

CAMDEN ANNEXE

NOISE IMPACT ASSESSMENT

CROSSTREE REAL ESTATE MANAGEMENT LTD

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Revision 01

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1 INTRODUCTION

- 1.1 Proposals are in place to develop the former Camden Town Hall Annexe on Euston Road into a hotel. It is intended that the existing building be converted with additional floors of hotel accommodation introduced onto the existing roof. 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)

- 2.3.2 Section 7.7.5.1.1 of BS 8233 states that *the recommendations for ambient noise in hotel bedrooms are similar to those for living accommodation (see 7.7.2)*. The Standard also acknowledges that hotel operators often adopt their own standards dependent on the nature of the accommodation to be provided. eg budget or luxury.

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 fixed building services plant associated with the new hotel. 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 using the methodologies set down in BS 4142.

3 EXTERNAL NOISE SURVEY

3.1 INTRODUCTION

- 3.1.1 In order to inform the acoustic design of the proposed hotel an external noise survey was undertaken at a number of locations across the site. The data from this survey has been used to assess both noise intrusion into the hotel 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 four locations around the site. Location 1 was at second floor level on the Euston Road elevation of the building about 1m in front of the façade. Location 2 was also at second floor level but on the rear elevation of the building facing the school about 1m in front of the façade.
- 3.2.3 Location 3 was at the existing roof level on the Euston Road elevation of the building about 500mm in front of the façade and Location 4 was also at roof level on the rear elevation of the building.
- 3.2.4 The measurement locations are shown superimposed upon an existing site plan in Figure 3.1.
- 3.2.5 The measurements were undertaken between about 11:00 on Tuesday 8 September through to about and 13:00 on Friday 11 September 2014. Statistical and spectral data were recorded continuously throughout the measurement period in 10-minute samples.
- 3.2.6 The following equipment was used for the noise survey:

Locations	Equipment	Type	Serial No.
1 & 3	Norsonic 131	Precision sound analyser	1312728
	Norsonic 1212	Microphone protection system	n/a
2 & 4	Norsonic 131	Precision sound analyser	1312729
	Norsonic 1212	Microphone protection system	n/a
All	Brüel & Kjær 4231	Calibrator	2291098

Table 3.1: Noise measurement equipment

- 3.2.7 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.

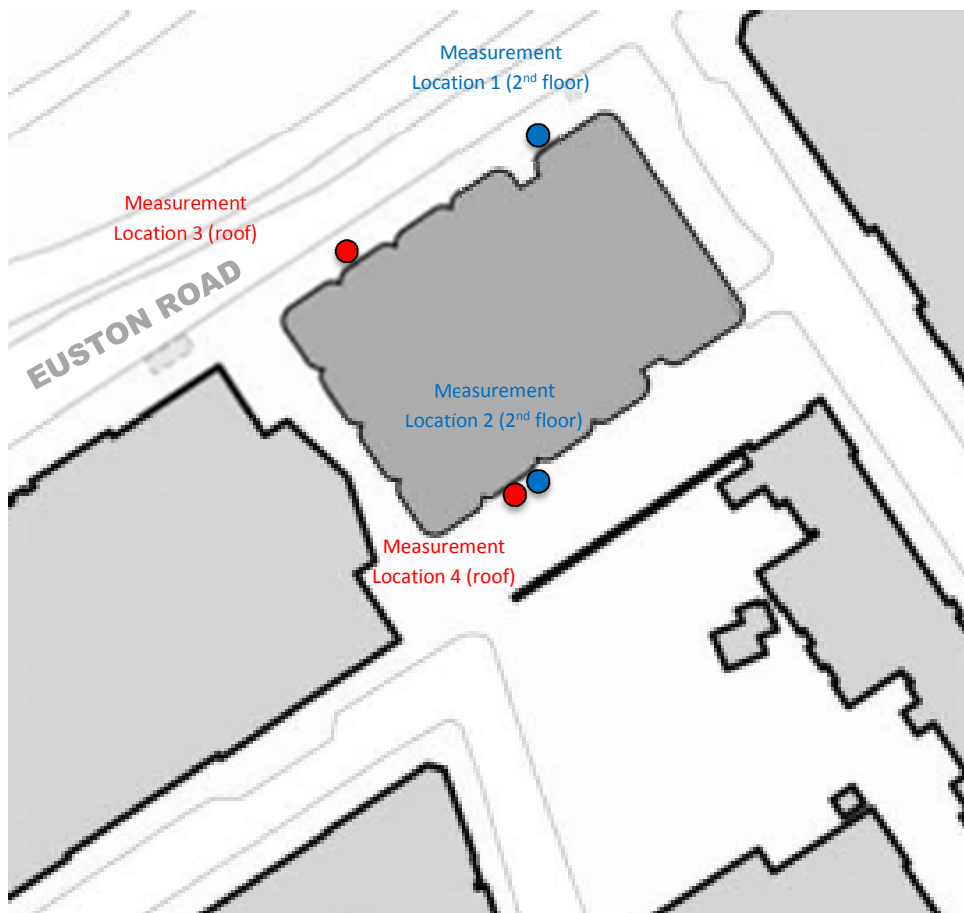


Figure 3.1: Existing site plan showing measurement location

- 3.2.8 The weather conditions throughout the measurement period were dry with a gentle to moderate breeze. The weather conditions are not considered to have had a detrimental influence on the measurement results.

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 four locations are presented in Figure 3.2



Figure 3.2: External noise levels, Locations 1 & 2

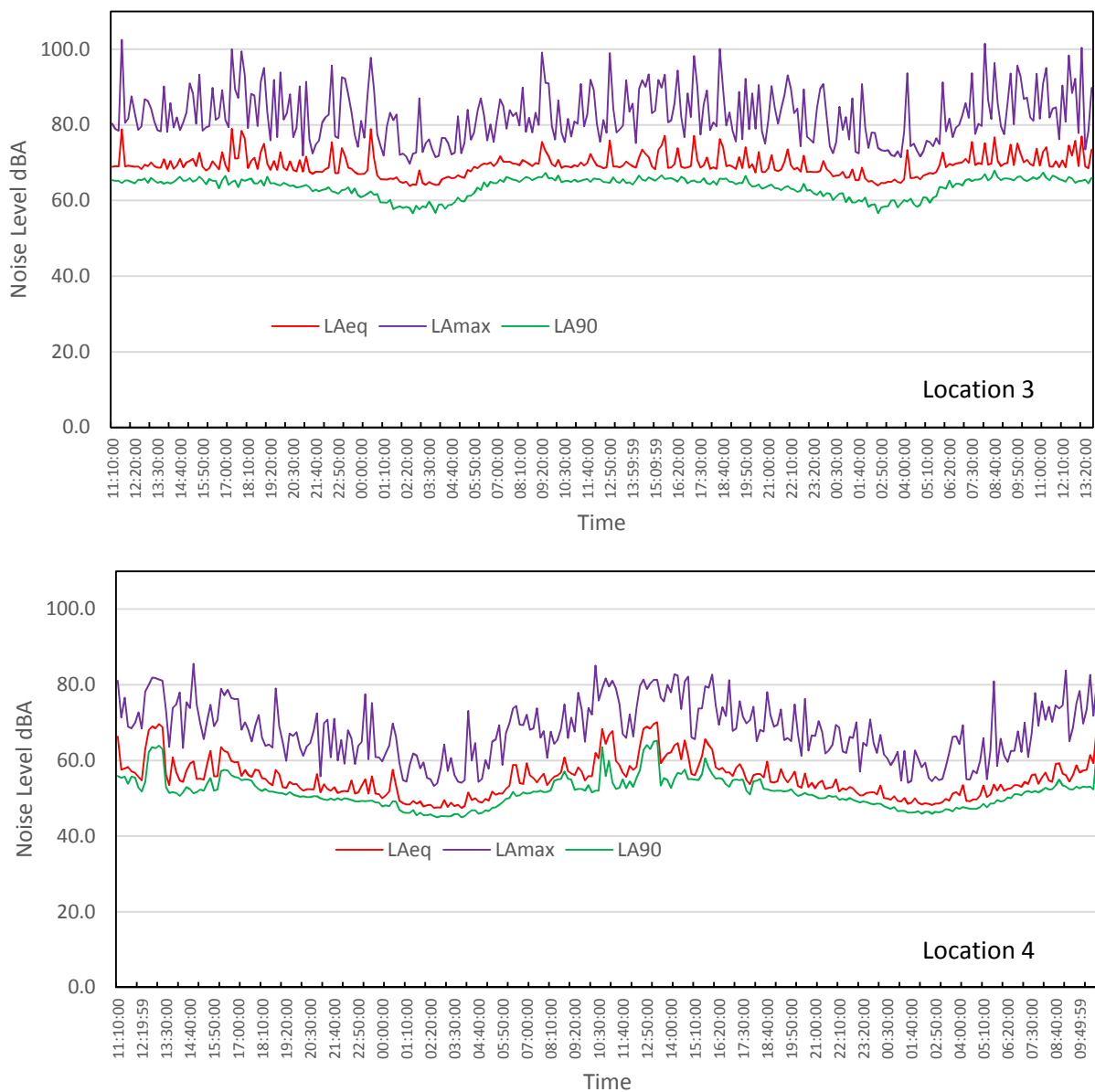


Figure 3.3: External noise levels, Location 3 & 4

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 (2 nd flr Euston Rd)	Location 2 (2 nd flr rear)	Location 3 (roof, Euston Rd)	Location 4 (roof, rear)
Daytime (07:00-19:00)	75 dB $L_{Aeq,12hr}$	63 dB $L_{Aeq,12hr}$	71 dB $L_{Aeq,12hr}$	62 dB $L_{Aeq,12hr}$
Evening (19:00-23:00)	73 dB $L_{Aeq,4hr}$	54 dB $L_{Aeq,4hr}$	70 dB $L_{Aeq,4hr}$	54 dB $L_{Aeq,4hr}$
Night-time (23:00-07:00)	71 dB $L_{Aeq,8hr}$	51 dB $L_{Aeq,8hr}$	68 dB $L_{Aeq,8hr}$	51 dB $L_{Aeq,8hr}$

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

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
Euston Road elevation (2 nd floor)	76	67	67	65	67	64	57
Rear elevation (2 nd floor)	59	53	49	47	48	43	35
Euston Road elevation (roof)	72	67	64	62	64	61	53
Rear elevation (roof)	62	55	51	48	47	43	35

All values are $L_{Aeq,8hr}$ sound pressure levels in dB re: 2×10^{-5} Pa

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

Daytime	Frequency Hz						
	63	125	250	500	1000	2000	4000
Euston Road elevation (2 nd floor)	80	72	70	68	70	68	61
Rear elevation (2 nd floor)	64	59	55	55	58	56	49
Euston Road elevation (roof)	76	71	67	65	67	65	57
Rear elevation (roof)	65	59	55	55	57	55	48

All values are $L_{Aeq,16hr}$ sound pressure levels in dB re: 2×10^{-5} Pa

Table 3.4: Daytime reference noise levels 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 (2 nd flr Euston Rd)	Location 2 (2 nd flr rear)	Location 3 (roof, Euston Rd)	Location 4 (roof, rear)
Daytime (07:00-23:00)	62 dB $L_{A90,1hr}$	46 dB $L_{A90,1hr}$	61 dB $L_{A90,1hr}$	48 dB $L_{A90,1hr}$
Night-time (23:00-07:00)	56 dB $L_{A90,5min}$	40 dB $L_{A90,5min}$	56 dB $L_{A90,5min}$	44 dB $L_{A90,5min}$

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

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

Table 3.5: Summary of lowest measured background noise levels

3.4 COMMENTARY

- 3.4.1 Noise levels at the proposed development site are influenced by road traffic on Euston Road. This traffic generates high levels of noise particularly at low frequencies from the engines of buses and HGVs. Sirens from emergency vehicles are also regularly present.
- 3.4.2 Noise levels on Argyle Street to the east of the site are lower but the influence of noise from road traffic on Euston Road is still significant. In a similar manner to the west of the site noise levels in Tonbridge Walk are also lower than on Euston Road.
- 3.4.3 To the rear of the site noise levels are significantly reduced where the buildings are screened from Euston Road. Noise levels here are however influenced by activity at the neighbouring school as children play in the playground during the morning and at lunch time.
- 3.4.4 It is considered that the measurement data is representative of both the highest noise levels typically encountered at the site during the daytime and also the quietest levels likely to be experienced overnight for both weekdays and weekends.

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 noise levels on the Euston Road elevation of the building are high enough to normally prevent such a site from gaining planning permission were this to be a residential development. To the rear of the site noise levels are low enough that planning permission for residential development would normally be granted without noise attenuation measures being required.
- 4.1.2 It is clear from this assessment that the Euston Road elevation of the site is exposed to very high noise levels however this is not a residential development and it is proposed that the hotel will be designed in line with noise intrusion standards generally commensurate with residential accommodation and hotel operators' brand standards.
- 4.1.3 External noise intrusion into the hotel 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 hotel have been established using the relevant reference noise levels in Tables 3.3 and 3.4. Recommended minimum sound insulation performance figures are set down in Table 4.1.

Euston Road elevation	Frequency Hz						
	63	125	250	500	1000	2000	4000
Replacement windows	27	38	41	46	51	53	57
New curtain walling	24	29	36	43	44	46	59

Elevations facing the school	Frequency Hz						
	63	125	250	500	1000	2000	4000
Replacement windows	24	21	28	34	42	37	49
New curtain walling	15	20	25	35	43	35	46

Argyle St & Tonbridge Walk elevations	Frequency Hz						
	63	125	250	500	1000	2000	4000
Windows	27	38	41	46	51	53	57
Facades	24	29	36	43	44	46	59

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

Table 4.1: Required façade sound reduction indices

- 4.2.2 The required sound insulation performance of the replacement glazing for the existing window openings should be achievable with a substantial double glazed unit such as 14mm laminate glass / 22mm cavity / 12mm laminate glass. The new curtain walling to the upper floors will require a glazing configuration such as 10mm glass / 22mm cavity / 12mm 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 As the development of the Annexe building is not residential there is no specific requirement to comply with these standards however in order to maintain a good level of amenity within the hotel vibration levels must be at a similarly low level.
- 4.3.3 Vibration from the adjacent underground railway is not believed to effect the existing commercial use of the building and experience suggests that given the juxtaposition of the road and underground railway to the building, levels of vibration would be very low and unlikely to exceed the most onerous requirements identified in London Borough of Camden's guidance. Vibration is therefore not considered to be of concern for this development.

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 kitchen, restaurant, toilet and guestroom ventilation plant all located on the 10 floor level. There is also an emergency standby generator located at this level. Ventilation and boiler plant is to be located in the basements with intakes and discharges at ground level.
- 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 hotel.

5.3 NEAREST NOISE SENSITIVE NEIGHBOURS

- 5.3.1 The nearest noise sensitive façade to the proposed development site is considered to be the rear of the property at 12 Argyle Street to the south east of the site. This location is likely to have the greatest potential to be affected by noise from the ventilation intakes and discharges which serve the hotel and are located at ground level. At their closest these are about 6m away.
- 5.3.2 These properties are probably less likely to be affected by roof mounted plant owing to the screening effect provided by the parapet around the roof of the hotel. Instead the nearest noise sensitive facades to the roof plant are likely to be the upper floors on the front elevations of those properties on the corner of Tonbridge Street and Bidborough Street to the south west of the development. At its closest, the plant is likely to be about 50m from these facades.

