MPE Calculation for FCC Controlled Environment

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
Source Based Time Averaged Duty Cycle is 100% in calculation below

Maximum peak output power at antenna input terminal:	54.10	(dBm)
Maximum peak output power at antenna input terminal:	257.040	(W)
Antenna gain(typical):	0.00	(dBi)
Maximum antenna gain:	1.000	(numeric)
Prediction distance:	100	(cm)
Prediction frequency:	5800	(MHz)
Time Averaged Duty Cycle	100	%
MPE limit for controlled exposure at prediction frequency:	50.00	(W/m^2)
Power density at prediction frequency:	2.0455	(mW/cm^2)
Power density at prediction frequency:	20.455	(W/m^2)
Maximum allowable antenna gain:	3.9	(dBi)
Margin of Compliance:	3.9	(dB)