

MPE CALCULATION

For AIRAYA CORP – Wireless Bridge; Model: WirelessGRID
FCC ID: QDE-GRID-3X3-PS

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:	5745 – 5825 MHz
Limits for General Population/Uncontrolled Exposure in the band of:	1.5 – 100 GHz
Power Density Limit:	1 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

Point to point Link

5.8 GHz, Power = 24.96 dBm, Antenna Gain = 28 dBi, Power density limit = 1 mW/ cm²;
R= 29.81026

Result

The Above Result had shown that Device complied with 1mW/cm² Power density requirement for distance with minimum distance 29.81026 cm.

Point to multiple point Link

5.8 GHz, Power = 24.96 dBm, Antenna Gain = 10 dBi, Power density limit = 1 mW/ cm²;

Result

The Above Result had shown that Device complied with 1mW/cm² Power density requirement for distance with minimum distance 3.752899 cm.

Completed By : Choon Sian Ooi

Date : January 29, 2009