

<u>Plant room Louvre</u>	63Hz	125Hz	250Hz	50Hz	1kHz	2kHz	4kHz	8kHz	dB(A)
Original Condensing Unit data from Acoustic Report Lw	79	73	70	65	62	58	55	50	68
Mitsubishi PURY P550YSJM Lw*	78.5	78.5	78	78	78	76.5	71	63.5	82
Swegon Gold RX AHU1 - Breakout Lw	71	63	54	54	43	43	39	37	
Total Lw in plant room Lw	79.2	78.6	78.0	78.0	78.0	76.5	71.0	63.5	
Rev. Correction	-3	-3	-4	-6	-6	-6	-6	-6	
Plantroom Level Lw	76.2	75.6	74.0	72.0	72.0	70.5	65.0	57.5	
louvre loss (300mm deep single bank)	-6	-6	-9	-13	-20	-20	-16	-15	
area correction	4	4	4	4	4	4	4	4	
end reflection	-6	-2	-1	0	0	0	0	0	
In to out loss constant	-6	-6	-6	-6	-6	-6	-6	-6	
distance loss (8m)	-18	-18	-18	-18	-18	-18	-18	-18	
Heispherical radiation correction (Q=2)	-8	-8	-8	-8	-8	-8	-8	-8	
directivity (Hor:140, Vert:40)	-1	-2	-4	-8	-10	-10	-10	-10	
screening loss (measurement loc. screened by existing perimeter wall)	-5	-5	-5	-5	-5	-5	-5	-5	
Level at receiver	30	33	27	18	9	8	6	0	22
A weighted Spectrum Lp (A)	4	17	18	15	9	9	7	-1	22

<u>Mitsubishi Unit</u>	63Hz	125Hz	250Hz	50Hz	1kHz	2kHz	4kHz	8kHz	dB(A)
Mitsubishi PURY P550YSJM Lw*	78.5	78.5	78	78	78	76.5	71	63.5	
lined duct loss (90° Bend)	-1	-7	-17	-18	-16	-17	-18	-18	
louvre loss (300mm deep single bank)	-6	-6	-9	-13	-20	-20	-16	-15	
End reflection	-4	-1	0	0	0	0	0	0	
Distance Loss	-10	-10	-10	-10	-10	-10	-10	-10	
Radiation Correction	-5	-5	-5	-5	-5	-5	-5	-5	
directivity loss	-1	-3	-7	-9	-9	-9	-9	-9	
screening loss (measurement loc. screened by existing perimeter wall)	-5	-5	-5	-5	-5	-5	-5	-5	
Level at receiver	47	42	25	18	13	11	8	2	27
A weighted Spectrum Lp (A)	21	26	16	15	13	12	9	1	27

	63Hz	125Hz	250Hz	50Hz	1kHz	2kHz	4kHz	8kHz	dB(A)
Swegon Gold F RX AHU1 - inlet Lw	74	71	68	58	49	47	42	43	
louvre loss (300mm deep single bank)	-6	-6	-9	-13	-20	-20	-16	-15	
end reflection	-4	-2	-1	0	0	0	0	0	
distance loss (8m)	-18	-18	-18	-18	-18	-18	-18	-18	
Heispherical radiation correction	-8	-8	-8	-8	-8	-8	-8	-8	
Directivity (Hor:140, Vert:40)	-1	-2	-4	-8	-10	-10	-10	-10	
screening loss (measurement loc. screened by existing perimeter wall)	-5	-5	-5	-5	-5	-5	-5	-5	
level at receiver	32	30	23	6	-12	-14	-15	-13	17
A weighted Spectrum Lp (A)	6	14	14	3	-12	-13	-14	-14	17

	63Hz	125Hz	250Hz	50Hz	1kHz	2kHz	4kHz	8kHz	dB(A)
Swegon Gold F RX AHU1 - Outlet Lw	80	75	75	73	74	74	69	64	
louvre loss (300mm deep single bank)	-6	-6	-9	-13	-20	-20	-16	-15	
lined duct loss (90° Bend)	-1	-7	-17	-18	-16	-17	-18	-18	
end reflection	-4	-2	-1	0	0	0	0	0	
distance loss (8m)	-18	-18	-18	-18	-18	-18	-18	-18	
Heispherical radiation correction	-8	-8	-8	-8	-8	-8	-8	-8	
Directivity (Hor:140, Vert:40)	-1	-2	-4	-8	-10	-10	-10	-10	
screening loss (measurement loc. screened by existing perimeter wall)	-5	-5	-5	-5	-5	-5	-5	-5	
level at receiver	38	34	30	21	13	13	12	8	25
A weighted Cumulative Spectrum Lp (A)	21	26	22	19	16	16	14	7	29

NOTE: PURY P550YSJM Lw spectrum for calculation based on SWL in cooling mode as advised by Jamie Duncan plus 5dB for 80Pa pressure, and less 6dB for 85% operational duty