



24th April 2007

EXLT18-A3 Exalt Communications Inc , Model EX-5i

Maximum Permissible Exposure Calculations

FCC, Part 15 Subpart C §15.407(f)

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)

For 37.5 dBi (6165 num.) antenna P(worst case) = -7.5 dBm (0.178)

Because the EUT belongs to the General Population / Uncontrolled Exposure the limit of power density is 1mW/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)
28.0	631	+2.0	1.585	8.9
37.5	5623	-7.5	0.178	8.9