Prediction of MPE limit at a given distance

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

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

Equipment   MW-145BT
Manufacturer   BROTHER INDUSTRIES, LTD

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:	-4.30	(dBm)
Maximum peak output power at antenna input terminal:	0.371535229	(mW)
Antenna gain(typical):	1	(dBi)
Maximum antenna gain:	1.25892541	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	2441	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.0	(mW/cm^2)

Power density at prediction frequency: 0.0000931 (mW/cm^2)

Maximum allowable antenna gain: 41.3126986 (dBi)

Margin of Compliance: 40.3126986