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 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/cm^2) = P_T / 4π 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 = 28.72 dBm +17.9 dBi = 46.62 dBm = 45919 mW, where

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

r = sqrt { P_T / (Px4π)} = sqrt {45919 / 12.56} = 60.5 cm.

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