RF exposure

The output power of the EUT is 2 mW and the gain of the antenna is 2dBi

The following information provides the minimum separation distance for the EUT, as calculated from **FCC OET 65 Appendix B, Table 1B** "Guidelines for General Population/Uncontrolled Exposure"

This calculation is based on the highest EIRP possible from the EUT considering maximum power and antenna gain. The formulas were used:

GP limit is = 0.29 mW/cm^2 for 434 MHz (from F/1500)
Pwatts*Ggain or ERP = 10^(PdBm-30+GdBi)/10) =0.003 Watts
0.003 Watts = 5 dBm

S= E^2/3770 mW/cm^2
E or V/m = (ERP*30)^0.5/d, (d in meters)
d = ((ERP*30)/3770*S))^0.5

	S	Maximum	Antenna			MSD		
Freq.	GP limit	RF power	Gain	ERP	E	d		
MHz	mW/cm^2	dBm	dBi	watts	V/m	meters		
434	0.289333	3	2	0.003	33.0	0.009		
GP is the limit for general Population/Uncontrolled Exposure								
MSD is the minimum Seperation Distance								

NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less