



TUVR74-A1 CISCO 74-3625 802.11b/g Wireless Module

Maximum Permissible Exposure

FCC, Part 15 Subpart C §15.247(b)(5)

Industry Canada RSS-210 §14

Calculations for Maximum Permissible Exposure Levels

Power Density = P_d (mW/cm²) = $EIRP / (4\pi d^2)$

$EIRP = P * G$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

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

P (worst case) = +23.97 dBm, **249.5 mW**, Antenna Gain = 5.2 dBi, **3.31 numeric**

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

Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated RF Exposure at d=20cm (mW/cm ²)	Limit (mW/cm ²)
3.31	+23.97	249.5	0.164	1

Specification

Maximum Permissible Exposure Limits

§15.247 (b)(5) Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency levels in excess of the Commission's guidelines. See §1.1307 (b)(1) of this chapter.

Limit $S = 1\text{mW} / \text{cm}^2$ from 1.310 Table 1

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

RSS-210 §14 Before equipment certification is granted, the procedures of RSS-102 must be followed concerning exposure of humans to RF fields.