



SAR Test exclusion documentation according to FCC KDB 447498

Report identification number: 1-2702/21-01-06-A Exclusion (FCC)

contains the module with the following certification numbers	
FCC ID	2AXDT-RFM004

This test report is electronically signed and valid without handwritten signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Document authorised:



Michael Dorongovski
Lab Manager
Radio Labs



Eric Tuettmann
Testing Manager
Radio Labs

EUT technologies:

Technologies:	Max. measured conducted (AVG) power:	Max. gain:	Min. pathloss:
Bluetooth LE	5.8 dBm	0.8 dBi	0 dB (if applicable)
MI 3.27 MHz	-12.0 dBm	--	--

Note: Bluetooth LE test results see cetecom advanced test report 1-2702/21-01-05.

E.I.R.P. peak results are:

2402 MHz: 5.9 dBm

2440 MHz: 6.6 dBm

2480 MHz: 4.4 dBm

NOTE: 3.27 MHz power is extracted from the operational description of the applicant.

SAR test exclusion according to KDB447498 (General RF Exposure Guidance v06)

Exclusion limits extracted from Appendix A and C:

Appendix A**SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm**

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

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	

Appendix C**SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm**

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	< 50	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	237	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	mW
50	308	617	625	634	643	651	660	669	677	686	695	703	712	721	729	738	
10	474	948	961	975	988	1001	1015	1028	1041	1055	1068	1081	1095	1108	1121	1135	
1	711	1422	1442	1462	1482	1502	1522	1542	1562	1582	1602	1622	1642	1662	1682	1702	
0.1	948	1896	1923	1949	1976	2003	2029	2056	2083	2109	2136	2163	2189	2216	2243	2269	
0.05	1019	2039	2067	2096	2125	2153	2182	2211	2239	2268	2297	2325	2354	2383	2411	2440	
0.01	1185	2370	2403	2437	2470	2503	2537	2570	2603	2637	2670	2703	2737	2770	2803	2837	

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

SRD Technology	Frequency [MHz]		Reference #	Output Power [dBm]			Power [mW]		Share of Limit %
	f _{Min}	f _{Max}		P _{cond}	P _{EIRP}	P _{RF Exp}	P _{Result}	P _{Limit}	
BT LE	2402	2480	A	5.8	6.6	6.6	4.57	9.80	46.6%
3.28 MHz	3.28	3.28	B	-12.00	-12.00	-12.0	0.06	648.00	0.01%

Co-Location:

Technology	Share of Limit [%]
3.28MHz	0.01%
BT LE	46.6%
Sum	46.61%