



Date of Report: 9/8/09

Maximum Permissible Exposure Statement

Calculations prepared for:

Safetran Systems, Inc.
10655 7th Street.
Rancho Cucamonga, Ca. 91730

Calculations prepared by:

Eddie Wong
CKC Laboratories, Inc.
110 N. Olinda Place
Brea, CA 9283

FCC ID Number:: LTY-9710-PS009900
Model Number: A53470

Fundamental Operating Frequency: 896.5-898 MHz

Maximum Rated Output Power: 30 Watts
Measured Output Power: 30 Watts

Power Output and Operating Frequency Information used for these calculations were from:
CKC Laboratories, Test Report # FC09-104A

Device and Antenna Operating Configuration:

Transmitting continuously. The typical antennas to be used with the EUT are professionally installed, structure mount antennas which under normal operation has an antenna distance of at least 3.05 meter from all personnel. As can be seen from the MPE result, this device passes the limit specified in 1.1310 at a distance of 0.65 meter.

Test Procedure:

This equipment is evaluated in accordance with the guidelines set forth in OET Guide 65.

Other Considerations:

None.

4056 Sierra Pines Dr. * Mariposa, CA 95338 * PH (209) 966-5240 * Fax (209) 742-6133

WORLDWIDE EMC – COMMERCIAL * INDUSTRIAL * MEDICAL * MILITARY * AVIONICS
BREA, CA * FREMONT, CA * MARIPOSA, CA * REDMOND, WA

MPE Calculations:

MPE Limit in accordance with 1.1310:

Occupational / Controlled Exposure
X General Population / Uncontrolled Exposure

MPE Limit for 896.5-898 MHz = 0.56 mW/cm² (5.6 W/m²)

Note: Limit is calculated based on the lowest frequency used in the operating frequency range.

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

P_t = Power Delivered to the Antenna
d = Distance in meters

G = Antenna Gain
Z₀ = Impedance of Free Space

ERP (Watts)	Minimum Distance (Meters)	Power Density Limit (mW/cm ²)	Result
30	0.65	0.56	Pass

Calculation:

$$d = \sqrt{\frac{30 \times 30 \times 1}{5.6 \times 377}}$$

= 0.65 meter.

Statement of Compliance:

This device demonstrates compliance under the operating conditions specified in this document. Under normal operating conditions, the antenna is designed to be installed in accordance with the manufacturer's instructions in such a manor to maintain the minimum separation distance. The MPE calculations shown above demonstrate compliance to the provisions of 1.1310 in accordance with the guidelines of OET 65.

As can be seen from the MPE results, this device passes the limits specified in 1.1310 at a distance of 0.65M and at a output power of 30W under normal operating conditions.

4056 Sierra Pines Dr. * Mariposa, CA 95338 * PH (209) 966-5240 * Fax (209) 742-6133