25 RATHBONE PLACE
LONDON
W1T 1JB

NOISE IMPACT ASSESSMENT REPORT

Our Ref: CPT/250722/001/Rev01

Written By:

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1.0 Introduction

1.1 This report relates to a proposed change of use development located at 25 Rathbone Place, London, W1T 1JB.

1.2 It has been prepared by Eurovib Acoustic Products on behalf of QuinnRoss Consultants.

1.3 The report sets out the details of an environmental noise assessment in relation to noise levels likely to be incident on the proposed building facades.

1.4 The purpose of the assessment is to establish the required sound insulation values of the façade elements to protect the future residents from noise ingress from the exterior and establish a noise emission criteria for any future plant.

2.0 Executive Summary

2.1 An Environmental Noise Assessment has been carried out at 25 Rathbone Place, London, W1T 1JB.

2.2 Façade noise levels have been measured and analyses performed pursuant to BS8233: 2014 in order to establish the required sound insulation values of the various façade elements in order to ensure the Local Authority's noise ingress level limits will not be exceeded.

2.3 Examples of construction/ manufacturer details have been provided to ensure that the required sound insultation levels are achievable.

2.4 An assessment of amenity noise levels has been undertaken and a recommendation that the existing terrace and balcony be provided with perimeter acoustic screening that is solid, imperforate and of at least 10 Kg/m^2 formed from materials such as solid timber, glazing or masonry. This measure would provide acoustic screening to reduce the noise levels as far as is practicable.

2.5 An analysis pursuant of BS4142: 2014 has been undertaken in order to establish a noise rating limit for any future building services equipment in order to ensure that the Local Authority's requirement for new equipment noise being not less than 10 dB below the minimum background noise level for the proposed hours of use of the equipment are met.

2.6 The noise rating limits established at the closest noise sensitive receptors are as follows:

- 36 dB $L_{Aeq,\ 15\ minute}$ for day time use (07.00-23.00)
- 33 dB $L_{Aeq,\ 15\ minute}$ for night time use (23.00-07.00)

3.0 Site Description & Background

3.1 25 Rathbone Place is a five-storey property located within the London Borough of Camden.

3.2 The basement, ground and first floors are currently used as dining and bar areas for The Wheatsheaf public house.

3.3 The second and third floor are currently used as ancillary pub accommodation.

3.4 It is intended to re-develop the property with a change of use for the first to third floors from ancillary pub accommodation to three flats.

3.5 The property is bounded to the North by 26 Rathbone Place with further mixed use premise beyond; to the West by Percy Mews with the rear of further mixed use premises aligning; to the South by 24 Rathbone Place with further mixed use premises beyond; and to the West by Rathbone Place with further mixed use premises beyond.

3.6 The site in relation to its surroundings is shown in Appendix A of this report.

3.7 The primary sources of noise affecting the site are near and distant traffic noise and equipment noise serving other properties in the locale.

4.0 Relevant Guidance

4.1 The Department for Communities and Local Government revised the National Planning Policy Framework (NPPF) on 19th January 2019 which sets out government's planning policies for England and how these are expected to be applied.

4.4 Paragraph180 of the NPPF contains the following statement:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;

b) Identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason: and

c) Limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation

4.5 The Department for Environment Food and Rural Affairs published the Noise Policy Statement for England (NPSE) in March 2010. The explanatory note of NPSE defines the following terms used in the NPPF:

"NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

2.21 Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur."

4.6 The NPSE does not define any of the above effect levels numerically.

4.7 The NPSE presents the Noise Policy Aims as:

"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy and sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life."*

4.8 It can be seen that the first two policy aims are similar to Section 11 of the NPPF, with a third aim that seeks to improve health and quality of life. The NPSE later expands on the Noise Policy Aims, stating:

2.23 The first aim of the NPSE states that significant adverse effects on health and quality of life should be avoided while also taking into account the guiding principles of sustainable development (paragraph 1.8).

2.24 The second aim of the NPSE refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development (paragraph 1.8). This does not mean that such adverse effects cannot occur.

2.25 This aim (the third aim)*, seeks where possible, positively to improve health and quality of life through the pro-active management of noise while also taking into account the guiding principles of sustainable development (paragraph 1.8), recognising that there will be opportunities for such measures to be taken and that they will deliver potential benefits to society. The protection of*

quiet places and quiet times as well as the enhancement of the acoustic environment will assist with delivering this aim."

4.9 It is clear that noise described in the NPSE as SOAEL that would lead to significant adverse effects should be avoided, although there is no definition as to what constitutes a significant adverse effect. Similarly, noise should be mitigated where it is high enough to lead to adverse effects, termed the LOAEL, but not so high that it leads to significant adverse effects.

4.10 BS8233: 2014 'Guidance on Sound Insulation and Noise Reduction for Buildings' is a standard regularly referred to by Local Authority's to ensure that residents of proposed new build or refurbished developments have adequate noise insulation and are suitably protected from noise outside of their building in order to achieve, for example, reasonable sleeping/ resting conditions.

4.11 The standard is not intended to assess the effect of changes in the external noise climate.

4.12 The standard suggests suitable noise levels within different types of buildings, including residential dwellings.

4.13 It suggests that for steady state noise sources during the day an internal noise level of 35 dB L_{Aeq} is appropriate for resting conditions in living rooms and bedrooms and a level of 40 dB L_{Aeq} is applicable for dining rooms. During the night an internal level of 30 dB L_{Aeq} is recommended for bedrooms.

4.14 The recommended levels are based on the existing guidelines issued by the World Health Organisation and assume normal daily fluctuations in external noise. It also states that:

"*Where development is considered necessary or desirable, despite external noise levels above WHO guidelines, the internal target levels can be relaxed by up to 5 dB and reasonable internal conditions still achieved.*"

4.15 Recommendations for design criteria for external noise are also provided and it is stated that:

"*For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB* LA_{eq} *with an upper guideline value of 55 dB LAeq which would be acceptable in noisier environments. However, it is also recognised that these guideline values are not achievable in all circumstances where development might be desirable. In*

higher noise areas such as city centres or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors, such as convenience of living in these locations or making efficient use of land resources to ensure that development needs can be met, might be warranted. In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces, but should not be prohibited."

4.16 BS4142: 2014 'Methods for rating and assessing industrial and commercial sound' is intended to be used to assess whether noise from factories, industrial premises or fixed installations and sources of an industrial nature in commercial premises is likely to give rise to complaints from people residing in nearby dwellings.

4.17 The procedure contained in BS4142 for assessing the likelihood of complaints is to compare the "*specific noise level*", which is the measured or predicted noise level from the source in question immediately outside the dwelling, with the background noise level. Where the noise contains a "*distinguishable discrete continuous note (whine, hiss, screech, hum etc.) or if there are distinct impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough to attract attention*" then a correction of +5dB is added to the specific noise level to obtain the "*rating level*" or L_{Ar}.

4.18 The likelihood of noise provoking complaints is assessed by subtracting the background noise level from the rating noise level. BS4142 states:

"A difference of around 10dB or higher indicates that complaints are likely. A difference of around 5dB is of marginal significance. A difference of -10dB is a positive indication that complaints are unlikely."

The standard also notes that:

"The greater this difference the greater the likelihood of complaints."

4.19 In the context of the NPPF, it is considered that a situation where BS4142 suggests complaints are unlikely would equate to the No Observed Effect Level (NOEL). The situation where BS4142 suggests complaints are likely would equate to the Significant Observed Adverse Effect Level (SOAEL).

4.20 The Lowest Observed Adverse Effect Level (LOAEL) has been equated to the situation that BS4142 describes as “marginal” as this is the only intermediate threshold identified in BS4142.

4.21 The London Borough of Camden’s requirements in regard to noise are detailed within their Local Plan.

4.22 In terms of noise ingress from general environmental noise their requirements align with the requirements of BS8233: 2014.

4.23 In terms of noise from equipment such as building services equipment their requirements are for the Rating Level of the noise to be at least 10 dB below background noise level at the closest noisee sensitive receptors for the proposed hours of use of the equipment.

5.0 Noise Survey Procedure & Equipment

5.1 An automated survey of the existing external noise levels has been undertaken at the site. The measurement positions are shown within Appendix A of this report.

5.2 The measurements were made in accordance with BS7445-1: 2003 "Description and measurement of environmental noise. "Guide to quantities and procedures" and BS7445-2: 1991 "Description and measurement of environmental noise. Acquisition of data relevant to land use".

5.3 The survey period was from 13.12 on the 13th July 2022 through until 10.42 on the 15th July 2022.

5.4 The measurements consisted of consecutive 15 minute overall L_{Amax}, L_{Amin}, L_{A10}, L_{A90} and L_{Aeq} sound pressure levels and octave band levels L_{max}, L_{min}, L_{10}, L_{90} and L_{eq} from 63 Hz to 8 kHz.

5.5 There were two measurements positions as follows:

- Position 1, 1 m from the first floor front façade where measurements were made from 13.12 on the 13th July 2022 through until 13.12 on the 14th July 2022.

- Position 2, at roof top level at the rear of the property where measurements were made from 13.42 on the 14th July 2022 through until 10.42 on the 15th July 2022.

5.5 The equipment used was as follows:

- Rion NL-52/NX42RT Class 1 Environmental Noise Analyser
- Rion NC74 Class 1 Acoustic Calibrator
- Rion 12 mm Condenser Microphone & Foam Windshield on a 1.5 m extension pole
- Rion weatherproof security box

5.6 The instruments carry current calibration certificates details of which are below.

Item	Type	Serial No.	Date of Cal.	Authority
SLM	NL-52	01143558	12/01/2022	ANV Ltd
F/ Ware	NX42RT	2.0	12/01/2022	ANV Ltd
Pre-Amp	NH-25	43575	12/01/2022	ANV Ltd
Mic	UC-59	07367	12/01/2022	ANV Ltd
Calibrator	NC-74	34536109	12/01/2022	ANV Ltd

5.7 Additionally the instruments were hand calibrated before and after with no drift detected.

5.8 The weather throughout both survey periods was warm with clear skies, no cloud and no rain.

5.9 The site engineer was Cliff Tucker and the results were analysed & reported by Cliff Tucker.

6.0 Measurement Results

6.1 The relevant measured levels are contained within Appendix B of this report.

6.2 The reference levels on which the assessments are based are as follows:

6.2.1 Position 1

Measurement	Maximum	Minimum	Average
L_{Aeq}	70.7	58.5	64.5
L_{A90}	64.7	48.5	
L_{Amax}	105.5	72.4	89.1

Table 6.2.1.1 Summary of Position 1 Day Time Results (07.00-23.00)

Measurement	Maximum	Minimum	Average
L_{Aeq}	64.8	50.5	58.9
L_{A90}	60.0	45.5	
L_{Amax}	94.2	67.5	83.9

Table 6.2.1.2 Summary of Position 1 Night Time Results (23.00-07.00)

6.2.2 Position 2

Measurement	Maximum	Minimum	Average
L_{Aeq}	74.4	49.0	66.6
L_{A90}	60.7	45.6	
L_{Amax}	103.8	63.0	90.8

Table 6.2.2.1 Summary of Position 2 Day Time Results (07.00-23.00)

Measurement	Maximum	Minimum	Average
L_{Aeq}	61.4	47.2	55.8
L_{A90}	50.3	43.0	
L_{Amax}	91.7	66.9	81.2

Table 6.2.2.2 Summary of Position 2 Night Time Results (23.00-07.00)

6.5 Based on the results from the environmental noise survey the following assessment levels have been derived:

	63	125	250	500	1k	2k	4k	8k	dB-A
$L_{eq,\ 16\ hours}$	76	72	65	59	52	45	46	30	67
$L_{eq,\ 8\ hour}$	63	57	53	52	44	47	43	39	59

7.0 BS8233: 2014 Assessment

7.1 In order to maintain a satisfactory internal noise climate the residents will require a satisfactory alternative to openable windows for ventilation.

7.2 This will be in the form of MVHR units serving each flat.

7.3 At the time of writing the make and model of the MVHR units is unknown. Once a final equipment selection has been made the supply and extract paths should be assessed and if necessary attenuated such that the in room levels with the mechanical ventilation operating at normal duty does not exceed the following levels:

Bedrooms - 20 dB-A
Living Areas - 30 dB-A

7.4 It is understood that the existing external non-glazed elements at the front of the property consist as a minimum of a brick/ block cavity wall with a minimum 50 mm cavity or equivalent.

7.5 As such we have assumed the following sound reduction indices for the non-glazed elements on the front elevation.

Rw	**125**	**250**	**500**	**1k**	**2k**
51	41	45	45	54	58

7.6 The glazed elements at the front of the building will be retained and it will therefore be necessary to provide secondary glazing to these elements.

7.7 As such we have assumed the following sound reduction indices for all glazed elements at the front of the building.

Rw	**125**	**250**	**500**	**1k**	**2k**
47	26	34	44	44	38

The secondary glazing should consist of the existing glazing made good and well sealed, a 100 mm air gap and secondary glazing with a 6 mm window pane.

7.8 It is assumed that the new external non-glazed elements at the rear of the building will comprise as a minimum of 9” blockwork.

7.9 As such we have assumed the following sound reduction indices for the non-glazed elements on the rear elevation.

Rw	125	250	500	1k	2k
51	41	44	48	55	55

7.10 The new glazed elements at the rear of the building should provide minimum sound reduction indices as follows:

Rw	125	250	500	1k	2k
37	26	27	34	40	38

These values can typically be achieved using 6/12/10 double glazed window elements.

7.11 As part of the development includes a roof terrace and balconies the guidance from BS8233: 2014 in regard to external amenity areas is also considered to be relevant.

7.12 This indicates a desirable range of 50-55 dB L_{Aeq}, however, BS8233: 2014 also recognises that it is not always possible to achieve the desired range in urban areas. In such a situation a compromise position should be reached and the development should be designed to achieve the lowest levels practicable but the development should not be prohibited.

7.13 As the predicted day-time L_{Aeq} noise level at the building façade is 67 dB-A it is recommended that the balconies and terraces be provided with perimeter acoustic glass screening that is imperforate. This measure would provide acoustic screening to reduce the noise levels as far as is practicable.

7.14 There is also the potential for noise transfer from the existing public house to affect the proposed residential areas on the upper floors.

