

KEVIN M. FITZGERALD

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

Antenna Make: SCALA

Antenna Model: FMV-2 2-bay Half-Wave Dipole Array

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	0.023	0.005	-52.77	0.0450	81.1	0.00
85	0.018	0.003	-54.89	0.0452	78.9	3.94
80	0.060	0.036	-44.44	0.0457	89.3	7.93
75	0.104	0.108	-39.66	0.0466	93.9	12.06
70	0.148	0.219	-36.59	0.0479	96.7	16.38
65	0.189	0.357	-34.47	0.0497	98.5	20.98
60	0.222	0.493	-33.07	0.0520	99.5	25.98
55	0.240	0.576	-32.40	0.0549	99.7	31.51
50	0.235	0.552	-32.58	0.0587	99.0	37.76
45	0.198	0.392	-34.07	0.0636	96.8	45.00
40	0.119	0.142	-38.49	0.0700	91.5	53.63
35	0.010	0.001	-60.00	0.0785	69.0	64.27
30	0.163	0.266	-35.76	0.0900	92.1	77.94
25	0.350	1.225	-29.12	0.1065	97.3	96.50
20	0.545	2.970	-25.27	0.1316	99.3	123.64
15	0.726	5.271	-22.78	0.1739	99.3	167.94
10	0.873	7.621	-21.18	0.2591	97.5	255.21
5	0.967	9.351	-20.29	0.5163	92.4	514.35

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

Maximum ERP	10 watts	Max dBu to Ground Level	99.53
Radiation Center AG	0.045 km		
Radiation Center AG	147.638 ft.		