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

RFID

Maximum peak output power at device output terminal:	-43.33	dBm
Cable and Jumper loss:	0.0	dB
Maximum peak output power at antenna input terminal:	-43.33	dBm
	4.64515E-05	mW
Single Antenna gain (typical):	0	dBi
Number of Antennae:	1	
Total Antenna gain (typical):	0	dBi
	1	(numeric)
Prediction distance:	20	cm
Prediction frequency:	13.56	MHz
MPE limit for uncontrolled exposure at prediction frequency:	13.27433628	mW/cm^2
Power density at prediction frequency:	**0.00000001**	**mW/cm^2**
	0.0000001	W/m^2
Tx On time:	100.000000	ms
Tx period time:	100.000000	ms
Average Factor:	100.000000	%
Average Power density at prediction frequency:	0.0000001	W/m^2
Percentage to limit:	6.96173E-08	%

Bluetooth

Maximum peak output power at device output terminal:	-0.06	dBm
Cable and Jumper loss:	0.0	dB
Maximum peak output power at antenna input terminal:	-0.06	dBm
	0.986279486	mW
Single Antenna gain (typical):	1.3	dBi
Number of Antennae:	1	
Total Antenna gain (typical):	1.3	dBi
	1.348962883	(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:	**0.000265**	**mW/cm^2**
	0.002647	W/m^2
Tx On time:	100.000000	ms
Tx period time:	100.000000	ms
Average Factor:	100.000000	%
Average Power density at prediction frequency:	0.002647	W/m^2
Percentage to limit:	0.02646855	%

Total Percentage to limit:	0.026468619	%

(PSD1/Limit 1) + (PSD 2/limit 2):	0.000264686	<1