

Holiday Inn Express London Excel

Acoustics Planning Report

24 July 2025

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Comments

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Comments

Revision		Status	
P*nn*	Preliminary (shared; non-contractual)	S1	Coordination
C*nn*	Contractual	S2	Information
		S3	Review & Comment
		S4	Review & Authorise
		S5	Review & Acceptance
		A0, A1, A*n*	Authorised & Accepted (*n*=work stage if applicable)

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1. Introduction

1.1 Assessment Overview

Waterman Infrastructure & Environment Ltd (hereafter referred to as 'Waterman') has been appointed by London ExCel Management Limited (hereafter, the 'Applicant') to undertake a noise assessment in support of a planning application for the proposed 96 bed extension to the Holiday Inn Express located at 1018 Dockside Rd, Royal Docks, London E16 2FQ (herafter, the 'Site'). Consideration has been given to the suitability of the Site for the hotel extension development together with the potential impact from building service plant associated with the proposed development.

A glossary of the acoustic terminology used within this report is presented in **Appendix A**.

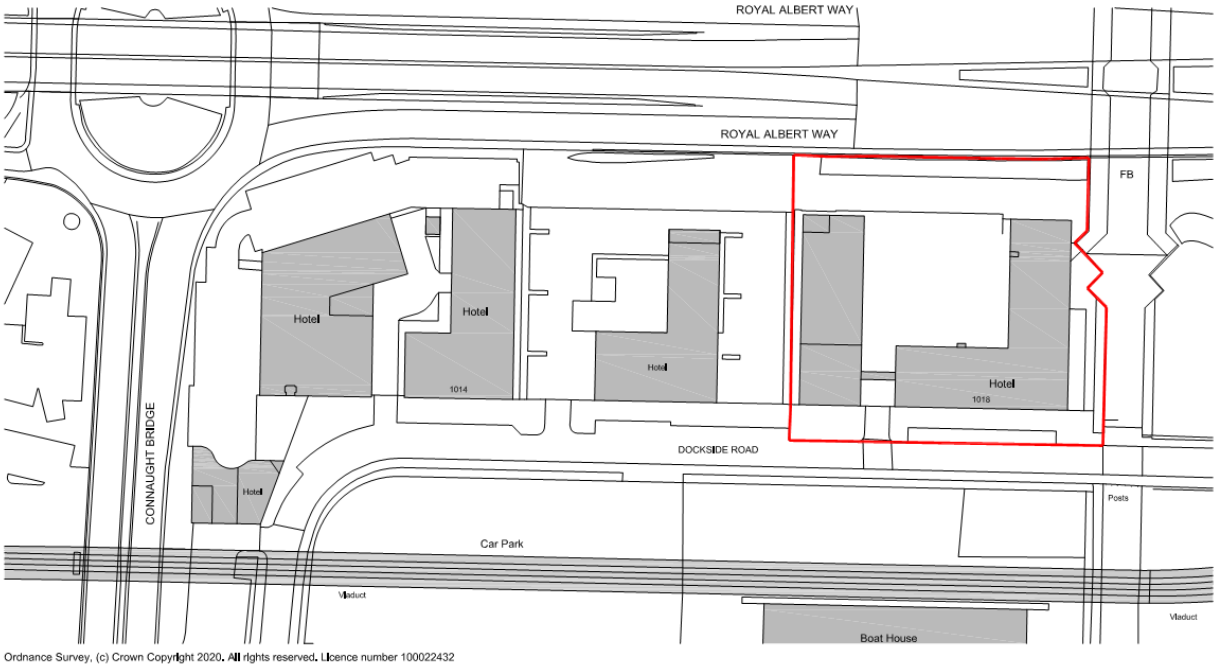
1.2 Site Location and Proposed Development

Located on Dockside Road, the Site sits east of the Connaught Roundabout, south of the Royal Albert Way (A1020) motorway, north of the light rail DLR line, and approximately 250 metres to the north of London City Airport.

The Development description is as follows:

> *Erection of a five-storey extension to the existing hotel (use class C1) to provide 77 x additional hotel bedrooms and a single storey extension to the existing cafe / restaurant at ground floor; change of use of a vacant retail unit (use class E) to a meeting room ancillary to the hotel; associated hard and soft landscaping works.*

Figure 1-1: Site Location Plan (*Orbit Architects drawing Extension Holiday Inn Express, Dockside Road, E16, Version P1*)



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2. Planning Policy & Guidance

This section presents the key planning policy and guidance documents pertaining to noise within England relevant to the proposed Development. These documents set out the aims, many of which are comparable, without providing details on specific noise levels, the latter of which are transposed into British Standards or sector specific guidance which is presented within Section 3.

2.1 National Planning Policy Framework

The National Planning Policy Framework[1] (NPPF) with regard to noise promotes 'good design' as part of 'sustainable Development' and advocates 'preventing new and existing Development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of ……. noise pollution…'

Paragraph 198 of NPPF states 'Planning policies and decisions should also ensure that new Development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the Site or the wider area to impacts that could arise from the Development. In doing so they should:

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

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

Paragraph 200 of the NPPF introduces the 'Agent of change principle'. 'Where the operation of an existing business or community facility could have a significant adverse effect on new Development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the Development has been completed.'

The NPPF reflects advice within Noise Policy Statement for England (NPSE) in that they promote the avoidance of significant adverse impacts and reduction of other adverse impacts on health and quality of life; set within the context of the Government's policy on sustainable Development.

2.2 Noise Policy Statement for England

Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable Development the Noise Policy Statement For England[2] (NPSE) aims to:

- Avoid significant adverse impacts on health and quality of life;
- Mitigate and minimse adverse impoacts on health and uality of life; and
- Where possible, contribute to the improvement of health and quality of life.

It introduces the concept of noise "effect levels" although it does not equate these to a specific level of noise as this is likely to be different for different noise sources, receptors and time of day. The effect levels are as follows:

[1] Ministry of Housing, Communities and Local Government. (December 2024) National Planning Policy Framework. HMSO. Available at https://www.gov.uk/government/publications/national-planning-policy-framework--2
[2] Defra. (2010) Noise Policy Statement For England (NPSE).

- NOEL - No Observed Effect Level: Level below which no effect on health and quality of life due to noise can be detected;
- LOAEL - Lowest Observed Adverse Effect Level: Level above which adverse effects on health and quality of life can be detected;
- SOAEL - Significant Observed Adverse Effect Level: Level above which significant effects on health and quality of life occur.

Predominantly, guidance is drawn from the World Health Organisation (WHO) when setting specific noise levels to the above effect levels, which essentially have been transposed into various British Standards, Policy and Guidance.

2.3 Consultation with London Borough of Newham

A full transcript of the consultation correspondence is included as **Appendix B**.

3. Hotel Amenity Criteria

Compliance with the noise assessment criteria presented within Section 3 of this report allows the Planning Policy requirements discussed within Section 2 to be satisfied.

3.1 Internal Ambient Noise Levels

When considering the amenity of future occupants of the Hotel, the most relevant criteria to assess the severity of noise intrusion to bedrooms are set out in BS8233:2014 '*Guidance on Sound Insulation and Noise Reduction for Buildings*'. BS8233 states that the recommendations for ambient noise in hotel bedrooms are similar to those for living accommodation and that it is desirable to avoid intrusive noise in bedrooms of hotels, especially when occupants are sleeping.

