

# Vertical Radiation Pattern Freespace Interference Study for a Scala FMV

## Scala FMV One Bay Antenna, Vertical Polarization

Power Output in Main Lobe 17 watts -17.6955 DBK

Contour in Volts per Meter 3.548134 V/m or 131 Dbu

Height of Ant Above Pt Roof 9 m

From Antenna  
Vert Dist to  
131 dBu  
From PT Roof  
Level to  
to  
131 dBu

Depr. Angle in Degs	Antenna Relative Field	Antenna Loss DBK	Total Power DBK	Total Power Watts	Slant Dist to 131 dBu	Horz Dist to Intercept	Vert Dist to 131 dBu	Level to 131 dBu
0	1	0.00	-17.6955	17 watts	8.146 m	8.146 m	0.000 m	9.000 m
1	0.999	0.00	-17.6955	17 watts	8.146 m	8.145 m	0.142 m	8.858 m
2	0.999	-0.01	-17.7055	16.9609 watts	8.137 m	8.132 m	0.284 m	8.716 m
3	0.998	-0.02	-17.7155	16.92189 watts	8.128 m	8.117 m	0.425 m	8.575 m
4	0.997	-0.03	-17.7255	16.88297 watts	8.118 m	8.099 m	0.566 m	8.434 m
5	0.995	-0.04	-17.7355	16.84414 watts	8.109 m	8.078 m	0.707 m	8.293 m
6	0.993	-0.06	-17.7555	16.76675 watts	8.090 m	8.046 m	0.846 m	8.154 m
7	0.991	-0.08	-17.7755	16.68972 watts	8.072 m	8.012 m	0.984 m	8.016 m
8	0.989	-0.10	-17.7955	16.61303 watts	8.053 m	7.975 m	1.121 m	7.879 m
9	0.985	-0.13	-17.8255	16.49867 watts	8.025 m	7.927 m	1.255 m	7.745 m
10	0.982	-0.16	-17.8555	16.38509 watts	7.998 m	7.876 m	1.389 m	7.611 m
11	0.977	-0.20	-17.8955	16.23487 watts	7.961 m	7.815 m	1.519 m	7.481 m
12	0.973	-0.24	-17.9355	16.08603 watts	7.924 m	7.751 m	1.648 m	7.352 m
13	0.967	-0.29	-17.9855	15.9019 watts	7.879 m	7.677 m	1.772 m	7.228 m
14	0.962	-0.34	-18.0355	15.71987 watts	7.834 m	7.601 m	1.895 m	7.105 m
15	0.956	-0.39	-18.0855	15.53993 watts	7.789 m	7.523 m	2.016 m	6.984 m
16	0.95	-0.45	-18.1455	15.32671 watts	7.735 m	7.435 m	2.132 m	6.868 m
17	0.942	-0.51	-18.2055	15.11642 watts	7.682 m	7.346 m	2.246 m	6.754 m
18	0.935	-0.58	-18.2755	14.87472 watts	7.620 m	7.247 m	2.355 m	6.645 m
19	0.927	-0.66	-18.3555	14.60323 watts	7.550 m	7.139 m	2.458 m	6.542 m
20	0.918	-0.74	-18.4355	14.33669 watts	7.481 m	7.030 m	2.559 m	6.441 m
21	0.909	-0.83	-18.5255	14.04265 watts	7.404 m	6.912 m	2.653 m	6.347 m
22	0.899	-0.92	-18.6155	13.75463 watts	7.328 m	6.794 m	2.745 m	6.255 m
23	0.889	-1.02	-18.7155	13.44154 watts	7.244 m	6.668 m	2.830 m	6.170 m
24	0.878	-1.13	-18.8255	13.10536 watts	7.153 m	6.534 m	2.909 m	6.091 m
25	0.867	-1.24	-18.9355	12.77759 watts	7.063 m	6.401 m	2.985 m	6.015 m
26	0.855	-1.36	-19.0555	12.42936 watts	6.966 m	6.261 m	3.054 m	5.946 m
27	0.842	-1.49	-19.1855	12.06282 watts	6.862 m	6.114 m	3.115 m	5.885 m
28	0.83	-1.62	-19.3155	11.70709 watts	6.760 m	5.969 m	3.174 m	5.826 m
29	0.816	-1.76	-19.4555	11.33572 watts	6.652 m	5.818 m	3.225 m	5.775 m
30	0.803	-1.91	-19.6055	10.95088 watts	6.538 m	5.662 m	3.269 m	5.731 m
31	0.788	-2.07	-19.7655	10.55477 watts	6.419 m	5.502 m	3.306 m	5.694 m
32	0.774	-2.23	-19.9255	10.173 watts	6.302 m	5.344 m	3.339 m	5.661 m
33	0.758	-2.40	-20.0955	9.782479 watts	6.180 m	5.183 m	3.366 m	5.634 m

