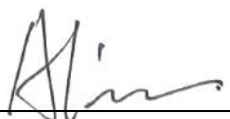


JAPAN RADIO TEST REPORT

Applicant..... : I-O DATA DEVICE, INC.
Address..... : 3-10, Sakurada-machi, Kanazawa-shi, Ishikawa, 920-8512, Japan
Manufacturer..... : Leotec Electronics Co., Ltd
Address..... : No. 174, Wenzhou Road, Dongcheng Street, Dongguan City, Guangdong
Province
Factory..... : Leotec Electronics Co., Ltd
Address..... : No. 174, Wenzhou Road, Dongcheng Street, Dongguan City, Guangdong
Province
Product Name : CD BOOMBOX
Brand Name..... : I-O DATA
Model No. : CD-P1
Measurement Standard..... : Article 2 Paragraph 1 of Certification Ordinance Item 19
Receipt Date of Samples..... : January 12, 2026
Date of Tested..... : January 15, 2026 to April 28, 2026
Date of Report..... : May 14, 2026

This report shows that above equipment is technically compliant with the requirements of the standards above.
All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore
Testing Center Co., Ltd, this report shall not be reproduced except in full.



Prepared by

Alina Guo / Project Engineer



Approved by

Iori Fan / Authorized Signatory

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1. Summary of Test Result

Section MIC Notice No.88	Description of Test	Result	Remarks
3.2(1) Article 49-20	Spread Spectrum Method	N/A	---
3.2(2) Article 49-20	Antenna Power	PASS	---
3.2(3) Article 14	Antenna Power Tolerance	PASS	---
3.2(4) Article 5, Attached Table No.1	Frequency Tolerance	PASS	---
3.2(5)	Transmission rate	N/A	---
3.2(6) Article 7	Unwanted Emission Strength	PASS	---
3.3(1) Article 24	Secondary Radiated Emission Strength	PASS	---
3.2(7) Article 6, Attached Table No.2	Occupied Bandwidth	PASS	---
3.2(8) Article 49-20	Spreading Bandwidth	---	Reporting only
3.6(2) Article 49-20	Transmitting Antenna Absolute Gain	N/A	---
3.6(2) Article 49-20	Half Power Beam Angle	N/A	Only for EIRP > 12.14dBm/MHz
Article 49-20	Carrier Sensing Function	N/A	---
3.2(11) Article 49-20	Dwell time	PASS	---
Article 49-20	Number of Carrier	N/A	---
Article 6-2, Article 9-4	Interference Prevention Function	PASS	---
Article 49-20	Spreading Factor	N/A	---

Note:

1. Test method is conducted according MIC Notice No.88 Appendix No.43 (Item 19, Paragraph 1, Article 2).
2. N/A means not applicable.

3. General Information

Product Information	
Product Name:	CD BOOMBOX
Main Model Name:	CD-P1
Additional Model Name:	N/A
Model Difference:	N/A
S/N:	2601-0189
Brand Name:	I-O DATA
Hardware version:	V1.02
Software version:	V2.0
Rating:	DC 9V come from adapter
Test Voltage:	AC 100V (Normal Voltage)
I/O Port:	Reference the user's manual
Accessories Information	
Adapter:	Model: A361-0904000P Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 9.0V, 4.0A
Cable:	DC Line: 1.50m unshielded, undetachable
Other:	N/A
Additional information	
Note:	N/A
Remark:	All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual.

Technical Specification

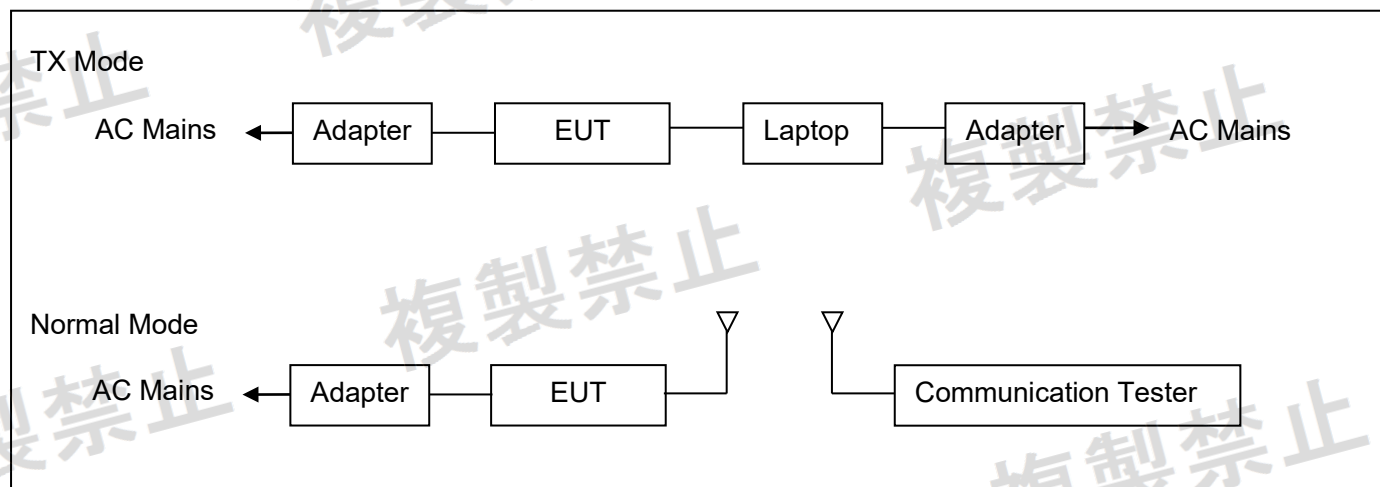
Bluetooth Version:	V5.4
Frequency Range:	2402-2480MHz
Modulation Type:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Number of Channel:	79
Channel Space:	1MHz
Antenna Type:	Integrated Antenna
Number of Antenna	1
Antenna Gain:	4.7 dBi
Note	All the information above are provided by the manufacturer.
Remark: The report only applies the BDR and EDR function of EUT.	

Channel List							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (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
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	24721
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	----	----

4. Test Channels and Modes Detail

Mode		Channel		Frequency (MHz)	Modulation
1.	TX (Hopping)	0-78		2402 – 2480	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
2.	TX	Low	0	2402	(Un-modulation)
		Middle	39	2441	(Un-modulation)
		High	78	2480	(Un-modulation)
3.	TX	Low	0	2402	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
		Middle	39	2441	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
		High	78	2480	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
4.	RX	Low	0	2402	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
		Middle	39	2441	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
		High	78	2480	GFSK/ $\pi/4$ -DQPSK/ 8DPSK
5.	Normal Mode	---	---	---	---

5. Block Diagram of Configuration (Conduction connection)



6. Modification of EUT

No modifications are made to the EUT during all test items.

7. Description Support Device

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Brand	M/N	S/N	Cable Specification	Remarks
1.	Laptop	Lenovo	R720-151KBN	PF0Z35FH	I/P: AC 100-240V 50-60Hz, 1.5A O/P: DC 20V 6.75A	Provide by the Lab
2.	Adapter	Delta	ADL135NDC3A	---	Power cord: 1.10m unshielded DC Line: 1.15m unshielded with a core	Provide by the Lab

No.	Test Software	Modulation	Power Setting
1.	FCC_assist1.0.4.exe	GFSK	10
2.		$\pi/4$ -DQPSK	10
3.		8DPSK	10

8. Test Facility and Location

Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)
Accreditations and Authorizations	:	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 Listed by CNAS, August 13, 2018 The Certificate Registration Number is L5795. The Certificate is valid until August 13, 2030 The Laboratory has been assessed and proved to be in compliance with ISO17025 Listed by A2LA, November 01, 2017 The Certificate Registration Number is 4429.01 The Certificate is valid until December 31, 2027 Listed by FCC, November 06, 2017 Test Firm Registration Number: 907417 Listed by Industry Canada, June 08, 2017 The Certificate Registration Number. Is 9743A
Test Site Location	:	Room 101, 1101, Building 2, No. 61, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan, Guangdong, 523000 People's Republic of China

9. Applicable Standards and References

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

Test Standards:

Article 2 Paragraph 1 of Certification Ordinance Item 19

Test method is conducted according MIC Notice No.88 Appendix No.43 (Item 19, Paragraph 1, Article 2).

10. Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

11. Test Conditions

No.	Test Item	Test Mode	Test Voltage	Tested by	Remarks
1.	Frequency tolerance	2	☒ NV ☐ LV ☐ HV	Sean	See note 1
2.	Permissible value for occupied bandwidth	1	☒ NV ☐ LV ☐ HV	Sean	See note 1
3.	Spread bandwidth	1	☒ NV ☐ LV ☐ HV	Sean	See note 1
4.	Spurious emission intensity	1, 3	☒ NV ☐ LV ☐ HV	Sean	See note 1
5.	Limit on secondary radiated emissions	4	☒ NV ☐ LV ☐ HV	Sean	See note 1
6.	Antenna power	1	☒ NV ☐ LV ☐ HV	Sean	See note 1
7.	Tolerances for antenna power	1	☒ NV ☐ LV ☐ HV	Sean	See note 1
8.	Dwell time	1	☒ NV ☐ LV ☐ HV	Sean	See note 1
9.	Interference Prevention Function	5	☒ NV ☐ LV ☐ HV	Sean	See note 1

Note:

- The testing climatic conditions for temperature, humidity, and atmospheric pressure are within: 24℃, 55%, 101kPa.
- NV= Normal Voltage; LV= Low Voltage = 90% x Normal Voltage; HV= High Voltage = 110% x Normal Voltage.
- During the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage (AC 100V) to test all regulations.

Input voltage		RF circuit voltage	RF circuit voltage variation
NV	AC 100	3.30Vdc	0%
LV	AC 90	3.30Vdc	0%
HV	AC 110	3.30Vdc	0%

12. Measurement Uncertainty

Test Item	Measurement Uncertainty
Uncertainty for Conduction Spurious emission Measurement:	± 1.06 dB
Uncertainty for Output power Measurement:	± 1.08 dB
Uncertainty for Power density Measurement:	± 1.09 dB
Uncertainty for Frequency range Measurement:	0.8×10^{-7}
Uncertainty for Bandwidth Measurement:	± 0.71 %
Uncertainty for Temperature	± 0.8 °C
Uncertainty for Humidity	± 3.2 %
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.	

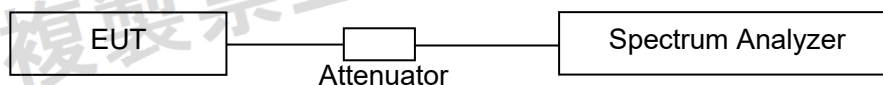
13. Test Item and Test Result

13.1 Frequency tolerance

LIMITS

Standard	Item	Limit
Item 19 of Article 2-1	Tolerance of Frequency	$\leq \pm 50$ ppm

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

- The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - Set center frequency to test frequency
 - Set the span to 500 KHz.
 - Set the RBW to 10 KHz
 - Set the VBW $\geq$ RBW
 - Set the Detector = peak
 - Set the Sweep time = auto couple
 - Set the Trace mode = max hold
 - Allow trace to fully stabilize
- Use the peak marker function to determine the frequency tolerance.

