



November 9, 2012

Attn: Application Examiner, Reviewing Engineer

The following is the SAR calculation for the FlexWave™ Prism – HDM 850/1900, FCC ID: F8I-PSM8192D, 850 Band, using the system's maximum RF emission. The calculation is based on FCC 47CFR Part 2 and OET 65.

Per OET 65:

Maximum Permissible Exposure is Freq. (MHz)/1500 = MPE mW/cm<sup>2</sup>  
881.5 MHz/1500 = 0.5877 mW/cm<sup>2</sup>

The following equations determine the distance from the antenna that the power density is  $\leq 0.5877 \text{ mW/cm}^2$ .

+44.10 dBm Transmitter Power (Max)  
15.90 dBi Antenna Gain (Max)  
44.10 dBm + 15.90 dBi = +60 dBm EIRP  
+60 dBm EIRP = 1000 Watts EIRP  
1000 Watts EIRP =  $1000*10^3 \text{ mWatts EIRP}$   
 $0.5877 \text{ mW/cm}^2 = 1000*10^3 \text{ mW}/(4*\pi*r^2)$   
 $r = \text{SQR}(1000*10^3/4*\pi * 0.5877)$   
 $r = 368.06 \text{ cm or 3.68 Meters}$

In addition, the following statement will be added to our installation/operation manual:

To comply with Maximum Permissible Exposure (MPE) requirements, the maximum composite output from the antenna cannot exceed 1000 Watts EIRP and the antenna must be permanently installed in a fixed location that provides at least 6 meters (20 feet) of separation from all persons.

Sincerely,

A handwritten signature in black ink that reads "Joshua J. Wittman".

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