

December 20, 2006

## **Maximum Permissible Exposure Evaluation**

### **RF Safety - Maximum Permissible Exposure**

The NOM-110 React has the antenna with 1.9 dBi nominal Antenna Gain. Therefore the numeric antenna gain is 1.549 (1.9 dBi=10 log (numeric gain))

Based on the FCC OET Bulletin 65, Edition 97-01, power density at a distance of 20 cm was calculated as below:

$$S=PG/4\pi R^2$$

Where:

S=Power Density (mW/cm<sup>2</sup>)

P=Power input to Antenna (mW)

G=Antenna Numeric Gain

R=Distance from center of Radiation Antenna (cm)

<b>Tx Freq</b>	<b>Ant Gain (dBi)</b>	<b>Antenna Gain (Numeric)</b>	<b>Peak Output Power (dBm)</b>	<b>Peak Output Power (mW)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>*Limit of Power Density (mW/cm<sup>2</sup>)</b>
2.402 GHz (Low TX)	1.9	1.549	17.76	59.70	0.0184	1
2.440GHz (Medium TX)	1.9	1.549	17.39	54.83	0.0169	1
2.479 GHz (High TX)	1.9	1.549	17.63	57.94	0.0178	1

\*Limit for General Population/Uncontrolled Exposure is applied as per FCC Part 15, Section 1.1310.

**Overall Results:** The NOM-110 React met the Maximum Permissible Exposure (MPE) requirements specified in FCC Part 15, Section 15.247 (i).



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