

Bridgelight, L.L.C.

Freespace Interference Study for a given antenna based on Vertical Radiation Pattern

Antenna Make: Shively

Antenna Model: 6813-4 (7/8 Wave Spaced)

Depression Angle from Antenna	Antenna Relative Field	ERP Watts	ERP dBk	Distance to Ground from Antenna (km)	Free Space Signal (dBu)	Circular Distance From Tower (m)
90	0.001	0.000	-70.97	0.0440	63.08	0.00
85	0.012	0.012	-49.39	0.0442	84.63	3.85
80	0.020	0.032	-44.95	0.0447	88.97	7.76
75	0.022	0.039	-44.12	0.0456	89.63	11.79
70	0.013	0.014	-48.69	0.0468	84.82	16.01
65	0.009	0.006	-51.88	0.0485	81.31	20.52
60	0.045	0.162	-37.90	0.0508	94.90	25.40
55	0.094	0.707	-31.51	0.0537	100.81	30.81
50	0.146	1.705	-27.68	0.0574	104.05	36.92
45	0.190	2.888	-25.39	0.0622	105.65	44.00
40	0.207	3.428	-24.65	0.0685	105.56	52.44
35	0.175	2.450	-26.11	0.0767	103.11	62.84
30	0.079	0.499	-33.02	0.0880	95.01	76.21
25	0.086	0.592	-32.28	0.1041	94.29	94.36
20	0.307	7.540	-21.23	0.1286	103.51	120.89
15	0.554	24.553	-16.10	0.1700	106.21	164.21
10	0.781	48.797	-13.12	0.2534	105.73	249.54
5	0.942	70.989	-11.49	0.5048	101.37	502.92

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

Maximum ERP 80 watts

Radiation Center AG 0.044 km

Radiation Center AG 144.357 ft.

112 dBu contour using Vertical Radiation Pattern Does Not Reach the Ground