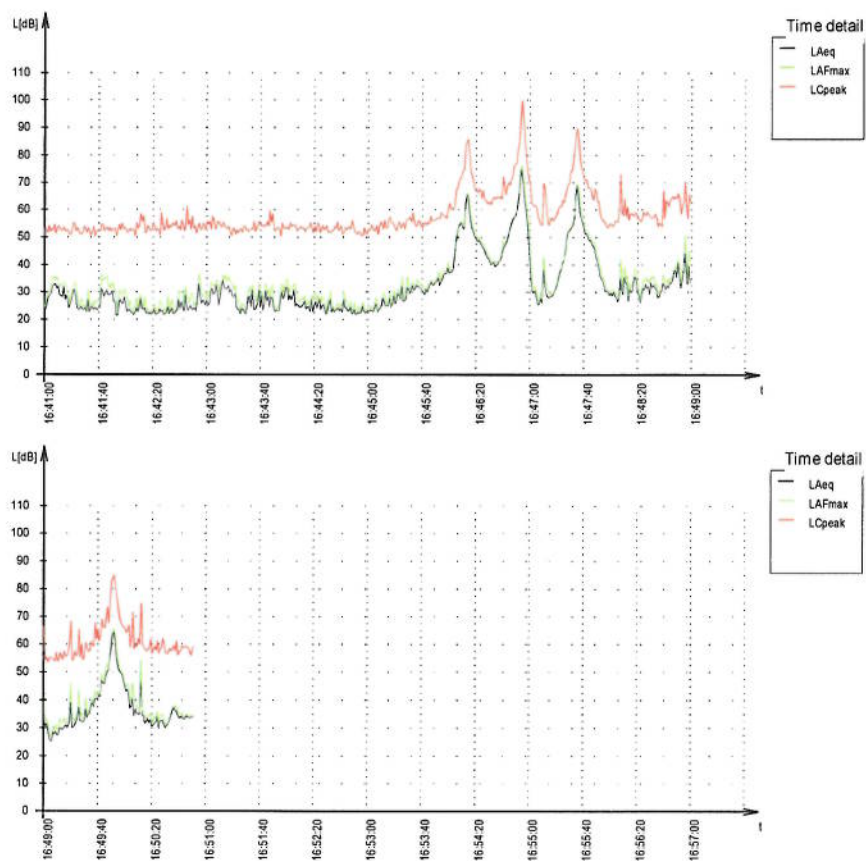




| <b>AUDITOR s.r.o.</b><br>Olivová 13, 040 01 Košice<br>IČO: 44 005 032, DIČ: 2022554820<br>Tel.: +421 911 141 158                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       | <b>Záznam z merania hluku</b><br>vo vonkajšom prostredí<br><b>19_37 0003</b>                                                                                  |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
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| <b>Zákazník:</b> AMDT AGRO s.r.o., SNP 250/75, 076 03 Hraň                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | <b>Miesto merania:</b> Malá Trňa, ul. Kráľovka 24/158                                                                                                         |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <b>Prevádzka:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | <b>Umiestnenie mikrofónu:</b> vo výške 150 cm, na statíve, na okraji cesty 4 m od rodinného domu na ulici Kráľovka č 24/158 a bol pevne spojený s hlukomerom. |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <b>Činnosť zdroja:</b> Doprava a celkový hluk na ulici Kráľovka oproti miestu plánovanej výstavby Počas merania prešlo 11 osobných áut                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       | <b>Prístroj:</b> NOR 118                                                                                                                                      | <b>Parametre prostredia</b>                                                                       |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | <b>Začiatok merania:</b> 6.11.2019<br><b>Dĺžka merania :</b> 14:53:00<br><b>Dĺžka periódy:</b> 0:57:52.0<br>0:0:1.0                                           | <b>Teplota:</b> 10°C<br><b>Tlak:</b> 1004 hPa<br><b>Vlhkosť:</b> 81 %<br><b>Vietor:</b> bezvetrie |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <b>Namerané akustické parametre</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                                                                                                                                               |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| File: F:\HLUK\HLUK_2019\19_37_TRNA\MERANIA\191106\NOR118_7847439_191106_0003.NBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |                                                                                                                                                               |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <table border="1"> <thead> <tr> <th>Deskriptor</th> <th>Level [dB]</th> <th>Deskriptor</th> <th>Level [dB]</th> <th>Percentile</th> <th>Level [dB]</th> </tr> </thead> <tbody> <tr> <td>L<sub>Aeq</sub></td> <td>51,2</td> <td>L<sub>Ceq</sub></td> <td>62,1</td> <td>L 0,1</td> <td>73,5</td> </tr> <tr> <td>L<sub>A1eq</sub></td> <td>-</td> <td>L<sub>Cfmax</sub></td> <td>92,9</td> <td>L 1</td> <td>63,5</td> </tr> <tr> <td>L<sub>Afmax</sub></td> <td>79,4</td> <td>L<sub>Cpeak</sub></td> <td>101,5</td> <td>L 5</td> <td>51,3</td> </tr> <tr> <td>L<sub>Afmin</sub></td> <td>19,0</td> <td>L<sub>Zeq</sub></td> <td>-</td> <td>L 10</td> <td>43,6</td> </tr> <tr> <td>L<sub>Ceq</sub>-L<sub>Aeq</sub></td> <td>10,9</td> <td>L<sub>Zfmax</sub></td> <td>-</td> <td>L 50</td> <td>27,9</td> </tr> <tr> <td>L<sub>Zeq</sub>-L<sub>Aeq</sub></td> <td>-</td> <td>L<sub>Zpeak</sub></td> <td>-</td> <td>L 90</td> <td>21,9</td> </tr> <tr> <td></td> <td></td> <td>L<sub>Af</sub>(TMS)</td> <td>-</td> <td>L 95</td> <td>20,8</td> </tr> <tr> <td></td> <td></td> <td>L<sub>Ai</sub>(TMS)</td> <td>-</td> <td>L 99</td> <td>19,9</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Deskriptor            | Level [dB]                                                                                                                                                    | Deskriptor                                                                                        | Level [dB]             | Percentile           | Level [dB] | L <sub>Aeq</sub> | 51,2 | L <sub>Ceq</sub> | 62,1  | L 0,1 | 73,5 | L <sub>A1eq</sub> | -    | L <sub>Cfmax</sub> | 92,9 | L 1  | 63,5 | L <sub>Afmax</sub> | 79,4  | L <sub>Cpeak</sub> | 101,5 | L 5  | 51,3 | L <sub>Afmin</sub> | 19,0 | L <sub>Zeq</sub> | -    | L 10 | 43,6  | L <sub>Ceq</sub> -L <sub>Aeq</sub> | 10,9 | L <sub>Zfmax</sub> | -    | L 50 | 27,9 | L <sub>Zeq</sub> -L <sub>Aeq</sub> | -    | L <sub>Zpeak</sub> | -   | L 90   | 21,9 |      |      | L <sub>Af</sub> (TMS) | -    | L 95 | 20,8 |      |      | L <sub>Ai</sub> (TMS) | -    | L 99 | 19,9 |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| Deskriptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Level [dB]            | Deskriptor                                                                                                                                                    | Level [dB]                                                                                        | Percentile             | Level [dB]           |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 51,2                  | L <sub>Ceq</sub>                                                                                                                                              | 62,1                                                                                              | L 0,1                  | 73,5                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>A1eq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -                     | L <sub>Cfmax</sub>                                                                                                                                            | 92,9                                                                                              | L 1                    | 63,5                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>Afmax</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 79,4                  | L <sub>Cpeak</sub>                                                                                                                                            | 101,5                                                                                             | L 5                    | 51,3                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>Afmin</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 19,0                  | L <sub>Zeq</sub>                                                                                                                                              | -                                                                                                 | L 10                   | 43,6                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>Ceq</sub> -L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10,9                  | L <sub>Zfmax</sub>                                                                                                                                            | -                                                                                                 | L 50                   | 27,9                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| L <sub>Zeq</sub> -L <sub>Aeq</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -                     | L <sub>Zpeak</sub>                                                                                                                                            | -                                                                                                 | L 90                   | 21,9                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | L <sub>Af</sub> (TMS)                                                                                                                                         | -                                                                                                 | L 95                   | 20,8                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       | L <sub>Ai</sub> (TMS)                                                                                                                                         | -                                                                                                 | L 99                   | 19,9                 |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <table border="1"> <thead> <tr> <th>Frekvencia [Hz]</th> <th>L<sub>Aeq</sub> [dB]</th> <th>L<sub>fmax</sub> [dB]</th> <th>L<sub>fmin</sub> [dB]</th> <th>L<sub>Af</sub> [dB]</th> </tr> </thead> <tbody> <tr><td>6.3Hz</td><td>37,3</td><td>62,4</td><td>13,3</td><td>-48,1</td></tr> <tr><td>8.0Hz</td><td>37,0</td><td>60,6</td><td>13,1</td><td>-40,8</td></tr> <tr><td>10Hz</td><td>37,9</td><td>62,0</td><td>16,1</td><td>-32,5</td></tr> <tr><td>12.5Hz</td><td>39,1</td><td>63,7</td><td>18,4</td><td>-24,3</td></tr> <tr><td>16Hz</td><td>40,2</td><td>66,2</td><td>21,7</td><td>-16,5</td></tr> <tr><td>20Hz</td><td>40,7</td><td>68,4</td><td>22,0</td><td>-9,8</td></tr> <tr><td>25Hz</td><td>48,7</td><td>75,7</td><td>23,5</td><td>4,0</td></tr> <tr><td>31.5Hz</td><td>50,0</td><td>75,9</td><td>25,9</td><td>10,6</td></tr> <tr><td>40Hz</td><td>50,6</td><td>81,3</td><td>23,6</td><td>16,0</td></tr> <tr><td>50Hz</td><td>51,6</td><td>82,1</td><td>25,2</td><td>21,4</td></tr> <tr><td>63Hz</td><td>56,6</td><td>90,9</td><td>22,4</td><td>30,4</td></tr> <tr><td>80Hz</td><td>49,0</td><td>78,8</td><td>16,9</td><td>26,5</td></tr> <tr><td>100Hz</td><td>50,1</td><td>81,0</td><td>13,8</td><td>31,0</td></tr> <tr><td>125Hz</td><td>57,7</td><td>90,6</td><td>10,8</td><td>41,6</td></tr> <tr><td>160Hz</td><td>45,7</td><td>75,5</td><td>7,7</td><td>32,3</td></tr> <tr><td>200Hz</td><td>47,2</td><td>81,3</td><td>5,5</td><td>36,3</td></tr> <tr><td>250Hz</td><td>43,9</td><td>74,1</td><td>6,1</td><td>35,3</td></tr> <tr><td>315Hz</td><td>41,6</td><td>68,5</td><td>5,1</td><td>35,0</td></tr> <tr><td>400Hz</td><td>40,1</td><td>67,2</td><td>5,5</td><td>35,3</td></tr> <tr><td>500Hz</td><td>41,1</td><td>71,1</td><td>5,0</td><td>37,9</td></tr> <tr><td>630Hz</td><td>41,1</td><td>69,9</td><td>5,0</td><td>39,2</td></tr> <tr><td>800Hz</td><td>42,2</td><td>70,6</td><td>6,2</td><td>41,4</td></tr> <tr><td>1.0 