Annex H of BS8233 gives examples of design criteria adopted by hotel groups. Section H.4 of the annex gives target noise levels within hotel bedrooms, with windows closed, from all external noise sources and noise activity from adjacent premises. The target indoor ambient noise level ranges for hotel bedrooms are summarised as **Table 3-1** below:

Table 3-1: Indoor Ambient Noise Level Ranges for Hotel Bedrooms

Organisation	Typical Situation	Recommended Target Noise Level	
		Daytime	Night-time
BS 8233:2014	Bedrooms	30 - 40 dB $L_{Aeq,1hr}$	25 - 35 dB $L_{Aeq,1hr}$ 45 - 55 dB L_{Amax}

3.2 Fixed Mechanical Plant Noise

When considering noise which is commercial or industrial in nature the primary source of guidance is BS 4142:2014+A1:2019[3]. This guidance document provides a method for the rating and assessment of sound of a commercial/industrial nature. The assessment method allows the likely effects of sound on people to be determined. The significance of the sound depends upon the margin by which the 'rating level' ($L_{Ar,Tr}$) exceeds the background sound level (L_{A90}). Typically, the greater this difference the greater the magnitude of the impact. **Table 3-2** presents the significance of impact based on the noise difference between the rating level and the background sound level.

Table 3-2: Significance of Impact (BS4142)

Noise Level Difference dB(A) Rating Noise Level *Minus* Background Sound Level	Magnitude of Impact	Significance
≤ -10	No impact	No Impact
≤ 0	Low impact.	Negligible
<+5	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, depending on the context	Minor Adverse
≥+5	Adverse impact, depending on the context	Moderate Adverse

[3] BSI (2019) BS 4142:2014+A1:2019. Methods for rating and assessing industrial and commercial sound

Noise Level Difference dB(A) Rating Noise Level *Minus* Background Sound Level	Magnitude of Impact	Significance
≥+10	Significant adverse impact, depending on the context	Substantial Adverse

The 'rating level' is equal to the specific sound level if there are no acoustic features present (tonal/impulsive/intermittent). Depending on the acoustic feature an acoustic correction of +2 to +9dB may be applied to obtain the rating noise level. Where a sound has more than one acoustic feature of equal dominance then the appropriate acoustic corrections are summed.

For the purpose of this assessment, the impact of noise sources associated with the Development are assessed as a cumulative effect on the nearest noise sensitive receptors (NSRs).

4. Baseline Environmental Conditions

4.1 Nearest Sensitive Receptors

The nearest sensitive receptors to the Site are presented in **Table 4-1.**

Table 4-1: Nearest Noise Sensitive Receptors

Receptor	Type of Receptor	Description / Name	Approximate Distance to Site Boundary (m)
SR A	Hotel	Travelodge London Excel and Moxy London Excel	Approximately 20m to the west of the Site boundary
SR B	School	International School of Musicians	Approximately 85m to the east of the Site boundary

4.2 Baseline Environmental Noise Survey

A baseline environmental noise survey was conducted at the Site between Thursday 17th July and Wednesday 23rd July 2025. Environmental noise loggers were installed:

- Overlooking Dockside Road at Roof Level of the existing Holiday Inn Express Building to establish the combination of noise levels from road traffic (Dockside Road and Royal Albert Way), aircraft and light rail.
- At the rear of the Site (ground level). Measurement within closer proximity to Royal Albert Way.

4.2.1 Noise Survey Locations and Methodology

Table 4-2 presents a description of the noise measurement locations. Full details of the baseline survey are presented as **Appendix C**.

Table 4-2: Noise Monitoring Locations

Monitoring Location (Refer to Figure C-1)	Description	Approximate What3Words Location	Observations and Predominant Noise Sources
LT1	Free-field measurement at roof level of existing Holiday Inn Express Building facing onto Dockside Road. Microphone at 1.5m above roof level of existing hotel.	deeply.paints.decide	Background noise levels dictated by Royal Albert Way road roughly 20m to the north of the Site. Average and maximum noise levels dominated by aircraft noise. (flight-path details presented within **Appendix D**).
LT2	Free-field measurement at the rear of the Site within the car park area at ground level situated below Royal Albert Way. Microphone at 1.5m AGL (above ground level).	sung.locked.deny	Dominated by noise from train pass-by's throughout the day and night-time periods. Distant noise from Barclay Road and Park Lane also contributes to the background noise level at this location.

4.2.2 Noise Survey Results

Table 4-3 presents a summary of the noise measurements which have discounted periods of adverse weather conditions removed (discussed within noise survey details **Appendix C**)

Table 4-3: Summary of Measured Noise Levels

Monitoring Location	Date	Period	dB $L_{Aeq,T}$	dB L_{AFmax}, 90th percentile	dB L_{A10}	dB L_{A90} mode	dB L_{A90} minimum
LT1[5]	Thursday 17/07/2025	Day[1]	68	90	65	55	51
		Night	57	71	56	51	49
	Friday 18/07/2025	Day	67	90	65	55	52
		Night	59	71	56	51	50
	Saturday 19/07/2025	Day	64	86	61	53	51
		Night	54	69	55	51	50
	Sunday 20/07/2025	Day	67	91	62	53	51
		Night	55	69	55	50	49
	Monday 21/07/2025	Day	67	90	64	54	51
		Night	56	69	56	51	49
	Tuesday 22/07/2025	Day	67	90	63	53	51
		Night	56	69	55	51	49
	Wednesday 23/07/2025	Day[2]	68	90	64	55	52
		Night	68	90	65	55	51
LT2	Thursday 17/07/2025	Day[3]	68	84	71	60	42
		Night	62	79	64	37	35
	Friday 18/07/2025	Day	68	85	71	58	41
		Night	62	79	64	35	33
	Saturday 19/07/2025	Day	68	84	71	55	42
		Night	60	78	62	39	35
	Sunday 20/07/2025	Day	67	85	70	58	39
		Night	62	79	63	36	33
	Monday 21/07/2025	Day	68	85	71	55	45
		Night	64	80	65	38	37
	Tuesday 22/07/2025	Day	68	85	71	57	43
		Night	63	80	64	40	38
	Wednesday 23/07/2025	Day[4]	68	84	72	54	49
		Night	68	84	71	60	42

Note 1: Daytime measurement ran from setup time 10:40 to 23:00 on this respective day.

Note 2: Daytime measurement ran from 07:00 to end time 10:55 on this respective day.

Note 3: Daytime measurement ran from setup time 11:00 to 23:00 on this respective day

Note 4: Daytime measurement ran from 07:00 to end time 10:30 on this respective day

Note 5: It is noted that this measurement location experienced some slight noise contamination (50Hz and 160Hz 1/3rd octave bands) from nearby rooftop plant equipment. The presented figures for this measurement location do not include any contribution from these 1/3rd octave band frequencies and therefore indicate the worst-case noise levels in relation to this noise impact assessment.

4.2.3 London City Airport Noise Contours

London City Airport Noise Contours[4] are presented for Day, Evening and Night-time periods within **Appendix D**.

[4] London City Airport. Noise Action Plan 2024 – 2028. London_City_Airport_-_Noise_Action_Plan_2024-2028.pdf (accessed 09/07/2025)

5. Assessment

5.1 Façade Noise Exposure and Performance Requirements

External noise sources affecting the façade of the proposed Site will include a combination of local road traffic, aircraft from London City Airport, and plant noise.

Table 5-1 Error! Reference source not found. presents the noise levels associated with different transportation sources and periods for use in the assessment of the façade sound insulation performance requirements.

