

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

The transceiver is classified as mobile device.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm² for 1500 -100000 MHz frequency range.

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

P_T is the transmitted power, which is equal to the peak transmitter output power plus maximum antenna gain. The maximum equivalent isotropically radiated power EIRP is

$$P_T = 26.92 \text{ dBm} + 10.5 \text{ dBi} = 37.42 \text{ dBm} = 5521 \text{ mW}, \text{ where}$$

26.92 dBm is the EUT maximum output power,
10.5 dBi – antenna gain.

According to the applicant statement, a duty cycle is 0.7428, so, the average equivalent isotropically radiated power is

$$5521 \text{ mW} \times \text{duty cycle} = 5521 \text{ mW} \times 0.7428 = 4096.6 \text{ mW}$$

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

$$4096.6 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.815 \text{ mW/cm}^2$$

A warning about a safe distance is contained in the user manual. General public cannot be exposed to dangerous RF level.