Paragon
Acoustic Consultants

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Opinions included herein are based on information gathered during the study and from our experience. If additional information becomes available which may affect our comments, conclusions or recommendations, Paragon Acoustic Consultants Ltd reserves the right to review the information, reassess any new potential concerns and modify our opinions accordingly.

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1 Introduction

Paragon Acoustic Consultants Ltd has been commissioned to conduct an environmental noise survey to obtain statistical noise data characterising the existing local background and ambient noise climate in the vicinity of the Morelands & Riverside Buildings, Hampton TW12 2ER.

This information shall be used to derive noise limits to atmosphere based on Local Authority Noise Policy and other relevant guidance and to subsequently gauge whether or not the proposed new mechanical plant selection will require acoustic mitigation to meet with the derived noise limits.

The client has advised that the operational period of the proposed mechanical plant shall be unrestricted

The assessment contained within this report is based upon the principles and recommendations contained within the following documents:

- National Planning Policy Framework;
- National Policy Statement for England;
- National Planning Practice Guidance, Noise;
- London Borough of Richmond Upon Thames, Supplementary Planning Document (SPD). Development Control for Noise Generating and Noise Sensitive Development;
- BS 4142:2014+A1:2019, Methods for rating and assessing industrial and commercial sound;
- BS8233: 2014: Guidance on sound insulation and noise reduction for buildings;
- World Health Organisation, Guidelines for Community Noise, 1999;
- BS 7445-2:1991, Description and measurement of environmental noise. Guide to the acquisition of data pertinent to land use;

2 Site Description

The scheme is located within the administrative jurisdiction of the London Borough of Richmond Upon Thames. The proposal seeks to refurbish and redevelop the existing buildings located at Morelands and Riverdale to provide new laboratory facilities for the development of vaccinations related to the COVID pandemic.

The site lies in a mixed use area that has residential dwellings commercial premises and utilities. It measures approximately 230m × 60m at its widest points, having a frontage on the Upper Sunbury Road.

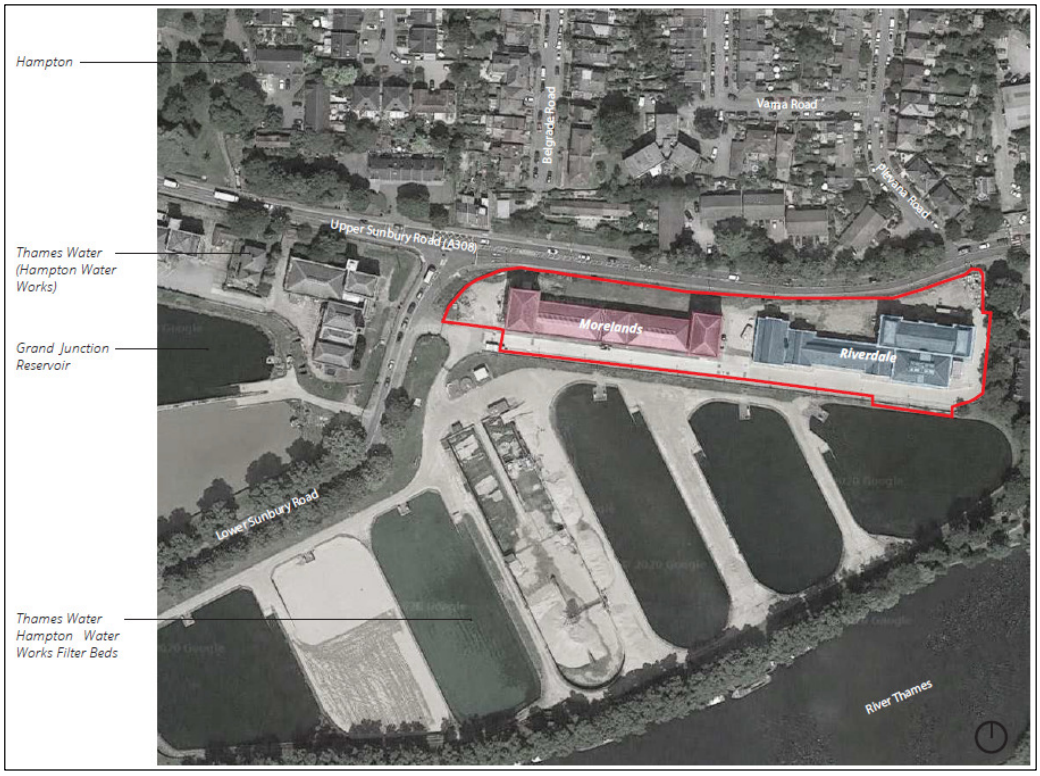
Immediately to the rear if the site is the Hampton Water Treatment Works, beyond which is the River Thames.

Residential premises of Upper Sunbury Road are directly opposite the site at a remove of around 30m from the north façade of the Morelands Building.

The residential premises of Thames Close are located to the east of the site, generally varying in height from two to four storeys.

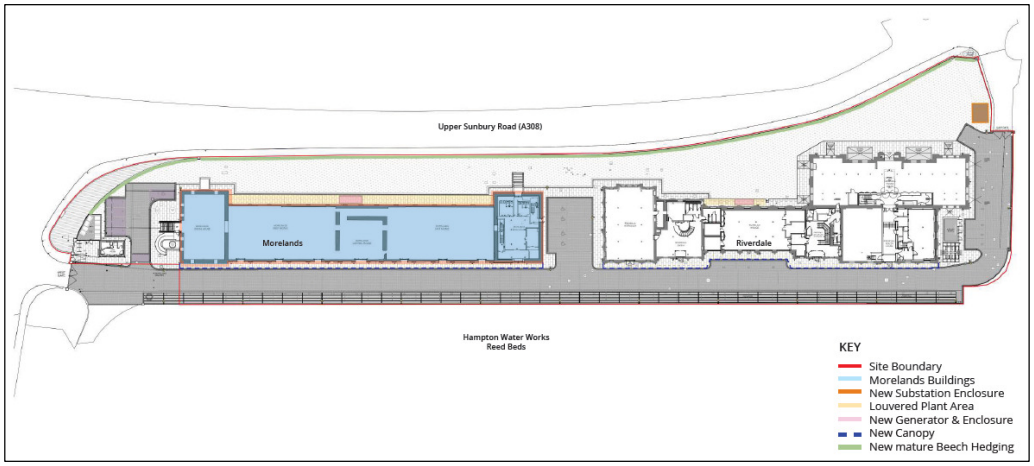
The site and surroundings are illustrated in Figure 1 below.

Figure 1: Site location



The proposal is to include the installation of new mechanical plant comprising items such as a substation, louvered plant compound and generators and enclosures. The intended locations of these sources are illustrated in Figure 2.

Figure 2: Proposed Site Plan and Location of New Plant



3 Existing Noise Climate

3.1 Road Traffic

The local noise climate is strongly influenced by vehicle movements along the busy Upper Sunbury Road (A308), which connects Hampton to the M3 motorway approximately 3km to the west. The Lower Sunbury Road flanks the site to the west, however traffic flows along this road were observed to be significantly lower than those along the A308.

3.2 Rail Traffic

Rail traffic was not observed during the manned period at the start and end of the surveys.

3.3 Aircraft

Aircraft over flights associated with the nearby London Heathrow Airport were observed during the manned survey at the start and end of the period. Their contribution to the ambient sound climate will have been included within the measurements taken.

3.4 Industrial/Commercial Sources

Activity at the Hampton Water Treatment works was clearly audible at the rear of the site comprising use of wheeled excavators and other items of fixed equipment. These sources were not however audible at the front of the site, due to screening provided by the intervening buildings and the influence of road traffic on the A308.

4 Planning Policy Context

4.1 National Planning Policy Framework 2019

The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.

There are a number of paragraphs in the NPPF that directly mention noise.

Paragraph 170 states that planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability

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

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life[1];

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 182 requires that:

> *"Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. 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."*

4.2 Noise Policy Statement for England 2010

The Noise Policy Statement for England (NPSE) sets out the long-term vision of Government noise policy, which is to:

"Promote good health and a good quality of life through the management of noise within the context of Government policy on sustainable development".

This long term vision is supported by the following aims:

[1] See Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food & Rural Affairs, 2010).

> *"Through the effective management of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*
>
> - *avoid significant adverse impacts on health and quality of life;*
> - *mitigate and minimise adverse impacts on health and quality; and*
> - *where possible, contribute to the improvement of health and quality of life."*

When discussing the meaning of *"significant adverse"* and *"adverse"*, within an Explanatory Note the NPSE states:

> *"There are two established concepts from toxicology that are currently being applied to noise impacts for example, by the World Health Organisation. They are*
>
> *NOEL – No Observed Effect Level - This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.*
>
> *LOAEL – Lowest Observed Adverse Effect Level - This is the level above which adverse effects on health and quality of life can be detected."*

For the purposes of the NPSE, the Government added the following related concept:

> *"SOAEL – Significant Observed Adverse Effect Level - This is the level above which significant adverse effects on health and quality of life occur."*

It is also noted that it is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different sources, for different receptors and at different times.

4.3 National Planning Practice Guidance 2014

The National Planning Practice Guidance (NPPG) was published as an online resource in 2014. It includes guidance on how to recognise when noise could be a concern in planning decisions and includes advice that the planning process should be used to "avoid" significant observed adverse effects occurring, by use of appropriate mitigation such as altering design and layout.

The NPPG also states that the planning process should be used to *"prevent"* unacceptable adverse effects where noise is noticeable and very disruptive leading to extensive and regular changes in behaviour and/or an inability to mitigate the effect of noise leading to psychological stress or physiological effects.

The NPPG provides a summary table setting out the noise exposure hierarchy based on the likely average response, reproduced below.

Perception	Examples of outcomes	Increasing effect level	Action
Not noticeable	No effect	No observed effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No observed adverse effect	No specific measures required
Lowest Observed Adverse Effect Level			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed adverse effect	Mitigate and reduce to a minimum
Significant Observed Adverse Effect Level			
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant observed adverse effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

4.4 Local Authority Policy

As noted above, the development is located within the administrative jurisdiction of the London Borough of Richmond upon Thames (Richmond). The Richmond Local Plan, adopted July 2018, recognises that noise *"can have a significant effect on health, quality of life, amenity, living conditions and the environment in general"* and should be considered at an early stage during the planning process for both noise generating and noise sensitive developments.

With regards to the potential impact on existing business of a new noise sensitive development, The Richmond Local Plan paraphrases the NPPF *"agent of change"* principal as follows:

> *"Businesses should not have unreasonable restrictions put on them because future noise sensitive uses are subsequently permitted adjacent to the business or within the surrounding area; this also includes changes of use. Therefore, proposed new noise sensitive developments should follow good acoustic design principles and incorporate adequate mitigation measures to ensure appropriate acoustic conditions in new developments."*

The London Borough of Richmond Upon Thames Supplementary Planning Document (SPD) Development Control for Noise Generating and Noise Sensitive Development to address noise issues affecting the Borough and assist in providing a consistent approach to development where noise is an issue. It addresses policy context, aims and objectives and provides guidance on the technical aspects of acoustic design for noise sensitive and noise generating development.

