



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:	21.00	21.00	(dBm)
Maximum peak output power at antenna input terminal:	125.8925	125.89254	(mW)
Antenna gain(typical):	15	15	(dBi)
Maximum antenna gain:	31.62278	31.622777	(numeric)
Prediction distance:	35	35	(cm)
Prediction frequency:	850	1900	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.533333	1	(mW/cm^2)

Power density at prediction frequency: 0.258615 0.25862 (mW/cm^2)

Multiple transmitter Calculation: (Sum of all fractional Contributions)

$$0.48490 + 0.25862 = 0.74352 < 1.0$$