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 limit 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 noise emission limit 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	Rear of properties in Argyle Street	Properties in Tonbridge & Bidborough Street
Daytime (07:00-23:00)	41 dB $L_{Aeq,1hr}$	43 dB $L_{Aeq,1hr}$
Night-time (23:00-07:00)	35 dB $L_{Aeq,5min}$	39 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 hotel development at the former Camden Town Hall Annexe in Euston Road. As part of this assessment a comprehensive noise survey has been undertaken at a number of locations about the proposed development site. This information 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 hotel. It is highlighted that the development is not residential in nature but is a commercially operated hotel and the objective external noise level limits advised are not strictly applicable. The hotel is, however, to be designed in accordance with good practice and in line with hotel operators brand standards which align with those required by London Borough of Camden for residential accommodation.
- 6.3 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.
- 6.4 As the hotel is to be developed in a retained building there are few practical measures available for further controlling ground borne noise intrusion or vibration intrusion from traffic sources and the underground rail network. That said, vibration is not reported in the existing building and vibration sensitive uses such as bedrooms are not located in the basements or at ground floor. Given the juxtaposition of the building to the underground railway, neither the underground nor road traffic is expected to give rise to vibration levels with even a low probability of adverse comment.
- 6.5 It is therefore concluded that despite the development not being residential in nature the levels of vibration within the development will be a level commensurate with residential development and the criteria identified within Policy DP28.
- 6.6 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 residential properties on the adjacent streets.
- 6.7 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}
11:00 - 11:10	82.0	72.7	75.3	67.0	63.6
11:10 - 11:20	83.3	72.5	75.1	66.8	63.5
11:20 - 11:30	84.1	71.9	74.6	65.2	62.7
11:30 - 11:40	86.7	71.6	73.9	67.4	63.6
11:40 - 11:50	86.8	71.6	73.8	66.9	64.5
11:50 - 12:00	94.3	72.8	74.1	66.3	62.8
12:00 - 12:10	93.4	72.3	74.3	68.0	63.4
12:10 - 12:20	88.7	72.3	74.5	68.7	64.6
12:20 - 12:30	84.0	71.6	74.0	67.4	64.5
12:30 - 12:40	82.7	71.8	74.3	67.1	63.5
12:40 - 12:50	80.3	70.7	72.9	66.7	63.9
12:50 - 13:00	87.6	71.7	73.9	68.1	64.2
13:00 - 13:10	84.4	71.9	74.3	67.1	64.0
13:10 - 13:20	83.1	73.2	76.1	67.9	64.8
13:20 - 13:30	90.2	75.0	76.4	68.1	65.3
13:30 - 13:40	91.6	73.0	75.5	67.7	63.8
13:40 - 13:50	102.9	78.7	75.4	67.2	65.0
13:50 - 14:00	85.9	72.3	74.9	65.7	63.1
14:00 - 14:10	96.5	75.4	76.5	67.4	63.3
14:10 - 14:20	107.2	84.1	75.7	65.9	63.6
14:20 - 14:30	80.9	72.6	75.0	67.5	64.8
14:30 - 14:40	101.8	78.2	75.5	67.0	63.7
14:40 - 14:50	94.5	75.0	74.9	66.4	62.4
14:50 - 15:00	87.4	73.4	76.5	66.6	63.6
15:00 - 15:10	95.5	77.0	76.2	67.0	64.3
15:10 - 15:20	84.2	72.2	74.4	66.7	63.7
15:20 - 15:30	83.0	72.1	74.8	65.8	61.5
15:30 - 15:40	82.1	71.1	73.6	66.9	63.4
15:40 - 15:50	85.6	71.3	73.2	66.8	63.5
15:50 - 16:00	86.0	71.3	73.5	67.2	63.9
16:00 - 16:10	91.9	72.1	73.5	66.5	62.8
16:10 - 16:20	92.6	74.5	75.4	67.6	63.6
16:20 - 16:30	83.4	72.4	75.0	67.2	63.9
16:30 - 16:40	89.9	72.8	74.7	66.8	64.0
16:40 - 16:50	104.0	82.9	79.6	67.4	63.0
16:50 - 17:00	99.6	76.6	74.9	67.0	65.0
17:00 - 17:10	89.1	72.6	74.5	67.1	62.9
17:10 - 17:20	88.3	72.1	74.2	66.5	62.7
17:20 - 17:30	90.0	73.0	75.0	65.7	63.0
17:30 - 17:40	89.2	73.3	75.5	66.3	63.6
17:40 - 17:50	85.4	72.8	75.3	66.9	63.2
17:50 - 18:00	88.7	73.6	75.5	68.0	63.8
18:00 - 18:10	86.5	72.4	74.3	67.6	64.7
18:10 - 18:20	87.5	73.2	75.4	67.8	64.2
18:20 - 18:30	81.5	72.0	74.5	65.7	62.2
18:30 - 18:40	98.1	76.0	75.7	65.7	62.5
18:40 - 18:50	85.5	72.2	74.6	66.1	62.5
18:50 - 19:00	88.7	72.9	74.6	65.9	62.9
19:00 - 19:10	80.6	72.9	75.6	66.6	62.6
19:10 - 19:20	84.2	71.9	74.4	65.1	61.3
19:20 - 19:30	84.9	72.3	74.8	65.5	62.6
19:30 - 19:40	84.3	72.1	74.6	65.2	62.1
19:40 - 19:50	98.4	79.4	78.3	66.0	61.8
19:50 - 20:00	84.5	72.4	74.9	65.7	62.8
20:00 - 20:10	84.5	71.5	74.0	65.2	61.5
20:10 - 20:20	78.8	71.1	73.8	64.2	61.3
20:20 - 20:30	81.6	71.5	74.1	64.3	60.4
20:30 - 20:40	80.8	71.2	74.2	64.0	60.1
20:40 - 20:50	88.7	71.2	73.8	65.0	60.7
20:50 - 21:00	97.7	76.0	75.0	63.8	60.7
21:00 - 21:10	90.7	72.6	74.2	64.7	61.1
21:10 - 21:20	99.9	74.7	74.1	65.0	62.1
21:20 - 21:30	91.3	72.4	74.3	65.1	61.9
21:30 - 21:40	94.4	72.3	73.6	65.4	60.7
21:40 - 21:50	80.1	71.3	74.5	64.3	60.7
21:50 - 22:00	85.3	71.4	73.7	64.9	61.2
22:00 - 22:10	79.3	70.7	73.8	63.8	60.5
22:10 - 22:20	81.4	71.2	74.2	63.5	59.1
22:20 - 22:30	96.3	74.0	73.9	63.5	59.6
22:30 - 22:40	86.4	71.0	73.7	64.4	59.6
22:40 - 22:50	80.8	71.1	74.0	64.0	58.2
22:50 - 23:00	79.7	70.8	73.9	64.8	60.2

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:00 - 23:10	81.8	70.8	73.7	63.1	59.4
23:10 - 23:20	81.6	70.9	74.1	63.7	57.7
23:20 - 23:30	84.4	71.0	73.9	64.3	57.0
23:30 - 23:40	94.4	74.7	75.0	64.7	61.5
23:40 - 23:50	96.0	72.7	74.0	64.1	61.0
23:50 - 00:00	82.9	70.7	74.2	63.6	59.6
00:00 - 00:10	105.3	81.2	76.6	62.2	58.8
00:10 - 00:20	83.3	70.4	73.5	62.6	57.9
00:20 - 00:30	90.1	70.4	73.3	61.2	56.4
00:30 - 00:40	90.5	70.5	73.3	61.1	55.9
00:40 - 00:50	83.1	70.1	73.7	61.4	57.8
00:50 - 01:00	93.1	72.6	73.5	60.8	54.7
01:00 - 01:10	83.3	69.0	72.6	60.5	54.6
01:10 - 01:20	87.5	70.6	72.9	62.8	57.0
01:20 - 01:30	82.2	68.8	72.1	59.5	55.5
01:30 - 01:40	80.4	68.0	71.6	58.8	54.9
01:40 - 01:50	81.9	69.1	72.5	59.6	53.8
01:50 - 02:00	80.5	68.2	71.9	56.9	53.8
02:00 - 02:10	79.2	68.5	72.0	59.9	54.9
02:10 - 02:20	80.8	68.2	71.9	58.6	54.1
02:20 - 02:30	76.7	68.5	72.1	59.0	53.9
02:30 - 02:40	81.4	68.4	72.0	58.7	54.3
02:40 - 02:50	77.5	67.7	71.7	57.0	53.0
02:50 - 03:00	78.4	68.1	72.2	58.1	53.0
03:00 - 03:10	83.2	68.5	72.1	59.4	55.3
03:10 - 03:20	80.3	68.2	71.8	57.1	52.7
03:20 - 03:30	82.5	67.9	71.5	58.3	53.5
03:30 - 03:40	81.1	68.2	72.0	58.6	53.4
03:40 - 03:50	77.0	68.5	72.2	58.2	52.3
03:50 - 04:00	94.5	71.9	72.9	60.0	55.7
04:00 - 04:10	81.3	68.8	72.3	59.4	52.0
04:10 - 04:20	82.8	70.0	73.5	62.8	59.7
04:20 - 04:30	79.3	68.7	72.2	60.8	56.3
04:30 - 04:40	77.1	69.2	72.8	62.6	55.8
04:40 - 04:50	78.0	69.3	72.6	61.6	57.4
04:50 - 05:00	81.9	70.5	74.0	62.6	59.4
05:00 - 05:10	81.6	70.0	73.4	61.5	56.5
05:10 - 05:20	80.9	70.3	73.7	62.7	58.3
05:20 - 05:30	82.3	70.4	73.4	61.6	55.2
05:30 - 05:40	81.7	70.4	73.9	63.5	59.9
05:40 - 05:50	80.2	71.3	74.3	63.4	55.3
05:50 - 06:00	78.9	71.2	74.5	62.2	54.9
06:00 - 06:10	80.7	71.8	74.7	64.6	61.6
06:10 - 06:20	81.8	72.5	75.4	64.6	59.3
06:20 - 06:30	90.8	73.8	76.1	66.1	62.2
06:30 - 06:40	95.6	74.4	75.9	65.5	61.9
06:40 - 06:50	88.4	73.9	76.6	66.5	62.3
06:50 - 07:00	89.8	74.1	76.1	65.7	62.2
07:00 - 07:10	88.9	74.8	77.7	67.4	61.4
07:10 - 07:20	83.4	73.2	75.6	66.5	62.4
07:20 - 07:30	88.2	74.1	76.5	66.1	62.2
07:30 - 07:40	82.7	73.7	76.4	65.4	63.1
07:40 - 07:50	89.1	73.4	75.7	66.6	61.6
07:50 - 08:00	84.2	73.2	75.8	66.6	62.0
08:00 - 08:10	87.8	72.6	74.6	67.4	64.8
08:10 - 08:20	103.3	78.8	75.3	66.6	64.0
08:20 - 08:30	89.4	72.9	74.9	68.2	64.3
08:30 - 08:40	87.5	72.7	75.1	68.1	64.5
08:40 - 08:50	84.0	72.5	75.1	68.1	64.1
08:50 - 09:00	81.5	71.8	74.5	67.3	64.8
09:00 - 09:10	80.5	72.2	75.0	68.0	64.0
09:10 - 09:20	94.2	74.5	76.3	67.8	64.4
09:20 - 09:30	83.0	72.7	75.1	67.0	63.6
09:30 - 09:40	82.7	72.3	74.9	66.3	61.7
09:40 - 09:50	99.3	74.3	76.8	67.7	64.8
09:50 - 10:00	85.4	72.7	75.4	65.3	61.8
10:00 - 10:10	87.9	72.8	75.1	67.6	65.1
10:10 - 10:20	92.1	73.1	75.4	67.3	64.2
10:20 - 10:30	83.6	73.0	75.6	67.6	63.5

Table A1: Location 1, Statistical data, 8-9 September 2014

Time	L_{Amax}	L_{Aeq}	L_{A10}	L_{A90}	L_{Amin}
11:20 - 11:30	84.4	67.4	71.9	56.3	55.5
11:30 - 11:40	78.0	63.1	65.9	54.9	48.5
11:40 - 11:50	81.8	56.6	57.0	51.1	48.7
11:50 - 12:00	88.7	58.4	57.3	51.8	48.8
12:00 - 12:10	73.2	57.5	59.7	52.1	49.5
12:10 - 12:20	63.7	54.3	56.5	51.9	50.1
12:20 - 12:30	69.1	55.5	58.0	51.9	49.3
12:30 - 12:40	82.2	64.8	68.5	55.4	51.6
12:40 - 12:50	84.5	71.5	74.6	65.8	59.1
12:50 - 13:00	85.5	71.0	73.8	65.1	59.0
13:00 - 13:10	82.5	70.2	73.2	64.4	58.9
13:10 - 13:20	83.7	71.7	74.5	66.0	60.2
13:20 - 13:30	87.2	73.7	76.6	67.9	63.2
13:30 - 13:40	76.5	62.0	67.0	52.3	50.1
13:40 - 13:50	71.7	59.7	64.3	51.7	48.3
13:50 - 14:00	69.9	54.1	55.4	50.8	48.2
14:00 - 14:10	81.0	58.1	56.3	50.9	48.6
14:10 - 14:20	85.8	59.2	60.7	52.1	47.9
14:20 - 14:30	70.8	55.8	58.1	52.1	49.3
14:30 - 14:40	70.5	58.4	61.0	53.4	48.2
14:40 - 14:50	73.7	57.5	58.5	51.5	49.1
14:50 - 15:00	75.5	53.9	55.6	50.1	47.8
15:00 - 15:10	76.3	55.0	56.2	49.5	47.0
15:10 - 15:20	67.1	52.1	53.6	49.4	46.1
15:20 - 15:30	74.5	56.1	58.0	50.7	47.6
15:30 - 15:40	80.3	62.4	65.4	54.1	50.5
15:40 - 15:50	77.7	63.0	65.9	55.9	51.6
15:50 - 16:00	79.2	60.5	64.1	52.0	49.1
16:00 - 16:10	76.6	57.4	59.8	51.3	47.8
16:10 - 16:20	65.9	55.0	58.0	50.6	47.9
16:20 - 16:30	70.0	55.0	57.7	50.3	47.5
16:30 - 16:40	79.4	57.4	60.8	49.9	46.9
16:40 - 16:50	78.1	59.0	62.2	50.6	48.0
16:50 - 17:00	69.7	55.8	58.7	50.5	47.4
17:00 - 17:10	64.7	53.1	55.1	50.3	47.3
17:10 - 17:20	63.3	52.9	54.9	50.1	47.7
17:20 - 17:30	66.4	53.5	56.0	49.9	47.4
17:30 - 17:40	64.6	53.2	55.6	49.4	46.3
17:40 - 17:50	78.5	56.4	55.2	49.7	46.0
17:50 - 18:00	68.7	54.4	56.8	50.5	47.5
18:00 - 18:10	70.8	55.4	56.7	50.5	47.8
18:10 - 18:20	65.6	52.8	54.5	50.1	47.4
18:20 - 18:30	70.5	53.9	55.6	49.6	45.8
18:30 - 18:40	66.7	55.1	57.9	50.6	47.9
18:40 - 18:50	66.4	53.6	55.2	49.8	46.9
18:50 - 19:00	72.5	52.5	54.1	49.4	47.1
19:00 - 19:10	65.3	52.9	55.0	49.5	46.1
19:10 - 19:20	60.9	51.5	53.5	48.9	45.7
19:20 - 19:30	67.5	55.9	58.2	50.0	45.5
19:30 - 19:40	62.5	51.5	53.5	48.5	44.9
19:40 - 19:50	71.2	55.8	59.3	49.1	46.1
19:50 - 20:00	67.0	52.5	54.4	49.4	46.5
20:00 - 20:10	73.4	53.7	53.9	47.5	44.8
20:10 - 20:20	66.0	52.2	54.1	48.3	45.7
20:20 - 20:30	67.5	51.1	53.2	48.0	45.2
20:30 - 20:40	60.0	50.8	52.8	47.6	44.7
20:40 - 20:50	73.7	56.8	58.3	47.7	44.6
20:50 - 21:00	67.0	53.5	54.9	48.6	44.6
21:00 - 21:10	70.7	54.5	54.5	48.0	44.8
21:10 - 21:20	74.6	51.7	53.7	47.6	44.6
21:20 - 21:30	70.3	53.6	55.7	47.7	45.3
21:30 - 21:40	70.5	50.9	52.1	47.3	44.8
21:40 - 21:50	70.2	54.3	55.2	47.6	43.9
21:50 - 22:00	70.2	50.2	51.3	47.2	44.6
22:00 - 22:10	66.8	52.2	54.6	46.9	44.0
22:10 - 22:20	73.3	54.6	56.8	48.3	44.6
22:20 - 22:30	80.9	56.1	57.6	47.9	43.6
22:30 - 22:40	69.0	53.0	55.4	48.1	44.4
22:40 - 22:50	76.6	57.3	56.9	47.8	44.3
22:50 - 23:00	70.9	54.9	58.3	48.5	44.6
23:00 - 23:10	71.1	52.2	53.9	47.4	43.4
23:10 - 23:20	74.6	53.0	55.2	47.9	43.2

