



Noise Impact Assessment

Wymondley BESS

Pivoted Power LLP (part of EDF Energy Renewables Ltd)

Prepared by:

SLR Consulting Limited

15 Middle Pavement, Nottingham, NG1 7DX

SLR Project No.: 402.065238.00001

10 April 2025

Revision: 06

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
06	10 th April 2025	AT	MD	MD

Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Pivoted Power LLP (part of EDF Energy Renewables Ltd) (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.



Table of Contents

Basis of Report	i
1.0 Introduction	4
1.1 Report Structure	4
2.0 Site Description.....	5
2.1 Existing Site	5
2.2 Proposed Site.....	6
3.0 Guidance and Standards	7
3.1 Local Guidance	7
3.2 National Standards.....	7
3.3 British Standard 4142:2014+A1:2019	7
3.4 ISO 9613-2:2024	8
4.0 Baseline Environmental Sound Survey	9
4.1 Survey Date	9
4.2 Equipment.....	9
4.3 Survey Locations	9
4.4 Soundscape	10
4.4.1 Location 1.....	10
4.4.2 Location 2.....	10
4.4.3 Location 3.....	10
4.4.4 Location 4.....	10
4.4.5 Location 5.....	10
4.5 Weather Conditions.....	11
4.6 Baseline Sound Level Results.....	12
4.7 Baseline Background Sound Levels	14
4.7.1 Location 1.....	15
4.7.2 Location 2.....	15
4.7.3 Location 3.....	16
4.7.4 Location 4.....	16
4.7.5 Location 5.....	16
4.8 Uncertainty	16
5.0 BS 4142 Assessment	18
5.1 BESS Noise Sources	18
5.2 Noise Model Assumptions	18
5.3 Sound Character Corrections	19
5.4 Results	19



5.5 Discussion.....	23
6.0 Conclusion.....	24

Tables in Text

Table 4-1 Survey Equipment.....	9
Table 4-2: Location 1 - Summary of Measured Sound Levels, free-field, dB	12
Table 4-3: Location 2 - Summary of Measured Sound Levels, free-field, dB	13
Table 4-4: Location 3 - Summary of Measured Sound Levels, free-field, dB	13
Table 4-5: Location 4 - Summary of Measured Sound Levels, free-field, dB	14
Table 4-6: Location 5 - Summary of Measured Sound Levels, free-field, dB	14
Table 4-7: Baseline Background Sound Levels for BS 4142 Assessment	15
Table 5-1: Noise Source Data	18
Table 5-3: BS 4142 Assessment	20

Figures in Text

Figure 2-1 Site Location	5
Figure 2-2: BESS location at Site No.1	6
Figure 4-1: Survey and NSR Locations	11
Figure 5-1: Daytime Predicted Specific Sound Levels $L_{Aeq,T}$ dB	21
Figure 5-2: Night-time Predicted Specific Sound Levels $L_{Aeq,T}$ dB	22

Appendices

Appendix A Glossary of Terminology

A.1 Glossary of Terminology

A.2 Acoustic Terminology

Appendix B Drawings

Appendix C Survey Photos

Appendix D Weather Data

Appendix E Noise Survey Results

Appendix F Statistical Histogram Analysis



1.0 Introduction

Pivoted Power LLP (part of EDF Energy Renewables Ltd) (EDF-R) has appointed SLR Consulting Ltd (SLR) to undertake a Noise Impact Assessment (NIA) to accompany the planning application for a proposed BESS (battery energy storage system) at Titmore Green, Little Wymondley, Hitchin.

Due to the potential for the development to increase noise levels in the area this Report includes:

- A baseline noise survey.
- A BS 4142 Assessment of the proposed operations.

1.1 Report Structure

This Report presents:

- A description of the Site.
- A description of applicable guidance.
- The results of a baseline background sound survey at locations representative of the Nearest Sensitive Receptors (NSR) to the proposed new plant.
- An assessment of proposed operations undertaken in accordance with British Standard 4142:2014+A1:2019 '*Methods for rating and assessing industrial and commercial sound*'.

Whilst reasonable effort has been made to ensure that this report is easy to understand, it is technical in nature; to assist the reader, a glossary of terminology is included in **Appendix A**.



2.0 Site Description

2.1 Existing Site

The Site is located in Titmore Green, Little Wymondley, Hitchin and is bound as follows:

- To the north by woodland and the A602.
- To the east by woodland and the A602.
- To the south by open fields with residential properties beyond.
- To the west by woodland and a National Grid Substation.

The position of the Site in the context of the surrounding area can be seen in Figure 2-1.

Figure 2-1 Site Location



Image Courtesy of Google Earth



2.2 Proposed Site

The proposed BESS layout at Site No.1 is shown in Figure 2-2. A drawing showing the site layout is provided in **Appendix B**.

Figure 2-2: BESS location at Site No.1

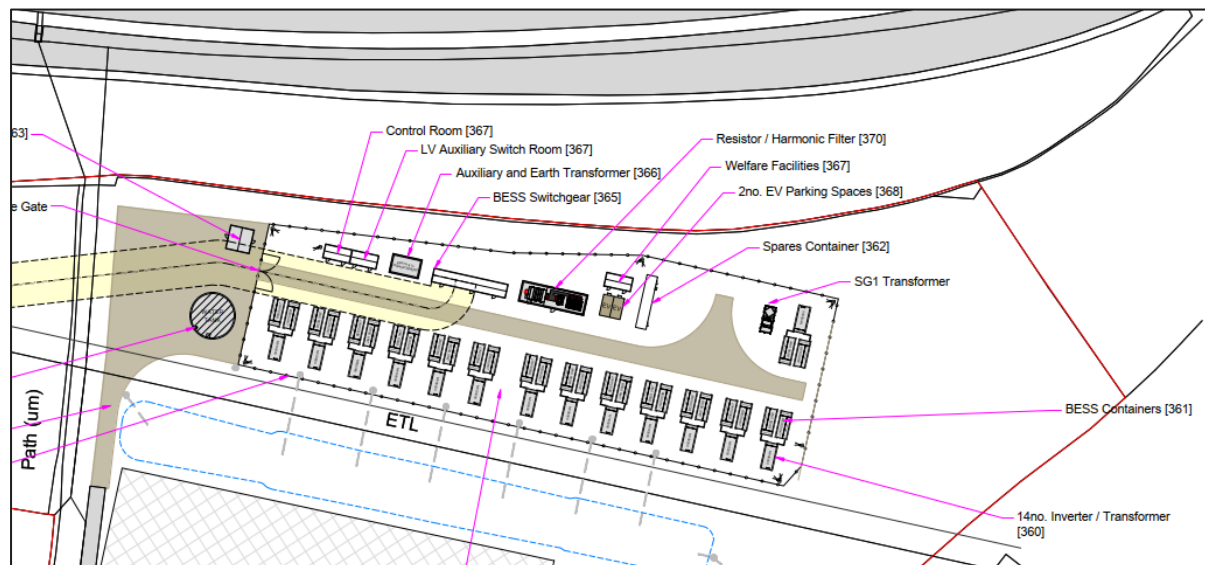


Image Courtesy of EDF Renewables. Drawing No. WYM-EDFR-BESS-CIV-PLN-300-04. Rev: 04. Title: 'Site Layout Plan'



3.0 Guidance and Standards

3.1 Local Guidance

The North Hertfordshire Local Plan 2011 – 2031 was adopted on Tuesday 8th November 2022 and sets out guidance and policies in regard to development within the area.

Policy D3: 'Protecting Living Conditions' states:

"Planning permission will be granted for development proposals which do not cause unacceptable harm to living conditions North Hertfordshire Local Plan 2011-2031 Where the living conditions of proposed developments would be affected by an existing use or the living conditions of an existing development would be affected by a proposed use, the Council will consider whether there are mitigation measures that can be taken to mitigate the harm to an acceptable level. If the Council is not satisfied that mitigation proposals would address the identified harm, development proposals will not be permitted."

Following the above, section 9.19 of the Local Plan goes on to state:

"All development has the potential to have an adverse impact on its neighbours, in a wide variety of ways. Such harm may arise from traffic generation, parking, loss of daylight and sunlight, noise, overlooking, pollution (including light pollution) and dominance as well as other issues."

Further references in Section 9.22 and 9.23 relate to the use of appropriate mitigation measures to ensure that suitable living conditions are met.

3.2 National Standards

A summary of the requirements outlined in BS 4142:2014+A1:2019 are provided below.

3.3 British Standard 4142:2014+A1:2019

British Standard 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound' is intended to be used to assess the potential adverse impact of sound, of an industrial and/or commercial nature, at nearby noise-sensitive receptor locations within the context of the existing sound environment.

Where the specific sound contains tonality, impulsivity and/or other sound characteristics, penalties should be applied depending on the perceptibility. For tonality, a correction of either 0, 2, 4 or 6 dB should be added and for impulsivity, a correction of either 0, 3, 6 or 9 dB should be added. If the sound contains specific sound features which are neither tonal nor impulsive, a penalty of 3 dB should be added.

In addition, if the sound contains identifiable operational and non-operational periods, that are readily distinguishable against the existing sound environment, a further penalty of 3 dB may be applied.

The assessment of impact contained in BS 4142:2014+A1:2019 is undertaken by comparing the sound rating level, i.e. the specific sound level of the source plus any penalties, to the measured representative background sound level immediately outside the noise-sensitive receptor location. Consideration is then given to the context of the existing sound environment at the noise-sensitive receptor location to assess the potential impact.

Once an initial estimate of the impact is determined, by subtracting the measured background sound level from the rating sound level, BS 4142:2014+A1:2019 states that the following should be considered:

- typically, the greater the difference, the greater the magnitude of the impact;



- a difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;
- a difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context; and
- the lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. It is an indication that the specific sound source has a low impact, depending on the context.

BS 4142:2014+A1:2019 notes that:

“Adverse impacts include, but are not limited to, annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact.”

BS 4142:2014+A1:2019 outlines guidance for the consideration of the context of the potential impact including consideration of the existing residual sound levels, location and/or absolute sound levels.

To account for the acoustic character of proposed sound sources, BS 4142:2014+A1:2019 provides the following with respect to the application of penalties to account for *“the subjective prominence of the character of the specific sound at the noise-sensitive locations and the extent to which such acoustically distinguishing characteristics will attract attention”*.

- **Tonality** – For sound ranging from not tonal to predominantly tonal the Joint Nordic Method gives a correction of between 0dB and +6dB for tonality. Subjectively, this can be converted to a penalty of 2dB for a tone which is just perceptible at the noise receptor, 4 dB where it is clearly perceptible and 6dB where it is highly perceptible;
- **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 receptor, 6 dB where it is clearly perceptible, and 9 dB where it is highly perceptible;
- **Intermittency** – When the specific sound has identifiable on/off conditions, the specific sound level ought to be representative of the time period of length equal to the reference time interval which contains the greatest total amount of on time. If the intermittency is readily distinctive against the residual acoustic environment, a penalty of 3 dB can be applied; and
- **Other Sound Characteristics** – Where the 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.

Finally, BS 4142:2014+A1:2019 outlines guidance for the consideration of the context of the potential impact, including consideration of the existing residual sound levels, location and/or absolute sound levels.

3.4 ISO 9613-2:2024

The levels of sound generated by the operation of the proposed Plant has been predicted in accordance with the prediction framework within ISO 9613-2:2024 ‘Acoustics – Attenuation of Sound during Propagation Outdoors– Part 2: Engineering method for the prediction of sound pressure levels outdoors’. This method of calculation takes into account the distance between the sound sources and the closest receptors, and the amount of attenuation due to atmospheric absorption. The methodology also assumes downwind propagation, i.e. a wind direction that assists the propagation of sound from the source to the receiver.



4.0 Baseline Environmental Sound Survey

4.1 Survey Date

To determine baseline sound levels in the vicinity of the Site, an environmental sound survey was undertaken between Thursday 23rd May 2024 and Tuesday 28th May 2024.

4.2 Equipment

The equipment used during the survey is detailed in Table 4-1. All measurement instrumentation was calibrated before and after the measurements. No significant drift was observed. The calibration chain is traceable via the United Kingdom Accreditation Service (UKAS) to National Standards held at the National Physical Laboratory.

Table 4-1 Survey Equipment

Location	Equipment	Serial Number
1	Cirrus CR:831B Class 1 Sound Level Meter	C17175FF
	Cirrus CR:515 Acoustic Calibrator	72210
2	Cirrus CR:171B Class 1 Sound Level Meter	G303356
	Cirrus CR:515 Acoustic Calibrator	97641
3	Cirrus CR:171B Class 1 Sound Level Meter	G061094
	Cirrus CR:515 Acoustic Calibrator	72210
4	Cirrus CR:171B Class 1 Sound Level Meter	G068726
	Cirrus CR:515 Acoustic Calibrator	102979
5	Norsonic Nor140 Class 1 Sound Level Meter	1403012
	Norsonic 1251 Acoustic Calibrator	31872

4.3 Survey Locations

Sound levels were measured at five locations, representative of the nearest NSRs to the Site, as follows:

- Location 1: Representative of NSR on Tower Close, Stevenage Road (North)
- Location 2: Representative of NSR at Hermit of Redcoats, Titmore Green and Titmore Green Farm and the development at the Land South of Little Wymondley.
- Location 3: Representative of NSRs at Chantry Lane and Stevenage Road (South).
- Location 4: Representative of NSR at Blakemore Farmhouse
- Location 5: Representative of NSR at Redcoats and The Farmhouse.

Photographs of each survey position can be seen in **Appendix C**.

The survey locations (indicated in green) and the nearest NSRs (indicated in yellow) are shown in Figure 4-1.



4.4 Soundscape

4.4.1 Location 1

On setup, the noise climate consisted of mostly the A602 main road, with occasional trains and planes to and from Luton airport. Birdsong and noise from people playing tennis at the nearby tennis club was also audible.

On collection, the noise climate was again dominated by the A602 with occasional trains and planes to and from Luton airport. Due to inclement weather, on collection, there was no birdsong heard, and the tennis courts were not in use.

4.4.2 Location 2

On setup, the noise climate consisted of mostly road traffic on the A602, with occasional trains and aircraft associated with Luton airport. Birdsong was also audible.

On collection, the noise climate was again dominated by the A602 with occasional trains and aircraft. Due to inclement weather, on collection, there was no birdsong heard.

4.4.3 Location 3

On setup, the noise climate consisted of road traffic on the A602 main road and Chantry Lane, birdsong, occasional dogs from the day camp and breeze in the trees.

On collection, the noise climate was the same as setup, with the addition of occasional aircraft.

4.4.4 Location 4

On setup, the noise climate consisted of mostly road traffic on the A602, along with occasional traffic from Blakemore End Road. Birdsong was also audible.

On collection, the A602 was considered to be dominant.

4.4.5 Location 5

On setup, the noise climate consisted of principally birdsong, with road traffic on the A602 and Blake Road, and aircraft associated with Luton airport also heard. Notably, music was audible, potentially emanating from 'The Farmhouse' to the south.

On collection, the A602 was considered to be dominant. Birdsong could also be heard.



Figure 4-1: Survey and NSR Locations



Image Courtesy of Google Earth

At the survey locations, the microphone was placed approximately 1.5 m above the local ground level in free-field conditions, i.e. at least 3.5 m from the nearest vertical, reflecting surface. The following noise level indices were recorded:

- $L_{Aeq,T}$: The A-weighted equivalent continuous noise level over the measurement period.
- $L_{A90,T}$: The A-weighted noise level exceeded for 90 % of the measurement period. This parameter is often used to describe background noise.
- $L_{A10,T}$: The A-weighted noise level exceeded for 10 % of the measurement period. This parameter is often used to describe road traffic noise.
- L_{AFmax} : The maximum A-weighted noise level during the measurement period.

4.5 Weather Conditions

A weather station was set up on site to measure the weather conditions. During the survey, the weather conditions were generally suitable for noise monitoring. There was some rainfall and high wind speeds recorded during Thursday 23rd and Sunday 26th May. Data obtained during these periods of inclement weather have been excluded from the dataset before determining the noise levels.

A full summary of the weather conditions for the duration of the noise survey during daytime and night-time periods can be seen in **Appendix D**.



4.6 Baseline Sound Level Results

A summary of the survey results is shown in Table 4-2 to Table 4-6. The logarithmic average $L_{Aeq,T}$ value is given for day and night-time periods in the tables. The full survey results are available in **Appendix E**.

At 08:45 on Friday the 24th May at Location 1, the meter stopped recording due to a battery malfunction. The nearest meter to Location 1 that was operational was Location 2; from a comparison of the L_{90} during the time periods where the two datasets can be compared (the data obtained between 12:15 on the 23rd and 07:00 on the 24th May), the measured L_{A90} levels at Location 2 were higher than at Location 1 as follows:

- Daytime: 2 dB(A).
- Night-Time: 1.7 dB(A).

The measured noise levels at Location 2 have been adjusted by the above amounts to determine the L_{A90} dB at Location 1.

The adjusted data is shown in Table 4-2, in *italic*.

Table 4-2: Location 1 - Summary of Measured Sound Levels, free-field, dB

Date	Period, T	$L_{Aeq,T}$	L_{Amax}	Median $L_{A10,15min}$	Median $L_{A90,15min}$
Thursday 23 rd May	12:15 – 23:00	51.0	68.3	52.8	47.9
	23:00 – 07:00	46.7	64.8	48.0	38.0
Friday 24 th May	07:00 – 23:00	-	-	-	48.1
	23:00 – 07:00	-	-	-	45.0
Saturday 25 th May	07:00 – 23:00	-	-	-	50.3
	23:00 – 07:00	-	-	-	43.2
Sunday 26 th May	07:00 – 23:00	-	-	-	47.2
	23:00 – 07:00	-	-	-	38.1
Monday 27 th May	07:00 – 23:00	-	-	-	44.7
	23:00 – 07:00	-	-	-	38.3
Tuesday 28 th May	07:00 – 12:45	-	-	-	49.1



Table 4-3: Location 2 - Summary of Measured Sound Levels, free-field, dB

Date	Period	$L_{Aeq,T}$	L_{Amax}	Median $L_{A10,15min}$	Median $L_{A90,15min}$
Thursday 23 rd May	18:15 – 23:00	61.0	88.4	55.7	49.9
	23:00 – 07:00	48.6	70.4	50.1	39.7
Friday 24 th May	07:00 – 23:00	53.4	87.1	54.6	50.1
	23:00 – 07:00	51.1	72.7	52.8	46.6
Saturday 25 th May	23:00 – 07:00	55.7	77.4	57.6	52.3
	23:00 – 07:00	50.2	75.0	50.4	44.9
Sunday 26 th May	23:00 – 07:00	52.2	73.9	53.7	49.2
	23:00 – 07:00	46.9	80.4	48.4	39.8
Monday 27 th May	23:00 – 07:00	50.8	82.6	52.3	46.7
	23:00 – 07:00	48.2	67.1	48.1	40.0
Tuesday 28 th May	07:00 – 12:45	53.2	79.7	54.4	51.1

Table 4-4: Location 3 - Summary of Measured Sound Levels, free-field, dB

Date	Period	$L_{Aeq,T}$	L_{Amax}	Median $L_{A10,15min}$	Median $L_{A90,15min}$
Thursday 23 rd May	18:15 – 23:00	51.9	83.3	52.0	46.4
	23:00 – 07:00	47.2	76.3	47.0	37.6
Friday 24 th May	07:00 – 23:00	61.5	96.8	53.6	47.2
	23:00 – 07:00	50.0	66.7	51.9	47.0
Saturday 25 th May	07:00 – 23:00	54.0	77.7	55.3	51.6
	23:00 – 07:00	50.2	70.6	49.8	43.6
Sunday 26 th May	07:00 – 23:00	52.5	76.5	53.8	49.5
	23:00 – 07:00	47.0	71.9	47.8	41.0
Monday 27 th May	07:00 – 23:00	51.2	72.4	53.0	47.3
	23:00 – 07:00	49.9	69.5	48.7	42.5
Tuesday 28 th May	07:00 – 12:15	55.1	74.4	56.6	53.0



Table 4-5: Location 4 - Summary of Measured Sound Levels, free-field, dB

Date	Period	$L_{Aeq,T}$	L_{Amax}	Median $L_{A10,15min}$	Median $L_{A90,15min}$
Thursday 23 rd May	18:15 – 23:00	55.5	78.5	53.8	47.6
	23:00 – 07:00	48.3	75.7	49.8	37.6
Friday 24 th May	07:00 – 23:00	53.7	79.7	55.5	49.8
	23:00 – 07:00	51.9	81.7	52.9	45.0
Saturday 25 th May	07:00 – 23:00	56.4	78.2	58.5	52.6
	23:00 – 07:00	54.1	71.8	56.1	44.3
Sunday 26 th May	07:00 – 23:00	54.5	77.4	55.9	50.5
	23:00 – 07:00	47.9	67.5	50.4	39.4
Monday 27 th May	07:00 – 23:00	52.6	78.0	54.8	47.0
	23:00 – 07:00	52.5	72.2	54.2	39.3
Tuesday 28 th May	07:00 – 13:15	58.3	76.2	60.7	55.4

Table 4-6: Location 5 - Summary of Measured Sound Levels, free-field, dB

Date	Period	$L_{Aeq,T}$	L_{Amax}	Median $L_{A10,15min}$	Median $L_{A90,15min}$
Thursday 23 rd May	18:15 – 23:00	48.3	77.5	50.4	45.8
	23:00 – 07:00	42.2	68.0	43.5	34.7
Friday 24 th May	07:00 – 23:00	48.5	76.6	50.3	43.0
	23:00 – 07:00	47.1	74.2	48.0	39.0
Saturday 25 th May	07:00 – 23:00	52.2	75.6	54.6	48.5
	23:00 – 07:00	47.7	72.2	48.6	41.6
Sunday 26 th May	07:00 – 23:00	48.2	74.6	48.9	43.3
	23:00 – 07:00	42.7	76.5	43.0	36.3
Monday 27 th May	07:00 – 23:00	46.7	82.7	48.3	42.2
	23:00 – 07:00	44.5	60.8	44.9	35.8
Tuesday 28 th May	07:00 – 13:00	50.4	82.6	51.6	47.8

4.7 Baseline Background Sound Levels

Histograms of the daytime and night-time baseline background sound levels at all locations can be seen in **Appendix F**.

