



TEST REPORT

Applicant Name: M5Stack Technology Co., Ltd
Address: Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, China
Report Number: 2604R48107E-RF-07B

Test Standard (s)

Japan item 19 of Article 2 Paragraph 1

Sample Description

Product Name: M5Atom Matrix V1.1
Model No.: Atom Matrix V1.1
Trade Mark: 
M5STACK
Date Received: 2026-03-12
Report Date: 2026-03-30

Test Result:	The EUT complied with the standards above.
--------------	--

Prepared and Checked By:

Jason Fan

Jason Fan
EMC Engineer

Approved By:

Bob. Liao

Bob.Liao
EMC Engineer

Note: The information marked “#” is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked.
This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Shenzhen Accurate Technology Co., Ltd.

Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Tel: +86 755-26503290

Web: www.atc-lab.com

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	4
GENERAL INFORMATION	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	5
TEST METHODOLOGY	5
TEST FACILITY	6
MEASUREMENT UNCERTAINTY	6
EUT TEST CONFIGURATION	7
DESCRIPTION OF TEST CONFIGURATION	7
TEST VOLTAGE [#]	7
EUT EXERCISE SOFTWARE AND POWER LEVEL [#]	7
EQUIPMENT MODIFICATIONS	7
SUPPORT EQUIPMENT LIST AND DETAILS	8
EXTERNAL I/O CABLE	8
CONFIGURATION OF TEST SETUP	8
SUMMARY OF TEST RESULTS	9
TEST EQUIPMENT LIST	10
FREQUENCY TOLERANCE	11
LIMIT	11
TEST PROCEDURE	11
MEASUREMENT SYSTEM DIAGRAM	11
TEST DATA	11
OCCUPIED BANDWIDTH	12
LIMIT	12
TEST PROCEDURE	12
MEASUREMENT SYSTEM DIAGRAM	12
TEST DATA	12
TRANSMITTER SPURIOUS EMISSION STRENGTH AND UNWANTED EMISSION INTENSITY	13
LIMIT	13
TEST PROCEDURE	13
MEASUREMENT SYSTEM DIAGRAM	14
TEST DATA	14
ANTENNA OUTPUT POWER AND ANTENNA POWER TOLERANCE	15
LIMIT	15
TEST PROCEDURE	15
MEASUREMENT SYSTEM DIAGRAM	15
TEST DATA	15
RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY	16
LIMIT	16
TEST PROCEDURE	16
MEASUREMENT SYSTEM DIAGRAM	16
TEST DATA	16
INTERFERENCE PREVENTION FUNCTION	17
REQUIREMENT	17
TEST PROCEDURE	17
MEASUREMENT SYSTEM DIAGRAM	17
TEST DATA	17

CONSTRUCTION PROTECTION CONFIRMATION..... 18

LIMIT 18

CONFIRMATION METHOD 18

APPENDIX 19

FREQUENCY ERROR..... 20

OCCUPIED BANDWIDTH 22

TRANSMITTER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY 24

ANTENNA OUTPUT POWER AND OUTPUT POWER TOLERANCE..... 28

RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY 29

INTERFERENCE PREVENTION FUNCTION..... 31

EXHIBIT A - EUT PHOTOGRAPHS 32

EXHIBIT B - TEST SETUP PHOTOGRAPHS 33

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604R48107E-RF-07B	Original Report	2026-03-30

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	M5Atom Matrix V1.1
Tested Model	Atom Matrix V1.1
Nominal Power Supply [#]	DC5V from USB-C port

Radio Type		BLE (1M)
Data Rate		1Mbps,
Technical Parameters	Frequency Range	2402-2480 MHz
	Modulation Type	GFSK
	Rated Output Power [#]	4.50mW
	Antenna Specification [#]	Gain: 2.0 dBi
Sample Serial Number		3IFC-1 (Assigned by ATC, Shenzhen)
Sample/EUT Status		Good condition

Objective

The objective of this current document is to demonstrate the EUT, as equipment type in Certification Ordinance Article 2-1-19 of Specific Radio Equipment Specified in Article 38-2-2 Paragraph 1 Item 1of the Radio Low, compliant with Article 49-20 of Radio equipment regulations.

Test Methodology

All measurements contained in this report were conducted with technical regulations of MIC Notice No.88 of 2004, Appendix No.43 (Version: MIC Notice No.409 of 2023).

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	5 %
RF Frequency	0.064×10^{-7}
RF output power, conducted	0.3 dB
Unwanted Emission, conducted	1.2 dB
Temperature	1 °C
Humidity	2 %
Supply voltages	0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

EUT TEST CONFIGURATION

Description of Test Configuration

For BLE: 40 channels are provided for testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	21	2444
...	...	...	...
...	...	...	...
...	...	...	...
18	2438	38	2478
19	2440	39	2480

EUT was tested with channel 0, 19 and 39.

Test Voltage[#]

The EUT has a voltage chip: SY8089, the fluctuation of power supply to the RF circuit of EUT is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition tests, EUT only operated in normal voltage to test all regulations. Details as following:

Voltage Condition	Input(V _{DC})	Chip Voltage (V _{DC})
NV	5.0	3.3
LV	4.5	3.3
HV	5.5	3.3

Test voltage: 5.0V (Normal Voltage) (It is provided by the applicant.)

EUT Exercise Software and Power Level[#]

“EspRFTTestTool” exercise software was made to the EUT tested and the power level was provided by the manufacturer.

