

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>1.16</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>1.31</u>	(mW)
Antenna gain(typical):	<u>2.0</u>	(dBi)
Maximum antenna gain:	<u>1.58</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>2441</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1</u>	(mW/cm^2)
Power density at prediction frequency:	<u>0.000412</u>	(mW/cm^2)
Power density at prediction frequency:	<u>0.00412</u>	(W/m^2)
Maximum allowable antenna gain:	<u>35.9</u>	(dBi)
Margin of Compliance:	<u>33.9</u>	(dB)