Table 5-1: Representative Noise Levels for Assessment

Noise Source	Reference	Average Daytime (07:00-23:00) Noise Pressure Level at Façade L_{Aeq} (dB)	Average Night-time (23:00-07:00) Noise Pressure Level at Façade L_{Aeq} (dB)	Maximum Night-time (23:00-07:00) Noise Pressure Level at Façade L_{Aeq} (dB)
Road, DLR rail, and aircraft	Noise Survey Data	68 (Location 1)	64 (Location 2)	80 (90^{th} Percentile of night-time noise data set – Location 2)
Aircraft	London City Airport Noise Contours 2019	Site located in the 63-66 contour as per Appendix D L_{Day} Noise Contour	Site located in the 48-51 contour as per Appendix D L_{Night} Noise Contour	-
Plant noise	Highest plant noise level at 1 metre from guestroom window as per Section 5.2.4 of this report	49 is the rating noise level prediction assuming continuous for 1h. From Section 5.2.4 of this report	49 is the rating noise level prediction assuming continuous for 15min. From Section 5.2.4 of this report	-
Cumulative noise level used for assessment		**68**	**64**	**80**

It is understood that the façade of the hotel extension building will be made up of a brick facade. As such, the acoustic performance of the glazing will be the most critical element in determining the overall outdoor to indoor sound insulation performance of the façade.

Outdoor to indoor sound transmission predictions have been carried out in accordance with ISO 12354-3[5] to determine the required glazing sound insulation performance. **Table 5-2** presents the glazing sound insulation requirements.

Due to the early stage of the design, final details of the construction are not available. As such, the predictions have assumed that the glazing makes up is 50% of the total façade area, compared to solid areas.

Table 5-2: Required Sound Insulation Performance of Glazing, Façade, and Roof.

Building Element	Sound Insulation Performance Requirement R_w+C_{tr} (dB)
Glazing	39

[5] ISO 12354-3:2017 Building acoustics — Estimation of acoustic performance of buildings from the performance of elements – Part 3: Airborne sound insulation against outdoor sound.

5.2 Building Services Plant Noise Emissions

5.2.1 Plant Noise Limits

To ensure that noise emissions from fixed mechanical plant are adequately controlled, noise level limits have been recommended based on the existing noise levels around the Site (dB L_{A90}), guidance provided in BS 4142:2014+A1:2019 and requirements of LBN.

The limits below are based on the Rating Level ($L_{Ar,Tr}$) being 10dB below the representative background sound level (L_{A90}).

Where the prevailing background sound level is less than 45dB L_{A90} a minimum value of 35dB $L_{Ar,Tr}$ is recommended. A noise limit of this magnitude during the night-time period when residents are inside, would adequately safeguard residential amenity, even with windows open. Further to this, at all locations, 35dB $L_{A,Tr}$ is also more than 5 dB below the prevailing ambient noise levels. Noise level limits are presented as **Table 5-3.**

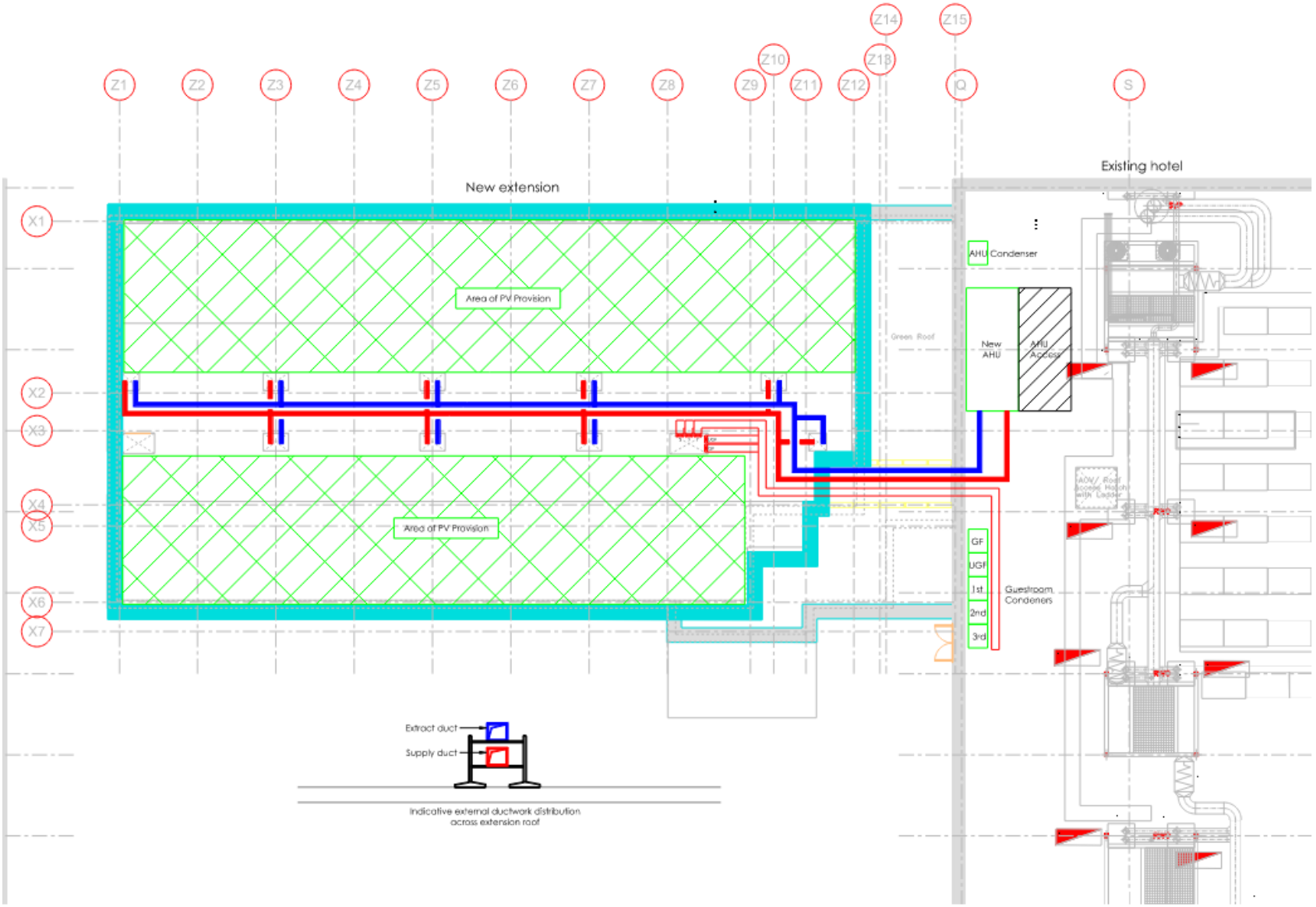
Table 5-3: Recommended Plant Noise Limits

Sensitive Receptor	Period	Representative Background Noise Level dB L_{A90}	Rating Level Plant Noise Limit dB $L_{Ar,Tr}$
SR A - Travelodge London Excel and Moxy London Excel	Day (07:00-23:00)	53	≤43
	Night (23:00-07:00)	40	≤35
SR B – International School of Musicians	Day (07:00-23:00)	53	≤43
	Night (23:00-07:00)	40	≤35

5.2.2 Plant Proposals and Sound Power Levels

As part of the proposed hotel extension, 1no. new air handling unit (AHU) and 10no. condensers will be located on the existing and new roof of the Site. **Figure 5-1** presents an indicative location of the proposed plant items. **Appendix E** presents the sound power levels associated with the plant items.

