

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 an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at device output terminal:	24.77	(dBm)
Cable and Jumper loss	1.0	(dB)
Maximum peak output power at antenna input terminal:	23.77	(dBm)
Maximum peak output power at antenna input terminal:	238.2319469	(mW)
Single Antenna gain(typical):	10	(dBi)
Number of Antennae	1	
Total Antenna gain(typical):	10	(dBi)
Maximum antenna gain:	10	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	5200	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm ²)
Power density at prediction frequency:	0.473947	(mW/cm ²)
	4.739474	(W/m ²)
Tx On time:	100.000000	
Tx period time:	100.000000	
Average Factor:	100.000000	
Average Power density at prediction frequency:	4.739474	(W/m ²)
Maximum allowable antenna gain:	13.24269855	(dBi)
Margin of Compliance:	3.242698554	dB

