MPE Calculations

- Frequency range : **2402** MHz ~ **2480** MHz
- Maximum RF output power : **-3** dBm
- Maximum antenna peak gain : **-0.50** dBi

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the user.

The MPE calculation for this exposure is shown below.

The peak radiated output power (EIRP) is calculated as follows:

▪ **EIRP** = P + G = **-3.00** dBm + **-0.50** dBi = **-3.50** dBm	**- Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = P G / (4 R^2 π) = **0.50** X **0.891** / (4 X 20^2 X π) = **0.00009** mW/cm^2	**- Note** S = Maximum power dencity(mW/cm^2) P = Power input to the antenna(mW) G = Numeric power gain of the antenna R = Distance to the center of the radiation of the antenna(20cm)

Conclusion : N/A (The EIRP is below the limit.)

The maximum permissible exposure(MPE) of the general population/Uncontrolled for this device is **1.61** mW/cm^2