Figure 5-1: Proposed AHU and Condenser Plant Locations (*Exi Architects Drawing 5453-EXI-ZZ-R1-DR-M-570001 P1*)



5.2.3 Plant Noise CadnaA Model

Based on the sound power levels provided to Waterman Group by Exi, the MEP consultants for the Development, a noise prediction has been carried out in Cadna software to assess the impact at the nearest noise sensitive receptors. **Figure 5-2** presents the rating noise levels at the nearest SR locations as well as the Holiday Inn Express Hotel itself along with the locations of the plant proposed new plant items. It should be noted that the rating noise levels include a +3dB 'acoustic feature' which has been added to account the potential intermittency of the proposed plant items.

It is noted that the operation times of the proposed units are not known, therefore as a worst-case scenario, it is assumed that the plant items run for 24hrs a day for the purposes of the Plant Noise Impact Assessment.

As shown, the rating noise level at 1m from the façade is predicted to be $L_{Ar,Tr}$ 49 dB. This figure is used within the glazing performance requirement calculations, discussed within **Section 5.1**.

Figure 5-2: Predicted Rating Noise Level ($L_{Ar,Tr}$) from Proposed Plant Items



5.2.4 BS4142:2014+A1:2019 Assessment

Based on the recommended plant noise limits presented as **Table 5-3**, and the calculated noise levels at SR A and SR B, presented above, a BS4142 Assessment has been made and presented below as **Table 5-4**.

Table 5-4: BS4142:2014 Assessment

Sensitive Receptor	Representative Rating Noise Level ($L_{A,Tr}$)	Limiting Criteria (Table 5-3)	Exceedance of Standard Plant Noise Limiting criteria (dB)	Meets Criteria?
SR A - Travelodge London Excel and Moxy London Excel	29	≤35	-6	**Yes**
SR B – International School of Musicians	18	≤35	-17	**Yes**

In-line with a BS4142 assessment, the results indicate that the recommended criteria for mechanical plant is achieved for SR A - Travelodge London Excel and Moxy London Excel and SR B – International School of Musicians. Therefore, the sensitive receptors will not be adversely affected or negatively impacted by the installation of the proposed plant equipment.

For completeness, context has been considered below as required by BS4142:2014+A1:2019.

5.2.5 Context

Absolute Noise Levels

With reference to the noise survey data (detailed within **Section 4**), the measured absolute noise levels within the area range from **54 to 64 dB $L_{Aeq,T}$**. It is noted that the absolute noise levels from the proposed plant equipment is at least 18 dB below the low end of this range at SR A. It is considered that the absolute noise level is not significant given the existing absolute noise levels in the area and will likely not be perceptible.

Noise Character of the Area

It is noted that the surrounding buildings are predominantly hotels. A review of arial imagery on Google Maps indicates that several of the hotel buildings in the area include rooftop plant items that are considered to be similar to what is proposed as part of the extension works. it is considered that the proposed plant items will not add any unique and decipherable noise sources to the area and therefore would not be readily distinctive.

6. Conclusion

This noise report for planning has been prepared by Waterman, on behalf of London ExCel Management Limited, as part of their application for planning permission for a 77 new bedroom extension to the existing hotel.

The conclusions are as follows:

- Internal noise levels within the new building from transportation sources road, rail, aircraft and plant will be controlled through a glazing sound insulation performance of **39 dB R_w**.
- Plant rating noise levels have been predicted at the façades of the nearest noise sensitive receptors using CadnaA modelling software. In-line with a BS4142:2014+A1:2019 assessment, it has been determined that the noise impact of the new proposed plant items (AHU and 5x condensers) would be negligible.

Overall, it is considered that the Site would be suitable for the proposed hotel extension from an acoustic standpoint.

Appendices

A. Acoustic Glossary

AAWT-18h	Annual Average Week Day Traffic over the time period 0600-0000. Only includes Monday to Friday data.
Ambient sound	The totally encompassing sound in a given situation at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
A-weighting	A frequency weighting applied to measured or predicted sounds levels in order to compensate for the non-linearity of human hearing.
Background noise	Background noise is the term used to describe the noise measured in the absence of the noise under investigation. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L_{90} noise level (see below).
Background Sound Level dB $L_{A90,T}$	A-weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90% of a given time interval, T, measured using time weighting F and quoted to the nearest whole number of decibels.
Broadband	Containing the full range of frequencies.
Decibel [dB]	The level of noise is measured objectively using a Sound Level Meter. This instrument has been specifically developed to mimic the operation of the human ear. The human ear responds to minute pressure variations in the air. These pressure variations can be likened to the ripples on the surface of water but of course cannot be seen. The pressure variations in the air cause the eardrum to vibrate and this is heard as sound in the brain. The stronger the pressure variations, the louder the sound that is heard. The range of pressure variations associated with everyday living may span over a range of a million to one. On the top range may be the sound of a jet engine and on the bottom of the range may be the sound of a pin dropping. Instead of expressing pressure in units ranging from a million to one, it is found convenient to condense this range to a scale 0 to 120 and give it the units of decibels. The following are examples of the decibel readings of every day sounds: Four engine jet aircraft at 100m 120 dB Riveting of steel plate at 10m 105 dB Pneumatic drill at 10m 90 dB Circular wood saw at 10m 80 dB Heavy road traffic at 10m 75 dB Telephone bell at 10m 65 dB Male speech, average at 10m 50 dB Whisper at 10m 25 dB Threshold of hearing, 1000 Hz 0 dB
dB(A): A-weighted decibels	The ear is not as effective in hearing low frequency sounds as it is hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the 'A' filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter. The sound pressure level in dB(A) gives a close indication of the subjective loudness of the noise.
Façade Noise Level	A noise level measured or predicted at the façade of a building, typically at a distance of 1m, containing a contribution made up of reflections from the façade itself (+3 dB).
Free Field Noise Level	A noise level measured or predicted which is unaffected by reflections, generally taken as being 3m from any reflecting surface excepting the ground.
L_{Amax} noise level	This is the maximum noise level recorded over the measurement period.
L_{Amin} noise level	This is the lowest level during the measurement period.

$L_{Aeq,T}$ noise level	This is the 'equivalent continuous A-weighted sound pressure level, in decibels' and is defined in British Standard 7445 as the 'value of the A-weighted sound pressure level of a continuous, steady sound that, within a specified time interval, T, has the same mean square sound pressure as a sound under consideration whose level varies with time'. It is a unit commonly used to describe construction noise, noise from industrial premises and is the most suitable unit for the description of other forms of environmental noise.
L_{A90} noise level	This is the noise level that is exceeded for 90% of the measurement period and gives an indication of the noise level during quieter periods. It is often referred to as the background noise level and is used in the assessment of disturbance from industrial noise.
L_{A10} noise level	This is the noise level which is achieved for 10% of the monitoring period and is often used to describe road traffic noise.
Rating Level, dB $L_{Ar,Tr}$	Specific sound level plus any adjustment for the characteristic features of the sound.
Residual Sound	Ambient sound remaining at the assessment location when the specific sound source is supressed to such a degree that it does not contribute to the ambient sound source.
Sound Reduction Index (R)	The sound reduction index is a single-number rating of the sound reduction through a wall or other building element. Since the sound reduction may be different at different frequencies, test measurements are subjected to a standard procedure which yields a single number that is about equal to the average sound reduction in the middle of the human hearing range.
Specific Sound Level, $L_{Aeq,Tr}$	Equivalent continuous A-weighted sound pressure level produced by the specific sound source at the assessment location over a given time interval T.
Weighted Sound Reduction Index dB R_w	Single number rating used to describe the laboratory airborne sound insulation properties of a material or building element over a range of frequencies, typically 100-3150Hz.
C_{TR}	An adjustment to the Rw scale to take account of the lower performance against a typical spectrum of road traffic noise dominated by low frequencies.
$D_{ne,W}$	Weighted element normalised level difference.
PPV	Ground vibration is measured in terms of Peak Particle Velocity (PPV) with units in mm/s. It should be noted that the PPV refers to the movement within the ground of molecular particles and not surface movement. The displacement value in mm refers to the movement of particles at the surface (surface movement).

