

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

The calculation was done for confirm compliance with power density limit at 20 cm distance.

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 / 4π r²**, where

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

The peak output power of 26.3 dBm with 6 dBi antenna gain corresponds to the equivalent isotropically radiated power (EIRP) of

$$26.3 \text{ dBm} + 6 \text{ dBi} = 32.3 \text{ dBm}, \text{ which is equal to } 1698 \text{ mW}.$$

The power density at 20 cm calculated as follows:

$$1698 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.33 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.