

**Compliance with OET 65**

American Educational Broadcasting, Inc. ("AEB") desires to show that the proposed FM translator will not significantly affect the RFR at the collocation site set forth in this application.

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 16-A, an FM translator operating at 0.25 kw, operating at an above ground height of 32 meters and using the identical antenna that AEB uses in its translator facilities, does not exceed the 5% threshold at any point. The maximum contribution to RF on the site for this facility would be  $9.7121 \text{ uW/cm}^2$  at a distance of 8 meters from the tower, which is 4.86% of the uncontrolled (public) exposure limit.

The proposed facility will have a lower RF contribution since it is either lower in power or has a higher above ground level.

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

AEB 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 16-A**  
**RF Analysis**

**Proposed**

**Site type:**

**Channel:**

**Class:** D

**ERP:** 0.25 kw

**Antenna:** RFS CPF500

ring stub

2-bay

full wave

**COR AGL:** 32 m

**Polarization:** Circular

<b>Distance From Tower (m)</b>	<b>Proposed Facility</b>	<b>Total RF (uW/cm2)</b>	<b>Percent of 200uW/cm2</b>
0	8.1567	8.16	4.08
1	8.3219	8.32	4.16
2	8.4717	8.47	4.24
3	8.6582	8.66	4.33
4	9.0428	9.04	4.52
5	9.4077	9.41	4.70
6	9.6525	9.65	4.83
7	9.6979	9.70	4.85
8	9.7121	9.71	4.86
9	9.6797	9.68	4.84
10	9.5951	9.60	4.80
11	9.4752	9.48	4.74
12	9.3479	9.35	4.67
13	9.2331	9.23	4.62
14	9.0768	9.08	4.54
15	8.8715	8.87	4.44
16	8.5302	8.53	4.27
17	8.1657	8.17	4.08
18	7.7817	7.78	3.89
19	7.4082	7.41	3.70
20	7.0409	7.04	3.52
21	6.6589	6.66	3.33
22	6.2666	6.27	3.13
23	5.8254	5.83	2.91
24	5.3637	5.36	2.68
25	4.9165	4.92	2.46
26	4.4865	4.49	2.24
27	4.0772	4.08	2.04
28	3.6956	3.70	1.85
29	3.3343	3.33	1.67
30	2.9940	2.99	1.50
31	2.6755	2.68	1.34
32	2.3790	2.38	1.19
33	2.0937	2.09	1.05
34	1.8332	1.83	0.92
35	1.5965	1.60	0.80
36	1.3825	1.38	0.69
37	1.1898	1.19	0.59
38	1.0172	1.02	0.51
39	0.8830	0.88	0.44
40	0.7622	0.76	0.38
41	0.6513	0.65	0.33
42	0.5504	0.55	0.28
43	0.4593	0.46	0.23
44	0.3779	0.38	0.19
45	0.3057	0.31	0.15

Distance From Tower (m)	Proposed Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	0.2414	0.24	0.12
47	0.1840	0.18	0.09
48	0.1363	0.14	0.07
49	0.0974	0.10	0.05
50	0.0662	0.07	0.03
51	0.0420	0.04	0.02
52	0.0240	0.02	0.01
53	0.0115	0.01	0.01
54	0.0038	0.00	0.00
55	0.0003	0.00	0.00
56	0.0006	0.00	0.00
57	0.0040	0.00	0.00
58	0.0102	0.01	0.01
59	0.0188	0.02	0.01
60	0.0294	0.03	0.01
61	0.0417	0.04	0.02
62	0.0554	0.06	0.03
63	0.0702	0.07	0.04
64	0.0860	0.09	0.04
65	0.1024	0.10	0.05
66	0.1195	0.12	0.06
67	0.1368	0.14	0.07
68	0.1544	0.15	0.08
69	0.1718	0.17	0.09
70	0.1886	0.19	0.09
71	0.2052	0.21	0.10
72	0.2215	0.22	0.11
73	0.2374	0.24	0.12
74	0.2529	0.25	0.13
75	0.2679	0.27	0.13
76	0.2825	0.28	0.14
77	0.2965	0.30	0.15
78	0.3099	0.31	0.15
79	0.3228	0.32	0.16
80	0.3352	0.34	0.17
81	0.3470	0.35	0.17
82	0.3582	0.36	0.18
83	0.3688	0.37	0.18
84	0.3789	0.38	0.19
85	0.3885	0.39	0.19
86	0.3974	0.40	0.20
87	0.4059	0.41	0.20
88	0.4139	0.41	0.21
89	0.4213	0.42	0.21
90	0.4283	0.43	0.21
91	0.4349	0.43	0.22
92	0.4409	0.44	0.22
93	0.4465	0.45	0.22
94	0.4517	0.45	0.23
95	0.4565	0.46	0.23
96	0.4609	0.46	0.23
97	0.4649	0.46	0.23
98	0.4685	0.47	0.23
99	0.4718	0.47	0.24
100	0.4747	0.47	0.24