

Proposed Antenna: Scala CL-FM V Pol

Proposed Power: 0.09 kW

Antenna Height AGL: 76 meters

Interference Contour: 111 dBu f(50:10)

Artificial Rcv Antenna Height: 2 meters

Fill in "yellow" cells

Distance (Free Space) Equation: $= (10^{((106.92 - [\text{desired dBu}] + [\text{ERP in dBk}]) / 20)}) * 1000$

Field Strength (dBu) Equation $= 106.92 - (20 * (\text{LOG10}[\text{DistMeters} / 1000])) + [\text{ERP in dBk}]$

Depression				Distance			
Angle	Antenna			from Ant.	Distance	Field Strength	Distance
Below	Relative	ERP	ERP	to Interf	from Ant. to	in dBu @	from Ant.
Horizon	Field	in kW	in dBk	Contour	Artificial Plane	Artificial Plane	to Ground Level
0°	1.000	0.090	-10.46	187.55 m	infinite	---	infinite
-5°	0.980	0.086	-10.63	183.80 m	849.05 m	97.71 dBu	872.00 m
-10°	0.950	0.081	-10.90	178.17 m	426.15 m	103.43 dBu	437.67 m
-15°	0.895	0.072	-11.42	167.86 m	285.91 m	106.37 dBu	293.64 m
-20°	0.820	0.061	-12.18	153.79 m	216.36 m	108.04 dBu	222.21 m
-25°	0.735	0.049	-13.13	137.85 m	175.10 m	108.92 dBu	179.83 m
-30°	0.645	0.037	-14.27	120.97 m	148.00 m	109.25 dBu	152.00 m
-35°	0.562	0.028	-15.46	105.40 m	129.02 m	109.24 dBu	132.50 m
-40°	0.470	0.020	-17.02	88.15 m	115.12 m	108.68 dBu	118.24 m
-45°	0.360	0.012	-19.33	67.52 m	104.65 m	107.19 dBu	107.48 m
-50°	0.250	0.006	-22.50	46.89 m	96.60 m	104.72 dBu	99.21 m
-55°	0.155	0.002	-26.65	29.07 m	90.34 m	101.15 dBu	92.78 m
-60°	0.085	0.001	-31.87	15.94 m	85.45 m	96.42 dBu	87.76 m
-65°	0.045	0.000	-37.39	8.44 m	81.65 m	91.29 dBu	83.86 m
-70°	0.020	0.000	-44.44	3.75 m	78.75 m	84.56 dBu	80.88 m
-75°	0.010	0.000	-50.46	1.88 m	76.61 m	78.78 dBu	78.68 m
-80°	0.010	0.000	-50.46	1.88 m	75.14 m	78.94 dBu	77.17 m
-85°	0.010	0.000	-50.46	1.88 m	74.28 m	79.04 dBu	76.29 m
-90°	0.010	0.000	-50.46	1.88 m	74.00 m	79.08 dBu	76.00 m



Field Strength
in dBu @
Ground Level

97.48 dBu
103.19 dBu
106.14 dBu
107.80 dBu
108.69 dBu
109.02 dBu
109.01 dBu
108.45 dBu
106.96 dBu
104.49 dBu
100.92 dBu
96.19 dBu
91.06 dBu
84.33 dBu
78.55 dBu
78.71 dBu
78.81 dBu
78.85 dBu