

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:	18.90	(dBm)	*
Maximum peak output power at antenna input terminal:	77.6	(mW)	
Antenna gain(maximum):	8	(dBi)	*
Maximum antenna gain:	6.31	(numeric)	
Time Averaging:	100	(%)	*
Prediction distance:	20	(cm)	*
Prediction frequency:	2440	(MHz)	*
FCC MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm ²)	
IC MPE limit for uncontrolled exposure at prediction frequency:	17.14	(W/m^2)	
Power density at prediction frequency:	0.097	(mW/cm ²)	
This equates to:	0.97	(W/m^2)	