the wireless lab

**August 27, 2007**

### MLWI01– A10 – Meshlinx Multi-Radio Access Point MWI5000

Maximum Permissible Exposure Calculations

### FCC, Part 90 Subpart C §90.1217

**Calculations for Maximum Permissible Exposure Levels**

Power Density = Pd (mW/cm2) = EIRP/($4\pi d2$)

EIRP = P * G

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

Numeric Gain = 10 ^ (G (dBi)/10)

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

| 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) |
|---|---|---|---|---|---|
| 4.9 | +9.0 | 7.95 | +14.6 | 28.85 | 4.3 |