

**KTVM-TV****Channel 20 - Butte, Montana****ERP = 1000000.00 WATTS****APPENDIX A****Maximum ERP 1000 kW**

Polarization ----- 2 Circular  
 Antenna Height Above Ground -- 53.3 meters 174.9 feet  
 FCC Uncontrolled RFR Limit ---- 339.33  $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 9.811  $\mu\text{W}/\text{cm}^2$   
 2.89% of limit

Angle Below Horizontal (degrees)	<Point X> Horiz Distance from tower to 2 m AGL (meters)	Slant Distance from antenna to Point X (meters)	Vertical Pattern (REL. FIELD)	KTVM-TV ERP (kW)	KTVM-TV Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			1.000	1000.0000			
5	586.4	588.6	0.160	25.6000	4.936	1.45%	No
10	290.9	295.4	0.075	5.6250	4.305	1.27%	No
15	191.5	198.2	0.031	0.9610	1.634	0.48%	No
20	140.9	150.0	0.027	0.7290	2.165	0.64%	No
25	110.0	121.4	0.042	1.7640	7.997	2.36%	No
30	88.9	102.6	0.008	0.0640	0.406	0.12%	No
35	73.3	89.4	0.032	1.0240	8.551	2.52%	No
40	61.1	79.8	0.028	0.7840	8.222	2.42%	No
45	51.3	72.5	0.020	0.4000	5.077	1.50%	No
50	43.0	67.0	0.023	0.5290	7.880	2.32%	No
55	35.9	62.6	0.024	0.5760	9.811	2.89%	No
60	29.6	59.2	0.009	0.0810	1.542	0.45%	No
65	23.9	56.6	0.018	0.3240	6.755	1.99%	No
70	18.7	54.6	0.017	0.2890	6.478	1.91%	No
75	13.7	53.1	0.013	0.1690	4.002	1.18%	No
80	9.0	52.1	0.005	0.0250	0.615	0.18%	No
85	4.5	51.5	0.003	0.0090	0.227	0.07%	No
90	0.0	51.3	0.000	0.0000	0.000	0.00%	No

