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

The calculation was done to confirm required safe distance for fixed device.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm^2 for 1500 -100000 MHz frequency range:
Limit for power density for occupational exposure is 5 mW/cm^2 for 1500 -100000 MHz frequency range.

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

P_T is the maximum equivalent isotropically radiated power (EIRP), measured value is 40.46 dBm.
which is equal to 11117 mW.

The minimum safe distance “r” for general population/uncontrolled exposure, where RF exposure does not exceed FCC permissible limit, is

$$r = \text{sqrt}\ \{ P_T / (Px4\pi)\} = \text{sqrt}\ \{11117 / 12.56\} = 29.75\ \text{cm}.$$

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

$$r = \text{sqrt}\ \{ P_T / (Px4\pi)\} = \text{sqrt}\ \{11117 / 5 \times 12.56\} = 13.3\ \text{cm}.$$

The information note about safe distance shall be provided in the User Manual.