

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 (tower ID 1061009) 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 full-waved spaced antenna.

As can be seen in Exhibit 24-A, the maximum theoretical RF value would be $150.6\mu\text{W}/\text{cm}^2$ at a distance of 10 meters from the tower, which is 75.3% of the $200\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 15.06% 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: Tremonton, UT**KUAO****201****C2****KUAO****Site type:** Application**Channel:** 201**Class:** C2**ERP:** 8.6**Antenna:** ERI

Rototiller

3

full waved

COR AGL: 20m**Polarization:** Circular Pol

Distance From Tower (m)	KUAO Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	43.0961	43.10	21.55
1	42.9869	42.99	21.49
2	46.2416	46.24	23.12
3	61.0519	61.05	30.53
4	78.1402	78.14	39.07
5	97.2505	97.25	48.63
6	114.6169	114.62	57.31
7	129.0305	129.03	64.52
8	140.7696	140.77	70.38
9	147.7927	147.79	73.90
10	150.6037	150.60	75.30
11	147.6428	147.64	73.82
12	139.3783	139.38	69.69
13	126.5034	126.50	63.25
14	109.1064	109.11	54.55
15	87.0174	87.02	43.51
16	65.4945	65.49	32.75
17	45.9810	45.98	22.99
18	29.5057	29.51	14.75
19	16.7258	16.73	8.36
20	7.7620	7.76	3.88
21	2.3830	2.38	1.19
22	0.1529	0.15	0.08
23	0.4339	0.43	0.22
24	2.5535	2.55	1.28
25	5.8965	5.90	2.95
26	9.8991	9.90	4.95
27	14.0880	14.09	7.04
28	18.0917	18.09	9.05
29	21.5493	21.55	10.77
30	24.2336	24.23	12.12
31	26.1780	26.18	13.09
32	27.3760	27.38	13.69
33	27.8672	27.87	13.93
34	27.7216	27.72	13.86
35	27.1023	27.10	13.55
36	26.1453	26.15	13.07
37	24.8020	24.80	12.40
38	23.1633	23.16	11.58
39	21.3148	21.31	10.66
40	19.3348	19.33	9.67
41	17.2920	17.29	8.65
42	15.2455	15.25	7.62
43	13.2326	13.23	6.62
44	11.2309	11.23	5.62
45	9.3759	9.38	4.69

Distance From Tower (m)	KUAO Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	7.6849	7.68	3.84
47	6.1682	6.17	3.08
48	4.8305	4.83	2.42
49	3.6720	3.67	1.84
50	2.6892	2.69	1.34
51	1.8757	1.88	0.94
52	1.2233	1.22	0.61
53	0.7222	0.72	0.36
54	0.3615	0.36	0.18
55	0.1301	0.13	0.07
56	0.0165	0.02	0.01
57	0.0092	0.01	0.00
58	0.0972	0.10	0.05
59	0.2699	0.27	0.13
60	0.5173	0.52	0.26
61	0.8297	0.83	0.41
62	1.1981	1.20	0.60
63	1.6142	1.61	0.81
64	2.0701	2.07	1.04
65	2.5589	2.56	1.28
66	3.0740	3.07	1.54
67	3.6096	3.61	1.80
68	4.1603	4.16	2.08
69	4.7215	4.72	2.36
70	5.2889	5.29	2.64
71	5.8586	5.86	2.93
72	6.4275	6.43	3.21
73	6.9926	6.99	3.50
74	7.5514	7.55	3.78
75	8.0972	8.10	4.05
76	8.6240	8.62	4.31
77	9.1376	9.14	4.57
78	9.6369	9.64	4.82
79	10.1208	10.12	5.06
80	10.5885	10.59	5.29
81	11.0395	11.04	5.52
82	11.4732	11.47	5.74
83	11.8894	11.89	5.94
84	12.2880	12.29	6.14
85	12.6687	12.67	6.33
86	13.0317	13.03	6.52
87	13.3771	13.38	6.69
88	13.7050	13.71	6.85
89	14.0157	14.02	7.01
90	14.3095	14.31	7.15
91	14.5867	14.59	7.29
92	14.8476	14.85	7.42
93	15.0926	15.09	7.55
94	15.3222	15.32	7.66
95	15.5369	15.54	7.77
96	15.7369	15.74	7.87
97	15.9229	15.92	7.96
98	16.0952	16.10	8.05
99	16.2544	16.25	8.13
100	16.4008	16.40	8.20