k</td><td>42,5</td><td>71,0</td><td>4,7</td><td>42,5</td></tr> <tr><td>1.25 k</td><td>41,1</td><td>67,3</td><td>4,5</td><td>41,7</td></tr> <tr><td>1.6 k</td><td>40,3</td><td>67,9</td><td>4,4</td><td>41,3</td></tr> <tr><td>2.0 k</td><td>38,2</td><td>65,2</td><td>4,5</td><td>39,4</td></tr> <tr><td>2.5 k</td><td>36,8</td><td>66,0</td><td>4,7</td><td>38,1</td></tr> <tr><td>3.15 k</td><td>34,1</td><td>62,7</td><td>4,3</td><td>35,3</td></tr> <tr><td>4.0 k</td><td>32,5</td><td>60,0</td><td>4,3</td><td>33,5</td></tr> <tr><td>5.0 k</td><td>30,0</td><td>58,6</td><td>4,9</td><td>30,5</td></tr> <tr><td>6.3 k</td><td>27,7</td><td>57,1</td><td>4,5</td><td>27,6</td></tr> <tr><td>8.0 k</td><td>26,9</td><td>57,3</td><td>4,7</td><td>25,8</td></tr> <tr><td>10.0 k</td><td>23,4</td><td>54,9</td><td>4,6</td><td>20,9</td></tr> <tr><td>12.5 k</td><td>21,8</td><td>52,1</td><td>4,7</td><td>17,5</td></tr> <tr><td>16.0 k</td><td>18,7</td><td>49,7</td><td>4,3</td><td>12,1</td></tr> <tr><td>20.0 k</td><td>12,3</td><td>43,4</td><td>4,3</td><td>3,0</td></tr> </tbody> </table> | Frekvencia [Hz]       | L <sub>Aeq</sub> [dB]                                                                                                                                         | L <sub>fmax</sub> [dB]                                                                            | L <sub>fmin</sub> [dB] | L <sub>Af</sub> [dB] | 6.3Hz      | 37,3             | 62,4 | 13,3             | -48,1 | 8.0Hz | 37,0 | 60,6              | 13,1 | -40,8              | 10Hz | 37,9 | 62,0 | 16,1               | -32,5 | 12.5Hz             | 39,1  | 63,7 | 18,4 | -24,3              | 16Hz | 40,2             | 66,2 | 21,7 | -16,5 | 20Hz                               | 40,7 | 68,4               | 22,0 | -9,8 | 25Hz | 48,7                               | 75,7 | 23,5               | 4,0 | 31.5Hz | 50,0 | 75,9 | 25,9 | 10,6                  | 40Hz | 50,6 | 81,3 | 23,6 | 16,0 | 50Hz                  | 51,6 | 82,1 | 25,2 | 21,4 | 63Hz | 56,6 | 90,9 | 22,4 | 30,4 | 80Hz | 49,0 | 78,8 | 16,9 | 26,5 | 100Hz | 50,1 | 81,0 | 13,8 | 31,0 | 125Hz | 57,7 | 90,6 | 10,8 | 41,6 | 160Hz | 45,7 | 75,5 | 7,7 | 32,3 | 200Hz | 47,2 | 81,3 | 5,5 | 36,3 | 250Hz | 43,9 | 74,1 | 6,1 | 35,3 | 315Hz | 41,6 | 68,5 | 5,1 | 35,0 | 400Hz | 40,1 | 67,2 | 5,5 | 35,3 | 500Hz | 41,1 | 71,1 | 5,0 | 37,9 | 630Hz | 41,1 | 69,9 | 5,0 | 39,2 | 800Hz | 42,2 | 70,6 | 6,2 | 41,4 | 1.0 k | 42,5 | 71,0 | 4,7 | 42,5 | 1.25 k | 41,1 | 67,3 | 4,5 | 41,7 | 1.6 k | 40,3 | 67,9 | 4,4 | 41,3 | 2.0 k | 38,2 | 65,2 | 4,5 | 39,4 | 2.5 k | 36,8 | 66,0 | 4,7 | 38,1 | 3.15 k | 34,1 | 62,7 | 4,3 | 35,3 | 4.0 k | 32,5 | 60,0 | 4,3 | 33,5 | 5.0 k | 30,0 | 58,6 | 4,9 | 30,5 | 6.3 k | 27,7 | 57,1 | 4,5 | 27,6 | 8.0 k | 26,9 | 57,3 | 4,7 | 25,8 | 10.0 k | 23,4 | 54,9 | 4,6 | 20,9 | 12.5 k | 21,8 | 52,1 | 4,7 | 17,5 | 16.0 k | 18,7 | 49,7 | 4,3 | 12,1 | 20.0 k | 12,3 | 43,4 | 4,3 | 3,0 |  |  |  |
| Frekvencia [Hz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | L <sub>Aeq</sub> [dB] | L <sub>fmax</sub> [dB]                                                                                                                                        | L <sub>fmin</sub> [dB]                                                                            | L <sub>Af</sub> [dB]   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 6.3Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 37,3                  | 62,4                                                                                                                                                          | 13,3                                                                                              | -48,1                  |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 8.0Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 37,0                  | 60,6                                                                                                                                                          | 13,1                                                                                              | -40,8                  |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 10Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 37,9                  | 62,0                                                                                                                                                          | 16,1                                                                                              | -32,5                  |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 12.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 39,1                  | 63,7                                                                                                                                                          | 18,4                                                                                              | -24,3                  |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 16Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 40,2                  | 66,2                                                                                                                                                          | 21,7                                                                                              | -16,5                  |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 20Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 40,7                  | 68,4                                                                                                                                                          | 22,0                                                                                              | -9,8                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 25Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 48,7                  | 75,7                                                                                                                                                          | 23,5                                                                                              | 4,0                    |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 31.5Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 50,0                  | 75,9                                                                                                                                                          | 25,9                                                                                              | 10,6                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 40Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 50,6                  | 81,3                                                                                                                                                          | 23,6                                                                                              | 16,0                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 50Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 51,6                  | 82,1                                                                                                                                                          | 25,2                                                                                              | 21,4                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 56,6                  | 90,9                                                                                                                                                          | 22,4                                                                                              | 30,4                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 80Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 49,0                  | 78,8                                                                                                                                                          | 16,9                                                                                              | 26,5                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 100Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50,1                  | 81,0                                                                                                                                                          | 13,8                                                                                              | 31,0                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 125Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 57,7                  | 90,6                                                                                                                                                          | 10,8                                                                                              | 41,6                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 160Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45,7                  | 75,5                                                                                                                                                          | 7,7                                                                                               | 32,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 200Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 47,2                  | 81,3                                                                                                                                                          | 5,5                                                                                               | 36,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 250Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 43,9                  | 74,1                                                                                                                                                          | 6,1                                                                                               | 35,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 315Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 41,6                  | 68,5                                                                                                                                                          | 5,1                                                                                               | 35,0                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 400Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40,1                  | 67,2                                                                                                                                                          | 5,5                                                                                               | 35,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 500Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 41,1                  | 71,1                                                                                                                                                          | 5,0                                                                                               | 37,9                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 630Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 41,1                  | 69,9                                                                                                                                                          | 5,0                                                                                               | 39,2                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 800Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 42,2                  | 70,6                                                                                                                                                          | 6,2                                                                                               | 41,4                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 1.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 42,5                  | 71,0                                                                                                                                                          | 4,7                                                                                               | 42,5                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 1.25 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 41,1                  | 67,3                                                                                                                                                          | 4,5                                                                                               | 41,7                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 1.6 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40,3                  | 67,9                                                                                                                                                          | 4,4                                                                                               | 41,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 2.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 38,2                  | 65,2                                                                                                                                                          | 4,5                                                                                               | 39,4                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 2.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 36,8                  | 66,0                                                                                                                                                          | 4,7                                                                                               | 38,1                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 3.15 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 34,1                  | 62,7                                                                                                                                                          | 4,3                                                                                               | 35,3                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 4.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 32,5                  | 60,0                                                                                                                                                          | 4,3                                                                                               | 33,5                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 5.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 30,0                  | 58,6                                                                                                                                                          | 4,9                                                                                               | 30,5                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 6.3 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 27,7                  | 57,1                                                                                                                                                          | 4,5                                                                                               | 27,6                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 8.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 26,9                  | 57,3                                                                                                                                                          | 4,7                                                                                               | 25,8                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 10.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 23,4                  | 54,9                                                                                                                                                          | 4,6                                                                                               | 20,9                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 12.5 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 21,8                  | 52,1                                                                                                                                                          | 4,7                                                                                               | 17,5                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 16.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 18,7                  | 49,7                                                                                                                                                          | 4,3                                                                                               | 12,1                   |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 20.0 k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 12,3                  | 43,4                                                                                                                                                          | 4,3                                                                                               | 3,0                    |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                               |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                               |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| <b>Dátum vyhodnotenia</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       | <b>Vyhodnotil, meral:</b>                                                                                                                                     |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |
| 11. novembra 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       | Prof. MVDr. Ján Venglovský, PhD                                                                                                                               |                                                                                                   |                        |                      |            |                  |      |                  |       |       |      |                   |      |                    |      |      |      |                    |       |                    |       |      |      |                    |      |                  |      |      |       |                                    |      |                    |      |      |      |                                    |      |                    |     |        |      |      |      |                       |      |      |      |      |      |                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |       |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |      |        |      |      |     |     |  |  |  |







