Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{P\,G}{4\,\pi\,R^2} = \frac{EIRP}{4\,\pi\,R^2} = \frac{E^2\,D^2}{120\,\pi\,R^2}$$

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
EIRP = equivalent isotropically radiated power
E = field strength of fundamental emission
D = distance when measured field strength

Field strength of fundamental emission:	44.3	[dBµV/m]
Field strength of fundamental emission:	164	[µV/m]
Measured distance of fundamental emission:	3	[m]
Antenna gain(typical):	-63.50	[dBi]
Equivalent isotropically radiated power:	0.0000081	[mW]
Prediction distance:	20	[cm]
Prediction frequency:	13.56	[MHz]
MPE limit for uncontrolled exposure at prediction frequency:	0.97	[mW/cm^2]
Power density at prediction frequency:	0.0000000017	[mW/cm^2]
	0.000000017	[W/m^2]
Maximum allowable antenna gain:	24.1	[dBi]
Margin of Compliance:	87.6	[dB]