

TEST REPORT

Product Name : BT module

Brand Mark : RF-star

Model No. : RF-BM-2642B1

FCC ID : 2ABN2-BM2642B1

Report Number : BLA-EMC-202203-A3903

Date of Sample Receipt : 2022/3/9

Date of Test : 2022/3/9 to 2022/3/25

Date of Issue : 2022/3/25

Test Standard 47 CFR Part 1.1307, Part 2.1093, KDB

Test Standard . 447498

Test Result : Pass

Josu Blue Zhong

Prepared for:

ShenZhen RF-STAR Technology CO.,LTD 2F,BLDG.8,Zone A,BaoAn Internet Industry Base, BaoYuan Road,XiXiang, BaoAn DIST, ShenZhen China

Prepared by:

BlueAsia of Technical Services(Shenzhen) Co.,Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China

TEL: +86-755-23059481

Compiled by:

Approved by:

Review by:

Date:







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REPORT REVISE RECORD

Version No.	Date	Description	
00	2022/3/25	Original	



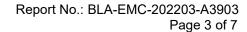




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1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 2.1093, KDB 447498	CFR 47 Part 2.1093	CFR 47 Part 2.1093	PASS





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2 GENERAL INFORMATION

Applicant	ShenZhen RF-STAR Technology CO.,LTD		
Address	2F,BLDG.8,Zone A,BaoAn Internet Industry Base, BaoYuan Road,XiXiang, BaoAn DIST, ShenZhen China		
Manufacturer	ShenZhen RF-STAR Technology CO.,LTD		
Address 2F,BLDG.8,Zone A,BaoAn Internet Industry Base, BaoYuan Road,XiX BaoAn DIST, ShenZhen China			
Factory	ShenZhen RF-STAR Technology CO.,LTD		
Address	2F,BLDG.8,Zone A,BaoAn Internet Industry Base, BaoYuan Road,XiXiang, BaoAn DIST, ShenZhen China		
Product Name	BT module		
Test Model No.	RF-BM-2642B1		

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	1.0
Software Version	1.0
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Channel Spacing:	2MHz
Number of Channels:	40
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi(Provided by the applicant)



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4 LABORATORY LOCATION

All tests were performed at:

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province,

China

Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673

No tests were sub-contracted.





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5 RF EXPOSURE COMPLIANCE REQUIREMENT

5.1 STANDARD REQUIREMENT

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.2 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is \leq 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

5.3 EUT RF EXPOSURE

Operational Mode: BLE 1M						
Channel	Maximum Peak Conducted	Tune up tolerance (dB)	Maximum tune-up Power		Calculated	Exclusion
Gridinici	Output Power (dBm)		(dBm)	(mW)	value	threshold
2402 MHz	3.173	±1	4.173	2.61	0.81	2.0
2442 MHz	3.038	±1	4.038	2.53	0.79	3.0
2480 MHz	2.35	±1	3.35	2.16	0.68	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

----END OF REPORT----

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