

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

Maximum peak output power at the antenna terminal:	1.89 (mW)
Antenna gain (maximum):	4.40 (dBi)
Antenna gain (maximum):	2.75 (numeric)
Prediction distance:	20.0 (cm)
Prediction frequency:	2405 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm ²)
Power density at prediction frequency:	0.001 (mW/cm²)
Maximum allowable antenna gain:	34.2 (dBi)

¹ JN5139_XXX_M03_FCC_MPE_Calculation_1v0.doc CF.