

Product: RF Module
Trademark: Tractel
Manufacturer: TRACTEL
Model: BLE652-SA
FCC ID: **OVL-BL652**
Registration Number: 197516
Designation Number: FR0008

SAR Test exclusion limits single transmission

KDB 447498 D01 General RF Exposure Guidance v06

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

SAR Test exclusion limits simultaneous transmission

- 1) $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}/x}] \text{ W/kg}$, for test separation distances $\leq 50 \text{ mm}$;
where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

Transmitter n°1 (RF Proprietary: 2400-2483,5 MHz)

Average E-Field at 3m:	90,95	(dBμV/m)
Distance:	5,00	(mm)
Frequency:	2,48	(GHz)
RF output power:	0,37	(mW)
SAR Test Exclusion RF output power thresholds	9,53	(mW)

Note: Transmitter n°1 Single modular FCC ID: OVL-RF24GHZ operating in colocation with transmitter n°2

Transmitter n°2 (BLE: 2400-2483.5MHz)

Average output power at the antenna terminal:	4,39	(mW)
Antenna gain:	2,21	(dBi)
Antenna gain linear:	1,66	(numeric)
Distance:	5,00	(mm)
Frequency:	2,40	(GHz)
RF output power:	7,30	(mW)
SAR Test Exclusion RF output power thresholds	9,68	(mW)

Transmitter n°1 (RF Proprietary: 2400-2483,5 MHz) + Transmitter n°2 (BLE: 2400-2483,5 MHz)

Transmitter 1 "1g SAR Estimation"	0,02	(W/Kg)
Transmitter 2 "1g SAR Estimation"	0,30	(W/Kg)
Simultaneous Transmission "1g SAR Estimation"	0,32	(W/Kg)
Simultaneous Transmission "1g SAR Test Exclusion"	0,40	(W/Kg)