



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 $\text{Freq. (MHz)} / 1500 = \text{MPE mW/cm}^2$
 $881.5 \text{ MHz} / 1500 = 0.5877 \text{ mW/cm}^2$

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

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 blue ink, appearing to read "Joshua J. Wittman", is written over a horizontal blue line.

Joshua J. Wittman
Compliance Engineer
Tele: 952 403-8322
Fax: 952 403-8858
Email: joshua.wittman@te.com