



PREPARED: 17 September 2026

ARDEN GRANGE, ALBOURNE

NOISE IMPACT ASSESSMENT

CONTENTS

1.0

INTRODUCTION

1

2.0

COMPETENCE

1

3.0

SITE DESCRIPTION & PROPOSALS

1

4.0

LOCAL AUTHORITY REQUIREMENTS & RELEVANT GUIDANCE

1

5.0

ENVIRONMENTAL NOISE SURVEY

3

6.0

BS4142 ASSESSMENT

4

7.0

UNCERTAINTY

8

8.0

CONCLUSION

8

LIST OF ATTACHMENTS

AS14744/SP1

Indicative Site Plan

AS14744/TH1-TH10

Environmental Noise Survey Time Histories

APPENDIX A

Acoustic Terminology

APPENDIX B

Summary of BS4142 Calculations

APPENDIX C

Summary of BS4142 Assessment Methodology

Project Ref:	AS14744	Project Name:	Arden Grange, Albourne
Report Ref:	AS14744.260917.NIA.1	Report Title:	Noise Impact Assessment
Client Name:	LKQ Electriq		
Project Manager:	Alec Korchev		
Report Author:	Alec Korchev		
Clarke Saunders Acoustics Winchester SO22 5BE		This report has been prepared in response to the instructions of our client. It is not intended for and should not be relied upon by any other party or for any other purpose.	

1.0 INTRODUCTION

- 1.1 Clarke Saunders Acoustics (CSA) has been appointed by LKQ Electriq to undertake a noise impact assessment of the proposed change of use at Arden Grange, Albourne from a Class B8 use to Class B2 use.
- 1.2 This report details the methodology and outcomes of an environmental noise survey as well as the details of a noise impact assessment, including the calculations and its findings.
- 1.3 A summary of technical terminology used throughout this report is provided in Appendix A.

2.0 COMPETENCE

- 2.1 The author of this report is a Senior Specialist Consultant at CSA with over 7 years' experience in acoustics consulting. Alec holds a PhD in Engineering and the Built Environment and is a corporate member of the Institute of Acoustics (MIOA).
- 2.2 This report adheres with the principles required by the Institute of Acoustics in its Code of Conduct, and the work is within the author's own area of knowledge and expertise. Where opinions have been expressed these represent true and complete professional opinions on the matters to which they refer.
- 2.3 CSA is a full member of the Association of Noise Consultants (ANC).

3.0 SITE DESCRIPTION & PROPOSALS

- 3.1 The site is a warehouse located just off the B2118 at Arden Grange, Albourne, BN6 9BJ. The site also includes associated offices and car parking for the main warehouse unit. Currently, the site has permission for Class B8 use, however, is not operational at time of writing.
- 3.2 The site is surrounded by a mix of residential and other commercial buildings, all predominantly located on the western boundary of the site. To the east of the site is the A23 road and other commercial buildings located to the north including the Leander Kennels. The nearest noise-sensitive receptor has been identified as the residential property, named Ardenburg, immediately to the west of the Site boundary.
- 3.3 The site and surrounding area can be seen in the appended site plan, Figure AS14744/SP1.
- 3.4 The proposals involve the change of use of the existing site from use Class B8 to Industrial Use Class B2. The incoming tenants are confirmed to be LKQ Electriq and intend to use the site as a vehicle specialist high-voltage battery and electrical component testing and repair facility.

4.0 LOCAL AUTHORITY REQUIREMENTS & RELEVANT GUIDANCE

4.1 LOCAL AUTHORITY CRITERIA

- 4.1.1 The site falls under the jurisdiction of the Mid Sussex District Council.
- 4.1.2 The 'Planning Noise Advice Document: Sussex' September 2021 states the following regarding noise impact assessments for industrial sites;

'3.2.1. The rating level of the industrial or commercial sound source should, where practicable, achieve a level no greater than the representative background sound, when measured in accordance with BS 4142:2014 + A1: 2019. There may be instances, for specific sites, where a rating level below background is deemed appropriate. This can be determined through discussion with the Local Planning Authority (LPA). A rating level below background may be required if there are concerns for potential noise creep, for example in a High Street setting. It is considered that meeting this criterion would avoid adverse noise impacts, in the interests of ensuring a good standard of amenity and protecting human health. Where these criteria are not attainable, the noise report should explain why, and how best practicable means will be implemented to control noise in order to satisfy the LPA that the development is acceptable. At all times the reports shall have regard to the context.'

4.1.3 Oliver Benson, Senior Environmental Health Officer at Mid Sussex District Council, was consulted over email in September 2026. It was discussed that the dormancy of the Site would result in surveyed environmental sound levels being significantly lower than those which could be expected from the facilities lawful use. As a result, the contextual discussion that is prevalent in all BS4142 assessments would be of higher importance than the simple numerical assessment as this would not appropriately represent the potential noise impact.

4.1.4 It was also discussed that the tenant in this case is known and would be expected to generate relatively low levels of noise, when compared to other common B2 uses. On this basis, a condition to secure this specific use was suggested by the Local Authority.

4.1.5 In CSA's experience, a reasonable approach to managing the risk of noise from different types of future occupancies may be to require future tenants that operate differently to LKQ Electriq to prepare operational noise management plans prior to occupation. These often detail the specific operations of a potential tenant along with proposed mitigation measures and a comprehensive complaints management procedure.

4.1.6 Lastly, outside of the BS4142 method, it was requested that a discussion of absolute noise levels from each of the proposed plant items be provided to describe how these might be perceived at the neighbouring dwelling.

4.2 BRITISH STANDARD BS4142:2014+A1:2019

4.2.1 British Standard BS4142:2014+A1:2019¹ (BS4142) provides a methodology to assess the likelihood of adverse impact arising from sound generated by industrial and commercial sound sources.

4.2.2 Sound emissions which result in distinguishable features are subject to additional penalties. The context of the sound emissions and existing soundscape form an important part of the assessment.

4.2.3 It is important to note that the assessment of private cars (such as those driven by employees and customers) are excluded from the scope of BS4142. Assessment of sound from commercial vehicles on public roads is similarly outside the scope of BS4142.

4.2.4 A detailed summary of the BS4142 assessment methodology is presented in Appendix C.

¹ British Standard BS4142:2014+A1:2019 *Methods for rating and assessing industrial and commercial sound*

5.0 ENVIRONMENTAL NOISE SURVEY

5.1 Automated measurements of consecutive 5-minute L_{Aeq} , L_{Amax} , L_{A10} and L_{A90} sound pressure levels were taken at the two positions shown in site plan AS14744/SP1 between Thursday 3rd September and Monday 7th September 2026, following procedures in BS4142 and BS7445-2:1991.²

5.2 The equipment used during the survey was as follows:

- 1 no. Rion Class 1 sound level meter type NA28 (LT1);
- 1 no. Rion Class 1 sound level meter type NL52 (LT2); and
- 1 no. Rion sound level calibrator type NC74.

5.3 Calibration of the sound level meters was verified before and after the surveys, with no significant calibration drift detected. All CSA equipment has current traceable laboratory calibration which is available for inspection upon request.

5.4 RESULTS

5.4.1 The table below details the results from the environmental noise survey at both monitoring locations. The appended time histories, Figures AS14744/TH1-TH10, show the variation of the measured sound levels at the monitoring positions.

5.4.2 The existing sound climate is primarily determined by traffic on the local road network, namely along the A23, with occasional contributions from traffic on the B2118 and occasional dog barking.

LT1	Daytime (07:00 to 23:00)	52	39
	Operational Hours (07:00 to 19:00)	53	40
	Night-time (23:00 to 07:00)	47	35
LT2	Daytime (07:00 to 23:00)	58	50
	Operational Hours (07:00 to 19:00)	58	51
	Night-time (23:00 to 07:00)	53	40
*Derived as the lowest 10 th percentile of the associated $L_{A90,15min}$ dataset			

Table 1 – Environmental Noise Survey Results [dB ref. 20 µPa]

² British Standard BS7445-2:1991 *Description and measurement of environmental noise Part 2: Acquisition of data pertinent to land use*

6.0 BS4142 ASSESSMENT

6.1 OPERATIONAL ACTIVITY SOUND SOURCES

- 6.1.1 The anticipated tenants for the site have been confirmed to be LKQ Electriq with the proposed operations consisting of high-voltage battery and electrical component testing and repair.
- 6.1.2 Specific operations are expected to include use of handheld tools, impact drivers, drills, air compressors, vehicle ramps and sanding/grinding tools.
- 6.1.3 To quantify the expected noise likely to be produced by the proposed development, an attended survey was undertaken at an existing LKQ Electriq site in Shoreham by Sea.
- 6.1.4 The equipment used during the survey was as follows:
- 1 no. Rion Class 1 sound level meter type NA28;
 - 1 no. NTi Class 1 sound level meter type XL2; and
 - 1 no. Rion sound level calibrator type NC74.
- 6.1.5 Calibration of the sound level meters was verified before and after the surveys, with no significant calibration drift detected. All CSA equipment has current traceable laboratory calibration which is available for inspection upon request.
- 6.1.6 Activities including sanding, drilling as well as use of air compressors and vehicle ramps were measured under normal operation in reverberant conditions. For reference, the existing workshop has smaller volume than the unit on the application site. During lulls in the short-term activity the reverberant levels, in the low-mid 60's dB, $L_{Aeq,T}$ were. For reference, the existing workshop has smaller volume than the unit on the application site. During lulls in the short-term activity the reverberant levels, in the low-mid 60's dB, $L_{Aeq,T}$ were determined by low level background noise from the radio. determined by low level background noise from the radio. A one-hour sample of activity is shown in time history in Figure 1.