TEST RESULTS

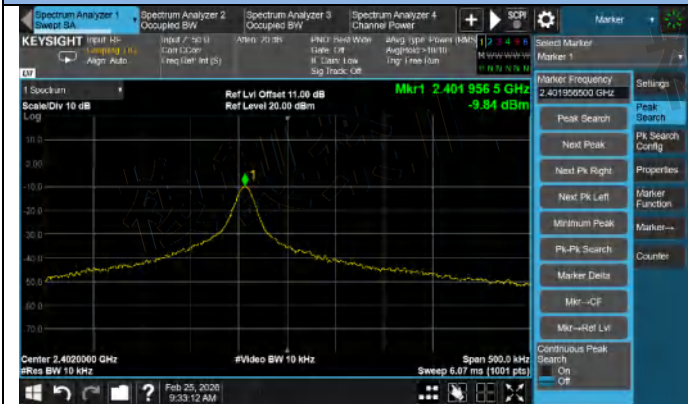
PASS

Please refer to the following tables.

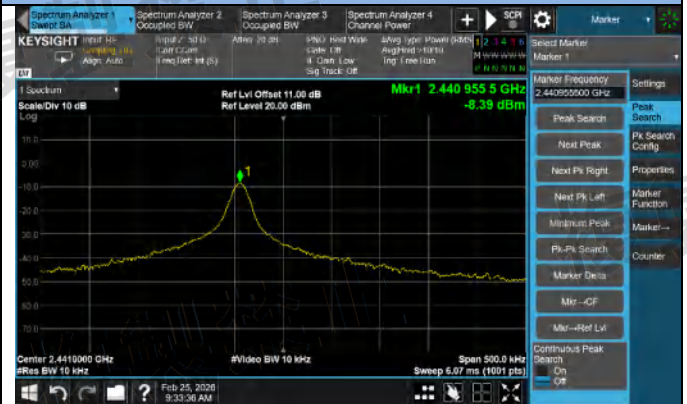
Test Date: February 25, 2026		Test Result: PASS		
Frequency (MHz)	Test Power	Test Result (MHz)	Frequency Error (ppm)	Limit
TX (Un-modulation)				
2402	NV	2401.9565	-18.11	±50ppm
	LV	--	--	--
	HV	--	--	--
2441	NV	2440.9555	-18.23	±50ppm
	LV	--	--	--
	HV	--	--	--
2480	NV	2479.9545	-18.35	±50ppm
	LV	--	--	--
	HV	--	--	--

Test Plots - (Normal Voltage)

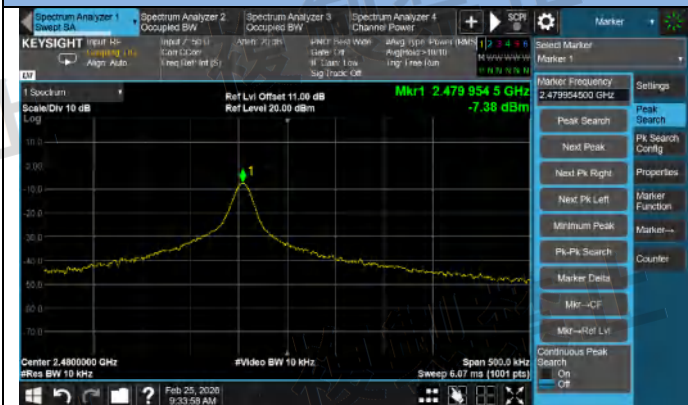
2402 MHz



2441 MHz



2480 MHz



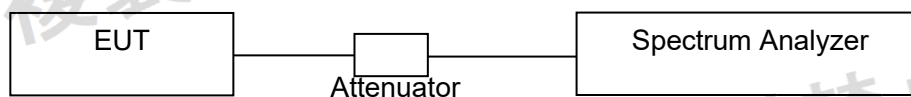
Blank

13.2 Occupied Bandwidth (99%)

LIMITS

Standard	Type	Limit
Item 19 of Article 2-1	DSSS	<26MHz
	FHSS	<83.5MHz
	OFDM	<26MHz or <26~40MHz
	Others	<26MHz

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

- The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - Set frequency to 2402 ~ 2480 MHz
 - Set the RBW to 1 MHz
 - Set the VBW $\geq$ RBW
 - Set the span to 107.5 MHz.
 - Set the Detector = peak
 - Set the Sweep time = auto couple
 - Set the Trace mode = max hold
 - Allow trace to fully stabilize
- Use the 99% occupied bandwidth function to determine the occupied bandwidth.

TEST RESULTS

PASS

Please refer to the following tables.

Test Date: February 25, 2026		Test Result: PASS		
Frequency (MHz)	Test Power	Packet Type	Test Result (MHz)	Limit
TX Hopping (GFSK)				
2402-2480	NV	DH1	78.580	<83.5MHz
		DH3	78.590	<83.5MHz
		DH5	78.586	<83.5MHz
	LV	DH1	--	--
		DH3	--	--
		DH5	--	--
	HV	DH1	--	--
		DH3	--	--
		DH5	--	--
TX Hopping (π/4-DQPSK)				
2402-2480	NV	2-DH1	78.634	<83.5MHz
		2-DH3	78.692	<83.5MHz
		2-DH5	78.764	<83.5MHz
	LV	2-DH1	--	--
		2-DH3	--	--
		2-DH5	--	--
	HV	2-DH1	--	--
		2-DH3	--	--
		2-DH5	--	--

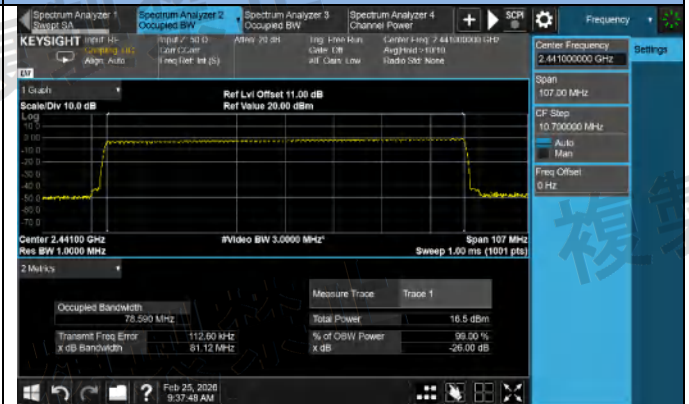
Frequency (MHz)	Test Power	Packet Type	Test Result (MHz)	Limit
TX Hopping (8DPSK)				
2402-2480	NV	3-DH1	78.667	<83.5MHz
		3-DH3	78.696	<83.5MHz
		3-DH5	78.705	<83.5MHz
	LV	3-DH1	--	--
		3-DH3	--	--
		3-DH5	--	--
	HV	3-DH1	--	--
		3-DH3	--	--
		3-DH5	--	--

Test Plots - (Normal Voltage)

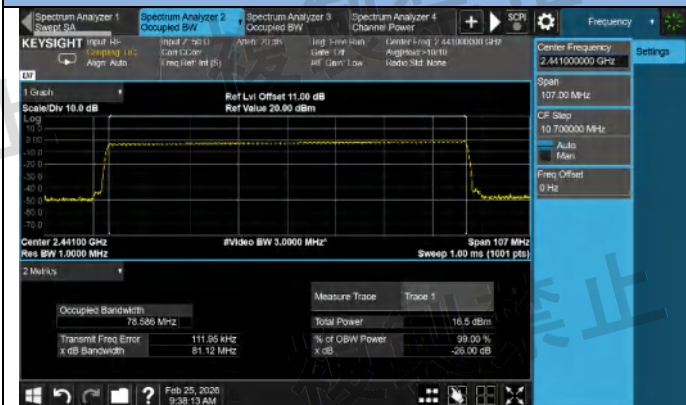
GFSK DH1



GFSK DH3



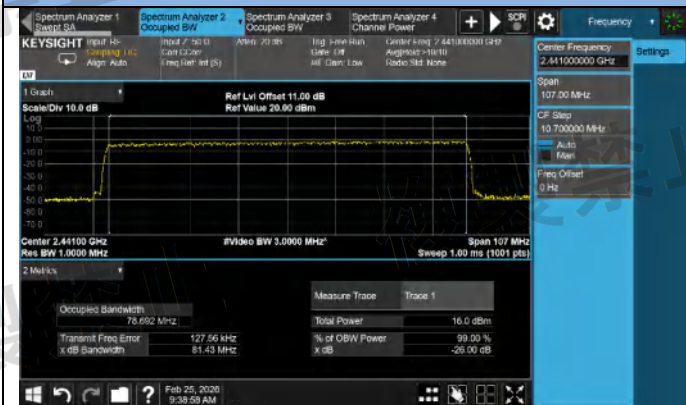
GFSK DH5



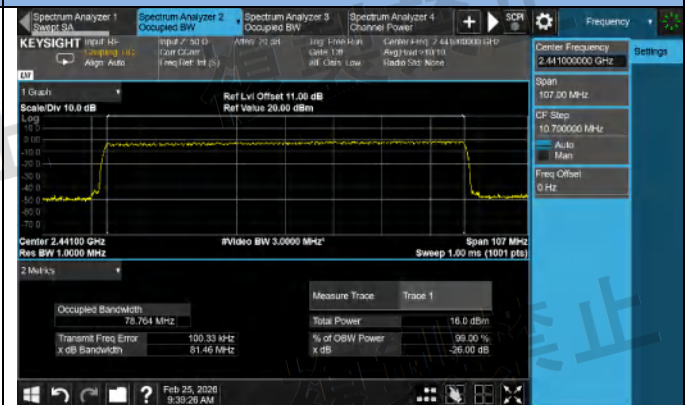
$\pi/4$ -DQPSK 2-DH1



$\pi/4$ -DQPSK 2-DH3



$\pi/4$ -DQPSK 2-DH5

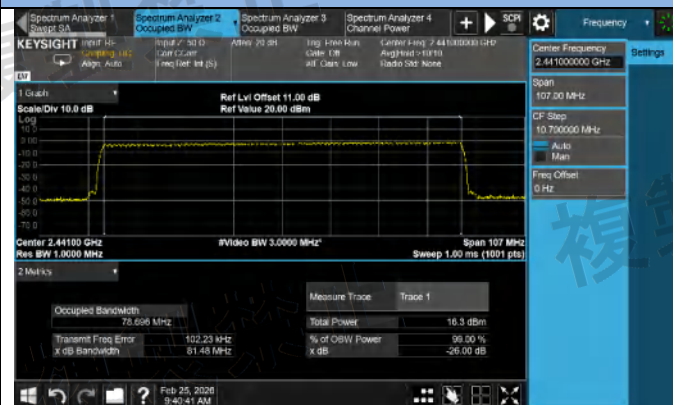


Test Plots - (Normal Voltage)

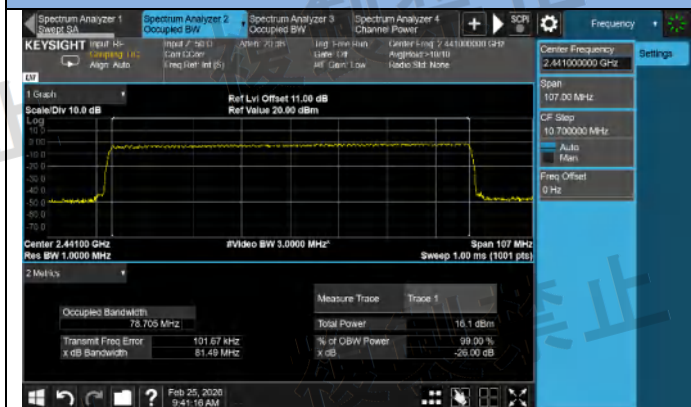
8DPSK 3-DH1



8DPSK 3-DH3



8DPSK 3-DH5



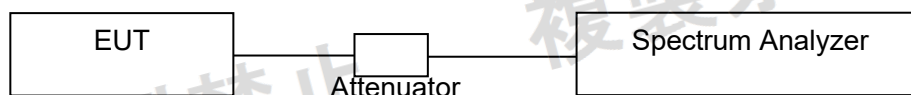
Black

13.3 Spread-Spectrum Bandwidth (90%)

LIMITS

Standard	Type	Limit
Item 19 of Article 2-1	Spread-Spectrum	Only for reported

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

1. The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - a. Set frequency to 2402 ~ 2480 MHz
 - b. Set the RBW to 1 MHz
 - c. Set the VBW $\geq$ RBW
 - d. Set the span to 107.5 MHz
 - e. Set the Detector = peak
 - f. Set the Sweep time = auto couple
 - g. Set the Trace mode = max hold
2. Allow trace to fully stabilize
3. Use the 90% occupied bandwidth function to determine the Spread-Spectrum bandwidth.

