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:	29.6	(dBm)	*
Maximum peak output power at antenna input terminal:	918.3	(mW)	
Antenna gain(maximum):	42.5	(dBi)	*
Maximum antenna gain:	17782.79	(numeric)	
Time Averaging:	100	(%)	*
Prediction distance:	1200	(cm)	*
Prediction frequency:	5700	(MHz)	*
FCC MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm^2)	
IC MPE limit for uncontrolled exposure at prediction frequency:	30.60	(W/m^2)	
Power density at prediction frequency:	0.902	(mW/cm^2)	
This equates to:	9.02	(W/m^2)	