



SKELLY&COUCH

P1210 – Linton House
Environmental Noise Assessment
December 2012

1) Introduction

The site is located on Highgate Road in the London Borough of Camden. The main sources of noise affecting the site are traffic on Highgate Road, and other nearby Streets as well as residential and commercial activity noise.

This report presents the results of an environmental noise survey of the site undertaken between 14th of December 2012 and 17th of December 2012.

The definitions of some common acoustic terminology are given at the end of this document. If required, other definitions can be found in standard acoustic texts.

2) Measurement Procedure

A 70 hour environmental noise survey of the site (postcode – NW5 1RT) was undertaken between 12:00 on 14th December and 10:00 on 17th December 2012.

The weather during the survey was generally mild and clear. There was light rain for approximately 4 hours during the afternoon of 14th and 16th December and the average temperature was around 9° C (see Figure 1).

A microphone windshield was used during all measurements as a precaution.

The main sources of noise affecting the site are:

- Traffic and pedestrian noise from Highgate Road, and other nearby, streets.
- Activity noise from neighbouring residential and commercial properties

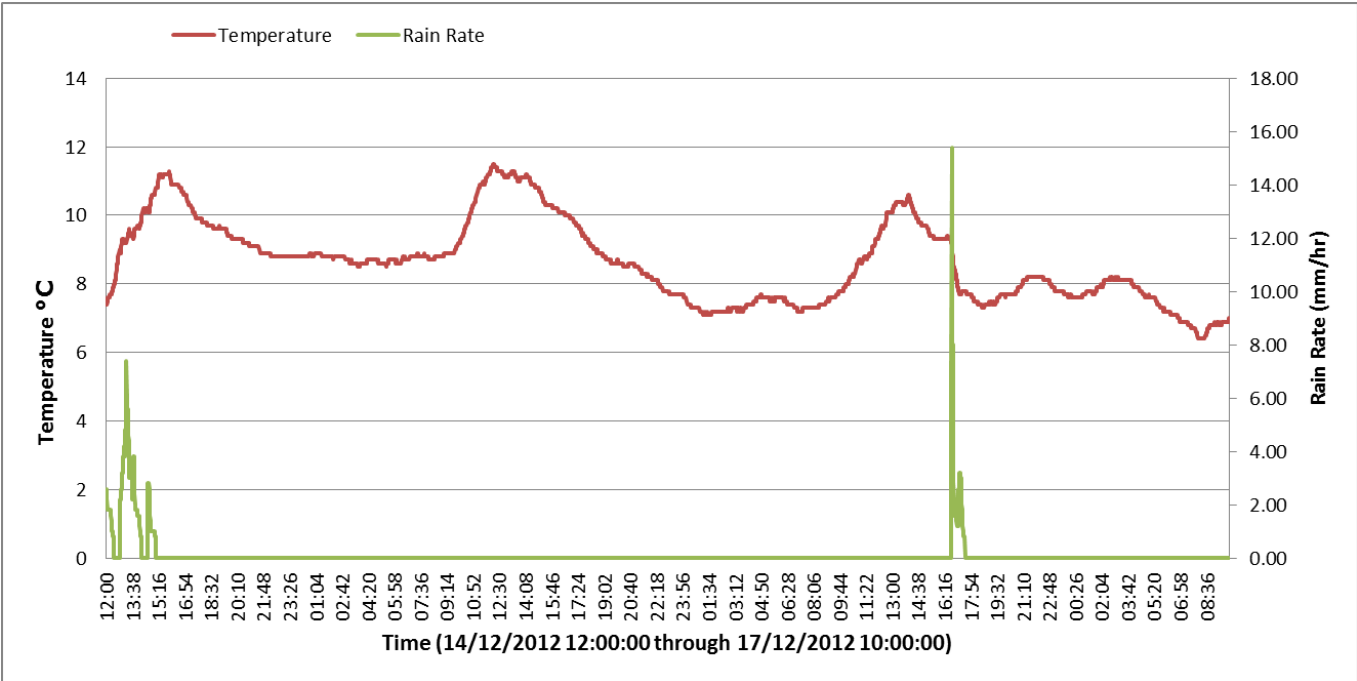


Figure 1: Temperature and rainfall data measured at Islington, London
(Data from Atomwide Weather Monitoring System).

Figure 2 shows the location at which the noise measurement was made. Figure 3 shows photographs taken during the survey.

Data was logged every second and statistical values were calculated and stored every 15 minutes, for a period of 70 hours. The microphone was approximately 1.2m above the roof level.

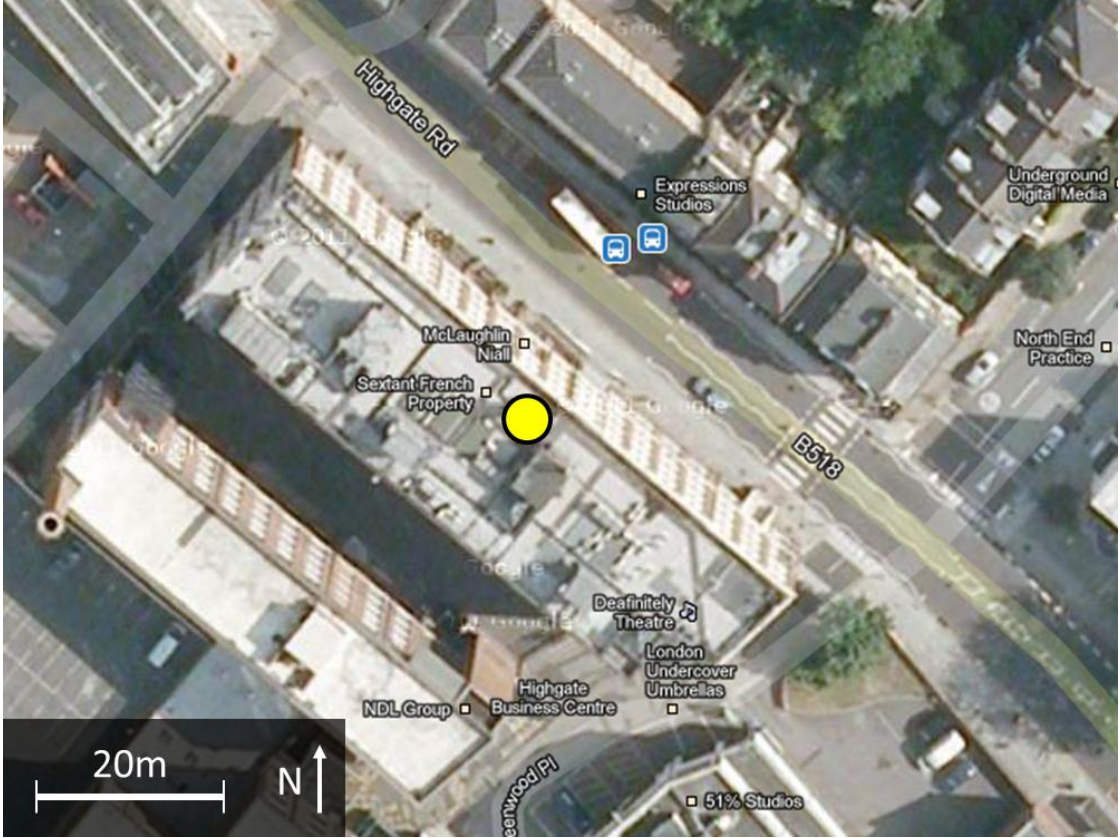


Figure 2: The noise survey location.