TEST RESULTS

PASS

Please refer to the following tables.

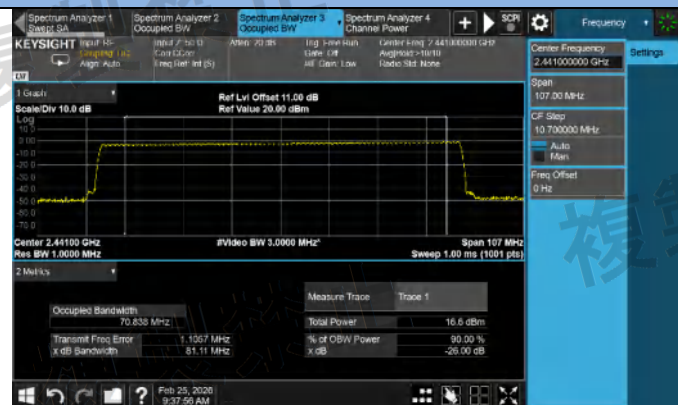
Test Date: February 25, 2026		Test Result: PASS		
Frequency (MHz)	Test Power	Packet Type	Test Result (MHz)	Limit
TX Hopping (GFSK)				
2402-2480	NV	DH1	70.763	Reporting only
		DH3	70.838	Reporting only
		DH5	70.886	Reporting only
	LV	DH1	--	--
		DH3	--	--
		DH5	--	--
	HV	DH1	--	--
		DH3	--	--
		DH5	--	--
TX Hopping (π/4-DQPSK)				
2402-2480	NV	2-DH1	70.916	Reporting only
		2-DH3	71.025	Reporting only
		2-DH5	70.874	Reporting only
	LV	2-DH1	--	--
		2-DH3	--	--
		2-DH5	--	--
	HV	2-DH1	--	--
		2-DH3	--	--
		2-DH5	--	--
TX Hopping (8DPSK)				
2402-2480	NV	3-DH1	71.077	Reporting only
		3-DH3	70.715	Reporting only
		3-DH5	70.849	Reporting only
	LV	3-DH1	--	--
		3-DH3	--	--
		3-DH5	--	--
	HV	3-DH1	--	--
		3-DH3	--	--
		3-DH5	--	--

Test Plots - (Normal Voltage)

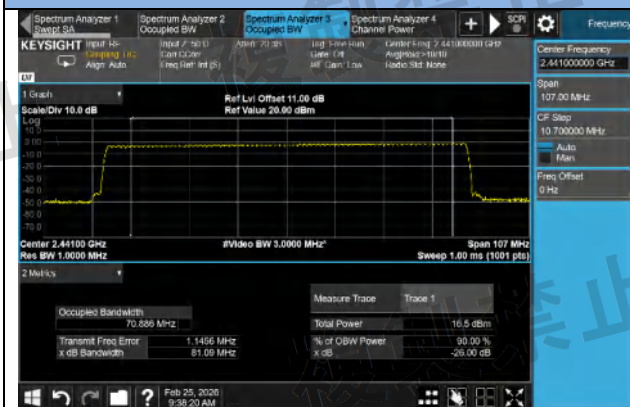
GFSK DH1



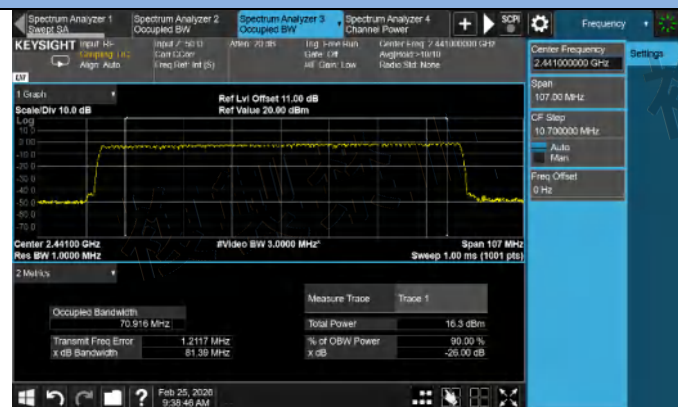
GFSK DH3



GFSK DH5



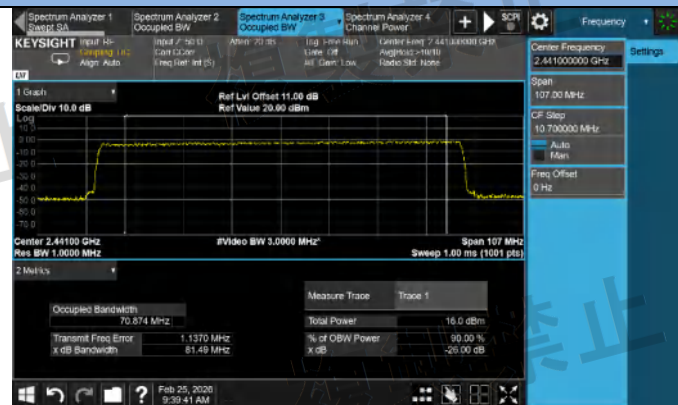
$\pi/4$ -DQPSK 2-DH1



$\pi/4$ -DQPSK 2-DH3



$\pi/4$ -DQPSK 2-DH5

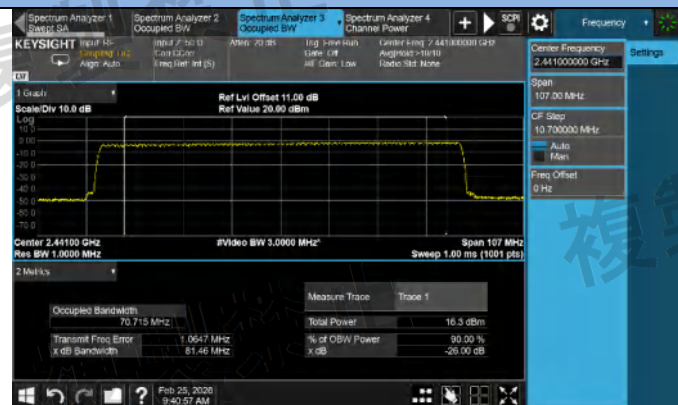


Test Plots - (Normal Voltage)

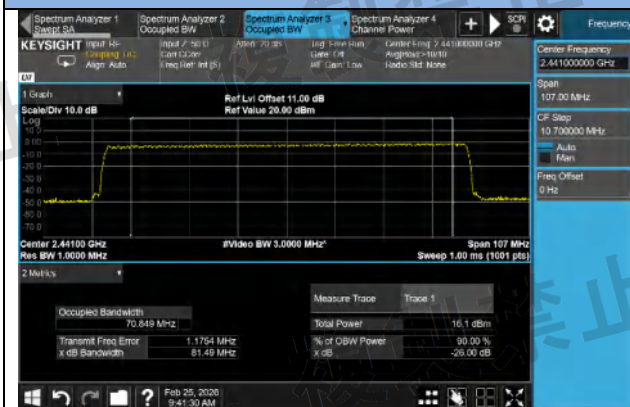
8DPSK 3-DH1



8DPSK 3-DH3



8DPSK 3-DH5



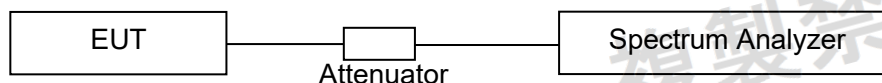
Black

13.4 Spurious Emission Intensity

LIMITS

Standard	Item	Frequency	Limit
Item 19 of Article 2-1	TX Spurious Emission	30 - 2387MHz	< 2.5uW/-26dBm/MHz
		2387 - 2400MHz	< 25uW/-16dBm/MHz
		2483.5 - 2496.5MHz	< 25uW/-16dBm/MHz
		2496.5MHz - 12.5GHz	< 2.5uW/-26dBm/MHz

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

- The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - Set frequency to: 30 ~ 2387 MHz, 2387 ~ 2400 MHz, 2483.5 ~ 2496.5 MHz, 2496.5 ~ 12500 MHz
 - Set the RBW to 1 MHz
 - Set the VBW ≥ RBW
 - Set the Detector = peak
 - Set the Sweep time = auto couple
 - Set the Trace mode = max hold
 - Allow trace to fully stabilize
- Use the peak marker function to determine the emissions.
- Mark center the maximum measured emission and set SPAN as 0, and then use the RMS or AVG detector to make the final reading, if necessary.

TEST RESULTS

PASS

Please refer to the following tables.

Test Date: February 25, 2026		Test Result: PASS	
Frequency (MHz)	Frequency Range	Test Result (dBm/MHz)	Limit (dBm/MHz)
Normal voltage			
TX (GFSK)			
2402	30 - 2387MHz	-39.84dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-31.64dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.50dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.09dBm/MHz	< -26 dBm/MHz
2441	30 - 2387MHz	-42.34dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-42.29dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.47dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-39.66dBm/MHz	< -26 dBm/MHz
2480	30 - 2387MHz	-41.26dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-42.54dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-35.72dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-39.04dBm/MHz	< -26 dBm/MHz
TX ($\pi/4$ -DQPSK)			
2402	30 - 2387MHz	-39.97dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-27.25dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.99dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.93dBm/MHz	< -26 dBm/MHz
2441	30 - 2387MHz	-41.14dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-42.91dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.84dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-39.65dBm/MHz	< -26 dBm/MHz
2480	30 - 2387MHz	-42.25dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-43.91dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-34.95dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-37.22dBm/MHz	< -26 dBm/MHz

Test Date: February 25, 2026		Test Result: PASS	
Frequency (MHz)	Frequency Range	Test Result	Limit
Normal voltage			
TX (8DPSK)			
2402	30 - 2387MHz	-38.95dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-28.42dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.57dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.93dBm/MHz	< -26 dBm/MHz
2441	30 - 2387MHz	-42.70dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-42.76dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-42.70dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-37.88dBm/MHz	< -26 dBm/MHz
2480	30 - 2387MHz	-41.52dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-43.47dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-36.10dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.75dBm/MHz	< -26 dBm/MHz

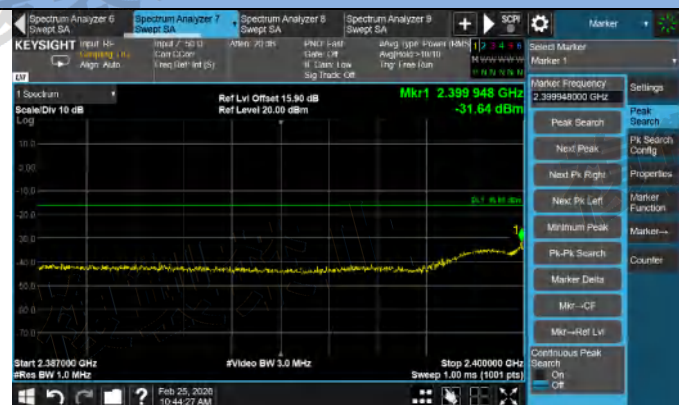
Test Date: February 25, 2026		Test Result: PASS	
Frequency (MHz)	Frequency Range	Test Result	Limit
Normal voltage			
TX Hopping (GFSK)			
2402-2480	30 - 2387MHz	-40.36dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-35.75dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-37.18dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-39.04dBm/MHz	< -26 dBm/MHz
TX Hopping ($\pi/4$ -DQPSK)			
2402-2480	30 - 2387MHz	-41.08dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-28.12dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-37.86dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.39dBm/MHz	< -26 dBm/MHz
TX Hopping (8DPSK)			
2402-2480	30 - 2387MHz	-40.32dBm/MHz	< -26 dBm/MHz
	2387 - 2400MHz	-29.20dBm/MHz	< -16 dBm/MHz
	2483.5 - 2496.5MHz	-38.13dBm/MHz	< -16 dBm/MHz
	2496.5MHz - 12.5GHz	-38.73dBm/MHz	< -26 dBm/MHz