B. Full London Borough of Newham Consultation Correspondence

1st July 2025

Hi Mark,

Thank you for taking the time to look at this,

We are assisting with the Noise and Air Quality planning assessments for the proposed extension at Holiday Inn Express, Dockside Rd, London E16 2FQ.

We have carried out a planning noise assessment back in 2020 which is attached (details of the extension are included within). We are now looking to carry out a repeat noise survey to assist with our assessment, please see our indicative strategy below:

Red – indicative red-line boundary

Blue – indicative zone for LT1 measurement establishing contributions from Light-Railway line (orange) and surrounding road networks Dockside Road and distant Connaught Bridge. (either on the roof of existing building or attached within car park area)

Green – indicative zone for LT2 measurement establishing road traffic noise from Royal Albert Way (either on the roof of existing building or attached to lamppost)



The following noise parameters will be measured L_{Aeq}, L_{AFmax}, L_{A10} and L_{A90} together with 1/3 octave L_{eq}. Noise measurements will comprise 5-minute contiguous measurements - to allow atypical sets to be removed should something occur. The measurements will be taken over a typical weekday and weekend period (either Thursday to Monday or Friday to Tuesday as a minimum). The noise survey will be undertaken where wind-speeds are generally below 5 m/s and rainfall is minimal.

In conjunction with the measured noise levels, we will also reference a noise survey carried out for the London Design and Engineering UTC at 15 University Way Beckton London E16 2RD further to the east (also attached)

Regarding plant noise limits, this was the stance of LBN previously, is this unchanged for this assessment?

> *"We would expect the noise rating level from plant noise to be no greater than the background level, however this seems like a case where a slightly higher level may be justifiable, providing work has been done to try and minimise noise levels from the plant as much as possible. The BS8233 internal noise levels will be more of a driver in these circumstance with sealed windows."*

Please let us know if you are happy with our noise impact assessment strategy,

Kind regards

Stefan Fox-Marshall

Acoustic Consultant

Waterman Infrastructure & Environment Ltd

4th July 2025

Good morning Stefan,

My feedback:

- Bear in mind the operations of the airport. Weekend operations for the airport include a 24 hour respite period between midday Saturday and midday Sunday. You may want to include this respite period in your monitoring, to get the quietest time, but also make sure you get their busiest periods as well which is weekday peak hours, both morning and evening. Your proposed survey should cover that, but you should make sure to analyse the difference in operations when assessing the impact against background noise.
- Our standard condition for plant noise is below, but owing to the fact that your application is for a hotel and the surrounding area contains no residential, there is potential for relaxation of this standard, although it will have to be justified and efforts made to try and achieve it:

  Fixed Plant Machinery

  Prior to the installation of any mechanical plant associated with the development hereby permitted, an acoustic report demonstrating that at all times the operational plant on site shall not give rise to a cumulative BS4142 rating level greater than 10 dB below the background noise level at the nearest or worst affected property, shall be submitted to and approved in writing by the Local Planning Authority. Where it is considered impractical to meet this noise standard the report should detail mitigation measures taken to reduce noise to a minimum.

  The scheme as approved shall be installed and permanently maintained thereafter.

  Reason: To protect the amenity of future occupants and/or neighbours.

I hope this provides you with the confidence to proceed with your study, however please do get back in touch should you require any further clarity or you have any further questions.

Regards,

Mark Partridge | He / Him

Noise and Pollution Team Manager | Planning and Development

London Borough of Newham

C. Environmental Noise Survey Details

Table C1 presents the equipment detail used for the baseline noise survey. The equipment was field calibrated before and on completion of the survey with no significant drift.

Table C1: Equipment Detail

Location	Description	Serial Number	Date of Last Calibration
LT1	Rion NL-52 Type 1 Sound Level Meter	01076306	27th February 2025 Certificate Number 1511409-4
	Rion NH-25 Pre-amplifier	76523	
	Rion UC-59 Microphone	12355	
LT2	Rion NL-52 Type 1 Sound Level Meter	01076307	19th November 2024 Certificate Number 1510597-2
	Rion NH-25 Pre-amplifier	76524	
	Rion UC-59 Microphone	12357	

Figure C-1 presents the noise monitoring locations.

Graph C1 and **Graph C2** present the time history plots of measured noise levels at monitoring location LT1 and LT2, respectively, with periods of rainfall indicated.

Weather data for the duration of the survey was recorded remotely at weather station ILONDO575[6].

[6] Personal Weather Station Dashboard | Weather Underground (wunderground.com)

Figure C-1: July 2025 Baseline Noise Monitoring Locations



Site Boundary

Sensitive Receptors

Noise Monitoring Locations

0 5 10 20 30 40 50 m

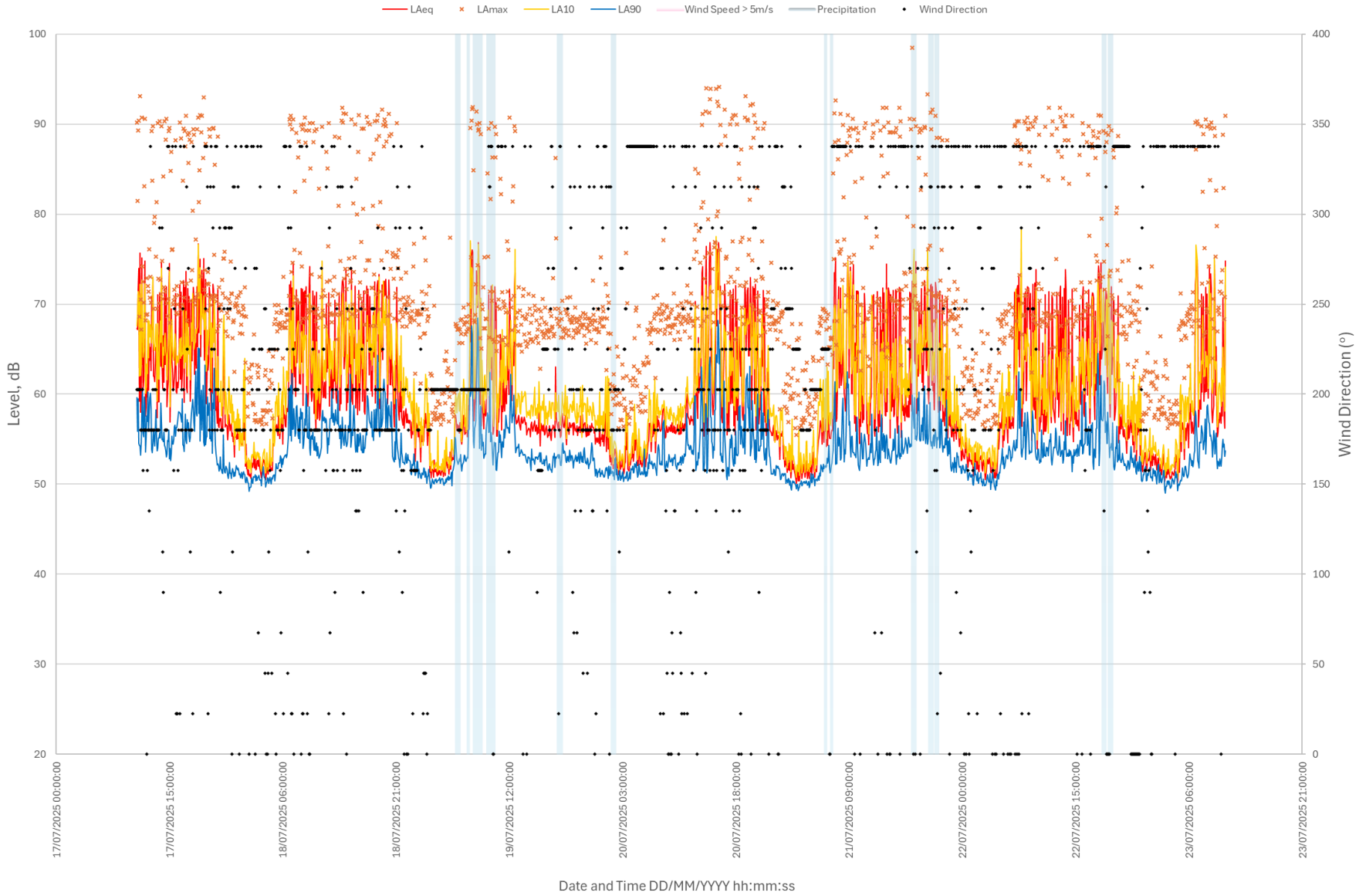
Project Details	WIE21583-100: Holiday Inn Express, Dockside Road
Figure Title	Figure C-1: July 2025 Baseline Noise Monitoring Locations
Figure Ref	21583100-WAT-XX-XX-GS-N-710001_P01
Date	July 2025
File Location	Projects\WIE21583-100\9_GIS\21583100-WAT-XX-XX-GS-N-71