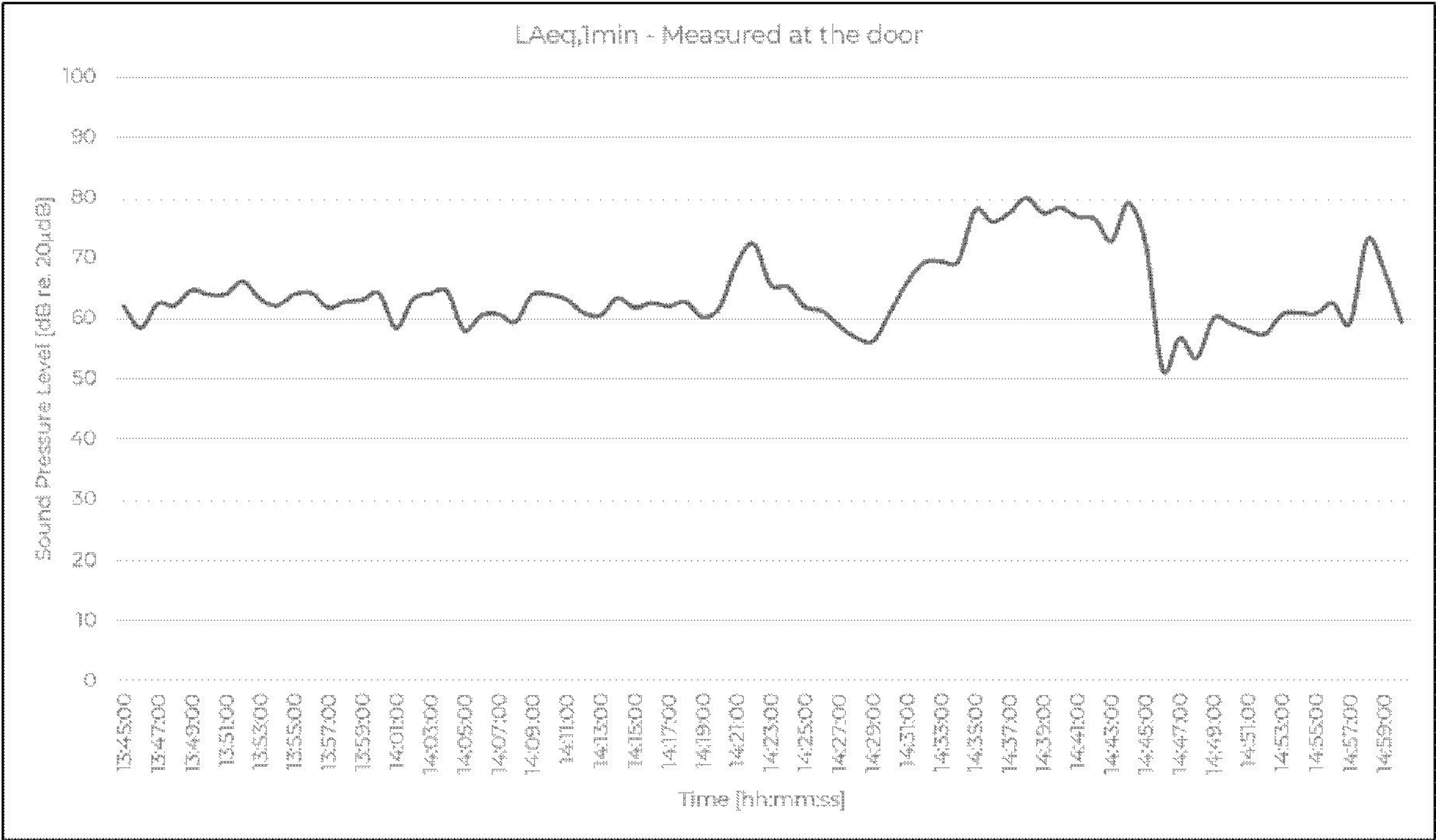


Figure 1 – 11-minute sound pressure level measured in existing LKQ Electriq facility

6.1.7 Table 2 details the highest rolling 1-hour reverberant sound pressure level measured at the door of the existing unit. This will be used in the BS4142 assessment.

Reverberant Sound Pressure Level (1-hour)	L _{p(rev)} , 1-hour	66	63	60	62	67	64	63	61	71

Table 2 – Measured Reverberant Sound Pressure Level (1-hour)

Site Traffic Noise

- 6.1.1 Contributions from traffic on public roads is not within the scope of BS4142, however, it is reasonable to include commercial vehicles entering and exiting the Site in the noise impact assessment.
- 6.1.2 Transport consultants, Rovia, have provided details of the change in vehicle and HGV movements in and out of the site anticipated with the change from a class B8 use to B2.
- 6.1.3 Summarily, the outcomes demonstrate a modest increase in total vehicles during peak morning and afternoon hours, however, at such low traffic densities, this increase is not expected to be noticeable. Crucially, there is an overall reduction of HGV movements, which commonly control traffic-related noise levels at similar sites. As such, an overall reduction in potential noise levels associated with vehicle movements in and out of the Site is anticipated.

6.2 ASSESSMENT

6.2.1 The Specific Sound Level at the nearest noise-sensitive receptor has been calculated following procedures in BS4142. Appendix B details calculations of the Specific Sound Level.

Operational Noise

6.2.2 Operational hours have been confirmed as 07:00 to 19:00hrs Monday to Fridays. The building envelope of the warehouse comprises a masonry wall up to circa 2 to 3.5m height with a lightweight metal cladding system above, which can be reasonably assumed to maintain a sound reduction performance in the order of R_w 25 -30 dB as a minimum. The roller shutter doors around the entrance to the Site are expected to maintain a sound reduction level in the low 20s R_w dB. It is assumed that these will remain closed during peak operational hours, however, in practice there is not necessarily a reason this could not remain open outside of peak operational times. Similarly, there is no acoustics reason that the door to the east can't remain open at all times, if required.

6.2.3 A pessimistic character correction of +3 dB has been applied to the Specific Sound Level on the basis that the workshop sound may occasionally be distinctly intermittent.

Predictions

6.2.4 A summary of the BS414 assessment calculation results is presented in Table 3.

<i>Assessment Period</i>	<i>Daytime Worst Case 1hr Period</i>
Specific Sound Level ($L_{Aeq,1hour}$)	39 dB
Character Correction	+3dB
Total Rating Level ($L_{A,T,r}$)	42 dB
Background Sound Level (L_{A90})	40 dB
Assessment Level	+2 dB

Table 3 – BS4142 Assessment Calculation Results

6.2.5 The numerical assessment indicates a low likelihood low likelihood for adverse impact, depending on context.

6.3 CONTEXT & DISCUSSION

6.3.1 The numerical assessment indicates a low likelihood of adverse impact which, in context, is expected to be lower still.

6.3.2 The site has existing consent to operate as class B8 use, however, the site is currently unoccupied and therefore the environmental sound survey does not fully represent the Site's lawful use, where levels could be notably higher. This is of particular relevance given that the Class B8 use could recommence at any time.

6.3.3 This assessment derives indicated impact by calculating a worst-case 1-hour period. In practice, more commonly it is anticipated that each of these measured activities would not necessarily all occur concurrently or subsequently frequently, and there would be periods where none of these activities are being undertaken.

6.3.4 Lastly, given the proposed operational hours being limited to daytime weekdays only, impact on evenings and weekends would not be expected, reducing neighbours' potential exposure to any noise significantly.

6.3.5 In discussions with Environment Health at Mid Sussex District Council, it was agreed that a discussion of noise levels from each of the proposed plant items would be provided to describe how these might be perceived individually at the neighbouring dwelling. For the avoidance of doubt, these activities have been accounted for in the BS4142 assessment presented above, and this section describes individual, short-term events that may influence conditions at the neighbouring dwelling.

6.3.6 The individual activities measured throughout the attended survey are presented in Table 4.

Sanding	L _{p(rev)}	64	59	57	56	56	57	60	53	64
Drilling	L _{p(rev)}	65	60	59	57	57	58	56	54	64
Air Compressor	L _{p(rev)}	64	60	60	61	63	67	70	72	75
Vehicle Ramps	L _{p(rev)}	59	57	57	56	56	54	47	41	60

Table 4 – Measured Site Operational Noise Activities (Short-term)

6.3.7 Assuming the same propagation and corrections applied to the BS4142 assessment the short-term predicted level of each of the activities is presented in Table 5.

