

## APPENDIX A

### Glossary of Acoustic Terminology

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- Decibel (dB):** The Decibel is a logarithmic unit used to express ratios of quantities such as sound pressure or sound power. The logarithmic nature of the unit means that decibel values cannot be added or subtracted in the usual way. An auditory sensation of halving or doubling of loudness equates to a decrease or increase of around 10 dB.
- dB(A) or  $L_A$ :** The A weighted scale is used to take account of the fact that the human ear is more sensitive to sounds at high frequencies than sounds at low frequencies. "A" weighted sound pressure level (sound level) measurements correspond roughly to the subjective impression of loudness of the average listener.
- $L_{max}$  :** The  $L_{max}$  is the maximum sound pressure level (sound level) recorded during any given measurement period.
- $L_{90}$  :** The  $L_{90}$  is the sound level that is exceeded for 90% of the measurement period, and is generally considered to describe the background noise, since it inherently excludes the sounds of transient events.
- $L_{eq}$  :** The  $L_{eq}$  index is used as a method of averaging temporally or spatially varying sound levels. At a given position, it may be defined as the notional sound level which contains the same amount of acoustical energy as the actual (time varying) sound level over the same measurement period. The  $L_{eq}$  index has gained wide acceptance for many types of noise assessment, and is now referred to within British Standards 4142 and 8233, and also within The Noise at Work Regulations.

# SCHEDULE OF PLANT NOISE LEVELS

89 WHITFIELD STREET - LONDON W1

THE  
EQUUS  
PARTNERSHIP  
Member of the Association of Noise Consultants  
CONSULTANTS IN  
ACOUSTICS

SCHEDULE: 6266/PN1
SHEET NO. 1 OF 1
DATE: 25th SEP. 2008

PLANT REF.	MODEL	LOCATION	QTY	Pa.	Lw / Lp	63	125	250	500	1k	2k	4k	8k
AIR-COOLED COND. UNIT	DAIKINRXYQ18P	ROOF	1	-	Lp at 1m				63	dB(A)			
AIR-HANDLING UNIT	MTX 5	ROOF	1	-	Lw	86	78	82	80	80	78	70	64

Lw = Sound Power Level (dB. re. 1 pico Watt).  
Lp = Sound Pressure Level (dB. re. 20 micro Pascals).

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