

MPE CALCULATION

For Wattstopper, Inc.; Model MR2000; FCCID: Q4BMR2K

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: 902 – 928 MHz

EUT Maximum Measured Conducted Power: 0 dBm (0.001 Watt)

EUT Antenna Gain: 3 dBi (2 numeric)

Limits for General Population/Uncontrolled Exposure: $f/1500$; f (frequency) in MHz

Power Density Limit: $902 / 1500 = 0.601 \text{ mW/cm}^2$ or 6.01 W/m^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

$$S = 0.001\text{W} \cdot 2 / 4 \cdot 3.14 \cdot (0.2\text{m})^2 = 0.002\text{W} / 0.503\text{m}^2 = 0.004 \text{ W/m}^2 (0.0004 \text{ mW/cm}^2)$$

EUT comply with 20cm distance exposure.