## 5. Hygienické požiadavky na hluk vo vonkajšom prostredí

Posúdenie hlukovej záťaže v dotknutom území bolo realizované na základe modelovania hlukovej záťaže pomocou výpočtového programu CADNA\_A, ver. 3.7.123, Datakustik, Mníchov.

Metodika vyhodnocovania vypočítaných údajov bola zvolená tak, aby čo najkomplexnejšie postihovala sledované akustické pomery a boli dodržané určené podmienky vyhlášky MZ č. 549/2007 Z.z. a ďalšej platnej legislatívy.

Výhladové hodnoty ekvivalentných hladín akustického tlaku  $L_{Aeq}$ , ako aj súčasné akustické pomery boli určené pomocou výpočtového programu CADNA\_A verzia 3.7.123. Vypočítané údaje boli vyhodnotené vo vzťahu k najvyšším prípustným hodnotám (NPH) hluku vo vonkajšom prostredí, ktoré definuje príloha k vyhláške MZ č. 549/2007 Z.z.

Tabuľka č.: 2

| Kategoría územia | Opis chráneného územia alebo vonkajšieho priestoru                                                                                                                                                                    | Referenčný časový interval | Prípustné hodnoty [dB]           |                        |                    |                      |                      |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------|------------------------|--------------------|----------------------|----------------------|
|                  |                                                                                                                                                                                                                       |                            | Hluk z dopravy                   |                        |                    |                      | Hluk z iných zdrojov |
|                  |                                                                                                                                                                                                                       |                            | Pozemná a vodná doprava<br>b) c) | Železničné dráhy<br>c) | Letecká doprava    |                      |                      |
|                  |                                                                                                                                                                                                                       |                            |                                  |                        | L <sub>Aeq,p</sub> | L <sub>ASmax,p</sub> |                      |
| I.               | Územie s osobitnou ochranou pred hlukom, napr. kúpeľné miesta kúpeľné a liečebné areály                                                                                                                               | deň                        | 45                               | 45                     | 50                 | -                    | 45                   |
|                  |                                                                                                                                                                                                                       | večer                      | 45                               | 45                     | 50                 | -                    | 45                   |
|                  |                                                                                                                                                                                                                       | noc                        | 40                               | 40                     | 40                 | 60                   | 40                   |
| II.              | Priestor pred oknami obytných miestností bytových a rodinných domov, priestor pred oknami chránených miestností školských budov, zdravotníckych zariadení a iných chránených objektov, <sup>d)</sup> rekreačné územie | deň                        | 50                               | 50                     | 55                 | -                    | 50                   |
|                  |                                                                                                                                                                                                                       | večer                      | 50                               | 50                     | 55                 | -                    | 50                   |
|                  |                                                                                                                                                                                                                       | noc                        | 45                               | 45                     | 45                 | 65                   | 45                   |
| III.             | Územie ako v kategórii II. v okolí <sup>a)</sup> diaľnic, ciest I. a II. triedy miestnych komunikácií s hromadnou dopravou, železničných dráh a letísk, mestské centrá                                                | deň                        | 60                               | 60                     | 60                 | -                    | 50                   |
|                  |                                                                                                                                                                                                                       | večer                      | 60                               | 60                     | 60                 | -                    | 50                   |
|                  |                                                                                                                                                                                                                       | noc                        | 50                               | 55                     | 50                 | 75                   | 45                   |
| IV.              | Územie bez obytnej funkcie a bez chránených vonkajších priestorov, výrobné zóny, priemyselné parky, areály závodov                                                                                                    | deň                        | 70                               | 70                     | 70                 | -                    | 70                   |
|                  |                                                                                                                                                                                                                       | večer                      | 70                               | 70                     | 70                 | -                    | 70                   |
|                  |                                                                                                                                                                                                                       | noc                        | 70                               | 70                     | 70                 | 95                   | 70                   |

Poznámky k tabuľke:

- Prípustné hodnoty platia pre suchý povrch vozovky a nezasnežený terén.
- Pozemná doprava je doprava na pozemných komunikáciách vrátane električkovej dopravy.
- Zastávky miestnej hromadnej dopravy, autobusovej, železničnej, vodnej dopravy a stanovišťa taxislužieb určené iba na nastupovanie a vystupovanie osôb sa hodnotia ako súčasť pozemnej a vodnej dopravy.
- Prípustné hodnoty pred fasádou nebytových objektov sa uplatňujú v čase ich používania (napríklad školy počas vyučovania).

Okolie je:

- 1) územie do vzdialenosti 100 m od osi príslušnej koľaje železničnej dráhy,
- 2) územie do vzdialenosti 500 m od okraja pohybových plôch letísk, územie do vzdialenosti 1 000 m od osi vzletových a pristávacích dráh a územie do vzdialenosti 1 000 m od kolmého priemetu určených letových trajektórií<sup>1)</sup> s dĺžkou priemetu 9 000 m od okraja vzletových a pristávacích dráh letísk.

Poznámka:

Novelizáciou vyhlášky 549/2007 Z.z., vyhláškou 237/2009 Z.z., bolo zrušené okolie diaľnic, ciest I. a II. triedy a miestnych komunikácií s hromadnou dopravou. V zmysle výkladu novej vyhlášky 237/2009 Z.z. Úradom verejného zdravotníctva SR UVZ SR (Metodické usmernenie Hlavného hygienika OHŽP-7197/2009, na zabezpečenie jednotného postupu regionálnych úradov verejného zdravotníctva pri uplatňovaní prípustných hodnôt určujúcich veličín hluku vo vonkajšom prostredí pri hodnotení hluku z dopravy na pozemných komunikáciách a vodných plochách vrátane miestnej hromadnej dopravy), okolie do 100 metrov od osi cesty a miestnych komunikácií s hromadnou dopravou, v sledovanom území, patrí v zmysle vyhlášky 549/2007 Z.z., do kategórie III.

Ak je preukázané, že jestvujúci hluk z pozemnej a koľajovej dopravy prekračujúci prípustné hodnoty podľa tabuľky č. 1 pre kategórie územia II a III zapríčinený postupným narastaním dopravy nie je možné obmedziť dostupnými technickými opatreniami alebo organizačnými opatreniami bez podstatného narušenia dopravného výkonu, posudzovaná hodnota pre kategóriu územia II môže prekročiť prípustné hodnoty určujúcich veličín hluku z pozemnej dopravy uvedené v tabuľke č. 1 najviac o 5 dB a pre kategóriu územia III a IV najviac o 10 dB

Na základe súhlasného stanoviska orgánu na ochranu zdravia sa môžu umiestňovať nové budovy na bývanie a budovy vyžadujúce tiché prostredie okrem škôl, škôlok, nemocničných izieb a podobne aj v území, kde hluk z dopravy prekračuje hodnoty uvedené v tabuľke pre kategóriu územia II, alebo v území, kde takéto prekročenie je možné v budúcnosti očakávať,

- a) ak sa vykonávajú opatrenia na ochranu ich vnútorného prostredia,
- b) ak posudzovaná hodnota v primeranej časti príslušného vonkajšieho prostredia budovy na bývanie alebo oddychovej zóny v tesnej blízkosti budovy na bývanie neprekročí prípustné hodnoty uvedené v tabuľke č. 1 pre kategóriu územia II o viac ako 5 dB a pre kategóriu územia III a IV o viac ako 10 dB.

V zmysle citovanej Vyhlášky MZ SR navrhujeme predmetné vonkajšie prostredie zaradiť do II. kategórie, kde pre najvyššiu prípustnú ekvivalentnú hladinu A hluku z dopravy (pozemná) platia nasledovné prípustné hodnoty:

|           |                        |
|-----------|------------------------|
| pre deň   | $L_{Aeq12h,p} = 50$ dB |
| pre večer | $L_{Aeq4h,p} = 50$ dB  |
| pre noc   | $L_{Aeq8h,p} = 45$ dB  |

Pre hluk z iných zdrojov:

|           |                        |
|-----------|------------------------|
| pre deň   | $L_{Aeq12h,p} = 50$ dB |
| pre večer | $L_{Aeq4h,p} = 50$ dB  |
| pre noc   | $L_{Aeq8h,p} = 45$ dB  |

Tabuľka 3: Korekcie K na stanovenie posudzovaných hodnôt hluku vo vonkajšom prostredí

| Špecifický hluk                                      | K <sup>a)</sup><br>na stanovenie<br>$L_n$<br>(dB) |
|------------------------------------------------------|---------------------------------------------------|
| Zvlášť rušivý hluk, tónový hluk bežný impulzový hluk | +5                                                |
| Vysoko impulzový hluk                                | +12                                               |
| Vysoko energetický impulzový hluk                    | podľa b)                                          |

Poznámky k tabuľke:

- a) Korekcie sa uplatňujú pre časový interval trvania špecifického hluku.
- b) Pri hodnotení vysoko energetického impulzového hluku sa primerane postupuje podľa slovenskej technickej normy, STN ISO 1996-1: 2006 Akustika. Opis, meranie a posudzovanie hluku vo vonkajšom prostredí. Časť 1: Základné veličiny a postupy posudzovania vrátane prílohy B.

## **6. Popis hlukovej situácie**

### **6.1. Cestná doprava**

#### **6.1.1. Súčasný stav:**

Je to pomerne tichá oblasť s občasným prejazdom osobných, úžitkových áut a poľnohospodárskych strojov do vinohradov. Na celkovom hluku sa podieľajú aktivity obyvateľov pri prácach na priľahlých záhradách a údržbe nehnuteľnosti, zvukové prejavy zvierat (psy, hydina) a tiež prejazdy vlakov.

#### **Navrhovaný stav:**

Súvisiaca doprava:

Prevádzka sa predpokladá v dennom prípadne večernom čase.

