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:	47.8	dBm
Maximum peak output power at antenna input terminal:	59979.1	mW
Antenna gain(maximum):	17.2	dBi
Maximum antenna gain:	52.5	numeric
Time Averaging:	100	%
Prediction distance:	780	cm
Prediction frequency:	2110	MHz
IC MPE limit for uncontrolled exposure at prediction frequency:	4.90	W/m^2
Power density at prediction frequency:	0.41	mW/cm^2
This equates to:	4.12	W/m^2