

77-79 CHARLOTTE STREET

NOISE IMPACT ASSESSMENT

CHARLOTTE STREET PROPERTY LTD

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Revision 00

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1 INTRODUCTION

- 1.1 It is proposed to redevelop 77-79 Charlotte Street in conjunction with 5 Tottenham Mews into a combination of residential accommodation and associated commercial office space. To support the planning application for this development a noise impact assessment has been undertaken and is presented in this document.
- 1.2 As part of the assessment an external noise survey has been carried out at the site and the findings of this survey have been considered in the context of appropriate noise criteria and standards relevant to the development and guidance provided by the London Borough of Camden. Recommendations have been provided which when adopted within the development will enable the criteria and standards to be achieved.
- 1.3 Chapter 2 of this report considers the guidance on noise intrusion and noise emission relevant to the project. An external noise survey required for the assessment is presented in Chapter 3, whilst Chapters 4 and 5 present the assessments of noise intrusion and noise emission respectively.
- 1.4 Measurement data from the noise survey are presented in Appendix A. A completed copy of the London Borough of Camden's Self certified acoustic report checklist is included in Appendix B.

2 CRITERIA & GUIDANCE

2.1 LOCAL AUTHORITY REQUIREMENTS

2.1.1 The London Borough of Camden's policy for addressing noise and vibration when considering planning applications is set down in *Policy DP28 - Noise and Vibration* within the *Camden Development Policies, Adoption Version 10*.

2.1.2 The guidance provided with Policy DP28 states:

The Council will only grant planning permission for development sensitive to noise in locations that experience noise pollution, and for development likely to generate noise pollution, if appropriate attenuation measures are taken, such as double-glazing. Planning permission will not be granted for development sensitive to noise in locations that have unacceptable levels of noise. Where uses sensitive to noise are proposed close to an existing source of noise or when development that generates noise is proposed, the Council will require an acoustic report to ensure compliance with PPG24: Planning and noise.

2.1.3 Objective standards are also advised by the Authority as set down in the tables below.

Table A: Noise levels on residential sites adjoining railways and roads at which planning permission will not be granted

Noise description and location of measurement	Period	Time	Sites adjoining railways	Sites adjoining roads
Noise at 1 metre external to a sensitive façade	Day	0700-1900	74 dB L_{Aeq} 12h	72 dB L_{Aeq} 12h
Noise at 1 metre external to a sensitive façade	Evening	1900-2300	74 dB L_{Aeq} 4h	72 dB L_{Aeq} 4h
Noise at 1 metre external to a sensitive façade	Night	2300-0700	66 dB L_{Aeq} 8h	66 dB L_{Aeq} 8h

Table B: Noise levels on residential streets adjoining railways and roads at and above which attenuation measures will be required

Noise description and location of measurement	Period	Time	Sites adjoining railways	Sites adjoining roads
Noise at 1 metre external to a sensitive façade	Day	0700-1900	65 dB L_{Aeq} 12h	62 dB L_{Aeq} 12h
Noise at 1 metre external to a sensitive façade	Evening	1900-2300	60 dB L_{Aeq} 4h	57 dB L_{Aeq} 4h
Noise at 1 metre external to a sensitive façade	Night	2300-0700	55 dB L_{Aeq} 1h	52 dB L_{Aeq} 1h
Individual noise events several times an hour	Night	2300-0700	>82dB L_{Amax} (S time weighting)	>82dB L_{Amax} (S time weighting)

Table C: Vibration levels on residential sites adjoining railways and roads at which planning permission will not be granted

Vibration description and location of measurement	Period	Time	Vibration levels
Vibration inside critical areas such as a hospital operating theatre	Day, evening and night	0000-2400	0.1 VDV ms-1.75
Vibration inside dwellings	Day and evening	0700-2300	0.2 to 0.4 VDV ms-1.75
Vibration inside dwellings	Night	2300-0700	0.13 VDV ms-1.75
Vibration inside offices	Day, evening and night	0000-2400	0.4 VDV ms-1.75
Vibration inside workshops	Day, evening and night	0000-2400	0.8 VDV ms-1.75
Where dwellings may be affected by ground-borne regenerated noise internally from, for example, railways or underground trains within tunnels, noise levels within the rooms should not be greater than 35dB(A) $_{max}$			

Table D: Noise levels from places of entertainment on adjoining residential sites at which planning permission will not be granted

Noise description and measurement location	Period	Time	Sites adjoining places of entertainment
Noise at 1 metre external to a sensitive façade	Day and evening	0700-2300	L _{Aeq} , 5m shall not increase by more than 5dB*
Noise at 1 metre external to a sensitive façade	Night	2300-0700	L _{Aeq} , 5m shall not increase by more than 3dB*
Noise inside any living room of any noise sensitive premises, with the windows open or closed	Night	2300-0700	L _{Aeq} , 5m (in the 63Hz Octave band measured using the 'fast' time constant) should show no increase in dB*
* As compared to the same measure, from the same position, and over a comparable period, with no entertainment taking place			

Table E: Noise levels from plant and machinery at which planning permission will not be granted

Noise description and location of measurement	Period	Time	Noise level
Noise at 1 metre external to a sensitive façade	Day, evening and night	0000-2400	5dB(A) <LA90
Noise that has a distinguishable discrete continuous note (whine, hiss, screech, hum) at 1 metre external to a sensitive façade.	Day, evening and night	0000-2400	10dB(A) <LA90
Noise that has distinct impulses (bangs, clicks, clatters, thumps) at 1 metre external to a sensitive façade.	Day, evening and night	0000-2400	10dB(A) <LA90
Noise at 1 metre external to sensitive façade where LA90>60dB	Day, evening and night	0000-2400	55dB _{L_{Aeq}}

Figure 2.1: London Borough of Camden objective standards

- 2.1.4 The limits and targets provided in these tables have been used within the noise impact assessments presented in this document in conjunction with other guidance set down in documents such as PPG24, BS 8233 and BS 4142. The relevant guidance from these documents is presented below.

2.2 PPG24

- 2.2.1 *Planning Policy Guidance 24: Planning and Noise*, (PPG24), referred to by London Borough of Camden, sets down guidance on the suitability of a site based on categorising the prevailing noise climate during the daytime and night-time. The document presents the guidance on the importance of noise when considering development based on noise exposure categories determined from the prevailing noise levels experienced at the site.
- 2.2.2 In March 2012 a new National Planning Policy Framework (NPPF) came into effect which was intended to replace documents such as PPG24. PPG24, is however, still considered pertinent as it provides objective guidance on noise unlike the NPPF and so it has been considered within the assessment presented here. Importantly, London Borough of Camden have developed the categories within PPG 24 further to include noise levels during the evening period and these alternative limits have been considered in the assessments presented here.

2.3 BS 8233

- 2.3.1 Important guidance on acceptable levels of noise intrusion into residential developments is also contained within BS 8233 : 2014 *Guidance on sound insulation and noise reduction for buildings*. In Section 7.7.2 of BS 8233 : 2014, recommendations on suitable internal ambient noise levels as a result of external sources within dwellings are provided. These recommendations are presented in Table 2.1.

Activity	Location	07:00 - 23:00	23:00 - 07:00
Sleeping (daytime resting)	Bedrooms	35 dB L_{Aeq} 16hr	30 dB L_{Aeq} 8hr

Table 2.1: Indoor ambient noise level criterion for dwellings (taken from BS 8233 : 2014)

2.4 BS 4142 : 1997

- 2.4.1 As well as considering noise intrusion it is necessary to also consider noise emission from the development and London Borough of Camden can be expected to impose conditions, should they grant planning permission, which control the level of noise emission from any fixed building services plant associated with the new development. The assessment of building services noise is usually undertaken in accordance with the recommendations in BS 4142: 1997 *Method for rating industrial noise affecting mixed residential and industrial areas*.
- 2.4.2 BS 4142 provides guidance on the assessment of the likelihood of complaints relating to noise. The standard presents a method of rating noise levels by comparing the noise level of the new source (the specific noise level) with that of the existing background noise level in the area in the absence of the new source (the background noise level).
- 2.4.3 The rating method according to BS 4142 accounts for unusual acoustic features such as a whine, hiss, impulsive or irregular noise by the addition of a single 5 dB correction to the specific noise level. The corrected specific noise level is the rating level.
- 2.4.4 The BS 4142 rating is determined by arithmetically subtracting the background noise level from the rating level. A difference of around +10 dB or more indicates that complaints relating to noise are likely. A difference of +5 dB is said to be of marginal significance. If the rating is more than 10 dB below the measured background noise level it is a positive indication that complaints are unlikely.

2.5 ENVIRONMENTAL PROTECTION ACT 1990

- 2.5.1 In addition to meeting the Local Authority's requirements, it must also be considered that there is always the potential that neighbours may take direct noise nuisance action under the provisions of the Environmental Protection Act 1990, if they believe they have been subjected to noise nuisance. Usually if any Conditions to Planning concerning noise emission are complied with, the risk of such action is satisfactorily minimised.

2.6 CONCLUSION

- 2.6.1 From the guidance presented above it is considered appropriate to review the prevailing external noise climate at the site in the light of the guideline levels in Tables A and B of Figure 2.1. as London Borough of Camden have established these levels in lieu of those in PPG24.
- 2.6.2 Noise intrusion will be assessed on the basis of the guidance in BS 8233 as recommended in PPG24.
- 2.6.3 Noise emission limits will be established on the basis of the limits advised in Table E of Figure 2.1 using the methodologies set down in BS 4142 : 1997.

3 EXTERNAL NOISE SURVEY

3.1 INTRODUCTION

- 3.1.1 In order to inform the acoustic design of the proposed development an external noise survey was undertaken at two locations on the site. The data from this survey has been used to assess both noise intrusion into the residential accommodation as well as noise emission from building services plant associated with the development.

3.2 MEASUREMENT METHODOLOGY

- 3.2.1 Continuous unattended noise level measurements were conducted at two locations at the site. Location 1 was in line with the perimeter of the site 1m above roof level facing the corner of Charlotte Street and Street. Location 2 was also 1m above the existing roof level, on the western boundary of the site adjacent to the neighbouring residential properties.
- 3.2.2 The measurement locations are shown superimposed upon an existing site plan in Figure 3.1.
- 3.2.3 The measurements were undertaken at Location 1 between 14:50 on Thursday 19 December through to 14:20 on Friday 20 December 2014. The measurements at Location 2 were undertaken between 14:30 on Friday 20 December through to 10:00 on Monday 22 December 2014. Statistical and spectral data were recorded continuously throughout the measurement period in 10-minute samples.
- 3.2.4 The following equipment was used for the noise survey:

Equipment	Type	Serial No.
Norsonic 131	Precision sound analyser	1312766
Norsonic 1218	Outdoor microphone protection system	12182517
Bruel & Kjaer 4231	Calibrator	2291098

Table 3.1: Noise measurement equipment

- 3.2.5 The sound level meters and associated microphones were calibrated prior to and on completion of the measurement periods in accordance with recommended practice. No significant drift in calibration occurred during the measurement periods. The accuracy of the calibrator can be traced to National Physical Laboratory Standards. Calibration certificates can be provided if required.

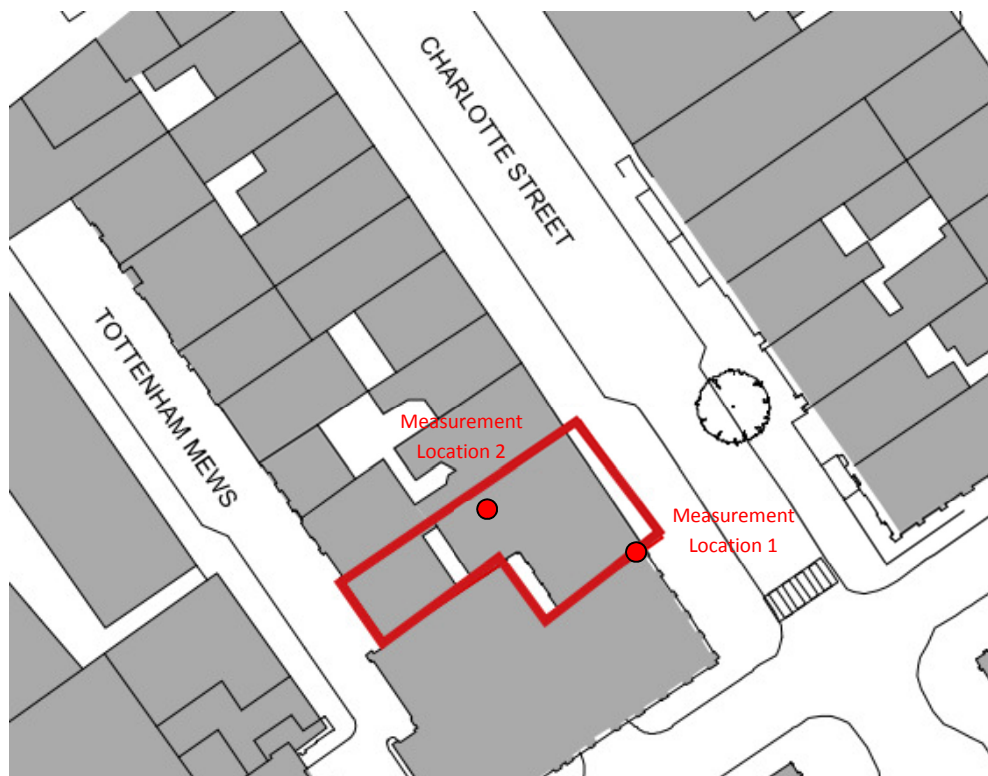


Figure 3.1: Existing site plan showing measurement location



Figure 3.2: Measurement Location 1, with sight over Charlotte St.

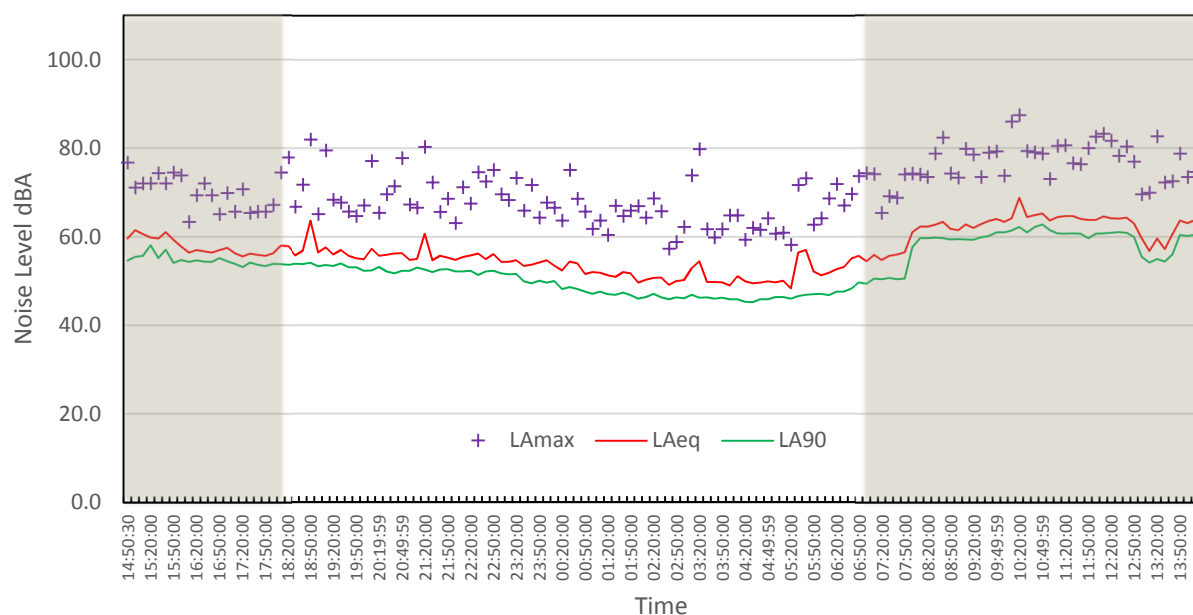


Figure 3.3: Measurement Location 2, close to residential neighbour

- 3.2.6 The weather conditions throughout the measurement periods were changeable. On the Thursday night there were rain showers but on the Friday and over the weekend it was generally dry. Wind speeds at the beginning of the survey were typically 1.5m/s whilst on the Monday they were about 3m/s. The weather conditions are not considered to have had a detrimental influence on the lowest measured background noise levels and if anything may have increased ambient noise levels slightly.
- 3.2.7 The neighbouring property on the corner of Charlotte Street and Tottenham Street has been demolished and is currently a construction site and will continue to be so for at least 12 months. Activity at this site during the survey consisted of concrete pouring on the lower floors well below the measurement locations. A tower crane is, however, in operation on this site and overlooks the roof of 77-79 Charlotte Street.
- 3.2.8 Construction noise from this neighbouring site would have influenced the measured noise levels and so data recorded at times when construction activity may have taken place (between 7am and 7pm on the Thursday Friday and Monday and from 7am to 1pm on the Saturday) has not been used in the noise emission and noise intrusion assessments. The measured data has however been included for completeness.

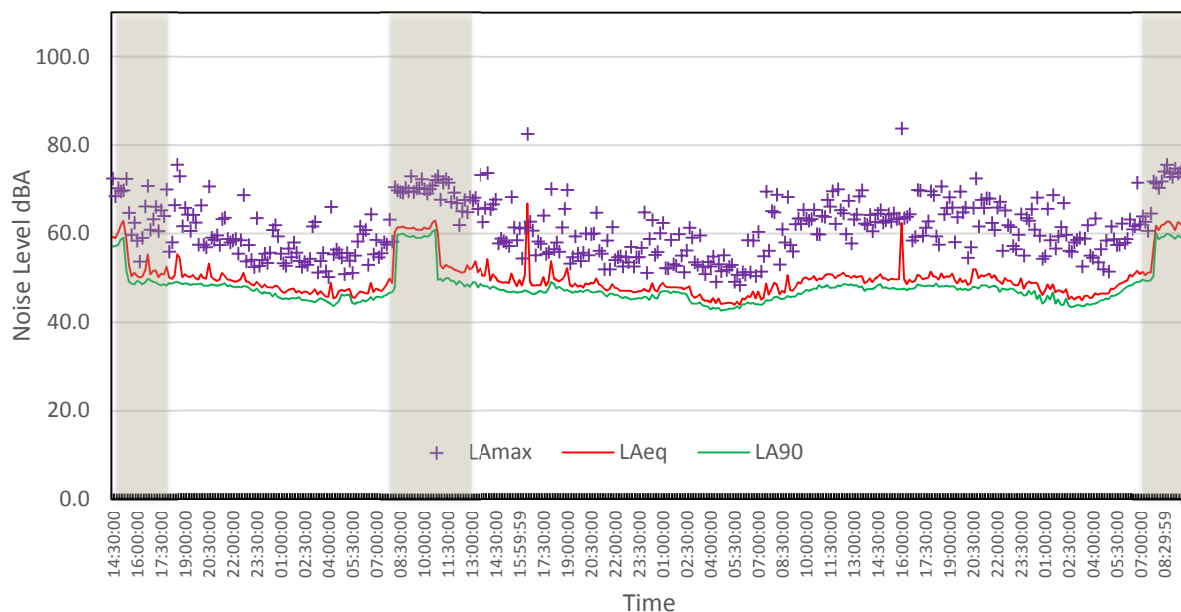
3.3 MEASUREMENT RESULTS

- 3.3.1 The measurement results are presented in Appendix A. Graphs showing the time histories for the measurements at the two locations are presented in Figures 3.4 & 3.5.



Note: shaded areas expected to be influenced by construction noise

Figure 3.4: External noise levels, Location 1



Note: shaded areas expected to be influenced by construction noise

Figure 3.5: External noise levels, Location 2

3.3.2 Typical ambient noise levels determined from the measured data for use when considering the standards of London Borough of Camden, are given in Table 3.2.

Time Period	Location 1	Location 2
Daytime (07:00-19:00)	61 dB $L_{Aeq,12hr}$ ¹	52 dB $L_{Aeq,12hr}$ ²
Evening (19:00-23:00)	56 dB $L_{Aeq,4hr}$	50 dB $L_{Aeq,4hr}$
Night-time (23:00-07:00)	52 dB $L_{Aeq,8hr}$	47 dB $L_{Aeq,8hr}$
Night-time (23:00-07:00)	54 dB $L_{Aeq,1hr}$ ³	50 dB $L_{Aeq,1hr}$ ³

All values are sound pressure levels in dB re: 2×10^{-5} Pa

1. influenced by construction noise
2. in absence of construction noise
3. loudest hour overnight

Table 3.2: Measured ambient noise levels

- 3.3.3 Reference noise spectra for use in façade calculations have been determined from the measurement data and these are presented in Tables 3.3. and 3.4

Night-time	Frequency Hz						
	63	125	250	500	1000	2000	4000
Charlotte Street elevation (roof level)	61	57	55	51	50	47	42
Tottenham Mews elevation (roof level)	62	55	52	47	45	39	23

All values are $L_{eq,8hr}$ sound pressure levels in dB re: $2 \times 10^{-5} \text{Pa}$

Table 3.3: Night-time reference noise level spectra for use in façade sound insulation assessments

Daytime	Frequency Hz						
	63	125	250	500	1000	2000	4000
Charlotte Street elevation (roof level)	67	60	56	54	57	54	44
Tottenham Mews elevation (roof level)	65	59	56	54	49	40	24

All values are $L_{eq,16hr}$ sound pressure levels in dB re: $2 \times 10^{-5} \text{Pa}$

Table 3.4: Daytime reference noise level spectra for use in façade sound insulation assessments

- 3.3.4 The lowest measured background noise levels typically expected to occur during the daytime, and night-time at the nearest noise sensitive properties around the development are set down in Table 3.5. These levels have been determined based on the measured data and have assumed that the lowest levels measured are representative of those likely to be experienced at the facades of noise sensitive properties.

