

Radiofrequency Electromagnetic Exposure Analysis

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	Power Density $\mu\text{W}/\text{cm}^2$ at 2 meters AGL				
						within 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$)	Max. PD	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$)	Distance to maximum PD (m)
PROPOSED	5.9	SCALA FMV-1	1	0.000	0.250	95.6	9.6%	95.6	47.8%	5
						95.6	9.6%	95.6	47.8%	5

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using Equation 10 from OET Bulletin 65 and elevation pattern provided by antenna manufacturer

Elevation Pattern, Scala FMV-1

Degrees	Rel. Field
0	1.000
1	0.999
2	0.999
3	0.998
4	0.997
5	0.995
6	0.993
7	0.991
8	0.989
9	0.985
10	0.982
11	0.977
12	0.973
13	0.967
14	0.962
15	0.956
16	0.950
17	0.942
18	0.935
19	0.927
20	0.918
21	0.909
22	0.899
23	0.889
24	0.878
25	0.867
26	0.855
27	0.842
28	0.830
29	0.816

Degrees	Rel. Field
30	0.803
31	0.788
32	0.774
33	0.758
34	0.743
35	0.727
36	0.711
37	0.695
38	0.678
39	0.662
40	0.645
41	0.628
42	0.610
43	0.593
44	0.575
45	0.558
46	0.541
47	0.523
48	0.506
49	0.489
50	0.472
51	0.455
52	0.438
53	0.421
54	0.404
55	0.388
56	0.372
57	0.356
58	0.341
59	0.326

Degrees	Rel. Field
60	0.310
61	0.296
62	0.282
63	0.268
64	0.254
65	0.240
66	0.226
67	0.214
68	0.201
69	0.188
70	0.176
71	0.164
72	0.152
73	0.141
74	0.130
75	0.119
76	0.108
77	0.098
78	0.087
79	0.077
80	0.067
81	0.057
82	0.047
83	0.038
84	0.028
85	0.019
86	0.010
87	0.010
88	0.010
89	0.017
90	0.025