All measurements were made using a Norsonic 140 Sound Level Meter (serial number 1403338) conforming to BS EN IEC 61672 Class 1 and a Norsonic 1214 outdoor microphone protection kit (serial number 12146225). Calibration certificates are available on request.

The meter and microphone were calibrated both before and after the survey using a Norsonic 1251 Calibrator (serial number 32123) conforming to type 1 of BS EN 60942. No significant variations were observed.

The batteries were checked both before and after the measurements.



Figure 3: Photos of Noise Survey

3) Measurement Results

The graph in Figure 4 shows the results of the 70-hour noise survey. The graph shows the variation in the A-weighted values (L_{Aeq} , L_{AF10} and L_{AF90}) across the measurement period. The corresponding octave band data is appended to this report in table format for reference.

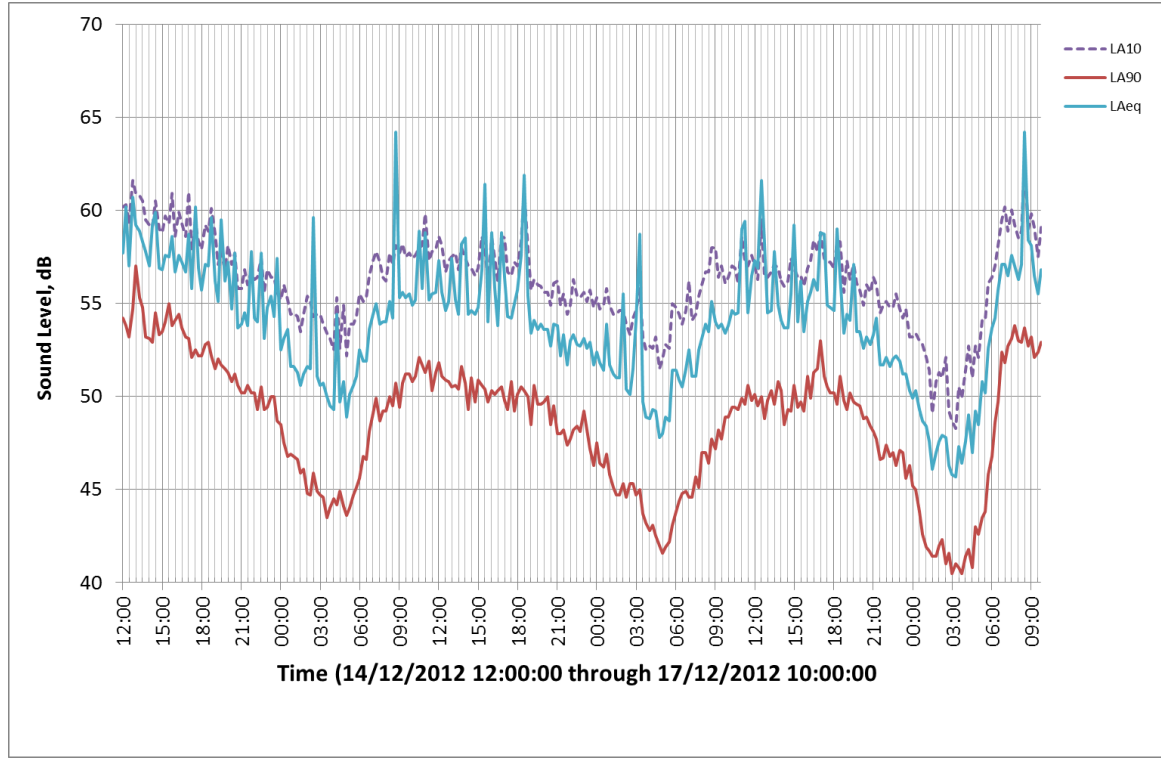


Figure 4: 70-hour noise levels

4) Analysis of Results

The 70-hour variation in noise level measured can (by convention) be summarised by the following average levels:

- $L_{day} = L_{Aeq,7am-7pm} = 57.0dB$
- $L_{evening} = L_{Aeq,7pm-11pm} = 54.4dB$
- $L_{night} = L_{Aeq,11pm-7am} = 51.9dB$

Planning Policy Guidance 24

Although now superseded by the National Planning Policy Framework, PPG24 gives useful guidance to local authorities in England on the use of their planning powers to minimise the adverse impact of noise. It outlines the considerations to be taken into account in determining planning applications both for noise-sensitive developments and for those activities which will generate noise.

$L_{Amax(slow)}$ levels did not exceeded 82dB during the night time periods of the 70 hour noise survey. The night time noise level of $L_{Aeq,11pm-7am} = 51.9dB$ and the daytime noise level of $L_{Aeq,7am-11pm} = 56.5dB$ put the location into Noise Exposure Category B.

The corresponding advice is that “Noise should be taken into account when determining planning applications and, where appropriate, conditions imposed to ensure an adequate level of protection against noise”.

Indoor Ambient Noise Levels

The break-in of external noise to a space is generally dominated by the noise which passes via any ventilation openings.

British Standard 8233 (1999) suggests that the indoor ambient noise level within living rooms, to achieve reasonable resting conditions, should be $L_{Aeq,t} = 30\text{dB}$ for ‘Good’ conditions and $L_{Aeq,t} = 40\text{dB}$ for ‘Reasonable’ conditions.

BS 8233 suggests that the indoor ambient noise level within bedrooms at night should be $L_{Aeq,t} = 30\text{dB}$ for ‘Good’ conditions and $L_{Aeq,t} = 35\text{dB}$ for ‘Reasonable’ conditions.

In order to achieve these indoor noise level criteria mechanical ventilation and/or acoustically attenuated natural ventilation will be required.

Noise Impact

It is likely that there will be planning conditions imposed on the development to ensure that any new items of plant and machinery do not cause an annoyance and give rise to complaints.

The usual method for assessing the impact of industrial noise is British Standard 4142:1997

BS4142:1997 suggests that where a noise rating level is 10dB or more below the existing background noise level it is a positive indication that complaints are unlikely.

The minimum measured background noise level during the night (11pm – 7am) is $LA_{90,15\text{min}}=40.5\text{dB}$, occurring between 3:00am and 3:15am on 17th December. The noise rating level from all new plant equipment and machinery should therefore be below $L_{Aeq,t} = 30.5\text{dB}$ at the nearest noise sensitive location during night time hours.

The minimum measured background noise level during the day (7am – 11pm) is $LA_{90,15\text{min}}=44.6\text{dB}$, occurring between 7am and 7:30am on 16th December. The noise rating level from all new plant equipment and machinery should therefore be below $L_{Aeq,t} = 34.6\text{dB}$ at the nearest noise sensitive location during daytime hours.

Any openings and flues shall be sufficiently attenuated in order to meet the target noise levels. Any items of external plant may require screening in the form of acoustic louvres in order to meet the target noise levels.

5) Conclusions

- A 70-hour environmental noise survey was undertaken between 12:00 on 14th December and 10:00 on 17th December 2012.
- The measured 70-hour average values were $L_{day}=57.0\text{dB}$, $L_{evening}=54.4\text{dB}$ and $L_{night}=51.9\text{dB}$.
- The minimum measured daytime background noise level is $LA_{90,15\text{min}}=44.6\text{dB}$. The minimum measured night time background noise level is $LA_{90,15\text{min}}=40.5\text{dB}$.
- During the measurement period individual noise events did not exceed 82 dB L_{Amax} (Slow) during night time periods.
- Measurement values place the location with PPG24 Noise Exposure Category ‘B’.
- Mechanical ventilation and/or acoustically attenuated natural ventilation will be required in order to achieve recommended indoor ambient noise levels.
- The combined noise from building services shall be below $L_{Aeq,t} = 34.6\text{dB}$ during daytime hours and $L_{Aeq,t} = 30.5\text{dB}$ during night-time hours at the nearest noise sensitive location.