Time Period	Background noise levels	
	Location 1	Location 2
Daytime (07:00-23:00)	50dB $L_{A90,1hr}$	44dB $L_{A90,1hr}$
Night-time (23:00-07:00)	44dB $L_{A90,5min}$	42dB $L_{A90,5min}$

All values are sound pressure levels in dB re: $2 \times 10^{-5} \text{Pa}$

The $L_{A90,5min}$ has been taken to be equivalent to the $L_{A95,10min}$ or the $L_{A90,10min} - 1\text{dB}$

Table 3.5: Summary of lowest measured background noise levels

3.4 COMMENTARY

- 3.4.1 Noise levels on the front elevation of the proposed development site are influenced by road traffic and pedestrian activity on Charlotte Street and to a lesser extent other roads at the intersection with Tottenham Street. During the survey noise from the neighbouring construction site was influential but the noise from construction activity has been excluded from the assessments presented here.
- 3.4.2 Noise levels to the rear of the site on Tottenham Mews are lower and will be influenced by noise from traffic on Tottenham Street and specific vehicle movements in Tottenham Mews.
- 3.4.3 It is considered that the measurement data is representative of noise levels typically encountered at the site during the evening and overnight and at weekends during the daytime. As night-time noise levels are most likely to influence the design of facades and noise control measures for any building services plant, the presence of construction noise during the daytime is not considered problematic. As access for the survey was only available at roof level, corrections will need to be applied to account for noise levels incident on lower floors facing onto Charlotte Street and this will be accounted for within the assessments presented in Section 4.

4 EXTERNAL NOISE INTRUSION

4.1 COMPARISON WITH LOCAL AUTHORITY REQUIREMENTS

- 4.1.1 The measured ambient noise levels within Table 3.2 can be compared with the guidelines advised by London Borough of Camden set down in Section 2.13 of this report. If this is done it can be seen that the noise levels measured at 77-79 Charlotte Street are significantly below the levels reported in Table A, above which planning permission will normally be refused. They are also less, with the exception of the night-time L_{Aeq1hr} criterion, than the levels in Table B above which noise control measures will be required.
- 4.1.2 It is reasonable to conclude that the site is not especially noisy however there is still a need to control noise intrusion into both the residential and commercial elements of the development so that a suitable level of amenity is achieved internally. External noise intrusion into the development has therefore been assessed on the basis of the guidance in BS 8233 and the objective standards set down in Table 2.1 of this report.

4.2 REQUIRED FAÇADE PERFORMANCE

- 4.2.1 Based on achieving the external noise intrusion limits in Table 2.1, the required sound insulation performance of the windows and other façade elements for the residential parts of the development have been established.
- 4.2.2 As previously noted, data from the measurement location at roof level needs to be corrected to account for the higher noise levels experienced at lower floors of the building which are closer to the street. Based on the relative heights of the first floor and the microphone position, a correction of 11dB has been applied to the results at Location 1. For the residential accommodation facing into Tottenham Mews a smaller correction has been applied to the data from Location 1.
- 4.2.3 The level of external noise intrusion into the residential accommodation is a function of the volume and surface finishes of the particular rooms, and the sound insulation performance provided by the building envelope. The latter is dependent upon the combined sound insulation performance of the glazing and solid elements and, where relevant, ventilation openings and the roof. An MVHR ventilation system is to be used in each dwelling and so trickle ventilators have not been included in the assessment.
- 4.2.4 The reference noise levels in Tables 3.3 and 3.4 have therefore been corrected and minimum sound insulation performance figures determined for the facades to Charlotte Street and Tottenham Mews. These are set down in Table 4.1.

	Frequency Hz						
	63	125	250	500	1000	2000	4000
Charlotte Street windows	25	27	36	45	51	50	56
Tottenham Mews windows	21	24	26	30	37	34	43
All solid facades	30	46	54	62	65	65	65

All values are sound reduction indices, R , measured in accordance with BS EN ISO 10140-2

Table 4.1: Required façade sound reduction indices

- 4.2.5 The required sound insulation performance of the facades should be readily achievable with an internally lined masonry construction. Windows to the Charlotte Street elevation will need to include a substantial double or triple glazed unit such as 13mm laminate glass / 8mm cavity / 6mm glass / 8mm cavity / 9mm laminate glass. The windows to the Tottenham Mews elevation will require a glazing configuration such as 6mm glass / 16mm cavity / 8mm laminate glass.

4.3 VIBRATION LEVELS

- 4.3.1 The London Borough of Camden have advised maximum vibration levels which should not be exceeded at residential sites. These are set down in Table C in Figure 2.1 of Section 2 of this report.
- 4.3.2 The only sources of vibration likely to impact on the residential development at 77-79 Charlotte Street are the building services plant which serve the commercial parts of the development. Given the mixed use of the development any vibration which has the potential to disturb neighbouring properties has the potential to disturb the new residential accommodation as well and so it is in the interests of the developer to ensure vibration is fully addressed. All plant will therefore be mounted on appropriate anti-vibration mounts selected so that vibration is imperceptible and structure borne noise is appropriately controlled.

5 NOISE EMISSION

5.1 BUILDING SERVICES EQUIPMENT

- 5.1.1 The principal items of noise generating plant associated with the hotel are expected to be air cooled chillers and ventilation plant all located at roof level. Some ventilation and boiler plant is to be located in the basement with intakes and discharges at ground level. Each dwelling will also have a dedicated MVHR system.
- 5.1.2 Specific plant selections have not yet been undertaken at this stage of the design and so an approach of establishing a maximum noise level limit at the nearest noise sensitive neighbours has been adopted.

5.2 BACKGROUND NOISE LEVELS

- 5.2.1. The measurement data obtained from the survey was recorded in 10 minute samples as this provides a good balance between detail and quantity of data over an 18 hour measurement period. The methodology in BS 4142, however, requires that a 5 minute assessment period be used at night and an hourly period be used during the daytime. In practice it is expected that the difference in noise level between these two sample periods at night is negligible and unlikely to be more than 1dB. During the daytime the lowest $L_{A90,10min}$ will be lower than the lowest $L_{A90,1hr}$ and so using this lower value in any assessment will give a more conservative estimate of the likely noise impact.
- 5.2.2 The lowest background noise levels, as reported in Table 3.5 are considered to be suitable for setting noise emission limits from the building services plant serving the development.

5.3 NEAREST NOISE SENSITIVE NEIGHBOURS

- 5.3.1 The nearest noise sensitive neighbours to the proposed development site on the upper levels are considered to be the residential properties in the neighbouring 81 Charlotte Street. Residential accommodation is also to be introduced as part of the new development currently under construction to other side of 77-79 Charlotte Street. These two neighbouring properties are likely to have the greatest potential to be affected by noise from any plant serving 77-79 Charlotte Street.

5.4 NOISE EMISSION LIMITS

- 5.4.1 The London Borough of Camden require noise emission to be controlled in line with the limits set down in Table E of Figure 2.1 in Section 2 of this report. For non-specific building services plant the noise emission should be controlled to 5dBA below the background noise level however if this plant noise includes some acoustic feature such as a distinctive tone or impulsive character then the limit is made more onerous and reduced to 10dB below the underlying background noise level.
- 5.4.2 London Borough of Camden do not specify a particular assessment duration for establishing the noise emission limit and so the guidance within BS 4142 : 1997 has been adopted as discussed in Section 2. This methodology requires that the plant noise be assessed against the quietest 5 minutes at night and the quietest hour during the day.
- 5.4.3 At this time there is no reason to expect the proposed building services plant to have any particular acoustic feature or distinctive character and so a rating level of 5dB below the prevailing background noise level has been considered appropriate. Should it be established that particular plant will have an acoustic feature as the design develops, the rating level for that item of plant will be revised to be 5dB more onerous.
- 5.4.4 Based on the measured background noise levels presented in Table 3.5 and the limitation of 5dB below the underlying background noise level, noise emission limits have been determined and are set down in Table 5.1

Time Period	All neighbouring properties
Daytime (07:00-23:00)	39 dB $L_{Aeq,1hr}$
Night-time (23:00-07:00)	37 dB $L_{Aeq,5min}$

All values are sound pressure levels in dB re: 2×10^{-5} Pa

Table 5.1: Noise emission limits for all building services plant operating simultaneously

6 CONCLUSIONS

- 6.1 A noise impact assessment has been undertaken for the proposed mixed use development at 77-79 Charlotte Street. As part of this assessment a noise survey has been undertaken at two locations on the roof of the existing property. The information from the survey is essential for determining the levels of noise ingress into the development and the limits to noise emission.
- 6.2 Consideration has been given to available guidance from London Borough of Camden and other sources and appropriate criteria for noise intrusion established for the development. In line with Camden's recommendations it is intended to control noise intrusion into the residential accommodation in line with the guidance within BS 8233 : 2014. The required sound insulation performances for the various facades of the development have been established based on the findings of the survey. It is concluded that if these sound insulation performance specifications are achieved, noise intrusion into the development will be controlled to acceptable levels.
- 6.3 The only potential sources of vibration within the development will be building services plant, although it is expected that any vibration will be readily mitigated by the use of appropriate anti-vibration mountings. The criteria identified within Policy DP28 will therefore be readily achieved.
- 6.4 Noise emission from fixed building services equipment associated with the development has also been considered in line with guidance advised by London Borough of Camden. Noise emission limits have been set on the basis of the lowest measured background noise level at the site. These limits are not to be exceeded at the nearest noise sensitive facades to the development. These have been identified as the neighbouring residential properties on Charlotte Street.
- 6.5 The precise selections of façade elements and building services equipment are not yet available but the criteria and specifications proposed in this assessment will be incorporated as the design of the development progresses.

APPENDIX A - NOISE LEVEL DATA

A selection of the measured noise level data are presented in the tables in this appendix. The full set of data are available in electronic form on request.

All values are sound pressure levels in dB re 2×10^{-5} Pa.

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
14:50 - 15:00	76.8	59.6	64.1	54.6	52.2
15:00 - 15:10	71.1	61.5	65.2	55.5	53.7
15:10 - 15:20	72.1	60.6	63.3	55.7	52.4
15:20 - 15:30	72.1	59.8	61.1	58.1	56.1
15:30 - 15:40	74.4	59.6	62.3	55.2	52.2
15:40 - 15:50	72.1	61.1	62.6	57.1	53.2
15:50 - 16:00	74.5	59.3	62.0	54.1	51.7
16:00 - 16:10	73.9	57.8	59.7	54.8	52.1
16:10 - 16:20	63.4	56.4	58.1	54.3	51.9
16:20 - 16:30	69.4	57.0	58.7	54.7	51.9
16:30 - 16:40	72.1	56.7	58.3	54.4	52.7
16:40 - 16:50	69.4	56.4	57.9	54.3	52.3
16:50 - 17:00	65.1	57.0	58.7	55.2	53.6
17:00 - 17:10	69.9	57.5	59.6	54.5	52.5
17:10 - 17:20	65.7	56.3	58.3	53.9	50.9
17:20 - 17:30	70.8	55.6	57.3	53.2	51.0
17:30 - 17:40	65.4	56.2	57.7	54.2	51.9
17:40 - 17:50	65.7	55.9	57.5	53.7	51.6
17:50 - 18:00	65.7	55.7	57.5	53.4	51.6
18:00 - 18:10	67.2	56.3	58.2	53.9	51.9
18:10 - 18:20	74.5	58.0	60.0	53.8	51.6
18:20 - 18:30	77.9	57.9	59.3	53.7	51.0
18:30 - 18:40	66.8	55.8	57.4	53.9	51.3
18:40 - 18:50	71.8	56.9	59.0	53.8	52.1
18:50 - 19:00	82.0	63.7	61.3	54.1	52.1
19:00 - 19:10	65.1	56.4	58.3	53.3	50.5
19:10 - 19:20	79.5	57.6	58.6	53.6	51.2
19:20 - 19:30	68.4	56.0	58.0	53.4	51.0
19:30 - 19:40	67.7	57.0	59.3	54.0	52.6
19:40 - 19:50	65.7	55.7	57.8	53.1	51.2
19:50 - 20:00	64.7	55.1	56.9	53.1	51.2
20:00 - 20:10	67.1	54.9	56.8	52.3	50.1
20:10 - 20:20	77.1	57.3	58.4	52.4	49.7
20:20 - 20:30	65.4	55.7	57.5	53.2	51.1
20:30 - 20:40	69.6	55.9	57.4	52.2	50.2
20:40 - 20:50	71.4	56.2	57.7	51.7	49.8
20:50 - 21:00	77.8	56.3	57.4	52.3	50.4
21:00 - 21:10	67.3	54.8	56.6	52.3	50.3
21:10 - 21:20	66.6	55.0	56.7	53.0	51.3
21:20 - 21:30	80.3	60.7	59.0	52.6	50.4
21:30 - 21:40	72.3	54.7	56.2	52.0	50.1
21:40 - 21:50	65.6	55.7	57.7	52.6	50.4
21:50 - 22:00	68.6	55.3	57.4	52.7	50.8
22:00 - 22:10	63.1	54.8	56.7	52.2	50.3
22:10 - 22:20	71.2	55.4	57.3	52.2	49.6
22:20 - 22:30	67.5	55.8	58.3	52.3	49.9
22:30 - 22:40	74.6	56.2	57.5	51.4	49.5
22:40 - 22:50	72.5	54.9	56.7	52.2	48.8
22:50 - 23:00	75.1	56.1	57.9	52.3	50.0
23:00 - 23:10	69.6	54.3	56.0	51.7	49.3
23:10 - 23:20	68.3	54.3	56.1	51.5	49.4
23:20 - 23:30	73.3	54.7	56.5	51.6	49.0
23:30 - 23:40	65.9	53.4	55.6	49.9	47.9
23:40 - 23:50	71.7	53.7	55.9	49.5	47.3
23:50 - 00:00	64.3	54.2	56.8	50.1	47.5
00:00 - 00:10	67.7	54.7	57.1	49.6	47.7
00:10 - 00:20	66.6	53.5	56.0	50.0	47.5
00:20 - 00:30	63.7	52.4	55.6	48.2	46.3
00:30 - 00:40	75.1	54.4	55.4	48.6	46.8
00:40 - 00:50	68.6	54.0	56.9	48.2	46.4
00:50 - 01:00	65.7	51.6	53.7	47.6	45.9
01:00 - 01:10	61.8	52.0	55.0	47.1	45.4
01:10 - 01:20	63.7	51.9	55.2	47.6	45.3
01:20 - 01:30	60.4	51.3	54.8	47.0	45.2
01:30 - 01:40	67.0	50.9	53.1	46.9	45.1
01:40 - 01:50	64.7	52.0	55.1	47.4	45.4
01:50 - 02:00	65.9	51.7	54.6	46.8	45.1
02:00 - 02:10	66.9	49.6	51.5	46.0	44.7
02:10 - 02:20	64.3	50.3	53.2	46.4	44.8
02:20 - 02:30	68.7	50.7	53.2	47.1	45.1
02:30 - 02:40	65.8	50.8	53.5	46.3	44.3
02:40 - 02:50	57.3	49.1	52.9	45.9	44.4

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
02:50 - 03:00	58.8	50.0	53.5	46.3	44.4
03:00 - 03:10	62.2	50.2	54.0	46.1	44.0
03:10 - 03:20	73.9	52.9	54.9	46.9	44.5
03:20 - 03:30	79.8	54.5	55.9	46.2	44.3
03:30 - 03:40	61.7	49.8	52.4	46.3	44.9
03:40 - 03:50	59.8	49.8	53.2	46.0	44.4
03:50 - 04:00	61.7	49.7	53.0	46.2	44.5
04:00 - 04:10	64.8	49.0	51.1	45.9	44.1
04:10 - 04:20	64.8	51.1	53.7	45.9	44.0
04:20 - 04:30	59.3	49.9	53.8	45.3	43.7
04:30 - 04:40	62.0	49.5	52.5	45.2	43.6
04:40 - 04:50	61.6	49.6	52.2	45.9	44.6
04:50 - 05:00	64.2	49.9	52.3	45.9	44.6
05:00 - 05:10	60.7	49.7	52.5	46.4	44.9
05:10 - 05:20	60.9	50.1	53.4	46.4	44.9
05:20 - 05:30	58.2	48.3	50.7	46.0	44.5
05:30 - 05:40	71.7	56.4	57.0	46.6	44.9
05:40 - 05:50	73.2	57.0	56.3	46.9	45.2
05:50 - 06:00	62.7	52.2	56.2	47.0	45.1
06:00 - 06:10	64.2	51.3	54.7	47.1	45.5
06:10 - 06:20	68.7	51.9	54.8	46.8	45.0
06:20 - 06:30	71.9	52.7	54.8	47.6	46.2
06:30 - 06:40	67.1	53.2	56.1	47.6	45.9
06:40 - 06:50	69.7	55.1	58.8	48.3	46.4
06:50 - 07:00	73.7	55.7	58.0	49.7	48.0
07:00 - 07:10	74.4	54.5	57.7	49.4	48.1
07:10 - 07:20	74.2	55.9	58.0	50.6	48.9
07:20 - 07:30	65.4	54.8	58.0	50.4	48.6
07:30 - 07:40	69.2	55.7	58.0	50.7	48.0
07:40 - 07:50	68.8	56.0	58.3	50.4	48.3
07:50 - 08:00	74.1	56.5	59.0	50.6	47.9
08:00 - 08:10	74.3	61.1	62.9	57.7	52.7
08:10 - 08:20	74.1	62.3	64.0	59.7	57.3
08:20 - 08:30	73.5	62.3	64.2	59.7	57.6
08:30 - 08:40	78.8	62.7	64.1	59.8	57.3
08:40 - 08:50	82.4	63.4	65.1	59.7	57.5
08:50 - 09:00	74.3	61.8	63.6	59.4	55.0
09:00 - 09:10	73.4	61.5	63.3	59.5	57.5
09:10 - 09:20	79.9	62.8	65.0	59.4	57.1
09:20 - 09:30	78.6	62.0	64.1	59.3	57.1
09:30 - 09:40	73.5	62.9	65.7	59.9	58.1
09:40 - 09:50	79.0	63.6	65.9	60.2	57.0
09:50 - 10:00	79.3	64.0	66.1	61.0	58.7
10:00 - 10:10	73.8	63.4	65.3	61.0	58.1
10:10 - 10:20	86.0	64.2	65.9	61.4	58.7
10:20 - 10:30	87.5	68.8	68.4	62.2	59.0
10:30 - 10:40	79.4	64.5	66.8	61.0	58.8
10:40 - 10:50	79.1	64.9	67.1	62.2	60.7
10:50 - 11:00	78.8	65.3	67.7	62.8	60.9
11:00 - 11:10	73.1	63.7	65.1	61.5	58.9
11:10 - 11:20	80.5	64.5	67.2	60.8	58.4
11:20 - 11:30	80.7	64.7	67.1	60.7	56.8
11:30 - 11:40	76.6	64.7	67.4	60.8	58.1
11:40 - 11:50	76.4	64.0	66.4	60.7	57.2
11:50 - 12:00	80.0	63.8	66.8	59.7	57.0
12:00 - 12:10	82.6	63.8	66.0	60.7	57.4
12:10 - 12:20	83.3	64.6	67.6	60.8	57.4
12:20 - 12:30	81.7	64.2	66.7	60.9	58.1
12:30 - 12:40	78.3	64.1	66.4	61.1	57.7
12:40 - 12:50	80.4	64.3	66.3	60.9	56.6
12:50 - 13:00	77.0	63.0	64.9	60.0	57.1
13:00 - 13:10	69.6	59.7	62.5	55.5	53.3
13:10 - 13:20	70.0	56.8	58.5	54.2	52.0
13:20 - 13:30	82.7	59.6	60.2	55.0	52.9
13:30 - 13:40	72.3	57.2	58.7	54.4	52.0
13:40 - 13:50	72.6	60.6	62.4	56.1	53.1
13:50 - 14:00	78.8	63.7	65.9	60.4	57.6
14:00 - 14:10	73.5	63.1	64.9	60.2	56.8
14:10 - 14:20	74.7	63.8	65.9	60.5	56.5

