

TEST REPORT

Applicant: SANWA SUPPLY INC

Address of Applicant: 1-10-1,TAMACHI, KITAKU, OKAYAMA PREF,
CITY 700-0825 JAPAN

Manufacturer: SHENZHEN ALEX TECHNOLOGY CO., LTD.

Address of Manufacturer: 7th Floor, Building B, Tangxi Zhigu, Xijing Road, Xixiang,
Baoan, Shenzhen, China

Equipment Under Test (EUT)

Product Name: Bone Conduction Sound Amplifier Headphones-Transmitter

Model No.: 400-HABC2

Trade Mark: N/A

Applicable standards: Article 2 paragraph 1 item(19)
MIC Notice No.88 Annex 1
MIC Notice No.88 Annex 43

Date of sample receipt: January 20, 2026

Date of Test: January 20, 2026 to March 09, 2026

Date of report issued: March 09, 2026

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



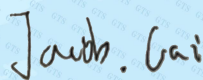
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	March 09, 2026	Original

Tested By:



Date:

March 09, 2026

Test Engineer

Prepared By:

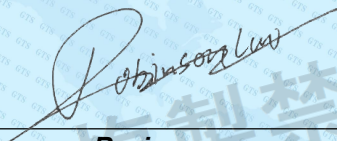


Date:

March 09, 2026

Project Engineer

Check By:



Date:

March 09, 2026

Reviewer

3 Contents

Page

1	COVER PAGE.....	1
2	VERSION	2
3	CONTENTS	3
4	TEST SUMMARY	4
5	GENERAL INFORMATION	5
5.1	GENERAL DESCRIPTION OF EUT	5
5.2	TEST MODE	7
5.3	TEST CONDITION	7
5.4	TEST FACILITY	7
5.5	TEST LOCATION	7
5.6	OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
5.7	DESCRIPTION OF SUPPORT UNITS	7
5.8	TEST INSTRUMENTS LIST	8
5.9	MEASUREMENT UNCERTAINTY	8
6	TEST RESULTS AND MEASUREMENT DATA	9
6.1	FREQUENCY ERROR	9
6.2	ANTENNA POWER	12
6.3	OCCUPY BANDWIDTH (99%)	20
6.4	SPURIOUS EMISSION INTENSITY	25
6.5	LIMIT OF SECONDARY RADIATED EMISSIONS	34
6.6	INTERFERENCE SUPPRESSION	38
6.7	EQUIVALENT ISOTROPIC RADIATED POWER	39
7	TEST SETUP PHOTO	41
8	EUT CONSTRUCTIONAL DETAILS	41

4 Test Summary

Test Item	Test Requirement	Result
RF shielding method	ARIB STD T-66 Clause 3.7	Pass
Frequency Error	ARIB STD T-66 Clause 3.2(4)	Pass
Antenna Power	ARIB STD T-66 Clause 3.2(2)	Pass
99% Occupied bandwidth	ARIB STD T-66 Clause 3.2(7)	Pass
Spurious Emissions Intensity	ARIB STD T-66 Clause 3.2(6)	Pass
Limit of secondary radiated emissions	ARIB STD T-66 Clause 3.3(1)	Pass
Interference suppression	ARIB STD T-66 Clause 3.4.1	Pass
Transmission Antenna Gain	ARIB STD T-66 Clause 3.6	N/A
Transmission Radiation Angle Width(3dB Beam width)	ARIB STD T-66 Clause 3.6	N/A

Remarks

1. Pass: The EUT complies with the carrier sense capability and radio interference prevention capability.
2. N/A: EIRP does not exceed 12.14dBm/MHz

5 General Information

5.1 General Description of EUT

Product Name:	Bone Conduction Sound Amplifier Headphones-Transmitter
Model No.:	400-HABC2
Test Model No.:	400-HABC2
Operation Frequency:	2402MHz~2480MHz
Channel numbers:	40
Channel separation:	2MHz
Modulation technology:	GFSK
Data Rate:	LE 1M PHY: 1Mbps/LE 2M PHY: 2Mbps
Hardware version:	V1.3
Software version:	V1.0
Antenna Specification:	Chip antenna
Antenna Gain:	2.5dBi
Power supply:	DC 5V by adapter or DC 3.7V by battery

Disclaimer statement:

1. Antenna gain information provided by the customer, and the laboratory is not responsible for its authenticity.
2. The information in this section is provided by the applicant or manufacturer, GTS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402 MHz	10	2422 MHz	20	2442 MHz	30	2462 MHz
1	2404 MHz	11	2424 MHz	21	2444 MHz	31	2464 MHz
2	2406 MHz	12	2426 MHz	22	2446 MHz	32	2466 MHz
3	2408 MHz	13	2428 MHz	23	2448 MHz	33	2468 MHz
4	2410 MHz	14	2430 MHz	24	2450 MHz	34	2470 MHz
5	2412 MHz	15	2432 MHz	25	2452 MHz	35	2472 MHz
6	2414 MHz	16	2434 MHz	26	2454 MHz	36	2474 MHz
7	2416 MHz	17	2436 MHz	27	2456 MHz	37	2476 MHz
8	2418 MHz	18	2438 MHz	28	2458 MHz	38	2478 MHz
9	2420 MHz	19	2440 MHz	29	2460 MHz	39	2480 MHz

Final test channel as follow:					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	19	2440	39	2480

5.2 Test mode

Software is used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

5.3 Test condition

Normal voltage	High voltage +10% of Normal voltage	Low voltage -10% of Normal voltage
DC 3.7V	DC 4.07V	DC 3.33V

Remark: Both normal and extremely condition were tested, only show the worst case.

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC—Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

- **ISED —Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower AS, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: +86-0755-27798480

Fax: +86-0755-27798960

5.6 Other Information Requested by the Customer

None.

5.7 Description of Support Units

None.

5.8 Test Instruments list

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 11, 2025	Apr. 10, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 11, 2025	Apr. 10, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026

All above equipments were calibrated by Guangzhou LiSai Metrology & Test Co.,Ltd..

Technical basis for calibration: JJF 1076-2020, JJF 1101-2019, JJF 1144-2006, JJF 1396-2013, JJF 1885-2020, JJF 1931-2021, GJB 2650-1996.

Calibration Information (Article24-2,Paragraph 4 of the Radio Act)	
☐	a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	(b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act
☒	(C) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	(d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above

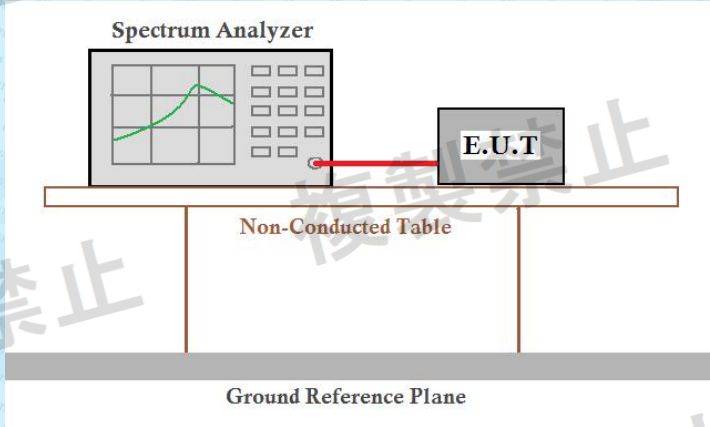
5.9 Measurement uncertainty

For the test methods, according to the present document, the measurement uncertainty figures shall be calculated in accordance with TR100028-1 [2] and shall correspond to an expansion factor (coverage factor) K=1.96 or K=2 (which provide confidence levels of respectively 95% and 95.5% in the case where the distributions characterizing the actual measurement uncertainties are normal).

Parameter	Uncertainty
RF frequency	$\pm 6 \times 10^{-7}$
Total RF power, conducted	$\pm 0.8\text{dB}$
Spurious emissions, conducted	$\pm 0.8\text{dB}$
DC and low frequency voltages	$\pm 3\%$
Humidity	$\pm 5\%$
Temperature	$\pm 1^\circ\text{C}$

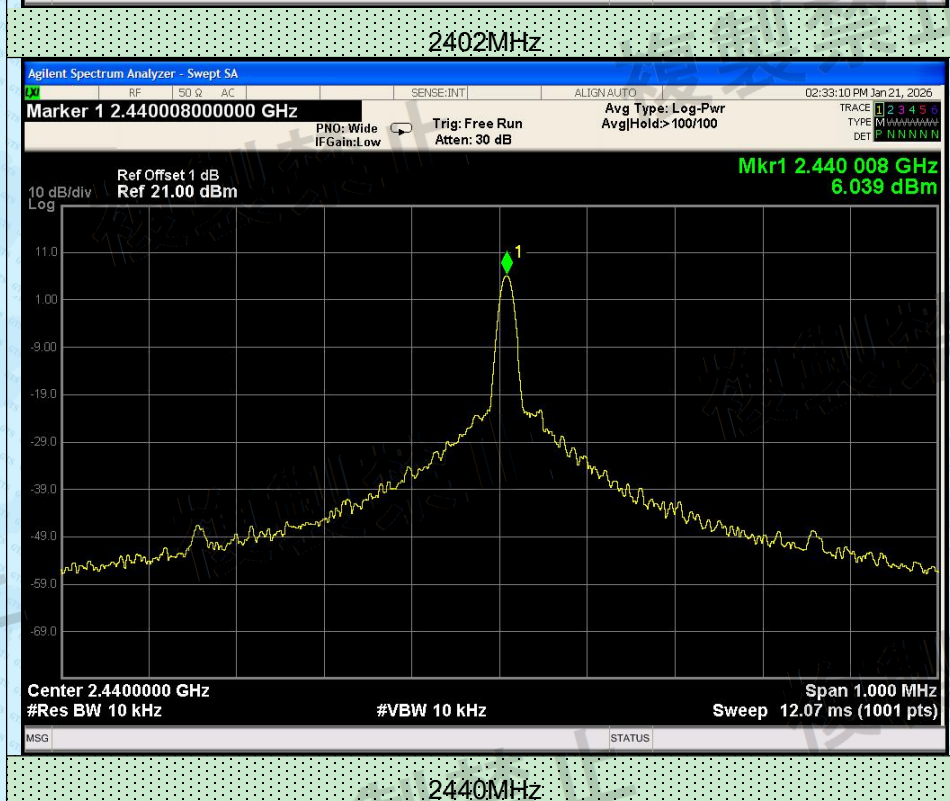
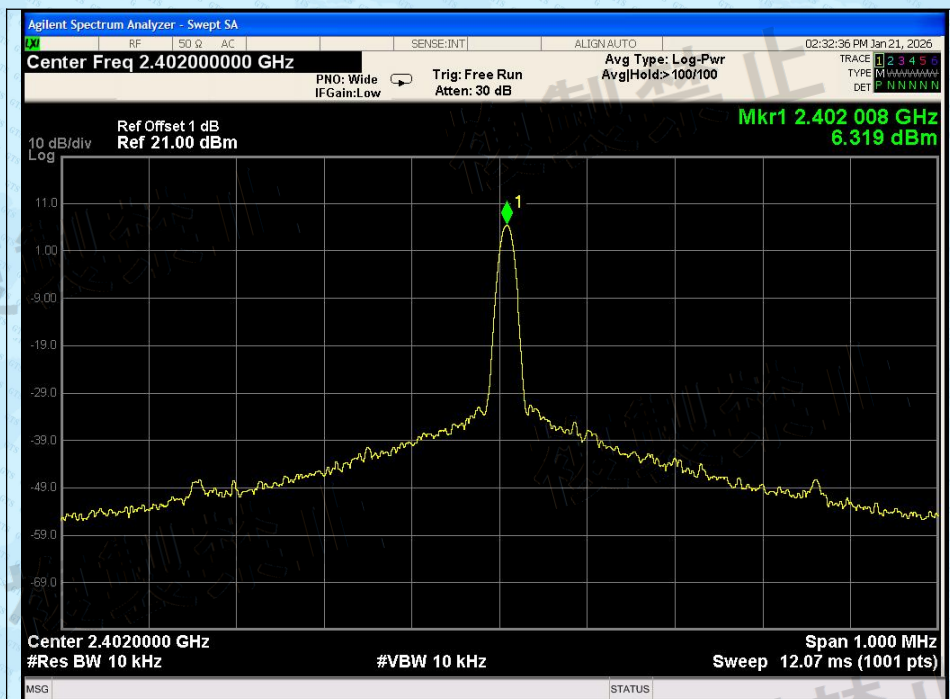
6 Test results and Measurement Data

