



TEST REPORT

Applicant Name: M5Stack Technology Co., Ltd
Address: Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District, Shenzhen, China
Report Number: 2604R48087E-RF-07A

Test Standard (s)

Japan item 19 of Article 2 Paragraph 1

Sample Description

Product Name: M5Core2 V1.3
Model No.: Core2 V1.3, Core2 For AWS V1.3
Trade Mark: 
M5STACK
Date Received: 2026-03-12
Report Date: 2026-05-08

Test Result:	The EUT complied with the standards above.
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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.
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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604R48087E-RF-07A	Original Report	2026-05-08

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	M5Core2 V1.3
Tested Model	Core2 V1.3
Multiple Model	Core2 For AWS V1.3
Model Difference [#]	They have the same circuit, PCB layout and electronically identical the only difference is model names, shell colors and bases. Please refer to DOS letter for more detail. The applicant provided model "Core2 V1.3" for testing.
Nominal Power Supply [#]	DC3.7V from battery or DC5V from adapter

Radio Type		Bluetooth
Technical Parameters	Frequency Range	2402-2480 MHz
	Modulation Type	GFSK, $\pi/4$ -DQPSK, 8DPSK
	Rated Output Power [#]	Normal mode: 0.100mW/MHz AFH: 0.250mW/MHz
	Antenna Specification [#]	Gain: 2.46dBi
Sample Serial Number		3IF5-1 (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

The EUT supports modes and channel list as below.

Modulation	Data Rate(Mbps)	Modulation	Data Rate(Mbps)	Modulation	Data Rate(Mbps)
GFSK	1	$\pi/4$ -DQPSK	2	8DPSK	3

Channel List

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	/	/

EUT was tested with Channel 0, 39 and 78.

Test Voltage[#]

The EUT has a voltage chip: AXP192, 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	3.7	3.3
LV	3.33	3.3
HV	4.07	3.3

Test voltage: DC 3.7V (Normal Voltage) (It is provided by the manufacturer.)

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
BDR	1Mbps	7	7	7
EDR($\pi/4$ -DQPSK)	2Mbps	7	7	7
EDR(8DPSK)	3Mbps	7	7	7

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

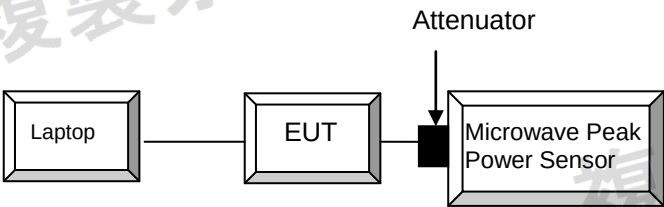
Manufacturer	Description	Model	Serial Number
LENOVO	Laptop	ThinkPad T470	PF-17P19A

External I/O Cable

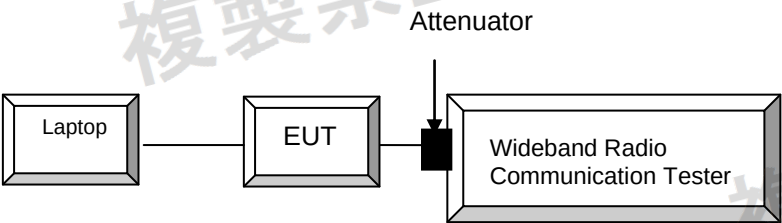
Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	No	1.0	EUT	Laptop
RF cable	No	0.1	EUT	Microwave Peak Power/Spectrum/ Wideband Radio Communication Tester

Configuration of Test Setup

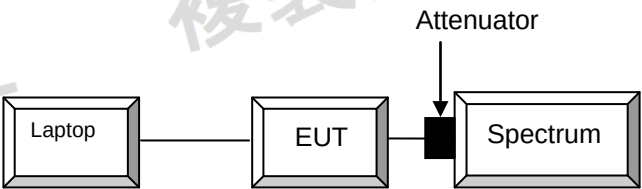
For Antenna Output Power and Output Power Tolerance:



For Interference Prevention Function:



Other test items:



SUMMARY OF TEST RESULTS

Items	Description of Test	Result
1	Frequency Tolerance	Compliance
2	Occupied Bandwidth and Spreading 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	Compliance
11	Construction Protection Confirmation	Compliance

Not Applicable - The EUT is a FHSS device.

Not Applicable* - This test item was not required for the output power less than 6.91 dBm/MHz (E.I.R.P)

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	UTP1306 S	2109D09 03324	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 ERROR

Limit

- 50ppm or below

Test Procedure

Conditions of Application Equipment (EUT)

- Set the application equipment (EUT) to the measurement frequency.
- The modulation state shall be “continuous carrier wave without modulation” by stopping frequency-hopping mode.

Spectrum Analyzer Conditions

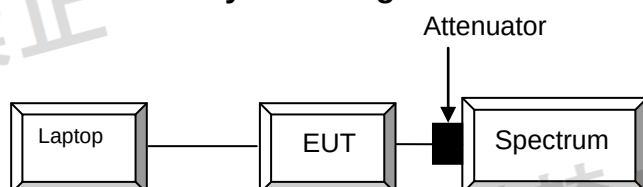
- Center Frequency: Frequency to measure (2402 MHz, 2441MHz, and 2480MHz)
- RBW: 1kHz, VBW: 3kHz
- Span: 300kHz
- Sweep time: Auto or more
- Log scale: 10dB/Div, Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak
- Sweep mode: Continuous Sweep
- Marker: Spot

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 AND SPREADING BANDWIDTH

Limit

- Occupied bandwidth: FH≤83.5 MHz; OFDM, DS≤26 MHz; Others≤26 MHz

Test Procedure

Conditions of Application Equipment (EUT)

- The modulation state shall be “continuous frequency-hopping mode” by spread spectrum.

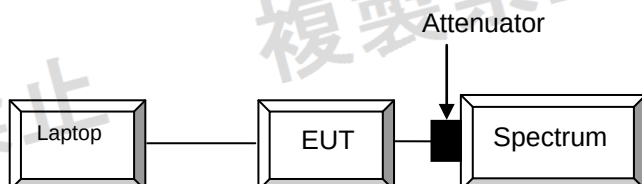
Spectrum Analyzer Conditions

- Frequency range: 2.4GHz to 2.4835GHz
- RBW: 300 kHz
- VBW: 300 kHz
- Sweep time: Auto (Minimum time to ensure measurement accuracy.)
- Log scal: 10dB/Div
- Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak
- Sweep mode: Continuous

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	0.25 μ W/100kHz (-36dBm/100kHz)
1GHz-2387MHz	2.5 μ W/MHz (-26dBm/MHz)
2387MHz-2400MHz	25 μ W/MHz (-16dBm/MHz)
2483.5MHz-2496.5MHz	25 μ W/MHz (-16dBm/MHz)
2496.5MHz-12.5GHz	2.5 μ W/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

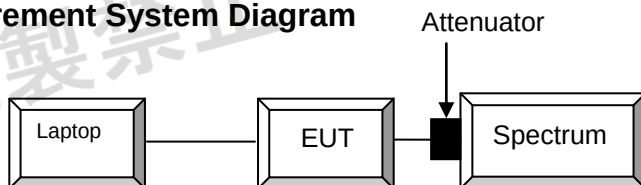
- Span: 0Hz
- RBW: 1MHz(Above 1GHz), VBW: Same as RBW.
- Sweep time: Auto(Minimum time to ensure measurement accuracy.

*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

- $\leq 3 \text{ mW /MHz}$ (FHSS from 2402-2480 MHz)

The Output Power Tolerance must be below +20%.

EIRP

- $\leq 6.91 \text{ dBm/MHz}$ (FHSS from 2402-2480 MHz)

Test Procedure

For FHSS UUT:

Step 1: Measure the total power by Power Meter in a state of 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 per 1MHz by dividing the total power by spread bandwidth.

Antenna output power (mW/MHz) = Antenna output power Reading (mW) / Burst Ratio / Spread Bandwidth (MHz)

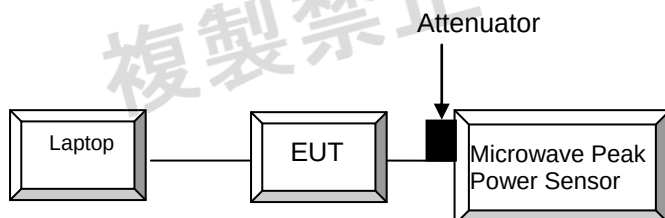
Note: The burst ratio has been calculated to result by power meter, so the equation updated as below:

Antenna output power (mW/MHz) = Antenna output power Reading (mW) / Spread Bandwidth (MHz)

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”.

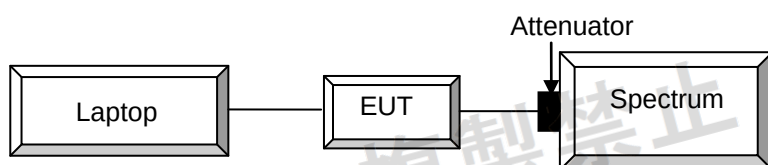
Spectrum Analyzer Conditions

- 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.

FREQUENCY HOPPING DWELL TIME

Applicable Standard

According to Radio Law Radio Equipment Regulations Article 49-20, frequency dwell time is 0.4 seconds or below.

Test Procedure

Conditions of Application Equipment (EUT)

- Set the application equipment (EUT) to the measurement frequency.
- The modulation state shall be “continuous (burst) transmission mode”. If impossible, it shall be continuous frequency-hopping mode”.

Spectrum Analyzer Conditions

Step 1:

- Center Frequency: 2441.0 MHz
- Span: ZERO SPAN, • RBW: 10MHz, • VBW: 10MHz
- Log scale: 10dB/Div, Data points: 400 points or more
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak,
- Sweep mode: Single Sweep
- Duty cycle= Ton/(Ton+Toff)

Step 2:

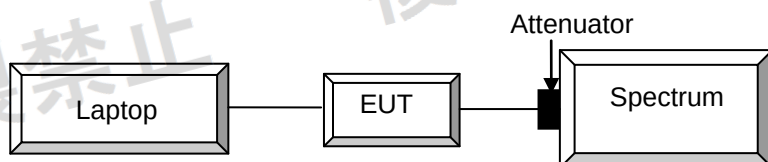
- Center Frequency: 2441.0 MHz
- RBW: 1MHz, • VBW: 1MHz, • Span: ZERO SPAN
- Reference level: Enough level for maximum dynamic range
- Detection: Positive Peak,
- Sweep mode: Single Sweep
- Sweep time: 0.4SBW[second]

Dwell time = Time per one hopping (On time) hopping numbers

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.

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

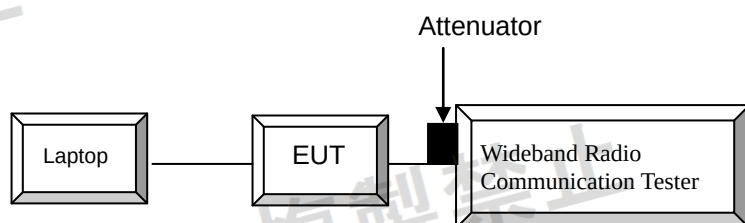
In the case that the EUT has the function of automatically transmitting the identification code:

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 shell of the product has fixed screws and can't be opened easily. Please refer to the EUT photos

APPENDIX

Test Information:

Sample No.:	3IF5-1	Test Date:	2026/03/23-2026/05/08
Test Site:	RF	Test Mode:	Transmitting
Tester:	Steve Lu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.0-24.6	Relative Humidity: (%)	53-59	ATM Pressure: (kPa)	100.4-100.6
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Frequency Error

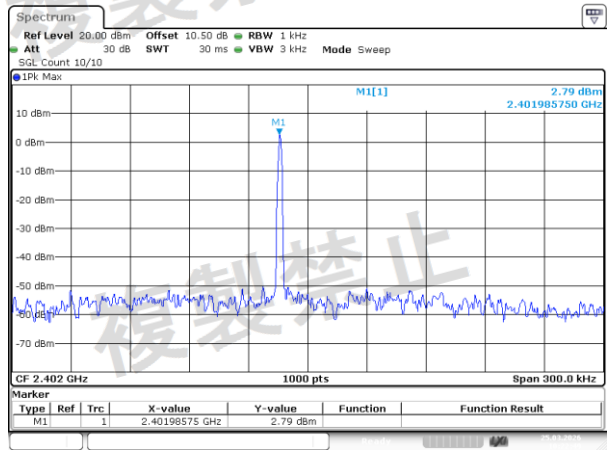
Test Condition: NV

Mode	Frequency (MHz)	Measure Frequency (MHz)	Frequency Tolerance (ppm)	Limit (ppm)	Verdict
Single Carrier	2402	2401.98575	-5.93	± 50	Pass
	2441	2440.98575	-5.84		Pass
	2480	2479.98575	-5.75		Pass

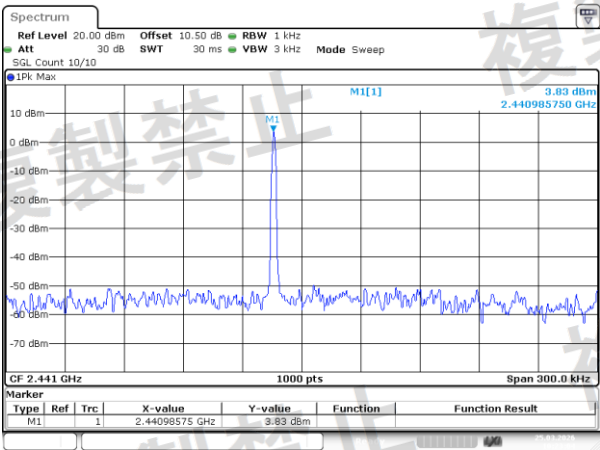
Frequency Tolerance = (Measure Frequency - Frequency)/Frequency*10⁶

Test Condition: NV

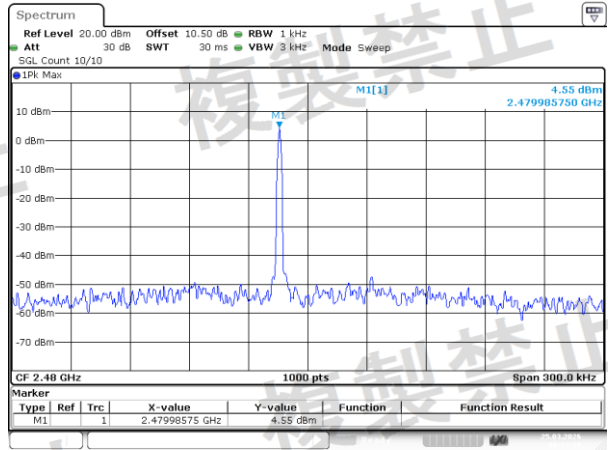
2402MHz



2441MHz



2480MHz



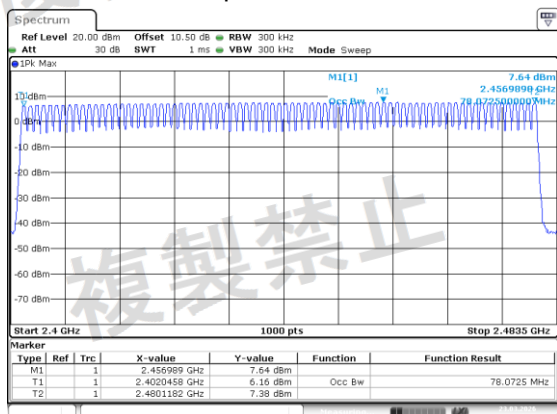
Occupied Bandwidth and Spreading Bandwidth
Test Condition: NV

Mode	Packet Type	Occupied bandwidth (MHz)		Spreading bandwidth (MHz)	Result
		Measured	Limit	Measured	Verdict
GFSK	DH1	78.073	≤ 83.5	70.641	Pass
	DH3	78.073	≤ 83.5	70.641	Pass
	DH5	78.073	≤ 83.5	70.641	Pass
π/4-DQPSK	2DH1	78.240	≤ 83.5	70.641	Pass
	2DH3	78.240	≤ 83.5	70.641	Pass
	2DH5	78.240	≤ 83.5	70.641	Pass
8DPSK	3DH1	78.240	≤ 83.5	70.725	Pass
	3DH3	78.240	≤ 83.5	70.641	Pass
	3DH5	78.240	≤ 83.5	70.641	Pass

Test Condition: NV

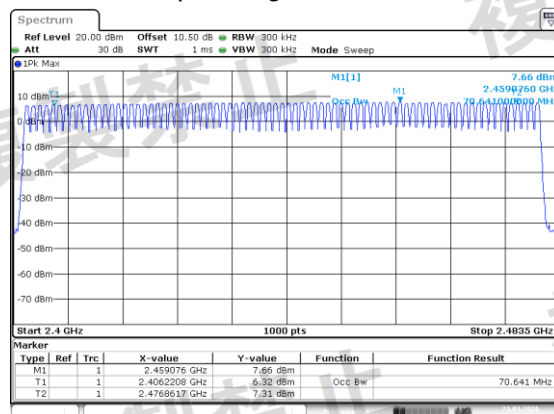
GFSK_Hopping_DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:12:46

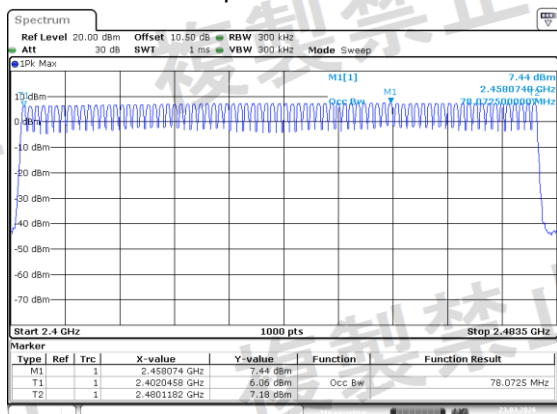
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:13:29

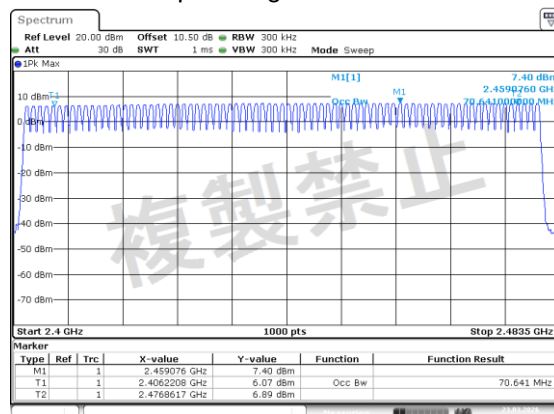
GFSK_Hopping_DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:14:45

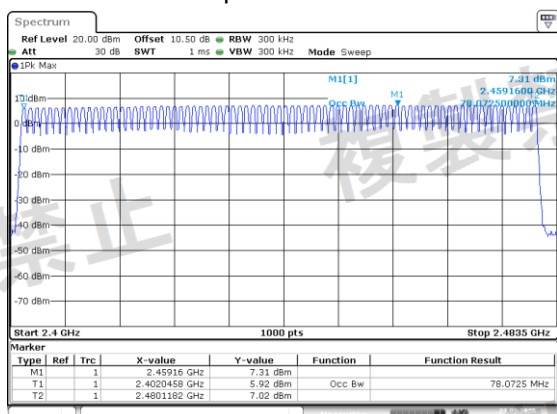
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:15:25

