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 the end user device.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm2 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).

1) The selected power is the max allowed power level as per FCC for an end user device. The EIRP

calculation will include the total antenna gain. Please refer to "§96.41 General radio requirements" corresponds to

the equivalent isotropically radiated power (EIRP) for an end user device

FCC MAX EIRP 23 dBm, is equal to 199.5 mW

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

$r = \mathrm{sqrt}\ \{\ PT\ /\ (Px4\pi)\} = \mathrm{sqrt}\ \{199.5\ /\ 12.56\} = 3.98\ \mathrm{cm}.$

General public cannot be exposed to dangerous RF level, the user manual instructs the end user device is located at least 20 cm from all persons.