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

FCC ID: 2AWXX-ABR0385CRM

The transceiver is classified as fixed, the calculation was done to check a safe distance.

Limit for power density for general population/uncontrolled exposure is 1 $\,$ mW/cm 2 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

$$P_T = 29.99 \text{ dBm} + 4.7 \text{ dBi} = 34.69 \text{ dBm} = 2944.4 \text{ mW}$$
, where

The minimum safe distance "r", where RF exposure does not exceed FCC permissible limit, is

$$r = sqrt \{ PT / (Px4\pi) \} = sqrt \{ 2944.4 / 12.56 \} = 15.3 cm.$$

A warning about a safe distance is contained in the user manual.