

## Appendix 9.1 – Derived OHL Noise Data

Table 9.1-1: Supplied One-third Octave Data – 230 kV Untreated Totara at 1 mm/h

Conductor Type (at 1 mm/h)	Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
230 kV Untreated Totara	Level (dB)	32.9	28.3	27	45.3	28.7	31.3	47.3	30.4	42.4	38.2	37.5	38.3	41	41	40.6	41.1	41.7	41.4	41.6	42.4	43

Table 9.1-2: Correction Value Determination

Measured 230 kV LAeq (dB) at 0 m	Distance (m)	L2 1 mm/h LAeq (dB)	L2 Correction (dB)	L8 1 mm/h LAeq (dB)	L8 Correction (dB)
53.9	0	56.1	2.2	54.9	1
53.9	10	55.6	1.7	54.4	0.5
53.9	20	54	0.1	52.9	-1
53.9	30	52.6	-1.3	51.5	-2.4
53.9	40	51.4	-2.5	50.4	-3.5
53.9	50	50.5	-3.4	49.4	-4.5
53.9	60	49.6	-4.3	48.5	-5.4
53.9	70	48.9	-5	47.8	-6.1
53.9	80	48.3	-5.6	47.2	-6.7
53.9	90	47.7	-6.2	46.6	-7.3
53.9	100	47.2	-6.7	46.1	-7.8

Table 9.1-3: Calculated L8 External Noise Spectra at 1 mm/h

Distance (m)	Frequency (Hz)																				
	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
0	33.9	29.3	28	46.3	29.7	32.3	48.3	31.4	43.4	39.2	38.5	39.3	42	42	41.6	42.1	42.7	42.4	42.6	43.4	44
10	33.4	28.8	27.5	45.8	29.2	31.8	47.8	30.9	42.9	38.7	38	38.8	41.5	41.5	41.1	41.6	42.2	41.9	42.1	42.9	43.5
20	31.9	27.3	26	44.3	27.7	30.3	46.3	29.4	41.4	37.2	36.5	37.3	40	40	39.6	40.1	40.7	40.4	40.6	41.4	42
30	30.5	25.9	24.6	42.9	26.3	28.9	44.9	28	40	35.8	35.1	35.9	38.6	38.6	38.2	38.7	39.3	39	39.2	40	40.6
40	29.4	24.8	23.5	41.8	25.2	27.8	43.8	26.9	38.9	34.7	34	34.8	37.5	37.5	37.1	37.6	38.2	37.9	38.1	38.9	39.5
50	28.4	23.8	22.5	40.8	24.2	26.8	42.8	25.9	37.9	33.7	33	33.8	36.5	36.5	36.1	36.6	37.2	36.9	37.1	37.9	38.5
60	27.5	22.9	21.6	39.9	23.3	25.9	41.9	25	37	32.8	32.1	32.9	35.6	35.6	35.2	35.7	36.3	36	36.2	37	37.6
70	26.8	22.2	20.9	39.2	22.6	25.2	41.2	24.3	36.3	32.1	31.4	32.2	34.9	34.9	34.5	35	35.6	35.3	35.5	36.3	36.9
80	26.2	21.6	20.3	38.6	22	24.6	40.6	23.7	35.7	31.5	30.8	31.6	34.3	34.3	33.9	34.4	35	34.7	34.9	35.7	36.3
90	25.6	21	19.7	38	21.4	24	40	23.1	35.1	30.9	30.2	31	33.7	33.7	33.3	33.8	34.4	34.1	34.3	35.1	35.7
100	25.1	20.5	19.2	37.5	20.9	23.5	39.5	22.6	34.6	30.4	29.7	30.5	33.2	33.2	32.8	33.3	33.9	33.6	33.8	34.6	35.2

Table 9.1-4: Calculated L2 External Noise Spectra at 1 mm/h

Distance (m)	Frequency (Hz)																				
	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
0	35.1	30.5	29.2	47.5	30.9	33.5	49.5	32.6	44.6	40.4	39.7	40.5	43.2	43.2	42.8	43.3	43.9	43.6	43.8	44.6	45.2
10	34.6	30	28.7	47	30.4	33	49	32.1	44.1	39.9	39.2	40	42.7	42.7	42.3	42.8	43.4	43.1	43.3	44.1	44.7
20	33	28.4	27.1	45.4	28.8	31.4	47.4	30.5	42.5	38.3	37.6	38.4	41.1	41.1	40.7	41.2	41.8	41.5	41.7	42.5	43.1
30	31.6	27	25.7	44	27.4	30	46	29.1	41.1	36.9	36.2	37	39.7	39.7	39.3	39.8	40.4	40.1	40.3	41.1	41.7
40	30.4	25.8	24.5	42.8	26.2	28.8	44.8	27.9	39.9	35.7	35	35.8	38.5	38.5	38.1	38.6	39.2	38.9	39.1	39.9	40.5
50	29.5	24.9	23.6	41.9	25.3	27.9	43.9	27	39	34.8	34.1	34.9	37.6	37.6	37.2	37.7	38.3	38	38.2	39	39.6
60	28.6	24	22.7	41	24.4	27	43	26.1	38.1	33.9	33.2	34	36.7	36.7	36.3	36.8	37.4	37.1	37.3	38.1	38.7
70	27.9	23.3	22	40.3	23.7	26.3	42.3	25.4	37.4	33.2	32.5	33.3	36	36	35.6	36.1	36.7	36.4	36.6	37.4	38
80	27.3	22.7	21.4	39.7	23.1	25.7	41.7	24.8	36.8	32.6	31.9	32.7	35.4	35.4	35	35.5	36.1	35.8	36	36.8	37.4
90	26.7	22.1	20.8	39.1	22.5	25.1	41.1	24.2	36.2	32	31.3	32.1	34.8	34.8	34.4	34.9	35.5	35.2	35.4	36.2	36.8
100	26.2	21.6	20.3	38.6	22	24.6	40.6	23.7	35.7	31.5	30.8	31.6	34.3	34.3	33.9	34.4	35	34.7	34.9	35.7	36.3