

## 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:	9.1 dBm 8.1 mW
Ant. gain in dBi Antenna gain(maximum):	36 dBi
Maximum antenna gain:	3981.1 numeric
Use the duty cycle from test report or 100% Time Averaging:	100 %
Separation distance from antenna to user in cm. Prediction distance:	55 cm
Freq. in MHz Prediction frequency:	62500 MHz
FCC MPE limit for uncontrolled exposure at prediction frequency:	1.00 mW/cm <sup>2</sup>
IC MPE limit for uncontrolled exposure at prediction frequency:	10.00 W/m <sup>2</sup>
Power density at prediction frequency:	0.85 mW/cm <sup>2</sup>
This equates to:	8.51 W/m <sup>2</sup>



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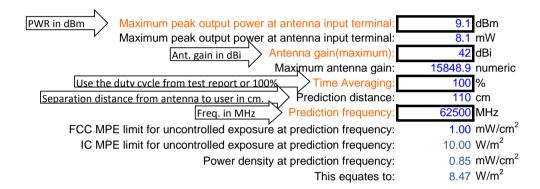
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