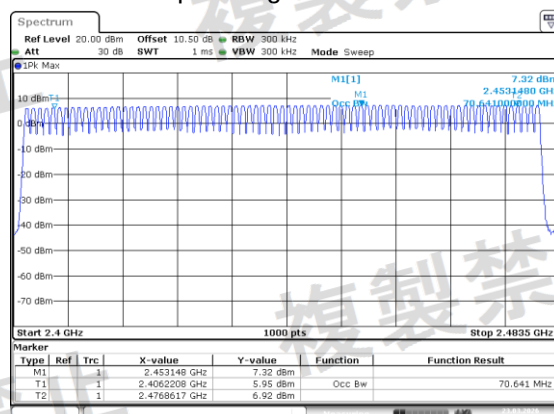
GFSK_Hopping_DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:16:11

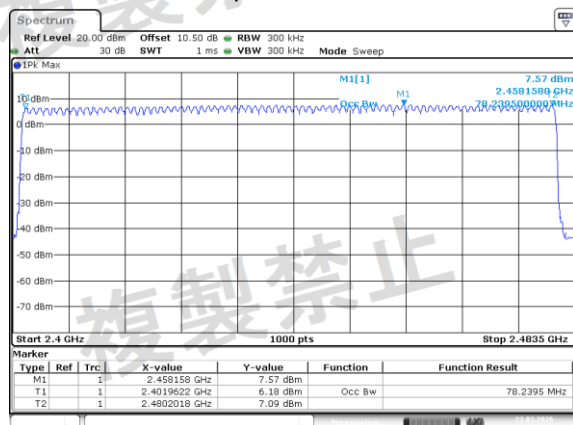
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:16:49

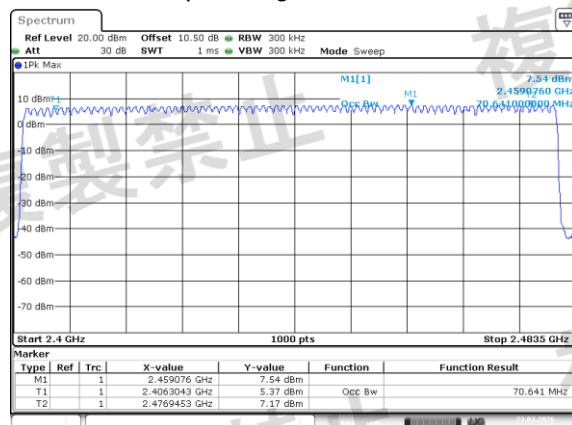
$\pi/4$ -DQPSK_Hopping_2DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:18:04

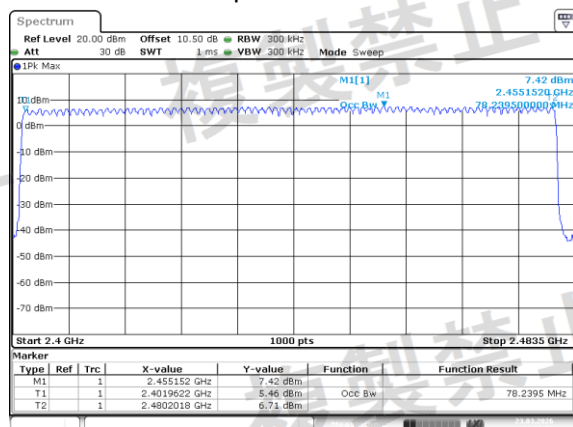
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:18:55

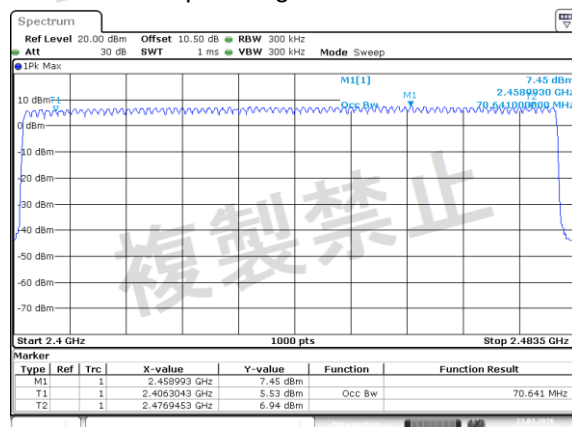
 $\pi/4$ -DQPSK_Hopping_2DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:20:52

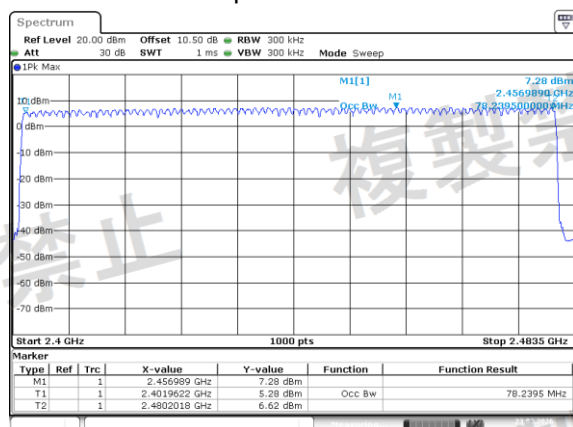
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:21:36

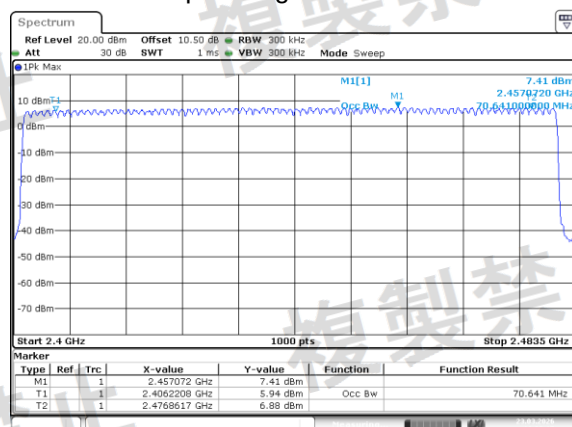
 $\pi/4$ -DQPSK_Hopping_2DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:22:16

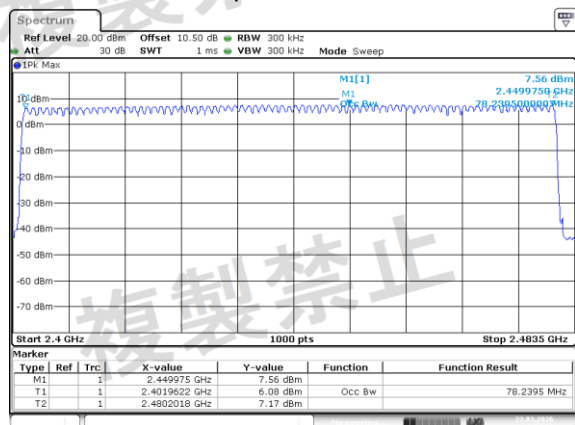
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:23:18

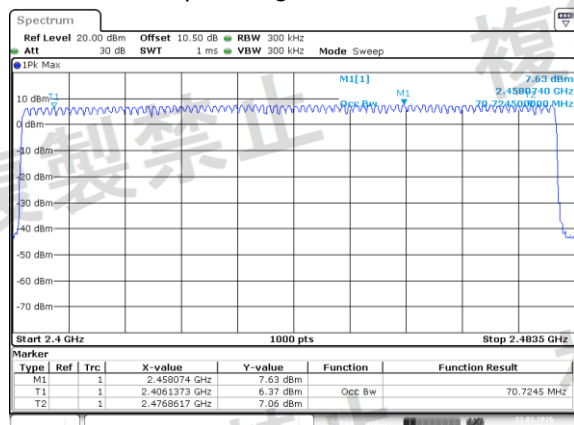
8DPSK_Hopping_3DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:24:19

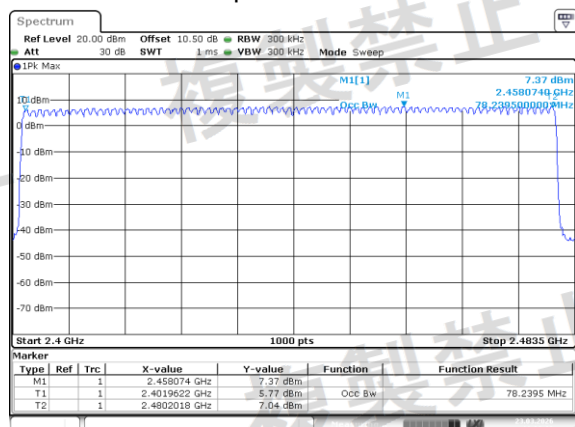
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:24:19

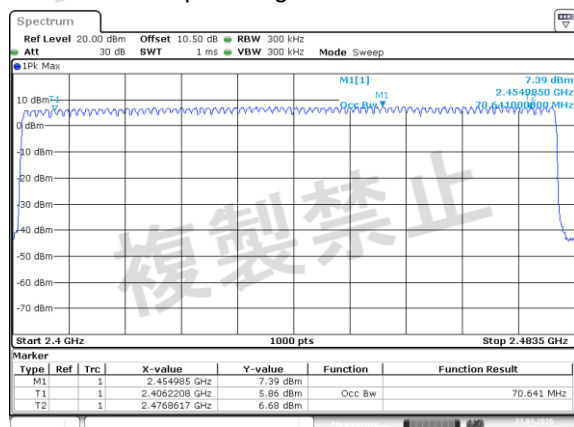
8DPSK_Hopping_3DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:26:02

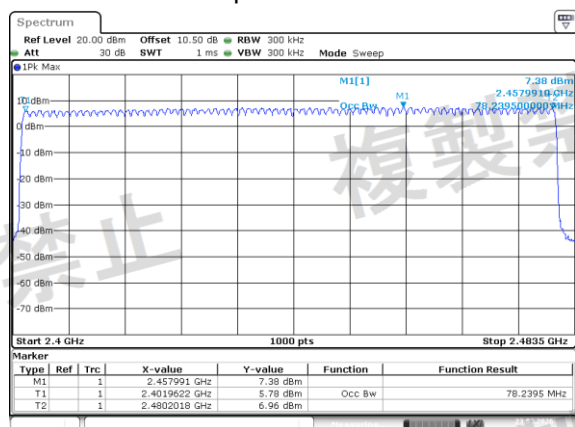
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:26:46

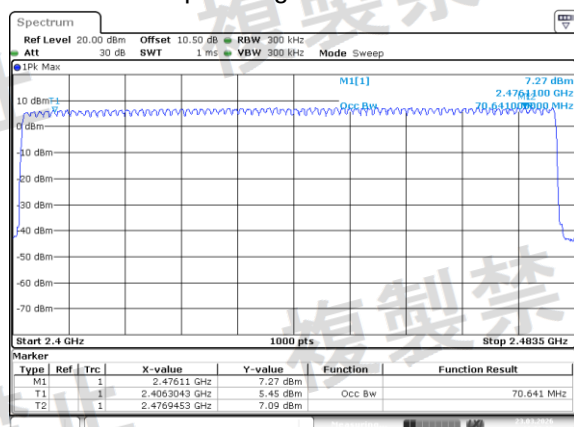
8DPSK_Hopping_3DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:27:42

Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:28:21

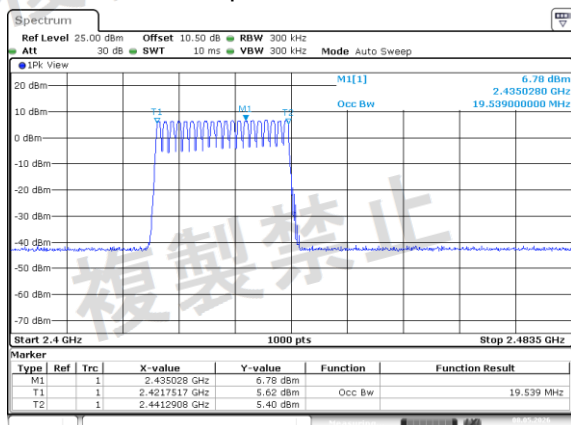
Test Condition: NV

Mode	Packet Type	Occupied bandwidth (MHz)		Spreading bandwidth (MHz)	Result
		Measured	Limit	Measured	Verdict
GFSK	AFH_DH1	19.539	≤ 83.5	17.953	Pass
	AFH_DH3	19.623	≤ 83.5	17.953	Pass
	AFH_DH5	19.539	≤ 83.5	18.036	Pass
π/4-DQPSK	AFH_2DH1	20.040	≤ 83.5	18.203	Pass
	AFH_2DH3	20.040	≤ 83.5	18.207	Pass
	AFH_2DH5	20.040	≤ 83.5	18.203	Pass
8DPSK	AFH_3DH1	20.040	≤ 83.5	18.203	Pass
	AFH_3DH3	20.040	≤ 83.5	18.203	Pass
	AFH_3DH5	20.040	≤ 83.5	18.120	Pass

Test Condition: NV

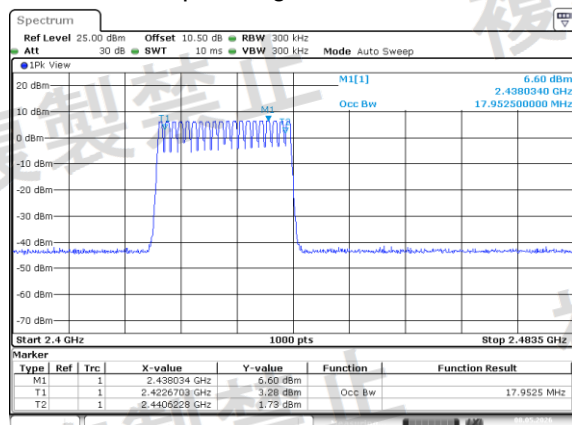
GFSK_Hopping_AFH_DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:37:59

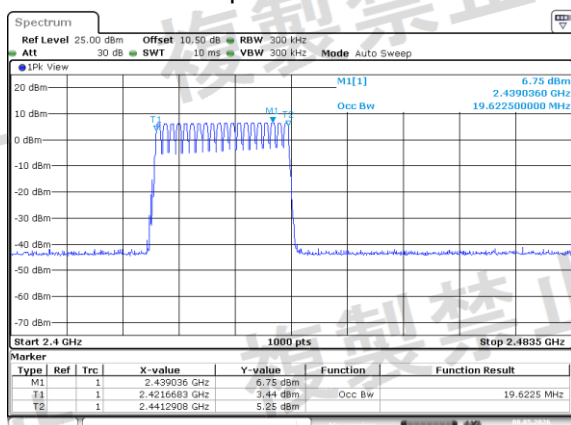
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:40:20

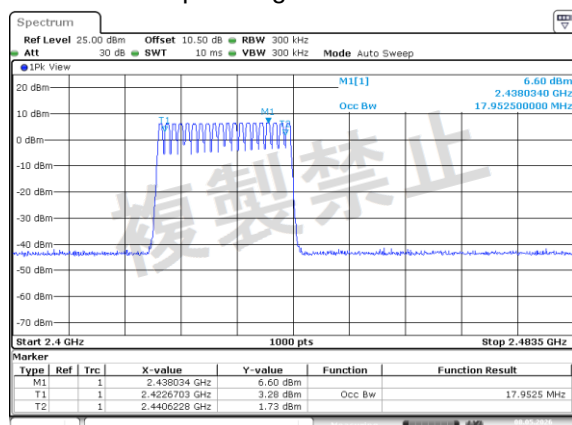
GFSK_Hopping_AFH_DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:44:19

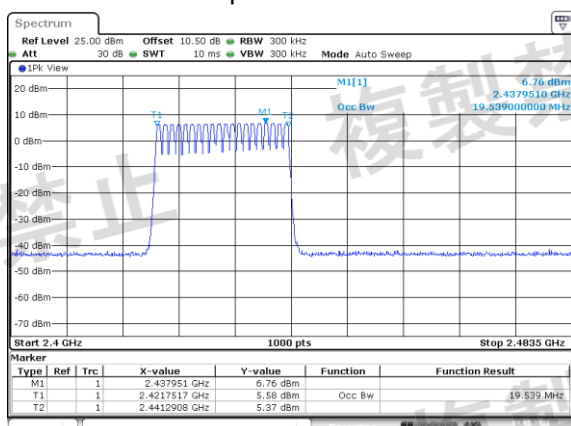
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:40:37

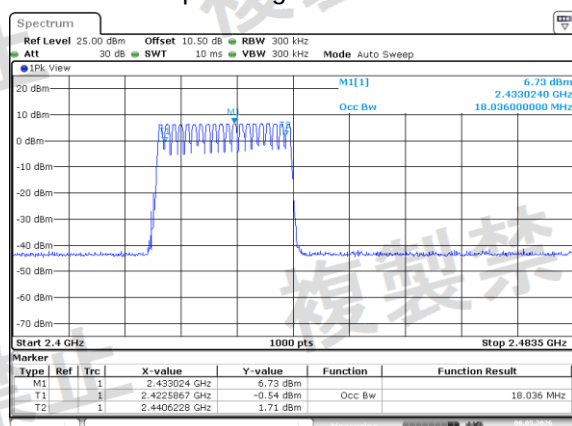
GFSK_Hopping_AFH_DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:46:26

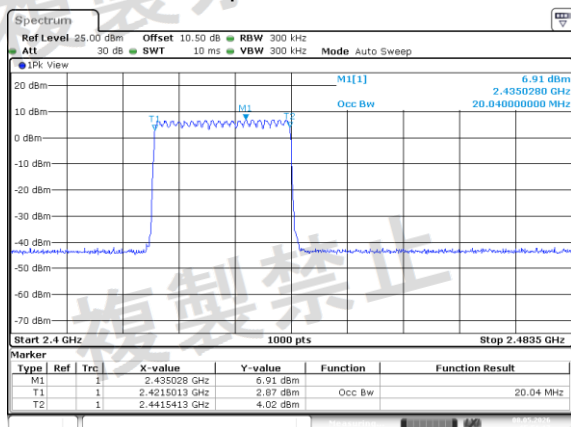
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:48:48

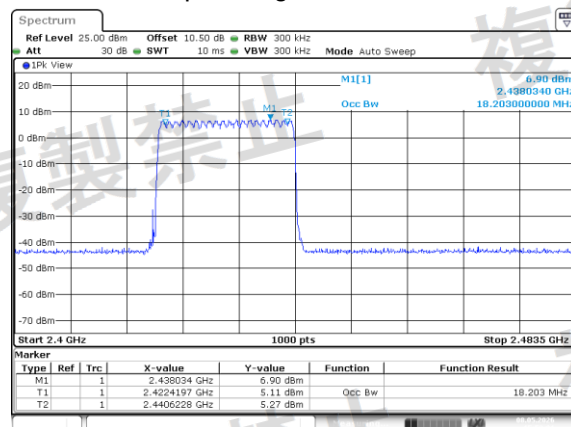
$\pi/4$ -DQPSK_Hopping_AFH_2DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:51:17

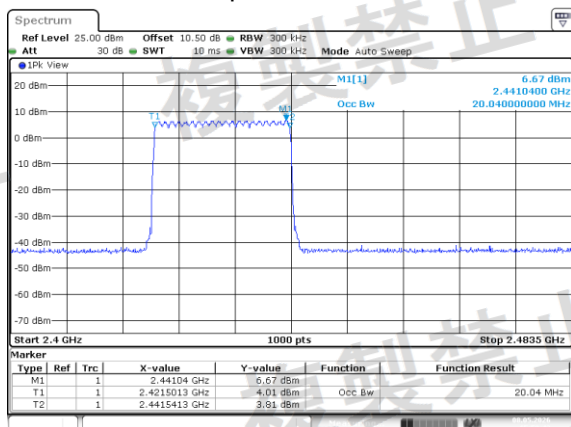
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:53:01

