

EXHIBIT 14 MPE CALCULATIONS

The following MPE calculations are based on a 5 dBi Omni-directional monopole antenna, with a measured ERP of 120.77 dBμV/m, at 3 meters, and conducted RF power of +18.2 dBm as presented to the antenna. The maximum gain of this antenna, based on the manufacturer's documentation is 5 dBi.

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:	18.20 (dBm)
Maximum peak output power at antenna input terminal:	66.069 (mW)
Antenna gain(typical):	5 (dBi)
Maximum antenna gain:	3.162 (numeric)
Prediction distance:	20 (cm)
Prediction frequency:	2417 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)
Power density at prediction frequency:	0.041565 (mW/cm^2)
Maximum allowable antenna gain:	18.8 (dBi)
Margin of Compliance at 20 cm =	13.8 dB