

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

Valid for frequencies from 30 to 100.000 MHz

Maximum peak output power at antenna input terminal:	<u>19.20</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>83.17637711</u>	(mW)
Antenna gain(typical):	<u>2.70</u>	(dBi)
Maximum antenna gain:	<u>1.862087137</u>	(numeric)
Prediction distance:	<u>20</u>	(cm)
Prediction frequency:	<u>1925</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1.00</u>	(mW/cm ²)
Power density at prediction frequency:	0.030813	(mW/cm ²)
Maximum allowable antenna gain:	17.81	(dBi)
Margin of Compliance:	15.11	(dB)