

**FCC ID: H38UEM-8T**

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

The calculation was done for required safe distance.

Limit for power density for general population/uncontrolled exposure is  $f/1500 \text{ mW/cm}^2$  for 300 -1500 MHz frequency range:

For operating frequency range 535 - 546 MHz, the limit for power density is **(535/1500)**  $\text{mW/cm}^2$ .

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

**$P \text{ (535/1500)} = 0.357 \text{ mW/cm}^2$**  for operating frequency range 535 - 546 MHz;

$P_T$  is the maximum equivalent isotropically radiated power (EIRP).

The peak output power of 16.213 dBm (ERP),

The equivalent isotropically radiated power (EIRP)

= Power(ERP)+ 2.15 dB = 16.213 dBm +2.15 dB= 18.363 dBm (EIRP) = 68.6 mW (EIRP)

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

$r = \sqrt{P_T / (P \times 4\pi)} = \sqrt{68.6 / (0.357 \times 4\pi)} = 3.91 \text{ cm}$ .