Mode	Data rate	Power level [#]		
		Low channel	Middle channel	High channel
BLE 1M	1Mbps	7	7	7

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

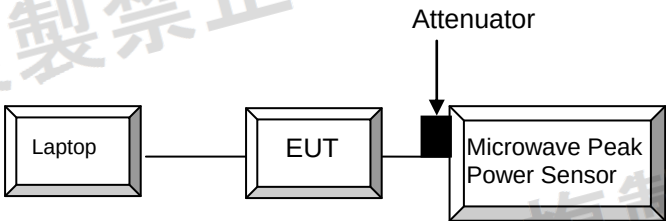
Manufacturer	Description	Model	Serial Number
LENOVO	Laptop	ThinkPad T470	PF-17P19A

External I/O Cable

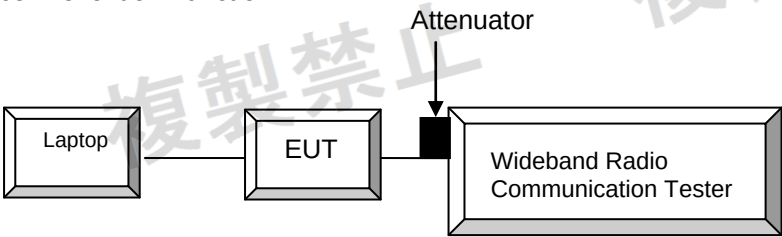
Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	No	1.0	EUT	Laptop
RF cable	No	0.1	EUT	Microwave Peak Power/Spectrum/ Wideband Radio Communication Tester

Configuration of Test Setup

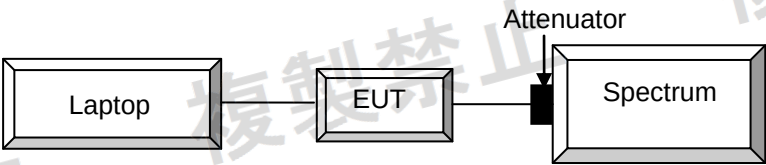
For Antenna Output Power and Output Power Tolerance:



For Interference Prevention Function:



Other test items:



SUMMARY OF TEST RESULTS

MIC Notice No.88 of 2004, Appendix No.43, Article 2, Paragraph 1, Item 19

Items	Description of Test	Result
1	Frequency Tolerance	Compliance
2	Occupied Bandwidth	Compliance
3	Transmitter Spurious Emission and Unwanted Emission Intensity	Compliance
4	Antenna Output Power and Output Power Tolerance	Compliance
5	Receiver Spurious Emission and Unwanted Emission Intensity	Compliance
6	Carrier Sense Capability	Not Applicable**
7	Transmission Antenna Gain	Not Applicable
8	Transmission Radiation Angle Width	Not Applicable
9	Interference Prevention Function	Compliance
10	Frequency Hopping Dwell Time	Not Applicable*
11	Construction Protection Confirmation	Compliance

Not Applicable - This test item was not required for the output power less than 12.14 dBm (E.I.R.P).

Not Applicable* -Testing is only required for FHSS system devices.

Not Applicable**-The OBW of EUT is less than 26 MHz and the EUT is not radio control model aircraft.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Authority	Calibration Method
Anritsu	Microwave Peak Power Sensor	MA24418A	12619	2026/01/20	2027/01/19	BACL Cal	C
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101948	2025/09/18	2026/09/17	BACL Cal	C
WEINSCHEL	10dB Attenuator	5324	AU 3842	2026/01/20	2027/01/19	BACL Cal	C
Unknown	RF Coaxial Cable	No.35	/	2025/05/30	2026/05/29	BACL Cal	C
Unknown	RF Coaxial Cable	No.36	/	2025/05/30	2026/05/29	BACL Cal	C
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	124441	2025/09/17	2026/09/16	BACL Cal	C
UNI-T	DC Power Supply	UTP1306S	2109D0903324	2026/01/20	2027/01/19	BACL Cal	C
UNI-T	Multimeter	UT191T	/	2026/01/20	2027/01/19	BACL Cal	C

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Note

- A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as"NICT")or a designated calibration agency under Article 102-18 paragraph (1)
- B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No.51of1992)
- C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph(1)
- D.Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from A to C.

FREQUENCY TOLERANCE

Limit

- 50ppm or below

Test Procedure

Set the EUT to the measurement frequency without modulation.

Setting of SA is following as:

- Center Frequency: Frequency to measure
- RBW: 1kHz, VBW: 3kHz
- Span: 300kHz
- Sweep time: Auto or more
- Log scale: 10dB/Div, Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak
- Sweep mode: Continuous Sweep
- Marker: Spot

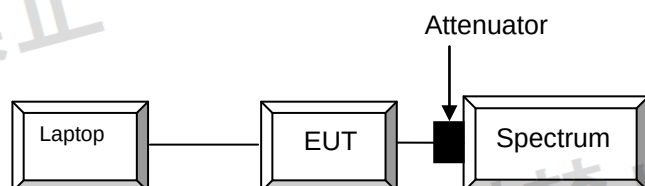
Record the peak spot frequency.

If the EUT can't set at un-modulation mode, measure the 10dBc center frequency.

EUT operation mode: Transmitting

Note: Offset = RF cable loss(0.5dB[#]) + Attenuator(10dB)

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

OCCUPIED BANDWIDTH

Limit

- Occupied bandwidth: FH $\leq$ 83.5 MHz; OFDM, DS $\leq$ 26 MHz; Others $\leq$ 26 MHz

Test Procedure

1. Setting of SA is following as:

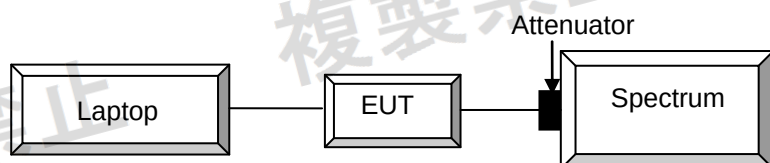
- Center Frequency: Frequency to measure
- RBW: 30 kHz, VBW: 30 kHz
- Span: 2.5MHz
- Sweep time: Auto or more
- Log scale: 10dB/Div, Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak
- Sweep mode: Continuous Sweep
- Marker: Spot

2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% of occupied bandwidth to measure occupied bandwidth.

EUT operation mode: Transmitting

Note: Offset = RF cable loss(0.5dB[#]) + Attenuator(10dB)

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

TRANSMITTER SPURIOUS EMISSION STRENGTH AND UNWANTED EMISSION INTENSITY

Limit

Frequency Band	Limit
30MHz-1GHz	0.25μW/100kHz (-36dBm/100kHz)
1GHz-2387MHz	2.5μW/MHz (-26dBm/MHz)
2387MHz-2400MHz	25μW/MHz (-16dBm/MHz)
2483.5MHz-2496.5MHz	25μW/MHz (-16dBm/MHz)
2496.5MHz-12.5GHz	2.5μW/MHz (-26dBm/MHz)

Test Procedure

Conditions of Application Equipment (EUT)

- The modulation state shall be in continuously transmitting mode.