Table A1: Location 1, Statistical data, 18-19 December 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
14:30 - 14:40	72.5	59.3	60.4	57.1	55.8
14:40 - 14:50	68.5	59.0	60.3	57.2	55.5
14:50 - 15:00	70.3	60.3	62.1	57.5	55.0
15:00 - 15:10	69.6	61.9	64.4	58.7	56.4
15:10 - 15:20	69.8	62.9	65.3	59.1	55.9
15:20 - 15:30	72.4	58.7	61.3	51.8	50.2
15:30 - 15:40	64.7	53.0	53.5	49.2	47.8
15:40 - 15:50	59.7	50.4	51.8	48.7	47.0
15:50 - 16:00	62.5	51.2	53.4	48.6	47.0
16:00 - 16:10	58.4	50.5	51.5	49.4	47.9
16:10 - 16:20	53.7	50.1	51.0	49.1	48.1
16:20 - 16:30	59.1	50.3	51.6	48.6	46.6
16:30 - 16:40	66.2	51.6	53.0	49.0	47.6
16:40 - 16:50	70.8	55.3	58.5	49.8	48.1
16:50 - 17:00	60.9	50.8	51.8	49.5	48.0
17:00 - 17:10	63.3	51.6	52.1	49.1	47.6
17:10 - 17:20	66.1	51.7	52.5	49.0	47.3
17:20 - 17:30	60.6	50.2	51.7	48.6	46.9
17:30 - 17:40	65.3	51.0	52.1	48.4	47.3
17:40 - 17:50	64.0	50.8	51.7	48.6	47.2
17:50 - 18:00	70.0	52.6	52.9	48.3	47.0
18:00 - 18:10	56.0	50.1	51.2	48.9	47.7
18:10 - 18:20	58.1	49.8	50.9	48.7	47.4
18:20 - 18:30	66.5	50.6	51.8	49.0	47.4
18:30 - 18:40	75.6	55.4	53.9	49.2	47.8
18:40 - 18:50	73.0	54.7	54.6	48.9	47.3
18:50 - 19:00	61.7	50.1	51.1	48.6	47.3
19:00 - 19:10	65.8	50.8	51.7	48.7	47.5
19:10 - 19:20	64.3	50.3	51.3	48.7	47.2
19:20 - 19:30	60.6	50.2	50.9	48.4	47.1
19:30 - 19:40	64.2	50.7	52.1	48.6	47.0
19:40 - 19:50	62.5	49.9	51.1	48.5	46.8
19:50 - 20:00	57.5	49.6	50.6	48.6	47.1
20:00 - 20:10	66.4	50.8	52.0	48.7	47.4
20:10 - 20:20	57.5	50.0	51.2	48.2	46.9
20:20 - 20:30	56.9	49.8	51.1	48.2	46.3
20:30 - 20:40	70.7	53.2	52.0	48.2	46.6
20:40 - 20:50	59.1	50.2	51.4	48.5	47.2
20:50 - 21:00	58.6	49.7	50.8	48.4	47.0
21:00 - 21:10	59.6	49.3	50.2	48.2	46.9
21:10 - 21:20	57.4	49.6	50.7	48.4	47.0
21:20 - 21:30	63.3	51.1	53.4	48.5	47.2
21:30 - 21:40	63.6	50.5	51.5	48.8	47.5
21:40 - 21:50	58.8	49.6	50.7	48.1	46.5
21:50 - 22:00	58.0	49.5	50.6	48.3	47.0
22:00 - 22:10	58.4	49.3	50.3	48.0	46.4
22:10 - 22:20	58.8	49.1	50.2	47.9	46.4
22:20 - 22:30	55.5	49.3	50.4	48.0	46.6
22:30 - 22:40	58.5	49.7	51.1	47.9	46.4
22:40 - 22:50	68.7	51.1	52.3	48.1	46.8
22:50 - 23:00	53.7	49.2	50.1	48.1	46.9
23:00 - 23:10	57.4	49.1	50.0	47.8	46.4
23:10 - 23:20	54.1	48.5	49.7	47.3	46.2
23:20 - 23:30	52.4	48.3	49.4	47.0	45.8
23:30 - 23:40	63.5	49.1	49.9	47.6	46.0
23:40 - 23:50	52.7	48.5	49.9	46.9	45.5
23:50 - 00:00	54.0	47.8	49.1	46.4	45.2
00:00 - 00:10	55.5	48.5	50.1	46.8	45.1
00:10 - 00:20	53.4	47.9	49.1	46.5	45.0
00:20 - 00:30	55.7	47.9	49.1	46.6	45.4
00:30 - 00:40	60.8	47.8	49.3	45.8	44.5
00:40 - 00:50	61.9	48.2	49.6	46.5	45.1
00:50 - 01:00	59.4	48.1	49.9	45.7	44.4
01:00 - 01:10	55.5	47.2	48.9	45.4	44.3
01:10 - 01:20	53.3	46.6	48.0	45.2	43.9
01:20 - 01:30	52.7	46.8	48.2	45.4	43.7
01:30 - 01:40	56.6	47.3	48.7	45.2	43.8
01:40 - 01:50	54.7	47.5	49.3	45.4	44.0
01:50 - 02:00	58.0	47.6	49.2	45.4	44.0
02:00 - 02:10	55.7	46.7	48.0	45.3	44.3
02:10 - 02:20	53.8	47.1	48.7	45.6	44.3
02:20 - 02:30	52.5	46.5	47.9	45.0	43.6

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
02:30 - 02:40	53.6	46.9	48.8	45.0	43.8
02:40 - 02:50	52.9	46.8	48.4	44.9	43.6
02:50 - 03:00	54.3	46.3	47.8	44.8	43.3
03:00 - 03:10	61.6	46.7	47.9	44.7	43.1
03:10 - 03:20	62.6	47.4	48.9	44.5	43.3
03:20 - 03:30	51.2	46.2	47.6	44.9	43.4
03:30 - 03:40	53.8	47.0	48.6	45.4	44.1
03:40 - 03:50	55.6	46.4	47.7	45.1	44.0
03:50 - 04:00	51.5	45.8	46.9	44.8	43.6
04:00 - 04:10	50.2	45.7	46.9	44.5	43.5
04:10 - 04:20	66.0	48.9	48.6	44.1	43.0
04:20 - 04:30	55.3	45.3	46.9	43.6	42.3
04:30 - 04:40	56.4	45.7	47.5	44.2	42.7
04:40 - 04:50	55.6	47.0	48.5	44.7	43.1
04:50 - 05:00	54.6	47.3	48.3	46.2	45.2
05:00 - 05:10	50.8	47.0	47.9	46.0	44.7
05:10 - 05:20	55.6	47.3	48.2	46.1	44.9
05:20 - 05:30	53.9	47.5	49.0	46.2	45.2
05:30 - 05:40	51.1	45.6	46.8	44.3	43.1
05:40 - 05:50	55.0	45.5	46.8	44.1	43.0
05:50 - 06:00	58.2	46.3	48.0	44.5	43.3
06:00 - 06:10	61.6	46.9	48.4	44.5	43.0
06:10 - 06:20	59.9	46.8	48.3	45.0	43.3
06:20 - 06:30	60.8	46.5	47.9	44.7	43.3
06:30 - 06:40	52.9	46.5	47.9	45.0	43.8
06:40 - 06:50	64.4	48.9	50.6	45.7	43.8
06:50 - 07:00	55.3	46.8	48.8	45.0	43.5
07:00 - 07:10	58.6	47.6	49.5	45.7	44.4
07:10 - 07:20	54.7	47.3	48.8	45.7	44.2
07:20 - 07:30	55.6	47.1	48.8	45.6	44.4
07:30 - 07:40	58.1	47.7	49.2	46.0	44.8
07:40 - 07:50	57.6	48.6	50.3	46.2	44.6
07:50 - 08:00	63.2	49.9	51.7	46.7	44.8
08:00 - 08:10	58.2	48.9	50.7	46.8	44.7
08:10 - 08:20	70.5	60.4	62.6	47.8	46.2
08:20 - 08:30	69.8	61.4	62.7	59.7	57.8
08:30 - 08:40	69.4	61.5	62.7	59.9	57.6
08:40 - 08:50	69.3	61.6	62.8	60.0	57.9
08:50 - 09:00	70.4	61.3	62.5	59.6	57.7
09:00 - 09:10	69.6	61.2	62.5	59.4	57.5
09:10 - 09:20	73.0	61.2	62.5	59.3	57.3
09:20 - 09:30	69.4	61.4	62.8	59.5	57.4
09:30 - 09:40	70.3	60.9	62.0	59.0	57.4
09:40 - 09:50	70.3	60.9	62.1	59.1	57.3
09:50 - 10:00	72.3	60.8	61.9	59.1	56.7
10:00 - 10:10	70.1	61.4	62.7	59.5	57.7
10:10 - 10:20	69.1	61.1	62.3	59.3	57.7
10:20 - 10:30	70.1	61.2	62.3	59.6	57.9
10:30 - 10:40	70.9	62.5	63.9	60.5	58.4
10:40 - 10:50	72.1	63.0	64.6	60.9	58.6
10:50 - 11:00	73.0	60.2	63.8	49.6	47.5
11:00 - 11:10	67.7	52.9	53.9	49.8	48.2
11:10 - 11:20	71.5	52.1	53.0	49.3	48.1
11:20 - 11:30	72.3	53.0	53.8	50.0	48.1
11:30 - 11:40	71.5	52.6	53.5	50.0	48.5
11:40 - 11:50	67.2	52.4	54.2	49.3	48.0
11:50 - 12:00	69.3	51.9	53.3	49.3	47.9
12:00 - 12:10	66.9	51.7	52.8	48.5	47.2
12:10 - 12:20	62.0	51.5	53.0	49.3	47.6
12:20 - 12:30	65.1	51.2	52.5	48.8	47.0
12:30 - 12:40	67.6	51.4	53.4	48.1	46.7
12:40 - 12:50	64.9	52.9	55.8	48.6	47.0
12:50 - 13:00	68.3	51.9	52.7	48.0	46.5
13:00 - 13:10	67.5	52.5	55.0	49.0	47.4
13:10 - 13:20	68.1	53.8	56.6	49.0	47.5
13:20 - 13:30	65.6	51.3	53.3	47.9	46.1
13:30 - 13:40	73.3	52.2	54.1	48.7	46.7
13:40 - 13:50	62.6	50.5	52.2	48.3	46.5
13:50 - 14:00	65.8	50.5	52.1	48.1	46.0
14:00 - 14:10	73.7	54.2	54.3	48.1	46.0
14:10 - 14:20	65.5	49.4	50.8	47.5	45.9
14:20 - 14:30	66.6	50.8	52.2	48.1	46.5

Table A2: Location 2, Statistical data, 19-20 December 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
14:30 - 14:40	67.7	50.2	51.7	47.8	46.3
14:40 - 14:50	57.8	49.2	50.9	47.4	45.7
14:50 - 15:00	58.9	49.1	50.6	47.2	45.2
15:00 - 15:10	58.3	48.9	50.3	47.3	45.9
15:10 - 15:20	58.0	49.0	50.8	46.9	45.3
15:20 - 15:30	57.2	48.8	50.7	46.8	45.4
15:30 - 15:40	68.3	51.0	51.3	46.8	45.5
15:40 - 15:50	61.4	49.4	51.2	46.9	45.2
15:50 - 16:00	58.5	48.1	49.3	46.6	45.3
16:00 - 16:10	61.2	49.5	51.2	46.8	45.0
16:10 - 16:20	54.4	48.2	49.5	46.8	45.3
16:20 - 16:30	61.3	50.6	53.0	47.2	45.6
16:30 - 16:40	82.5	66.8	70.6	46.9	45.6
16:40 - 16:50	62.7	49.2	51.1	46.7	44.7
16:50 - 17:00	60.7	48.2	49.5	46.3	44.8
17:00 - 17:10	55.1	48.3	49.8	46.4	44.7
17:10 - 17:20	58.2	48.4	50.0	46.8	45.3
17:20 - 17:30	57.7	48.3	49.3	47.1	45.9
17:30 - 17:40	64.1	50.2	51.7	46.7	44.7
17:40 - 17:50	55.4	48.2	49.7	46.6	45.4
17:50 - 18:00	55.8	49.2	50.7	47.5	45.9
18:00 - 18:10	70.1	53.8	55.7	49.0	47.5
18:10 - 18:20	56.5	49.9	51.1	48.6	47.5
18:20 - 18:30	58.0	49.5	50.9	47.6	45.6
18:30 - 18:40	55.9	49.2	50.3	48.0	47.0
18:40 - 18:50	61.4	49.6	51.1	47.5	45.8
18:50 - 19:00	65.6	50.4	51.6	47.1	45.8
19:00 - 19:10	69.9	52.2	53.1	47.3	45.8
19:10 - 19:20	53.2	48.4	49.7	46.9	45.3
19:20 - 19:30	54.7	48.0	49.1	46.6	44.9
19:30 - 19:40	59.4	48.7	50.1	46.9	45.5
19:40 - 19:50	55.5	48.0	49.3	46.8	45.5
19:50 - 20:00	53.8	48.3	49.6	47.1	45.7
20:00 - 20:10	55.7	47.8	48.7	46.8	45.2
20:10 - 20:20	60.0	48.7	49.9	47.2	45.7
20:20 - 20:30	55.1	48.5	49.8	47.2	46.1
20:30 - 20:40	59.9	48.9	50.3	46.8	45.4
20:40 - 20:50	60.0	48.7	50.5	46.7	45.7
20:50 - 21:00	64.7	49.9	51.2	46.8	45.7
21:00 - 21:10	56.1	48.5	49.8	47.0	45.2
21:10 - 21:20	55.5	48.2	49.3	46.9	45.5
21:20 - 21:30	51.9	47.5	48.6	46.3	45.3
21:30 - 21:40	58.4	47.1	48.2	45.8	44.4
21:40 - 21:50	51.9	47.5	48.5	46.4	45.1
21:50 - 22:00	61.5	48.6	49.0	46.4	45.0
22:00 - 22:10	54.0	47.8	49.2	46.1	44.8
22:10 - 22:20	54.7	47.6	48.8	46.1	44.7
22:20 - 22:30	54.9	47.1	48.2	45.7	44.4
22:30 - 22:40	52.6	47.1	48.7	45.4	44.0
22:40 - 22:50	54.7	47.1	48.5	45.7	44.6
22:50 - 23:00	53.5	47.1	48.6	45.4	44.1
23:00 - 23:10	57.0	47.1	48.4	45.1	43.4
23:10 - 23:20	52.6	46.7	48.1	45.2	44.1
23:20 - 23:30	54.7	46.8	48.0	45.3	44.0
23:30 - 23:40	54.7	47.0	48.4	45.4	44.3
23:40 - 23:50	56.8	47.0	48.5	45.3	43.9
23:50 - 00:00	64.8	47.4	48.3	45.7	44.0
00:00 - 00:10	51.1	47.1	48.3	45.6	44.1
00:10 - 00:20	58.8	46.9	48.2	45.0	43.6
00:20 - 00:30	63.1	48.8	50.0	46.2	44.5
00:30 - 00:40	55.2	47.2	48.7	45.5	44.4
00:40 - 00:50	55.8	46.9	48.4	45.3	44.3
00:50 - 01:00	60.1	48.2	49.2	46.7	44.7
01:00 - 01:10	62.4	48.9	50.0	47.0	45.8
01:10 - 01:20	52.2	48.1	49.2	47.0	45.9
01:20 - 01:30	52.1	47.9	48.9	46.9	45.8
01:30 - 01:40	58.6	47.9	48.4	46.5	45.2
01:40 - 01:50	53.1	47.9	48.9	46.9	45.9
01:50 - 02:00	52.7	47.9	48.9	46.8	45.6
02:00 - 02:10	59.9	47.8	48.8	46.7	45.5
02:10 - 02:20	55.0	47.8	49.1	46.5	45.5
02:20 - 02:30	51.3	47.4	48.5	46.5	45.6

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
02:30 - 02:40	56.2	47.7	49.0	46.3	45.4
02:40 - 02:50	61.3	48.1	50.2	45.0	43.3
02:50 - 03:00	59.1	46.1	47.0	44.2	42.6
03:00 - 03:10	53.5	45.5	46.8	44.2	42.8
03:10 - 03:20	52.9	45.8	47.4	44.2	43.0
03:20 - 03:30	59.6	46.3	47.3	44.5	43.3
03:30 - 03:40	52.5	45.2	46.8	43.8	42.5
03:40 - 03:50	50.8	44.8	46.0	43.6	42.3
03:50 - 04:00	53.6	44.8	46.0	43.5	42.5
04:00 - 04:10	52.6	44.5	46.1	42.9	41.9
04:10 - 04:20	54.8	45.4	47.2	43.2	42.0
04:20 - 04:30	49.1	44.3	45.7	43.0	41.8
04:30 - 04:40	53.1	45.3	47.4	43.2	41.8
04:40 - 04:50	51.5	44.1	45.6	42.6	41.1
04:50 - 05:00	55.1	44.2	45.5	42.7	41.5
05:00 - 05:10	51.8	44.3	45.9	42.8	41.5
05:10 - 05:20	52.5	44.4	46.1	43.0	42.0
05:20 - 05:30	52.9	44.3	45.4	43.0	42.0
05:30 - 05:40	49.1	43.9	44.5	43.1	42.1
05:40 - 05:50	50.7	44.6	45.8	43.6	42.4
05:50 - 06:00	48.4	43.9	44.7	43.1	41.9
06:00 - 06:10	51.3	45.3	46.5	44.0	42.7
06:10 - 06:20	50.7	45.1	45.9	44.0	42.9
06:20 - 06:30	58.5	45.9	47.3	44.5	43.3
06:30 - 06:40	51.3	45.6	46.7	44.2	42.9
06:40 - 06:50	58.4	46.9	49.0	44.3	42.8
06:50 - 07:00	50.4	45.3	46.9	44.0	42.8
07:00 - 07:10	60.4	46.9	48.2	44.0	42.8
07:10 - 07:20	51.4	45.1	46.3	43.9	42.6
07:20 - 07:30	54.9	45.5	46.7	44.2	42.8
07:30 - 07:40	69.5	48.7	50.1	45.0	43.7
07:40 - 07:50	56.1	46.2	47.3	44.8	43.4
07:50 - 08:00	65.1	47.5	48.4	45.0	43.3
08:00 - 08:10	64.8	48.9	49.9	45.6	44.0
08:10 - 08:20	68.8	48.5	50.4	45.8	44.5
08:20 - 08:30	53.0	46.3	47.3	45.3	44.0
08:30 - 08:40	61.0	47.1	48.1	45.2	44.0
08:40 - 08:50	58.0	46.6	48.0	45.3	44.2
08:50 - 09:00	68.3	50.6	50.9	45.9	43.7
09:00 - 09:10	57.4	47.2	48.9	45.6	44.5
09:10 - 09:20	56.0	47.1	48.3	45.8	44.2
09:20 - 09:30	62.1	47.9	49.1	45.8	44.5
09:30 - 09:40	63.4	49.0	51.1	46.5	44.8
09:40 - 09:50	62.2	48.7	51.4	46.3	44.9
09:50 - 10:00	65.4	49.9	51.3	46.7	45.5
10:00 - 10:10	63.4	50.1	51.8	47.3	46.1
10:10 - 10:20	62.9	49.6	50.7	47.1	45.6
10:20 - 10:30	63.3	49.8	51.3	47.3	45.7
10:30 - 10:40	65.4	50.4	52.0	47.6	46.3
10:40 - 10:50	59.9	49.4	50.9	47.5	46.2
10:50 - 11:00	59.8	49.9	51.1	48.4	46.7
11:00 - 11:10	64.0	49.7	51.0	47.8	46.7
11:10 - 11:20	63.8	50.5	52.1	48.0	46.3
11:20 - 11:30	67.6	50.8	52.3	48.4	47.2
11:30 - 11:40	66.1	50.8	52.7	47.7	46.0
11:40 - 11:50	69.6	50.7	52.2	47.8	46.6
11:50 - 12:00	62.2	49.9	51.4	47.8	46.7
12:00 - 12:10	70.0	50.5	50.9	48.3	47.1
12:10 - 12:20	65.3	50.7	52.4	48.1	46.8
12:20 - 12:30	64.6	51.2	53.3	48.6	47.2
12:30 - 12:40	59.9	50.4	51.9	48.5	46.7
12:40 - 12:50	67.4	50.5	51.8	48.4	47.0
12:50 - 13:00	57.8	50.0	51.3	48.5	47.2
13:00 - 13:10	63.2	50.5	52.2	48.2	46.8
13:10 - 13:20	64.3	50.1	51.2	48.4	46.7
13:20 - 13:30	68.4	50.3	51.3	47.9	45.8
13:30 - 13:40	69.8	50.4	51.6	48.1	46.7
13:40 - 13:50	62.3	48.8	50.0	47.1	45.8
13:50 - 14:00	62.0	49.1	50.3	47.4	46.3
14:00 - 14:10	64.2	49.9	51.1	47.5	46.2
14:10 - 14:20	60.5	49.0	50.4	47.4	46.3
14:20 - 14:30	62.6	49.8	51.1	47.8	46.4

