



Date of Report: January 19, 2007

## Maximum Permissible Exposure Statement

Calculations prepared for:

Calculations prepared by:

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5046 Sierra Pines Dr.  
Mariposa, CA 95338

FCC ID Number::  
Model Number: 2B4121

Fundamental Operating Frequency: 896-901 MHz

Maximum Rated Output Power: 5 Watts  
Measured Output Power: 4.68 Watts Peak Conducted

Maximum Antenna Gain: 5.12 dBi (Mobile Use)

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

### ***Device and Antenna Operating Configuration:***

Equipment is designed for connection to only one cell phone for uplink. The peak to average ratio of the intrinsic duty cycle of TDMA signal is -9dB. Therefore average power output can be calculated as 36.7dBm - 9dB = 27.7dBm or 0.59 Watts conducted output power.

The maximum antenna gain used with this equipment is 5.12dBi with a cable loss of 4.0dB as declared by the manufacturer which provides 28.8dBm or 0.76 Watts EIRP.

### ***Test Procedure:***

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

### ***Other Considerations:***

The downlink path is not investigated as the amplifier directly connects to end user equipment.

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***MPE Calculations:***

*MPE Limit in accordance with 1.1310:*

- Occupational / Controlled Exposure
- X General Population / Uncontrolled Exposure

$$\begin{aligned} \text{MPE Limit} &= F / 1500 \text{ (mW/cm}^2\text{)} \\ &= 0.58 \text{ (mW/cm}^2\text{)} \end{aligned}$$

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

$$\text{PowerDensity(mW / cm}^2\text{)} = \frac{\text{EIRP}}{4\pi d^2} \quad \text{Given: EIRP in mW and d in cm}$$

EIRP (mW)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Result
762.08	10.23	0.579	Pass

***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 less than 20cm and at a output power of 0.76 Watts EIRP under normal operating conditions.