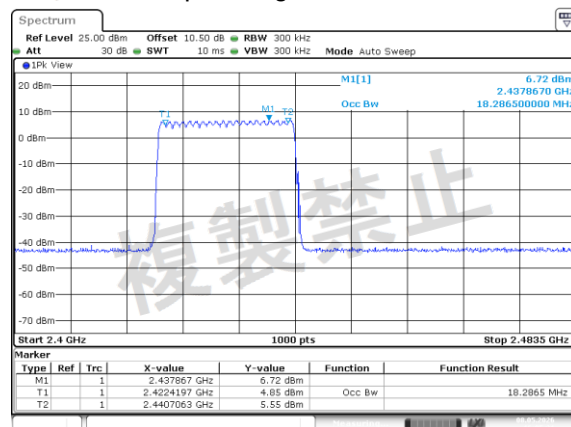
 $\pi/4$ -DQPSK_Hopping_AFH_2DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 15:58:43

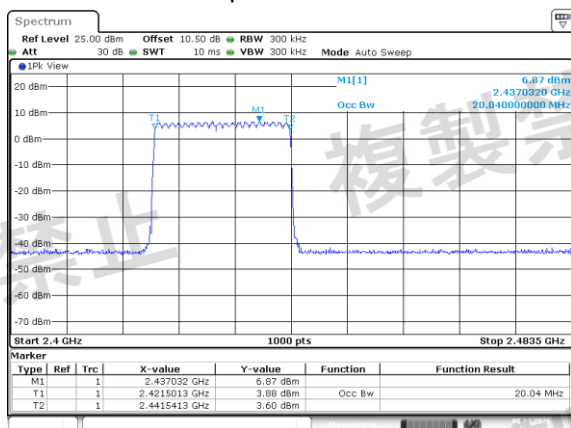
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:05:21

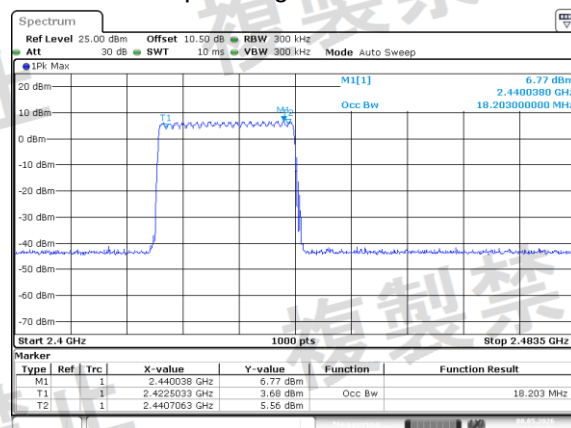
 $\pi/4$ -DQPSK_Hopping_AFH_2DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:09:05

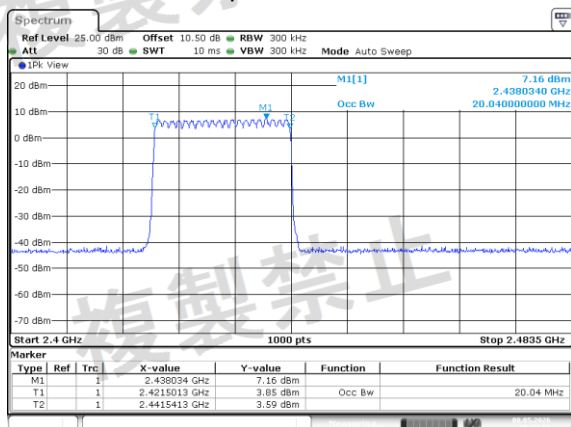
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:11:03

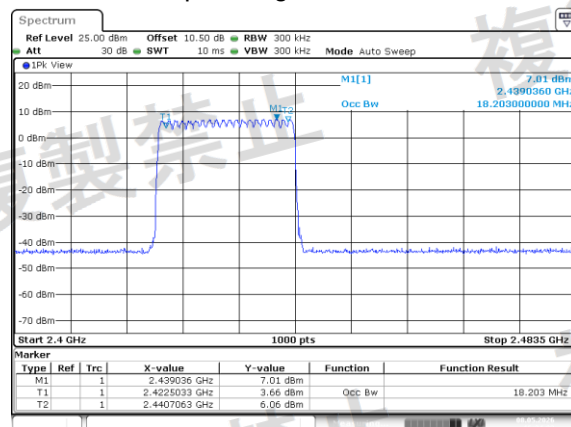
8DPSK_Hopping_AFH_3DH1

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:32:10

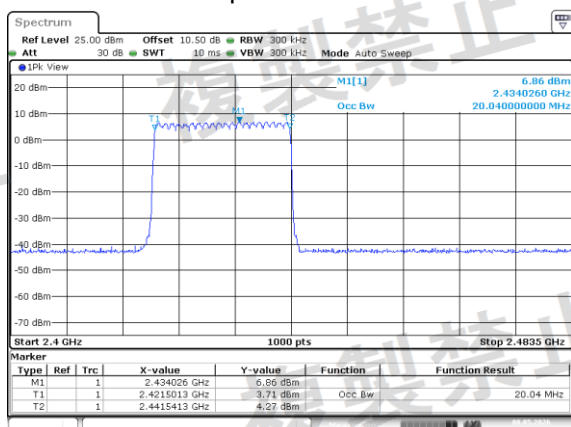
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:34:02

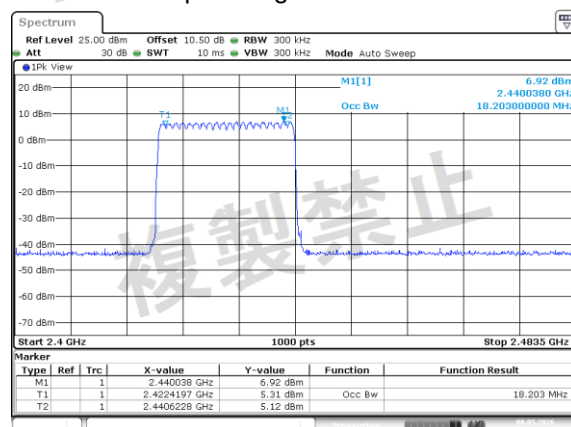
8DPSK_Hopping_AFH_3DH3

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:45:19

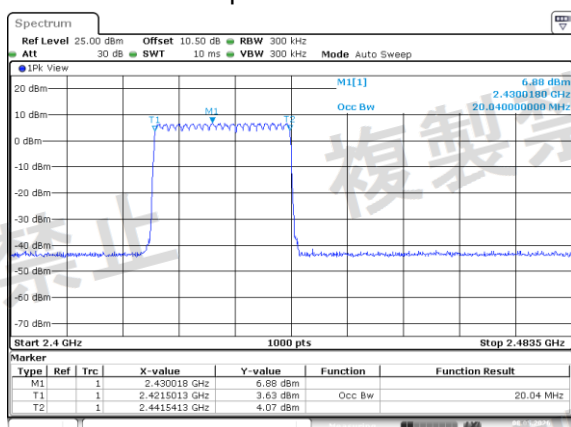
Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:46:54

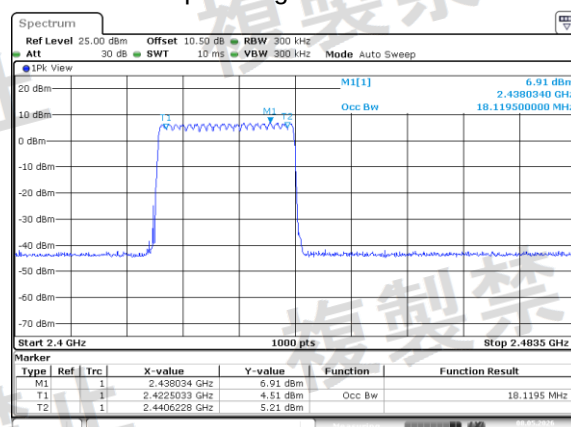
8DPSK_Hopping_AFH_3DH5

Occupied Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:50:08

Spreading Bandwidth



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 8.MAY.2026 16:51:51

Transmitter Spurious Emission and Unwanted Emission Intensity

Test Condition: NV, GFSK

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	800.91	-43.43	0.045	0.25	Pass
	Band II (1MHz)	1000	2387	1540.58	-38.59	0.138	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9968	-32.10	0.617	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2491.3683	-38.13	0.154	25	Pass
	Band V (1MHz)	2496.5	12500	5860.2	-32.75	0.531	2.50	Pass
Middle	Band I (100kHz)	30	1000	813.52	-43.31	0.047	0.25	Pass
	Band II (1MHz)	1000	2387	2318.69	-37.94	0.161	2.50	Pass
	Band III (1MHz)	2387	2400	2399.2948	-38.23	0.150	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2483.5293	-37.26	0.188	25	Pass
	Band V (1MHz)	2496.5	12500	6425.4	-32.93	0.509	2.50	Pass
High	Band I (100kHz)	30	1000	826.61	-43.09	0.049	0.25	Pass
	Band II (1MHz)	1000	2387	1144.59	-38.41	0.144	2.50	Pass
	Band III (1MHz)	2387	2400	2391.9368	-37.75	0.168	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2488.3653	-37.56	0.175	25	Pass
	Band V (1MHz)	2496.5	12500	5825.2	-33.51	0.446	2.50	Pass

Test Condition: NV, π/4-DQPSK

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	800.91	-43.55	0.044	0.25	Pass
	Band II (1MHz)	1000	2387	2355.45	-37.89	0.163	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9708	-24.77	3.334	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2491.6023	-36.06	0.248	25	Pass
	Band V (1MHz)	2496.5	12500	5920.2	-33.25	0.473	2.50	Pass
Middle	Band I (100kHz)	30	1000	813.52	-43.91	0.041	0.25	Pass
	Band II (1MHz)	1000	2387	1279.83	-38.73	0.134	2.50	Pass
	Band III (1MHz)	2387	2400	2397.1043	-38.36	0.146	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2490.3608	-37.72	0.169	25	Pass
	Band V (1MHz)	2496.5	12500	6935.6	-32.89	0.514	2.50	Pass
High	Band I (100kHz)	30	1000	827.1	-44.64	0.034	0.25	Pass
	Band II (1MHz)	1000	2387	1046.12	-38.13	0.154	2.50	Pass

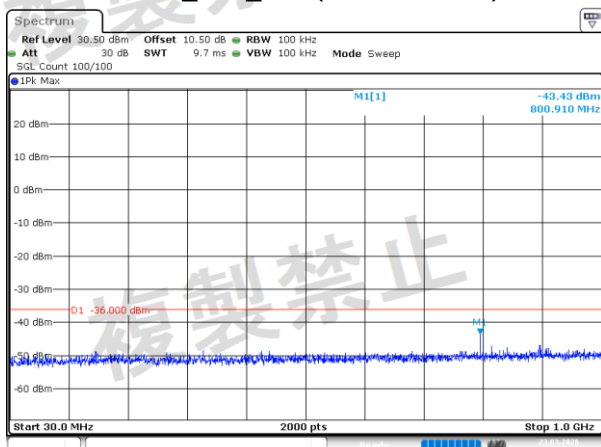
Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start(MHz)	Stop(MHz)					
High	Band III (1MHz)	2387	2400	2395.4663	-37.80	0.166	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2486.6623	-37.13	0.194	25	Pass
	Band V (1MHz)	2496.5	12500	6995.6	-32.24	0.597	2.50	Pass

Test Condition: NV, 8DPSK

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	800.91	-44.24	0.038	0.25	Pass
	Band II (1MHz)	1000	2387	2181.38	-38.90	0.129	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9838	-24.50	3.548	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2486.7208	-37.52	0.177	25	Pass
	Band V (1MHz)	2496.5	12500	5795.2	-32.98	0.504	2.50	Pass
Middle	Band I (100kHz)	30	1000	813.52	-43.07	0.049	0.25	Pass
	Band II (1MHz)	1000	2387	2166.81	-37.51	0.177	2.50	Pass
	Band III (1MHz)	2387	2400	2398.0468	-38.31	0.148	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2487.5918	-37.48	0.179	25	Pass
	Band V (1MHz)	2496.5	12500	6710.5	-33.47	0.450	2.50	Pass
High	Band I (100kHz)	30	1000	827.1	-43.46	0.045	0.25	Pass
	Band II (1MHz)	1000	2387	1676.51	-38.48	0.142	2.50	Pass
	Band III (1MHz)	2387	2400	2389.5968	-36.91	0.204	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2486.2788	-37.49	0.178	25	Pass
	Band V (1MHz)	2496.5	12500	5865.2	-33.29	0.469	2.50	Pass

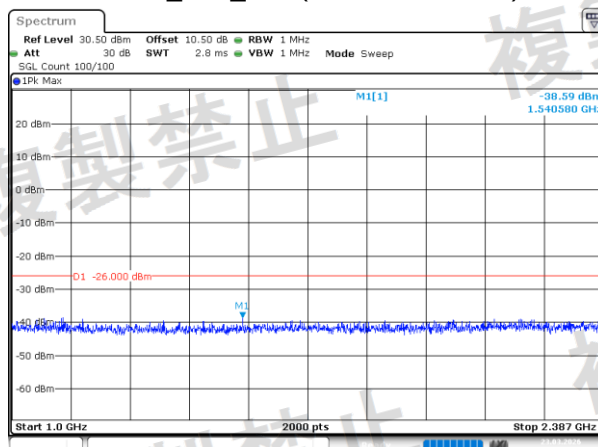
Test Condition: NV

GFSK_Low_DH1(30MHz~1GHz)



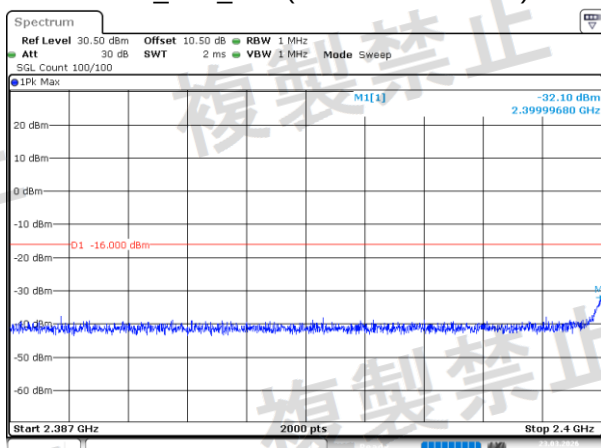
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:30:53

GFSK_Low_DH1(1GHz~2.387GHz)



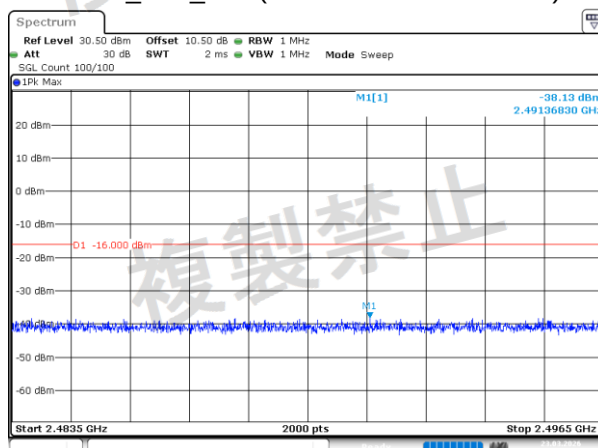
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:31:02

GFSK_Low_DH1(2.387GHz~2.4GHz)



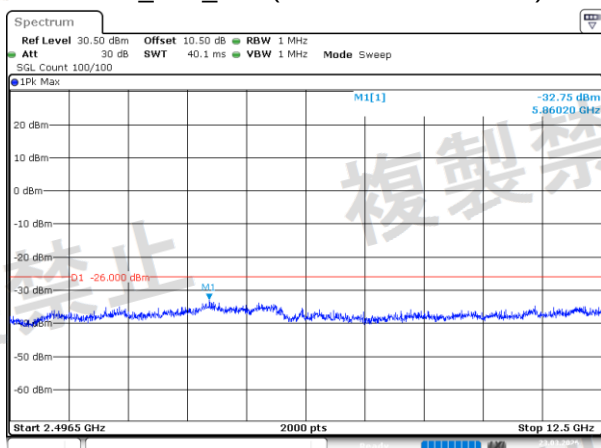
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:31:08

GFSK_Low_DH1(2.4835GHz~2.4965GHz)



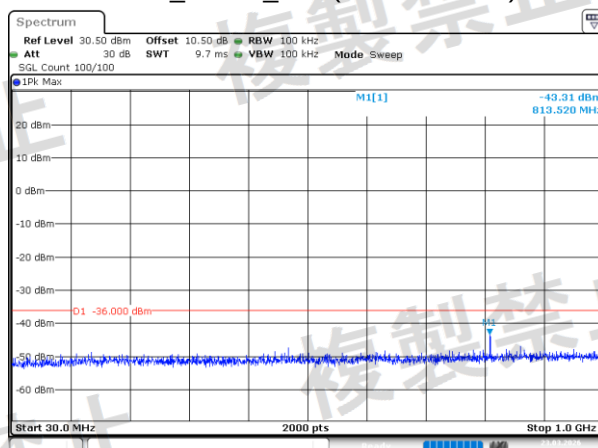
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:31:14

GFSK_Low_DH1(2.4965GHz~12.5GHz)



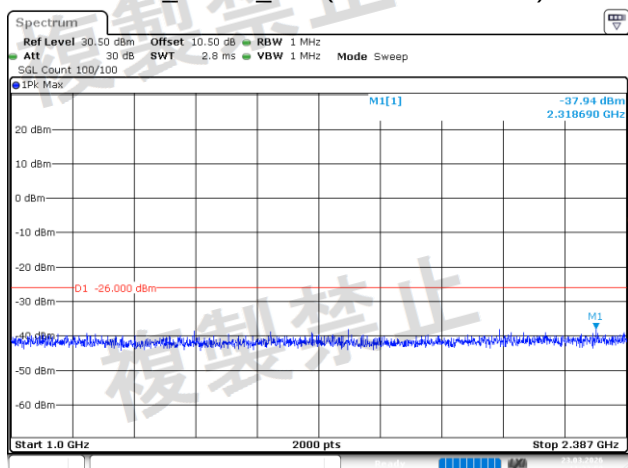
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:31:36

GFSK_Middle_DH1(30MHz~1GHz)



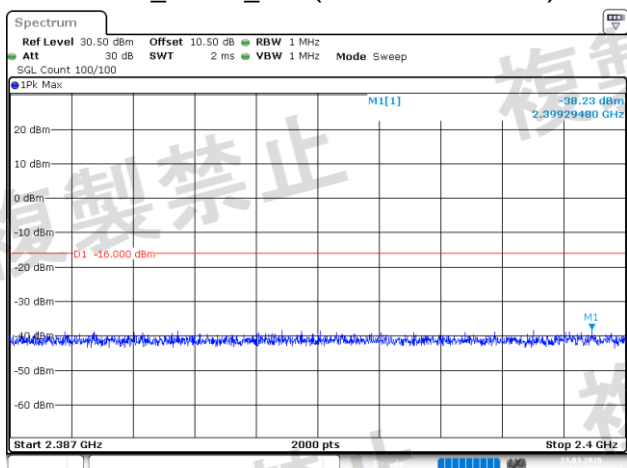
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Date: 23.MAR.2026 11:32:44

GFSK_Middle_DH1(1GHz~2.387GHz)



