

Exhibit 12

Freespace Interference Study based on Vertical Radiation Pattern ERI 100-1 1 Bay Antenna

Depression Angle from Antenna	Antenna Relative Field	ERP Watts	ERP dBk	Distance to Ground from Antenna (m)	Free Space Signal (dBu)	dB Loss for Reflection	Signal Strength at Ground (dBu)	Circular Distance From Tower (m)	Distance to Contour using Free Space (m)	Height of Contour above Ground (m)
90	0.135	0.911	-30.40	33.00	106.15	0	106.15	0.00	7.35	25.65
85	0.200	2.000	-26.99	33.13	109.53	0	109.53	2.89	10.89	22.15
80	0.280	3.920	-24.07	33.51	112.35	0	112.35	5.82	15.25	17.99
75	0.355	6.301	-22.01	34.16	114.24	0	114.24	8.84	19.33	14.33
70	0.425	9.031	-20.44	35.12	115.57	0	115.57	12.01	23.14	11.25
65	0.495	12.251	-19.12	36.41	116.58	0	116.58	15.39	26.95	8.57
60	0.565	15.961	-17.97	38.11	117.33	0	117.33	19.05	30.76	6.36
55	0.625	19.531	-17.09	40.29	117.72	0	117.72	23.11	34.03	5.12
50	0.690	23.805	-16.23	43.08	118.00	0	118.00	27.69	37.57	4.22
45	0.745	27.751	-15.57	46.67	117.97	0	117.97	33.00	40.56	4.32
40	0.795	31.601	-15.00	51.34	117.71	0	117.71	39.33	43.29	5.18
35	0.840	35.280	-14.52	57.53	117.20	0	117.20	47.13	45.74	6.77
30	0.880	38.720	-14.12	66.00	116.41	0	116.41	57.16	47.91	9.04
25	0.920	42.320	-13.73	78.08	115.33	0	115.33	70.77	50.09	11.83
20	0.945	44.651	-13.50	96.49	113.73	0	113.73	90.67	51.45	15.40
15	0.975	47.531	-13.23	127.50	111.58	0	111.58	123.16	53.09	19.26
10	0.980	48.020	-13.19	190.04	108.16	0	108.16	187.15	53.36	23.73
5	0.989	48.906	-13.11	378.63	102.25	0	102.25	377.19	53.85	28.31

Distance to Ground Level assumes flat ground or a site where the site level is above average terrain in all azimuths.

Maximum ERP	50 watts	Max dBu at Ground Level	118.00	Lowest Height of Contour (m)	4.22
Radiation Center AG	33 m			Lowest Height of Contour (ft)	13.85
Radiation Center AG	108 ft.				Must be +
Maximum ERP	-13.01 dBk				
Protected dBu	79.19 dBu				
Interfering dBu	119.2 dBu				
Free Space Distance	54.45 m				