6) Glossary of Acoustic Terminology

Frequency

The rate of vibration of the air molecules which transmit the sound. Measured in cycles per second or Hertz, Hz. The human ear is sensitive to sound in the range 20Hz – 20kHz.

The frequency spectrum is commonly divided into a series of octave bands. The 8 standard octave bands are centred on the following frequencies: 63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz.

dB, Decibel

Decibels are used to measure the magnitude of sound on a logarithmic scale. In subjective terms, a 3dB increase in sound level is just noticeable and a 10dB increase in sound level is perceived as a doubling of loudness.

Sound Pressure Level, Lp

A measure of the instantaneous sound pressure at a point in space expressed on a logarithmic (i.e. decibel) scale that is arranged so that the zero-point (0dB) corresponds to the threshold of human hearing.

A-weighting

The A-weighting is a standard method of weighting sound levels at different frequencies to simulate the sensitivity of the human ear to sounds of different frequencies. Using this weighting allows the full frequency spectrum of data to be represented by a single figure.

A-weighted parameters are given a subscript “A” – for example L_{Aeq} or L_{AF90} . Alternatively, A-weighted values are sometimes expressed in dB(A) units.

Time-weighting

Sound level meters generally use a time-weighting system whereby the measured value is actually an average over a short period of time. This is used so that the measurement display does not jump about so rapidly that it cannot be read. The most commonly used time-weighting is the “fast” time weighting where readings are averaged over 0.125 seconds.

Values using a “fast” time weighting are given a subscript “F” – for example L_{AF90} .

Equivalent Continuous Noise Level, $L_{eq,T}$

This is an energy average of a varying sound level over a particular period of time, T. Using this type of averaging allows the full set of data of sound level versus time to be summarised as a single average value.

Equivalent continuous noise levels are given the subscript “eq” – for example L_{Aeq} . The equivalent continuous level is not dependent on which time-weighting was used because it is itself an average value.

N% EXCEEDENCE SOUND PRESSURE LEVEL, $L_{AFN,T}$

This is the A-weighted sound pressure level which is exceeded for N% of the time during a measurement period T. The subscript F denotes the time-weighting.

$L_{AF10,T}$ (the level exceeded for 10% of the time) is commonly used as a measure of traffic noise.

$L_{AF90,T}$ (the level exceeded for 90% of the time) is commonly used as a measure of background noise.

Page 1 of 5		Leq										L1										L10										L90									
Time	Date	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A				
12:00 - 12:15	14/12/2012	66.9	59.3	54.8	52.1	53.1	51.5	46.2	36.9	57.7	74.5	67.7	61.0	57.0	57.3	56.8	51.8	42.8	62.4	69.6	61.7	57.2	54.2	55.6	54.0	49.1	39.9	60.2	61.7	54.5	51.0	48.8	49.6	47.3	40.9	30.9	54.2				
12:15 - 12:30	14/12/2012	67.5	60.8	57.6	54.3	56.4	53.6	46.9	35.8	60.2	76.0	71.3	68.7	65.4	67.6	64.1	57.4	45.4	70.8	70.2	62.8	59.6	55.3	55.8	53.3	48.0	38.1	60.3	62.1	55.1	51.2	48.7	49.1	46.2	39.1	27.4	53.8				
12:30 - 12:45	14/12/2012	66.5	58.7	55.3	52.2	52.5	50.0	44.6	35.3	57.0	73.0	66.2	63.8	59.3	56.5	54.3	49.4	40.8	61.7	69.4	61.2	58.0	54.5	54.9	52.6	47.6	38.4	59.3	61.6	54.3	50.7	48.4	48.6	45.6	39.4	28.4	53.2				
12:45 - 13:00	14/12/2012	66.3	58.4	54.2	53.3	58.4	52.2	46.8	38.4	60.7	73.4	64.7	60.2	61.9	71.3	59.0	51.4	43.3	71.9	68.9	60.8	56.4	55.2	59.3	54.4	49.2	40.4	61.6	61.7	54.7	51.1	49.3	50.0	47.8	42.7	35.0	54.7				
13:00 - 13:15	14/12/2012	67.8	59.4	56.3	54.0	54.1	53.0	48.2	41.4	59.2	75.3	67.4	65.0	62.3	58.8	57.1	52.0	46.2	64.2	70.8	62.0	58.4	55.1	55.7	54.7	49.9	43.6	60.9	62.8	55.1	52.3	51.3	51.8	50.8	45.9	38.0	57.0				
13:15 - 13:30	14/12/2012	67.3	59.5	57.1	54.1	53.5	52.6	47.9	41.0	58.9	75.0	67.4	67.0	63.6	58.7	57.0	52.3	46.1	64.1	70.3	62.1	58.8	55.7	55.5	54.8	50.4	44.0	60.8	62.1	55.0	51.5	49.8	50.0	48.2	42.8	35.9	55.3				
13:30 - 13:45	14/12/2012	66.7	59.9	56.2	53.2	53.1	52.0	47.2	38.7	58.3	73.5	67.6	64.2	60.0	57.6	56.0	51.2	43.2	62.7	69.5	62.8	58.7	55.4	55.2	54.4	49.6	41.0	60.5	62.0	55.3	51.5	49.4	49.6	48.2	42.9	35.3	54.8				
13:45 - 14:00	14/12/2012	66.6	57.7	54.0	51.5	53.1	52.3	45.4	36.8	57.8	75.0	64.5	60.6	56.9	62.0	62.2	51.5	42.7	65.8	69.3	60.2	56.5	53.9	54.9	53.2	48.0	39.2	59.5	61.4	54.1	50.5	48.0	48.6	46.2	39.8	30.6	53.2				
14:00 - 14:15	14/12/2012	67.3	59.1	55.5	52.1	52.1	50.3	45.1	35.9	57.0	75.9	66.5	64.1	59.5	56.5	54.6	49.5	41.3	62.1	70.1	61.8	58.0	54.1	54.5	52.9	47.9	38.4	59.2	61.7	54.6	50.9	48.1	48.2	45.9	39.7	30.3	53.1				
14:15 - 14:30	14/12/2012	66.3	57.4	53.9	51.5	55.9	53.0	46.9	36.8	59.2	73.9	63.5	60.4	57.1	67.7	64.6	57.4	45.6	70.5	69.0	59.7	56.3	53.5	54.7	52.8	48.0	39.1	59.1	61.5	54.1	50.6	48.1	48.0	45.7	39.9	30.1	52.9				
14:30 - 14:45	14/12/2012	68.1	61.8	60.5	57.4	54.6	51.4	46.2	38.1	59.9	78.3	73.8	74.2	71.1	66.3	57.5	51.0	44.7	71.6	70.5	61.9	58.9	55.2	55.6	53.9	48.9	41.0	60.5	61.7	54.8	51.6	49.3	49.7	47.3	41.2	31.6	54.5				
14:45 - 15:00	14/12/2012	66.4	58.5	56.0	52.5	52.6	49.6	43.8	33.8	56.9	73.2	64.9	63.5	59.4	57.3	53.4	48.2	39.1	61.3	69.2	60.9	58.5	54.5	54.7	51.7	46.3	36.5	59.0	61.6	54.9	51.5	48.7	48.8	45.6	38.7	27.9	53.3				
15:00 - 15:15	14/12/2012	65.6	58.5	55.6	52.4	52.6	49.5	43.0	34.1	56.8	73.4	64.6	62.0	57.8	57.1	54.7	48.3	42.8	61.6	68.2	60.7	58.0	54.7	54.7	51.7	45.7	36.1	58.8	60.8	55.0	51.8	49.2	49.1	45.6	38.3	26.7	53.5				
15:15 - 15:30	14/12/2012	67.3	59.9	56.8	54.3	53.1	49.9	42.6	32.3	57.6	74.8	67.1	65.0	61.1	58.7	57.3	48.7	39.7	64.3	70.3	62.5	59.1	56.9	55.3	51.7	45.4	35.3	59.7	61.8	55.4	52.4	50.1	49.5	45.7	37.9	26.2	54.0				
15:30 - 15:45	14/12/2012	69.2	60.6	57.8	54.0	52.9	49.3	42.7	32.2	57.5	76.8	67.3	64.7	60.6	57.1	53.7	48.1	39.3	62.2	71.6	62.7	60.2	56.0	54.7	51.2	44.5	34.4	59.3	63.9	56.7	53.3	50.6	50.4	46.8	39.4	28.0	55.0				
15:45 - 16:00	14/12/2012	69.4	60.6	56.7	53.9	53.8	52.4	43.2	37.2	58.6	79.8	68.6	63.9	60.6	62.2	63.0	51.0	49.3	67.2	71.5	63.1	59.5	56.6	56.0	53.0	45.8	39.7	60.9	62.2	56.0	52.2	49.6	49.1	45.5	37.7	26.0	53.8				
16:00 - 16:15	14/12/2012	71.4	61.6	56.3	52.9	51.8	48.5	41.9	32.6	56.7	81.9	70.7	63.6	59.6	56.5	53.4	48.8	42.1	62.9	73.9	63.7	58.3	54.8	53.7	50.4	44.1	34.7	58.6	63.6	56.6	53.1	50.0	49.2	45.7	37.8	26.3	54.1				
16:15 - 16:30	14/12/2012	72.8	63.0	56.8	53.8	52.9	49.1	42.3	33.9	57.6	83.9	72.3	63.4	60.6	59.8	55.2	50.7	44.4	64.2	75.2	65.4	59.4	56.2	55.1	51.2	44.8	35.8	59.9	63.6	56.7	52.9	50.2	49.6	46.1	37.6	26.3	54.4				
16:30 - 16:45	14/12/2012	72.3	62.2	56.6	53.5	52.5	48.6	41.2	33.0	57.2	84.0	72.0	64.3	60.2	58.3	54.4	49.4	43.9	63.9	74.4	64.7	59.2	55.8	54.5	50.7	43.6	35.1	59.3	62.0	55.5	52.0	49.4	49.3	45.2	36.7	25.0	53.7				
16:45 - 17:00	14/12/2012	72.6	62.3	55.7	52.3	52.0	48.2	41.																																	

