

MPE CALCULATION

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|---|--------------------------------|
| 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: | 903-927 MHz |
| Limits for General Population/Uncontrolled Exposure in the band of: | 300–1500 MHz |
| Power Density Limit: | f/1500 mW / cm ² ; |

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 20cm

| Antenna Gain | Channel | Channel Frequency (MHz) | Measured Output Power(dBm) | Power Density Limit (mW/ cm ²) | Power Density (mW/ cm ²) |
|--------------|---------|-------------------------|----------------------------|--|--------------------------------------|
| 5dBi | Low | 903 | 26.37 | 0.602 | 0.431 |
| 5dBi | Mid | 915 | 26.03 | 0.610 | 0.399 |
| 5dBi | High | 927 | 26.03 | 0.618 | 0.399 |
| 15dBi | Low | 903 | 19.53 | 0.602 | 0.268 |
| 15dBi | Mid | 915 | 19.37 | 0.610 | 0.258 |
| 15dBi | High | 927 | 19.37 | 0.618 | 0.258 |

Result

The Above Result had shown that Device complied with f/1500 mW/cm² Power density requirement for distance of 20cm.

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