## **MPE CALCULATION**

RF Exposure Requirements: 47 CFR §1.1307(b)

RF Radiation Exposure Limits: 47 CFR §1.1310

RF Radiation Exposure Guidelines: FCC OST/OET Bulletin Number 65

EUT Frequency Band: 2402-2480 MHz
Limits for General Population/Uncontrolled Exposure in the band of: 1500 - 100,000 MHz

Power Density Limit: 1 mW / cm<sup>2</sup>;

Equation:  $S = PG / 4\pi R^2$  or  $R = \sqrt{PG / 4\pi S}$ 

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

## Prediction distance 25cm

Antenna Gain	Channel	Channel Frequency (MHz)	Measured Output Power(dBm)	Power Density Limit (mW/ cm²)	Power Density (mW/ cm²)
9dBi	Low	2402	28.7	1	0.849
9dBi	Mid	2440	28.9	1	0.890
9dBi	High	2480	28.8	1	0.869
24dBi	Low	2402	23.7	1	0.716
24dBi	Mid	2440	23.9	1	0.750
24dBi	High	2480	23.9	1	0.750

## Result

The Above Result had shown that Device complied with 1 mW/cm<sup>2</sup> Power density requirement for distance of 25cm.

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