7.15 The proposed floor build up is as detailed below in order to protect the amenity of the residential areas:

- Engineered timber flooring
- 35 mm Reduc Foundation 35
- Existing floor boards mastic sealed where necessary
- Existing floor joists
- 100 mm mineral wool slab laid in the cavity
- Existing ceiling

7.16 The above construction will typically provide a level difference as follows:

125	250	500	1k	2k
32	41	46	52	55

7.17 The spectrum below is based on typical similar public house measured levels.

125	250	500	1k	2k
65	69	74	73	69

7.18 The calculation for the resultant noise level on the residential side of the flooring is therefore as follows:

	125	250	500	1k	2k	dB-A
$Lp,_T$	65	69	74	73	69	76
D	32	41	46	52	55	
$Lp,_R$	33	28	27	21	14	27

It can therefore be seen that the Local Authority's requirements should be achieved with the floor construction as proposed in Para 7.9.

7.19 It is proposed to provide an exhaust air path from the kitchen to atmosphere that passes up through the building to roof top level.

7.20 There is the potential for noise transfer from the ducts to the rear bedrooms of Flat 1 (1st floor) and Flat 2 (2nd floor).

7.21 As the final equipment selections are as yet unknown it is not possible to quantify the risk from this. Once the final equipment selections are known a assessment of noise ingress from this element should be undertaken.

7.22 It should be noted that it is probable that a proprietary insulation system such as British-Gypsum Shaft Wall will be required to control this aspect of noise ingress. It is important to note that the final form of the shaft insulation needs to be considered in the context of the fire protection strategy.

8.0 BS4142: 2014/ London Borough of Camden Assessment

8.1 The Rating level is based on the specific noise level of the noise source in question.

8.2 A correction should be applied to the specific noise level to obtain an increased Rating level if *a tone, impulse or other characteristic occurs or is expected to occur for new or modified sound sources*. BS4142: 2014 gives the following in regards to corrections for acoustic characteristics:

d) Tonality - *For sound from not tonal to prominently tonal the Joint Nordic Method gives a correction of between 0 dB and +6 dB for tonality. Subjectively this can be converted to a penalty of +2 dB for a tone which is just perceptible at the noise receptor, +4 dB where it is clearly perceptible and +6 dB where it is highly perceptible.*

e) Impulsivity – *A correction of up to +9 dB can be applied for sound that is highly impulsive, considering both the rapidity of the change in sound level and the overall change in sound level. Subjectively, this can be converted to a penalty of +3 dB for impulsivity which is just perceptible at the noise sensitive receptor, +6 dB where it is clearly perceptible and +9 dB where it is highly perceptible.*

f) Intermittency – *When a specific sound has identifiable on/ off conditions, if the intermittency is readily distinctive against the residual acoustic environment, a penalty of +3 dB can be applied.*

g) Other Characteristics – *Where specific sound features characteristics that are neither tonal nor impulsive, though otherwise are readily distinctive against the residual acoustic environment, a penalty of + 3 dB can be applied.*

8.3 Whilst any future building services equipment selections are currently unknown it is not anticipated that any of the above corrections will be relevant.

8.4 This aspect of the noise strategy should cover atmospheric noise from the proposed MVHR uniyts, the kitchen fresh air in and exhaust fans and any other equipment which has the potential to produce noise to atmosphere.

8.5 The closest noise sensitive receptors are typically the closest receptors outside of the development, however, as the development introduces new residential property it is suggested that noise from any future

building services equipment meets the criteria at any openable windows within the development in order to protect the amenity of the residents.

8.6 The minimum measured background noise levels are as follows:

Day Time	45.6 dB $L_{A90,\ 15\ minute}$
Night Time	43.0 dB $L_{A90,\ 15\ minute}$

8.7 Therefore the Rating Sound Level (dB L_{ArTr}) of any future building services equipment should not exceed 36 dB $L_{Aeq,\ 15\ minute}$ for day time use (07.00-23.00) or 33 dB $L_{Aeq,\ 15\ minute}$ for night time use (23.00-07.00) at the closest noise sensitive receptor.

Report ends

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APPENDIX A – Measurement Position & Site Plan


Aperture Printing
Percy M
Mews
REAR MEASUREMENT
POSITION
W1T 1JB
Rainbone Pl
Hobgoblin Music London


Aperture Printing
W1T 1JB
FRONT
MEASUREMENT
POSITION

Appendix B1 – Measured Levels Position 1

Leq Front Elevation Day Time

Start Time	Measurement Time	LAeq	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
13/07/2022 13:12:13	00d 00:15:00.0	70.7	61.6	60.2	58.4	61.2	58.8	61.2	56.0	51.6
13/07/2022 13:27:13	00d 00:15:00.0	61.5	60.6	59.0	56.7	56.5	46.6	47.5	40.5	32.5
13/07/2022 13:42:13	00d 00:15:00.0	61.7	61.9	60.6	57.6	56.2	47.0	47.9	41.2	33.8
13/07/2022 13:57:13	00d 00:15:00.0	63.6	61.3	61.8	59.9	58.3	48.1	49.6	44.0	36.1
13/07/2022 14:12:13	00d 00:15:00.0	61.9	63.2	60.0	57.2	56.0	47.5	49.5	42.1	35.2
13/07/2022 14:27:13	00d 00:15:00.0	63.7	65.6	62.9	60.4	57.7	49.0	49.9	42.6	35.2
13/07/2022 14:42:13	00d 00:15:00.0	60.5	59.5	58.5	56.2	54.7	45.9	48.1	40.0	31.6
13/07/2022 14:57:13	00d 00:15:00.0	60.8	63.7	59.8	56.0	54.9	45.7	49.4	40.4	34.0
13/07/2022 15:12:13	00d 00:15:00.0	62.7	64.7	61.8	57.6	56.6	48.3	49.9	45.2	40.1
13/07/2022 15:27:13	00d 00:15:00.0	64.8	65.0	61.8	56.9	58.1	54.1	50.0	39.6	31.2
13/07/2022 15:42:13	00d 00:15:00.0	60.5	62.7	59.8	56.7	54.9	46.1	46.0	39.3	31.5
13/07/2022 15:57:13	00d 00:15:00.0	63.8	64.5	68.4	61.0	57.0	47.4	48.9	43.9	35.7
13/07/2022 16:12:13	00d 00:15:00.0	68.8	69.5	75.8	65.1	59.4	47.1	47.3	42.6	33.9
13/07/2022 16:27:13	00d 00:15:00.0	60.8	59.0	57.9	56.4	55.7	46.5	46.5	39.0	31.1
13/07/2022 16:42:13	00d 00:15:00.0	61.3	59.9	62.4	56.7	55.9	46.1	46.3	39.1	31.1
13/07/2022 16:57:13	00d 00:15:00.0	63.9	61.9	63.3	59.2	59.0	48.2	49.4	42.6	34.8
13/07/2022 17:12:13	00d 00:15:00.0	63.4	66.7	65.9	59.2	57.7	47.7	48.5	41.9	34.2
13/07/2022 17:27:13	00d 00:15:00.0	62.9	66.1	66.9	57.5	57.3	48.3	48.0	40.8	35.7
13/07/2022 17:42:13	00d 00:15:00.0	65.0	66.2	65.9	59.9	59.4	50.3	50.4	43.5	40.9
13/07/2022 17:57:13	00d 00:15:00.0	64.9	60.9	59.9	58.7	60.0	50.2	51.0	43.6	37.1
13/07/2022 18:12:13	00d 00:15:00.0	64.6	59.8	59.2	57.4	59.7	50.2	50.2	41.6	32.5
13/07/2022 18:27:13	00d 00:15:00.0	65.5	57.6	59.2	58.4	60.9	51.7	51.0	42.3	32.8
13/07/2022 18:42:13	00d 00:15:00.0	67.0	58.6	60.5	60.5	62.4	53.4	52.5	43.4	33.3
13/07/2022 18:57:13	00d 00:15:00.0	67.7	60.6	63.4	60.9	62.8	54.0	53.1	43.8	34.2
13/07/2022 19:12:13	00d 00:15:00.0	67.5	61.5	67.5	59.2	62.5	54.0	53.2	44.0	34.9
13/07/2022 19:27:13	00d 00:15:00.0	67.0	59.8	60.3	59.7	62.3	53.4	52.8	44.3	35.6
13/07/2022 19:42:13	00d 00:15:00.0	64.7	58.0	58.2	57.0	59.7	50.9	50.7	42.2	32.1
13/07/2022 19:57:13	00d 00:15:00.0	65.6	58.9	58.9	57.7	60.5	51.8	51.7	42.3	31.7
13/07/2022 20:12:13	00d 00:15:00.0	66.0	72.2	62.5	58.4	60.8	52.4	52.3	43.1	33.2
13/07/2022 20:27:13	00d 00:15:00.0	66.3	66.1	59.7	58.4	61.3	52.7	52.8	44.5	34.8
13/07/2022 20:42:13	00d 00:15:00.0	65.1	59.4	60.0	57.8	59.9	51.0	51.3	43.2	43.0
13/07/2022 20:57:13	00d 00:15:00.0	64.8	59.1	61.3	58.1	59.7	50.3	50.6	42.3	33.3
13/07/2022 21:12:13	00d 00:15:00.0	64.9	59.6	59.1	57.1	59.5	51.4	51.9	43.7	36.0
13/07/2022 21:27:13	00d 00:15:00.0	64.4	60.1	59.8	57.0	59.5	50.2	50.7	41.8	32.6
13/07/2022 21:42:13	00d 00:15:00.0	64.3	61.1	59.0	56.6	59.2	50.4	50.7	41.8	32.8
13/07/2022 21:57:13	00d 00:15:00.0	68.1	59.5	62.5	59.5	61.9	55.3	56.3	46.3	34.1
13/07/2022 22:12:13	00d 00:15:00.0	64.6	60.2	58.5	56.7	59.5	50.0	51.7	41.8	32.4
13/07/2022 22:27:13	00d 00:15:00.0	65.1	58.5	58.2	57.4	59.8	50.8	53.0	43.0	32.6
13/07/2022 22:42:13	00d 00:15:00.0	65.8	59.0	60.7	58.3	60.3	51.1	52.6	41.5	33.3
13/07/2022 22:57:13	00d 00:15:00.0	64.0	62.2	60.0	56.7	58.8	50.1	50.9	41.7	33.0
14/07/2022 06:57:13	00d 00:15:00.0	59.8	61.4	59.7	56.0	51.7	45.7	47.6	43.6	34.1
14/07/2022 07:12:13	00d 00:15:00.0	60.3	63.2	57.4	55.5	52.2	45.6	48.4	44.3	36.6
14/07/2022 07:27:13	00d 00:15:00.0	58.5	56.4	55.0	53.0	51.9	43.3	46.4	42.8	31.6
14/07/2022 07:42:13	00d 00:15:00.0	61.0	59.4	59.1	56.9	53.3	45.6	49.5	42.5	43.3
14/07/2022 07:57:13	00d 00:15:00.0	60.6	59.5	62.4	58.5	53.0	45.8	47.8	41.6	34.5
14/07/2022 08:12:13	00d 00:15:00.0	60.6	59.8	59.0	56.9	53.5	46.1	48.9	41.2	34.4
14/07/2022 08:27:13	00d 00:15:00.0	65.8	62.8	62.0	59.6	58.1	52.2	53.3	48.7	46.3
14/07/2022 08:42:13	00d 00:15:00.0	67.3	63.4	64.4	59.8	58.5	53.8	57.1	52.3	42.0
14/07/2022 08:57:13	00d 00:15:00.0	60.8	61.8	61.6	55.7	52.4	46.0	47.3	41.7	43.8
14/07/2022 09:12:13	00d 00:15:00.0	60.5	60.9	59.5	57.5	53.1	46.0	48.3	41.8	35.0
14/07/2022 09:27:13	00d 00:15:00.0	61.4	61.4	60.7	58.1	54.4	47.0	48.3	41.9	34.0
14/07/2022 09:42:13	00d 00:15:00.0	62.0	64.6	63.9	59.6	54.7	47.8	49.7	43.6	37.1
14/07/2022 09:57:13	00d 00:15:00.0	60.8	59.6	60.3	56.4	54.0	46.2	48.3	42.6	35.6
14/07/2022 10:12:13	00d 00:15:00.0	60.1	63.1	59.2	55.6	54.2	45.9	47.4	40.7	32.3
14/07/2022 10:27:13	00d 00:15:00.0	62.9	61.1	59.1	57.2	55.9	48.7	50.3	48.2	40.1
14/07/2022 10:42:13	00d 00:15:00.0	66.9	62.7	61.0	62.2	58.7	54.9	55.4	48.7	38.9
14/07/2022 10:57:13	00d 00:15:00.0	67.5	72.9	69.2	65.2	58.2	55.0	54.0	47.9	38.4
14/07/2022 11:12:13	00d 00:15:00.0	63.9	60.3	60.4	59.5	57.6	48.0	53.5	45.6	37.0
14/07/2022 11:27:13	00d 00:15:00.0	62.5	64.4	61.4	57.6	56.7	48.9	49.2	42.7	34.9
14/07/2022 11:42:13	00d 00:15:00.0	61.7	62.4	62.0	57.9	55.3	47.1	48.1	41.7	34.9
14/07/2022 11:57:13	00d 00:15:00.0	61.6	61.7	60.1	57.3	55.9	48.6	47.5	40.2	31.9
14/07/2022 12:12:13	00d 00:15:00.0	64.3	62.9	63.2	65.0	58.0	47.5	47.0	39.5	32.4
14/07/2022 12:27:13	00d 00:15:00.0	64.3	67.2	63.8	60.9	58.5	47.9	50.8	43.5	35.9
14/07/2022 12:42:13	00d 00:15:00.0	63.2	64.4	64.9	58.0	56.7	52.1	48.6	40.9	33.3
14/07/2022 12:57:13	00d 00:15:00.0	62.3	58.3	59.3	56.7	57.5	47.6	48.5	40.5	45.4
	Leq, 16 hour	64.5	63.6	63.4	58.9	58.4	50.6	51.5	44.7	38.8

