

## Maximum Permissible Exposure

**FCC, Part 15 Subpart C §15.407(f)**

**Industry Canada RSS-Gen §5.5**

### Calculations for Maximum Permissible Exposure Levels

Power Density = Pd (mW/cm<sup>2</sup>) = EIRP/(4πd<sup>2</sup>)

EIRP = P \* G

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

Numeric Gain = 10 ^ (G (dBi)/10)

The Trilliant CONNECTOR has a single transmitter.

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

Freq. Band (MHz)	Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm <sup>2</sup> Limit(cm)	Minimum Separation Distance (cm)
5150 - 5250	17.0	50.1	+4.52	2.83	3.36	20.00
5250 – 5350	17.0	50.1	+12.27	16.87	8.20	20.00
5470 - 5725	18.5	70.8	+11.30	13.49	8.72	20.00

**Note:** for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

### Specification

#### Maximum Permissible Exposure Limits

**FCC §1.1310** Limit = 1mW / cm<sup>2</sup> from 1.310 Table 1

**RSS-Gen §5.5** Before equipment certification is granted, the application requirements of RSS-102 shall be met.

#### Laboratory Measurement Uncertainty for Power Measurements

Measurement uncertainty	±1.33 dB
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