

Human exposure to excess levels of radiofrequency radiation

The proposed facility is to be built using a 1-bay vertically polarized full-wave spaced antenna.

According to OET 65, “Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% “contour” where the appropriate limits are found to be exceeded.”

As can be seen in Exhibit 17-A, the proposed facility’s maximum contribution to RF on the site is $.00674 \mu\text{W}/\text{cm}^2$ at a distance of 98 meters from the tower, which is 0.003% of the uncontrolled (public) exposure limit.

Therefore, because the proposed facility will not cause an RF field that is equal to or greater than 5% of the $200 \mu\text{W}/\text{cm}^2$ limit for uncontrolled exposure at any point, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other 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.

Exhibit 17-A
RF Analysis: W220DM Parma, OH

W220DM
Site type: Proposed
Channel: 224
Class: D
ERP: .25kw
Antenna: SCA CL-FM/V
EPA Type 1
1 bay

COR AGL: 144 m
Polarization: Vertical

Distance From Tower (m)	W220DM Facility	Percent of 200uW/cm2
0	0.00004	0.000
1	0.00004	0.000
2	0.00004	0.000
3	0.00004	0.000
4	0.00004	0.000
5	0.00004	0.000
6	0.00004	0.000
7	0.00004	0.000
8	0.00004	0.000
9	0.00004	0.000
10	0.00004	0.000
11	0.00004	0.000
12	0.00004	0.000
13	0.00004	0.000
14	0.00004	0.000
15	0.00004	0.000
16	0.00004	0.000
17	0.00004	0.000
18	0.00004	0.000
19	0.00004	0.000
20	0.00004	0.000
21	0.00004	0.000
22	0.00004	0.000
23	0.00004	0.000
24	0.00004	0.000
25	0.00004	0.000
26	0.00004	0.000
27	0.00004	0.000
28	0.00004	0.000
29	0.00004	0.000
30	0.00004	0.000
31	0.00004	0.000
32	0.00004	0.000
33	0.00004	0.000
34	0.00004	0.000
35	0.00004	0.000
36	0.00004	0.000
37	0.00004	0.000
38	0.00004	0.000
39	0.00004	0.000
40	0.00006	0.000
41	0.00006	0.000
42	0.00005	0.000
43	0.00007	0.000
44	0.00007	0.000
45	0.00010	0.000

Distance From Tower (m)	W220DM Facility	Percent of 200uW/cm2
46	0.00010	0.000
47	0.00010	0.000
48	0.00012	0.000
49	0.00012	0.000
50	0.00012	0.000
51	0.00015	0.000
52	0.00015	0.000
53	0.00015	0.000
54	0.00023	0.000
55	0.00023	0.000
56	0.00032	0.000
57	0.00032	0.000
58	0.00032	0.000
59	0.00043	0.000
60	0.00043	0.000
61	0.00043	0.000
62	0.00056	0.000
63	0.00055	0.000
64	0.00055	0.000
65	0.00069	0.000
66	0.00069	0.000
67	0.00069	0.000
68	0.00095	0.000
69	0.00094	0.000
70	0.00094	0.000
71	0.00119	0.001
72	0.00119	0.001
73	0.00118	0.001
74	0.00155	0.001
75	0.00154	0.001
76	0.00153	0.001
77	0.00152	0.001
78	0.00189	0.001
79	0.00187	0.001
80	0.00186	0.001
81	0.00226	0.001
82	0.00224	0.001
83	0.00223	0.001
84	0.00301	0.002
85	0.00299	0.001
86	0.00297	0.001
87	0.00295	0.001
88	0.00382	0.002
89	0.00380	0.002
90	0.00377	0.002
91	0.00473	0.002
92	0.00470	0.002
93	0.00467	0.002
94	0.00572	0.003
95	0.00569	0.003
96	0.00565	0.003
97	0.00561	0.003
98	0.00674	0.003
99	0.00669	0.003
100	0.00665	0.003