From a review of the data, the following baseline background sound levels presented in Table 4-7 may be considered representative for the BS 4142:2014+A1:2019 assessment required for the Site. Data affected by unsuitable weather conditions has been removed.



Table 4-7: Baseline Background Sound Levels for BS 4142 Assessment

Monitoring Location	Noise Sensitive Receptor	Period	$L_{A90,15min}$ Range, dB	$L_{A90,15min}$ Selected, dB
1	Tower Close	07:00 - 23:00	-	47
		23:00 - 07:00	-	40
1	Stevenage Road (North)	07:00 - 23:00	-	47
		23:00 - 07:00	-	40
4	Blakemore Farmhouse	07:00 - 23:00	43 - 57	49
		23:00 - 07:00	32 - 56	40
5	Red Coats	07:00 - 23:00	35 - 51	43
		23:00 - 07:00	27 - 49	37
5	The Farmhouse	07:00 - 23:00	35 - 51	43
		23:00 - 07:00	27 - 49	37
2	Hermit of Redcoats	07:00 - 23:00	42 - 55	49
		23:00 - 07:00	31 - 51	42
2	Titmore Green	07:00 - 23:00	42 - 55	49
		23:00 - 07:00	31 - 51	42
2	Titmore Green Farm	07:00 - 23:00	42 - 55	49
		23:00 - 07:00	31 - 51	42
2	Land South of Little Wymondley Development	07:00 - 23:00	42 - 55	49
		23:00 - 07:00	31 - 51	42
3	Chantry Lane	07:00 - 23:00	41 - 54	48
		23:00 - 07:00	32 - 53	41
3	Stevenage Road (South)	07:00 - 23:00	41 - 54	48
		23:00 - 07:00	32 - 53	41

4.7.1 Location 1

Daytime

See discussion for Location 2 with a level of 2 dB(A) lower selected. Value selected is therefore 47 dB(A).

Night-time

See discussion for Location 2 with a level of 2 dB(A) lower selected. Value selected is therefore 40 dB(A).

4.7.2 Location 2

Daytime

There is a strong daytime peak at 50 dB(A). However, this value will not be used as the measured noise level is less than 50 dB(A) for approx. 59 % of the time. Therefore, a level of 49 dB(A) has been selected as more representative. The baseline background sound level is lower than this value for approx. 40 % of the time.



Night-time

Night-time levels were somewhat evenly spread between 31 dB(A) – 49 dB(A), with an upward trend towards 49 dB(A). A level of 42 dB(A) may be considered a robust representative baseline background sound level, as a level lower than this value occurred for just 40% of the time.

4.7.3 Location 3

Daytime

There is a strong daytime peak at 48 dB(A). On the basis that the measured noise level is less than 48 dB(A) for approx. 34 % of the time a level of 48 dB(A) has been selected as a robust baseline background sound level at Location 3.

Night-time

Night-time levels were spread between 32 and 53 dB(A). Approximately 35% of results were less than 41 dB(A) and therefore this figure has been selected as a robust baseline background sound level at Location 3.

4.7.4 Location 4

Daytime

There is a strong daytime peak at 51 dB(A). However, this value will not be used as the measured noise level is less than 51 dB(A) for approx. 63 % of the time. Therefore, a level of 49 dB(A) has been selected as more representative. The baseline background sound level is lower than this value for approx. 40 % of the time.

Night-time

Night-time levels were spread between 32 dB(A) – 56 dB(A), with under 40 % of results at less than 40 dB(A). 40 dB(A) has been selected as a robust baseline background sound level at Location 4.

4.7.5 Location 5

Daytime

There is a strong daytime peak at 43 dB(A). On the basis that the measured noise level is less than 43 dB(A) for approx. 40 % of the time a level of 43 dB(A) has been selected as a robust baseline background sound level at Location 5.

Night-time

Night-time levels were spread between 27 dB(A) – 49 dB(A), with under 40 % of results at less than 37 dB(A). 37 dB(A) has been selected as a robust baseline background sound level at Location 4.

4.8 Uncertainty

In accordance with BS 4142:2014+A1:2019 the uncertainty associated with measured baseline sound levels requires discussion. Baseline sound level measurement uncertainty was minimised using the following steps:

- Measurement locations were representative of the nearest NSR to the Site;
- Measurements were undertaken using a suitable logging period considered to provide representative background sound levels;
- The sound measurements included an extended period;



- Measurements were rounded to the nearest one decimal place before the final calculations; and
- Instrumentation was appropriate and in accordance with Section 5 of BS 4142:2014+A1:2019.



5.0 BS 4142 Assessment

5.1 BESS Noise Sources

The noise sources at the BESS Site would include:

- Harmonic Filter.
- Auxiliary Transformer.
- PCS and Transformer.
- Battery units.

Manufacturer supplied noise data for the proposed plant is shown in Table 5-1. The location of each item of plant can be seen in Figure 2-2.

Table 5-1: Noise Source Data

Plant	Model Details	Noise Attribute	Quantity
Harmonic Filter and Resister	Source at 6 m. Modelled as a vertical area source.	57 dB(A) at 1m	1
Transformer	Source at 4 m. Modelled as a Point Source	Sound Power 76 dB(A)	1
PCS and Transformer	Details discussed below	Sound Power 83 dB(A)	28
Battery units	Details discussed below	Sound Power 81 dB(A)	14

For the battery units, the sides and roof have been modelled as area sources, with the noise model validated against the noise test report provided by the manufacturer.

The battery units have been modelled as an area source (i.e. building structure) with hard reflective ground, and the following dimensions:

- Width – 6058 mm
- Depth – 2438 mm
- Height – 2896 mm (plus a 300 mm sub-base + 989 mm noise mitigation kit)

The noise model also includes the noise attenuation kit, which will be installed with the battery units and significantly reduces the noise output.

The MVS combines the PCS and transformer on a single 6m long skid base. Due to the complexities in modelling this setup, the MVS has been modelled a single point source, at a height of 1.5m. This approach aligns with the noise test report, which indicates that the PCS is the dominant noise source on the MVS.

5.2 Noise Model Assumptions

The sound predictions in this assessment have been undertaken using a proprietary software-based noise model, CadnaA, which implements the full range of UK noise-based calculation methods. The calculation algorithms set out in ISO 9613-2:1996 '*Acoustics – Attenuation of sound during propagation outdoors – Part 2 General method of calculation*' have been used and the model assumes:

- A ground absorption factor of 0.5.
- Contour Data to include OS terrain data.



- A reflection factor of 3.

5.3 Sound Character Corrections

The character of each noise source, and the sound correction that will be applied in the BS 4142:2014+A1:2019 assessment, is detailed below:

- **Tonality:** SLR has not been able to undertake the BS 4142:2014+A1:2019 Objective method for assessing the audibility of tones in sound: one third octave method. However, it is understood that the equipment would be broadband in nature, and tonal noise would be designed out of the Scheme. Therefore, taking a precautionary approach, a 2 dB(A) character correction will be applied.
- **Impulsivity:** It is not anticipated that the operation would produce any impulsive noise.
- **Other sound characteristics:** When operating, the proposals may be distinctive against the residual soundscape. Therefore, a precautionary 3 dB(A) correction will be applied.
- **Intermittency:** Over the BS4142:2014+A1:2019 reference period of 1-hour in the daytime (07:00 – 23:00) and 15-minutes at night-time (23:00 – 07:00), it is anticipated that the noise sources would be constant; therefore, no intermittency correction is required.

Based on the above, a 5 dB acoustic character correction has been applied to the predicted specific sound level, to derive the corresponding rating levels.

5.4 Results

The BS 4142 assessment for the BESS Site, is presented in Table 5-3. The daytime and night-time CADNA output images can be seen in Figure 5-1 and Figure 5-2 respectively.



Table 5-2: BS 4142 Assessment

Receptor	Assessment Period	Predicted Specific Sound Level, $L_{Aeq,T}^1$	Predicted Rating Level, $L_{Ar,Tr}$	Referenced Background Sound Level $L_{A90,T}$	Difference
Tower Close	Daytime	31	36	47	-11
	Night-Time	32	37	40	-3
Stevenage Road (North)	Daytime	27	32	47	-15
	Night-Time	28	33	40	-7
Blakemore Farmhouse	Daytime	27	32	49	-17
	Night-Time	28	33	40	-7
Red Coats	Daytime	26	31	43	-12
	Night-Time	28	33	37	-4
The Farmhouse	Daytime	26	31	43	-12
	Night-Time	27	32	37	-5
Hermit of Redcoats	Daytime	35	40	49	-9
	Night-Time	36	41	42	-1
Titmore Green	Daytime	38	43	49	-6
	Night-Time	38	43	42	1
Titmore Green Farm	Daytime	38	43	49	-6
	Night-Time	39	44	42	2
Land South of Little Wymondley Development	Daytime	33	38	49	-11
	Night-Time	34	39	42	-3
Chantry Lane	Daytime	34	39	48	-9
	Night-Time	34	39	41	-2
Stevenage Road (South)	Daytime	34	39	48	-9
	Night-Time	35	40	41	-1

¹ See Table 7.1 of Report 410.HF03.00001 V3 Dated October 2022.



Figure 5-1: Daytime Predicted Specific Sound Levels $L_{Aeq,T}$ dB

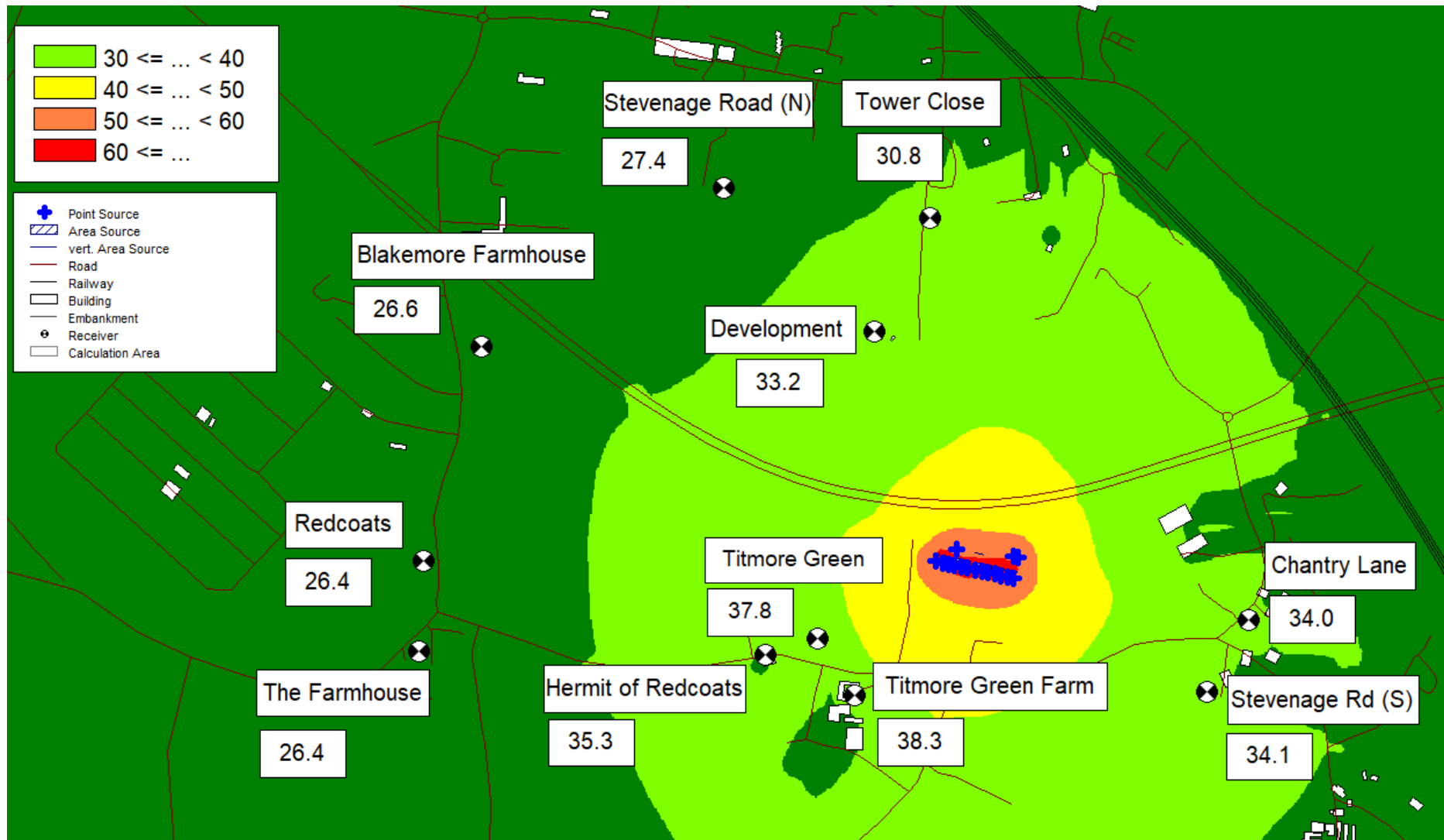
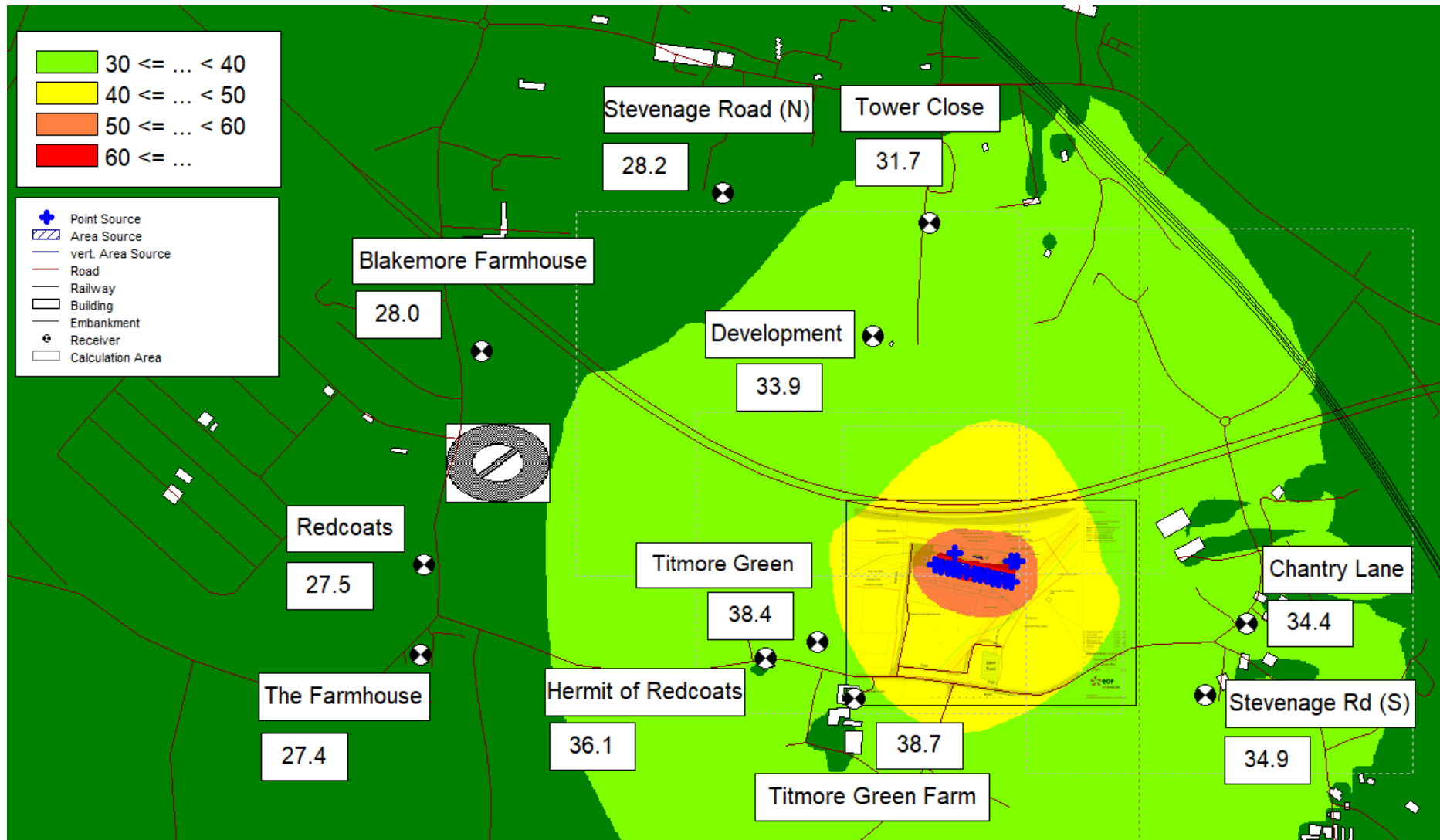


Figure 5-2: Night-time Predicted Specific Sound Levels $L_{Aeq,T}$ dB



5.5 Discussion

The results in Table 5-3 show that, during the daytime, the rating level of the proposed development would be between 6 dB(A) and 17 dB(A) below the baseline background sound level.

During the night-time, the rating level of the proposed development would be between 2 dB(A) above and 7 dB(A) below the baseline background sound level.

The above findings indicate that, with reference to BS 4142, the proposed development is unlikely to lead to an adverse impact upon the nearest residential receptors during both the daytime and night-time.

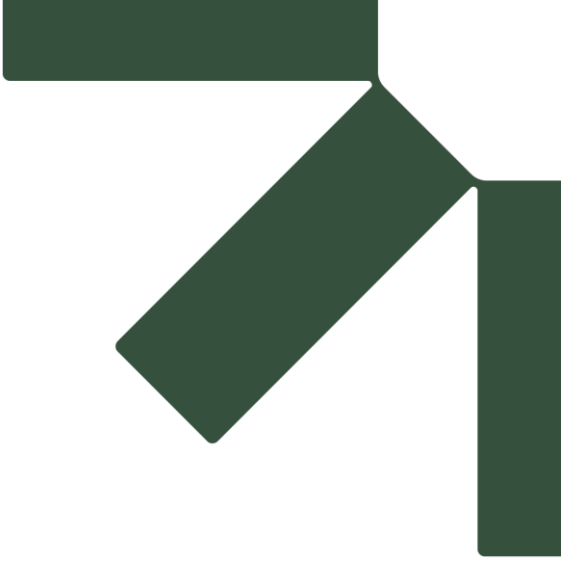


6.0 Conclusion

Pivoted Power LLP (part of EDF Energy Renewables Ltd) (EDF-R) has appointed SLR Consulting Ltd (SLR) to undertake a Noise Impact Assessment (NIA) to accompany the planning application for a proposed BESS (battery energy storage system) at Titmore Green, Little Wymondley, Hitchin.

This assessment has concluded that, with the addition of the proposed development, the rating level is unlikely to lead to an adverse impact on the nearest Noise Sensitive Receptors during the daytime and night-time.





Appendix A Glossary of Terminology

A.1 Glossary of Terminology

The human ear can detect a very wide range of pressure fluctuations, which are perceived as sound. In order to express these fluctuations in a manageable way, a logarithmic scale called the decibel, or dB scale is used. The decibel scale typically ranges from 0dB (the threshold of hearing) to over 120dB. An indication of the range of sound levels commonly found in the environment is given in the following table.

Table A-1: Sound Levels Commonly Found in the Environment

0 dB(A)	Threshold of hearing
20 to 30 dB(A)	Quiet bedroom at night
30 to 40 dB(A)	Living room during the day
40 to 50 dB(A)	Typical office
50 to 60 dB(A)	Inside a car
60 to 70 dB(A)	Typical high street
70 to 90 dB(A)	Inside factory
100 to 110 dB(A)	Burglar alarm at 1m away
110 to 130 dB(A)	Jet aircraft on take off
140 dB(A)	Threshold of Pain

A.2 Acoustic Terminology

dB (decibel) The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (of 20 μ Pa).

dB(A) A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.

$L_{Aeq, T}$ $L_{Aeq, T}$ is defined as the notional steady sound level which, over a stated period T, would contain the same amount of acoustical energy as the A-weighted fluctuating sound measured over that period.

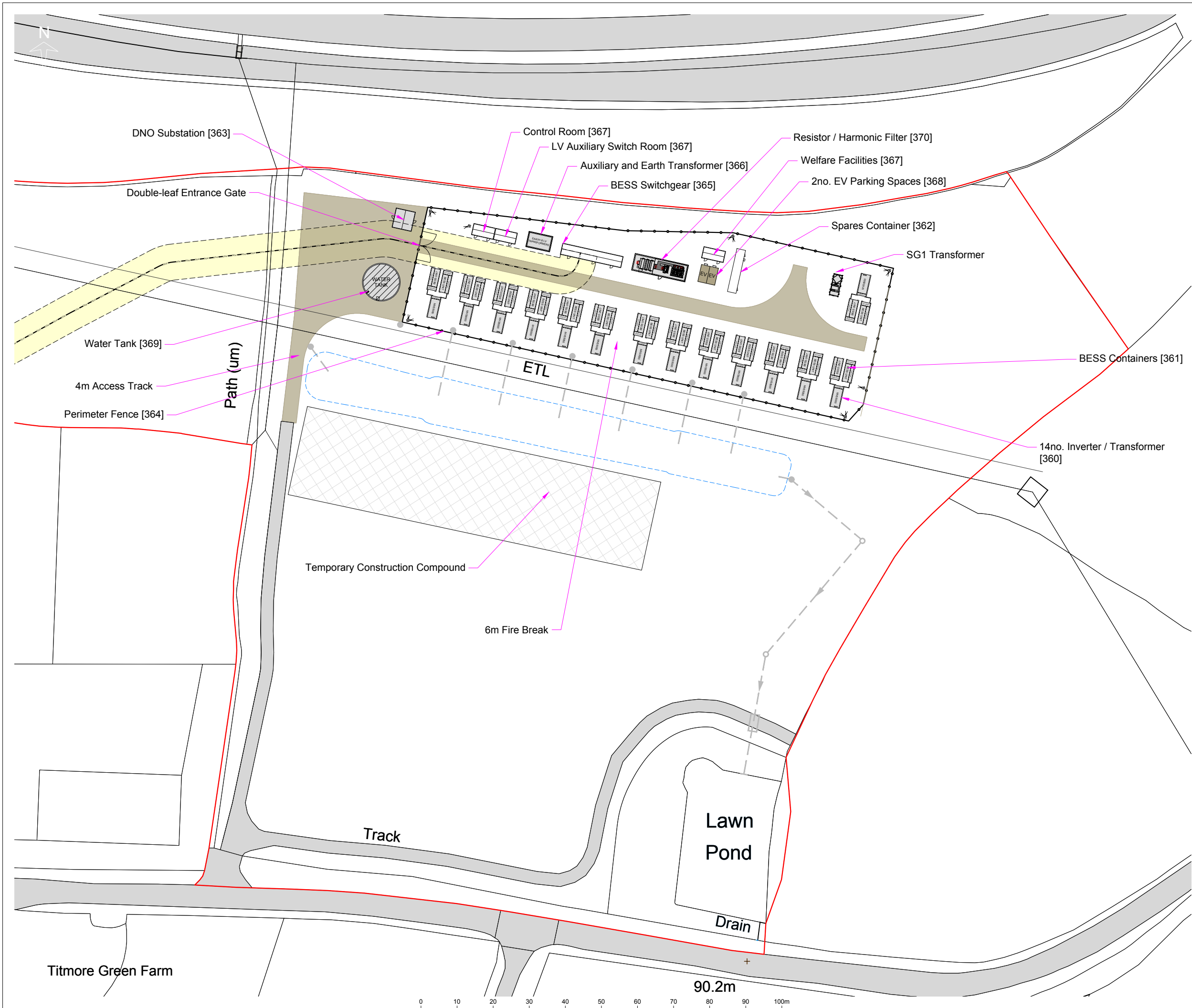
$L_{A10, T}$ & L_{A90} If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The L_n indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence L_{A10} is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L_{A90} is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the L_{A10} index to describe traffic noise.

