

Potential Health Hazard EM Radiation Level

It has been determined that the DUT output power is less than 10 mW (10 dBm), and given the low gain of the PCB antenna (~1 dBi) , no health hazard exists beyond the physical dimensions of the DUT. The following table summarizes the minimum operating distance for this device as calculated from FCC OET Bulletin 65.

Table 6.3 Potential Health Hazard Radiation Level

Ant.	Ant.Gain (dB)	Po (mW)	EIRP (mW)	R (cm)	S(mW/cm ²) @ 20cm
PCB	1	2.78	3.50	0.53	0.0007

The following equations were used in calculating the operating distance (R).

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

and

$$R = \sqrt{\frac{EIRP(mW)}{4 \cdot \Pi \cdot S(mW/cm^2)}}, \quad S = 1mW/cm^2$$