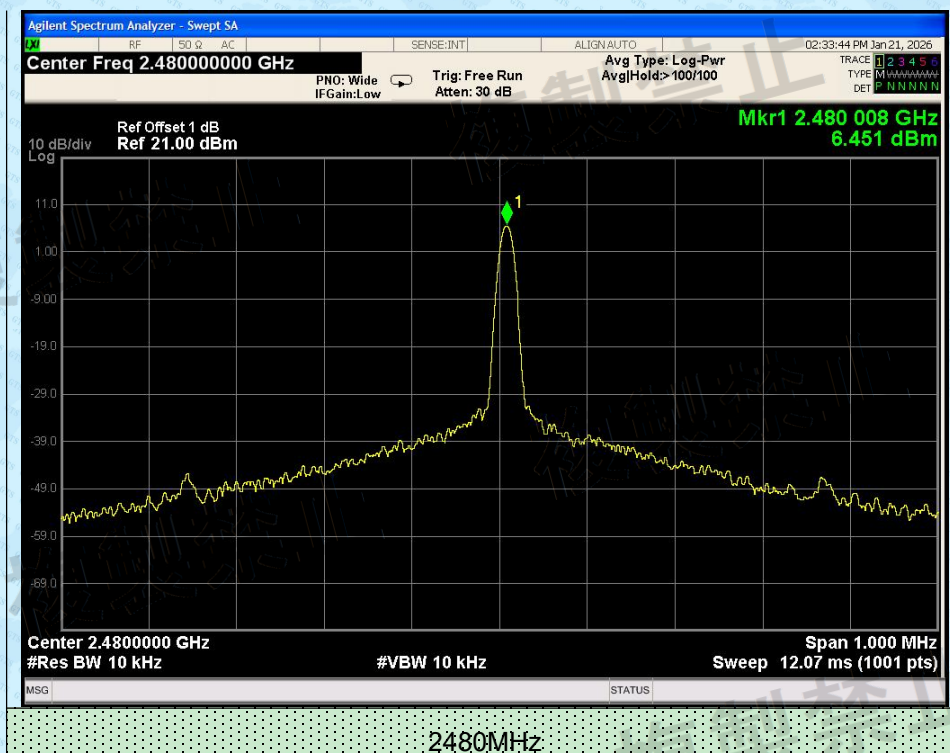
6.1 Frequency Error

Test condition:	Without modulation, continuously transmitting.
Spectrum set:	Test Frequency: test channel, RBW=VBW=10KHz, Span=1MHz, Sweep time=Auto, Detector mode=Positive peak
Limit:	±50ppm
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.
Test Instruments:	Refer to section 5.8 for details
Test results:	Pass

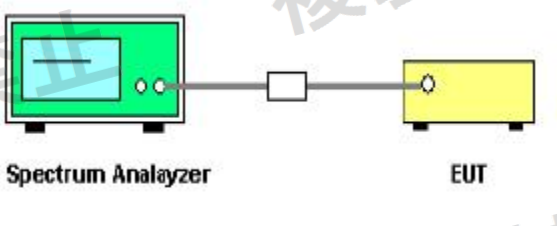
Measurement Data:

Test Data of Frequency Error					
Test Mode	Test Frequency (MHz)	Measure Frequency (MHz)	Frequency Error (ppm)	Limit (ppm)	Result
un-modulation	2402	2402.008	3.33	±50	Pass
	2440	2440.008	3.28	±50	Pass
	2480	2480.008	3.23	±50	Pass





6.2 Antenna Power

Test condition:	Test diffusion code and modulate with standard coding test signal
Test Procedure:	a) Connect the EUT to the spectrum analyzer as TEST CONFIGURATION and use the following settings. b) Remove the EUT and put the replacing signal generator (SG). Set the signal generator (SG) at same frequency and transmit on, the set SG output power at P_t to give the equivalent output level of "E". c) Calculate antenna power density by the formula below $PD = P_t + 10 \cdot \log(1/x)$ x: The duty cycle of the EUT in continuously transmitting mode P_t: Output power of the SG d) Antenna power tolerance: +20% No lower limit
Limit:	10mW
Test setup:	 The diagram illustrates the test setup. On the left is a green box labeled 'Spectrum Analyzer'. A cable connects it to a yellow box labeled 'EUT' (Equipment Under Test) on the right. A small white box is located in the middle of the cable, representing a connector or adapter.
Test Instruments:	Refer to section 5.8 for details
Test results:	Pass

Measurement Data:

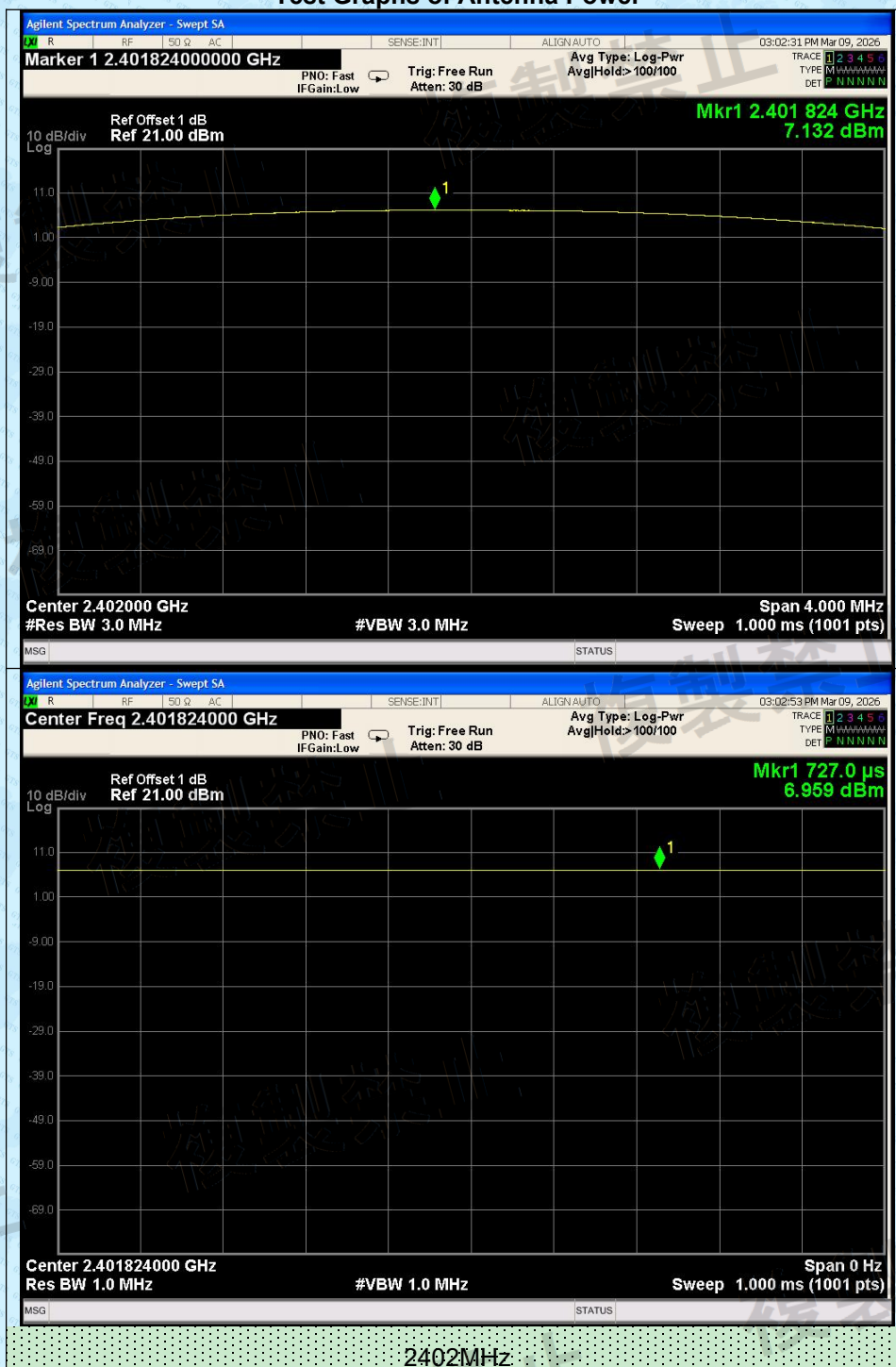
BLE 1M

Test Data of Antenna Power Error								
Test Mode	Test Frequency (MHz)	Average burst power(dBm)	Output power (mW)	Limit (mW)	Rated power density (mW)	Antenna Power Error (%)	Limit (%)	Result
GFSK	2402	7.132	5.167	10	5	3.34	20	Pass
	2440	6.977	4.985	10	5	-0.30	20	Pass
	2480	7.370	5.458	10	5	9.16	20	Pass

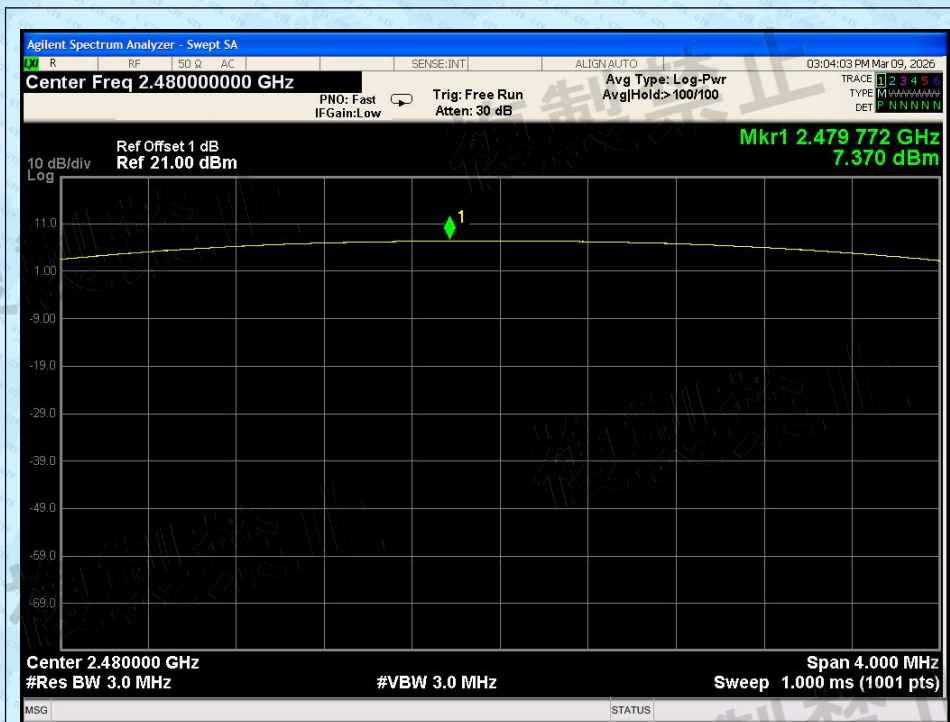
BLE 2M

Test Data of Antenna Power Error								
Test Mode	Test Frequency (MHz)	Average burst power(dBm)	Output power (mW)	Limit (mW)	Rated power density (mW)	Antenna Power Error (%)	Limit (%)	Result
GFSK	2402	7.118	5.150	10	5	3.00	20	Pass
	2440	6.900	4.898	10	5	-2.04	20	Pass
	2480	7.342	5.423	10	5	8.46	20	Pass

