

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:	16.00 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	16.00 dBm
	39.81071706 mW
Single Antenna gain (typical):	3.4 and 2.7 dBi
Number of Antennae:	2
Total Antenna gain (typical):	6.1 dBi
	4.073802778 (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:	0.032265 mW/cm²
	0.322649 W/m ²
Tx On time:	1.000000 ms
Tx period time:	1.000000 ms
Average Factor:	100.000000 %
Average Power density at prediction frequency:	0.322649 W/m ²
Maximum allowable antenna gain:	21.01269855 dBi
Margin of Compliance:	14.91269855 dB