

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 the Radar with operating duty cycle applied is 5.2 dBm or 3.3 mW. Per the calculations below, SAR measurements are not necessary.

Health Hazard:

The following table summarizes the power density at a distance of 20 cm and at 1 cm (minimum possible separation between DUT and vehicle surface / consumer) as calculated from FCC OET Bulletin 65.

Potential Health Hazard Radiation Level

Worst Case	Pk EIRP meas. (dBm)	Duty Cycle (dB)	Avg EIRP (dBm)	S _{1cm} (mW/cm ²)	S _{20cm} (mW/cm ²)
Amplified System	18.2	-13.0	5.2	0.26	0.0007

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

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

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