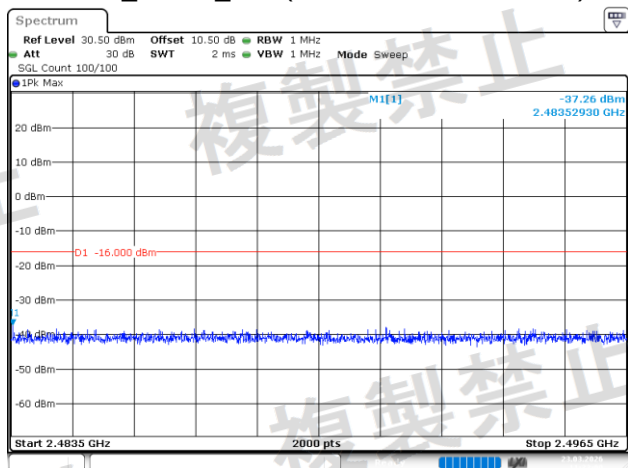
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:32:51

GFSK_Middle_DH1(2.387GHz~2.4GHz)



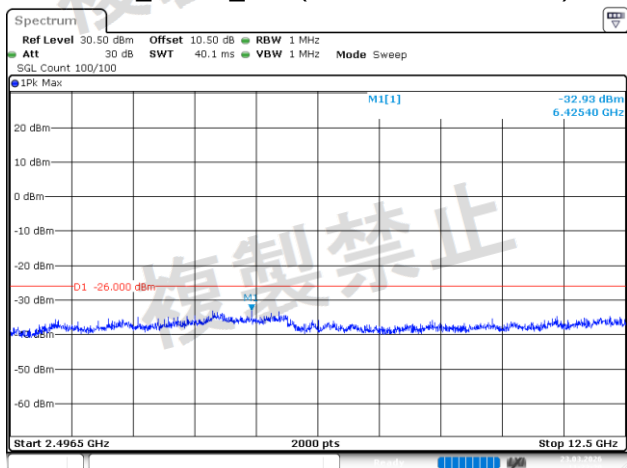
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:32:56

GFSK_Middle_DH1(2.4835GHz~2.4965GHz)



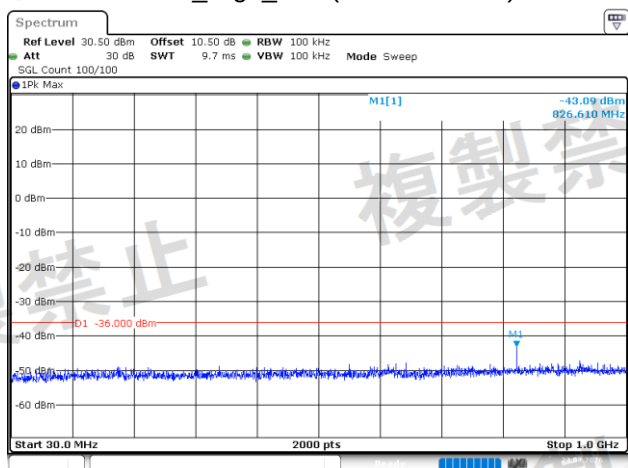
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:33:00

GFSK_Middle_DH1(2.4965GHz~12.5GHz)



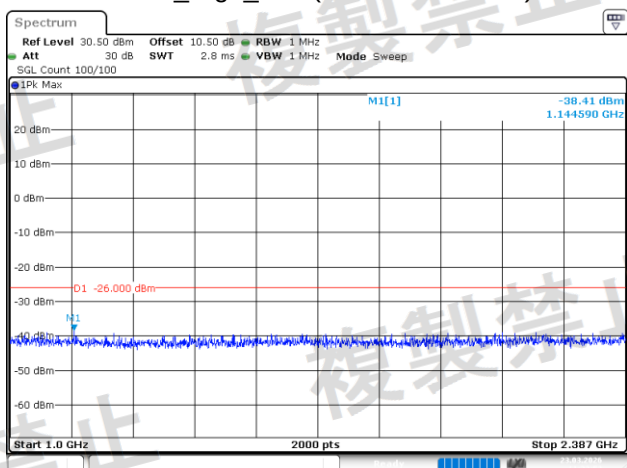
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:33:21

GFSK_High_DH1(30MHz~1GHz)



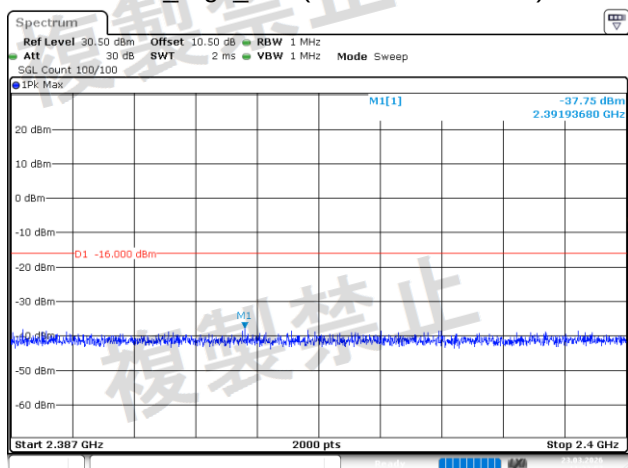
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:33:46

GFSK_High_DH1(1GHz~2.387GHz)



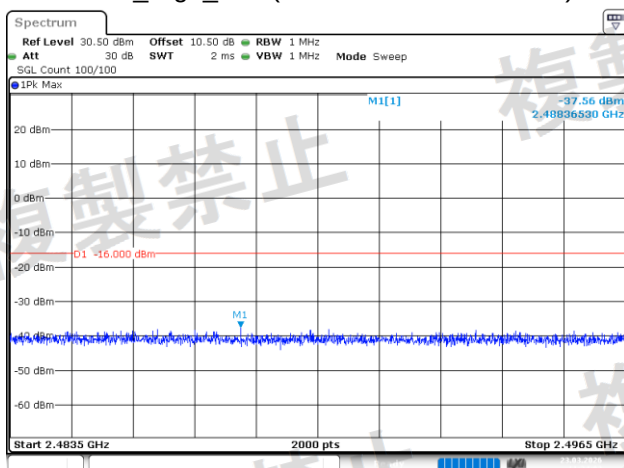
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:33:53

GFSK_High_DH1(2.387GHz~2.4GHz)



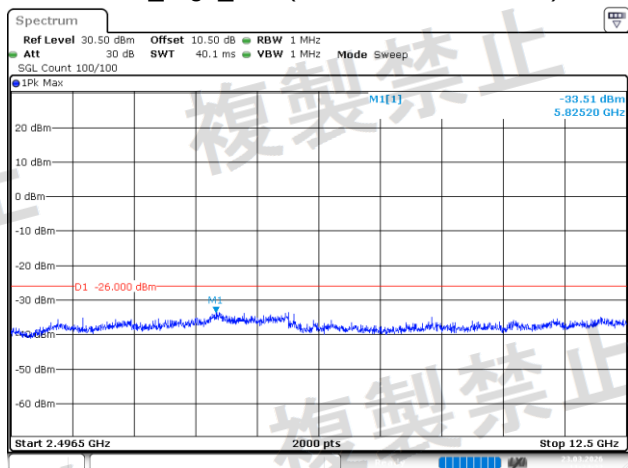
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:33:58

GFSK_High_DH1(2.4835GHz~2.4965GHz)

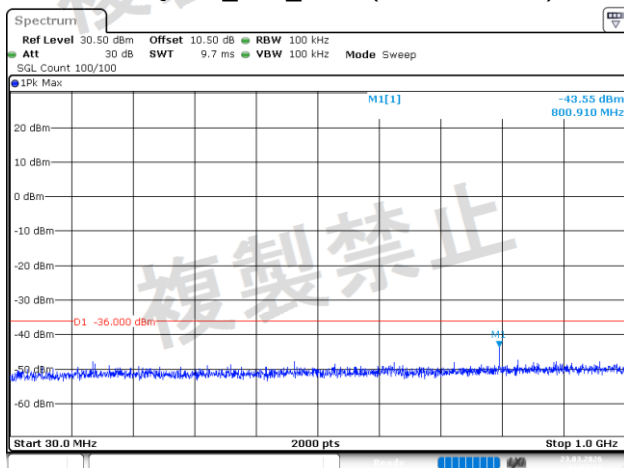


ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:34:02

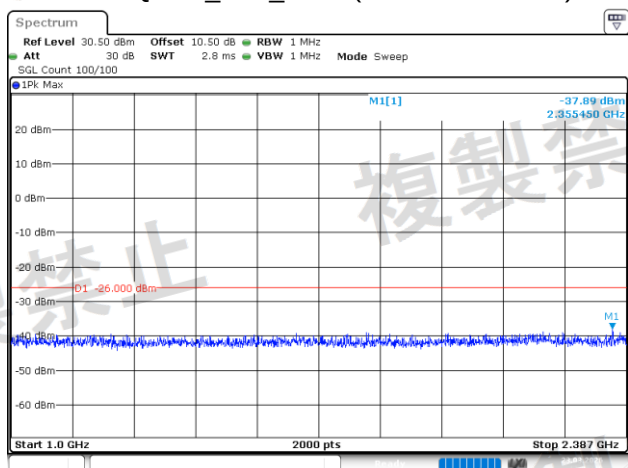
GFSK_High_DH1(2.4965GHz~12.5GHz)



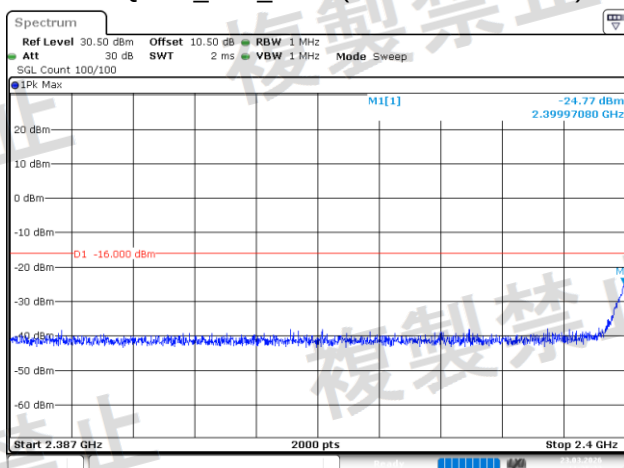
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:34:23

 $\pi/4$ -DQPSK_Low_2DH1(30MHz~1GHz)

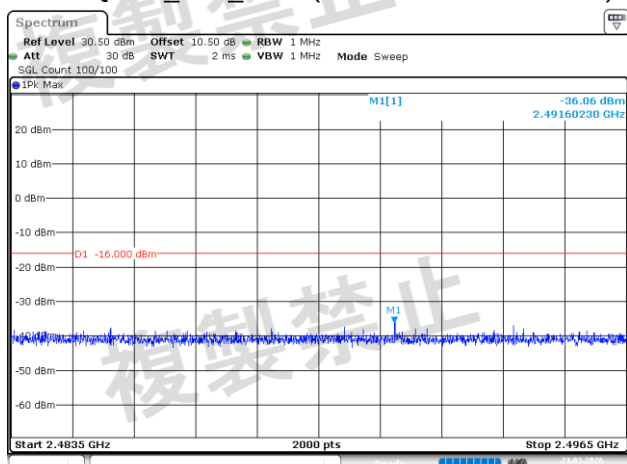
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:35:12

 $\pi/4$ -DQPSK_Low_2DH1(1GHz~2.387GHz)

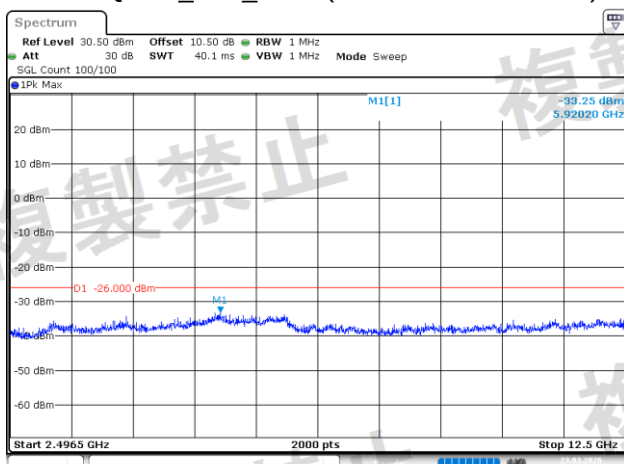
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:35:19

 $\pi/4$ -DQPSK_Low_2DH1(2.387GHz~2.4GHz)

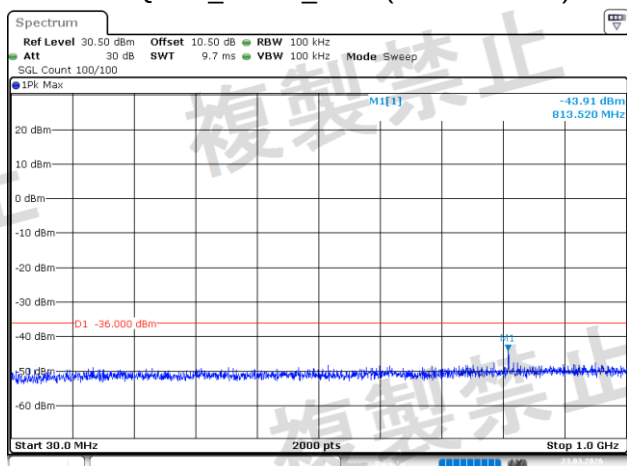
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:35:23

$\pi/4$ -DQPSK_Low_2DH1(2.4835GHz~2.4965GHz)

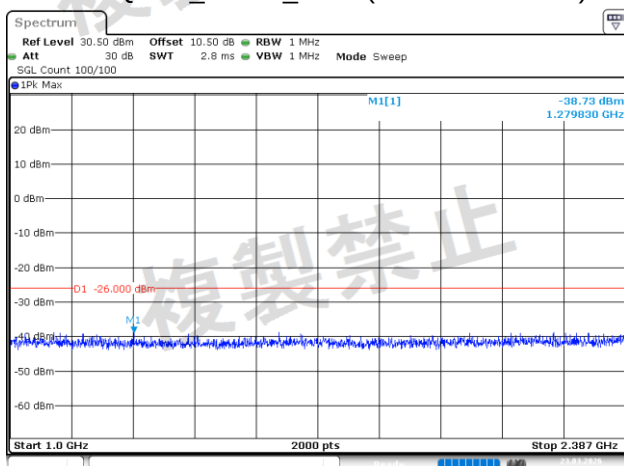
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:35:28

 $\pi/4$ -DQPSK_Low_2DH1(2.4965GHz~12.5GHz)

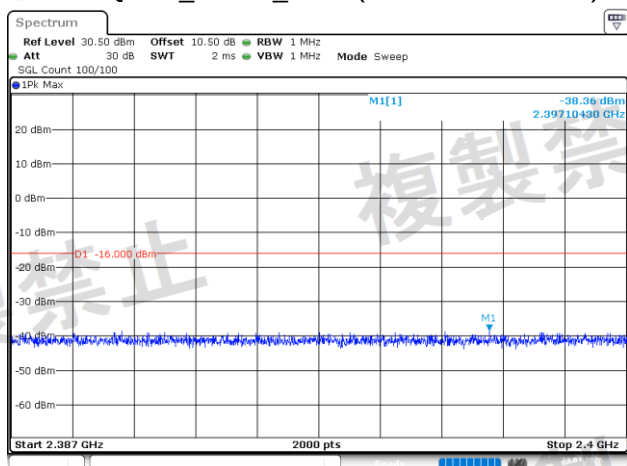
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:35:48

 $\pi/4$ -DQPSK_Middle_2DH1(30MHz~1GHz)

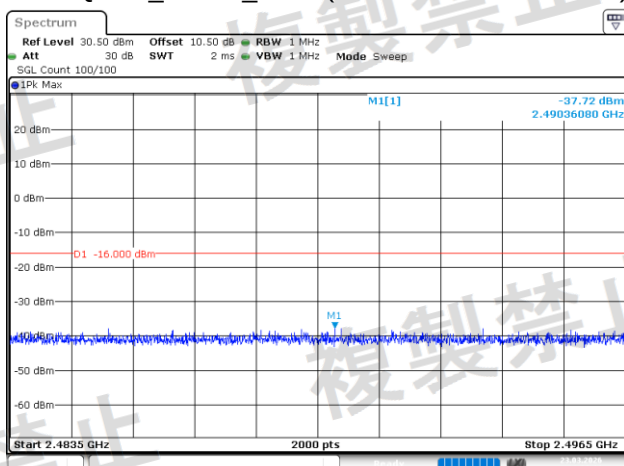
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:36:16

 $\pi/4$ -DQPSK_Middle_2DH1(1GHz~2.387GHz)

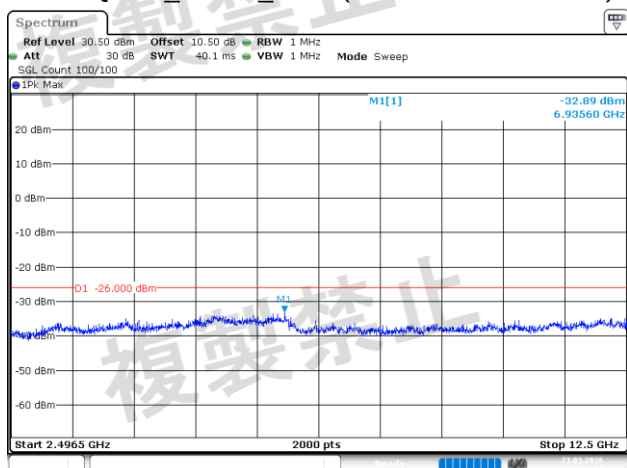
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:36:23

 $\pi/4$ -DQPSK_Middle_2DH1(2.387GHz~2.4GHz)

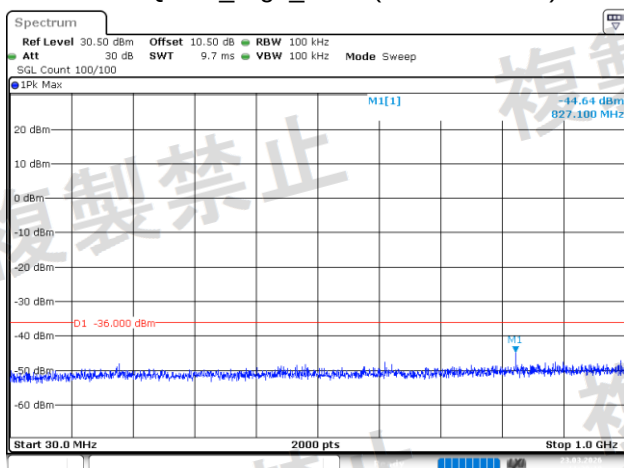
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:36:28

 $\pi/4$ -DQPSK_Middle_2DH1(2.4835GHz~2.4965GHz)

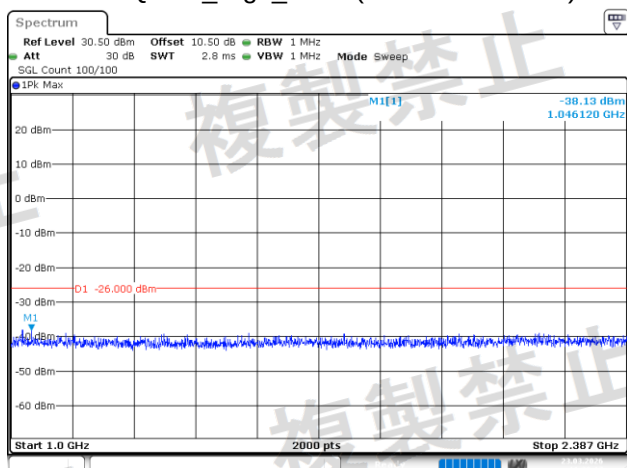
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:36:33

