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

Model:

Field strength of fundamental emission:	51.1	[dBµV/m]
Field strength of fundamental emission:	359	[µV/m]
Measured distance of fundamental emission:	3	[m]
Antenna gain(typical):	-63.50	[dBi]
Equivalent isotropically radiated power:	0.000039	[mW]
Prediction distance:	20	[cm]
Prediction frequency:	13.56	[MHz]
MPE limit for uncontrolled exposure at prediction frequency:	1	[mW/cm^2]
Power density at prediction frequency:	0.0000000077	[mW/cm^2]
	0.000000077	[W/m^2]
Maximum allowable antenna gain:	17.6	[dBi]
Margin of Compliance:	81.1	[dB]