www.watermangroup.com

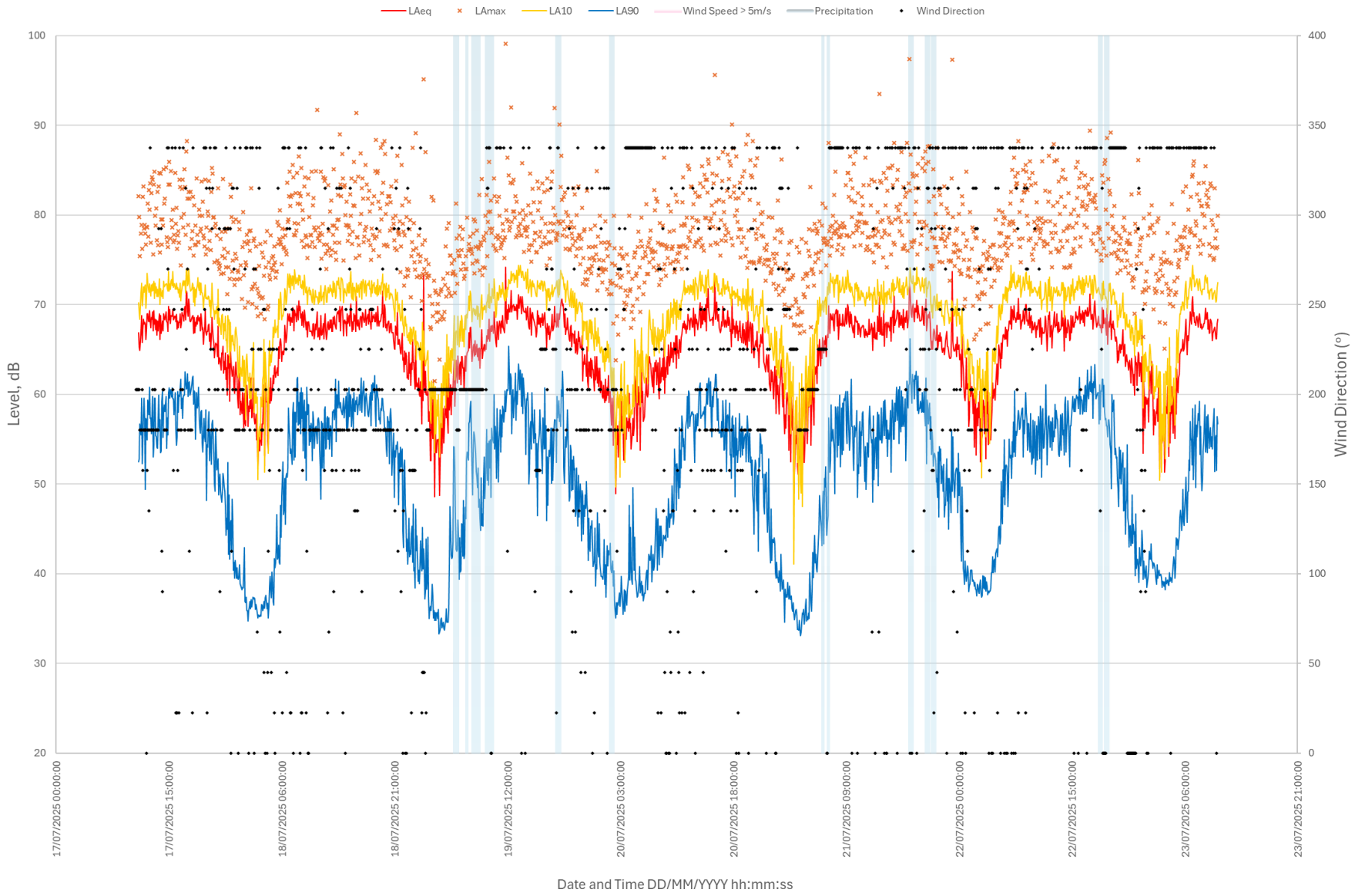
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Contains data from OS Zoomstack

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Graph C1: Time History Plot of Measured Noise Levels at LT1