$\pi/4$ -DQPSK_Middle_2DH1(2.4965GHz~12.5GHz)

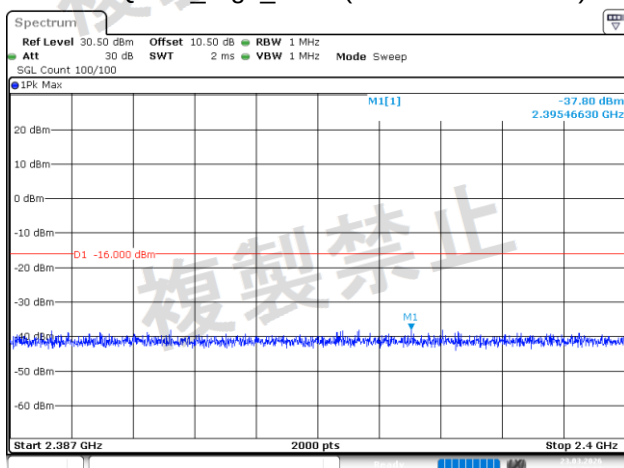
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:36:54

 $\pi/4$ -DQPSK_High_2DH1(30MHz~1GHz)

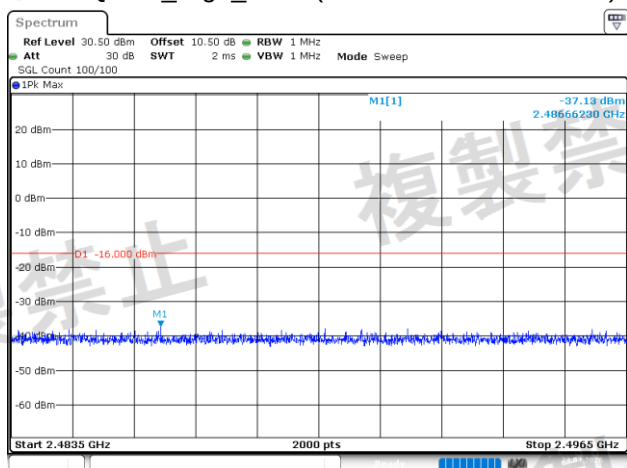
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:38:10

 $\pi/4$ -DQPSK_High_2DH1(1GHz~2.387GHz)

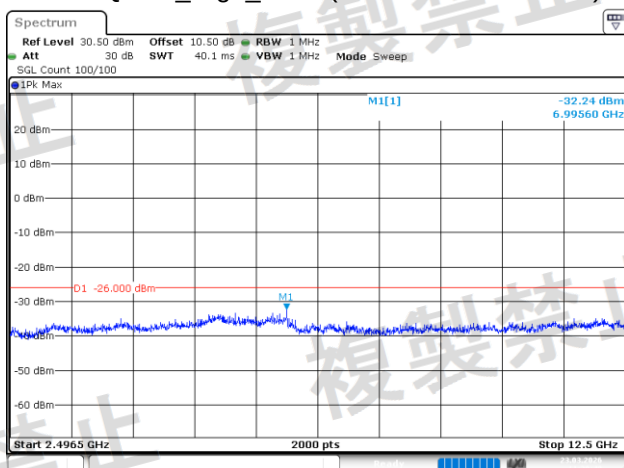
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:38:17

 $\pi/4$ -DQPSK_High_2DH1(2.387GHz~2.4GHz)

ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:38:23

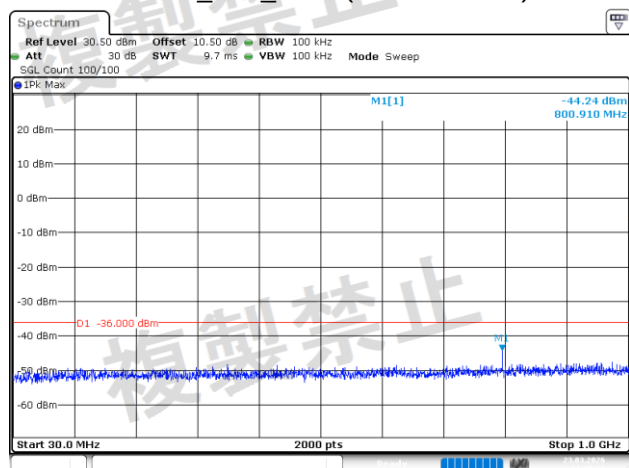
 $\pi/4$ -DQPSK_High_2DH1(2.4835GHz~2.4965GHz)

ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:38:28

 $\pi/4$ -DQPSK_High_2DH1(2.4965GHz~12.5GHz)

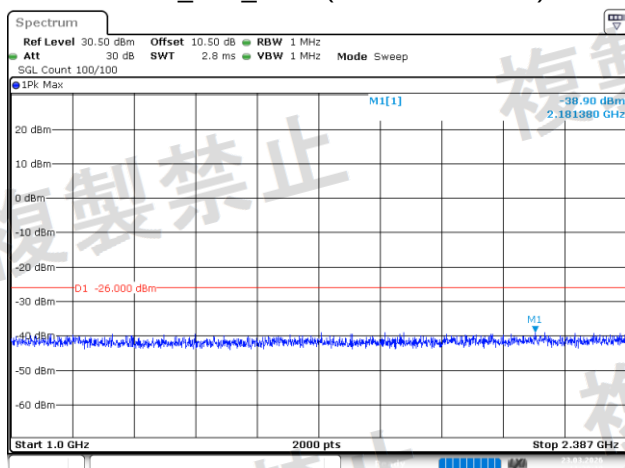
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:38:48

8DPSK_Low_3DH1(30MHz~1GHz)



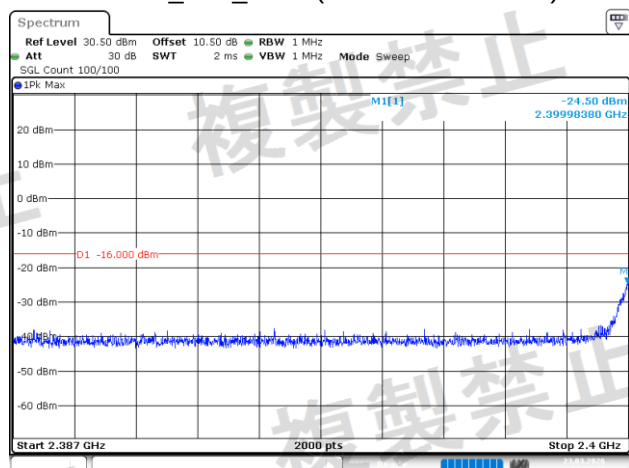
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:39:11

8DPSK_Low_3DH1(1GHz~2.387GHz)



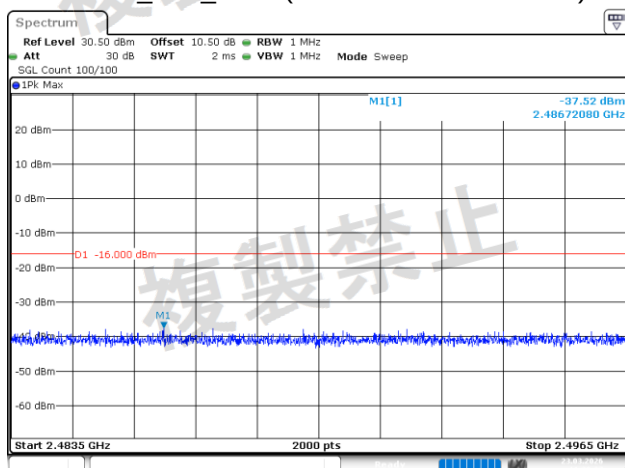
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:39:19

8DPSK_Low_3DH1(2.387GHz~2.4GHz)



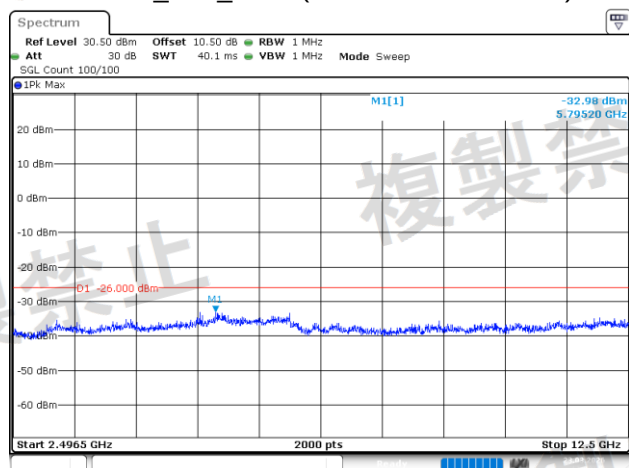
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:39:23

8DPSK_Low_3DH1(2.4835GHz~2.4965GHz)



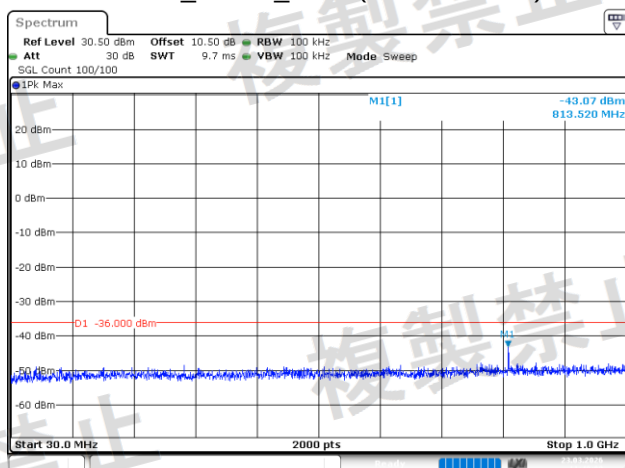
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:39:28

8DPSK_Low_3DH1(2.4965GHz~12.5GHz)



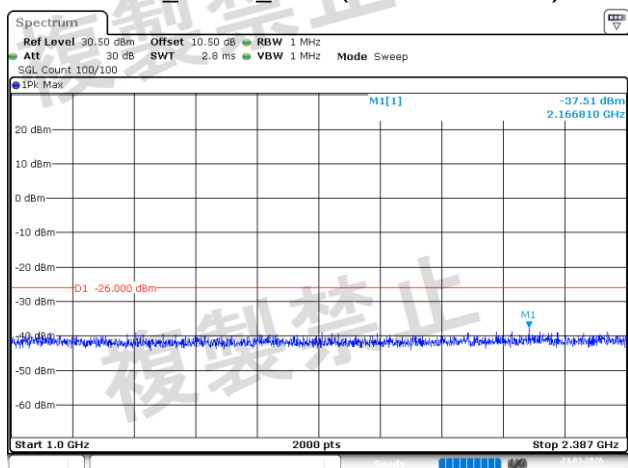
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:39:48

8DPSK_Middle_3DH1(30MHz~1GHz)



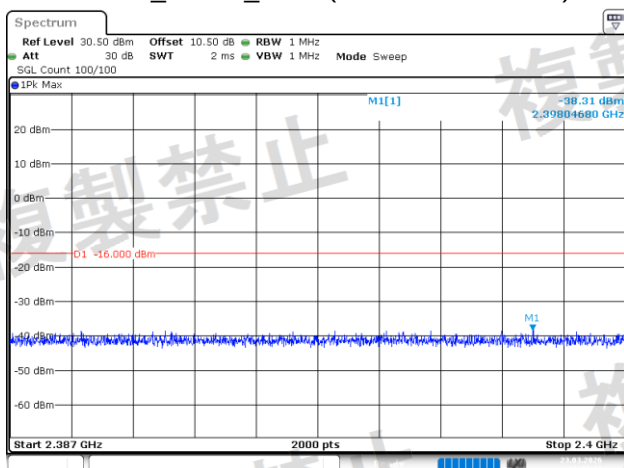
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:40:09

8DPSK_Middle_3DH1(1GHz~2.387GHz)



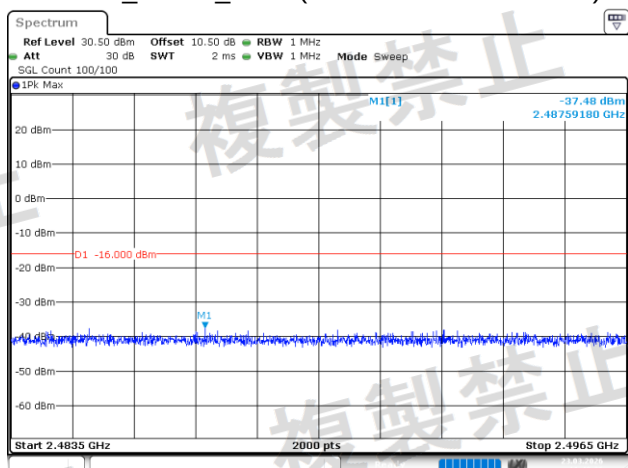
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:40:17

8DPSK_Middle_3DH1(2.387GHz~2.4GHz)



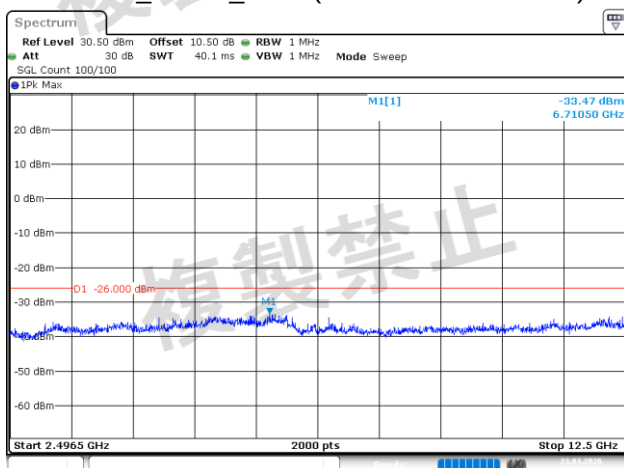
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:40:22

8DPSK_Middle_3DH1(2.4835GHz~2.4965GHz)



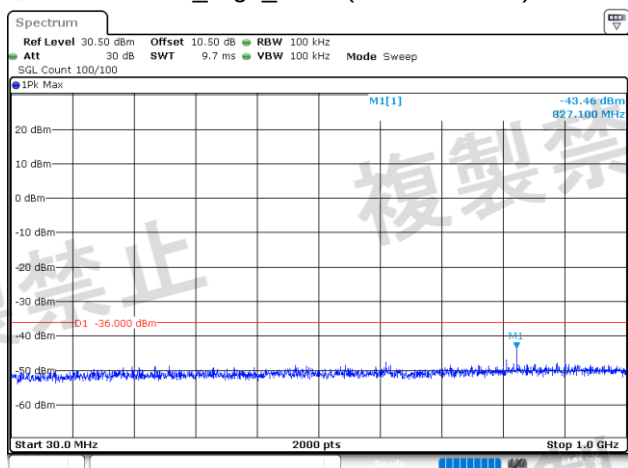
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:40:26

8DPSK_Middle_3DH1(2.4965GHz~12.5GHz)



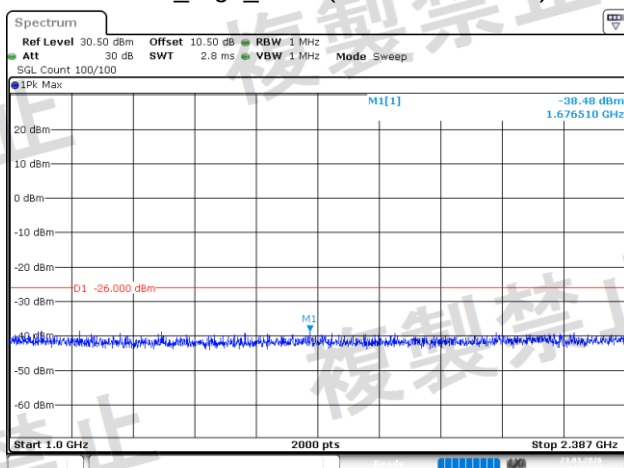
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:40:47

8DPSK_High_3DH1(30MHz~1GHz)



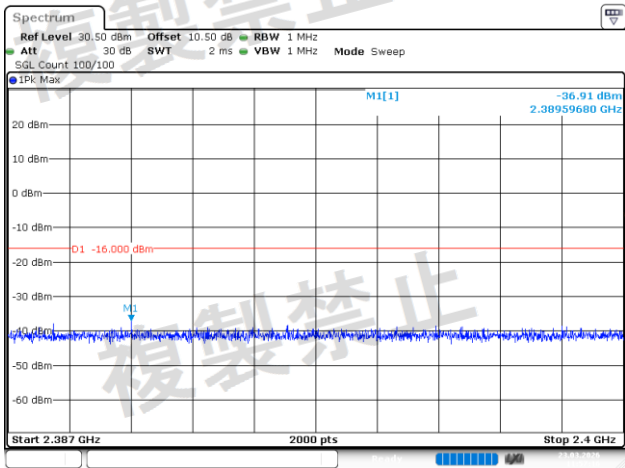
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:57:05

8DPSK_High_3DH1(1GHz~2.387GHz)



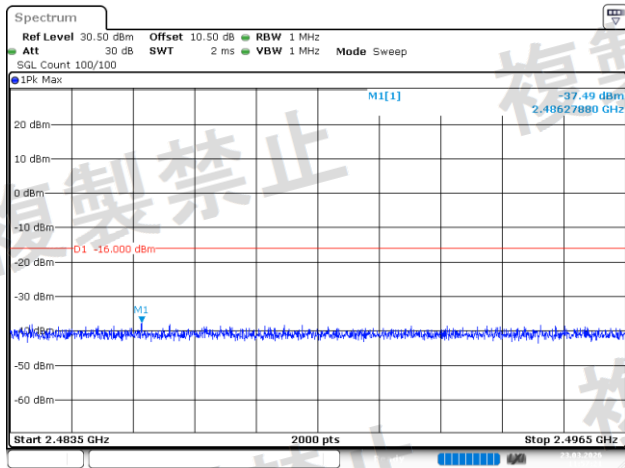
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:57:12

8DPSK_High_3DH1(2.387GHz~2.4GHz)



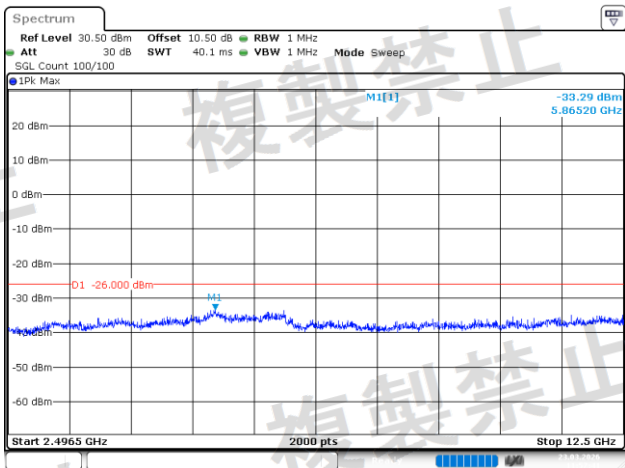
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:57:17

8DPSK_High_3DH1(2.4835GHz~2.4965GHz)



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:57:21

8DPSK_High_3DH1(2.4965GHz~12.5GHz)



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 11:57:42

Antenna Output Power and Output Power Tolerance

Test Condition: NV

Mode	Antenna gain (dBi)	Declared power (mW/MHz)
GFSK	2.46	0.100
π/4 DQPSK		0.100
8DPSK		0.100

Mode	Antenna output power (dBm)	Spread bandwidth (MHz)	Antenna output power (mW/MHz)		Antenna output power tolerance(%)		EIRP (dBm/MHz)		Verdict
			Result	Limit	Result	Limit	Result	Limit	
GFSK	6.80	70.641	0.068	≤ 3	-32.00	+20	-9.21	≤ 6.91	Pass
π/4-DQPSK	6.07	70.641	0.057	≤ 3	-43.00	+20	-9.98	≤ 6.91	Pass
8DPSK	5.53	70.641	0.051	≤ 3	-49.00	+20	-10.46	≤ 6.91	Pass

Note:
Antenna output power(mW) = 10^{Antenna output power(dBm) / 10}
Antenna output power(mW/MHz) = Antenna output power(mW) / Spread bandwidth(MHz)
Antenna output power Tolerance(%) = (Antenna output power(mW/MHz) - Declared power) / Declared power * 100%
Antenna output power(dBm/MHz) = 10 * log10{Antenna output power(mW/MHz)}
EIRP(dBm/MHz) = Antenna output power(dBm/MHz) + Antenna gain.