34	0.743	-2.58	-20.2755	9.385316 watts	6.053 m	5.018 m	3.385 m	5.615 m
35	0.727	-2.77	-20.4655	8.983569 watts	5.922 m	4.851 m	3.397 m	5.603 m
36	0.711	-2.96	-20.6555	8.599019 watts	5.794 m	4.687 m	3.406 m	5.594 m
37	0.695	-3.16	-20.8555	8.212 watts	5.662 m	4.522 m	3.407 m	5.593 m
38	0.678	-3.37	-21.0655	7.824362 watts	5.527 m	4.355 m	3.403 m	5.597 m
39	0.662	-3.59	-21.2855	7.437876 watts	5.389 m	4.188 m	3.391 m	5.609 m
40	0.645	-3.81	-21.5055	7.07048 watts	5.254 m	4.025 m	3.377 m	5.623 m
41	0.628	-4.05	-21.7455	6.690351 watts	5.111 m	3.857 m	3.353 m	5.647 m
42	0.61	-4.29	-21.9855	6.330659 watts	4.971 m	3.694 m	3.326 m	5.674 m
43	0.593	-4.54	-22.2355	5.976527 watts	4.830 m	3.533 m	3.294 m	5.706 m
44	0.575	-4.80	-22.4955	5.629229 watts	4.688 m	3.372 m	3.256 m	5.744 m
45	0.558	-5.07	-22.7655	5.289918 watts	4.544 m	3.213 m	3.213 m	5.787 m
46	0.541	-5.34	-23.0355	4.971059 watts	4.405 m	3.060 m	3.169 m	5.831 m
47	0.523	-5.63	-23.3255	4.649957 watts	4.261 m	2.906 m	3.116 m	5.884 m
48	0.506	-5.92	-23.6155	4.349596 watts	4.121 m	2.757 m	3.062 m	5.938 m
49	0.489	-6.22	-23.9155	4.059279 watts	3.981 m	2.612 m	3.004 m	5.996 m
50	0.472	-6.53	-24.2255	3.779627 watts	3.841 m	2.469 m	2.943 m	6.057 m
51	0.455	-6.85	-24.5455	3.511146 watts	3.702 m	2.330 m	2.877 m	6.123 m
52	0.438	-7.18	-24.8755	3.254235 watts	3.564 m	2.194 m	2.809 m	6.191 m
53	0.421	-7.52	-25.2155	3.009185 watts	3.427 m	2.063 m	2.737 m	6.263 m
54	0.404	-7.87	-25.5655	2.776188 watts	3.292 m	1.935 m	2.663 m	6.337 m
55	0.388	-8.22	-25.9155	2.561232 watts	3.162 m	1.814 m	2.590 m	6.410 m
56	0.372	-8.59	-26.2855	2.352063 watts	3.030 m	1.694 m	2.512 m	6.488 m
57	0.356	-8.96	-26.6555	2.159976 watts	2.904 m	1.582 m	2.435 m	6.565 m
58	0.341	-9.35	-27.0455	1.974463 watts	2.776 m	1.471 m	2.354 m	6.646 m
59	0.326	-9.75	-27.4455	1.800731 watts	2.651 m	1.366 m	2.273 m	6.727 m
60	0.31	-10.16	-27.8555	1.638509 watts	2.529 m	1.265 m	2.190 m	6.810 m
61	0.296	-10.57	-28.2655	1.490901 watts	2.413 m	1.170 m	2.110 m	6.890 m
62	0.282	-11.01	-28.7055	1.347252 watts	2.293 m	1.077 m	2.025 m	6.975 m