Test Plots - Normal Voltage

GFSK / 2402MHz

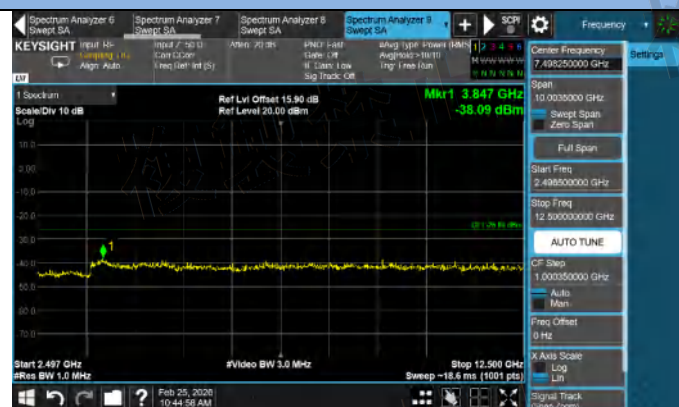
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz



Test Plots - Normal Voltage

GFSK / 2441MHz

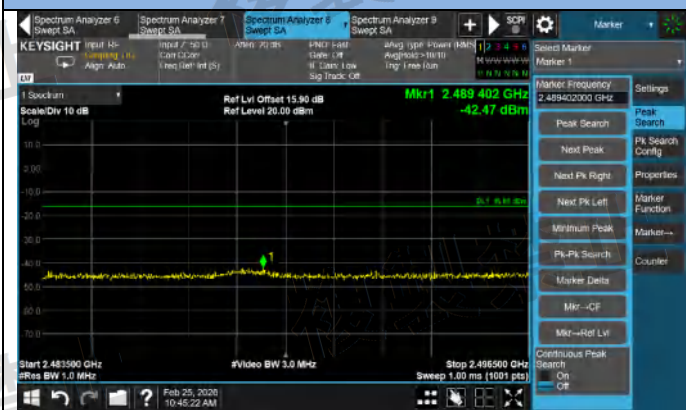
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

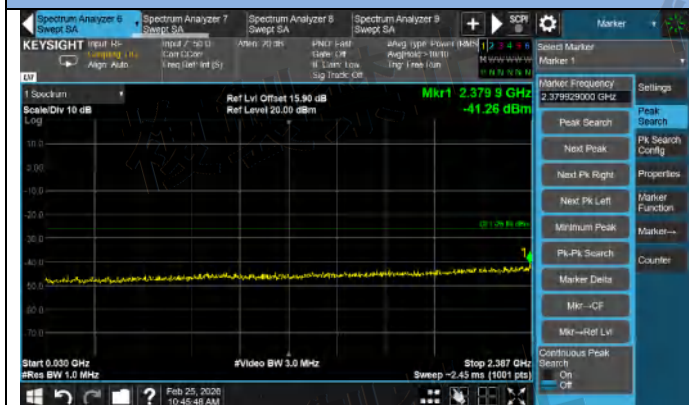
2496.5MHz-12.5GHz



Test Plots - Normal Voltage

GFSK / 2480MHz

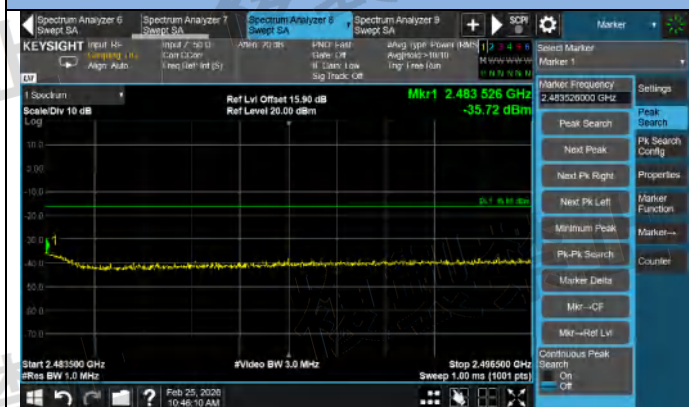
30-2387MHz



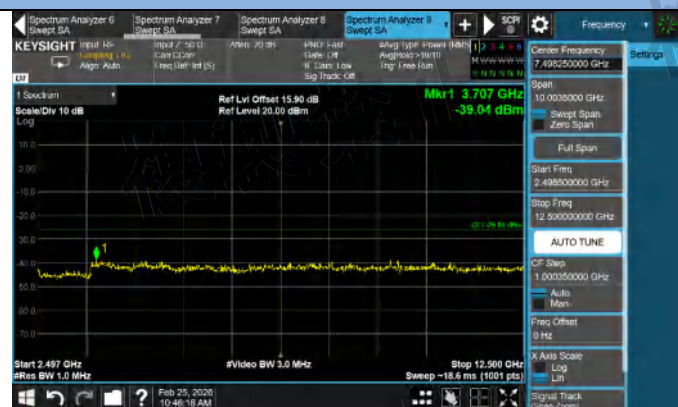
2387-2400MHz



2483.5-2496.5MHz



2496.5MHz-12.5GHz

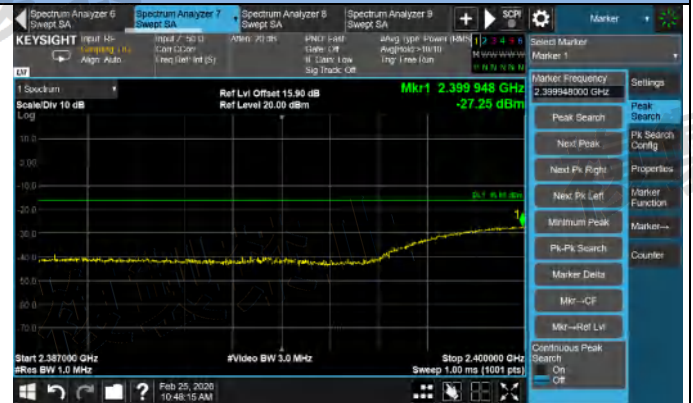
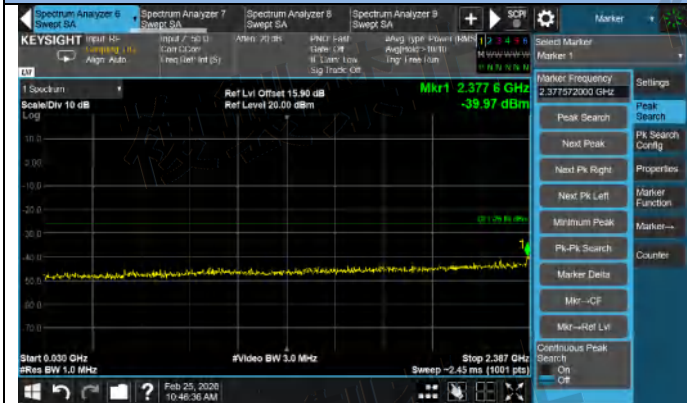


Test Plots - Normal Voltage

Π4-DQPSK / 2402MHz

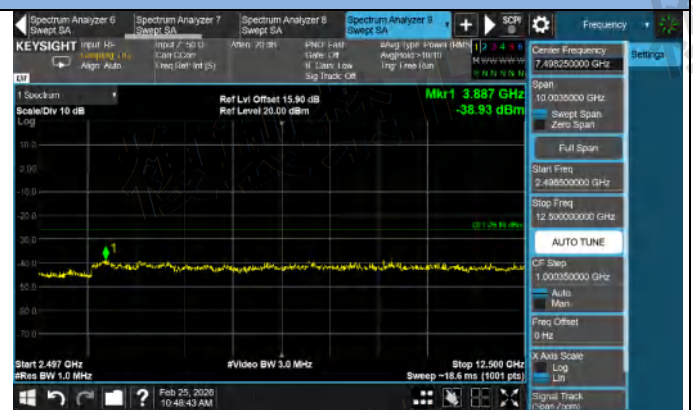
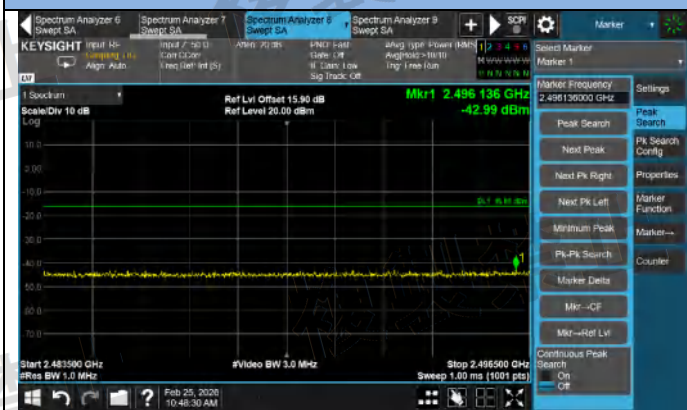
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz



Test Plots - Normal Voltage

Π4-DQPSK / 2441MHz

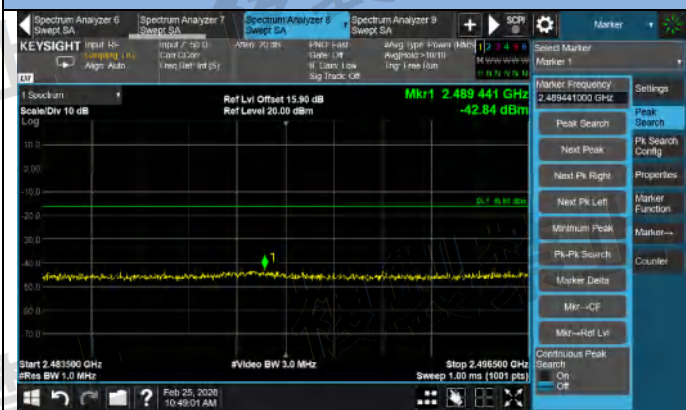
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

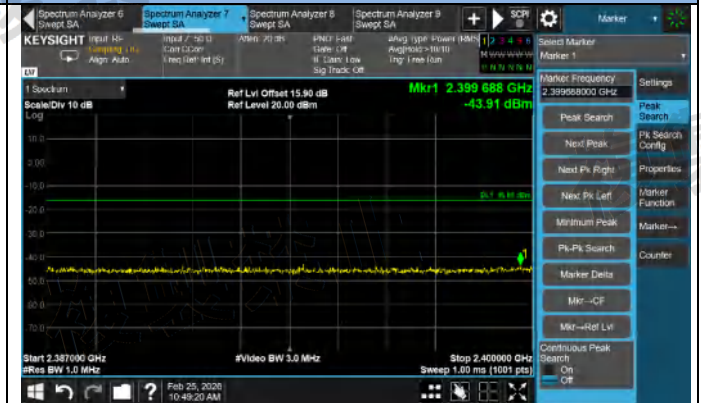


Test Plots - Normal Voltage

Π4-DQPSK / 2480MHz

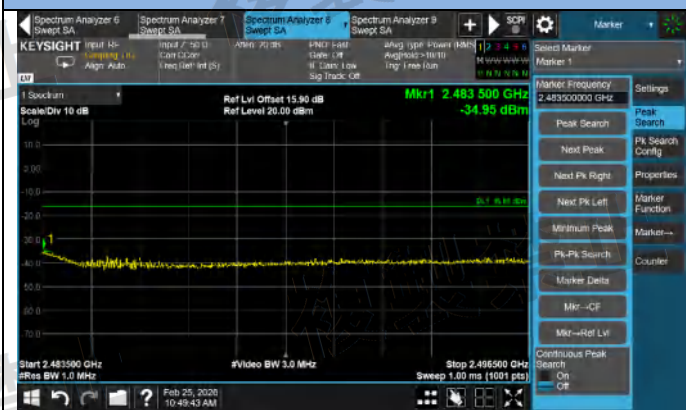
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