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:20 - 23:30	68.9	52.9	55.5	48.2	43.9
23:30 - 23:40	75.9	59.5	62.9	49.3	44.8
23:40 - 23:50	74.4	56.0	59.0	47.7	44.8
23:50 - 00:00	71.1	52.0	53.4	46.6	44.0
00:00 - 00:10	74.0	55.7	56.5	46.3	43.2
00:10 - 00:20	61.0	49.7	52.1	45.3	42.2
00:20 - 00:30	69.0	52.0	54.4	45.4	42.0
00:30 - 00:40	69.4	50.5	52.2	45.1	41.9
00:40 - 00:50	72.4	51.4	52.7	44.4	41.9
00:50 - 01:00	67.7	49.9	50.8	43.6	40.7
01:00 - 01:10	64.2	48.1	50.4	43.3	40.9
01:10 - 01:20	65.3	48.4	49.6	43.5	41.2
01:20 - 01:30	60.1	47.7	50.2	43.2	40.8
01:30 - 01:40	73.3	49.1	50.5	42.7	40.6
01:40 - 01:50	54.0	47.1	49.6	43.1	41.1
01:50 - 02:00	63.2	46.2	48.8	42.0	40.6
02:00 - 02:10	57.4	47.0	49.2	43.5	40.9
02:10 - 02:20	55.4	46.4	49.4	42.0	40.4
02:20 - 02:30	53.7	46.2	49.1	42.1	40.1
02:30 - 02:40	55.7	46.6	49.5	41.9	40.3
02:40 - 02:50	60.0	45.9	48.5	41.0	39.5
02:50 - 03:00	55.3	46.0	49.1	41.3	39.6
03:00 - 03:10	60.5	46.4	48.8	41.0	39.6
03:10 - 03:20	58.8	46.1	48.8	40.8	38.9
03:20 - 03:30	56.3	45.9	48.5	41.4	39.8
03:30 - 03:40	55.9	46.5	49.0	42.0	40.1
03:40 - 03:50	53.2	46.4	49.3	41.5	39.5
03:50 - 04:00	71.4	51.9	52.4	42.3	40.0
04:00 - 04:10	56.2	46.6	49.3	42.3	40.3
04:10 - 04:20	56.1	47.2	49.8	42.9	41.0
04:20 - 04:30	56.5	46.8	49.3	42.6	40.5
04:30 - 04:40	54.6	47.1	49.7	43.4	41.0
04:40 - 04:50	54.3	47.0	49.4	43.2	40.9
04:50 - 05:00	57.3	48.1	50.8	43.7	41.2
05:00 - 05:10	59.5	48.1	50.7	43.3	40.9
05:10 - 05:20	58.0	48.1	50.4	44.4	42.5
05:20 - 05:30	65.6	49.9	52.1	44.6	41.1
05:30 - 05:40	64.0	49.4	51.9	45.2	41.9
05:40 - 05:50	55.8	49.1	51.4	45.2	42.3
05:50 - 06:00	59.2	50.0	52.3	45.8	42.1
06:00 - 06:10	62.5	51.2	52.9	48.0	45.8
06:10 - 06:20	63.9	53.0	55.2	49.5	47.0
06:20 - 06:30	64.5	52.1	53.4	49.4	47.3
06:30 - 06:40	68.5	53.1	54.7	49.6	46.7
06:40 - 06:50	72.2	55.1	57.0	50.5	47.8
06:50 - 07:00	75.6	56.2	56.9	50.7	46.7
07:00 - 07:10	62.3	53.9	55.9	50.9	47.9
07:10 - 07:20	69.7	53.4	55.1	50.4	47.5
07:20 - 07:30	69.0	55.5	56.9	51.6	49.2
07:30 - 07:40	68.4	53.3	55.1	50.8	48.6
07:40 - 07:50	62.3	54.0	56.1	50.7	47.2
07:50 - 08:00	71.0	54.7	56.5	50.8	47.7
08:00 - 08:10	77.2	54.2	55.1	50.4	47.7
08:10 - 08:20	72.1	56.2	57.9	50.7	48.6
08:20 - 08:30	74.7	54.7	57.4	50.9	48.7
08:30 - 08:40	75.4	56.6	57.8	51.5	48.3
08:40 - 08:50	75.7	58.4	60.5	52.4	49.7
08:50 - 09:00	78.9	62.2	65.4	55.3	51.8
09:00 - 09:10	76.1	57.7	59.8	53.1	50.2
09:10 - 09:20	75.1	57.7	60.1	51.0	48.9
09:20 - 09:30	68.5	55.4	58.1	51.1	49.0
09:30 - 09:40	72.9	57.0	58.8	50.8	48.8
09:40 - 09:50	72.6	59.1	63.0	52.1	49.2
09:50 - 10:00	70.8	55.3	57.1	51.0	48.3
10:00 - 10:10	71.9	57.1	60.1	51.5	48.1
10:10 - 10:20	71.0	55.4	57.2	51.5	48.8
10:20 - 10:30	74.4	55.5	57.7	51.3	49.6
10:30 - 10:40	80.5	64.3	68.2	50.9	48.5

Table A2: Location 2, Statistical data, 8-9 September 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
11:10 - 11:20	78.9	69.1	71.5	65.2	63.3
11:20 - 11:30	78.4	69.0	71.0	65.2	61.9
11:30 - 11:40	102.5	78.8	73.7	64.6	60.5
11:40 - 11:50	80.5	69.0	71.1	65.3	62.1
11:50 - 12:00	81.7	69.2	71.2	65.3	62.3
12:00 - 12:10	87.6	69.1	70.6	64.9	62.8
12:10 - 12:20	83.2	68.9	70.7	64.5	61.9
12:20 - 12:30	78.7	69.0	71.1	65.5	62.0
12:30 - 12:40	79.6	68.3	70.3	65.4	63.3
12:40 - 12:50	86.8	69.5	71.3	65.8	63.7
12:50 - 13:00	86.3	69.1	70.9	64.7	62.9
13:00 - 13:10	84.3	70.1	71.5	66.0	63.6
13:10 - 13:20	80.9	69.1	71.4	65.3	63.1
13:20 - 13:30	78.6	68.7	71.2	64.7	62.9
13:30 - 13:40	78.3	68.7	71.1	65.0	62.9
13:40 - 13:50	90.2	70.9	72.0	64.4	61.4
13:50 - 14:00	78.1	68.3	70.6	64.8	61.7
14:00 - 14:10	85.8	70.5	71.1	64.5	62.1
14:10 - 14:20	79.3	68.4	70.8	64.9	62.7
14:20 - 14:30	82.0	69.2	71.3	65.6	62.9
14:30 - 14:40	78.6	71.0	74.0	66.3	63.2
14:40 - 14:50	80.7	68.8	70.7	65.2	61.9
14:50 - 15:00	83.3	70.1	71.8	65.3	62.4
15:00 - 15:10	91.0	70.5	70.9	65.9	63.2
15:10 - 15:20	88.3	71.0	71.9	65.0	62.1
15:20 - 15:30	80.3	69.1	71.5	65.4	62.8
15:30 - 15:40	93.3	72.6	73.3	66.3	63.7
15:40 - 15:50	78.4	68.9	71.0	65.5	64.0
15:50 - 16:00	79.4	67.9	69.9	64.3	62.3
16:00 - 16:10	79.7	68.5	70.0	65.7	63.0
16:10 - 16:20	89.8	70.4	71.5	65.2	63.3
16:20 - 16:30	81.3	69.3	71.3	65.2	63.5
16:30 - 16:40	82.0	68.2	70.5	63.2	61.2
16:40 - 16:50	89.2	72.8	72.1	65.4	63.4
16:50 - 17:00	81.3	69.4	71.1	66.5	64.1
17:00 - 17:10	79.4	67.7	69.6	64.1	60.9
17:10 - 17:20	100.0	79.0	74.3	64.9	62.7
17:20 - 17:30	89.4	71.1	71.2	65.3	62.7
17:30 - 17:40	87.1	71.2	72.5	63.5	61.3
17:40 - 17:50	99.5	78.4	81.1	65.6	62.4
17:50 - 18:00	93.3	76.4	77.7	65.2	61.7
18:00 - 18:10	79.1	68.5	70.2	65.5	62.9
18:10 - 18:20	88.2	70.5	71.7	65.8	62.9
18:20 - 18:30	87.8	71.3	72.4	64.5	62.1
18:30 - 18:40	79.7	68.3	70.2	64.5	62.2
18:40 - 18:50	91.4	72.9	73.0	65.4	63.0
18:50 - 19:00	95.1	75.0	71.8	63.9	61.0
19:00 - 19:10	83.5	69.8	71.6	66.3	63.5
19:10 - 19:20	75.9	68.1	70.2	64.5	61.1
19:20 - 19:30	91.9	70.5	71.7	64.6	61.8
19:30 - 19:40	76.7	68.1	69.9	64.2	61.1
19:40 - 19:50	93.9	72.8	73.2	64.0	61.9
19:50 - 20:00	81.4	68.7	70.7	64.7	61.4
20:00 - 20:10	83.1	68.0	70.1	64.3	62.1
20:10 - 20:20	88.1	70.4	71.3	63.8	61.5
20:20 - 20:30	76.7	68.1	70.5	64.0	60.8
20:30 - 20:40	79.2	67.7	69.8	63.4	60.2
20:40 - 20:50	90.2	70.7	71.8	63.6	61.1
20:50 - 21:00	71.9	67.6	69.6	63.8	61.1
21:00 - 21:10	91.4	71.6	70.9	64.1	60.3
21:10 - 21:20	76.3	67.6	70.0	63.5	59.6
21:20 - 21:30	72.4	67.1	69.5	62.4	58.7
21:30 - 21:40	74.8	67.6	69.9	62.9	59.8
21:40 - 21:50	75.9	67.6	70.2	62.4	60.3
21:50 - 22:00	80.6	67.5	70.1	62.8	58.8
22:00 - 22:10	82.0	68.3	70.8	63.0	59.7
22:10 - 22:20	82.7	68.7	70.8	63.5	61.3
22:20 - 22:30	95.7	75.4	72.4	62.4	58.5
22:30 - 22:40	77.0	67.2	69.9	62.2	58.6
22:40 - 22:50	76.5	67.2	69.7	61.8	59.3
22:50 - 23:00	92.6	73.9	70.5	62.7	58.9
23:00 - 23:10	92.2	71.8	70.2	62.9	59.2

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:10 - 23:20	88.0	68.7	70.2	63.5	58.2
23:20 - 23:30	83.4	68.4	69.9	61.9	59.1
23:30 - 23:40	77.4	67.5	70.2	63.2	58.5
23:40 - 23:50	74.2	67.0	69.4	61.4	57.7
23:50 - 00:00	81.1	67.0	69.9	60.9	55.3
00:00 - 00:10	76.6	67.1	69.9	61.3	58.5
00:10 - 00:20	88.0	68.0	69.7	61.8	57.3
00:20 - 00:30	97.8	78.9	76.6	62.4	57.0
00:30 - 00:40	89.3	71.2	70.6	61.5	56.6
00:40 - 00:50	77.5	66.6	69.2	61.7	59.0
00:50 - 01:00	74.5	65.7	68.9	59.5	55.7
01:00 - 01:10	71.9	65.6	68.7	59.5	54.7
01:10 - 01:20	79.6	65.5	68.2	59.4	55.7
01:20 - 01:30	83.2	65.8	68.7	60.2	56.6
01:30 - 01:40	81.2	65.7	69.1	57.7	54.2
01:40 - 01:50	82.8	66.1	68.9	58.2	54.0
01:50 - 02:00	72.1	65.0	68.3	58.5	54.8
02:00 - 02:10	72.4	64.7	67.8	58.0	54.0
02:10 - 02:20	71.6	65.0	68.3	58.3	54.4
02:20 - 02:30	69.7	63.8	66.5	58.0	54.4
02:30 - 02:40	72.4	64.3	68.0	56.6	52.6
02:40 - 02:50	72.6	64.1	67.3	58.6	54.8
02:50 - 03:00	87.0	68.0	68.8	57.6	54.3
03:00 - 03:10	72.8	64.7	68.4	58.5	54.1
03:10 - 03:20	75.2	64.1	67.4	58.2	55.7
03:20 - 03:30	76.2	64.9	67.9	59.7	56.7
03:30 - 03:40	73.5	64.4	67.6	58.4	54.2
03:40 - 03:50	71.5	64.1	67.4	56.7	53.1
03:50 - 04:00	71.8	64.2	67.1	58.9	54.4
04:00 - 04:10	76.6	65.6	68.8	59.0	53.1
04:10 - 04:20	76.5	66.0	69.9	57.8	53.0
04:20 - 04:30	75.0	66.3	69.8	58.8	53.9
04:30 - 04:40	72.2	65.9	69.9	58.9	55.8
04:40 - 04:50	72.6	66.0	69.3	59.6	54.1
04:50 - 05:00	82.3	66.7	69.7	60.8	53.2
05:00 - 05:10	72.5	66.2	69.5	59.9	52.8
05:10 - 05:20	75.2	66.0	69.0	59.7	56.2
05:20 - 05:30	84.0	68.1	70.9	61.2	57.2
05:30 - 05:40	76.0	67.7	71.0	61.3	56.5
05:40 - 05:50	78.0	68.9	72.0	62.0	57.7
05:50 - 06:00	83.7	68.5	70.9	63.4	58.9
06:00 - 06:10	87.0	69.3	71.5	62.7	60.6
06:10 - 06:20	82.5	69.8	72.2	64.8	58.6
06:20 - 06:30	75.9	69.6	72.1	63.7	60.9
06:30 - 06:40	80.1	70.1	72.1	65.0	61.2
06:40 - 06:50	75.5	69.1	71.4	64.6	60.5
06:50 - 07:00	81.4	69.9	72.4	64.6	59.0
07:00 - 07:10	86.8	71.7	72.9	65.5	60.7
07:10 - 07:20	84.9	70.2	72.4	64.9	60.1
07:20 - 07:30	79.0	70.2	72.2	66.2	63.5
07:30 - 07:40	83.9	70.2	72.4	65.9	62.1
07:40 - 07:50	82.3	69.8	71.8	65.5	62.4
07:50 - 08:00	83.2	69.7	71.7	65.4	62.3
08:00 - 08:10	79.8	69.3	71.7	64.9	62.6
08:10 - 08:20	89.9	70.7	71.8	65.5	62.2
08:20 - 08:30	78.1	70.2	72.3	66.2	63.5
08:30 - 08:40	81.9	69.7	71.7	66.0	63.8
08:40 - 08:50	78.0	69.1	70.7	65.4	62.7
08:50 - 09:00	83.2	69.9	71.8	65.8	62.8
09:00 - 09:10	80.0	69.7	71.6	66.2	63.8
09:10 - 09:20	99.2	75.5	71.8	66.1	63.6
09:20 - 09:30	91.1	73.1	73.7	67.3	64.7
09:30 - 09:40	91.0	71.6	71.5	65.8	61.9
09:40 - 09:50	79.7	69.6	71.4	66.0	62.7
09:50 - 10:00	76.1	69.0	71.5	65.3	62.8
10:00 - 10:10	86.5	70.8	71.7	66.6	64.5
10:10 - 10:20	78.0	68.6	70.7	64.8	61.6
10:20 - 10:30	75.4	69.1	71.2	65.1	62.5
10:30 - 10:40	81.6	69.0	71.0	65.2	63.1
10:40 - 10:50	76.9	68.8	71.0	64.9	63.0
10:50 - 11:00	80.9	69.3	71.5	65.5	63.1
11:00 - 11:10	80.3	69.0	71.4	65.0	61.4

