

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>31.01</u> (dBm)
Maximum peak output power at antenna input terminal:	1261.827535 (mW)
Antenna gain(typical):	2 (dBi)
Maximum antenna gain:	1.584893192 (numeric)
Prediction distance:	<u> 20 </u> (cm)
Prediction frequency: _	<u>851</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.567333333 (mW/cm^2)
Power density at prediction frequency:	0.397860 (mW/cm^2)
Maximum allowable antenna gain:	3.541081564 (dBI)
Margin of Compliance:	1.541081564

Note: 1dB of cable and splitter loss has been added to the power calculation.