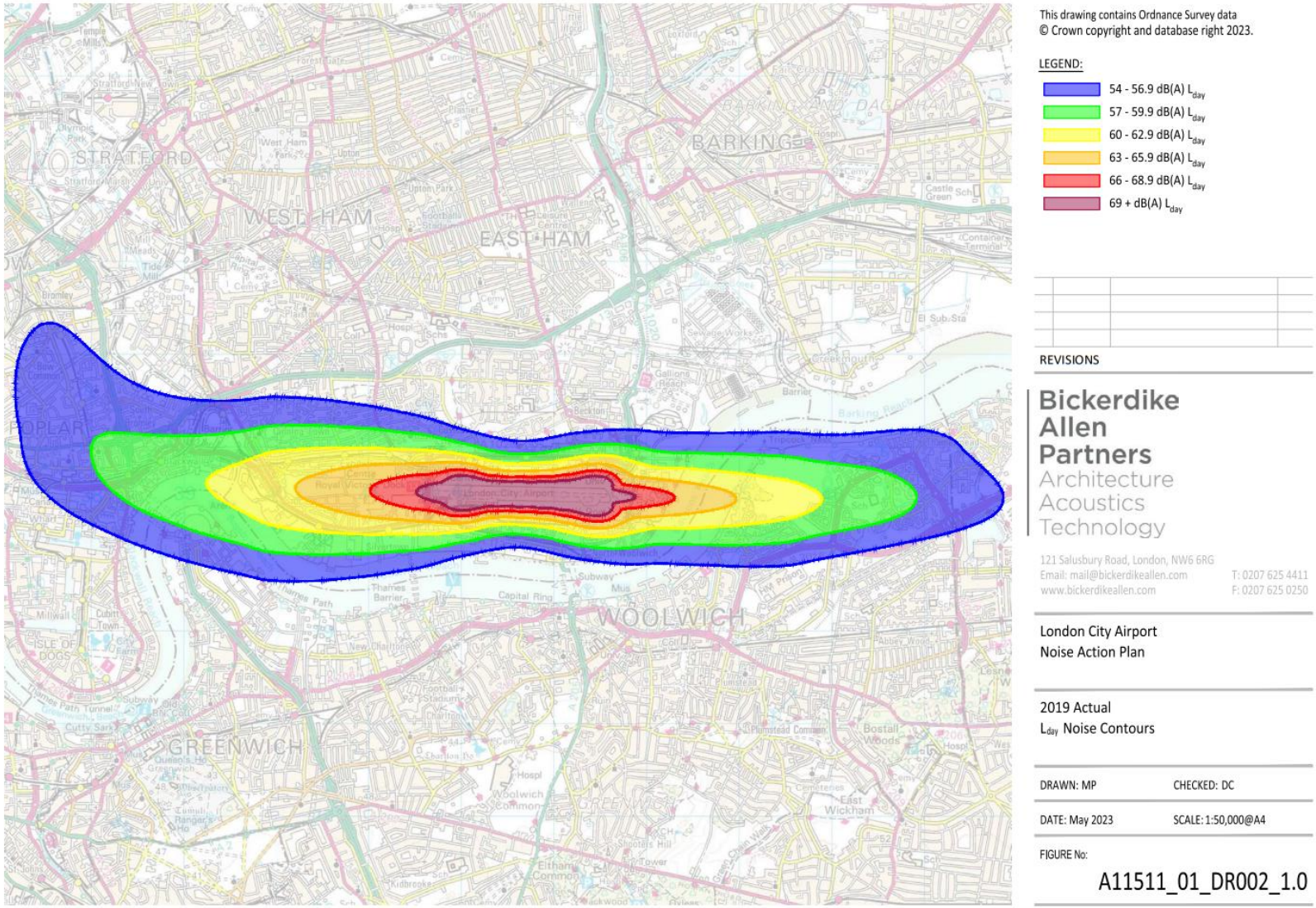


Graph C2: Time History Plot of Measured Noise Levels at LT2



D. London City Airport Noise Contours

Figure D1: 2019 Supplementary Noise Maps L_{Day}



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LEGEND:

- 54 - 56.9 dB(A) L_{day}
- 57 - 59.9 dB(A) L_{day}
- 60 - 62.9 dB(A) L_{day}
- 63 - 65.9 dB(A) L_{day}
- 66 - 68.9 dB(A) L_{day}
- 69 + dB(A) L_{day}

REVISIONS

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London City Airport
Noise Action Plan

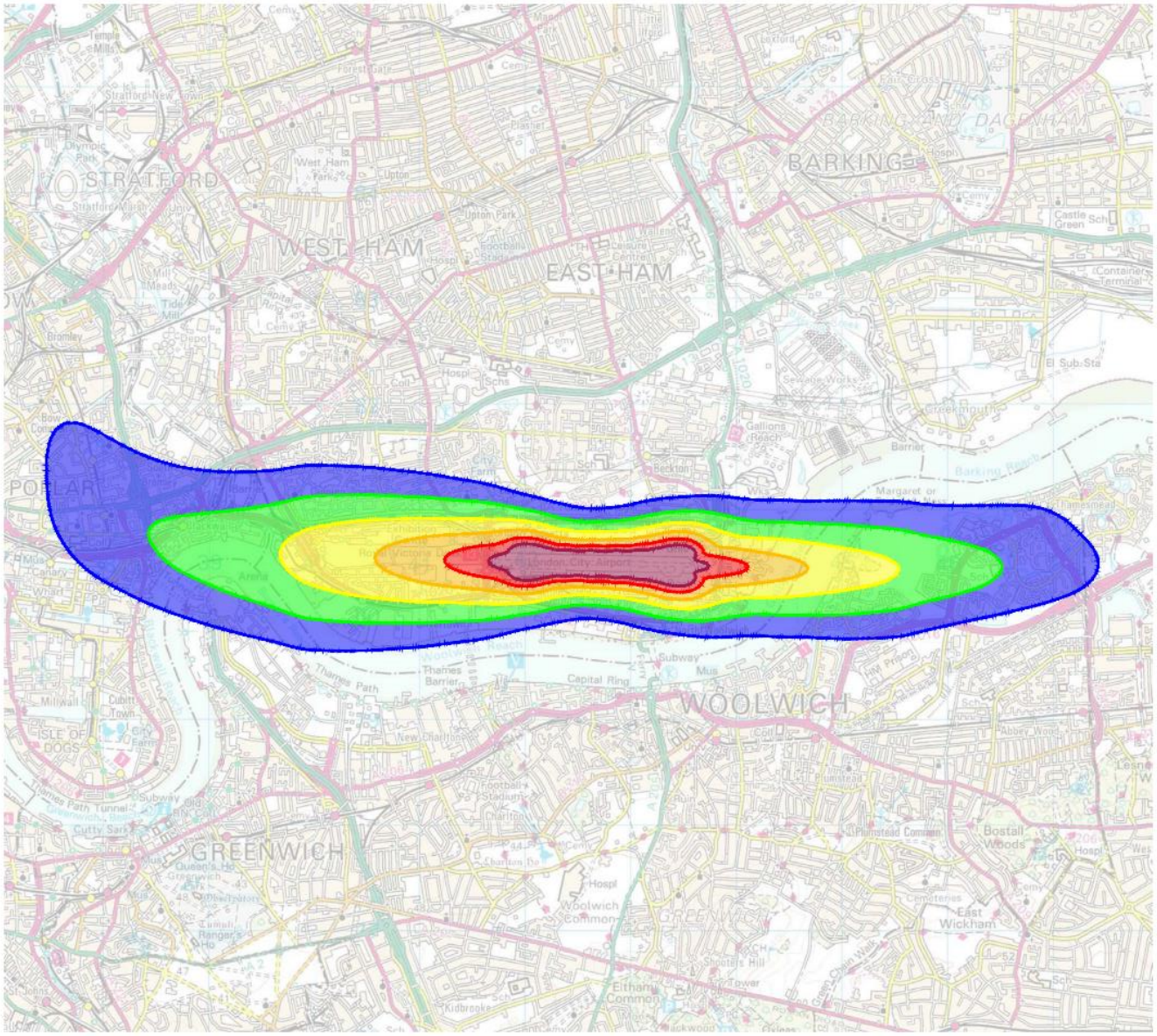
2019 Actual
L_{day} Noise Contours

DRAWN: MP CHECKED: DC

DATE: May 2023 SCALE: 1:50,000@A4

FIGURE No:
A11511_01_DR002_1.0

Figure D2: 2019 Supplementary Noise Maps $L_{Evening}$



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LEGEND:

- 54 - 56.9 dB(A) $L_{evening}$
- 57 - 59.9 dB(A) $L_{evening}$
- 60 - 62.9 dB(A) $L_{evening}$
- 63 - 65.9 dB(A) $L_{evening}$
- 66 - 68.9 dB(A) $L_{evening}$
- 69 + dB(A) $L_{evening}$

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2019 Actual
$L_{evening}$ Noise Contours

