

Job Number: JAL 5201  
 Client: AWE Aldermaston  
 Receptor: Rag Hill Cottage  
 Date: 22-Apr-10  
 Consultant: DG  
 QA: RM/TAD

### Sound Power Level at Louvres of Operational Building (assuming 80 dB(A) internal noise level)

Segment ID	Segment Name	dB(A)	Octave bands with mid frequency in Hz								Distance to receptor (m)
			63	125	250	500	1 k	2 k	4 k	8 k	
D=1	Side 1	79	90	86	84	77	69	63	61	57	N/A
D=2	Side 2	71	82	78	76	69	61	55	53	49	N/A
D=3	Side 3	80	90	86	84	77	69	63	61	57	1109
D=4	Side 4	77	88	84	82	75	67	61	59	55	1069
D=5	Side 5	77	87	83	81	74	66	60	58	54	1058
D=6	Side 6	71	82	78	76	69	61	55	53	49	1077
D=7	Side 7	79	90	86	84	77	69	63	61	57	1116
D=8	Side 8	83	94	90	88	81	73	67	65	61	N/A
Sum		85	95	91	89	82	74	68	66	62	

### Specific Noise Level at Receptor (Calculated using ISO 9613:1996 [\*1])

Segment ID	Segment Name	dB(A)	Octave bands with mid frequency in Hz							
			63	125	250	500	1 k	2 k	4 k	8 k
D=3	Side 3	8	25	13	13	5				
D=4	Side 4	6	23	11	10	3				
D=5	Side 5	5	23	11	10	3				
D=6	Side 6		17	5	5					
D=7	Side 7	7	25	13	12	5				
Total		13	30	18	18	11	0			

### Other Contributions

Roof	19
Walls	14
IVA Chillers	16

### Non-Test Operation

	Daytime	Nighttime
Specific Noise Level (dBA)	22	22
Background Noise Level (dBA)	35	32
Specific minus Background (dB)	-13	-10

[\*1] - International Organization for Standardization (ISO) (1996). ISO 9613: Acoustics – Attenuation of sound during propagation outdoors. ISO Switzerland.