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 center of radiation of the antenna

Maximum peak output power at antenna input terminal:	26.90	(dBm)
Maximum peak output power at antenna input terminal:	489.7788194	(mW)
Antenna gain(maximum):	2.14	(dBi)
Maximum antenna gain:	1.636816521	(numeric)
Time Averaging:	100	(%)
Prediction distance:	20	(cm)
Prediction frequency:	2400	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm^2)
Power density at prediction frequency:	0.159489	(mW/cm^2)
Margin of compliance:	-8.0	(dB)
This equates to:	1.594887832	W/m^2