Table A3: Location 3, Statistical data, 9-10 September 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
11:10 - 11:20	90.8	70.1	71.4	65.2	63.1
11:20 - 11:30	79.6	69.2	71.5	65.5	63.1
11:30 - 11:40	82.8	69.9	71.6	65.7	63.3
11:40 - 11:50	92.0	72.3	72.9	64.9	62.2
11:50 - 12:00	89.3	70.6	71.5	65.8	62.4
12:00 - 12:10	80.1	69.2	71.4	65.7	61.8
12:10 - 12:20	75.5	69.0	71.1	65.6	62.7
12:20 - 12:30	81.3	68.5	70.3	64.9	63.1
12:30 - 12:40	77.9	68.8	71.3	64.8	63.1
12:40 - 12:50	99.0	75.9	71.2	64.7	61.9
12:50 - 13:00	84.2	69.0	71.0	66.1	64.0
13:00 - 13:10	78.0	69.0	71.1	65.0	63.4
13:10 - 13:20	78.8	68.8	71.4	64.7	62.5
13:20 - 13:30	79.8	69.2	71.1	65.7	62.6
13:30 - 13:40	91.8	70.3	71.0	64.6	61.3
13:40 - 13:50	83.5	69.6	71.5	64.8	62.4
13:50 - 14:00	85.6	69.1	71.2	64.2	62.0
14:00 - 14:10	75.2	68.7	71.0	65.3	62.9
14:10 - 14:20	89.5	71.4	73.1	66.6	62.8
14:20 - 14:30	91.8	73.5	72.7	65.5	63.1
14:30 - 14:40	90.0	72.3	72.6	65.2	62.8
14:40 - 14:50	93.4	71.5	70.3	66.1	64.3
14:50 - 15:00	83.1	69.0	70.8	65.7	64.3
15:00 - 15:10	83.8	68.2	70.2	65.2	63.1
15:10 - 15:20	91.9	73.4	75.2	65.9	64.3
15:20 - 15:30	89.8	74.6	73.3	66.7	65.2
15:30 - 15:40	93.3	77.1	81.3	65.7	62.6
15:40 - 15:50	80.7	68.6	70.3	65.8	64.4
15:50 - 16:00	81.2	68.8	70.7	65.9	63.5
16:00 - 16:10	85.6	69.6	71.5	65.5	63.9
16:10 - 16:20	94.4	73.9	72.0	65.0	63.6
16:20 - 16:30	82.2	68.9	70.6	66.3	64.3
16:30 - 16:40	76.7	68.6	70.7	65.8	63.6
16:40 - 16:50	88.3	68.8	70.1	64.5	62.0
16:50 - 17:00	82.1	69.1	71.1	65.1	63.0
17:00 - 17:10	98.2	77.1	76.0	65.3	62.1
17:10 - 17:20	90.3	70.7	71.5	64.8	63.1
17:20 - 17:30	77.4	68.7	70.5	64.9	63.1
17:30 - 17:40	85.5	69.3	71.2	65.9	63.7
17:40 - 17:50	89.1	71.4	73.0	64.6	61.6
17:50 - 18:00	78.6	68.4	70.5	64.3	61.3
18:00 - 18:10	80.7	68.8	70.6	65.1	63.0
18:10 - 18:20	79.6	68.4	70.6	64.1	61.4
18:20 - 18:30	100.1	76.3	71.7	65.8	63.0
18:30 - 18:40	89.6	74.1	75.7	65.7	63.4
18:40 - 18:50	79.8	69.1	71.0	65.8	63.3
18:50 - 19:00	83.3	69.3	71.3	65.0	62.4
19:00 - 19:10	78.3	68.9	70.9	64.9	61.6
19:10 - 19:20	75.6	68.3	70.2	64.3	61.8
19:20 - 19:30	88.7	71.5	71.2	64.7	60.8
19:30 - 19:40	76.2	68.5	70.5	64.6	61.8
19:40 - 19:50	92.2	74.1	72.6	66.5	62.3
19:50 - 20:00	78.8	68.6	70.8	64.5	61.6
20:00 - 20:10	88.3	69.6	69.4	63.7	60.9
20:10 - 20:20	79.0	67.4	69.4	63.8	61.2
20:20 - 20:30	90.5	72.8	72.6	64.2	60.3
20:30 - 20:40	78.3	67.5	69.7	63.1	60.0
20:40 - 20:50	75.0	67.5	69.8	63.4	61.7
20:50 - 21:00	81.4	68.5	70.5	63.9	60.8
21:00 - 21:10	90.3	72.0	71.3	64.2	61.4
21:10 - 21:20	84.5	68.1	70.4	63.3	60.4
21:20 - 21:30	80.3	67.8	70.2	63.2	60.9
21:30 - 21:40	84.3	68.2	69.9	62.7	59.9
21:40 - 21:50	87.9	70.2	70.4	63.4	60.7
21:50 - 22:00	93.1	73.6	71.5	63.8	60.4
22:00 - 22:10	89.6	69.3	70.9	63.1	59.8
22:10 - 22:20	83.1	68.2	70.6	62.9	60.2
22:20 - 22:30	84.3	68.7	70.5	62.3	57.7
22:30 - 22:40	74.3	67.6	69.9	62.6	59.7
22:40 - 22:50	89.4	71.9	70.8	64.4	61.0
22:50 - 23:00	76.9	67.5	70.0	62.6	57.9
23:00 - 23:10	76.1	67.6	70.1	62.8	59.8

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:10 - 23:20	75.3	67.5	70.4	62.0	60.0
23:20 - 23:30	84.4	67.5	70.2	61.5	57.0
23:30 - 23:40	89.5	67.8	70.2	62.4	58.4
23:40 - 23:50	90.8	70.5	70.9	61.1	55.5
23:50 - 00:00	82.3	68.3	70.4	62.0	57.1
00:00 - 00:10	74.3	67.5	70.0	61.8	54.8
00:10 - 00:20	72.5	66.4	69.8	60.1	56.0
00:20 - 00:30	75.5	66.6	69.3	61.0	57.1
00:30 - 00:40	84.8	66.7	69.6	61.8	58.6
00:40 - 00:50	78.7	67.6	70.1	62.0	57.5
00:50 - 01:00	82.1	66.0	69.1	59.6	55.5
01:00 - 01:10	76.1	66.1	68.8	60.9	57.3
01:10 - 01:20	87.0	68.2	69.5	59.5	56.1
01:20 - 01:30	72.9	65.4	68.6	59.5	56.6
01:30 - 01:40	72.5	65.4	68.3	60.1	55.8
01:40 - 01:50	90.8	68.7	68.2	59.7	55.5
01:50 - 02:00	79.4	65.8	68.7	60.8	57.1
02:00 - 02:10	73.9	65.0	68.3	58.3	55.1
02:10 - 02:20	78.0	65.2	68.2	58.9	55.5
02:20 - 02:30	77.9	64.5	67.5	59.0	56.2
02:30 - 02:40	73.9	64.0	67.4	56.6	53.7
02:40 - 02:50	73.3	64.7	68.2	58.2	54.8
02:50 - 03:00	73.1	64.6	67.8	58.4	54.7
03:00 - 03:10	73.3	65.0	68.5	58.5	54.3
03:10 - 03:20	72.0	64.9	68.1	60.0	55.0
03:20 - 03:30	71.7	65.6	68.7	60.0	56.0
03:30 - 03:40	73.0	64.9	68.1	58.2	55.1
03:40 - 03:50	71.4	64.7	68.0	59.2	56.1
03:50 - 04:00	78.1	65.6	68.9	60.1	56.2
04:00 - 04:10	93.7	73.3	70.2	59.7	53.7
04:10 - 04:20	74.3	65.9	69.1	60.5	57.1
04:20 - 04:30	75.0	66.0	69.7	59.0	55.9
04:30 - 04:40	73.2	66.3	69.7	58.3	52.6
04:40 - 04:50	71.6	65.6	69.4	58.9	54.8
04:50 - 05:00	73.0	66.6	69.8	60.9	56.8
05:00 - 05:10	75.8	66.9	70.2	60.7	54.3
05:10 - 05:20	75.4	67.3	70.4	59.4	55.2
05:20 - 05:30	74.3	67.1	70.2	60.7	56.7
05:30 - 05:40	76.5	67.5	70.3	61.1	56.8
05:40 - 05:50	74.9	69.3	72.0	63.6	59.7
05:50 - 06:00	91.3	72.7	72.1	63.4	60.3
06:00 - 06:10	78.3	68.8	72.0	63.1	58.0
06:10 - 06:20	81.7	69.7	71.5	65.3	61.5
06:20 - 06:30	76.7	69.3	71.5	63.4	60.6
06:30 - 06:40	79.3	69.8	72.1	64.4	61.8
06:40 - 06:50	80.0	69.9	72.4	64.4	60.2
06:50 - 07:00	82.5	70.1	72.7	64.0	61.0
07:00 - 07:10	85.8	71.0	73.3	65.4	62.3
07:10 - 07:20	81.8	69.9	72.1	65.7	62.0
07:20 - 07:30	93.7	75.5	75.0	65.1	62.2
07:30 - 07:40	77.6	69.4	71.5	65.5	61.6
07:40 - 07:50	80.3	69.9	72.4	65.5	62.9
07:50 - 08:00	79.7	69.6	71.7	65.8	63.0
08:00 - 08:10	101.5	75.2	72.7	67.0	64.1
08:10 - 08:20	86.6	69.5	71.6	65.3	62.1
08:20 - 08:30	81.5	69.8	71.8	66.0	63.8
08:30 - 08:40	96.4	76.7	78.7	67.9	64.7
08:40 - 08:50	85.6	70.5	72.1	66.1	63.2
08:50 - 09:00	79.6	69.1	71.3	65.4	62.7
09:00 - 09:10	77.5	69.7	71.8	65.8	63.6
09:10 - 09:20	85.3	69.9	71.7	65.8	63.8
09:20 - 09:30	93.6	74.8	74.8	65.7	64.1
09:30 - 09:40	80.1	69.3	71.4	65.3	61.7
09:40 - 09:50	95.7	75.1	73.0	66.2	64.0
09:50 - 10:00	92.8	72.4	72.7	66.4	63.6
10:00 - 10:10	86.9	70.1	71.8	65.5	63.9
10:10 - 10:20	87.2	70.8	72.1	65.1	63.3
10:20 - 10:30	82.0	69.6	71.7	65.6	63.9
10:30 - 10:40	81.1	69.2	71.2	66.1	63.9
10:40 - 10:50	93.5	73.7	72.9	65.7	63.7
10:50 - 11:00	81.6	69.2	71.1	66.2	62.9
11:00 - 11:10	91.0	72.9	72.4	67.4	66.0

Table A4: Location 3, Statistical data, 10-11 September 2014

Time	L_{Amax}	L_{Aeq}	L_{A10}	L_{A90}	L_{Amin}
11:10 - 11:20	95.1	74.1	76.6	66.0	64.1
11:20 - 11:30	81.9	69.0	70.9	65.4	63.4
11:30 - 11:40	84.3	68.9	70.9	66.6	64.4
11:40 - 11:50	84.6	70.4	72.0	66.2	64.1
11:50 - 12:00	76.2	68.8	70.8	65.7	62.6
12:00 - 12:10	90.4	70.6	72.3	65.4	62.9
12:10 - 12:20	80.8	68.8	70.8	65.0	62.8
12:20 - 12:30	98.4	74.6	72.2	66.2	64.4
12:30 - 12:40	88.4	71.9	72.2	65.8	63.0
12:40 - 12:50	92.2	75.8	79.3	64.7	61.9
12:50 - 13:00	77.8	69.1	71.2	65.1	62.8
13:00 - 13:10	100.4	77.0	73.3	65.2	62.7
13:10 - 13:20	73.5	69.0	71.2	65.5	63.3
13:20 - 13:30	78.4	68.5	70.6	64.5	62.6
13:30 - 13:40	89.8	73.5	74.9	66.0	63.9

Table A5: Location 3, Statistical data, 11 September 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
11:00 - 11:10	81.1	66.3	70.0	55.9	52.7
11:10 - 11:20	71.3	57.6	59.9	55.4	51.4
11:20 - 11:30	76.6	57.9	59.2	55.7	54.8
11:30 - 11:40	68.9	58.3	61.0	53.8	51.9
11:40 - 11:50	68.5	57.1	58.1	55.7	54.8
11:50 - 12:00	69.9	56.7	57.7	55.5	53.3
12:00 - 12:10	72.7	55.6	56.9	52.8	50.0
12:10 - 12:20	68.4	54.7	56.5	51.8	49.9
12:20 - 12:30	78.2	63.0	66.1	54.3	50.0
12:30 - 12:40	80.0	68.0	71.1	62.1	57.4
12:40 - 12:50	81.9	69.0	71.8	63.5	58.7
12:50 - 13:00	81.8	68.5	71.2	63.2	57.3
13:00 - 13:10	81.4	69.6	72.7	63.9	58.3
13:10 - 13:20	81.1	68.8	71.8	63.0	53.6
13:20 - 13:30	73.2	56.2	58.5	52.9	50.4
13:30 - 13:40	63.6	53.5	55.1	51.4	49.3
13:40 - 13:50	73.9	60.8	64.2	51.6	49.4
13:50 - 14:00	74.8	56.9	58.0	51.4	49.9
14:00 - 14:10	78.0	54.7	55.2	50.6	48.6
14:10 - 14:20	63.3	54.3	56.4	51.5	49.3
14:20 - 14:30	75.4	57.3	58.2	52.9	51.0
14:30 - 14:40	73.8	59.1	61.1	52.4	50.6
14:40 - 14:50	85.6	59.7	56.5	51.3	49.7
14:50 - 15:00	74.7	55.1	55.4	51.6	50.0
15:00 - 15:10	69.8	55.2	56.3	52.3	49.4
15:10 - 15:20	65.6	54.9	57.0	52.0	50.2
15:20 - 15:30	70.6	59.2	63.1	53.9	51.1
15:30 - 15:40	74.7	62.5	65.4	55.3	50.8
15:40 - 15:50	69.0	55.8	58.1	52.0	49.5
15:50 - 16:00	70.7	55.8	58.2	52.3	49.8
16:00 - 16:10	79.0	63.5	66.3	57.2	51.4
16:10 - 16:20	77.2	62.5	65.4	57.5	53.1
16:20 - 16:30	78.7	62.1	64.4	57.3	55.2
16:30 - 16:40	76.5	59.9	62.2	56.1	54.5
16:40 - 16:50	76.2	59.5	61.9	55.6	51.4
16:50 - 17:00	76.3	59.6	61.5	55.5	51.8
17:00 - 17:10	68.1	55.9	56.9	54.8	51.9
17:10 - 17:20	70.1	57.5	59.3	54.9	54.0
17:20 - 17:30	68.2	56.2	57.3	54.9	54.0
17:30 - 17:40	65.0	55.6	56.7	54.6	53.9
17:40 - 17:50	69.2	57.6	60.0	53.2	51.3
17:50 - 18:00	72.0	57.3	61.1	52.4	50.6
18:00 - 18:10	66.1	55.3	58.0	51.9	50.3
18:10 - 18:20	63.8	55.1	57.0	52.5	50.2
18:20 - 18:30	64.2	54.0	55.7	51.8	50.0
18:30 - 18:40	63.4	53.4	54.6	51.8	49.7
18:40 - 18:50	79.1	57.5	56.7	51.5	49.7
18:50 - 19:00	69.0	56.3	58.6	51.4	49.7
19:00 - 19:10	64.8	52.9	54.2	51.3	49.3
19:10 - 19:20	59.9	52.7	54.0	50.9	49.2
19:20 - 19:30	67.1	54.3	56.1	51.6	49.2
19:30 - 19:40	66.5	53.7	55.3	51.0	49.4
19:40 - 19:50	67.5	53.8	55.8	50.7	49.2
19:50 - 20:00	63.4	52.7	53.8	50.4	48.3
20:00 - 20:10	61.2	52.0	53.2	50.5	48.5
20:10 - 20:20	63.7	52.4	54.2	50.3	48.4
20:20 - 20:30	64.6	52.4	53.7	50.3	48.7
20:30 - 20:40	67.9	52.3	53.6	50.5	48.7
20:40 - 20:50	72.5	56.4	57.5	50.5	48.3
20:50 - 21:00	55.8	51.5	52.7	50.0	48.0
21:00 - 21:10	69.9	53.7	54.9	49.7	48.1
21:10 - 21:20	70.8	52.5	53.8	49.5	47.5
21:20 - 21:30	60.8	52.0	53.8	49.9	47.5
21:30 - 21:40	71.0	52.9	53.3	49.5	47.3
21:40 - 21:50	60.0	51.4	52.7	50.0	48.6
21:50 - 22:00	65.4	51.8	53.2	49.5	47.8
22:00 - 22:10	59.1	51.9	53.4	50.0	48.0
22:10 - 22:20	68.0	51.8	53.1	49.8	47.7
22:20 - 22:30	65.8	54.7	57.3	49.5	48.0
22:30 - 22:40	59.0	51.2	52.6	49.2	47.6
22:40 - 22:50	63.8	51.5	53.1	49.1	47.5
22:50 - 23:00	64.9	53.3	55.0	49.3	47.5

