

Proposed Facility Free-Space Contour Elevation Table

Freespace Interference Study based on Vertical Radiation Pattern

SHI 6812b-4FW 4 Bay Full-Wave Spaced 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	0.001	0.000	-66.02	130.00	58.62	0	58.62	0.00	0.62	129.38
85	0.049	0.600	-32.22	130.50	92.39	0	92.39	11.37	30.56	99.56
80	0.084	1.764	-27.54	132.01	96.97	0	96.97	22.92	52.39	78.41
75	0.100	2.500	-26.02	134.59	98.32	0	98.32	34.83	62.37	69.76
70	0.087	1.892	-27.23	138.34	96.87	0	96.87	47.32	54.26	79.01
65	0.042	0.441	-33.56	143.44	90.23	0	90.23	60.62	26.20	106.26
60	0.030	0.225	-36.48	150.11	86.91	0	86.91	75.06	18.71	113.80
55	0.112	3.136	-25.04	158.70	97.87	0	97.87	91.03	69.85	72.78
50	0.174	7.569	-21.21	169.70	101.12	0	101.12	109.08	108.52	46.87
45	0.180	8.100	-20.92	183.85	100.72	0	100.72	130.00	112.26	50.62
40	0.108	2.916	-25.35	202.24	95.45	0	95.45	154.93	67.36	86.70
35	0.032	0.256	-35.92	226.65	83.90	0	83.90	185.66	19.96	118.55
30	0.181	8.190	-20.87	260.00	97.75	0	97.75	225.17	112.89	73.56
25	0.247	15.252	-18.17	307.61	98.99	0	98.99	278.79	154.05	64.89
20	0.146	5.329	-22.73	380.09	92.59	0	92.59	357.17	91.06	98.86
15	0.140	4.900	-23.10	502.28	89.80	0	89.80	485.17	87.32	107.40
10	0.529	69.960	-11.55	748.64	97.88	0	97.88	737.27	329.93	72.71
5	0.866	187.489	-7.27	1491.58	96.18	0	96.18	1485.91	540.12	82.93

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

Maximum ERP	250 watts	Max dBu at Ground Level	101.12	Lowest Height of Contour (m)	46.87
Radiation Center AG	130 m			Lowest Height of Contour (f)	153.76
Radiation Center AG	427 ft.				
Maximum ERP	-6.02 dBk				
Protected dBu	65 dBu				
Interfering dBu	105.0 dBu				
Free Space Distance	623.69 m				
	2046.21 ft.				