Table A3: Location 2, Statistical data, 20-21 December 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
14:30 - 14:40	64.5	50.2	51.4	48.3	46.5
14:40 - 14:50	65.3	50.8	52.0	48.6	46.9
14:50 - 15:00	62.5	49.8	51.0	47.7	46.4
15:00 - 15:10	63.0	49.9	51.3	47.9	46.4
15:10 - 15:20	64.4	49.4	50.6	47.6	46.4
15:20 - 15:30	62.7	49.8	50.6	47.6	46.3
15:30 - 15:40	64.6	49.7	50.7	47.7	46.2
15:40 - 15:50	63.3	49.7	50.9	47.4	45.4
15:50 - 16:00	63.4	49.7	51.0	47.4	45.5
16:00 - 16:10	83.8	62.4	64.4	47.4	45.7
16:10 - 16:20	63.5	49.7	50.6	47.6	46.4
16:20 - 16:30	63.8	48.6	49.7	47.2	45.8
16:30 - 16:40	64.4	49.6	51.4	47.6	46.2
16:40 - 16:50	58.4	49.0	50.3	47.5	46.3
16:50 - 17:00	59.2	49.3	50.6	47.7	46.5
17:00 - 17:10	69.9	50.7	51.9	48.5	46.9
17:10 - 17:20	69.7	50.4	51.5	48.3	47.0
17:20 - 17:30	59.5	49.7	50.6	48.2	46.9
17:30 - 17:40	61.3	49.9	51.2	48.1	46.6
17:40 - 17:50	62.8	50.0	51.0	48.2	46.7
17:50 - 18:00	69.6	51.4	51.5	48.2	46.3
18:00 - 18:10	68.7	50.3	51.0	48.1	46.5
18:10 - 18:20	59.4	50.2	51.4	48.7	47.0
18:20 - 18:30	57.5	49.6	51.0	48.0	46.7
18:30 - 18:40	70.7	51.0	51.2	48.1	46.6
18:40 - 18:50	64.4	50.0	51.5	48.1	46.7
18:50 - 19:00	65.8	50.4	51.6	48.2	46.5
19:00 - 19:10	68.2	50.2	51.1	48.0	46.8
19:10 - 19:20	65.9	51.0	52.0	48.1	46.5
19:20 - 19:30	58.1	49.6	51.0	48.0	46.5
19:30 - 19:40	63.7	48.7	49.7	47.3	45.9
19:40 - 19:50	69.5	49.9	51.2	47.6	46.1
19:50 - 20:00	64.8	49.0	50.0	47.3	46.1
20:00 - 20:10	65.9	49.5	50.9	47.5	45.4
20:10 - 20:20	54.5	48.4	49.4	47.2	46.1
20:20 - 20:30	56.9	48.9	50.3	47.4	46.1
20:30 - 20:40	65.8	52.0	54.9	48.0	46.0
20:40 - 20:50	72.5	51.9	52.2	47.9	46.4
20:50 - 21:00	61.6	49.9	51.2	47.6	46.0
21:00 - 21:10	67.6	50.6	51.5	48.3	46.7
21:10 - 21:20	65.8	50.3	51.5	48.3	47.1
21:20 - 21:30	68.0	50.6	51.2	48.3	47.0
21:30 - 21:40	67.9	51.0	52.5	47.8	46.5
21:40 - 21:50	62.4	50.0	51.2	48.1	46.2
21:50 - 22:00	60.8	50.6	52.1	48.2	47.2
22:00 - 22:10	65.9	49.5	50.4	47.9	46.9
22:10 - 22:20	67.2	49.1	49.9	46.8	44.7
22:20 - 22:30	56.1	48.6	49.5	47.6	46.5
22:30 - 22:40	65.2	50.0	51.1	47.4	46.3
22:40 - 22:50	61.9	49.3	50.6	47.3	45.8
22:50 - 23:00	61.5	49.4	50.8	47.6	45.9
23:00 - 23:10	57.2	48.6	49.7	47.5	46.3
23:10 - 23:20	56.5	48.3	49.4	47.0	45.5
23:20 - 23:30	59.7	48.4	50.1	46.5	44.7
23:30 - 23:40	64.4	49.9	50.8	46.8	45.3
23:40 - 23:50	55.0	47.5	48.7	46.0	44.4
23:50 - 00:00	63.5	48.7	50.3	46.1	44.9
00:00 - 00:10	62.9	49.2	50.4	47.1	45.6
00:10 - 00:20	65.5	48.8	49.8	46.3	44.6
00:20 - 00:30	60.9	48.9	50.1	47.1	45.9
00:30 - 00:40	68.1	48.9	48.8	45.2	43.9
00:40 - 00:50	59.5	47.4	48.7	46.1	45.2
00:50 - 01:00	54.3	46.1	47.8	44.2	42.9
01:00 - 01:10	54.9	47.0	48.5	44.6	42.6
01:10 - 01:20	65.6	48.5	49.9	46.0	43.7
01:20 - 01:30	58.5	47.4	48.6	45.1	43.5
01:30 - 01:40	68.7	48.5	49.2	46.7	45.4
01:40 - 01:50	56.6	46.7	48.6	44.2	42.9
01:50 - 02:00	59.4	47.2	48.4	45.1	43.8
02:00 - 02:10	61.5	47.0	48.4	43.9	42.8
02:10 - 02:20	66.9	46.6	47.2	43.9	42.5
02:20 - 02:30	59.7	47.4	49.0	45.3	42.5

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
02:30 - 02:40	56.1	45.2	46.3	43.7	42.5
02:40 - 02:50	55.9	45.8	47.7	43.4	42.0
02:50 - 03:00	58.0	45.1	46.7	43.5	42.4
03:00 - 03:10	58.6	45.5	47.1	43.8	42.5
03:10 - 03:20	59.0	45.8	47.6	43.8	42.7
03:20 - 03:30	52.6	44.9	46.3	43.6	42.6
03:30 - 03:40	58.9	45.9	47.1	43.7	42.5
03:40 - 03:50	61.9	46.0	47.6	44.1	42.6
03:50 - 04:00	55.0	45.4	46.6	43.9	42.7
04:00 - 04:10	54.5	45.6	47.0	44.1	42.7
04:10 - 04:20	63.4	46.5	47.6	44.2	42.5
04:20 - 04:30	53.5	46.2	47.8	44.5	43.1
04:30 - 04:40	56.5	46.4	48.2	44.9	43.8
04:40 - 04:50	51.9	46.5	48.2	45.0	43.5
04:50 - 05:00	58.4	46.4	47.3	45.3	44.1
05:00 - 05:10	51.4	46.5	47.8	45.2	44.1
05:10 - 05:20	61.6	47.6	49.2	45.9	44.6
05:20 - 05:30	58.7	47.4	48.6	45.9	44.1
05:30 - 05:40	57.4	48.1	50.2	46.2	45.1
05:40 - 05:50	57.5	48.6	50.8	46.5	45.4
05:50 - 06:00	62.3	48.8	50.3	47.0	45.7
06:00 - 06:10	57.9	49.2	50.3	47.6	46.1
06:10 - 06:20	58.8	49.4	50.7	48.0	46.5
06:20 - 06:30	63.2	50.7	52.2	48.3	46.9
06:30 - 06:40	61.0	50.3	51.8	48.3	47.1
06:40 - 06:50	61.7	50.9	52.6	48.9	47.4
06:50 - 07:00	71.5	51.6	53.3	49.1	47.9
07:00 - 07:10	62.1	50.9	52.3	49.2	47.7
07:10 - 07:20	63.9	51.4	53.1	49.7	48.3
07:20 - 07:30	62.7	50.6	51.3	49.4	48.1
07:30 - 07:40	60.7	51.2	52.8	49.3	47.7
07:40 - 07:50	64.6	51.3	52.7	49.5	48.3
07:50 - 08:00	71.8	56.8	61.0	50.5	48.6
08:00 - 08:10	71.4	61.8	63.1	60.1	57.1
08:10 - 08:20	70.4	60.8	62.6	58.7	56.8
08:20 - 08:30	71.8	61.9	63.9	59.3	58.0
08:30 - 08:40	74.1	62.1	64.2	59.4	57.3
08:40 - 08:50	75.6	62.8	64.9	60.0	58.3
08:50 - 09:00	73.6	62.7	65.0	59.8	57.8
09:00 - 09:10	72.8	61.9	64.2	59.4	58.0
09:10 - 09:20	74.7	60.8	62.0	58.9	57.3
09:20 - 09:30	73.6	62.6	64.9	59.6	57.3
09:30 - 09:40	73.9	62.2	64.9	59.2	57.7
09:40 - 09:50	72.8	61.5	63.5	58.9	57.5
09:50 - 10:00	74.0	61.3	63.0	58.8	56.1

Table A4: Location 2, Statistical data, 21-22 December 2014

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
14:50 - 15:00	67.0	62.6	58.7	57.1	55.3	50.2	43.7	35.0	81.9	78.6	73.6	74.4	72.7	69.1	66.1	61.3
15:00 - 15:10	67.5	62.4	60.0	58.9	57.3	52.4	47.2	35.7	81.3	79.6	73.9	67.7	67.6	63.7	66.0	60.6
15:10 - 15:20	68.5	63.8	61.4	58.4	55.6	50.9	44.8	39.1	85.2	78.5	72.6	69.3	67.3	66.0	65.7	64.1
15:20 - 15:30	69.1	63.5	62.6	58.6	53.6	47.2	37.7	27.3	86.3	79.8	74.6	69.9	68.0	64.1	54.4	45.5
15:30 - 15:40	68.3	63.1	60.4	57.8	54.5	49.1	43.3	35.9	80.9	79.4	76.2	71.7	71.4	68.3	67.4	60.7
15:40 - 15:50	67.6	64.0	63.9	59.9	54.1	49.4	43.8	37.0	83.5	80.1	74.6	70.5	68.1	69.2	62.7	63.3
15:50 - 16:00	71.6	64.3	62.1	57.4	53.0	47.8	40.5	30.3	91.2	79.4	72.6	75.4	70.9	68.2	60.6	49.0
16:00 - 16:10	67.4	62.0	58.1	56.2	52.8	47.1	39.9	29.0	81.0	79.3	78.6	74.5	66.9	61.1	57.9	52.0
16:10 - 16:20	67.3	60.6	56.6	54.7	51.7	45.6	35.8	22.1	79.2	71.8	66.5	63.6	62.0	56.8	50.2	38.8
16:20 - 16:30	67.3	62.1	58.2	55.3	51.9	45.7	36.2	19.2	78.9	74.3	72.0	63.9	68.6	57.1	65.5	38.7
16:30 - 16:40	67.9	61.4	57.6	54.8	51.7	45.9	36.6	20.6	83.3	77.0	70.3	64.1	70.6	65.3	64.5	41.3
16:40 - 16:50	67.1	61.3	57.1	54.8	51.5	44.9	35.0	19.5	80.5	74.6	65.9	62.3	68.2	60.0	60.8	36.5
16:50 - 17:00	67.7	61.9	57.4	55.1	52.2	46.5	36.0	21.4	80.0	79.6	67.5	62.7	61.9	56.9	52.7	42.1
17:00 - 17:10	67.8	62.0	58.0	55.9	52.8	46.8	36.5	20.3	83.6	73.6	67.7	68.2	69.2	64.6	63.8	37.1
17:10 - 17:20	66.9	60.7	56.7	54.8	51.5	45.5	34.2	18.4	79.3	72.0	67.4	65.0	62.4	58.3	53.8	31.8
17:20 - 17:30	65.3	59.5	56.1	54.1	51.1	43.9	32.9	18.6	81.0	71.2	67.8	65.7	65.9	65.3	60.4	44.6
17:30 - 17:40	68.0	61.1	57.0	54.8	51.1	44.3	32.7	20.0	88.0	76.8	71.2	62.3	60.3	53.6	46.5	41.1
17:40 - 17:50	66.2	61.2	56.6	54.5	50.8	44.3	34.5	20.7	77.7	75.3	67.6	68.0	59.4	56.3	54.8	43.4
17:50 - 18:00	66.2	61.3	56.0	54.1	51.0	44.4	32.6	17.5	82.5	81.0	67.3	63.1	62.8	54.5	51.7	31.7
18:00 - 18:10	66.9	60.9	57.1	54.9	51.2	44.9	35.5	35.7	79.4	70.5	69.3	67.0	61.7	56.2	61.1	65.2
18:10 - 18:20	69.3	67.2	59.6	55.6	51.8	45.7	35.1	19.0	84.9	85.6	75.5	75.4	63.0	59.7	52.9	36.1
18:20 - 18:30	67.7	64.3	59.5	56.4	52.6	45.3	33.4	18.5	82.1	83.7	81.6	78.7	70.8	65.5	49.4	40.0
18:30 - 18:40	67.7	61.0	56.8	54.4	50.7	44.0	32.2	17.8	83.7	77.9	72.3	63.7	60.2	54.2	46.3	33.5
18:40 - 18:50	67.7	63.7	59.0	55.7	50.8	44.0	33.5	17.1	83.1	80.0	72.2	75.1	58.9	53.8	56.2	34.2
18:50 - 19:00	66.4	61.4	56.4	57.5	60.3	57.4	49.0	30.7	81.0	73.2	69.8	77.8	79.6	78.7	70.2	50.6
19:00 - 19:10	66.6	61.2	57.2	54.9	51.5	44.6	32.6	17.8	82.3	75.3	70.1	67.0	60.2	55.5	45.7	32.5
19:10 - 19:20	65.9	60.3	57.4	56.1	53.2	46.9	36.8	20.2	81.2	72.7	77.6	78.8	75.6	69.8	61.8	42.7
19:20 - 19:30	67.1	61.0	57.0	54.3	51.2	44.2	32.2	18.8	88.6	77.2	72.8	65.6	63.3	58.9	47.0	34.5
19:30 - 19:40	67.5	62.9	56.8	55.3	52.2	46.1	33.7	18.0	80.9	79.9	67.8	69.6	63.4	57.6	47.6	32.4
19:40 - 19:50	66.0	59.6	56.0	54.3	51.1	44.4	32.4	17.3	81.7	72.7	66.5	66.1	64.9	61.6	45.3	31.8
19:50 - 20:00	66.1	60.8	55.9	53.5	50.3	43.6	31.1	16.5	80.8	76.5	72.0	60.9	58.3	57.6	45.2	35.9
20:00 - 20:10	65.8	58.7	55.6	53.5	50.2	42.8	30.1	17.6	87.1	74.0	72.2	64.9	60.8	53.1	43.6	32.9
20:10 - 20:20	66.4	64.5	58.6	55.2	51.9	45.8	32.5	16.8	83.8	86.0	82.1	77.9	70.8	64.8	50.2	32.5
20:20 - 20:30	65.1	60.0	56.0	54.2	51.2	44.4	32.4	16.9	80.8	75.9	65.4	65.5	60.0	56.5	51.3	35.9
20:30 - 20:40	64.4	59.5	56.3	54.4	51.0	44.1	41.3	16.9	77.1	77.7	73.3	69.6	64.5	57.8	66.8	35.9
20:40 - 20:50	66.2	62.8	59.2	54.7	49.9	43.0	31.1	17.6	83.9	84.3	78.8	70.8	63.7	60.6	47.8	32.9
20:50 - 21:00	64.1	60.4	57.5	55.4	51.1	43.4	30.3	14.8	76.0	82.6	79.2	77.7	73.0	59.9	46.9	30.7
21:00 - 21:10	63.0	58.4	55.5	53.5	50.2	42.6	29.5	14.5	75.0	71.8	68.3	65.4	64.6	56.5	50.8	33.6
21:10 - 21:20	64.8	59.6	55.6	53.5	50.5	43.2	30.9	15.3	77.3	77.6	68.3	68.8	63.9	56.2	52.0	31.1
21:20 - 21:30	66.9	60.0	56.3	54.3	57.7	54.0	44.1	25.3	84.1	72.3	73.5	67.0	80.3	77.5	66.0	47.9
21:30 - 21:40	65.0	58.7	55.4	53.3	49.9	42.8	30.3	15.8	87.6	79.1	74.7	69.6	69.7	62.5	51.6	32.9
21:40 - 21:50	65.7	60.7	56.4	54.1	51.0	44.3	32.3	18.4	83.4	75.1	69.8	63.7	65.5	57.7	47.6	36.1
21:50 - 22:00	66.3	60.4	56.1	53.7	50.5	43.4	31.0	15.8	83.1	72.7	64.1	64.2	67.0	58.9	47.1	31.2
22:00 - 22:10	64.5	59.1	55.2	53.4	50.3	43.3	30.6	15.5	82.6	73.2	66.6	61.1	59.6	56.4	46.7	32.6
22:10 - 22:20	63.5	58.0	55.0	54.2	51.0	43.5	34.7	16.1	79.1	71.2	66.5	72.2	66.2	57.9	65.2	35.7
22:20 - 22:30	65.4	59.4	56.7	54.2	51.2	43.9	31.9	17.7	83.5	72.5	70.5	67.5	64.0	55.4	45.9	32.6
22:30 - 22:40	68.5	60.3	56.6	53.4	51.2	47.5	31.6	19.3	91.3	78.6	74.0	63.2	72.0	72.9	50.5	34.3
22:40 - 22:50	68.4	59.6	56.2	53.2	49.8	42.6	31.0	19.2	93.4	84.5	75.2	68.9	64.5	57.0	49.9	34.3
22:50 - 23:00	65.6	59.7	56.1	54.4	51.9	44.3	31.9	17.5	82.5	72.5	69.2	71.0	74.6	58.6	49.4	35.1
23:00 - 23:10	64.3	58.3	55.0	52.2	49.7	43.1	39.2	16.5	80.1	69.2	65.6	63.4	64.6	62.6	66.8	32.9
23:10 - 23:20	63.7	56.8	54.3	52.8	50.3	42.5	29.7	15.2	79.1	69.2	69.7	68.2	63.9	56.3	49.1	31.6
23:20 - 23:30	63.3	57.5	54.1	53.7	50.3	43.1	30.0	15.1	78.0	72.2	63.5	75.9	66.4	59.2	43.0	30.7
23:30 - 23:40	62.6	57.1	53.7	51.8	49.0	41.8	28.6	14.5	76.7	71.7	64.1	67.0	61.4	57.6	42.8	31.7
23:40 - 23:50	62.2	56.5	53.7	51.8	49.8	41.8	29.0	14.1	74.9	68.2	64.6	63.2	71.2	55.1	49.5	29.9
23:50 - 00:00	63.8	58.4	55.6	52.2	49.5	43.1	31.7	16.6	78.0	71.6	67.2	63.3	60.8	58.0	50.3	32.4
00:00 - 00:10	62.9	58.2	55.2	53.2	50.3	43.1	30.4	15.7	78.2	69.2	67.0	65.3	64.0	59.5	48.1	33.3
00:10 - 00:20	62.3	56.3	53.9	51.8	49.4	41.8	29.8	15.5	85.2	70.7	63.3	64.8	61.8	59.1	54.8	37.0
00:20 - 00:30	62.5	56.7	53.6	50.4	48.0	40.3	29.8	15.1	81.7	72.0	69.0	60.3	62.1	51.5	60.6	35.3
00:30 - 00:40	61.2	54.9	53.0	53.5	50.5	41.9	27.4	16.7	79.5	69.3	63.6	76.9	72.7	61.8	41.2	41.4
00:40 - 00:50	67.6	57.9	54.5	51.4	49.5	44.5	33.0	17.6	87.1	75.2	65.9	64.6	66.0	60.4	53.4	35.9
00:50 - 01:00	63.2	56.1	53.1	49.8	46.8	39.4	28.6	15.6	81.7	71.1	66.1	63.4	62.2	57.5	52.8	35.3
01:00 - 01:10	62.9	56.0	52.7	49.5	47.9	40.7	30.3	18.6	82.4	71.9	67.3	60.0	56.5	49.8	46.3	36.2
01:10 - 01:20	63.9	55.6	53.0	49.6	47.7	39.9	30.2	17.8	84.5	72.7	69.3	61.7	58.0	52.8	54.3	34.3
01:20 - 01:30	61.4	54.2	51.9	49.2	47.3	39.6	29.5	17.2	78.7	64.6	62.0	61.3	58.5	50.8	48.0	37.9
01:30 - 01:40	63.8	55.3	52.9	48.8	45.9	38.6	30.2	18.7	88.6	77.6	73.4	63.6	61.9	53.6	53.4	36.4
01:40 - 01:50	63.0	57.3	53.6	49.6	47.3	40.7	30.6	17.6	83.3	73.5	70.6	62.2	63.3	56.9	50.3	35.8
01:50 - 02:00	61.6	56.6	53.4	49.5	46.9	41.2	30.6	17.2	78.6	75.7	70.3	63.3	61.5	61.4	55.6	43.3
02:00 - 02:10	58.9	52.8	50.6	47.2	45.6	38.6	24.8	13.2	77.6	64.0	60.3	56.6	66.2	63.7	46.2	30.8
02:10 - 02:20	61.4	54.5	51.9	48.1	45.9	38.0	25.6	15.3	82.8	69.6	63.9	61.8	61.5	55.1	45.1	36.3
02:20 - 02:30	60.8	55.6	52.1	48.6	46.2	38.6	28.2	15.0	75.5	75.9	66.0	66.7	66.6	60.3	45.6	31.3
02:30 - 02:40	61.9	54.7	52.2	48.7	46.1	39.7	30.6	17.8	83.9	71.7	66.4	66.1	61.3	58.1	54.0	39.7
02:40 - 02:50	58.7	53.1	50.4	47.1	44.7	37.5	23.7	12.7	72.0	68.5	59.5	57.0	54.0	49.9	36.2	30.8