Section 6 of the SPD covers new noise generating industrial and commercial development and advises that

> *"All industrial and commercial development with the potential to generate noise will be assessed and, where relevant, controlled by planning conditions in order to protect residential amenity. Conditions may be used, for example, to restrict noise levels and to control hours of operation. The most relevant standard for assessing new industrial and commercial development is BS4142:2014."*

Table 2 of Section 6.2 of the SPD sets out a matrix for gauging noise significance risk against a BS 4142 assessment outcome together with accompanying planning advice, reproduced below. It goes on to say that *"As a general rule, the Borough will seek to achieve the external noise standards detailed in Table 2"*.

Table 1: BS4142 assessment outcome and planning advice
(source: London Borough of Richmond Upon Thames SPD, Table 2)

Noise Significance Risk	BS4142 Outcome	Planning Advice
Minimal	$L_{A,Tr} - L_{A90,T} \leq -5$	Where the rating level of noise is below the background noise level by at least 5dB, this indicates that the proposed NGD is likely to be acceptable from a noise perspective. The Borough will seek this level of compliance in most noise sensitive areas and/or where there is a requirement to mitigate creeping background effects.
Low	$L_{A,Tr} - L_{A90,T}$ is > -5 & ≤ 0	Where the rating level of noise is equal to, or below the background noise level by up to 5dB, this indicates that the proposed NGD may be acceptable from a noise perspective but will be more context dependent, i.e. extent and effect on noise sensitive receivers (externally and internally). Compliance within this range is more applicable to less sensitive sites or where there is no requirement to mitigate creeping background effects.
Medium	$L_{A,Tr} - L_{A90,T}$ is > 0 & $\leq +5$	Where the rating level of noise is equal to, or above the background noise level by up to 5dB, this indicates that the proposed NGD is less likely to be acceptable from a noise perspective and will be context dependent, i.e. extent and effect on noise sensitive receivers (externally and internally). Compliance within this range is typically only applicable to non-sensitive sites or where there are overriding other reasons why development should be considered. It will typically be necessary for the applicant to confirm how adverse impacts from the NGD will be mitigated and minimised. It is less likely that planning consent will be granted.
High	$L_{A,Tr} - L_{A90,T} > +5$	Where the rating level of noise is above the background noise level by more than 5dB, this indicates that the proposed NGD is unlikely to be acceptable from a noise perspective and planning consent is likely to be refused on noise grounds.

An overview of BS 4142 is given at Section 5.1 below.

5 Guidance on the Assessment of Noise

5.1 BS 4142:2014+A1:2019. Methods for Rating and Assessing Industrial and Commercial Sound

British Standard BS 4142:2019 supersedes BS 4142:2014, which is withdrawn. The main aim of the standard is to provide an assessment and rating method that is proportionate, sufficiently flexible and suitable for use by practitioners to inform professional judgement.

The standard describes methods for rating and assessing sound of an industrial and/or commercial nature, which includes:

a) sound from industrial and manufacturing processes;

b) sound from fixed installations which comprise mechanical and electrical plant and equipment;

c) sound from the loading and unloading of goods and materials at industrial and/or commercial premises; and

d) sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes, such as that from fork-lift trucks, or that from train or ship movements on or around an industrial and/or commercial site.

The Scope of the Standard is explicit in that its methods can be used to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident. By definition, the methods are not therefore applicable to the assessment of the effects of sound on users of commercial, industrial or similar types of "non-residential" premises.

An initial estimate of the impact of the specific sound is obtained by subtracting the measured background sound level from the rating level. Typically, the greater this difference, the greater the magnitude of the impact. The standard advises that:

a) A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.

b) A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.

c) 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. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."

Note 2 to Clause 11 advises that:

> *"Adverse impacts may include but not be limited to annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact."*

When the initial estimate of the impact needs to be modified due to the context, all pertinent factors should be considered which may include:

1. The absolute level of sound. For a given difference between the rating level and the background sound level, the magnitude of the overall impact might be greater for an acoustic environment where the residual sound level is high than for an acoustic environment where the residual sound level is low.

   Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night.

2. The character and level of the residual sound compared to the character and level of the specific sound.

3. The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions, such as:

   i) facade insulation treatment;
   ii) ventilation and/or cooling; and
   iii) acoustic screening.

As noted at point 1 above, the initial estimate of impact can be modified depending on the absolute level of the sound. On this point, guidance on absolute sound levels both within buildings and at outdoor amenity areas is given in BS 8233:2014, which is referred to in the examples of Annex A of the standard. The relevant content of BS 8233:2014 is reviewed below.

5.2 BS 8233:2014: Guidance on sound insulation and noise reduction for buildings

This British Standard came into effect on 28 February 2014 and superseded BS 8233:1999, which was withdrawn.

The standard draws on the results of research and experience to provide information on the design of buildings that have internal acoustic environments appropriate to their functions. It deals with control of noise from outside the building, noise from plant and services within it, and room acoustics for non-critical situations. It is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, but does not provide guidance on assessing the effects of changes in the external noise levels to occupants of an existing building.

Indoor ambient noise levels for dwellings are set out at Section 7.7.2, Table 4, reproduced below.

Table 2: Indoor ambient noise levels for dwellings (from BS 8233:2014, Table 4)

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	—
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	—
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

A series of notes provide context to the guideline values of Table 4. Note 1 advises that the indoor ambient noise levels are *"the sum total of structure-borne and airborne noise sources. Groundborne noise is assessed separately and is not included as part of these*

targets, as human response to groundborne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity."

Note 3 states *"These levels are based on annual average data and do not have to be achieved in all circumstances. For example, it is normal to exclude occasional events, such as fireworks night or New Year's Eve."*

For outdoor areas (i.e. balconies), BS 8233:2014 recommends that *"it is desirable that the external noise level does not exceed 50 dB $L_{Aeq,T}$, with an upper guideline value of 55 dB $L_{Aeq,T}$"*.

However, the standard makes the important distinction that these guideline values are not achievable in all circumstances and in higher noise areas, a compromise might be warranted. In such circumstances, development should be designed to achieve the lowest practicable levels in these external amenity spaces.

5.3 World Health Organisation, Guidelines for Community Noise

The World Health Organisation (WHO) document "Guidelines for Community Noise" provided a review of the effects of noise and a description of the principles of health criteria.

Table 1 of the document presents guideline values arranged according to specific environments and critical health effects. Noise indices to be adopted and the accompanying time base to be used for the assessment are also presented.

The guideline values consider all health effects for a specific environment. An adverse health effect refers to any temporary or long-term impairment of physical, psychological or social functioning associated with noise exposure.

The specific noise limits were set for each health "using the lowest noise level that produces an adverse health effect":

Table 3: Guideline values for community noise in specific environments
(source: WHO Guidelines for Community Noise, Table 1)

Specific environment	Critical health effect(s)	L_{Aeq} [dB(A)]	Time base [hours]	L_{Amax} fast [dB]
Outdoor living area	Serious annoyance, daytime and evening	55	16	-
	Moderate annoyance, daytime and evening	50	16	-
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16	
Inside bedrooms	Sleep disturbance, night-time	30	8	45
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60

5.4 World Health Organisation Night Noise Guidelines for Europe

World Health Organisation Night Noise Guidelines for Europe provides details of the health effects observed in the population.

The relationship between night noise exposure and health effects is summarised in Table 3 of the document, reproduced below, expressed in terms of the metric $L_{night,outside}$[2], which is an annual average with an 8- hour time base (23:00 - 07:00 hours).

Table 4: Effects of different levels of night noise on the populations health
(source: WHO Night Noise Guidelines, Table 3)

Average night noise level over a year $L_{night,outside}$	Health effects observed in the population
Up to 30 dB	Although individual sensitivities and circumstances may differ, it appears that up to this level no substantial biological effects are observed. $L_{night,outside}$ of 30 dB is equivalent to the no observed effect level (NOEL) for night noise.
30 to 40 dB	A number of effects on sleep are observed from this range: body movements, awakening, self-reported sleep disturbance, arousals. The intensity of the effect depends on the nature of the source and the number of events. Vulnerable groups (for example children, the chronically ill and the elderly) are more susceptible. However, even in the worst cases the effects seem modest. $L_{night,outside}$ of 40 dB is equivalent to the lowest observed adverse effect level (LOAEL) for night noise.
40 to 55 dB	Adverse health effects are observed among the exposed population. Many people have to adapt their lives to cope with the noise at night. Vulnerable groups are more severely affected.
Above 55 dB	The situation is considered increasingly dangerous for public health. Adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed. There is evidence that the risk of cardiovascular disease increases.

[2] Defined in the Environmental Noise Directive (2002/49/EC).

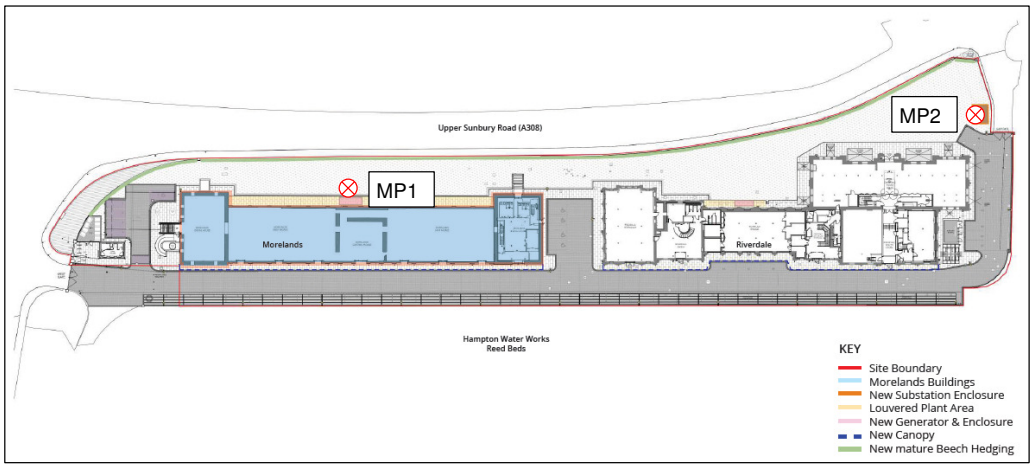
6 Environmental Noise Survey

6.1 Procedure

Monitoring was undertaken between the 21st April 2021 and 27th April 2021 to characterise the local existing background and ambient sound climate. Measurements were made at the following locations:

- MP1: North boundary of the site, approximately 7m from the mid-point of the Morelands building north façade (21/04/2021 to 23/04/2021);
- MP2: East boundary of the site, approximately 9m from the corner of the Riverside building (23/04/2021 to 27/04/2021).

Figure 3: Noise monitoring positions



The microphone was mounted on an extension pole such that its diaphragm was of the order 2m above local ground level. The data are considered to be free-field values due to the minimal contribution form reflected sound from surfaces other than the ground plane.