Sanding	L _{Aeq,T} 33 dB
Drilling	L _{Aeq,T} 33 dB
Air Compressor	L _{Aeq,T} 44 dB
Vehicle Ramps	L _{Aeq,T} 29 dB

Table 5 – Predicted individual, short-term levels [dB ref. 20 µPa]

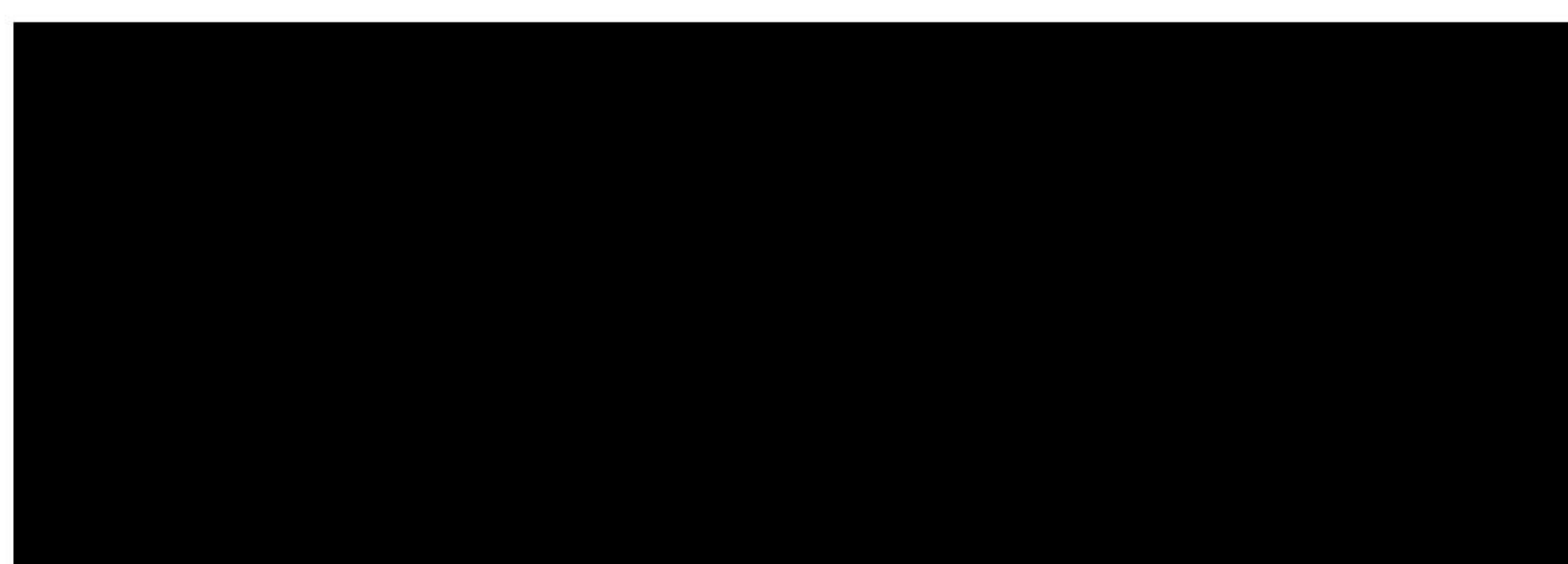
6.3.8 Against a typical Background Sound Level of L_{A90} 40 dB during operational hours, it is possible that these could be audible, with the air compressor being potentially noticeable albeit over very short durations. However, against an Average Sound Level of L_{Aeq} 53 dB for the period, this is unlikely to be disruptive or introduce a notable adverse impact.

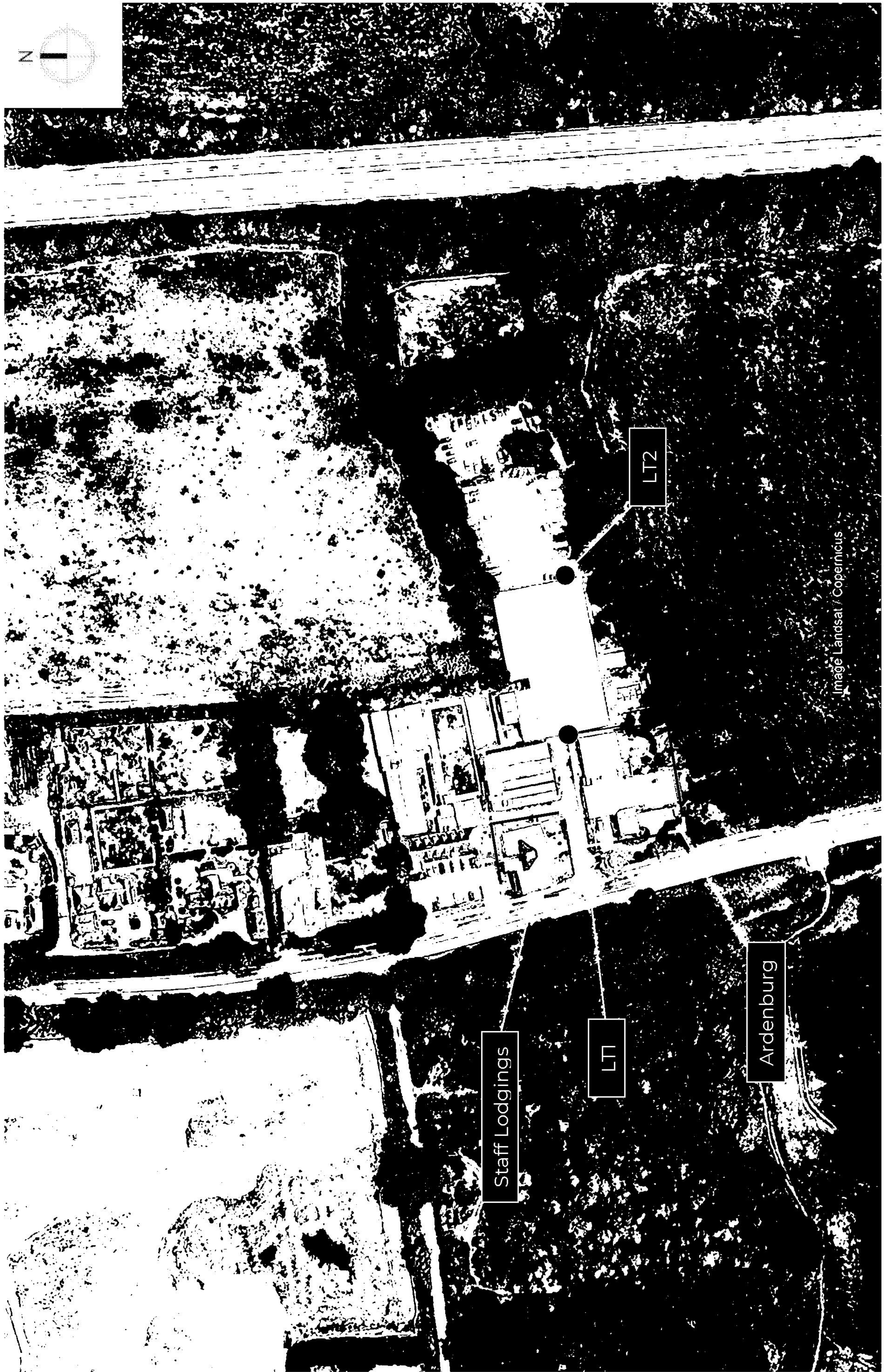
7.0 UNCERTAINTY

- 7.1 As per the requirements of BS4142, the uncertainty in the assessment is considered and reported. This is not an indication of error, but an acknowledgement of possible variability of the factors contributing to the assessment.
- 7.2 Use of calibrated type 1 sound level meters for surveys reduces measurement instrumentation error to insignificant levels as compared to environmental variations.
- 7.3 The operational source sound level data used in this assessment was measured by CSA, and the context of the measurements is understood and appropriate for use in this assessment.
- 7.4 Robust assumptions have been made in relation to sound propagation calculations and operational times of noise sources, erring on the side of caution.

8.0 CONCLUSION

- 8.1 Planning consent is sought for the reclassification of the commercial site at Arden Grange, Albourne from Class B8 to Class B2 use. A noise impact assessment, following procedures in BS4142, has been undertaken by Clarke Saunders Acoustics to predict the likely noise impacts that may arise from the proposed development.
- 8.2 An environmental sound survey has been undertaken to establish the existing noise climate and to inform noise impact prediction calculations. However, due to the dormancy of the consented B8 use, this survey may not fully represent the lawful use of the Site and is the basis for some notable uncertainty.
- 8.3 Based on the results of this survey and the subsequent prediction calculations, the numerical assessment suggests a low likelihood of adverse impact on the neighbouring residence, depending on the context.
- 8.4 However, in the context of the lawful use of the Site, which could recommence under B8 use at any time, as well as the fixed operational times, the magnitude of the predicted impact is expected to reduce notably. Allowing for context, it can therefore be concluded that the proposals would result in low impact with respect to noise.