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:00 - 23:10	77.5	55.0	55.1	49.2	47.3
23:10 - 23:20	60.3	51.2	52.7	49.3	47.1
23:20 - 23:30	75.2	55.8	56.5	49.4	47.4
23:30 - 23:40	60.9	51.2	52.8	48.9	46.8
23:40 - 23:50	60.8	51.1	52.9	48.8	47.0
23:50 - 00:00	59.7	50.0	51.3	47.8	46.3
00:00 - 00:10	61.9	50.8	52.3	48.1	45.8
00:10 - 00:20	63.9	51.8	53.7	47.9	45.7
00:20 - 00:30	69.8	57.6	60.4	49.2	46.8
00:30 - 00:40	66.3	53.5	54.5	49.1	47.9
00:40 - 00:50	59.3	49.3	50.5	46.9	45.2
00:50 - 01:00	54.8	48.7	50.5	46.3	44.5
01:00 - 01:10	54.4	48.4	50.1	46.1	44.9
01:10 - 01:20	58.8	48.4	50.0	46.1	44.3
01:20 - 01:30	61.8	49.3	50.5	46.9	45.0
01:30 - 01:40	61.3	48.5	50.4	45.5	43.9
01:40 - 01:50	57.9	49.1	51.1	46.2	44.1
01:50 - 02:00	59.5	47.8	49.4	45.5	44.1
02:00 - 02:10	55.4	48.1	50.0	45.5	43.8
02:10 - 02:20	55.0	48.3	50.5	45.7	43.9
02:20 - 02:30	53.2	47.4	48.9	45.3	43.6
02:30 - 02:40	53.9	47.6	49.4	45.0	43.4
02:40 - 02:50	57.9	47.5	49.5	45.3	43.7
02:50 - 03:00	64.2	49.5	50.3	45.3	43.5
03:00 - 03:10	57.2	47.7	49.8	45.2	43.7
03:10 - 03:20	60.7	48.8	50.0	45.3	44.1
03:20 - 03:30	56.1	47.9	49.7	45.8	44.4
03:30 - 03:40	54.4	48.3	50.5	45.8	43.8
03:40 - 03:50	54.1	47.4	49.1	45.0	43.0
03:50 - 04:00	54.8	48.0	49.8	45.3	44.0
04:00 - 04:10	73.1	51.5	51.0	46.1	44.7
04:10 - 04:20	60.0	49.5	51.7	46.8	44.9
04:20 - 04:30	64.6	50.0	52.2	46.8	44.9
04:30 - 04:40	54.3	49.1	51.5	45.9	44.5
04:40 - 04:50	55.1	48.8	51.1	46.1	44.5
04:50 - 05:00	60.1	49.8	51.6	46.8	44.5
05:00 - 05:10	57.8	49.4	51.4	46.6	43.9
05:10 - 05:20	65.0	51.8	54.2	47.4	45.0
05:20 - 05:30	65.5	50.9	52.2	47.6	46.2
05:30 - 05:40	69.3	51.3	52.8	48.2	46.6
05:40 - 05:50	58.8	51.2	52.6	48.9	46.7
05:50 - 06:00	67.2	52.5	54.2	49.8	47.4
06:00 - 06:10	69.9	53.3	54.6	50.1	48.3
06:10 - 06:20	73.7	58.8	62.4	51.7	49.7
06:20 - 06:30	74.4	58.8	57.0	50.6	48.3
06:30 - 06:40	69.5	54.0	55.5	50.8	48.2
06:40 - 06:50	69.3	53.8	55.9	51.5	48.9
06:50 - 07:00	72.1	59.3	63.4	51.2	49.1
07:00 - 07:10	68.1	56.0	58.1	51.3	49.3
07:10 - 07:20	68.5	55.3	57.7	51.8	49.6
07:20 - 07:30	73.8	54.2	55.1	51.7	50.3
07:30 - 07:40	66.0	55.5	56.6	52.0	50.1
07:40 - 07:50	67.8	56.5	60.4	51.6	50.1
07:50 - 08:00	60.7	53.5	55.3	51.7	49.6
08:00 - 08:10	67.6	54.7	56.3	52.1	49.6
08:10 - 08:20	64.4	55.7	56.5	54.6	52.4
08:20 - 08:30	65.4	56.0	56.6	54.9	54.1
08:30 - 08:40	68.3	56.8	58.3	55.1	54.2
08:40 - 08:50	74.8	60.8	63.0	57.1	54.9
08:50 - 09:00	65.9	57.2	59.0	55.2	54.2
09:00 - 09:10	71.3	56.6	58.0	54.9	53.6
09:10 - 09:20	67.6	56.1	57.6	52.2	50.5
09:20 - 09:30	77.9	58.2	60.4	52.5	50.1
09:30 - 09:40	73.4	57.0	57.8	52.5	50.9
09:40 - 09:50	64.9	54.7	56.4	52.0	49.2
09:50 - 10:00	73.9	55.9	57.2	53.5	49.8
10:00 - 10:10	72.1	55.8	58.0	51.5	49.7
10:10 - 10:20	85.1	62.0	63.6	52.0	48.9
10:20 - 10:30	75.8	60.5	63.8	52.0	50.1
10:30 - 10:40	79.1	68.3	71.2	63.5	56.1
10:40 - 10:50	81.7	64.4	68.2	55.9	54.4
10:50 - 11:00	79.5	66.7	69.8	60.0	55.2

Table A6: Location 4, Statistical data, 9-10 September 2014

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
11:00 - 11:10	81.1	67.8	71.3	54.2	51.1
11:10 - 11:20	79.0	59.9	61.2	52.5	49.7
11:20 - 11:30	74.9	58.7	61.2	52.8	50.4
11:30 - 11:40	67.0	56.8	58.5	55.0	53.8
11:40 - 11:50	65.9	55.6	57.8	52.6	50.4
11:50 - 12:00	72.2	58.6	61.0	54.5	52.4
12:00 - 12:10	66.3	57.5	60.0	53.0	50.7
12:10 - 12:20	73.7	58.3	59.3	55.3	54.5
12:20 - 12:30	79.7	63.8	67.2	57.4	55.5
12:30 - 12:40	81.4	68.3	71.2	62.7	58.7
12:40 - 12:50	78.8	68.9	71.8	64.1	59.7
12:50 - 13:00	80.3	68.4	71.3	63.0	58.3
13:00 - 13:10	81.3	69.6	72.4	65.0	59.9
13:10 - 13:20	81.3	70.1	72.9	65.2	55.2
13:20 - 13:30	76.6	59.3	62.2	53.3	50.8
13:30 - 13:40	75.6	60.6	64.4	55.3	54.1
13:40 - 13:50	80.0	61.8	65.0	54.8	52.0
13:50 - 14:00	78.0	62.1	65.7	52.7	50.1
14:00 - 14:10	82.8	64.0	67.2	55.2	51.5
14:10 - 14:20	82.5	64.6	67.7	56.7	54.7
14:20 - 14:30	73.6	60.3	62.8	56.4	54.5
14:30 - 14:40	80.8	65.3	67.8	57.6	55.0
14:40 - 14:50	82.2	61.2	61.2	55.0	54.0
14:50 - 15:00	66.1	56.4	57.5	55.1	54.0
15:00 - 15:10	65.6	56.1	57.1	54.9	53.9
15:10 - 15:20	73.7	58.5	60.7	54.8	52.5
15:20 - 15:30	73.7	61.1	63.7	56.3	55.1
15:30 - 15:40	79.6	65.6	68.4	60.6	55.7
15:40 - 15:50	79.2	64.1	67.1	58.0	55.4
15:50 - 16:00	82.7	62.9	65.0	56.4	54.4
16:00 - 16:10	74.6	58.2	59.8	55.2	53.7
16:10 - 16:20	69.4	57.6	59.4	55.3	54.0
16:20 - 16:30	74.1	58.0	59.5	55.1	51.4
16:30 - 16:40	71.7	56.8	59.0	53.7	51.1
16:40 - 16:50	81.2	56.9	57.0	53.0	49.6
16:50 - 17:00	67.8	55.9	56.7	54.8	54.2
17:00 - 17:10	68.4	58.0	60.5	54.9	53.9
17:10 - 17:20	75.7	59.0	58.9	54.8	53.9
17:20 - 17:30	71.6	57.5	59.1	54.9	54.0
17:30 - 17:40	69.8	54.8	56.6	52.0	49.6
17:40 - 17:50	70.6	53.7	55.7	51.0	48.8
17:50 - 18:00	74.2	56.1	57.1	54.5	50.9
18:00 - 18:10	65.1	56.4	58.1	54.6	53.7
18:10 - 18:20	68.1	56.4	57.6	55.1	54.1
18:20 - 18:30	67.6	55.5	57.1	52.5	50.6
18:30 - 18:40	78.1	59.7	60.6	52.4	49.6
18:40 - 18:50	72.0	54.3	55.8	52.1	50.6
18:50 - 19:00	68.9	54.2	56.1	51.9	50.2
19:00 - 19:10	69.4	54.5	55.8	52.0	49.8
19:10 - 19:20	73.5	57.7	58.8	52.0	50.0
19:20 - 19:30	65.4	55.5	58.2	51.8	48.9
19:30 - 19:40	65.9	54.2	55.9	51.9	49.7
19:40 - 19:50	65.1	55.5	58.2	52.4	50.8
19:50 - 20:00	74.8	57.0	57.0	51.3	48.7
20:00 - 20:10	66.9	53.2	54.9	50.6	49.0
20:10 - 20:20	61.2	52.8	54.4	50.9	48.9
20:20 - 20:30	76.3	56.5	57.5	51.4	49.7
20:30 - 20:40	62.6	52.9	54.3	50.9	48.2
20:40 - 20:50	66.6	54.1	56.5	50.9	49.2
20:50 - 21:00	66.5	52.6	54.0	50.5	48.7
21:00 - 21:10	70.4	54.0	55.4	50.0	48.0
21:10 - 21:20	67.5	54.6	56.3	50.0	47.5
21:20 - 21:30	61.8	52.5	54.3	50.1	48.4
21:30 - 21:40	62.7	52.8	54.1	50.7	48.7
21:40 - 21:50	64.1	52.9	54.3	50.4	48.4
21:50 - 22:00	69.4	55.0	57.5	50.5	48.4
22:00 - 22:10	68.7	51.8	53.0	49.6	47.7
22:10 - 22:20	62.4	52.6	54.2	49.8	47.9
22:20 - 22:30	62.0	52.2	53.9	49.5	47.3
22:30 - 22:40	66.2	53.0	54.3	50.1	48.1
22:40 - 22:50	65.9	52.6	54.1	49.6	47.9
22:50 - 23:00	70.1	51.5	52.6	49.2	47.2

Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A90}	L _{Amin}
23:00 - 23:10	57.0	50.8	52.3	48.9	47.0
23:10 - 23:20	64.7	50.8	52.3	49.1	47.3
23:20 - 23:30	63.8	51.4	52.9	49.0	46.9
23:30 - 23:40	70.9	51.5	52.6	48.6	46.9
23:40 - 23:50	64.5	51.6	52.9	48.4	46.8
23:50 - 00:00	62.0	51.0	52.5	48.6	46.3
00:00 - 00:10	66.8	53.4	55.1	48.5	46.8
00:10 - 00:20	61.6	50.1	51.5	47.9	46.2
00:20 - 00:30	60.5	49.9	51.4	47.5	45.8
00:30 - 00:40	58.7	49.6	51.4	47.2	45.5
00:40 - 00:50	60.2	50.5	52.3	47.7	45.7
00:50 - 01:00	62.3	49.3	51.0	46.6	44.8
01:00 - 01:10	54.6	49.1	50.7	46.7	44.5
01:10 - 01:20	62.5	50.1	51.5	46.7	44.4
01:20 - 01:30	54.1	48.5	50.3	46.2	44.5
01:30 - 01:40	54.6	48.8	50.6	46.2	44.8
01:40 - 01:50	62.7	50.0	51.2	46.3	44.2
01:50 - 02:00	60.6	48.8	50.4	46.6	44.9
02:00 - 02:10	58.2	48.4	50.1	45.9	44.4
02:10 - 02:20	59.4	48.7	50.2	46.4	45.0
02:20 - 02:30	55.4	48.5	50.1	46.4	44.9
02:30 - 02:40	54.5	48.2	49.9	45.9	44.5
02:40 - 02:50	55.7	48.6	50.6	46.4	45.0
02:50 - 03:00	54.8	48.6	50.2	46.3	44.4
03:00 - 03:10	55.1	49.0	50.8	46.5	45.3
03:10 - 03:20	58.2	49.8	52.1	47.1	44.8
03:20 - 03:30	62.0	49.4	50.8	47.0	45.0
03:30 - 03:40	66.2	51.2	52.8	46.5	44.9
03:40 - 03:50	66.4	51.6	52.3	47.5	46.0
03:50 - 04:00	64.3	50.8	51.8	47.2	45.9
04:00 - 04:10	69.3	53.5	52.4	47.7	45.7
04:10 - 04:20	55.0	49.3	51.0	47.4	45.5
04:20 - 04:30	54.9	49.2	51.1	47.2	45.5
04:30 - 04:40	57.3	49.7	51.7	47.2	45.7
04:40 - 04:50	56.6	49.7	51.7	47.2	46.0
04:50 - 05:00	60.0	50.8	52.6	47.7	45.7
05:00 - 05:10	65.9	53.4	56.5	48.5	46.4
05:10 - 05:20	55.0	50.3	52.1	47.6	46.1
05:20 - 05:30	62.6	51.0	52.7	48.6	46.8
05:30 - 05:40	80.9	53.6	52.6	48.6	46.6
05:40 - 05:50	58.5	52.0	53.6	49.5	47.5
05:50 - 06:00	65.8	53.6	55.2	49.1	47.3
06:00 - 06:10	61.3	52.0	53.7	49.4	47.8
06:10 - 06:20	59.6	52.5	54.1	50.2	48.7
06:20 - 06:30	62.5	52.6	54.0	50.0	48.5
06:30 - 06:40	62.5	53.5	55.0	51.1	48.7
06:40 - 06:50	67.7	53.5	55.2	51.1	48.7
06:50 - 07:00	62.2	53.0	54.5	50.8	48.8
07:00 - 07:10	70.0	54.3	56.0	51.6	49.1
07:10 - 07:20	60.9	53.8	55.3	51.9	50.0
07:20 - 07:30	67.1	56.1	59.1	51.5	49.4
07:30 - 07:40	77.8	56.3	58.0	51.9	49.9
07:40 - 07:50	69.2	53.8	55.1	51.5	49.7
07:50 - 08:00	75.7	55.5	56.7	52.1	50.3
08:00 - 08:10	70.7	56.8	59.1	52.8	50.6
08:10 - 08:20	74.2	54.7	55.8	52.3	49.9
08:20 - 08:30	70.2	54.3	55.4	52.4	50.9
08:30 - 08:40	74.6	59.0	60.8	53.4	51.1
08:40 - 08:50	73.7	59.3	62.1	54.9	52.7
08:50 - 09:00	74.6	56.5	58.0	53.4	51.7
09:00 - 09:10	83.8	56.1	56.5	53.1	51.0
09:10 - 09:20	65.1	54.4	56.0	52.4	50.6
09:20 - 09:30	68.6	56.1	58.7	52.3	50.4
09:30 - 09:40	75.1	58.7	60.1	53.1	51.0
09:40 - 09:50	78.4	56.8	58.6	52.6	51.2
09:50 - 10:00	69.7	57.3	60.0	53.1	50.9
10:00 - 10:10	73.5	57.5	60.3	52.9	50.7
10:10 - 10:20	82.6	61.4	63.5	53.1	50.5
10:20 - 10:30	71.8	59.3	63.0	52.3	49.5
10:30 - 10:40	81.0	69.4	72.4	62.9	55.3