The measurements were obtained using the instrumentation scheduled below, which complies with the Type 1 specification of IEC 60651 and IEC 60804, Class 1 specification of IEC 61260 and IEC 61672 and Class 1 of IEC 60942 as applicable.

The following instrumentation and equipment was used during the testing:

Table 5: Schedule of instrumentation

Type	Serial Number	Calibration Certificate	Calibration Due Date
SVANTEK SVAN 971 sound level meter	56214	TCRT20/1691	10-11-2022
SVANTEK SV18 preamplifier	57317		
ACO microphone 7025E	70751		
SVANTEK SV33A acoustic calibrator	58015		
SVANTEK weather protection kit	n/a	n/a	n/a

Field calibration checks were made using a calibrator meeting Class 1 of IEC 60942 at the beginning and end of the measurement session. No significant drift was encountered (0.2 dB), calibration level 114.0 dB ± 0.2dB @ 1000 Hz ± 0.2%.

Various statistical broad-band and spectral sound pressure level measurements were obtained during the survey. For background and ambient measurements, a measurement time interval T_m = 15 minutes was used for sampling. The quantities recorded included:

- $L_{eq,T}$: 1/1 and 1/3 octave band Z-weighted and broadband (A-weighted) values of the equivalent continuous sound pressure level over the measurement period, T;
- L_{Fmax}: 1/1 octave band Z-weighted and broadband (A-weighted) values of the maximum sound pressure level for the measurement period, T;
- $L_{F90\%,T}$: 1/1 octave band Z-weighted and broadband (A-weighted) values of the sound pressure level exceeded for 90% of the measurement period, T.

6.2 Results

The recorded survey data is shown in Appendix A. Broadband sound pressure level data over the survey period (L_{AFmax}, L_{Aeq} and $L_{AF90\%}$ values) are shown graphically below:

Figure 4: Ambient and background measurement results at MP1

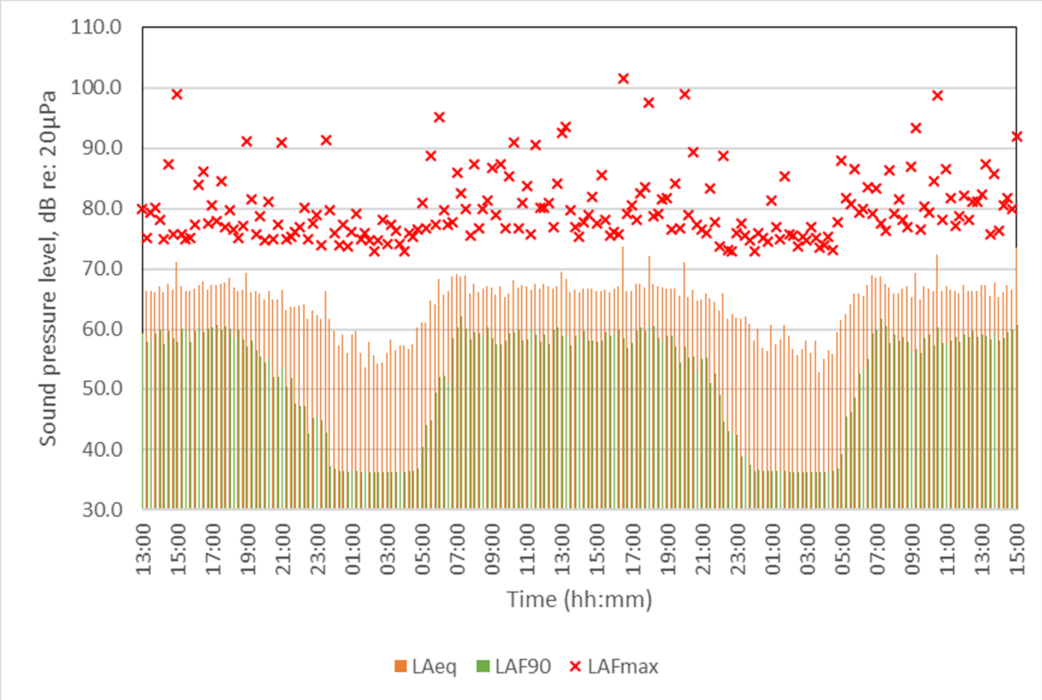
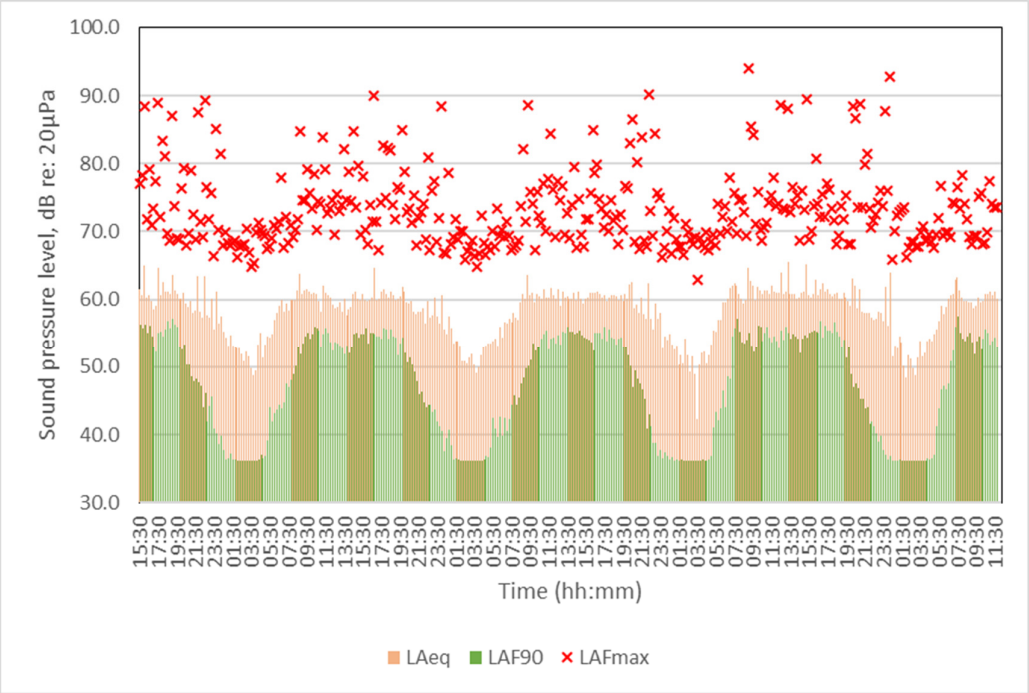


Figure 5: Ambient and background measurement results at MP2



As noted at Section 4.4 above, the Local Authority SPD requires that developments that may generate noise should be evaluated as per the method set out in BS 4142.

In respect of determining background sound levels, the commentary to Clause 8.1 of the British Standard advises that:

> *"In using the background sound level in the method for rating and assessing industrial and commercial sound it is important to ensure that values are reliable and suitably represent both the particular circumstances and periods of interest. For this purpose, the objective is not simply to ascertain a lowest measured background sound level, but rather to quantify what is typical during particular time periods."*

The standard doesn't explicitly advise how a typical background sound level(s) should be determined. Note 1 to Subclause 8.1.4 makes it clear that it is not a simple matter of identifying a minimum or modal value over a particular period, but recognizes that several periods of measurement may be necessary and that a thorough analysis of the data may be required.

The background sound level data have been plotted as distribution graphs for the day and night periods, as per Figures 6 to 9 below and typical values have been derived accordingly, Table 6 refers.

On this point, for the daytime, the typical value has been assessed based on professional judgment. A lower level than the modal value is considered appropriate, having regard to contextual matters such as the absolute sound level that would result from the corresponding rating level.

For the night, the modal value is numerically equal to the lowest value and this has therefore been taken.

Table 6: Typical background sound levels

Measurement Position	Typical Daytime Background and Ambient Sound Levels	
	$L_{AF90,60min}$ (07:00-23:00 hrs)	$L_{AF90,15min}$ (23:00-07:00 hrs)
MP1	52 dB	36 dB
MP2	48 dB	36 dB

Figure 6: Distribution of $L_{AF90,15min}$ sound levels at MP1 during the daytime

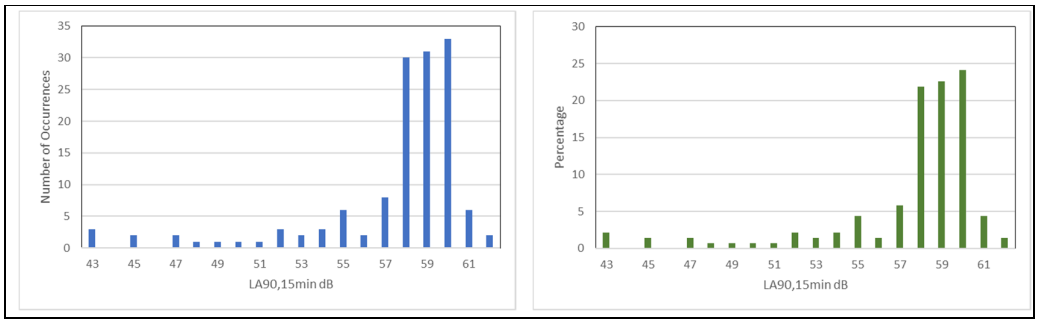


Figure 7: Distribution of $L_{AF90,15min}$ sound levels at MP1 during the night

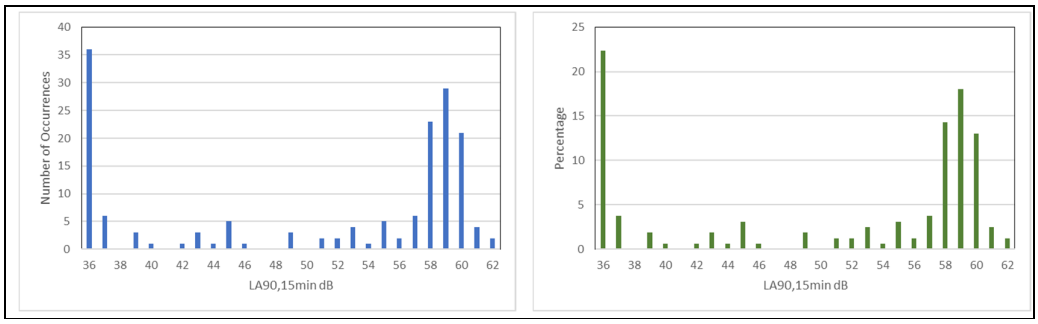


Figure 8: Distribution of $L_{AF90,15min}$ sound levels at MP2 during the daytime