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
02:50 - 03:00	59.6	53.5	50.7	47.5	46.3	38.6	27.5	14.7	79.4	65.8	60.7	56.1	55.4	52.8	49.6	35.4
03:00 - 03:10	60.7	54.2	51.7	47.9	45.9	38.8	28.8	16.4	82.1	69.7	68.3	57.9	54.3	54.2	47.2	32.7
03:10 - 03:20	62.4	55.9	54.5	49.7	47.1	44.8	39.2	23.0	90.4	77.0	76.4	69.6	66.9	69.7	64.9	47.9
03:20 - 03:30	60.8	56.9	54.5	51.2	49.7	46.5	42.2	26.0	75.6	82.3	80.0	75.0	72.7	75.4	72.3	56.3
03:30 - 03:40	60.4	53.9	51.7	47.9	44.9	37.6	24.9	14.2	83.9	71.5	65.3	57.9	57.9	50.3	39.6	32.2
03:40 - 03:50	60.7	53.7	51.0	47.5	45.6	38.0	26.0	13.6	78.1	66.4	61.7	58.9	59.0	52.2	45.4	33.5
03:50 - 04:00	59.3	53.7	51.1	47.5	45.2	38.7	29.3	15.9	75.6	64.1	60.6	61.0	58.1	51.8	46.3	32.0
04:00 - 04:10	60.1	53.5	50.8	47.0	44.0	38.2	28.8	15.3	81.8	68.0	64.8	60.7	57.6	62.4	50.7	32.5
04:10 - 04:20	60.8	54.9	51.9	49.0	46.9	39.9	29.3	16.0	78.2	70.8	65.7	63.9	60.5	56.6	46.8	31.8
04:20 - 04:30	59.9	53.5	50.7	47.7	45.9	38.5	26.1	14.1	77.1	64.9	60.3	60.5	56.0	49.4	39.5	31.7
04:30 - 04:40	59.3	53.1	50.8	47.2	45.4	37.9	25.4	13.4	77.1	67.4	60.9	58.2	60.3	50.8	42.0	30.7
04:40 - 04:50	63.0	54.5	51.0	47.5	44.7	38.5	28.0	20.7	84.4	70.3	62.7	62.4	55.8	49.0	51.7	50.8
04:50 - 05:00	61.0	54.1	51.1	47.5	45.1	40.1	26.6	14.8	83.8	71.2	69.0	61.7	58.7	58.8	46.0	32.2
05:00 - 05:10	60.5	54.2	51.1	47.9	44.9	38.6	27.8	14.9	78.0	64.3	65.8	59.5	55.6	52.5	44.4	32.0
05:10 - 05:20	60.2	53.6	50.8	47.8	46.1	39.3	26.1	13.8	79.5	63.0	64.9	59.5	59.4	52.0	41.3	31.8
05:20 - 05:30	59.2	53.0	50.0	46.9	43.4	35.8	23.5	12.7	79.1	64.3	60.9	56.0	56.4	52.7	36.0	31.5
05:30 - 05:40	61.1	54.6	51.1	51.3	54.0	48.9	35.1	17.4	75.9	69.7	60.4	64.6	70.6	65.8	53.8	34.4
05:40 - 05:50	60.6	55.8	53.0	52.7	54.8	48.5	33.3	16.9	75.2	70.1	70.4	69.6	72.2	65.7	50.1	32.9
05:50 - 06:00	61.8	56.3	52.6	50.1	47.8	42.2	32.4	17.5	84.0	67.4	63.8	61.0	58.4	55.9	46.3	33.4
06:00 - 06:10	62.8	56.5	53.1	49.6	46.1	39.7	28.5	14.8	81.7	70.1	66.9	64.7	60.5	54.6	45.2	30.5
06:10 - 06:20	63.4	56.1	53.2	50.1	47.1	41.0	30.5	16.3	79.6	68.6	64.7	71.9	59.4	55.1	45.2	29.3
06:20 - 06:30	63.0	56.9	54.1	50.3	48.2	42.1	31.7	17.6	80.1	71.1	70.8	69.1	69.8	61.7	54.1	39.1
06:30 - 06:40	62.9	57.5	54.0	51.0	48.4	43.0	32.1	17.6	76.1	76.9	68.7	64.7	62.0	60.5	50.5	34.5
06:40 - 06:50	63.6	58.5	55.1	52.2	50.4	47.3	35.6	20.6	83.9	72.3	72.3	65.7	61.0	66.6	53.9	36.6
06:50 - 07:00	63.4	58.5	54.9	52.5	51.2	48.3	38.9	23.5	80.6	74.0	72.0	69.6	69.3	67.5	65.8	46.6
07:00 - 07:10	65.7	59.6	55.3	51.8	49.7	45.0	35.1	19.3	80.6	74.2	71.3	63.9	65.9	71.6	65.4	48.7
07:10 - 07:20	64.7	60.4	56.6	53.5	51.3	46.2	35.9	20.1	79.9	79.5	72.1	73.1	70.6	66.2	56.5	39.7
07:20 - 07:30	65.7	58.9	54.7	52.5	49.7	46.4	34.0	18.6	86.6	71.2	63.8	66.5	61.5	58.5	50.6	32.5
07:30 - 07:40	66.1	61.0	56.5	53.4	51.1	45.4	34.9	20.2	82.4	76.0	72.3	68.7	64.1	60.0	52.5	42.7
07:40 - 07:50	65.4	59.9	56.2	53.5	51.7	46.0	35.1	19.3	81.7	77.5	71.4	68.5	65.6	60.6	50.8	33.5
07:50 - 08:00	65.2	59.8	56.0	54.3	52.3	47.1	36.0	20.7	81.1	78.0	74.7	75.1	69.3	62.1	50.5	36.5
08:00 - 08:10	67.9	62.8	62.5	59.2	55.8	51.3	44.7	34.1	84.8	72.8	73.7	78.3	67.8	62.1	61.8	55.8
08:10 - 08:20	67.5	63.3	64.0	59.7	57.5	52.6	45.5	36.4	81.4	73.6	78.0	70.2	69.3	68.7	69.2	64.0
08:20 - 08:30	67.0	62.8	63.6	59.9	57.5	52.9	46.8	38.1	80.7	72.2	75.3	69.3	71.5	66.3	65.7	60.2
08:30 - 08:40	67.3	64.0	64.6	59.8	58.0	53.0	45.4	35.9	83.2	80.3	81.5	70.6	75.1	73.8	67.6	54.5
08:40 - 08:50	68.7	66.7	66.5	60.3	58.0	53.2	46.8	37.1	86.0	84.4	85.8	71.0	80.3	75.2	70.6	61.5
08:50 - 09:00	68.6	65.3	64.1	59.4	56.7	51.8	43.7	34.7	82.9	81.9	82.6	70.8	70.2	66.2	62.0	57.6
09:00 - 09:10	67.3	64.4	62.7	59.3	56.5	51.8	44.2	33.9	81.2	80.2	72.3	71.1	70.4	65.5	64.0	51.4
09:10 - 09:20	69.1	65.4	64.9	60.5	57.8	52.6	45.4	34.2	86.4	80.3	77.3	75.1	77.5	72.5	67.5	52.2
09:20 - 09:30	69.7	64.3	64.1	60.2	56.3	52.0	44.0	32.3	88.9	78.5	76.0	74.1	76.7	70.6	65.5	48.7
09:30 - 09:40	69.0	64.0	64.8	60.5	58.0	53.5	45.5	35.3	84.7	75.1	77.6	71.0	69.4	68.3	62.2	54.7
09:40 - 09:50	68.9	64.3	65.2	61.2	58.8	54.4	45.7	35.2	83.2	79.6	79.8	76.0	77.4	66.7	61.4	57.3
09:50 - 10:00	69.9	65.2	67.3	60.8	58.8	54.4	44.8	33.4	83.7	74.5	88.7	70.3	68.0	66.6	64.9	54.4
10:00 - 10:10	69.6	63.9	64.8	60.1	58.7	55.1	46.2	35.8	80.4	79.3	82.3	72.7	70.2	67.2	64.5	56.6
10:10 - 10:20	70.3	65.5	64.8	60.5	59.5	57.0	46.4	35.4	86.5	80.0	80.1	77.7	84.8	79.0	60.4	52.4
10:20 - 10:30	73.0	66.6	66.4	62.9	65.6	62.1	49.4	38.6	83.8	84.0	79.3	77.0	85.1	84.3	64.7	57.5
10:30 - 10:40	68.5	64.9	65.0	61.7	60.1	55.3	48.8	38.7	81.8	80.1	79.1	77.4	72.6	71.1	72.4	63.4
10:40 - 10:50	70.5	64.7	65.5	62.3	60.5	55.7	46.4	35.4	83.0	80.3	82.7	76.9	75.2	70.5	63.4	56.6
10:50 - 11:00	69.6	64.7	65.8	62.7	60.9	56.6	47.6	36.3	86.0	76.5	80.8	76.6	74.3	69.9	62.6	54.3
11:00 - 11:10	68.7	64.2	63.6	61.1	59.4	55.1	47.0	36.8	81.2	81.2	73.0	73.3	69.7	66.9	68.0	58.1
11:10 - 11:20	67.5	64.3	66.1	61.9	59.7	55.3	48.4	36.9	83.2	77.1	82.3	78.1	76.6	73.0	69.2	56.6
11:20 - 11:30	67.3	64.3	65.8	61.6	60.4	55.4	49.2	39.2	87.9	80.2	79.9	77.8	79.3	71.8	77.8	67.5
11:30 - 11:40	67.4	63.8	66.3	61.7	60.3	55.7	47.8	38.7	80.4	73.8	83.4	75.9	74.3	72.4	67.1	64.1
11:40 - 11:50	69.2	64.6	65.4	61.1	59.5	54.7	46.6	36.5	82.7	76.8	80.9	73.7	74.9	68.5	63.6	58.1
11:50 - 12:00	68.5	64.0	65.1	60.7	59.4	54.9	46.1	33.6	82.9	82.6	83.4	77.5	75.6	70.5	60.4	53.3
12:00 - 12:10	69.0	64.7	65.2	60.9	59.2	54.6	45.9	34.6	88.6	79.0	81.6	80.5	80.0	71.5	60.6	54.4
12:10 - 12:20	68.1	64.4	66.4	61.7	60.1	55.4	47.0	35.4	87.8	81.8	82.7	80.7	80.8	71.4	65.8	55.7
12:20 - 12:30	69.0	64.9	65.1	61.5	59.7	55.4	46.7	35.9	81.5	82.6	83.4	80.3	78.1	72.7	59.2	55.5
12:30 - 12:40	68.1	64.9	65.4	61.4	59.6	55.2	46.4	34.8	82.5	78.4	78.5	76.2	77.5	73.2	62.8	54.7
12:40 - 12:50	67.9	64.2	66.8	61.5	59.5	54.9	46.2	34.9	83.1	79.0	84.6	79.7	76.7	70.3	65.7	61.7
12:50 - 13:00	67.3	63.6	64.5	60.5	58.0	53.8	46.1	35.1	79.1	78.0	81.1	75.9	72.3	70.9	69.1	57.6
13:00 - 13:10	66.9	62.1	59.6	57.4	55.1	50.8	41.6	30.3	82.3	74.8	71.1	65.4	64.5	64.1	64.6	52.0
13:10 - 13:20	66.6	60.1	57.5	54.8	52.3	46.2	34.5	19.9	80.5	72.9	73.9	68.3	66.2	61.2	51.0	34.8
13:20 - 13:30	68.2	64.9	61.3	57.7	54.1	49.3	37.0	20.4	81.2	84.8	85.0	81.2	76.4	74.8	62.8	41.8
13:30 - 13:40	67.1	64.3	59.1	55.4	51.6	44.8	32.6	17.6	82.8	85.6	78.0	67.9	62.7	56.3	44.9	32.8
13:40 - 13:50	67.4	62.6	61.4	58.8	55.9	50.4	41.2	30.8	79.6	79.8	69.9	69.4	69.1	65.3	54.4	45.6
13:50 - 14:00	69.0	64.7	67.2	61.1	58.5	53.5	44.1	32.4	85.1	79.9	81.7	74.0	77.9	66.1	60.5	47.2
14:00 - 14:10	67.8	64.0	66.1	60.4	58.2	53.3	44.4	32.8	80.5	82.1	82.9	73.5	71.0	66.4	60.1	48.2
14:10 - 14:20	67.8	64.8	67.7	61.2	58.3	53.5	44.3	32.6	79.8	75.2	82.4	71.0	73.5	67.7	57.7	49.2

Table A6: Location 1, L_{eq} and L_{max} frequency data, 19 December 2014

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
14:30 - 14:40	67.0	63.1	62.4	58.3	53.3	46.1	36.8	24.6	77.8	74.8	75.5	73.3	67.2	59.1	52.6	37.4
14:40 - 14:50	67.7	63.1	62.3	57.6	53.0	45.9	36.6	24.9	86.8	76.7	68.2	68.0	65.9	59.4	48.9	34.5
14:50 - 15:00	67.5	64.1	63.9	58.7	54.2	47.4	37.7	25.7	82.7	70.6	72.3	70.8	66.2	60.6	51.3	46.9
15:00 - 15:10	73.6	68.0	64.0	60.1	55.9	49.7	40.2	27.7	83.0	75.4	71.4	69.1	66.0	58.7	50.9	45.6
15:10 - 15:20	78.5	73.0	63.2	59.9	55.9	51.1	43.6	31.0	85.4	76.5	68.0	68.9	65.9	59.7	50.9	36.4
15:20 - 15:30	76.3	70.3	58.9	53.9	50.6	46.5	40.7	28.8	82.1	76.6	76.6	70.8	64.7	62.6	51.1	39.6
15:30 - 15:40	75.6	62.6	53.3	49.4	45.4	38.9	31.0	19.7	90.8	74.5	66.9	57.9	55.5	52.3	47.6	35.3
15:40 - 15:50	64.2	57.0	52.2	48.8	45.0	36.6	23.5	14.1	83.7	69.5	60.9	55.1	52.1	48.5	48.6	32.6
15:50 - 16:00	64.6	58.1	52.7	49.0	46.0	39.5	26.5	14.5	84.6	75.6	61.8	56.5	59.2	54.0	43.8	32.5
16:00 - 16:10	64.1	58.2	52.3	48.9	44.8	36.1	24.4	13.7	80.3	70.5	59.3	57.5	54.8	48.1	50.2	32.2
16:10 - 16:20	63.2	58.0	52.3	48.7	44.1	35.2	22.7	12.4	75.3	68.8	58.9	53.7	49.5	42.1	36.7	29.8
16:20 - 16:30	64.3	57.8	52.7	48.8	44.2	35.3	21.7	14.3	82.9	69.7	62.6	59.5	57.2	47.6	34.8	32.5
16:30 - 16:40	65.0	58.1	53.8	50.7	45.5	36.0	21.8	13.1	81.3	69.6	68.3	67.6	59.8	45.9	34.4	32.2
16:40 - 16:50	65.7	61.3	58.1	54.5	48.8	39.1	23.9	12.1	80.3	74.7	72.3	72.4	65.6	57.9	42.2	31.4
16:50 - 17:00	64.0	59.8	53.1	49.2	44.7	35.9	22.0	13.1	83.0	77.8	62.3	58.8	49.8	45.1	34.9	32.0
17:00 - 17:10	64.0	59.7	54.1	50.4	45.3	35.3	20.9	11.7	75.4	73.2	66.7	64.8	58.6	44.8	32.6	29.2
17:10 - 17:20	64.8	59.5	54.2	50.4	45.3	36.1	21.9	11.8	78.0	73.8	69.4	68.3	59.7	45.9	33.5	28.7
17:20 - 17:30	64.1	57.7	52.2	48.4	44.4	36.7	22.8	13.9	80.8	76.1	60.0	53.5	54.2	50.8	35.2	32.3
17:30 - 17:40	63.6	59.1	54.0	49.6	44.1	34.7	20.6	11.6	76.1	76.7	69.6	63.7	57.5	39.8	32.1	28.4
17:40 - 17:50	63.8	57.8	52.6	49.9	44.8	35.2	21.1	13.4	78.1	72.5	63.5	64.7	58.8	45.0	33.3	32.2
17:50 - 18:00	64.4	57.9	54.8	52.2	46.0	35.7	21.4	13.4	81.6	70.2	72.0	70.5	64.0	50.4	40.1	32.3
18:00 - 18:10	63.6	57.2	51.9	48.6	44.3	36.8	24.6	12.8	75.5	66.6	62.4	54.7	51.1	46.3	48.6	32.3
18:10 - 18:20	63.6	56.6	51.5	48.6	44.2	35.4	21.4	11.7	78.3	66.7	59.0	53.5	57.8	45.2	35.5	29.8
18:20 - 18:30	63.8	57.1	52.1	49.1	45.2	37.3	25.1	12.6	75.9	66.3	64.1	65.8	62.6	56.3	49.8	33.0
18:30 - 18:40	65.0	60.4	57.5	54.5	49.8	40.3	25.1	11.6	82.0	78.2	76.3	73.7	71.6	64.8	46.6	20.8
18:40 - 18:50	65.2	59.1	55.9	54.1	49.3	40.4	24.3	11.5	82.1	71.1	72.9	72.8	68.4	61.2	45.1	28.6
18:50 - 19:00	63.0	55.9	51.4	49.5	44.4	35.3	21.0	11.4	75.4	65.5	59.9	63.8	52.4	44.9	31.6	17.8
19:00 - 19:10	62.8	58.1	52.8	49.7	44.6	35.7	20.9	11.5	74.5	77.4	69.3	67.0	54.2	45.7	30.0	29.8
19:10 - 19:20	63.7	57.0	51.8	49.4	44.3	35.6	20.6	11.6	78.5	75.9	69.2	61.8	53.5	47.7	31.0	29.9
19:20 - 19:30	62.7	56.2	51.0	48.7	45.7	35.7	22.3	11.4	73.6	67.4	59.4	54.8	59.9	44.3	43.0	16.1
19:30 - 19:40	62.8	55.5	51.6	49.4	46.0	37.5	23.9	11.7	75.7	67.5	63.6	59.0	63.6	54.0	41.7	22.1
19:40 - 19:50	63.0	56.4	51.8	48.5	44.6	35.8	21.8	11.5	74.4	70.6	64.5	62.2	60.8	55.7	40.1	18.9
19:50 - 20:00	62.2	55.3	50.7	48.5	44.5	35.5	21.1	11.5	73.0	66.6	55.6	56.4	54.3	48.9	36.5	22.6
20:00 - 20:10	62.9	55.4	51.7	49.6	45.9	38.4	26.5	12.5	73.1	65.5	64.2	63.8	63.7	59.7	50.7	32.0
20:10 - 20:20	61.9	55.0	50.6	48.3	45.3	38.3	25.1	11.7	73.8	68.6	60.9	56.8	55.7	51.2	41.2	21.5
20:20 - 20:30	61.6	54.6	50.5	48.9	44.7	35.7	21.1	11.4	73.3	62.1	56.6	57.9	55.2	52.6	45.9	25.2
20:30 - 20:40	62.0	56.3	52.7	53.2	48.2	35.8	20.3	11.3	76.4	68.8	67.4	71.7	68.2	50.2	33.5	21.1
20:40 - 20:50	61.7	56.7	52.2	49.0	44.5	35.4	22.1	11.7	72.1	71.4	65.3	57.0	51.9	47.9	47.5	25.4
20:50 - 21:00	62.4	56.1	51.1	48.4	44.5	35.3	20.3	11.4	73.9	64.0	58.8	57.3	58.2	47.2	32.5	14.2
21:00 - 21:10	61.7	55.8	50.9	48.0	44.0	34.6	19.8	11.4	75.2	69.0	57.8	57.7	57.2	51.1	38.2	21.3
21:10 - 21:20	62.4	56.0	51.0	48.6	44.3	34.8	20.0	11.3	78.1	66.2	58.2	58.0	52.6	46.8	34.4	16.4
21:20 - 21:30	62.0	57.3	52.4	48.8	46.6	38.6	21.7	11.5	71.1	69.4	64.8	58.3	62.4	54.9	40.5	28.9
21:30 - 21:40	62.5	55.9	52.3	49.4	45.2	35.9	24.3	11.6	75.9	62.8	63.9	64.2	62.2	50.6	50.6	20.6
21:40 - 21:50	62.7	56.4	51.2	48.4	44.0	34.9	20.7	11.6	75.8	71.2	62.9	61.7	52.6	48.8	38.5	30.4
21:50 - 22:00	61.5	55.6	51.0	48.5	44.2	35.0	21.2	11.5	74.4	68.1	61.0	57.3	53.8	51.3	39.9	22.8
22:00 - 22:10	62.7	55.4	50.7	48.1	44.1	34.8	20.5	11.4	74.7	68.9	56.6	57.7	54.0	48.8	40.5	22.8
22:10 - 22:20	61.5	55.3	50.5	47.9	44.1	34.8	20.1	11.3	72.5	63.2	62.7	57.4	55.9	52.4	40.6	22.5
22:20 - 22:30	62.0	55.5	50.6	47.7	44.3	35.9	20.7	11.4	72.1	67.4	57.8	54.6	52.5	49.0	33.3	16.3
22:30 - 22:40	62.1	54.7	50.3	47.8	45.5	37.6	20.1	11.4	76.8	68.6	58.5	56.5	57.4	53.5	30.6	20.3
22:40 - 22:50	61.8	55.7	51.3	49.9	47.0	36.5	20.4	11.3	72.8	67.8	63.8	68.3	65.9	50.6	35.2	16.7
22:50 - 23:00	62.2	55.6	51.0	47.6	44.0	34.7	20.3	11.4	73.5	68.1	59.9	53.0	48.9	41.4	38.0	18.8
23:00 - 23:10	62.6	55.4	50.5	47.7	44.0	35.2	21.3	11.4	73.9	66.7	58.3	57.2	52.8	49.8	39.1	29.7
23:10 - 23:20	61.7	54.6	49.9	47.1	43.6	34.0	19.2	11.4	73.1	63.8	56.7	51.9	51.8	43.4	31.4	30.1
23:20 - 23:30	62.3	53.9	49.9	46.9	43.2	33.3	18.3	11.6	75.0	61.2	53.9	53.3	47.8	39.9	33.3	31.8
23:30 - 23:40	62.1	53.4	49.7	47.2	44.8	37.3	19.1	11.3	72.3	61.7	54.1	52.3	60.8	59.0	34.0	28.7
23:40 - 23:50	62.6	53.6	49.7	46.9	43.8	34.3	19.2	11.3	76.5	62.7	54.7	52.8	49.5	43.9	30.8	16.0
23:50 - 00:00	61.2	53.2	49.1	46.3	43.1	33.2	18.2	11.2	76.5	68.7	54.0	53.1	51.9	43.4	32.9	16.5
00:00 - 00:10	60.9	53.4	49.8	47.1	43.7	34.6	20.1	11.4	71.6	65.3	58.0	55.7	51.3	45.9	36.1	20.0
00:10 - 00:20	61.1	53.8	49.3	46.2	43.1	33.8	19.2	11.7	72.8	65.1	55.2	50.7	49.5	43.2	32.5	30.4
00:20 - 00:30	60.4	53.0	49.5	46.3	43.1	33.7	19.7	11.6	78.6	65.0	63.1	53.9	53.7	43.2	36.8	31.8
00:30 - 00:40	59.1	53.8	49.0	46.6	43.1	33.3	23.9	12.7	76.6	72.0	59.0	64.6	57.3	48.6	45.6	30.2
00:40 - 00:50	62.6	53.5	49.6	46.4	43.2	35.0	28.1	15.6	79.1	63.5	58.4	54.3	61.9	51.7	51.5	36.6
00:50 - 01:00	59.7	52.3	48.8	46.4	43.6	33.8	33.4	21.3	73.3	63.6	59.9	59.2	57.1	46.9	52.9	41.4
01:00 - 01:10	58.8	52.0	48.0	45.2	42.7	33.7	32.2	21.6	69.3	64.9	56.4	50.3	54.5	51.6	50.3	40.9
01:10 - 01:20	58.8	51.5	48.0	45.0	42.0	32.6	27.7	15.9	73.0	60.0	54.9	52.2	52.4	45.3	48.6	37.7
01:20 - 01:30	58.4	51.6	48.2	45.2	42.3	33.0	22.8	12.8	70.4	63.7	54.6	51.1	51.1	44.9	41.8	30.8
01:30 - 01:40	58.1	51.8	48.0	45.1	43.3	34.9	27.8	16.1	69.2	63.4	57.4	50.0	56.6	50.0	46.0	35.3
01:40 - 01:50	58.5	52.1	48.6	45.1	43.3	35.0	29.0	16.0	69.7	62.5	56.7	50.9	54.2	49.2	50.7	33.8
01:50 - 02:00	60.2	52.9	49.1	45.7	43.1	33.9	25.9	14.2	76.2	66.5	59.5	56.8	55.7	47.5	47.5	30.3
02:00 - 02:10	58.1	51.2	47.9	44.9	42.2	33.5	25.1	13.6	69.6	59.0	54.0	53.2	52.8	52.1	47.1	31.4
02:10 - 02:20	59.1	51.6	48.2	45.4	42.7	34.2	18.9	11.7	75.5	63.3	55.3	53.5	51.8	48.6	33.7	31.2
02:20 - 02:30	58.8	51.4	47.8	45.0	41.9	32.2	19.9	12.8	72.4	62.5	53.6	50.8	49.1	40.3	41.8	31.9

