

## RF Exposure

This calculation is based on the highest EIRP possible from the EUT. The following formulas were used:

The peak effective radiated power is 46 mW or 16.7 dBm

### 1 MINIMUM SEPARATION DISTANCE PER OET 65

The following information provides the minimum separation distance for the EUT, as calculated from **FCC OET 65 Appendix B, Table 1B** "Guidelines for General Population/Uncontrolled Exposure"

| Freq.<br>MHz | S<br>GP limit<br>mW/cm <sup>2</sup> | Maximum<br>RF power<br>dBm | Antenna<br>Gain<br>dB | EIRP<br>dBm | EIRP<br>watts | MSD<br>d<br>meters |
|--------------|-------------------------------------|----------------------------|-----------------------|-------------|---------------|--------------------|
| 2450         | 1                                   | 16.7                       | 0                     | 16.7        | 0.0468        | 0.0193             |

GP is the limit for general Population/Uncontrolled Exposure

MSD is the minimum Separation Distance

Notes on above table.

(S) GP limit is from OET 65 table 1B

EIRP = Power in dBm + Antenna Gain in dBi

MSD (Minimum Separation Distance) =  $((\text{EIRP} \times 30) / 3770 \times \text{S})^{0.5}$

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

This is not a hand held device.

### 2 RF EVALUATION FOR RSS-102E

Since the e.i.r.p. of the Product is 46 mW, it is exempt from routine SAR and RF exposure evaluations in accordance to Sections 2.5.1 or 2.5.2 of RSS-102e.

The following information provides the calculation for section 4.2 of RSS-102e for the General Public.

| Freq.<br>MHz | RF<br>Power<br>dBm | Antenna<br>Gain<br>dB | Effective<br>RF power<br>dBm | Effective<br>RF power<br>mW | Measurement<br>Distance<br>meters | RF field<br>from EUT<br>V/m | Exposure<br>GP limit<br>V/m rms |
|--------------|--------------------|-----------------------|------------------------------|-----------------------------|-----------------------------------|-----------------------------|---------------------------------|
| 2450         | 16.7               | 0                     | 16.7                         | 46.77                       | 0.025                             | 47.4                        | 61.4                            |

GP is the limit for general Public

Note on above table.

ERP =  $(\text{V/m} \times \text{dist})^{2/30}$