

WUCW**Channel 22 - Minneapolis, Minnesota****ERP = 65780.00 WATTS****APPENDIX A****Maximum ERP 65.78 kW**

Polarization ----- 2 Circular
 Antenna Height Above Ground -- 280.4 meters 919.9 feet
 FCC Uncontrolled RFR Limit ---- 347.33 $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 2.400 $\mu\text{W}/\text{cm}^2$
 0.69% 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) | WUCW ERP (kW) | WUCW Calculated Power Density $\mu\text{W}/\text{cm}^2$ | Percent Limit | Limit Exceeded? |
|---|---|--|-------------------------------------|---------------------|---|------------------|--------------------|
| 0 | | | 1.000 | 65.7800 | | | |
| 5 | 3182.1 | 3194.3 | 0.539 | 19.1105 | 0.125 | 0.04% | No |
| 10 | 1578.9 | 1603.2 | 0.178 | 2.0842 | 0.054 | 0.02% | No |
| 15 | 1039.0 | 1075.7 | 0.089 | 0.5210 | 0.030 | 0.01% | No |
| 20 | 764.9 | 814.0 | 0.032 | 0.0674 | 0.007 | 0.00% | No |
| 25 | 597.0 | 658.8 | 0.125 | 1.0278 | 0.158 | 0.05% | No |
| 30 | 482.2 | 556.8 | 0.047 | 0.1453 | 0.031 | 0.01% | No |
| 35 | 397.6 | 485.4 | 0.072 | 0.3410 | 0.097 | 0.03% | No |
| 40 | 331.8 | 433.1 | 0.135 | 1.1988 | 0.427 | 0.12% | No |
| 45 | 278.4 | 393.7 | 0.075 | 0.3700 | 0.159 | 0.05% | No |
| 50 | 233.6 | 363.4 | 0.025 | 0.0411 | 0.021 | 0.01% | No |
| 55 | 194.9 | 339.9 | 0.092 | 0.5568 | 0.322 | 0.09% | No |
| 60 | 160.7 | 321.5 | 0.201 | 2.6576 | 1.718 | 0.49% | No |
| 65 | 129.8 | 307.2 | 0.227 | 3.3896 | 2.400 | 0.69% | No |
| 70 | 101.3 | 296.3 | 0.167 | 1.8345 | 1.396 | 0.40% | No |
| 75 | 74.6 | 288.2 | 0.089 | 0.5210 | 0.419 | 0.12% | No |
| 80 | 49.1 | 282.7 | 0.035 | 0.0806 | 0.067 | 0.02% | No |
| 85 | 24.4 | 279.5 | 0.009 | 0.0053 | 0.005 | 0.00% | No |
| 90 | 0.0 | 278.4 | 0.000 | 0.0000 | 0.000 | 0.00% | No |