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
02:30 - 02:40	59.2	52.1	48.1	45.1	42.4	33.2	20.0	11.8	73.8	64.9	56.3	51.5	51.2	45.9	40.1	30.4
02:40 - 02:50	58.2	52.0	48.2	45.2	42.2	32.2	18.3	11.4	69.5	62.4	58.0	53.0	50.3	41.1	39.9	24.8
02:50 - 03:00	58.7	52.0	47.6	44.8	41.5	32.0	25.8	15.1	76.8	67.2	55.6	52.2	47.3	43.2	44.9	34.2
03:00 - 03:10	58.7	52.4	48.6	45.2	41.8	32.7	21.6	12.2	73.7	67.1	61.1	57.8	58.7	52.1	40.2	28.4
03:10 - 03:20	59.1	52.3	48.6	45.9	42.3	35.1	30.4	16.7	75.6	64.6	62.6	61.5	58.3	53.9	51.0	36.3
03:20 - 03:30	57.6	51.9	47.5	44.6	41.5	32.1	16.5	11.5	69.1	66.2	53.3	51.5	47.9	42.7	32.8	32.1
03:30 - 03:40	58.8	52.5	48.6	45.3	42.4	32.7	17.7	13.3	77.2	64.6	61.6	50.6	50.6	41.6	34.7	32.7
03:40 - 03:50	58.7	51.7	48.4	45.0	41.3	31.2	18.1	12.5	79.1	65.8	57.4	55.9	51.4	43.9	40.1	31.8
03:50 - 04:00	57.3	50.9	47.7	44.4	41.0	31.1	16.9	11.2	72.4	61.3	53.8	50.6	47.2	43.3	35.9	13.8
04:00 - 04:10	56.9	51.0	47.3	44.3	40.9	31.3	21.3	13.0	71.2	58.3	52.9	49.1	46.6	41.1	40.9	32.0
04:10 - 04:20	60.3	58.8	53.7	46.2	40.8	31.0	17.6	11.4	76.1	79.1	73.3	63.3	49.7	41.1	40.9	29.4
04:20 - 04:30	56.0	50.4	46.7	43.9	40.8	30.8	16.2	11.4	68.9	58.5	53.8	52.7	53.3	44.7	27.6	22.5
04:30 - 04:40	58.1	51.1	47.3	44.4	40.8	30.7	16.0	11.2	78.3	63.7	56.5	55.2	52.7	44.4	27.1	13.7
04:40 - 04:50	58.8	55.1	49.2	45.6	41.2	31.9	23.8	13.1	74.3	63.0	60.5	53.7	51.1	46.0	45.1	31.8
04:50 - 05:00	58.5	56.2	49.6	45.7	41.5	32.9	21.0	11.7	74.0	63.7	58.5	52.5	48.5	45.0	35.4	16.1
05:00 - 05:10	57.9	55.7	49.5	45.3	41.2	31.6	18.6	11.4	71.8	63.0	56.4	49.4	46.3	37.6	24.6	13.3
05:10 - 05:20	58.0	55.6	49.3	45.3	42.4	31.9	18.7	11.8	72.8	64.2	53.2	49.8	54.6	41.3	33.0	32.0
05:20 - 05:30	59.2	55.6	50.3	45.8	41.7	32.1	18.3	12.3	77.0	62.7	60.9	56.2	49.2	41.0	34.3	32.1
05:30 - 05:40	57.8	52.4	47.9	44.1	40.2	30.3	17.1	12.1	74.0	60.6	55.2	49.7	45.4	38.8	32.5	32.2
05:40 - 05:50	57.4	51.2	48.0	44.3	40.0	30.1	16.6	11.3	72.6	61.6	60.3	57.1	47.1	36.7	26.0	15.4
05:50 - 06:00	59.4	52.5	49.3	45.0	40.4	31.2	18.4	11.5	77.9	63.6	63.7	56.9	53.2	43.1	36.1	29.8
06:00 - 06:10	58.5	53.2	49.6	46.2	40.3	30.4	17.3	11.4	69.2	65.9	65.4	62.1	49.6	41.5	31.6	17.6
06:10 - 06:20	59.0	53.2	49.4	45.6	40.8	31.6	20.9	11.9	74.5	71.5	63.5	56.4	51.7	48.0	46.6	29.8
06:20 - 06:30	57.9	52.2	48.3	45.0	40.3	36.8	22.5	11.6	75.1	62.6	59.1	55.8	60.5	56.8	44.5	29.6
06:30 - 06:40	58.3	52.1	48.6	45.0	40.5	35.9	21.1	11.3	75.0	62.0	58.3	52.5	49.1	46.9	39.2	14.0
06:40 - 06:50	62.1	54.6	50.9	47.4	43.1	36.7	25.4	12.7	74.8	67.2	65.7	63.5	61.2	57.1	45.4	27.9
06:50 - 07:00	59.8	53.5	48.9	45.4	41.2	32.9	19.6	11.5	78.5	69.1	59.6	54.7	49.8	43.0	37.2	29.2
07:00 - 07:10	60.8	53.6	50.0	46.2	41.9	33.1	20.0	12.7	79.1	67.3	62.4	57.7	54.7	47.5	37.5	32.3
07:10 - 07:20	59.8	53.7	49.9	46.2	41.3	31.6	18.6	11.3	70.5	63.1	58.5	57.3	46.6	38.1	34.8	17.8
07:20 - 07:30	59.9	53.0	50.0	45.8	41.2	31.9	18.7	11.3	77.2	62.4	63.9	56.5	53.0	44.9	35.0	16.9
07:30 - 07:40	58.9	53.3	50.0	46.5	42.1	34.2	22.3	11.4	71.2	62.3	59.0	56.9	53.2	52.4	43.3	22.1
07:40 - 07:50	61.7	54.1	50.8	47.2	42.9	34.9	22.3	12.8	77.9	67.0	61.2	56.8	53.3	48.2	40.2	32.2
07:50 - 08:00	61.4	54.9	51.4	48.5	44.4	38.6	27.5	14.9	74.8	70.1	65.5	64.3	56.0	59.7	48.6	32.2
08:00 - 08:10	61.0	54.3	50.7	47.6	43.3	36.2	24.9	13.9	76.1	68.8	59.6	58.1	51.5	55.5	47.6	32.0
08:10 - 08:20	64.5	62.6	64.2	59.6	53.0	46.4	36.8	24.4	79.3	69.9	74.0	70.5	65.8	62.1	53.2	43.1
08:20 - 08:30	66.1	63.9	65.3	60.8	53.4	46.6	36.8	24.6	80.1	70.5	71.9	70.4	65.3	59.1	51.6	41.6
08:30 - 08:40	65.4	64.2	65.5	60.8	53.3	46.5	37.0	24.5	83.0	72.9	71.6	70.7	65.5	59.4	52.7	43.4
08:40 - 08:50	65.3	64.4	65.8	61.0	52.9	45.9	36.7	24.1	75.7	73.4	71.2	68.1	65.5	61.4	55.3	43.8
08:50 - 09:00	66.0	64.0	65.3	60.7	53.1	46.5	37.0	24.6	78.3	72.1	71.8	69.8	66.2	59.8	52.5	42.7
09:00 - 09:10	65.5	64.5	65.2	60.2	53.4	46.7	37.1	24.3	75.3	72.0	72.0	70.5	66.3	59.9	52.1	41.3
09:10 - 09:20	65.7	64.2	65.0	60.3	53.7	47.1	37.5	24.7	83.1	71.8	71.9	69.6	72.3	59.7	53.4	42.9
09:20 - 09:30	65.3	64.3	65.3	60.7	53.7	47.1	37.1	24.4	78.3	71.1	71.8	69.2	65.5	59.3	52.7	42.0
09:30 - 09:40	64.5	63.4	64.6	59.7	53.8	47.6	38.1	25.0	77.8	70.0	73.0	69.9	66.3	60.3	56.0	41.8
09:40 - 09:50	65.4	64.2	64.6	59.8	53.9	47.3	37.8	25.3	83.1	71.5	78.0	69.6	66.2	60.8	53.3	46.0
09:50 - 10:00	64.9	63.8	63.9	59.6	54.4	48.0	37.9	25.0	79.8	77.3	78.7	71.0	67.1	61.6	53.6	45.3
10:00 - 10:10	66.0	64.0	64.8	60.6	54.2	47.7	37.9	25.3	82.5	71.3	71.6	69.0	67.5	62.1	52.9	44.6
10:10 - 10:20	67.2	65.0	64.6	59.8	54.4	47.9	37.5	25.1	89.5	80.3	75.6	68.5	65.3	60.0	54.1	44.2
10:20 - 10:30	66.8	63.9	64.6	60.0	54.5	48.5	38.2	25.2	88.7	76.9	73.7	69.7	67.1	61.2	55.7	44.7
10:30 - 10:40	66.4	64.3	65.4	61.2	56.5	50.1	39.7	26.4	82.6	72.1	72.8	70.0	68.5	62.3	56.3	47.3
10:40 - 10:50	67.8	64.7	65.7	61.8	57.1	50.8	40.7	27.5	87.9	76.0	74.3	71.6	70.3	63.3	57.8	45.6
10:50 - 11:00	69.1	62.9	63.0	58.5	54.7	48.0	37.7	25.2	90.9	79.7	75.0	69.7	72.5	64.5	59.1	47.6
11:00 - 11:10	68.2	60.5	57.6	50.3	45.7	37.1	24.9	18.8	87.6	79.8	76.1	65.1	55.5	51.2	38.6	33.0
11:10 - 11:20	66.8	59.5	57.0	49.2	45.1	36.3	23.9	18.6	92.1	80.4	78.7	63.9	52.2	48.2	41.6	32.9
11:20 - 11:30	68.5	60.5	57.2	50.3	46.5	38.1	24.8	17.3	93.9	84.2	77.8	65.2	54.8	50.1	38.7	33.1
11:30 - 11:40	68.0	59.7	56.7	49.8	46.4	38.4	25.1	18.8	91.9	83.5	77.0	63.3	52.6	48.1	38.9	33.8
11:40 - 11:50	66.2	59.2	56.0	49.9	46.4	39.1	25.1	18.0	86.5	77.8	75.1	62.6	62.1	59.5	39.2	32.8
11:50 - 12:00	66.7	58.4	55.5	49.4	46.1	38.3	25.5	18.3	89.4	81.8	73.7	64.3	56.3	51.8	42.3	33.8
12:00 - 12:10	67.1	58.3	56.1	48.7	45.3	37.4	24.7	18.2	90.1	79.1	74.4	59.5	51.1	45.6	37.1	32.8
12:10 - 12:20	65.2	57.5	54.4	49.1	46.2	38.7	24.7	17.4	83.4	70.5	69.6	58.1	57.5	53.8	38.0	32.7
12:20 - 12:30	65.3	57.8	55.8	48.7	44.8	36.4	22.8	17.0	86.7	74.5	73.5	56.5	52.8	42.3	35.3	32.6
12:30 - 12:40	64.6	57.7	55.8	49.3	44.9	36.1	21.8	16.3	84.2	77.1	76.0	63.8	52.4	43.3	35.2	32.5
12:40 - 12:50	65.5	60.0	56.2	50.2	47.5	40.2	22.6	15.7	86.2	76.7	71.8	64.2	60.4	51.9	36.6	32.6
12:50 - 13:00	63.4	59.0	55.7	49.8	45.5	36.4	21.9	15.1	81.8	76.0	73.5	67.3	61.3	55.5	41.9	32.4
13:00 - 13:10	68.0	59.6	57.7	49.5	45.2	37.2	24.5	19.5	87.3	77.9	76.7	59.5	55.2	47.3	38.9	32.7
13:10 - 13:20	67.9	59.5	58.4	51.8	47.1	37.2	24.2	20.2	89.2	77.7	75.8	68.3	63.4	46.7	36.0	32.8
13:20 - 13:30	66.9	57.6	55.1	49.2	44.4	35.7	22.6	18.4	87.1	76.3	71.1	62.5	60.5	56.2	36.1	32.7
13:30 - 13:40	68.5	59.1	55.8	49.8	45.5	37.4	24.4	19.0	97.7	85.5	75.9	63.8	57.3	52.9	43.0	32.9
13:40 - 13:50	65.8	56.6	52.9	49.0	44.3	35.7	24.6	17.7	84.1	73.4	67.2	59.6	52.7	55.6	53.6	33.7
13:50 - 14:00	65.6	56.9	52.8	49.1	44.2	35.4	23.2	18.1	87.4	76.7	68.7	62.9	62.2	53.3	42.3	32.8
14:00 - 14:10	67.5	59.5	56.1	53.0	48.8	39.6	25.9	18.4	87.5	77.7	75.1	72.9	70.3	59.2	45.5	32.7
14:10 - 14:20	64.2	55.4	51.6	48.0	43.5	34.6	21.2	16.5	89.3	73.5	67.5	60.3	48.3	50.5	35.0	32.6
14:20 - 14:30	63.2	57.1	53.1	49.4	45.1	37.2	24.5	14.9	78.7	76.4	69.1	67.5	59.1	53.4	44.5	32.7

