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

Maximum peak output power at antenna input terminal:	30.00	(dBm)
Maximum peak output power at antenna input terminal:	1000	(mW)
Antenna gain(typical):	1.6	(dBi)
Maximum antenna gain:	1.445439771	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	894	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.533333333	(mW/cm^2)
Power density at prediction frequency:	0.287561	(mW/cm^2)
Maximum allowable antenna gain:	4.282685833	(dBi)

This device is intended for use with antennas mounted on permanent outdoor structures. A separation distance of 20 cm. can reasonably be maintained. The following statement appears in the User Installation guide:

CAUTION: This product should be installed such that a separation distance of at least 20 cm. will be maintained between the radiating element and any nearby person. The maximum antenna gain allowed is 1.6 dBi. Failure to adhere to these guidelines may cause the rf exposure levels to exceed those allowed by the FCC rules.