Test Graphs of Antenna Power

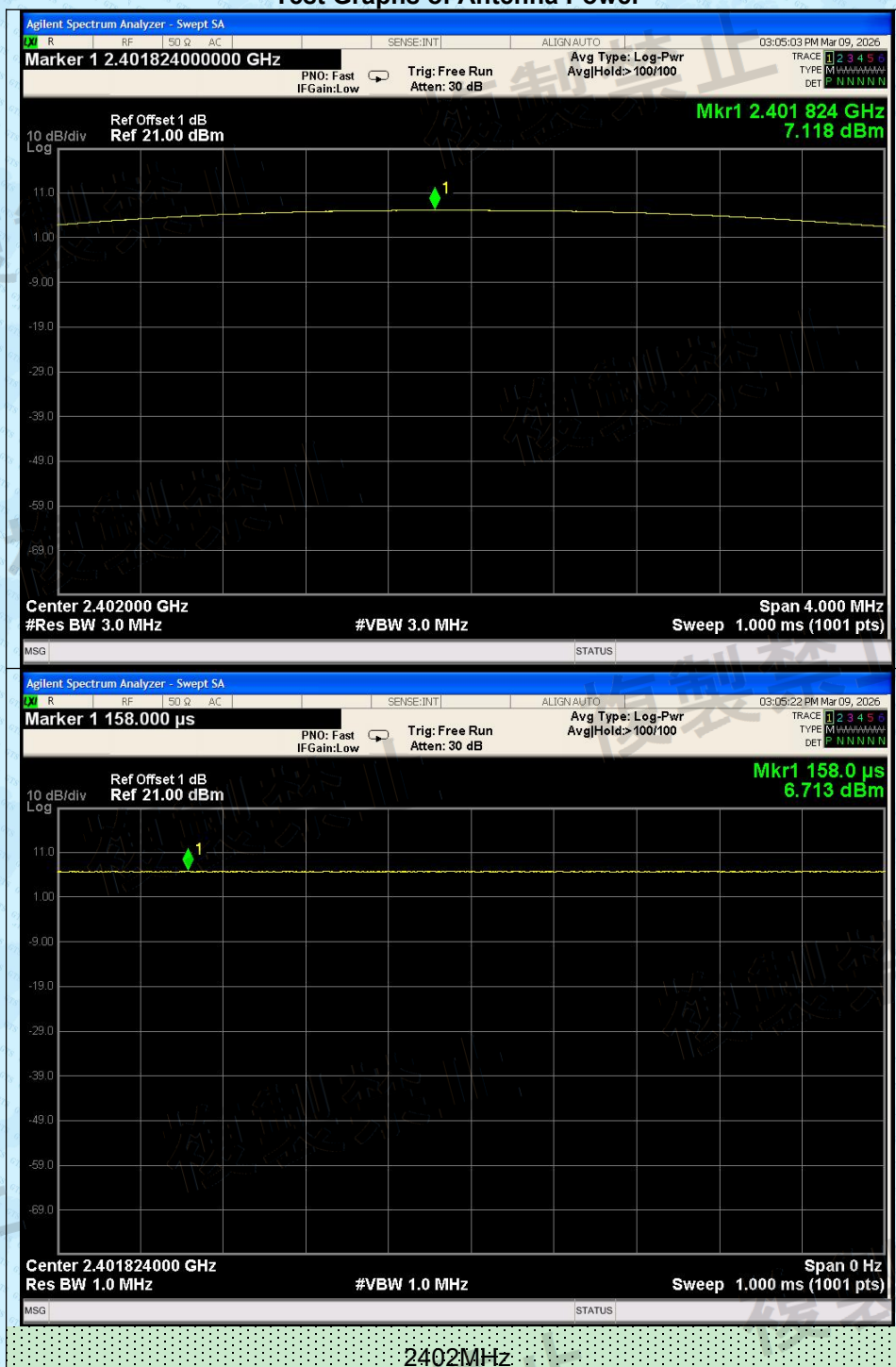




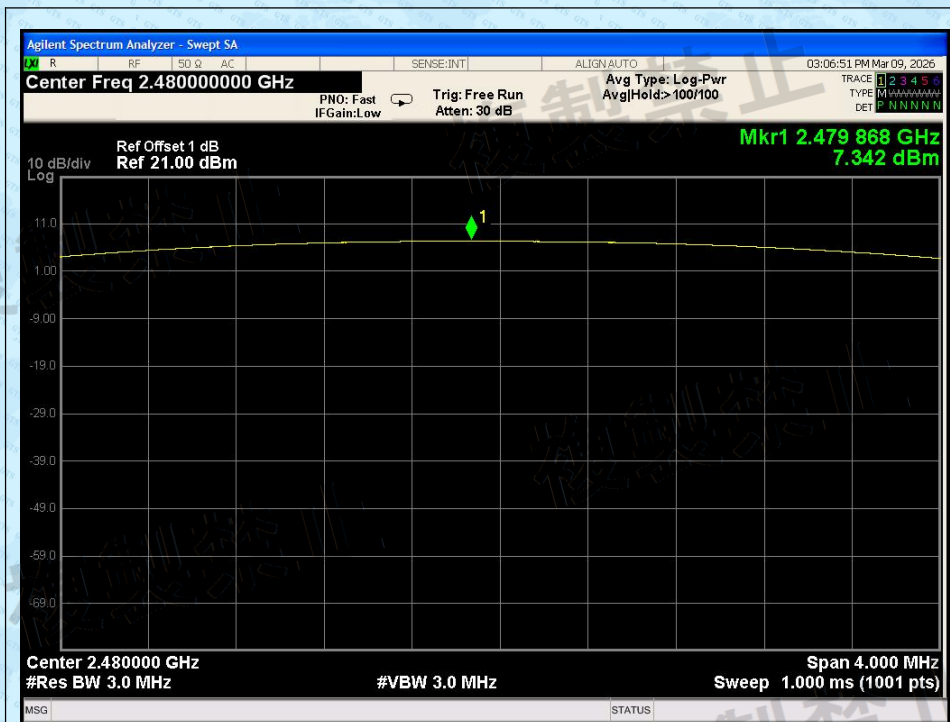


2480MHz

Test Graphs of Antenna Power

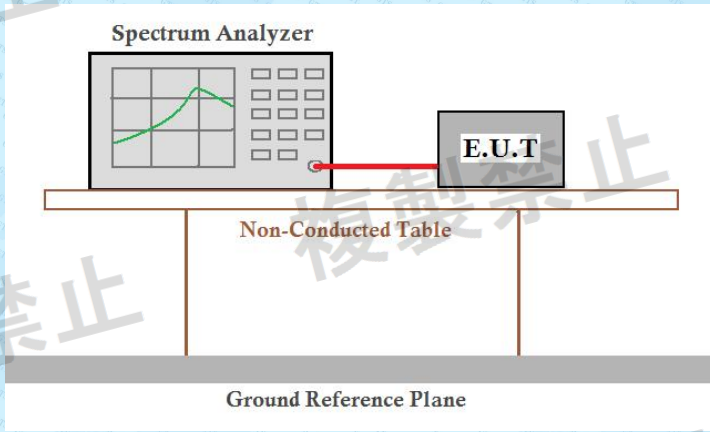






2480MHz

6.3 Occupancy Bandwidth (99%)

Test condition:	Test diffusion code and modulate with standard coding test signal
Spectrum set:	Test Frequency: test channel, RBW=VBW=300KHz, Span=4MHz, Sweep time=Auto, Detector mode=Positive peak
Limit:	26MHz or less
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table, which sits on a Ground Reference Plane.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Transmitting mode
Test results:	Pass

Measurement Data:

BLE 1M

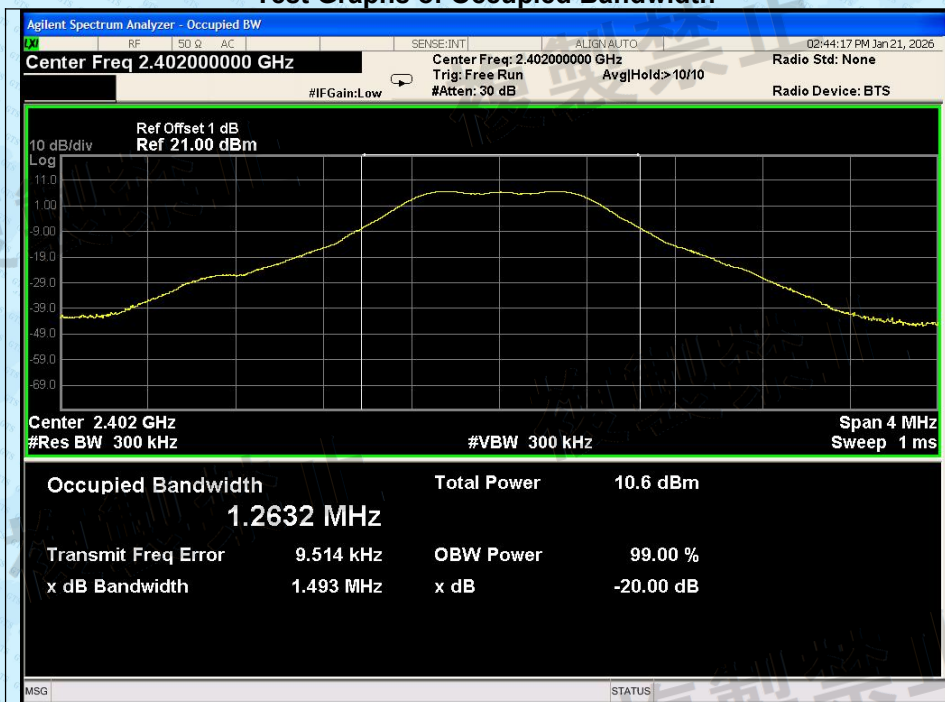
Test Data of Occupied Bandwidth				
Test Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Limit(MHz)	Result
GFSK	2402	1.2632	<26	Pass
	2440	1.2768	<26	Pass
	2480	1.2585	<26	Pass

BLE 2M

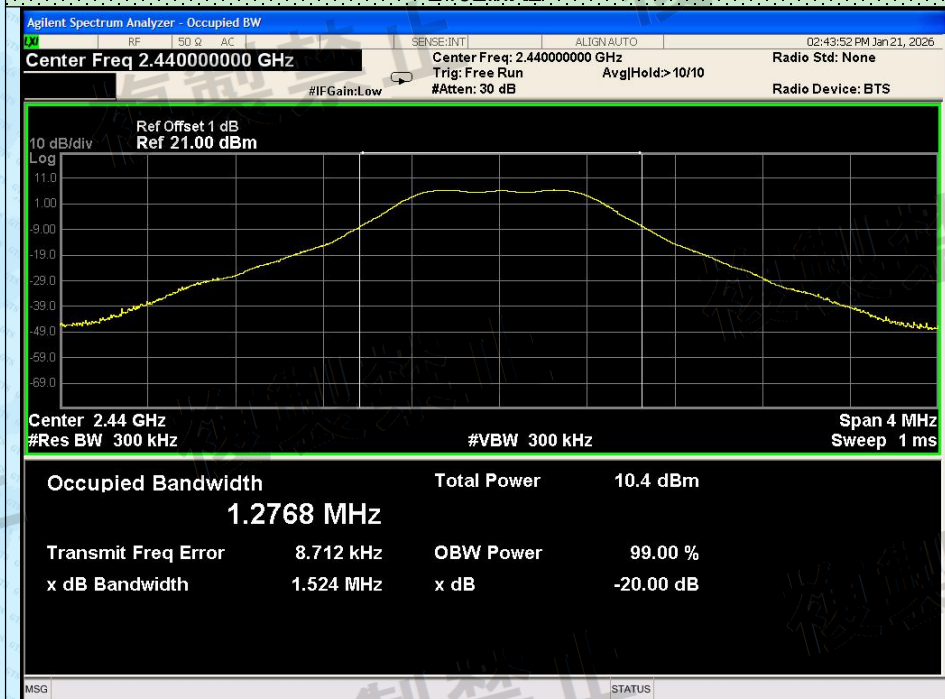
Test Data of Occupied Bandwidth				
Test Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Limit(MHz)	Result
GFSK	2402	1.9864	<26	Pass
	2440	1.9718	<26	Pass
	2480	1.9660	<26	Pass

