


Manufacturer: Advanced Microwave Engineering Srl **Name:** Oscar Frau

Product: LPS UWB 001, LPS UWB 002 **Title:** Project Handler

FCC ID: UKOLPSUWB **Signature:** 

MPE limits (§1.1310)

Mode	Frequency MHz	Duty Cycle %	Power dBm	Antenna	EIRP ¹ dBm	EIRP mW	Distance cm	PD ² mW/cm ²	PD Limit ³ mW/cm ²	Margin dB	2.1091 EIRP	2.1091 EIRP	PD/PD Limit	Worst PD/PD values to be considered
				Gain dBi							Limit mW	Margin dB		
BT-EDR ⁶	2441,0	100	2,30	1,63	3,93	2,47	20	0,00049	1,000	33,08	1260	27,07	0,00049	0,00049
UWB ⁴	4012,5	100	-0,2	0	-0,20	0,95	20	0,00019	1,000	37,21	1260	31,20	0,00019	0,00019
WBT ⁵	6503,0	100	-0,3	0	-0,30	0,93	20	0,00019	1,000	37,31	1260	31,30	0,00019	0,00019
FCC Co-Location =		0,00087	< 1											

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)

²PD = EIRP / (4xπxD²)

³CFR 47 Part 1, §1.1310(e), Table 1

⁴See Report No: 485181-6TRFWL

⁵See Report No. 485181-7TRFWL

⁶See FCC ID: A8TBM78ABCDEFHG (09/24/2015), Table 5 (antenna gain = 1.63 dBi) and Table 7 (Pout = 0.00170 W @ 2441 MHz)

2.1091 EIRP Limit

1.1307 (b)(3)(i)(C) exemption limit

RF Source Frequency MHz	F MHz	R m	λ m	λ/2π m	R/(λ/2π)	Threshold ERP W	Threshold EIRP W	Threshold EIRP mW	EIRP mW	Margin dB
	2441,0	0,20	0,123	0,0196	10,2	0,76800	1,260	1260	2,47	27,07
1500-100000	4012,5	0,20	0,075	0,0119	16,8	0,76800	1,260	1260	0,95	31,20
	6503,0	0,20	0,046	0,0073	27,2	0,76800	1,260	1260	0,93	31,30