



Monday, September 04, 2006

**Strix Systems Inc - Access One Network OWS 2400-20**

**Maximum Permissible Exposure Calculation**

**FCC, Part 15 Subpart C §15.247(b)(5)**

**Calculations for Maximum Permissible Exposure Levels**

Power Density =  $P_d$  (mW/cm<sup>2</sup>) =  $EIRP/(4\pi d^2)$

$EIRP = P * G$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

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

Worst case = **2.4 GHz +28 dBm 12 dBi (15.85 numeric)**

**2.4 GHz +26.5 dBm 16.4 dBi (43.65 num.)**

**5.8 GHz +30 dBm 23 dBi (199.53 num.)**

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

| Freq. Band (GHz) | Antenna Gain (dBi) | Numeric Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Calculated Safe Distance @ 1mW/cm <sup>2</sup> Limit (cm) |
|------------------|--------------------|------------------------|-------------------------|------------------------|-----------------------------------------------------------|
| 2.4              | 12                 | 15.85                  | +28.0                   | 631.0                  | 28.2                                                      |
| 2.4              | 16.4               | 43.65                  | +26.5                   | 446.7                  | 39.4                                                      |
| 5.8              | 23                 | 199.53                 | +30.0                   | 1,000                  | 126.0                                                     |