

Attachment 49  
Environmental Considerations  
**KMEX License Partnership, GP**  
KMEX-DT Los Angeles, CA  
Ch 34 40 kW-DA 222m

This application proposes use of the Flint Peak multiple-user facility owned by Richland Towers, for auxiliary (backup) purposes only. The proposed KMEX-DT/KFTR-DT shared antenna will be installed on a monopole structure adjacent to the existing transmitter building. This structure is significantly lower than the tower structures present at this site. Use of shared sites located in areas near other towers is environmentally preferred.

Operation is proposed on channel 34, with its center frequency of 593 MHz yielding a radiofrequency radiation exposure guideline value of  $395 \mu\text{W}/\text{cm}^2$  for the general population. The proposed RFS RD16A antenna, with its radiation center 41.4 meters above ground level, has a maximum downward radiation value toward ground of 0.042 at a depression angle of  $81^\circ$  (elevation pattern attached hereto). Consequently, the worst-case predicted exposure level at 2 meters above ground level is  $1.52 \mu\text{W}/\text{cm}^2$ . This exposure level is 0.38% of the guideline value, far below the “responsibility threshold” of 5%. Access to the site is restricted by fencing, with appropriate warning signage. The monopole itself also bears warning signs, as do other tower structures on the property.

As noted, this site is a multi-user communications facility. A coordinated RFR safety protocol is in effect. KMEX-DT will cooperate with site management and other communications users to ensure that RFR levels are maintained within guideline values, via power reduction, shutdowns, etc. when workers are present at the site.

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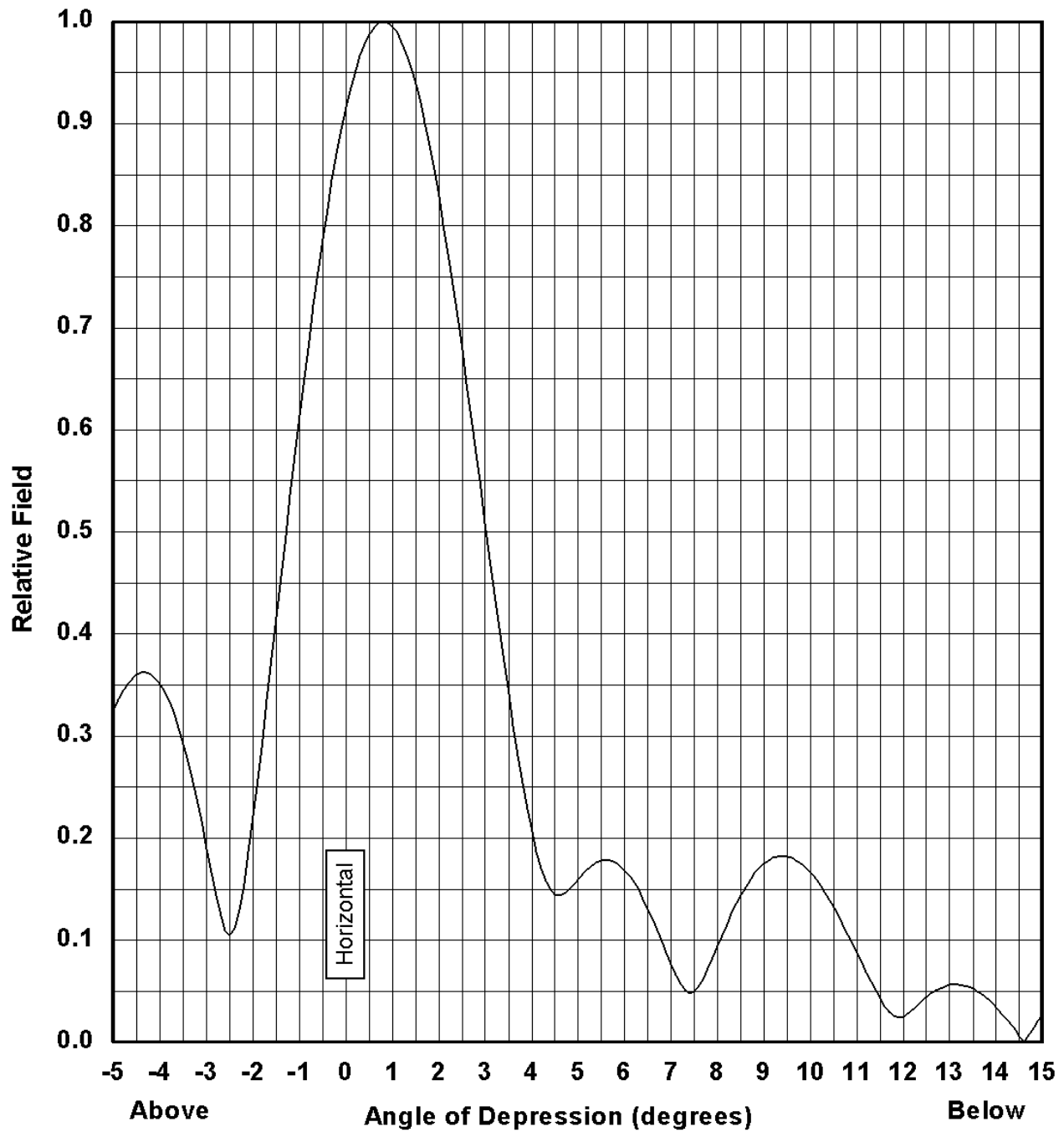
**Elevation Pattern**  
Model: RD16