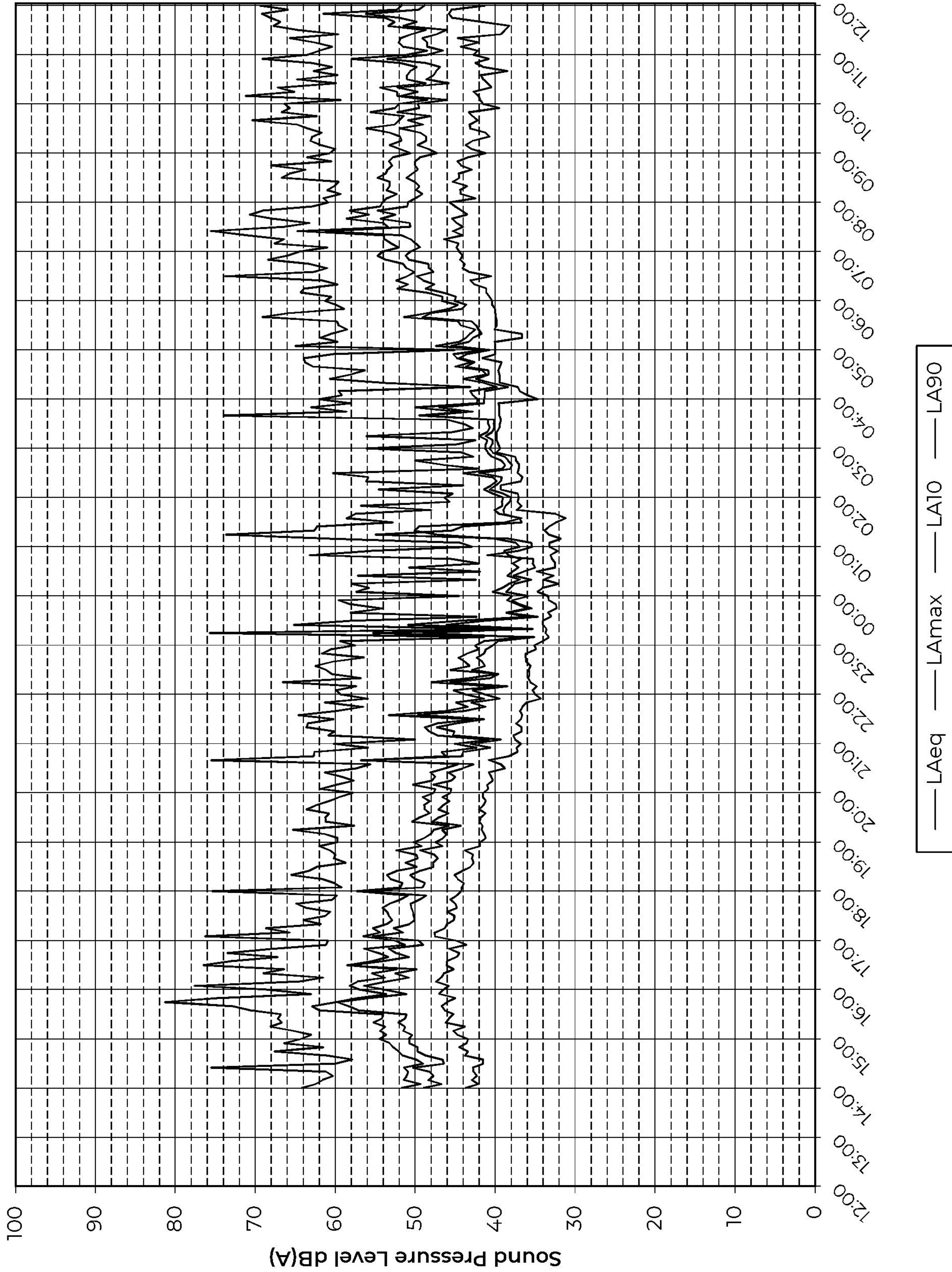




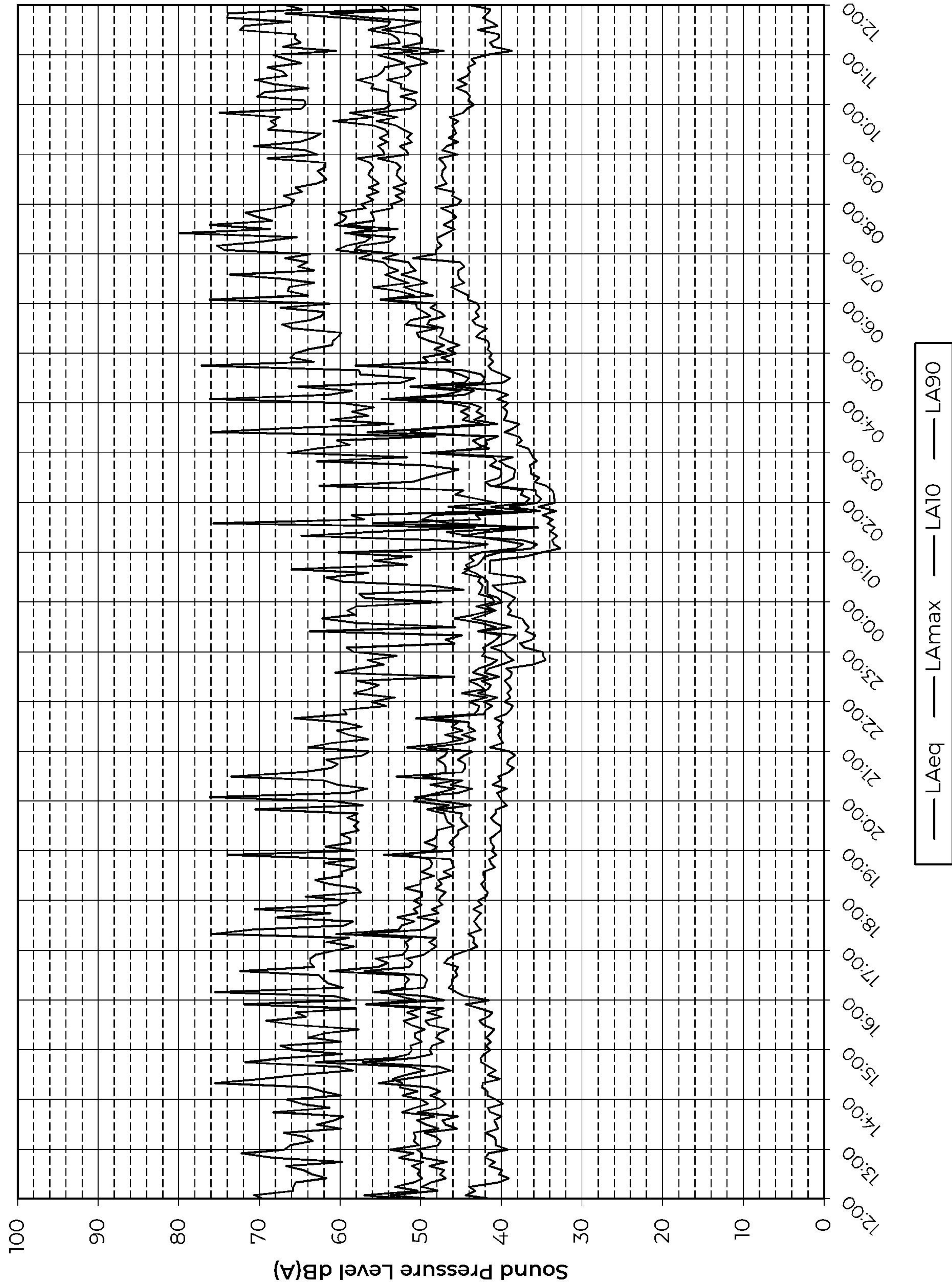
Indicative Site Plan

Figure AS14744/SP1

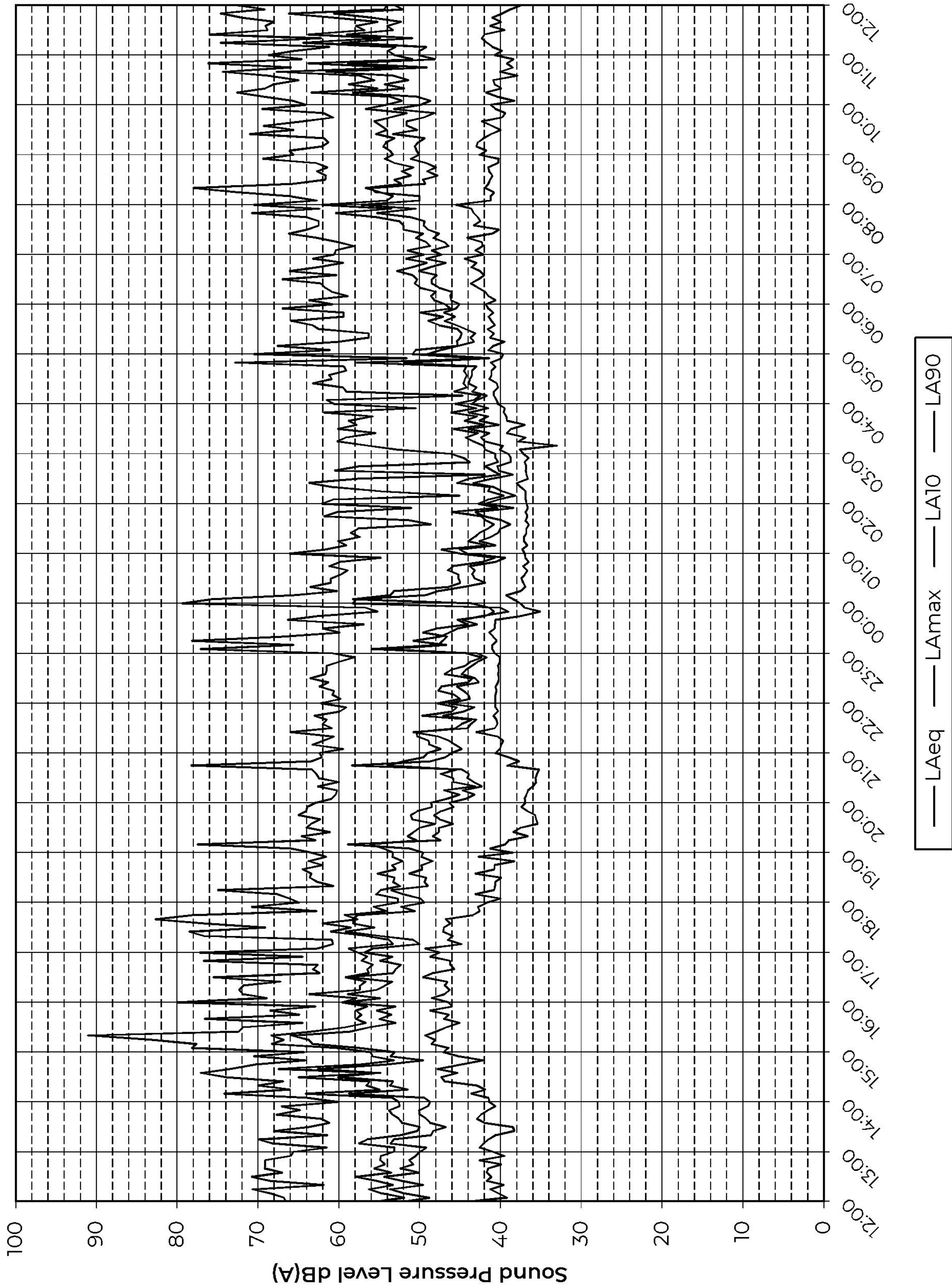
Position LT1



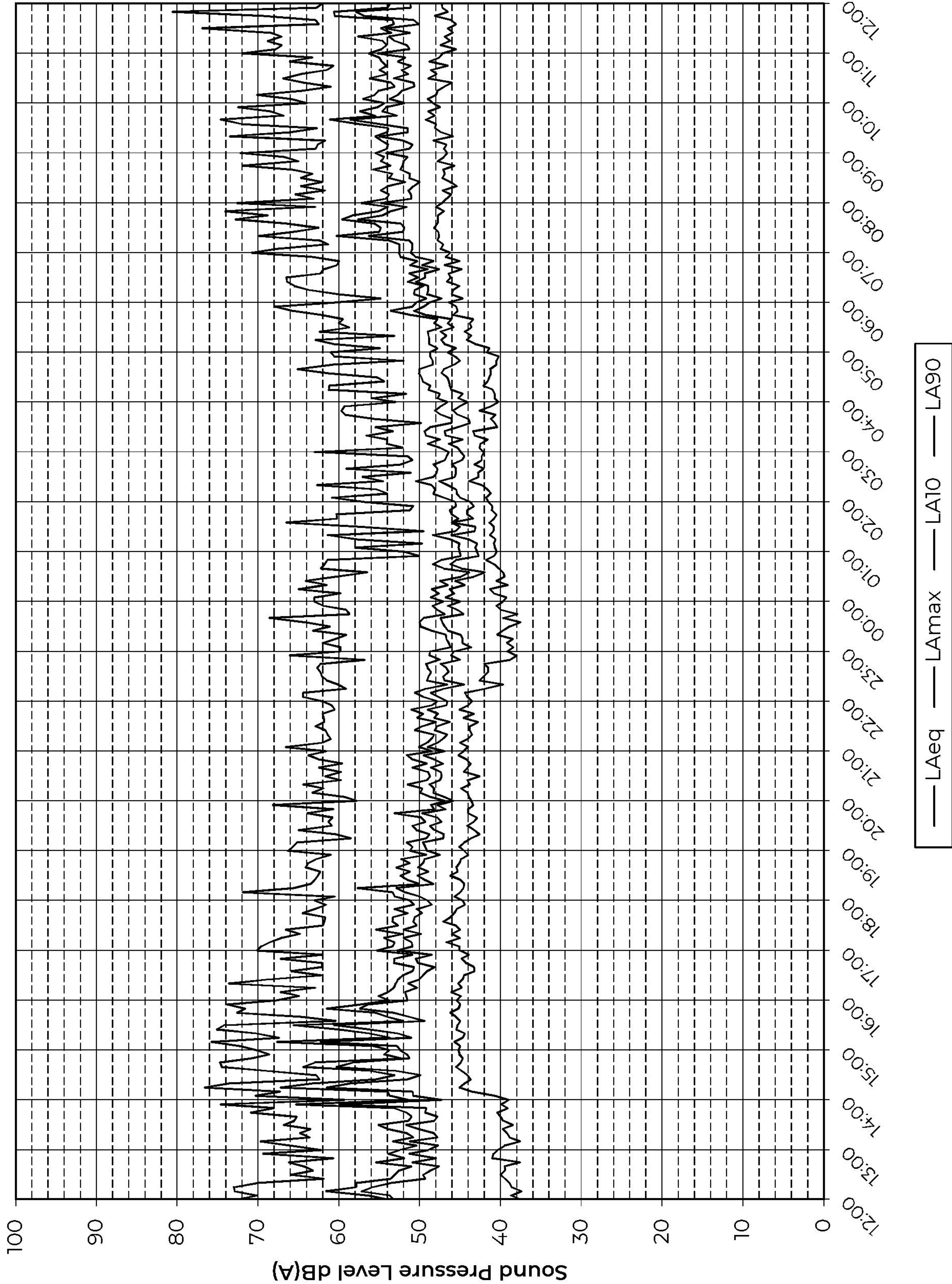
