Environmental evaluation and exposure limit according to FCC CFR 47 part 15, §15.247(b)(5) and §1.1307

EUT Model: IDR 2.4GHz TDD Ext

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

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

P_T - transmitted power.

P_T is equal to transmitter output power 18.93 dBm plus maximum antenna gain 17 dBi, the maximum equivalent isotropically radiated power (e.i.r.p.) is 35.93 dBm = 3917 mW.

$$1(mW/cm^2) = 3917\ mW / 4\pi r^2$$

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

$$3917\ mW / 4\pi\ (20\ cm)^2 = 0.78\ mW/cm^2 < 1\ mW/cm^2$$

General public cannot be exposed to dangerous RF level.