BLE 1M

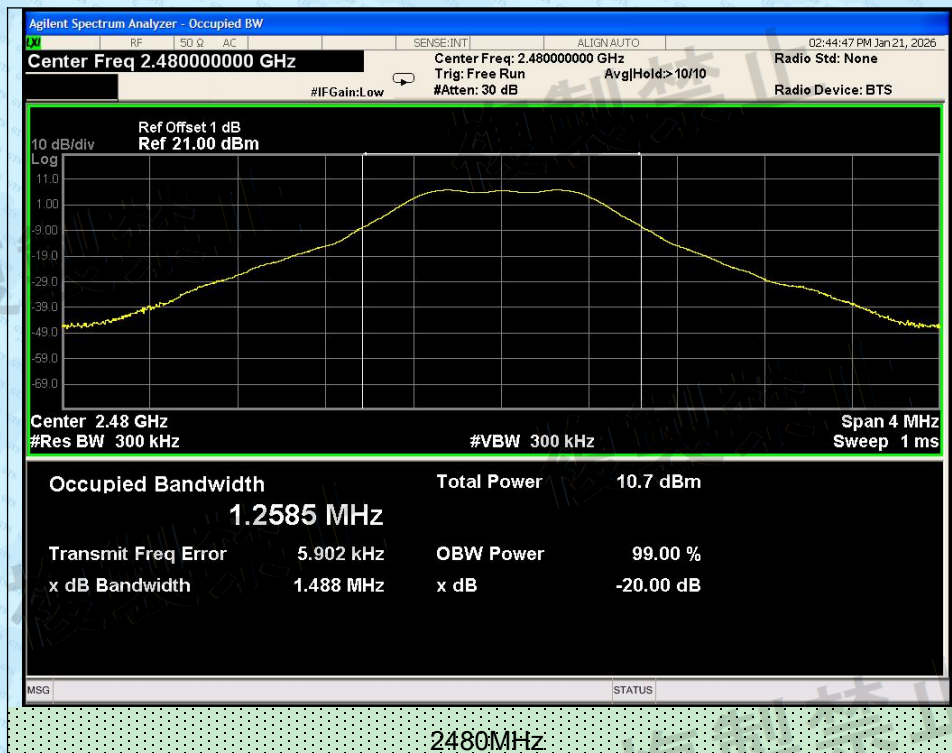
Test Graphs of Occupied Bandwidth



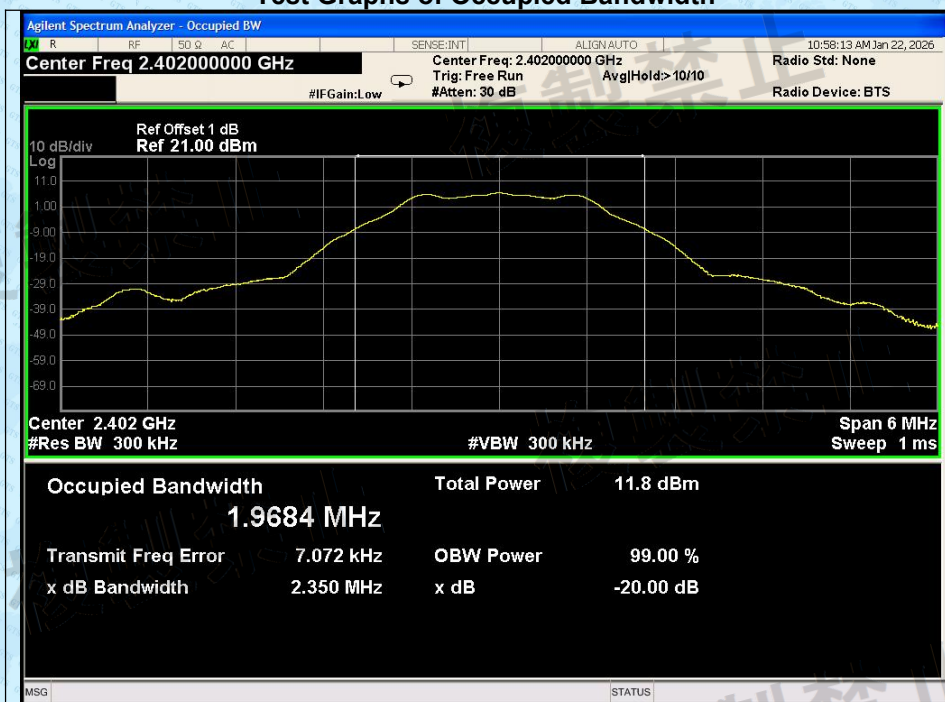
2402MHz



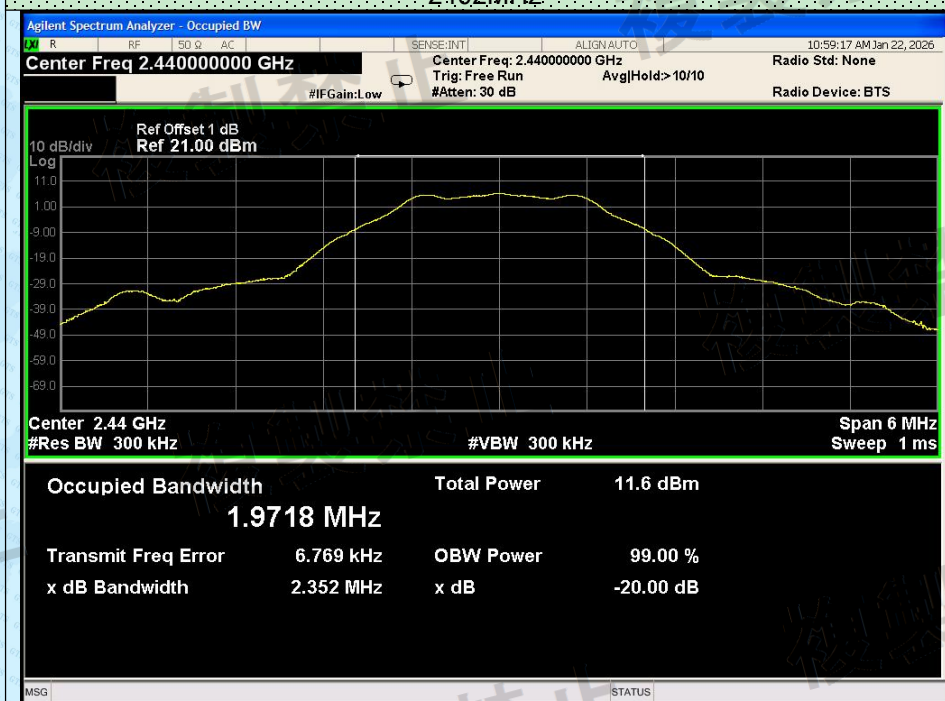
2440MHz



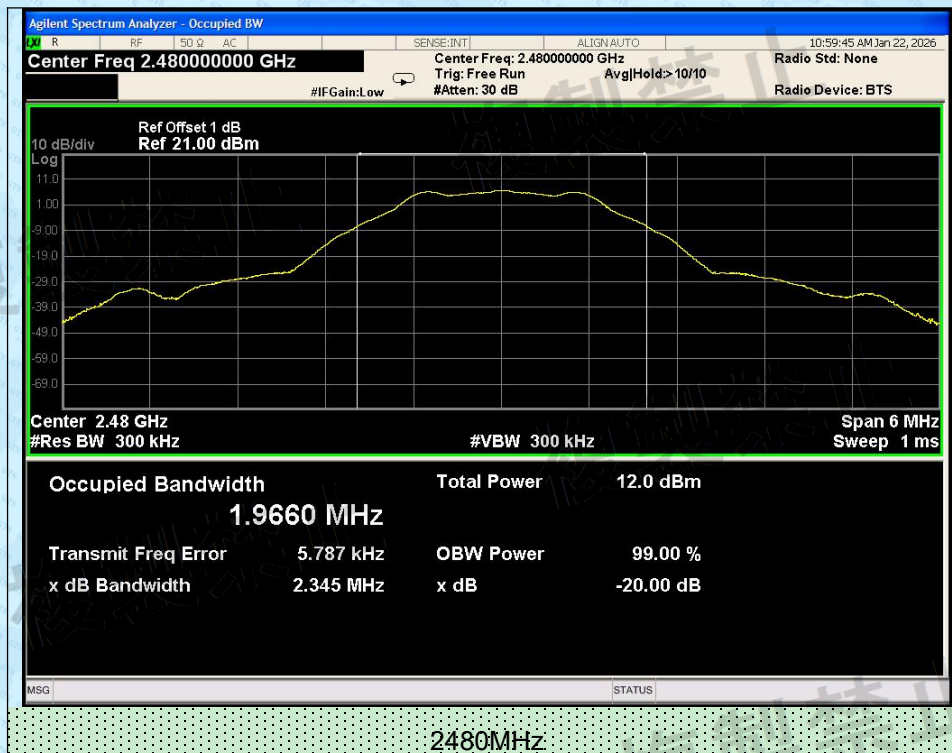
Test Graphs of Occupied Bandwidth



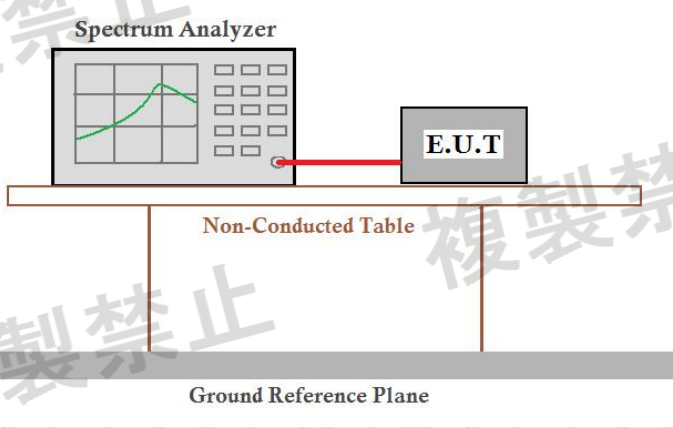
2402MHz



2440MHz



6.4 Spurious emission intensity

Test condition:	Test diffusion code and modulate with standard coding test signal
Measurement procedure:	Step 1 All spurious are measured from 30MHz to 13GHz by peak mode. Step 2 If the value measured by Step1 is 3dB or less to the limit, measure in average mode.
Spectrum set:	Step 1: Test Frequency: test channel, Below 1GHz, RBW=VBW=100KHz; Above 1GHz, RBW=VBW=1MHz, Sweep time=Auto, Detector mode=Positive peak Step 2: Test Frequency: spurious frequency Below 1GHz, RBW=VBW=100KHz; Above 1GHz, RBW=VBW=1MHz, Sweep time=Auto, Detector mode= Positive peak, Span=0Hz
Limit:	$\leq 2.5\mu\text{W}(-26\text{dBm})$ ($30\text{MHz} \leq f \leq 1000\text{MHz}$) $\leq 2.5\mu\text{W}(-26\text{dBm})$ ($1000\text{MHz} < f \leq 2387\text{MHz}$) $\leq 25\mu\text{W}(-16\text{dBm})$ ($2387\text{MHz} < f \leq 2400\text{MHz}$) $\leq 25\mu\text{W}(-16\text{dBm})$ ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$) $\leq 2.5\mu\text{W}(-26\text{dBm})$ ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an Equipment Under Test (E.U.T.) via a probe. The E.U.T. is placed on a Non-Conducted Table, which is positioned above a Ground Reference Plane.
Test Instruments:	Refer to section 5.8 for details
Test results:	Pass

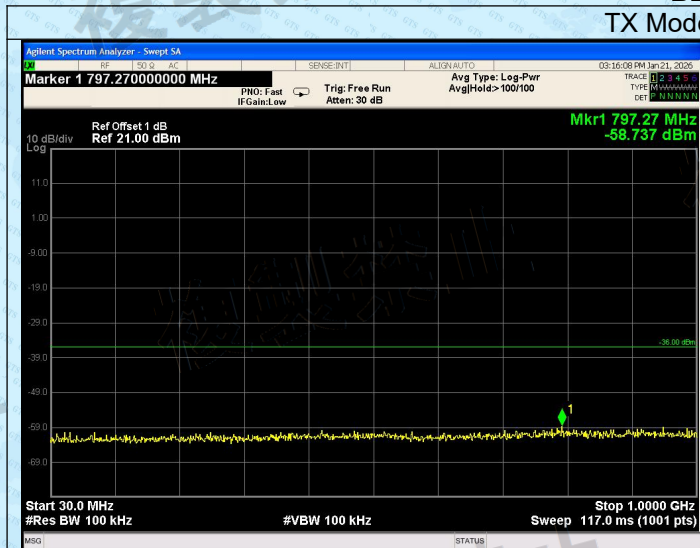
Measurement Data:

