



16th March 2007

TUVR109-A1 Spectralink Corporation RCH400

Maximum Permissible Exposure

FCC, Part 15 Subpart C §15.247(i), §1.1310
Industry Canada RSS-102

Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d \text{ (mW/cm}^2\text{)} = \text{EIRP}/(4\pi d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10 \wedge (\text{G (dBi)}/10)$$

P (worst case) = +10.01 dBm, 10.02 mW

Antenna Gain (Worst Case) = 0 dBi, 1.0 numeric

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

The MPE calculations are calculated using the maximum allowable power levels calculated for each antenna in Section 5.1.4 “Output Power” of the report.

Antenna Gain (dBi)	Numeric Gain (numeric)	Max Peak Power (dBm)	Max Peak Power (mW)	Calculated Safe Distance at 1 mW/cm ² (cm)
0.0	1.0	+10.01	10.02	0.90