Table A7: Location 4, Statistical data, 10-11 September 2014

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
11:00 - 11:10	80.5	73.2	70.4	68.0	68.2	65.9	60.7	53.0	93.3	91.5	84.0	80.4	78.0	74.6	77.8	67.0
11:10 - 11:20	80.7	70.3	69.8	67.9	68.3	65.6	60.4	53.5	98.6	81.0	83.4	81.0	77.4	76.1	81.5	74.4
11:20 - 11:30	79.3	69.3	69.3	67.8	67.5	64.9	59.4	52.8	90.4	78.6	87.3	84.2	78.8	74.5	76.2	75.9
11:30 - 11:40	80.1	69.5	68.1	66.3	66.9	65.0	61.1	54.8	96.4	79.8	77.9	75.3	79.6	80.3	84.6	79.3
11:40 - 11:50	80.6	70.0	67.8	66.3	67.0	65.2	61.0	54.6	93.1	84.5	75.7	76.4	79.7	84.7	79.2	74.2
11:50 - 12:00	80.2	71.3	71.0	68.6	68.7	65.3	61.1	54.3	91.0	86.7	89.7	91.1	92.9	84.0	88.4	78.8
12:00 - 12:10	80.6	71.0	69.6	67.5	67.3	65.5	62.4	54.8	98.5	89.1	87.1	83.8	79.0	78.9	92.2	77.8
12:10 - 12:20	80.1	71.7	71.7	67.0	67.5	65.8	60.6	55.1	92.2	91.1	97.8	79.8	78.5	77.5	75.1	74.3
12:20 - 12:30	80.0	69.4	68.3	66.9	66.9	65.1	60.2	52.1	91.8	81.5	84.9	81.2	80.2	76.8	79.1	73.9
12:30 - 12:40	80.5	71.9	69.9	67.1	67.3	64.8	59.6	52.0	92.6	89.4	86.7	81.5	80.3	79.5	72.4	69.5
12:40 - 12:50	78.3	69.8	67.6	66.0	66.1	64.1	59.2	52.3	88.8	86.9	80.9	76.4	75.4	75.5	70.5	67.7
12:50 - 13:00	80.0	71.6	69.6	66.9	67.2	64.9	59.7	52.6	90.3	84.4	82.3	80.6	87.2	74.7	70.9	67.3
13:00 - 13:10	80.4	69.9	69.3	67.4	67.4	65.1	59.7	53.4	94.5	81.3	82.1	81.2	80.7	80.6	72.9	70.9
13:10 - 13:20	80.1	72.6	72.3	69.0	68.9	65.9	60.4	52.5	90.2	87.2	92.0	80.5	80.6	74.3	77.3	71.6
13:20 - 13:30	80.9	71.8	70.9	69.5	71.0	69.0	61.1	54.8	98.1	86.1	87.0	81.6	87.8	86.9	76.6	77.2
13:30 - 13:40	81.2	72.5	70.4	68.9	69.0	65.7	59.6	52.2	96.5	89.4	87.7	86.5	90.1	82.1	80.9	73.1
13:40 - 13:50	79.8	70.8	69.6	68.0	73.7	75.3	61.3	51.4	90.1	81.3	81.1	79.9	97.0	101.7	83.6	69.3
13:50 - 14:00	79.8	69.3	68.2	67.2	68.4	65.6	59.7	52.2	89.6	80.0	77.5	78.9	84.8	78.1	71.4	69.0
14:00 - 14:10	80.0	71.3	70.2	68.9	71.4	69.8	62.6	53.7	89.8	86.5	83.9	86.5	90.5	93.0	88.0	76.6
14:10 - 14:20	79.8	71.4	69.9	68.4	81.1	79.3	63.3	52.2	90.0	88.3	86.3	86.7	106.8	104.9	86.1	69.1
14:20 - 14:30	80.9	72.0	69.5	67.8	68.4	65.8	60.2	55.4	93.8	89.5	79.9	79.0	79.0	75.5	73.8	75.7
14:30 - 14:40	79.9	70.2	68.9	67.6	74.8	73.2	60.8	53.3	93.3	90.1	80.3	84.7	100.9	97.4	78.8	72.8
14:40 - 14:50	80.1	70.6	69.0	67.8	70.8	69.0	64.6	55.8	94.9	81.1	81.8	80.0	90.7	91.1	85.6	77.9
14:50 - 15:00	80.1	72.5	71.9	68.9	68.8	66.2	63.0	54.3	90.4	87.6	93.3	80.1	79.8	78.5	83.4	70.3
15:00 - 15:10	80.2	70.1	68.9	67.6	74.5	70.2	63.5	54.3	94.7	85.2	81.3	77.1	94.3	88.7	81.0	72.5
15:10 - 15:20	79.2	69.6	68.7	67.5	68.2	65.3	59.7	51.3	91.7	81.1	80.9	79.8	77.3	75.3	82.3	64.8
15:20 - 15:30	79.7	70.8	69.5	67.8	68.0	65.0	59.4	52.0	93.2	86.8	85.5	84.6	78.2	75.0	71.0	71.5
15:30 - 15:40	79.2	71.2	69.5	66.3	66.9	64.2	58.4	51.3	91.3	90.7	83.1	74.9	78.2	78.4	71.5	71.7
15:40 - 15:50	79.3	70.0	69.0	66.7	66.9	64.3	59.2	50.3	89.8	82.6	86.2	80.3	78.9	80.9	82.9	69.4
15:50 - 16:00	79.6	69.3	67.9	67.0	66.8	64.5	59.2	56.1	93.0	82.5	75.5	83.5	83.4	80.7	73.5	82.3
16:00 - 16:10	79.3	71.0	69.9	68.3	67.1	64.6	62.1	51.8	91.2	88.5	90.0	86.6	80.2	83.2	90.4	73.0
16:10 - 16:20	79.9	72.3	71.9	68.6	70.6	68.3	60.7	53.2	92.1	92.8	98.3	89.4	88.3	89.6	79.1	72.0
16:20 - 16:30	79.3	71.2	70.8	68.9	68.0	64.9	59.2	52.6	92.4	90.7	83.5	84.0	79.2	72.8	72.2	69.2
16:30 - 16:40	80.0	72.2	70.6	68.7	68.7	65.5	59.7	52.0	91.3	90.5	88.5	88.8	87.8	82.8	77.5	70.3
16:40 - 16:50	79.0	71.3	70.4	68.8	79.2	78.9	63.6	52.1	90.3	85.1	85.4	87.5	102.8	102.6	86.0	66.8
16:50 - 17:00	80.2	72.7	70.3	67.4	74.0	70.2	62.6	53.6	94.3	87.6	88.6	86.2	98.6	93.3	87.0	73.6
17:00 - 17:10	79.6	72.2	70.3	68.2	68.4	65.6	59.6	52.1	91.8	92.0	88.2	85.7	83.8	82.7	79.2	76.7
17:10 - 17:20	80.0	70.8	69.8	67.6	68.1	65.1	59.2	51.9	90.0	83.6	86.3	82.7	85.1	82.1	73.2	72.8
17:20 - 17:30	79.5	73.9	71.8	67.4	69.1	65.7	59.9	51.3	91.6	93.0	93.1	83.6	88.3	83.2	80.8	67.4
17:30 - 17:40	79.9	73.8	71.2	68.2	69.0	66.5	61.0	52.7	91.2	90.7	89.6	81.4	86.8	85.5	82.0	72.1
17:40 - 17:50	79.3	71.8	70.9	68.5	68.5	65.8	59.6	51.9	90.4	85.6	90.4	83.3	76.3	75.5	71.2	66.2
17:50 - 18:00	80.1	74.2	72.9	69.8	69.0	66.2	60.9	52.7	93.4	91.7	91.0	84.9	87.3	85.5	83.6	69.9
18:00 - 18:10	80.5	72.9	69.8	67.9	68.4	65.5	58.8	50.9	93.5	85.6	84.7	83.6	80.3	82.7	69.3	66.6
18:10 - 18:20	80.4	73.4	71.4	68.6	68.9	66.2	60.3	52.0	91.9	89.1	90.7	84.6	82.1	80.9	78.9	70.4
18:20 - 18:30	79.5	72.9	70.3	67.3	68.0	64.8	58.7	50.7	91.3	89.4	88.6	78.0	76.2	76.0	72.8	69.5
18:30 - 18:40	80.1	74.7	71.5	69.1	72.7	69.7	62.1	53.2	93.7	96.1	90.5	84.4	96.2	94.6	82.6	72.5
18:40 - 18:50	79.5	72.4	70.4	67.7	68.1	65.0	59.1	51.7	89.3	92.3	91.7	82.8	77.9	73.1	80.2	71.3
18:50 - 19:00	79.4	71.1	69.6	67.6	68.7	66.3	61.1	53.5	91.5	87.7	85.8	83.7	84.1	84.2	84.7	79.3
19:00 - 19:10	79.0	72.2	69.8	70.6	68.5	65.2	58.7	51.3	94.0	88.4	86.0	82.9	77.1	75.0	76.6	75.6
19:10 - 19:20	79.7	71.9	70.0	67.4	68.0	64.8	58.4	50.8	95.9	89.3	87.6	83.2	81.3	73.4	69.2	65.7
19:20 - 19:30	79.8	72.7	69.8	67.6	68.3	65.2	59.2	51.6	93.1	90.7	87.5	81.0	80.1	80.4	73.9	67.9
19:30 - 19:40	79.1	71.9	70.2	67.6	68.2	64.8	58.7	51.4	91.6	88.5	85.8	81.3	81.0	76.2	71.5	66.6
19:40 - 19:50	79.0	70.8	68.7	71.6	76.7	73.2	66.1	55.4	92.3	88.0	82.4	92.9	98.1	94.8	92.0	80.0
19:50 - 20:00	79.0	70.7	70.1	68.3	68.2	65.1	60.0	52.3	89.2	84.6	85.7	87.1	78.5	77.5	76.6	69.7
20:00 - 20:10	78.7	70.6	69.5	66.7	67.6	64.3	58.6	50.1	88.7	90.0	91.5	79.9	78.6	78.1	80.6	67.7
20:10 - 20:20	79.4	68.4	67.4	66.0	67.5	64.3	57.9	50.1	98.9	81.8	79.4	74.6	77.1	75.2	72.6	72.6
20:20 - 20:30	78.3	71.0	68.5	67.1	67.8	64.2	57.5	49.6	93.9	88.0	87.4	83.2	78.8	72.7	71.3	66.6
20:30 - 20:40	78.3	69.0	68.0	66.4	67.5	64.2	57.6	50.9	90.0	79.5	80.6	79.3	76.8	74.4	74.1	73.7
20:40 - 20:50	78.5	68.2	67.7	67.0	67.4	64.1	58.0	51.5	90.5	78.6	85.8	92.2	78.3	76.4	74.3	73.8
20:50 - 21:00	77.8	67.9	67.1	66.3	72.5	70.7	64.1	54.9	88.3	83.3	78.1	83.1	93.4	95.9	87.4	78.0
21:00 - 21:10	78.6	69.0	68.8	67.5	68.6	66.0	60.7	52.1	91.0	82.1	86.4	84.1	88.4	87.3	82.8	71.4
21:10 - 21:20	77.5	69.1	67.1	66.0	70.2	69.0	66.3	55.5	89.1	90.7	80.2	81.6	93.5	97.1	92.7	80.4
21:20 - 21:30	78.4	71.3	69.3	67.7	68.6	65.2	59.7	53.1	89.5	86.8	86.7	85.1	87.4	86.7	81.5	77.9
21:30 - 21:40	77.3	70.8	73.1	67.8	68.2	64.9	59.1	50.2	91.1	95.5	102.5	93.3	86.4	83.3	80.8	71.3
21:40 - 21:50	78.3	69.1	67.6	66.5	67.8	64.2	57.9	49.5	90.1	81.3	79.4	76.0	76.0	74.1	73.7	66.2
21:50 - 22:00	79.5	69.2	68.8	67.8	67.1	64.0	58.6	50.9	94.1	85.1	87.9	87.6	77.9	79.2	81.9	66.5
22:00 - 22:10	78.0	68.4	66.9	65.7	67.1	63.6	57.5	49.1	90.0	85.0	82.3	76.7	76.7	71.7	76.4	68.5
22:10 - 22:20	78.1	68.3	68.1	66.7	67.5	64.1	57.8	51.6	90.4	83.1	85.3	80.3	76.9	79.2	72.5	72.2
22:20 - 22:30	78.8	68.5	66.4	65.4	70.9	68.4	57.4	49.2	93.9	80.8	79.0	82.6	93.2	93.2	75.1	63.5
22:30 - 22:40	78.2	68.2	66.9	65.7	67.2	63.8	57.3	59.6	90.0	80.0	78.8	75.3	77.4	72.3	73.8	87.1
22:40 - 22:50	77.7	67.9	67.5	66.3	67.6	64.1	57.2	50.2	88.5	87.1	83.1	80.3	76.5	72.6	70.7	69.8
22:50 - 23:00	77.0	66.5	66.8	65.7	67.3	63.9	57.6	51.6	87.8	78.6	79.4	76.0	76.0	76.9	77.5	72.5

