5473A Clouds Rest Road : Mariposa, CA 95338 : Phone 209-966-5420 : Fax 209-742-6133

Maximum Permissible Exposure Calculations

Date of Report: 1/11/07

Calculations prepared for:

Powerwave Technologies
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Model Number: PAF-08XX-XXX
FCC Identification: NA

Fundamental Operating Frequency: 1930-1990 MHz

Maximum Rated Output Power: 555Watts
Measured Output Power: 500Watts

MPE Limit in accordance with 1.1310(b): Limits for general population/uncontrolled exposure

MPE Limit for 869 - 894 MHz = f/1500 = 0.6 mW/cm^2 (6 W/m^2)

Power Output (Watts)	Power Density Limit (mW/cm^2)	Minimum Distance (Meters)
500	**0.6**	**2.6**

$$\text{Power Density } (W/m^2) = \frac{30 \text{ x } P_t \text{ x } G}{d^2 \text{ x } Z_0}$$

P_t = Power Delivered to the Antenna
G = Antenna Gain
d = Distance in meters
Zo = Impedance of Free Space

The typical antennas to be used with the EUT are structure mount antennas which under normal operation has an antenna height of at least 5 meters. As can be seen from the MPE result, this device passes the limit specified in 1.1310 at a distance of 2.6 meter.

Calculation:

$$d = \sqrt{\frac{30 \, x \, 500 \, x \, 1}{6 \text{ x } 377}}$$

= 2.6meter.