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 f/1500 mW/cm^2 for 300 – 1500 MHz frequency range:

P = 733/1500 = 0.49 mW/cm^2

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

$$P_T = 33.68 \text{ dBm } +13.5 \text{ dBi} = 47.18 \text{ dBm} = 52239.6 \text{ mW, where}$$

33.68 dBm is the EUT maximum output power,
13,5 dBi – antenna gain.

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

$$r = \text{sqrt } \{ P_T / (Px4\pi)\} = \text{sqrt } \{52239.6 / (0.49 \text{ x}12.56)\} = 92 \text{ cm}.$$

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