BLE 1M

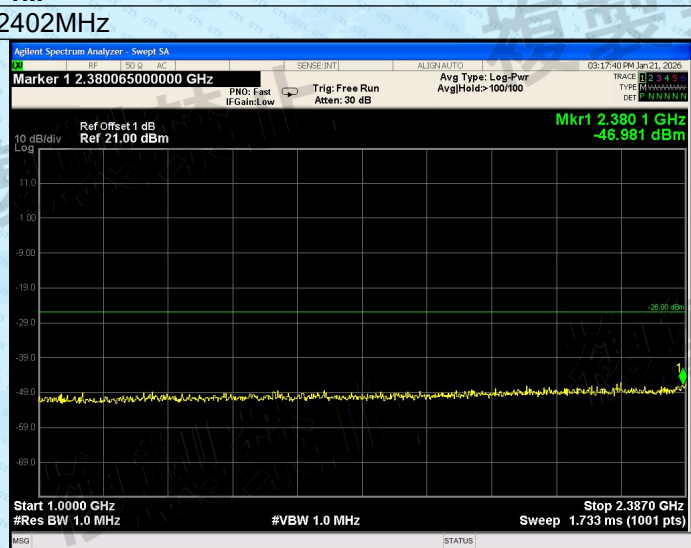
Test freq. [MHz]	Test freq. range [MHz]	Freq. [MHz]	Result [(dBm/ 100kHz)]	Result [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Result
2402	30-1000	797.27	-68.737	-58.737	0.00134	≤2.5	PASS
	1000-2387	2380.1	/	-46.981	0.02004	≤2.5	PASS
	2387-2400	2400.000	/	-28.518	1.40670	≤25	PASS
	2483.5-2496.5	2489.870	/	-45.887	0.02578	≤25	PASS
	2496.5-12500	4807	/	-33.569	0.43964	≤2.5	PASS
2440	30-1000	826.37	-69.002	-59.002	0.00126	≤2.5	PASS
	1000-2387	2354.0	/	-47.215	0.01899	≤2.5	PASS
	2387-2400	2394.319	/	-46.494	0.02242	≤25	PASS
	2483.5-2496.5	2491.664	/	-45.188	0.03028	≤25	PASS
	2496.5-12500	4877	/	-34.695	0.33923	≤2.5	PASS
2480	30-1000	815.70	-68.473	-58.473	0.00142	≤2.5	PASS
	1000-2387	2344.0	/	-47.354	0.01839	≤2.5	PASS
	2387-2400	2397.829	/	-45.891	0.02576	≤25	PASS
	2483.5-2496.5	2488.180	/	-44.477	0.03567	≤25	PASS
	2496.5-12500	4957	/	-35.918	0.25598	≤2.5	PASS

BLE 2M

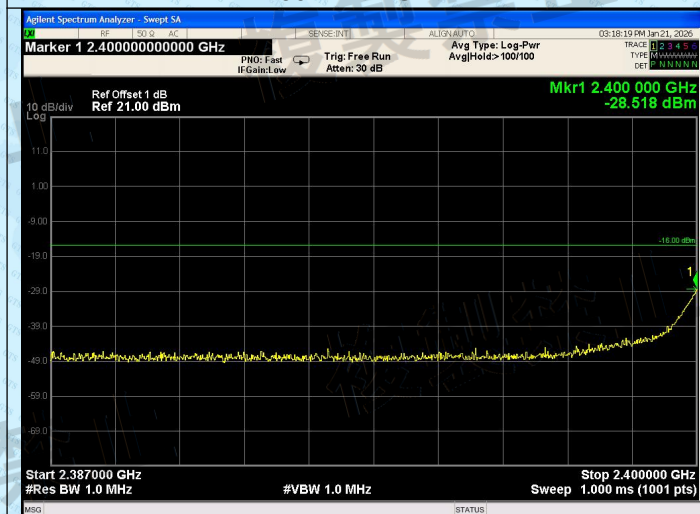
Test freq. [MHz]	Test freq. range [MHz]	Freq. [MHz]	Result [(dBm/ 100kHz)]	Result [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Result
2402	30-1000	779.81	-69.42	-59.472	0.00113	≤2.5	PASS
	1000-2387	2055.5	/	-46.801	0.02089	≤2.5	PASS
	2387-2400	2400.000	/	-18.680	13.55189	≤25	PASS
	2483.5-2496.5	2484.010	/	-46.86	0.02061	≤25	PASS
	2496.5-12500	4807	/	-32.715	0.53518	≤2.5	PASS
2440	30-1000	839.95	-69.252	-59.252	0.00119	≤2.5	PASS
	1000-2387	2230.3	/	-47.113	0.01944	≤2.5	PASS
	2387-2400	2399.844	/	-46.81	0.02084	≤25	PASS
	2483.5-2496.5	2494.966	/	-46.490	0.02244	≤25	PASS
	2496.5-12500	4877	/	-34.167	0.38309	≤2.5	PASS
2480	30-1000	887.48	-68.141	-58.141	0.00153	≤2.5	PASS
	1000-2387	2029.2	/	-47.351	0.01840	≤2.5	PASS
	2387-2400	2398.596	/	-47.005	0.01993	≤25	PASS
	2483.5-2496.5	2483.500	/	-41.181	0.07619	≤25	PASS
	2496.5-12500	4957	/	-35.219	0.30068	≤2.5	PASS

BLE 1M
TX Mode 2402MHz

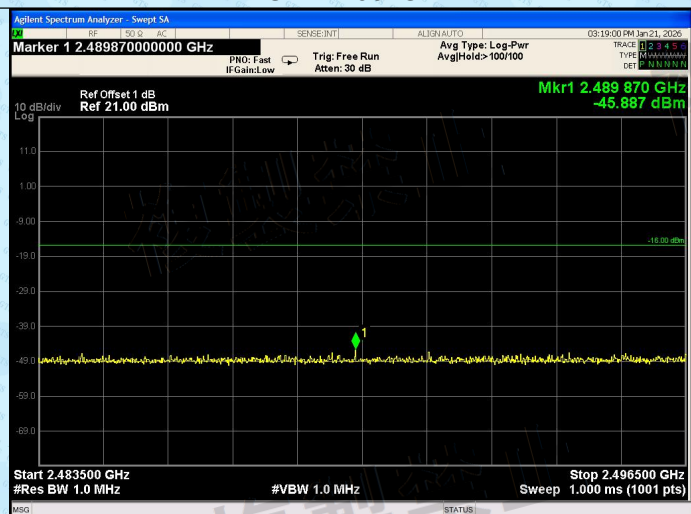
30MHz~1GHz



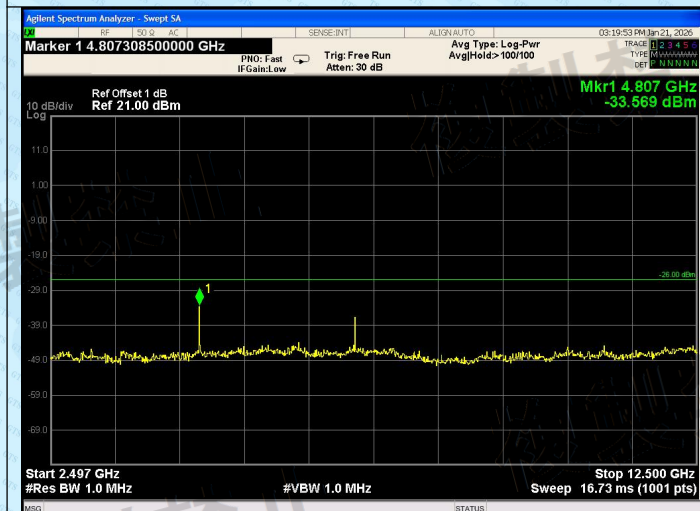
1GHz~2.387GHz



2.387GHz~2.4GHz

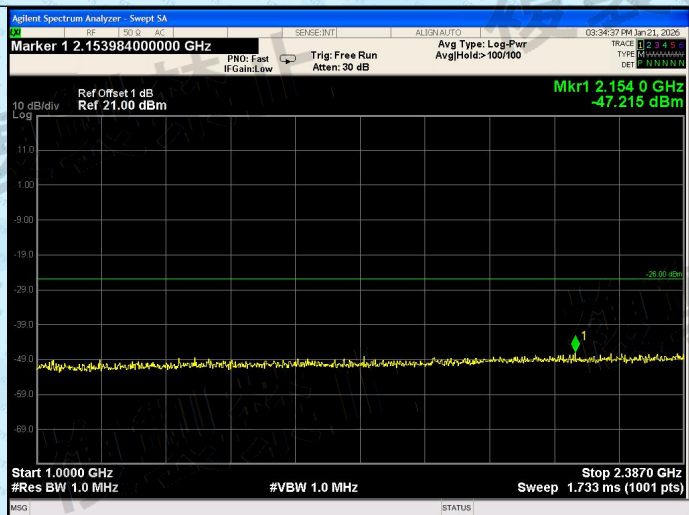
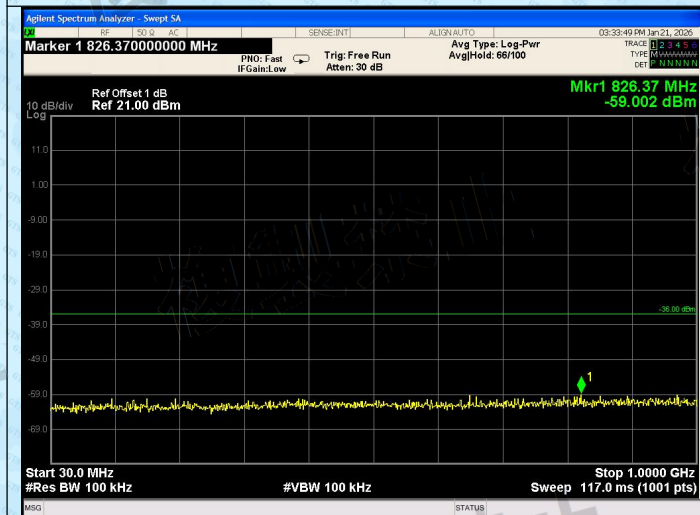


