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

Maximum peak output power at antenna input terminal:	**29.36**	(dBm)
Maximum peak output power at antenna input terminal:	863	(mW)
Antenna gain(typical):	**3.5**	(dBi)
Maximum antenna gain:	2.239	(numeric)
Prediction distance:	**30**	(cm)
Sourse Based Time Average Duty Cycle:	**25**	(%)*
Prediction frequency:	1900	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.0427	(mW/cm^2)
Margin of Compliance:	13.7	

* Duty cycle is source based time average and is based on GSM station class 6