



Wednesday, 14th June 2006

EXLT02-A2 Exalt Communications Inc , Model EX-5i

Maximum Permissible Exposure Calculations

FCC, Part 15 Subpart C §15.247(i)
Industry Canada RSS-Gen §5.5

Calculations for Maximum Permissible Exposure Levels

Power Density = P_d (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)

P (Worst case) = +30 dBm, (1000 num)

Antenna gains = +28 dBi (631 num.), 37.9 dBi (6166 num.)

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

Freq. Band (GHz)	Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm ² Limit (cm)
5.8	28.0	631	+30.00	1000	224.0
5.8	37.9	6166	+30.00	1000	700.5