Spectrum Analyzer Conditions:

- Span: Measuring Frequency Range
- RBW: 1MHz (frequency range; 1GHz over), 100kHz (frequency range; 30MHz to 1GHz)
- VBW: Same as RBW (1MHz or 100kHz)
- Sweep time: Auto(Minimum time to ensure measurement accuracy.)
- Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak

If the measured value is under the technical standard value, do not need to measure more detail.

If above test over the limit, the below test procedure should be used:

Step 1: Center the frequency which was want to investigate, search the peak frequency.

Step 2: Center frequency: Searched Frequency

- Span: 0Hz
- RBW: 1MHz(Above 1GHz), VBW: Same as RBW.
- Sweep time: Auto(Minimum time to ensure measurement accuracy.

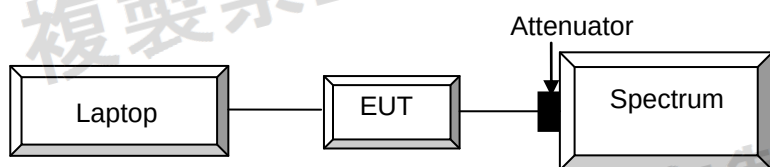
*In case of burst wave, one burst shall be included per data point)

- Data points: 400 points or more.
- Sweep mode: Single Sweep.
- Detection Mode: Sample

EUT operation mode: Transmitting

Note: Offset = RF cable loss(0.5dB[#]) + Attenuator(10dB)

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

ANTENNA OUTPUT POWER AND ANTENNA POWER TOLERANCE

Limit

- ≤ 10 mW/MHz (OFDM (20MHz system), DSSS from 2400-2483.5 MHz)
- ≤ 5 mW/MHz (OFDM (40MHz system) from 2400-2483.5 MHz)
- ≤ 10 mW (other from 2400-2483.5 MHz)

The Output Power Tolerance must be below +20%.

EIRP

- ≤ 12.14 dBm/MHz (OFDM(20MHz system), DSSS from 2400-2483.5MHz)
- ≤ 9.13 dBm/MHz (OFDM(40MHz system), from 2400-2483.5MHz)
- ≤ 12.14 dBm (other from 2400-2483.5MHz)

Test Procedure

Step 1: Measure the total power by Power Meter in a state of non-hopping mode (with Average Sensor)

Step 2: If it's the burst wave, please measure the burst ratio. Then calculate the real total power by burst ratio.

Step 3: Calculate the mean power.

Antenna output power (mW) = Antenna output power Reading (mW) / Burst Ratio

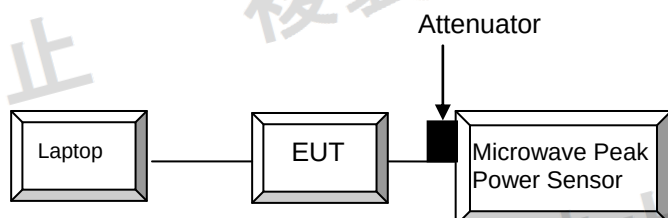
Note: The burst ratio has been calculated to result by power meter, so the equation updated as below:

Antenna output power (mW) = Antenna output power Reading (mW)

EUT operation mode: Transmitting

Note: Offset = RF cable loss(0.5dB[#]) + Attenuator(10dB)

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY

Limit

Frequency Band	Limit
30MHz-1GHz	4nW (-54dBm)
1GHz-12.5GHz	20nW (-47dBm)

Test Procedure

Conditions of Application Equipment (EUT)

- The modulation state shall be “continuous receiving mode”.

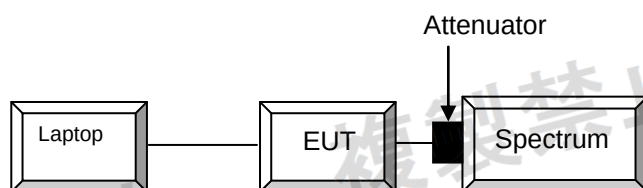
Spectrum Analyzer Conditions

- Start Frequency: Start Frequency of frequency range to measure (30MHz or 1GHz)
- Stop Frequency: Stop Frequency of frequency range to measure (1GHz or 12.5GHz)
- Span: AUTO (Measurement Range)
- RBW: 100 kHz, VBW: 100 kHz for Frequency < 1 GHz
- RBW: 1MHz, VBW: 1MHz for Frequency > 1 GHz
- Sweep time: AUTO or more
- Sweep mode: Auto Sweep
- Detection: Positive Peak
- Reference Level: Enough level for maximum dynamic range

EUT operation mode: Receiving

Note: Offset = RF cable loss(0.5dB[#]) + Attenuator(10dB)

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

INTERFERENCE PREVENTION FUNCTION

Requirement

The EUT shall have the interference prevention capability to transmit or to receive the identification automatically, so that sender and receiver shall exclude other equipment.

Test Procedure

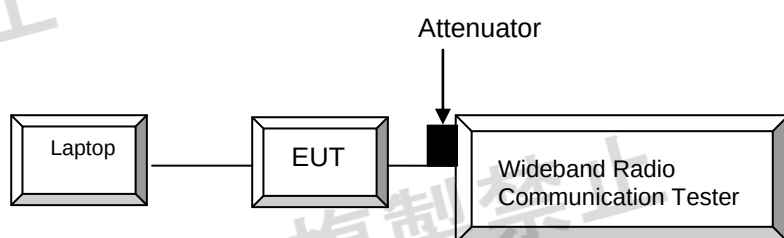
In the case that the EUT has the function of automatically transmitting the identification code:

1. Transmit the predetermined identification codes from EUT
2. Check the transmitted identification codes with the demodulator.

In the case of receiving the identification codes:

1. Transmit the predetermined identification codes from the counterpart.
2. Check if communication is normal
3. Transmit the signal other than predetermined ID codes from the counterpart.
4. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

Measurement System Diagram



Test Data

Test Result: Please refer to the Appendix.

CONSTRUCTION PROTECTION CONFIRMATION

Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

Confirmation Method

The EUT use a shell cover with the super glue in the gap, the shielding cannot be opened easily. Please refer to the EUT photos.