2.4835GHz~2.4965GHz

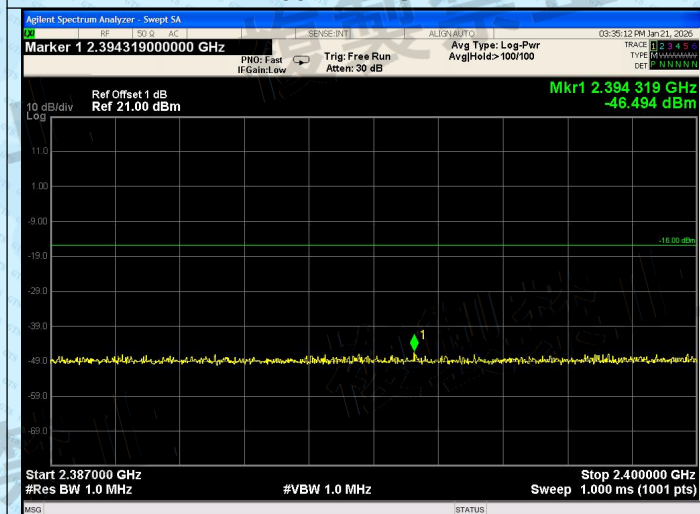


2.4965GHz~12.5GHz

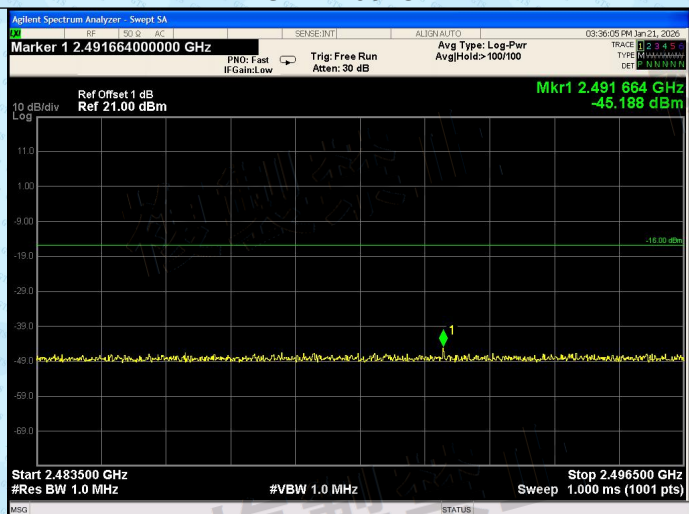
TX Mode 2440MHz



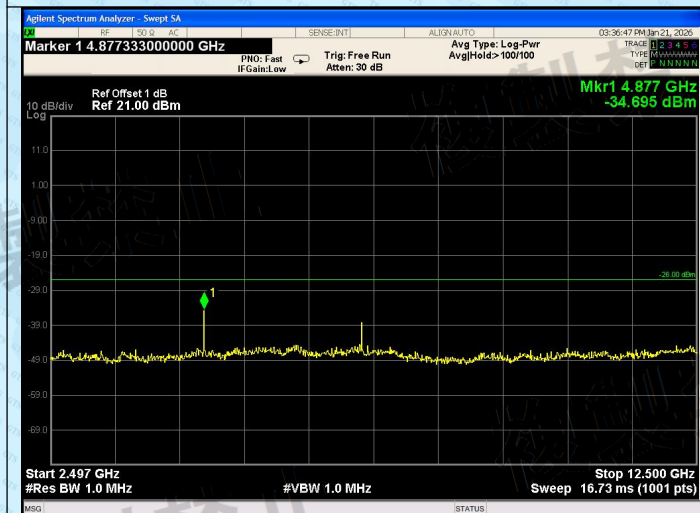
30MHz~1GHz



1GHz~2.387GHz



2.387GHz~2.4GHz

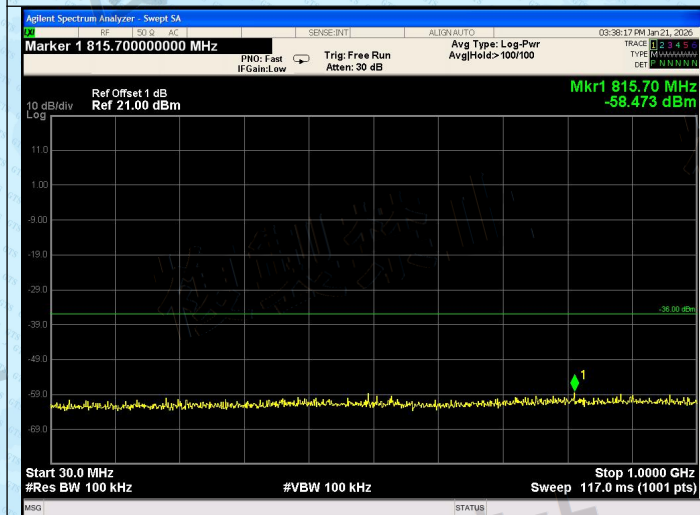


2.4835GHz~2.4965GHz

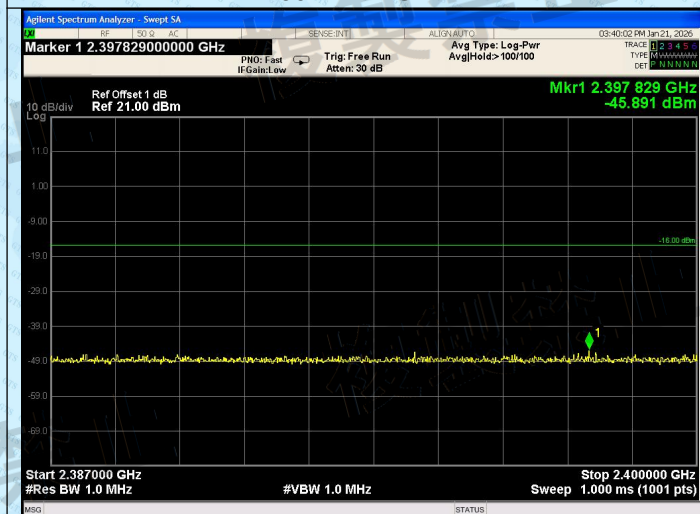


2.4965GHz~12.5GHz

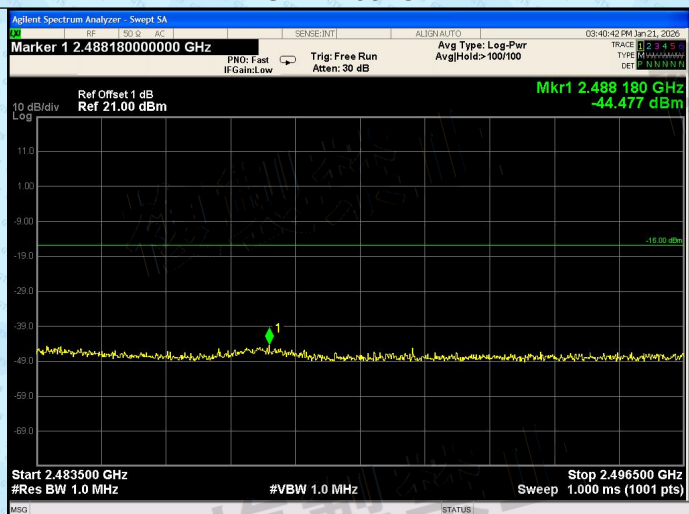
TX Mode 2480MHz



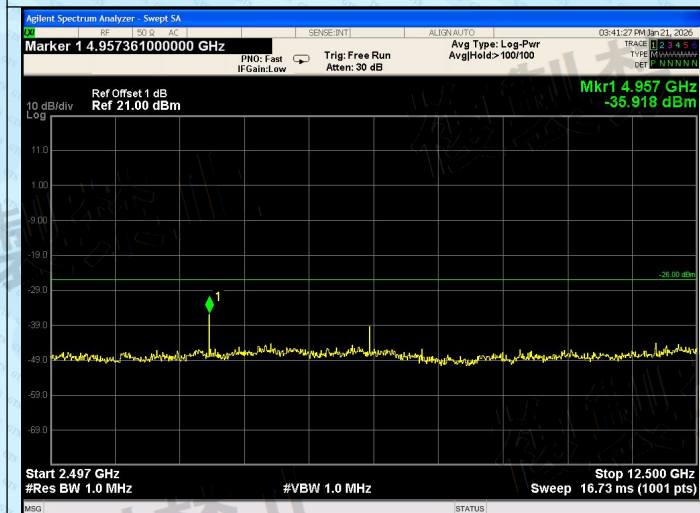
30MHz~1GHz



1GHz~2.387GHz



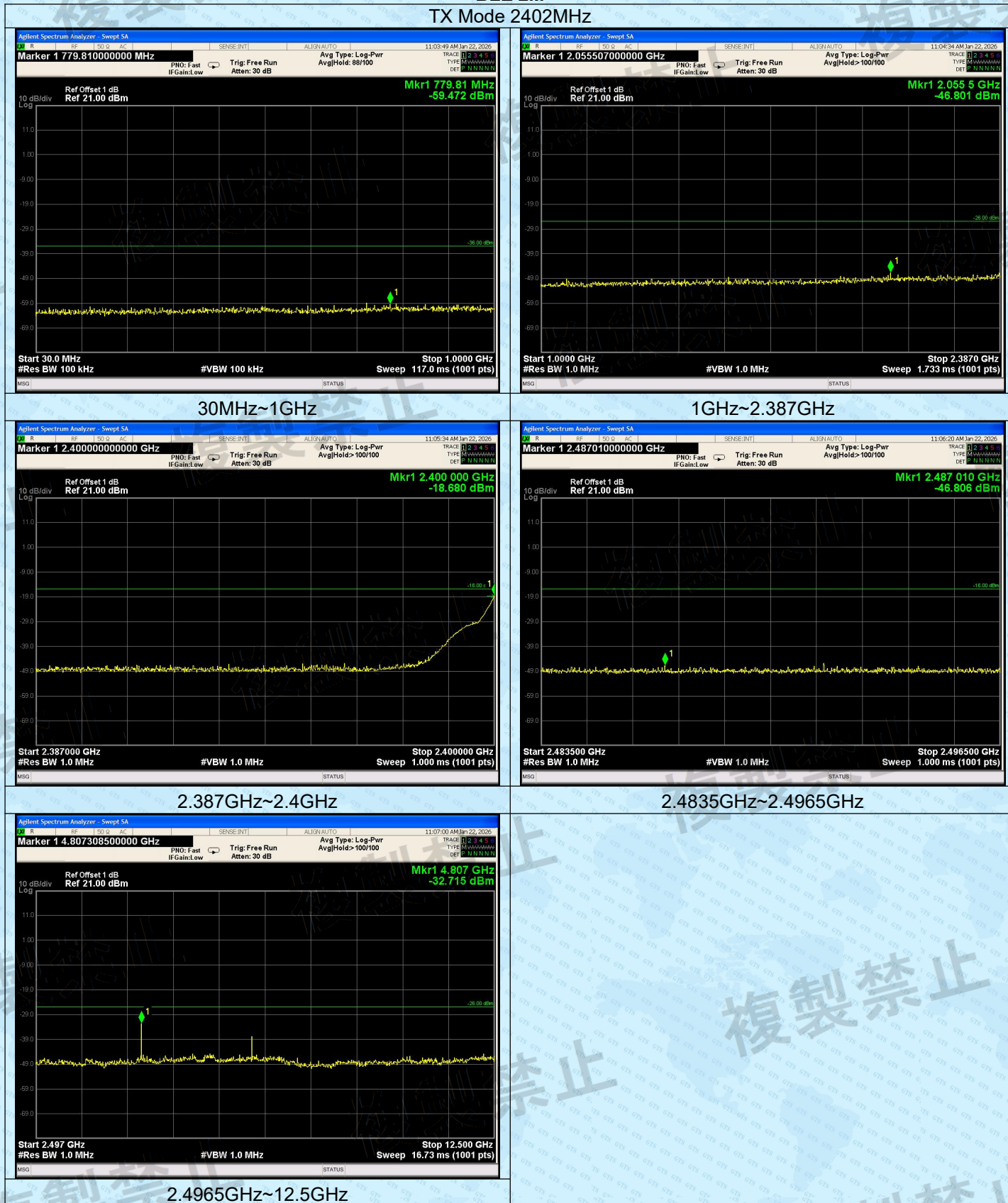
2.387GHz~2.4GHz



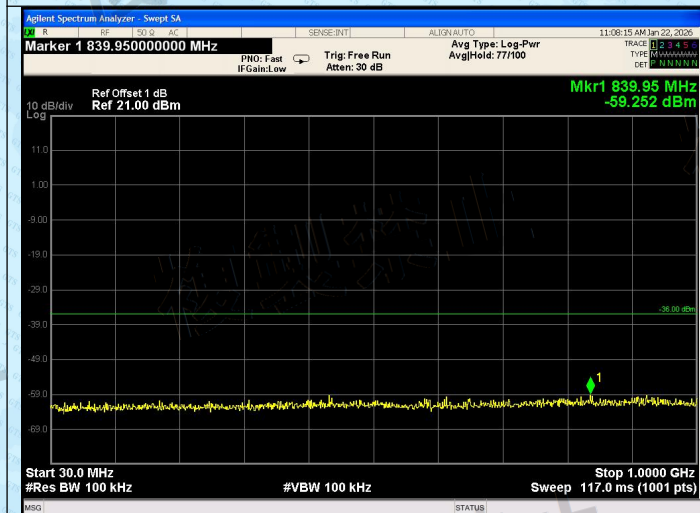
2.4835GHz~2.4965GHz



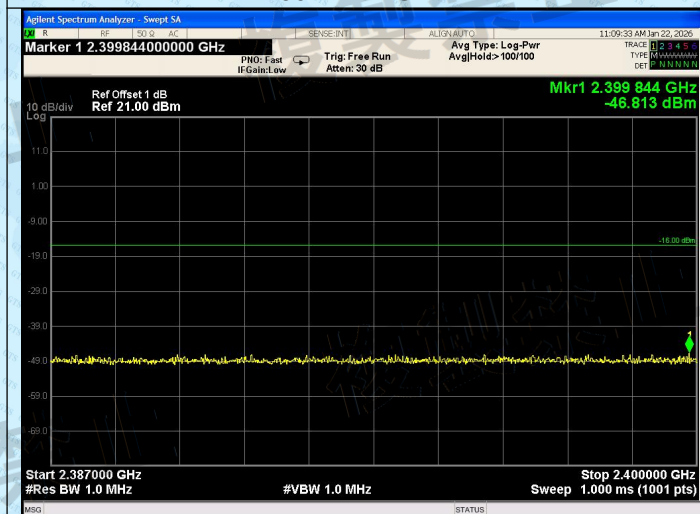
2.4965GHz~12.5GHz

BLE 2M
TX Mode 2402MHz

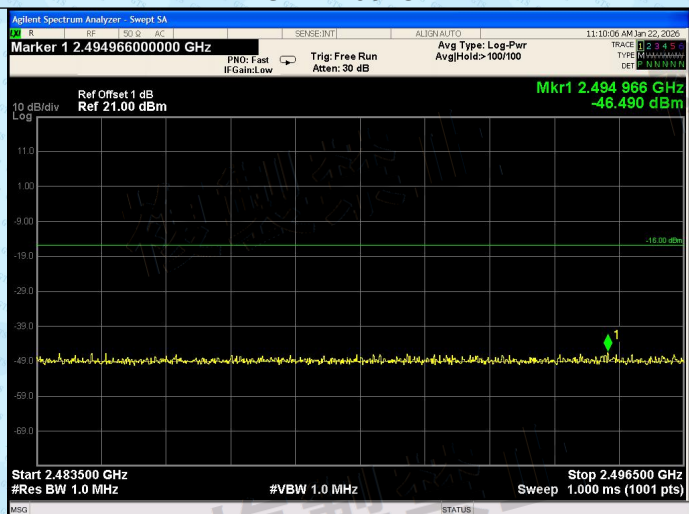
TX Mode 2440MHz



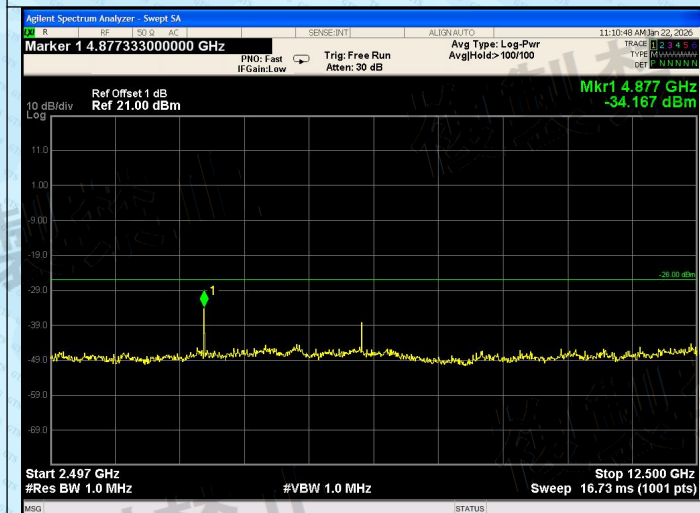
30MHz~1GHz



1GHz~2.387GHz



2.387GHz~2.4GHz

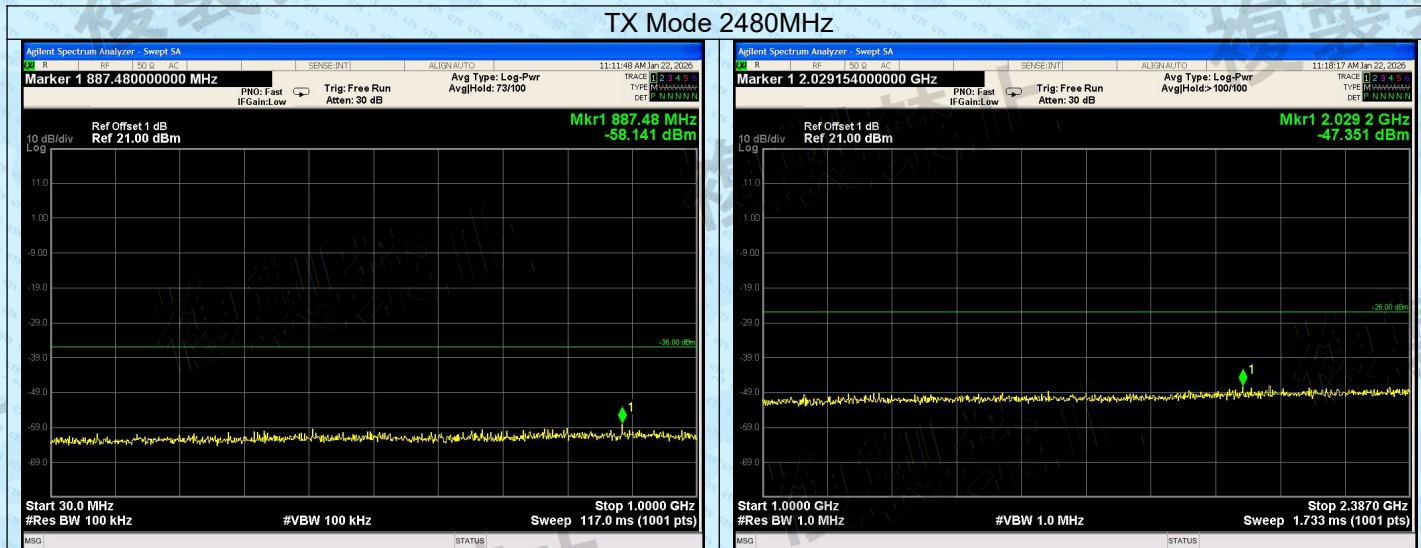


2.4835GHz~2.4965GHz



2.4965GHz~12.5GHz

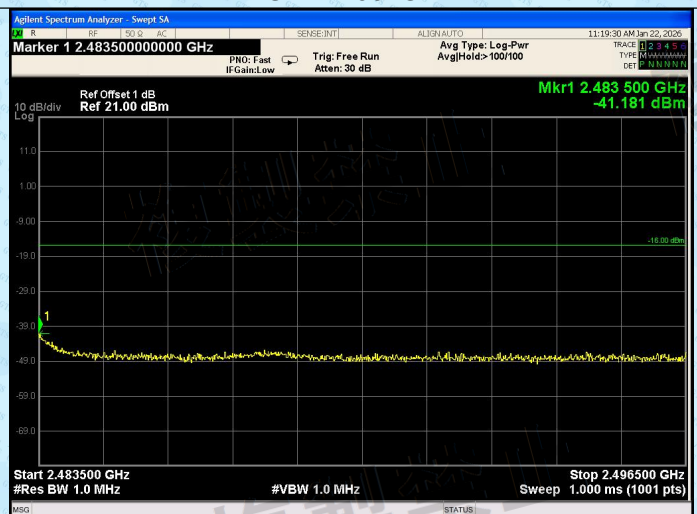
TX Mode 2480MHz



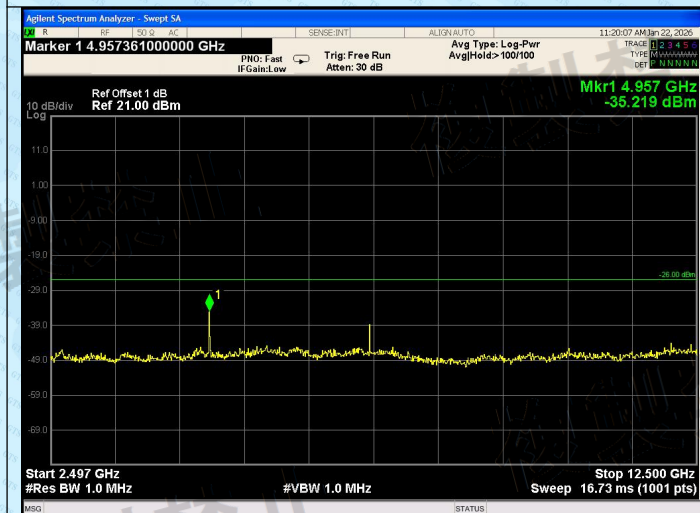
30MHz~1GHz



1GHz~2.387GHz



2.387GHz~2.4GHz

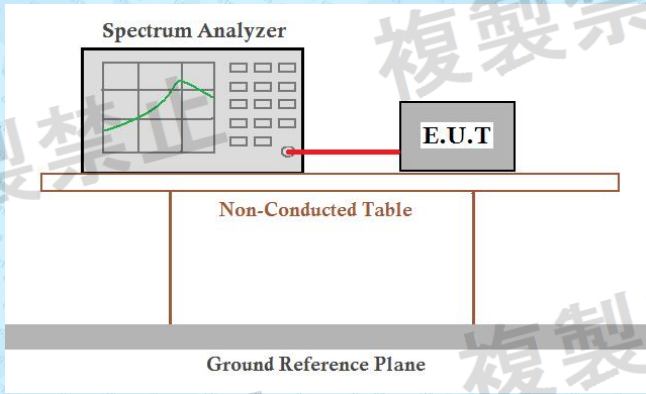


2.4835GHz~2.4965GHz



2.4965GHz~12.5GHz

6.5 Limit of secondary radiated emissions

Test condition:	Receiving mode
