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

Example: +31 dBm carrier level with 40 cm. separation distance allows antenna gain of 12 dBi

Maximum peak eirp:	43.00	(dBm)
Maximum peak eirp:	19952.62315	(mW)
Time Averaging:	100	(%)
Prediction distance:	40	(cm)
Prediction frequency:	1960	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.992362	(mW/cm^2)
Margin of compliance:	0.0	(dB)
This equates to	9.923620631	W/m^2