



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

Maximum Permissible Exposure Calculations

Date of Report: October 17, 2001

Calculations prepared for:

IP Mobile Net
11909 East Telegraph Road
Santa Fe Springs, CA 90670

Model Number: IP1
FCC Identification: MI7-IPMNIP1

Fundamental Operating Frequency: 150MHz - 156MHz

Maximum Rated Output Power: 60.00 Watts
Measured Output Power: 60.25 Watts

Power Output and Operating Frequency Information used for these calculations were from:
CKC Laboratories, Test Report # FC01-064A

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

$$\text{MPE Limit} = \mathbf{0.2\text{mW/cm}^2 \text{ or } 27.5\text{V/M}}$$

Power Output (Watts)	Distance (Meters)	V/M	Power Density (mW/cm ²)	Result
60.25	2.0	21.258	0.1198	PASS
60.25	1.6	26.573	0.1873	PASS

$$\text{Power Density (W/M}^2\text{)} = (30 * P_t * G) / (d^2 * Z_0)$$

P_t = Power Delivered to the Antenna

G = Antenna Gain

d = Distance in meters

Z₀ = Impedance of Free Space

Under normal operating conditions, the antenna is designed to maintain a separation distance of 2 meters from all persons. As can be seen from the MPE results, this device passes the limits specified in 1.1310 at a distance of 1.6 Meters and at the measured output power of 60.25 Watts.