Measurement procedure:	Step 1 All spurious are measured from 30MHz to 13GHz by peak mode. Step 2 If the value measured by Step1 is 3dB or less to the limit, measure in average mode.
Spectrum set:	Step 1: Test Frequency: test channel, Below 1GHz, RBW=VBW=100KHz; Above 1GHz, RBW=VBW=1MHz, Sweep time=Auto, Detector mode=Positive peak Step 2: Test Frequency: spurious frequency Test Frequency: test channel, Below 1GHz, RBW=VBW=100KHz; Above 1GHz, RBW=VBW=1MHz, Sweep time=Auto, Detector mode= Positive peak, Span=0Hz
Limit:	Below 1GHz: 4.0nW or less Above 1GHz: 20nW or less
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are positioned on a Non-Conducted Table. This table is placed on a Ground Reference Plane.
Test Instruments:	Refer to section 5.8 for details
Test results:	Pass

Measurement Data:

BLE 1M

Test freq. [MHz]	Test freq. range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Result
2402	30-1000	869.05	-69.240	≤-54.00	0.00012	≤4	PASS
	1000-12500	6256	-64.788	≤-47.00	0.00033	≤20	PASS

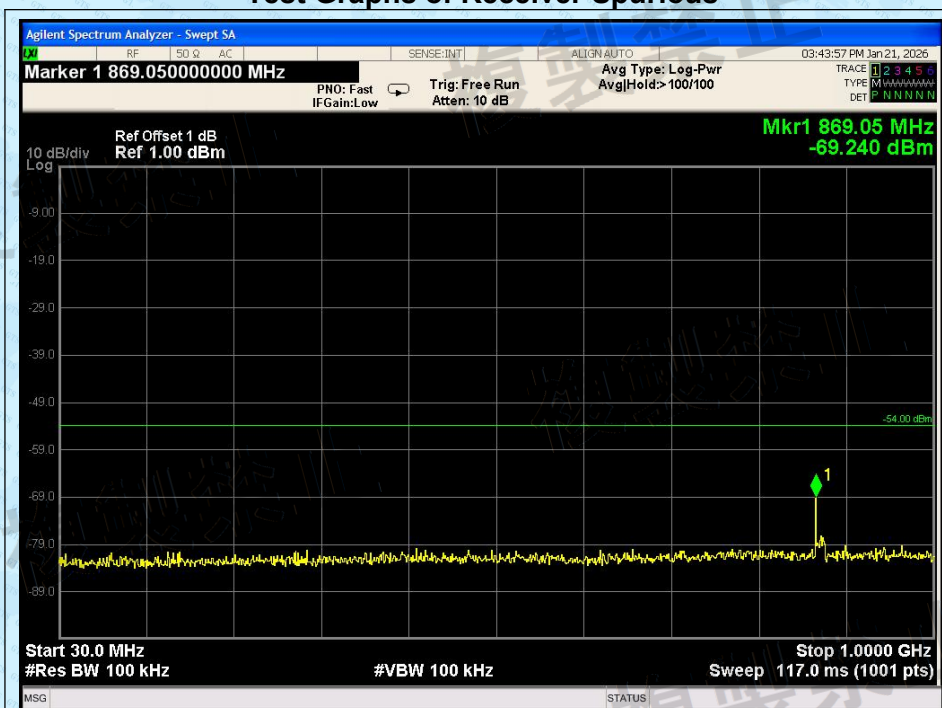
BLE 2M

Test freq. [MHz]	Test freq. range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Result
2402	30-1000	869.05	-70.715	≤-54.00	0.00008	≤4	PASS
	1000-12500	7187	-64.940	≤-47.00	0.00032	≤20	PASS

