

**Translator W249DA**  
**Channel 249D – 97.7 MHz**  
**0.250 kW ERP – 609 m COR AMSL**  
**Crossville, Tennessee**  
May 2021

**Radiofrequency Radiation Statement**

This radiofrequency radiation study is being conducted to determine whether this proposal is in compliance with OET Bulletin Number 65, dated August 1997, regarding human exposure to radiofrequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and utilizes the appropriate formulas contained in the OET Bulletin.

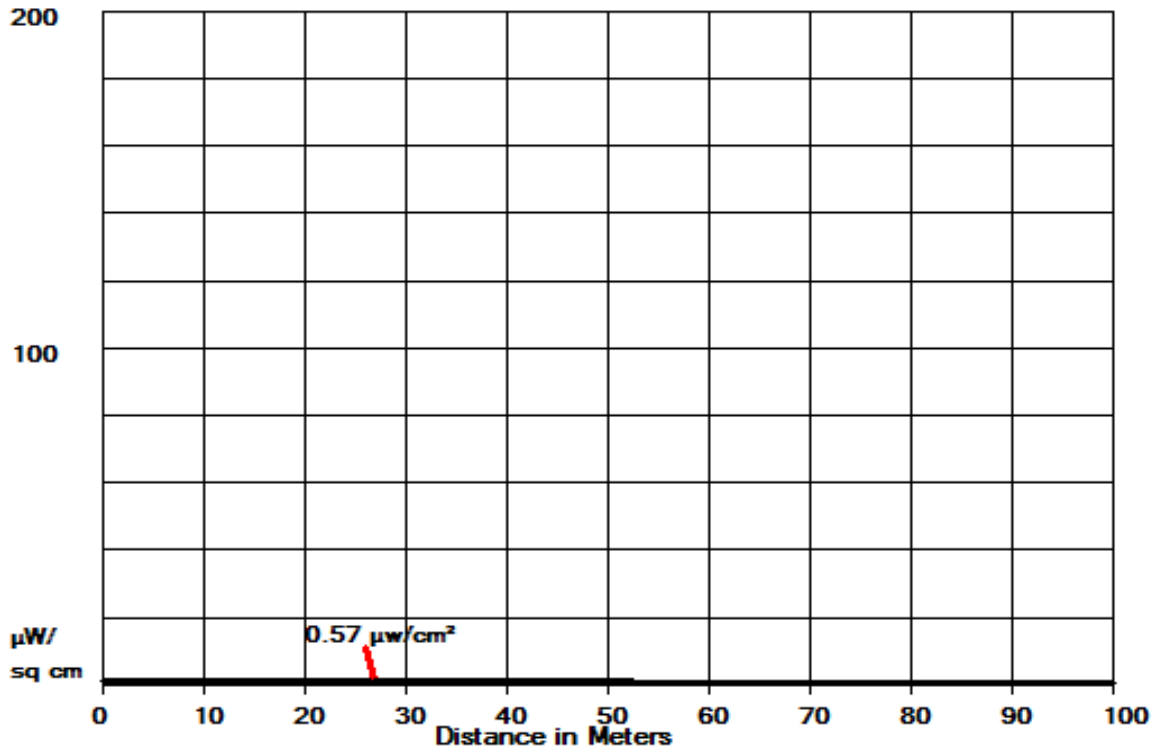
The 2-bay 0.85 wave spaced Nicom BKG77/2M antenna system will be mounted with its center of radiation 59 meters above the ground and will operate with an effective radiated power of 0.250 kilowatts in both the horizontal and vertical plane (circularly polarized). The Nicom BKG77/2M is an “Opposed V” (EPA Type 2) antenna and qualifies for “best case” RFR treatment. At two meters, the height of an average person, above the ground at the base of the tower, this proposal will contribute, best case, 0.286 microwatts/sq. centimeter or 0.143% of the allowable ANSI limit. Other areas near the tower were examined and it was found that the maximum radiofrequency radiation contribution is 0.3 percent of the allowable ANSI limit from 18 to 35 meters from the tower. See the attached Radiofrequency Radiation Density graph. There will be another co-located FM translator operating with an effective radiated power of 0.250 kW with its center of radiation 59 meters above ground. Since this contribution is less than 5% of the allowable ANSI limit, it is not necessary to calculate the contributions of other broadcast stations at this multi-user site. Co-located WAEW (AM) and WCSV (AM) are operating within all radiofrequency radiation

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requirements. Since this level is below the maximum contribution of 100% defined in the aforementioned bulletin, this proposal is believed to be in compliance with OET Bulletin Number 65 as is required by the Federal Communications Commission. All calculations were made in the uncontrolled mode.

Further, the applicant will post warning signs in the vicinity of the tower warning of potential radiofrequency radiation hazards at the site. In addition, the applicant will reduce the power of the proposed facility or cease operation, as necessary, to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.