Page 2 of 5		Leq										L1										L10										L90									
Time	Date	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A				
03:15 - 03:30	15/12/2012	60.5	53.8	48.9	46.3	47.4	42.3	31.5	19.1	50.7	70.0	64.6	57.1	53.6	55.2	50.3	40.1	27.5	57.9	63.1	54.8	51.4	49.6	50.9	45.6	34.7	21.7	53.9	53.5	47.3	44.0	41.2	40.6	34.9	24.1	14.4	44.6				
03:30 - 03:45	15/12/2012	59.7	50.8	47.6	45.5	46.7	42.3	31.8	19.0	50.0	69.1	57.6	53.8	52.0	54.7	50.3	40.8	28.0	57.3	62.0	53.3	50.2	48.8	50.2	45.9	35.6	22.7	53.4	53.1	46.3	43.1	40.2	39.6	33.3	22.3	13.8	43.5				
03:45 - 04:00	15/12/2012	59.4	51.6	47.8	45.2	46.0	41.7	31.2	19.1	49.5	70.2	60.3	56.5	52.7	53.3	48.8	39.6	28.8	56.7	61.8	53.9	50.1	48.3	49.6	45.6	34.6	21.5	53.1	52.9	46.4	43.3	40.7	40.0	34.1	22.7	14.0	44.0				
04:00 - 04:15	15/12/2012	60.7	51.2	47.7	44.7	46.0	41.2	32.9	22.5	49.3	72.1	60.0	56.3	52.3	53.1	49.2	44.5	35.4	56.8	61.7	53.3	49.8	47.4	49.4	44.9	34.9	22.5	52.5	53.5	46.8	43.6	40.7	40.6	35.1	23.6	14.2	44.5				
04:15 - 04:30	15/12/2012	60.5	56.7	54.8	52.8	50.0	43.9	32.2	19.3	54.4	71.5	69.4	66.8	66.5	62.5	55.7	42.9	29.1	67.4	63.7	57.6	57.3	52.9	51.3	46.2	36.1	22.5	55.3	53.5	47.1	43.5	41.3	40.1	33.7	22.4	14.0	44.2				
04:30 - 04:45	15/12/2012	58.3	51.6	49.0	46.1	45.8	41.0	34.3	24.5	49.7	66.4	58.9	58.4	53.4	53.7	49.3	44.6	36.0	56.7	60.8	53.6	51.3	48.9	48.9	44.7	37.7	27.3	52.6	53.5	47.5	44.1	41.5	40.6	34.4	24.1	14.3	44.9				
04:45 - 05:00	15/12/2012	60.1	51.9	48.5	46.3	47.5	42.9	35.9	25.8	50.8	70.4	59.7	56.6	54.3	55.5	51.3	45.8	37.3	58.1	62.4	54.9	51.4	49.8	51.7	47.3	40.0	28.8	54.9	53.4	47.0	43.5	40.6	39.6	33.5	24.3	14.4	44.1				
05:00 - 05:15	15/12/2012	59.1	51.3	48.0	44.7	45.2	40.3	34.5	25.2	48.9	67.9	58.9	56.8	52.5	53.2	48.9	44.4	36.1	56.8	62.5	54.1	50.4	47.7	48.9	43.9	38.3	28.5	52.2	52.9	46.6	43.4	40.3	39.0	32.4	23.2	14.4	43.6				
05:15 - 05:30	15/12/2012	60.1	55.6	49.8	45.0	46.1	41.4	35.3	25.9	50.1	70.6	68.9	59.3	52.6	54.8	49.9	45.4	37.5	58.1	62.9	56.2	52.1	48.7	49.9	45.4	38.8	28.3	53.9	53.2	46.9	43.7	40.2	39.4	33.4	24.0	14.7	44.0				
05:30 - 05:45	15/12/2012	60.7	52.1	48.8	46.3	46.8	42.8	35.3	26.3	50.6	70.0	59.8	57.0	55.5	55.6	52.1	44.9	35.6	58.9	63.9	55.0	51.4	49.3	50.1	46.2	39.0	30.5	53.9	54.5	47.4	44.3	41.5	40.4	34.9	25.3	14.9	44.7				
05:45 - 06:00	15/12/2012	60.8	52.7	49.7	47.3	47.3	43.0	35.6	25.4	51.1	70.0	60.1	57.1	56.2	56.0	51.0	43.6	34.2	59.4	63.2	55.5	52.4	49.8	50.6	46.6	39.5	29.5	54.3	54.9	48.0	44.9	41.8	40.1	34.6	26.0	15.7	45.1				
06:00 - 06:15	15/12/2012	60.7	54.0	51.7	49.3	48.4	44.0	36.2	25.1	52.5	69.4	63.0	62.4	59.8	57.1	52.8	46.1	35.0	61.7	63.7	57.0	54.3	51.7	51.8	47.5	39.7	28.3	55.5	54.6	48.8	46.0	43.0	40.8	35.5	26.7	16.3	45.6				
06:15 - 06:30	15/12/2012	60.9	54.1	51.0	48.7	47.9	43.4	34.5	23.3	51.9	70.0	60.9	57.8	56.3	54.9	50.9	43.1	32.7	58.7	63.8	56.5	53.6	51.4	51.6	47.4	38.2	27.1	55.1	55.2	49.6	46.6	43.9	41.8	36.2	26.8	15.6	46.8				
06:30 - 06:45	15/12/2012	61.8	54.2	50.9	48.2	48.0	43.9	35.3	24.1	51.9	71.4	61.5	58.1	55.0	55.1	52.3	44.3	33.9	58.6	64.5	56.8	53.6	51.2	51.6	47.7	38.7	27.5	55.3	55.7	49.8	46.7	43.6	41.5	36.0	27.3	16.0	46.6				
06:45 - 07:00	15/12/2012	63.5	55.5	53.3	50.4	49.4	45.0	37.4	26.5	53.6	72.6	63.3	62.6	59.0	56.0	51.7	44.9	34.4	60.1	66.3	58.3	56.2	53.3	52.6	48.1	40.5	30.5	56.5	57.4	50.5	47.6	44.5	43.5	38.9	30.1	18.0	48.1				
07:00 - 07:15	15/12/2012	63.0	56.7	53.7	50.9	50.3	46.3	38.8	27.4	54.4	71.9	64.2	61.5	58.6	56.1	53.0	47.2	36.7	60.5	65.7	59.5	56.7	53.8	53.3	49.4	41.9	30.6	57.3	57.2	51.3	48.7	45.6	44.6	40.2	31.7	18.7	49.1				
07:15 - 07:30	15/12/2012	64.9	59.1	54.3	51.5	50.7	46.9	38.3	26.6	55.0	73.6	69.4	62.0	60.7	58.6	55.3	47.4	36.6	63.0	67.0	61.3	57.1	53.7	53.3	49.7	40.9	29.6	57.8	58.0	51.9	49.1	46.0	45.2	41.0	32.0	18.8	49.9				
07:30 - 07:45	15/12/2012	64.4	56.1	51.9	49.8	50.0	46.2	37.6	25.3	53.9	74.2	64.3	58.0	56.6	56.5	54.0	45.8	34.2	60.4	67.5	58.9	54.4	52.6	53.6	49.7	40.7	28.5	57.2	57.6	51.3	48.4	45.4	44.2	39.9	31.0	18.2	48.7				
07:45 - 08:00	15/12/2012	63.0	55.8	53.0	50.3	50.2	45.8	36.8	26.7	54.0	71.2	63.1	60.4	57.2	57.2	52.6	43.7	35.8	60.3	65.9	58.1	54.9	52.7	52.6	48.3	39.8	29.2	56.4	57.8	51.5	48.2	45.4	44.9	40.4	30.3	17.6	49.2				
08:00 - 08:15	15/12/2012	63.2	55.3	52.8	50.8	50.2	45.6	37.																																	