AFH

Mode	Antenna gain (dBi)	Declared power (mW/MHz)
GFSK	2.46	0.250
$\pi/4$ DQPSK		0.250
8DPSK		0.250

Mode	Antenna output power (dBm)	Spread bandwidth (MHz)	Antenna output power (mW/MHz)		Antenna output power tolerance(%)		EIRP (dBm/MHz)		Verdict
			Result	Limit	Result	Limit	Result	Limit	
GFSK	6.57	17.953	0.253	≤ 3	1.14	+20	-3.51	≤ 6.91	Pass
$\pi/4$ -DQPSK	5.87	18.203	0.212	≤ 3	-15.10	+20	-4.27	≤ 6.91	Pass
8DPSK	5.51	18.120	0.196	≤ 3	-21.60	+20	-4.62	≤ 6.91	Pass

Note:
Antenna output power(mW) = $10^{\{\text{Antenna output power(dBm)} / 10\}}$
Antenna output power(mW/MHz) = Antenna output power(mW) / Spread bandwidth(MHz)
Antenna output power Tolerance(%) = (Antenna output power(mW/MHz) - Declared power) / Declared power * 100%
Antenna output power(dBm/MHz) = $10 * \log_{10}\{\text{Antenna output power(mW/MHz)}\}$
EIRP(dBm/MHz) = Antenna output power(dBm/MHz) + Antenna gain.

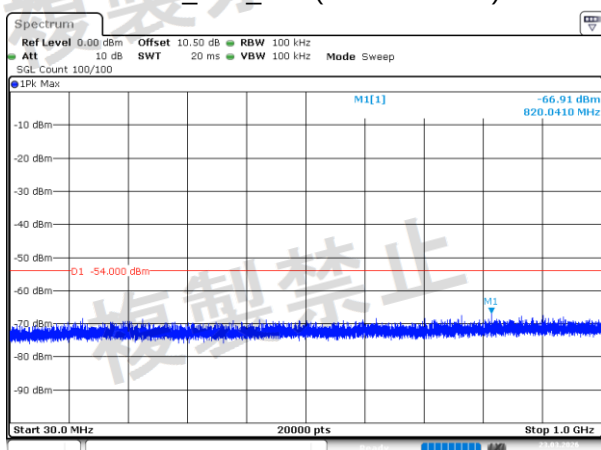
Receiver Spurious Emission and Unwanted Emission Intensity

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)					
GFSK	Low	Band I (100kHz)	30	1000	820.041	-66.91	0.204	4	Pass
		Band II (1MHz)	1000	12500	6780.19	-52.94	5.082	20	Pass
	Middle	Band I (100kHz)	30	1000	855.009	-67.50	0.178	4	Pass
		Band II (1MHz)	1000	12500	5808.44	-53.36	4.613	20	Pass
	High	Band I (100kHz)	30	1000	877.562	-67.21	0.190	4	Pass
		Band II (1MHz)	1000	12500	5911.94	-52.84	5.200	20	Pass
π/4-DQPSK	Low	Band I (100kHz)	30	1000	897.253	-67.79	0.166	4	Pass
		Band II (1MHz)	1000	12500	6391.49	-53.15	4.842	20	Pass
	Middle	Band I (100kHz)	30	1000	838.665	-67.48	0.179	4	Pass
		Band II (1MHz)	1000	12500	6993.51	-52.62	5.470	20	Pass
	High	Band I (100kHz)	30	1000	885.661	-66.96	0.201	4	Pass
		Band II (1MHz)	1000	12500	6756.04	-53.56	4.406	20	Pass
8DPSK	Low	Band I (100kHz)	30	1000	858.938	-67.72	0.169	4	Pass
		Band II (1MHz)	1000	12500	5806.71	-53.56	4.406	20	Pass
	Middle	Band I (100kHz)	30	1000	999.103	-68.12	0.154	4	Pass
		Band II (1MHz)	1000	12500	6976.84	-52.90	5.129	20	Pass
	High	Band I (100kHz)	30	1000	911.997	-66.21	0.239	4	Pass
		Band II (1MHz)	1000	12500	5846.39	-52.94	5.082	20	Pass

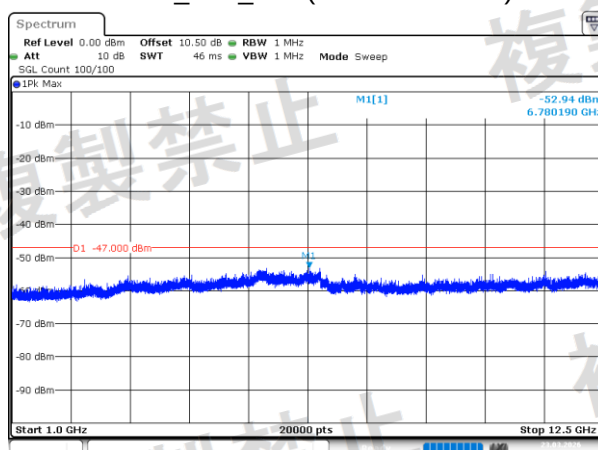
Test Condition: NV

GFSK_Low_DH1(30MHz~1GHz)



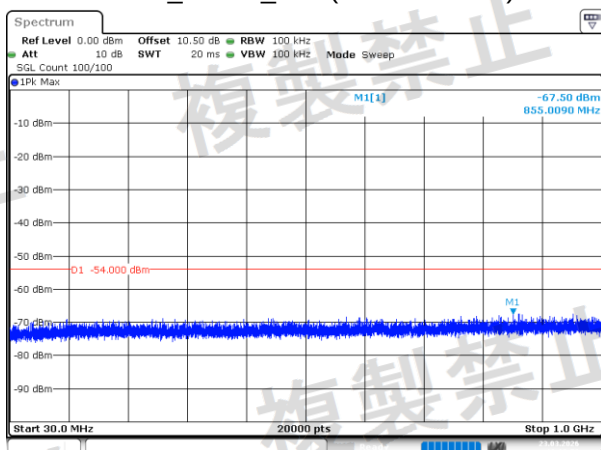
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:25:42

GFSK_Low_DH1(1GHz~12.5GHz)



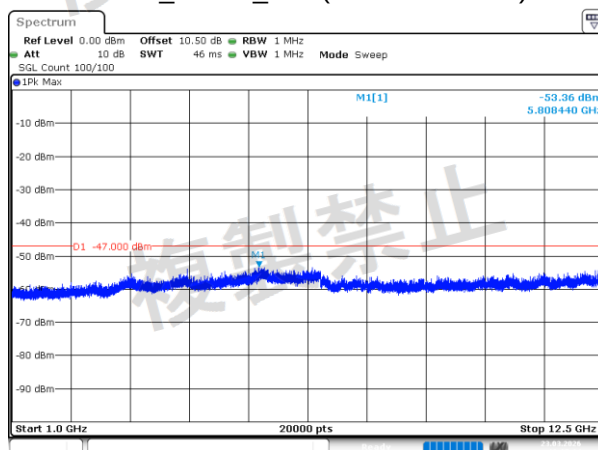
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:26:03

GFSK_Middle_DH1(30MHz~1GHz)



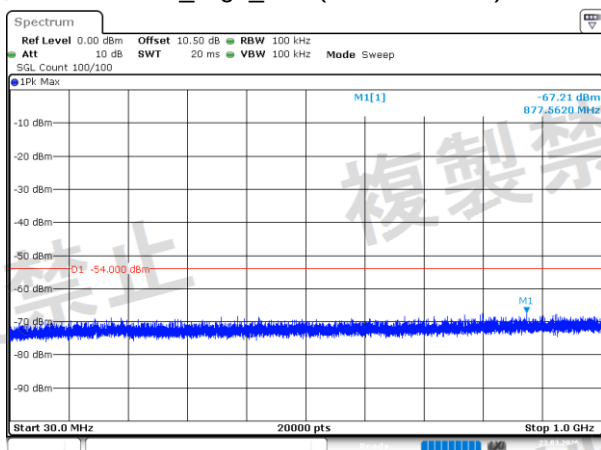
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:26:53

GFSK_Middle_DH1(1GHz~12.5GHz)



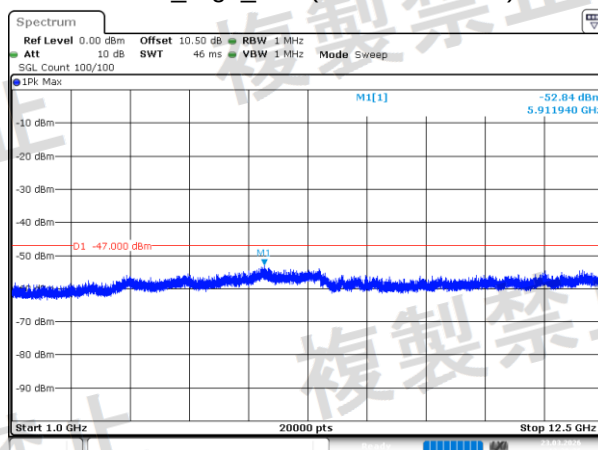
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:27:15

GFSK_High_DH1(30MHz~1GHz)

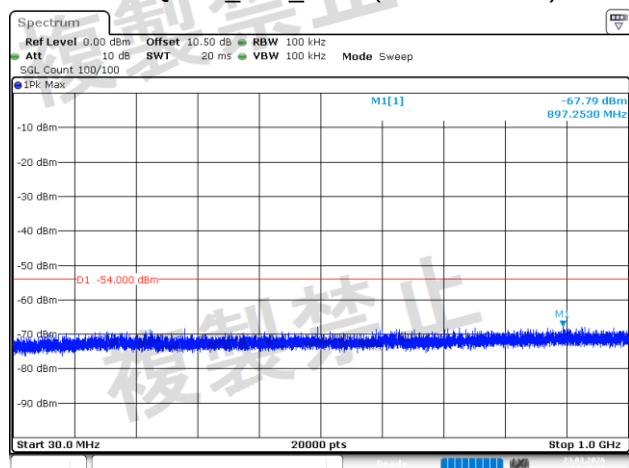


ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:28:15

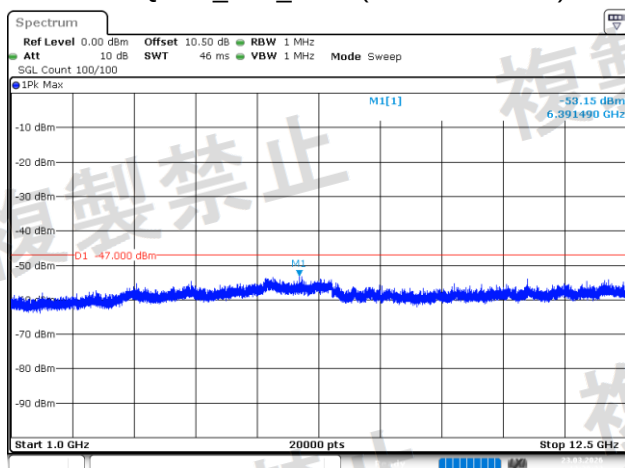
GFSK_High_DH1(1GHz~12.5GHz)



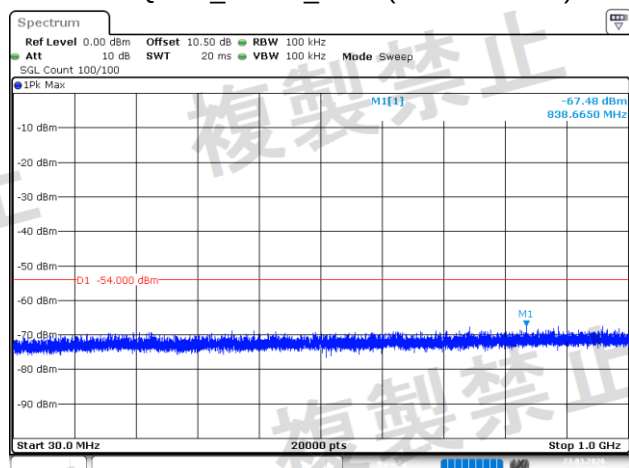
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:28:37

$\pi/4$ -DQPSK_Low_2DH1(30MHz~1GHz)

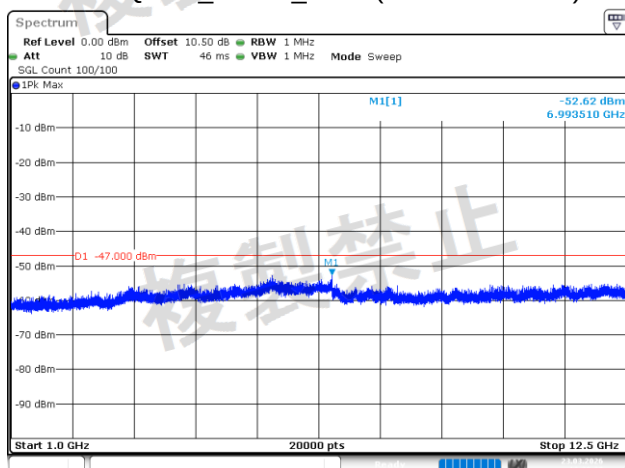
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:29:12

 $\pi/4$ -DQPSK_Low_2DH1(1GHz~12.5GHz)

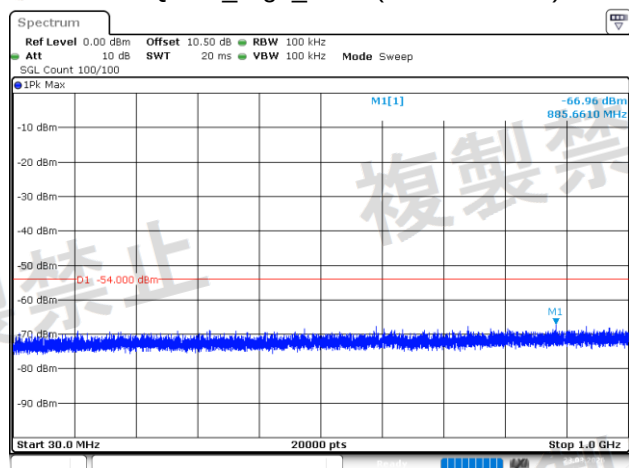
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:29:33

 $\pi/4$ -DQPSK_Middle_2DH1(30MHz~1GHz)

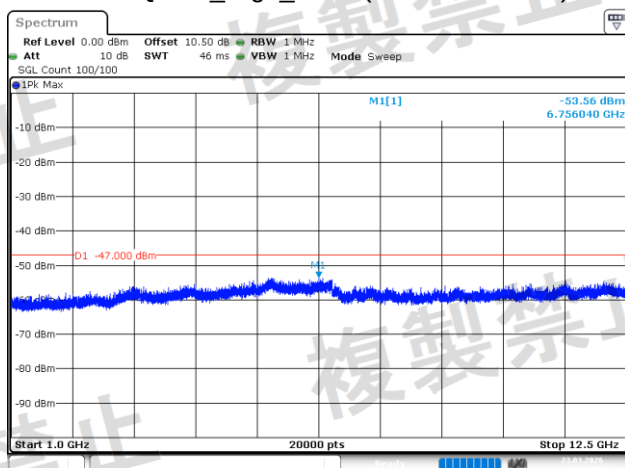
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:30:09

 $\pi/4$ -DQPSK_Middle_2DH1(1GHz~12.5GHz)

ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:30:31

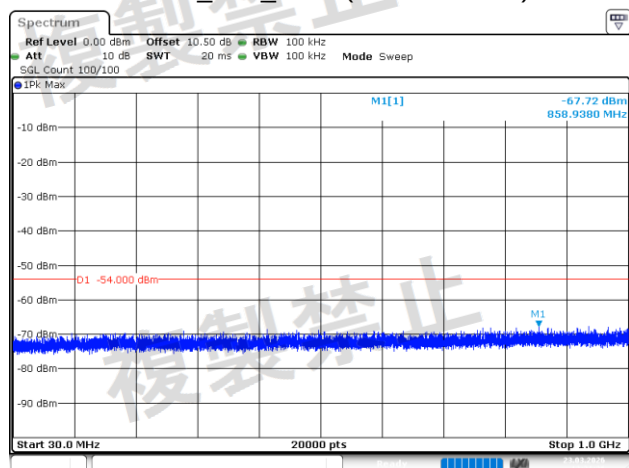
 $\pi/4$ -DQPSK_High_2DH1(30MHz~1GHz)

ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:30:47

 $\pi/4$ -DQPSK_High_2DH1(1GHz~12.5GHz)

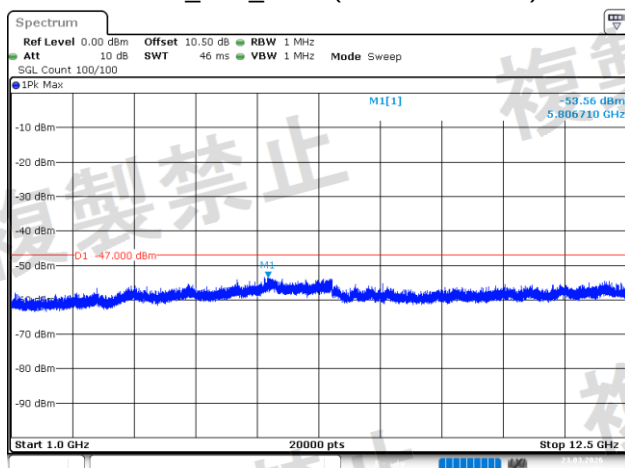
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:31:09

8DPSK_Low_3DH1(30MHz~1GHz)



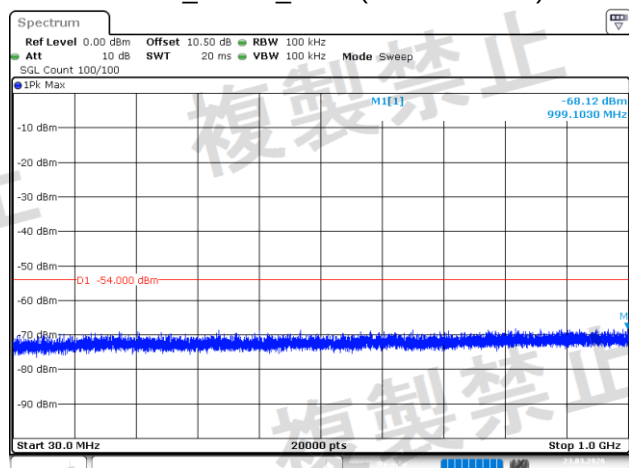
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:31:37

8DPSK_Low_3DH1(1GHz~12.5GHz)