Position LT1



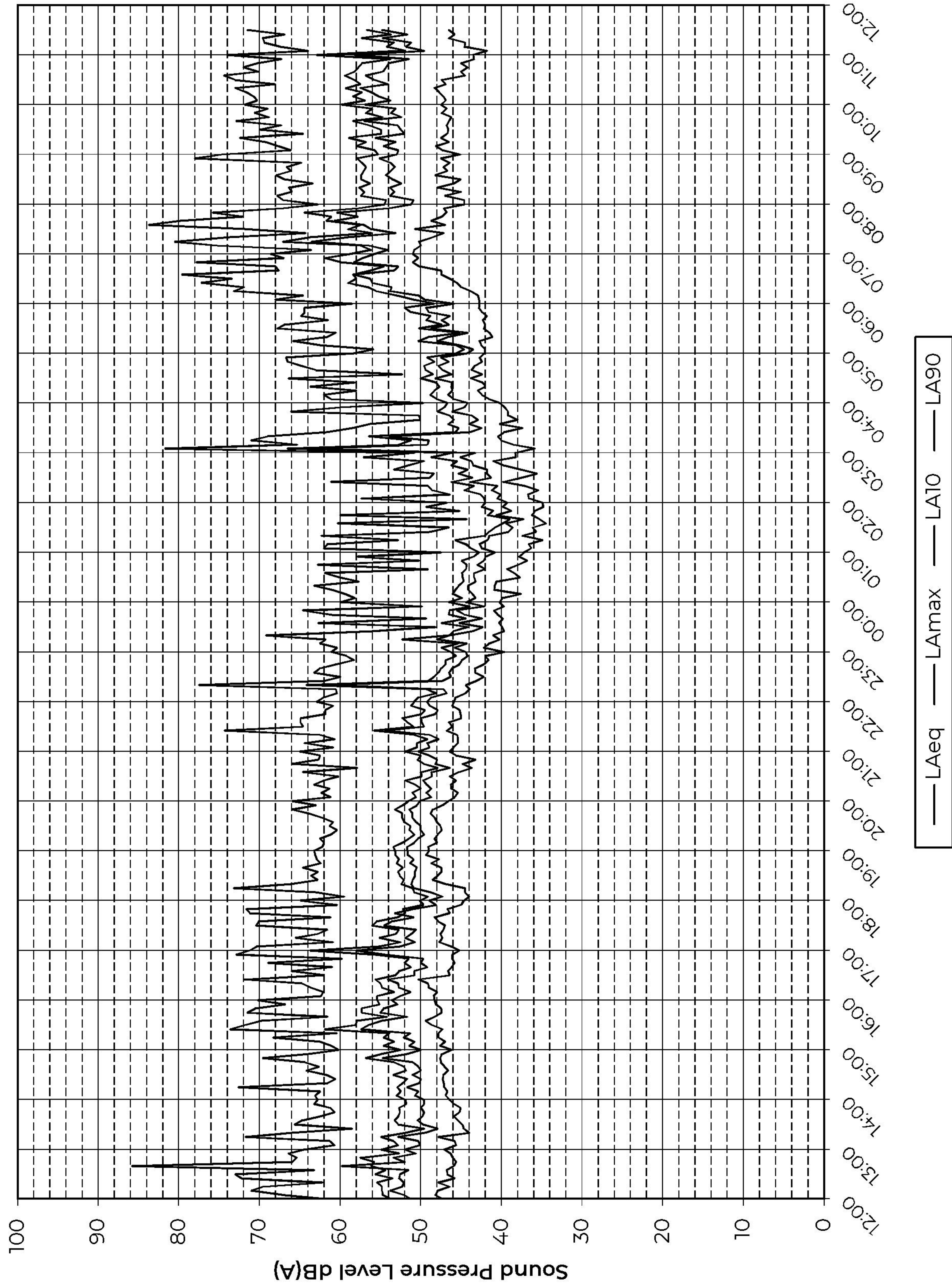
Position LT1



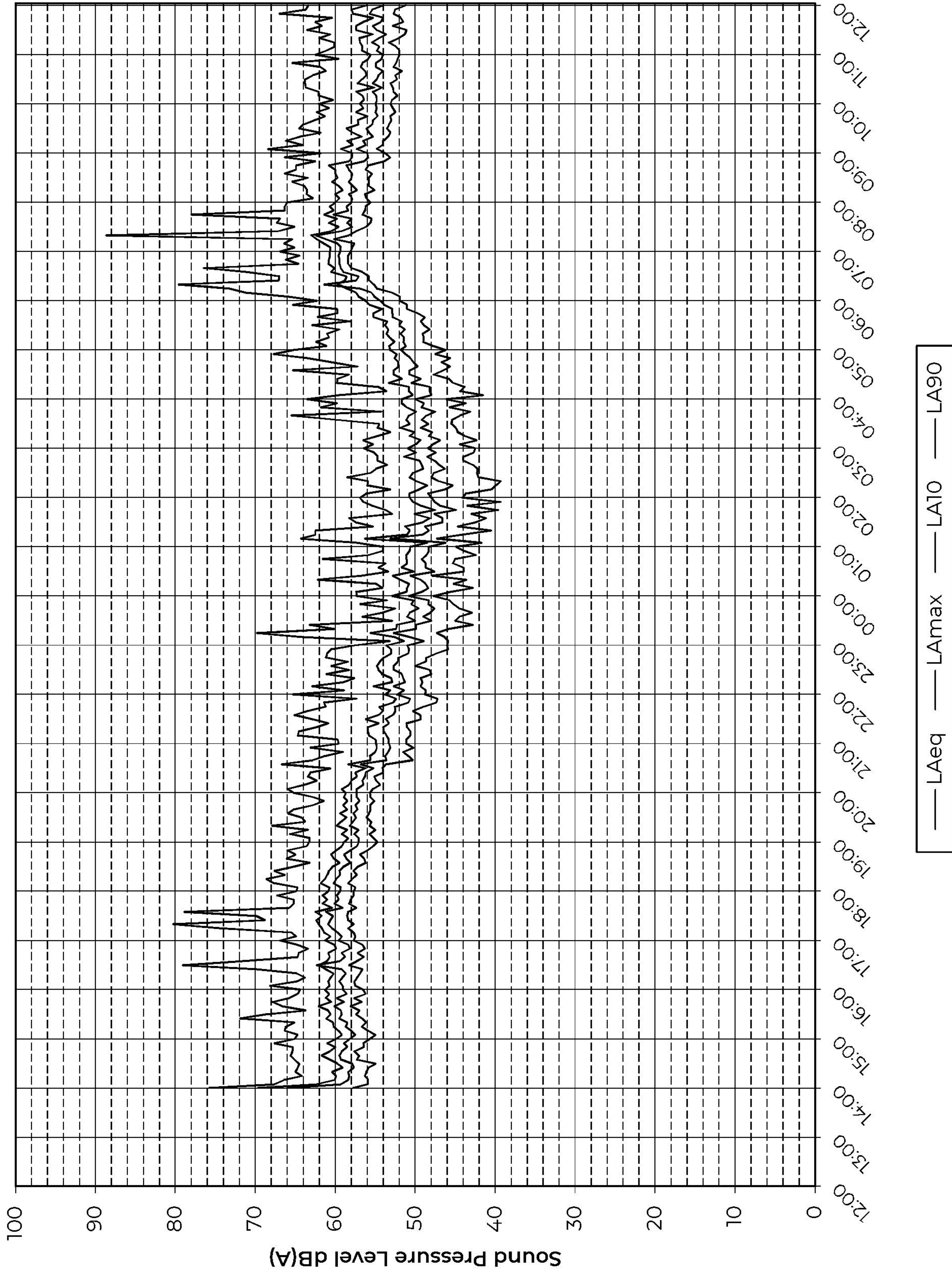
Position LT1



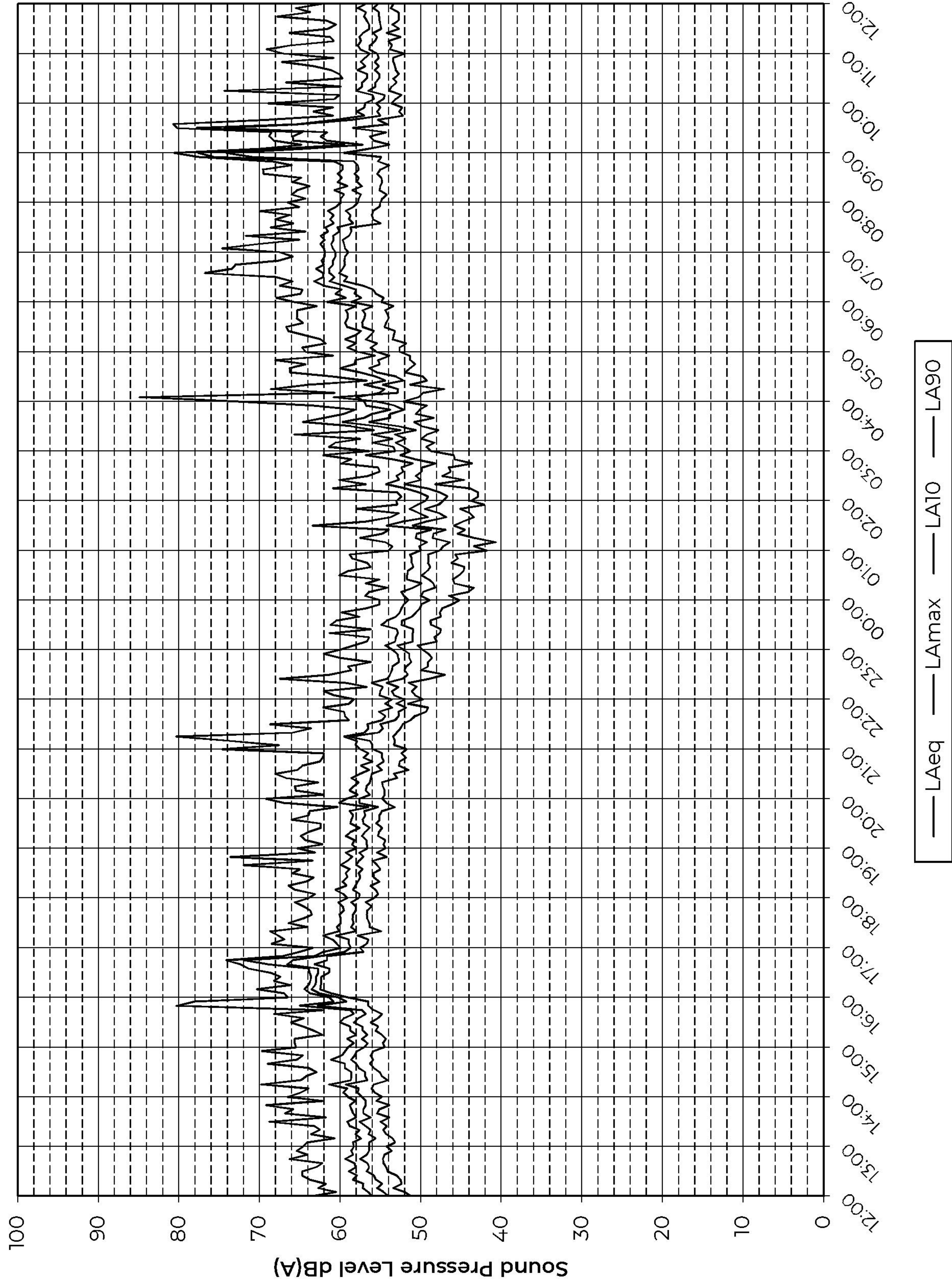
Position LT1



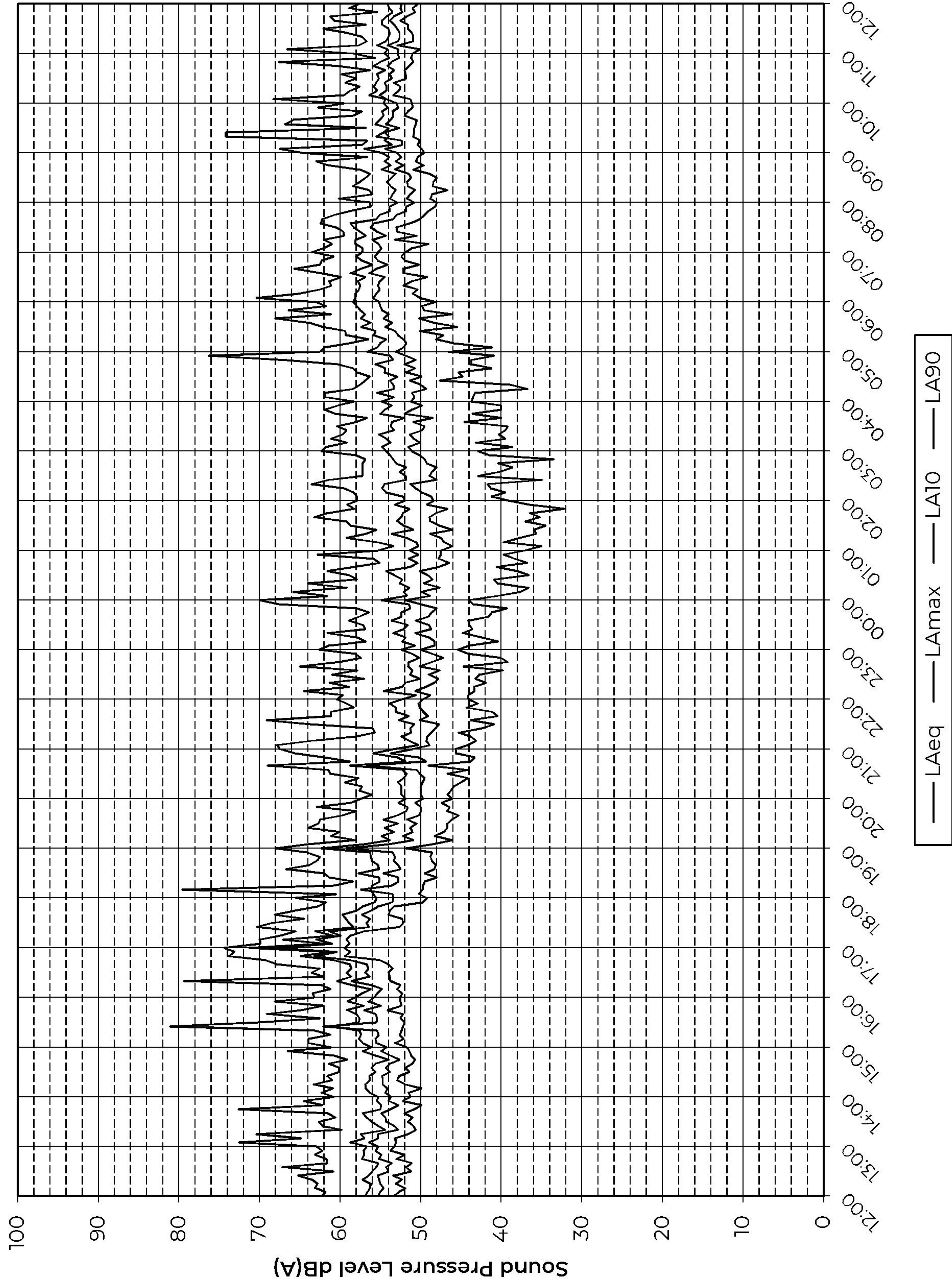
