

TEST REPORT

Reference No...... : WTH26H03056177W002
Applicant..... : Shenzhen Jiayz photo industrial., Ltd
Address..... : A16 Building, Intelligent Terminal Industrial Park of Silicon Valley
Power, Guanlan, Longhua District, Shenzhen, China
Manufacturer..... : Shenzhen Jiayz photo industrial., Ltd
Address..... : A16 Building, Intelligent Terminal Industrial Park of Silicon Valley
Power, Guanlan, Longhua District, Shenzhen, China
Product Name..... : Dual-Channel Digital UHF Wireless Audio System for Filmmakers
Model No...... : K9 TX, K9 TX-JP
Test specification..... : Article 2 paragraph 1 item 19
Date of Receipt sample..... : 2026-03-09
Date of Test..... : 2026-03-13 to 2026-03-27
Date of Issue..... : 2026-03-31
Test Report Form No...... : TRFITEM19-RF-001-V01
Test Result..... : Pass

Prepared By:

Waltek Testing Group HCT (Shenzhen) Co., Ltd.

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Tony Wu

Contents

<u>1.</u>	<u>TEST STANDARDS AND REPORT VERSION</u>	<u>3</u>
1.1.	Test Standards	3
1.2.	Report version	3
<u>2.</u>	<u>TEST DESCRIPTION</u>	<u>4</u>
<u>3.</u>	<u>SUMMARY</u>	<u>5</u>
3.1.	Client Information	5
3.2.	Product Description	5
3.3.	EUT operation mode	6
3.4.	Test Frequency	6
3.5.	EUT configuration	6
3.6.	Modifications	6
<u>4.</u>	<u>TEST ENVIRONMENT</u>	<u>7</u>
4.1.	Address of the test laboratory	7
4.2.	Environmental conditions	7
4.3.	Statement of the measurement uncertainty	7
4.4.	Application of decision rule	8
4.5.	Equipments Used during the Test	9
<u>5.</u>	<u>TEST CONDITIONS AND RESULTS</u>	<u>10</u>
5.1.	RF shielding method	10
5.2.	Frequency Error	11
5.3.	Antenna Power	14
5.4.	Occupy Bandwidth (99%)	19
5.5.	Spread spectrum bandwidth (90%)	22
5.6.	Spurious emission intensity	25
5.7.	Limit of secondary radiated emissions	35
5.8.	Radio Interference Prevention Capability Measurement	41
5.9.	Carrier Sense Capability Measurement	42
5.10.	Transmission Radiation Angle Width (3DB Beamwidth) Measurement	42
<u>6.</u>	<u>TEST SETUP PHOTOS OF THE EUT</u>	<u>44</u>
<u>7.</u>	<u>EXTERNAL AND INTERNAL PHOTOS OF THE EUT</u>	<u>45</u>

1. Test standards and Report version

1.1. Test Standards

The tests were performed according to following standards:

[Appendix No.43 of MIC Notification No 88 and Article 2 paragraph 1 item 19:](#) Low power data communications system in the 2.4GHz band.

1.2. Report version

Revision No.	Date of issue	Description
Rev.00	2026-03-31	Original

2. Test description

Test Item	Result
RF shielding method	PASS
Frequency Error	PASS
Antenna Power	PASS
99% Occupied bandwidth	PASS
Spread spectrum bandwidth	PASS
Spurious Emissions Intensity	PASS
Limit of secondary radiated emissions	PASS
Radio Interference Prevention Capability Measurement	PASS
Carrier Sense Capability Measurement	PASS

3. Summary

3.1. Client Information

Applicant:	Shenzhen Jiayz photo industrial ., Ltd
Address:	A16 Building, Intelligent Terminal Industrial Park of Silicon Valley Power, Guanlan,Longhua District, Shenzhen, China
Manufacturer:	Shenzhen Jiayz photo industrial ., Ltd
Address:	A16 Building, Intelligent Terminal Industrial Park of Silicon Valley Power, Guanlan,Longhua District, Shenzhen, China

3.2. Product Description

Name of EUT:	Dual-Channel Digital UHF Wireless Audio System for Filmmakers
Trade Mark:	Saramonic
Model/Type reference:	K9 TX
Listed Model(s):	K9 TX-JP
Power supply:	DC 3V by battery or DC 5V from adapter
Battery Capacity:	/
Adapter information:	/
Software Version:	V2.53
Hardware Version:	V1.0

Note: The test data is gathered from a production sample, provided by the manufacturer. The model naming of others models listed in the report is different from main-test model K9 TX, but the circuit and the electronic construction do not change, declared by the manufacturer.

RF Specification

Frequency Range:	2402MHz, 2426MHz, 2480MHz
Channel number:	3
Modulation type:	GFSK
Antenna Type:	Whip Antenna
Antenna Gain:	-7dBi
RF Rated output power:	1mW

3.3. EUT operation mode

The EUT has been tested under typical operating condition. The Applicant provides software to control the EUT for staying in continuous transmitting and receiving mode for testing.

3.4. Test Frequency

Test Channel	Channel No.	Frequency (MHz)
CH _L	00	2402
CH _M	01	2426
CH _H	02	2480

3.5. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- - supplied by the lab

○ AC/DC ADAPTOR	Manufacturer :	SHENZHEN JIYIN INDUSTRIAL CO.,LTD.
	Model No. :	JYSY005-0501000E
○ USB line	Length (m) :	0.6

3.6. Modifications

No modifications were implemented to meet testing criteria.

4. Test Environment

4.1. Address of the test laboratory

All measurement required was performed at Waltek Testing Group HCT (Shenzhen) Co., Ltd. At Building B, Tianji Industrial Park, 1/F. & 2/F. & 3/F., No.30-9, Laiyin Road, Xinsheng Community, Longgang Subdistrict, Longgang District, Shenzhen, Guangdong, China.

4.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

EUT supply power	RF module input power	Rated RF module power	Tolerance (%)
DC 3V	DC 3.3V	DC 3.3V	0
DC 2.7V	DC 3.3V	DC 3.3V	0
DC 3.3V	DC 3.3V	DC 3.3V	0
DC 5V	DC 3.3V	DC 3.3V	0
DC 4.5V	DC 3.3V	DC 3.3V	0
DC 5.5V	DC 3.3V	DC 3.3V	0
Conclusion: when the input voltage to EUT from the external source changes at 10%, the change of the input voltage to RF Module circuit of EUT is less 1%, another test item only need to test for normal condition.			
Other	Normal Temperature/Tnor:	23°C	
	Relative Humidity	57 %	
	Air Pressure	101 Kpa	

4.3. Statement of the measurement uncertainty

Parameter	Uncertainty
Frequency Error	70 Hz
Total RF power, conducted	0.51 dB
Spurious emissions, conducted	0.51 dB
DC and low frequency voltages	3%
Humidity	5%
Temperature	1°C

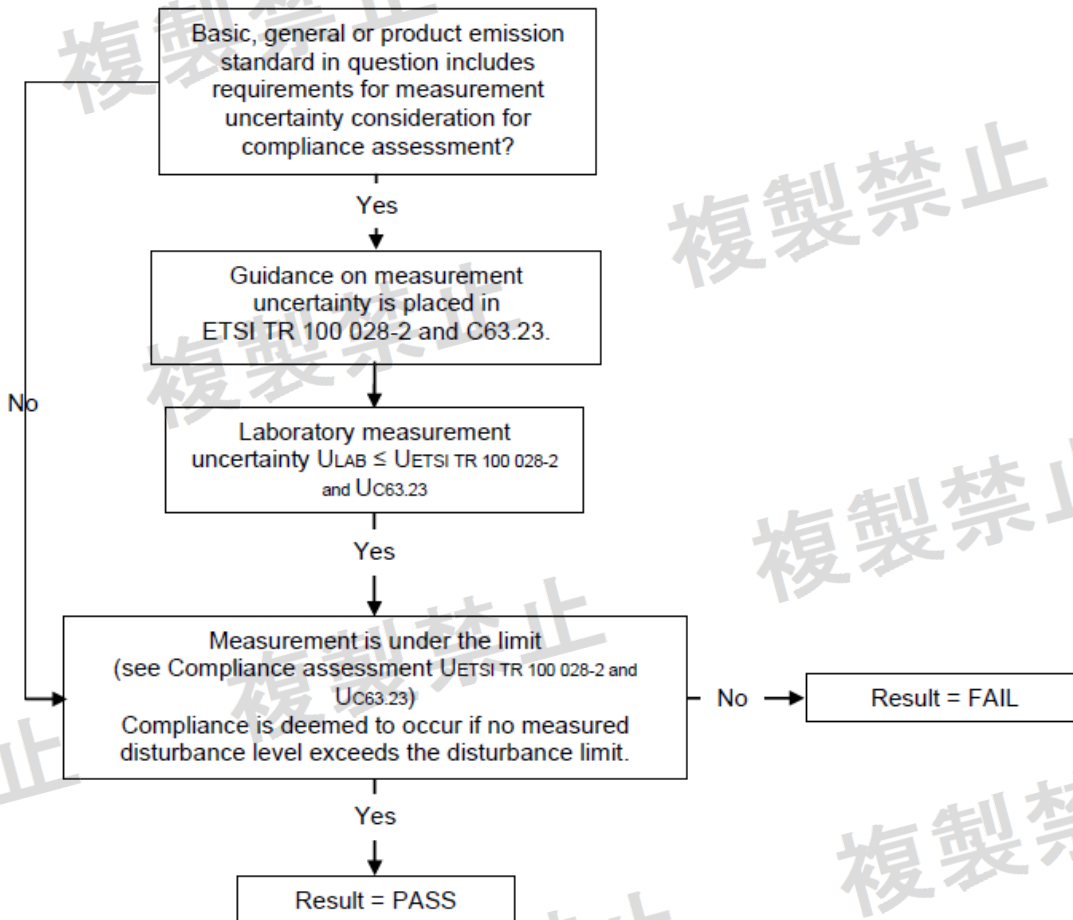
For the test methods, according to the present document, the measurement uncertainty figures shall be calculated in accordance with TR100028-1 [2] and shall correspond to an expansion factor (coverage factor) $K=1.96$ or $K=2$ (which provide confidence levels of respectively 95% and 95.5% in the case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

4.4. Application of decision rule

Application of decision rule and statement of conformity is defined in document CNAS-GL015 Decision rule and measurement uncertainty.