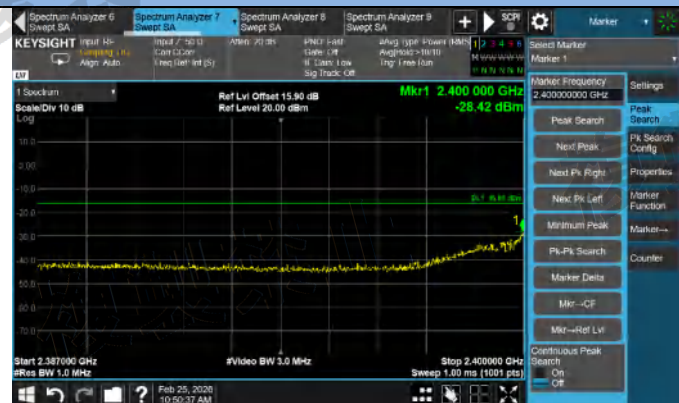
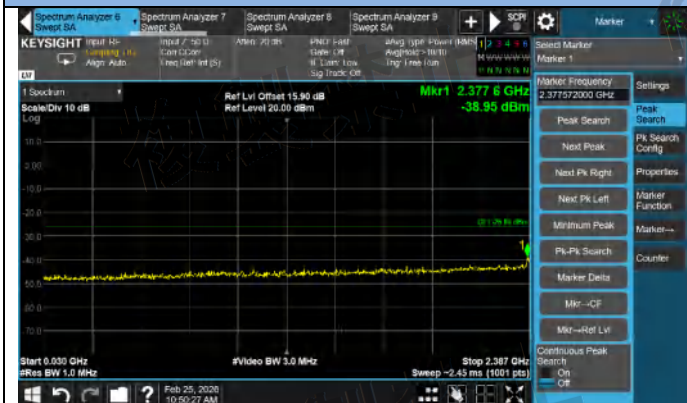


Test Plots - Normal Voltage

8DPSK / 2402MHz

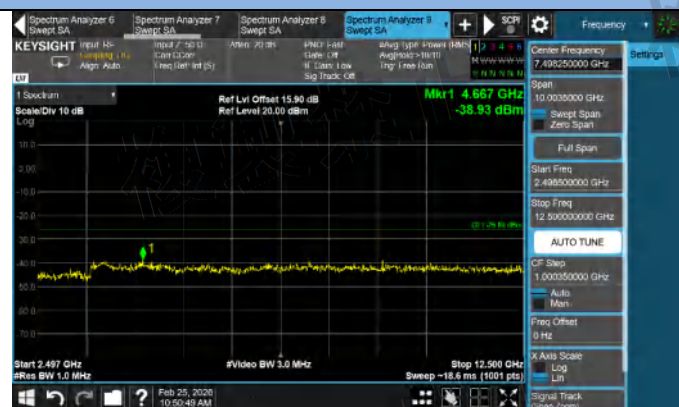
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

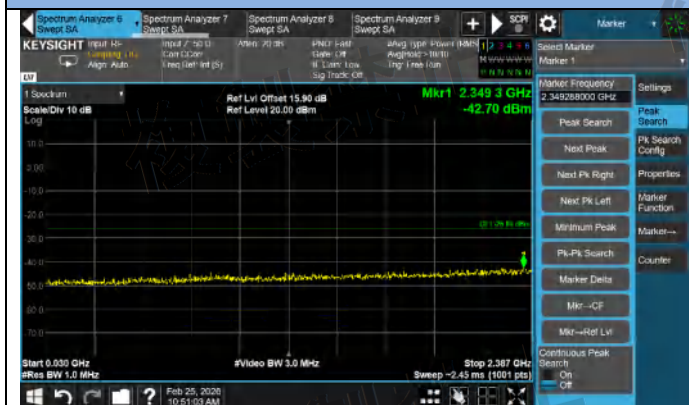


Test Plots - Normal Voltage

8DPSK / 2441MHz

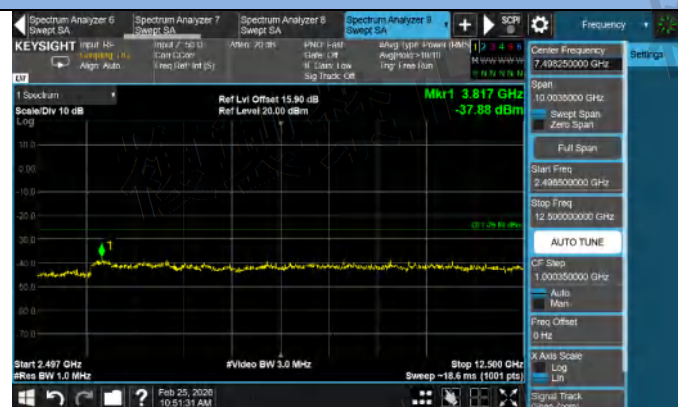
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

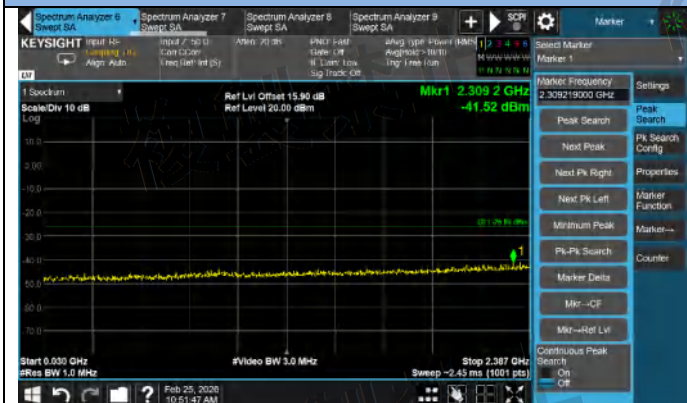


Test Plots - Normal Voltage

8DPSK / 2480MHz

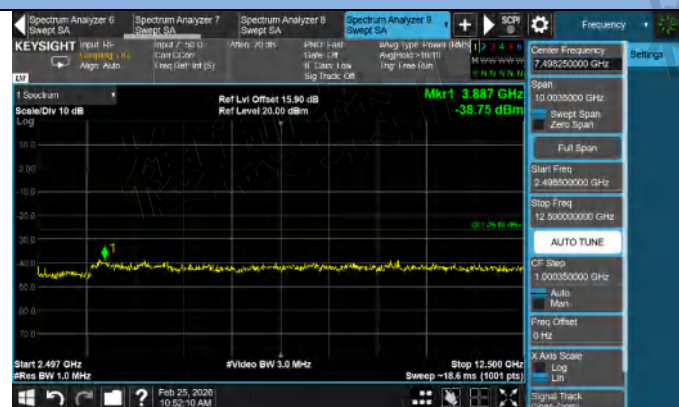
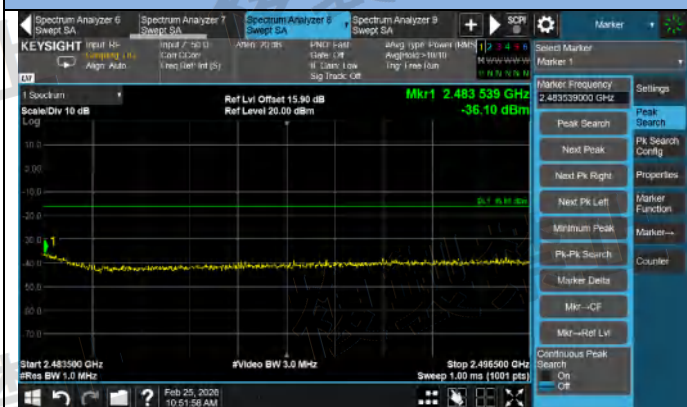
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

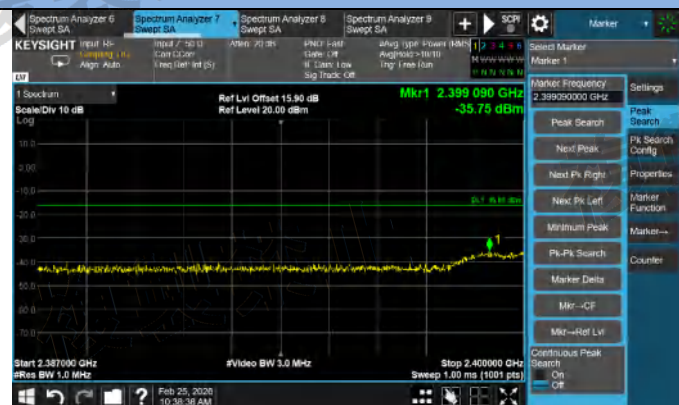


Test Plots - Normal Voltage

GFSK / Hopping

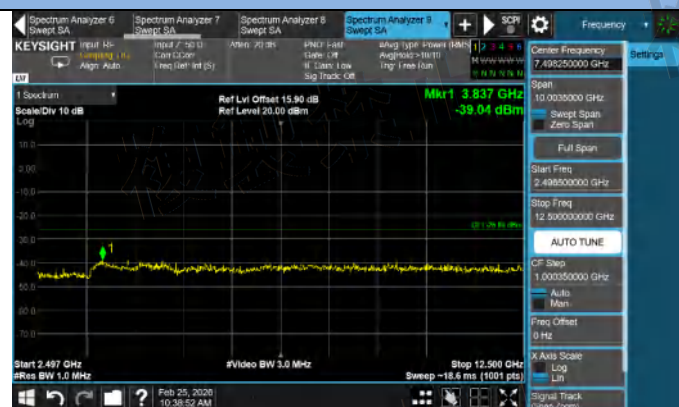
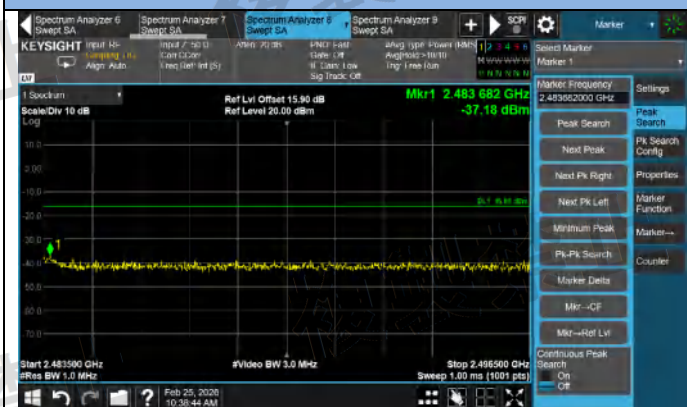
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

