

**Applicant:** **PointRed Technologies Inc.**  
1283 Old Mountain View Alviso Road  
Suite B  
Sunnyvale, CA 94089

**FCC ID: QDU-MCRD-BASE-2R5**

The following antennas are recommended by the manufacturer for use with this MMDS base station:

Base Station:

Til-Tek 10 dBi omni TA-2550

Maxrad 7 dBi omni MFB25007

RadioWaves 90 deg sector, 13 dBi SEC-25H-90 for horizontal and SEC-25V-90 for vertical polarization

**RF Hazard Distance Calculation**

**MPE Calculati**

**mW/cm2 from Table1:** **1.00**

Max RF Power P, dBm	TX Antenna G, dBi	MPE Safe Distance, cm	Antenna Type
<b>25.1</b>	<b>13.0</b>	<b>22.7</b>	90 deg sector
<b>25.1</b>	<b>10.0</b>	<b>16.0</b>	omni
<b>25.1</b>	<b>7.0</b>	<b>11.4</b>	omni

**Basis of Calculations:**

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

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

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

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

**NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less**