Predpoklad dvaja zamestnanci: 4 prejazdy osobných áut.

Sezónna prevádzka obchodu: predpoklad 15 osobných áut za deň – 30 prejazdov za deň.

## **7. Hluk počas výstavby**

Počas výstavby možno očakávať zvýšenie hluku, spôsobené činnosťou stavebných mechanizmov v priestore staveniska. Tento vplyv však bude obmedzený na priestor stavby a časovo obmedzený na dobu výstavby, predovšetkým v čase terénnych úprav a zemných prác. V neskorších fázach výstavby bude hluková záťaž obyvateľstva v území nižšia.

V pracovných dňoch od 7.00 do 21.00 h a v sobotu od 8.00 do 13.00 h sa pri hodnotení hluku zo stavebnej činnosti vo vonkajšom prostredí stanovuje posudzovaná hodnota pripočítaním korekcie  $K = (-10)$  dB k ekvivalentnej hladine A zvuku v uvedených časových intervaloch. V týchto časových intervaloch sa neuplatňujú korekcie

V pracovných dňoch od 8.00 h do 19.00 h sa pri hodnotení hluku zo stavebnej činnosti vo vnútri budov posudzovaná hodnota stanovuje pripočítaním korekcie  $K = (-15)$  dB k maximálnej hladine A zvuku. Pri hodnotení hluku zo stavebnej činnosti sa neuplatňuje korekcia pre špecifický hluk. Z toho dôvodu sa odporúčame zásobovanie stavby a hlučné operácie vykonávať len vo vyššie uvedenom časovom rozpätí v rámci pracovnej zmeny.

## 8. Výpočtový model

Hodnoty ekvivalentných hladín hluku vo výpočtových bodoch uvádzame v obrazových prílohách.

-  imisný (výpočtový bod) prípustné hodnoty určujúcich veličín hluku sú prekročené,
-  imisný (výpočtový bod) prípustné hodnoty určujúcich veličín hluku nie sú prekročené.

Z poskytnutých projektových podkladov bol vo výpočtovom programe CADNA\_A vytvorený výpočtový model. Výsledky a priebehy izofón sú graficky spracované vo výške 1,5 m nad terénom. Delenie pásiem po 1 dB resp. 5dB.

Imisné body sme umiestnili pred fasádami najbližších posudzovaných rodinných domov vo výške 1.5 m nad podlahou a 2 m pred fasádou jednotlivých domov.

Akustická situácia vo vonkajšom priestore záujmového územia bola posudzovaná v zmysle zákona NR SR č. 355/2007 Z.z. z 21. júna 2007, o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov a vyhlášky MZ SR č. 549/2007 Z.z. v aktualizovanej podobe, ktorou sa ustanovujú podrobnosti o prípustných hodnotách hluku, infrazvuku a vibrácií a o požiadavkách na objektivizáciu hluku, infrazvuku a vibrácií v životnom prostredí.

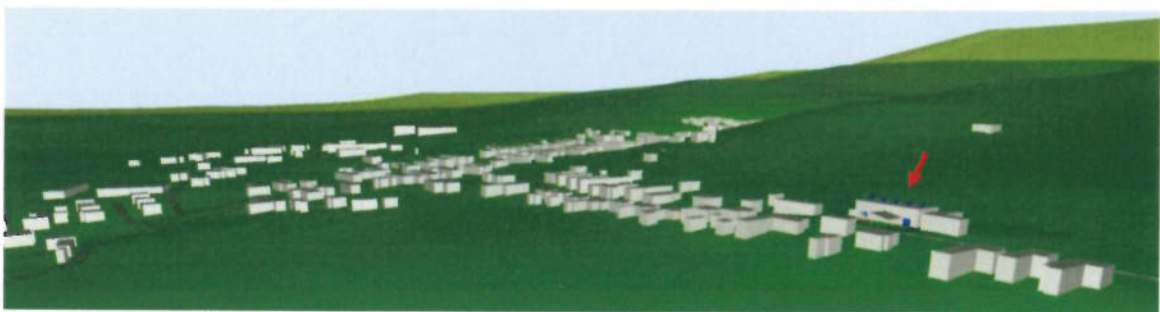
Tabuľka č. 4: Technologické zdroje hluku s ktorými sa v štúdiu uvažovalo

Bodové zdroje

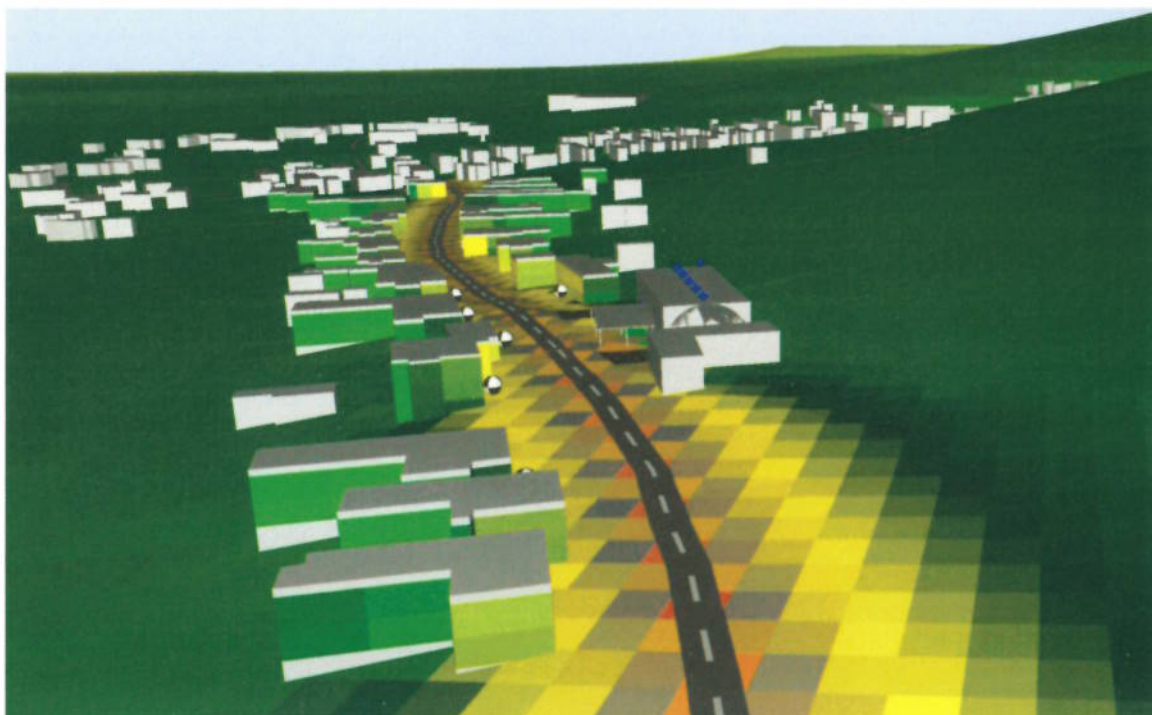
| Meno      | ID   | Akustic.výkon Lw |       |       | Lw / Li |         | Čas pôsobenia |        |        | Výška<br>(m) | Súradnice  |             |        |
|-----------|------|------------------|-------|-------|---------|---------|---------------|--------|--------|--------------|------------|-------------|--------|
|           |      | Deň              | Večer | Noc   | typ     | Hodnota | Deň           | Večer  | Noc    |              | X          | Y           | Z      |
|           |      | (dBA)            | (dBA) | (dBA) |         | dBA     | (min)         | (min)  | (min)  |              | (m)        | (m)         | (m)    |
| VZT_01    | Z_01 | 65,0             | 65,0  | 65,0  | Lw      | 65      | 720,00        | 240,00 | 480,00 | 8,05         | -232582,05 | -1270748,19 | 186,05 |
| VZT_02    | Z_02 | 65,0             | 65,0  | 65,0  | Lw      | 65      | 720,00        | 240,00 | 480,00 | 8,05         | -232584,78 | -1270742,84 | 186,05 |
| VZT_03    | Z_03 | 65,0             | 65,0  | 65,0  | Lw      | 65      | 720,00        | 240,00 | 480,00 | 8,05         | -232587,50 | -1270737,49 | 186,05 |
| VZT_04    | Z_04 | 65,0             | 65,0  | 65,0  | Lw      | 65      | 720,00        | 240,00 | 480,00 | 8,05         | -232590,22 | -1270732,15 | 186,05 |
| VZT_05    | Z_05 | 65,0             | 65,0  | 65,0  | Lw      | 65      | 720,00        | 240,00 | 480,00 | 8,05         | -232592,95 | -1270726,80 | 186,05 |
| Kotolňa   | Z_06 | 60,0             | 60,0  | 60,0  | Lw      | 60      | 720,00        | 240,00 | 480,00 | 8,05         | -232590,38 | -1270721,74 | 186,05 |
| Šatňa_VZT | Z_07 | 45,0             | 45,0  | 45,0  | Lw      | 45      | 120,00        | 20,00  | 45,00  | 3,55         | -232596,79 | -1270721,20 | 181,55 |
| Toaleta   | Z_08 | 45,0             | 45,0  | 45,0  | Lw      | 45      | 120,00        | 20,00  | 45,00  | 3,55         | -232595,49 | -1270720,55 | 181,55 |

