

### 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:	19.80	(dBm)
Cable and Jumper loss	0.0	(dB)
Maximum peak output power at antenna input terminal:	19.80	(dBm)
Maximum peak output power at antenna input terminal:	95.4992586	(mW)
Single Antenna gain(typical):	11	(dBi)
Number of Antennae	1	
Total Antenna gain(typical):	11	(dBi)
Maximum antenna gain:	12.58925412	(numeric)
Prediction distance:	40	(cm)
Prediction frequency:	473	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.315333333	(mW/cm^2)
Power density at prediction frequency:	0.059796	(mW/cm^2)
	0.597957	(W/m^2)
Tx On time:	1.000000	
Tx period time:	1.000000	
Average Factor:	100.000000	
Average Power density at prediction frequency:	0.597957	(W/m^2)
Maximum allowable antenna gain:	18.22099728	(dBi)
Margin of Compliance:	7.220997284	dB

