



### 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:	<u>1.5</u>	(dBm)	*
Maximum peak output power at antenna input terminal:	<u>1.4</u>	(mW)	
Antenna gain(maximum):	<u>3</u>	(dBi)	*
Maximum antenna gain:	<u>2.00</u>	(numeric)	
Time Averaging:	<u>100</u>	(%)	*
Prediction distance:	<u>20</u>	(cm)	*
Prediction frequency:	<u>2450</u>	(MHz)	*
FCC MPE limit for uncontrolled exposure at prediction frequency:	<u>1.000</u>	(mW/cm <sup>2</sup> )	
IC MPE limit for uncontrolled exposure at prediction frequency:	<u>17.18</u>	(W/m <sup>2</sup> )	
Power density at prediction frequency:	<u>0.000556</u>	(mW/cm <sup>2</sup> )	
This equates to:	<u>0.005556</u>	(W/m <sup>2</sup> )	