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
23:00 - 23:10	77.6	67.4	67.1	65.8	67.3	64.1	57.0	49.1	94.4	80.8	78.3	76.3	75.8	80.3	68.9	63.5
23:10 - 23:20	77.4	68.8	68.2	66.7	67.2	63.6	56.6	49.6	88.8	81.6	81.0	83.9	76.2	73.8	68.5	69.6
23:20 - 23:30	77.7	68.3	67.4	66.2	67.3	64.0	58.0	52.0	92.0	86.3	87.5	81.2	76.2	77.8	81.0	75.9
23:30 - 23:40	76.6	67.0	66.7	67.3	72.3	67.8	58.1	52.2	89.4	78.3	82.7	85.8	93.6	90.4	79.6	77.0
23:40 - 23:50	78.3	67.4	67.0	65.8	68.0	67.0	63.2	53.4	90.8	79.5	81.1	74.7	87.8	92.3	91.9	79.3
23:50 - 00:00	76.9	66.2	65.7	65.0	67.3	64.0	57.3	51.3	91.5	76.8	75.9	74.7	80.2	76.2	78.4	77.1
00:00 - 00:10	75.7	66.3	65.1	65.6	77.3	77.5	59.5	49.2	91.3	83.6	75.4	85.4	101.1	103.9	80.2	69.0
00:10 - 00:20	76.2	66.8	66.1	64.9	67.0	63.5	56.3	50.6	90.1	82.4	80.7	75.7	77.4	75.4	79.1	78.8
00:20 - 00:30	76.1	66.6	66.1	64.3	66.7	63.8	57.8	51.0	89.7	82.4	81.7	73.6	86.1	86.1	82.2	78.4
00:30 - 00:40	75.5	65.8	65.8	65.5	67.2	63.5	55.7	47.5	89.5	79.1	79.6	82.5	86.2	86.7	68.9	61.2
00:40 - 00:50	75.5	65.3	65.2	64.6	66.9	63.3	55.8	48.5	88.6	83.3	79.2	74.7	78.7	78.0	73.5	67.4
00:50 - 01:00	75.0	65.3	65.0	65.0	70.5	65.3	55.1	47.6	89.9	80.8	78.1	79.6	92.7	88.1	66.2	62.5
01:00 - 01:10	75.0	64.6	64.2	63.6	65.9	62.1	54.5	46.7	89.8	80.2	77.1	75.7	82.2	73.1	68.8	63.8
01:10 - 01:20	75.8	72.8	70.4	68.2	65.9	62.4	55.5	49.3	91.5	93.9	92.4	89.7	74.5	72.3	76.1	69.6
01:20 - 01:30	74.1	63.6	63.6	63.4	65.6	62.0	54.3	46.4	89.6	76.7	79.0	78.2	78.1	76.1	69.0	68.9
01:30 - 01:40	73.5	66.1	63.5	62.3	64.6	61.4	53.3	45.2	86.4	85.9	78.7	76.2	76.5	76.0	66.7	64.5
01:40 - 01:50	73.7	69.1	65.7	63.8	65.8	61.9	55.0	46.8	86.2	87.6	80.3	75.2	79.9	78.4	75.7	67.9
01:50 - 02:00	73.0	63.4	62.6	62.4	65.2	61.4	53.2	45.6	88.7	80.9	76.6	75.0	78.5	74.3	69.6	66.8
02:00 - 02:10	74.8	64.3	64.9	63.3	65.4	61.3	53.4	45.3	89.2	75.6	75.5	75.0	77.4	73.0	67.5	61.2
02:10 - 02:20	73.8	63.2	62.7	62.7	65.0	61.6	54.3	46.4	94.1	76.2	75.3	79.1	78.7	74.1	69.9	62.8
02:20 - 02:30	73.4	62.6	63.1	62.9	65.4	61.7	52.9	43.8	87.3	73.6	75.8	73.0	74.2	70.8	65.2	58.1
02:30 - 02:40	75.3	64.7	64.1	63.3	65.1	61.5	54.2	47.5	91.5	78.0	79.8	77.1	78.5	74.7	67.1	65.0
02:40 - 02:50	71.0	63.5	62.5	62.1	64.7	60.7	52.4	44.8	85.6	79.0	76.3	73.9	73.8	71.5	66.8	67.1
02:50 - 03:00	73.7	62.9	63.3	62.7	65.0	61.2	53.4	46.1	91.7	77.5	79.7	74.7	76.4	72.5	65.8	65.1
03:00 - 03:10	73.4	63.9	64.5	63.1	65.3	61.6	53.5	45.9	88.8	82.5	82.9	77.3	82.9	78.1	65.8	60.6
03:10 - 03:20	72.7	62.5	62.6	63.0	65.2	61.2	52.9	45.5	87.6	76.2	74.6	74.9	74.9	74.1	75.7	63.3
03:20 - 03:30	72.5	62.6	62.6	62.3	64.5	61.2	54.5	50.2	89.6	74.4	74.9	72.0	74.1	74.2	78.1	77.6
03:30 - 03:40	72.5	62.5	62.7	62.7	65.1	61.2	53.2	46.4	86.9	77.9	75.5	78.6	78.0	72.9	65.7	67.8
03:40 - 03:50	72.5	63.0	63.5	62.6	65.4	61.8	54.1	46.3	88.4	77.4	77.0	72.9	75.0	70.6	70.3	62.5
03:50 - 04:00	73.3	62.7	62.4	62.1	69.0	66.6	54.0	45.0	91.1	80.0	77.0	73.4	93.0	91.3	71.7	60.2
04:00 - 04:10	73.3	63.3	63.1	63.2	65.7	62.0	54.0	46.4	87.4	78.1	79.2	77.6	79.2	73.6	69.0	65.4
04:10 - 04:20	74.7	66.2	65.7	65.1	66.5	63.0	55.7	48.1	87.9	79.9	82.2	78.5	81.5	72.8	65.7	65.9
04:20 - 04:30	73.5	62.8	62.8	63.4	65.4	62.1	54.7	46.7	90.3	75.1	77.6	76.3	75.0	74.3	67.1	61.3
04:30 - 04:40	74.7	63.4	63.6	63.5	65.8	62.6	55.7	48.9	90.7	77.2	73.1	74.6	75.1	71.9	71.0	67.6
04:40 - 04:50	75.5	65.2	64.6	63.8	66.1	62.5	55.2	48.5	89.2	77.8	75.9	75.8	75.7	70.9	66.4	67.6
04:50 - 05:00	76.5	66.3	65.8	64.9	67.2	63.6	57.1	49.6	91.9	80.6	82.5	78.6	79.2	73.1	69.2	64.8
05:00 - 05:10	75.1	65.4	64.9	64.7	66.5	63.3	56.4	48.9	91.0	78.9	79.7	78.8	79.6	77.5	73.1	65.2
05:10 - 05:20	76.8	66.1	65.7	64.7	66.7	63.5	57.2	53.2	89.3	78.6	79.3	76.1	75.8	75.4	74.7	79.8
05:20 - 05:30	75.9	68.2	68.9	64.9	66.8	63.5	56.1	48.4	90.7	88.7	88.7	76.7	76.9	74.9	68.4	68.3
05:30 - 05:40	76.4	67.2	66.6	65.2	66.8	63.5	57.2	52.1	91.2	83.6	80.3	79.4	77.8	75.5	71.5	71.1
05:40 - 05:50	77.4	68.4	67.5	65.9	67.9	64.6	57.8	50.5	89.4	82.7	78.4	76.3	77.1	75.8	69.9	66.1
05:50 - 06:00	78.0	68.6	66.7	65.7	67.9	64.3	57.1	49.2	94.6	87.3	78.7	75.3	76.6	72.6	70.9	61.8
06:00 - 06:10	78.2	67.9	67.2	66.3	68.4	65.1	58.4	51.6	93.2	81.7	78.7	77.0	78.7	73.6	74.3	72.9
06:10 - 06:20	78.5	69.6	69.0	67.3	68.9	65.6	59.0	51.4	92.5	89.7	83.7	81.2	78.9	73.8	68.5	62.9
06:20 - 06:30	80.0	71.6	71.6	69.9	69.8	66.7	60.3	54.4	92.1	91.0	92.9	92.5	82.4	76.0	71.2	73.4
06:30 - 06:40	80.1	71.3	72.0	70.2	70.1	67.0	61.9	57.0	89.3	88.3	93.2	95.8	88.4	85.3	89.2	87.4
06:40 - 06:50	80.3	72.3	70.9	68.8	70.2	67.0	60.7	54.9	92.4	86.5	86.1	79.7	86.0	81.7	74.7	80.4
06:50 - 07:00	80.3	73.0	72.1	70.2	69.8	66.9	61.0	54.1	90.0	90.5	90.1	92.0	83.9	77.8	76.9	74.5
07:00 - 07:10	80.7	74.0	73.4	70.9	70.4	67.5	62.1	55.6	92.0	91.9	90.2	82.4	86.8	83.4	77.8	73.8
07:10 - 07:20	80.2	71.1	71.0	68.2	69.3	66.4	60.4	53.4	90.7	85.6	92.2	80.6	79.2	77.7	76.6	69.2
07:20 - 07:30	81.6	75.3	74.2	69.8	69.5	66.7	61.0	54.0	92.0	91.5	92.2	85.3	83.0	79.1	75.2	66.7
07:30 - 07:40	80.5	72.1	70.3	69.7	69.4	66.8	61.3	54.4	96.3	87.0	80.8	85.4	77.3	75.3	76.7	72.3
07:40 - 07:50	81.0	73.3	70.6	68.4	69.0	66.9	61.6	54.9	92.7	88.3	83.9	83.0	84.4	83.7	81.0	74.6
07:50 - 08:00	80.1	73.7	71.6	68.8	68.8	66.2	60.4	54.0	91.7	91.4	89.0	82.6	81.0	75.3	72.4	74.9
08:00 - 08:10	80.5	71.6	69.5	66.7	68.1	66.1	61.9	54.8	92.4	88.0	84.3	79.8	86.2	82.3	82.7	76.0
08:10 - 08:20	80.8	73.5	69.8	67.7	75.0	74.4	60.9	57.2	95.6	89.6	84.8	86.4	100.8	100.4	80.6	82.5
08:20 - 08:30	80.8	73.4	71.4	69.6	67.9	65.6	60.7	53.8	92.7	90.1	87.1	91.7	85.6	79.0	78.0	72.6
08:30 - 08:40	79.6	73.2	71.0	68.0	67.6	66.1	61.4	58.3	89.8	88.4	86.8	83.5	75.5	86.2	80.0	77.0
08:40 - 08:50	80.9	75.0	71.4	67.9	67.4	65.5	60.6	54.8	94.9	95.8	89.3	82.0	77.0	74.3	71.8	72.0
08:50 - 09:00	80.8	73.8	70.1	67.1	66.8	64.9	60.3	54.1	94.6	90.8	83.1	82.2	75.4	76.1	77.0	70.3
09:00 - 09:10	80.5	72.6	70.3	67.4	67.7	65.3	60.2	55.0	90.6	86.3	84.9	77.6	76.6	73.6	74.1	74.3
09:10 - 09:20	81.5	73.3	71.0	68.1	69.9	68.5	63.6	56.6	96.7	86.5	86.1	82.3	90.2	92.1	85.1	74.2
09:20 - 09:30	80.0	72.5	70.3	68.1	68.2	66.0	60.8	54.3	93.8	89.6	87.2	80.7	80.6	78.4	73.3	70.0
09:30 - 09:40	80.4	71.9	70.3	67.8	67.8	65.5	60.0	53.1	92.7	87.9	86.7	82.7	76.2	75.9	69.4	67.3
09:40 - 09:50	80.3	72.0	71.0	68.7	69.2	67.7	64.7	61.8	92.2	84.6	86.0	80.5	83.9	92.6	94.7	93.9
09:50 - 10:00	80.1	73.0	71.6	68.2	68.1	65.6	60.5	54.2	91.0	89.4	88.8	83.7	82.9	77.5	76.6	75.0
10:00 - 10:10	80.5	71.2	69.9	67.9	68.5	66.1	60.7	54.0	92.1	84.7	85.6	81.5	82.8	82.7	78.8	70.9
10:10 - 10:20	80.6	71.6	71.0	68.3	68.7	66.1	62.2	54.1	91.8	87.9	86.3	84.1	84.7	82.6	90.2	71.4
10:20 - 10:30	81.3	72.2	70.2	68.2	68.7	66.2	60.6	54.6	94.5	87.1	85.8	82.2	77.6	78.3	78.6	75.2

Table A9: Location 1, L_{eq} and L_{max} frequency data, 9-10 September 2014

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
11:00 - 11:10	65.5	58.7	54.2	57.4	63.0	60.7	53.6	40.8	74.8	67.7	62.2	75.7	77.9	77.6	70.8	59.1
11:10 - 11:20	66.4	57.8	54.3	55.8	50.5	50.0	46.5	40.5	75.2	70.0	72.6	68.3	65.7	62.8	60.1	61.1
11:20 - 11:30	66.3	58.3	54.5	56.3	50.1	50.3	47.6	41.8	75.7	73.9	70.2	65.2	69.3	70.1	72.2	65.0
11:30 - 11:40	65.8	59.0	55.7	56.4	52.9	50.8	42.9	39.7	77.8	71.5	69.0	70.3	69.1	66.8	55.0	57.6
11:40 - 11:50	66.4	58.3	53.9	56.4	49.5	48.8	43.9	41.1	72.8	70.3	67.4	71.0	62.2	62.8	59.7	68.0
11:50 - 12:00	66.0	58.0	53.5	55.6	49.5	48.6	43.2	40.2	73.2	67.0	69.0	66.8	66.4	63.6	60.6	64.0
12:00 - 12:10	65.5	58.7	53.2	53.9	49.7	47.4	41.1	37.5	83.5	84.0	72.3	68.4	66.9	63.4	58.8	63.7
12:10 - 12:20	64.1	59.0	53.8	52.8	49.9	45.2	37.6	29.4	78.1	80.7	68.3	68.3	64.1	62.2	57.9	56.0
12:20 - 12:30	65.1	58.8	54.6	56.2	60.2	56.3	48.2	36.4	74.6	70.8	67.8	70.5	76.7	75.2	63.2	56.9
12:30 - 12:40	64.1	58.9	54.7	59.1	65.0	61.9	55.4	41.4	73.4	70.7	63.8	77.2	79.3	75.5	76.5	57.3
12:40 - 12:50	64.7	59.3	55.4	60.0	65.7	63.4	55.7	42.4	78.6	70.6	65.9	74.6	80.7	79.1	76.9	62.2
12:50 - 13:00	65.6	61.9	58.2	60.3	64.9	63.3	55.0	42.2	76.9	77.2	71.4	77.6	78.8	79.6	72.7	60.6
13:00 - 13:10	64.8	58.5	54.8	60.2	65.7	64.8	56.9	43.3	74.0	69.4	64.4	75.2	78.7	79.2	72.3	60.3
13:10 - 13:20	65.1	58.7	54.5	59.4	65.0	63.8	56.8	43.5	73.0	69.2	66.8	71.3	78.2	77.9	74.3	61.5
13:20 - 13:30	64.8	58.8	54.9	53.7	51.1	48.2	41.9	36.3	74.7	71.3	64.4	63.9	65.9	71.7	61.6	52.4
13:30 - 13:40	63.8	57.9	53.1	50.9	48.5	44.9	38.1	29.9	72.9	72.4	63.8	63.6	59.9	57.7	50.5	51.2
13:40 - 13:50	64.1	58.8	54.9	53.7	55.4	53.2	53.4	51.5	73.9	71.2	69.1	70.8	71.7	64.7	64.8	62.9
13:50 - 14:00	64.3	60.0	57.8	54.8	51.3	47.2	44.1	40.5	74.9	77.8	79.9	76.4	69.8	61.6	58.2	56.6
14:00 - 14:10	64.3	58.0	52.7	49.9	49.6	48.6	40.8	30.7	75.0	73.4	65.8	66.8	71.9	74.8	66.8	59.4
14:10 - 14:20	64.6	58.2	53.4	51.0	49.6	45.9	40.6	31.0	75.9	67.5	62.5	59.2	61.4	57.8	57.5	49.8
14:20 - 14:30	65.4	60.4	54.3	51.8	52.4	50.4	47.6	38.6	78.2	73.7	64.6	62.5	68.7	69.7	70.9	63.6
14:30 - 14:40	65.2	59.4	56.2	54.6	55.1	52.1	44.4	36.4	76.8	73.9	71.0	70.8	72.0	69.1	62.0	60.3
14:40 - 14:50	63.9	59.1	55.0	53.2	52.8	51.9	54.3	44.6	70.6	72.6	72.5	73.7	76.0	78.0	82.8	73.9
14:50 - 15:00	63.7	58.0	53.6	50.9	49.5	47.7	45.4	37.9	70.6	68.0	65.3	57.8	69.3	68.5	69.8	61.4
15:00 - 15:10	64.7	58.3	53.7	53.7	48.6	46.4	41.1	38.8	72.7	69.8	66.8	62.2	69.4	60.3	62.2	64.6
15:10 - 15:20	64.2	59.4	55.2	52.1	49.9	46.3	38.8	27.8	72.9	74.7	71.4	63.0	64.0	59.5	50.4	44.4
15:20 - 15:30	64.3	59.8	56.7	56.0	55.2	51.7	43.9	31.5	73.6	73.4	71.9	70.8	69.5	68.4	64.2	54.7
15:30 - 15:40	65.2	60.3	57.8	58.3	58.9	55.6	47.3	34.0	78.9	74.2	73.2	72.7	71.5	70.3	67.3	49.5
15:40 - 15:50	64.0	57.6	53.0	51.6	51.9	48.6	39.7	27.4	75.0	70.1	62.8	65.8	67.0	66.6	59.1	50.3
15:50 - 16:00	63.6	58.1	53.9	51.9	51.7	48.2	41.3	27.7	71.6	69.0	67.1	63.1	64.6	67.2	69.5	46.7
16:00 - 16:10	64.3	60.1	54.7	56.3	60.1	57.4	50.6	35.9	78.8	81.2	66.3	71.5	76.1	75.8	71.8	55.5
16:10 - 16:20	65.4	59.7	56.8	57.6	59.0	55.7	48.7	40.6	78.2	75.9	74.7	71.5	76.4	72.1	69.9	62.1
16:20 - 16:30	65.2	57.6	53.3	56.9	57.4	55.9	51.7	42.4	71.9	68.0	67.0	73.8	73.6	75.6	77.6	66.7
16:30 - 16:40	65.8	59.4	53.6	56.0	55.0	53.1	49.4	41.9	80.3	79.2	64.1	68.6	72.3	69.3	73.5	66.7
16:40 - 16:50	66.1	58.3	54.4	55.7	54.7	53.1	46.4	41.2	78.4	70.7	65.1	65.3	73.2	72.4	65.5	67.2
16:50 - 17:00	65.4	60.2	57.4	56.2	54.4	52.4	45.9	40.3	77.7	76.9	74.9	66.6	72.4	71.7	67.4	64.3
17:00 - 17:10	65.5	57.8	53.2	54.9	48.2	47.5	42.5	41.1	74.2	70.7	65.0	64.5	60.7	64.7	62.9	65.2
17:10 - 17:20	65.1	58.3	54.0	55.0	51.6	51.0	42.3	40.3	75.1	68.0	68.9	65.9	65.5	68.8	56.9	60.0
17:20 - 17:30	65.5	59.4	54.9	55.3	48.3	47.4	42.2	41.0	73.0	75.3	69.8	65.0	59.8	56.3	63.4	67.4
17:30 - 17:40	65.7	57.7	52.9	54.8	48.1	47.0	42.0	40.6	73.8	67.4	62.0	63.7	56.7	52.9	60.8	61.2
17:40 - 17:50	64.8	58.6	54.4	54.6	52.9	50.6	41.7	38.6	74.6	69.6	65.1	64.6	67.2	65.7	60.5	61.8
17:50 - 18:00	64.4	60.0	54.8	52.8	54.0	49.2	39.9	30.3	74.4	76.6	67.4	63.5	66.5	66.6	67.5	52.7
18:00 - 18:10	64.3	59.7	54.9	53.8	50.3	45.1	37.4	28.7	79.4	71.2	66.1	67.4	62.7	58.0	53.0	47.6
18:10 - 18:20	65.0	61.0	55.9	52.7	50.0	45.5	38.3	28.4	73.2	73.0	69.3	63.2	61.2	57.8	55.8	48.3
18:20 - 18:30	64.3	59.4	54.0	51.1	49.3	45.0	36.9	28.1	72.1	69.2	61.2	63.3	61.4	59.9	54.7	49.7
18:30 - 18:40	64.4	58.0	53.6	50.5	48.6	44.3	38.2	30.5	73.9	65.7	63.0	60.2	58.3	58.3	58.1	46.3
18:40 - 18:50	64.4	59.8	54.4	51.5	54.9	49.4	39.3	27.7	76.5	77.5	72.7	67.8	78.1	72.4	61.5	44.0
18:50 - 19:00	63.6	58.4	53.5	50.3	52.5	50.1	36.9	27.8	72.2	70.1	66.1	60.1	66.7	65.3	50.6	43.3
19:00 - 19:10	64.1	58.1	53.6	50.1	48.1	43.3	35.8	25.8	73.5	70.1	65.5	63.5	59.7	55.6	51.6	44.4
19:10 - 19:20	63.5	57.5	53.2	49.9	48.0	43.0	36.2	27.3	72.9	69.9	62.8	60.1	56.4	52.5	48.9	39.7
19:20 - 19:30	64.0	58.2	53.3	51.1	49.9	45.8	39.7	32.5	77.2	69.2	68.8	64.1	65.3	61.0	62.0	61.5
19:30 - 19:40	63.9	58.3	53.4	51.0	49.2	44.8	37.0	26.5	75.5	70.8	65.8	66.1	61.3	61.0	53.4	45.5
19:40 - 19:50	63.1	57.4	53.0	50.5	49.5	45.4	39.9	29.1	72.6	69.3	64.3	63.1	63.1	61.9	60.0	51.1
19:50 - 20:00	64.4	56.3	52.5	49.7	48.2	43.7	36.7	24.7	76.6	64.7	62.6	57.6	60.3	59.3	56.8	41.7
20:00 - 20:10	63.0	56.5	52.2	49.0	47.6	42.6	35.2	26.6	71.2	65.4	60.6	55.9	59.5	51.6	47.8	37.9
20:10 - 20:20	63.1	56.5	52.4	49.0	48.1	43.7	36.3	26.0	70.6	64.0	61.5	57.3	62.7	57.6	60.2	36.4
20:20 - 20:30	62.8	56.9	52.4	49.2	48.0	43.5	35.5	25.5	70.1	68.2	62.3	60.7	62.2	56.5	50.1	46.5
20:30 - 20:40	63.2	57.4	52.6	49.0	47.5	43.0	38.1	29.4	71.0	69.2	63.4	57.9	57.4	59.3	66.2	58.8
20:40 - 20:50	63.6	57.2	55.5	53.7	52.5	47.6	37.2	29.4	76.2	67.7	71.6	71.2	70.4	65.9	55.4	56.8
20:50 - 21:00	63.2	56.0	52.0	48.4	47.0	42.3	34.7	25.2	77.1	64.2	58.5	53.6	53.3	50.2	51.0	38.3
21:00 - 21:10	62.7	56.7	52.1	48.9	49.5	46.9	36.5	24.1	70.9	67.2	61.2	58.5	65.6	68.0	54.6	41.2
21:10 - 21:20	63.7	58.4	54.6	49.3	47.3	42.7	35.4	25.3	74.4	74.0	73.8	67.5	65.2	63.5	61.6	52.8
21:20 - 21:30	63.4	58.2	53.3	48.8	47.1	42.5	34.4	28.0	71.5	70.4	65.1	60.7	57.4	54.7	50.0	56.4
21:30 - 21:40	63.7	59.4	53.0	50.3	47.5	44.2	38.1	27.7	76.5	78.4	69.5	69.5	65.2	62.3	61.2	52.7
21:40 - 21:50	62.6	55.5	51.3	48.3	47.2	42.2	34.0	23.9	73.7	63.0	58.0	57.0	58.6	51.9	46.6	38.3
21:50 - 22:00	62.4	55.8	51.7	48.9	47.2	42.7	37.3	30.5	69.9	65.4	63.2	66.5	60.1	59.1	62.0	57.0
22:00 - 22:10	63.0	56.2	52.7	48.5	47.5	43.0	35.6	26.7	73.4	64.2	64.3	54.4	53.9	56.2	48.0	37.8
22:10 - 22:20	62.6	56.9	52.7	48.5	47.2	42.6	34.7	26.6	73.1	72.4	68.6	56.1	65.4	62.6	54.4	47.5
22:20 - 22:30	62.4	55.9	51.9	49.6	51.9	46.4	36.6	25.6	74.3	65.9	64.8	62.8	63.8	59.7	54.5	49.0
22:30 - 22:40	62.5	56.2	51.2	48.0	46.9	42.0	33.4	22.2	72.6	67.5	60.7	56.6	55.4	51.1	44.1	36.5
22:40 - 22:50	62.1	57.1	52.1	48.1	47.0	42.3	34.2	23.6	70.4	71.2	65.0	58.6	60.1	59.9	51.5	41.4
22:50 - 23:00	64.1	55.6	52.0	48.5	50.3	44.7	33.4	22.7	77.1	70.6	65.9	59.9	63.3	58.4	42.8	40.1