As a general rule Pass/Fail decisions are based on simple acceptance and acceptance limits chosen based on simple acceptance ($w = 0$, $AL = TL$) except if a decision rule is governed by particular standard or guidance document.

Decision rule:



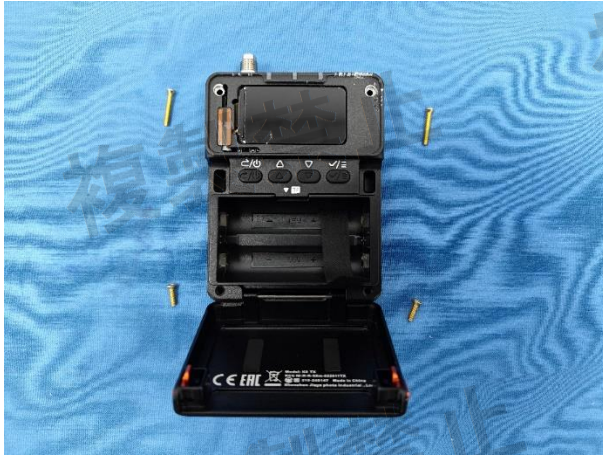
4.5. Equipments Used during the Test

Management number	Description	Manufacturer	Model	Serial Number	Cal Date	Due Date	Calibration Methods
WTHW1001A1-003	Spectrum Analyzer	Keysight	N9020A	/	2025-12-10	2026-12-09	JJF 1396-2013
WTHW1003A1-001	Power Meter	DARE!!	RPR3006W	/	2025-12-10	2026-12-09	JJF 1757-2019
WTHW1002A1-001	Vector Signal Generator	Agilent	N5182A	MY47071034	2026-01-14	2027-01-13	JJF 1931-2021
Software List							
Description		Manufacturer		Model		Version	
Test Software		Pomis		PTS2450		2.0.0.1 [#]	
[#] Remark: indicates software version used in the compliance certification testing Calibration laboratory: CCIC (Shenzhen) Metrology & Testing Service Co.,Ltd Calibration laboratory address: ShengHui Hongxing Chuangzhi Square, Tongren Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen Calibrated by:Jinhui Liu Calibration Methods: Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act							

5. Test conditions and Results

5.1. RF shielding method

Rf shielding method: The enclosure is sealed by Special screws, it can not be easily open. Otherwise, the device will be damaged.

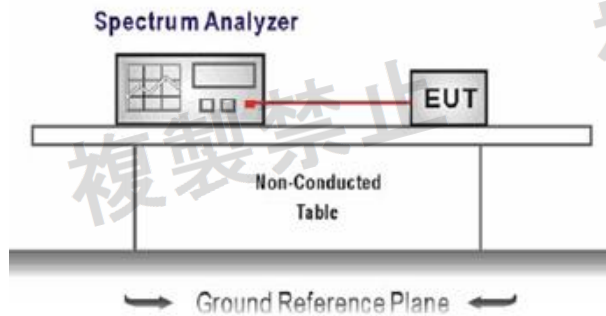


5.2. Frequency Error

LIMIT

50ppm

TEST CONFIGURATION



TEST CONDITION

Without modulation, continuously transmitting

SPECTRUM SET:

Test Frequency= test channel,

RBW=VBW=10KHz, Span=1MHz, Sweep time=Auto, Detector mode=Positive peak

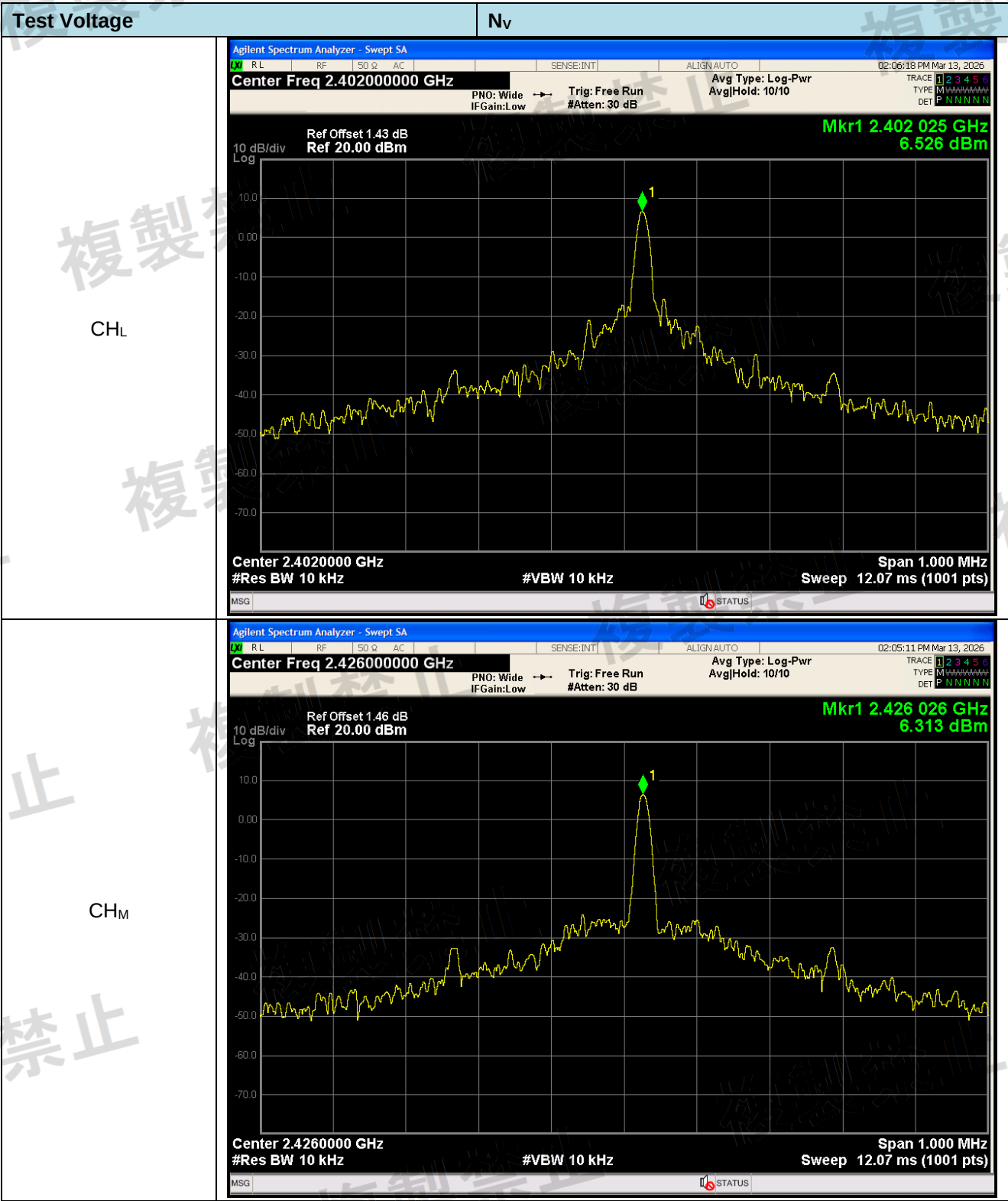
TEST RESULTS

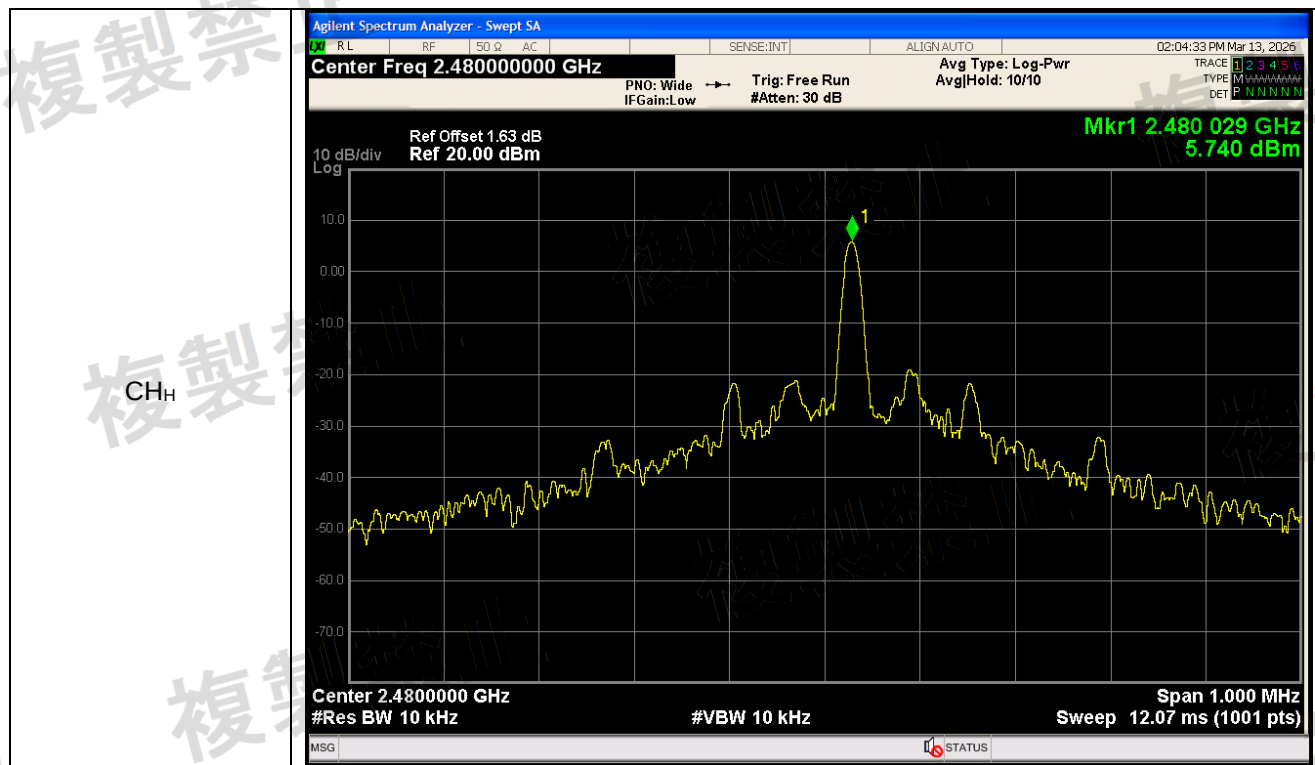
☒ Passed
 ☐ Not Applicable

Please refer to the below test data:

Test voltage	Test Channel	Rating Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Limit (ppm)	Result
N _v	CH _L	2402	2402.025	10.41	±50.00	Pass
	CH _M	2426	2426.026	10.72		
	CH _H	2480	2480.029	11.69		

Test plot as follows:



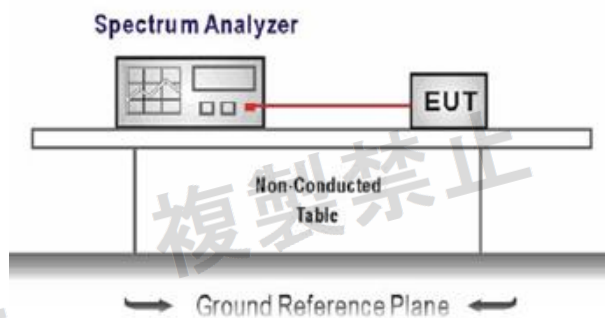


5.3. Antenna Power

LIMIT

No.	Moduation type	Limit
1	FH, FH+DS , FH+OFDM (2427 - 2470.75 MHz)	3mW/MHz
2	OFDM OBW<=26MHz DS, FH other than (1)	10mW/MHz
3	OFDM (OBW 26 – 38MHz)	5mW/MHz
4	Other than (1) & (2)&(3)	10mW

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

- 1) Search Frequency of Peak Power
Test Frequency: test channel,
RBW=VBW=1MHz, Span=4MHz, Sweep time=Auto, Detector mode =Positive peak
- 2) Measure of average burst power
Test Frequency: frequency of peak power
RBW=VBW≥99% Occupy Bandwidth , Span=0Hz, Sweep time=Auto, Detector mode=RMS
Reading Level = burst power

