

## MPE CALCULATION

### For AIRAYA Corp–Wireless Bridge, Model: WirelessGRID-300

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:	4945MHz ~4985MHzMHz
Limits for General Population/Uncontrolled Exposure in the band of:	1500MHz – 10000MHz
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

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Power = 27.24dBm, Typical Antenna Gain = 29dBi, MPE limit= 1mW/cm<sup>2</sup>

By using equation  $R = \sqrt{PG / 4\pi S}$

**R= 182.96cm**

#### Result

The Above Result had shown that the minimum separation distance in order to meet MPE requirement is 182.96cm.

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