EPA Type 2: Opposed "V" dipole, 2 Bays, Spac= 0.85, H=0.250 kW, V=0.250 kW, 59 M AG



HORZ. DISTANCE FROM FM RADIATOR VS POWER DENSITY (Microwatt/Square cm)  
 Dist(Meters) PD (H) PD (V) Total(uW/cm2) Percent Max.(200)

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)	Percent Max.(200)
0	0.06	0.22	0.29	0.1
1	0.06	0.23	0.29	0.1
2	0.05	0.24	0.29	0.1
3	0.05	0.25	0.30	0.1
4	0.04	0.25	0.30	0.1
5	0.04	0.26	0.30	0.2
6	0.04	0.27	0.32	0.2
7	0.05	0.29	0.33	0.2
8	0.05	0.30	0.35	0.2
9	0.05	0.31	0.36	0.2
10	0.06	0.32	0.38	0.2
11	0.06	0.33	0.40	0.2
12	0.07	0.34	0.41	0.2
13	0.08	0.35	0.43	0.2
14	0.09	0.35	0.45	0.2
15	0.10	0.36	0.46	0.2
16	0.11	0.36	0.47	0.2
17	0.12	0.37	0.49	0.2
18	0.13	0.37	0.50	0.3
19	0.14	0.37	0.51	0.3
20	0.16	0.37	0.53	0.3
21	0.17	0.37	0.53	0.3
22	0.18	0.36	0.54	0.3
23	0.19	0.36	0.55	0.3
24	0.21	0.35	0.56	0.3
25	0.22	0.35	0.57	0.3

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)	Percent Max.
26	0.23	0.34	0.57	0.3
27	0.24	0.33	0.57	0.3
28	0.24	0.32	0.57	0.3
29	0.25	0.32	0.56	0.3
30	0.25	0.31	0.56	0.3
31	0.25	0.30	0.55	0.3
32	0.25	0.29	0.54	0.3
33	0.25	0.28	0.53	0.3
34	0.25	0.27	0.52	0.3
35	0.25	0.26	0.51	0.3
36	0.25	0.25	0.49	0.2
37	0.24	0.24	0.48	0.2
38	0.24	0.22	0.46	0.2
39	0.24	0.21	0.45	0.2
40	0.23	0.20	0.43	0.2
41	0.22	0.19	0.41	0.2
42	0.21	0.18	0.39	0.2
43	0.20	0.17	0.37	0.2
44	0.19	0.16	0.35	0.2
45	0.18	0.15	0.33	0.2
46	0.18	0.14	0.31	0.2
47	0.17	0.13	0.29	0.1
48	0.16	0.12	0.27	0.1
49	0.15	0.11	0.26	0.1
50	0.14	0.10	0.24	0.1
51	0.13	0.09	0.23	0.1
52	0.13	0.09	0.21	0.1
53	0.12	0.08	0.20	0.1
54	0.11	0.07	0.18	0.1
55	0.10	0.06	0.17	0.1
56	0.09	0.06	0.15	0.1
57	0.09	0.05	0.14	0.1
58	0.08	0.05	0.12	0.1
59	0.07	0.04	0.11	0.1
60	0.06	0.04	0.10	0.0
61	0.06	0.03	0.09	0.0
62	0.05	0.03	0.08	0.0
63	0.04	0.02	0.07	0.0
64	0.04	0.02	0.06	0.0
65	0.03	0.02	0.05	0.0
66	0.03	0.01	0.04	0.0
67	0.02	0.01	0.04	0.0
68	0.02	0.01	0.03	0.0
69	0.02	0.01	0.02	0.0
70	0.01	0.01	0.02	0.0
71	0.01	0.00	0.01	0.0
72	0.01	0.00	0.01	0.0
73	0.00	0.00	0.01	0.0
74	0.00	0.00	0.00	0.0
75	0.00	0.00	0.00	0.0
76	0.00	0.00	0.00	0.0
77	0.00	0.00	0.00	0.0

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)	Percent Max.
78	0.00	0.00	0.00	0.0
79	0.00	0.00	0.00	0.0
80	0.00	0.00	0.00	0.0
81	0.00	0.00	0.00	0.0
82	0.00	0.00	0.00	0.0
83	0.00	0.00	0.00	0.0
84	0.00	0.00	0.01	0.0
85	0.01	0.00	0.01	0.0
86	0.01	0.00	0.01	0.0
87	0.01	0.00	0.01	0.0
88	0.01	0.01	0.02	0.0
89	0.01	0.01	0.02	0.0
90	0.02	0.01	0.02	0.0
91	0.02	0.01	0.03	0.0
92	0.02	0.01	0.03	0.0
93	0.02	0.01	0.03	0.0
94	0.03	0.01	0.04	0.0
95	0.03	0.01	0.04	0.0
96	0.03	0.02	0.05	0.0
97	0.03	0.02	0.05	0.0
98	0.04	0.02	0.06	0.0
99	0.04	0.02	0.06	0.0
100	0.04	0.02	0.06	0.0