TEST RESULTS

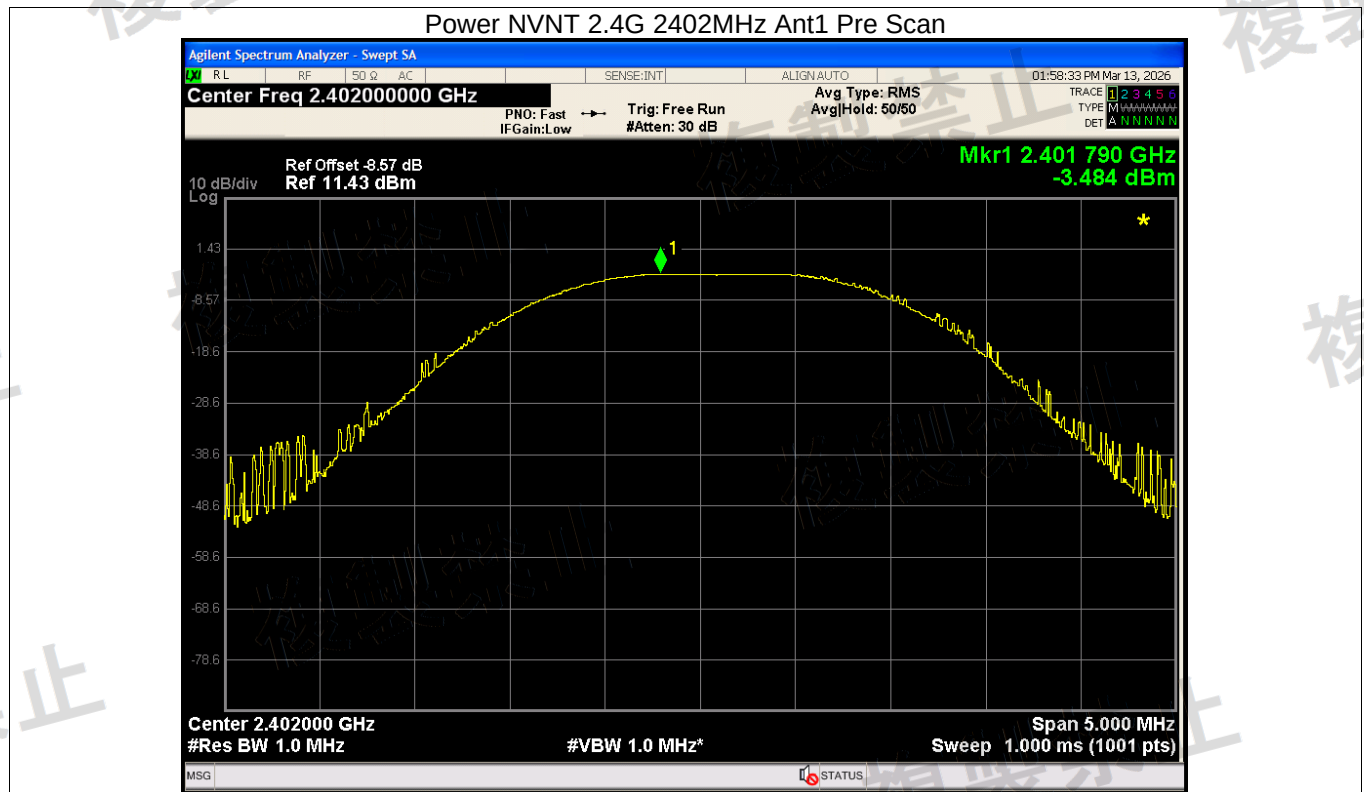
☒ Passed ☐ Not Applicable

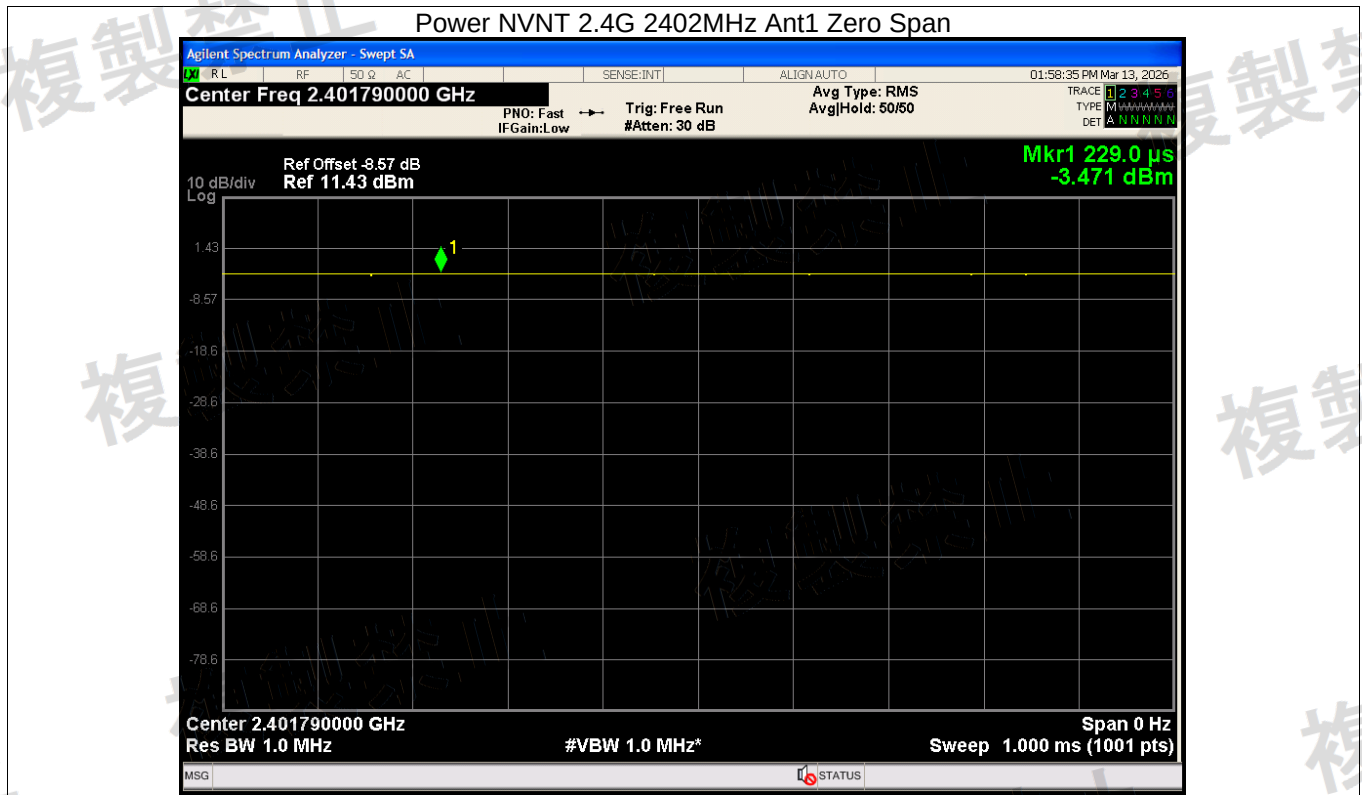
Please refer to the below test data:

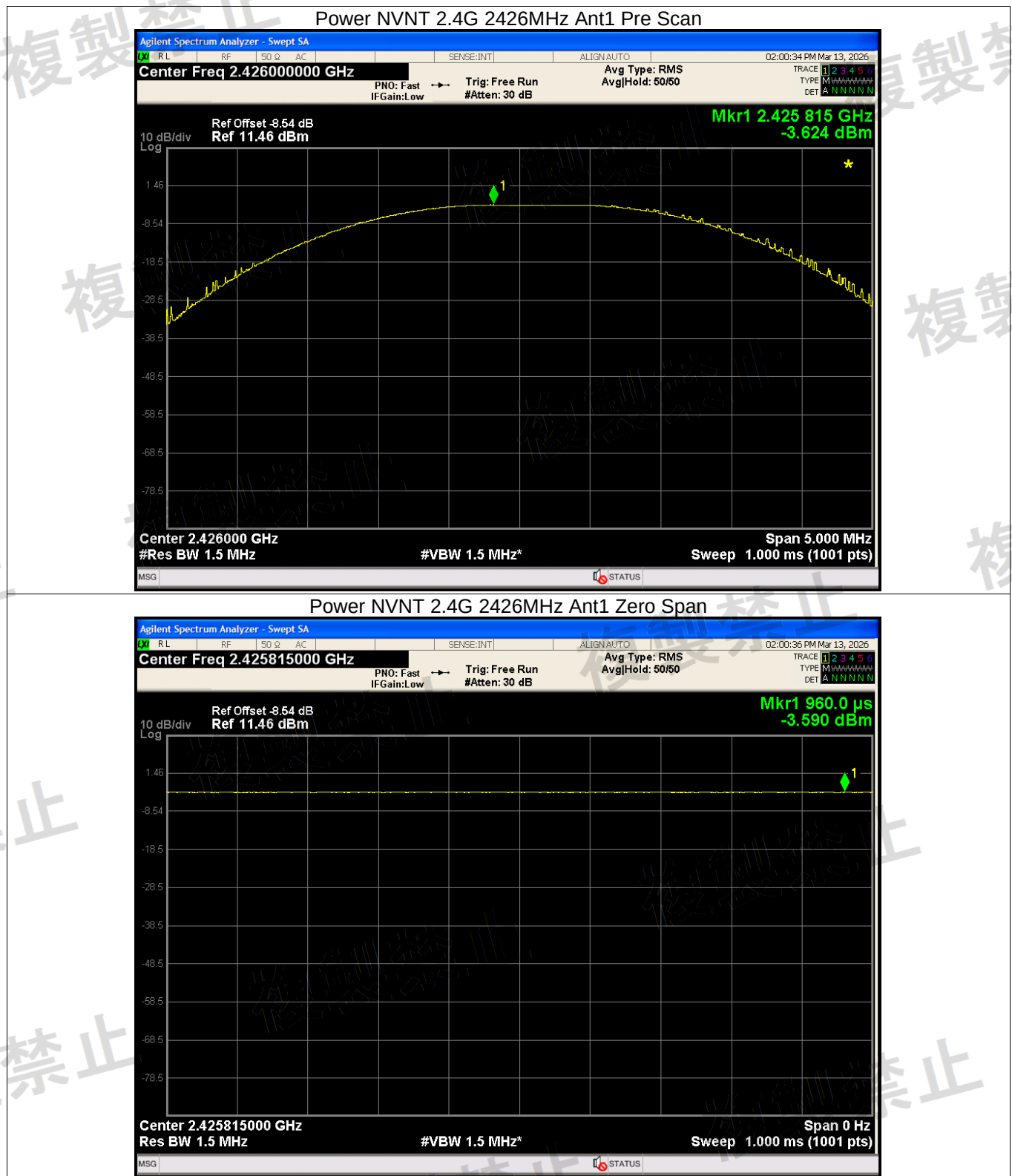
Test voltage	Test channel	Frequency (MHz)	Antenna power (mW)	E.I.R.P (dBm)	Declared Power (mW)	Tolerance (%)	Limit (%)	Result
N _v	CH _L	2402	0.450	-10.471	1	-55.0	-80~+20	Pass
	CH _M	2442	0.438	-10.590	1	-56.2		
	CH _H	2480	0.380	-11.203	1	-62.0		

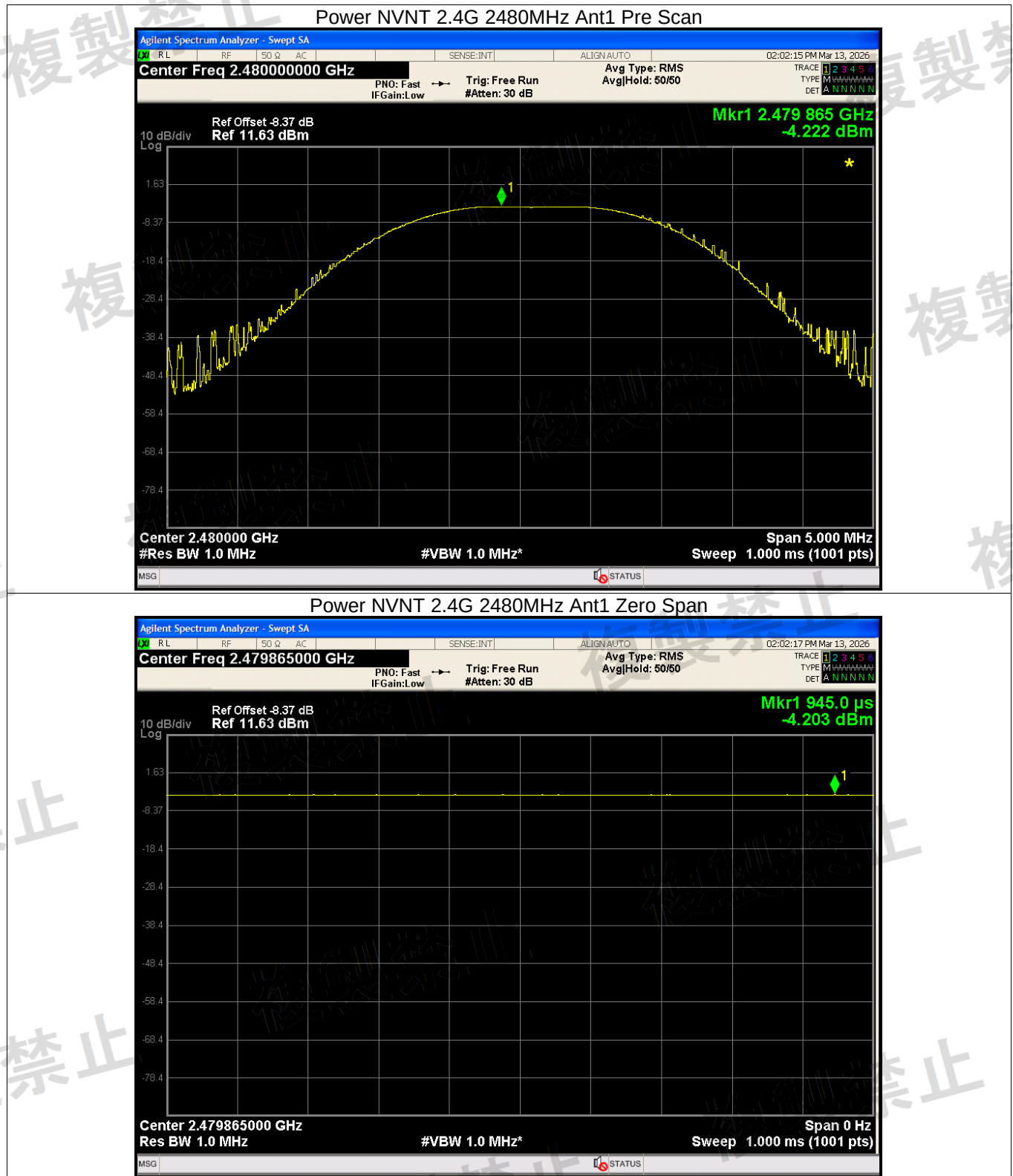
Note:

- 1) Tolerance = (Antenna power – Rated power) / Rated power *100%







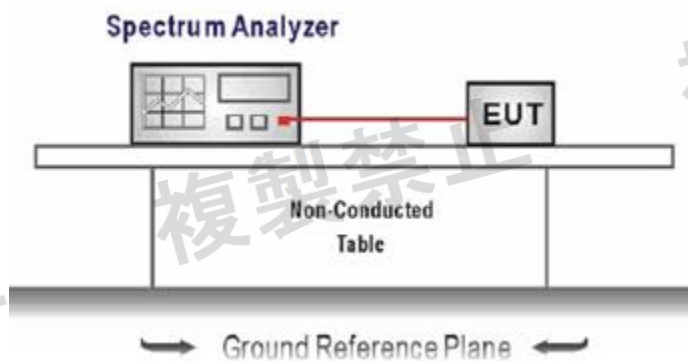


5.4. Occupy Bandwidth (99%)

LIMIT

Moduation type	Limit
FH	83.5MHz or less
FH + DS	83.5MHz or less
FH + OFDM	83.5MHz or less
OFDM	38MHz or less
Others	26MHz or less

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

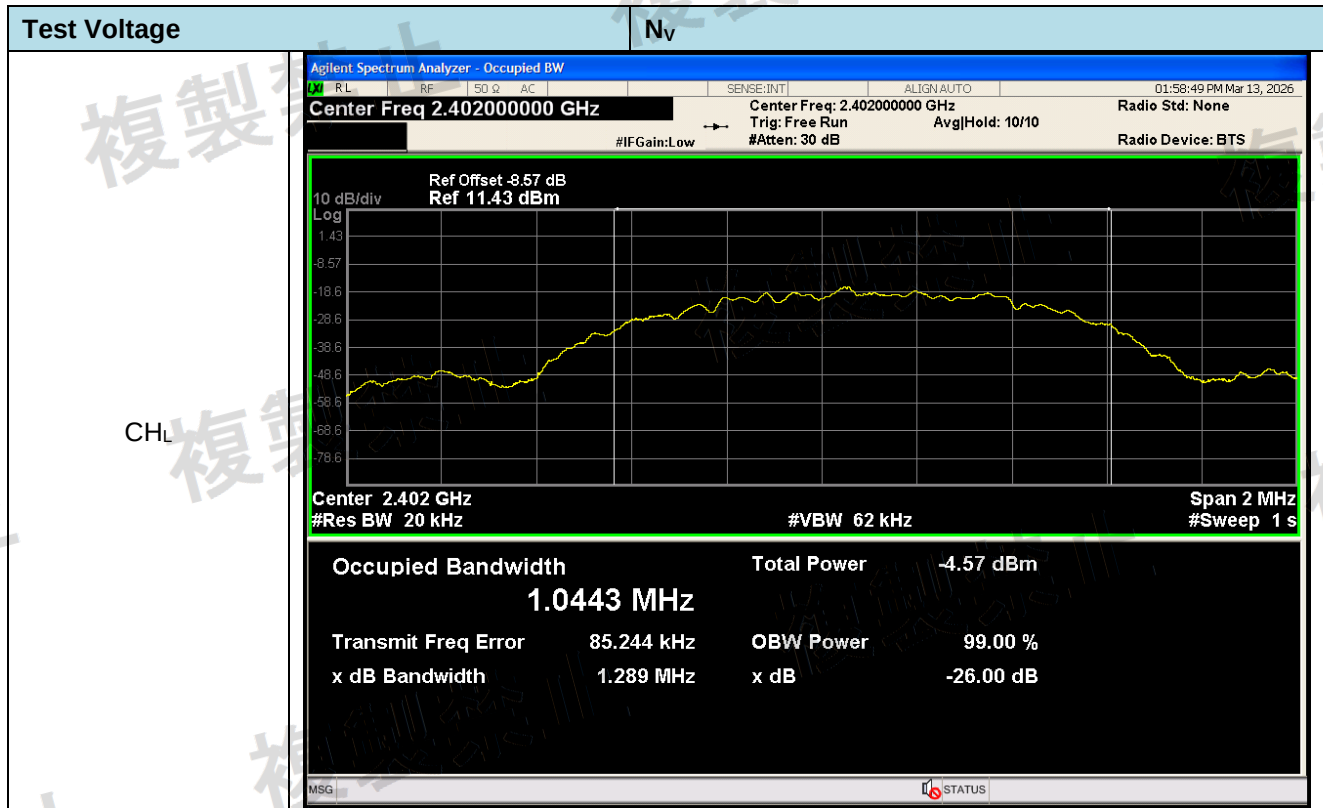
Test Frequency: test channel,
RBW=20KHz, VBW=60KHz, Span=2MHz, Sweep time=1S, Detector mode=RMS

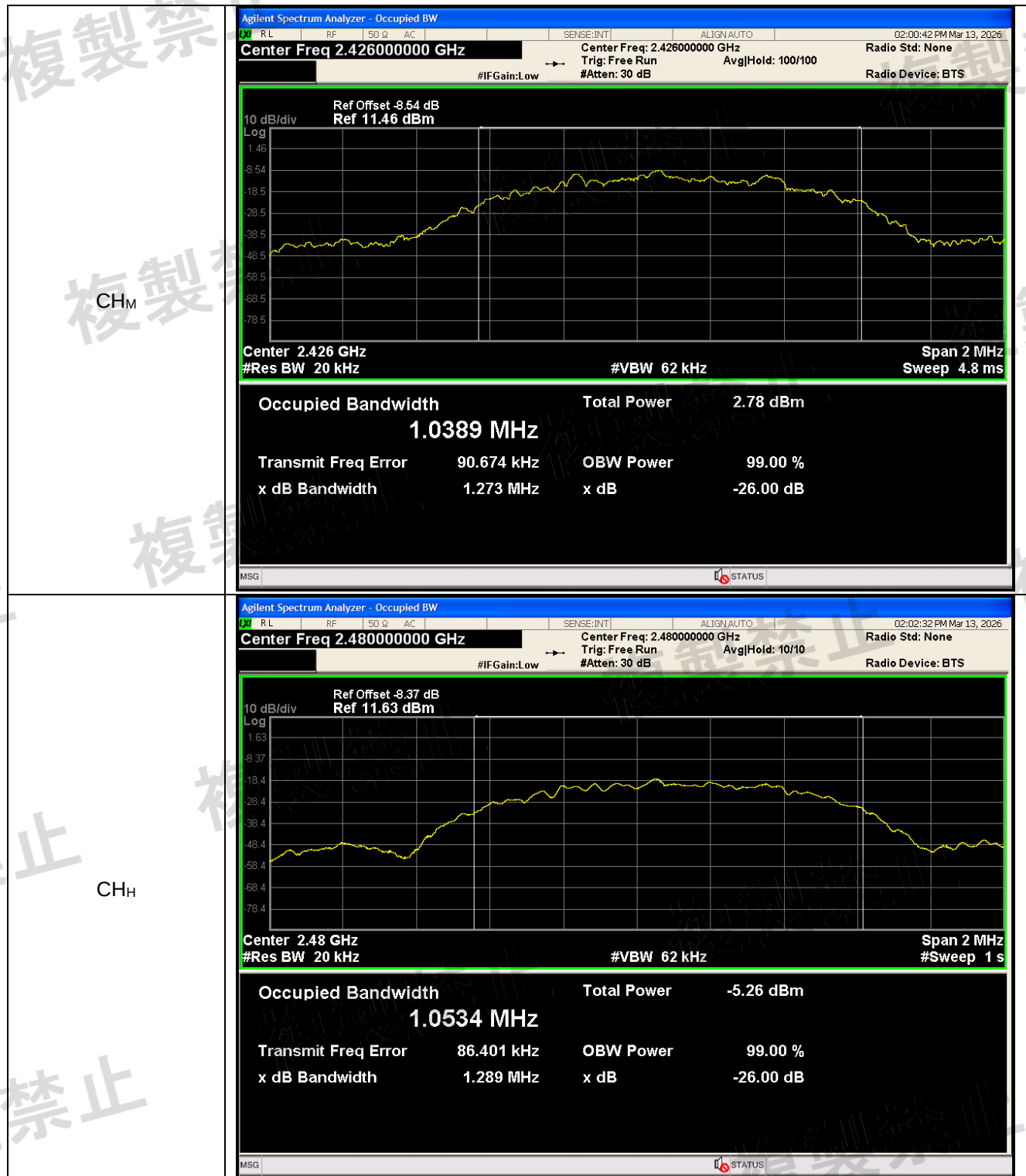
TEST RESULTS

☒ Passed ☐ Not Applicable

Please refer to the below test data:

