



TRIL12-U3

Maximum Permissible Exposure

FCC, Part 15 Subpart C §15.407(f)

Industry Canada RSS-Gen §5.6

Calculations for Maximum Permissible Exposure Levels

Power Density = Pd (mW/cm²) = EIRP/(4πd²)

EIRP = P * G

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

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

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm²

Freq. Band (MHz)	Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm ² Limit(cm)	Minimum Separation Distance (cm)
5150 - 5250	20.0	100.0	+2.18	1.65	3.6	20
5250 - 5350	24.0	251.2	+5.70	3.71	8.6	20
5470 - 5725	31.0	1258.9	-1.09	0.78	8.8	20

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

<p>FCC §1.1310 Limit = 1mW / cm² from 1.310 Table 1</p> <p>RSS-Gen §5.6 Category I and Category II equipment shall comply with the applicable requirements of RSS-102.</p>

Laboratory Measurement Uncertainty for Power Measurements

Measurement uncertainty	±1.33 dB
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