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 = 730.5/1500 = 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 = 46.06 dBm +13.5 dBi = 59.56 dBm = 903649.5 mW, where

46.06 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 = sqrt { P_T / (Px4π)} = sqrt {903649.5 /(0.49 x 12.56)} =383.2 cm ≈ 384 cm.

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