DRAWN: MP CHECKED: DC

DATE: May 2023 SCALE: 1:50,000@A4

FIGURE No:
A11511_01_DR003_1.0

Figure D3: 2019 Supplementary Noise Maps L_{Night}



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LEGEND:

- 48 - 50.9 dB(A) L_{night}
- 51 - 53.9 dB(A) L_{night}
- 54 - 56.9 dB(A) L_{night}
- 57 - 59.9 dB(A) L_{night}
- 60 - 62.9 dB(A) L_{night}
- 63 - 65.9 dB(A) L_{night}
- 66 + dB(A) L_{night}

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London City Airport
Noise Action Plan

2019 Actual
L_{night} Noise Contours

DRAWN: MP CHECKED: DC

DATE: May 2023 SCALE: 1:50,000@A4

FIGURE No:
A11511_01_DR005_1.0

E. Proposed Plant Equipment

LENNOX

PROPOSAL NO	1 rev. 1 pos. Holiday Inn City Airport	DATE:	01/04/2020
PROJECT	-		
REF.	AHU01		
FLOWRATE m³/h	9900/9900	MODEL	LX0808
		ITEM NO.	89230808
		PRINTED	01/04/2020

DATA SHEET





Data for Eurovent Energy Class calculation

	Supply	Return
Section [m2]	1.5625	1.5625
Velocity [m/s]	1.76	1.76
Type:	With Recirculation 0 [%]	
external winter design temperature °C	-5	

· GENERAL FEATURES

Supply flowrate [m3/h]	9900	[l/s] 2750	Face velocity -coil [m/s] 2.25
Return flowrate [m3/h]	9900	[l/s] 2750	Face velocity -coil [m/s] 2.25

Feed

Installed el. power [kW] :	8.4
Tension [V] :	400
Phase:	3
Cycles [Hz] :	50
Switchboard:	Not available

Dimensions and mass

Length [mm]	3790
Width [mm]	1370
Height [mm]	2890
Mass (no fluids) [kg]	1646
N° sections [frames]	5
Inspection side	RH
Header side	RH

Sound power	[Hz]	63	125	250	500	1000	2000	4000	8000	global
Sound power at supply Outlet	[dB]	69.5	81.9	77.8	77.3	72.8	66	59.3	50.5	[dB(A)] 78.01
Sound power at supply Inlet	[dB]	66.5	76.9	72.8	73.3	66.8	61	54.3	41.5	[dB(A)] 73.2
Sound power at return Outlet	[dB]	65.8	74.9	73.2	74.1	69	65.6	63.2	56.5	[dB(A)] 75.01
Sound power at return Inlet	[dB]	67.8	79.9	77.2	77.1	74	69.6	67.2	64.5	[dB(A)] 79.04
Sound power outside panels	[dB]	59.6	70	66.4	65	61.7	53.9	38.5	30.4	[dB(A)] 66.21

Type:	Frame with panels
Thermal break:	with nylon profiles
Panel thickness [mm]:	60
Outer skin:	Galvanised prepainted 1 [mm]
Inner skin:	Galvanised 1 [mm]
Insulation:	Polyurethane 45 [kg]/m³
Framework	anodized aluminium
Roof:	prepainted 1.0 [mm]
Handles:	nylon with key
Drainable floor	Not available
floor with checkered plate	Not available
Baseframe	Galvanised
Conduit for wiring	Not available

Classification according to EN1886

Mech. strength:	D1 (M)	D1 (R)
Leakage -400/+700 Pa	L1/L1 (M)	L2/L2 (R)
Pre filter By-pass		M5 (R)
Filter by-pass	F9 (M)	F9 (R)
Transmittance:	T2 (M)	
Thermal bridges:	TB2 (M)	
Doors with sightglas	Yes	
Technical room:	Not available	
Light:	Yes	

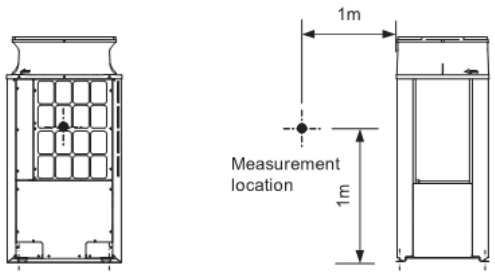
Acoustic insulation: (not certified data)

[Hz]	63	125	250	500	1000	2000	4000	8000
[dB]	12.9	14.9	15.4	16.3	17.1	20.1	32.8	37.1

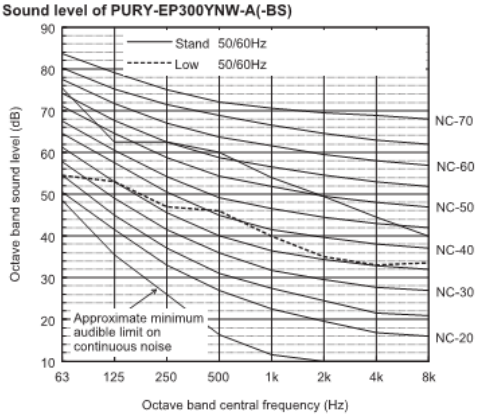
5. SOUND LEVELS

5-1. Sound levels in cooling mode

Measurement condition
PURY-EP200, 250, 300YNW-A(-BS)



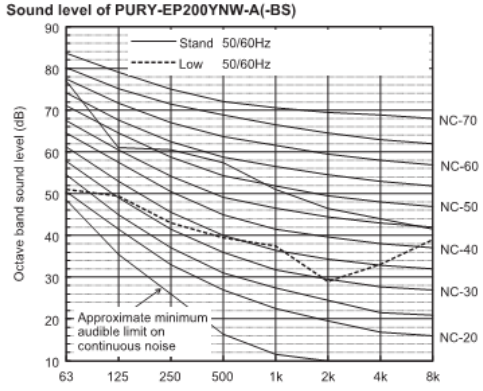
Sound level of PURY-EP300YNW-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	50/60Hz	75.5	62.5	62.5	60.0	54.0	49.5	44.5	40.0	61.0
Low noise mode	50/60Hz	54.5	53.0	47.0	46.0	40.0	35.0	33.0	33.5	47.0

When Low noise mode is set,the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

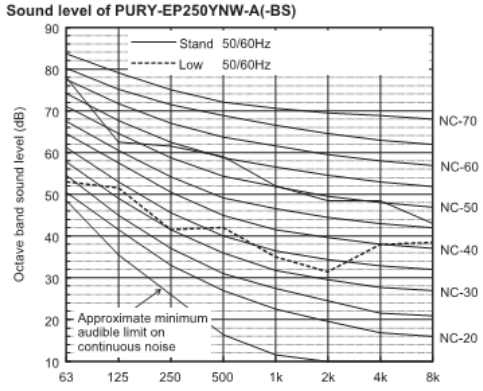
Sound level of PURY-EP200YNW-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	50/60Hz	77.0	61.0	60.5	57.5	51.0	46.5	44.0	41.5	59.0
Low noise mode	50/60Hz	51.0	49.5	43.0	39.5	37.5	29.0	33.0	39.0	44.0

When Low noise mode is set,the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

Sound level of PURY-EP250YNW-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	50/60Hz	78.0	62.5	61.5	59.0	52.0	48.5	48.5	43.0	60.5
Low noise mode	50/60Hz	53.0	51.5	41.5	42.0	35.0	31.5	38.0	38.5	45.0

When Low noise mode is set,the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

PURY-EP-T(S)NW-A

- Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required. For BC controller, it is recommended to be installed in places such as ceilings of corridor, rest rooms and plant rooms.

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