MPE Calculations(OBW: 5MHz)

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user. The MPE calculation for this exposure is shown below.

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

EIRP = 29.31dBm(RF Test report) = 0.853W

Power density at the specific separation:

$S = EIRP/(4R^2\pi)$ $S = 853mW / (4*20^2*\pi) cm^2$ $S = 0.170\ mW/cm^2$	Where, S = Maximum power density (mW/cm^2) R = Distance to the center of the radiation of the antenna (20cm)

Conclusion:

The Maximum permissible exposure (MPE) of the general Population/Uncontrolled for this device is 1.0 mW/cm^2 . The power density at 20cm does not exceed the 1.0 mW/cm^2.

Therefore, the exposure condition of the EUT is compliant with FCC rules.

MPE Calculations(OBW: 10MHz)

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user. The MPE calculation for this exposure is shown below.

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

EIRP = 29.67dBm(RF Test report) = 0.927W

Power density at the specific separation:

$S = EIRP/(4R^2\pi)$ $S = 927mW / (4*20^2*\pi) cm^2$ $S = 0.184\ mW/cm^2$	Where, S = Maximum power density (mW/cm^2) R = Distance to the center of the radiation of the antenna (20cm)

Conclusion:

The Maximum permissible exposure (MPE) of the general Population/Uncontrolled for this device is 1.0 mW/cm^2 . The power density at 20cm does not exceed the 1.0 mW/cm^2.

Therefore, the exposure condition of the EUT is compliant with FCC rules.