## 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:	30.85	(dBm)
Maximum peak output power at antenna input terminal:	1216.2	(mW)
Antenna gain(typical):	2.15	(dBi)
Maximum antenna gain:	1.641	(numeric)
Prediction distance:	20	(cm)
Sourse Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	824.2	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.549	(mW/cm^2)
Power density at prediction frequency:	0.39694	(mW/cm^2)
Power density at prediction frequency:	3.9694	(W/m^2)
Margin of Compliance:	1.41	(dB)