$L_{Amax(F)}$ $L_{Amax(F)}$ is the maximum A-weighted sound pressure level recorded over the period stated. L_{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.



Appendix B Drawings





NOTES

1. Drawing details and dimensions for planning purposes only.

LEGEND

- PLANNING APPLICATION BOUNDARY
- PERIMETER FENCE
- CONSTRUCTION COMPOUND
- UNDERGROUND POC CABLE ROUTE AND EASEMENT
- SWALE
- DRAINAGE RUNS

08.	Title Updated	07.04.25	SRY
07.	Key updated	04.04.25	SRY
06.	Drainage layout updated	21.02.25	SRY
05.	Red line updated	21.02.25	SRY
04.	Site components updated	17.02.25	SRY
03.	BESS spaced to 1.5m	13.02.25	SRY
02.	Temp compound added	11.02.25	SRY
01.	Initial Issue	30.01.25	SRY
Rev	Description	Date	Checked

Drawing No.
WYM-EDFR-BESS-CIV-PLN-300-08

Project
Wymondley BESS

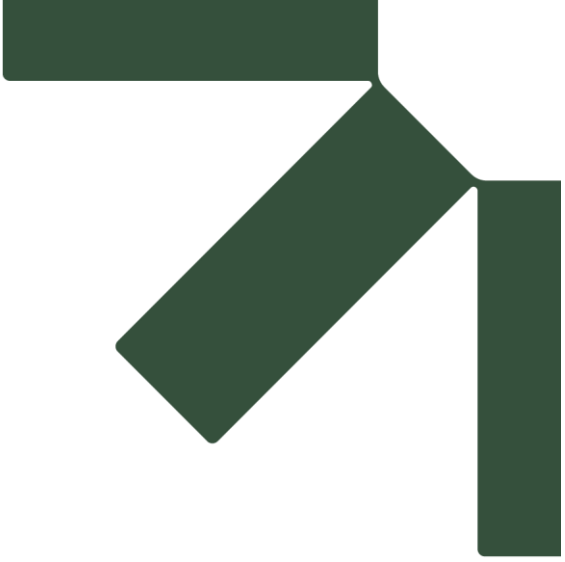
Title
Site Layout Plan

Scale
1:1000 @A3

Drawn by
JL

Checked
-

Date
30.01.25



Appendix C Survey Photos

Location 1



Location 2



Location 3

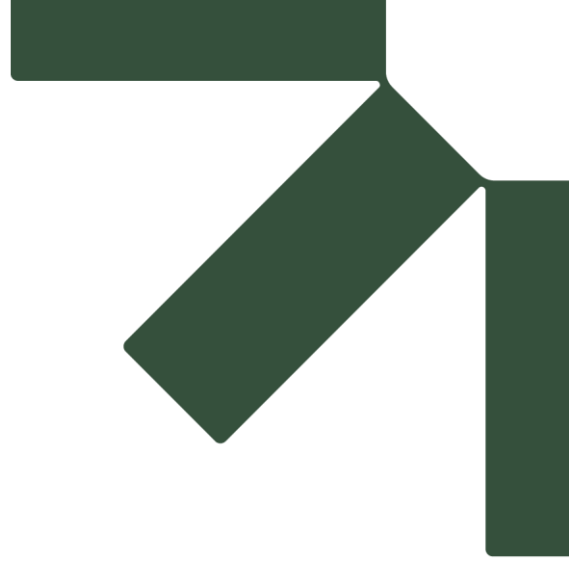


Location 4



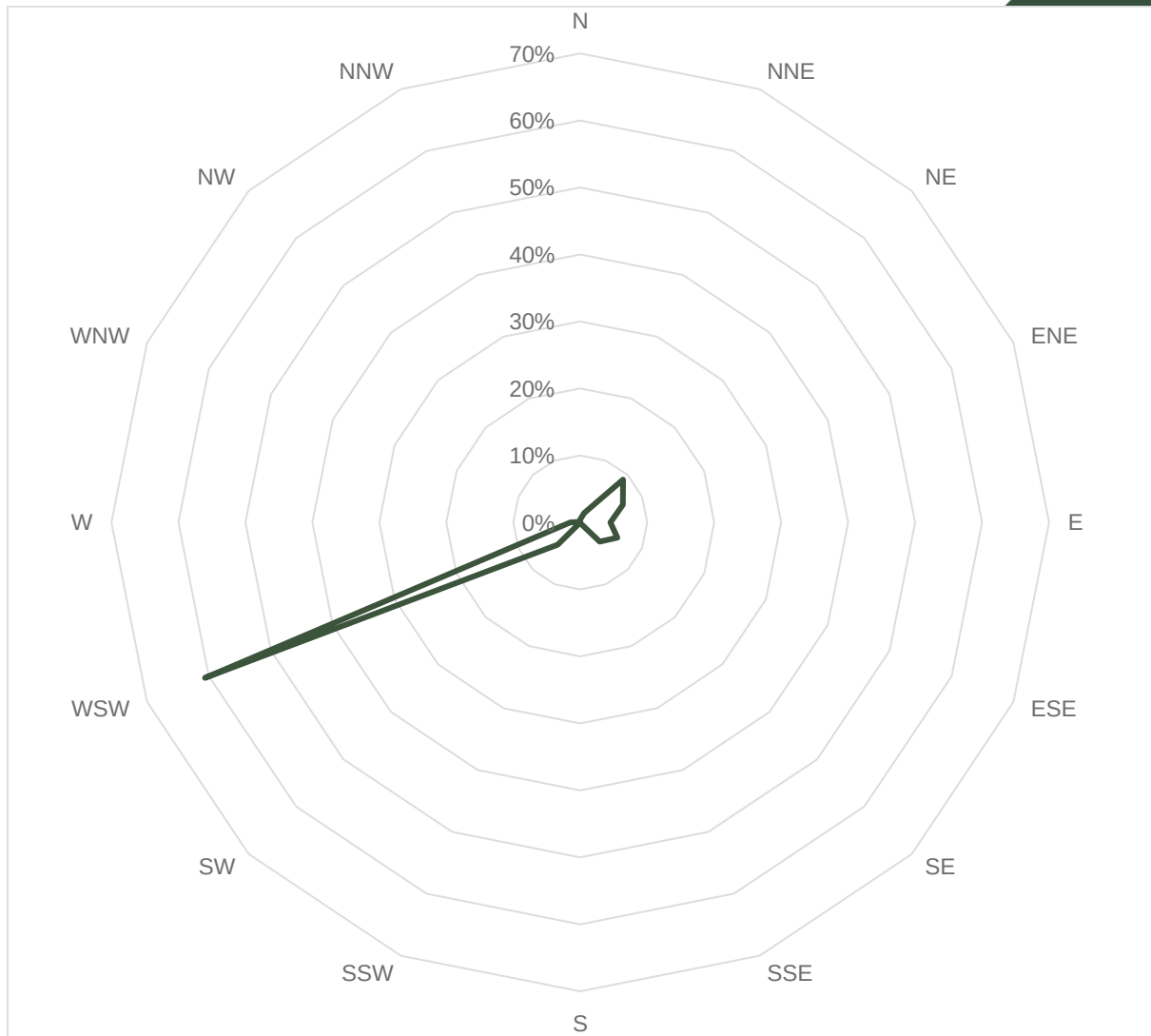
Location 5



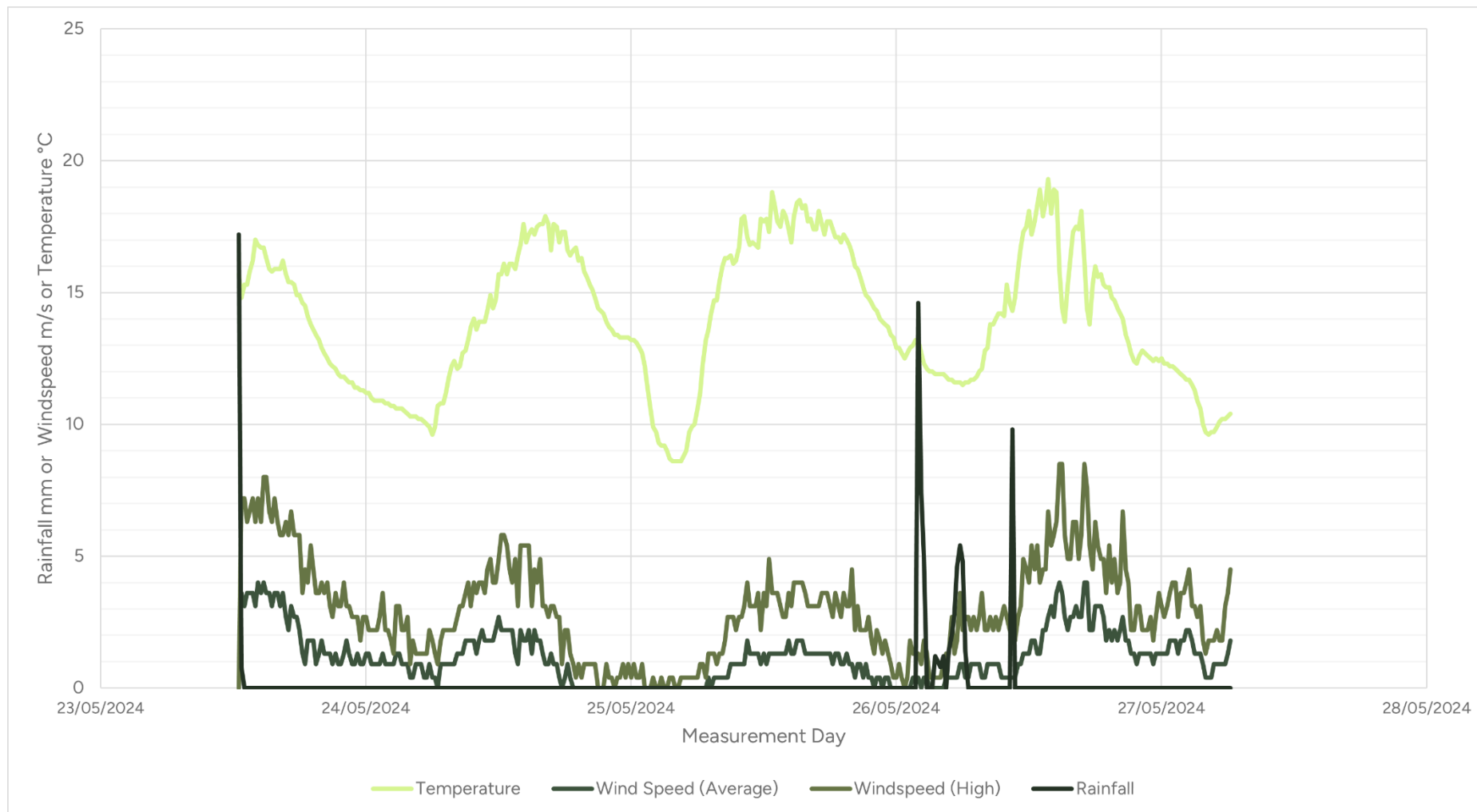


Appendix D Weather Data

Wind Direction Plot



Weather Overview



Appendix E Noise Survey Results



Measured Sound Levels at Location 1, free-field, dB



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
23/05/2024 18:15	52.30	54.00	50.30	60.40
23/05/2024 18:30	51.30	52.80	48.90	63.30
23/05/2024 18:45	52.30	54.00	50.10	60.50
23/05/2024 19:15	51.20	52.80	48.80	61.70
23/05/2024 19:30	52.30	54.00	49.60	64.00
23/05/2024 19:45	51.60	53.70	48.70	61.60
23/05/2024 20:00	51.50	53.30	48.50	62.00
23/05/2024 20:15	51.90	53.90	48.40	64.60
23/05/2024 20:30	52.30	53.30	47.80	68.10
23/05/2024 20:45	50.40	52.30	47.90	59.10
23/05/2024 21:00	50.30	52.10	47.00	66.20
23/05/2024 21:15	49.90	51.90	46.90	58.90
23/05/2024 21:30	48.30	50.60	44.80	55.80
23/05/2024 21:45	49.90	52.20	45.30	63.00
23/05/2024 22:00	48.90	51.70	44.00	57.20
23/05/2024 22:15	49.70	52.50	44.50	60.60
23/05/2024 22:30	48.20	50.60	44.20	56.50
23/05/2024 22:45	47.60	50.30	43.40	57.30
23/05/2024 23:00	47.60	50.40	42.60	60.30
23/05/2024 23:15	47.90	50.50	42.20	62.90
23/05/2024 23:30	45.40	48.50	40.10	56.30
23/05/2024 23:45	45.00	48.40	37.20	57.30
24/05/2024 00:00	44.50	47.60	37.90	57.10
24/05/2024 00:15	43.80	46.90	36.60	55.10
24/05/2024 00:30	44.00	46.50	38.10	59.60
24/05/2024 00:45	44.80	47.10	36.90	64.80
24/05/2024 01:00	43.60	46.50	36.80	54.20
24/05/2024 01:15	43.60	46.90	36.00	56.90
24/05/2024 01:30	42.20	45.70	31.60	53.70
24/05/2024 01:45	42.90	46.50	34.30	55.10
24/05/2024 02:00	42.00	45.00	33.60	57.60
24/05/2024 02:15	40.90	44.10	32.00	56.40
24/05/2024 02:30	40.30	43.60	32.50	54.70
24/05/2024 02:45	42.20	45.90	32.60	57.50
24/05/2024 03:00	41.60	44.90	31.50	53.30
24/05/2024 03:15	42.00	45.60	32.40	55.20
24/05/2024 03:30	42.80	46.10	35.80	53.90
24/05/2024 03:45	43.50	47.40	34.20	53.90
24/05/2024 04:00	46.80	49.70	41.40	58.20
24/05/2024 04:15	47.70	50.20	44.20	57.80
24/05/2024 04:30	48.40	51.20	43.70	59.00
24/05/2024 04:45	47.20	49.60	43.10	55.10
24/05/2024 05:00	46.20	48.40	41.80	56.80



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 05:15	47.70	49.80	44.40	55.30
24/05/2024 05:30	48.70	50.90	44.70	56.80
24/05/2024 05:45	50.30	52.60	46.20	59.10
24/05/2024 06:00	50.50	52.30	46.90	60.70
24/05/2024 06:15	49.90	51.70	47.10	55.10
24/05/2024 06:30	51.10	52.70	48.20	58.30
24/05/2024 06:45	51.90	53.90	48.50	61.90
24/05/2024 07:00	52.00	54.00	48.90	60.90
24/05/2024 07:15	50.30	51.70	48.40	56.70
24/05/2024 07:30	50.60	52.50	48.00	60.10
24/05/2024 07:45	50.10	51.20	46.80	64.50
24/05/2024 08:00	51.10	52.90	48.30	62.10
24/05/2024 08:15	55.90	59.20	50.10	67.40
24/05/2024 08:30	57.80	59.20	53.80	62.50
23/05/2024 12:07	54.00	54.80	49.60	80.40
23/05/2024 12:15	53.70	55.60	50.30	68.30
28/05/2024 12:10	52.50	53.40	50.00	76.30
28/05/2024 12:15	52.10	53.70	50.20	59.60
28/05/2024 12:30	51.20	52.80	49.50	57.60
28/05/2024 12:45	52.30	54.10	50.20	63.40
28/05/2024 13:00	52.50	54.20	50.40	59.60
28/05/2024 13:15	54.10	56.10	51.90	64.30
28/05/2024 13:30	54.80	56.70	52.20	65.10



Measured Sound Levels at Location 2, free-field, dB



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
23/05/2024 18:15	71.8	75.9	55.4	88.4
23/05/2024 18:30	64.2	68.9	55	75.7
23/05/2024 18:45	61.5	65.3	54.7	70.5
23/05/2024 19:15	56.3	58.8	52.8	65.2
23/05/2024 19:30	55.4	57.5	52.4	63.2
23/05/2024 19:45	54.7	56.8	51.1	67.6
23/05/2024 20:00	54.6	56.8	50.7	62.8
23/05/2024 20:15	55.2	56.6	50.5	71.7
23/05/2024 20:30	53.7	56	49.6	64.4
23/05/2024 20:45	53.3	55.4	50.1	62.3
23/05/2024 21:00	52.8	55.1	49.1	62
23/05/2024 21:15	52.7	55.1	48.2	63.3
23/05/2024 21:30	52.2	54.6	47.7	61.9
23/05/2024 21:45	52	54.3	46.8	65.3
23/05/2024 22:00	51.4	54.1	46.4	59.7
23/05/2024 22:15	51.4	54	47.4	59.1
23/05/2024 22:30	50.4	53.3	45.8	59
23/05/2024 22:45	49	51.6	44.7	57.8
23/05/2024 23:00	49.5	52	44.5	58.4
23/05/2024 23:15	49.3	52.1	44.6	61.9
23/05/2024 23:30	47.7	50.1	42.5	58.1
23/05/2024 23:45	46.6	49.8	38.2	57.8
24/05/2024 00:00	47.3	50.1	39.3	60.9
24/05/2024 00:15	46.8	49.8	39.2	57.9
24/05/2024 00:30	46.8	49.5	41	58.1
24/05/2024 00:45	47.5	50.2	37.5	67.9
24/05/2024 01:00	46.2	49.3	38.3	57.2
24/05/2024 01:15	46.3	49.4	39.4	57.7
24/05/2024 01:30	44.3	47.8	32.5	56.1
24/05/2024 01:45	45.4	49	36.3	55.9
24/05/2024 02:00	44	47.6	34.7	55.4
24/05/2024 02:15	42.6	45.9	33.2	55.7
24/05/2024 02:30	42.9	46.1	34	59.2
24/05/2024 02:45	44	47.7	31.5	57.5
24/05/2024 03:00	43.3	46.5	31	58.1
24/05/2024 03:15	45.3	49.1	35.6	56
24/05/2024 03:30	45.8	49.1	36.2	57.6
24/05/2024 03:45	42.4	46.2	30.9	52
24/05/2024 04:00	48.4	51.7	39.9	62.6
24/05/2024 04:15	54.8	58.9	44.5	70.4
24/05/2024 04:30	50.4	51.8	43.1	69



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 04:45	49.2	52.3	43.4	59.7
24/05/2024 05:00	48.9	51.7	43.6	57.2
24/05/2024 05:15	47.5	50.1	43.3	56.5
24/05/2024 05:30	49.3	51.7	45	59.2
24/05/2024 05:45	50.3	52.8	45.9	57.4
24/05/2024 06:00	50.6	52.5	46.3	68.9
24/05/2024 06:15	50.9	53.1	47.5	61.3
24/05/2024 06:30	52.1	53.6	48.9	63.3
24/05/2024 06:45	53	55.1	49.4	64.4
24/05/2024 07:00	52.7	54.2	50.1	61
24/05/2024 07:15	52.5	54	49.8	67.9
24/05/2024 07:30	53.3	55.3	50.4	62.9
24/05/2024 07:45	52.7	54.4	50	64.5
24/05/2024 08:00	52.6	54.3	50.2	57.8
24/05/2024 08:15	53.9	55.7	51.1	64.8
24/05/2024 08:30	53.2	55.3	50.5	62.5
24/05/2024 08:45	52.8	54.9	49.5	61
24/05/2024 09:00	51.9	54.1	48.2	67.6
24/05/2024 09:15	52.3	54.2	49.7	62.8
24/05/2024 09:30	51.5	53.4	48.4	60.9
24/05/2024 09:45	51.9	53.6	49.5	60.2
24/05/2024 10:00	51.1	52.5	48.7	62.2
24/05/2024 10:15	56.3	53.5	48.1	87.1
24/05/2024 10:30	52.6	54.5	49.6	63.1
24/05/2024 10:45	52.3	54.5	48.4	65.9
24/05/2024 11:00	51	52.6	48.4	63.1
24/05/2024 11:15	52.7	54.7	49.9	66.4
24/05/2024 11:30	54.5	55.8	51.1	79.4
24/05/2024 11:45	51.6	53.7	48.8	60.6
24/05/2024 12:00	51.5	53.3	48	68.8
24/05/2024 13:00	54	56.4	50.1	65.4
24/05/2024 13:15	55.5	57.4	52.2	67.4
24/05/2024 13:30	54	55.7	51.1	65.5
24/05/2024 13:45	53	55.1	49.4	64.2
24/05/2024 15:00	51.4	53.1	48.9	57.4
24/05/2024 15:15	52.7	54.6	49.5	61.9
24/05/2024 15:30	50.5	52.2	47.8	57.2
24/05/2024 15:45	52	54	49.1	61.3
24/05/2024 16:00	52.3	54	49.8	58.2
24/05/2024 16:15	53.2	54.8	50.7	62.6
24/05/2024 16:30	51.2	53	48.5	57.6