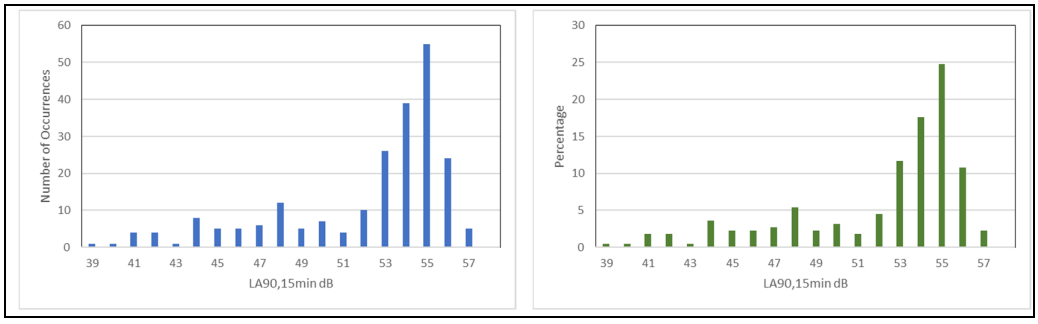
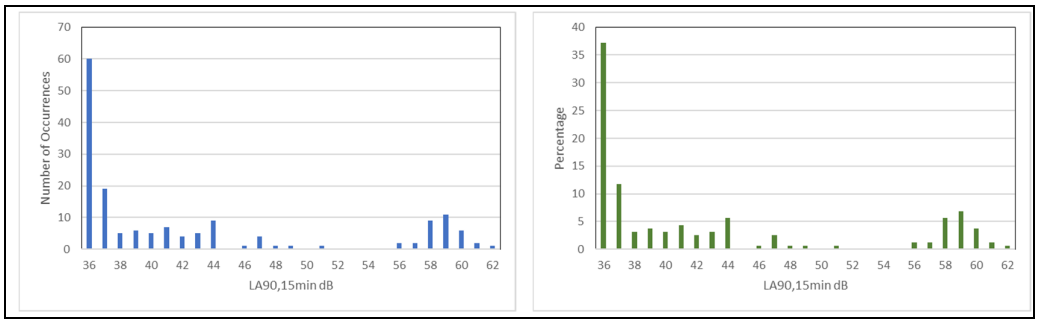


Figure 9: Distribution of $L_{AF90,15min}$ sound levels at MP2 during the night



7 External Noise Criteria

7.1 Residential Premises

As noted above, the Richmond SPD requires new plant to be assessed in accordance with BS 4142. Based on Table 2 therein, it is proposed that a rating level be set 5 dB below the typical background sound level.

The derived external noise criteria at residential receptors are summarised in Table 7:

Table 7: External Noise Design Criteria

Plant location	Receptor	Design Criterion	
		Daytime (07:00-23:00)	Night time (23:00-07:00)
Any location on site	Third party residential window or at a height of 1.2m above any adjacent residential garden, terrace, balcony or patio	43 dB $L_{Ar,Tr}$	31 dB $L_{Ar,Tr}$

Consideration may in principle need to be given to whether acoustic features are present at an assessment location. Features such as tones or impulses will be quantified using, for example, the procedures in Annex C and Annex E of BS 4142:2014 respectively. Where such features are present at an assessment location, the character corrections set out in Clause 9 of BS 4142 shall be applied as applicable.

Achievement of the values in Table 7 would result in absolute sound levels well below the LOAEL values that may be derived from the WHO documents reviewed above. Further, internal sound levels would meet the guidelines given in Table 4 of BS 8233, when windows are open.

Note that the limiting noise criteria apply with all mechanical plant operating. The selection of future mechanical plant items must allow for the combined effect of all plant noise to be introduced to the site.

7.2 Commercial Premises

BS 4142 is not applicable to the assessment of industrial/commercial sound sources at commercial premises. In this context, it is reasonable to assess noise emissions to commercial properties in line with the guidelines provided in BS 8233:2014, as below.

Objective	Typical situations	Design range $L_{Aeq,T}$ dB
Typical noise levels for acoustic privacy in shared spaces	Restaurant	40 – 55
	Open plan office	45 – 50
	Night club, public house	40 – 45
	Ballroom, banqueting hall	35 – 40
	Living room	35 – 40

NOTE See Noise control in building services [28] and BS EN ISO 3382.

Activity	Location	Design range dB $L_{Aeq,\,T}$
Speech or telephone communications	Department store Cafeteria, canteen, kitchen	50 – 55
	Concourse Corridor, circulation space	45 – 55
Study and work requiring concentration	Library, gallery, museum	40 – 50
	Staff/meeting room, training room	35 – 45
	Executive office	35 – 40
Listening	Place of worship, counselling, meditation, relaxation	30 – 35

In view of the details presented above it is considered reasonable to adopt a noise criterion of 40 dB $L_{Aeq,T}$ for commercial spaces in the proximity of the site.

Various sources of guidance advise that any type of window in a façade when partially open will provide a weighted sound reduction index of 10 to 15 dB R_w. It is reasonable to stipulate a noise criterion external to windows of commercial premises by taking account of the internal design noise level and the loss expected through an openable window (10 dB being used). This gives rise to the following criterion.

Noise criterion external to Commercial office spaces = 50 dB $L_{Aeq,T}$

7.3 Vibration – Mechanical Plant

It is recommended that the client provisions for appropriate vibration isolation mountings for the proposed mechanical plant items. It is recommended that the plant be installed on vibration isolation mounts providing a minimum of 98% isolation efficiency at the lowest forcing frequency using an isolation mount system approved by the plant supplier. In addition, all pipework should be suitably isolated from the building structure.

8 Conclusions

A detailed environmental noise survey has been undertaken to determine the underlying ambient and background noise level climate in the vicinity of the applicant site.

Appropriate external noise criteria have been identified on the basis of national and local planning policy on noise and other industry Standards and sources of guidance, and this shall be used in the future selection of mechanical plant and noise mitigation scheme (if necessary) to maintain the criteria prescribed herein. In this event future reservations with respect to noise emissions from the new fixed mechanical plant would not be expected in relation to the planning application.

Appendix A: Measurement Data

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
21/04/2021	13:00	@RBH525	00:15:00	80.0	67.7	59.4
21/04/2021	13:15	@RBH526	00:15:00	75.2	66.4	57.9
21/04/2021	13:30	@RBH527	00:15:00	79.4	66.4	58.2
21/04/2021	13:45	@RBH528	00:15:00	80.1	66.1	59.3
21/04/2021	14:00	@RBH529	00:15:00	78.1	67.1	59.9
21/04/2021	14:15	@RBH530	00:15:00	75.0	66.2	57.6
21/04/2021	14:30	@RBH531	00:15:00	87.3	67.5	59.7
21/04/2021	14:45	@RBH532	00:15:00	75.8	66.5	58.6
21/04/2021	15:00	@RBH533	00:15:00	98.9	71.1	58.0
21/04/2021	15:15	@RBH534	00:15:00	75.7	67.1	60.1
21/04/2021	15:30	@RBH535	00:15:00	75.0	66.5	60.0
21/04/2021	15:45	@RBH536	00:15:00	75.2	66.5	57.9
21/04/2021	16:00	@RBH537	00:15:00	77.3	66.7	59.8
21/04/2021	16:15	@RBH538	00:15:00	84.0	67.4	60.3
21/04/2021	16:30	@RBH539	00:15:00	86.2	67.9	59.5
21/04/2021	16:45	@RBH540	00:15:00	77.6	66.7	60.1
21/04/2021	17:00	@RBH541	00:15:00	80.5	67.3	60.4
21/04/2021	17:15	@RBH542	00:15:00	78.0	67.4	60.7
21/04/2021	17:30	@RBH543	00:15:00	84.6	67.6	60.0
21/04/2021	17:45	@RBH544	00:15:00	76.9	67.8	60.5
21/04/2021	18:00	@RBH545	00:15:00	79.7	68.5	60.2
21/04/2021	18:15	@RBH546	00:15:00	76.5	67.0	58.5
21/04/2021	18:30	@RBH547	00:15:00	75.1	66.4	60.0
21/04/2021	18:45	@RBH548	00:15:00	77.2	66.6	58.4
21/04/2021	19:00	@RBH549	00:15:00	91.1	69.4	57.1
21/04/2021	19:15	@RBH550	00:15:00	81.5	66.2	58.2
21/04/2021	19:30	@RBH551	00:15:00	75.7	66.3	56.6
21/04/2021	19:45	@RBH552	00:15:00	78.8	65.9	55.4
21/04/2021	20:00	@RBH553	00:15:00	74.8	65.0	54.4
21/04/2021	20:15	@RBH554	00:15:00	81.2	66.5	55.1
21/04/2021	20:30	@RBH555	00:15:00	75.0	64.9	52.0
21/04/2021	20:45	@RBH556	00:15:00	77.3	65.0	52.0
21/04/2021	21:00	@RBH557	00:15:00	91.0	66.6	53.6
21/04/2021	21:15	@RBH558	00:15:00	75.0	63.2	50.3
21/04/2021	21:30	@RBH559	00:15:00	75.3	63.7	51.7
21/04/2021	21:45	@RBH560	00:15:00	76.1	63.8	47.6
21/04/2021	22:00	@RBH561	00:15:00	77.0	64.0	47.1
21/04/2021	22:15	@RBH562	00:15:00	80.3	64.1	47.1
21/04/2021	22:30	@RBH563	00:15:00	75.0	61.8	42.6
21/04/2021	22:45	@RBH564	00:15:00	77.5	63.2	45.2
21/04/2021	23:00	@RBH565	00:15:00	79.0	62.5	45.3
21/04/2021	23:15	@RBH566	00:15:00	74.1	61.7	44.8
21/04/2021	23:30	@RBH567	00:15:00	91.4	66.4	42.7

