

Environmental Protection

There are two main factors that need to be addressed in order to make sure that the environment around a proposed facility is protected.

1- Significant affects to the environment.

EMF's proposed facility will be constructed on an existing tower and will cause no adverse effects to the surrounding environment at the site.

2- Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 3-bay circularly polarized fullwaved spaced antenna.

As can be seen in Exhibit 24A, the maximum theoretical RF value would be $87.56\mu\text{W}/\text{cm}^2$ at a distance of 4 meters from the tower, which is 43.78% of the $200\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 8.76% of the $1000\mu\text{W}/\text{cm}^2$ permitted for worker (controlled) exposure.

Therefore, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other future site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

RF Analysis: Avondale, AZ**KLVA****288****C2****KLVA****Site type:** Application**Channel:** 288**Class:** C2**ERP:** .8kw**Antenna:** ERI

Rototiller

3 bay

fullwaved

COR AGL: 8m**Polarization:** Circular Pol

Distance From Tower (m)	KLVA Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	25.0559	25.06	12.53
1	31.1010	31.10	15.55
2	56.5410	56.54	28.27
3	78.6279	78.63	39.31
4	87.5603	87.56	43.78
5	77.6834	77.68	38.84
6	50.5915	50.59	25.30
7	21.6888	21.69	10.84
8	4.5128	4.51	2.26
9	0.0126	0.01	0.01
10	3.4282	3.43	1.71
11	9.3792	9.38	4.69
12	14.0893	14.09	7.04
13	16.1082	16.11	8.05
14	15.7571	15.76	7.88
15	13.9617	13.96	6.98
16	11.2412	11.24	5.62
17	8.2770	8.28	4.14
18	5.4511	5.45	2.73
19	3.1842	3.18	1.59
20	1.5635	1.56	0.78
21	0.5549	0.55	0.28
22	0.0757	0.08	0.04
23	0.0244	0.02	0.01
24	0.3008	0.30	0.15
25	0.8143	0.81	0.41
26	1.4877	1.49	0.74
27	2.2578	2.26	1.13
28	3.0749	3.07	1.54
29	3.9016	3.90	1.95
30	4.7077	4.71	2.35
31	5.4588	5.46	2.73
32	6.1561	6.16	3.08
33	6.7928	6.79	3.40
34	7.3655	7.37	3.68
35	7.8740	7.87	3.94
36	8.3195	8.32	4.16
37	8.7047	8.70	4.35
38	9.0331	9.03	4.52
39	9.3086	9.31	4.65
40	9.5354	9.54	4.77
41	9.7177	9.72	4.86
42	9.8596	9.86	4.93
43	9.9652	9.97	4.98
44	10.0381	10.04	5.02
45	10.0819	10.08	5.04

Distance From Tower (m)	KLVA Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	10.1022	10.10	5.05
47	10.1009	10.10	5.05
48	10.0793	10.08	5.04
49	10.0399	10.04	5.02
50	9.9849	9.98	4.99
51	9.9164	9.92	4.96
52	9.8361	9.84	4.92
53	9.7457	9.75	4.87
54	9.6467	9.65	4.82
55	9.5404	9.54	4.77
56	9.4280	9.43	4.71
57	9.3104	9.31	4.66
58	9.1887	9.19	4.59
59	9.0637	9.06	4.53
60	8.9360	8.94	4.47
61	8.8064	8.81	4.40
62	8.6753	8.68	4.34
63	8.5434	8.54	4.27
64	8.4109	8.41	4.21
65	8.2784	8.28	4.14
66	8.1461	8.15	4.07
67	8.0144	8.01	4.01
68	7.8834	7.88	3.94
69	7.7534	7.75	3.88
70	7.6247	7.62	3.81
71	7.4973	7.50	3.75
72	7.3714	7.37	3.69
73	7.2471	7.25	3.62
74	7.1245	7.12	3.56
75	7.0036	7.00	3.50
76	6.8847	6.88	3.44
77	6.7676	6.77	3.38
78	6.6525	6.65	3.33
79	6.5393	6.54	3.27
80	6.4281	6.43	3.21
81	6.3189	6.32	3.16
82	6.2118	6.21	3.11
83	6.1066	6.11	3.05
84	6.0034	6.00	3.00
85	5.9023	5.90	2.95
86	5.8031	5.80	2.90
87	5.7058	5.71	2.85
88	5.6105	5.61	2.81
89	5.5171	5.52	2.76
90	5.4256	5.43	2.71
91	5.3360	5.34	2.67
92	5.2458	5.25	2.62
93	5.1558	5.16	2.58
94	5.0678	5.07	2.53
95	4.9817	4.98	2.49
96	4.8975	4.90	2.45
97	4.8152	4.82	2.41
98	4.7347	4.73	2.37
99	4.6560	4.66	2.33
100	4.5790	4.58	2.29