

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:	22.69 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	22.69 dBm
	186 mW
Single Antenna gain (typical):	8 dBi
Number of Antennae:	1
Total Antenna gain (typical):	8 dBi
	6.31 (numeric)
Prediction distance:	40 cm
Prediction frequency:	473 MHz
MPE limit for uncontrolled exposure at prediction frequency:	0.32 mW/cm ²
Power density at prediction frequency:	0.058 mW/cm²
	0.58 W/m ²
Tx On time:	1.00 ms
Tx period time:	1.00 ms
Average Factor:	100 %
Average Power density at prediction frequency:	0.58 W/m ²
Maximum allowable antenna gain:	15.3 dBi
Margin of Compliance:	7.3 dB