Leq Front Elevation Night Time

Start Time	Measurement Time	LAeq	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
13/07/2022 22:57:13	00d 00:15:00.0	64.0	62.2	60.0	56.7	58.8	50.1	50.9	41.7	33.0
13/07/2022 23:12:13	00d 00:15:00.0	62.7	58.8	56.0	54.9	57.5	48.6	50.1	42.3	33.0
13/07/2022 23:27:13	00d 00:15:00.0	62.3	59.9	56.8	56.2	56.5	47.6	49.1	41.4	32.6
13/07/2022 23:42:13	00d 00:15:00.0	63.5	58.1	60.0	59.8	57.1	45.9	48.9	40.8	31.9
13/07/2022 23:57:13	00d 00:15:00.0	64.8	62.7	58.5	56.7	55.3	49.0	54.8	50.4	51.6
14/07/2022 00:12:13	00d 00:15:00.0	63.8	70.9	64.4	57.9	55.3	45.9	54.3	50.0	41.3
14/07/2022 00:27:13	00d 00:15:00.0	58.1	71.5	59.5	53.8	52.1	42.9	43.7	37.1	27.8
14/07/2022 00:42:13	00d 00:15:00.0	58.1	72.6	57.9	54.2	50.8	41.6	43.2	37.9	40.2
14/07/2022 00:57:13	00d 00:15:00.0	57.3	69.8	57.8	54.2	50.5	42.4	44.2	37.6	28.7
14/07/2022 01:12:13	00d 00:15:00.0	55.6	54.5	61.9	52.4	48.3	39.4	37.3	30.6	21.6
14/07/2022 01:27:13	00d 00:15:00.0	54.0	58.2	54.0	50.2	49.0	39.6	38.3	32.0	28.0
14/07/2022 01:42:13	00d 00:15:00.0	53.8	56.4	54.2	50.6	48.9	38.2	38.9	33.3	26.1
14/07/2022 01:57:13	00d 00:15:00.0	53.9	54.3	52.0	50.5	48.5	40.2	38.9	31.5	24.6
14/07/2022 02:12:13	00d 00:15:00.0	56.4	54.1	53.1	50.5	49.1	42.7	42.3	36.3	29.9
14/07/2022 02:27:13	00d 00:15:00.0	52.4	52.0	51.7	48.9	46.5	37.3	38.6	29.0	21.3
14/07/2022 02:42:13	00d 00:15:00.0	62.9	55.3	55.1	50.8	50.4	42.3	51.0	52.9	44.9
14/07/2022 02:57:13	00d 00:15:00.0	56.0	52.1	51.2	50.3	52.6	41.3	38.2	31.3	27.1
14/07/2022 03:12:13	00d 00:15:00.0	55.3	54.0	52.0	49.6	49.3	41.2	42.9	34.8	26.7
14/07/2022 03:27:13	00d 00:15:00.0	51.8	50.6	54.1	48.3	46.0	37.7	38.2	30.7	20.5
14/07/2022 03:42:13	00d 00:15:00.0	53.1	52.2	52.6	47.8	47.3	38.6	38.6	31.3	21.6
14/07/2022 03:57:13	00d 00:15:00.0	56.5	51.3	51.4	49.6	48.8	41.4	42.5	39.6	33.4
14/07/2022 04:12:13	00d 00:15:00.0	53.6	49.8	51.3	48.6	45.1	39.4	40.1	37.4	30.5
14/07/2022 04:27:13	00d 00:15:00.0	50.5	51.1	50.7	48.0	42.9	36.8	36.9	31.0	26.6
14/07/2022 04:42:13	00d 00:15:00.0	50.9	51.5	51.6	47.9	43.6	34.2	37.4	32.5	27.3
14/07/2022 04:57:13	00d 00:15:00.0	54.9	53.6	51.7	50.9	46.1	40.1	42.7	37.5	33.7
14/07/2022 05:12:13	00d 00:15:00.0	51.9	51.7	52.3	48.3	43.5	35.6	39.2	34.7	21.3
14/07/2022 05:27:13	00d 00:15:00.0	54.3	55.1	53.4	50.7	47.3	40.3	42.0	34.8	24.1
14/07/2022 05:42:13	00d 00:15:00.0	61.4	56.4	58.7	54.0	53.0	46.2	51.0	46.2	40.0
14/07/2022 05:57:13	00d 00:15:00.0	54.1	57.1	54.9	50.7	46.7	39.7	41.3	33.8	27.5
14/07/2022 06:12:13	00d 00:15:00.0	57.3	63.0	54.4	52.0	48.1	43.2	47.1	39.9	30.7
14/07/2022 06:27:13	00d 00:15:00.0	55.5	56.9	53.1	51.0	48.0	41.7	44.1	37.0	31.6
14/07/2022 06:42:13	00d 00:15:00.0	57.8	60.0	56.4	53.4	49.9	43.5	46.1	41.0	32.6
	Leq, 8 hour	58.9	63.3	56.7	53.1	51.9	43.5	46.9	42.7	38.6

LA90 Front Elevation Day Time

Address	Start Time	Measurement Time	LA90	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
1	13/07/2022 13:12:13	00d 00:15:00.0	58.1	53.4	54.8	53.3	52.6	41.6	42.1	34.7	25.8
2	13/07/2022 13:27:13	00d 00:15:00.0	58.4	53.5	54.9	53.5	53.0	42.2	42.8	34.9	25.4
3	13/07/2022 13:42:13	00d 00:15:00.0	57.8	53.8	55.1	53.4	52.1	41.7	42.3	35.1	24.7
4	13/07/2022 13:57:13	00d 00:15:00.0	57.9	53.0	54.7	53.4	52.3	41.8	42.5	35.1	25.9
5	13/07/2022 14:12:13	00d 00:15:00.0	57.1	52.8	54.5	52.8	51.3	41.0	41.8	34.2	24.7
6	13/07/2022 14:27:13	00d 00:15:00.0	57.0	53.6	55.3	53.0	51.2	40.8	41.4	33.8	24.1
7	13/07/2022 14:42:13	00d 00:15:00.0	56.2	52.9	54.7	52.6	50.4	39.9	40.4	32.7	23.0
8	13/07/2022 14:57:13	00d 00:15:00.0	56.7	54.7	54.8	52.6	50.9	40.5	40.9	33.2	23.7
9	13/07/2022 15:12:13	00d 00:15:00.0	56.9	53.8	55.1	52.7	51.1	40.5	41.1	33.2	23.3
10	13/07/2022 15:27:13	00d 00:15:00.0	56.9	53.7	55.0	52.9	51.1	40.7	40.9	34.0	23.4
11	13/07/2022 15:42:13	00d 00:15:00.0	56.2	53.0	54.1	52.4	50.4	39.9	40.1	33.1	22.5
12	13/07/2022 15:57:13	00d 00:15:00.0	56.5	53.3	54.5	52.9	51.0	40.2	39.9	32.5	21.7
13	13/07/2022 16:12:13	00d 00:15:00.0	56.8	53.3	54.2	52.8	51.2	41.0	40.9	33.0	22.3
14	13/07/2022 16:27:13	00d 00:15:00.0	56.9	52.5	53.9	52.8	51.4	40.4	40.6	32.7	22.0
15	13/07/2022 16:42:13	00d 00:15:00.0	57.2	52.5	54.1	52.9	51.8	40.7	41.0	33.1	23.2
16	13/07/2022 16:57:13	00d 00:15:00.0	58.8	53.6	55.6	54.1	53.6	42.4	42.3	34.5	24.5
17	13/07/2022 17:12:13	00d 00:15:00.0	57.9	53.5	55.7	53.7	52.8	41.5	41.3	33.5	23.5
18	13/07/2022 17:27:13	00d 00:15:00.0	59.3	53.4	55.6	53.9	53.8	43.1	43.1	35.2	24.7
19	13/07/2022 17:42:13	00d 00:15:00.0	60.9	52.8	55.6	54.6	55.7	45.1	45.0	37.0	26.2
20	13/07/2022 17:57:13	00d 00:15:00.0	61.8	53.8	56.0	54.9	56.7	46.0	46.3	38.0	27.2
21	13/07/2022 18:12:13	00d 00:15:00.0	62.3	52.9	55.6	54.6	57.1	46.7	47.1	38.1	26.4
22	13/07/2022 18:27:13	00d 00:15:00.0	63.2	51.8	55.4	55.1	58.0	47.9	47.8	39.1	27.3
23	13/07/2022 18:42:13	00d 00:15:00.0	64.4	53.2	56.5	56.5	59.1	49.0	49.1	40.2	28.9
24	13/07/2022 18:57:13	00d 00:15:00.0	64.7	52.4	56.0	56.4	59.5	49.5	49.3	40.3	28.6
25	13/07/2022 19:12:13	00d 00:15:00.0	64.6	51.5	55.3	55.6	59.3	49.3	49.5	40.5	28.8
26	13/07/2022 19:27:13	00d 00:15:00.0	64.5	52.3	55.9	55.9	59.1	49.2	49.4	40.5	28.5
27	13/07/2022 19:42:13	00d 00:15:00.0	62.5	52.0	55.3	54.5	57.1	47.0	47.5	38.9	27.0
28	13/07/2022 19:57:13	00d 00:15:00.0	63.2	51.7	55.8	54.9	57.7	47.7	48.3	39.1	27.5
29	13/07/2022 20:12:13	00d 00:15:00.0	63.4	52.3	56.2	55.1	57.8	47.9	48.6	39.8	28.3
30	13/07/2022 20:27:13	00d 00:15:00.0	63.5	51.4	55.5	55.2	58.1	48.0	48.6	40.3	28.9
31	13/07/2022 20:42:13	00d 00:15:00.0	62.1	51.8	55.9	54.5	56.8	46.6	47.4	38.9	27.9
32	13/07/2022 20:57:13	00d 00:15:00.0	61.8	51.3	55.3	54.3	56.4	46.1	46.7	38.5	27.3
33	13/07/2022 21:12:13	00d 00:15:00.0	62.1	52.3	55.7	54.0	56.5	46.4	47.3	38.6	27.6
34	13/07/2022 21:27:13	00d 00:15:00.0	61.6	53.2	56.4	54.0	56.1	45.9	46.9	37.6	26.9
35	13/07/2022 21:42:13	00d 00:15:00.0	61.6	51.9	56.0	53.7	56.0	45.8	46.8	37.6	26.8
36	13/07/2022 21:57:13	00d 00:15:00.0	62.9	51.6	56.1	54.0	57.0	47.4	48.5	39.3	28.2
37	13/07/2022 22:12:13	00d 00:15:00.0	60.8	52.8	55.3	53.5	55.4	44.9	46.4	37.1	26.3
38	13/07/2022 22:27:13	00d 00:15:00.0	61.4	51.6	55.0	54.0	55.8	45.3	47.2	37.7	26.7
39	13/07/2022 22:42:13	00d 00:15:00.0	61.0	51.0	53.8	53.7	55.0	44.6	46.1	36.2	25.8
72	14/07/2022 06:57:13	00d 00:15:00.0	48.5	50.1	48.4	46.5	41.2	32.1	33.7	26.4	13.4
73	14/07/2022 07:12:13	00d 00:15:00.0	51.5	49.1	49.9	48.6	43.9	36.0	37.8	27.0	14.2
74	14/07/2022 07:27:13	00d 00:15:00.0	51.1	49.6	49.7	48.1	43.6	35.0	36.4	28.1	17.1
75	14/07/2022 07:42:13	00d 00:15:00.0	51.3	49.2	50.2	48.4	43.6	35.3	36.7	27.8	16.8
76	14/07/2022 07:57:13	00d 00:15:00.0	52.9	50.6	51.8	50.0	44.8	36.9	40.3	28.9	18.1
77	14/07/2022 08:12:13	00d 00:15:00.0	53.8	51.8	52.2	50.3	46.2	38.0	40.9	30.9	20.7
78	14/07/2022 08:27:13	00d 00:15:00.0	54.2	51.6	53.4	50.9	46.9	38.6	40.6	31.3	21.9
79	14/07/2022 08:42:13	00d 00:15:00.0	55.4	54.1	54.1	51.9	47.9	39.8	41.7	33.6	23.9
80	14/07/2022 08:57:13	00d 00:15:00.0	54.9	53.3	53.4	51.4	47.5	39.1	40.8	32.9	23.1
81	14/07/2022 09:12:13	00d 00:15:00.0	55.0	52.5	53.8	51.6	47.8	39.5	40.7	33.5	23.9
82	14/07/2022 09:27:13	00d 00:15:00.0	55.6	53.0	54.3	52.3	48.3	40.0	41.2	33.6	23.9
83	14/07/2022 09:42:13	00d 00:15:00.0	54.8	52.6	54.0	51.7	47.8	39.0	40.0	32.6	22.5
84	14/07/2022 09:57:13	00d 00:15:00.0	54.9	52.3	54.4	51.8	48.2	38.9	39.4	32.5	22.3
85	14/07/2022 10:12:13	00d 00:15:00.0	54.7	52.2	54.1	51.4	48.3	39.0	39.4	31.8	20.3
86	14/07/2022 10:27:13	00d 00:15:00.0	55.3	52.5	54.5	51.9	48.6	39.4	39.6	31.7	21.5
87	14/07/2022 10:42:13	00d 00:15:00.0	55.8	52.6	55.0	52.2	48.9	39.8	40.6	32.9	22.8
88	14/07/2022 10:57:13	00d 00:15:00.0	56.0	52.1	55.1	52.1	49.9	39.4	40.2	32.8	22.6
89	14/07/2022 11:12:13	00d 00:15:00.0	56.3	52.1	55.5	52.0	50.5	39.8	40.6	32.5	22.4
90	14/07/2022 11:27:13	00d 00:15:00.0	56.1	52.4	55.5	52.2	50.4	39.7	40.0	32.3	22.1
91	14/07/2022 11:42:13	00d 00:15:00.0	55.1	52.6	55.3	51.8	49.2	39.0	39.1	31.2	21.0
92	14/07/2022 11:57:13	00d 00:15:00.0	57.2	52.7	55.6	53.2	51.4	41.4	41.8	33.9	24.9
93	14/07/2022 12:12:13	00d 00:15:00.0	56.4	52.5	55.2	52.3	50.6	40.3	40.8	32.9	22.8
94	14/07/2022 12:27:13	00d 00:15:00.0	57.3	52.7	55.6	53.1	51.6	41.4	41.9	34.1	24.4
95	14/07/2022 12:42:13	00d 00:15:00.0	58.3	52.5	55.4	53.4	52.7	41.8	42.6	34.6	24.4
96	14/07/2022 12:57:13	00d 00:15:00.0	58.4	52.3	55.2	53.4	53.1	41.9	43.0	34.5	24.1