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
21/04/2021	23:45	@RBH568	00:15:00	79.8	61.8	37.1
22/04/2021	00:00	@RBH569	00:15:00	75.9	59.7	36.7
22/04/2021	00:15	@RBH570	00:15:00	74.0	57.4	36.4
22/04/2021	00:30	@RBH571	00:15:00	77.3	59.2	36.4
22/04/2021	00:45	@RBH572	00:15:00	73.7	56.1	36.2
22/04/2021	01:00	@RBH573	00:15:00	76.1	59.1	36.3
22/04/2021	01:15	@RBH574	00:15:00	79.2	59.7	36.4
22/04/2021	01:30	@RBH575	00:15:00	74.9	56.0	36.1
22/04/2021	01:45	@RBH576	00:15:00	76.0	53.6	36.1
22/04/2021	02:00	@RBH577	00:15:00	74.7	57.9	36.1
22/04/2021	02:15	@RBH578	00:15:00	72.9	55.6	36.1
22/04/2021	02:30	@RBH579	00:15:00	74.8	54.1	36.1
22/04/2021	02:45	@RBH580	00:15:00	78.2	54.4	36.1
22/04/2021	03:00	@RBH581	00:15:00	74.2	56.0	36.1
22/04/2021	03:15	@RBH582	00:15:00	77.4	58.5	36.1
22/04/2021	03:30	@RBH583	00:15:00	76.4	56.5	36.1
22/04/2021	03:45	@RBH584	00:15:00	74.2	57.4	36.2
22/04/2021	04:00	@RBH585	00:15:00	72.9	57.4	36.2
22/04/2021	04:15	@RBH586	00:15:00	76.0	56.8	36.3
22/04/2021	04:30	@RBH587	00:15:00	75.3	57.7	36.4
22/04/2021	04:45	@RBH588	00:15:00	76.6	60.4	36.7
22/04/2021	05:00	@RBH589	00:15:00	80.9	61.2	40.4
22/04/2021	05:15	@RBH590	00:15:00	76.8	61.2	44.0
22/04/2021	05:30	@RBH591	00:15:00	88.7	64.7	44.8
22/04/2021	05:45	@RBH592	00:15:00	77.3	64.1	49.3
22/04/2021	06:00	@RBH593	00:15:00	95.1	68.4	52.0
22/04/2021	06:15	@RBH594	00:15:00	79.8	65.9	52.1
22/04/2021	06:30	@RBH595	00:15:00	77.3	66.3	51.0
22/04/2021	06:45	@RBH596	00:15:00	77.8	68.8	58.5
22/04/2021	07:00	@RBH597	00:15:00	86.0	69.1	60.3
22/04/2021	07:15	@RBH598	00:15:00	82.7	68.7	62.2
22/04/2021	07:30	@RBH599	00:15:00	80.0	68.9	60.2
22/04/2021	07:45	@RBH600	00:15:00	75.5	66.0	58.4
22/04/2021	08:00	@RBH601	00:15:00	87.3	67.5	59.5
22/04/2021	08:15	@RBH602	00:15:00	76.8	66.2	59.3
22/04/2021	08:30	@RBH603	00:15:00	79.9	66.7	58.9
22/04/2021	08:45	@RBH604	00:15:00	81.3	67.1	60.3
22/04/2021	09:00	@RBH605	00:15:00	86.8	67.0	58.6
22/04/2021	09:15	@RBH606	00:15:00	79.1	65.7	57.5
22/04/2021	09:30	@RBH607	00:15:00	87.3	67.1	57.5
22/04/2021	09:45	@RBH608	00:15:00	76.7	65.4	58.1
22/04/2021	10:00	@RBH609	00:15:00	85.3	66.0	59.3
22/04/2021	10:15	@RBH610	00:15:00	90.9	68.2	59.6

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
22/04/2021	10:30	@RBH611	00:15:00	76.7	67.1	59.9
22/04/2021	10:45	@RBH612	00:15:00	81.0	67.3	58.1
22/04/2021	11:00	@RBH613	00:15:00	83.7	67.1	58.3
22/04/2021	11:15	@RBH614	00:15:00	75.7	66.5	59.9
22/04/2021	11:30	@RBH615	00:15:00	90.6	67.5	59.2
22/04/2021	11:45	@RBH616	00:15:00	80.2	66.8	58.0
22/04/2021	12:00	@RBH617	00:15:00	80.1	67.6	59.2
22/04/2021	12:15	@RBH618	00:15:00	80.9	67.1	57.6
22/04/2021	12:30	@RBH619	00:15:00	77.0	66.8	60.0
22/04/2021	12:45	@RBH620	00:15:00	84.2	67.1	60.4
22/04/2021	13:00	@RBH621	00:15:00	92.6	69.5	59.0
22/04/2021	13:15	@RBH622	00:15:00	93.6	68.5	58.8
22/04/2021	13:30	@RBH623	00:15:00	79.7	66.1	57.4
22/04/2021	13:45	@RBH624	00:15:00	77.1	66.6	59.0
22/04/2021	14:00	@RBH625	00:15:00	75.3	66.2	58.6
22/04/2021	14:15	@RBH626	00:15:00	77.7	66.9	59.8
22/04/2021	14:30	@RBH627	00:15:00	79.0	66.7	58.1
22/04/2021	14:45	@RBH628	00:15:00	82.0	66.8	58.1
22/04/2021	15:00	@RBH629	00:15:00	77.5	66.4	58.0
22/04/2021	15:15	@RBH630	00:15:00	85.5	66.3	58.2
22/04/2021	15:30	@RBH631	00:15:00	78.1	66.6	59.6
22/04/2021	15:45	@RBH632	00:15:00	75.5	66.1	58.9
22/04/2021	16:00	@RBH633	00:15:00	76.2	66.8	59.4
22/04/2021	16:15	@RBH634	00:15:00	75.7	67.1	59.9
22/04/2021	16:30	@RBH635	00:15:00	101.5	73.8	58.5
22/04/2021	16:45	@RBH636	00:15:00	79.2	66.4	56.9
22/04/2021	17:00	@RBH637	00:15:00	80.7	66.4	57.7
22/04/2021	17:15	@RBH638	00:15:00	78.2	67.5	59.8
22/04/2021	17:30	@RBH639	00:15:00	82.7	67.6	60.4
22/04/2021	17:45	@RBH640	00:15:00	83.6	66.9	59.8
22/04/2021	18:00	@RBH641	00:15:00	97.5	72.2	60.5
22/04/2021	18:15	@RBH642	00:15:00	78.8	67.5	60.5
22/04/2021	18:30	@RBH643	00:15:00	79.1	67.1	58.5
22/04/2021	18:45	@RBH644	00:15:00	81.5	67.0	58.1
22/04/2021	19:00	@RBH645	00:15:00	81.9	66.8	59.0
22/04/2021	19:15	@RBH646	00:15:00	76.5	66.8	59.0
22/04/2021	19:30	@RBH647	00:15:00	84.2	66.7	57.2
22/04/2021	19:45	@RBH648	00:15:00	76.7	65.6	54.3
22/04/2021	20:00	@RBH649	00:15:00	98.9	71.1	57.1
22/04/2021	20:15	@RBH650	00:15:00	79.0	65.3	55.1
22/04/2021	20:30	@RBH651	00:15:00	89.4	66.6	55.4
22/04/2021	20:45	@RBH652	00:15:00	77.3	64.8	52.8
22/04/2021	21:00	@RBH653	00:15:00	76.5	65.0	55.0

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
22/04/2021	21:15	@RBH654	00:15:00	76.0	65.9	55.1
22/04/2021	21:30	@RBH655	00:15:00	83.4	65.1	50.9
22/04/2021	21:45	@RBH656	00:15:00	77.8	64.6	52.5
22/04/2021	22:00	@RBH657	00:15:00	73.7	63.2	49.0
22/04/2021	22:15	@RBH658	00:15:00	88.8	66.0	44.5
22/04/2021	22:30	@RBH659	00:15:00	73.1	61.8	42.9
22/04/2021	22:45	@RBH660	00:15:00	73.0	62.5	42.6
22/04/2021	23:00	@RBH661	00:15:00	76.0	61.9	42.4
22/04/2021	23:15	@RBH662	00:15:00	77.6	61.7	38.8
22/04/2021	23:30	@RBH663	00:15:00	75.6	62.1	38.8
22/04/2021	23:45	@RBH664	00:15:00	74.9	61.1	37.4
23/04/2021	00:00	@RBH665	00:15:00	73.0	58.3	36.4
23/04/2021	00:15	@RBH666	00:15:00	76.0	60.2	36.5
23/04/2021	00:30	@RBH667	00:15:00	75.1	57.1	36.4
23/04/2021	00:45	@RBH668	00:15:00	74.6	56.4	36.3
23/04/2021	01:00	@RBH669	00:15:00	81.4	60.7	36.4
23/04/2021	01:15	@RBH670	00:15:00	76.9	57.6	36.3
23/04/2021	01:30	@RBH671	00:15:00	75.1	58.4	36.3
23/04/2021	01:45	@RBH672	00:15:00	85.3	60.7	36.3
23/04/2021	02:00	@RBH673	00:15:00	75.7	59.1	36.2
23/04/2021	02:15	@RBH674	00:15:00	75.6	56.8	36.1
23/04/2021	02:30	@RBH675	00:15:00	73.7	55.6	36.2
23/04/2021	02:45	@RBH676	00:15:00	75.3	56.7	36.2
23/04/2021	03:00	@RBH677	00:15:00	74.7	58.2	36.1
23/04/2021	03:15	@RBH678	00:15:00	76.9	56.0	36.1
23/04/2021	03:30	@RBH679	00:15:00	75.2	58.1	36.2
23/04/2021	03:45	@RBH680	00:15:00	73.5	52.8	36.1
23/04/2021	04:00	@RBH681	00:15:00	74.0	54.9	36.1
23/04/2021	04:15	@RBH682	00:15:00	75.5	56.5	36.1
23/04/2021	04:30	@RBH683	00:15:00	73.1	55.7	36.3
23/04/2021	04:45	@RBH684	00:15:00	77.8	59.7	36.8
23/04/2021	05:00	@RBH685	00:15:00	88.0	61.7	39.2
23/04/2021	05:15	@RBH686	00:15:00	81.9	62.6	45.4
23/04/2021	05:30	@RBH687	00:15:00	80.8	64.1	46.2
23/04/2021	05:45	@RBH688	00:15:00	86.5	65.9	48.6
23/04/2021	06:00	@RBH689	00:15:00	79.4	66.0	52.6
23/04/2021	06:15	@RBH690	00:15:00	80.0	65.6	53.1
23/04/2021	06:30	@RBH691	00:15:00	83.6	67.4	54.9
23/04/2021	06:45	@RBH692	00:15:00	79.2	69.0	59.3
23/04/2021	07:00	@RBH693	00:15:00	83.3	68.6	59.9
23/04/2021	07:15	@RBH694	00:15:00	77.5	68.9	61.7
23/04/2021	07:30	@RBH695	00:15:00	76.4	67.5	60.5
23/04/2021	07:45	@RBH696	00:15:00	86.3	66.9	57.7

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
23/04/2021	08:00	@RBH697	00:15:00	79.1	66.0	59.2
23/04/2021	08:15	@RBH698	00:15:00	81.6	65.9	58.2
23/04/2021	08:30	@RBH699	00:15:00	78.3	66.8	58.8
23/04/2021	08:45	@RBH700	00:15:00	76.9	67.2	58.0
23/04/2021	09:00	@RBH701	00:15:00	87.0	65.3	55.9
23/04/2021	09:15	@RBH702	00:15:00	93.3	69.3	56.8
23/04/2021	09:30	@RBH703	00:15:00	76.6	64.9	55.9
23/04/2021	09:45	@RBH704	00:15:00	80.4	67.2	58.5
23/04/2021	10:00	@RBH705	00:15:00	79.3	66.7	59.1
23/04/2021	10:15	@RBH706	00:15:00	84.6	66.3	57.4
23/04/2021	10:30	@RBH707	00:15:00	98.8	72.3	60.4
23/04/2021	10:45	@RBH708	00:15:00	78.2	66.4	57.8
23/04/2021	11:00	@RBH709	00:15:00	86.5	67.1	57.5
23/04/2021	11:15	@RBH710	00:15:00	81.8	66.5	58.1
23/04/2021	11:30	@RBH711	00:15:00	77.1	66.3	58.7
23/04/2021	11:45	@RBH712	00:15:00	78.7	65.9	58.0
23/04/2021	12:00	@RBH713	00:15:00	82.1	67.3	59.1
23/04/2021	12:15	@RBH714	00:15:00	78.1	66.4	58.8
23/04/2021	12:30	@RBH715	00:15:00	81.1	66.3	59.7
23/04/2021	12:45	@RBH716	00:15:00	81.2	66.5	58.7
23/04/2021	13:00	@RBH717	00:15:00	82.4	67.3	59.2
23/04/2021	13:15	@RBH718	00:15:00	87.3	67.3	59.0
23/04/2021	13:30	@RBH719	00:15:00	75.7	65.5	58.4
23/04/2021	13:45	@RBH720	00:15:00	85.8	67.7	59.5
23/04/2021	14:00	@RBH721	00:15:00	76.3	65.5	58.1
23/04/2021	14:15	@RBH722	00:15:00	80.6	66.2	58.5
23/04/2021	14:30	@RBH723	00:15:00	81.8	67.3	59.6
23/04/2021	14:45	@RBH724	00:15:00	80.0	66.7	60.0
23/04/2021	15:00	@RBH725	00:01:52	91.9	73.7	60.8