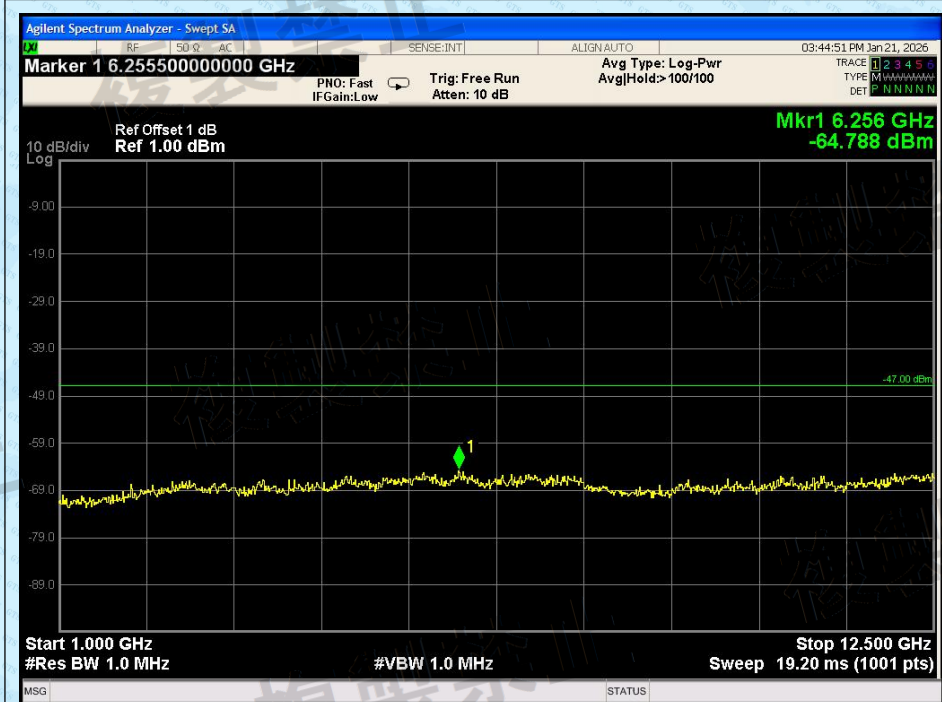
Note: The receiving mode for GFSK low channel is the worst case, and only the data of the worst case recorded in this test report.

BLE 1M

Test Graphs of Receiver Spurious

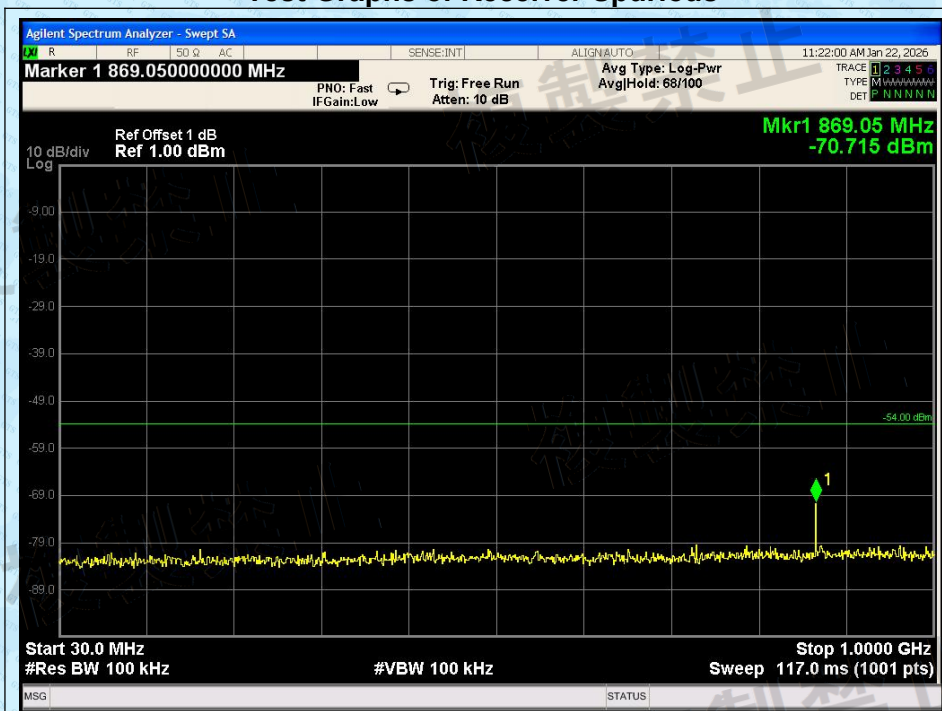


30~1000MHz

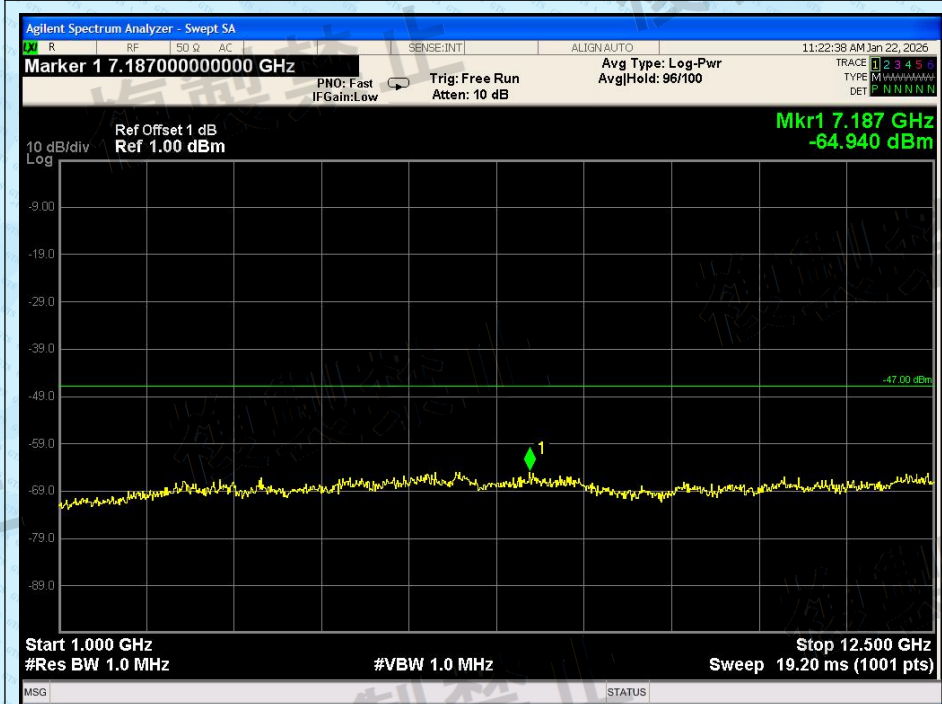


1000~13000MHz

Test Graphs of Receiver Spurious



30~1000MHz



1000~13000MHz

6.6 Interference suppression

Measurement procedure:	(1) The radio equipment with automatic transmitting function of identification code a) Transmit the assigned identification code from the radio equipment. b) Confirm the identification code received by the demodulator. (2) The radio equipment with automatic receiving function of identification code a) Transmit the assigned identification code from the opposite equipment. b) Confirm that the usual communication is available. c) Transmit the identification code distinct from the assigned one from the opposite equipment. d) Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.		
Test setup:	Radio equipment	Dummy load Attenuator)	Demodulator
Test Instruments:	Refer to section 5.8 for details		
Test results:	Pass		

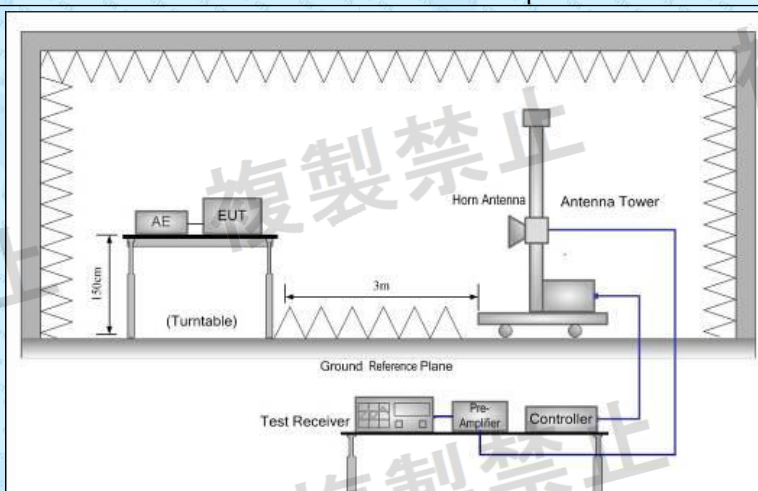
Measurement data:

Identification function:	Good
Mac address	04-42-1A-95-3E-3C

6.7 Equivalent Isotropic Radiated Power

Test condition:	Transmitting mode	
Measurement procedure:	Step 1 Set the test equipment at test frequency, and in continuous transmitting mode or intermittent burst mode (constant frequency and constant burst time). Stop the spread. Step 2 Set the height and direction of test equipment and measurement antenna approximately facing each other. Step 3 In the frequency derived in D), change the height of the measurement antenna from the ground by $\pm 50\text{cm}$ with a central focus on the antenna of test equipment. Search the location that the power is maximum by adjusting the direction of measurement antenna. Set the indicator of spectrum analyzer at this point as "E". Step 4 Remove the test equipment from the turntable, set the opening of substitution antenna at the same location as the opening of the test equipment, and receive by outputting radio wave of the same frequency from the standard signal generator for substitution. Step 5 Adjust at the maximum power point, turning the substitution antenna. Step 6 Change the height of the measurement antenna from the ground by $\pm 50\text{cm}$ with a central focus on the substitution antenna, and adjust the direction of measurement antenna to the location that the received power is maximum. Step 7 Adjust output of standard signal generator and record the power P_s that is equal to "E". Or record P_s by counting backward from the difference with "E" as the close value to "E" (within $\pm 1\text{dB}$). Step 8 EIRP is derived from the following calculating formula: $\text{EIRP} = G_s - L_F + P_s$ G_s: Absolute gain of substitution antenna (dBi). L_F: Loss of electric supply line between standard signal generator and substitution antenna (dB). P_s: Output of standard signal generator (dBm).	
Spectrum set:	Center frequency:	Frequency that gives maximum electric power (searched frequency)
	Sweep frequency band:	0 MHz
	Resolution bandwidth:	1MHz
	Video bandwidth:	Comparable level with resolution bandwidth
	Sweep mode:	Continuous sweep
	Detective mode:	positive peak
Limit:	12.14 dBm/MHz	

Test setup:



Test Instruments:

Refer to section 5.8 for details

Test results:

Pass

Measurement Data:

BLE 1M:

TEST CONDITION	EIRP Power dBm/MHz
Normal Voltage (DC 3.7V)	9.632
Normal Voltage +10% (DC 4.07V)	9.477
Normal Voltage -10%(AC 3.33V)	9.87
Remarks: Low/Mid/High of test frequency range; Limit $\leq 16.37\text{mW/MHz}$ (12.14dBm/MHz)	

BLE 2M:

TEST CONDITION	EIRP Power dBm/MHz
Normal Voltage (DC 3.7V)	9.618
Normal Voltage +10% (DC 4.07V)	9.4
Normal Voltage -10%(AC 3.33V)	9.842
Remarks: Low/Mid/High of test frequency range; Limit $\leq 16.37\text{mW/MHz}$ (12.14dBm/MHz)	

7 Test Setup Photo

Reference to the appendix I for details

8 EUT Constructional Details

Reference to the appendix II for details

-----End-----