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 Power = 1.405X30 Watts=42.150 Watts for 90% amplitude modulation

Maximum peak output power at antenna input terminal:	46.25	(dBm)
Maximum peak output power at antenna input terminal:	42150	(mW)
Antenna gain(typical):	2	(dBi)
Maximum antenna gain:	1.584893192	(numeric)
Prediction distance:	200	(cm)
Prediction frequency:	118-136	(MHz)
PE limit for uncontrolled exposure at prediction frequency:	0.2	(mW/cm^2)
Power density at prediction frequency:	0.132901	(mW/cm^2)
Maximum allowable antenna gain:	3.775022721	(dBi)
Margin	1.775022721	

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