APPENDIX

Test Information:

Sample No.:	3IFC-1	Test Date:	2026/03/20
Test Site:	RF	Test Mode:	Transmitting/ Receiving
Tester:	Steve Lu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.2	Relative Humidity: (%)	51	ATM Pressure: (kPa)	100.4
----------------------	------	------------------------------	----	------------------------	-------

Frequency Error

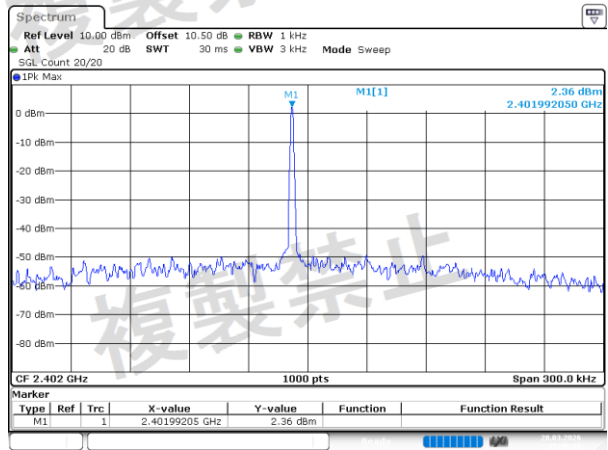
Test Condition: NV

Mode	Frequency (MHz)	Measure Frequency (MHz)	Frequency Tolerance (ppm)	Limit (ppm)	Verdict
Single Carrier	2402	2401.99205	-3.31	± 50	Pass
	2440	2439.99175	-3.38		Pass
	2480	2479.99145	-3.45		Pass

Frequency Tolerance = (Measure Frequency - Frequency)/Frequency*10⁶

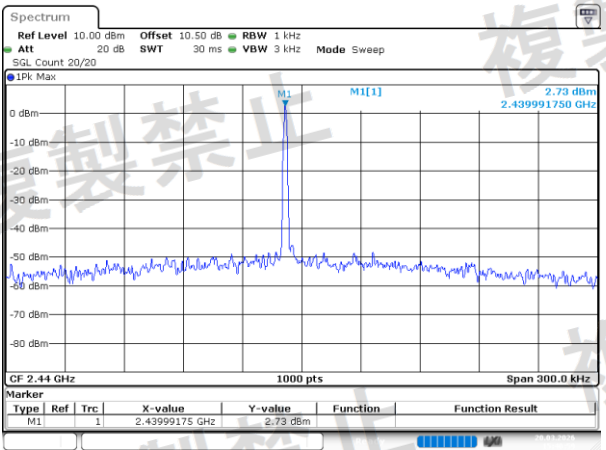
Test Condition: NV

2402MHz



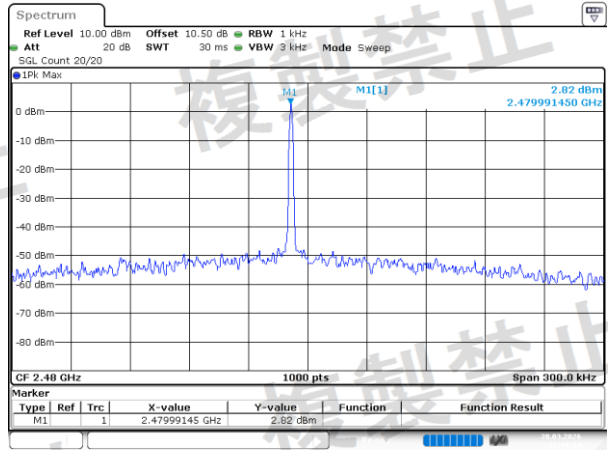
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:40:35

2440MHz



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:40:59

2480MHz



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:41:14

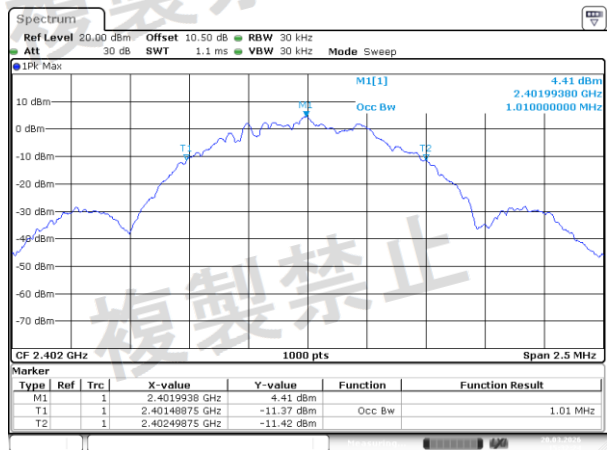
Occupied Bandwidth

Test Condition: NV

Mode	Occupied bandwidth (MHz)			Limit(MHz)	Verdict
	Low Channel	Middle Channel	High Channel		
BLE 1M	1.01	1.01	1.01	≤ 26	Pass

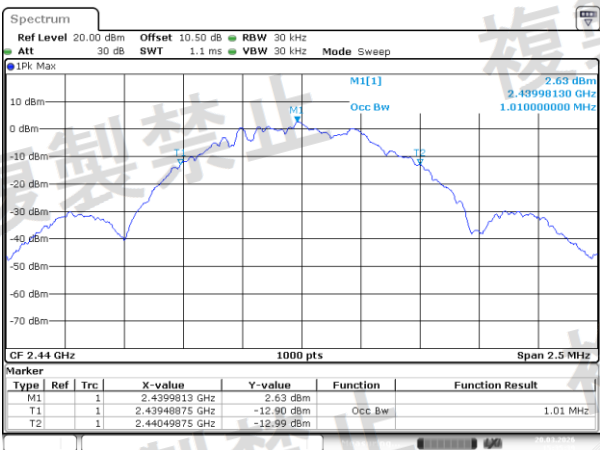
Test Condition: NV

BLE 1M_Low Channel



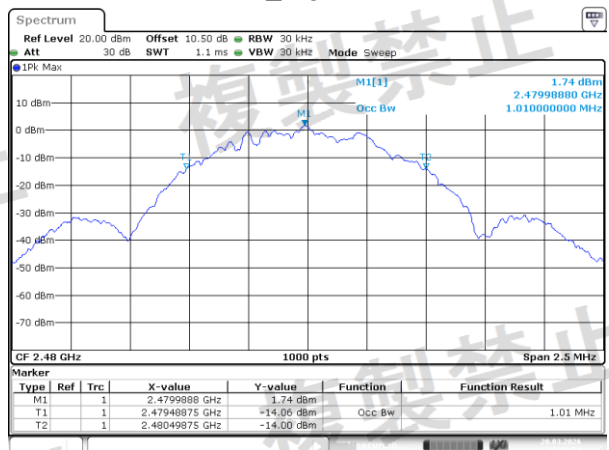
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:32:24

