Prediction of MPE limit at a given distance

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

$$S = \frac{PG}{4\boldsymbol{p}R^2}$$

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

23.9 dBm   From test report's measured radiated power.

Maximum peak output power at antenna input terminal:	23.9	(dBm)
Maximum peak output power at antenna input terminal:	0.245	(W)
Antenna gain(typical):	-0.50	(dBi)
Maximum antenna gain:	0.89	(numeric)
Prediction distance:	20.00	(cm)
Prediction frequency:	1908.75	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.00	(mW/cm^2)

Power density at prediction frequency:	0.044	(mW/cm^2)
Maximum allowable antenna gain:	43.11	(dBi)
Margin of Compliance:	13.61	dB

Therefore the power density at 20 cm is 490/4/PI/20^2 = 0.044 mW/cm2