L90 Front Elevation Night Time

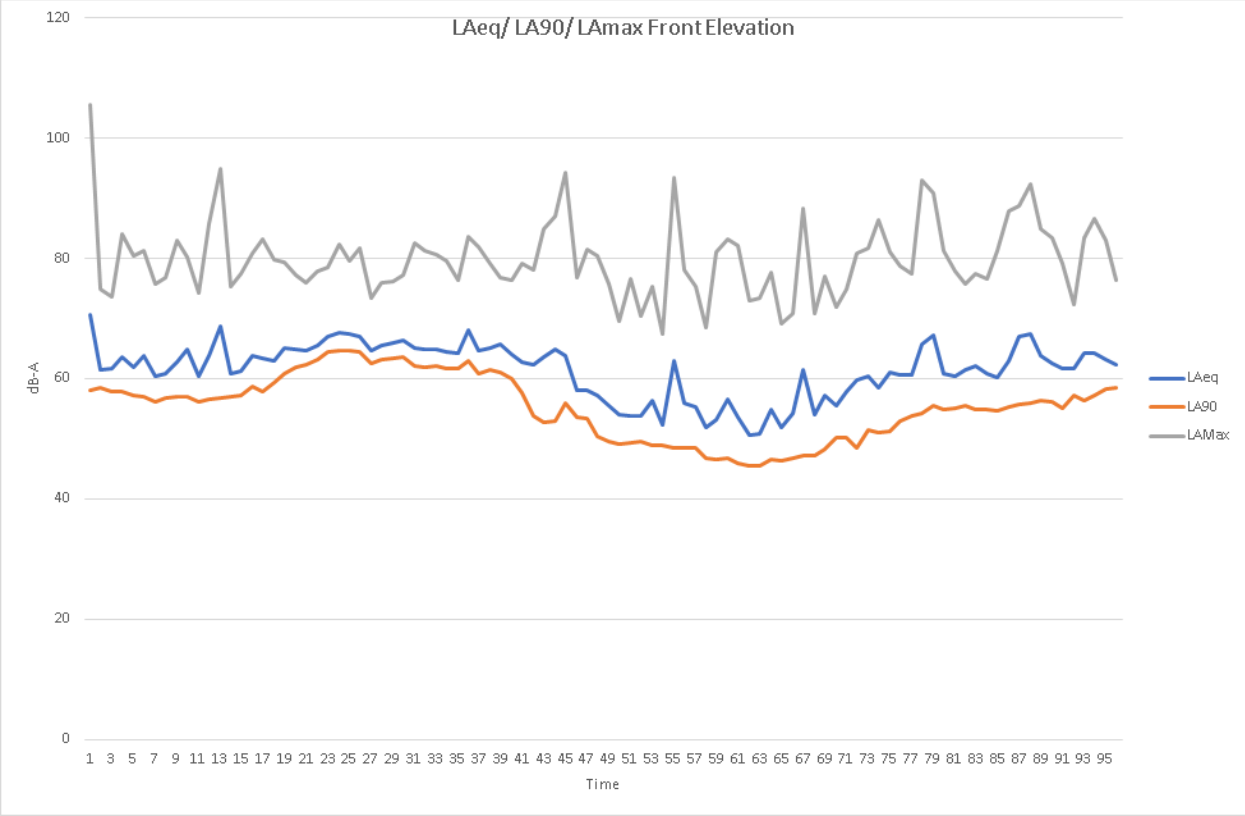
Address	Start Time	Measurement Time	LA90	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
40	13/07/2022 22:57:13	00d 00:15:00.0	60.0	52.2	53.7	52.6	54.3	43.9	45.5	36.3	25.0
41	13/07/2022 23:12:13	00d 00:15:00.0	57.6	51.4	52.2	51.2	51.8	41.1	42.8	33.9	23.5
42	13/07/2022 23:27:13	00d 00:15:00.0	53.7	50.5	51.9	49.7	48.3	37.1	37.5	30.0	20.0
43	13/07/2022 23:42:13	00d 00:15:00.0	52.8	49.7	52.0	49.6	46.7	35.9	37.1	29.7	19.0
44	13/07/2022 23:57:13	00d 00:15:00.0	52.9	50.0	51.4	49.0	46.3	36.5	37.1	30.8	19.7
45	14/07/2022 00:12:13	00d 00:15:00.0	55.9	51.6	55.2	51.7	49.1	38.4	39.4	33.3	21.4
46	14/07/2022 00:27:13	00d 00:15:00.0	53.5	68.7	55.5	50.2	46.3	35.5	36.0	29.1	16.1
47	14/07/2022 00:42:13	00d 00:15:00.0	53.3	70.4	53.0	49.3	46.4	35.1	35.8	28.8	15.0
48	14/07/2022 00:57:13	00d 00:15:00.0	50.3	49.4	50.3	47.0	44.2	32.6	33.4	26.3	14.6
49	14/07/2022 01:12:13	00d 00:15:00.0	49.5	47.6	48.4	46.8	43.2	31.9	32.5	25.2	14.2
50	14/07/2022 01:27:13	00d 00:15:00.0	49.1	46.5	46.4	45.5	43.6	31.5	32.0	24.7	12.4
51	14/07/2022 01:42:13	00d 00:15:00.0	49.3	46.7	47.0	45.6	43.9	31.3	31.8	24.8	12.0
52	14/07/2022 01:57:13	00d 00:15:00.0	49.6	46.1	46.7	45.8	43.8	32.1	32.6	24.7	12.5
53	14/07/2022 02:12:13	00d 00:15:00.0	48.8	45.6	45.9	45.1	43.2	31.2	31.5	24.2	12.4
54	14/07/2022 02:27:13	00d 00:15:00.0	49.0	45.4	45.8	44.5	41.9	30.2	33.1	24.4	10.7
55	14/07/2022 02:42:13	00d 00:15:00.0	48.5	47.0	47.1	45.4	42.2	31.5	32.5	24.6	12.2
56	14/07/2022 02:57:13	00d 00:15:00.0	48.4	45.2	46.1	45.0	41.7	31.5	32.5	24.6	12.4
57	14/07/2022 03:12:13	00d 00:15:00.0	48.4	46.3	46.6	45.1	42.3	31.1	31.8	24.1	11.3
58	14/07/2022 03:27:13	00d 00:15:00.0	46.7	44.9	45.3	44.0	40.1	29.8	30.5	23.2	11.0
59	14/07/2022 03:42:13	00d 00:15:00.0	46.6	44.8	45.2	43.8	39.8	29.4	30.3	23.4	11.3
60	14/07/2022 03:57:13	00d 00:15:00.0	46.7	45.4	45.8	44.3	39.4	29.1	31.2	23.5	11.7
61	14/07/2022 04:12:13	00d 00:15:00.0	45.9	44.6	45.2	43.5	38.1	28.3	30.3	22.6	10.8
62	14/07/2022 04:27:13	00d 00:15:00.0	45.5	44.8	45.1	43.4	37.8	28.0	29.3	22.1	11.2
63	14/07/2022 04:42:13	00d 00:15:00.0	45.5	45.0	45.3	43.4	37.6	28.1	29.4	22.7	10.8
64	14/07/2022 04:57:13	00d 00:15:00.0	46.6	46.2	45.9	44.4	38.6	28.6	30.4	23.4	11.2
65	14/07/2022 05:12:13	00d 00:15:00.0	46.3	46.2	45.7	44.3	38.6	28.7	30.1	23.1	11.4
66	14/07/2022 05:27:13	00d 00:15:00.0	46.8	46.2	46.2	44.9	39.0	29.1	31.1	23.5	11.2
67	14/07/2022 05:42:13	00d 00:15:00.0	47.1	46.7	46.4	45.1	39.4	29.4	31.1	23.8	11.4
68	14/07/2022 05:57:13	00d 00:15:00.0	47.1	47.2	47.0	45.0	39.6	29.3	30.9	24.1	11.2
69	14/07/2022 06:12:13	00d 00:15:00.0	48.2	47.7	47.5	45.9	40.4	31.9	33.4	24.3	10.8
70	14/07/2022 06:27:13	00d 00:15:00.0	50.2	48.6	47.9	47.0	42.4	34.4	35.3	25.6	12.3
71	14/07/2022 06:42:13	00d 00:15:00.0	50.2	49.1	48.9	47.5	42.8	34.3	34.9	25.7	13.4

Lmax Front Elevation Day Time

Start Time	Measurement Time	LAMax	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
13/07/2022 13:12:13	00d 00:15:00.0	105.5	74.2	83.9	81.5	82.0	86.2	98.0	90.2	89.0
13/07/2022 13:27:13	00d 00:15:00.0	74.8	54.1	58.2	56.1	58.8	54.6	69.9	53.7	43.9
13/07/2022 13:42:13	00d 00:15:00.0	73.5	73.6	68.9	64.7	64.5	64.0	63.7	58.1	50.6
13/07/2022 13:57:13	00d 00:15:00.0	84.1	82.4	79.5	81.3	77.8	63.1	65.1	63.4	53.1
13/07/2022 14:12:13	00d 00:15:00.0	80.5	56.2	55.8	54.7	72.0	66.6	74.8	57.3	45.3
13/07/2022 14:27:13	00d 00:15:00.0	81.3	75.3	69.4	76.3	76.0	64.9	63.1	52.4	32.1
13/07/2022 14:42:13	00d 00:15:00.0	75.7	58.8	59.7	61.0	63.5	53.9	73.6	51.6	29.4
13/07/2022 14:57:13	00d 00:15:00.0	76.7	59.7	62.2	56.5	51.4	43.7	75.4	47.3	31.0
13/07/2022 15:12:13	00d 00:15:00.0	83.0	75.9	75.7	72.4	70.8	68.9	73.9	70.7	66.6
13/07/2022 15:27:13	00d 00:15:00.0	80.3	56.2	57.5	58.4	62.1	65.1	58.3	39.7	24.4
13/07/2022 15:42:13	00d 00:15:00.0	74.2	87.6	83.7	72.6	68.0	54.0	46.9	41.8	27.1
13/07/2022 15:57:13	00d 00:15:00.0	85.7	83.2	92.6	85.0	78.8	63.3	67.9	66.9	60.3
13/07/2022 16:12:13	00d 00:15:00.0	94.8	96.7	101.4	88.5	84.2	65.5	65.8	67.8	53.7
13/07/2022 16:27:13	00d 00:15:00.0	75.3	62.3	66.9	69.4	68.8	57.4	65.8	60.1	54.4
13/07/2022 16:42:13	00d 00:15:00.0	77.5	59.8	58.4	55.5	60.4	60.5	46.5	41.2	29.7
13/07/2022 16:57:13	00d 00:15:00.0	80.9	60.0	76.9	74.2	71.3	59.3	61.9	59.9	52.8
13/07/2022 17:12:13	00d 00:15:00.0	83.2	73.0	93.3	83.1	76.5	61.4	58.2	52.8	44.4
13/07/2022 17:27:13	00d 00:15:00.0	79.8	67.1	90.8	71.8	74.3	66.9	63.4	55.8	51.8
13/07/2022 17:42:13	00d 00:15:00.0	79.3	77.6	85.4	79.0	70.7	62.6	59.5	56.1	46.5
13/07/2022 17:57:13	00d 00:15:00.0	77.3	63.3	62.6	63.2	66.5	56.5	72.8	46.9	38.0
13/07/2022 18:12:13	00d 00:15:00.0	75.9	59.2	59.7	60.2	68.7	54.8	52.6	48.0	33.4
13/07/2022 18:27:13	00d 00:15:00.0	77.8	56.1	58.9	69.4	67.3	61.8	52.0	41.6	29.2
13/07/2022 18:42:13	00d 00:15:00.0	78.6	56.8	61.7	63.4	66.9	58.3	67.6	45.0	38.6
13/07/2022 18:57:13	00d 00:15:00.0	82.4	52.3	61.6	59.1	65.9	62.4	57.2	48.0	38.6
13/07/2022 19:12:13	00d 00:15:00.0	79.5	72.2	91.9	68.4	69.4	60.5	65.3	59.5	55.9
13/07/2022 19:27:13	00d 00:15:00.0	81.8	69.0	61.6	66.9	70.6	58.3	58.9	56.6	51.5
13/07/2022 19:42:13	00d 00:15:00.0	73.3	69.4	64.6	67.0	60.7	58.9	55.7	46.6	35.1
13/07/2022 19:57:13	00d 00:15:00.0	76.0	49.3	58.0	61.8	70.3	64.2	50.0	47.7	34.3
13/07/2022 20:12:13	00d 00:15:00.0	76.1	77.0	78.8	76.5	70.0	59.6	58.1	49.2	39.7
13/07/2022 20:27:13	00d 00:15:00.0	77.2	55.8	60.0	62.5	62.3	64.3	66.2	53.6	40.6
13/07/2022 20:42:13	00d 00:15:00.0	82.5	54.5	60.2	58.0	60.9	52.8	57.4	57.5	73.4
13/07/2022 20:57:13	00d 00:15:00.0	81.2	60.0	60.0	58.5	65.7	60.6	50.8	47.2	41.0
13/07/2022 21:12:13	00d 00:15:00.0	80.6	70.9	73.4	74.6	76.0	66.0	69.0	64.0	56.8
13/07/2022 21:27:13	00d 00:15:00.0	79.5	54.8	58.8	58.0	59.1	50.6	61.9	66.4	37.7
13/07/2022 21:42:13	00d 00:15:00.0	76.3	64.8	58.1	61.5	72.7	62.1	54.3	49.2	35.2
13/07/2022 21:57:13	00d 00:15:00.0	83.6	61.1	65.7	65.4	68.9	75.8	75.7	60.4	45.6
13/07/2022 22:12:13	00d 00:15:00.0	82.0	55.7	57.8	56.2	58.4	56.9	59.4	44.3	37.8
13/07/2022 22:27:13	00d 00:15:00.0	79.1	53.4	59.4	62.3	66.3	62.4	60.4	53.1	41.0
13/07/2022 22:42:13	00d 00:15:00.0	76.9	49.9	55.0	61.3	68.6	58.1	62.0	44.0	30.3
14/07/2022 06:57:13	00d 00:15:00.0	80.9	63.2	65.6	74.6	76.7	70.9	63.4	55.4	46.0
14/07/2022 07:12:13	00d 00:15:00.0	81.6	72.6	73.8	70.7	70.3	67.1	70.2	70.4	61.7
14/07/2022 07:27:13	00d 00:15:00.0	86.3	68.1	58.5	68.1	74.4	69.0	76.4	77.2	65.1
14/07/2022 07:42:13	00d 00:15:00.0	81.1	72.9	77.5	74.0	73.9	64.8	70.6	63.8	59.5
14/07/2022 07:57:13	00d 00:15:00.0	78.8	68.2	66.3	72.3	68.9	62.8	70.2	69.7	62.3
14/07/2022 08:12:13	00d 00:15:00.0	77.5	66.9	76.0	77.9	74.5	63.6	62.6	53.8	48.2
14/07/2022 08:27:13	00d 00:15:00.0	93.0	85.9	91.0	86.5	87.0	79.3	81.7	78.8	68.1
14/07/2022 08:42:13	00d 00:15:00.0	90.8	66.3	65.8	71.3	78.6	78.6	81.1	69.8	54.1
14/07/2022 08:57:13	00d 00:15:00.0	81.2	66.9	69.4	53.5	50.6	43.8	51.9	56.3	72.7
14/07/2022 09:12:13	00d 00:15:00.0	77.9	78.0	71.8	77.8	66.9	60.5	65.6	59.7	50.4
14/07/2022 09:27:13	00d 00:15:00.0	75.7	73.1	69.8	70.0	70.6	57.1	62.4	56.0	50.0
14/07/2022 09:42:13	00d 00:15:00.0	77.5	57.0	58.6	65.1	68.0	59.2	66.5	67.7	62.3
14/07/2022 09:57:13	00d 00:15:00.0	76.5	68.3	59.2	56.6	60.4	65.0	61.1	45.1	36.6
14/07/2022 10:12:13	00d 00:15:00.0	81.3	56.8	68.5	70.9	80.3	63.2	67.5	58.9	36.0
14/07/2022 10:27:13	00d 00:15:00.0	87.8	65.2	69.3	78.1	79.8	72.9	71.9	77.8	70.6
14/07/2022 10:42:13	00d 00:15:00.0	88.8	74.4	71.5	78.4	79.7	76.2	82.0	74.6	67.0
14/07/2022 10:57:13	00d 00:15:00.0	92.3	72.1	77.0	90.8	78.9	83.7	78.0	75.0	67.0
14/07/2022 11:12:13	00d 00:15:00.0	84.9	65.9	76.1	75.0	73.2	68.5	78.3	66.5	59.3
14/07/2022 11:27:13	00d 00:15:00.0	83.5	61.4	68.4	74.6	71.3	72.1	75.0	67.0	55.5
14/07/2022 11:42:13	00d 00:15:00.0	79.2	67.1	75.9	82.2	75.5	64.9	61.3	56.4	49.8
14/07/2022 11:57:13	00d 00:15:00.0	72.4	63.9	67.8	69.5	65.5	57.0	59.1	53.7	47.0
14/07/2022 12:12:13	00d 00:15:00.0	83.5	70.4	79.1	86.9	76.7	59.5	61.0	52.6	44.7
14/07/2022 12:27:13	00d 00:15:00.0	86.5	52.5	59.0	63.4	71.5	64.5	82.2	65.0	56.7
14/07/2022 12:42:13	00d 00:15:00.0	82.9	53.6	57.5	56.0	54.2	82.8	54.9	42.7	27.0
14/07/2022 12:57:13	00d 00:15:00.0	76.4	64.6	68.1	60.7	62.2	52.5	53.6	46.3	76.7
	LMax, 16 hour	89.1	80.1	85.6	78.6	75.3	72.8	80.6	73.4	71.6

