

FOUR RIVERS COMMUNITY BROADCASTING CORP

Freespace Interference Study for a given antenna based on Vertical F

Antenna Make: SCA

Antenna Model: CA5-FM/CP/RM 1-bay

Depression Angle from Antenna	Antenna Relative Field	ERP Watts	ERP dBk	Distance to Ground from Antenna (km)	Free Space Signal (dBu)	2.5 dB Loss or Reflection	Signal Strength Ground (dBm)	Circular Distar From Tower (m)
90	0.157	0.493	-33.07	0.0320	103.7	0	103.7	0.00
85	0.149	0.444	-33.53	0.0321	103.3	0	103.3	2.80
80	0.142	0.403	-33.94	0.0325	102.7	0	102.7	5.64
75	0.147	0.432	-33.64	0.0331	102.9	0	102.9	8.57
70	0.134	0.359	-34.45	0.0341	101.8	0	101.8	11.65
65	0.161	0.518	-32.85	0.0353	103.1	0	103.1	14.92
60	0.190	0.722	-31.41	0.0370	104.2	0	104.2	18.48
55	0.266	1.415	-28.49	0.0391	106.6	0	106.6	22.41
50	0.329	2.165	-26.65	0.0418	107.9	0	107.9	26.85
45	0.429	3.681	-24.34	0.0453	109.5	0	109.5	32.00
40	0.528	5.576	-22.54	0.0498	110.4	0	110.4	38.14
35	0.623	7.763	-21.10	0.0558	110.9	0	110.9	45.70
30	0.718	10.310	-19.87	0.0640	110.9	0	110.9	55.43
25	0.791	12.514	-19.03	0.0757	110.3	0	110.3	68.62
20	0.866	14.999	-18.24	0.0936	109.3	0	109.3	87.92
15	0.902	16.272	-17.89	0.1236	107.2	0	107.2	119.43
10	0.952	18.126	-17.42	0.1843	104.2	0	104.2	181.48
5	0.976	19.052	-17.20	0.3672	98.4	0	98.4	365.76

Distance to Ground Level assumes flat ground or a site where the ground level is above

Maximum ERP	20 watts	Max dBu to Ground Level	110.93
Radiation Center AG	0.032 km		
Radiation Center AG	104.987 ft.		

ORATION

Radiation Pattern

ice
m)

re average terrain in all azimuths.