Page 3 of 5			Leq									L1									L10									L90								
Time	Date		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A
18:30 - 18:45	15/12/2012		64.7	57.0	53.5	51.2	58.6	57.0	38.0	23.1	61.9	72.5	65.2	60.2	57.5	71.7	71.4	49.3	32.2	75.3	67.4	59.5	55.8	53.2	57.2	54.2	39.8	25.6	61.0	58.0	51.7	48.8	46.7	46.1	40.7	28.8	16.2	50.3
18:45 - 19:00	15/12/2012		64.8	58.7	55.1	52.9	51.4	45.5	34.5	21.8	55.4	73.2	67.9	64.1	62.6	58.6	51.8	42.0	30.1	63.0	67.8	61.9	57.8	55.2	54.0	48.0	37.5	24.8	57.9	58.5	52.0	49.0	46.5	45.8	40.3	28.6	16.3	50.0
19:00 - 19:15	15/12/2012		63.3	55.2	52.5	49.7	49.9	44.8	33.5	22.0	53.4	71.3	61.2	57.7	55.4	55.7	50.3	39.7	27.6	58.8	66.4	57.5	54.0	51.8	52.4	47.4	36.2	23.3	55.7	57.4	50.6	47.5	45.5	44.3	38.9	27.4	15.7	48.5
19:15 - 19:30	15/12/2012		65.7	57.6	53.9	50.7	50.2	45.0	36.1	24.5	54.1	75.3	66.7	61.9	56.5	55.1	50.4	46.4	36.4	59.5	68.2	59.9	55.9	52.8	52.5	47.5	38.4	26.7	56.3	59.1	52.8	49.5	47.4	46.5	40.9	29.7	16.8	50.6
19:30 - 19:45	15/12/2012		64.8	60.6	53.2	49.6	49.6	44.4	33.0	21.5	53.6	73.0	73.8	61.2	55.6	54.6	50.1	39.7	28.8	59.4	68.0	60.4	55.5	51.7	52.0	46.9	35.7	23.6	56.0	59.2	53.4	49.4	46.2	45.4	39.8	28.2	16.2	49.6
19:45 - 20:00	15/12/2012		64.1	56.4	52.3	50.7	49.9	45.8	34.5	22.9	53.9	71.5	62.4	58.2	58.7	55.8	52.9	43.6	33.7	60.1	67.3	58.7	54.2	52.8	52.1	46.8	36.3	24.3	55.9	58.5	52.6	48.7	46.2	45.2	39.6	27.9	15.9	49.6
20:00 - 20:15	15/12/2012		64.4	58.1	52.7	50.4	49.4	44.6	37.3	25.3	53.6	72.9	67.4	60.6	60.2	56.2	51.6	45.4	37.3	61.3	67.4	60.2	55.3	51.9	51.4	46.8	37.8	26.6	55.6	58.2	51.9	48.5	46.1	45.5	40.6	30.0	17.2	49.7
20:15 - 20:30	15/12/2012		65.0	56.4	53.1	50.6	49.7	44.5	34.6	23.3	53.6	73.2	63.7	61.2	59.1	57.1	51.3	42.8	33.6	60.5	67.9	58.7	55.0	52.6	51.6	46.4	36.6	25.3	55.6	59.5	52.5	48.9	46.3	45.5	40.2	28.6	16.5	50.0
20:30 - 20:45	15/12/2012		65.1	56.9	53.9	49.1	48.4	43.2	32.7	20.9	52.7	73.5	66.6	64.0	57.5	53.4	47.6	40.2	29.2	59.4	67.0	59.3	55.9	51.1	51.0	45.7	35.3	23.1	54.9	58.2	51.1	48.0	44.8	44.3	38.8	26.9	15.2	48.5
20:45 - 21:00	15/12/2012		63.7	56.5	53.4	50.7	49.9	45.4	36.8	22.8	53.9	71.1	64.2	62.7	58.8	56.6	54.0	48.1	32.5	61.4	66.6	59.1	55.4	52.9	52.1	47.6	38.8	25.1	56.1	58.5	52.1	49.0	46.3	44.8	39.3	27.9	16.2	49.5
21:00 - 21:15	15/12/2012		63.9	56.2	53.2	51.6	49.8	43.8	34.3	25.7	53.8	71.3	62.6	61.7	63.2	58.0	49.7	43.7	38.5	62.5	67.1	58.7	55.8	53.5	52.0	46.6	37.1	25.0	56.2	58.2	51.8	47.8	44.5	43.5	38.3	26.5	15.2	48.0
21:15 - 21:30	15/12/2012		62.6	55.7	52.5	48.9	48.2	43.0	32.4	20.4	52.2	69.6	63.0	61.8	56.6	53.6	48.3	39.6	28.7	57.6	65.5	58.6	55.0	51.3	50.8	45.7	35.8	23.4	54.9	57.5	51.0	46.9	44.2	44.1	38.6	26.5	15.2	48.0
21:30 - 21:45	15/12/2012		62.9	56.1	53.7	50.6	49.2	43.9	33.6	23.1	53.3	71.9	64.1	64.7	61.1	58.5	52.3	43.0	34.7	62.8	66.1	60.0	56.3	52.7	51.1	46.2	36.5	24.2	55.5	56.5	50.0	46.9	45.2	43.6	38.7	27.2	15.5	48.2
21:45 - 22:00	15/12/2012		62.5	53.8	50.1	48.7	48.2	42.6	31.6	19.3	51.7	71.0	59.2	55.5	56.8	54.3	47.3	39.2	27.3	57.2	65.5	56.1	52.3	50.8	51.0	45.5	34.4	22.0	54.4	56.0	49.9	46.2	44.3	43.0	37.3	25.4	14.6	47.4
22:00 - 22:15	15/12/2012		62.2	54.9	52.5	50.5	49.1	43.3	32.8	20.8	53.0	69.5	61.6	61.1	61.8	58.2	49.0	40.2	29.5	62.5	65.2	57.5	54.5	51.5	51.0	46.0	35.8	23.5	54.9	57.4	50.7	47.5	44.3	43.6	38.3	26.2	14.9	47.7
22:15 - 22:30	15/12/2012		63.8	57.2	53.3	50.8	49.3	43.6	32.9	20.2	53.3	71.4	66.0	62.5	59.5	56.6	50.6	39.8	27.8	60.1	67.1	58.9	55.9	53.7	52.2	46.4	36.1	23.7	56.3	58.0	51.3	47.7	44.7	43.9	38.4	26.1	14.7	48.2
22:30 - 22:45	15/12/2012		63.6	56.8	52.6	49.4	48.8	43.8	33.1	21.5	52.8	72.0	67.6	61.4	55.9	54.9	50.1	40.4	30.1	58.7	66.7	59.0	54.6	51.4	51.5	46.7	36.0	23.4	55.4	57.6	50.3	47.6	45.0	44.2	38.3	26.0	14.6	48.4
22:45 - 23:00	15/12/2012		64.1	55.5	51.9	48.9	49.1	44.1	33.1	21.8	52.7	72.8	64.0	59.5	54.7	54.9	50.6	40.3	28.7	58.0	66.9	58.0	54.6	51.3	51.8	46.9	35.9	23.2	55.3	57.0	50.4	47.2	44.5	44.1	38.6	26.2	14.7	48.1
23:00 - 23:15	15/12/2012		64.9	55.2	52.8	49.3	49.5	44.4	33.6	22.0	53.1	75.5	64.6	62.2	55.1	54.0	48.9	40.9	30.7	58.2	67.5	57.5	53.7	51.5	52.1	47.2	36.4	24.6	55.6	57.2	50.0	47.1	45.8	45.5	40.0	28.2	16.0	49.2
23:15 - 23:30	15/12/2012		62.3	54.1	50.6	48.8	49.2	44.1	32.7	20.3	52.6	70.1	62.2	56.9	54.7	54.7	49.5	39.4	27.8	57.8	65.2	56.3	52.8	51.0	52.1	47.0	35.6	22.8	55.1	56.6	49.8	46.5	44.7	44.4	38.8	27.0	15.4	48.2
23:30 - 23:45	15/12/2012		62.7	54.2	51.8	48.0	49.2	45.7	33.3	20.7	52.9	71.8	61.3	60.7	53.0	56.26																						