Lmax Front Elevation Night Time

Start Time	Measurement Time	LAMax	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
13/07/2022 22:57:13	00d 00:15:00.0	76.3	61.3	60.9	58.2	72.0	60.2	72.4	54.9	35.4
13/07/2022 23:12:13	00d 00:15:00.0	79.2	60.3	63.6	63.6	62.6	67.0	66.5	55.2	43.1
13/07/2022 23:27:13	00d 00:15:00.0	78.1	73.4	68.9	73.2	69.3	60.5	61.7	52.2	45.0
13/07/2022 23:42:13	00d 00:15:00.0	84.8	59.7	86.3	83.2	80.4	58.6	64.0	57.6	53.3
13/07/2022 23:57:13	00d 00:15:00.0	87.0	67.4	62.7	60.9	66.3	65.1	73.0	76.8	81.5
14/07/2022 00:12:13	00d 00:15:00.0	94.2	57.2	63.0	63.0	68.6	67.4	88.7	83.9	74.8
14/07/2022 00:27:13	00d 00:15:00.0	76.9	73.4	70.8	74.6	72.7	55.8	56.9	54.5	38.6
14/07/2022 00:42:13	00d 00:15:00.0	81.4	70.3	57.5	53.2	48.4	38.2	47.3	53.4	68.3
14/07/2022 00:57:13	00d 00:15:00.0	80.4	73.6	65.6	70.8	73.8	64.5	69.7	66.7	54.0
14/07/2022 01:12:13	00d 00:15:00.0	75.8	62.4	87.5	71.3	62.4	43.5	41.6	33.7	22.3
14/07/2022 01:27:13	00d 00:15:00.0	69.5	50.8	52.4	58.2	65.2	51.6	47.0	39.8	26.6
14/07/2022 01:42:13	00d 00:15:00.0	76.5	79.1	77.9	72.1	73.1	57.9	61.8	54.0	51.0
14/07/2022 01:57:13	00d 00:15:00.0	70.4	65.9	60.9	66.3	60.7	60.4	55.2	45.1	38.3
14/07/2022 02:12:13	00d 00:15:00.0	75.3	53.6	60.2	48.7	55.7	57.0	49.4	47.6	22.4
14/07/2022 02:27:13	00d 00:15:00.0	67.5	46.8	47.4	63.9	56.8	46.1	40.7	32.1	27.9
14/07/2022 02:42:13	00d 00:15:00.0	93.5	58.9	59.8	61.9	72.5	67.3	78.7	85.3	77.8
14/07/2022 02:57:13	00d 00:15:00.0	78.1	48.1	54.0	64.5	65.9	56.3	46.0	50.6	57.3
14/07/2022 03:12:13	00d 00:15:00.0	75.3	47.6	51.8	54.3	57.9	62.1	67.8	54.6	29.2
14/07/2022 03:27:13	00d 00:15:00.0	68.5	56.7	58.9	54.1	57.9	54.5	61.6	51.4	43.5
14/07/2022 03:42:13	00d 00:15:00.0	81.1	48.8	49.1	47.5	62.9	69.6	68.3	60.8	43.7
14/07/2022 03:57:13	00d 00:15:00.0	83.2	52.3	59.6	51.6	55.2	60.8	61.1	70.6	60.4
14/07/2022 04:12:13	00d 00:15:00.0	82.2	54.2	49.4	52.8	56.7	62.9	69.6	68.5	61.5
14/07/2022 04:27:13	00d 00:15:00.0	73.0	61.9	64.3	63.4	62.5	65.9	60.0	58.1	60.1
14/07/2022 04:42:13	00d 00:15:00.0	73.4	56.0	67.2	60.4	60.1	54.2	63.1	62.0	59.0
14/07/2022 04:57:13	00d 00:15:00.0	77.6	48.6	47.1	47.6	43.3	65.3	55.8	41.1	34.1
14/07/2022 05:12:13	00d 00:15:00.0	69.1	49.0	48.4	45.6	42.5	45.8	58.9	52.3	34.1
14/07/2022 05:27:13	00d 00:15:00.0	70.8	61.3	61.8	62.6	66.0	56.2	60.1	52.5	36.9
14/07/2022 05:42:13	00d 00:15:00.0	88.4	64.4	69.0	67.4	69.5	67.3	80.4	76.9	69.6
14/07/2022 05:57:13	00d 00:15:00.0	70.8	60.2	68.4	67.5	62.2	56.4	59.3	48.6	39.7
14/07/2022 06:12:13	00d 00:15:00.0	77.1	68.2	72.1	69.4	64.6	62.2	68.2	59.3	49.6
14/07/2022 06:27:13	00d 00:15:00.0	71.8	73.6	65.4	62.7	60.4	58.2	63.1	53.3	46.8
14/07/2022 06:42:13	00d 00:15:00.0	74.9	56.8	60.4	65.9	59.0	61.5	66.6	60.8	55.0
	Lmax, 8 hour	83.9	68.2	75.5	70.4	69.2	62.7	75.1	73.5	69.0


LAeq/ LA90/ LAmax Front Elevation
120
100
80
60
40
20
0
dB-A
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95
Time
LAeq
LA90
LAMax

Appendix B2 – Measured Levels Position 2

Leq Rear Elevation Day Time

Start Time	Measurement Time	LAeq	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
14/07/2022 13:42:13	00d 00:15:00.0	63.1	73.2	68.6	60.7	55.8	49.1	40.0	29.2	18.3
14/07/2022 13:57:13	00d 00:15:00.0	67.1	77.1	72.8	65.5	59.6	51.3	42.1	30.9	19.1
14/07/2022 14:12:13	00d 00:15:00.0	67.0	77.0	73.1	65.6	59.5	51.1	42.2	31.8	21.4
14/07/2022 14:27:13	00d 00:15:00.0	65.6	76.1	71.3	63.7	58.5	50.3	41.4	30.4	20.2
14/07/2022 14:42:13	00d 00:15:00.0	71.2	80.8	76.9	70.7	63.2	55.2	45.0	34.8	19.9
14/07/2022 14:57:13	00d 00:15:00.0	60.9	69.3	65.3	57.8	53.8	48.4	39.1	33.2	17.6
14/07/2022 15:12:13	00d 00:15:00.0	66.5	77.1	72.9	65.2	59.1	47.9	39.5	29.8	17.5
14/07/2022 15:27:13	00d 00:15:00.0	71.5	81.1	77.0	70.9	63.4	55.7	46.4	38.7	23.4
14/07/2022 15:42:13	00d 00:15:00.0	61.6	72.2	67.4	60.4	54.1	44.8	37.0	26.8	16.4
14/07/2022 15:57:13	00d 00:15:00.0	70.3	79.7	76.1	69.9	62.2	53.5	44.1	34.0	19.5
14/07/2022 16:12:13	00d 00:15:00.0	61.3	72.0	66.7	59.7	54.1	44.9	39.8	33.5	19.6
14/07/2022 16:27:13	00d 00:15:00.0	70.5	81.0	76.5	69.6	62.8	53.0	44.1	32.7	18.7
14/07/2022 16:42:13	00d 00:15:00.0	70.7	80.6	76.6	70.0	62.8	53.1	44.2	32.8	19.3
14/07/2022 16:57:13	00d 00:15:00.0	69.0	78.7	74.6	68.0	61.3	53.0	43.4	31.5	17.8
14/07/2022 17:12:13	00d 00:15:00.0	68.2	78.3	73.8	66.8	60.5	53.2	42.9	30.7	17.9
14/07/2022 17:27:13	00d 00:15:00.0	65.3	75.3	70.0	62.5	58.2	52.2	42.1	31.1	24.1
14/07/2022 17:42:13	00d 00:15:00.0	74.4	83.7	80.1	73.9	66.5	58.7	48.8	39.1	23.6
14/07/2022 17:57:13	00d 00:15:00.0	70.5	80.4	76.2	69.3	62.7	55.2	45.3	35.4	20.3
14/07/2022 18:12:13	00d 00:15:00.0	72.8	83.0	78.3	71.8	65.0	57.1	47.5	38.4	22.2
14/07/2022 18:27:13	00d 00:15:00.0	70.5	80.1	75.9	69.6	62.6	55.4	45.2	34.5	19.1
14/07/2022 18:42:13	00d 00:15:00.0	72.3	81.3	77.4	71.8	64.1	57.2	47.3	37.6	21.9
14/07/2022 18:57:13	00d 00:15:00.0	66.1	75.5	71.1	63.8	58.7	53.1	43.0	31.1	17.7
14/07/2022 19:12:13	00d 00:15:00.0	68.3	78.0	73.7	66.7	60.6	54.0	44.2	32.6	17.8
14/07/2022 19:27:13	00d 00:15:00.0	64.9	74.1	69.2	61.7	57.8	52.2	42.5	32.2	17.2
14/07/2022 19:42:13	00d 00:15:00.0	63.7	72.0	67.2	60.1	56.3	52.1	42.7	31.0	17.2
14/07/2022 19:57:13	00d 00:15:00.0	62.7	71.0	65.7	58.0	55.4	51.6	41.5	28.7	16.7
14/07/2022 20:12:13	00d 00:15:00.0	62.6	70.1	65.5	57.7	55.3	51.7	41.1	28.9	16.1
14/07/2022 20:27:13	00d 00:15:00.0	62.7	69.6	65.0	57.6	55.4	52.1	43.7	32.4	23.5
14/07/2022 20:42:13	00d 00:15:00.0	62.6	69.6	65.1	57.6	55.7	51.7	41.8	28.6	15.8
14/07/2022 20:57:13	00d 00:15:00.0	64.2	73.4	68.1	61.0	56.5	52.4	43.7	32.5	16.9
14/07/2022 21:12:13	00d 00:15:00.0	62.5	70.1	65.2	57.4	55.7	51.4	41.2	28.7	16.9
14/07/2022 21:27:13	00d 00:15:00.0	60.8	60.7	59.3	51.3	54.5	51.0	40.8	29.0	16.5
14/07/2022 21:42:13	00d 00:15:00.0	60.8	60.6	59.6	51.4	54.4	51.3	40.6	28.3	16.0
14/07/2022 21:57:13	00d 00:15:00.0	60.5	54.6	58.7	50.0	54.4	51.1	40.5	27.8	16.3
14/07/2022 22:12:13	00d 00:15:00.0	60.6	54.4	58.3	50.4	54.6	51.3	40.8	28.0	16.1
14/07/2022 22:27:13	00d 00:15:00.0	60.2	54.2	58.9	49.4	54.0	51.1	40.1	28.0	20.0
14/07/2022 22:42:13	00d 00:15:00.0	59.1	55.4	57.1	49.4	53.0	50.2	39.6	27.4	16.9
15/07/2022 06:57:13	00d 00:15:00.0	52.6	59.9	53.2	49.1	44.0	42.2	36.9	34.3	17.3
15/07/2022 07:12:13	00d 00:15:00.0	54.7	66.4	60.5	53.6	44.8	41.5	34.9	28.9	15.4
15/07/2022 07:27:13	00d 00:15:00.0	50.8	62.5	55.2	50.0	41.5	37.3	32.6	25.0	12.4
15/07/2022 07:42:13	00d 00:15:00.0	49.0	54.9	49.2	47.5	41.1	38.5	33.5	26.7	14.6
15/07/2022 07:57:13	00d 00:15:00.0	53.7	65.1	57.7	51.9	44.7	40.4	35.7	27.8	14.2
15/07/2022 08:12:13	00d 00:15:00.0	53.0	63.1	57.6	51.0	44.0	40.6	36.9	29.8	15.6
15/07/2022 08:27:13	00d 00:15:00.0	53.1	63.4	57.3	51.5	44.1	40.6	37.8	28.9	15.9
15/07/2022 08:42:13	00d 00:15:00.0	58.2	68.3	62.5	55.3	47.5	44.4	42.2	34.3	19.8
15/07/2022 08:57:13	00d 00:15:00.0	55.5	66.4	60.3	53.2	45.5	41.1	39.4	31.1	17.0
15/07/2022 09:12:13	00d 00:15:00.0	58.2	69.4	64.0	56.5	49.0	43.5	40.5	33.9	20.9
15/07/2022 09:27:13	00d 00:15:00.0	58.5	70.0	64.5	56.8	49.8	42.2	40.0	32.6	16.8
15/07/2022 09:42:13	00d 00:15:00.0	56.1	67.9	61.6	54.5	46.9	41.3	38.3	30.5	17.4
15/07/2022 09:57:13	00d 00:15:00.0	60.7	72.2	67.2	59.4	52.6	41.5	36.9	30.2	16.4
15/07/2022 10:12:13	00d 00:15:00.0	62.0	73.8	68.5	60.6	54.0	42.4	37.0	28.5	17.1
15/07/2022 10:27:13	00d 00:15:00.0	57.3	69.5	63.2	56.2	49.1	39.6	36.5	29.3	14.8
15/07/2022 10:42:13	00d 00:06:40.6	70.0	70.9	65.5	59.2	61.6	57.3	59.4	62.9	47.2
	Leq, 16 hour	66.6	76.0	71.8	65.2	58.8	51.9	45.2	45.9	30.3