Tabuľka č. 5: Vertikálne plošné zdroje (vráta)

| Meno            | ID    | Akustic.výkon Lw |       |       | Akustic.výkon Lw" |       |       | Čas pôsobenia |       |       | K0  |
|-----------------|-------|------------------|-------|-------|-------------------|-------|-------|---------------|-------|-------|-----|
|                 |       | Deň              | Večer | Noc   | Deň               | Večer | Noc   | Deň           | Večer | Noc   |     |
|                 |       | (dBA)            | (dBA) | (dBA) | (dBA)             | (dBA) | (dBA) | (min)         | (min) | (min) |     |
| Dvere_rolovacie | ZP_01 | 64,5             | 64,5  | 64,5  | 55,0              | 55,0  | 55,0  | 480,00        | 60,00 | 15,00 | 3,0 |
| Dvere_rolovacie | ZP_02 | 64,5             | 64,5  | 64,5  | 55,0              | 55,0  | 55,0  | 480,00        | 60,00 | 15,00 | 3,0 |



Obrázok 5.: Výpočtový model

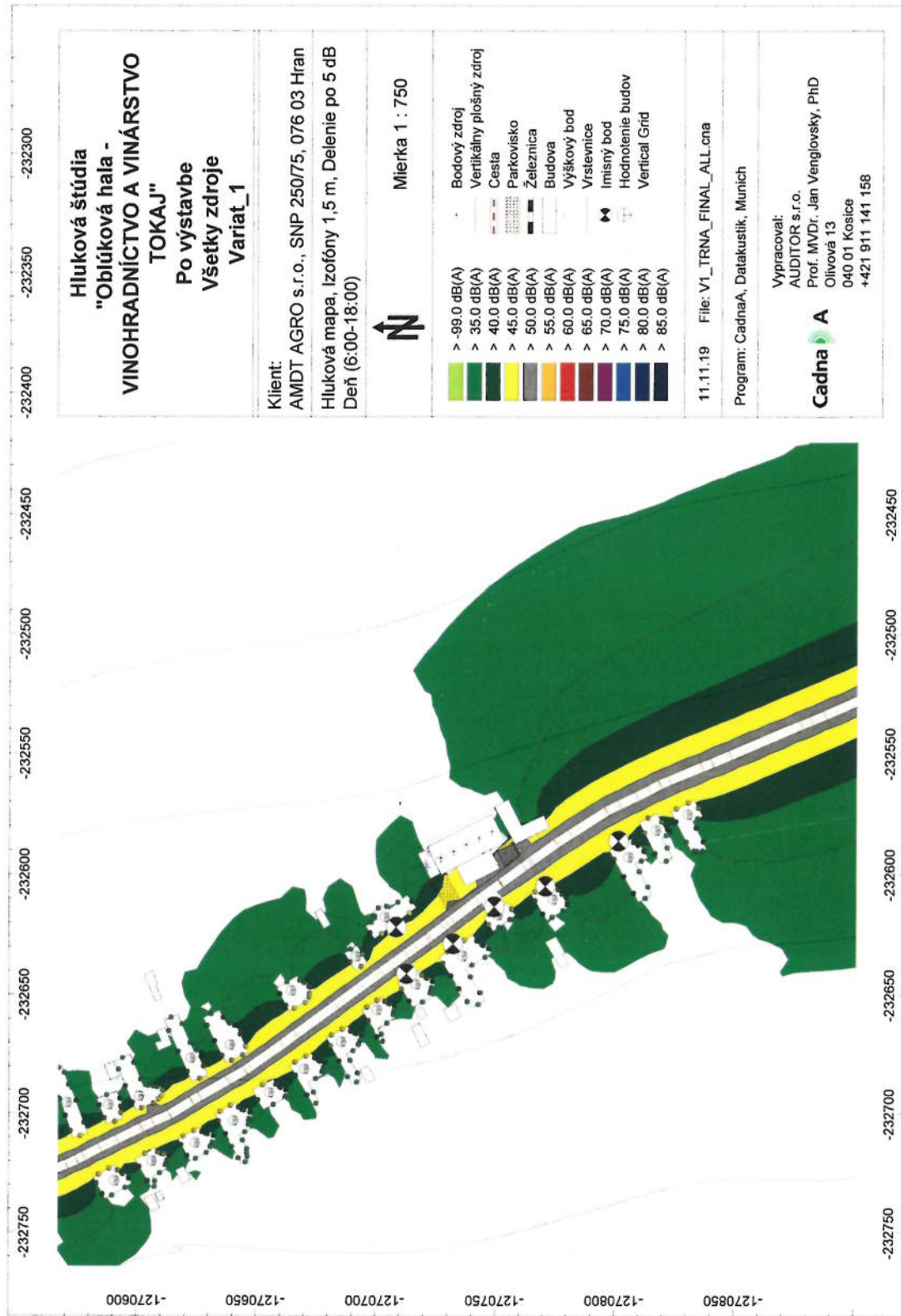


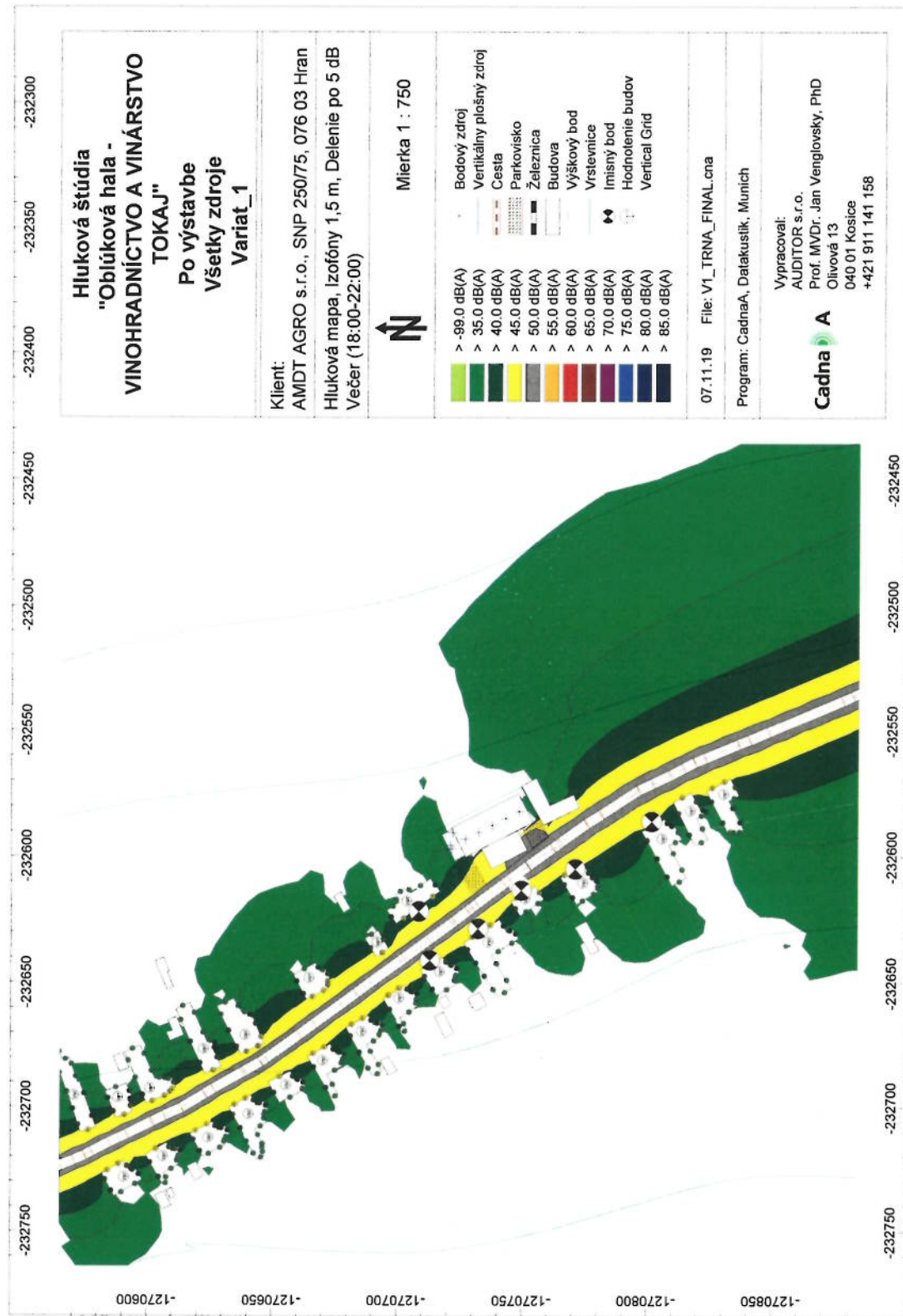
Obrázok 6.: Výpočtový model a umiestnenie imisných bodov

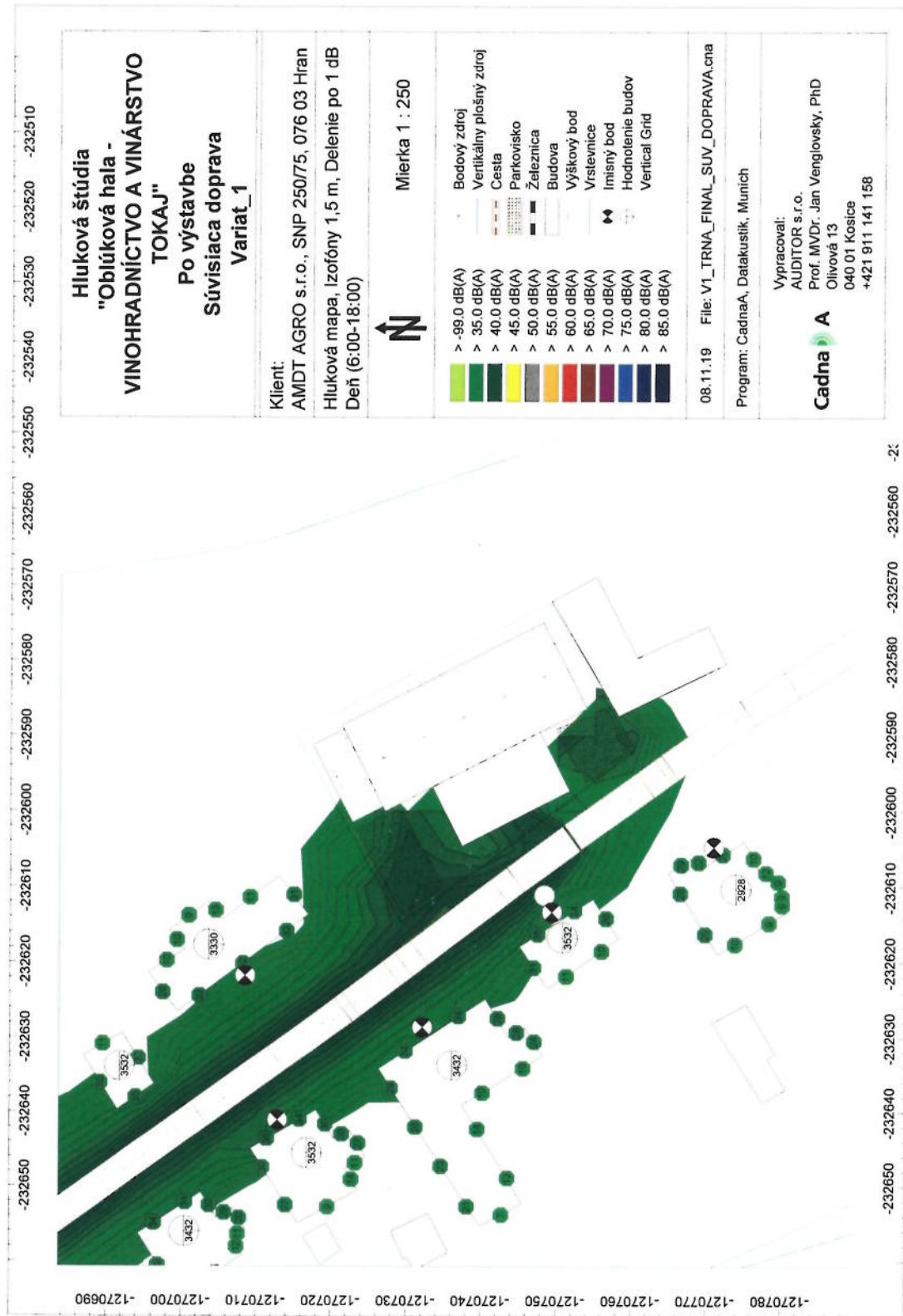
Na základe vykonanej predikcie akustických pomerov v rozsahu požiadaviek zákona NR SR č. 355/2007 v záujmovom území od emisie hluku bolo zistené, že:

1. z mobilných zdrojov pozemnej dopravy, ktoré priamo súvisia iba s činnosťou navrhovanej prevádzky:
  - a. pre denný čas, nie je PH prekročená,
  - b. pre večerný čas, nie je PH prekročená
  - c. pre nočný čas nie je PH prekročená
2. z iných (technologických zdrojov) pre referenčný časový interval deň, večer a noc nie je PH prekročená

Vypočítané ekvivalentné hladiny A hluku pre referenčný časový interval deň  $L_{PAeq,12h}$ , večer  $L_{PAeq,4h}$ , noc  $L_{PAeq,8h}$  vo výpočtových bodoch v záujmovom území udávame v grafickej prílohe a tabuľkách.







