

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

	800MHz	1900MHz	
Maximum peak output power at antenna input terminal:	27.00	27	(dBm)
Maximum peak output power at antenna input terminal:	501.1872	501.18723	(mW)
Antenna gain(typical):	10	10	(dBi)
Maximum antenna gain:	10	10	(numeric)
Prediction distance:	35	35	(cm)
Prediction frequency:	880	1900	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.533333	1	(mW/cm ²)

Power density at prediction frequency: 0.325577 0.32558 (mW/cm^2)

Multiple transmitter Calculation: (Sum of all fractional Contributions)

0.61046 + 0.32558 = 0.93603 < 1.0