Nemko

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 radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	2.1	(dBm) *
Maximum peak output power at antenna input terminal:	1.6	(mW)
Antenna gain(maximum):	3	(dBi) *
Maximum antenna gain:	2.00	(numeric)
Time Averaging:	100	(%) *
Prediction distance:	20	(cm) *
Prediction frequency:	2405	(MHz) *
FCC MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm^2)
IC MPE limit for uncontrolled exposure at prediction frequency:	16.97	(W/m^2)
Power density at prediction frequency:	0.001	(mW/cm^2)
This equates to:	0.01	(W/m^2)