

MPE CALCULATION

For Airaya – Wireless GRID

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: 5250 – 5350 MHz

EUT Maximum Measured Conducted Power: 6.8 dBm (0.0048 watt)

EUT Antenna Gain: 28 dBi (630.957 numeric)

Limits for General Population/Uncontrolled Exposure: 1500 – 100,000 MHz

Power Density Limit: 1.0 mW/cm² or 10.0 W/m²

Equation: $S = PG / 4\pi R^2$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

$$S = 0.0048W * 630.957 / 4 * 3.14 * (0.2m)^2 = 3.029W / 0.503m^2 = 6.025 \text{ W/m}^2 (0.6025 \text{ mW/cm}^2)$$

EUT comply with 20cm distance exposure.