

### 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>50.48</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>111686.3248</u>	(mW)
Antenna gain(typical):	<u>8</u>	(dBi)
Maximum antenna gain:	<u>6.309573445</u>	(numeric)
Prediction distance:	<u>300</u>	(cm)
Prediction frequency:	<u>937.5</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>0.625</u>	(mW/cm^2)
Power density at prediction frequency:	0.623085	(mW/cm^2)
Maximum allowable antenna gain:	8.013323908	(dBi)
Margin of Compliance:	0.013323908	