63	0.268	-11.45	-29.1455	1.217444 watts	2.180 m	0.990 m	1.942 m	7.058 m
64	0.254	-11.92	-29.6155	1.092569 watts	2.065 m	0.905 m	1.856 m	7.144 m
65	0.24	-12.40	-30.0955	0.978248 watts	1.954 m	0.826 m	1.771 m	7.229 m
66	0.226	-12.90	-30.5955	0.871864 watts	1.845 m	0.750 m	1.685 m	7.315 m
67	0.214	-13.41	-31.1055	0.775263 watts	1.740 m	0.680 m	1.601 m	7.399 m
68	0.201	-13.95	-31.6455	0.684619 watts	1.635 m	0.612 m	1.516 m	7.484 m
69	0.188	-14.50	-32.1955	0.603183 watts	1.535 m	0.550 m	1.433 m	7.567 m
70	0.176	-15.08	-32.7755	0.527775 watts	1.435 m	0.491 m	1.349 m	7.651 m
71	0.164	-15.69	-33.3855	0.458616 watts	1.338 m	0.436 m	1.265 m	7.735 m
72	0.152	-16.34	-34.0355	0.394865 watts	1.242 m	0.384 m	1.181 m	7.819 m
73	0.141	-17.01	-34.7055	0.338414 watts	1.149 m	0.336 m	1.099 m	7.901 m
74	0.13	-17.73	-35.4255	0.286714 watts	1.058 m	0.292 m	1.017 m	7.983 m
75	0.119	-18.49	-36.1855	0.240685 watts	0.969 m	0.251 m	0.936 m	8.064 m
76	0.108	-19.33	-37.0255	0.198358 watts	0.880 m	0.213 m	0.854 m	8.146 m
77	0.098	-20.21	-37.9055	0.161975 watts	0.795 m	0.179 m	0.775 m	8.225 m
78	0.087	-21.20	-38.8955	0.128958 watts	0.710 m	0.148 m	0.694 m	8.306 m
79	0.077	-22.27	-39.9655	0.100797 watts	0.627 m	0.120 m	0.616 m	8.384 m
80	0.067	-23.49	-41.1855	0.076111 watts	0.545 m	0.095 m	0.537 m	8.463 m
81	0.057	-24.86	-42.5555	0.05552 watts	0.466 m	0.073 m	0.460 m	8.540 m

82	0.047	-26.48	-44.1755	0.038234 watts	0.386 m	0.054 m	0.383 m	8.617 m
83	0.038	-28.42	-46.1155	0.02446 watts	0.309 m	0.038 m	0.307 m	8.693 m
84	0.028	-30.91	-48.6055	0.013786 watts	0.232 m	0.024 m	0.231 m	8.769 m
85	0.019	-34.30	-51.9955	0.006316 watts	0.157 m	0.014 m	0.156 m	8.844 m
86	0.01	-39.94	-57.6355	0.001724 watts	0.082 m	0.006 m	0.082 m	8.918 m
87	0.01	-40.00	-57.6955	0.0017 watts	0.081 m	0.004 m	0.081 m	8.919 m
88	0.01	-40.00	-57.6955	0.0017 watts	0.081 m	0.003 m	0.081 m	8.919 m
89	0.017	-35.56	-53.2555	0.004726 watts	0.136 m	0.002 m	0.136 m	8.864 m
90	0.025	-31.89	-49.5855	0.011001 watts	0.207 m	0.000 m	0.207 m	8.793 m