Leq Rear Elevation Night Time

Address	Start Time	Measurement Time	LAeq	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
136	14/07/2022 22:57:13	00d 00:15:00.0	56.7	66.7	61.7	54.6	49.8	42.1	36.9	27.2	15.1
137	14/07/2022 23:12:13	00d 00:15:00.0	58.6	71.2	64.8	57.4	50.4	41.2	35.1	27.0	15.0
138	14/07/2022 23:27:13	00d 00:15:00.0	61.2	72.4	67.8	59.9	53.1	42.7	36.9	27.0	15.3
139	14/07/2022 23:42:13	00d 00:15:00.0	61.4	73.1	67.4	60.3	53.6	43.2	36.4	24.6	12.8
140	14/07/2022 23:57:13	00d 00:15:00.0	60.3	71.0	66.3	59.7	50.8	42.2	35.4	24.7	18.0
141	15/07/2022 00:12:13	00d 00:15:00.0	56.5	68.2	62.4	54.8	48.5	40.3	36.0	26.9	14.5
142	15/07/2022 00:27:13	00d 00:15:00.0	52.4	64.0	57.4	49.9	44.2	39.5	34.4	23.6	11.6
143	15/07/2022 00:42:13	00d 00:15:00.0	50.3	62.2	53.3	48.5	43.5	37.3	31.9	22.2	13.0
144	15/07/2022 00:57:13	00d 00:15:00.0	49.9	61.3	53.5	48.2	42.8	36.9	31.4	21.7	11.2
145	15/07/2022 01:12:13	00d 00:15:00.0	50.4	60.7	54.6	48.8	42.9	36.8	32.0	22.2	11.1
146	15/07/2022 01:27:13	00d 00:15:00.0	51.7	63.5	58.7	50.3	42.7	35.9	30.6	21.0	11.1
147	15/07/2022 01:42:13	00d 00:15:00.0	61.4	73.1	68.2	60.2	53.5	41.3	34.0	26.0	18.2
148	15/07/2022 01:57:13	00d 00:15:00.0	58.7	70.8	65.0	57.4	50.5	38.7	31.6	21.2	11.4
149	15/07/2022 02:12:13	00d 00:15:00.0	51.7	64.0	57.1	51.1	43.2	35.0	29.1	20.5	10.0
150	15/07/2022 02:27:13	00d 00:15:00.0	53.1	66.0	59.4	52.2	43.4	35.0	29.0	19.7	10.3
151	15/07/2022 02:42:13	00d 00:15:00.0	49.3	60.6	53.5	48.0	41.2	35.4	30.1	23.3	10.4
152	15/07/2022 02:57:13	00d 00:15:00.0	47.2	55.0	49.2	46.6	40.6	34.6	29.2	20.3	11.7
153	15/07/2022 03:12:13	00d 00:15:00.0	50.2	62.9	55.3	49.9	41.3	34.8	28.8	19.8	10.5
154	15/07/2022 03:27:13	00d 00:15:00.0	48.8	61.4	53.9	48.3	40.0	33.7	28.4	18.9	10.3
155	15/07/2022 03:42:13	00d 00:15:00.0	57.0	68.8	64.1	55.5	48.7	36.8	30.0	19.4	10.8
156	15/07/2022 03:57:13	00d 00:15:00.0	54.6	66.9	60.6	53.4	45.5	36.9	34.6	30.2	14.7
157	15/07/2022 04:12:13	00d 00:15:00.0	53.4	66.3	60.1	52.6	42.5	35.5	30.1	23.0	10.4
158	15/07/2022 04:27:13	00d 00:15:00.0	53.8	64.1	57.5	51.8	45.3	40.0	38.6	30.8	12.5
159	15/07/2022 04:42:13	00d 00:15:00.0	55.5	67.8	60.9	53.7	43.4	40.8	37.2	34.4	17.6
160	15/07/2022 04:57:13	00d 00:15:00.0	50.9	60.3	53.6	47.7	40.7	38.9	34.6	27.9	11.9
161	15/07/2022 05:12:13	00d 00:15:00.0	51.9	55.4	48.3	45.0	39.9	40.3	33.8	28.4	13.0
162	15/07/2022 05:27:13	00d 00:15:00.0	51.4	60.6	53.1	47.9	39.8	39.8	41.5	30.6	14.5
163	15/07/2022 05:42:13	00d 00:15:00.0	52.3	65.5	58.3	51.9	42.1	34.2	29.6	22.2	12.2
164	15/07/2022 05:57:13	00d 00:15:00.0	53.7	66.7	59.9	52.7	43.0	37.5	33.1	26.9	12.5
165	15/07/2022 06:12:13	00d 00:15:00.0	57.2	67.7	61.7	54.0	44.0	43.8	38.2	38.5	18.8
166	15/07/2022 06:27:13	00d 00:15:00.0	49.8	57.4	50.6	47.0	40.5	41.3	35.2	28.3	12.0
167	15/07/2022 06:42:13	00d 00:15:00.0	52.5	62.8	56.9	50.3	43.1	42.8	35.1	29.2	13.5
		Leq, 8 hour	55.8	67.3	61.7	54.4	47.2	39.6	34.7	28.3	13.8

L90 Rear Elevation Day Time

Address	Start Time	Measurement Time	LA90	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
99	14/07/2022 13:42:13	00d 00:15:00.0	58.9	52.1	59.1	53.0	52.3	47.8	38.2	25.8	14.8
100	14/07/2022 13:57:13	00d 00:15:00.0	59.0	52.1	58.6	52.9	52.4	47.9	38.1	25.7	14.7
101	14/07/2022 14:12:13	00d 00:15:00.0	59.1	53.8	58.8	53.3	52.5	47.9	38.3	27.0	16.0
102	14/07/2022 14:27:13	00d 00:15:00.0	58.8	51.8	58.7	52.8	52.2	47.8	37.8	26.4	15.9
103	14/07/2022 14:42:13	00d 00:15:00.0	58.8	52.6	59.2	53.0	52.1	47.7	37.8	25.9	15.3
104	14/07/2022 14:57:13	00d 00:15:00.0	56.1	51.7	56.9	52.9	50.5	43.7	35.9	25.6	15.0
105	14/07/2022 15:12:13	00d 00:15:00.0	55.2	52.5	54.7	52.9	49.4	42.0	35.0	25.0	14.7
106	14/07/2022 15:27:13	00d 00:15:00.0	55.3	53.2	54.9	52.8	49.4	42.1	35.0	24.9	14.7
107	14/07/2022 15:42:13	00d 00:15:00.0	54.9	52.3	54.3	52.5	49.0	41.8	34.5	24.2	14.5
108	14/07/2022 15:57:13	00d 00:15:00.0	55.1	52.7	54.5	52.7	49.3	41.9	35.2	24.9	14.8
109	14/07/2022 16:12:13	00d 00:15:00.0	55.5	52.3	53.8	52.6	49.6	42.6	36.2	25.8	14.9
110	14/07/2022 16:27:13	00d 00:15:00.0	55.4	53.3	54.1	53.0	49.5	42.5	35.3	23.9	13.3
111	14/07/2022 16:42:13	00d 00:15:00.0	55.5	53.9	54.4	53.1	49.6	42.4	35.1	23.7	13.4
112	14/07/2022 16:57:13	00d 00:15:00.0	55.6	53.4	55.0	53.3	50.0	42.9	35.9	25.1	13.5
113	14/07/2022 17:12:13	00d 00:15:00.0	60.5	52.2	58.0	53.3	53.8	50.1	39.5	26.3	14.7
114	14/07/2022 17:27:13	00d 00:15:00.0	60.5	52.1	57.7	53.3	53.6	50.1	39.2	26.1	14.7
115	14/07/2022 17:42:13	00d 00:15:00.0	60.7	53.0	58.2	53.6	54.1	50.4	39.8	26.8	15.1
116	14/07/2022 17:57:13	00d 00:15:00.0	60.1	52.0	57.1	50.3	53.3	50.1	40.1	26.6	14.1
117	14/07/2022 18:12:13	00d 00:15:00.0	60.3	52.2	57.2	50.3	53.5	50.3	40.0	26.7	14.0
118	14/07/2022 18:27:13	00d 00:15:00.0	60.3	51.8	57.1	50.2	53.0	50.5	39.7	26.6	14.0
119	14/07/2022 18:42:13	00d 00:15:00.0	60.5	51.4	57.1	50.3	53.2	50.6	40.0	27.1	14.5
120	14/07/2022 18:57:13	00d 00:15:00.0	60.3	50.7	56.8	49.9	53.2	50.4	39.9	26.9	14.7
121	14/07/2022 19:12:13	00d 00:15:00.0	60.5	50.1	56.8	49.9	53.4	50.7	40.4	27.3	14.6
122	14/07/2022 19:27:13	00d 00:15:00.0	60.4	50.1	56.5	49.7	53.2	50.6	40.3	27.0	14.3
123	14/07/2022 19:42:13	00d 00:15:00.0	60.2	49.1	56.3	49.5	52.7	50.4	40.0	26.8	14.3
124	14/07/2022 19:57:13	00d 00:15:00.0	60.2	49.8	56.7	49.4	52.5	50.4	40.0	26.7	14.0
125	14/07/2022 20:12:13	00d 00:15:00.0	60.1	49.1	56.4	48.8	52.5	50.3	39.6	26.5	13.9
126	14/07/2022 20:27:13	00d 00:15:00.0	60.1	49.5	56.5	48.7	52.3	50.3	39.8	26.3	13.9
127	14/07/2022 20:42:13	00d 00:15:00.0	60.3	49.3	56.4	48.9	52.9	50.3	39.9	26.6	13.8
128	14/07/2022 20:57:13	00d 00:15:00.0	60.3	50.0	56.7	49.0	52.6	50.4	39.7	26.5	14.0
129	14/07/2022 21:12:13	00d 00:15:00.0	60.0	49.5	56.3	48.6	52.7	50.0	39.6	26.1	13.9
130	14/07/2022 21:27:13	00d 00:15:00.0	60.0	48.4	56.1	48.4	52.8	50.0	39.5	26.4	14.1
131	14/07/2022 21:42:13	00d 00:15:00.0	59.9	48.1	56.1	48.3	52.6	50.1	39.2	26.5	14.2
132	14/07/2022 21:57:13	00d 00:15:00.0	59.7	47.8	55.6	47.9	52.5	50.0	39.3	26.0	14.4
133	14/07/2022 22:12:13	00d 00:15:00.0	59.8	48.4	55.6	47.9	52.7	50.2	39.5	26.4	14.3
134	14/07/2022 22:27:13	00d 00:15:00.0	59.5	49.6	55.8	47.7	52.3	50.2	38.9	26.7	15.3
135	14/07/2022 22:42:13	00d 00:15:00.0	50.1	50.1	48.6	46.8	44.0	37.8	33.4	24.0	13.3
168	15/07/2022 06:57:13	00d 00:15:00.0	46.9	45.9	44.8	44.8	39.9	35.1	29.5	20.4	10.8
169	15/07/2022 07:12:13	00d 00:15:00.0	47.4	46.7	44.5	44.8	39.7	37.0	29.8	19.1	10.2
170	15/07/2022 07:27:13	00d 00:15:00.0	45.8	47.1	45.1	44.3	38.5	33.7	27.6	18.4	9.9
171	15/07/2022 07:42:13	00d 00:15:00.0	45.6	46.4	44.9	44.6	38.7	32.7	27.4	17.9	10.1
172	15/07/2022 07:57:13	00d 00:15:00.0	46.2	47.7	46.0	44.9	39.0	32.9	27.9	18.6	10.0
173	15/07/2022 08:12:13	00d 00:15:00.0	47.5	47.0	45.8	45.0	40.1	35.3	31.4	22.3	11.0
174	15/07/2022 08:27:13	00d 00:15:00.0	49.0	47.4	46.7	45.7	41.5	37.7	33.6	24.9	11.9
175	15/07/2022 08:42:13	00d 00:15:00.0	49.8	47.7	48.3	46.4	42.0	37.8	33.7	24.4	11.8
176	15/07/2022 08:57:13	00d 00:15:00.0	48.4	47.1	49.7	45.5	40.8	36.1	32.3	22.8	10.4
177	15/07/2022 09:12:13	00d 00:15:00.0	48.4	47.9	49.0	45.3	40.7	36.4	32.1	22.7	10.5
178	15/07/2022 09:27:13	00d 00:15:00.0	49.6	48.4	48.4	46.2	42.0	37.4	33.4	24.1	11.3
179	15/07/2022 09:42:13	00d 00:15:00.0	49.8	48.7	48.6	46.6	42.3	37.2	33.4	24.4	11.4
180	15/07/2022 09:57:13	00d 00:15:00.0	48.6	48.5	48.3	46.2	41.2	35.4	30.7	22.1	10.5
181	15/07/2022 10:12:13	00d 00:15:00.0	48.9	49.0	48.5	46.5	41.6	35.9	31.1	21.5	10.7
182	15/07/2022 10:27:13	00d 00:15:00.0	48.4	48.7	48.6	46.2	41.2	35.7	30.7	21.0	10.4
183	15/07/2022 10:42:13	00d 00:06:40.6	48.9	48.5	47.7	46.3	41.6	36.7	32.8	21.8	10.7

