

## 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

Maximum peak output power at antenna input terminal: 16.5	(dBm)	*
Maximum peak output power at antenna input terminal: 44.7	(mW)	
Antenna gain(maximum): 0	(dBi)	*
Maximum antenna gain: 1.00	(numeric)	
Time Averaging: 100	(%)	*
Prediction distance: 20	(cm)	*
Prediction frequency: 2452	(MHz)	*
FCC MPE limit for uncontrolled exposure at prediction frequency: 1.000	(mW/cm <sup>2</sup> )	
IC MPE limit for uncontrolled exposure at prediction frequency: 17.19	(W/m <sup>2</sup> )	
Power density at prediction frequency: 0.009	(mW/cm <sup>2</sup> )	
This equates to: 0.09	(W/m <sup>2</sup> )	