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
14:30 - 14:40	65.6	56.7	52.8	48.4	43.9	35.0	22.2	17.4	88.9	80.3	70.5	60.8	48.8	45.8	35.2	32.8
14:40 - 14:50	63.2	54.7	51.1	47.7	43.9	35.0	20.9	16.0	81.4	69.5	60.7	56.4	51.6	47.1	34.8	32.6
14:50 - 15:00	62.8	54.8	51.2	47.5	43.7	34.9	20.4	14.5	83.5	67.4	61.4	54.7	53.3	48.6	34.8	32.4
15:00 - 15:10	62.8	54.9	51.1	47.4	43.3	33.9	20.1	15.1	81.9	70.0	60.3	57.6	49.0	43.9	34.8	32.5
15:10 - 15:20	60.4	54.2	50.8	48.0	43.5	35.0	20.5	12.7	77.8	66.3	62.2	59.4	52.3	44.5	34.1	31.9
15:20 - 15:30	62.4	54.6	50.7	47.2	42.9	36.9	21.1	13.8	81.3	67.7	61.3	54.5	49.4	50.7	33.3	32.1
15:30 - 15:40	62.7	56.8	54.5	49.8	43.8	34.3	20.4	11.8	79.9	74.8	73.4	68.7	56.7	47.2	40.8	30.9
15:40 - 15:50	62.4	56.8	51.4	48.3	43.5	34.6	20.0	12.0	76.8	70.4	63.1	63.2	49.8	45.1	33.0	31.6
15:50 - 16:00	62.3	54.2	50.1	46.6	42.4	34.1	20.5	13.6	81.7	67.2	61.8	55.7	48.6	46.6	37.3	32.4
16:00 - 16:10	62.6	55.4	51.5	48.0	44.1	35.8	22.0	13.7	83.1	74.4	62.5	61.0	58.8	47.8	35.5	32.3
16:10 - 16:20	61.3	54.4	50.2	46.6	42.9	34.1	20.0	12.0	75.8	65.3	58.0	55.3	50.0	42.8	34.2	31.5
16:20 - 16:30	62.4	57.3	53.1	49.2	44.8	35.6	19.7	11.5	73.2	70.8	66.8	61.5	56.4	48.3	33.5	24.2
16:30 - 16:40	71.1	67.9	68.5	66.6	61.4	52.0	36.8	15.8	87.8	86.5	83.7	83.5	76.8	67.9	52.9	30.9
16:40 - 16:50	63.0	57.4	51.4	47.9	42.9	34.3	21.1	11.6	79.0	72.2	67.1	63.4	56.1	48.2	41.9	19.9
16:50 - 17:00	61.9	57.3	50.3	46.4	42.0	32.8	18.7	11.3	78.0	75.9	65.1	58.6	49.4	38.9	32.5	14.2
17:00 - 17:10	61.4	54.2	50.3	47.1	42.7	34.0	23.0	11.4	73.4	63.7	59.9	55.4	48.9	42.4	41.1	16.3
17:10 - 17:20	61.1	54.9	50.8	46.6	43.1	34.1	19.7	12.2	80.5	68.0	59.2	54.9	54.9	46.1	33.6	32.2
17:20 - 17:30	62.6	55.0	50.1	46.6	43.0	33.8	19.1	11.4	75.4	63.8	57.5	53.6	57.0	42.9	29.4	17.9
17:30 - 17:40	61.0	54.8	52.5	46.8	45.3	41.0	32.0	15.1	72.3	65.3	68.4	56.6	62.3	61.0	53.2	35.8
17:40 - 17:50	62.7	54.8	50.0	46.4	43.0	33.8	19.3	11.4	78.2	64.0	55.8	52.4	53.9	44.1	37.2	27.8
17:50 - 18:00	61.3	57.5	51.4	47.4	43.5	34.8	20.1	11.5	71.3	69.8	60.4	55.6	50.6	47.7	33.7	20.5
18:00 - 18:10	64.3	59.8	54.9	52.6	49.0	40.1	26.6	12.6	76.7	71.9	68.5	70.7	66.7	62.6	54.8	34.9
18:10 - 18:20	62.1	57.7	52.2	48.3	44.1	35.0	21.1	12.0	77.2	69.3	59.4	57.2	51.0	43.4	34.3	31.1
18:20 - 18:30	62.0	56.6	52.2	48.0	43.6	34.2	20.0	12.3	74.3	68.5	64.5	57.1	49.6	40.5	34.6	31.5
18:30 - 18:40	61.6	56.8	51.2	47.7	43.6	34.6	21.1	12.5	75.1	67.3	62.5	55.4	48.4	48.2	43.6	31.9
18:40 - 18:50	62.2	56.7	51.3	48.8	43.7	34.2	20.0	12.3	76.8	72.2	58.6	63.5	49.0	40.3	33.2	32.1
18:50 - 19:00	62.1	54.8	51.9	50.1	44.2	33.8	19.9	12.8	83.3	69.2	65.6	65.9	61.2	40.7	34.7	32.6
19:00 - 19:10	64.8	59.8	54.9	51.1	45.8	36.1	20.9	15.1	82.4	78.5	72.6	70.9	62.9	53.8	34.8	32.7
19:10 - 19:20	61.3	54.3	50.2	47.1	42.9	33.5	18.6	11.4	71.4	64.9	60.6	54.3	48.3	40.1	29.2	28.0
19:20 - 19:30	60.4	53.3	49.8	46.7	43.0	33.6	18.4	11.3	71.1	59.5	55.8	53.7	53.4	46.1	30.6	14.9
19:30 - 19:40	61.4	54.0	50.2	47.8	43.0	33.8	20.6	11.9	74.3	62.5	58.0	62.1	49.0	51.4	47.2	31.2
19:40 - 19:50	60.5	53.8	50.0	46.6	43.0	33.2	18.2	11.3	70.1	65.5	62.5	52.9	49.8	40.7	31.4	14.0
19:50 - 20:00	61.1	54.0	50.1	46.7	43.4	34.1	18.6	11.5	72.2	63.6	57.5	53.2	48.2	44.0	31.6	30.3
20:00 - 20:10	60.6	53.6	49.7	46.3	42.7	33.1	18.1	11.3	70.8	61.6	57.5	53.8	53.3	44.2	27.5	14.4
20:10 - 20:20	61.6	55.5	51.0	47.4	43.1	33.5	18.9	11.7	75.6	68.8	65.4	59.1	51.7	44.1	33.8	30.3
20:20 - 20:30	62.1	54.2	50.2	47.1	43.3	33.8	19.4	12.7	77.7	66.7	59.2	55.8	48.2	42.8	34.6	32.6
20:30 - 20:40	61.0	54.0	50.3	48.0	43.4	33.8	23.3	12.4	72.2	63.1	56.8	61.4	51.6	42.3	44.0	30.3
20:40 - 20:50	63.4	55.6	50.2	47.2	43.2	33.2	19.0	11.3	81.4	75.2	59.5	55.9	49.7	43.0	31.4	17.3
20:50 - 21:00	63.5	55.7	51.3	49.2	44.2	33.7	18.7	11.3	84.5	70.4	67.2	66.0	58.4	40.7	27.4	13.0
21:00 - 21:10	61.7	53.7	49.9	47.0	43.6	35.1	18.8	12.0	78.9	67.6	56.8	55.5	53.1	50.1	33.2	31.6
21:10 - 21:20	60.6	54.1	50.0	46.7	43.2	34.0	18.0	11.3	75.6	68.9	61.9	56.3	48.1	47.3	33.3	17.5
21:20 - 21:30	60.9	53.1	49.0	45.8	42.9	32.8	18.7	11.4	73.5	63.3	59.8	49.8	46.8	39.9	33.3	27.7
21:30 - 21:40	59.6	52.6	49.2	45.7	41.9	31.8	17.3	11.4	71.4	63.6	63.0	58.3	48.2	40.0	31.5	29.2
21:40 - 21:50	61.6	53.7	49.2	45.8	42.6	32.9	19.2	11.3	73.9	63.9	57.1	51.5	47.7	41.2	42.5	15.4
21:50 - 22:00	60.3	54.9	52.0	47.0	42.8	33.2	18.1	11.3	72.7	69.6	69.1	59.8	49.5	44.5	31.3	16.9
22:00 - 22:10	60.2	53.4	49.5	46.3	43.0	33.6	18.8	11.4	70.0	62.3	56.6	56.6	50.2	42.1	32.0	20.3
22:10 - 22:20	61.6	53.7	49.4	46.0	42.5	32.9	19.1	11.4	74.0	62.7	56.1	56.5	47.8	41.5	29.1	16.9
22:20 - 22:30	61.6	53.0	48.7	45.4	42.3	32.6	18.5	11.3	72.6	64.2	56.5	52.5	53.4	41.6	36.3	16.4
22:30 - 22:40	62.0	53.4	48.8	45.4	42.1	32.7	18.8	11.3	76.7	67.6	56.3	50.4	50.6	41.3	31.1	14.7
22:40 - 22:50	61.4	53.7	49.0	45.5	41.9	32.9	18.6	11.3	75.2	68.0	59.8	54.6	48.6	39.6	29.2	16.7
22:50 - 23:00	60.7	54.1	48.8	45.5	41.8	33.0	19.2	11.4	73.0	68.8	56.3	52.0	49.6	41.8	37.2	18.2
23:00 - 23:10	60.4	55.0	49.4	45.2	41.3	32.2	18.2	11.3	71.7	71.0	62.1	51.8	46.8	38.6	29.0	14.5
23:10 - 23:20	60.5	52.4	48.5	45.1	41.7	32.5	18.5	11.3	74.2	64.7	57.1	51.4	47.3	40.0	34.4	20.8
23:20 - 23:30	60.1	52.2	48.5	45.2	41.9	32.2	18.7	11.3	71.3	62.6	58.6	54.0	47.9	41.9	36.5	17.2
23:30 - 23:40	60.7	52.7	48.7	45.3	42.2	32.5	18.4	11.3	73.0	65.2	60.0	54.6	51.1	41.5	31.8	16.2
23:40 - 23:50	60.2	52.0	48.4	45.3	42.6	32.6	18.2	11.3	71.7	60.2	61.2	56.7	55.6	42.7	33.1	15.7
23:50 - 00:00	60.1	52.7	48.7	45.4	43.1	33.2	18.7	11.3	70.5	67.1	55.9	53.3	64.8	50.8	32.2	15.7
00:00 - 00:10	60.6	52.6	48.5	45.2	42.5	33.1	18.8	11.3	71.4	62.5	54.8	49.0	48.2	39.6	31.8	15.7
00:10 - 00:20	59.3	53.2	48.5	45.0	42.2	32.2	17.4	11.3	72.7	68.7	61.0	59.2	56.1	45.5	30.3	16.6
00:20 - 00:30	62.4	56.0	49.7	47.1	43.7	34.9	20.9	11.8	79.6	70.4	62.7	64.4	61.3	52.4	36.1	26.1
00:30 - 00:40	59.4	54.5	48.9	45.5	42.2	33.0	24.5	14.0	72.2	67.3	59.7	52.1	48.4	44.4	42.7	33.3
00:40 - 00:50	58.9	54.0	48.7	45.2	41.7	32.4	24.6	13.5	72.3	66.7	61.9	55.5	48.9	39.3	42.6	32.1
00:50 - 01:00	60.0	56.6	49.9	46.5	42.8	33.5	19.8	11.6	70.7	65.9	57.1	59.3	56.8	47.1	37.2	20.6
01:00 - 01:10	59.0	56.2	50.0	46.2	44.6	37.1	20.6	11.6	70.5	61.9	54.6	56.5	59.1	57.6	37.1	16.8
01:10 - 01:20	59.5	56.3	50.2	46.1	42.8	33.7	22.1	12.1	72.2	62.6	55.1	50.6	48.8	42.7	39.7	30.5
01:20 - 01:30	59.3	56.1	50.2	46.0	42.5	33.1	22.6	12.7	71.0	64.5	55.2	50.8	49.5	39.7	41.0	30.5
01:30 - 01:40	57.3	55.6	49.6	45.5	43.5	34.3	20.2	11.8	66.3	62.3	56.1	51.2	57.8	49.3	36.5	29.7
01:40 - 01:50	58.4	55.9	50.0	46.1	42.8	33.5	19.2	11.5	70.5	61.5	57.0	51.9	50.1	42.9	34.8	24.0
01:50 - 02:00	58.2	56.0	50.0	46.1	42.8	33.2	19.0	11.4	67.8	61.8	56.7	51.2	49.1	44.8	30.6	16.6
02:00 - 02:10	59.2	55.4	49.7	46.2	42.7	32.7	22.7	12.4	74.4	62.6	53.9	60.1	57.1	42.0	42.1	27.2
02:10 - 02:20	58.5	55.5	49.9	45.9	42.8	33.0	25.3	13.6	72.5	66.8	58.7	50.5	54.5	43.5	46.2	31.3
02:20 - 02:30	58.5	55.2	49.4	45.8	42.3	32.4	22.9	12.6	71.0	62.4	54.4	50.7	47.7	38.8	44.0	28.6

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
02:30 - 02:40	57.8	55.2	49.5	46.1	42.6	33.2	19.6	11.5	70.4	65.4	58.1	55.2	52.7	45.9	32.1	18.5
02:40 - 02:50	59.7	53.8	49.8	46.8	42.8	35.8	29.7	14.5	75.3	64.8	64.2	59.9	55.8	51.3	55.5	34.3
02:50 - 03:00	57.1	51.2	47.6	44.6	41.4	32.6	19.0	11.5	68.6	66.7	60.7	60.5	56.1	46.2	38.5	20.6
03:00 - 03:10	58.7	51.2	47.2	44.1	40.5	31.3	22.4	12.7	71.9	64.3	56.9	52.4	50.9	43.8	44.2	28.8
03:10 - 03:20	57.7	50.6	47.2	44.1	41.1	31.8	30.2	16.0	72.8	59.9	54.2	50.0	49.9	41.6	50.8	34.8
03:20 - 03:30	57.0	50.6	47.0	44.1	42.3	35.1	19.8	11.4	70.5	61.6	53.7	47.7	56.5	57.1	40.5	20.1
03:30 - 03:40	56.5	50.1	46.6	43.6	40.6	31.4	25.7	14.4	67.5	57.5	52.1	49.6	50.3	42.4	46.3	32.9
03:40 - 03:50	56.2	50.1	46.1	43.3	40.1	30.7	16.4	11.3	67.2	55.6	54.1	49.4	48.1	39.0	30.9	14.1
03:50 - 04:00	56.2	50.7	46.4	43.2	39.9	31.0	18.9	11.3	65.8	60.6	54.3	54.6	48.3	41.6	42.9	16.6
04:00 - 04:10	56.2	50.1	45.8	42.9	39.6	30.1	28.9	15.9	71.6	64.7	52.4	51.7	48.6	43.7	50.6	35.5
04:10 - 04:20	56.1	50.6	46.4	43.7	40.9	32.3	17.8	11.3	71.1	63.9	55.7	52.3	52.6	43.5	28.1	18.1
04:20 - 04:30	56.2	50.1	45.5	43.1	39.2	30.2	16.1	11.4	69.0	58.2	50.2	48.7	45.9	42.2	30.1	29.5
04:30 - 04:40	57.1	51.3	47.1	44.1	39.9	30.8	16.9	11.3	70.0	62.9	58.7	51.1	47.5	39.8	28.0	15.7
04:40 - 04:50	56.1	50.0	45.6	42.7	39.0	29.7	24.3	13.7	67.4	63.8	53.6	55.1	49.3	41.1	43.4	32.3
04:50 - 05:00	56.1	50.2	46.0	43.2	38.7	29.6	16.6	11.4	67.6	57.3	54.1	56.2	53.6	45.1	29.9	18.3
05:00 - 05:10	55.7	50.2	45.9	43.2	39.0	29.7	16.4	11.5	68.6	61.7	56.1	54.9	47.9	41.9	32.0	22.2
05:10 - 05:20	56.1	50.7	46.7	43.6	38.4	28.7	15.5	11.3	66.8	61.8	56.8	53.3	44.3	37.6	30.0	29.3
05:20 - 05:30	55.2	50.3	46.2	43.4	38.6	29.3	15.5	11.2	63.5	57.9	54.7	56.5	48.7	41.1	23.8	16.7
05:30 - 05:40	54.7	49.6	45.8	42.8	38.6	28.6	16.1	11.6	69.1	57.9	53.0	46.3	46.3	37.3	32.7	17.6
05:40 - 05:50	56.2	50.1	46.2	43.5	39.6	29.8	16.1	11.8	76.8	59.0	52.5	48.2	46.6	37.8	32.6	31.8
05:50 - 06:00	55.0	49.8	45.9	42.8	38.6	28.8	15.4	11.5	65.1	57.0	52.9	47.2	44.1	42.6	26.9	19.3
06:00 - 06:10	56.1	51.3	47.5	44.4	39.6	30.0	16.1	11.3	64.1	58.6	54.5	54.8	48.2	40.6	29.0	17.9
06:10 - 06:20	56.1	51.2	47.1	44.0	39.6	29.7	16.2	11.4	68.8	60.1	53.6	49.6	47.3	38.7	33.5	30.2
06:20 - 06:30	57.1	52.1	48.1	44.8	40.0	31.2	20.9	11.7	69.1	65.3	58.5	53.8	54.5	52.1	47.4	29.2
06:30 - 06:40	58.0	51.7	47.6	44.4	40.0	31.0	17.7	11.4	72.8	59.7	53.6	52.7	47.3	41.8	37.3	18.1
06:40 - 06:50	59.0	53.0	49.4	46.0	40.7	32.4	20.4	11.7	73.6	63.6	61.2	59.5	56.4	49.4	38.4	25.1
06:50 - 07:00	56.9	51.6	47.1	44.0	40.1	31.4	16.9	11.3	68.4	60.1	54.2	52.5	47.8	45.8	31.3	17.8
07:00 - 07:10	57.7	52.6	49.4	45.5	41.2	33.3	20.5	11.7	79.0	70.1	65.4	57.7	52.7	47.1	34.5	30.8
07:10 - 07:20	56.5	51.2	47.4	44.1	39.6	29.8	16.0	11.2	68.6	64.4	57.1	51.5	44.5	43.5	29.3	16.1
07:20 - 07:30	56.7	50.9	47.4	44.7	40.0	30.6	17.5	11.4	72.2	57.7	53.5	58.8	47.5	42.3	34.7	20.9
07:30 - 07:40	59.5	53.2	50.1	47.5	43.3	36.7	27.2	12.8	72.5	68.7	69.5	69.4	64.3	58.7	51.6	31.1
07:40 - 07:50	57.5	51.6	48.0	45.3	40.6	31.4	18.1	11.3	68.6	60.2	57.2	55.2	52.2	48.6	42.7	17.8
07:50 - 08:00	59.8	53.9	50.3	46.5	40.7	32.0	18.8	12.4	78.9	70.0	70.9	62.1	53.1	49.6	35.6	31.7
08:00 - 08:10	60.1	53.7	50.8	47.8	43.6	34.6	19.9	11.7	76.9	64.7	68.1	66.3	61.1	51.4	32.5	28.9
08:10 - 08:20	61.2	54.0	50.1	46.9	43.1	36.0	27.2	13.4	78.1	69.0	64.3	65.5	65.0	61.6	56.6	36.5
08:20 - 08:30	57.9	51.9	48.2	45.3	40.9	31.4	17.7	12.0	74.5	63.7	55.4	52.6	48.0	41.9	30.2	29.1
08:30 - 08:40	59.4	53.2	49.2	45.7	41.7	33.2	18.9	12.0	78.6	70.7	64.6	60.0	55.3	52.3	37.7	30.9
08:40 - 08:50	58.0	52.2	48.5	45.4	41.3	33.1	19.6	11.7	70.4	60.0	56.3	62.1	51.1	50.4	37.6	30.9
08:50 - 09:00	62.8	59.9	54.8	48.3	42.6	34.9	22.3	12.9	79.8	81.2	73.7	68.5	58.5	51.3	43.8	32.3
09:00 - 09:10	59.3	54.4	50.0	45.8	41.3	32.3	18.5	12.5	80.7	65.6	64.6	55.6	48.6	45.6	33.3	32.3
09:10 - 09:20	58.7	53.5	49.8	45.7	41.5	32.3	18.8	12.1	75.6	66.8	65.4	52.5	47.6	42.4	36.9	31.9
09:20 - 09:30	61.3	54.0	51.0	45.8	41.9	35.8	23.3	15.9	84.6	70.8	68.4	57.0	54.4	59.1	48.2	38.8
09:30 - 09:40	60.6	55.0	52.0	47.1	43.3	36.1	25.1	12.6	79.9	68.9	72.0	57.2	52.0	48.3	46.3	31.7
09:40 - 09:50	58.4	54.0	50.7	47.1	43.9	35.8	21.3	12.2	71.5	68.4	64.7	61.3	57.0	49.1	40.4	31.0
09:50 - 10:00	59.7	54.8	51.7	48.4	44.6	38.3	25.2	13.3	76.0	70.6	68.7	63.4	61.0	54.3	43.0	29.8
10:00 - 10:10	61.1	56.6	51.9	48.4	44.9	37.2	24.8	13.7	76.3	70.5	64.6	60.5	60.4	54.8	44.8	33.1
10:10 - 10:20	61.1	54.1	50.9	47.8	44.7	38.2	28.3	15.7	72.4	66.7	65.3	60.5	60.1	56.2	48.1	35.9
10:20 - 10:30	60.9	55.3	51.0	48.1	45.0	38.0	26.6	13.9	73.6	71.4	63.9	61.5	59.3	54.1	44.6	31.6
10:30 - 10:40	61.6	55.2	51.9	48.1	45.8	39.8	26.3	15.4	77.1	68.6	69.1	65.9	62.2	57.7	47.6	38.7
10:40 - 10:50	61.8	56.5	51.8	47.6	44.0	35.4	21.6	12.5	76.6	70.6	64.9	59.1	54.0	45.5	34.0	31.0
10:50 - 11:00	61.1	57.0	51.7	48.1	44.9	36.3	23.1	12.8	74.0	66.1	63.1	57.4	56.9	50.0	42.4	31.0
11:00 - 11:10	63.9	56.2	52.6	47.5	44.2	35.9	22.4	14.6	89.6	74.4	71.0	55.7	50.3	45.1	35.0	32.3
11:10 - 11:20	64.2	59.0	53.1	48.2	44.8	36.8	22.9	14.7	82.1	77.3	70.7	62.1	55.3	48.3	37.9	32.5
11:20 - 11:30	63.3	56.3	53.2	48.9	45.8	37.9	24.6	13.7	81.3	72.5	69.8	66.8	62.5	53.3	40.0	32.0
11:30 - 11:40	62.1	55.4	52.8	48.5	46.4	38.7	25.2	14.5	80.3	69.4	70.6	62.8	63.6	56.1	43.9	32.4
11:40 - 11:50	65.4	56.9	54.8	47.9	44.8	37.1	24.4	17.6	88.0	76.5	79.3	59.7	58.8	56.4	40.6	32.6
11:50 - 12:00	61.9	54.8	52.2	47.9	44.8	37.5	30.0	15.6	79.0	67.4	68.5	58.5	59.6	52.8	40.2	32.3
12:00 - 12:10	65.2	56.2	53.7	48.3	44.4	37.2	30.6	17.0	92.5	79.0	76.4	65.5	55.8	48.0	40.1	32.7
12:10 - 12:20	65.3	56.9	54.5	48.2	44.5	37.5	31.1	19.2	88.5	77.9	73.6	57.8	53.2	46.7	40.7	32.8
12:20 - 12:30	65.1	56.4	54.0	48.1	46.1	40.0	31.0	17.7	85.0	73.1	73.0	56.8	56.6	51.4	36.8	32.6
12:30 - 12:40	63.0	55.9	53.1	48.5	44.9	38.2	30.6	15.6	77.3	70.1	68.7	55.9	50.3	43.3	37.5	32.3
12:40 - 12:50	64.6	57.2	54.5	48.1	44.3	36.9	26.8	15.7	87.2	77.1	75.0	59.3	52.8	49.2	43.0	32.5
12:50 - 13:00	61.2	55.7	52.3	48.4	44.8	36.8	22.9	12.3	75.7	64.6	65.8	57.8	52.6	48.1	33.7	31.1
13:00 - 13:10	63.8	56.5	53.4	48.3	45.2	37.0	23.7	14.9	84.1	73.6	69.3	63.5	56.1	47.2	37.5	32.6
13:10 - 13:20	62.8	56.8	53.5	48.1	44.2	36.3	23.8	13.6	83.7	72.8	73.3	55.3	53.2	49.7	44.6	32.5
13:20 - 13:30	64.6	57.2	54.2	47.9	44.1	36.3	23.1	15.8	89.7	81.5	73.0	63.2	53.1	50.9	39.1	32.8
13:30 - 13:40	65.0	56.5	54.2	48.2	44.2	36.0	22.7	16.5	91.1	79.3	76.5	61.9	54.8	47.3	35.1	32.7
13:40 - 13:50	60.6	54.2	51.9	47.0	43.5	35.3	21.6	13.6	80.0	70.8	70.1	56.7	54.4	45.9	38.0	32.3
13:50 - 14:00	61.9	54.7	51.9	47.0	44.0	35.8	22.3	13.1	79.9	69.4	70.9	53.7	49.6	41.9	37.7	31.6
14:00 - 14:10	64.1	55.8	53.5	47.6	44.0	36.1	23.0	16.5	85.4	75.3	70.8	59.8	55.4	50.4	37.7	32.6
14:10 - 14:20	61.6	55.0	52.1	47.0	43.6	35.5	21.9	12.5	77.6	66.8	69.3	53.0	51.2	48.8	33.2	31.7
14:20 - 14:30	63.8	55.8	53.1	47.6	44.1	37.0	23.1	14.3	83.6	71.7	71.2	56.9	48.4	49.4	35.5	32.2

