

MPE Calculation	
Company Name	LS Research
Model #	ProFLEX02
FCC ID #	TFB-PROFLEX2
IC #	5969A-PROFLEX2

The following MPE calculations are based on a Nearson Dipole antenna, with a measured ERP of 123.3 dBμV/m, at 3 meters, and conducted RF power of +25.27 dBm as presented to the antenna. The measured gain of this antenna, based on the ERP measurements is 2.8 dB as measured over a conducting ground plane.

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	<u>25.27</u> (dBm)
Maximum peak output power at antenna input terminal:	<u>336.512</u> (mW)
Antenna gain(typical):	<u>2.8</u> (dBi)
Maximum antenna gain:	<u>1.905</u> (numeric)
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>2440</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u> (mW/cm ²)
Power density at prediction frequency:	0.127565 (mW/cm ²)
Maximum allowable antenna gain:	11.7 (dBi)
Margin of Compliance at 20 cm =	8.9 dB