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
Valid for frequencies from 30 to 100.000 MHz

Maximum peak output power at antenna input terminal:	19.40	(dBm)
Maximum peak output power at antenna input terminal:	87.096359	(mW)
Antenna gain(typical):	4.30	(dBi)
Maximum antenna gain:	2.691534804	(numeric)
Prediction distance:	100	(cm)
Prediction frequency:	1921.536	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.00	(mW/cm^2)
Power density at prediction frequency:	0.001865	(mW/cm^2)
Maximum allowable antenna gain:	31.59	(dBi)
Margin of Compliance:	27.29	(dB)