**RADIO FREQUENCY SYSTEMS**



Beam Tilt: 0.75 degrees  
Null Fill: 15%

Directivity: 17.95 (12.54 dBd)  
Polarization: Horizontal



# Elevation Pattern Tabulated Data

Model: RD16

RADIO FREQUENCY SYSTEMS



Beam Tilt: 0.75 degrees

Directivity: 17.95 (12.54 dBd)

Null Fill: 15%

Polarization: Horizontal

Angle	Relative Field	dB	Angle	Relative Field	dB	Angle	Relative Field	dB	Angle	Relative Field	dB
-5.0	0.33	-9.74	7.2	0.06	-24.85	33.5	0.06	-24.45	64.0	0.02	-33.68
-4.8	0.34	-9.26	7.4	0.05	-26.36	34.0	0.05	-26.69	64.5	0.02	-32.43
-4.6	0.36	-8.95	7.6	0.06	-25.18	34.5	0.03	-29.68	65.0	0.03	-31.57
-4.4	0.36	-8.82	7.8	0.07	-22.75	35.0	0.02	-32.62	65.5	0.03	-31.03
-4.2	0.36	-8.86	8.0	0.09	-20.51	35.5	0.02	-33.11	66.0	0.03	-30.81
-4.0	0.35	-9.09	8.2	0.12	-18.74	36.0	0.03	-31.77	66.5	0.03	-30.87
-3.8	0.33	-9.54	8.4	0.14	-17.39	36.5	0.03	-30.84	67.0	0.03	-31.18
-3.6	0.31	-10.23	8.6	0.15	-16.37	37.0	0.03	-30.96	67.5	0.03	-31.80
-3.4	0.27	-11.22	8.8	0.17	-15.64	37.5	0.02	-32.22	68.0	0.02	-32.69
-3.2	0.23	-12.59	9.0	0.17	-15.14	38.0	0.02	-34.89	68.5	0.02	-33.94
-3.0	0.19	-14.44	9.2	0.18	-14.86	38.5	0.01	-39.33	69.0	0.02	-35.49
-2.8	0.14	-16.83	9.4	0.18	-14.76	39.0	0.01	-42.05	69.5	0.01	-37.46
-2.6	0.11	-19.19	9.6	0.18	-14.85	39.5	0.01	-38.06	70.0	0.01	-39.91
-2.4	0.11	-19.04	9.8	0.18	-15.12	40.0	0.02	-34.89	70.5	0.01	-42.97
-2.2	0.16	-16.15	10.0	0.17	-15.57	40.5	0.02	-33.43	71.0	0.00	-46.94
-2.0	0.22	-13.09	10.5	0.13	-17.57	41.0	0.02	-33.19	71.5	0.00	-52.40
-1.8	0.30	-10.55	11.0	0.09	-21.14	41.5	0.02	-34.02	72.0	0.00	-60.00
-1.6	0.38	-8.49	11.5	0.04	-27.29	42.0	0.02	-35.97	72.5	0.00	-80.00
-1.4	0.46	-6.81	12.0	0.02	-32.11	42.5	0.01	-39.49	73.0	0.00	-63.10
-1.2	0.54	-5.41	12.5	0.04	-27.15	43.0	0.01	-45.85	73.5	0.00	-54.42
-1.0	0.61	-4.24	13.0	0.06	-25.02	43.5	0.00	-64.44	74.0	0.00	-48.64
-0.8	0.69	-3.26	13.5	0.05	-25.58	44.0	0.00	-53.56	74.5	0.01	-44.29
-0.6	0.76	-2.44	14.0	0.03	-29.24	44.5	0.00	-51.06	75.0	0.01	-40.92
-0.4	0.82	-1.76	14.5	0.01	-44.29	45.0	0.00	-48.40	75.5	0.01	-38.13
-0.2	0.87	-1.20	15.0	0.03	-31.40	45.5	0.01	-40.72	76.0	0.02	-35.86
0.0	0.92	-0.76	15.5	0.06	-24.67	46.0	0.02	-34.89	76.5	0.02	-33.98
0.2	0.95	-0.43	16.0	0.08	-21.62	46.5	0.03	-30.72	77.0	0.02	-32.47
