

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 isotropic

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	23.84	(dBm)
Maximum peak output power at antenna input terminal:	242.1	(mW)
Antenna gain(typical):	5	(dBi)
Maximum antenna gain:	3.162	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2462	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm ²)
Power density at prediction frequency:	0.15231	(mW/cm ²)
Power density at prediction frequency:	1.5231	(W/m ²)
Margin of Compliance:	8.17	(dB)

Simultaneously transmission LTE+WiFi = 0.05685 + 0.15231 = 0.20916 mW/cm² < 1 mW/cm²