

MPE CALCULATION

MPE Limit Calculation: EUT's operating frequencies @ 5725 - 5850 MHz; highest conducted power = 24.7dBm (peak) therefore, **Limit for Uncontrolled exposure: 1 mW/cm² or 10 W/m²**

Power Density Determination:

$$S = PG / 4\pi R^2 \quad \text{or} \quad R = \sqrt{PG / 4\pi S}$$

where, S = Power Density (1 mW/cm²)
 P = Linear Power Input to antenna
 G = Numerical Antenna Gain
 R = Radius

Model 800		
Antenna Model	Gain (dBi)	Power Density @ 20cm or Distance to meet limit
ARC Wireless Solutions (Parabolic)	30	153.3cm separation distance required for 1 mW/cm ²
PlainAir HiperLink (15 ⁰ Sector)	22	61.0cm separation distance required for 1 mW/cm ²
PlainAir HiperAccess (90 ⁰ Sector)	14	24.3cm separation distance required for 1 mW/cm ²
MTI Wireless Edge (60 ⁰ Sector)	17	34.3cm separation distance required for 1 mW/cm ²
MTI Wireless Edge (120 ⁰ Sector)	15	27.2cm separation distance required for 1 mW/cm ²
MTI Wireless Edge (Omni)	9	0.46 mW/cm ² @ 20cm separation distance

Model 700		
Antenna Model	Gain (dBi)	Power Density @ 20cm or Distance to meet limit
ARC Wireless Solutions (Panel)	23	68.5cm separation distance required for 1 mW/cm ²