BLE 1M_Middle Channel



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:35:40

BLE 1M_High Channel



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:36:54

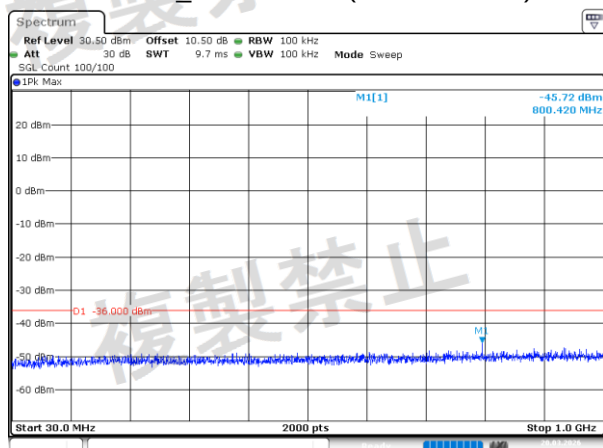
Transmitter Spurious Emission and Unwanted Emission Intensity

Test Condition: Normal, BLE 1M

Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start(MHz)	Stop(MHz)					
Low	Band I (100kHz)	30	1000	800.42	-45.72	0.027	0.25	Pass
	Band II (1MHz)	1000	2387	1638.37	-38.26	0.149	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9968	-27.12	1.941	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2485.8043	-37.48	0.179	25	Pass
	Band V (1MHz)	2496.5	12500	5935.2	-33.06	0.494	2.50	Pass
Middle	Band I (100kHz)	30	1000	813.03	-44.43	0.036	0.25	Pass
	Band II (1MHz)	1000	2387	1106.45	-38.47	0.142	2.50	Pass
	Band III (1MHz)	2387	2400	2388.2643	-37.97	0.160	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2485.4728	-38.07	0.156	25	Pass
	Band V (1MHz)	2496.5	12500	6750.5	-33.38	0.459	2.50	Pass
High	Band I (100kHz)	30	1000	826.61	-44.61	0.035	0.25	Pass
	Band II (1MHz)	1000	2387	2170.28	-38.21	0.151	2.50	Pass
	Band III (1MHz)	2387	2400	2390.6303	-37.90	0.162	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2494.2478	-37.26	0.188	25	Pass
	Band V (1MHz)	2496.5	12500	6710.5	-33.32	0.466	2.50	Pass

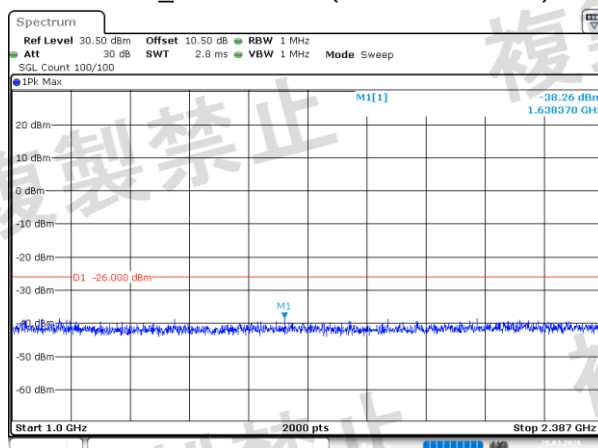
Test Condition: NV

BLE 1M_Low Channel(30MHz~1GHz)



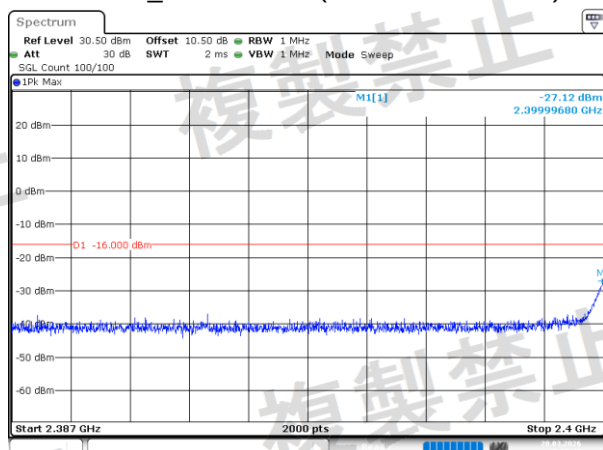
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:32:33

BLE 1M_Low Channel(1GHz~2.387GHz)



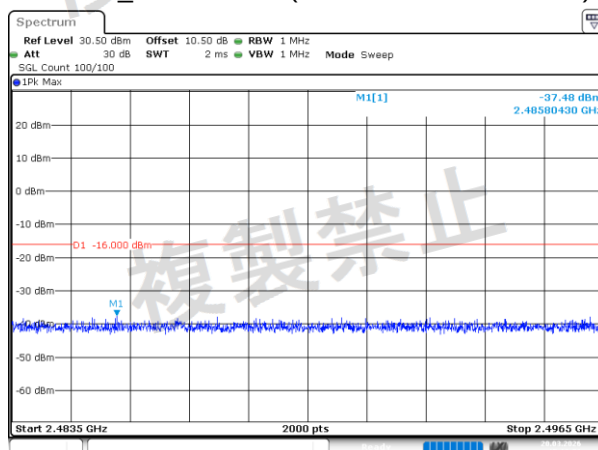
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:32:40

BLE 1M_Low Channel(2.387GHz~2.4GHz)



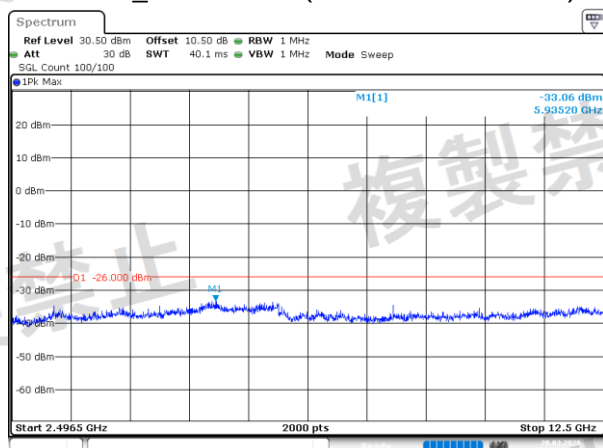
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:32:45