	Frequency Hz								Frequency Hz							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
23:00 - 23:10	62.5	60.1	57.6	51.1	50.4	45.1	35.8	23.8	79.5	83.2	83.8	75.8	69.6	61.9	55.5	45.0
23:10 - 23:20	62.8	55.3	51.1	47.8	47.0	42.5	34.3	21.8	76.0	66.0	58.3	55.5	58.9	57.5	52.5	37.4
23:20 - 23:30	61.8	56.0	52.1	51.4	52.9	47.1	37.5	23.0	71.0	65.8	61.5	74.8	73.8	67.7	58.1	44.5
23:30 - 23:40	61.4	56.1	51.4	47.9	46.9	41.9	34.0	22.6	69.3	65.4	61.6	57.2	58.6	52.4	46.6	37.7
23:40 - 23:50	61.8	54.9	50.3	47.5	47.2	42.4	34.7	23.8	69.6	67.4	57.3	57.0	58.3	54.7	45.8	41.4
23:50 - 00:00	60.9	54.1	50.0	46.7	45.9	40.9	32.1	20.2	68.5	61.7	57.2	54.1	53.4	55.4	51.1	36.9
00:00 - 00:10	61.0	54.2	50.4	47.3	46.5	42.2	35.7	24.8	70.8	64.2	64.7	56.7	61.0	56.4	52.9	41.2
00:10 - 00:20	61.5	56.2	52.8	48.8	47.3	42.6	32.7	20.0	70.1	69.9	67.1	60.3	60.7	59.1	44.7	35.0
00:20 - 00:30	61.5	54.8	50.5	48.4	54.9	51.5	40.0	26.0	71.5	67.6	58.8	62.9	67.8	67.5	54.9	46.7
00:30 - 00:40	60.5	53.6	50.0	47.5	49.8	47.3	39.5	24.7	69.6	63.0	63.5	59.7	63.8	63.0	58.0	45.8
00:40 - 00:50	60.3	53.7	49.5	45.7	45.2	40.1	30.8	19.6	69.5	66.2	55.1	55.8	57.2	53.9	45.8	32.4
00:50 - 01:00	59.8	53.7	49.3	45.4	44.5	39.1	30.2	19.8	69.8	65.2	54.4	52.0	50.2	47.8	46.5	46.0
01:00 - 01:10	59.0	52.7	48.8	44.9	44.4	39.1	29.6	18.6	66.6	62.5	55.2	53.0	50.5	47.5	39.4	27.2
01:10 - 01:20	58.8	52.7	48.6	45.0	44.3	39.0	29.9	19.9	68.7	60.3	57.8	54.7	56.1	52.8	47.5	40.3
01:20 - 01:30	59.4	53.2	49.1	46.4	45.1	40.1	31.1	20.1	67.5	67.0	64.6	59.5	57.8	53.4	48.1	38.2
01:30 - 01:40	58.5	53.6	49.4	45.4	44.1	38.7	29.4	18.4	67.6	69.6	63.8	59.0	56.0	53.8	47.0	32.4
01:40 - 01:50	58.8	52.4	49.3	46.1	45.0	39.8	30.4	20.0	68.6	62.6	60.8	61.1	55.9	51.3	44.5	33.3
01:50 - 02:00	59.1	52.2	47.9	44.6	43.6	38.6	29.2	18.7	70.3	62.4	61.6	56.6	55.0	51.0	44.3	42.4
02:00 - 02:10	59.2	52.3	48.3	44.9	44.1	38.9	29.3	18.6	73.2	60.3	54.5	51.9	52.5	47.9	41.7	37.5
02:10 - 02:20	58.8	51.9	48.2	45.0	44.3	39.2	30.2	19.5	70.0	59.0	55.8	51.3	51.3	47.3	42.1	34.9
02:20 - 02:30	58.1	51.9	48.1	44.1	43.0	38.1	28.6	17.8	68.6	58.2	53.3	49.0	49.1	46.4	40.0	29.0
02:30 - 02:40	58.7	51.4	47.9	44.3	43.6	38.2	28.2	17.6	72.3	57.7	55.9	49.6	51.1	45.4	35.6	30.4
02:40 - 02:50	58.4	52.0	47.7	44.4	43.5	38.0	28.3	17.5	69.4	67.5	57.2	56.0	57.0	50.4	37.5	33.5
02:50 - 03:00	59.1	52.1	48.3	44.8	46.6	40.6	29.0	17.7	69.5	65.3	56.8	60.9	64.1	58.2	41.5	30.1
03:00 - 03:10	58.5	52.0	47.7	44.4	43.7	38.6	29.2	18.3	69.6	58.8	53.3	54.4	53.5	51.0	42.3	33.8
03:10 - 03:20	58.6	51.9	47.8	44.7	45.4	40.0	29.0	18.2	72.2	61.7	61.6	56.1	60.1	58.9	42.8	31.9
03:20 - 03:30	58.4	52.4	48.4	44.7	43.7	38.7	29.6	18.6	71.1	61.0	60.3	57.9	50.0	45.4	43.8	31.0
03:30 - 03:40	58.5	52.4	48.3	45.0	44.2	39.2	29.6	18.6	69.1	62.8	56.5	52.4	51.9	47.4	39.8	32.4
03:40 - 03:50	58.4	51.9	47.8	44.0	43.3	38.2	29.2	19.2	74.5	59.2	51.9	49.2	49.3	48.8	41.1	40.4
03:50 - 04:00	58.9	52.2	48.5	44.7	43.8	38.8	30.1	19.6	70.9	59.7	54.6	51.5	51.8	48.1	44.5	36.2
04:00 - 04:10	59.1	55.9	53.7	49.4	45.9	41.7	33.5	22.8	69.0	78.4	75.7	73.7	67.4	65.2	57.7	45.6
04:10 - 04:20	59.4	53.3	49.5	46.2	45.3	40.7	32.3	20.6	69.4	63.5	55.6	53.3	55.9	56.1	45.5	32.4
04:20 - 04:30	60.7	53.8	50.1	47.1	45.8	40.7	32.1	21.4	69.8	63.0	59.9	57.9	62.1	59.3	49.2	36.8
04:30 - 04:40	60.1	53.1	48.8	45.4	45.3	40.1	31.1	19.9	69.1	61.7	54.1	51.6	51.4	48.1	43.2	32.8
04:40 - 04:50	60.3	53.0	49.1	45.5	44.7	39.5	30.7	19.2	69.9	60.1	57.5	52.3	50.1	49.0	41.7	29.6
04:50 - 05:00	60.3	53.6	49.5	46.4	45.7	41.1	32.3	21.4	68.9	62.6	61.0	57.0	55.4	55.9	46.2	37.3
05:00 - 05:10	60.3	53.4	49.6	45.7	45.6	40.3	31.2	21.5	71.4	62.4	57.6	52.8	56.6	50.8	43.8	48.3
05:10 - 05:20	61.2	56.2	51.2	47.3	47.3	44.2	35.9	25.1	73.4	72.0	62.9	55.7	63.0	59.2	54.3	46.4
05:20 - 05:30	61.4	55.1	52.2	48.8	46.1	40.3	31.7	19.5	73.2	67.9	68.3	67.1	60.7	50.8	52.2	33.1
05:30 - 05:40	61.4	55.2	51.1	47.7	46.8	43.0	36.0	24.9	73.6	64.5	61.0	59.9	61.7	65.3	62.1	49.4
05:40 - 05:50	61.6	55.3	52.0	48.4	46.8	41.5	33.5	23.1	73.3	62.0	59.0	55.6	57.2	50.3	53.5	39.3
05:50 - 06:00	63.8	57.0	52.6	49.0	47.9	43.8	36.7	25.9	74.6	67.6	63.7	61.7	61.4	63.5	60.0	51.9
06:00 - 06:10	63.5	57.9	53.0	49.6	48.8	45.1	37.4	27.7	72.7	69.0	71.1	63.8	65.2	65.3	60.5	50.5
06:10 - 06:20	65.5	60.4	56.3	55.1	54.3	51.3	46.7	39.2	76.0	75.5	68.1	69.9	70.7	69.0	65.2	59.6
06:20 - 06:30	67.0	62.6	58.9	57.5	54.3	47.6	39.0	29.0	85.7	78.6	76.1	75.0	71.3	63.7	60.4	57.3
06:30 - 06:40	64.9	59.9	55.3	50.6	48.8	45.2	38.3	28.7	73.6	73.4	70.0	66.3	61.3	65.9	62.5	53.5
06:40 - 06:50	64.6	59.2	54.4	51.2	49.0	44.4	35.6	25.4	73.4	68.7	60.9	60.9	64.3	65.8	58.1	46.0
06:50 - 07:00	66.8	62.4	59.7	57.2	54.3	50.5	40.3	27.4	79.1	74.3	74.6	72.0	66.9	65.0	52.9	47.4
07:00 - 07:10	65.7	60.8	56.4	53.0	51.0	47.5	39.3	30.2	76.7	76.7	68.2	68.9	63.8	62.2	61.6	59.8
07:10 - 07:20	65.6	60.7	55.7	51.8	50.4	47.0	40.1	28.0	82.6	75.2	67.5	63.6	62.4	64.7	61.0	46.5
07:20 - 07:30	64.9	59.7	54.3	51.2	48.7	45.7	40.4	32.9	73.1	75.6	70.2	69.6	67.5	68.3	65.3	53.4
07:30 - 07:40	65.2	59.8	54.7	51.0	49.1	48.4	45.6	42.2	74.9	69.1	64.9	58.6	56.4	62.9	61.4	58.1
07:40 - 07:50	65.7	60.6	55.6	52.0	50.1	49.1	47.2	43.6	77.6	73.6	71.2	67.5	63.8	59.9	60.4	61.1
07:50 - 08:00	65.0	59.2	54.1	50.9	48.5	44.3	36.5	26.2	75.6	70.2	67.6	61.5	58.4	55.1	50.4	39.4
08:00 - 08:10	65.0	59.3	54.2	52.5	49.1	46.2	40.3	36.7	72.9	70.3	64.1	62.6	65.7	64.9	58.9	61.8
08:10 - 08:20	65.6	59.3	53.7	54.5	48.6	47.3	41.8	39.6	75.2	78.5	68.2	61.6	62.5	59.5	53.8	62.2
08:20 - 08:30	65.8	59.0	53.7	54.8	48.7	47.7	42.2	40.2	73.6	68.4	64.5	65.4	63.1	57.0	57.6	59.8
08:30 - 08:40	65.8	58.6	53.5	55.2	50.5	49.0	43.4	40.6	71.8	66.8	64.4	65.1	64.7	66.2	63.6	61.3
08:40 - 08:50	66.3	62.3	55.1	57.5	56.5	53.5	48.0	42.8	81.3	80.4	69.8	69.4	73.1	69.3	65.1	64.1
08:50 - 09:00	66.0	61.2	56.1	55.2	50.5	49.0	43.9	41.3	75.9	70.7	67.8	60.2	61.3	58.8	62.7	62.3
09:00 - 09:10	65.8	59.8	54.1	54.8	49.5	48.7	43.9	41.2	73.5	69.6	64.2	61.1	64.3	64.1	68.4	66.5
09:10 - 09:20	64.7	57.9	53.3	52.3	50.8	49.3	42.5	39.2	74.6	65.3	64.7	64.5	66.7	65.4	61.2	61.2
09:20 - 09:30	65.5	62.9	56.6	52.4	54.2	51.5	42.9	37.1	77.1	77.0	70.4	62.6	74.5	76.5	66.6	65.7
09:30 - 09:40	65.7	61.3	56.6	54.5	52.4	47.7	41.5	37.6	75.6	76.2	71.5	70.2	71.6	62.3	60.8	61.6
09:40 - 09:50	64.8	58.1	53.8	52.5	49.2	46.4	40.2	36.3	74.9	67.4	67.0	65.2	64.0	60.2	57.7	60.1
09:50 - 10:00	64.7	58.0	53.6	53.9	49.8	48.1	42.5	40.1	72.2	74.7	68.5	65.2	71.6	67.9	59.1	61.9
10:00 - 10:10	65.3	59.5	55.6	52.7	50.4	47.9	42.3	36.1	75.2	76.7	76.1	72.4	66.5	66.5	65.7	64.0
10:10 - 10:20	67.1	60.8	57.1	57.1	57.0	55.8	51.3	44.1	81.1	81.7	76.8	77.1	80.1	80.2	76.5	64.5
10:20 - 10:30	64.6	57.8	53.3	54.7	55.7	54.6	50.0	42.6	73.6	67.7	67.0	68.5	72.2	74.4	70.4	64.5
10:30 - 10:40	65.8	59.1	54.7	59.8	64.4	63.1	56.1	44.5	74.4	70.6	69.2	78.3	75.6	76.9	74.1	63.4
10:40 - 10:50	65.6	57.5	53.4	57.4	60.8	58.4	51.9	42.8	74.1	67.0	65.2	73.4	80.9	72.6	71.1	61.9
10:50 - 11:00	66.1	58.4	53.9	59.4	63.3	60.8	54.0	43.2	75.6	70.0	68.0	75.1	76.9	75.3	72.3	62.6

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?		✓	Commercial hotel not residential
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?		✓	Not applicable
Other Considerations/Comments (please specify)			

Signed



Name

JOHN LLOYD

Company details

Scotch Partners LLP

Date

December 2014

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: 12 December 2014

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