Page 4 of 5		Leq										L1										L10										L90									
Time	Date	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A				
09:45 - 10:00	16/12/2012	62.8	56.1	51.7	49.5	49.8	45.1	34.8	25.2	53.4	71.2	65.6	59.6	55.4	54.7	50.1	42.1	34.9	58.2	66.1	58.7	53.8	52.1	52.8	48.1	37.6	26.8	56.1	56.7	50.3	47.3	45.1	44.6	39.8	28.9	16.8	48.9				
10:00 - 10:15	16/12/2012	63.1	57.1	54.2	50.3	50.1	44.8	34.1	22.3	53.8	71.8	68.9	64.3	56.9	57.3	52.1	43.0	32.4	60.2	66.0	58.1	56.5	52.8	52.8	47.4	36.6	24.8	56.4	56.9	50.2	47.4	45.4	44.5	39.5	27.6	15.6	48.9				
10:15 - 10:30	16/12/2012	62.6	56.5	54.6	51.5	50.6	45.6	34.9	24.6	54.6	71.4	65.0	64.0	59.9	56.6	51.1	43.3	34.8	61.3	66.0	59.2	57.6	54.4	53.2	48.2	37.9	27.3	57.0	56.1	50.6	47.9	45.9	45.2	40.3	28.6	16.6	49.4				
10:30 - 10:45	16/12/2012	63.8	57.8	53.3	51.4	50.5	45.6	34.6	23.5	54.4	72.1	69.7	62.0	59.1	55.1	50.1	41.9	33.7	59.5	67.0	59.4	55.8	54.5	53.0	48.3	37.3	26.1	56.9	57.7	51.0	48.3	45.6	45.5	39.8	28.6	16.7	49.4				
10:45 - 11:00	16/12/2012	66.0	64.1	55.0	49.8	49.7	44.9	34.6	23.5	54.5	75.8	77.3	66.7	57.3	54.7	50.7	42.6	33.6	63.2	69.6	59.7	55.3	51.8	52.2	47.6	37.1	26.0	56.1	58.3	51.9	48.7	45.6	44.9	40.0	28.7	16.9	49.3				
11:00 - 11:15	16/12/2012	63.9	58.7	54.8	55.0	56.3	49.0	40.8	28.1	59.0	72.0	69.5	64.1	65.6	69.3	61.4	51.5	37.4	71.2	67.0	60.7	57.6	55.9	53.7	47.4	37.9	26.9	58.6	57.9	52.3	49.4	46.4	45.4	40.2	28.5	17.0	49.9				
11:15 - 11:30	16/12/2012	65.1	56.9	53.1	51.6	56.9	52.6	43.5	30.2	59.4	74.2	65.0	61.2	61.8	70.3	66.5	57.8	43.9	72.5	68.1	59.7	55.5	53.1	53.5	48.5	38.4	27.1	57.3	57.5	51.2	48.0	45.2	45.3	41.1	30.3	17.5	49.6				
11:30 - 11:45	16/12/2012	64.0	57.5	54.3	52.0	50.3	45.0	34.6	23.3	54.5	72.5	65.8	61.3	58.7	55.4	51.4	43.0	31.8	60.1	67.2	60.6	57.2	55.3	52.7	47.1	36.8	25.0	57.0	57.6	52.1	49.7	46.9	45.9	40.8	28.8	16.6	50.6				
11:45 - 12:00	16/12/2012	64.1	64.8	56.6	51.8	51.8	48.2	36.3	23.0	56.5	73.4	74.7	65.4	59.4	62.7	60.5	47.8	32.4	67.2	66.8	61.0	57.0	54.6	52.9	47.9	37.8	25.8	57.6	57.3	51.8	48.2	46.3	45.8	40.0	28.3	16.3	49.8				
12:00 - 12:15	16/12/2012	65.9	58.4	56.4	55.3	53.1	47.8	39.1	31.3	57.3	75.2	68.7	69.4	69.0	66.5	60.2	50.6	41.9	70.5	69.4	60.4	56.3	54.2	52.7	47.8	38.1	28.1	57.0	58.2	51.8	48.8	46.4	46.0	40.8	29.1	16.6	50.1				
12:15 - 12:30	16/12/2012	64.3	55.9	52.8	50.4	53.7	50.5	41.8	29.3	56.9	72.9	62.5	58.7	58.8	63.4	62.0	53.7	41.3	67.6	67.2	58.6	55.3	52.3	52.4	46.8	37.9	27.4	56.3	58.2	51.4	48.5	45.9	44.9	39.4	27.9	16.2	49.5				
12:30 - 12:45	16/12/2012	64.2	57.0	53.2	55.0	58.1	55.8	42.2	28.9	61.6	71.8	66.0	59.6	58.8	72.4	70.3	55.9	41.4	75.8	67.4	59.5	56.0	54.0	56.1	53.3	40.6	28.1	59.5	58.1	51.7	48.7	46.4	45.3	40.8	29.2	16.9	50.0				
12:45 - 13:00	16/12/2012	65.1	57.0	52.3	50.1	54.0	52.8	47.4	34.4	58.2	72.9	64.4	58.3	56.6	66.3	67.5	61.0	45.9	72.0	68.7	59.6	54.8	52.5	52.5	47.8	38.2	26.8	56.4	58.3	51.3	47.1	45.5	44.8	39.5	28.3	16.5	48.8				
13:00 - 13:15	16/12/2012	64.5	57.3	54.1	52.3	50.3	44.7	34.9	25.3	54.5	71.5	63.6	60.3	63.2	57.5	50.7	43.2	35.1	62.8	67.4	60.0	56.7	53.3	52.5	46.9	37.2	26.0	56.4	58.9	52.9	50.2	46.5	44.4	39.3	28.7	17.3	49.8				
13:15 - 13:30	16/12/2012	64.7	56.8	54.1	51.0	50.8	46.0	37.4	26.4	54.6	71.8	63.1	62.0	58.3	58.8	54.6	48.5	39.3	62.1	67.9	59.5	56.2	53.2	53.0	48.0	38.9	27.3	56.7	59.3	52.8	49.7	46.8	45.5	40.1	28.9	17.1	50.3				
13:30 - 13:45	16/12/2012	64.7	57.1	53.0	50.4	53.5	52.3	46.4	34.9	57.8	72.1	65.2	58.5	57.5	65.5	66.0	59.0	46.6	70.2	67.6	59.6	55.5	52.6	53.5	48.7	39.7	33.8	57.1	59.2	52.5	49.1	46.2	44.8	40.0	28.9	16.7	49.6				
13:45 - 14:00	16/12/2012	64.4	58.3	55.2	51.6	50.8	45.9	36.6	31.7	54.9	72.1	66.7	65.7	60.5	56.7	53.1	45.7	44.1	62.6	67.5	61.2	57.5	53.8	53.1	48.1	39.0	30.4	56.9	58.4	52.5	49.5	46.8	46.2	41.4	30.2	18.1	50.8				
14:00 - 14:15	16/12/2012	64.3	56.7	53.4	50.3	50.4	45.4	34.7	28.6	54.1	72.4	63.0	60.0	56.3	54.9	50.4	41.8	40.3	58.3	67.3	59.8	56.1	52.7	52.6	47.4	37.5	32.3	56.2	58.2	51.5	48.2	45.9	46.0	40.9	28.7	16.3	50.3				
14:15 - 14:30	16/12/2012	66.0	56.5	52.5	49.9	49.9	45.0	34.9	25.5	53.7	75.0	63.3	58.7	55.5	55.0	50.0	41.9	37.0	58.6	68.5	59.0	54.9	52.1	52.4	47.6	37.8	26.3	55.9	58.3	51.9	47.8	44.9	44.5	39.6	27.8	16.4	48.5				
14:30 - 14:45	16/12/2012	64.0	56.1	52.9	49.8	50.0	45.3	35.																																	

