## 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:	22.14	(dBm)
Maximum peak output power at antenna input terminal:	163.7	(mW)
Antenna gain(typical):	27	(dBi)
Maximum antenna gain:	501.187	(numeric)
Prediction distance:	170	(cm)
Sourse Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	5785	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm^2)
Power density at prediction frequency:	0.22589	(mW/cm^2)
Power density at prediction frequency:	2.2589	(W/m^2)
Margin of Compliance:	6.46	(dB)