BLE 1M_Low Channel(2.4835GHz~2.4965GHz)



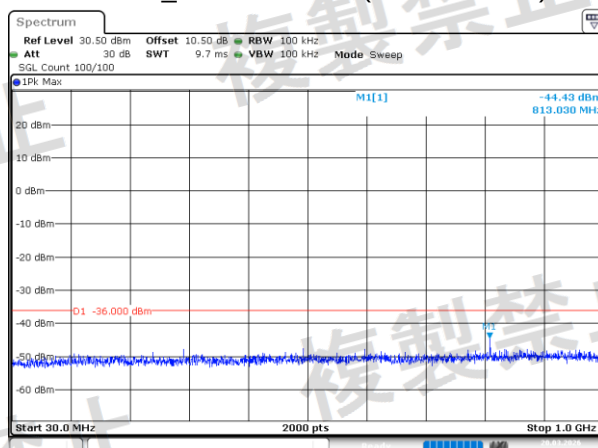
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:32:50

BLE 1M_Low Channel(2.4965GHz~12.5GHz)



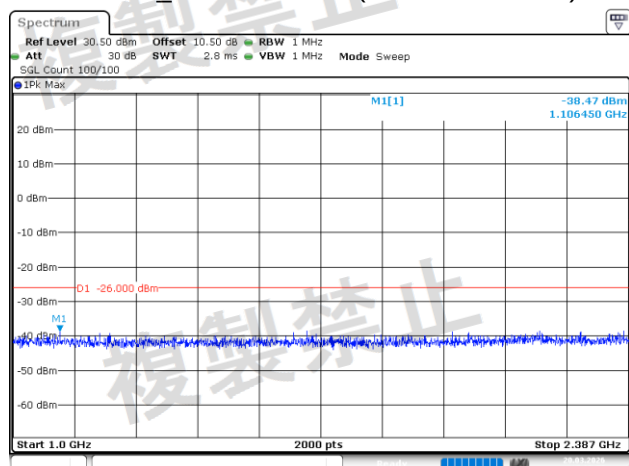
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:33:10

BLE 1M_Middle Channel(30MHz~1GHz)



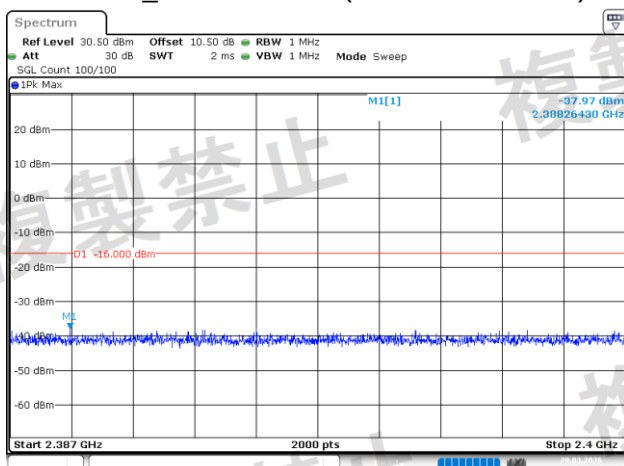
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:35:48

BLE 1M_Middle Channel(1GHz~2.387GHz)



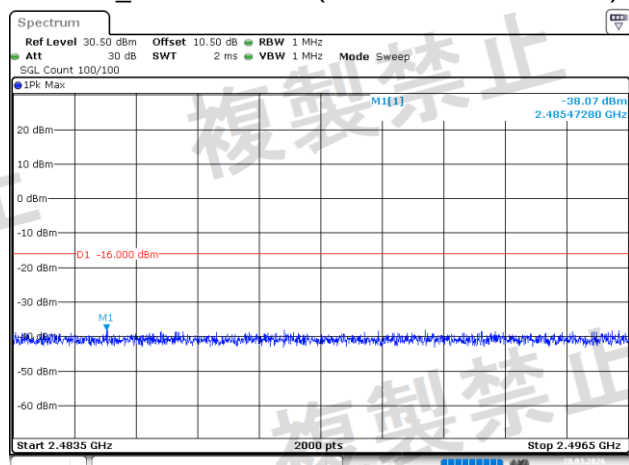
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:35:55

BLE 1M_Middle Channel(2.387GHz~2.4GHz)



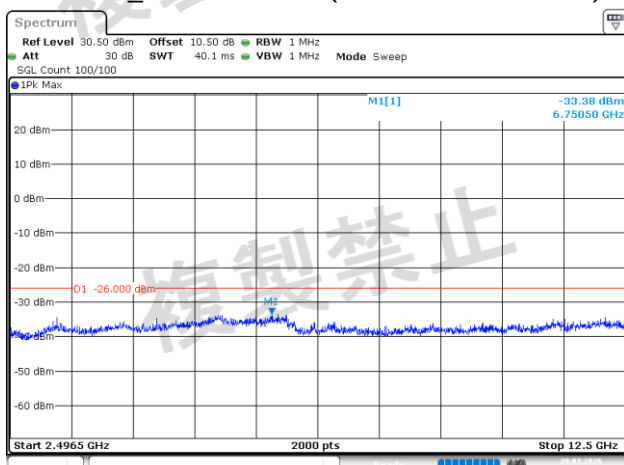
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:36:00

BLE 1M_Middle Channel(2.4835GHz~2.4965GHz)



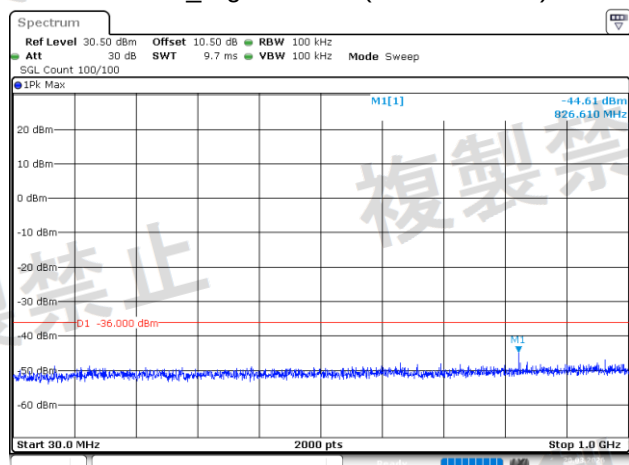
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:36:05

