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:	21.40	(dBm)
Maximum peak output power at antenna input terminal:	138.038	(mW)
Antenna gain(typical):	11	(dBi)
Maximum antenna gain:	12.589	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2402	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.345724	(mW/cm^2)
Maximum allowable antenna gain:	15.6	(dBi)
Margin of Compliance at 20 cm =	4.6	dB

Summary: There is 16.6 dB of margin therefore, the unit meets the MPE limit requirement.