

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:

This is a controlled device mounted inside the dash of an automobile, greater than 20 cm from the occupant. Worst case conducted power is 35.1 mW in WLAN mode (see below). Thus, a SAR measurement is not necessary.

Health Hazard:

It has been determined that the DUT EIRP is less than (0 dBm), thus, 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 – Bluetooth Mode

Ant.	Ant.Gain (dBi)*	Po (mW)	EIRP (mW)	S (mW/cm ²)
PCB	-19.9	1.27	0.0132	0.0000026

Table 6.3 Potential Health Hazard Radiation Level – WLAN Mode

Ant.	Ant.Gain (dBi)*	Po (mW)	EIRP (mW)	S (mW/cm ²)
PCB	-19.9	35.1	0.359	0.000071

The following equations were used in calculating the power density (S).

$$EIRP(mW) = Po(mW) \cdot 10^{\frac{Gain(dB)}{10}} \quad \text{and} \quad S(mW/cm^2) = \frac{EIRP(mW)}{4 \cdot \Pi \cdot R(cm)^2}, \quad R = 20 \text{ cm}$$

*Note: Antenna gain was computed by the test lab by comparing the conducted output power measured at the RF port to the maximum EIRP computed from measured field strength at 3 meters distance.