Page 5 of 5		Leq										L1										L10										L90									
Time	Date	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A				
01:00 - 01:15	17/12/2012	58.4	50.3	46.9	44.0	44.9	40.4	30.6	20.1	48.4	68.1	57.7	55.1	51.2	53.3	49.2	40.2	30.7	56.4	61.6	53.0	49.5	47.2	48.7	44.3	34.7	22.9	52.1	51.8	45.5	42.0	39.3	37.8	30.7	20.1	13.8	41.9				
01:15 - 01:30	17/12/2012	57.1	49.9	46.3	43.5	44.0	39.3	30.2	20.2	47.6	66.5	57.7	56.2	51.4	52.4	48.0	39.9	31.2	55.8	59.6	52.8	48.9	46.7	48.2	43.6	34.5	23.6	51.4	51.4	45.0	41.6	39.0	37.5	30.8	20.8	13.8	41.7				
01:30 - 01:45	17/12/2012	55.7	49.2	46.0	42.2	42.2	37.7	29.2	19.7	46.1	64.7	56.8	55.5	49.8	50.7	46.8	40.6	32.1	54.7	57.8	51.7	47.8	44.7	45.6	41.2	31.7	21.2	49.1	50.8	44.8	41.7	38.7	37.0	29.9	20.5	13.8	41.4				
01:45 - 02:00	17/12/2012	55.5	48.9	45.3	42.9	43.5	39.1	29.5	19.2	47.0	65.1	56.7	52.8	51.2	52.3	49.5	40.6	30.9	56.1	57.9	51.7	48.2	46.1	47.6	43.3	32.6	20.0	50.8	50.2	44.5	41.2	38.7	37.2	30.1	20.3	13.7	41.4				
02:00 - 02:15	17/12/2012	58.1	49.6	45.9	42.9	44.1	39.6	30.5	20.2	47.6	69.5	58.3	55.3	51.4	53.2	49.1	40.1	30.7	56.5	60.7	52.7	48.7	45.8	47.9	43.2	33.2	22.1	51.3	50.3	44.5	41.3	38.8	38.2	32.0	21.8	13.9	42.0				
02:15 - 02:30	17/12/2012	57.8	49.9	46.8	43.7	44.2	39.7	31.2	21.2	47.9	69.1	58.1	55.3	51.6	53.3	48.4	41.4	31.8	56.6	60.2	52.7	49.4	46.7	47.4	43.1	34.6	24.4	51.0	50.3	44.7	41.7	39.2	38.1	32.2	22.6	14.1	42.3				
02:30 - 02:45	17/12/2012	56.5	50.2	45.9	43.0	44.2	40.3	30.4	20.2	47.8	67.2	59.5	54.9	51.4	52.5	49.1	40.6	32.0	56.0	58.7	52.5	48.6	46.7	48.7	45.0	34.7	22.9	52.1	49.9	44.4	41.0	38.1	36.8	30.6	20.5	13.8	41.0				
02:45 - 03:00	17/12/2012	56.6	50.0	46.3	43.2	42.0	37.4	29.0	19.7	46.3	67.6	57.2	54.7	51.5	50.7	46.8	39.2	31.2	54.7	59.0	53.0	49.1	45.8	45.0	40.8	32.5	21.1	49.2	50.3	44.6	41.4	38.8	37.0	30.6	21.3	14.0	41.6				
03:00 - 03:15	17/12/2012	55.6	48.7	45.4	41.8	41.8	37.6	29.0	19.1	45.8	65.8	55.8	54.0	50.0	51.0	48.4	40.2	28.9	54.7	58.1	51.3	47.5	44.3	44.8	40.9	32.1	20.7	48.7	49.8	44.2	40.8	37.9	36.0	29.6	20.5	13.7	40.5				
03:15 - 03:30	17/12/2012	56.9	48.2	45.5	42.1	41.7	36.8	28.9	19.3	45.7	69.0	54.1	54.4	49.7	51.0	45.8	39.5	30.1	54.1	57.8	51.0	48.0	45.1	44.2	39.7	31.9	20.4	48.3	49.9	44.6	41.1	38.3	36.4	30.0	20.8	13.8	41.0				
03:30 - 03:45	17/12/2012	55.8	49.3	45.6	42.7	43.8	39.5	30.1	19.9	47.3	65.9	57.9	54.0	51.5	54.5	50.0	40.9	29.9	57.3	57.6	51.8	48.2	45.0	46.9	42.6	33.3	21.5	50.5	50.1	44.2	41.0	38.3	36.3	30.0	20.8	13.7	40.8				
03:45 - 04:00	17/12/2012	56.5	49.2	45.7	43.7	42.0	37.6	29.1	19.4	46.4	66.4	56.4	52.8	51.8	50.7	46.4	39.8	30.4	53.9	58.9	51.9	48.6	46.8	45.7	41.6	32.7	21.7	49.9	49.9	44.4	40.9	38.2	35.7	29.4	20.4	13.9	40.5				
