

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:

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

$$E, \text{ V/m} = (P_{\text{watts}} * G_{\text{gain}} * 30)^{0.5} / d, \text{ meters}$$

$$d = ((P_{\text{watts}} * G * 30) / 3770 * S)^{0.5}$$

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

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