Test voltage	Test channel	99% occupy bandwidth (MHz)	Limit (MHz)	Result
N _v	CH _L	1.04	≤26	Pass
	CH _M	1.04		
	CH _H	1.05		



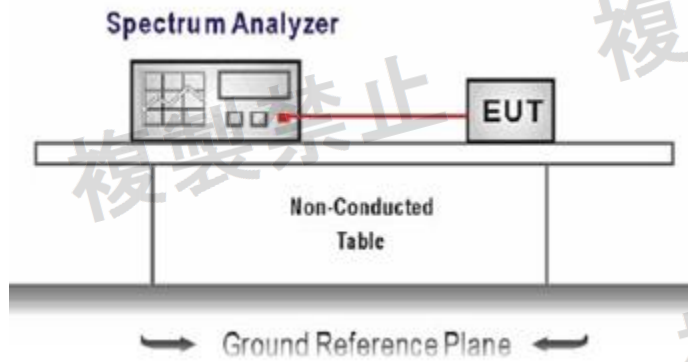


5.5. Spread spectrum bandwidth (90%)

LIMIT

500KHz or more

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

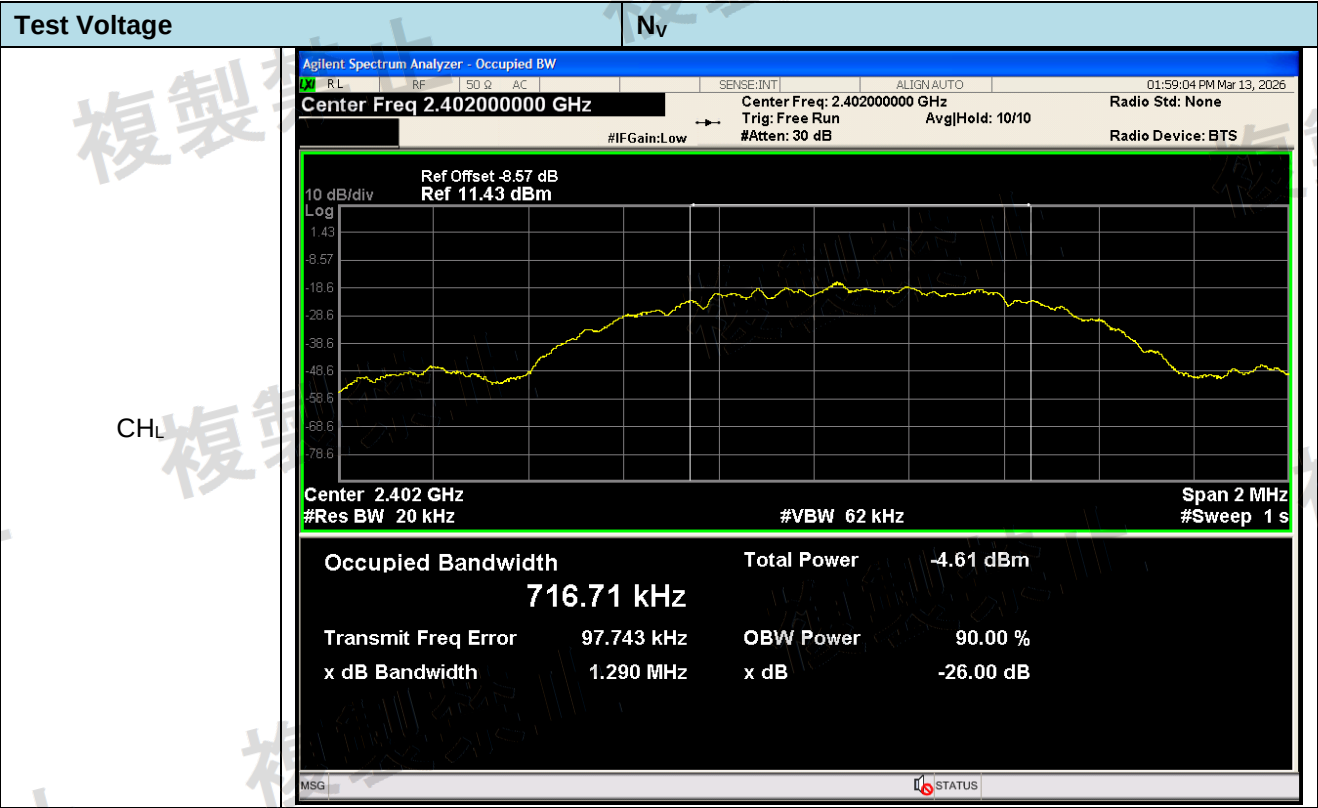
Test Frequency: test channel,
RBW=20KHz, VBW=60KHz, Span=2MHz, Sweep time=1S, Detector mode=RMS

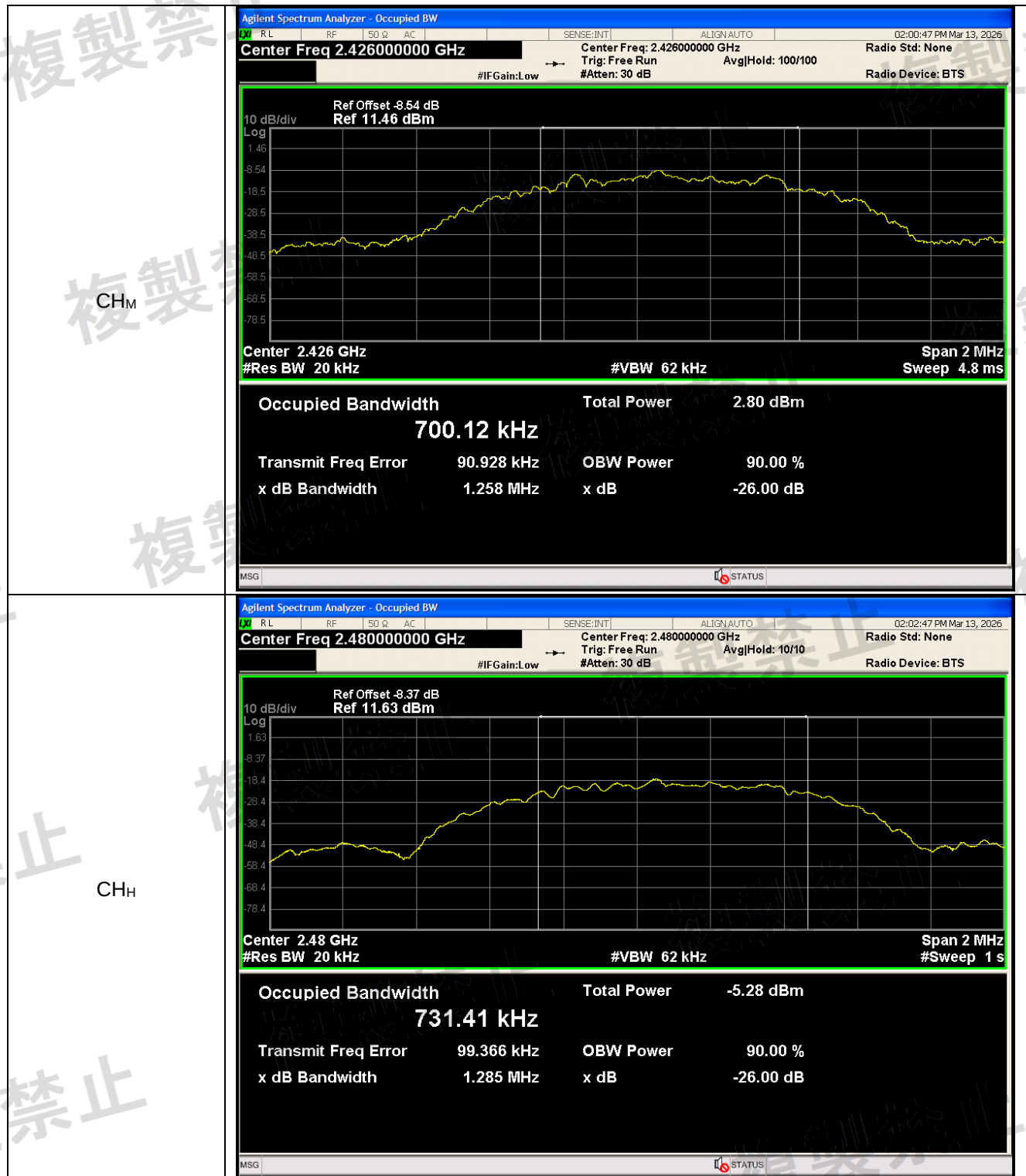
TEST RESULTS

☒ Passed ☐ Not Applicable

Please refer to the below test data:

