

Exposure limit according to §15.247(i) and §1.1307

The device is classified as mobile.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm² (for 1500 –100,000 MHz frequency range).

The power density P (mW/cm²) = $P_T / 4\pi r^2$

P_T is the transmitted power, which is equal to the peak transmitter output power 21.34 dBm plus maximum antenna gain 3 dBi, the maximum equivalent isotropically radiated power EIRP is

$$P_{T1} = 21.34 \text{ dBm} + 3 \text{ dBi} = 24.34 \text{ dBm} = 271.64 \text{ mW.}$$

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

$$271.64 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.05 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.