MPE CALCULATION

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

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 = 29 dBi, Power density limit = 1 mW/ cm2;
R= 140.72 cm

Result

The Above Result had shown that Device complied with 1mW/cm^2 Power density requirement for distance with minimum distance 140.72 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/cm^2 Power density requirement for distance with minimum distance 15.8 cm.

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