Test voltage	Test channel	Spread spectrum bandwidth (MHz)	Limit (kHz)	Result
N _v	CH _L	0.72	≥500	Pass
	CH _M	0.70		
	CH _H	0.73		



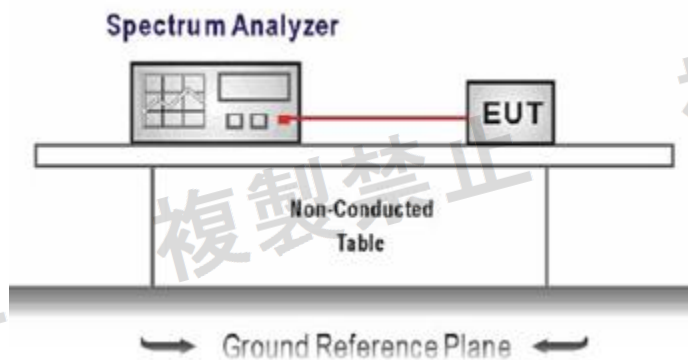


5.6. Spurious emission intensity

LIMIT

Frequency Range	Limit
30MHz -1000MHz	$\leq 2.5\mu\text{W/MHz}$ (-26dBm)
$\leq 2387\text{MHz}$	$\leq 2.5\mu\text{W/MHz}$ (-26dBm)
2387MHz to 2400MHz	$\leq 25\mu\text{W/MHz}$ (-16dBm)
2483.5MHz to 2496.5MHz	$\leq 25\mu\text{W/MHz}$ (-16dBm)
$\geq 2496.5\text{MHz}$	$\leq 2.5\mu\text{W/MHz}$ (-26dBm)

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

Step 1:

Test Frequency: test channel,

Below 1GHz, RBW=VBW=100KHz;

Above 1GHz, RBW=VBW=1MHz;

Sweep time=Auto, Detector mode=Positive peak

Step 2:

Test Frequency: spurious frequency

Below 1GHz, RBW=VBW=100KHz;

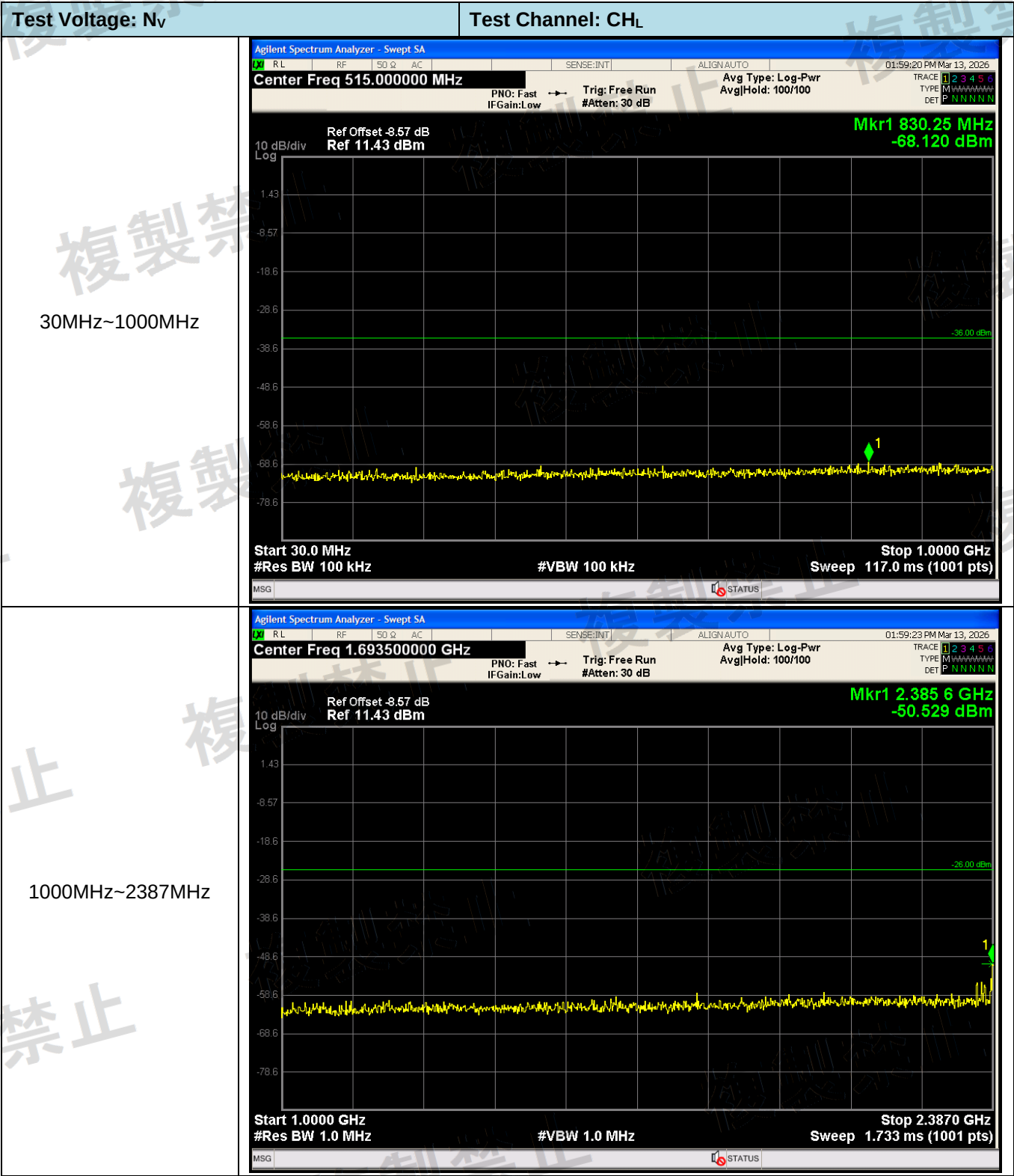
Above 1GHz, RBW=VBW=1MHz;

