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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 centre of radiation of the antenna

Peak Envelope Power	100	watts
Maximum peak output power at antenna input terminal:	50.00	(dBm)
Maximum peak output power at antenna input terminal:	100000	(mW)
Antenna gain(typical):	2	(dBi)
Maximum antenna gain:	1.584893192	(numeric)
Prediction distance:	300	(cm)
Prediction frequency:	30	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.200	(mW/cm^2)
Power density at prediction frequency:	0.1401	(mW/cm^2)
	1.401	(W/m^2)
Maximum allowable antenna gain:	3.544823691	(dBi)
Margin of Compliance:	1.544823691	