

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

The transceiver is classified as fixed, the calculation was done to confirm a safe 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 transmitted power, which is equal to the peak transmitter output power plus maximum antenna gain. The maximum equivalent isotropically radiated power EIRP is

$$P_T = 46.19 \text{ dBm} + 18 \text{ dBi} = 64.19 \text{ dBm} = 2624218.5 \text{ mW}, \text{ where}$$

46.19 dBm is the EUT maximum output power **stated in the original grant**,
18 dBi – antenna gain.

The EUT maximum output power obtained during testing for Class II Permissive change is 39.17 dBm, that is less than in the original grant.

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

$$r = \sqrt{P_T / (P \times 4\pi)} = \sqrt{2624218.5 / 12.56} = 457.0 \text{ cm}.$$

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