

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:	29.92 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	29.92 dBm
	981.747943 mW
Single Antenna gain (typical):	2.5 dBi
Number of Antennae:	1
Total Antenna gain (typical):	2.5 dBi
	1.77827941 (numeric)
Prediction distance:	20 cm
Prediction frequency:	902 MHz
MPE limit for uncontrolled exposure at prediction frequency:	0.601333333 mW/cm ²
Power density at prediction frequency:	0.347320 mW/cm²
	3.473203 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:	3.473203 W/m ²
Maximum allowable antenna gain:	4.883851338 dBi
Margin of Compliance:	2.383851338 dB