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
23/04/2021	15:30	@RBH729	00:15:00	77.0	61.5	56.2
23/04/2021	15:45	@RBH730	00:15:00	78.4	60.6	55.7
23/04/2021	16:00	@RBH731	00:15:00	88.5	65.1	56.3
23/04/2021	16:15	@RBH732	00:15:00	71.9	60.3	55.1
23/04/2021	16:30	@RBH733	00:15:00	79.2	60.7	56.1
23/04/2021	16:45	@RBH734	00:15:00	71.0	59.8	54.5
23/04/2021	17:00	@RBH735	00:15:00	73.3	58.6	53.0
23/04/2021	17:15	@RBH736	00:15:00	77.5	59.2	52.3
23/04/2021	17:30	@RBH737	00:15:00	88.9	64.6	55.1
23/04/2021	17:45	@RBH738	00:15:00	72.2	60.6	55.3
23/04/2021	18:00	@RBH739	00:15:00	83.4	62.5	54.5
23/04/2021	18:15	@RBH740	00:15:00	81.1	61.2	55.5
23/04/2021	18:30	@RBH741	00:15:00	69.7	61.2	56.8
23/04/2021	18:45	@RBH742	00:15:00	68.6	60.8	55.7
23/04/2021	19:00	@RBH743	00:15:00	87.1	63.6	57.2
23/04/2021	19:15	@RBH744	00:15:00	73.7	61.3	56.2
23/04/2021	19:30	@RBH745	00:15:00	69.1	60.9	56.0
23/04/2021	19:45	@RBH746	00:15:00	68.9	60.1	53.0
23/04/2021	20:00	@RBH747	00:15:00	76.4	60.1	52.6
23/04/2021	20:15	@RBH748	00:15:00	79.3	61.1	53.3
23/04/2021	20:30	@RBH749	00:15:00	68.0	59.4	50.3
23/04/2021	20:45	@RBH750	00:15:00	69.7	59.0	50.4
23/04/2021	21:00	@RBH751	00:15:00	79.1	59.8	48.5
23/04/2021	21:15	@RBH752	00:15:00	72.6	58.1	47.8
23/04/2021	21:30	@RBH753	00:15:00	68.8	58.4	48.2
23/04/2021	21:45	@RBH754	00:15:00	87.6	63.5	47.7
23/04/2021	22:00	@RBH755	00:15:00	71.5	58.3	47.1
23/04/2021	22:15	@RBH756	00:15:00	69.2	57.4	44.0
23/04/2021	22:30	@RBH757	00:15:00	89.4	63.5	46.2
23/04/2021	22:45	@RBH758	00:15:00	76.6	57.7	42.0
23/04/2021	23:00	@RBH759	00:15:00	71.7	57.4	44.2
23/04/2021	23:15	@RBH760	00:15:00	75.6	60.1	45.6
23/04/2021	23:30	@RBH761	00:15:00	66.5	55.5	40.8
23/04/2021	23:45	@RBH762	00:15:00	85.2	61.2	40.1
24/04/2021	00:00	@RBH763	00:15:00	70.3	56.4	38.6
24/04/2021	00:15	@RBH764	00:15:00	81.4	57.6	39.9
24/04/2021	00:30	@RBH765	00:15:00	67.9	55.2	37.7
24/04/2021	00:45	@RBH766	00:15:00	70.0	54.3	36.4
24/04/2021	01:00	@RBH767	00:15:00	68.3	53.1	36.5
24/04/2021	01:15	@RBH768	00:15:00	68.1	54.6	37.2
24/04/2021	01:30	@RBH769	00:15:00	68.4	53.0	36.3
24/04/2021	01:45	@RBH770	00:15:00	68.6	53.0	36.3
24/04/2021	02:00	@RBH771	00:15:00	66.2	52.8	36.2

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
24/04/2021	02:15	@RBH772	00:15:00	67.7	52.9	36.2
24/04/2021	02:30	@RBH773	00:15:00	68.0	51.9	36.2
24/04/2021	02:45	@RBH774	00:15:00	68.2	50.9	36.1
24/04/2021	03:00	@RBH775	00:15:00	70.5	52.2	36.1
24/04/2021	03:15	@RBH776	00:15:00	67.0	51.6	36.2
24/04/2021	03:30	@RBH777	00:15:00	64.9	49.7	36.1
24/04/2021	03:45	@RBH778	00:15:00	65.4	48.7	36.1
24/04/2021	04:00	@RBH779	00:15:00	69.9	49.4	36.2
24/04/2021	04:15	@RBH780	00:15:00	71.2	53.4	36.3
24/04/2021	04:30	@RBH781	00:15:00	70.2	55.0	37.1
24/04/2021	04:45	@RBH782	00:15:00	69.7	51.4	36.5
24/04/2021	05:00	@RBH783	00:15:00	69.4	53.2	36.8
24/04/2021	05:15	@RBH784	00:15:00	67.4	54.5	39.2
24/04/2021	05:30	@RBH785	00:15:00	67.8	54.3	44.0
24/04/2021	05:45	@RBH786	00:15:00	69.0	54.9	42.0
24/04/2021	06:00	@RBH787	00:15:00	70.9	56.9	43.2
24/04/2021	06:15	@RBH788	00:15:00	70.5	58.0	43.7
24/04/2021	06:30	@RBH789	00:15:00	71.5	59.0	44.3
24/04/2021	06:45	@RBH790	00:15:00	77.9	60.0	43.9
24/04/2021	07:00	@RBH791	00:15:00	67.7	58.2	44.8
24/04/2021	07:15	@RBH792	00:15:00	72.2	59.4	47.6
24/04/2021	07:30	@RBH793	00:15:00	68.3	58.4	47.0
24/04/2021	07:45	@RBH794	00:15:00	70.9	60.0	48.1
24/04/2021	08:00	@RBH795	00:15:00	69.2	59.9	49.0
24/04/2021	08:15	@RBH796	00:15:00	70.3	59.9	50.1
24/04/2021	08:30	@RBH797	00:15:00	71.8	61.3	52.9
24/04/2021	08:45	@RBH798	00:15:00	84.8	63.8	51.9
24/04/2021	09:00	@RBH799	00:15:00	74.6	60.7	53.5
24/04/2021	09:15	@RBH800	00:15:00	74.6	61.3	54.5
24/04/2021	09:30	@RBH801	00:15:00	79.1	61.5	55.0
24/04/2021	09:45	@RBH802	00:15:00	75.7	61.2	54.1
24/04/2021	10:00	@RBH803	00:15:00	73.4	60.9	54.8
24/04/2021	10:15	@RBH804	00:15:00	78.5	61.0	56.0
24/04/2021	10:30	@RBH805	00:15:00	70.3	60.8	55.7
24/04/2021	10:45	@RBH806	00:15:00	74.5	59.7	55.4
24/04/2021	11:00	@RBH807	00:15:00	74.1	58.2	52.9
24/04/2021	11:15	@RBH808	00:15:00	83.9	62.0	54.8
24/04/2021	11:30	@RBH809	00:15:00	79.1	61.0	55.7
24/04/2021	11:45	@RBH810	00:15:00	72.6	60.6	55.1
24/04/2021	12:00	@RBH811	00:15:00	73.4	60.3	53.6
24/04/2021	12:15	@RBH812	00:15:00	74.7	59.2	52.4
24/04/2021	12:30	@RBH813	00:15:00	69.6	58.6	53.6
24/04/2021	12:45	@RBH814	00:15:00	75.5	58.9	53.4

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
24/04/2021	13:00	@RBH815	00:15:00	73.0	59.5	53.2
24/04/2021	13:15	@RBH816	00:15:00	73.9	58.1	52.7
24/04/2021	13:30	@RBH817	00:15:00	82.1	60.2	51.9
24/04/2021	13:45	@RBH818	00:15:00	74.6	57.8	53.2
24/04/2021	14:00	@RBH819	00:15:00	78.8	58.6	52.1
24/04/2021	14:15	@RBH820	00:15:00	74.5	59.0	53.0
24/04/2021	14:30	@RBH821	00:15:00	84.8	60.9	54.8
24/04/2021	14:45	@RBH822	00:15:00	73.6	61.1	55.1
24/04/2021	15:00	@RBH823	00:15:00	79.7	60.1	54.3
24/04/2021	15:15	@RBH824	00:15:00	69.6	59.9	54.8
24/04/2021	15:30	@RBH825	00:15:00	78.2	60.9	54.9
24/04/2021	15:45	@RBH826	00:15:00	70.3	59.9	55.8
24/04/2021	16:00	@RBH827	00:15:00	68.2	59.7	53.5
24/04/2021	16:15	@RBH828	00:15:00	74.0	60.0	55.0
24/04/2021	16:30	@RBH829	00:15:00	71.5	60.4	55.0
24/04/2021	16:45	@RBH830	00:15:00	90.0	64.6	54.9
24/04/2021	17:00	@RBH831	00:15:00	71.5	59.9	54.5
24/04/2021	17:15	@RBH832	00:15:00	67.3	60.1	54.6
24/04/2021	17:30	@RBH833	00:15:00	74.2	61.1	54.2
24/04/2021	17:45	@RBH834	00:15:00	82.7	61.5	55.7
24/04/2021	18:00	@RBH835	00:15:00	74.9	60.8	55.6
24/04/2021	18:15	@RBH836	00:15:00	82.4	60.2	54.2
24/04/2021	18:30	@RBH837	00:15:00	82.0	61.1	55.5
24/04/2021	18:45	@RBH838	00:15:00	73.9	60.6	54.6
24/04/2021	19:00	@RBH839	00:15:00	71.8	60.0	54.4
24/04/2021	19:15	@RBH840	00:15:00	76.6	60.1	51.7
24/04/2021	19:30	@RBH841	00:15:00	76.3	60.4	53.5
24/04/2021	19:45	@RBH842	00:15:00	85.0	61.9	54.3
24/04/2021	20:00	@RBH843	00:15:00	78.9	61.1	52.1
24/04/2021	20:15	@RBH844	00:15:00	72.8	59.5	50.6
24/04/2021	20:30	@RBH845	00:15:00	73.3	59.4	51.3
24/04/2021	20:45	@RBH846	00:15:00	71.4	59.7	50.4
24/04/2021	21:00	@RBH847	00:15:00	75.4	58.2	49.2
24/04/2021	21:15	@RBH848	00:15:00	68.0	57.8	47.9
24/04/2021	21:30	@RBH849	00:15:00	72.0	58.1	46.0
24/04/2021	21:45	@RBH850	00:15:00	72.8	58.3	46.3
24/04/2021	22:00	@RBH851	00:15:00	74.1	58.8	44.8
24/04/2021	22:15	@RBH852	00:15:00	68.9	56.5	44.1
24/04/2021	22:30	@RBH853	00:15:00	80.9	59.7	44.3
24/04/2021	22:45	@RBH854	00:15:00	67.3	57.2	44.3
24/04/2021	23:00	@RBH855	00:15:00	76.1	57.7	43.4
24/04/2021	23:15	@RBH856	00:15:00	77.4	60.3	43.6
24/04/2021	23:30	@RBH857	00:15:00	68.5	57.6	42.0