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 16:45	53.5	55.3	50.6	64.9
24/05/2024 17:00	52.5	54.4	49.4	62.7
24/05/2024 17:15	53.2	54.6	50.9	65.8
24/05/2024 17:30	52.1	53.7	49.1	64.8
24/05/2024 17:45	52.9	54.3	50.5	59.4
24/05/2024 18:00	54.5	56.1	51.2	76
24/05/2024 18:15	53	54.6	50.3	61.1
24/05/2024 18:30	52.4	54	50	58.8
24/05/2024 18:45	52.5	54	49.8	62.3
24/05/2024 19:00	53.8	55.8	50.5	65.5
24/05/2024 19:15	52.3	53.8	50.1	62.7
24/05/2024 19:30	53.4	55.5	50.1	60.1
24/05/2024 19:45	55.8	57.6	52.9	66.4
24/05/2024 20:00	56.3	58.2	53.4	66.6
24/05/2024 20:15	55.9	57.8	53.4	63.6
24/05/2024 20:30	55.6	57.7	52.4	64.3
24/05/2024 20:45	55.1	57.2	51.7	65.1
24/05/2024 21:00	53.2	55	50.8	62.8
24/05/2024 21:15	54.8	56.4	52.1	68.2
24/05/2024 21:30	54.8	57.2	50.6	65.2
24/05/2024 21:45	54.4	56.8	50.7	64.1
24/05/2024 22:00	53.4	55.5	50.3	63.5
24/05/2024 22:15	53.2	55.1	50.4	64.3
24/05/2024 22:30	51.7	53.5	49	65.6
24/05/2024 22:45	52.9	55.2	49.6	61.8
24/05/2024 23:00	53.9	56.2	50.4	66.3
24/05/2024 23:15	55	56.6	49	72.7
24/05/2024 23:30	53.7	56.1	48.5	67.5
24/05/2024 23:45	53.4	55.9	49.3	65.2
25/05/2024 00:00	53.6	56.1	49	63.2
25/05/2024 00:15	52.8	55.4	48.8	62.1
25/05/2024 00:30	52.9	55.5	47.7	64.1
25/05/2024 00:45	51.3	54.1	46.1	60.8
25/05/2024 01:00	51.4	53.5	46.4	63.2
25/05/2024 01:15	50	52.5	45.5	63.1
25/05/2024 01:30	48.8	51.6	43.5	59.4
25/05/2024 01:45	48.1	50.5	43.4	57.7
25/05/2024 02:00	47.5	50	41.9	57.7
25/05/2024 02:15	47.2	50.1	41.1	55.2
25/05/2024 02:30	47.9	50.7	41.6	56.4
25/05/2024 02:45	47.2	50.5	40.8	57



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 03:00	48.1	51.3	41.3	59
25/05/2024 03:15	48.9	51.8	43.6	60
25/05/2024 03:30	48.6	51.7	40.6	57.3
25/05/2024 03:45	49.1	51.5	44.7	61.7
25/05/2024 04:00	50.2	52.4	46.4	58.3
25/05/2024 04:15	50.7	52.9	47.7	57.3
25/05/2024 04:30	50.4	52.8	46.7	60.3
25/05/2024 04:45	50	52.5	46.3	59.6
25/05/2024 05:00	48.9	51.1	45.6	60.7
25/05/2024 05:15	49.8	51.5	46.8	62.6
25/05/2024 05:30	50.8	52.8	47.9	58.6
25/05/2024 05:45	51.3	53.1	49	56.9
25/05/2024 06:00	52.5	54.9	49.2	61.5
25/05/2024 06:15	52.4	54.9	49.3	63.1
25/05/2024 06:30	51.8	53.7	48.9	60.5
25/05/2024 06:45	51.3	52.9	49	56.7
25/05/2024 07:00	51.2	53.7	47.5	62.1
25/05/2024 07:15	51.3	53.4	46.8	64.2
25/05/2024 07:30	54.8	57.9	48.2	67.2
25/05/2024 07:45	51.7	53.2	48.2	72.4
25/05/2024 08:00	53.4	54.2	48.8	69.9
25/05/2024 08:15	52.8	54.1	48.6	65.7
25/05/2024 08:30	52.8	54.6	50.2	63.5
25/05/2024 08:45	54.3	56.5	50.9	65.7
25/05/2024 09:00	54.4	56.4	51.3	65.3
25/05/2024 09:15	57.1	59	53.7	67.5
25/05/2024 09:30	54.7	56.7	51.3	61.9
25/05/2024 09:45	56.2	58.7	52.6	65.1
25/05/2024 10:00	58	60.2	54.1	66.8
25/05/2024 10:15	55.5	57.5	52.5	64.6
25/05/2024 10:30	57.6	59.6	54.4	65.9
25/05/2024 10:45	57.4	59.6	54.3	65.9
25/05/2024 11:00	56.8	59	53.8	69.4
25/05/2024 11:15	57.9	59.6	55.4	64.6
25/05/2024 11:30	56.8	59.2	53.3	64.9
25/05/2024 11:45	55.4	57.3	52	67.5
25/05/2024 12:00	54.8	56.6	52.2	63.1
25/05/2024 12:15	55.3	57.2	52.2	63.3
25/05/2024 12:30	56.1	57.8	53.3	69.5
25/05/2024 12:45	56.6	58	52.6	76.7
25/05/2024 13:00	56.7	58.5	52.8	71.3



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 13:15	55.8	57.9	52.3	65
25/05/2024 13:30	55.4	58.1	52.4	67.3
25/05/2024 13:45	58	60	54.7	68.3
25/05/2024 14:00	59	61.3	54.2	77.4
25/05/2024 14:15	58.9	61	54.8	72.6
25/05/2024 14:30	56.8	58.8	53.9	64.4
25/05/2024 14:45	56.8	58.6	53.7	66.8
25/05/2024 15:00	55.7	57.5	52.6	63.5
25/05/2024 15:15	55.5	57.6	52	65.2
25/05/2024 15:30	56.3	58.6	53.1	66.4
25/05/2024 15:45	57.5	59.6	53.7	68.8
25/05/2024 16:00	57	59.2	53.6	67.1
25/05/2024 16:15	56.2	58.4	53	65.2
25/05/2024 16:30	55.2	56.7	51.4	73.5
25/05/2024 16:45	56.5	58.7	52.6	69.6
25/05/2024 17:00	57	59.2	53.7	65
25/05/2024 17:15	57.3	59.3	54.4	65.1
25/05/2024 17:30	57.4	59.8	53.4	67.7
25/05/2024 17:45	56	58.1	52.8	68.6
25/05/2024 18:00	56	58.2	52.8	70.5
25/05/2024 18:15	55.2	57	52	71.9
25/05/2024 18:30	54.8	56.4	52	69.4
25/05/2024 18:45	56.1	58.2	52.3	72.2
25/05/2024 19:00	56.3	58.6	52.8	66.1
25/05/2024 19:15	54.5	56.4	52.1	64.1
25/05/2024 19:30	54.1	56.1	51	65.1
25/05/2024 19:45	53.5	55.4	50.8	62.3
25/05/2024 20:00	54.4	56.2	51.5	63.8
25/05/2024 20:15	53.8	55.5	51.4	62.2
25/05/2024 20:30	53.8	56	50.9	63
25/05/2024 20:45	54	55.8	50.5	64.9
25/05/2024 21:00	53.4	55	51.2	62
25/05/2024 21:15	54.5	56.1	51.5	67
25/05/2024 21:30	53	54.9	50	61.3
25/05/2024 21:45	52.2	54	49.7	60.2
25/05/2024 22:00	52.3	53.9	49.7	58.5
25/05/2024 22:15	51.5	53.2	48.7	61.4
25/05/2024 22:30	51.9	53.9	48.4	63.3
25/05/2024 22:45	52.6	53.2	47.9	72.1
25/05/2024 23:00	53.3	53.3	48.6	71.7
25/05/2024 23:15	51.4	53.5	48.5	63



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 23:30	50.2	51.9	47	60.2
25/05/2024 23:45	48.8	50.8	45.6	55.8
26/05/2024 00:00	48.6	50.5	45.7	55.2
26/05/2024 00:15	46.9	49.2	43.2	56.3
26/05/2024 00:30	47.5	49.8	44.2	58.3
26/05/2024 00:45	46.1	48.7	41.1	54
26/05/2024 01:00	46.8	49.4	42.3	58.5
26/05/2024 01:15	47.3	49.2	42.6	63.7
26/05/2024 01:30	46.6	49	42.6	56.2
26/05/2024 01:45	47.6	50.3	42.2	66.2
26/05/2024 02:45	44.1	47.1	38.7	57.1
26/05/2024 04:30	50.2	52	45.6	75
26/05/2024 06:30	54.9	56.1	49.9	70.2
26/05/2024 06:45	54.6	57.1	51.2	64.4
26/05/2024 07:00	54.5	55.8	49.7	71.1
26/05/2024 07:15	54.7	57.3	50.5	70.1
26/05/2024 07:30	56.2	56.8	50.1	73.9
26/05/2024 07:45	52.4	54.1	49.3	66.2
26/05/2024 08:00	51.9	53.6	49.5	61.5
26/05/2024 08:15	52	53.9	48.9	63.7
26/05/2024 08:30	52.4	54.3	49.2	63.6
26/05/2024 08:45	55.3	56	50.2	71.7
26/05/2024 09:00	52.6	54.1	50.1	62.5
26/05/2024 09:15	52.5	54.1	49.9	64.7
26/05/2024 09:45	52	53.8	49.5	57.3
26/05/2024 10:00	52.6	54.1	50.1	62.3
26/05/2024 10:45	52.2	53.6	50.2	56.9
26/05/2024 11:00	52.6	54.1	50	64.6
26/05/2024 11:15	51.7	53.2	49.3	59.2
26/05/2024 11:30	52	53.6	49.7	58.9
26/05/2024 11:45	52	53.3	49.8	61.9
26/05/2024 12:00	51.8	53.4	49.5	60.7
26/05/2024 12:30	52	53.6	49.6	65.1
26/05/2024 13:00	52.7	54.6	49.3	63.4
26/05/2024 13:15	53.1	54.7	50	65.5
26/05/2024 13:30	52.7	53.7	49	69.9
26/05/2024 15:30	50.7	52.3	48.6	59.1
26/05/2024 15:45	51.9	53.8	48.7	66.2
26/05/2024 16:30	52.4	54.5	49.1	61.4
26/05/2024 17:45	52.5	54.4	49.8	63.2
26/05/2024 18:30	50.5	52.3	47.3	61.7



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2024 18:45	51.2	53.3	47.8	61.8
26/05/2024 19:00	52	54	48.3	62.9
26/05/2024 19:30	51.4	53.4	47.3	64.7
26/05/2024 19:45	51.4	53.6	46.1	63.9
26/05/2024 20:00	51.1	53.1	47.6	65
26/05/2024 20:15	52.5	55.1	48.2	66
26/05/2024 20:45	54	57	48	66
26/05/2024 21:00	51.1	53.5	46.4	63.4
26/05/2024 21:15	50.3	52.3	46.7	67.2
26/05/2024 21:30	49.3	51.6	45.4	59
26/05/2024 21:45	49.1	51.1	45.4	61.4
26/05/2024 22:00	47.8	50.1	44.1	55.9
26/05/2024 22:15	47.9	50.2	43.4	55.9
26/05/2024 22:30	48	50.5	44	57.3
26/05/2024 22:45	48.4	50.9	43	67.5
26/05/2024 23:00	47.7	50	43.6	54.7
26/05/2024 23:15	47.8	50.3	43.8	55.8
26/05/2024 23:30	47.9	50.2	43.5	60.1
26/05/2024 23:45	47.2	49.7	42.6	55.5
27/05/2024 00:00	49.8	48.4	41.9	80.4
27/05/2024 00:15	45.8	48.5	40.3	54.4
27/05/2024 00:30	46.1	49	39.1	61
27/05/2024 00:45	47.9	50	39.9	64.6
27/05/2024 01:00	44.1	47.4	37.7	53.5
27/05/2024 01:15	42.9	45.8	36	57.5
27/05/2024 01:30	44.3	47.5	37.3	55.1
27/05/2024 01:45	47.4	48.6	33.3	66.9
27/05/2024 02:00	44.1	47.6	34.9	57.6
27/05/2024 02:15	43.2	46.6	34.5	52.8
27/05/2024 02:30	40.7	44.3	32.4	51.1
27/05/2024 02:45	41.2	44.6	32.8	51.2
27/05/2024 03:00	42.3	45.9	33.9	54.4
27/05/2024 03:15	42.1	45.4	35.6	51.3
27/05/2024 03:30	40.6	44.1	31.8	49.9
27/05/2024 03:45	43.8	46.8	37.1	56.6
27/05/2024 04:00	51.6	52.7	41.7	71.9
27/05/2024 04:15	49.2	50.4	40.3	70.7
27/05/2024 04:30	50.6	51.8	40.7	69.3
27/05/2024 04:45	44.7	47.4	39.7	57.8
27/05/2024 05:00	44.6	47.5	39.5	55
27/05/2024 05:15	44.6	47.4	39.7	55.1



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 05:30	45.7	48.2	41.4	60.7
27/05/2024 05:45	46.6	49.3	41.9	61.3
27/05/2024 06:00	47	48.4	41.7	63.7
27/05/2024 06:15	48.2	51.1	43.3	60.6
27/05/2024 06:30	49	51.3	44.4	64.9
27/05/2024 06:45	50.2	52.7	44.6	64.3
27/05/2024 07:00	48.2	50.4	44.6	61.2
27/05/2024 07:15	49.4	51.8	45.2	60.7
27/05/2024 07:30	50.6	53.6	45.2	62.8
27/05/2024 08:45	49.5	51.4	45.3	62.4
27/05/2024 09:00	48.7	51	45.5	56.8
27/05/2024 09:15	50	52.4	46	59.2
27/05/2024 09:30	49.6	51.6	46.6	58.4
27/05/2024 10:00	50.2	52	47.1	64.1
27/05/2024 11:45	51.7	52.8	48.2	66.6
27/05/2024 12:15	51.1	52.7	48.5	65.8
27/05/2024 13:15	52.1	54.2	49	63.6
27/05/2024 13:30	54.4	56.3	50.8	71.3
27/05/2024 14:15	50.1	51.8	47.3	60.5
27/05/2024 16:00	51.6	53.2	47.4	67.2
27/05/2024 17:15	48.9	50.9	45.7	57.6
27/05/2024 17:30	51.8	54	47.2	67.7
27/05/2024 17:45	53.1	55.5	48.9	61.5
27/05/2024 18:00	52	54.3	48.3	61.5
27/05/2024 18:30	53.5	56	49.2	66.3
27/05/2024 18:45	52.7	55.4	48.7	65.4
27/05/2024 19:00	51.9	53.8	48.4	63.2
27/05/2024 19:15	50.5	52.6	47.5	57
27/05/2024 19:30	51.4	53.4	48.1	60.5
27/05/2024 19:45	50.1	52.1	46.8	56.8
27/05/2024 20:00	52.1	54.1	48.1	63.6
27/05/2024 20:15	52.8	52.2	46.4	82.6
27/05/2024 20:30	49.5	51.2	46.4	62.7
27/05/2024 20:45	49.5	51.6	45.8	59.8
27/05/2024 21:00	50.9	53.1	47.5	58.1
27/05/2024 21:15	50	52.1	46.4	59.1
27/05/2024 21:30	48.9	51.2	45.2	59.3
27/05/2024 21:45	49.4	51.9	45.6	58.5
27/05/2024 22:00	47.2	49.6	43.9	53.5
27/05/2024 22:15	47.1	49.3	43.5	58.2
27/05/2024 22:30	49.6	52.9	43.6	62.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 22:45	46.1	48.8	41.7	55.2
27/05/2024 23:00	45.7	48.4	40.5	53.3
27/05/2024 23:15	47.8	50.6	40.4	60.4
27/05/2024 23:30	45.6	48.3	41.7	53.4
27/05/2024 23:45	45	47.9	39.6	54.3
28/05/2024 00:00	43.7	46.5	38.6	51.7
28/05/2024 00:15	42.9	45.6	37.8	51
28/05/2024 00:30	41.8	44.9	35.9	50.2
28/05/2024 00:45	42.6	45.5	36.5	53.7
28/05/2024 01:00	42.9	46.5	36.4	55.4
28/05/2024 01:15	43.1	46.2	36.5	54.3
28/05/2024 01:30	42.3	45.9	35.3	51.8
28/05/2024 01:45	40.3	43.8	33.2	49.2
28/05/2024 02:00	41.1	44.4	33.8	50.9
28/05/2024 02:15	39.1	42.6	31	51.8
28/05/2024 02:30	40.6	44.1	33.3	52.5
28/05/2024 02:45	40	43.3	34	49.1
28/05/2024 03:00	41.4	44.9	34.5	50.5
28/05/2024 03:15	41.8	44.9	35.6	52.6
28/05/2024 03:30	43.9	47.1	36.5	57.3
28/05/2024 03:45	45.7	48.7	40.9	58.2
28/05/2024 04:00	47.8	50.7	42.1	58.2
28/05/2024 04:15	51.7	54.1	44.1	67.1
28/05/2024 04:30	48.2	50.1	44.8	61
28/05/2024 04:45	48.7	50.3	46.1	62.8
28/05/2024 05:00	49.9	51.7	47.5	55.8
28/05/2024 05:15	50.8	52.1	48.9	64.3
28/05/2024 05:30	51.5	52.9	49.7	58.3
28/05/2024 05:45	52.1	53.3	50.3	59
28/05/2024 06:00	51.9	53.4	49.7	60
28/05/2024 06:15	52.7	54.2	50.5	64.9
28/05/2024 06:30	53.4	54.9	51	62.8
28/05/2024 06:45	53.4	55	51.2	63.1
28/05/2024 07:00	52.5	53.9	50.6	58.6
28/05/2024 07:15	53.4	54.8	51.3	60.2
28/05/2024 07:30	53.4	54.6	51.7	63.2
28/05/2024 07:45	53.5	54.8	51.7	61.9
28/05/2024 08:00	53.3	54.9	51	67.8
28/05/2024 08:15	53.5	54.6	51.5	65.1
28/05/2024 08:30	53.1	54.4	51.1	62.8
28/05/2024 09:00	52.9	54	51.1	66.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
28/05/2024 09:15	53.2	55	51	64.1
28/05/2024 09:30	53.4	54.6	51.5	62.9
28/05/2024 10:15	53.4	54.6	51.7	58
28/05/2024 10:45	53	54.3	51.3	61.5
28/05/2024 11:00	52.9	54.1	51.1	73.6
28/05/2024 11:15	53	54.1	51.1	60.7
28/05/2024 11:45	52.3	53.6	49.9	64.2
28/05/2024 12:15	52.3	53.7	50.4	57.9
28/05/2024 12:30	54.6	54	49	79.7