L90 Rear Elevation Night Time

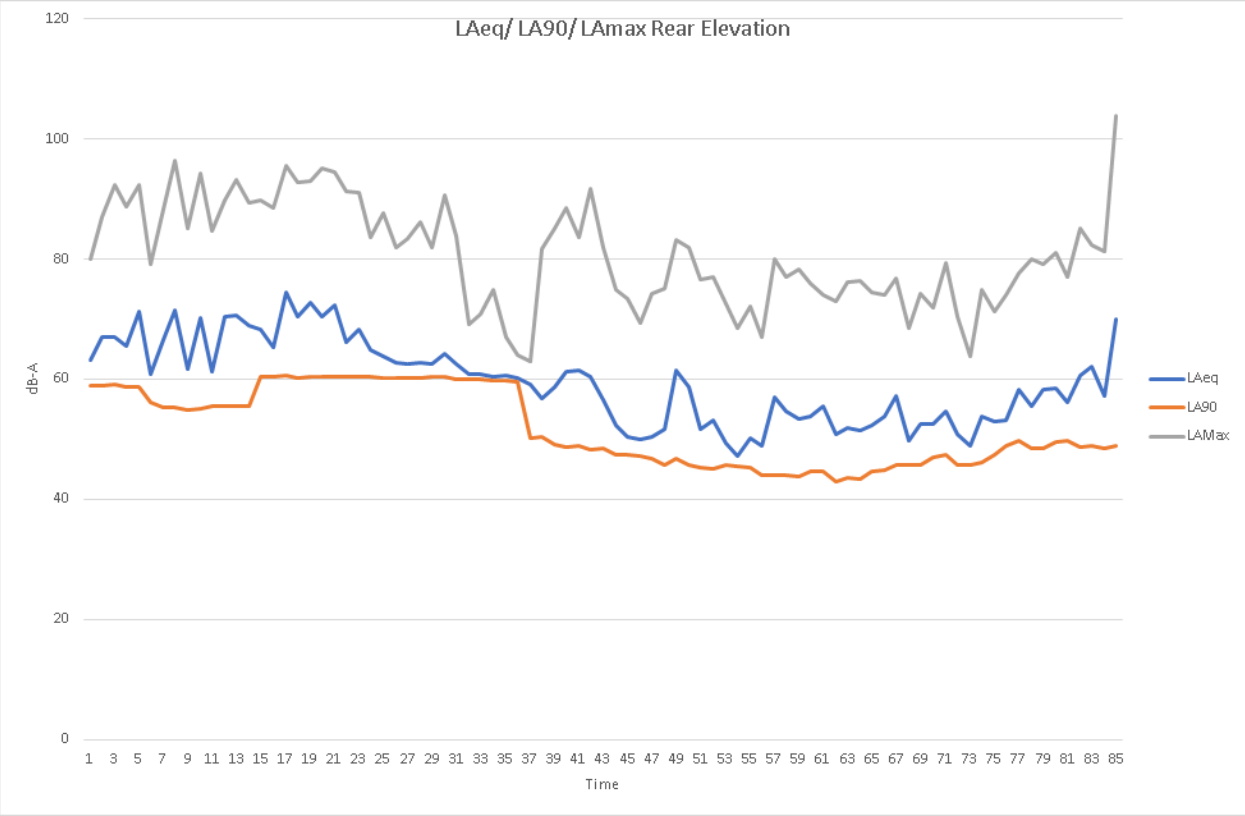
Address	Start Time	Measurement Time	LA90	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
136	14/07/2022 22:57:13	00d 00:15:00.0	50.3	51.0	47.1	46.0	44.0	38.2	33.6	23.9	12.3
137	14/07/2022 23:12:13	00d 00:15:00.0	49.1	53.2	47.4	46.0	42.6	37.1	31.8	22.0	11.1
138	14/07/2022 23:27:13	00d 00:15:00.0	48.7	52.6	46.8	45.4	42.0	36.9	31.2	20.3	10.3
139	14/07/2022 23:42:13	00d 00:15:00.0	48.8	53.2	47.4	45.6	41.8	36.7	31.2	21.0	10.5
140	14/07/2022 23:57:13	00d 00:15:00.0	48.2	52.0	46.5	45.2	41.2	36.2	30.5	20.4	10.4
141	15/07/2022 00:12:13	00d 00:15:00.0	48.4	53.2	45.9	44.9	41.6	36.6	31.4	21.0	10.6
142	15/07/2022 00:27:13	00d 00:15:00.0	47.3	48.8	44.9	44.1	40.6	35.4	30.1	19.8	10.3
143	15/07/2022 00:42:13	00d 00:15:00.0	47.5	51.2	45.4	44.4	40.7	35.3	29.8	19.8	10.3
144	15/07/2022 00:57:13	00d 00:15:00.0	47.2	48.6	45.4	44.3	40.5	34.8	29.5	20.2	10.4
145	15/07/2022 01:12:13	00d 00:15:00.0	46.7	45.5	44.5	44.2	40.1	34.4	29.4	19.9	10.1
146	15/07/2022 01:27:13	00d 00:15:00.0	45.7	45.2	43.7	43.8	38.8	33.7	27.5	17.7	9.5
147	15/07/2022 01:42:13	00d 00:15:00.0	46.8	45.9	45.2	44.5	40.1	34.5	29.1	19.5	9.9
148	15/07/2022 01:57:13	00d 00:15:00.0	45.6	44.9	43.6	43.8	39.3	33.3	27.4	17.9	9.5
149	15/07/2022 02:12:13	00d 00:15:00.0	45.2	44.7	43.2	43.4	38.7	32.9	26.9	17.2	9.3
150	15/07/2022 02:27:13	00d 00:15:00.0	45.0	45.0	43.6	43.5	38.1	32.5	26.4	16.9	9.3
151	15/07/2022 02:42:13	00d 00:15:00.0	45.7	44.2	43.8	43.8	39.1	33.1	27.2	17.8	9.6
152	15/07/2022 02:57:13	00d 00:15:00.0	45.4	43.5	43.7	43.9	38.8	33.1	27.8	19.0	10.0
153	15/07/2022 03:12:13	00d 00:15:00.0	45.2	44.4	44.0	43.9	38.3	32.8	27.7	18.8	10.0
154	15/07/2022 03:27:13	00d 00:15:00.0	43.9	44.2	42.5	43.1	37.0	31.2	25.4	16.4	9.3
155	15/07/2022 03:42:13	00d 00:15:00.0	43.9	44.3	42.9	43.2	37.1	31.2	25.3	16.3	9.2
156	15/07/2022 03:57:13	00d 00:15:00.0	44.1	44.3	42.8	43.3	37.3	31.5	25.7	16.6	9.3
157	15/07/2022 04:12:13	00d 00:15:00.0	43.8	44.9	43.1	43.1	36.8	30.6	24.8	15.6	9.2
158	15/07/2022 04:27:13	00d 00:15:00.0	44.7	43.7	43.4	43.5	37.8	31.7	27.0	18.4	10.0
159	15/07/2022 04:42:13	00d 00:15:00.0	44.7	44.5	43.4	43.5	37.7	31.3	26.9	18.4	9.8
160	15/07/2022 04:57:13	00d 00:15:00.0	43.0	43.0	41.5	42.6	36.4	29.8	23.9	15.2	8.7
161	15/07/2022 05:12:13	00d 00:15:00.0	43.5	43.1	41.8	42.5	36.6	29.9	24.4	15.8	9.4
162	15/07/2022 05:27:13	00d 00:15:00.0	43.4	43.6	42.3	42.7	36.9	30.2	24.5	15.9	9.5
163	15/07/2022 05:42:13	00d 00:15:00.0	44.6	45.5	44.2	43.6	37.8	30.9	26.9	18.5	10.2
164	15/07/2022 05:57:13	00d 00:15:00.0	44.9	45.1	44.3	43.9	38.2	31.7	27.3	18.8	10.1
165	15/07/2022 06:12:13	00d 00:15:00.0	45.7	46.1	44.1	43.7	38.2	33.7	28.6	19.7	10.1
166	15/07/2022 06:27:13	00d 00:15:00.0	45.6	44.7	42.9	43.5	38.4	35.9	29.4	18.1	9.8
167	15/07/2022 06:42:13	00d 00:15:00.0	45.8	45.3	44.0	43.8	38.6	34.5	28.2	18.6	10.2

Lmax Rear Elevation Day Time

Address	Start Time	Measurement Time	LAMax	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
99	14/07/2022 13:42:13	00d 00:15:00.0	80.0	86.7	80.4	80.8	75.6	63.2	52.2	37.8	25.5
100	14/07/2022 13:57:13	00d 00:15:00.0	87.0	94.0	90.2	85.2	79.6	72.9	63.2	54.1	32.4
101	14/07/2022 14:12:13	00d 00:15:00.0	92.3	102.5	100.0	92.6	84.6	75.7	66.3	57.3	38.1
102	14/07/2022 14:27:13	00d 00:15:00.0	88.7	98.8	95.5	87.8	81.2	73.9	62.0	53.5	34.1
103	14/07/2022 14:42:13	00d 00:15:00.0	92.4	94.6	95.3	94.6	86.1	78.6	60.4	52.8	33.5
104	14/07/2022 14:57:13	00d 00:15:00.0	79.2	87.7	85.4	76.0	71.3	62.3	51.7	56.9	33.8
105	14/07/2022 15:12:13	00d 00:15:00.0	88.2	95.5	94.4	87.4	81.1	70.7	59.7	50.4	28.5
106	14/07/2022 15:27:13	00d 00:15:00.0	96.4	102.5	101.8	95.9	85.6	83.5	75.6	70.8	56.0
107	14/07/2022 15:42:13	00d 00:15:00.0	85.0	93.9	91.9	79.3	77.4	70.7	59.9	49.8	29.1
108	14/07/2022 15:57:13	00d 00:15:00.0	94.2	101.2	98.7	94.7	84.8	77.1	66.7	57.8	40.3
109	14/07/2022 16:12:13	00d 00:15:00.0	84.7	94.6	91.8	83.4	77.1	68.3	59.2	46.4	28.2
110	14/07/2022 16:27:13	00d 00:15:00.0	89.7	99.3	94.6	91.7	79.9	75.5	62.4	54.2	37.6
111	14/07/2022 16:42:13	00d 00:15:00.0	93.1	96.4	95.2	94.5	85.3	80.2	69.4	62.8	46.9
112	14/07/2022 16:57:13	00d 00:15:00.0	89.3	93.7	93.7	86.7	80.1	77.4	65.4	56.1	38.2
113	14/07/2022 17:12:13	00d 00:15:00.0	89.8	93.9	90.9	88.5	78.6	77.6	66.4	58.5	40.5
114	14/07/2022 17:27:13	00d 00:15:00.0	88.5	101.3	92.8	87.0	80.7	72.7	62.8	54.8	35.8
115	14/07/2022 17:42:13	00d 00:15:00.0	95.5	98.8	99.3	93.7	85.3	82.6	71.9	64.0	49.7
116	14/07/2022 17:57:13	00d 00:15:00.0	92.8	104.1	98.0	92.0	84.6	77.9	68.7	64.0	49.0
117	14/07/2022 18:12:13	00d 00:15:00.0	92.9	101.2	95.7	93.9	81.9	79.1	66.9	56.4	40.4
118	14/07/2022 18:27:13	00d 00:15:00.0	95.2	101.8	97.8	96.4	86.7	79.1	68.1	60.6	43.1
119	14/07/2022 18:42:13	00d 00:15:00.0	94.4	96.8	96.1	95.8	87.2	77.9	68.0	62.9	46.1
120	14/07/2022 18:57:13	00d 00:15:00.0	91.3	100.1	94.6	92.1	80.7	80.0	70.5	58.9	44.1
121	14/07/2022 19:12:13	00d 00:15:00.0	91.1	98.1	97.6	92.0	82.7	74.7	65.4	55.0	39.2
122	14/07/2022 19:27:13	00d 00:15:00.0	83.7	95.7	88.3	85.0	73.8	64.8	54.8	42.4	26.1
123	14/07/2022 19:42:13	00d 00:15:00.0	87.7	94.4	86.7	88.1	79.7	73.1	61.0	55.0	32.3
124	14/07/2022 19:57:13	00d 00:15:00.0	82.0	90.7	88.1	80.5	74.5	61.8	54.6	36.1	22.8
125	14/07/2022 20:12:13	00d 00:15:00.0	83.4	94.2	86.7	83.5	76.2	66.4	57.5	43.5	26.7
126	14/07/2022 20:27:13	00d 00:15:00.0	86.1	80.1	79.5	80.8	81.1	76.7	73.9	64.7	58.3
127	14/07/2022 20:42:13	00d 00:15:00.0	81.9	91.0	89.7	80.5	73.1	61.3	52.0	35.4	25.1
128	14/07/2022 20:57:13	00d 00:15:00.0	90.6	103.5	95.9	91.7	82.1	72.6	63.8	55.2	37.9
129	14/07/2022 21:12:13	00d 00:15:00.0	83.8	93.9	88.2	81.5	77.3	67.4	58.1	49.5	28.2
130	14/07/2022 21:27:13	00d 00:15:00.0	69.2	78.1	77.0	67.3	56.9	52.1	40.2	25.2	16.8
131	14/07/2022 21:42:13	00d 00:15:00.0	70.8	80.7	76.6	66.8	69.0	52.6	42.7	29.0	15.1
132	14/07/2022 21:57:13	00d 00:15:00.0	74.8	79.5	79.9	74.4	65.0	53.1	42.2	26.6	16.1
133	14/07/2022 22:12:13	00d 00:15:00.0	67.0	78.7	75.9	65.8	56.8	53.0	41.6	26.6	15.1
134	14/07/2022 22:27:13	00d 00:15:00.0	64.0	50.7	58.7	53.2	56.3	52.4	45.7	28.9	18.1
135	14/07/2022 22:42:13	00d 00:15:00.0	63.0	52.9	57.4	48.3	55.4	50.9	41.2	31.3	18.3
168	15/07/2022 06:57:13	00d 00:15:00.0	72.0	51.0	48.0	46.8	43.8	49.7	57.2	55.8	40.3
169	15/07/2022 07:12:13	00d 00:15:00.0	79.3	87.6	87.2	77.4	67.8	52.8	42.7	24.9	24.1
170	15/07/2022 07:27:13	00d 00:15:00.0	70.4	81.8	75.5	67.3	63.9	47.7	36.5	21.0	10.4
171	15/07/2022 07:42:13	00d 00:15:00.0	63.9	80.1	67.4	67.3	50.6	34.6	27.9	18.5	10.9
172	15/07/2022 07:57:13	00d 00:15:00.0	74.9	83.2	77.4	74.3	70.0	54.5	45.8	29.7	24.1
173	15/07/2022 08:12:13	00d 00:15:00.0	71.2	82.9	77.9	70.5	59.7	46.4	43.8	34.6	26.5
174	15/07/2022 08:27:13	00d 00:15:00.0	74.0	80.4	80.4	70.9	63.8	47.7	36.6	24.8	11.6
175	15/07/2022 08:42:13	00d 00:15:00.0	77.7	87.1	87.9	77.5	69.0	55.4	48.4	34.0	18.1
176	15/07/2022 08:57:13	00d 00:15:00.0	80.0	95.7	86.4	78.3	71.0	58.2	51.0	35.7	23.3
177	15/07/2022 09:12:13	00d 00:15:00.0	79.2	88.0	82.5	77.1	75.3	58.6	52.7	45.5	37.9
178	15/07/2022 09:27:13	00d 00:15:00.0	81.1	94.5	89.3	78.4	74.1	61.1	53.6	38.2	24.7
179	15/07/2022 09:42:13	00d 00:15:00.0	77.0	89.7	83.8	77.2	66.3	52.3	40.6	27.3	12.9
180	15/07/2022 09:57:13	00d 00:15:00.0	85.1	88.3	93.0	85.3	77.6	64.9	56.8	48.3	26.7
181	15/07/2022 10:12:13	00d 00:15:00.0	82.3	93.4	88.6	80.2	75.4	63.5	54.9	40.1	25.8
182	15/07/2022 10:27:13	00d 00:15:00.0	81.3	93.6	87.0	80.8	73.3	63.4	54.9	39.0	25.6
183	15/07/2022 10:42:13	00d 00:06:40.6	103.8	76.2	80.4	86.5	95.3	90.5	94.0	97.8	81.6
		Lmax, 16 hour	90.8	96.5	93.2	89.0	82.2	76.9	77.0	80.6	64.4