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
24/04/2021	23:45	@RBH858	00:15:00	72.0	56.4	41.2
25/04/2021	00:00	@RBH859	00:15:00	88.5	60.6	40.6
25/04/2021	00:15	@RBH860	00:15:00	67.0	55.5	37.5
25/04/2021	00:30	@RBH861	00:15:00	66.7	54.8	39.4
25/04/2021	00:45	@RBH862	00:15:00	78.7	57.5	40.7
25/04/2021	01:00	@RBH863	00:15:00	68.1	55.8	38.5
25/04/2021	01:15	@RBH864	00:15:00	69.2	53.5	36.3
25/04/2021	01:30	@RBH865	00:15:00	71.9	53.7	36.5
25/04/2021	01:45	@RBH866	00:15:00	68.9	53.8	36.3
25/04/2021	02:00	@RBH867	00:15:00	70.0	53.2	36.2
25/04/2021	02:15	@RBH868	00:15:00	70.0	50.8	36.1
25/04/2021	02:30	@RBH869	00:15:00	65.9	50.8	36.2
25/04/2021	02:45	@RBH870	00:15:00	67.1	50.6	36.1
25/04/2021	03:00	@RBH871	00:15:00	67.7	51.4	36.2
25/04/2021	03:15	@RBH872	00:15:00	68.6	51.9	36.2
25/04/2021	03:30	@RBH873	00:15:00	66.4	50.4	36.2
25/04/2021	03:45	@RBH874	00:15:00	64.8	49.1	36.1
25/04/2021	04:00	@RBH875	00:15:00	66.7	49.9	36.1
25/04/2021	04:15	@RBH876	00:15:00	72.3	51.8	36.2
25/04/2021	04:30	@RBH877	00:15:00	68.3	52.9	36.4
25/04/2021	04:45	@RBH878	00:15:00	66.5	53.1	36.8
25/04/2021	05:00	@RBH879	00:15:00	67.8	53.5	36.7
25/04/2021	05:15	@RBH880	00:15:00	67.3	53.5	38.0
25/04/2021	05:30	@RBH881	00:15:00	70.0	53.7	42.4
25/04/2021	05:45	@RBH882	00:15:00	67.9	54.2	40.8
25/04/2021	06:00	@RBH883	00:15:00	73.4	53.1	39.7
25/04/2021	06:15	@RBH884	00:15:00	69.3	55.9	42.6
25/04/2021	06:30	@RBH885	00:15:00	70.2	54.3	39.8
25/04/2021	06:45	@RBH886	00:15:00	69.3	56.6	42.5
25/04/2021	07:00	@RBH887	00:15:00	71.6	56.5	40.5
25/04/2021	07:15	@RBH888	00:15:00	69.4	57.2	42.3
25/04/2021	07:30	@RBH889	00:15:00	67.2	56.6	44.4
25/04/2021	07:45	@RBH890	00:15:00	67.7	58.0	45.7
25/04/2021	08:00	@RBH891	00:15:00	68.1	57.4	44.3
25/04/2021	08:15	@RBH892	00:15:00	68.8	57.0	45.5
25/04/2021	08:30	@RBH893	00:15:00	73.7	59.6	47.6
25/04/2021	08:45	@RBH894	00:15:00	82.1	60.8	48.4
25/04/2021	09:00	@RBH895	00:15:00	71.4	60.2	49.8
25/04/2021	09:15	@RBH896	00:15:00	88.6	63.5	50.1
25/04/2021	09:30	@RBH897	00:15:00	75.8	60.7	51.0
25/04/2021	09:45	@RBH898	00:15:00	74.1	61.0	53.5
25/04/2021	10:00	@RBH899	00:15:00	67.3	59.6	52.5
25/04/2021	10:15	@RBH900	00:15:00	75.8	60.8	53.0

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
25/04/2021	10:30	@RBH901	00:15:00	72.4	60.4	53.0
25/04/2021	10:45	@RBH902	00:15:00	71.3	60.1	54.1
25/04/2021	11:00	@RBH903	00:15:00	77.0	61.4	54.9
25/04/2021	11:15	@RBH904	00:15:00	70.0	60.3	55.4
25/04/2021	11:30	@RBH905	00:15:00	77.8	60.3	52.6
25/04/2021	11:45	@RBH906	00:15:00	84.4	61.8	54.2
25/04/2021	12:00	@RBH907	00:15:00	76.1	60.6	54.4
25/04/2021	12:15	@RBH908	00:15:00	69.2	60.1	53.5
25/04/2021	12:30	@RBH909	00:15:00	77.4	61.4	54.7
25/04/2021	12:45	@RBH910	00:15:00	74.7	59.0	53.3
25/04/2021	13:00	@RBH911	00:15:00	76.7	61.2	55.2
25/04/2021	13:15	@RBH912	00:15:00	69.6	60.3	55.0
25/04/2021	13:30	@RBH913	00:15:00	72.7	60.4	56.0
25/04/2021	13:45	@RBH914	00:15:00	69.1	60.2	55.2
25/04/2021	14:00	@RBH915	00:15:00	73.9	60.2	55.2
25/04/2021	14:15	@RBH916	00:15:00	79.5	61.0	54.9
25/04/2021	14:30	@RBH917	00:15:00	67.7	60.0	55.1
25/04/2021	14:45	@RBH918	00:15:00	74.9	61.2	55.4
25/04/2021	15:00	@RBH919	00:15:00	69.6	60.1	54.7
25/04/2021	15:15	@RBH920	00:15:00	67.8	59.5	54.3
25/04/2021	15:30	@RBH921	00:15:00	71.8	60.0	54.2
25/04/2021	15:45	@RBH922	00:15:00	71.9	60.3	54.0
25/04/2021	16:00	@RBH923	00:15:00	75.7	61.0	53.7
25/04/2021	16:15	@RBH924	00:15:00	84.9	61.0	52.5
25/04/2021	16:30	@RBH925	00:15:00	78.6	60.9	55.0
25/04/2021	16:45	@RBH926	00:15:00	79.9	61.2	55.0
25/04/2021	17:00	@RBH927	00:15:00	74.9	60.7	55.0
25/04/2021	17:15	@RBH928	00:15:00	73.5	60.3	54.2
25/04/2021	17:30	@RBH929	00:15:00	70.7	60.7	56.0
25/04/2021	17:45	@RBH930	00:15:00	72.5	59.8	53.8
25/04/2021	18:00	@RBH931	00:15:00	70.1	60.4	55.6
25/04/2021	18:15	@RBH932	00:15:00	74.6	60.7	54.4
25/04/2021	18:30	@RBH933	00:15:00	71.6	60.6	54.1
25/04/2021	18:45	@RBH934	00:15:00	72.2	60.4	53.3
25/04/2021	19:00	@RBH935	00:15:00	68.1	60.0	54.2
25/04/2021	19:15	@RBH936	00:15:00	72.5	60.7	54.4
25/04/2021	19:30	@RBH937	00:15:00	70.2	59.8	52.9
25/04/2021	19:45	@RBH938	00:15:00	76.7	60.8	53.0
25/04/2021	20:00	@RBH939	00:15:00	76.4	60.2	51.7
25/04/2021	20:15	@RBH940	00:15:00	83.0	62.2	50.2
25/04/2021	20:30	@RBH941	00:15:00	86.5	62.6	47.0
25/04/2021	20:45	@RBH942	00:15:00	68.5	58.8	49.4
25/04/2021	21:00	@RBH943	00:15:00	80.2	59.2	48.3

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
25/04/2021	21:15	@RBH944	00:15:00	67.5	58.1	47.6
25/04/2021	21:30	@RBH945	00:15:00	83.9	60.2	46.7
25/04/2021	21:45	@RBH946	00:15:00	68.7	57.8	45.2
25/04/2021	22:00	@RBH947	00:15:00	67.9	57.2	40.8
25/04/2021	22:15	@RBH948	00:15:00	90.3	62.4	43.0
25/04/2021	22:30	@RBH949	00:15:00	73.1	57.1	41.2
25/04/2021	22:45	@RBH950	00:15:00	69.3	55.5	38.7
25/04/2021	23:00	@RBH951	00:15:00	84.3	59.4	38.8
25/04/2021	23:15	@RBH952	00:15:00	75.7	57.2	36.8
25/04/2021	23:30	@RBH953	00:15:00	75.0	57.9	37.8
25/04/2021	23:45	@RBH954	00:15:00	66.3	52.8	36.5
26/04/2021	00:00	@RBH955	00:15:00	67.7	54.5	37.3
26/04/2021	00:15	@RBH956	00:15:00	70.1	54.1	36.8
26/04/2021	00:30	@RBH957	00:15:00	73.1	54.9	36.4
26/04/2021	00:45	@RBH958	00:15:00	66.8	53.3	36.7
26/04/2021	01:00	@RBH959	00:15:00	72.0	52.6	36.2
26/04/2021	01:15	@RBH960	00:15:00	68.9	53.2	36.3
26/04/2021	01:30	@RBH961	00:15:00	67.9	50.2	36.1
26/04/2021	01:45	@RBH962	00:15:00	67.8	51.7	36.3
26/04/2021	02:00	@RBH963	00:15:00	66.6	50.5	36.2
26/04/2021	02:15	@RBH964	00:15:00	71.2	54.2	36.2
26/04/2021	02:30	@RBH965	00:15:00	69.9	51.7	36.2
26/04/2021	02:45	@RBH966	00:15:00	68.8	49.3	36.1
26/04/2021	03:00	@RBH967	00:15:00	68.2	51.5	36.1
26/04/2021	03:15	@RBH968	00:15:00	69.2	49.0	36.1
26/04/2021	03:30	@RBH969	00:15:00	62.8	42.3	36.1
26/04/2021	03:45	@RBH970	00:15:00	69.0	50.2	36.1
26/04/2021	04:00	@RBH971	00:15:00	68.1	52.1	36.4
26/04/2021	04:15	@RBH972	00:15:00	67.6	52.3	36.2
26/04/2021	04:30	@RBH973	00:15:00	69.9	50.4	36.2
26/04/2021	04:45	@RBH974	00:15:00	67.3	51.8	36.3
26/04/2021	05:00	@RBH975	00:15:00	68.5	53.3	36.9
26/04/2021	05:15	@RBH976	00:15:00	69.6	55.4	41.1
26/04/2021	05:30	@RBH977	00:15:00	68.0	55.2	43.4
26/04/2021	05:45	@RBH978	00:15:00	74.1	57.0	42.1
26/04/2021	06:00	@RBH979	00:15:00	69.7	57.1	43.9
26/04/2021	06:15	@RBH980	00:15:00	72.2	59.6	46.5
26/04/2021	06:30	@RBH981	00:15:00	73.8	59.5	44.1
26/04/2021	06:45	@RBH982	00:15:00	70.1	60.1	48.5
26/04/2021	07:00	@RBH983	00:15:00	77.9	61.7	48.2
26/04/2021	07:15	@RBH984	00:15:00	71.5	62.0	54.6
26/04/2021	07:30	@RBH985	00:15:00	75.6	62.4	55.7
26/04/2021	07:45	@RBH986	00:15:00	69.7	62.1	57.1

