Prediction of Maximum Permissible Exposure

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:	30.00	(dBm)
Maximum peak output power at antenna input terminal:	1000	(mW)
Antenna gain(typical):	15	(dBi)
Maximum antenna gain:	31.6227766	(numeric)
Time Averaging:	100	(%)
Prediction distance:	100	(cm)
Prediction frequency:	869	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.533333333	(mW/cm^2)

Power density(mW/cm^2):	0.251646	
Power density(W/cm^2):	2.516460605	

Margin of compliance:	-3.3	(dB)