

August 9, 2007

WNIG01 – A6 – KymaStar, 802.11 a Wireless Access Point

WNI Global, Inc.

Maximum Permissible Exposure Calculations

FCC, Part 15 Subpart C §15.247(i)

Calculations for Maximum Permissible Exposure Levels

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

$\text{EIRP} = P * G$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

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

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is $1.0 \text{ mW}/\text{cm}^2$

Freq. Band (GHz)	Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ $1\text{mW}/\text{cm}^2$ Limit (cm)
5.8	34.5	2818.4	+28.91	778.1	418.0