

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

*	(dBm)	27.8	Maximum peak output power at antenna input terminal:
	(mW)	602.6	Maximum peak output power at antenna input terminal:
*	(dBi)	7	Antenna gain(maximum):
	(numeric)	5.01	Maximum antenna gain:
*	(%)	100	Time Averaging:
*	(cm)	23	Prediction distance:
*	(MHz)	917	Prediction frequency:
	(mW/cm ²)	0.611	FCC MPE limit for uncontrolled exposure at prediction frequency:
	(W/m ²)	8.78	IC MPE limit for uncontrolled exposure at prediction frequency:
	(mW/cm ²)	0.454	Power density at prediction frequency:
	(W/m ²)	4.54	This equates to: