

MPE Distance Calculations

Equipment: Point to Point 5.8 GHz U-NII Transmitter

FCC ID: NTTSX1115 (class 2 permissive change)

RF Hazard Distance Calculation

mW/cm2 from Table1: 1.00

| | | |
|------------------------|----------------------|--------------------------|
| Max RF Power P, dBm | TX Antenna G, dBi | MPE Safe Distance, cm |
| 10.8 | 40 | 97.8 |

Basis of Calculations:

$$E^2/3770 = S, \text{ mW/cm}^2$$

$$E, \text{ V/m} = (P_{\text{watts}} * G_{\text{gain}} * 30)^{.5} / d, \text{ meters}$$

$$d = ((P_{\text{watts}} * G_{\text{gain}} * 30) / 3770 * S)^{.5}$$

$$P_{\text{watts}} * G_{\text{gain}} = 10^{(P_{\text{dBm}} - 30 + G_{\text{dBi}}) / 10}$$

NOTE: For FCC compliance of fixed transmitters, minimum separation distance is 1.5 m, even if calculations indicate MPE distance is less