

## 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 isotropic radiator

R = distance to the center of radiation of the antenna

PWR in dBm Maximum peak output power at antenna input terminal:   Maximum peak output power at antenna input terminal:	27.4 dBm 549.5 mW
Ant. gain in dBi 🔰 Antenna gain(maximum):	3 dBi
Maximum antenna gain:	2.0 numeric
Use the duty cycle from test report or 100% Time Averaging:	<mark>100</mark> %
Separation distance from antenna to user in cm. $>$ Prediction distance:	20 cm
Freq. in MHz Prediction frequency:	<mark>815</mark> MHz
FCC MPE limit for uncontrolled exposure at prediction frequency:	0.54 mW/cm <sup>2</sup>
Power density at prediction frequency:	0.22 mW/cm <sup>2</sup>