

15.407(f) RF Exposure Information

RF Hazard Distance Calculation

mW/cm2 from Table1: 1.00

Max RF Power P, dBm	TX Antenna G, dBi	MPE Safe Distance, cm
12.0	18.0	8.9
12.0	23.0	15.9
12.0	26.0	22.4
8.0	28.5	18.9

RF Hazard Distance Calculation

Basis of Calculations:

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

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

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

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

The Wireless UNII radio will be professionally installed. Antenna cables are provided with the EUT, antennas are specified for the installer to purchase. At present, there are four antennas specified for use with the radio:

Gabriel	SSP2-52ARI	28.5 dBi dish
MTI Technology	MT 30102	23 dBi flat panel array
Radiowaves	SP1-5.2NL	26 dBi dish
Gabriel	DFPD.5-52	18 dBi flat panel array

The radio will be provided with a 6 ft or a 12 ft long coaxial cable.

6 ft cable cable loss: 1.0 dB

12 ft cable loss: 1.9 dB

Cable loss will decrease RF power level delivered to the antenna.

Antennas will be fixed mounted in outdoor locations such as pole tops, building roofs, and similar structures. Professional installation is required for these antennas. Installer will be instructed to mount antennas so that a minimum distance of **1.5 meters** is maintained between all persons and the antenna. Refer to **page vii of the user manual**.