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

$$P_T = 32\ dBm + 18\ dBi = 50\ dBm = 100000\ mW, \text{ where}$$

32 dBm is the EUT maximum output power (per port),
18 dBi – antenna gain.

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

$$r = \text{sqrt}\ \{ P_T / (Px4\pi)\} = \text{sqrt}\ \{100000 / 12.56\} = 89.2\ cm \approx 90\ cm.$$

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