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
26/04/2021	08:00	@RBH987	00:15:00	74.6	60.7	55.3
26/04/2021	08:15	@RBH988	00:15:00	74.8	60.1	53.7
26/04/2021	08:30	@RBH989	00:15:00	72.9	59.4	53.4
26/04/2021	08:45	@RBH990	00:15:00	69.3	59.9	54.0
26/04/2021	09:00	@RBH991	00:15:00	94.1	64.7	55.1
26/04/2021	09:15	@RBH992	00:15:00	85.4	62.7	53.2
26/04/2021	09:30	@RBH993	00:15:00	84.3	62.0	52.3
26/04/2021	09:45	@RBH994	00:15:00	71.1	59.9	52.9
26/04/2021	10:00	@RBH995	00:15:00	75.8	61.9	56.1
26/04/2021	10:15	@RBH996	00:15:00	70.2	61.3	55.9
26/04/2021	10:30	@RBH997	00:15:00	68.7	60.8	53.9
26/04/2021	10:45	@RBH998	00:15:00	70.6	61.3	55.0
26/04/2021	11:00	@RBH999	00:15:00	71.2	61.3	55.9
26/04/2021	11:15	@RBH1000	00:15:00	74.2	60.8	54.4
26/04/2021	11:30	@RBH1001	00:15:00	75.3	62.0	53.6
26/04/2021	11:45	@RBH1002	00:15:00	77.9	61.2	54.6
26/04/2021	12:00	@RBH1003	00:15:00	73.8	61.0	53.8
26/04/2021	12:15	@RBH1004	00:15:00	74.0	61.0	52.8
26/04/2021	12:30	@RBH1005	00:15:00	88.7	64.0	55.4
26/04/2021	12:45	@RBH1006	00:15:00	73.3	60.7	54.0
26/04/2021	13:00	@RBH1007	00:15:00	73.3	61.2	55.9
26/04/2021	13:15	@RBH1008	00:15:00	88.2	65.6	55.0
26/04/2021	13:30	@RBH1009	00:15:00	72.9	60.8	54.1
26/04/2021	13:45	@RBH1010	00:15:00	76.6	60.8	54.9
26/04/2021	14:00	@RBH1011	00:15:00	74.1	60.9	54.6
26/04/2021	14:15	@RBH1012	00:15:00	75.4	60.2	54.2
26/04/2021	14:30	@RBH1013	00:15:00	68.7	60.3	52.1
26/04/2021	14:45	@RBH1014	00:15:00	76.0	61.0	54.2
26/04/2021	15:00	@RBH1015	00:15:00	73.3	61.2	54.7
26/04/2021	15:15	@RBH1016	00:15:00	89.4	65.2	54.4
26/04/2021	15:30	@RBH1017	00:15:00	68.9	60.7	55.0
26/04/2021	15:45	@RBH1018	00:15:00	70.1	60.3	55.2
26/04/2021	16:00	@RBH1019	00:15:00	73.8	60.9	55.4
26/04/2021	16:15	@RBH1020	00:15:00	80.7	62.9	55.3
26/04/2021	16:30	@RBH1021	00:15:00	74.1	60.7	55.1
26/04/2021	16:45	@RBH1022	00:15:00	72.2	61.4	56.8
26/04/2021	17:00	@RBH1023	00:15:00	75.5	62.4	54.3
26/04/2021	17:15	@RBH1024	00:15:00	72.3	61.2	56.1
26/04/2021	17:30	@RBH1025	00:15:00	77.1	61.6	55.4
26/04/2021	17:45	@RBH1026	00:15:00	76.1	60.8	55.4
26/04/2021	18:00	@RBH1027	00:15:00	73.5	60.5	55.1
26/04/2021	18:15	@RBH1028	00:15:00	71.6	60.8	56.7
26/04/2021	18:30	@RBH1029	00:15:00	68.1	60.9	55.2

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
26/04/2021	18:45	@RBH1030	00:15:00	69.3	60.2	54.5
26/04/2021	19:00	@RBH1031	00:15:00	73.7	60.2	53.0
26/04/2021	19:15	@RBH1032	00:15:00	71.9	60.9	54.0
26/04/2021	19:30	@RBH1033	00:15:00	75.4	60.4	51.4
26/04/2021	19:45	@RBH1034	00:15:00	68.1	59.8	52.9
26/04/2021	20:00	@RBH1035	00:15:00	68.2	59.1	49.0
26/04/2021	20:15	@RBH1036	00:15:00	88.4	63.0	47.0
26/04/2021	20:30	@RBH1037	00:15:00	86.7	62.0	47.5
26/04/2021	20:45	@RBH1038	00:15:00	73.6	58.7	46.8
26/04/2021	21:00	@RBH1039	00:15:00	88.8	61.5	45.3
26/04/2021	21:15	@RBH1040	00:15:00	73.6	58.1	45.2
26/04/2021	21:30	@RBH1041	00:15:00	79.8	58.0	43.8
26/04/2021	21:45	@RBH1042	00:15:00	81.4	58.0	44.1
26/04/2021	22:00	@RBH1043	00:15:00	73.4	58.1	41.5
26/04/2021	22:15	@RBH1044	00:15:00	70.6	57.3	42.0
26/04/2021	22:30	@RBH1045	00:15:00	71.6	57.0	41.3
26/04/2021	22:45	@RBH1046	00:15:00	72.5	57.2	40.2
26/04/2021	23:00	@RBH1047	00:15:00	74.3	58.2	39.0
26/04/2021	23:15	@RBH1048	00:15:00	76.0	58.0	39.8
26/04/2021	23:30	@RBH1049	00:15:00	73.7	56.8	37.7
26/04/2021	23:45	@RBH1050	00:15:00	87.7	61.9	37.1
27/02/2021	00:00	@RBH1051	00:15:00	76.0	56.2	36.3
27/02/2021	00:15	@RBH1052	00:15:00	92.9	64.0	36.8
27/02/2021	00:30	@RBH1053	00:15:00	65.9	51.5	36.2
27/02/2021	00:45	@RBH1054	00:15:00	70.2	53.1	36.2
27/02/2021	01:00	@RBH1055	00:15:00	72.3	52.7	36.2
27/02/2021	01:15	@RBH1056	00:15:00	72.9	54.5	36.3
27/02/2021	01:30	@RBH1057	00:15:00	73.2	53.7	36.1
27/02/2021	01:45	@RBH1058	00:15:00	73.6	50.2	36.1
27/02/2021	02:00	@RBH1059	00:15:00	66.2	48.4	36.1
27/02/2021	02:15	@RBH1060	00:15:00	67.6	51.8	36.1
27/02/2021	02:30	@RBH1061	00:15:00	68.5	51.3	36.1
27/02/2021	02:45	@RBH1062	00:15:00	68.4	49.9	36.1
27/02/2021	03:00	@RBH1063	00:15:00	67.7	48.7	36.1
27/02/2021	03:15	@RBH1064	00:15:00	67.8	51.4	36.1
27/02/2021	03:30	@RBH1065	00:15:00	69.9	53.7	36.2
27/02/2021	03:45	@RBH1066	00:15:00	70.8	51.6	36.1
27/02/2021	04:00	@RBH1067	00:15:00	68.8	52.0	36.2
27/02/2021	04:15	@RBH1068	00:15:00	68.7	53.8	36.5
27/02/2021	04:30	@RBH1069	00:15:00	69.5	54.2	36.3
27/02/2021	04:45	@RBH1070	00:15:00	68.6	53.8	36.5
27/02/2021	05:00	@RBH1071	00:15:00	67.7	54.8	37.1
27/02/2021	05:15	@RBH1072	00:15:00	69.6	55.6	41.2

Date	Time	Filename	Elapsed time	LAFmax	LAeq	LA90
27/02/2021	05:30	@RBH1073	00:15:00	72.0	56.9	43.9
27/02/2021	05:45	@RBH1074	00:15:00	76.7	59.1	46.6
27/02/2021	06:00	@RBH1075	00:15:00	69.3	57.8	47.1
27/02/2021	06:15	@RBH1076	00:15:00	69.9	58.9	46.7
27/02/2021	06:30	@RBH1077	00:15:00	69.9	60.1	47.6
27/02/2021	06:45	@RBH1078	00:15:00	69.2	60.6	50.8
27/02/2021	07:00	@RBH1079	00:15:00	74.3	60.8	52.4
27/02/2021	07:15	@RBH1080	00:15:00	74.1	62.9	55.9
27/02/2021	07:30	@RBH1081	00:15:00	76.5	63.3	57.5
27/02/2021	07:45	@RBH1082	00:15:00	73.4	61.4	55.0
27/02/2021	08:00	@RBH1083	00:15:00	78.3	60.2	54.2
27/02/2021	08:15	@RBH1084	00:15:00	74.1	59.8	53.9
27/02/2021	08:30	@RBH1085	00:15:00	71.8	59.8	54.5
27/02/2021	08:45	@RBH1086	00:15:00	69.2	59.6	55.0
27/02/2021	09:00	@RBH1087	00:15:00	68.1	59.5	53.6
27/02/2021	09:15	@RBH1088	00:15:00	69.4	58.8	51.9
27/02/2021	09:30	@RBH1089	00:15:00	69.4	59.0	53.8
27/02/2021	09:45	@RBH1090	00:15:00	75.2	60.3	54.5
27/02/2021	10:00	@RBH1091	00:15:00	75.6	59.5	52.6
27/02/2021	10:15	@RBH1092	00:15:00	68.2	59.8	54.2
27/02/2021	10:30	@RBH1093	00:15:00	68.4	60.7	55.5
27/02/2021	10:45	@RBH1094	00:15:00	69.9	60.7	55.0
27/02/2021	11:00	@RBH1095	00:15:00	77.5	61.1	53.3
27/02/2021	11:15	@RBH1096	00:15:00	74.0	60.7	53.9
27/02/2021	11:30	@RBH1097	00:15:00	73.6	61.1	54.3
27/02/2021	11:45	@RBH1098	00:15:00	73.6	60.0	52.9
27/02/2021	12:00	@RBH1099	00:00:39	32.6	30.5	36.1
27/02/2021	12:15	@RBH1100	00:00:07	31.5	30.5	36.1