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
14:30 - 14:40	63.4	56.1	53.8	48.1	44.4	36.3	22.8	14.8	83.1	71.7	74.4	57.1	51.9	47.4	35.6	32.4
14:40 - 14:50	65.4	56.9	54.4	48.5	44.8	37.5	28.5	16.8	86.1	74.6	73.4	56.4	50.9	46.5	46.6	32.5
14:50 - 15:00	63.0	55.6	53.1	47.5	44.0	36.9	29.3	16.0	81.0	70.3	71.5	55.6	51.1	44.4	35.7	32.4
15:00 - 15:10	63.9	55.5	52.5	47.7	44.7	37.2	27.4	15.2	85.1	71.5	70.7	54.1	53.7	52.6	38.3	32.6
15:10 - 15:20	61.9	54.9	52.2	47.1	44.5	36.0	21.6	13.3	84.7	73.7	73.1	58.9	53.0	52.7	38.4	32.3
15:20 - 15:30	63.7	55.9	53.3	47.7	44.0	35.5	21.9	15.5	85.6	73.6	68.7	57.3	51.5	52.4	38.9	32.8
15:30 - 15:40	62.7	55.4	52.8	48.0	43.9	35.2	21.6	14.1	83.9	72.6	71.5	64.3	47.9	43.2	34.2	32.6
15:40 - 15:50	64.0	55.7	53.2	48.0	43.7	35.6	22.9	14.9	84.8	76.1	70.1	58.7	50.4	53.6	42.4	32.4
15:50 - 16:00	63.2	55.4	52.4	48.2	44.1	35.0	21.3	12.8	86.1	72.9	70.2	58.4	54.4	44.7	36.6	31.9
16:00 - 16:10	69.6	64.5	64.5	62.3	56.5	47.9	32.0	15.9	86.5	83.1	86.8	84.8	78.6	67.9	50.5	32.9
16:10 - 16:20	62.5	55.3	52.6	47.9	44.4	35.3	21.8	13.5	82.3	69.5	71.3	60.8	55.1	46.5	34.0	32.2
16:20 - 16:30	61.8	54.7	51.0	47.0	43.4	34.6	21.0	12.6	81.1	71.4	72.6	55.4	50.1	42.5	37.4	32.3
16:30 - 16:40	62.9	55.8	52.6	47.5	44.2	36.2	23.0	13.5	87.2	74.9	69.9	55.8	56.9	50.0	34.5	32.5
16:40 - 16:50	61.9	55.0	51.9	47.1	43.5	34.9	21.1	13.3	76.3	64.3	67.3	53.8	48.4	41.6	40.0	32.6
16:50 - 17:00	63.5	55.6	52.5	47.2	43.6	34.5	21.9	13.7	81.0	68.6	66.4	53.4	50.0	45.5	34.0	31.6
17:00 - 17:10	63.3	56.5	53.1	49.2	45.2	37.3	25.7	14.4	81.2	67.9	69.0	69.7	65.2	59.2	49.6	32.2
17:10 - 17:20	62.2	55.8	52.5	48.9	45.1	37.8	25.8	12.7	74.5	67.1	63.2	66.6	66.6	62.0	52.3	32.3
17:20 - 17:30	62.7	55.7	53.1	47.9	43.8	35.1	21.4	14.1	78.7	67.7	69.1	53.3	50.8	45.2	37.2	32.0
17:30 - 17:40	63.0	55.7	52.8	47.9	44.7	36.7	21.0	13.7	81.7	70.0	70.0	57.5	55.5	51.9	34.7	32.1
17:40 - 17:50	64.0	56.4	53.7	47.9	43.8	35.1	21.7	14.9	83.9	71.9	70.3	54.7	52.1	41.8	36.2	32.3
17:50 - 18:00	68.2	58.5	56.1	48.5	44.3	35.9	23.1	18.4	92.7	81.0	76.1	62.6	57.7	53.6	36.9	32.9
18:00 - 18:10	65.5	57.1	53.8	48.1	44.0	35.7	22.7	15.3	90.7	80.0	72.2	60.4	54.5	51.1	44.9	33.0
18:10 - 18:20	62.8	55.9	52.9	48.7	44.6	36.3	22.3	12.1	82.2	67.5	67.5	59.6	51.2	45.3	33.8	30.8
18:20 - 18:30	61.8	56.0	52.4	48.1	43.9	35.6	21.7	12.9	78.3	67.9	66.2	57.9	52.0	42.1	32.8	31.9
18:30 - 18:40	67.7	58.3	55.0	48.0	44.7	36.5	22.6	16.6	93.5	82.3	76.6	62.1	59.9	55.3	38.7	32.9
18:40 - 18:50	64.1	56.2	53.5	47.9	44.1	35.8	22.6	15.6	86.7	75.0	69.8	57.0	49.5	53.4	37.2	32.6
18:50 - 19:00	64.9	57.0	53.9	48.4	44.2	36.2	22.5	14.2	88.4	76.1	71.8	59.4	51.6	52.5	37.5	32.3
19:00 - 19:10	64.8	56.6	54.1	47.9	44.1	35.8	22.3	15.8	89.1	78.6	75.2	58.8	50.2	52.8	37.1	32.8
19:10 - 19:20	64.3	58.6	55.2	48.8	44.2	35.8	22.6	15.0	85.4	75.7	73.3	64.1	51.7	46.5	36.5	32.4
19:20 - 19:30	62.4	55.5	52.2	47.8	44.1	36.1	23.0	12.9	75.7	66.2	66.3	58.2	54.5	49.9	40.8	31.5
19:30 - 19:40	61.1	54.2	51.3	46.8	43.5	35.3	21.0	13.1	81.7	71.5	71.7	56.3	55.7	52.4	37.8	32.1
19:40 - 19:50	62.5	55.3	52.4	48.6	44.1	35.5	21.6	13.2	85.3	77.1	77.5	61.8	49.6	44.5	35.3	32.8
19:50 - 20:00	62.9	55.0	52.2	46.9	43.4	35.3	21.5	13.7	86.7	75.1	71.2	56.4	47.6	42.7	34.9	32.8
20:00 - 20:10	62.3	55.0	52.5	47.3	44.3	36.9	21.6	14.2	86.8	72.0	74.4	59.1	50.7	48.6	35.3	32.8
20:10 - 20:20	59.8	53.8	50.3	46.6	43.5	35.0	20.8	11.7	72.2	63.3	60.8	52.8	48.7	40.8	30.3	29.6
20:20 - 20:30	60.5	54.1	50.7	47.1	44.2	36.3	21.5	11.8	77.5	67.4	65.2	55.4	51.3	46.0	35.7	29.9
20:30 - 20:40	66.6	57.4	54.6	48.5	47.1	41.3	24.4	17.7	89.5	76.4	70.6	60.0	62.2	57.3	41.6	32.8
20:40 - 20:50	69.4	60.0	55.6	48.9	44.8	37.6	25.0	17.1	96.2	85.6	77.2	66.6	56.5	54.9	42.3	35.0
20:50 - 21:00	63.3	55.8	53.4	47.9	43.9	35.7	22.6	15.8	82.4	69.9	69.5	54.7	50.8	50.3	34.9	32.5
21:00 - 21:10	65.1	56.7	54.2	48.6	44.2	36.1	23.3	16.4	90.3	78.5	72.6	58.2	52.4	53.6	37.0	32.8
21:10 - 21:20	63.9	57.0	53.7	48.3	44.4	36.3	23.4	17.2	87.1	75.9	72.4	57.6	52.5	47.4	35.4	32.8
21:20 - 21:30	61.6	56.9	53.7	48.9	44.9	36.6	22.5	13.8	80.9	72.0	71.1	68.3	61.5	51.9	36.0	32.1
21:30 - 21:40	67.4	57.8	54.8	48.4	44.4	36.9	23.7	16.9	92.8	77.7	73.2	59.9	60.3	54.7	37.0	32.7
21:40 - 21:50	62.0	56.9	52.4	48.4	44.6	36.1	23.2	14.5	85.7	73.4	68.0	55.1	51.9	40.8	35.1	32.7
21:50 - 22:00	62.4	56.8	52.9	47.6	46.1	38.6	24.5	15.1	83.0	70.3	68.0	54.8	59.6	55.1	36.6	32.5
22:00 - 22:10	62.8	56.8	52.7	47.1	43.9	35.7	22.3	14.2	86.2	76.6	72.5	57.4	50.1	44.2	34.5	32.3
22:10 - 22:20	63.9	56.3	52.3	46.6	43.4	35.3	22.2	15.1	90.3	79.2	70.7	58.8	49.7	49.4	36.6	32.5
22:20 - 22:30	59.9	55.7	50.9	46.6	43.5	35.1	21.4	13.0	77.5	64.7	63.4	51.3	48.6	44.5	33.4	31.7
22:30 - 22:40	64.9	57.8	53.4	47.1	44.0	36.5	23.7	16.3	87.1	76.8	71.8	59.2	55.4	55.1	41.1	32.7
22:40 - 22:50	63.3	56.4	52.5	46.9	43.8	35.5	22.1	14.8	85.8	74.8	67.5	53.6	50.7	48.4	34.7	32.2
22:50 - 23:00	61.2	56.2	51.8	47.1	44.3	36.6	22.6	13.2	83.3	73.3	65.7	54.5	51.1	45.9	35.2	32.0
23:00 - 23:10	59.9	56.0	50.9	46.5	43.6	35.5	21.9	12.4	77.6	68.0	63.3	52.9	50.4	48.3	37.3	31.5
23:10 - 23:20	59.4	54.9	50.5	46.3	43.5	35.0	21.1	12.7	76.2	65.5	65.5	51.9	51.7	45.9	34.6	31.9
23:20 - 23:30	60.4	53.7	50.6	46.6	43.4	35.8	22.9	13.7	81.3	69.2	67.8	57.4	50.6	44.6	41.7	32.3
23:30 - 23:40	61.6	55.3	51.7	46.9	45.5	39.2	23.3	13.6	86.3	70.8	67.0	57.1	61.5	61.8	41.3	31.6
23:40 - 23:50	59.4	53.8	49.5	45.7	42.7	34.3	20.2	11.6	75.9	64.6	62.2	52.3	51.1	44.0	30.3	28.3
23:50 - 00:00	61.3	55.2	51.4	46.6	43.6	35.4	21.9	14.0	84.3	71.5	71.3	54.9	52.0	45.2	35.7	32.6
00:00 - 00:10	64.0	56.3	52.7	46.6	43.4	35.2	22.3	16.4	85.8	74.3	69.7	57.6	49.7	51.7	37.5	32.5
00:10 - 00:20	63.7	55.8	52.2	46.5	42.8	34.8	24.4	15.5	88.4	75.9	70.8	59.7	50.7	48.9	45.4	32.6
00:20 - 00:30	62.4	56.0	51.4	46.7	43.3	35.8	27.1	15.1	80.4	71.2	66.4	59.1	53.5	46.5	48.4	32.2
00:30 - 00:40	66.2	56.2	52.8	45.9	42.2	34.5	23.0	16.5	91.0	80.8	73.1	59.6	56.8	52.9	42.2	32.7
00:40 - 00:50	57.6	54.5	49.4	45.5	42.5	34.2	20.8	12.2	80.2	67.3	67.0	55.2	53.0	45.9	34.2	31.2
00:50 - 01:00	56.7	52.7	47.9	44.4	41.3	32.8	19.6	11.6	75.2	60.8	57.9	53.8	48.5	42.7	33.6	19.2
01:00 - 01:10	58.3	53.9	49.5	44.9	41.8	33.5	20.5	13.1	76.6	64.6	62.1	49.3	47.3	39.8	33.6	31.7
01:10 - 01:20	58.7	55.0	50.9	47.1	43.1	34.7	21.8	13.1	78.4	71.1	74.8	59.0	53.6	47.5	34.2	32.2
01:20 - 01:30	58.1	53.3	49.9	45.7	42.2	34.8	22.5	15.2	80.4	68.2	65.5	55.2	52.1	47.4	34.7	32.5
01:30 - 01:40	61.8	56.3	50.9	46.4	42.8	35.2	27.9	15.6	90.4	81.7	73.1	64.3	50.5	50.2	47.6	33.9
01:40 - 01:50	58.3	53.3	48.8	44.8	41.3	34.0	26.3	14.3	75.0	71.3	63.0	52.9	50.0	47.3	47.8	32.2
01:50 - 02:00	58.9	54.3	49.6	45.2	42.1	34.0	21.0	13.6	80.4	70.1	65.2	55.0	50.0	43.9	34.7	32.4
02:00 - 02:10	59.3	53.8	50.0	45.0	41.4	33.2	20.7	14.5	81.5	71.5	68.9	53.1	50.2	42.6	34.8	32.1
02:10 - 02:20	61.6	54.0	49.5	44.3	40.9	32.8	20.8	13.8	90.7	76.4	71.7	58.9	51.6	45.9	38.0	32.1
02:20 - 02:30	60.3	54.8	50.0	45.2	41.9	34.1	21.9	14.1	83.4	70.5	65.6	53.2	50.6	47.2	34.6	31.9

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
02:30 - 02:40	57.9	50.6	47.9	43.5	39.6	31.8	19.7	13.0	80.2	68.2	63.6	50.8	49.3	42.5	33.6	31.9
02:40 - 02:50	57.2	51.0	47.8	44.2	40.4	33.4	21.3	12.2	73.1	64.4	58.0	55.0	50.0	46.9	36.1	31.7
02:50 - 03:00	56.1	50.0	47.0	43.4	40.0	32.7	24.5	13.5	78.0	67.5	64.3	50.7	49.0	45.9	49.6	34.3
03:00 - 03:10	56.9	50.8	48.0	43.7	39.9	31.9	30.2	16.8	78.8	67.4	66.3	54.3	47.4	43.3	51.8	37.3
03:10 - 03:20	57.6	51.0	48.2	44.0	40.5	33.0	20.2	12.2	79.2	66.6	67.0	50.9	47.8	41.6	33.1	30.1
03:20 - 03:30	56.3	49.8	46.8	43.4	39.8	31.9	25.3	13.5	74.7	61.6	60.6	49.8	48.5	43.1	50.4	36.8
03:30 - 03:40	59.4	51.7	48.8	44.2	39.9	32.0	19.8	12.8	81.1	67.2	65.8	52.3	46.9	42.2	34.4	32.0
03:40 - 03:50	58.8	51.3	48.7	44.3	40.6	32.7	20.1	12.5	80.3	68.8	68.1	59.7	47.6	41.1	33.8	31.7
03:50 - 04:00	57.1	50.9	47.5	43.9	40.0	32.3	19.8	12.3	70.9	65.5	62.0	50.9	48.3	42.2	35.0	31.5
04:00 - 04:10	57.9	51.6	48.1	43.9	40.0	32.0	19.6	12.6	77.2	63.1	62.5	48.5	47.3	39.8	34.7	32.0
04:10 - 04:20	60.4	52.7	49.8	44.4	40.4	32.4	22.7	16.1	84.1	74.4	71.4	54.2	50.0	43.8	46.7	32.9
04:20 - 04:30	58.0	51.1	48.1	44.1	41.3	33.7	28.2	15.4	76.1	63.5	60.1	48.7	48.6	43.5	45.8	33.1
04:30 - 04:40	58.5	51.6	48.5	44.8	41.3	33.4	21.2	12.5	75.7	65.2	62.0	52.5	49.1	44.8	37.0	31.8
04:40 - 04:50	57.4	51.2	48.3	44.9	41.7	34.1	21.3	11.9	72.9	61.5	58.3	50.5	50.0	45.8	41.8	29.1
04:50 - 05:00	58.7	52.9	48.9	44.6	40.8	32.8	19.9	12.2	81.4	71.1	61.6	51.8	46.0	41.5	37.2	31.9
05:00 - 05:10	58.3	53.0	48.4	44.9	41.3	33.2	20.0	11.8	70.5	59.9	56.0	49.1	48.7	40.7	27.6	22.1
05:10 - 05:20	61.1	54.3	50.0	45.7	42.1	34.9	22.4	13.4	82.7	69.9	68.8	53.6	48.3	47.3	35.0	32.1
05:20 - 05:30	59.5	53.9	49.6	45.6	42.0	34.6	22.0	12.7	77.2	67.2	66.6	51.7	50.0	45.9	34.7	32.0
05:30 - 05:40	60.5	54.0	50.4	46.1	42.7	35.9	24.0	13.2	78.6	66.1	64.6	52.6	53.1	46.9	38.2	32.0
05:40 - 05:50	61.3	54.4	50.3	46.5	43.7	36.5	24.2	13.3	76.4	69.4	63.3	57.5	53.4	50.4	41.9	32.3
05:50 - 06:00	62.6	55.3	51.3	46.7	43.3	36.0	23.7	14.2	85.0	73.1	68.1	55.7	51.7	46.9	37.3	32.3
06:00 - 06:10	61.2	55.0	51.1	47.3	44.2	36.5	23.6	12.9	78.1	68.6	63.8	57.1	53.8	45.9	34.8	31.0
06:10 - 06:20	61.6	55.1	51.1	47.7	44.4	36.9	24.4	13.5	78.6	67.1	65.5	55.9	50.2	44.0	33.3	31.2
06:20 - 06:30	63.9	56.5	52.7	48.3	45.8	39.3	26.0	15.9	84.2	72.9	71.5	61.6	58.9	56.0	38.4	32.4
06:30 - 06:40	62.4	55.9	52.2	48.4	45.1	38.4	25.9	13.7	80.0	72.4	64.9	59.2	55.0	51.6	39.0	31.1
06:40 - 06:50	65.6	56.9	53.3	48.6	45.4	38.8	26.6	16.3	84.1	72.6	67.4	57.6	53.1	48.4	38.2	32.6
06:50 - 07:00	65.8	57.9	53.8	49.1	46.1	40.2	30.0	16.7	87.4	74.3	68.5	68.1	67.8	64.0	58.0	37.5
07:00 - 07:10	64.6	56.8	52.9	48.9	45.8	38.9	26.3	14.9	83.9	75.3	65.1	58.4	51.9	52.5	36.9	32.5
07:10 - 07:20	64.9	57.6	53.6	49.4	46.0	38.9	27.2	16.3	82.5	71.3	71.7	55.5	53.4	50.0	39.9	32.7
07:20 - 07:30	64.6	57.2	52.8	48.5	45.0	37.9	25.7	16.0	85.0	75.3	67.1	56.6	51.6	52.0	37.6	32.7
07:30 - 07:40	64.6	56.8	52.8	49.2	46.2	39.5	27.3	13.9	81.9	64.9	63.0	56.9	56.3	51.7	42.7	32.0
07:40 - 07:50	65.4	57.7	53.5	49.2	46.0	39.1	26.7	14.7	88.1	76.3	70.4	57.4	51.2	51.2	37.4	32.7
07:50 - 08:00	67.1	61.1	59.5	55.0	51.4	45.0	34.7	23.1	87.8	75.8	70.3	70.5	68.5	62.6	52.0	38.6
08:00 - 08:10	66.0	64.7	64.5	60.4	55.8	50.0	40.1	27.8	82.3	73.2	70.6	71.1	67.2	63.3	55.9	48.6
08:10 - 08:20	68.7	63.6	63.8	59.1	55.0	49.2	40.2	28.0	90.7	81.2	75.2	67.9	66.9	61.9	55.0	44.3
08:20 - 08:30	69.6	64.1	63.8	60.1	56.9	51.5	43.5	30.7	92.8	83.2	75.4	71.6	68.4	64.6	57.1	45.1
08:30 - 08:40	68.3	63.8	63.8	60.4	57.3	51.6	42.6	29.9	91.0	79.0	73.8	73.6	70.6	65.0	55.0	47.7
08:40 - 08:50	71.0	65.5	64.2	60.8	58.0	52.4	42.4	29.6	94.9	88.4	80.8	73.9	71.2	65.2	54.0	44.7
08:50 - 09:00	70.0	64.3	64.0	60.8	58.1	52.4	42.5	29.9	93.6	84.1	76.0	73.3	70.1	66.2	56.1	43.3
09:00 - 09:10	68.8	64.3	63.6	60.0	57.2	51.5	42.5	29.8	88.1	77.7	72.3	71.1	69.9	64.7	54.0	44.6
09:10 - 09:20	66.7	63.0	62.6	58.8	55.9	50.2	42.0	29.2	83.2	73.9	69.7	71.8	72.0	66.1	55.7	43.6
09:20 - 09:30	71.9	65.0	64.3	60.7	57.7	52.3	42.8	29.8	95.0	83.8	76.7	72.4	70.0	65.3	54.5	44.6
09:30 - 09:40	68.4	63.6	63.8	60.5	57.5	51.7	42.4	29.3	86.0	73.4	75.5	73.0	70.6	67.0	56.5	43.4
09:40 - 09:50	67.2	63.2	63.3	59.9	56.7	50.9	42.0	29.3	85.0	76.5	73.4	73.8	70.2	65.6	56.8	44.0
09:50 - 10:00	68.6	63.4	63.3	59.3	56.4	50.8	42.0	29.1	86.8	76.6	72.0	71.8	71.0	65.0	55.2	42.8

Table A12: Location 2, L_{eq} and L_{max} frequency data, 22 December 2014

APPENDIX B - REPORT CHECKLIST

LB Camden Self certified Acoustic Report Checklist

Note: Each Acoustic report will need to have this checklist filled in and attached to the report.

Please place a tick against one box for every item in each category, to indicate whether the relevant information has been included in the report, excluded, or does not apply.

Category ITEM	Yes	No	Not applicable- state why?
1. Introduction & Description of Development	✓		
2. Authors name and qualifications	✓		
3. Maps/Plans included	✓		
4. Photo of site and surroundings		✓	See other application info
5. Guidance/Standards Quoted?	✓		
6. Calibration and Sound Level Meter details	✓		
7. Is Development considered Noise Sensitive?	✓		Some residential development
8. Is Development Potentially Noisy (see LAQs)?	✓		
9. Existing Noise Environment assessed?	✓		
10. Impact of Noise Sources?	✓		
11. Proposed Working Hours and Methods?		✓	Not applicable
12. Distance (nearest Noise sensitive receptor)?	✓		
13. Boundary Noise Limits?	✓		
14. Building Orientation/Construction?		✓	See other application info
15. Noise Barriers/ attenuation proposed?	✓		
16. Equipment Specification?		✓	Not applicable
17. Noise Management Plan?		✓	Not applicable
18. Background Noise measurement (General)?	✓		
19. Background Noise (Worse Case)?	✓		
20. LB Camden's Noise Conditions considered under DP28/DP29?	✓		
21. Evaluation/Analysis of measured levels?	✓		
22. Frequency Analysis done?	✓		
23. Vibration analysis done?		✓	n/a no vibration sources
Other Considerations/Comments (please specify)			

Signed 

Name JOHN LLOYD

Company details..... Scotch Partners LLP

Date..... January 2015

If you have any queries on filling in this form please see further guidance on the planning website, email helen.masterson@camden.gov.uk or ring our Noise duty officer on 0207 974 2163.

Date Created: 15 January 2015

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