

# RF Exposure Statement

## Requirement:

According to CFR 15 §1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

## SAR Testing:

The average output power under normal worst-case operation of EUT is 3.2 mW <math>60/f(\text{GHz})\text{ mW} = 24.19\text{ mW for }d < 2.5\text{ cm (general population category). The user is instructed in the product manual that at distances less than 2.5 cm, this device emits energy below the RF safety limits for the FCC and IC. Per the calculations below, SAR measurements are not necessary.}

## Health Hazard:

The following table summarizes the power density at a distance of 20 cm as calculated from FCC OET Bulletin 65.

**Potential Health Hazard Radiation Level**

| Worst Case | Ant.Gain<br>(dBi)* | Po<br>(dBm) | EIRP***<br>(dBm) | EIRP***<br>(mW) | $S_{20\text{cm}}$<br>(mW/cm <sup>2</sup> ) |
|------------|--------------------|-------------|------------------|-----------------|--|
| Cont Tx    | 2.5                | 2.5         | 5.0              | 3.2             | 0.0006                                     |

\*Gain value computed in associated test report.

\*\* Conducted power output measured with radio transmitting at maximum duty and data rate possible

\*\*\*Note: EIRP employed in calculation is the greater of the average conducted output power and the EIRP.

The following equations were used in calculating duty cycle and power density (S).

$$EIRP(\text{mW}) = Po(\text{mW}) \cdot 10^{\frac{Gain(\text{dB})}{10}}$$

$$S(\text{mW/cm}^2) = \frac{EIRP(\text{mW})}{4 \cdot \Pi \cdot R(\text{cm})^2}, R = 20\text{ cm}$$