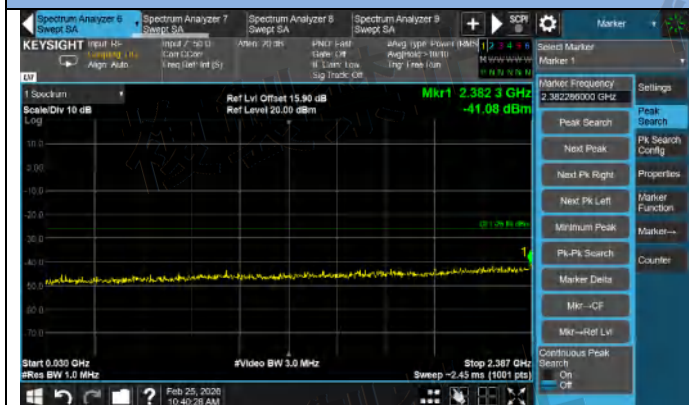


Test Plots - Normal Voltage

П4/-DQPSK / Hopping

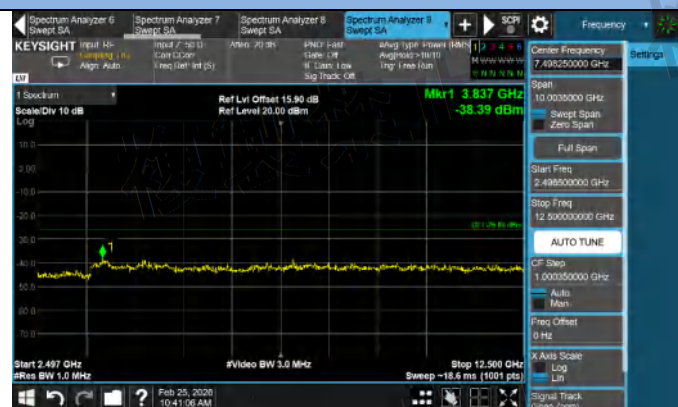
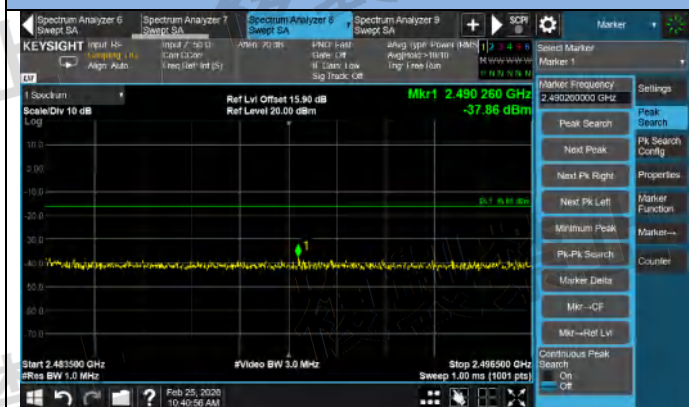
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

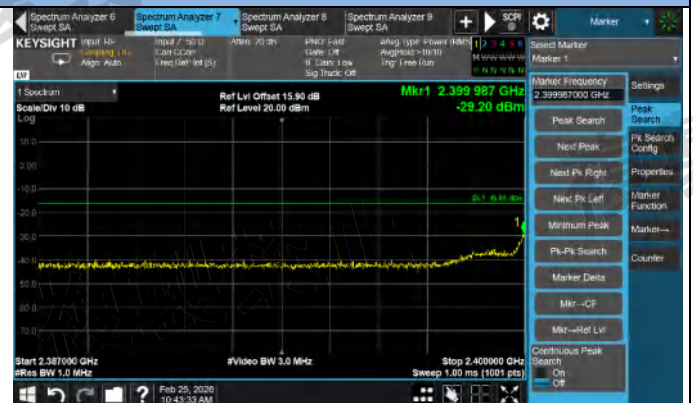
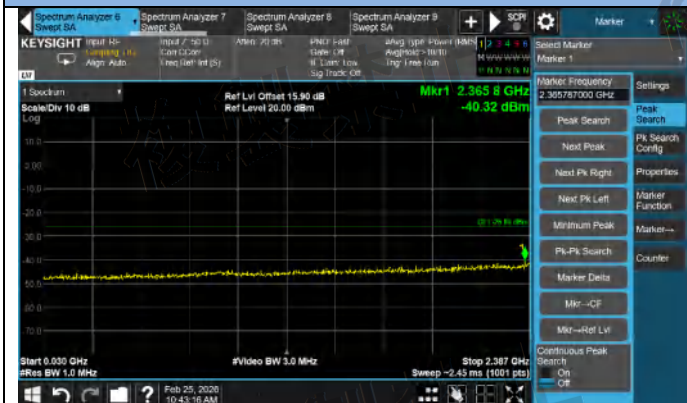


Test Plots - Normal Voltage

8DPSK / Hopping

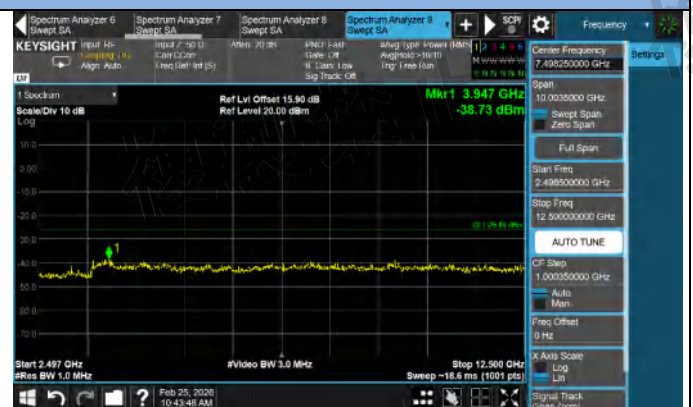
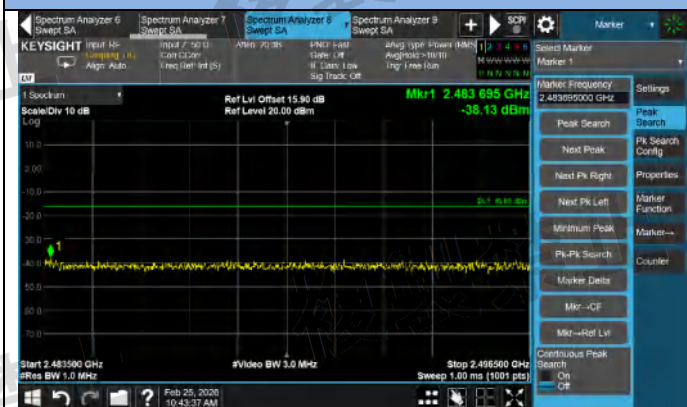
30-2387MHz

2387-2400MHz



2483.5-2496.5MHz

2496.5MHz-12.5GHz

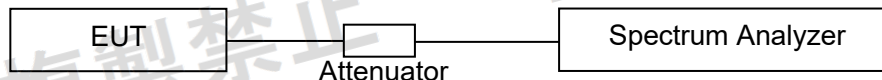


13.5 Limit of Secondary Spurious Emissions

LIMITS

Standard	Item	Frequency	Limit
Item 19 of Article 2-1	RX Spurious Emission	Below 1GHz	< 4nW/-54dBm
		Above 1GHz	< 20nW/-47dBm

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

1. The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - a. Set frequency to: 30 ~ 1000 MHz, 1000 ~ 12500 MHz
 - b. Set the RBW to 100 KHz for below 1GHz, and 1 MHz for above 1 GHz
 - c. Set the VBW $\geq$ RBW
 - d. Set the Detector = peak
 - e. Set the Sweep time = auto couple
 - f. Set the Trace mode = max hold
 - g. Allow trace to fully stabilize
2. Use the peak marker function to determine the emissions.
3. Mark center the maximum measured emission and set SPAN as 0, and then use the RMS or AVG detector to make the final reading, if necessary.

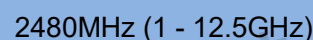
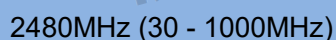
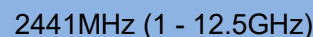
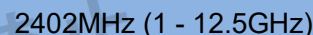
TEST RESULTS

PASS

Please refer to the following tables.

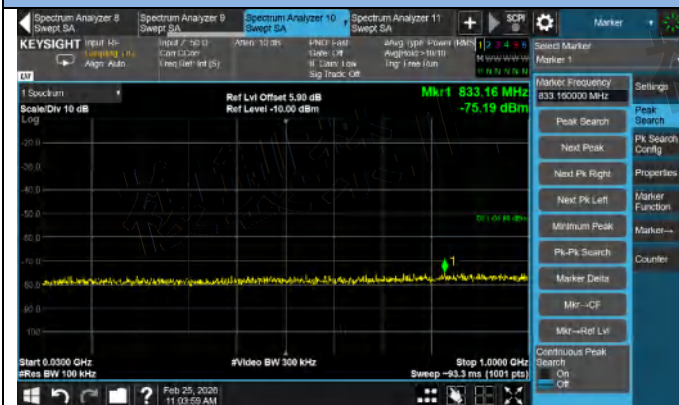
Test Date: February 25, 2026		Test Result: PASS	
Frequency (MHz)	Frequency Range	Test Result	Limit
RX (GFSK)– Normal Voltage			
2402	30 - 1000MHz	-74.54dBm	< -54dBm
	1 - 12.5GHz	-59.00dBm	< -47dBm
2441	30 - 1000MHz	-75.24dBm	< -54dBm
	1 - 12.5GHz	-58.10dBm	< -47dBm
2480	30 - 1000MHz	-74.83dBm	< -54dBm
	1 - 12.5GHz	-59.32dBm	< -47dBm
RX ($\pi/4$ -DQPSK) – Normal Voltage			
2402	30 - 1000MHz	-75.19dBm	< -54dBm
	1 - 12.5GHz	-59.18dBm	< -47dBm
2441	30 - 1000MHz	-74.73dBm	< -54dBm
	1 - 12.5GHz	-59.47dBm	< -47dBm
2480	30 - 1000MHz	-75.01dBm	< -54dBm
	1 - 12.5GHz	-58.18dBm	< -47dBm
RX (8DPSK) – Normal Voltage			
2402	30 - 1000MHz	-74.96dBm	< -54dBm
	1 - 12.5GHz	-58.71dBm	< -47dBm
2441	30 - 1000MHz	-74.85dBm	< -54dBm
	1 - 12.5GHz	-58.98dBm	< -47dBm
2480	30 - 1000MHz	-74.62dBm	< -54dBm
	1 - 12.5GHz	-59.53dBm	< -47dBm

2402MHz (30 - 1000MHz)

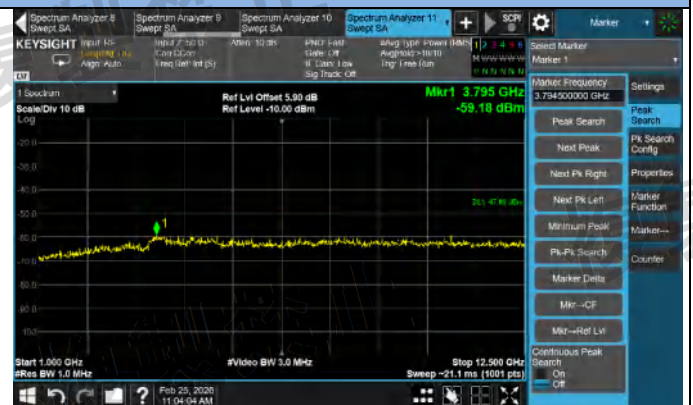


Test Plots – Π4/-DQPSK (Normal Voltage)