Measured Sound Levels at Location 3, free-field, dB



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
23/05/2024 18:15	52.9	54.9	49.8	64.8
23/05/2024 18:30	53.2	54.5	50.3	73.1
23/05/2024 18:45	52.7	54.5	49.9	61.8
23/05/2024 19:15	51.8	53.9	47.8	65.6
23/05/2024 19:30	59.4	55.8	48.8	83.3
23/05/2024 19:45	50.1	52.1	47	63.2
23/05/2024 20:00	51.2	53.8	46.6	63
23/05/2024 20:15	53.5	54.5	47.9	71.8
23/05/2024 20:30	50.2	52.6	46.8	61.2
23/05/2024 20:45	49.4	51.1	46.2	67.8
23/05/2024 21:00	49.6	51.9	46.1	60.7
23/05/2024 21:15	48.8	51.3	44.2	64.2
23/05/2024 21:30	48.1	50.6	44.1	58.3
23/05/2024 21:45	49.3	51.3	43.4	64.3
23/05/2024 22:00	47.7	50.3	43	56.4
23/05/2024 22:15	47.6	50.1	43.6	58
23/05/2024 22:30	45.9	48.1	41.9	56.7
23/05/2024 22:45	44.4	46.4	40.9	56.3
23/05/2024 23:00	46.2	49.2	41.2	58.9
23/05/2024 23:15	46.6	48.9	39.8	60.7
23/05/2024 23:30	44.3	47.2	39.5	55.5
23/05/2024 23:45	43.6	46.8	37.6	55
24/05/2024 00:00	44	47.1	37.5	57.5
24/05/2024 00:15	40.9	43.8	36.2	50.8
24/05/2024 00:30	43.8	46.1	37.3	59.8
24/05/2024 00:45	41.5	44.1	36	55.6
24/05/2024 01:00	43.7	47.1	36.2	59.8
24/05/2024 01:15	43.4	46.9	35.5	58.1
24/05/2024 01:30	38.7	40.8	33	54.7
24/05/2024 01:45	41.6	45.5	34.8	54.3
24/05/2024 02:00	39.4	40.9	32.9	55.8
24/05/2024 02:15	37.9	40.3	33.5	50.2
24/05/2024 02:30	38.6	41.1	34.1	51.7
24/05/2024 02:45	38.4	41.7	32.1	51.3
24/05/2024 03:00	36.7	39.4	32.4	45.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 03:15	40.8	43.8	33.3	59
24/05/2024 03:30	39	41.1	34	51.1
24/05/2024 03:45	39.1	41.5	35.3	48.4
24/05/2024 04:00	52	50.5	39.7	70.8
24/05/2024 04:15	47.7	47.9	41.2	76.3
24/05/2024 04:30	44.6	46.4	40.5	65.4
24/05/2024 04:45	46.5	48.1	41.6	67.9
24/05/2024 05:00	48.1	50.2	43.5	66.8
24/05/2024 05:15	48	50	44.7	64.2
24/05/2024 05:30	50.1	51.4	45.4	68.7
24/05/2024 05:45	51.8	54.7	46.7	67.6
24/05/2024 06:00	50.6	52.3	46.5	71.5
24/05/2024 06:15	52.6	53.6	46.6	73.8
24/05/2024 06:30	53.6	53.4	47.2	76.3
24/05/2024 06:45	51.2	54.4	46.5	62.1
24/05/2024 07:00	52.6	55.1	47.8	68.5
24/05/2024 07:15	53	54	48.4	74.8
24/05/2024 07:30	53	54.5	47.2	74.7
24/05/2024 07:45	52	54.7	47.6	65.6
24/05/2024 08:00	50.8	52.8	47.4	66.8
24/05/2024 08:15	51.9	54.4	47.7	63.8
24/05/2024 08:30	51.6	52.8	47.6	69.6
24/05/2024 08:45	51.4	53.3	47.7	72.6
24/05/2024 09:00	51.3	53.8	47	63.1
24/05/2024 09:15	51.3	53.9	46.7	69.2
24/05/2024 09:30	49.9	52	46	64.8
24/05/2024 09:45	51.2	53.4	47	64.3
24/05/2024 10:00	52.1	55.5	46.6	66.5
24/05/2024 10:15	49.5	51.4	44.6	71.1
24/05/2024 10:30	51	53.2	45.6	65.4
24/05/2024 10:45	50.2	53	45.1	66.2
24/05/2024 11:00	49.9	52.3	45.8	64
24/05/2024 11:15	51.7	53.9	47.1	71.1
24/05/2024 11:30	78.4	75.6	51.5	96.8
24/05/2024 11:45	64.2	67.5	47.3	83.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 12:00	60.2	56.8	46.5	84
24/05/2024 13:00	53	55.7	48.1	67.5
24/05/2024 13:15	61.1	66	49.1	71.7
24/05/2024 13:30	60.9	65.6	52.9	76.4
24/05/2024 13:45	54.4	56.9	46.7	69.2
24/05/2024 15:00	52.7	55.9	48.2	68
24/05/2024 15:15	67.7	67.4	46.5	85.5
24/05/2024 15:30	56.5	58.3	46.5	81.1
24/05/2024 15:45	55.6	57.6	46.6	80.6
24/05/2024 16:00	56.9	60.1	47.7	72
24/05/2024 16:15	50.9	53.8	46	61.4
24/05/2024 16:30	50.5	52.6	46.7	65.5
24/05/2024 16:45	51	53.5	46.6	66
24/05/2024 17:00	49.7	52	45.6	62.5
24/05/2024 17:15	53.9	53.1	43.7	78.5
24/05/2024 17:30	51.3	53.9	45.9	67.1
24/05/2024 17:45	54.8	57.2	48.3	66.8
24/05/2024 18:00	49.7	51.3	45.5	68.3
24/05/2024 18:15	50.9	53	46.1	65.9
24/05/2024 18:30	51.4	53.6	46.3	65.8
24/05/2024 18:45	50.5	51.9	46.3	68.1
24/05/2024 19:00	50.3	52.2	45.5	67.7
24/05/2024 19:15	52	51.7	45.9	75.8
24/05/2024 19:30	52.3	51.8	45.9	78.7
24/05/2024 19:45	49.5	51.6	46.3	61
24/05/2024 20:00	49.1	51.5	45.3	61
24/05/2024 20:15	48.5	50.8	44.9	56.9
24/05/2024 20:30	50.3	52.3	46.7	61.7
24/05/2024 20:45	52.1	53.5	48.7	67.5
24/05/2024 21:00	49.9	51.8	47.3	64.4
24/05/2024 21:15	51.4	53.6	47.5	60.2
24/05/2024 21:30	53.1	54.4	51.6	62.9
24/05/2024 21:45	53.8	55.3	52	61.7
24/05/2024 22:00	54	55.2	51.8	68.6
24/05/2024 22:15	53.2	54.6	51.2	62.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 22:30	52.5	54	50.4	60
24/05/2024 22:45	51.4	52.8	49.5	57.8
24/05/2024 23:00	52.5	54	50.4	60.1
24/05/2024 23:15	51.9	53.4	49.9	58.5
24/05/2024 23:30	51.9	53.4	49.1	66.8
24/05/2024 23:45	51.7	53.3	49.3	62.9
25/05/2024 00:00	51.4	53.2	48.8	59.8
25/05/2024 00:15	50.3	52.1	48.1	56.8
25/05/2024 00:30	50.8	52.3	48.9	58.3
25/05/2024 00:45	52.4	54	49.9	60.9
25/05/2024 01:00	51.5	53.2	49.2	61.7
25/05/2024 01:15	51.8	53.4	48.6	62.1
25/05/2024 01:30	51.3	53.2	48.4	59.5
25/05/2024 01:45	50.3	52.2	47.7	59.4
25/05/2024 02:00	50.5	52.4	46.8	64.3
25/05/2024 02:15	49.9	52	45.9	66.7
25/05/2024 02:30	47.8	50	44.3	54.9
25/05/2024 02:45	49.9	51	45	66.5
25/05/2024 03:00	46.8	48.9	43.3	55
25/05/2024 03:15	47.7	50.2	43.9	56.1
25/05/2024 03:30	46.4	49.2	42.2	56.3
25/05/2024 03:45	44.4	46.5	40.9	65
25/05/2024 04:00	46.2	46.9	39.3	61.3
25/05/2024 04:15	44	46.2	40.7	52.2
25/05/2024 04:30	43.5	45.6	39.8	51.7
25/05/2024 04:45	45.8	48.2	39.8	57.8
25/05/2024 05:00	46.5	49.2	42.6	55
25/05/2024 05:15	46.5	48.9	42.7	56.2
25/05/2024 05:30	47.3	49.3	43.9	58.3
25/05/2024 05:45	49	50.8	45.9	58.7
25/05/2024 06:00	50	51.7	47.1	64.2
25/05/2024 06:15	50.8	52.7	48	62.1
25/05/2024 06:30	51.4	53.5	48.8	58.7
25/05/2024 06:45	49.7	51.3	47.3	57.4
25/05/2024 07:00	53.7	57.4	48.5	66.6



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 07:15	51.9	53.6	49.5	60.9
25/05/2024 07:30	52.1	53.6	49.6	63.1
25/05/2024 07:45	52.6	54.7	49.8	62.9
25/05/2024 08:00	51.6	54.4	48.4	62.5
25/05/2024 08:15	51.3	53.4	48.2	59.9
25/05/2024 08:30	50.6	52.5	47.9	65.1
25/05/2024 08:45	49.8	52.1	46.4	59.9
25/05/2024 09:00	51.6	54.4	46.6	67
25/05/2024 09:15	54.4	57.4	47.5	67
25/05/2024 09:30	50.9	53	47.4	71.5
25/05/2024 09:45	51.4	52.8	46.9	66
25/05/2024 10:00	51.9	53.9	47.9	68.3
25/05/2024 10:15	51.8	53.2	48.8	72.6
25/05/2024 10:30	51.6	53.1	49.1	66.4
25/05/2024 10:45	53.2	55	50.6	62.1
25/05/2024 11:00	53.8	55.7	50.9	66.5
25/05/2024 11:15	53.3	55.1	50.7	61.7
25/05/2024 11:30	53.3	54.8	51.2	62.8
25/05/2024 11:45	53.2	54.6	50.6	65.3
25/05/2024 12:00	53.5	55.1	51	64.2
25/05/2024 12:15	54.9	56.6	52.7	64.4
25/05/2024 12:30	54.6	55.9	52.1	67.8
25/05/2024 12:45	54.8	56	52.1	67.9
25/05/2024 13:00	54.3	56	51.9	68.9
25/05/2024 13:15	52.8	54.5	50.4	61.6
25/05/2024 13:30	52.6	54.3	50.2	63.6
25/05/2024 13:45	52.1	53.5	50	62
25/05/2024 14:00	53.1	55.1	50	62
25/05/2024 14:15	52.7	54.3	50.5	64.3
25/05/2024 14:30	53.2	54.7	50.3	66.1
25/05/2024 14:45	55.1	55.4	51.6	71.6
25/05/2024 15:00	53.3	55	51.3	62.6
25/05/2024 15:15	54.1	55.3	51.3	69.2
25/05/2024 15:30	54.4	55.9	52.2	67.1
25/05/2024 15:45	56.3	57.9	52.6	70.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 16:00	55.8	57.5	53.5	67.4
25/05/2024 16:15	54.9	56.4	52.6	68.3
25/05/2024 16:30	55.2	56.4	52.5	72.5
25/05/2024 16:45	54.1	55.6	51.7	64.3
25/05/2024 17:00	54.1	55.6	51.3	74
25/05/2024 17:15	53.4	54.9	50.9	63.7
25/05/2024 17:30	56.3	57.1	52	72.4
25/05/2024 17:45	54.5	56	52.2	70.6
25/05/2024 18:00	54.2	55.8	52.1	66.2
25/05/2024 18:15	53.8	55	51.7	67
25/05/2024 18:30	54.9	56.6	51.6	70.8
25/05/2024 18:45	54.7	56.6	51.7	67.3
25/05/2024 19:00	55.3	56.7	53.3	66.2
25/05/2024 19:15	55	56.7	52.4	66
25/05/2024 19:30	54	55.3	52	62.4
25/05/2024 19:45	56.7	57.2	52.4	76.1
25/05/2024 20:00	55.2	55.5	51.8	77.7
25/05/2024 20:15	55.4	56.2	52.3	71.9
25/05/2024 20:30	55.3	56.2	52.5	73.9
25/05/2024 20:45	53.8	55.3	51.6	63.6
25/05/2024 21:00	54.7	55.9	52.7	68.4
25/05/2024 21:15	54	55.2	51.7	67.4
25/05/2024 21:30	54.1	55.5	52	62.2
25/05/2024 21:45	54.1	55.8	51.7	64.8
25/05/2024 22:00	54.2	55.9	52.2	63.6
25/05/2024 22:15	54	55.5	51.9	63.4
25/05/2024 22:30	54.2	55.6	51.9	63.8
25/05/2024 22:45	53.7	55.2	51.6	70
25/05/2024 23:00	53.8	55.3	51.6	64.6
25/05/2024 23:15	53.2	54.6	51.2	62.2
25/05/2024 23:30	52.9	54.5	50.6	64
25/05/2024 23:45	52.9	54.3	51	63
26/05/2024 00:00	53	54.3	49.7	68.7
26/05/2024 00:15	51.1	52.5	48.9	62.4
26/05/2024 00:30	53.6	53.8	48.1	70.3



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2024 00:45	50.6	52.5	47.7	59.6
26/05/2024 01:00	51.7	54	48.2	64.8
26/05/2024 01:15	48.5	50.2	45.9	59.3
26/05/2024 01:30	48.3	49.8	46.2	54.4
26/05/2024 01:45	48.5	50.1	46.3	58
26/05/2024 02:45	46.3	48.4	42.6	52.8
26/05/2024 04:30	47.3	49.6	43.6	55.8
26/05/2024 06:30	45.6	48.2	42	54.2
26/05/2024 06:45	46.8	48.8	43.4	58.7
26/05/2024 07:00	46.6	49.1	42.2	58.2
26/05/2024 07:15	46.7	48.9	42.9	57
26/05/2024 07:30	48.7	53	42.5	70.6
26/05/2024 07:45	43.1	45.3	39	52
26/05/2024 08:00	49.3	50.8	46.6	69.2
26/05/2024 08:15	56.1	57.1	51.2	70.5
26/05/2024 08:30	55.1	57.6	51.9	63.5
26/05/2024 08:45	54.8	56.9	50.7	67.4
26/05/2024 09:00	55.7	58	52.9	67.2
26/05/2024 09:15	56.7	57.7	51.1	76.5
26/05/2024 09:45	52	53.8	49.5	63.2
26/05/2024 10:00	52.9	54.4	50.1	65.4
26/05/2024 10:45	52.4	54.2	49.6	65.5
26/05/2024 11:00	53.8	55.6	50.3	72.6
26/05/2024 11:15	56.3	56.8	52.7	71.3
26/05/2024 11:30	53.2	54.7	51.2	61.3
26/05/2024 11:45	53.2	54.6	50.9	68.3
26/05/2024 12:00	53	54.8	50.7	60.3
26/05/2024 12:30	53.7	55.3	51.4	63.3
26/05/2024 13:00	51.7	53.2	49.5	67.7
26/05/2024 13:15	52.8	54.3	50.5	63
26/05/2024 13:30	51.8	53.1	49.7	67.1
26/05/2024 15:30	52.3	53.7	50.5	61.9
26/05/2024 15:45	52.3	53.6	50.7	63.7
26/05/2024 16:30	52.6	54.1	50.5	71.4
26/05/2024 17:45	52.2	53.8	49.6	60.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2024 18:30	52.7	54.4	50.1	65.2
26/05/2024 18:45	51.1	52.7	47.1	65.2
26/05/2024 19:00	53.3	54.9	50	70.2
26/05/2024 19:30	51.7	53.3	49.5	59.6
26/05/2024 19:45	52.1	54.2	48.6	62.1
26/05/2024 20:00	51.7	53.3	49.2	62.9
26/05/2024 20:15	51	52.6	48.7	61
26/05/2024 20:45	50.4	52.1	47.7	61.4
26/05/2024 21:00	50.3	52.4	47.4	63
26/05/2024 21:15	51.2	53	47.5	71.9
26/05/2024 21:30	51.9	53.8	48.2	65.5
26/05/2024 21:45	50.6	52.4	47.3	62.9
26/05/2024 22:00	50.6	52.7	47.5	60.6
26/05/2024 22:15	52.2	54.6	48.2	64.6
26/05/2024 22:30	54.1	57.4	48.3	67.2
26/05/2024 22:45	54.1	58.1	47.7	68.2
26/05/2024 23:00	50.3	52	48.1	57.5
26/05/2024 23:15	49.8	51.7	47.1	58.6
26/05/2024 23:30	48.5	50.2	46	55.6
26/05/2024 23:45	47.4	49.3	44.6	58.4
27/05/2024 00:00	48.4	50.2	45.1	61
27/05/2024 00:15	49.5	51.7	45	62.5
27/05/2024 00:30	47.9	50.4	43.6	58.8
27/05/2024 00:45	47.3	49.5	44	57
27/05/2024 01:00	47.5	49.4	44.5	61.4
27/05/2024 01:15	48.1	50.5	44.3	60.1
27/05/2024 01:30	46.5	48.5	43.2	58.6
27/05/2024 01:45	44.9	47.2	41.2	56.4
27/05/2024 02:00	44.5	46.5	40.8	55.6
27/05/2024 02:15	47.4	49.2	40.1	64.5
27/05/2024 02:30	44.8	47.8	39.4	54.9
27/05/2024 02:45	42	44.9	36.5	54.1
27/05/2024 03:00	41.3	44.1	36.4	53.4
27/05/2024 03:15	44.7	47.8	39.2	57
27/05/2024 03:30	43.9	47.3	35.7	62.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 03:45	40.7	43.3	36.3	50.8
27/05/2024 04:00	42.4	45.6	36.7	56.3
27/05/2024 04:15	39.3	41.7	34.8	51
27/05/2024 04:30	39.4	41.9	35.2	48.1
27/05/2024 04:45	41.2	43.9	35.7	54.4
27/05/2024 05:00	41.4	44.2	35.6	56.2
27/05/2024 05:15	40.3	43.1	34.6	51.1
27/05/2024 05:30	42.7	45.1	38.2	50.1
27/05/2024 05:45	47.8	48.8	41.5	67
27/05/2024 06:00	44.4	46.6	40.9	55.5
27/05/2024 06:15	44.9	47.2	41	60.4
27/05/2024 06:30	50.6	54.3	42.2	67
27/05/2024 06:45	49.8	53.5	42.2	65.8
27/05/2024 07:00	48.1	50.3	42.8	64.3
27/05/2024 07:15	49.6	50.8	44.1	66.7
27/05/2024 07:30	51.6	52.9	45.5	68.1
27/05/2024 08:45	48.2	50.5	44.7	59.9
27/05/2024 09:00	50.3	52.3	46	71.9
27/05/2024 09:15	50.8	53.7	46.5	63.3
27/05/2024 09:30	51.7	54.5	46.7	69.6
27/05/2024 10:00	50.4	52.9	46.7	59.8
27/05/2024 11:45	51.8	55.1	46	66.7
27/05/2024 12:15	53.6	56.2	47.4	72.4
27/05/2024 13:15	51.2	54.3	46	63
27/05/2024 13:30	51.2	52.4	45.2	70.4
27/05/2024 14:15	51	53.3	45.2	68.8
27/05/2024 16:00	49	50.9	45.7	63.4
27/05/2024 17:15	49.4	51.5	45.8	63.2
27/05/2024 17:30	48.5	50.1	45.7	60.2
27/05/2024 17:45	50.7	52.4	47.2	66.8
27/05/2024 18:00	50.4	52.3	47.5	63.1
27/05/2024 18:30	53.4	55.7	48	67.4
27/05/2024 18:45	52.3	54.5	48.9	68.6
27/05/2024 19:00	52	54.2	49	64.5
27/05/2024 19:15	52.2	53.8	49.8	63.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 19:30	52.6	54.3	49.4	68.2
27/05/2024 19:45	53.5	55.8	49.4	64.9
27/05/2024 20:00	52.6	54.2	50.1	66.5
27/05/2024 20:15	51	52.8	48.1	62.3
27/05/2024 20:30	51.7	53.1	48.5	67.6
27/05/2024 20:45	51	52.6	48.1	63.2
27/05/2024 21:00	50.6	52.2	48.3	61.1
27/05/2024 21:15	51.6	53.5	48.9	61.5
27/05/2024 21:30	53.1	55.4	49.8	65.6
27/05/2024 21:45	50.3	51.8	47.6	65.9
27/05/2024 22:00	50.4	52.4	47.5	62.2
27/05/2024 22:15	51.9	53.7	47.5	67.1
27/05/2024 22:30	52.8	53.9	47.7	70.7
27/05/2024 22:45	50.5	53.2	46.6	63.4
27/05/2024 23:00	50.4	51.4	45.2	68.9
27/05/2024 23:15	50.7	53.5	46.1	62.4
27/05/2024 23:30	50.4	51.4	46.8	68.7
27/05/2024 23:45	51	52.8	47.5	60.9
28/05/2024 00:00	52.1	53.7	48.1	66.1
28/05/2024 00:15	53.5	55.4	49.1	66.2
28/05/2024 00:30	53.8	57.4	47.3	67.2
28/05/2024 00:45	51.3	53.3	45.9	67.3
28/05/2024 01:00	50	51.7	47.1	62.1
28/05/2024 01:15	49.5	51.6	46.6	63.8
28/05/2024 01:30	51.3	53.2	47.3	68.7
28/05/2024 01:45	51.8	53.7	48.1	66
28/05/2024 02:00	51.2	52.3	47.6	66.2
28/05/2024 02:15	51.9	53.7	47.9	68.2
28/05/2024 02:30	48.9	50.8	44.8	64.6
28/05/2024 02:45	49	51.2	44.3	61.2
28/05/2024 03:00	51.8	54.2	47.6	65.9
28/05/2024 03:15	51.8	53.6	48.1	66
28/05/2024 03:30	50.9	53.1	46.1	65.7
28/05/2024 03:45	49.9	52	46.1	62.4
28/05/2024 04:00	49.5	51.2	46.7	61.1



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
28/05/2024 04:15	51	52.8	47.7	64.5
28/05/2024 04:30	51.2	53.5	47.6	63.9
28/05/2024 04:45	52.3	54.5	47.9	65.2
28/05/2024 05:00	51.9	54.1	47.6	65.6
28/05/2024 05:15	49.9	51.9	47	58
28/05/2024 05:30	49.1	50.9	46.6	56.6
28/05/2024 05:45	50.2	52.2	47	60.1
28/05/2024 06:00	49.5	51.5	46.6	61.5
28/05/2024 06:15	49.2	50.9	46.2	58.3
28/05/2024 06:30	49.8	52.4	46.1	61.3
28/05/2024 06:45	48	49.6	46	55.1
28/05/2024 07:00	48.7	50.8	45.8	56.6
28/05/2024 07:15	50.6	53.9	45.6	60.9
28/05/2024 07:30	47.4	49.3	44.5	54.1
28/05/2024 07:45	46.9	49.3	43.6	55.7
28/05/2024 08:00	49.5	52.5	44.5	60.5
28/05/2024 08:15	47.9	50.3	44.5	55.3
28/05/2024 08:30	47.1	49.4	42.8	58.5
28/05/2024 09:00	45.7	48.1	42.2	53.4
28/05/2024 09:15	45	47.5	40.7	57.5
28/05/2024 09:30	43.2	45.5	39.8	52.9
28/05/2024 10:15	44.5	47.3	39.7	56.5
28/05/2024 10:45	44.8	47.5	40.5	57
28/05/2024 11:00	44.6	47.4	39	54.8
28/05/2024 11:15	44	46.9	38.4	58.5
28/05/2024 11:45	43	46	37.9	55.5
28/05/2024 12:15	42.8	46	36.3	53.3



