

Environmental evaluation and exposure limit according to  
FCC CFR 47 part 15, §15.247(e)(i) and §1.1307

MPE limit for power density for general population/uncontrolled exposure according to FCC §1.1310 is 1 mW/cm<sup>2</sup>.

$$\text{A power density } P \text{ (mW/cm}^2\text{)} = \frac{P_T}{4\pi r^2}, \text{ where}$$

$P_T$  - transmitted power.

$P_T$  is equal to transmitter output power 16.1 dBm plus maximum antenna gain 1 dBi, the maximum equivalent isotropically radiated power (e.i.r.p.) is 17.1 dBm = 51.3 mW.

$$1(\text{mW/cm}^2) = 51.3 \text{ mW} / 4\pi r^2$$

The power density at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

$$51.3 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.01 \text{ mW/cm}^2 \ll 1 \text{ mW/cm}^2$$

Public cannot be exposed to dangerous RF level.