Position LT2



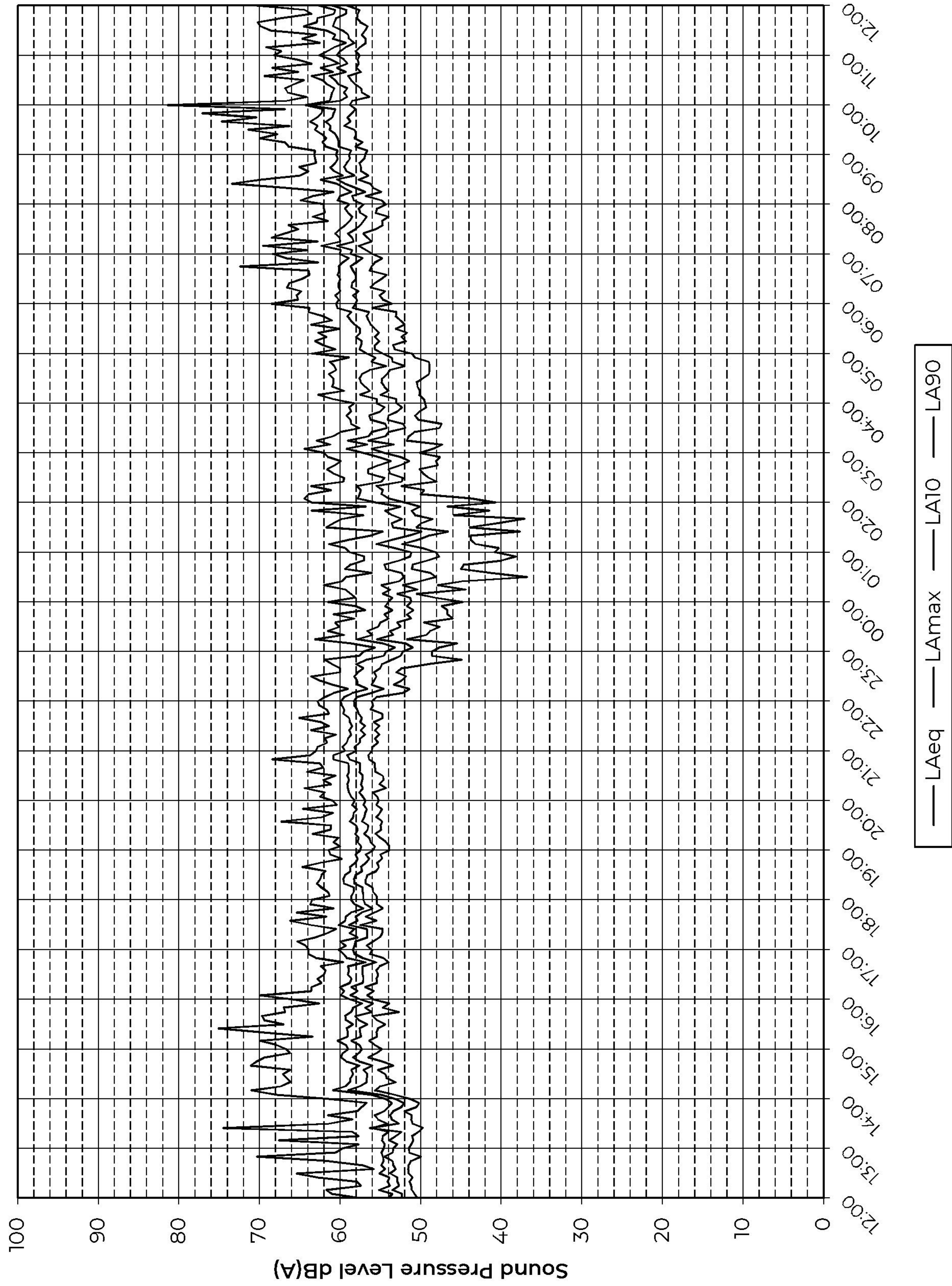
Position LT2



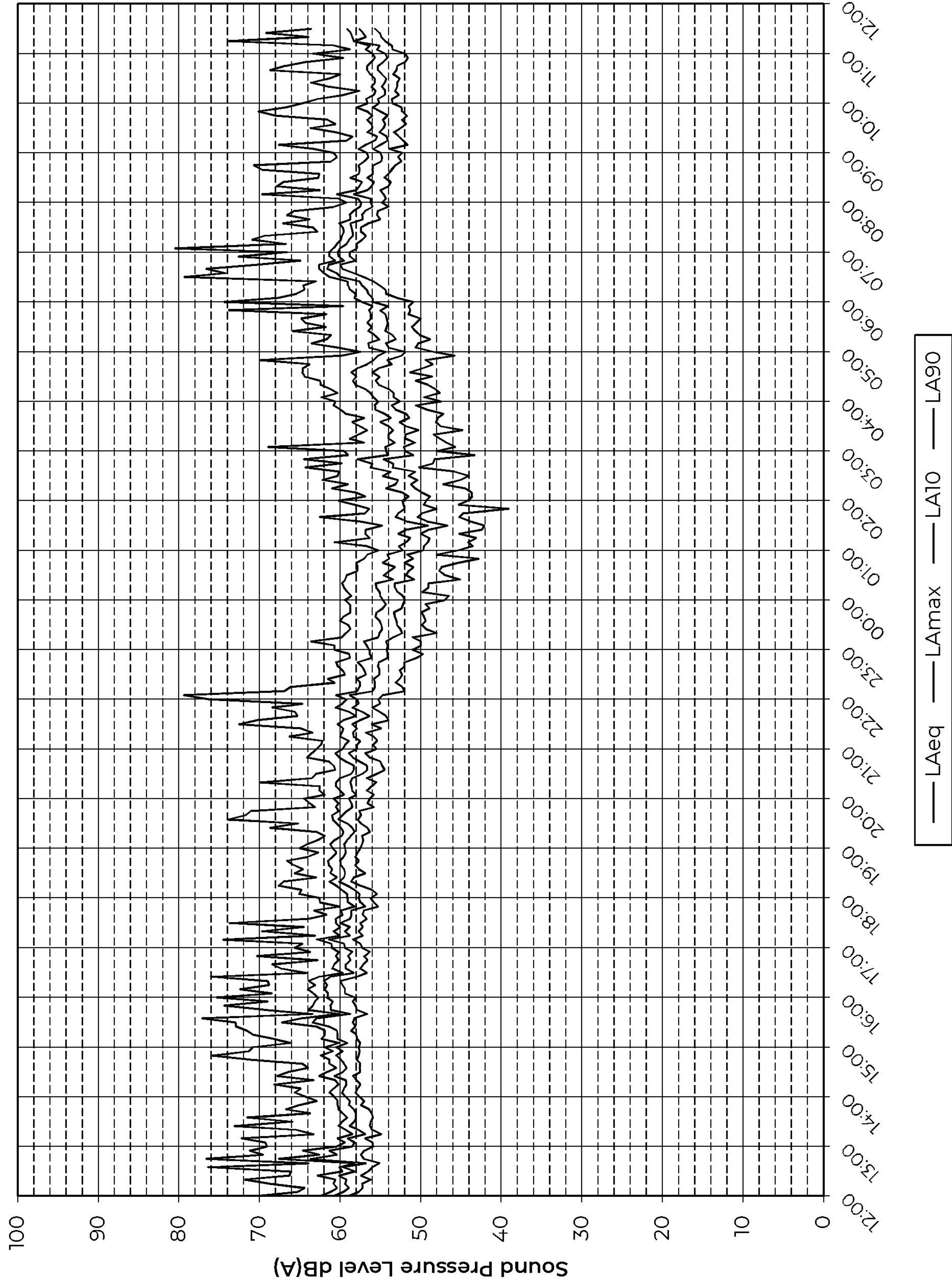
Position LT2



Position LT2



Position LT2



Acoustic Terminology

The human impact of sounds is dependent upon many complex interrelated factors such as 'loudness', its frequency (or pitch) and variation in level. In order to have some objective measure of the annoyance, scales have been derived to allow for these subjective factors.

