

**Environmental evaluation and exposure limit according to FCC CFR 47part 1,
§1.1307, §1.1310**

The transceiver is classified as mobile, the calculation was done for power density at 20 cm distance.

Limit for power density for general population/uncontrolled exposure is $f/1500$ mW/cm² for 300 – 1500 MHz frequency range:

$$P = 450/1500 = 0.3 \text{ mW/cm}^2$$

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

P_T is the maximum equivalent isotropically radiated power (EIRP).

The effective radiated power (ERP) of 20.65 dBm corresponds to the equivalent isotropically radiated power (EIRP) of 22.77 dBm, which is equal to 189.2 mW.

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

$$P = 189.2 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.038 \text{ mW/cm}^2 < 0.3 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.