0.4	0.98	-0.19	16.5	0.10	-20.27	47.0	0.04	-27.62	77.5	0.03	-31.18
0.6	0.99	-0.05	17.0	0.10	-20.14	47.5	0.05	-25.27	78.0	0.03	-30.14
0.8	1.00	0.00	17.5	0.09	-21.08	48.0	0.07	-23.54	78.5	0.03	-29.29
1.0	1.00	0.00	18.0	0.07	-23.12	48.5	0.08	-22.28	79.0	0.04	-28.61
1.2	0.98	-0.17	18.5	0.05	-26.25	49.0	0.08	-21.43	79.5	0.04	-28.11
1.4	0.96	-0.40	19.0	0.04	-29.09	49.5	0.09	-20.95	80.0	0.04	-27.77
1.6	0.92	-0.71	19.5	0.04	-28.47	50.0	0.09	-20.81	80.5	0.04	-27.58
1.8	0.88	-1.12	20.0	0.05	-26.69	50.5	0.09	-20.99	81.0	0.04	-27.51
2.0	0.83	-1.63	20.5	0.05	-26.00	51.0	0.08	-21.49	81.5	0.04	-27.62
2.2	0.77	-2.24	21.0	0.05	-26.82	51.5	0.08	-22.30	82.0	0.04	-27.85
2.4	0.71	-2.96	21.5	0.03	-29.50	52.0	0.07	-23.45	82.5	0.04	-28.25
2.6	0.65	-3.80	22.0	0.02	-34.52	52.5	0.06	-24.96	83.0	0.04	-28.80
2.8	0.58	-4.77	22.5	0.02	-34.07	53.0	0.05	-26.84	83.5	0.03	-29.58
3.0	0.51	-5.87	23.0	0.04	-28.66	53.5	0.03	-29.14	84.0	0.03	-30.57
3.2	0.44	-7.14	23.5	0.05	-25.51	54.0	0.03	-31.94	84.5	0.03	-31.84
3.4	0.37	-8.56	24.0	0.06	-23.97	54.5	0.02	-35.19	85.0	0.02	-33.51
3.6	0.31	-10.16	24.5	0.07	-23.60	55.0	0.01	-38.79	85.5	0.02	-35.76
3.8	0.25	-11.91	25.0	0.06	-24.26	55.5	0.01	-42.05	86.0	0.01	-38.94
4.0	0.21	-13.72	25.5	0.05	-25.99	56.0	0.01	-44.29	86.5	0.01	-44.44
4.2	0.17	-15.37	26.0	0.04	-29.07	56.5	0.01	-45.85	87.0	0.00	-63.10
4.4	0.15	-16.50	26.5	0.02	-34.15	57.0	0.00	-48.18	87.5	0.00	-46.74
4.6	0.14	-16.83	27.0	0.01	-41.31	57.5	0.00	-52.77	88.0	0.01	-40.18
4.8	0.15	-16.52	27.5	0.01	-39.66	58.0	0.00	-70.46	88.5	0.01	-36.54
5.0	0.16	-15.96	28.0	0.01	-37.39	58.5	0.00	-55.92	89.0	0.02	-34.07
5.2	0.17	-15.43	28.5	0.01	-39.25	59.0	0.00	-49.63	89.5	0.02	-32.25
5.4	0.18	-15.07	29.0	0.00	-53.56	59.5	0.00	-47.33	90.0	0.03	-30.87
5.6	0.18	-14.95	29.5	0.01	-38.79	60.0	0.00	-46.56			
5.8	0.18	-15.07	30.0	0.03	-31.03	60.5	0.00	-47.13			
6.0	0.17	-15.44	30.5	0.05	-26.92	61.0	0.00	-48.64			
6.2	0.16	-16.09	31.0	0.06	-24.39	61.5	0.00	-47.96			
6.4	0.14	-17.05	31.5	0.07	-22.93	62.0	0.01	-44.29			
6.6	0.12	-18.37	32.0	0.08	-22.25	62.5	0.01	-40.54			
6.8	0.10	-20.11	32.5	0.08	-22.29	63.0	0.01	-37.59			
7.0	0.08	-22.34	33.0	0.07	-23.01	63.5	0.02	-35.34			