

**Radiofrequency Radiation Calculation  
KEHD – 98.3 mHz - 100 KW – 90.2 M AGL**  
**Big Lake, TX**  
**May 2022**

This Radiofrequency Radiation Study is being conducted to determine if this proposal is in compliance with OET Bulletin 65, dated August 1997 regarding human exposure to radiofrequency radiation in the vicinity of broadcast towers.

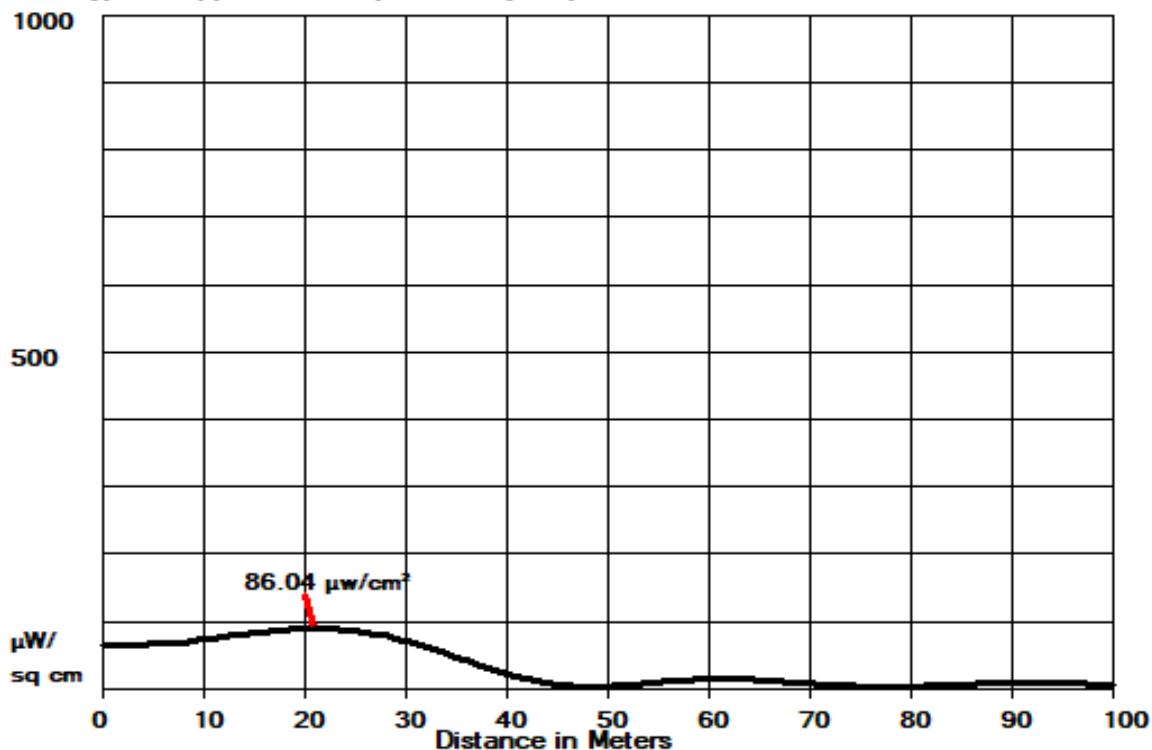
The Jampro JSCP-8 antenna will be mounted with its center of radiation 90.2 meters above ground level and operate with a power of 100 KW (horizontal and vertical). This antenna qualifies for "Best Case" RFR treatment. It is an EPA Type 2 antenna. At two meters, the height of an average person, at the base of the tower, this proposal contributes 60.9 microwatts/sq centimeter or 30.45% of the ANSI limit . However, there are other locations where the contribution is greater. The maximum occurs at between 21 and 22 meters from the tower base. At this location this proposal consumes 43% of the ANSI limit. All calculations were made in the uncontrolled mode. Please direct your attention to the tabulation and graph which is attached.

The proposed site is known as ASR 1290200. No height change will be made to the existing supporting structure. This proposal is in compliance with the nationwide programmatic agreement.

A search was made for co-located and nearby stations. There are no nearby AM, FM or TV stations to contribute additional radiation.

It is thought that this proposal complies with the requirements of the above referenced bulletin.