Lmax Rear Elevation Night Time

Start Time	Measurement Time	LAMax	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
14/07/2022 22:57:13	00d 00:15:00.0	81.7	80.2	89.6	82.5	74.9	60.8	45.2	29.8	24.5
14/07/2022 23:12:13	00d 00:15:00.0	85.1	99.3	91.8	84.1	77.4	70.9	57.0	45.1	26.3
14/07/2022 23:27:13	00d 00:15:00.0	88.5	96.3	95.6	87.7	80.5	69.0	61.2	49.7	29.4
14/07/2022 23:42:13	00d 00:15:00.0	83.7	87.3	88.6	82.8	74.7	64.5	56.9	42.2	24.8
14/07/2022 23:57:13	00d 00:15:00.0	91.7	99.6	97.5	91.4	80.6	72.3	65.4	54.0	32.6
15/07/2022 00:12:13	00d 00:15:00.0	81.9	89.2	87.7	80.3	76.5	65.0	54.8	37.4	19.1
15/07/2022 00:27:13	00d 00:15:00.0	74.9	89.3	81.2	70.2	65.3	52.8	43.5	24.7	11.1
15/07/2022 00:42:13	00d 00:15:00.0	73.4	83.9	79.7	68.4	70.2	55.5	46.8	26.7	11.5
15/07/2022 00:57:13	00d 00:15:00.0	69.3	78.1	75.8	67.6	55.7	43.1	30.9	21.2	11.4
15/07/2022 01:12:13	00d 00:15:00.0	74.2	83.1	81.9	68.9	66.6	52.9	40.4	26.5	13.3
15/07/2022 01:27:13	00d 00:15:00.0	75.0	86.7	83.0	72.0	69.8	53.2	43.7	22.7	16.1
15/07/2022 01:42:13	00d 00:15:00.0	83.2	94.4	87.8	82.0	75.7	65.2	56.1	41.5	23.8
15/07/2022 01:57:13	00d 00:15:00.0	82.0	89.0	86.3	81.0	73.3	61.0	53.5	34.6	25.4
15/07/2022 02:12:13	00d 00:15:00.0	76.6	89.0	81.4	74.9	69.6	53.7	43.5	20.9	9.6
15/07/2022 02:27:13	00d 00:15:00.0	77.1	87.8	84.9	77.0	67.8	53.1	41.7	20.8	9.6
15/07/2022 02:42:13	00d 00:15:00.0	72.6	83.6	78.9	68.6	62.8	49.4	37.3	21.2	10.3
15/07/2022 02:57:13	00d 00:15:00.0	68.4	73.1	74.4	67.3	62.4	42.0	30.6	20.5	10.6
15/07/2022 03:12:13	00d 00:15:00.0	72.1	85.4	75.3	70.3	63.0	45.0	37.6	20.0	10.5
15/07/2022 03:27:13	00d 00:15:00.0	66.9	80.8	73.8	63.7	56.9	39.7	29.3	17.4	10.3
15/07/2022 03:42:13	00d 00:15:00.0	79.9	91.4	86.2	77.8	74.0	60.1	51.0	34.2	25.2
15/07/2022 03:57:13	00d 00:15:00.0	77.1	85.5	85.9	73.7	68.9	55.7	45.8	28.0	15.4
15/07/2022 04:12:13	00d 00:15:00.0	78.3	85.4	83.5	77.1	71.7	59.1	50.4	31.9	21.4
15/07/2022 04:27:13	00d 00:15:00.0	76.0	87.6	83.4	72.7	70.9	56.7	48.5	28.5	25.1
15/07/2022 04:42:13	00d 00:15:00.0	74.0	82.1	79.4	71.0	66.6	48.9	36.8	19.6	10.5
15/07/2022 04:57:13	00d 00:15:00.0	73.0	48.8	43.2	45.0	37.3	69.7	55.7	42.1	28.0
15/07/2022 05:12:13	00d 00:15:00.0	76.1	58.1	55.9	45.9	38.2	54.8	47.0	46.3	31.0
15/07/2022 05:27:13	00d 00:15:00.0	76.4	45.0	43.2	44.2	41.3	53.5	71.1	56.0	33.6
15/07/2022 05:42:13	00d 00:15:00.0	74.5	84.5	79.5	71.7	71.1	53.3	47.0	24.9	11.2
15/07/2022 05:57:13	00d 00:15:00.0	74.0	86.2	79.8	71.7	65.0	54.5	44.3	24.0	13.5
15/07/2022 06:12:13	00d 00:15:00.0	76.7	82.2	87.9	74.2	67.6	50.7	41.8	22.9	11.2
15/07/2022 06:27:13	00d 00:15:00.0	68.5	76.4	73.6	68.8	52.7	40.6	33.8	20.4	9.9
15/07/2022 06:42:13	00d 00:15:00.0	74.2	86.5	79.6	71.5	69.9	56.6	45.7	27.8	11.1
	Lmax, 8 hour	81.2	90.4	87.4	80.2	72.7	63.0	58.1	44.4	24.8


LAeq/ LA90/ LAmax Rear Elevation
120
100
80
60
40
20
0
dB-A
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85
Time
LAeq
LA90
LAMax

Appendix C – BS8233: 2014 Calculations

BS8233 Calculation - Internal Noise Level Due to External Noise Ingress

Project:	25 Rathbone Place			**Date:**	26th July 2022
Client:	QuinnRoss			**Our Ref:**	Living area
Room Width	6.9	**Volume**	77.28	$L_{eq,2}$	32.3
Room Height	3.5	**Rev Time**	1		
Room Depth	3.2	**A**	12.44208	**S**	21.9
		A_0	10		

	125	250	500	1K	2K
$L_{eq,ff}$	72	65	59	52	45
Vent $D_{n,e}$	35	40	41	47	50
$(A_v/S)*10(-D_{n,e}/10)$	0.00014	0.00005	0.00004	0.00001	0.00000
$Area_{window}$	6.8				
Window SRI	26	34	44	44	38
$(S_w/S)*10(-R_w/10)$	0.00078	0.00012	0.00001	0.00001	0.00005
$Area_{external\ wall}$	15.1				
Wall SRI	41	45	45	554	58
$(S_{ew}/S)*10(-R_{ew}/10)$	0.00005	0.00002	0.00002	0.00000	0.00000
$Area_{ceiling}$	0				
Ceiling SRI	0	0	0	0	0
$(S_w/S)*10(-R_w/10)$	0.00000	0.00000	0.00000	0.00000	0.00000
Internal Lp	47.4	33.3	22.9	10.8	7.8
A Weighting	-16.2	-8.6	-3.2	0	1.2
A Weighted Levels	31.2	24.7	19.7	10.8	9.0
	1307.324079	292.9303	94.04698	11.95159	8.033196

BS8233 Calculation - Internal Noise Level Due to External Noise Ingress

Project:	25 Rathbone Place			**Date:**	26th July 2022
Client:	QuinnRoss			**Our Ref:**	Bedrooms Day time
Room Width	3.7	**Volume**	40.145	$L_{eq,2}$	33.3
Room Height	3.5	**Rev Time**	0.7		
Room Depth	3.1	**A**	9.23335	**S**	10.2
		A_0	10		

	125	250	500	1K	2K
$L_{eq,ff}$	72	65	59	52	45
Vent $D_{n,e}$	35	40	41	47	50
$(A_v/S)*10(-D_{n,e}/10)$	0.00031	0.00010	0.00008	0.00002	0.00001
$Area_{window}$	3.8				
Window SRI	26	27	34	40	38
$(S_w/S)*10(-R_w/10)$	0.00094	0.00074	0.00015	0.00004	0.00006
$Area_{external\ wall}$	6.4				
Wall SRI	41	44	48	55	55
$(S_{ew}/S)*10(-R_{ew}/10)$	0.00005	0.00002	0.00001	0.00000	0.00000
$Area_{ceiling}$	0				
Ceiling SRI	0	0	0	0	0
$(S_w/S)*10(-R_w/10)$	0.00000	0.00000	0.00000	0.00000	0.00000
Internal Lp	46.6	37.8	26.2	13.1	6.9
A Weighting	-16.2	-8.6	-3.2	0	1.2
A Weighted Levels	30.4	29.2	23.0	13.1	8.1
	1085.762132	833.5564	197.879	20.541	6.508447

BS8233 Calculation - Internal Noise Level Due to External Noise Ingress

Project:	25 Rathbone Place			**Date:**	26th July 2022
Client:	QuinnRoss			**Our Ref:**	Bedrooms Night time
Room Width	3.7	**Volume**	40.145	$L_{eq,2}$	21.5
Room Height	3.5	**Rev Time**	0.7		
Room Depth	3.1	**A**	9.23335	**S**	10.2
		A_0	10		

	125	250	500	1K	2K
$L_{eq,ff}$	57	53	52	44	47
Vent $D_{n,e}$	35	40	41	47	50
$(A_v/S)*10(-D_{n,e}/10)$	0.00031	0.00010	0.00008	0.00002	0.00001
$Area_{window}$	3.8				
Window SRI	26	27	34	40	38
$(S_w/S)*10(-R_w/10)$	0.00094	0.00074	0.00015	0.00004	0.00006
$Area_{external\ wall}$	6.4				
Wall SRI	41	44	48	55	55
$(S_{ew}/S)*10(-R_{ew}/10)$	0.00005	0.00002	0.00001	0.00000	0.00000
$Area_{ceiling}$	0				
Ceiling SRI	0	0	0	0	0
$(S_w/S)*10(-R_w/10)$	0.00000	0.00000	0.00000	0.00000	0.00000
Internal Lp	31.6	25.8	19.2	5.1	8.9
A Weighting	-16.2	-8.6	-3.2	0	1.2
A Weighted Levels	15.4	17.2	16.0	5.1	10.1
	34.33481335	52.59386	39.48205	3.25553	10.31519

Appendix D - Definitions

DECIBEL - The ratio of sound pressures that we can hear is a ratio of 10^6. A logarithmic measurement scale is therefore used for convenience. The resulting parameter is called the 'sound pressure level' (Lp) and the associated measurement unit is the decibel (dB). As the decibel is a logarithmic ratio, the laws of logarithmic addition and subtraction apply.

The threshold of normal hearing is in the region of 0 dB, and 140 dB is the threshold of pain.

A change of 1 dB is only perceptible under controlled conditions.

dB(A) - The unit generally used for measuring environmental, traffic or industrial noise is the A-weighted sound pressure level in decibels, denoted dB(A). An 'A'-weighting network can be built into a sound level measuring instrument such that sound levels in dB(A) can be read directly from a meter. The weighting is based on the frequency response of the human ear and has been found to correlate well with human subjective reactions to various sounds. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds to a subjective halving or doubling of the loudness of a sound.

EQUIVALENT CONTINUOUS SOUND LEVEL (LEQ) - An index often used for the assessment of overall noise exposure is the equivalent continuous sound level, (LEQ). This is a notional steady level which would, over a given period of time, deliver the same sound energy as the actual time-varying sound over the same period. Hence fluctuating levels can be described in terms of a single figure level.

The 'A' weighted statistical sound level over a time period, T, is denoted $LA_{EQ,T}$.

AMBIENT NOISE - The total encompassing sound in a given situation at a given time. Most often described in terms of the index $LA_{EQ,.T}$.

SPECIFIC NOISE ($LA_{EQ,T}$) - The equivalent continuous A-Weighted sound pressure level at the assessment position produced by the specific noise source over a time interval T.

STATISTICAL NOISE LEVELS - For levels of noise that vary widely with time, for example road traffic noise, it is necessary to employ an index which allows for this variation.

- The L10, the level exceeded for ten per cent of the time period under consideration, has been adopted in this country for the assessment of road traffic noise.
- The L90, the level exceeded for ninety per cent of the time, has been adopted to represent the background noise level.

'A' weighted statistical noise levels are generally used and are denoted LA10, LA90 etc. The reference time period (T) is normally included, e.g. $LA_{10.}$