



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

Lane Controller for Micro Industries

Maximum peak output power at antenna input terminal:	<u>-16.0</u>	(dBm)
Maximum peak output power at antenna input terminal:	<u>0.000</u>	(W)
Antenna gain(typical):	<u>0.40</u>	(dBi)
Maximum antenna gain:	<u>1.10</u>	(numeric)
Prediction distance:	<u>20.00</u>	(cm)
Prediction frequency:	<u>824.20</u>	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1.00</u>	(mW/cm^2)
Power density at prediction frequency:	0.000005	(mW/cm^2)
Maximum allowable antenna gain:	83.01	(dBi)
Margin of Compliance:	52.61	dB

Therefore the power density at 20 cm = 0.0000005 W/m^2