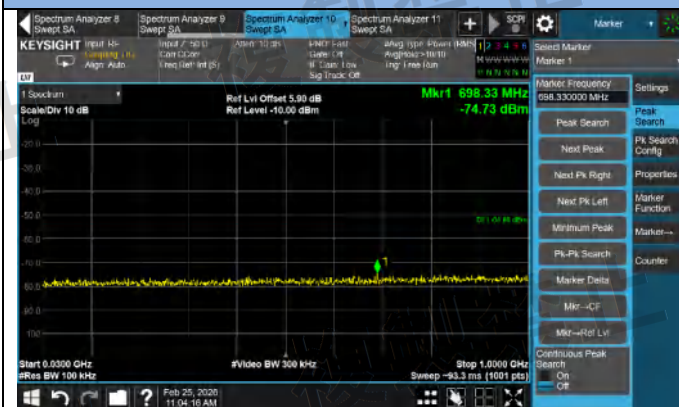
2402MHz (30 - 1000MHz)



2402MHz (1 - 12.5GHz)



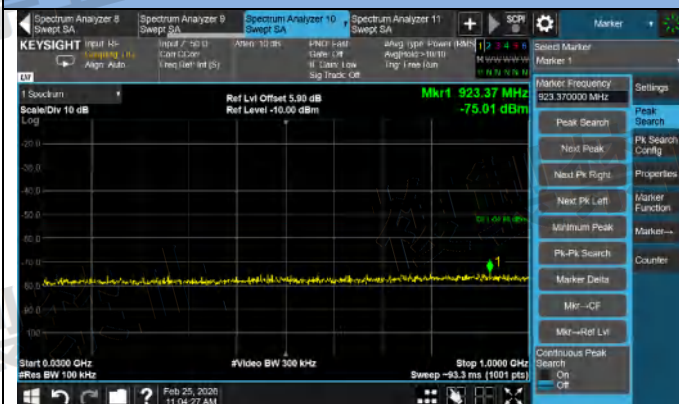
2441MHz (30 - 1000MHz)



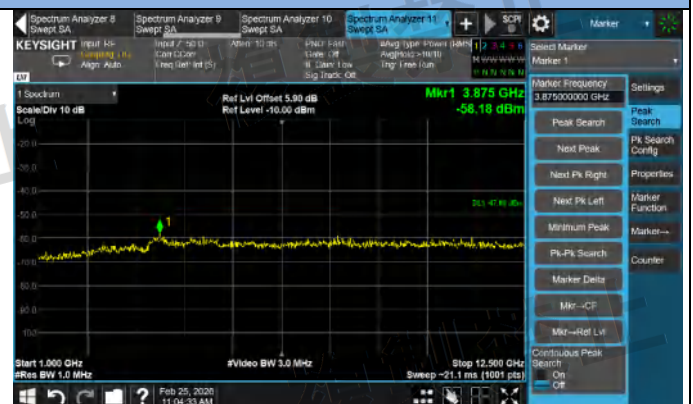
2441MHz (1 - 12.5GHz)



2480MHz (30 - 1000MHz)



2480MHz (1 - 12.5GHz)



Test Plots – 8DPSK (Normal Voltage)

2402MHz (30 - 1000MHz)



2402MHz (1 - 12.5GHz)



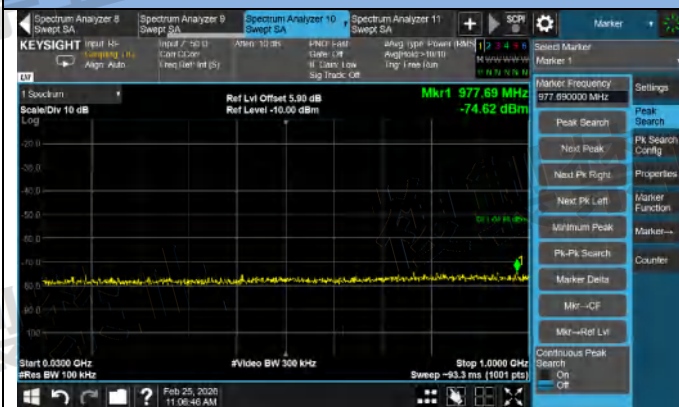
2441MHz (30 - 1000MHz)



2441MHz (1 - 12.5GHz)



2480MHz (30 - 1000MHz)



2480MHz (1 - 12.5GHz)

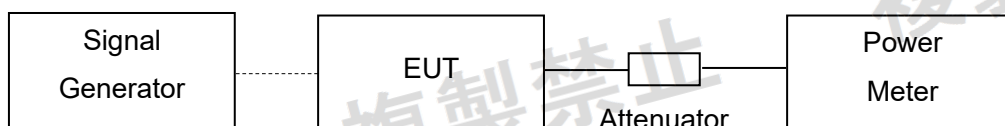


13.6 Antenna Power Measurement

LIMITS

Standard	Item	Spread Spectrum Method	Limit
Article 2-1 Item 19	Antenna Power	FHSS	3mW/MHz or less (2427 - 2470.75MHz)
			10mW/MHz or less (2400 - 2483.5MHz)
		DSSS	10mW/MHz or less
		OFDM	10mW/MHz or less (Occupied bandwidth within 26MHz)
			5mW/MHz or less (Occupied bandwidth 26 - 40MHz)
		Other	10mW/MHz or less
	Antenna Power Tolerance	---	+20% or less

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

1. Connect the EUT antenna terminal to the Power Meter and measure the total power.
2. Divide the total power by the spread bandwidth to find the average power per MHz.

TEST RESULTS

PASS

Please refer to the following table.

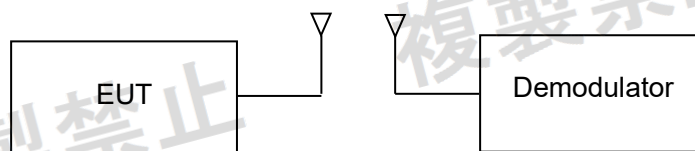
Test Date: February 25, 2026				Test Result: PASS					
Frequency (MHz)	Test Voltage	Power Output (dBm)	Power Output (mW)	Spread Bandwidth (MHz)	Antenna Power Output (mW/MHz)	Limit (mW/MHz)	Rating antenna power (mW/MHz)	Antenna Power Error (mW/MHz)	Antenna Power Error (+20%)
GFSK Hopping – DH5									
2402-2480	NV	16.08	40.55	70.886	0.572	< 3	1.0	-0.428	-42.80%
	LV	--	--	--	--	--	--	--	--
	HV	--	--	--	--	--	--	--	--
π/4-DQPSK Hopping – 2-DH1									
2402-2480	NV	16.00	39.81	70.916	0.561	< 3	1.0	-0.439	-43.90%
	LV	--	--	--	--	--	--	--	--
	HV	--	--	--	--	--	--	--	--
8DPSK Hopping – 3-DH1									
2402-2480	NV	16.03	40.09	71.077	0.564	< 3	1.0	-0.436	-43.60%
	LV	--	--	--	--	--	--	--	--
	HV	--	--	--	--	--	--	--	--
EIRP GFSK (The Worst Case)									
Antenna Power Output (dBm/ MHz)			Antenna Gain (dBi)				EIRP (dBm/MHz)		
-0.243			4.7				4.457		
Note:									
1. Rating antenna power (mW/MHz) declared by the manufacturer.									
2. Antenna Power Error (mW/MHz) = Test Result (mW/MHz) - Rating antenna power (mW/MHz)									
3. Antenna Power Error (+20% or less) = Antenna Power Error (mW/MHz) / Rating antenna power (mW/MHz) * 100%.									
4. When an E.I.R.P. is less than 2.14dBi + antenna power limit, the shortage can be compensated for by the antenna power.									
5. EIRP(dBm/MHz)=Antenna Power Output (dBm/MHz) + Antenna Gain (dBi)									

13.7 Radio Interface Prevention Function

LIMITS

Standard	Item	Limit
Item 19 of Article 2-1	Identification code	≥48 bits

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

1. In the case that the EUT has the function of automatically transmitting the identification code:
 - a. Transmit the predetermined identification codes form EUT.
 - b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code:
 - a. Transmit the predetermined identification codes form the counterpart.
 - b. Check if communication is normal.
 - c. Transmit the signals other than predetermined ID codes form the counterpart.
 - d. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

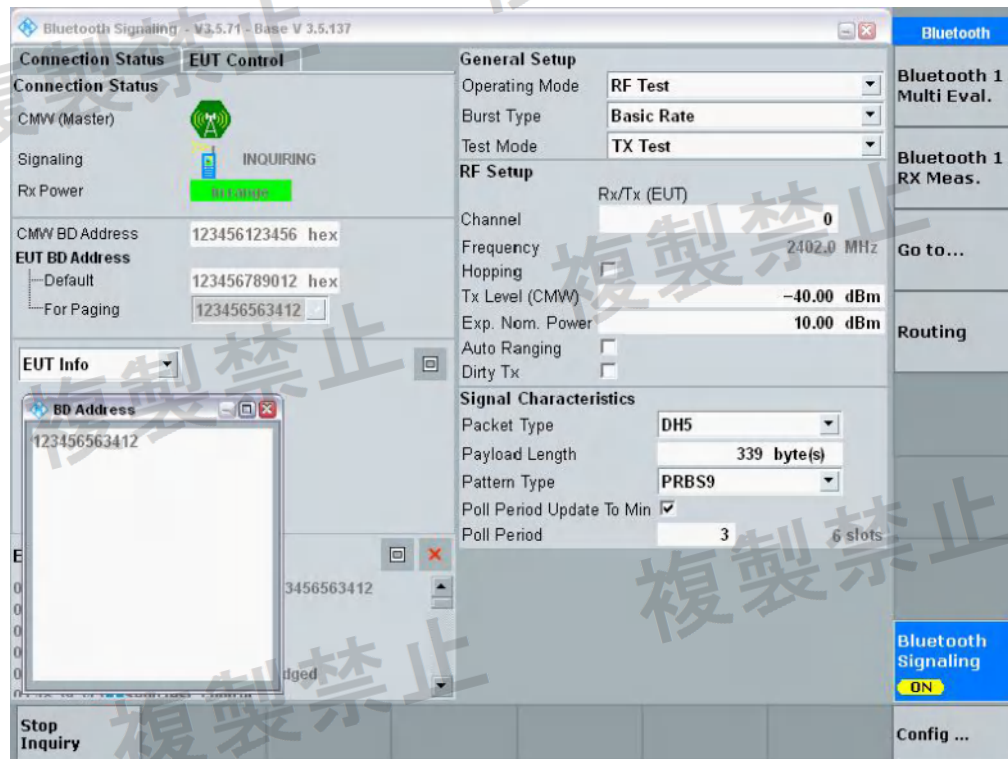
TEST RESULTS

PASS

Please refer to the following table.

Test Date: February 25, 2026

MAC Address	Result
12:34:56:56:34:12	Pass

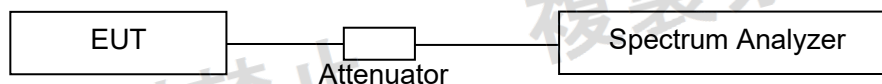


13.8 Dwell Time

LIMITS

Standard	Item	Limit
Item 19 of Article 2-1	Hopping Frequency Dwell Time	<0.4s

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

1. The antenna port of the EUT was connected to the input of a spectrum analyzer. And analyzer was set as below:
 - a. Set frequency to test frequency
 - b. Set the RBW to 1 MHz
 - c. Set the VBW $\geq$ RBW
 - d. Set the span to zero
 - e. Set the Detector = peak
 - f. Set the Sweep time = auto couple
 - g. Set the Trace mode = max hold
2. Set the EUT transmitting different packet to determine the maximum time duration of one single pulse.