BLE 1M_Middle Channel(2.4965GHz~12.5GHz)



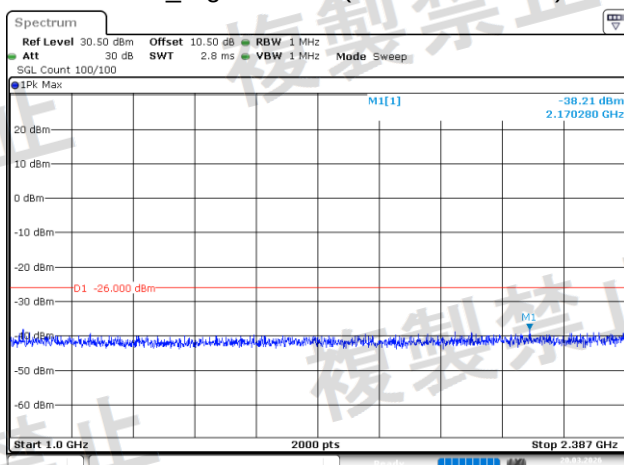
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:36:25

BLE 1M_High Channel(30MHz~1GHz)



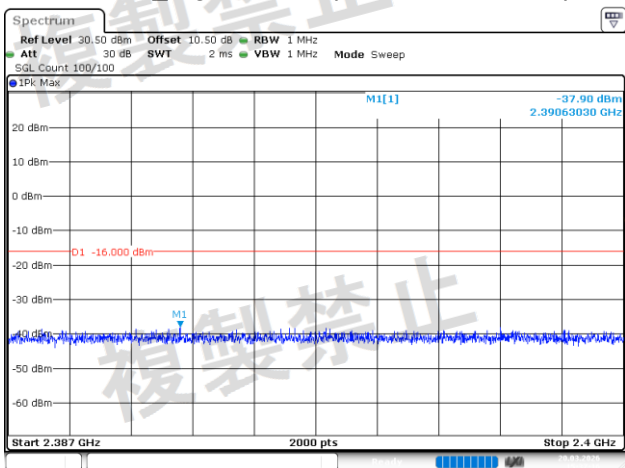
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:37:03

BLE 1M_High Channel(1GHz~2.387GHz)



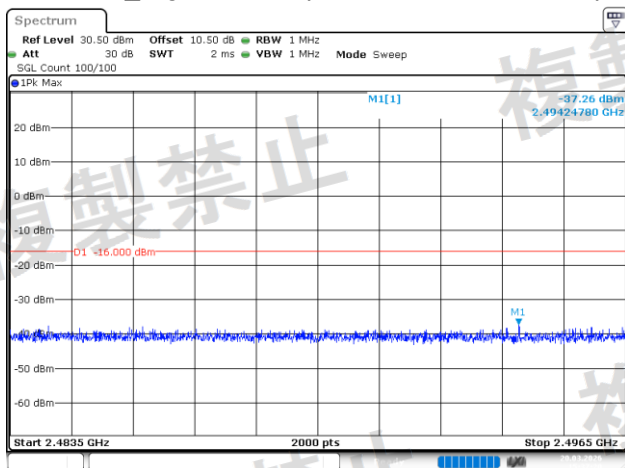
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:37:11

BLE 1M_High Channel(2.387GHz~2.4GHz)



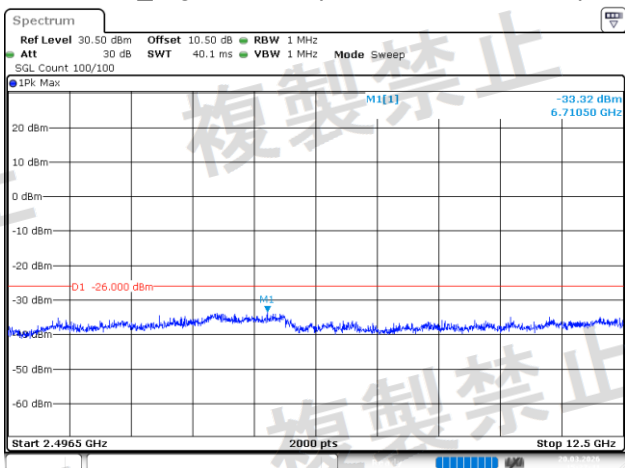
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:37:16

BLE 1M_High Channel(2.4835GHz~2.4965GHz)



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:37:21

BLE 1M_High Channel(2.4965GHz~12.5GHz)



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:37:41

Antenna Output Power and Output Power Tolerance

Test Condition: NV

Mode	Antenna gain [#] (dBi)	Declared power [#] (mW)
BLE 1M	2	4.50

Mode	Channel	Conducted power(dBm)	Antenna output power(mW)		Antenna output tolerance(%)		EIRP (dBm)		Verdict
			Result	Limit	Result	Limit	Result	Limit	
BLE 1M	Low	6.54	4.508	≤ 10	0.18	+20	8.54	≤ 12.14	Pass
	Middle	5.33	3.412		-24.18		7.33		Pass
	High	4.21	2.636		-41.42		6.21		Pass

Note:

Antenna output power(mW) = 10^{Conducted power(dBm) / 10}

Antenna output power tolerance(%) = (Antenna output power - Declared power) / Declared power * 100%

Antenna output power(dBm) = 10 * log10{Antenna output power(mW)}

EIRP(dBm) = Antenna output power(dBm) + Antenna gain.