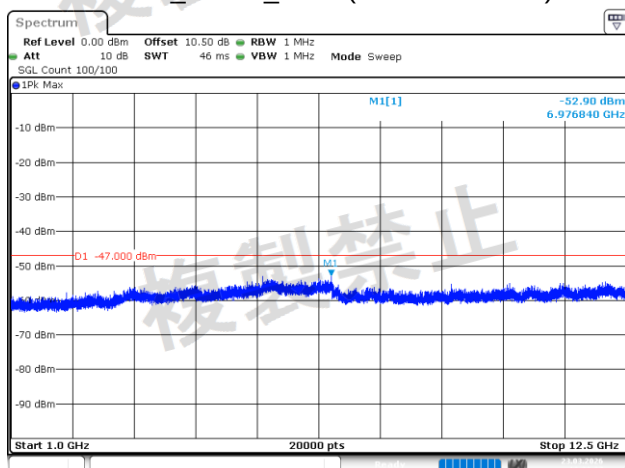
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:31:59

8DPSK_Middle_3DH1(30MHz~1GHz)



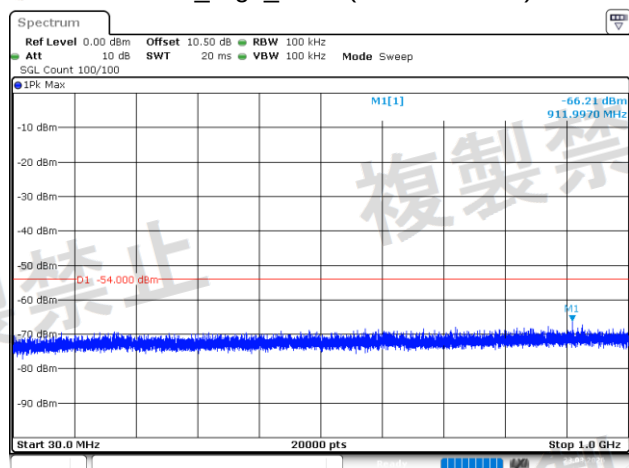
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:32:16

8DPSK_Middle_3DH1(1GHz~12.5GHz)



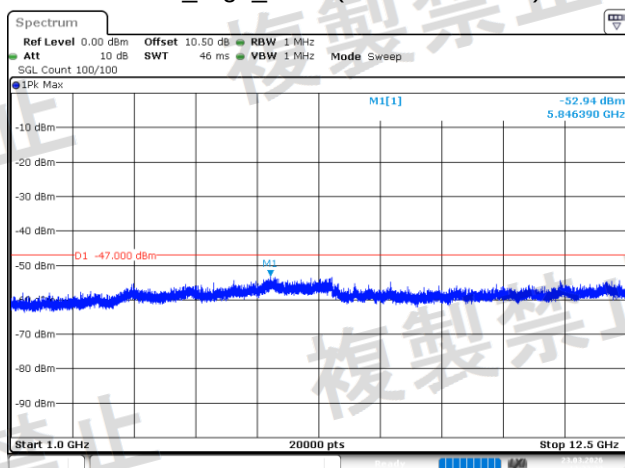
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:32:38

8DPSK_High_3DH1(30MHz~1GHz)



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:33:08

8DPSK_High_3DH1(1GHz~12.5GHz)



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:33:29

Frequency Hopping Dwell Time

Test Condition: NV

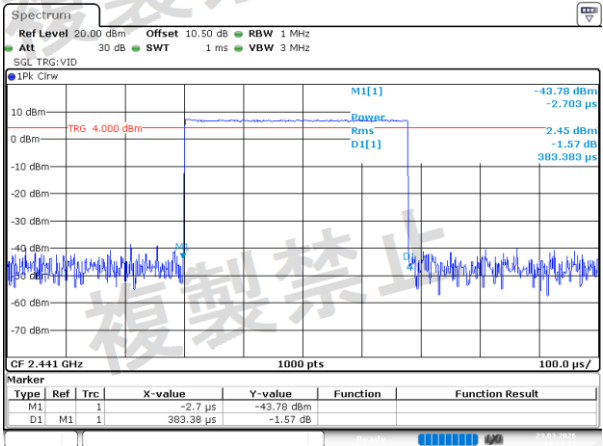
Mode	Packet Type	Spreading bandwidth	Ton (ms)	Observed Period(s)	Hopping Number In Observed Period	Result (s)	Limit(s)	Verdict
GFSK	DH1	70.641	0.383	28.2564	198	0.076	≤ 0.4	Pass
	DH3	70.641	1.646	28.2564	126	0.207		Pass
	DH5	70.641	2.903	28.2564	80	0.232		Pass
π/4-DQPSK	2DH1	70.641	0.396	28.2564	206	0.082		Pass
	2DH3	70.641	1.655	28.2564	126	0.208		Pass
	2DH5	70.641	2.913	28.2564	83	0.242		Pass
8DPSK	3DH1	70.725	0.395	28.2564	210	0.083		Pass
	3DH3	70.641	1.655	28.2564	124	0.205		Pass
	3DH5	70.641	2.913	28.2564	84	0.245		Pass

Note:

- 1. Dwell time = Time per one hopping (Ton) * hopping number (within the time obtained by multiplying the spread bandwidth by 0.4s).
- 2. The Spread Bandwidth please refer to Occupied Bandwidth and Spreading Bandwidth.

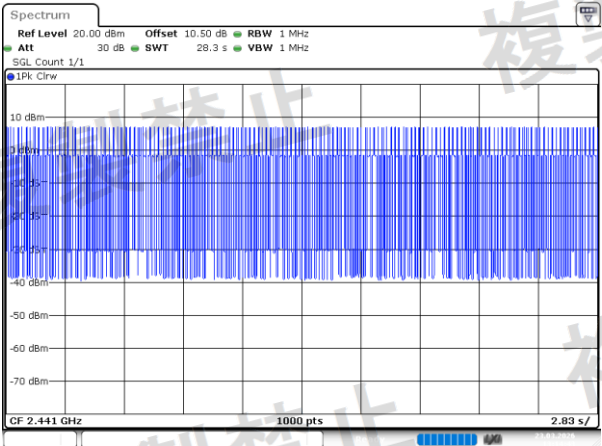
Test Condition: NV

GFSK_Hopping_DH1



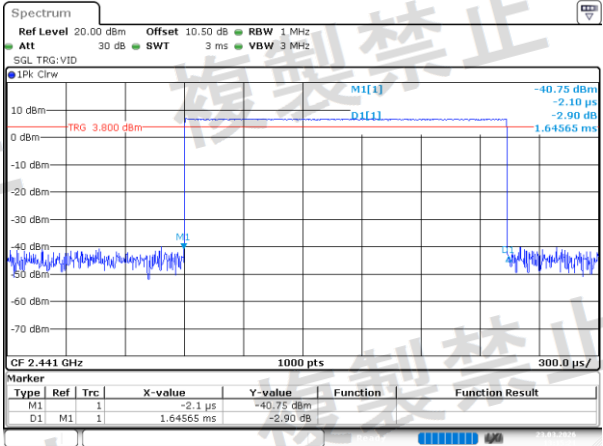
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:14:12

GFSK_Hopping_DH1



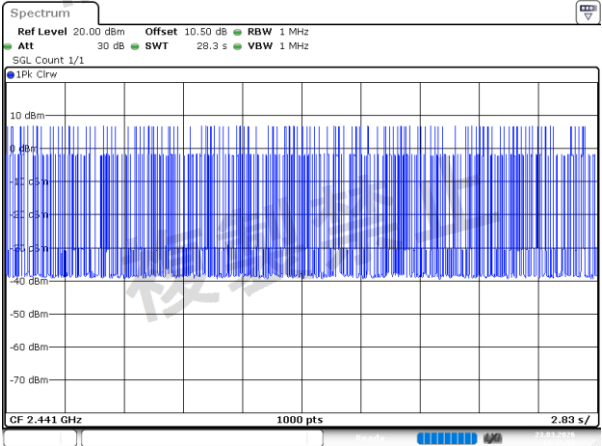
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Date: 23.MAR.2026 13:14:44

GFSK_Hopping_DH3



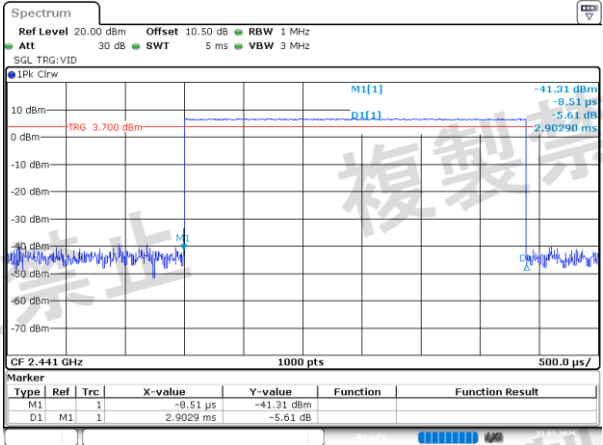
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Date: 23.MAR.2026 13:15:22

GFSK_Hopping_DH3



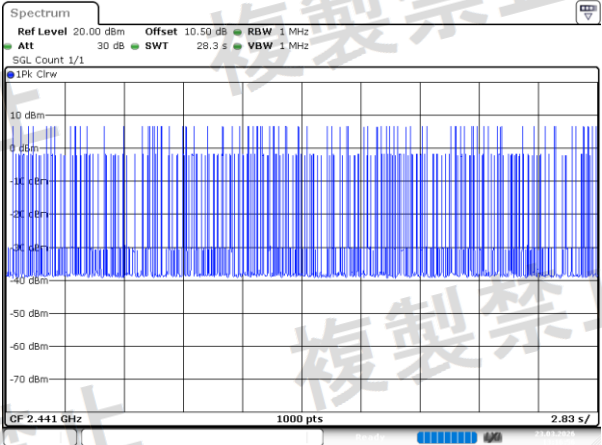
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Date: 23.MAR.2026 13:15:34

GFSK_Hopping_DH5



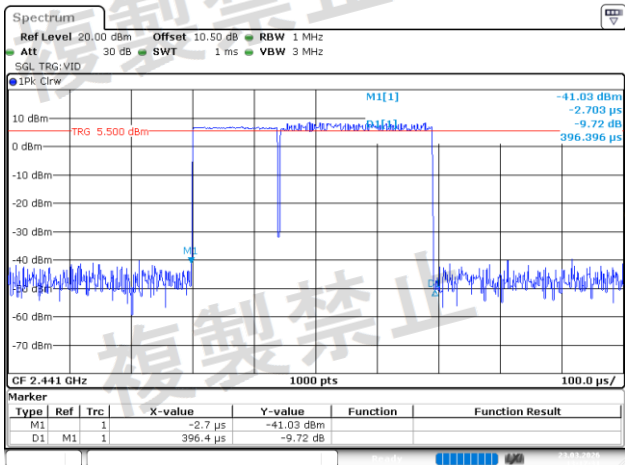
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Date: 23.MAR.2026 13:16:25

GFSK_Hopping_DH5



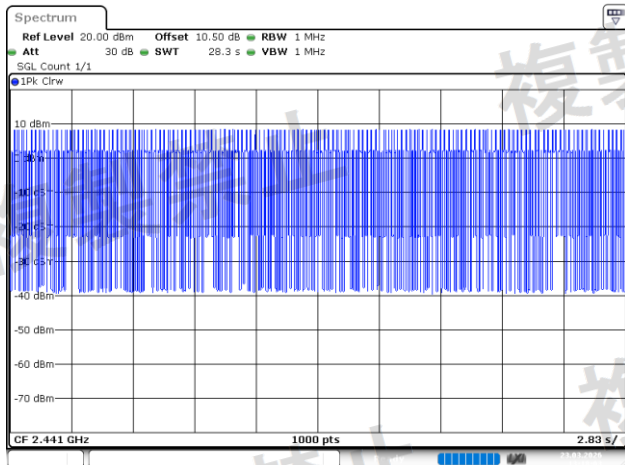
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Date: 23.MAR.2026 13:16:56

$\pi/4$ -DQPSK_Hopping_2DH1



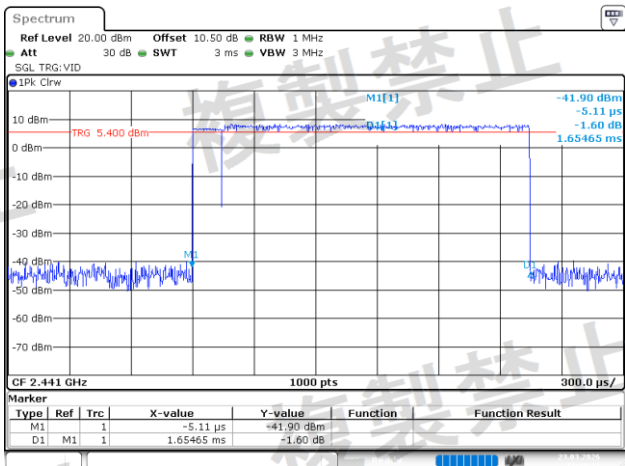
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$\pi/4$ -DQPSK_Hopping_2DH1



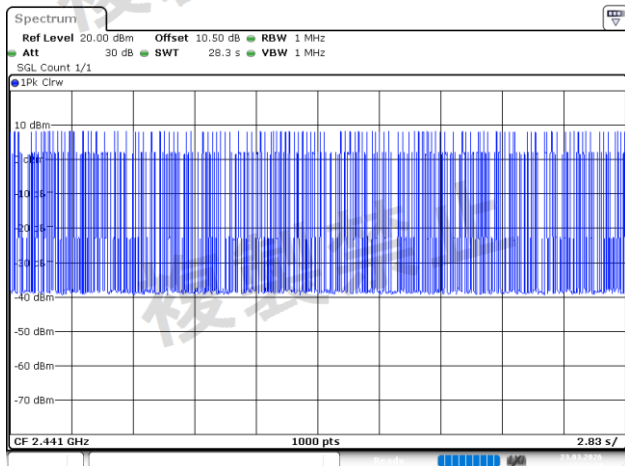
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Date: 23.MAR.2026 13:18:03

$\pi/4$ -DQPSK_Hopping_2DH3



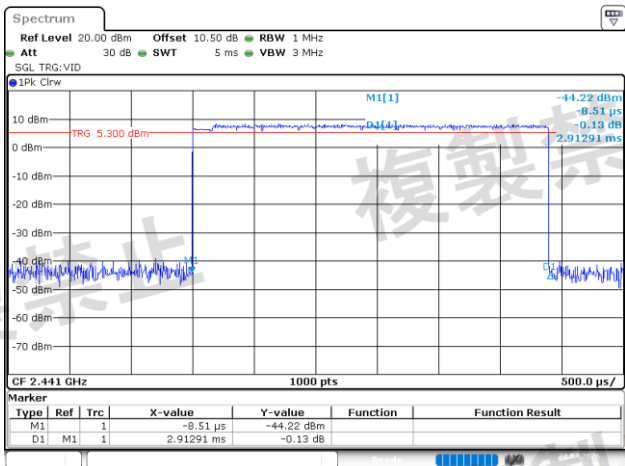
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Date: 23.MAR.2026 13:19:13

$\pi/4$ -DQPSK_Hopping_2DH3



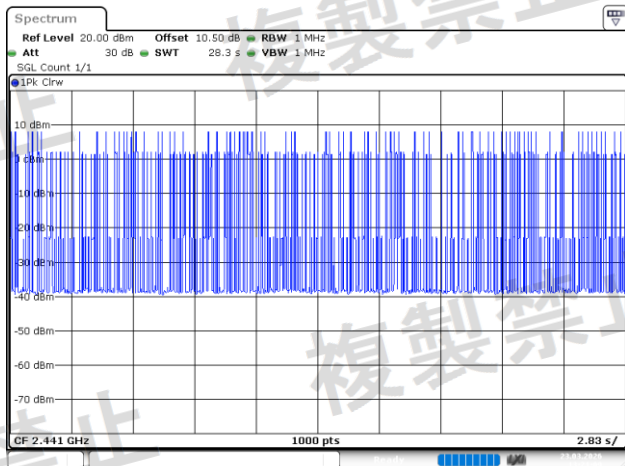
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Date: 23.MAR.2026 13:19:45

$\pi/4$ -DQPSK_Hopping_2DH5



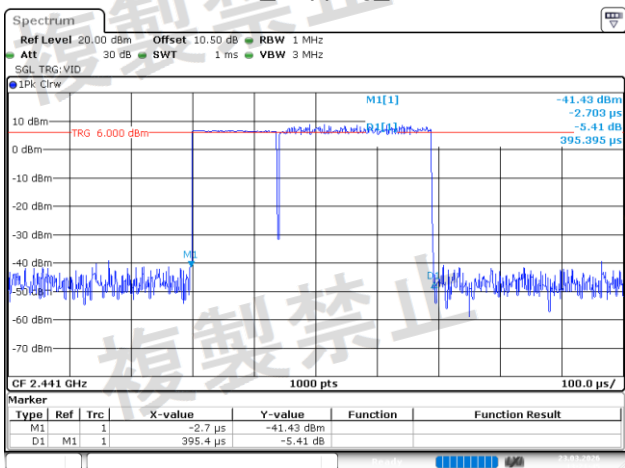
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Date: 23.MAR.2026 13:20:38

$\pi/4$ -DQPSK_Hopping_2DH5



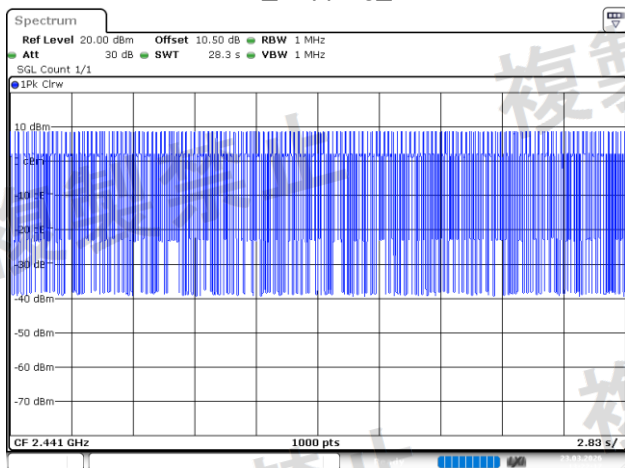
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Date: 23.MAR.2026 13:21:10

8DPSK_Hopping_3DH1



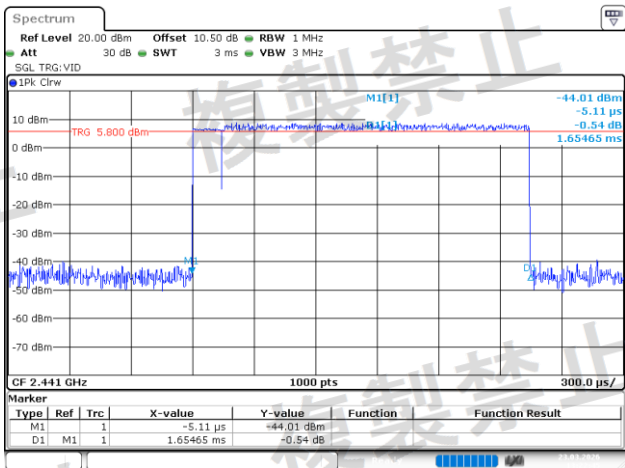
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Date: 23.MAR.2026 13:21:46