Measured Sound Levels at Location 4, free-field, dB



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
23/05/2024 18:15	54.7	56.6	51.2	70.2
23/05/2024 18:30	54.8	56.5	50.5	73.3
23/05/2024 18:45	59.5	62.7	51.1	76.5
23/05/2024 19:15	60.7	64.4	49.5	78.5
23/05/2024 19:30	53.5	55.4	50.1	68.8
23/05/2024 19:45	61.2	65.6	49.1	77.7
23/05/2024 20:00	59.2	62.8	49.4	74.4
23/05/2024 20:15	54.3	55.6	48.2	70.2
23/05/2024 20:30	52.3	54.2	47.6	68.5
23/05/2024 20:45	50.9	53.3	47.6	59.3
23/05/2024 21:00	50.6	53.0	46.1	61.6
23/05/2024 21:15	50.5	52.1	45.5	70.2
23/05/2024 21:30	50.1	52.4	44.7	64.0
23/05/2024 21:45	50.2	52.6	44.5	67.0
23/05/2024 22:00	49.5	52.3	44.0	59.7
23/05/2024 22:15	50.0	52.4	44.8	61.9
23/05/2024 22:30	48.3	50.9	42.8	56.8
23/05/2024 22:45	48.2	50.9	42.7	60.9
23/05/2024 23:00	47.8	50.5	42.4	59.9
23/05/2024 23:15	47.9	50.9	40.5	60.1
23/05/2024 23:30	47.3	49.9	39.9	68.6
23/05/2024 23:45	47.4	50.9	37.2	61.8
24/05/2024 00:00	46.0	49.1	37.0	60.9
24/05/2024 00:15	51.9	52.3	37.9	75.7
24/05/2024 00:30	46.3	49.0	38.1	62.7
24/05/2024 00:45	44.0	47.6	35.2	55.5
24/05/2024 01:00	44.8	48.3	36.6	55.9
24/05/2024 01:15	44.8	48.5	35.5	55.1
24/05/2024 01:30	43.1	47.1	32.7	56.7
24/05/2024 01:45	44.3	48.1	33.5	56.9
24/05/2024 02:00	44.5	47.8	33.6	60.3
24/05/2024 02:15	42.5	46.4	33.7	60.8
24/05/2024 02:30	41.7	45.9	33.1	52.7
24/05/2024 02:45	42.5	46.5	32.3	59.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 03:00	41.7	45.9	32.6	52.2
24/05/2024 03:15	43.5	47.4	33.9	56.3
24/05/2024 03:30	43.1	47.0	33.8	55.7
24/05/2024 03:45	42.8	47.2	31.7	52.8
24/05/2024 04:00	46.1	49.8	37.3	56.5
24/05/2024 04:15	46.7	49.7	41.0	55.8
24/05/2024 04:30	46.5	50.0	39.7	54.2
24/05/2024 04:45	47.3	50.7	40.2	60.2
24/05/2024 05:00	47.7	50.5	41.2	60.2
24/05/2024 05:15	49.2	52.3	43.2	56.8
24/05/2024 05:30	49.9	52.5	44.6	59.6
24/05/2024 05:45	51.0	53.9	44.7	62.6
24/05/2024 06:00	52.5	54.5	47.6	66.9
24/05/2024 06:15	52.7	55.0	48.3	60.5
24/05/2024 06:30	53.5	55.5	49.7	63.4
24/05/2024 06:45	54.2	56.2	50.5	68.2
24/05/2024 07:00	54.3	56.5	51.3	61.3
24/05/2024 07:15	54.8	56.6	51.5	65.4
24/05/2024 07:30	54.9	57.0	51.2	63.9
24/05/2024 07:45	55.2	57.4	51.5	66.4
24/05/2024 08:00	55.0	57.0	51.6	64.4
24/05/2024 08:15	55.1	57.4	51.5	65.1
24/05/2024 08:30	54.8	57.2	50.9	64.7
24/05/2024 08:45	53.9	55.6	50.5	67.2
24/05/2024 09:00	54.1	56.2	50.4	67.4
24/05/2024 09:15	53.3	55.2	49.8	67.1
24/05/2024 09:30	53.2	55.6	49.1	65.6
24/05/2024 09:45	56.5	59.5	51.3	73.8
24/05/2024 10:00	52.8	54.5	49.3	65.9
24/05/2024 10:15	53.3	55.0	49.0	66.9
24/05/2024 10:30	54.2	56.2	49.2	68.6
24/05/2024 10:45	53.0	55.1	49.1	66.9
24/05/2024 11:00	52.8	54.6	49.7	65.2
24/05/2024 11:15	53.0	54.9	49.8	63.6
24/05/2024 11:30	53.1	55.1	50.0	65.7



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 11:45	52.9	54.7	49.5	68.8
24/05/2024 12:00	53.4	55.3	49.7	64.5
24/05/2024 13:00	54.6	56.6	50.2	68.6
24/05/2024 13:15	53.4	55.3	49.8	64.0
24/05/2024 13:30	53.4	55.4	49.9	65.7
24/05/2024 13:45	53.5	55.5	50.3	65.4
24/05/2024 15:00	53.2	54.9	50.0	64.5
24/05/2024 15:15	53.3	55.2	48.7	71.2
24/05/2024 15:30	54.4	55.8	50.2	79.7
24/05/2024 15:45	53.8	56.1	50.7	68.1
24/05/2024 16:00	53.5	55.4	50.7	60.0
24/05/2024 16:15	53.9	55.8	50.7	70.0
24/05/2024 16:30	53.4	55.7	48.9	66.2
24/05/2024 16:45	54.2	56.0	50.4	72.2
24/05/2024 17:00	54.8	56.1	50.9	77.9
24/05/2024 17:15	55.5	57.0	51.1	69.9
24/05/2024 17:30	53.5	55.8	49.8	63.4
24/05/2024 17:45	53.5	55.6	50.2	62.1
24/05/2024 18:00	53.3	55.5	49.3	62.2
24/05/2024 18:15	52.9	54.9	49.8	63.3
24/05/2024 18:30	53.6	55.1	49.6	73.4
24/05/2024 18:45	52.6	54.8	49.3	62.5
24/05/2024 19:00	53.4	55.5	48.9	67.0
24/05/2024 19:15	53.4	55.3	49.7	63.1
24/05/2024 19:30	54.7	55.7	50.1	74.8
24/05/2024 19:45	54.0	56.0	50.7	67.0
24/05/2024 20:00	55.3	56.5	51.1	75.1
24/05/2024 20:15	54.1	55.9	51.6	62.5
24/05/2024 20:30	54.0	56.0	50.1	71.2
24/05/2024 20:45	52.6	54.6	48.4	65.1
24/05/2024 21:00	51.6	53.8	47.7	68.0
24/05/2024 21:15	52.3	54.0	49.0	72.0
24/05/2024 21:30	52.1	54.5	47.9	59.5
24/05/2024 21:45	51.9	54.3	47.6	61.7
24/05/2024 22:00	51.5	54.2	46.7	68.3



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2024 22:15	52.8	54.4	47.1	72.2
24/05/2024 22:30	52.4	52.6	45.7	72.2
24/05/2024 22:45	50.5	52.7	46.7	60.8
24/05/2024 23:00	52.0	54.1	48.2	62.4
24/05/2024 23:15	53.1	54.7	47.7	68.9
24/05/2024 23:30	52.1	54.6	48.0	62.1
24/05/2024 23:45	50.9	53.2	46.9	60.6
25/05/2024 00:00	50.3	52.4	46.2	65.5
25/05/2024 00:15	49.4	51.9	45.0	60.1
25/05/2024 00:30	49.5	52.0	44.7	60.3
25/05/2024 00:45	48.3	50.8	43.4	56.7
25/05/2024 01:00	49.5	52.0	43.1	61.9
25/05/2024 01:15	49.0	51.6	44.1	58.2
25/05/2024 01:30	47.5	51.0	40.2	60.1
25/05/2024 01:45	45.6	48.6	39.3	56.9
25/05/2024 02:00	45.1	48.6	38.9	55.7
25/05/2024 02:15	44.6	47.6	38.5	55.5
25/05/2024 02:30	45.9	49.6	36.9	59.1
25/05/2024 02:45	44.3	48.0	37.8	55.5
25/05/2024 03:00	46.8	50.5	38.5	59.0
25/05/2024 03:15	48.4	51.8	39.7	57.8
25/05/2024 03:30	47.8	51.4	38.9	61.9
25/05/2024 03:45	49.1	52.6	42.7	63.2
25/05/2024 04:00	50.2	53.5	42.8	62.8
25/05/2024 04:15	52.0	55.2	45.4	62.7
25/05/2024 04:30	52.3	55.4	45.5	67.1
25/05/2024 04:45	53.0	56.5	44.9	64.7
25/05/2024 05:00	54.2	57.8	46.9	64.5
25/05/2024 05:15	53.5	56.8	45.5	68.0
25/05/2024 05:30	56.3	57.7	47.0	81.7
25/05/2024 05:45	54.7	57.6	49.5	64.9
25/05/2024 06:00	55.5	58.2	49.6	66.7
25/05/2024 06:15	55.6	58.2	51.1	68.3
25/05/2024 06:30	55.0	57.5	51.0	62.5
25/05/2024 06:45	56.0	58.7	51.5	64.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 07:00	54.9	57.4	50.3	65.0
25/05/2024 07:15	54.8	57.4	49.7	65.4
25/05/2024 07:30	57.2	59.7	51.7	69.7
25/05/2024 07:45	54.9	57.0	50.7	67.7
25/05/2024 08:00	55.0	56.9	50.5	71.7
25/05/2024 08:15	55.2	57.4	51.9	64.0
25/05/2024 08:30	55.4	57.6	51.7	65.3
25/05/2024 08:45	54.8	56.4	51.5	67.8
25/05/2024 09:00	54.6	56.9	50.9	66.6
25/05/2024 09:15	56.5	58.6	52.1	68.7
25/05/2024 09:30	55.9	57.9	52.3	71.2
25/05/2024 09:45	55.2	56.9	52.2	64.8
25/05/2024 10:00	56.3	57.4	52.1	78.2
25/05/2024 10:15	54.6	56.2	51.9	68.4
25/05/2024 10:30	57.7	59.4	55.1	65.8
25/05/2024 10:45	57.4	59.4	54.9	66.4
25/05/2024 11:00	56.0	58.2	53.1	66.9
25/05/2024 11:15	56.9	58.9	54.2	63.7
25/05/2024 11:30	55.9	57.8	53.5	62.3
25/05/2024 11:45	56.7	58.5	52.3	72.0
25/05/2024 12:00	54.5	56.4	51.4	61.7
25/05/2024 12:15	58.5	61.3	54.4	70.6
25/05/2024 12:30	56.8	59.0	52.9	68.9
25/05/2024 12:45	57.5	60.1	52.9	73.4
25/05/2024 13:00	57.3	59.5	54.2	67.8
25/05/2024 13:15	57.0	59.4	53.5	66.5
25/05/2024 13:30	55.0	57.2	52.2	64.5
25/05/2024 13:45	56.9	58.4	54.1	70.7
25/05/2024 14:00	56.7	57.7	53.0	77.1
25/05/2024 14:15	58.6	60.4	54.5	72.2
25/05/2024 14:30	56.7	58.9	53.8	66.8
25/05/2024 14:45	55.6	57.5	52.7	66.3
25/05/2024 15:00	54.6	56.4	51.8	64.8
25/05/2024 15:15	57.3	59.4	54.0	69.5
25/05/2024 15:30	56.5	58.3	52.9	77.6



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2024 15:45	56.5	58.5	52.6	78.0
25/05/2024 16:00	56.2	58.1	53.3	63.2
25/05/2024 16:15	55.6	57.7	51.3	74.4
25/05/2024 16:30	55.4	56.6	52.1	70.2
25/05/2024 16:45	55.5	57.4	52.7	64.6
25/05/2024 17:00	55.1	56.9	52.3	64.4
25/05/2024 17:15	58.4	60.7	54.7	70.3
25/05/2024 17:30	57.0	59.2	53.3	66.1
25/05/2024 17:45	57.9	60.3	54.2	72.4
25/05/2024 18:00	57.2	59.2	53.7	71.5
25/05/2024 18:15	56.9	58.7	52.9	71.5
25/05/2024 18:30	57.4	59.5	54.2	68.2
25/05/2024 18:45	58.6	60.8	55.1	68.1
25/05/2024 19:00	55.5	57.5	52.6	65.8
25/05/2024 19:15	56.7	59.0	53.0	67.6
25/05/2024 19:30	55.5	57.6	52.0	66.8
25/05/2024 19:45	56.8	59.1	52.4	72.3
25/05/2024 20:00	57.3	59.3	53.2	74.6
25/05/2024 20:15	57.3	59.7	52.8	71.5
25/05/2024 20:30	56.7	58.9	53.1	67.7
25/05/2024 20:45	57.1	59.6	52.1	74.6
25/05/2024 21:00	55.8	58.1	52.2	65.0
25/05/2024 21:15	56.5	58.7	53.3	64.6
25/05/2024 21:30	56.2	58.5	52.3	64.8
25/05/2024 21:45	55.7	58.1	51.4	64.7
25/05/2024 22:00	55.5	57.9	50.7	66.1
25/05/2024 22:15	55.3	57.6	51.3	68.9
25/05/2024 22:30	56.5	59.1	50.2	69.6
25/05/2024 22:45	56.3	58.6	50.7	70.2
25/05/2024 23:00	56.8	59.3	51.7	69.0
25/05/2024 23:15	56.3	58.9	51.7	66.7
25/05/2024 23:30	54.4	57.1	50.0	62.5
25/05/2024 23:45	54.3	56.9	48.4	68.2
26/05/2024 00:00	54.5	57.6	48.6	64.1
26/05/2024 00:15	52.6	56.2	43.8	62.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2024 00:30	52.2	54.7	44.3	71.8
26/05/2024 00:45	51.0	54.5	42.4	62.6
26/05/2024 01:00	51.3	55.0	42.2	63.4
26/05/2024 01:15	51.6	55.1	41.0	63.0
26/05/2024 01:30	52.5	55.9	44.3	65.8
26/05/2024 01:45	52.5	55.8	44.0	71.8
26/05/2024 02:45	47.2	50.4	39.8	55.9
26/05/2024 04:30	52.8	56.0	43.7	69.3
26/05/2024 06:30	57.0	59.9	50.6	68.0
26/05/2024 06:45	57.6	60.3	52.7	67.9
26/05/2024 07:00	57.3	60.1	50.5	72.3
26/05/2024 07:15	57.0	60.0	50.4	69.9
26/05/2024 07:30	57.7	60.5	51.9	70.3
26/05/2024 07:45	55.5	58.1	50.9	67.0
26/05/2024 08:00	55.4	57.9	50.8	64.1
26/05/2024 08:15	55.7	58.2	51.3	66.7
26/05/2024 08:30	56.5	59.4	51.0	67.5
26/05/2024 08:45	57.7	60.4	52.4	68.7
26/05/2024 09:00	57.0	59.6	52.3	65.7
26/05/2024 09:15	57.0	59.5	53.2	66.0
26/05/2024 09:45	55.4	57.4	52.9	62.6
26/05/2024 10:00	56.6	58.6	53.7	64.0
26/05/2024 10:45	54.8	56.5	52.1	60.4
26/05/2024 11:00	55.6	57.7	52.4	63.5
26/05/2024 11:15	53.6	55.4	50.9	62.3
26/05/2024 11:30	54.1	56.0	51.5	61.1
26/05/2024 11:45	55.2	57.0	52.5	64.5
26/05/2024 12:00	54.3	56.3	51.3	61.9
26/05/2024 12:30	56.6	58.8	52.6	71.1
26/05/2024 13:00	54.2	56.3	50.7	63.2
26/05/2024 13:15	53.3	54.9	49.9	69.6
26/05/2024 13:30	54.4	56.1	51.0	68.8
26/05/2024 15:30	54.0	55.4	49.9	72.0
26/05/2024 15:45	55.3	55.8	50.6	77.4
26/05/2024 16:30	52.7	55.0	49.0	61.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2024 17:45	52.5	54.6	48.8	61.8
26/05/2024 18:30	52.0	54.2	48.4	64.0
26/05/2024 18:45	51.9	54.5	46.9	62.1
26/05/2024 19:00	52.6	54.9	48.1	62.3
26/05/2024 19:30	52.6	55.0	47.6	70.0
26/05/2024 19:45	51.7	54.5	46.4	61.8
26/05/2024 20:00	52.0	54.1	47.7	64.0
26/05/2024 20:15	52.5	54.8	47.1	66.6
26/05/2024 20:45	53.8	56.6	47.3	68.9
26/05/2024 21:00	52.7	55.4	47.9	64.6
26/05/2024 21:15	51.5	53.9	47.6	60.4
26/05/2024 21:30	51.2	53.6	45.5	62.3
26/05/2024 21:45	50.2	52.9	45.3	58.4
26/05/2024 22:00	49.8	52.1	45.3	64.0
26/05/2024 22:15	50.0	52.6	45.1	59.2
26/05/2024 22:30	51.0	53.4	45.7	64.0
26/05/2024 22:45	50.3	52.8	45.6	60.7
26/05/2024 23:00	50.7	53.0	46.7	57.2
26/05/2024 23:15	50.3	53.0	44.9	61.0
26/05/2024 23:30	49.9	52.8	44.9	57.8
26/05/2024 23:45	49.5	52.1	44.6	55.7
27/05/2024 00:00	47.7	50.7	41.7	55.1
27/05/2024 00:15	47.4	50.1	40.5	60.5
27/05/2024 00:30	47.3	50.7	38.6	58.8
27/05/2024 00:45	47.2	50.2	39.4	60.9
27/05/2024 01:00	43.4	47.1	34.4	54.3
27/05/2024 01:15	43.8	47.6	36.3	52.6
27/05/2024 01:30	45.6	48.9	36.2	60.9
27/05/2024 01:45	48.8	50.6	34.0	67.4
27/05/2024 02:00	43.8	47.7	35.5	53.2
27/05/2024 02:15	43.7	47.5	35.1	54.6
27/05/2024 02:30	43.7	47.8	34.1	52.8
27/05/2024 02:45	44.4	48.2	35.3	55.5
27/05/2024 03:00	44.7	48.5	35.5	55.3
27/05/2024 03:15	46.5	50.0	37.1	57.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 03:30	45.1	48.8	34.2	57.5
27/05/2024 03:45	50.1	53.5	39.5	67.5
27/05/2024 04:00	47.6	51.0	38.7	58.5
27/05/2024 04:15	46.9	49.9	38.2	62.3
27/05/2024 04:30	46.1	49.2	39.3	56.3
27/05/2024 04:45	47.7	50.8	40.2	64.9
27/05/2024 05:00	47.5	50.5	39.2	61.6
27/05/2024 05:15	47.1	49.4	40.0	63.0
27/05/2024 05:30	47.3	50.3	41.4	56.0
27/05/2024 05:45	48.3	51.2	42.6	62.7
27/05/2024 06:00	48.6	50.5	42.4	66.3
27/05/2024 06:15	49.4	52.5	43.5	61.8
27/05/2024 06:30	50.4	53.0	44.4	62.7
27/05/2024 06:45	51.9	55.2	44.6	65.8
27/05/2024 07:00	49.9	52.7	45.2	66.3
27/05/2024 07:15	52.7	55.0	45.5	73.7
27/05/2024 07:30	53.1	54.8	45.5	76.5
27/05/2024 08:45	52.0	55.2	45.7	63.7
27/05/2024 09:00	53.0	56.3	47.1	69.0
27/05/2024 09:15	52.0	54.4	45.6	70.3
27/05/2024 09:30	51.2	53.4	47.6	62.0
27/05/2024 10:00	51.8	53.9	48.1	62.0
27/05/2024 11:45	53.5	55.2	49.4	69.0
27/05/2024 12:15	56.2	59.8	49.9	71.1
27/05/2024 13:15	52.6	54.7	49.1	62.3
27/05/2024 13:30	53.1	54.9	49.5	67.6
27/05/2024 14:15	51.9	53.9	48.5	60.3
27/05/2024 16:00	52.7	54.9	47.5	65.5
27/05/2024 17:15	51.9	54.1	48.2	62.1
27/05/2024 17:30	52.9	55.3	48.8	67.4
27/05/2024 17:45	52.4	53.6	47.1	74.4
27/05/2024 18:00	52.6	54.6	48.5	69.7
27/05/2024 18:30	53.2	56.1	47.4	62.2
27/05/2024 18:45	53.2	56.0	47.4	67.1
27/05/2024 19:00	52.8	55.0	48.5	65.1



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2024 19:15	52.1	54.1	46.5	72.8
27/05/2024 19:30	51.1	53.5	45.9	67.9
27/05/2024 19:45	50.0	52.6	44.9	66.9
27/05/2024 20:00	53.9	54.6	47.7	76.7
27/05/2024 20:15	51.0	53.2	45.5	67.2
27/05/2024 20:30	52.3	54.0	47.6	73.5
27/05/2024 20:45	56.3	56.0	46.4	78.0
27/05/2024 21:00	52.0	54.2	46.8	70.6
27/05/2024 21:15	51.9	54.7	45.2	61.3
27/05/2024 21:30	51.6	55.0	44.5	63.3
27/05/2024 21:45	52.5	55.4	46.4	62.6
27/05/2024 22:00	52.1	55.4	45.8	66.8
27/05/2024 22:15	52.1	55.1	45.9	62.6
27/05/2024 22:30	52.8	55.9	46.7	67.1
27/05/2024 22:45	51.5	54.7	43.8	63.6
27/05/2024 23:00	51.7	55.2	41.8	63.3
27/05/2024 23:15	50.9	55.0	39.6	61.5
27/05/2024 23:30	49.5	52.4	43.0	60.4
27/05/2024 23:45	50.3	53.7	38.9	64.1
28/05/2024 00:00	48.7	52.3	35.7	62.1
28/05/2024 00:15	47.1	50.6	36.4	58.5
28/05/2024 00:30	46.0	49.9	33.9	57.8
28/05/2024 00:45	46.8	50.5	34.4	62.6
28/05/2024 01:00	47.2	51.3	34.4	61.7
28/05/2024 01:15	48.4	52.1	36.5	66.6
28/05/2024 01:30	47.0	49.4	33.6	72.2
28/05/2024 01:45	45.1	49.2	32.2	61.6
28/05/2024 02:00	46.6	51.0	32.6	61.1
28/05/2024 02:15	45.6	49.0	31.7	62.3
28/05/2024 02:30	43.5	47.3	33.1	57.5
28/05/2024 02:45	45.8	50.1	34.6	59.1
28/05/2024 03:00	47.1	50.9	35.1	62.4
28/05/2024 03:15	48.6	52.4	36.3	66.1
28/05/2024 03:30	50.9	54.7	35.2	68.3
28/05/2024 03:45	51.7	55.7	39.9	65.9