TEST RESULTS

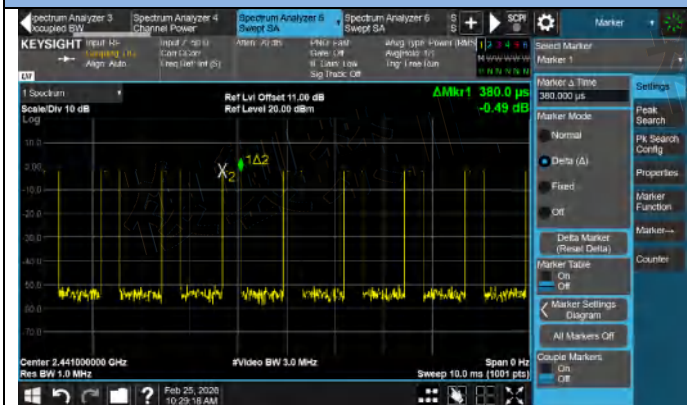
PASS

Please refer to the following tables.

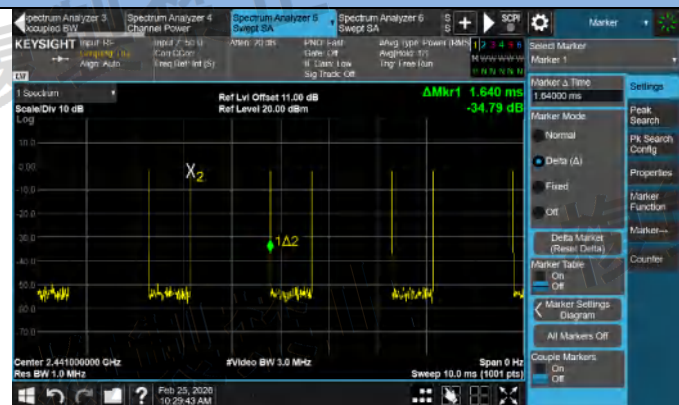
Test Date: February 25, 2026		Test Result: PASS			
Test Voltage: Normal Voltage					
Packet Type	90% Spread BW (MHz)	Sending time of 1 burst (ms)	Per second number of transmission	Dwell Time (s)	Limit (s)
GFSK Hopping					
DH1	70.763	0.380	10.13	0.1090	<0.4
DH3	70.838	1.640	5.06	0.2351	<0.4
DH5	70.886	2.890	3.38	0.2770	<0.4
π/4-DQPSK Hopping					
2-DH1	70.916	0.400	10.13	0.1149	<0.4
2-DH3	71.025	1.640	5.06	0.2358	<0.4
2-DH5	70.874	2.890	3.38	0.2769	<0.4
8DPSK Hopping					
3-DH1	71.077	0.390	10.13	0.1123	<0.4
3-DH3	70.715	1.650	5.06	0.2362	<0.4
3-DH5	70.849	2.890	3.38	0.2768	<0.4
Note:					
1. No. of Hopping Channel = 79					
2. Spreading rate = Spread Bandwidth / transmission rate					
3. Per second Number of Transmission / DH1= 1600/(2*79), DH3 = 1600/(4*79), DH5 = 1600/(6*79)					
4. Dwell time = 0.4s * spreading rate * sending time of 1 burst * Per second number of transmission					
5. Transmission rate = 1					

Test Plots – Normal Voltage

GFSK DH1



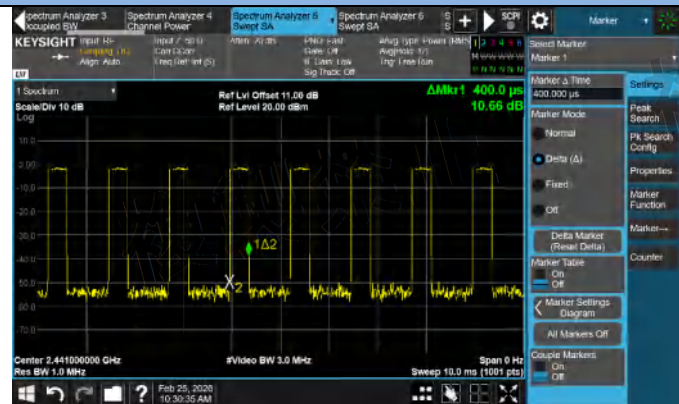
GFSK DH3



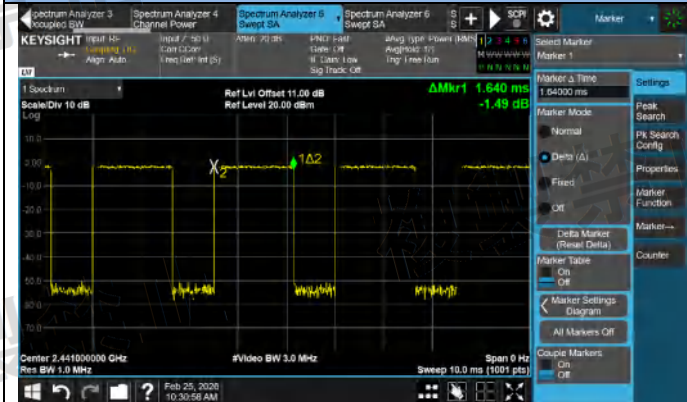
GFSK DH5



Π4-DQPSK 2-DH1



Π4-DQPSK 2-DH3

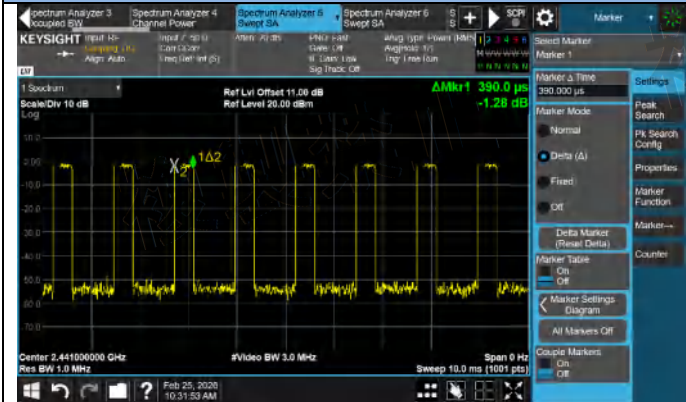


Π4-DQPSK 2-DH5

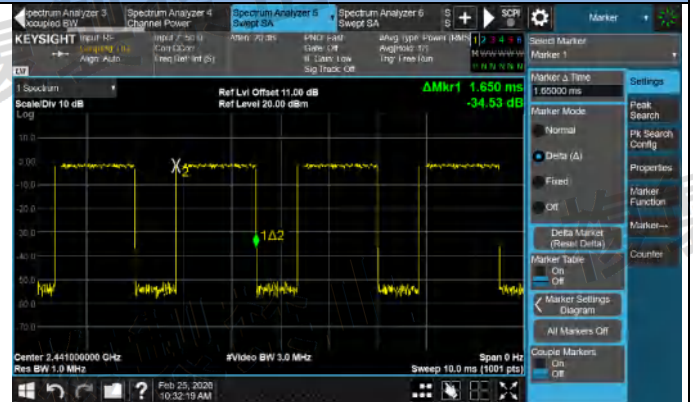


Test Plots – Normal Voltage

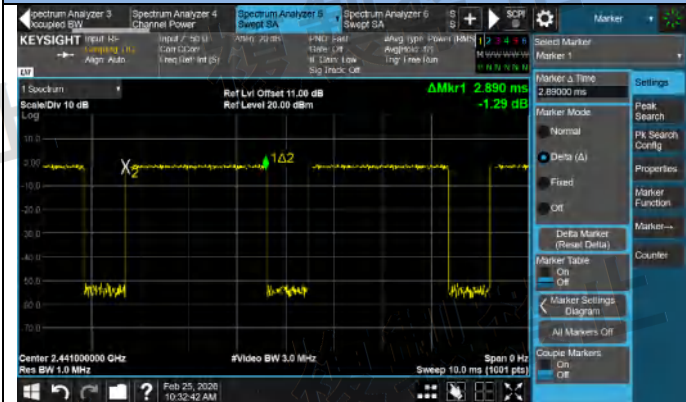
8DPSK 3-DH1



8DPSK 3-DH3



8DPSK 3-DH5



Black

14. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Keysight	N9010B	MY62170254	Aug. 21, 2025	1 Year
2.	Signal Generator	Agilent	E4421B	MY41000708	Aug. 22, 2025	1 Year
3.	Signal Generator	Agilent	N5182A	MY47071034	Aug. 22, 2025	1 Year
4.	Spectrum Analyzer	Keysight	N9020A	MY54200831	Aug. 22, 2025	1 Year
5.	Power Sensor	DARE	RPR3006W	15I00041SNO 64	Aug. 28, 2025	1 Year
6.	Power Meter	Agilent	N1912A	MY41497159	Aug. 21, 2025	1 Year
7.	Power Sensor	Agilent	N1921A	MY48251036	Aug. 21, 2025	1 Year
8.	Communication Tester	Rohde & Schwarz	CMW500	109851	Aug. 28, 2025	1 Year
9.	DC Source	ZHAOXIN	KXN305D	N/A	Aug. 23, 2025	1 Year

Remark:

(a) Calibration conducted by the National Institute of Information and Communications Technology(NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article102-18paragraph (1) in JRL.

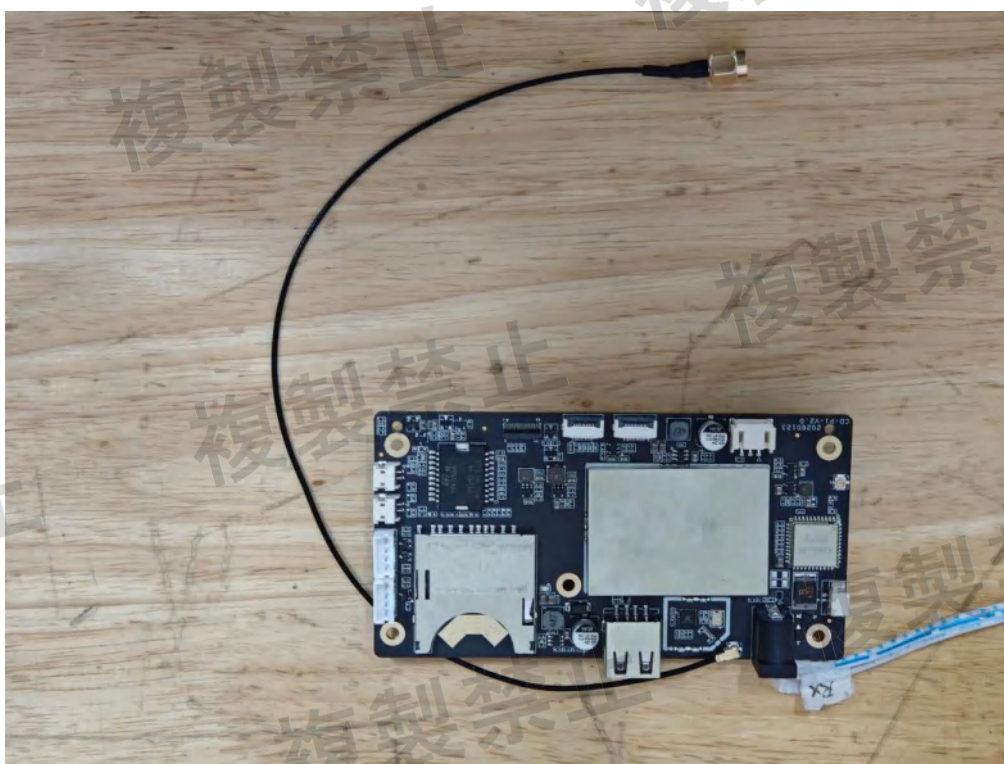
(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act(Act No. 51 of 1992) .

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (C) From JRL Article 24-2, paragraph 4, Item 2.

Note: Our lab selects method (c) for the calibration.

15. photograph of Test Setup



--End--