EPA Type 2: Opposed "V" dipole, 8 Bays, Spac= 1, H=100 kW, V=100 kW, 90.2 M AG



HORZ. DISTANCE FROM FM RADIATOR VS POWER DENSITY (Microwatt/Square cm)

Dist(Meters)	PD (H)	PD (V)	Total( $\mu\text{W}/\text{cm}^2$ )	Percent Max.(200)
0	13.05	47.85	60.90	30.5
1	12.43	48.94	61.37	30.7
2	11.83	50.02	61.84	30.9
3	11.23	51.09	62.33	31.2
4	10.65	52.16	62.81	31.4
5	10.08	53.21	63.30	31.6
6	9.53	54.24	63.77	31.9
7	8.98	55.25	64.23	32.1
8	8.73	56.47	65.20	32.6
9	9.20	58.30	67.51	33.8
10	9.67	60.09	69.76	34.9
11	10.13	61.81	71.94	36.0
12	10.58	63.44	74.02	37.0
13	11.02	64.96	75.98	38.0
14	11.44	66.34	77.78	38.9
15	11.83	67.57	79.39	39.7
16	12.50	68.50	81.00	40.5
17	13.54	69.08	82.62	41.3
18	14.55	69.43	83.98	42.0
19	15.51	69.52	85.03	42.5
20	16.41	69.32	85.73	42.9
21	17.22	68.82	86.04	43.0
22	17.93	67.99	85.92	43.0
23	18.52	66.83	85.35	42.7
24	19.08	65.27	84.35	42.2
25	19.65	63.29	82.94	41.5

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)	Percent Max.
26	20.05	60.97	81.02	40.5
27	20.26	58.34	78.60	39.3
28	20.25	55.41	75.67	37.8
29	20.04	52.21	72.25	36.1
30	19.61	48.78	68.39	34.2
31	18.97	45.14	64.11	32.1
32	18.12	41.35	59.48	29.7
33	17.39	37.27	54.66	27.3
34	16.46	33.17	49.63	24.8
35	15.33	29.13	44.46	22.2
36	14.02	25.19	39.22	19.6
37	12.58	21.43	34.00	17.0
38	11.04	17.87	28.91	14.5
39	9.45	14.57	24.02	12.0
40	7.86	11.57	19.43	9.7
41	6.32	8.90	15.22	7.6
42	4.81	6.60	11.41	5.7
43	3.47	4.65	8.12	4.1
44	2.34	3.06	5.40	2.7
45	1.43	1.84	3.27	1.6
46	0.76	0.96	1.72	0.9
47	0.33	0.41	0.74	0.4
48	0.13	0.16	0.29	0.1
49	0.14	0.17	0.31	0.2
50	0.35	0.41	0.75	0.4
51	0.72	0.82	1.54	0.8
52	1.23	1.36	2.59	1.3
53	1.84	1.99	3.83	1.9
54	2.52	2.65	5.17	2.6
55	3.23	3.30	6.53	3.3
56	3.92	3.91	7.83	3.9
57	4.57	4.45	9.02	4.5
58	5.14	4.88	10.02	5.0
59	5.60	5.20	10.80	5.4
60	5.93	5.39	11.32	5.7
61	6.13	5.45	11.57	5.8
62	6.16	5.37	11.54	5.8
63	6.02	5.18	11.20	5.6
64	5.75	4.88	10.63	5.3
65	5.36	4.50	9.85	4.9
66	4.87	4.04	8.91	4.5
67	4.32	3.54	7.85	3.9
68	3.72	3.01	6.73	3.4
69	3.10	2.48	5.58	2.8
70	2.49	1.97	4.46	2.2
71	1.91	1.50	3.41	1.7
72	1.39	1.08	2.46	1.2
73	0.93	0.72	1.65	0.8
74	0.56	0.43	0.99	0.5
75	0.29	0.21	0.50	0.3
76	0.11	0.08	0.19	0.1
77	0.02	0.02	0.04	0.0

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)
78	0.04	0.03	0.06
79	0.14	0.10	0.24
80	0.32	0.22	0.54
81	0.57	0.39	0.96
82	0.88	0.59	1.47
83	1.22	0.81	2.03
84	1.58	1.03	2.62
85	1.95	1.25	3.20
86	2.30	1.46	3.77
87	2.63	1.65	4.28
88	2.92	1.81	4.72
89	3.15	1.92	5.07
90	3.32	2.00	5.32
91	3.43	2.04	5.46
92	3.47	2.04	5.50
93	3.44	1.99	5.43
94	3.35	1.92	5.27
95	3.20	1.81	5.01
96	3.00	1.68	4.68
97	2.76	1.53	4.29
98	2.49	1.36	3.85
99	2.19	1.18	3.38
100	1.88	1.01	2.89