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
28/05/2024 04:00	51.7	55.9	40.4	64.5
28/05/2024 04:15	51.4	54.8	43.1	63.7
28/05/2024 04:30	52.0	55.3	44.2	64.5
28/05/2024 04:45	52.0	55.2	44.1	64.5
28/05/2024 05:00	53.0	56.2	46.3	64.4
28/05/2024 05:15	54.5	57.2	49.3	63.0
28/05/2024 05:30	55.7	58.3	51.4	65.6
28/05/2024 05:45	55.7	58.1	51.5	65.4
28/05/2024 06:00	56.8	59.5	52.6	67.2
28/05/2024 06:15	57.5	59.9	53.1	66.0
28/05/2024 06:30	58.5	60.4	55.6	66.3
28/05/2024 06:45	58.7	60.8	56.0	65.8
28/05/2024 07:00	58.8	60.7	55.4	70.0
28/05/2024 07:15	59.3	61.1	56.3	71.3
28/05/2024 07:30	59.6	61.3	57.3	66.3
28/05/2024 07:45	59.2	61.1	56.7	66.3
28/05/2024 08:00	58.8	60.7	56.1	66.0
28/05/2024 08:15	60.0	62.1	56.9	69.6
28/05/2024 08:30	59.0	60.9	56.4	67.8
28/05/2024 09:00	59.0	60.9	55.8	70.6
28/05/2024 09:15	58.3	60.3	55.2	66.5
28/05/2024 09:30	59.0	60.7	56.1	68.2
28/05/2024 10:15	58.8	60.7	55.9	65.8
28/05/2024 10:45	58.5	60.5	54.7	70.4
28/05/2024 11:00	57.8	60.0	54.6	66.9
28/05/2024 11:15	57.7	59.6	55.2	65.4
28/05/2024 11:45	56.1	57.6	53.6	69.2
28/05/2024 12:15	55.9	57.5	53.8	68.3
28/05/2024 12:30	55.2	56.8	52.6	66.6
28/05/2024 12:45	55.7	57.3	53.5	73.5
28/05/2024 13:00	55.7	56.9	53.3	76.2



Measured Sound Levels at Location 5, free-field, dB



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
23/05/2023 18:15	50.2	51.9	47.9	60.0
23/05/2023 18:30	49.9	51.0	47.5	77.5
23/05/2023 18:45	49.4	51.1	47.0	59.7
23/05/2023 19:15	49.1	51.0	46.2	60.3
23/05/2023 19:30	49.5	51.1	47.1	57.0
23/05/2023 19:45	48.5	50.3	45.6	60.7
23/05/2023 20:00	49.3	51.5	46.0	62.4
23/05/2023 20:15	51.7	51.5	46.1	71.3
23/05/2023 20:30	49.3	51.3	46.4	56.6
23/05/2023 20:45	48.6	50.5	45.9	56.9
23/05/2023 21:00	47.8	50.0	44.2	59.8
23/05/2023 21:15	45.5	47.2	42.7	57.3
23/05/2023 21:30	45.9	48.1	42.7	55.8
23/05/2023 21:45	46.6	48.2	42.0	61.9
23/05/2023 22:00	44.3	46.5	41.1	51.1
23/05/2023 22:15	46.1	49.1	41.8	58.7
23/05/2023 22:30	44.4	46.6	41.4	51.5
23/05/2023 22:45	43.7	46.4	40.0	52.8
23/05/2023 23:00	43.5	45.5	40.0	57.0
23/05/2023 23:15	44.2	47.2	38.7	61.1
23/05/2023 23:30	42.5	45.0	38.3	58.6
23/05/2023 23:45	41.7	45.0	35.0	56.2
24/05/2023 00:00	40.1	43.1	32.7	50.9
24/05/2023 00:15	39.9	42.0	33.5	55.5
24/05/2023 00:30	39.6	42.4	34.4	52.4
24/05/2023 00:45	38.0	40.8	32.2	47.9
24/05/2023 01:00	39.4	42.3	33.5	52.9
24/05/2023 01:15	39.8	42.7	32.6	54.5
24/05/2023 01:30	36.2	39.4	28.7	45.6
24/05/2023 01:45	38.9	42.2	32.9	51.8
24/05/2023 02:00	37.6	41.2	30.1	52.4
24/05/2023 02:15	35.0	37.7	28.7	54.7
24/05/2023 02:30	34.7	37.7	29.2	47.2
24/05/2023 02:45	36.2	38.9	30.7	48.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2023 03:00	34.7	38.1	28.1	42.5
24/05/2023 03:15	37.3	40.5	30.1	50.7
24/05/2023 03:30	36.5	39.5	30.5	49.5
24/05/2023 03:45	37.5	40.9	28.2	51.5
24/05/2023 04:00	42.7	45.9	37.0	53.2
24/05/2023 04:15	43.3	46.1	38.7	53.2
24/05/2023 04:30	43.0	45.7	38.4	52.0
24/05/2023 04:45	41.7	44.2	37.4	50.3
24/05/2023 05:00	42.7	43.8	37.1	68.0
24/05/2023 05:15	42.2	44.4	38.5	49.9
24/05/2023 05:30	43.1	45.1	39.0	58.2
24/05/2023 05:45	44.0	46.1	40.3	59.7
24/05/2023 06:00	45.7	48.0	41.8	57.7
24/05/2023 06:15	46.2	48.3	42.6	67.4
24/05/2023 06:30	47.0	49.2	43.7	57.7
24/05/2023 06:45	48.4	51.7	44.0	58.6
24/05/2023 07:00	48.3	50.0	45.1	58.5
24/05/2023 07:15	48.2	50.1	45.1	61.2
24/05/2023 07:30	49.6	51.2	45.3	64.8
24/05/2023 07:45	49.3	51.0	44.8	69.6
24/05/2023 08:00	47.5	49.6	44.9	57.7
24/05/2023 08:15	49.1	51.7	45.4	60.9
24/05/2023 08:30	48.6	50.3	44.4	64.4
24/05/2023 08:45	50.8	52.0	43.7	69.9
24/05/2023 09:00	47.8	50.1	42.9	62.9
24/05/2023 09:15	47.2	49.1	43.1	63.0
24/05/2023 09:30	46.5	48.4	41.8	71.4
24/05/2023 09:45	46.7	48.8	43.6	59.9
24/05/2023 10:00	45.7	47.0	42.4	62.4
24/05/2023 10:15	45.3	47.3	42.5	53.6
24/05/2023 10:30	46.5	48.3	43.0	63.7
24/05/2023 10:45	46.0	48.6	42.5	58.9
24/05/2023 11:00	45.4	47.2	42.7	59.0
24/05/2023 11:15	45.9	47.7	43.3	59.8
24/05/2023 11:30	46.6	48.4	43.7	66.2



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2023 11:45	45.8	47.2	43.0	66.8
24/05/2023 12:00	46.8	47.9	42.3	65.7
24/05/2023 12:30	46.7	50.3	38.7	58.0
24/05/2023 12:30	45.3	47.3	42.5	55.7
24/05/2023 12:45	46.3	49.7	37.8	64.3
24/05/2023 12:45	46.8	49.2	43.0	61.3
24/05/2023 13:30	47.8	49.1	44.3	63.8
24/05/2023 13:30	49.8	52.6	39.2	74.4
24/05/2023 13:45	50.0	52.3	39.2	68.0
24/05/2023 14:00	50.0	53.3	39.9	62.0
24/05/2023 14:15	48.2	51.3	39.0	62.4
24/05/2023 14:30	50.7	51.6	41.1	71.2
24/05/2023 14:45	46.2	48.2	43.6	55.4
24/05/2023 15:00	50.5	51.3	41.4	70.4
24/05/2023 15:15	47.5	50.2	40.3	62.0
24/05/2023 15:30	50.3	53.7	42.8	63.2
24/05/2023 15:45	50.6	51.8	42.5	68.9
24/05/2023 16:00	49.7	52.0	43.1	63.7
24/05/2023 16:15	48.1	51.1	42.4	57.4
24/05/2023 16:30	51.0	51.6	42.6	76.6
24/05/2023 16:45	50.4	52.1	42.6	66.1
24/05/2023 17:00	48.5	51.0	42.2	64.3
24/05/2023 17:15	48.1	51.3	41.3	59.7
24/05/2023 17:30	48.4	50.5	45.0	61.7
24/05/2023 17:45	46.9	50.5	40.4	61.0
24/05/2023 18:00	46.9	50.6	40.2	57.1
24/05/2023 18:15	48.6	51.4	40.8	65.1
24/05/2023 18:30	47.8	51.1	40.9	57.0
24/05/2023 18:45	47.1	48.7	44.9	56.5
24/05/2023 19:00	50.8	53.7	40.1	68.9
24/05/2023 19:15	49.7	53.4	41.5	59.3
24/05/2023 19:30	50.8	54.8	41.7	67.8
24/05/2023 19:45	49.8	54.1	40.1	65.1
24/05/2023 20:00	50.4	54.3	40.7	62.2
24/05/2023 20:15	51.1	54.1	41.5	67.6



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
24/05/2023 20:30	51.4	54.8	41.9	65.0
24/05/2023 20:45	48.2	51.7	39.2	64.6
24/05/2023 21:00	45.2	49.1	38.8	66.5
24/05/2023 21:15	45.7	50.1	38.2	63.2
24/05/2023 21:30	49.2	51.1	45.9	56.4
24/05/2023 21:45	46.2	50.0	37.2	66.5
24/05/2023 22:00	43.4	47.6	36.6	57.8
24/05/2023 22:15	43.4	47.5	36.3	56.7
24/05/2023 22:30	40.9	40.9	35.8	57.1
24/05/2023 22:45	47.9	49.5	45.9	54.6
24/05/2023 23:00	37.5	36.4	33.8	53.8
24/05/2023 23:15	42.8	42.0	33.4	66.5
24/05/2023 23:30	36.7	35.3	33.7	55.3
24/05/2023 23:45	37.9	37.7	33.3	53.0
25/05/2023 00:00	48.0	49.9	45.4	54.7
25/05/2023 00:15	37.8	37.1	33.5	54.7
25/05/2023 00:30	34.2	34.7	33.4	40.2
25/05/2023 00:45	35.7	35.8	33.2	52.1
25/05/2023 01:00	35.8	34.9	33.2	53.1
25/05/2023 01:15	45.4	47.4	42.4	54.8
25/05/2023 01:30	38.0	36.2	33.2	53.3
25/05/2023 01:45	43.6	45.9	39.9	53.9
25/05/2023 02:00	37.5	37.3	34.5	54.5
25/05/2023 02:15	41.8	43.8	38.2	53.3
25/05/2023 02:30	41.9	44.7	37.0	51.2
25/05/2023 02:45	41.3	43.7	37.9	49.2
25/05/2023 03:00	42.7	45.1	38.7	50.6
25/05/2023 03:15	44.6	47.5	39.6	52.1
25/05/2023 03:30	44.3	46.8	39.4	53.1
25/05/2023 03:45	44.4	46.5	41.5	51.2
25/05/2023 04:00	45.8	48.4	41.5	54.1
25/05/2023 04:15	43.2	46.8	37.7	56.3
25/05/2023 04:30	47.3	49.9	43.2	56.4
25/05/2023 04:45	46.7	49.2	42.4	55.9
25/05/2023 05:00	47.8	50.4	44.0	56.1



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2023 05:15	48.2	50.5	44.5	62.8
25/05/2023 05:30	49.5	53.6	37.8	63.4
25/05/2023 05:45	49.9	52.2	46.9	58.3
25/05/2023 06:00	51.2	53.6	47.3	59.8
25/05/2023 06:15	52.3	54.7	48.9	62.6
25/05/2023 06:30	50.8	52.4	48.5	60.8
25/05/2023 06:45	50.0	51.6	47.4	62.5
25/05/2023 07:15	53.7	56.8	44.6	69.2
25/05/2023 09:15	53.2	55.6	49.7	63.8
25/05/2023 09:30	50.6	54.2	42.6	63.2
25/05/2023 09:45	52.7	54.5	50.3	60.5
25/05/2023 10:00	53.8	55.5	50.6	69.0
25/05/2023 10:15	52.7	54.6	50.4	61.8
25/05/2023 10:30	53.8	55.6	51.3	62.3
25/05/2023 10:45	53.4	55.1	51.2	65.1
25/05/2023 11:00	52.5	54.6	49.7	60.9
25/05/2023 11:15	51.4	55.2	42.3	61.6
25/05/2023 11:30	53.5	55.5	50.4	68.6
25/05/2023 11:30	51.3	54.5	42.9	65.5
25/05/2023 11:45	52.6	54.8	48.5	63.9
25/05/2023 11:45	52.4	56.2	44.0	62.7
25/05/2023 12:00	51.4	53.7	48.0	58.2
25/05/2023 12:15	52.9	55.0	49.7	63.6
25/05/2023 12:45	53.4	55.4	49.6	66.6
25/05/2023 13:00	53.9	55.6	50.8	70.1
25/05/2023 13:15	52.8	54.6	49.7	60.1
25/05/2023 15:15	52.9	54.6	49.9	66.8
25/05/2023 15:30	53.0	54.6	49.7	71.3
25/05/2023 16:15	51.8	53.8	48.9	59.3
25/05/2023 17:30	53.1	55.1	49.8	61.4
25/05/2023 18:15	53.0	54.2	49.4	69.4
25/05/2023 18:30	52.6	54.2	49.8	67.0
25/05/2023 18:45	53.4	55.1	49.7	75.6
25/05/2023 19:15	52.3	54.6	49.2	59.4
25/05/2023 19:30	51.0	53.0	48.1	60.5



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
25/05/2023 19:45	51.3	53.1	48.5	62.3
25/05/2023 20:00	51.1	53.0	48.7	57.8
25/05/2023 20:30	51.2	53.0	48.6	59.5
25/05/2023 20:45	51.8	53.7	48.3	65.3
25/05/2023 21:00	50.5	52.6	48.1	56.8
25/05/2023 21:15	50.9	52.7	48.8	57.4
25/05/2023 21:30	50.5	52.3	47.9	58.3
25/05/2023 21:45	50.7	52.5	47.9	58.1
25/05/2023 22:00	50.9	53.0	47.9	58.9
25/05/2023 22:15	50.4	52.2	47.7	58.0
25/05/2023 22:30	50.4	52.6	47.1	60.5
25/05/2023 22:45	51.4	51.8	47.0	66.9
25/05/2023 23:00	51.1	52.8	48.3	63.1
25/05/2023 23:15	51.0	53.0	48.2	59.3
25/05/2023 23:30	49.9	52.0	47.0	57.5
25/05/2023 23:45	48.1	50.2	44.5	60.2
26/05/2023 00:00	47.4	49.3	44.4	55.1
26/05/2023 00:15	45.9	48.7	40.9	54.5
26/05/2023 00:30	46.0	48.3	41.0	60.0
26/05/2023 00:45	45.3	48.8	39.6	55.1
26/05/2023 01:00	44.9	47.7	39.3	54.2
26/05/2023 01:15	45.0	47.6	39.2	55.7
26/05/2023 01:30	44.7	47.1	39.9	55.0
26/05/2023 01:45	44.8	48.5	39.3	56.1
26/05/2023 02:00	42.6	44.4	39.1	61.8
26/05/2023 02:15	40.9	43.5	37.0	49.1
26/05/2023 02:30	40.5	43.5	35.7	55.0
26/05/2023 02:45	39.1	41.5	35.6	47.7
26/05/2023 03:00	40.3	42.8	35.1	46.6
26/05/2023 03:15	42.8	45.3	39.2	53.2
26/05/2023 03:30	42.0	44.4	36.9	51.2
26/05/2023 03:45	45.3	47.9	40.5	53.9
26/05/2023 04:00	45.8	47.9	41.5	55.8
26/05/2023 04:15	45.6	47.8	42.2	53.8
26/05/2023 04:30	46.0	48.6	41.6	53.9



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2023 04:45	46.6	48.5	44.0	64.9
26/05/2023 05:00	46.9	48.8	44.3	57.8
26/05/2023 05:15	47.4	49.1	44.4	59.3
26/05/2023 05:30	51.1	51.3	46.4	72.0
26/05/2023 05:45	48.4	50.7	44.8	57.7
26/05/2023 06:00	48.6	51.6	44.2	57.0
26/05/2023 06:15	51.7	54.3	44.8	71.3
26/05/2023 06:30	53.0	54.3	46.3	72.2
26/05/2023 06:45	52.3	55.6	47.7	64.6
26/05/2023 07:00	52.5	53.5	45.9	69.6
26/05/2023 07:15	55.3	55.7	46.5	74.6
26/05/2023 08:30	49.3	51.0	44.8	64.2
26/05/2023 08:45	51.3	53.0	45.9	67.2
26/05/2023 09:00	50.0	51.1	45.5	73.8
26/05/2023 09:15	48.3	50.0	45.8	59.8
26/05/2023 09:45	46.8	48.4	44.7	53.0
26/05/2023 11:30	46.6	48.2	44.6	58.5
26/05/2023 12:00	48.0	49.0	44.4	64.5
26/05/2023 13:00	48.2	50.0	45.2	63.3
26/05/2023 13:15	47.8	48.3	43.3	63.8
26/05/2023 14:00	48.1	49.8	44.1	62.7
26/05/2023 15:45	48.5	50.7	45.2	61.9
26/05/2023 17:00	47.7	49.5	45.0	59.5
26/05/2023 17:15	46.0	47.7	43.4	57.6
26/05/2023 17:30	47.1	47.8	43.3	65.3
26/05/2023 17:45	46.2	48.0	43.5	58.3
26/05/2023 18:15	48.8	51.6	43.2	65.2
26/05/2023 18:30	46.4	48.0	43.1	60.3
26/05/2023 18:45	45.8	47.6	42.6	57.3
26/05/2023 19:00	47.4	49.4	43.3	61.8
26/05/2023 19:15	45.7	47.7	42.6	61.3
26/05/2023 19:30	47.5	49.4	42.2	65.0
26/05/2023 19:45	46.9	49.2	42.0	61.8
26/05/2023 20:00	46.5	48.7	42.4	63.5
26/05/2023 20:15	48.4	50.6	43.3	64.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
26/05/2023 20:30	46.3	48.5	42.4	60.8
26/05/2023 20:45	50.3	54.2	43.0	64.0
26/05/2023 21:00	48.2	50.7	42.4	62.2
26/05/2023 21:15	44.4	46.2	41.9	51.9
26/05/2023 21:30	44.8	47.2	41.0	57.6
26/05/2023 21:45	43.5	45.7	39.9	51.9
26/05/2023 22:00	42.8	44.7	40.1	56.7
26/05/2023 22:15	43.3	45.4	40.2	58.2
26/05/2023 22:30	43.9	46.2	40.7	55.5
26/05/2023 22:45	44.2	45.8	39.7	59.6
26/05/2023 23:00	42.8	44.8	40.4	51.3
26/05/2023 23:15	42.6	44.7	39.6	52.9
26/05/2023 23:30	43.2	45.7	39.3	56.9
26/05/2023 23:45	42.5	44.5	39.1	51.7
27/05/2023 00:00	40.2	42.3	36.7	49.7
27/05/2023 00:15	40.3	43.1	35.2	50.0
27/05/2023 00:30	42.0	44.4	35.8	56.6
27/05/2023 00:45	42.7	43.9	36.0	60.0
27/05/2023 01:00	36.5	39.0	32.6	45.6
27/05/2023 01:15	37.2	39.5	32.3	49.2
27/05/2023 01:30	40.7	42.9	33.7	70.2
27/05/2023 01:45	44.9	45.9	31.8	64.3
27/05/2023 02:00	36.5	38.7	33.2	45.2
27/05/2023 02:15	37.6	40.5	32.2	55.1
27/05/2023 02:30	35.2	38.0	30.9	43.7
27/05/2023 02:45	36.4	38.7	33.2	44.3
27/05/2023 03:00	37.6	40.2	33.0	50.6
27/05/2023 03:15	36.4	38.9	32.2	46.0
27/05/2023 03:30	35.1	38.2	29.0	44.7
27/05/2023 03:45	39.6	42.4	34.5	56.2
27/05/2023 04:00	41.2	43.6	36.9	53.9
27/05/2023 04:15	40.2	42.6	35.8	59.7
27/05/2023 04:30	40.3	42.4	36.5	60.1
27/05/2023 04:45	41.1	43.3	37.5	55.1
27/05/2023 05:00	49.3	43.6	37.1	74.8



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2023 05:15	49.0	43.5	36.6	76.5
27/05/2023 05:30	39.9	41.8	37.3	49.4
27/05/2023 05:45	40.9	42.7	38.2	54.1
27/05/2023 06:00	42.5	44.6	38.8	64.2
27/05/2023 06:15	44.6	47.6	39.2	58.3
27/05/2023 06:30	46.2	49.2	40.0	61.0
27/05/2023 06:45	47.4	51.0	40.1	62.6
27/05/2023 07:00	43.6	45.8	40.7	52.7
27/05/2023 07:15	45.1	47.5	40.4	58.7
27/05/2023 07:30	47.9	52.0	40.6	60.3
27/05/2023 07:45	46.8	48.0	41.0	68.0
27/05/2023 08:00	45.5	47.5	40.2	63.2
27/05/2023 08:15	44.6	46.9	39.8	63.3
27/05/2023 08:45	49.0	50.5	40.8	69.4
27/05/2023 09:00	43.5	45.3	40.7	64.6
27/05/2023 09:15	45.8	48.8	41.1	59.1
27/05/2023 10:00	46.4	47.6	42.7	68.2
27/05/2023 10:30	46.6	48.6	43.8	60.0
27/05/2023 10:45	46.1	47.6	43.2	65.9
27/05/2023 11:00	47.5	49.3	44.7	57.4
27/05/2023 11:30	47.8	50.0	44.1	61.5
27/05/2023 12:00	46.8	48.5	43.3	61.9
27/05/2023 12:15	45.4	47.4	43.0	56.5
27/05/2023 12:30	46.4	48.6	43.6	57.0
27/05/2023 12:45	48.5	50.6	43.6	67.2
27/05/2023 13:00	45.7	47.7	42.2	57.5
27/05/2023 13:15	47.5	48.7	43.4	69.0
27/05/2023 13:30	49.0	50.3	43.9	67.1
27/05/2023 13:45	46.7	48.4	44.2	53.3
27/05/2023 14:00	46.8	48.4	43.2	63.2
27/05/2023 14:15	43.6	45.7	40.9	54.1
27/05/2023 14:30	46.8	49.0	42.3	62.5
27/05/2023 14:45	45.6	47.5	42.8	54.6
27/05/2023 15:00	46.5	48.6	43.8	60.9
27/05/2023 15:15	47.7	48.8	43.2	63.4



Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
27/05/2023 15:30	49.3	50.9	45.6	65.8
27/05/2023 15:45	48.3	51.7	43.1	63.4
27/05/2023 16:00	47.5	48.4	41.5	65.1
27/05/2023 16:15	46.6	49.0	42.2	64.3
27/05/2023 16:30	46.9	49.5	41.8	66.0
27/05/2023 16:45	47.3	48.8	42.7	63.2
27/05/2023 17:00	44.5	46.6	41.6	52.2
27/05/2023 17:15	44.3	46.1	41.3	62.3
27/05/2023 17:30	48.7	51.1	42.2	67.1
27/05/2023 17:45	46.2	48.1	43.4	52.3
27/05/2023 18:00	51.2	47.2	42.1	82.7
27/05/2023 18:15	47.4	48.8	42.2	65.1
27/05/2023 18:30	47.9	50.4	43.3	60.3
27/05/2023 18:45	48.7	52.0	42.9	64.4
27/05/2023 19:00	47.4	49.5	43.5	59.5
27/05/2023 19:15	46.4	46.9	41.6	73.9
27/05/2023 19:30	46.6	48.2	43.2	61.4
27/05/2023 19:45	44.5	46.4	41.8	49.6
27/05/2023 20:00	47.5	49.9	42.6	62.9
27/05/2023 20:15	44.2	46.0	40.6	58.9
27/05/2023 20:30	44.6	46.7	41.9	52.5
27/05/2023 20:45	45.2	47.4	41.4	59.5
27/05/2023 21:00	46.0	47.4	42.3	59.5
27/05/2023 21:15	44.5	46.6	40.2	54.4
27/05/2023 21:30	44.6	47.3	39.5	56.1
27/05/2023 21:45	45.1	47.9	40.3	55.1
27/05/2023 22:00	42.8	44.9	39.8	49.1
27/05/2023 22:15	43.2	45.4	40.1	50.6
27/05/2023 22:30	47.1	51.1	40.6	59.9
27/05/2023 22:45	43.2	45.8	38.7	50.6
27/05/2023 23:00	42.8	46.0	36.6	51.0
27/05/2023 23:15	45.4	48.5	36.7	59.4
27/05/2023 23:30	42.0	44.8	37.2	50.7
27/05/2023 23:45	41.7	45.0	34.9	53.2
28/05/2023 00:00	40.0	43.1	33.3	50.8

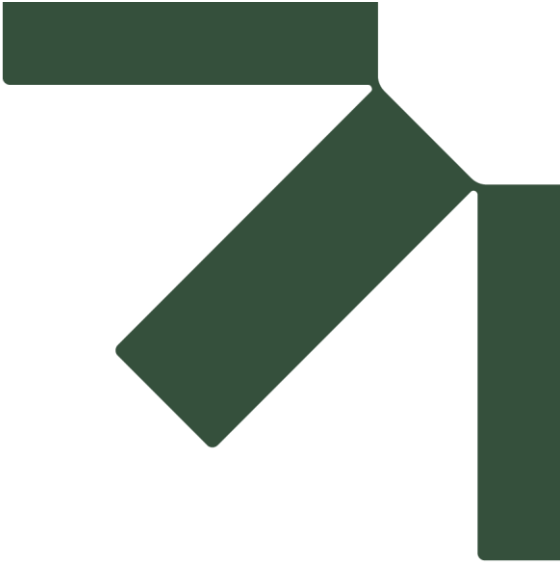


Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
28/05/2023 00:15	38.6	41.4	33.5	49.2
28/05/2023 00:30	37.4	40.5	31.7	45.5
28/05/2023 00:45	38.1	41.3	32.1	48.1
28/05/2023 01:00	39.3	42.9	32.6	48.6
28/05/2023 01:15	39.7	42.5	33.2	52.3
28/05/2023 01:30	37.0	40.4	30.4	49.4
28/05/2023 01:45	34.9	38.0	28.5	44.3
28/05/2023 02:00	36.5	39.9	28.9	48.4
28/05/2023 02:15	35.4	38.2	27.4	49.7
28/05/2023 02:30	36.2	39.5	28.8	48.3
28/05/2023 02:45	35.6	38.6	30.1	44.5
28/05/2023 03:00	37.4	40.9	31.6	52.1
28/05/2023 03:15	38.1	41.0	30.9	51.0
28/05/2023 03:30	40.5	43.8	31.4	55.3
28/05/2023 03:45	43.1	46.0	37.3	55.8
28/05/2023 04:00	43.9	46.4	39.8	52.6
28/05/2023 04:15	44.3	46.6	40.8	55.2
28/05/2023 04:30	45.0	47.3	41.3	53.9
28/05/2023 04:45	44.8	46.9	41.4	58.7
28/05/2023 05:00	46.3	48.3	43.3	56.0
28/05/2023 05:15	47.3	49.1	44.9	53.9
28/05/2023 05:30	48.0	49.8	45.7	56.1
28/05/2023 05:45	47.5	48.8	45.7	54.2
28/05/2023 06:00	48.2	49.7	45.6	59.1
28/05/2023 06:15	49.1	50.9	46.4	58.0
28/05/2023 06:30	50.6	52.5	48.2	60.8
28/05/2023 06:45	50.5	52.4	48.0	60.2
28/05/2023 07:00	49.4	50.8	47.7	57.6
28/05/2023 07:15	51.1	52.3	48.3	66.7
28/05/2023 07:30	51.4	52.8	49.5	59.6
28/05/2023 07:45	50.7	52.2	48.8	61.7
28/05/2023 08:00	52.0	52.9	47.9	74.7
28/05/2023 08:15	51.1	52.6	49.1	64.1
28/05/2023 08:30	50.7	52.5	48.6	62.8
28/05/2023 08:45	55.2	52.0	48.4	82.6



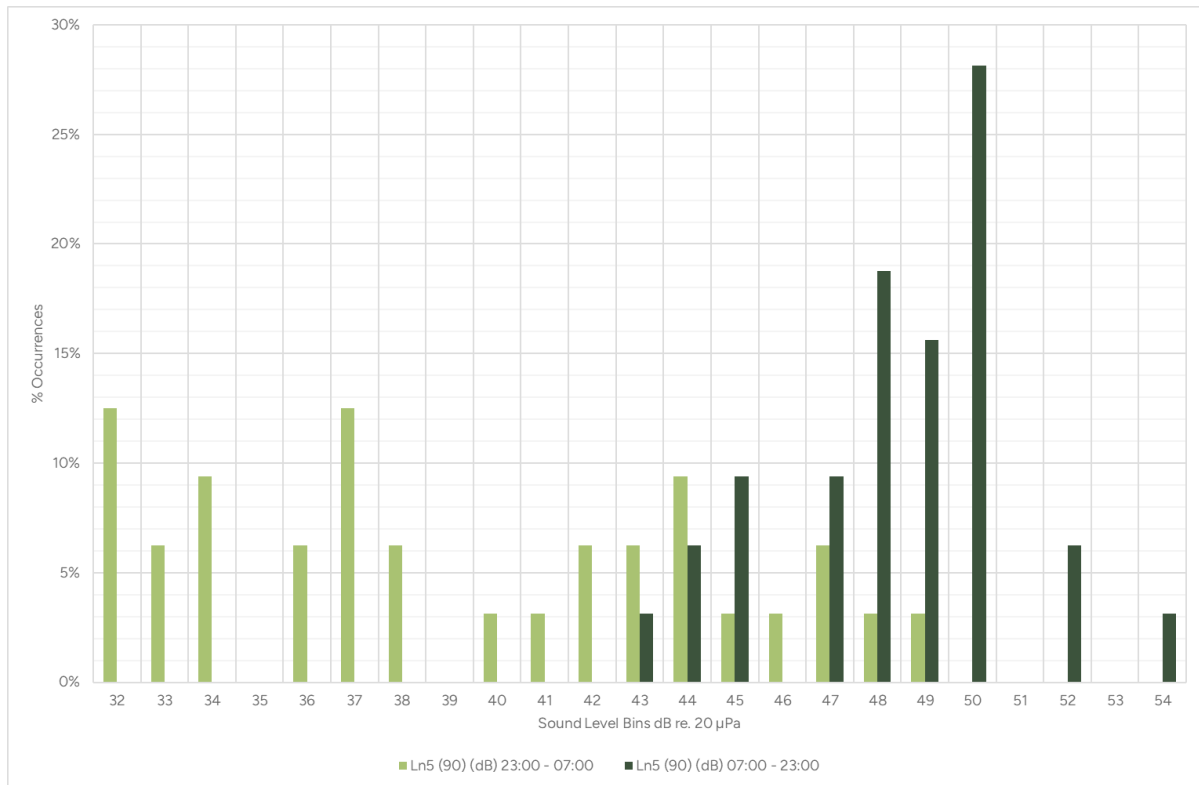
Date	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	L _{Amax} dB
28/05/2023 09:00	50.1	51.6	47.7	69.2
28/05/2023 09:15	50.9	53.1	47.8	62.0
28/05/2023 09:30	50.6	52.3	48.1	61.0
28/05/2023 09:45	50.7	52.1	48.7	58.7
28/05/2023 10:00	49.8	51.2	47.8	59.3
28/05/2023 10:15	49.9	51.5	48.0	61.5
28/05/2023 10:30	50.5	52.3	48.1	62.5
28/05/2023 10:45	49.6	51.1	47.4	59.7
28/05/2023 11:00	49.0	50.7	46.8	60.2
28/05/2023 11:15	49.0	50.8	46.9	58.8
28/05/2023 11:30	48.3	49.9	46.3	56.9
28/05/2023 11:45	47.4	49.1	45.3	54.1
28/05/2023 12:00	47.8	49.2	45.4	59.1
28/05/2023 12:15	47.5	49.2	45.2	55.5
28/05/2023 12:30	46.8	48.4	44.3	61.4
28/05/2023 12:45	51.3	51.3	45.9	79.2



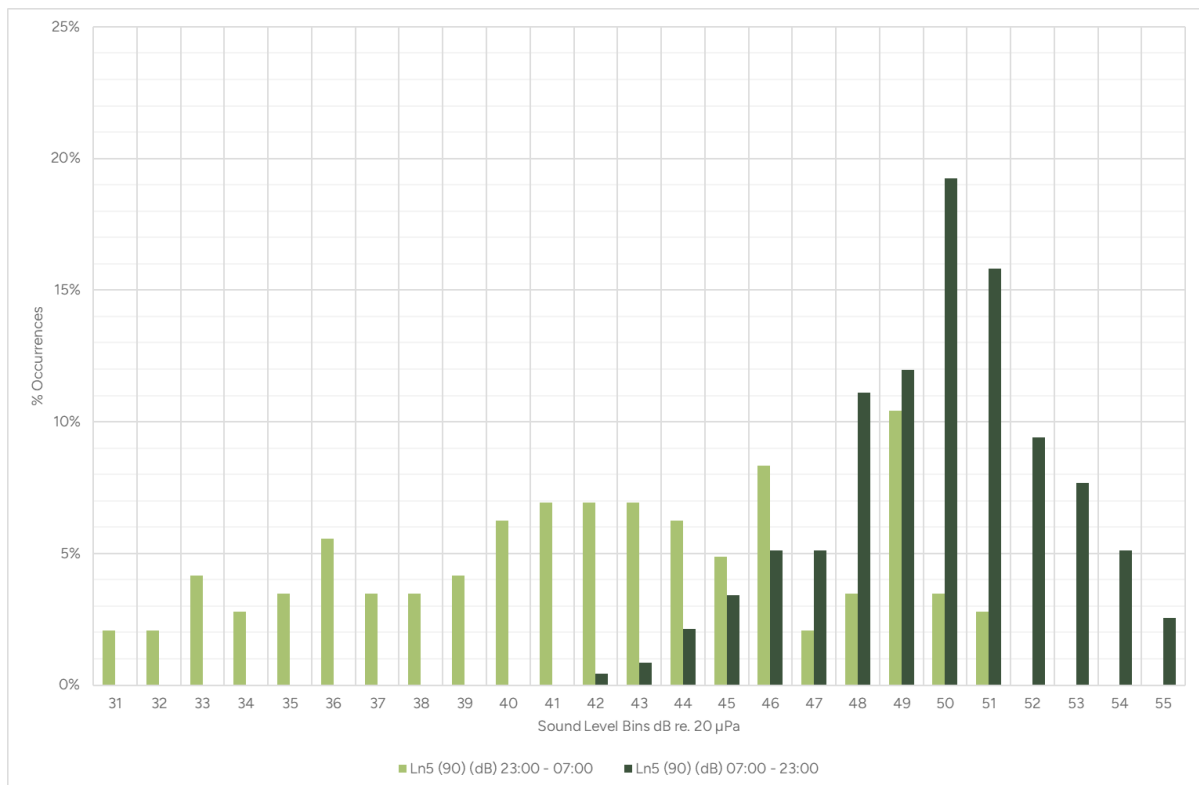


Appendix F Statistical Histogram Analysis

Location 1 Histogram, daytime and night-time, L90

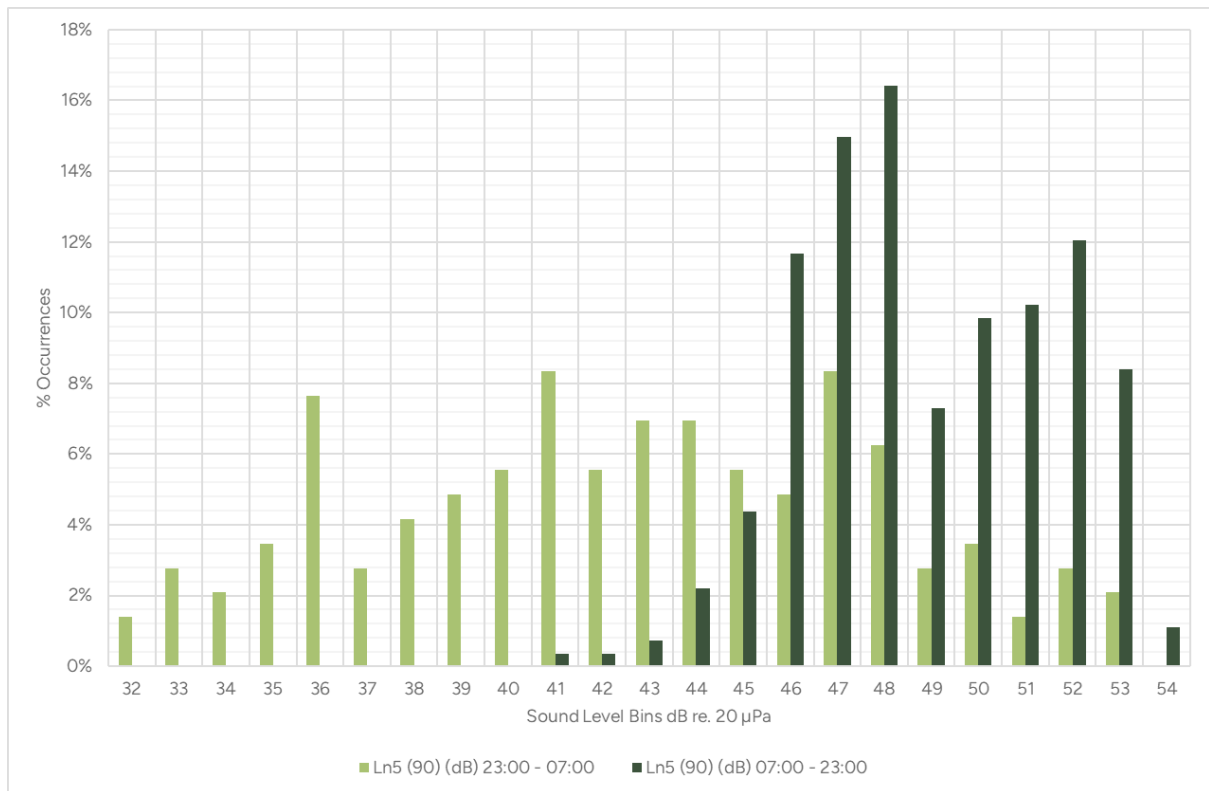


Location 2 Histogram, daytime and night-time, L90

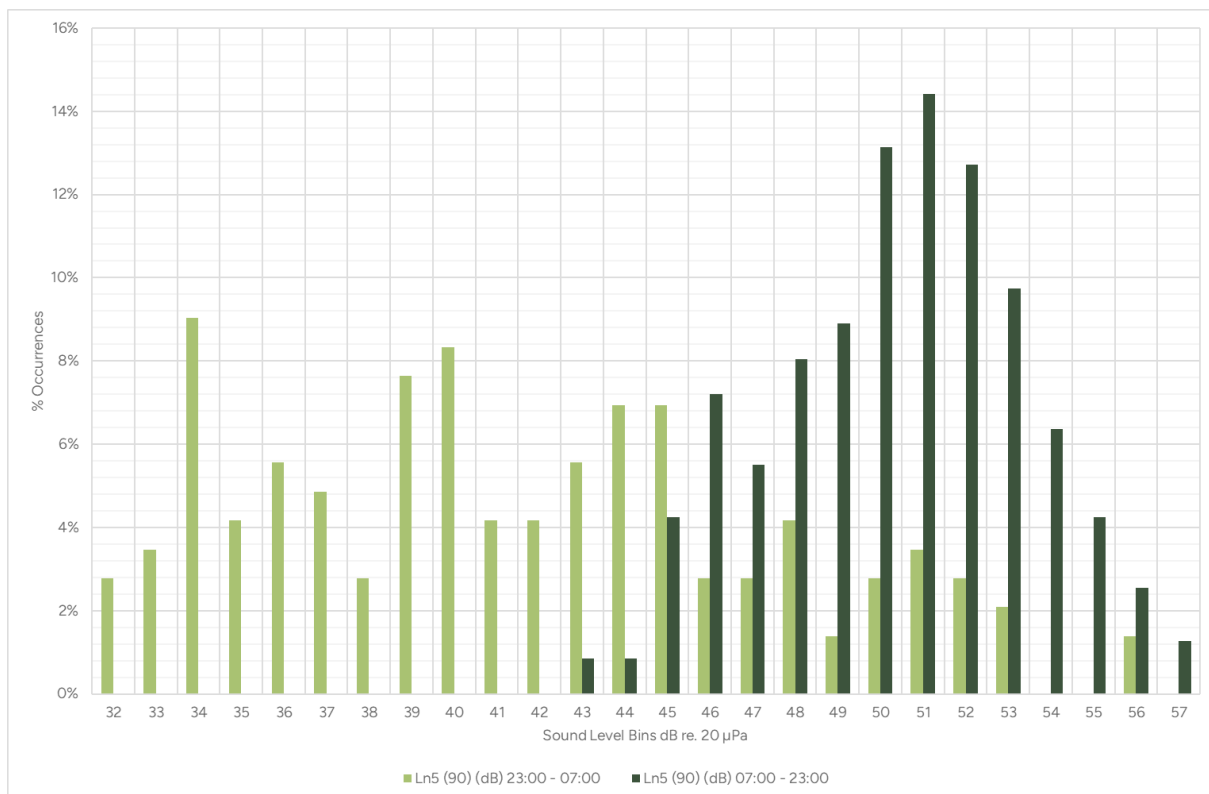


Location 3 Histogram, daytime and night-time, L90



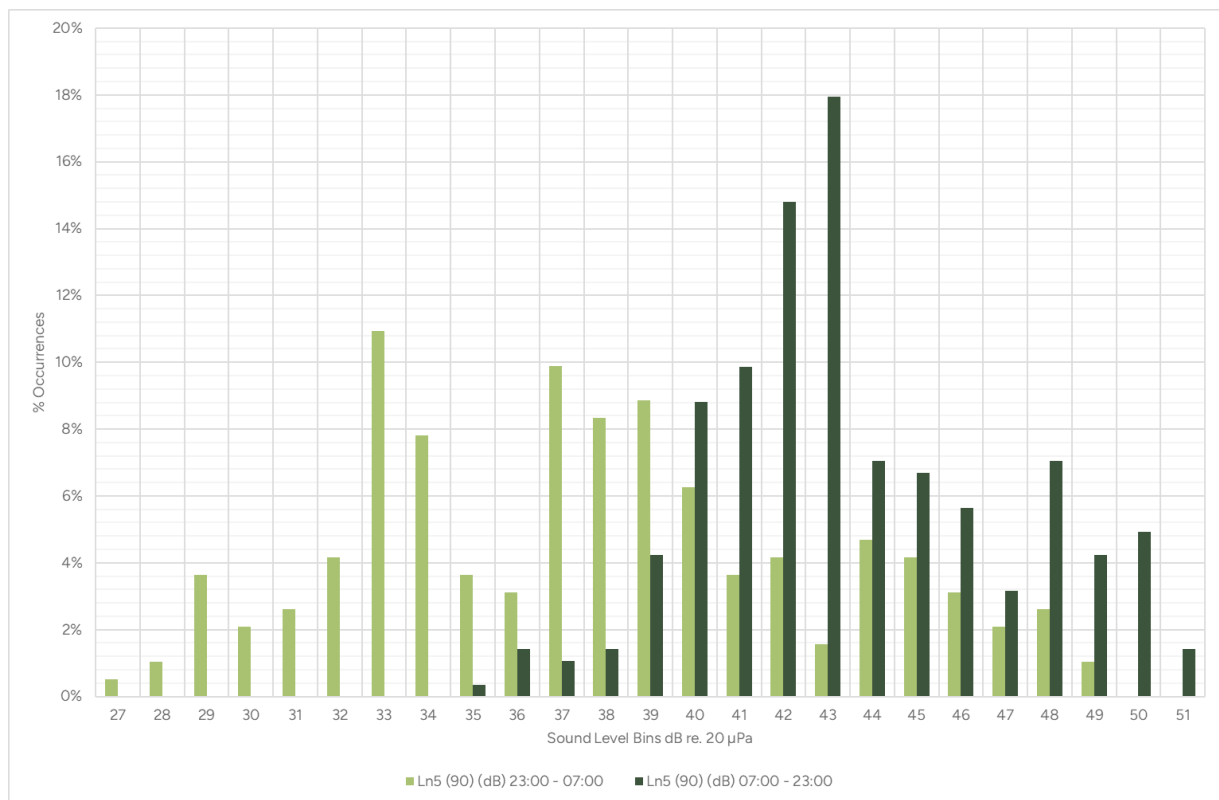


Location 4 Histogram, daytime and night-time, L90



Location 5 Histogram, daytime and night-time, L90







Making Sustainability Happen