Sound	Vibrations propagating through a medium (air, water, etc.) that are detectable by the auditory system.
Noise	Sound that is unwanted by or disturbing to the perceiver.
Frequency	The rate per second of vibration constituting a wave, measured in Hertz (Hz), where 1Hz = 1 vibration cycle per second. The human hearing can generally detect sound having frequencies in the range 20Hz to 20kHz. Frequency corresponds to the perception of 'pitch', with low frequencies producing low 'notes' and higher frequencies producing high 'notes'.
dB(A):	Human hearing is more susceptible to mid-frequency sounds than those at high and low frequencies. To take account of this in measurements and predictions, the 'A' weighting scale is used so that the level of sound corresponds roughly to the level as it is typically discerned by humans. The measured or calculated 'A' weighted sound level is designated as dB(A) or L_A .
L_{eq}:	A notional steady sound level which, over a stated period of time, would contain the same amount of acoustical energy as the actual, fluctuating sound measured over that period (e.g. 8 hour, 1 hour, etc). The concept of L_{eq} (equivalent continuous sound level) has primarily been used in assessing noise from industry, although its use is becoming more widespread in defining many other types of sounds, such as from amplified music and environmental sources such as aircraft and construction. Because L_{eq} is effectively a summation of a number of events, it does not in itself limit the magnitude of any individual event, and this is frequently used in conjunction with an absolute sound limit.
L_{10} & L_{90}:	Statistical L_n indices are used to describe the level and the degree of fluctuation of non-steady sound. The term refers to the level exceeded for n% of the time. Hence, L_{10} is the level exceeded for 10% of the time and as such can be regarded as a typical maximum level. Similarly, L_{90} is the typical minimum level and is often used to describe background noise. It is common practice to use the L_{10} index to describe noise from traffic as, being a high average, it takes into account the increased annoyance that results from the non-steady nature of traffic flow.
L_{max}:	The maximum sound pressure level recorded over a given period. L_{max} is sometimes used in assessing environmental noise, where occasional loud events occur which might not be adequately represented by a time-averaged L_{eq} value.
R	<i>Sound Reduction Index</i> . Effectively the Level Difference of a building element when measured in an accredited laboratory test suite in accordance with the procedures laid down in BS EN ISO 10140-2:2010 and corrected for its size and the reverberant characteristics of the receive room.
D	The sound insulation performance of a construction is described in terms of the difference in sound level on either side of the construction in the presence of a sound source on one side and the reverberant characteristics of the adjoining 'receive' space. D is the arithmetic Level Difference in decibels between the source and receive sound levels when filtered into frequency bands.

R_w
 $D_{nT,w}$
 $D_{n,f,w}$

D_w
 $D_{n,e,w}$

Value of parameter, determined as above, but weighted in accordance with the procedures laid down in BS EN ISO 717-1 to provide a single-figure value.

Octave Band Frequencies

In order to determine the way in which the energy of sound is distributed across the frequency range, the International Standards Organisation has agreed on "preferred" bands of frequency for sound measurement and analysis. The widest and most commonly used band for frequency measurement and analysis is the Octave Band.

In these bands, the upper frequency limit is twice the lower frequency limit, with the band being described by its "centre frequency" which is the average (geometric mean) of the upper and lower limits, e.g. 250 Hz octave band extends from 176 Hz to 353 Hz. The most commonly used octave bands are:

Octave Band Centre Frequency Hz	63	125	250	500	1000	2000	4000	8000
------------------------------------	----	-----	-----	-----	------	------	------	------

Human Perception of Broadband Noise

Because of the logarithmic nature of the decibel scale, it should be borne in mind that sound levels in dB(A) do not have a simple linear relationship. For example, 100dB(A) sound level is not twice as loud as 50dB(A). It has been found experimentally that changes in the average level of fluctuating sound, such as from traffic, need to be of the order of 3dB before becoming definitely perceptible to the human ear. Data from other experiments have indicated that a change in sound level of 10dB is perceived by the average listener as a doubling or halving of loudness. Using this information, a guide to the subjective interpretation of changes in environmental sound level can be given.

INTERPRETATION

Change in Sound Level dB	Subjective Impression	Human Response
0 to 2	Imperceptible change in loudness	Marginal
3 to 5	Perceptible change in loudness	Noticeable
6 to 10	Up to a doubling or halving of loudness	Significant
11 to 15	More than a doubling or halving of loudness	Substantial
16 to 20	Up to a quadrupling or quartering of loudness	Substantial
21 or more	More than a quadrupling or quartering of loudness	Very Substantial

Reverberant Sound Pressure Level (Lp @ 1m)	Lp @ 1m	66	63	60	62	67	64	63	61	71
Surface Area Correction (Lw)	16m²	12	12	12	12	12	12	12	12	
Lw to Lp @ 1m		-8	-8	-8	-8	-8	-8	-8	-8	
Roller shutter door		-9	-12	-10	-15	-21	-24	-16	-18	
Rathe Decay		-18	-18	-18	-18	-18	-18	-18	-18	
	Subtotal	44	37	37	33	32	27	33	29	39
Specific Sound Level at receptor	Leq 1hr	44	37	37	33	32	27	33	29	39

BS4142 is designed to allow contextual assessment of impact from commercial, or industrial sound on sensitive receptors. Examples covered by the Standard include:

- Sound from industrial and manufacturing processes;
- Sound from fixed installations which comprise mechanical and electrical plant and equipment.
- Sound from the loading and unloading of goods and materials at industrial and/or commercial premises, and
- Sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes.

In brief, the assessment procedure involves establishing sound levels from the items or processes of interest, (the specific sound source(s)), corrected for any acoustic features to derive the Rating Level, (L_{Ar,T_r}), at the relevant assessment position(s). The Rating Level is compared against the existing Background Sound Level, ($L_{A90,T}$), to provide an initial estimate of impact. The Standard offers the following guidance with regard to the significance of estimated impact:

- Typically, the greater this difference, the greater the magnitude of the impact;*
- A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context;*
- A difference of around +5dB could be an indication of an adverse impact, depending on the context;*
- Where the rating level does not exceed the background sound level, this is an indication of the specific sound having a low impact, depending on the context. The lower the rating level is relative to the background sound level, the less likely it is that the specific sound source will have an adverse impact.*

Where relevant, the initial estimate should then be modified by accounting for contextual aspects of the operation of the specific sound source and / or the context of the character of the area.

Other Assessment Parameters and Guidance on Character Corrections

The Specific Sound Level (L_s) is expressed in terms of an L_{Aeq} for a reference time interval, (T_r) of one-hour during the daytime (07:00 – 23:00 hours) and a fifteen-minute period during the night-time (23:00 – 07:00 hours). The Rating Level is also expressed in terms of the reference time interval, T_r .

The Specific Sound Level can be determined by various means, which can include prediction based on manufacturer's data and accompanying propagation calculations to the assessment position(s). This method could be used, for instance, where the specific sound source is not yet in-situ, or is in-situ but not yet operational.

Where the specific sound source is already operational and in-situ, measurements of the sound climate resulting from both the specific sound source and all other contributing sources, (known as the Ambient Sound Level, $L_a = L_{Aeq,T}$) should be measured over a representative time period, ideally at the assessment position(s).

Depending on the relative contribution of other sources not related to the specific sound, (known as the residual sound), the Specific Sound Level can be derived by logarithmically subtracting the Residual Sound Level, $L_r = L_{Aeq,T_r}$ from the Ambient Sound Level.

With justification, representative proxy locations can be used for the measurement of the ambient and/or residual sound climate. Where these measurement locations are not fully representative of the assessment position(s), measurement can be supplemented with calculation.

The Background Sound Level should ideally also be measured at the assessment position(s) but can be measured at representative proxy locations where suitable reasons can be provided. The Background Sound Level should be measured over a period which is suitable to characterise the background sound climate during the period of interest and should normally be at least 15 minutes.

When deriving the Rating Level from the Specific Sound Level, consideration is given to the character of the sound. The Standard provides several methods for deriving appropriate character corrections, offering the following advice for subjective assessment:

Tonality

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

Impulsivity

A correction of up to +9dB 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 allocated as a penalty of 3dB for impulsivity which is just perceptible at the receiver, 6dB where it is clearly perceptible and 9dB where it is highly perceptible.

Other sound characteristics

Where the specific sound contains characteristics that are neither tonal nor impulsive, but are otherwise startling, disturbing or incongruous with the residual acoustic environment, a penalty of +3dB can be applied.

Intermittency

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