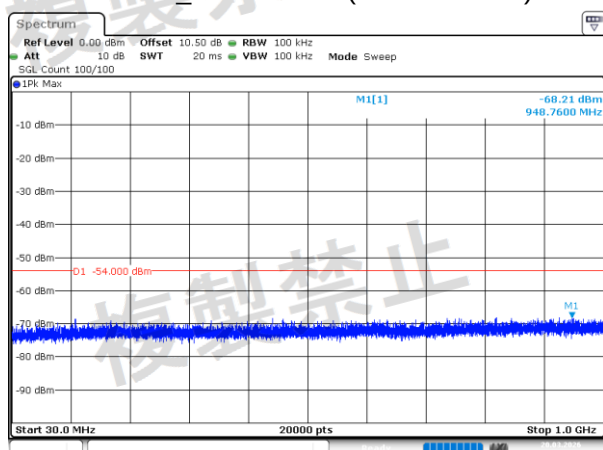
Receiver Spurious Emission and Unwanted Emission Intensity

Test Condition: NV

Mode	Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm)	Result (nW)	Limit (nW)	Verdict
			Start(MHz)	Stop(MHz)					
BLE 1M	Low	Band I (100kHz)	30	1000	948.76	-68.21	0.151	4	Pass
		Band II (1MHz)	1000	12500	6327.09	-53.26	4.721	20	Pass
	Middle	Band I (100kHz)	30	1000	976.938	-67.59	0.174	4	Pass
		Band II (1MHz)	1000	12500	5903.89	-53.16	4.831	20	Pass
	High	Band I (100kHz)	30	1000	734.729	-67.60	0.174	4	Pass
		Band II (1MHz)	1000	12500	5930.34	-53.11	4.887	20	Pass

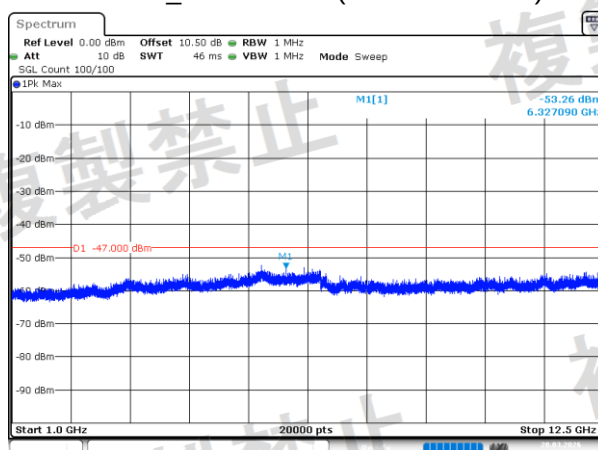
Test Condition: NV

BLE 1M_Low Channel(30MHz~1GHz)



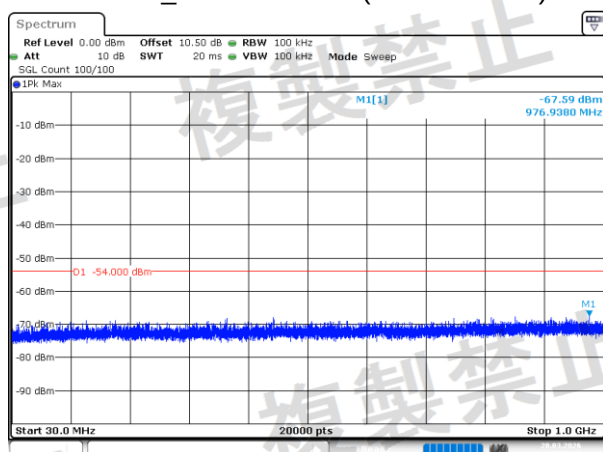
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:41:48

BLE 1M_Low Channel(1GHz~12.5GHz)



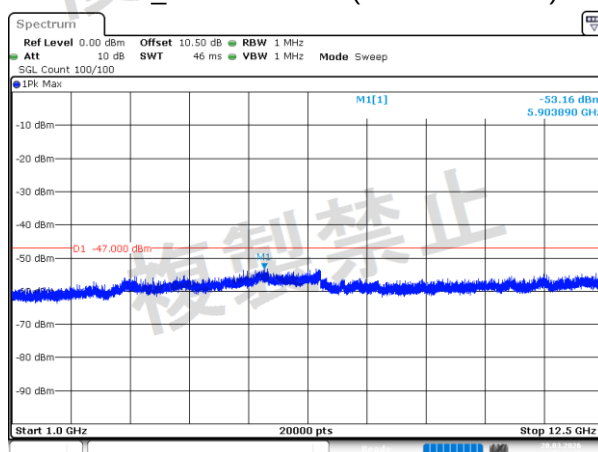
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:43:05

BLE 1M_Middle Channel(30MHz~1GHz)



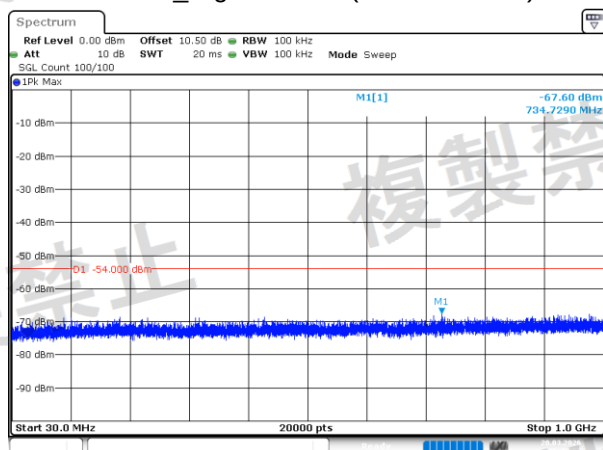
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:43:21

BLE 1M_Middle Channel(1GHz~12.5GHz)



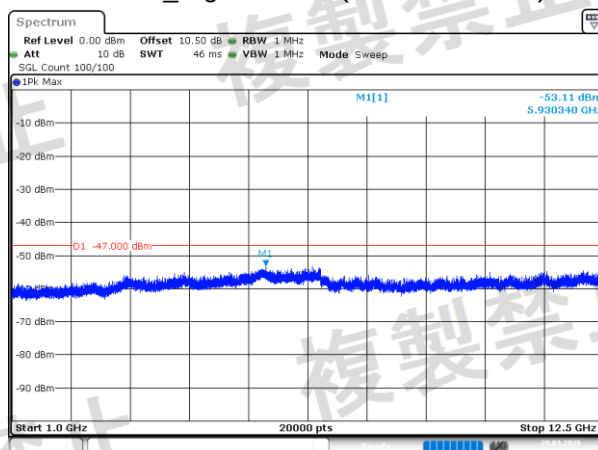
ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:43:43

BLE 1M_High Channel(30MHz~1GHz)



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:43:58

BLE 1M_High Channel(1GHz~12.5GHz)



ProjectNo.:2604R48107E-RF Tester:Steve Lu
Date: 20.MAR.2026 15:44:19

Interference Prevention Function

Test Result: Good. MAC: 45:e5:f9:fe:11:e4

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604R48107E-RF EUT External Photos and Attachment No.2 2604R48107E-RF EUT Internal Photos.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2604R48107E-RF Test Photos.

***** END OF REPORT *****