## 9. Výsledky

Predikované hodnoty hluku vo výpočtových bodoch pred fasádami posudzovaných rodinných domov uvádzame v nasledujúcich tabuľkách.

**Tabuľka č.6: Po výstavbe všetky zdroje (technológia a všetka doprava)**

| Meno                  | ID   | Hladina Lr |       |       | Limit. hodnota |       |       | Výška |   | Súradnice  |             |        |
|-----------------------|------|------------|-------|-------|----------------|-------|-------|-------|---|------------|-------------|--------|
|                       |      | Deň        | Večer | Noc   | Deň            | Večer | Noc   |       |   | X          | Y           | Z      |
|                       |      | (dBA)      | (dBA) | (dBA) | (dBA)          | (dBA) | (dBA) | (m)   |   | (m)        | (m)         | (m)    |
| RD_Kraľovka_158/24_2  | V_01 | 48,4       | 47,8  | 22,9  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232613,33 | -1270749,31 | 178,19 |
| RD_Kraľovka_158/24    | V_02 | 46,7       | 46,0  | 22,1  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232628,55 | -1270732,07 | 177,58 |
| RD_Kraľovka_193/26    | V_03 | 45,8       | 45,2  | 21,9  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232604,74 | -1270770,89 | 177,56 |
| RD_Kraľovka_157/28    | V_04 | 45,4       | 44,9  | 17,3  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232585,98 | -1270801,42 | 176,95 |
| RD_Kraľovka_159/22    | V_05 | 47,9       | 47,2  | 20,0  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232641,02 | -1270712,80 | 176,43 |
| RD_RD_Kraľovka_150/25 | V_06 | 44,6       | 44,0  | 12,3  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232621,73 | -1270708,46 | 177,17 |

**Tabuľka č.7: Po výstavbe - iba súvisiaca doprava**

| Meno                  | ID   | Hladina Lr |       |       | Limit. hodnota |       |       | Výška |   | Súradnice  |             |        |
|-----------------------|------|------------|-------|-------|----------------|-------|-------|-------|---|------------|-------------|--------|
|                       |      | Deň        | Večer | Noc   | Deň            | Večer | Noc   |       |   | X          | Y           | Z      |
|                       |      | (dBA)      | (dBA) | (dBA) | (dBA)          | (dBA) | (dBA) | (m)   |   | (m)        | (m)         | (m)    |
| RD_Kraľovka_158/24_2  | V_01 | 34,8       | 32,2  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232613,33 | -1270749,31 | 178,19 |
| RD_Kraľovka_158/24    | V_02 | 33,8       | 31,2  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232628,55 | -1270732,07 | 177,58 |
| RD_Kraľovka_193/26    | V_03 | 25,7       | 24,6  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232604,74 | -1270770,89 | 177,56 |
| RD_Kraľovka_157/28    | V_04 | 16,7       | 15,9  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232585,98 | -1270801,42 | 176,95 |
| RD_Kraľovka_159/22    | V_05 | 34,9       | 32,0  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232641,02 | -1270712,80 | 176,43 |
| RD_RD_Kraľovka_150/25 | V_06 | 31,7       | 29,1  |       | 50,0           | 50,0  | 45,0  | 1,50  | r | -232621,73 | -1270708,46 | 177,17 |

**Tabuľka č.8: Po výstavbe - iné (technologické) zdroje**

| Meno                  | ID   | Hladina Lr |       |       | Limit. hodnota |       |       | Výška |   | Súradnice  |             |        |
|-----------------------|------|------------|-------|-------|----------------|-------|-------|-------|---|------------|-------------|--------|
|                       |      | Deň        | Večer | Noc   | Deň            | Večer | Noc   |       |   | X          | Y           | Z      |
|                       |      | (dBA)      | (dBA) | (dBA) | (dBA)          | (dBA) | (dBA) | (m)   |   | (m)        | (m)         | (m)    |
| RD_Kraľovka_158/24_2  | V_01 | 27,4       | 27,0  | 22,9  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232613,33 | -1270749,31 | 178,19 |
| RD_Kraľovka_158/24    | V_02 | 26,3       | 25,5  | 22,1  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232628,55 | -1270732,07 | 177,58 |
| RD_Kraľovka_193/26    | V_03 | 26,9       | 26,0  | 21,9  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232604,74 | -1270770,89 | 177,56 |
| RD_Kraľovka_157/28    | V_04 | 21,1       | 20,5  | 18,9  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232585,98 | -1270801,42 | 176,95 |
| RD_Kraľovka_159/22    | V_05 | 22,4       | 21,8  | 20,0  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232641,02 | -1270712,80 | 176,43 |
| RD_RD_Kraľovka_150/25 | V_06 | 21,1       | 20,3  | 12,3  | 50,0           | 50,0  | 45,0  | 1,50  | r | -232621,73 | -1270708,46 | 177,17 |

**10. Záver**

Záverom hlukovej štúdie môžeme konštatovať, že predmetná štúdia analyzovala hlukové pomery v okolí plánovanej realizácie stavby „Oblúčková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ“, kde sa vyskytujú chránené rodinné domy.

Spracované posúdenie hlukových pomerov spôsobených prevádzkou „Oblúčková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ“ poukazuje, že hladiny hluku len z prevádzky stavby „Oblúčková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ“ neprekračujú najvyššie prípustné hladiny hluku ani pre referenčný časový interval deň, ani pre referenčný časový interval večer, ani pre referenčný časový interval noc (NPH 50dB, 50dB a 45dB).

Z výsledkov výpočtu vyplýva, že pri rešpektovaní vyššie uvedeného uloženia, umiestnenia a smerovania zariadení VZT budú dodržané prípustné hlukové limity pre hluk z iných zdrojov. Dodržanie prípustných hodnôt hluku odporúčame overiť priamymi meraniami po začatí prevádzky a v prípade nepriaznivých výsledkov realizovať dodatočné protihlukové opatrenia.

Po vykonaných výpočtoch a analýze výsledkov možno konštatovať nasledovné :

**samostatne hodnotená prevádzka „Oblúčková hala - VINOHRADNÍCTVO A VINÁRSTVO TOKAJ“ nespôsobí pred najbližšími chránenými rodinnými domami prekročenie prípustných hodnôt určujúcich veličín hluku.**

Spracovanie hlukovej štúdie bolo vykonané podľa vyhlášky MZ SR 549/2007, ktorou sa ustanovujú podrobnosti o prípustných hodnotách hluku, infrazvuku a vibrácií a o požiadavkách na objektivizáciu hluku, infrazvuku a vibrácií v životnom prostredí a vyhlášky 237/2009, ktorou sa mení a dopĺňa vyhláška MZ SR č. 549/2007.

Košice 11.11.2019

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Autor, Prof. MVDr. Ján Venglovský, PhD, je držiteľom:

- osvedčenia o odbornej spôsobilosti na činnosti podľa § 9 ods. 4 písm. a), b), c), d) zákona č.126/2006 Z. z. o verejnom zdravotníctve a o zmene a doplnení niektorých zákonov. Číslo osvedčenia OLP/7464/2006, vydané dňa 4. 12. 2006, na meranie hluku v životnom a pracovnom prostredí.
- osvedčenia o odbornej spôsobilosti na účely posudzovania vplyvov na životné prostredie podľa § 61 ods. 8 zákona č. 24/2006 Z. z. o posudzovaní vplyvov na životné prostredie a o zmene a doplnení niektorých zákonov pre v odboroch 2o ochrana zdravia, 2z hluk a vibrácie, 2i poľnohospodárstvo, oblasti 3i stavby pre potravinárske technológie, 3j poľnohospodárska výroba, 3g stavby pre odpadové hospodárstvo, číslo 447/2010/OHPV

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