

RF Exposure Statement

Requirement:

According to 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:

This is a portable/mobile device and the peak conducted EIRP is 2.29 mW (see below). The output power is lower than $P_o = 60/f_{(GHz)} \text{ mW} = 24.19 \text{ mW}$ for $d < 2.5 \text{ cm}$ (general population category). Thus, a SAR measurement is not necessary.

Health Hazard:

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 power density at a distance of 20 cm from the device as calculated from FCC OET Bulletin 65.

Table 6.3 Potential Health Hazard Radiation Level

Ant.	Ant.Gain (dBi)	Po (mW)	EIRP (mW)	S (mW/cm ²)
PCB	1	1.82	2.29	0.000456

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

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

and

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