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

Fundamental transmit (prediction) frequency:	2438	MHz
Maximum measured conducted peak output power:	19.60	dBm
Cable and/or jumper loss:	0.0	dB
Maximum peak power at antenna input terminal:	19.60	dBm
Tx On time:	0.860	ms
Tx period time:	100.000	ms
Average factor:	0.86	%
Maximum calculated average power at antenna input terminal:	0.784	mW
Single Antenna gain (typical):	16	dBi
Number of antennae:	1	
Total system gain (typical):	16.000	dBi

MPE limit for uncontrolled exposure at prediction frequency:	1	mW/cm^2
	10	W/m^2
Minimum calculated prediction distance for compliance:	2	cm

Typical (declared) distance:	25	cm

Average power density at prediction frequency:	**0.003976**	mW/cm^2
	0.03976	W/m^2

Margin of Compliance:	**24.00591**	dB
Maximum allowable antenna gain:	40.00591	dBi

Note 1: No simultaneous transmission between the WLAN and LTE Radios due to the antenna seperation distance ≥ 20cm
Note 2: EUT does not support simultaneous transmission between the 2.4 and 5 GHz WLAN Radios