8DPSK_Hopping_3DH1



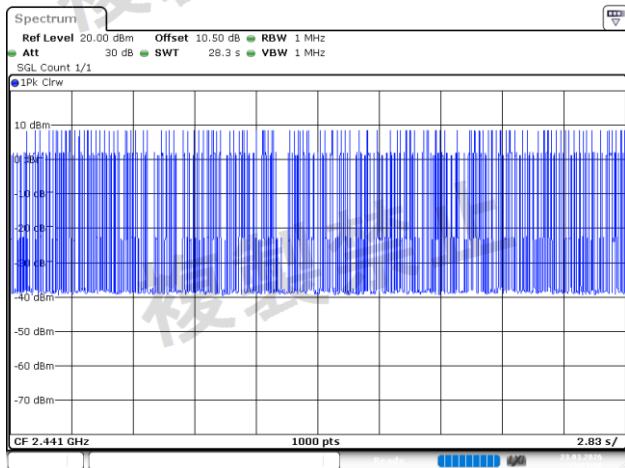
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Date: 23.MAR.2026 13:22:19

8DPSK_Hopping_3DH3



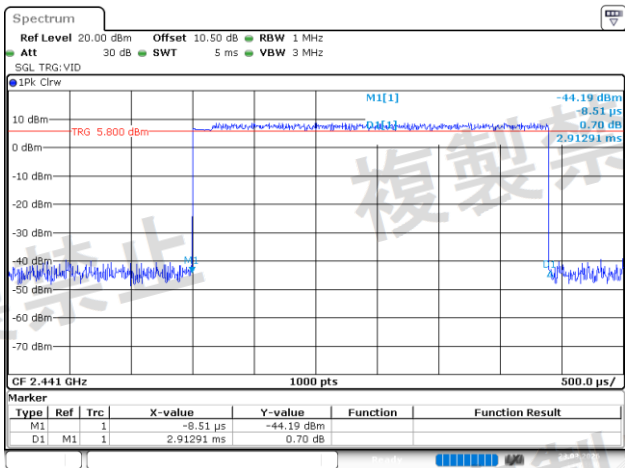
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:22:45

8DPSK_Hopping_3DH3



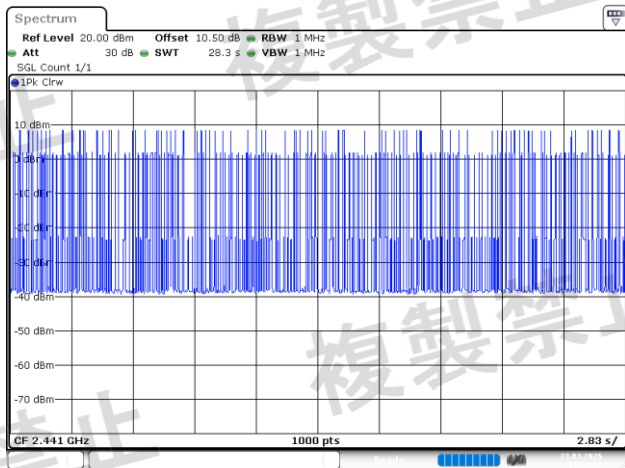
ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:23:17

8DPSK_Hopping_3DH5



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:23:41

8DPSK_Hopping_3DH5



ProjectNo.:2604R48087E-RF Tester:Steve Lu
Date: 23.MAR.2026 13:24:13

AFH

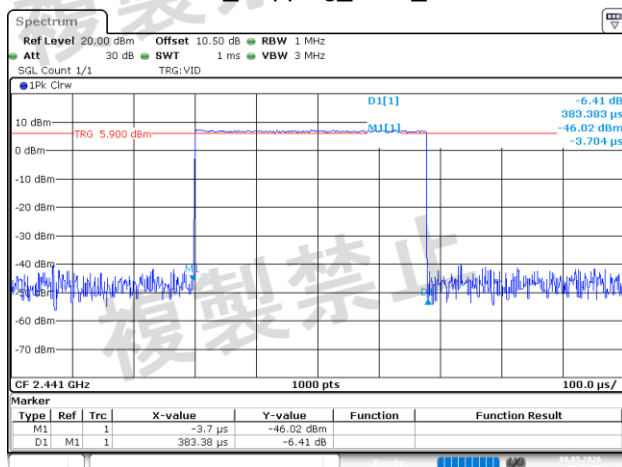
Mode	Packet Type	Spreading bandwidth	Ton (ms)	Observed Period(s)	Hopping Number In Observed Period	Result (s)	Limit(s)	Verdict
GFSK	AFH_DH1	17.953	0.383	7.1812	73	0.028	≤ 0.4	Pass
	AFH_DH3	17.953	1.648	7.1812	40	0.066		Pass
	AFH_DH5	18.036	2.894	7.2144	31	0.090		Pass
π/4-DQPSK	AFH_2DH1	18.203	0.397	7.2812	74	0.029		Pass
	AFH_2DH3	18.207	1.654	7.2828	38	0.063		Pass
	AFH_2DH5	18.203	2.909	7.2812	32	0.093		Pass
8DPSK	AFH_3DH1	18.203	0.397	7.2812	76	0.030		Pass
	AFH_3DH3	18.203	1.654	7.2812	44	0.073		Pass
	AFH_3DH5	18.120	2.915	7.2480	35	0.102		Pass

Note:

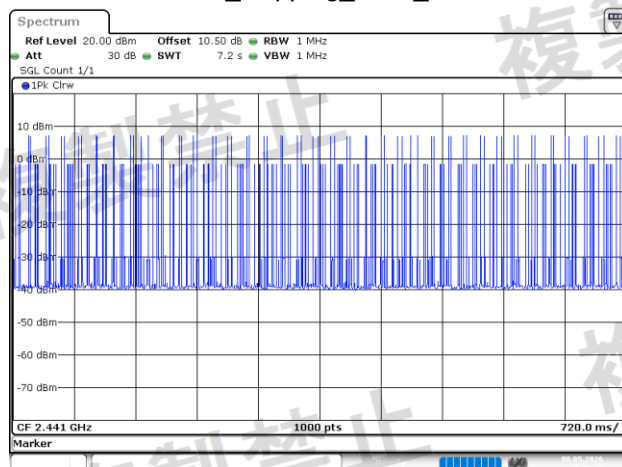
- 1. Dwell time = Time per one hopping (Ton) * hopping number (within the time obtained by multiplying the Spread Bandwidth by 0.4s).
- 2. The Spread Bandwidth please refer to Occupied Bandwidth and Spreading Bandwidth.

AFH

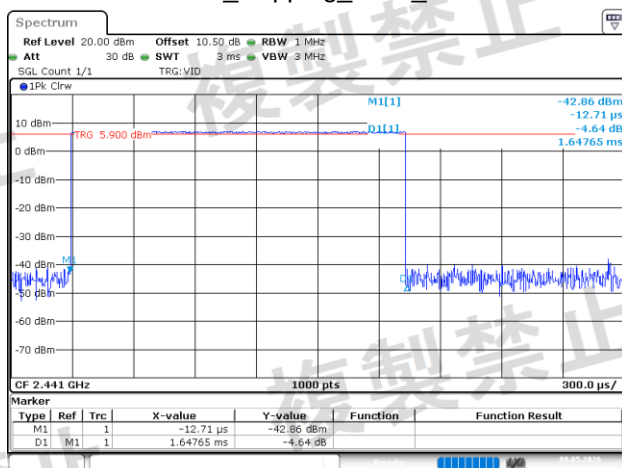
GFSK_Hopping_AFH_DH1



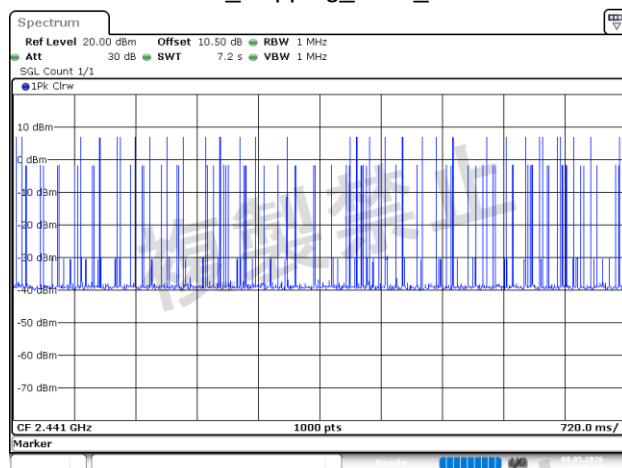
GFSK_Hopping_AFH_DH1



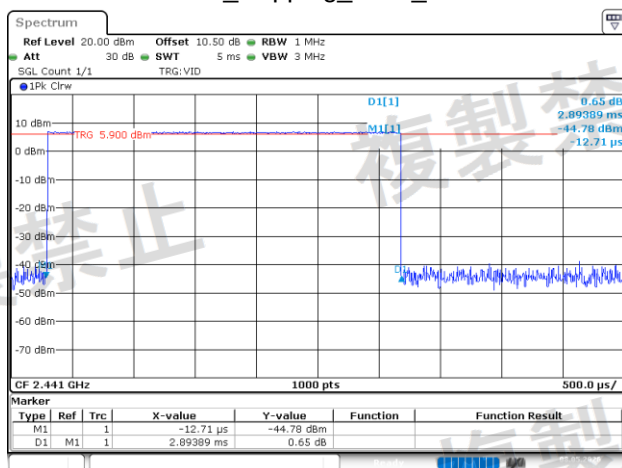
GFSK_Hopping_AFH_DH3



GFSK_Hopping_AFH_DH3

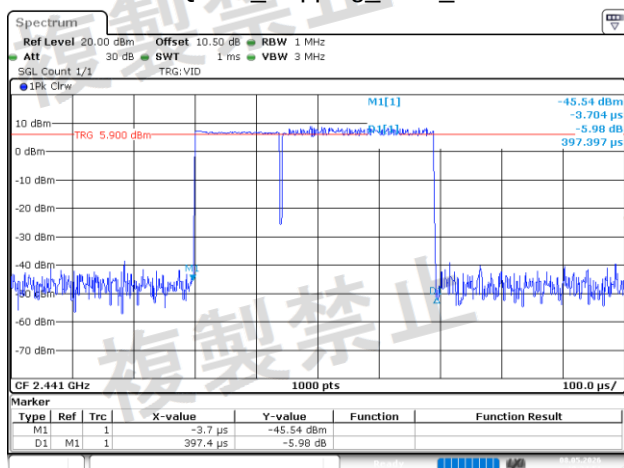
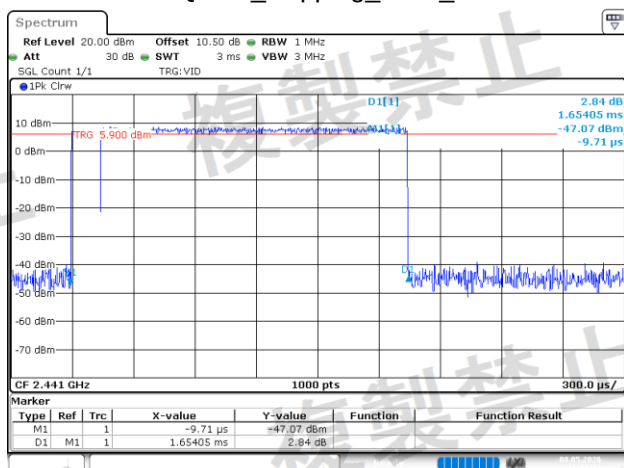
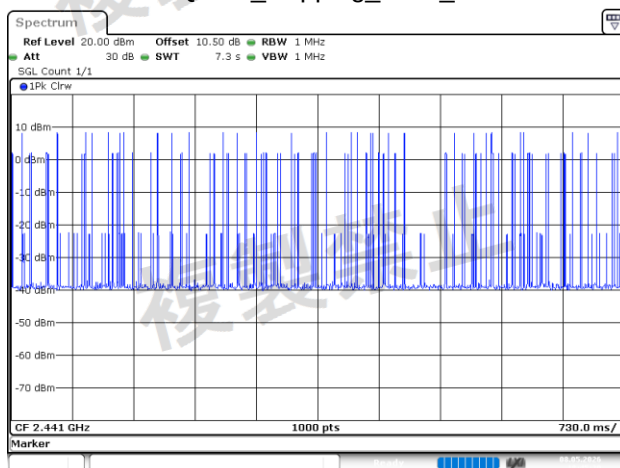
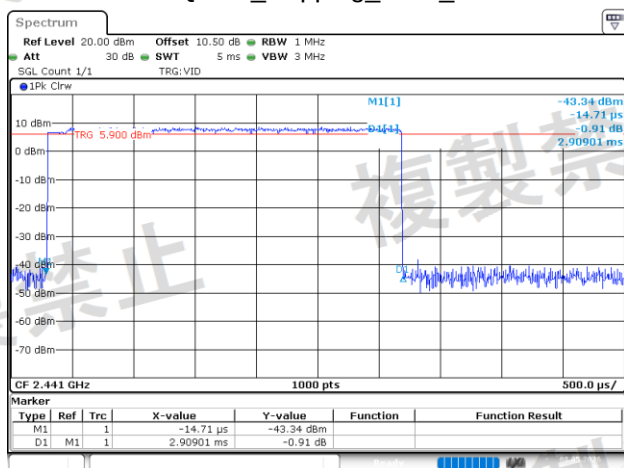
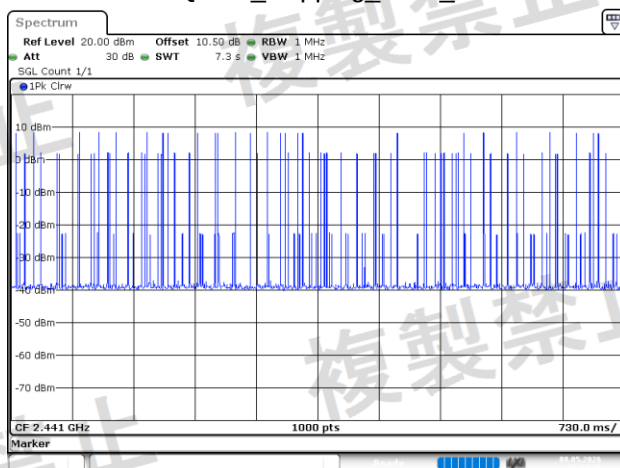


GFSK_Hopping_AFH_DH5

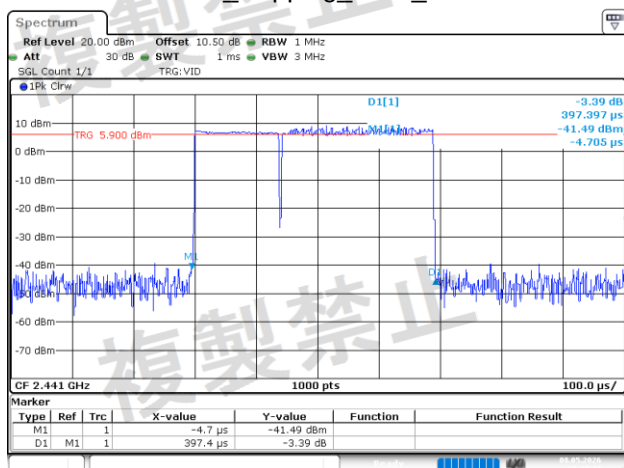


GFSK_Hopping_AFH_DH5

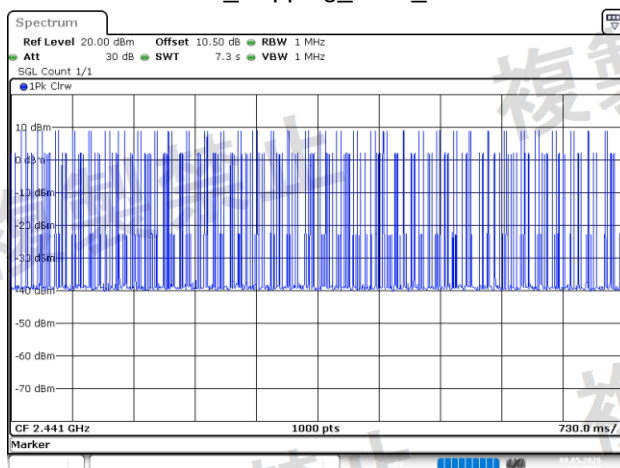


$\pi/4$ -DQPSK_Hopping_AFH_2DH1 $\pi/4$ -DQPSK_Hopping_AFH_2DH1 $\pi/4$ -DQPSK_Hopping_AFH_2DH3 $\pi/4$ -DQPSK_Hopping_AFH_2DH3 $\pi/4$ -DQPSK_Hopping_AFH_2DH5 $\pi/4$ -DQPSK_Hopping_AFH_2DH5

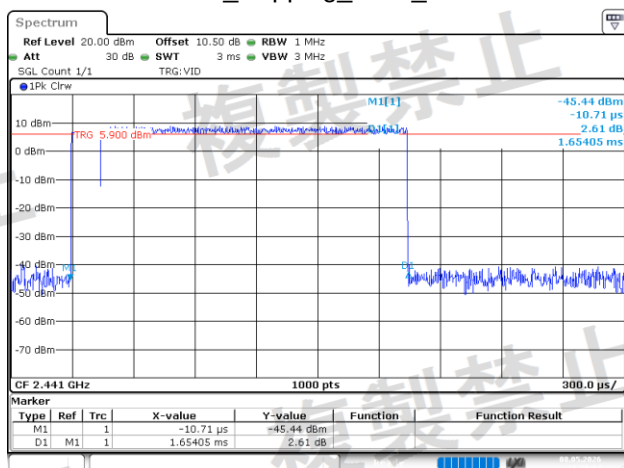
8DPSK_Hopping_AFH_3DH1



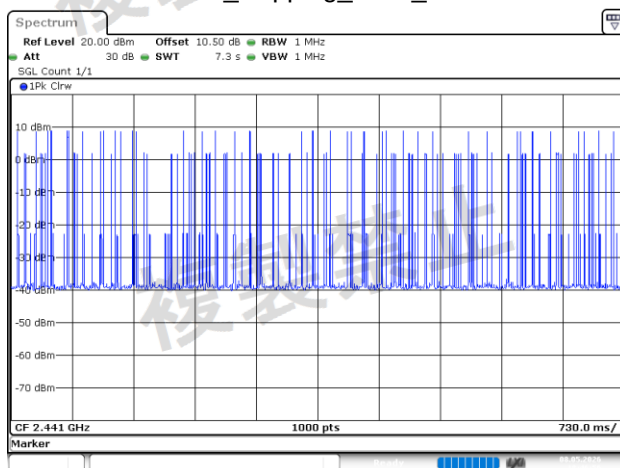
8DPSK_Hopping_AFH_3DH1



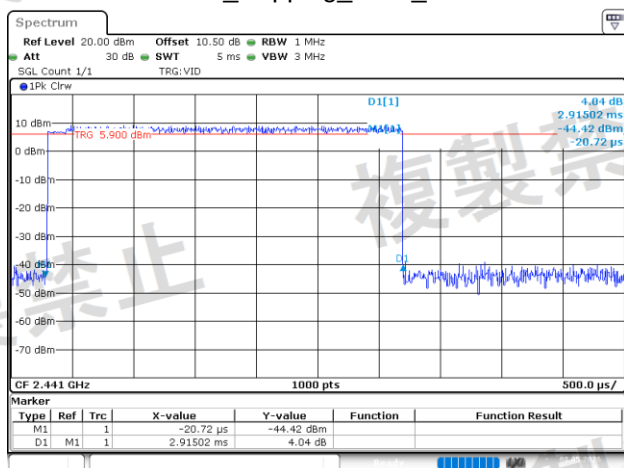
8DPSK_Hopping_AFH_3DH3



8DPSK_Hopping_AFH_3DH3



8DPSK_Hopping_AFH_3DH5



8DPSK_Hopping_AFH_3DH5



Interference Prevention Function

Test Result: Good. MAC: d0:8b:f4:d5:66:45

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604R48087E-RF EUT External Photos and Attachment No.2 2604R48087E-RF EUT Internal Photos.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2604R48087E-RF Test Photos.

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