



Wednesday, 14th June 2006

EXLT02-A5 Exalt Communications Inc , Model EX-5i

Maximum Permissible Exposure Calculations

FCC, Part 15 Subpart C §15.407(f)

Industry Canada RSS-Gen §5.5

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)

For 28 dBi (631 num.) antenna P (worst case) = +2 dBm (1.585 num)

For 37.9 dBi (6165 num.) antenna P (worst case) = -7.9 dBm (0.162 num)

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

Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated safe distance @ max limit 1mW/ cm ² (d=cm)
28	631	+2.0	1.585	8.91
37.9	6166	-7.9	0.162	8.91