04:00 - 04:15	17/12/2012	57.3	50.2	46.0	43.6	43.8	39.8	30.9	21.0	47.6	67.5	58.6	53.8	51.8	52.3	49.0	40.6	31.6	56.0	59.1	52.4	49.3	46.7	47.8	43.8	35.0	24.3	51.4	50.3	44.5	41.2	38.6	37.0	30.9	21.5	13.9	41.4				
04:15 - 04:30	17/12/2012	56.6	49.9	47.1	44.6	45.5	41.3	32.5	22.1	49.0	64.9	56.7	55.0	51.9	53.8	50.5	41.8	32.4	56.9	60.0	52.8	50.2	48.3	49.5	45.2	36.4	25.9	52.7	50.8	44.9	41.8	38.9	37.3	31.5	22.7	14.4	41.8				
04:30 - 04:45	17/12/2012	55.5	48.8	45.6	42.8	43.4	39.0	32.1	21.8	47.0	64.7	56.6	54.3	50.8	51.7	47.4	41.0	31.6	55.0	58.2	51.3	47.9	46.0	47.6	43.4	36.2	25.5	51.0	50.2	44.3	41.2	38.4	36.1	29.2	20.5	13.9	40.8				
04:45 - 05:00	17/12/2012	58.5	50.3	47.0	44.9	45.8	41.3	33.8	23.2	49.2	67.4	57.5	54.4	53.2	55.1	50.6	43.0	32.9	57.8	61.5	53.2	49.9	47.9	49.6	44.9	38.0	27.3	52.7	51.6	45.4	42.1	39.8	38.3	32.9	24.2	14.4	43.0				
05:00 - 05:15	17/12/2012	57.8	49.9	47.1	44.7	44.8	40.3	32.9	22.5	48.5	68.2	57.3	56.5	53.6	53.6	49.3	42.5	32.7	56.9	59.8	52.0	48.9	47.4	48.6	44.3	36.9	26.0	52.1	52.3	46.0	42.7	40.0	38.0	31.0	22.9	14.2	42.6				
05:15 - 05:30	17/12/2012	60.0	56.5	51.2	46.2	46.6	42.0	34.1	23.2	50.8	70.8	69.8	61.6	54.2	55.5	51.4	44.2	34.4	60.1	62.5	56.7	52.9	49.5	50.4	45.8	37.8	25.9	54.1	52.4	46.7	43.5	40.3	39.0	33.2	23.3	14.5	43.5				
05:30 - 05:45	17/12/2012	59.3	51.4	48.2	45.9	46.6	42.4	34.1	23.1	50.2	68.0	59.0	55.6	52.2	53.9	49.4	42.3	32.8	56.8	62.0	54.2	51.5	49.6	50.7	46.9	38.2	26.9	54.1	53.6	46.8	43.5	40.7	39.4	33.4	23.7	14.4	43.8				
05:45 - 06:00	17/12/2012	61.4	53.6	50.2	48.2	49.1	44.9	36.3	24.8	52.6	70.5	61.5	57.1	55.0	56.7	52.6	44.5	34.3	59.9	64.6	56.5	53.2	51.4	53.0	48.7	40.1	28.7	56.1	54.8	47.9	45.1	42.4	41.4	36.5	26.8	15.4	45.8				
06:00 - 06:15	17/12/2012	63.3	56.0	53.9	51.4	49.4	44.2	35.7	24.3	53.7	73.3	67.1	64.9	63.5	58.6	51.2	43.5	33.3	63.7	66.5	57.4	55.7	52.5	52.5	47.9	39.5	28.1	56.4	55.4	49.7	46.9	44.6	42.0	36.6	26.6	15.4	46.8				
06:15 - 06:30	17/12/2012	62.8	55.8	53.3	50.8	50.3	45.7	36.8	25.4	54.2	70.2	63.0	61.8	59.9	56.8	52.5	45.0	34.9	60.8	66.1	58.3	55.6	53.3	53.7	49.4	40.2	28.8	57.0	57.5	51.4	48.2	45.5	44.1	38.3	27.5	15.9	48.6				
06:30 - 06:45	17/12/2012	64.3	57.2	55.1	53.0	51.5	46.8	37.8	26.3	55.7	72.1	64.5	64.7	62.5	58.9	53.2	44.9	34.4	63.6	67.2	60.3	57.9	55.5	54.3	50.0	40.9	29.8	58.1	58.8	52.1	49.0	46.5	45.5	40.6	30.2	17.6	49.7				
06:45 - 07:00	17/12/2012	67.2	58.3	55.4	53.1	52.9	50.2	40.9	29.9	57.1	77.0	64.8	63.3	60.9	59.3	60.8	51.2	41.5	64.4	70.1	61.4	58.0	55.2	55.4	51.8	43.0	31.8	59.5	60.5	54.0	51.2	48.9	48.1	43.7	33.4	19.7	52.4				
07:00 - 07:15	17/12/2012	67.5	59.3	57.5	54.3	52.5	48.3	39.9	28.7	57.1	75.1	65.8	66.7	62.8	58.1	54.7	47.5	37.0	63.7	70.7	62.5	60.8	57.5	55.3	51.3	43.3	31.8	60.2	61.5	53.9	50.6	48.2	47.7	42.8	32.6	19.3	51.8				
07:15 - 07:30	17/12/2012	67.5	58.9	56.1	53.2																																				