

RF EXPOSURE INFO

RF Safety Requirements to 2.1091/95.1125 for Mobile Transmitters

Part 95 transmitters are considered categorically excluded from routine environmental evaluation as given in 47 CFR 2.1091. However, the following information is presented to prove compliance with the limits.

Power Output

The EUT's maximum output power as measured from the transmitter is -5.2 dBm (ERP). The EUT antenna's gain is -2dBi.

MPE Calculations

The limits for this unit (uncontrolled exposure) are 0.4 mW/cm^2 . Taking the RF Density Field Equation:

$$S = (\text{EIRP in mW}) / (4\pi R^2) \text{ and solving for Distance R}$$

$$R = \text{SQRT} (\text{EIRP in mW}) / (S4\pi)$$

Solving the above equation yields

$$R (\text{cm}) = \text{SQRT} (0.3(\text{mw})) / (0.4(\text{mW/cm}^2) * 4 * \pi) = 0.25 \text{ cm}$$