Sweep time=Auto, Detector mode=Sample, Span=0Hz

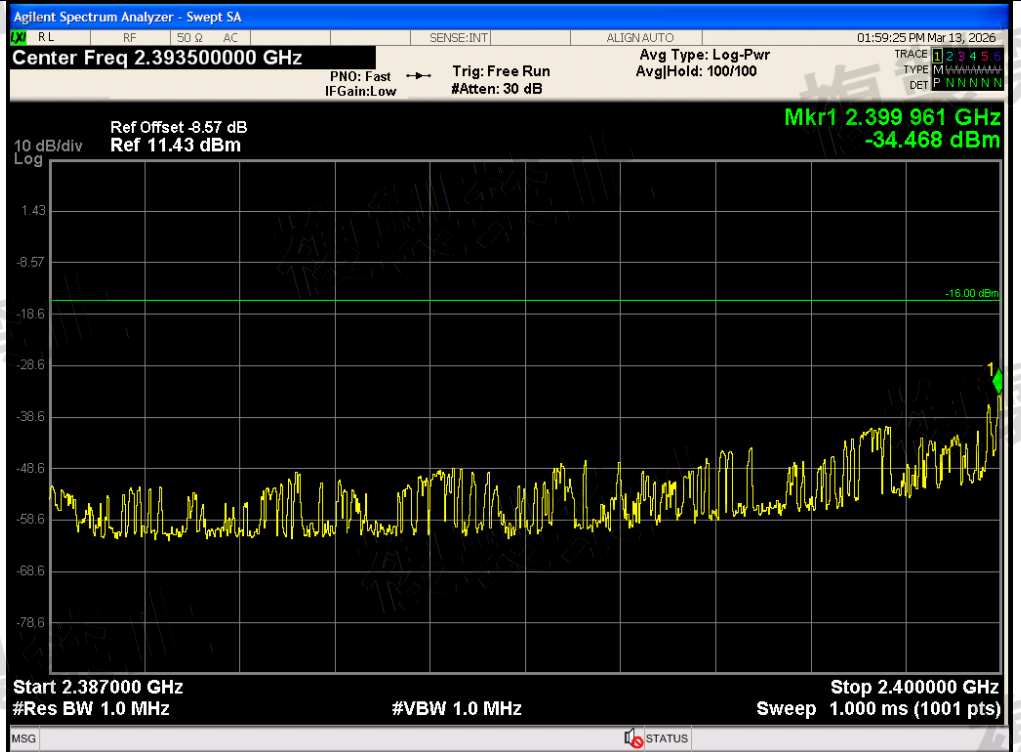
TEST RESULTS

☒ Passed ☐ Not Applicable

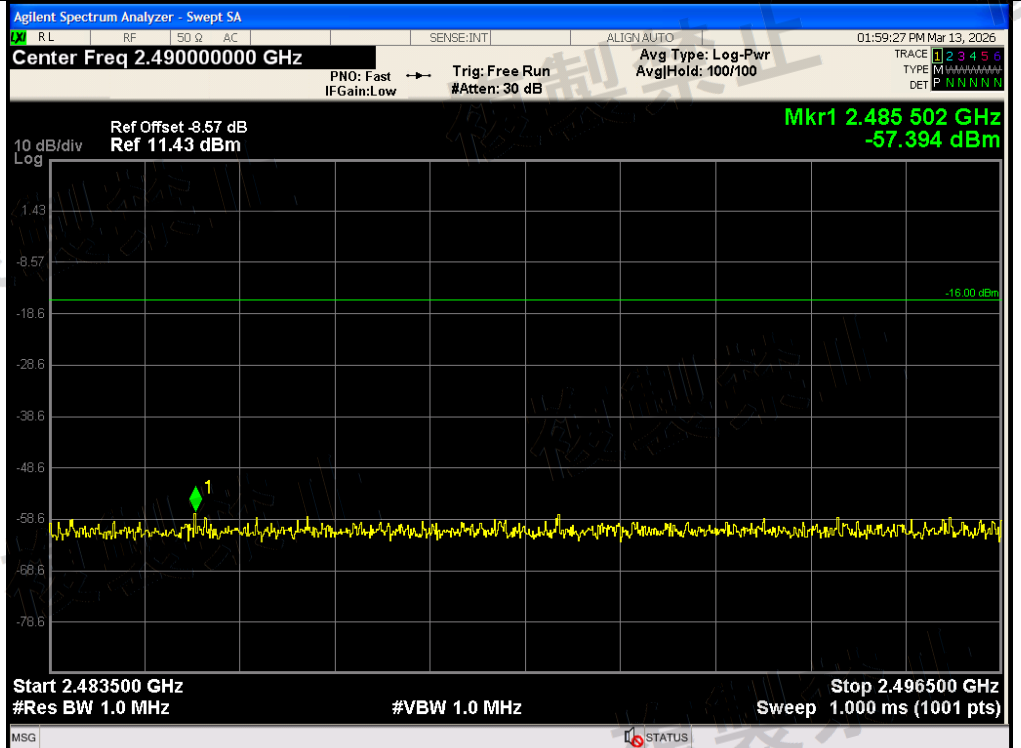
Please refer to the below test data:

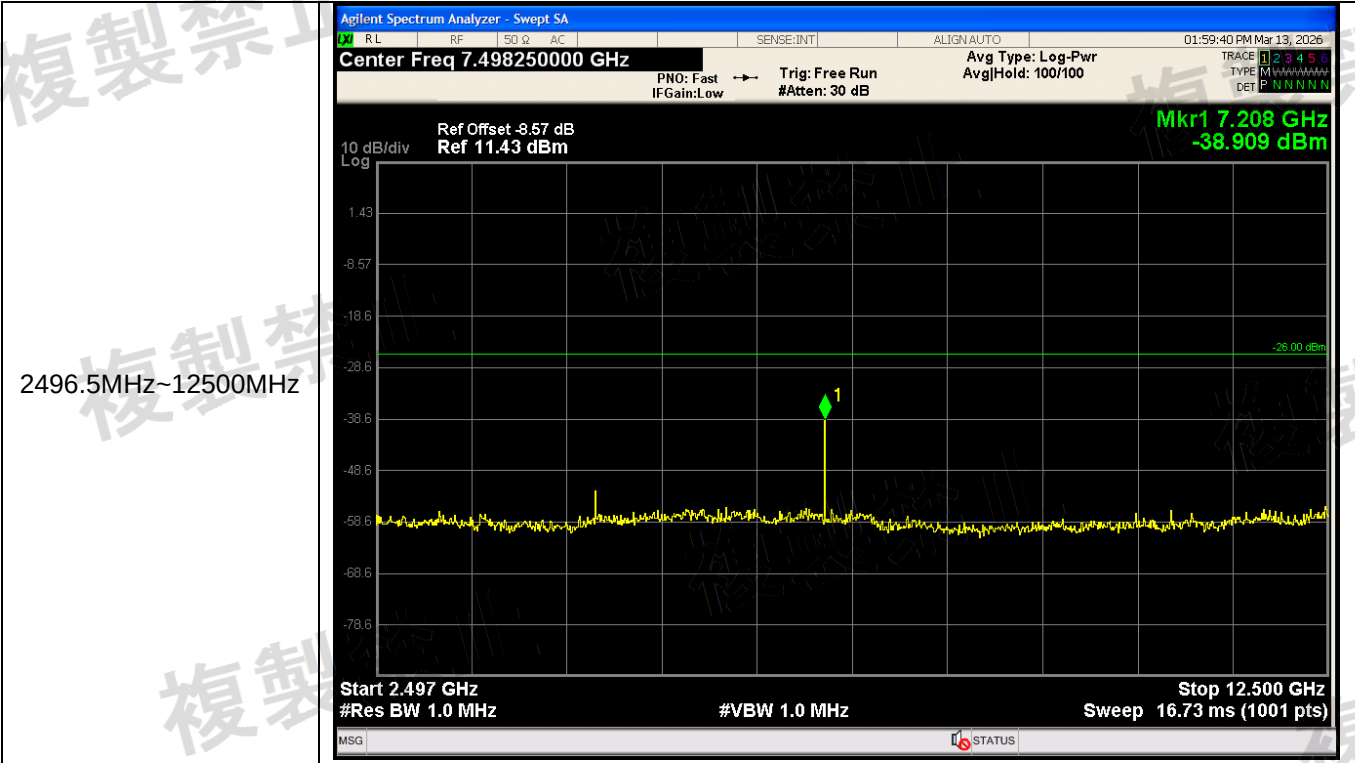


2387MHz~2400MHz

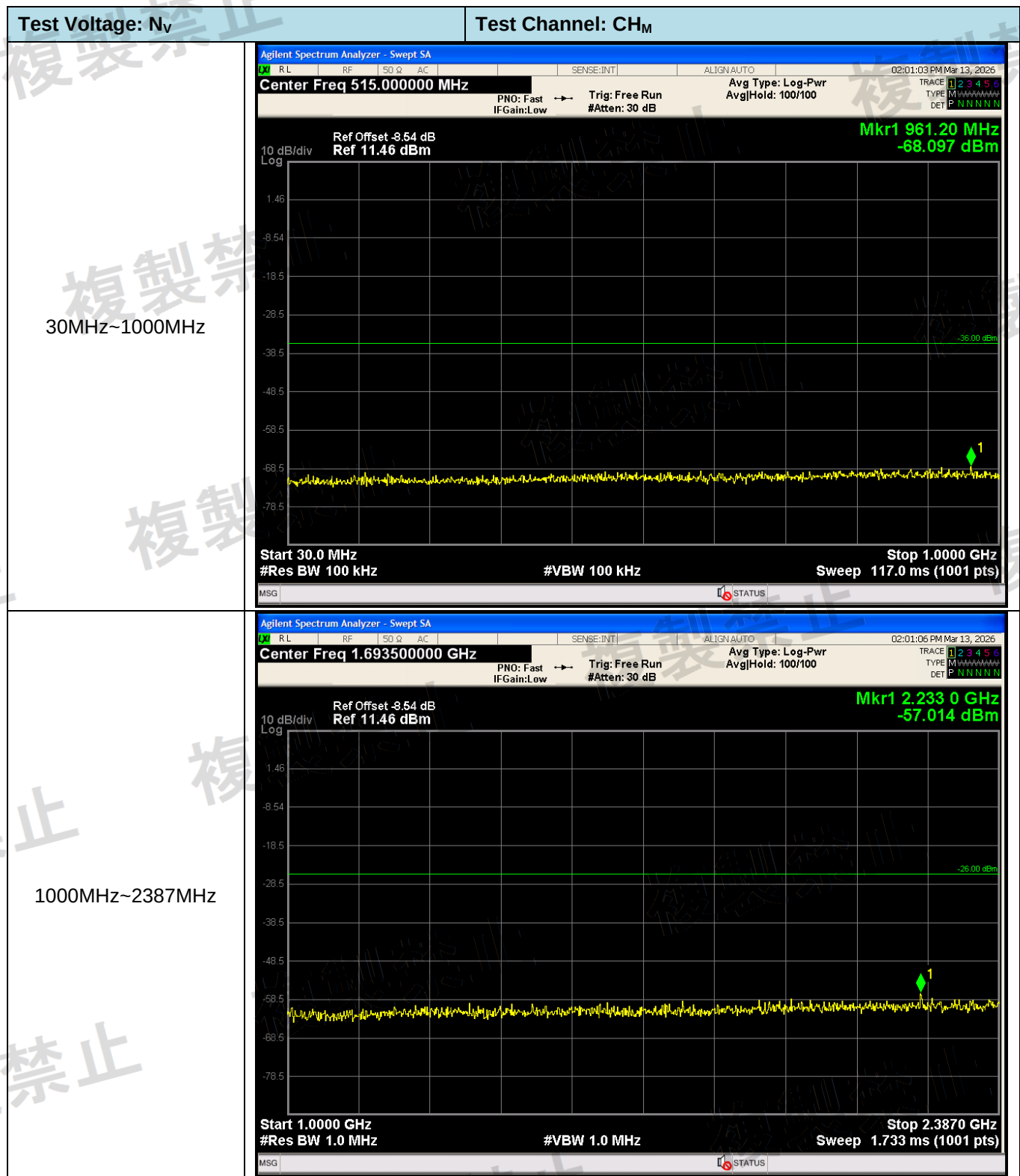


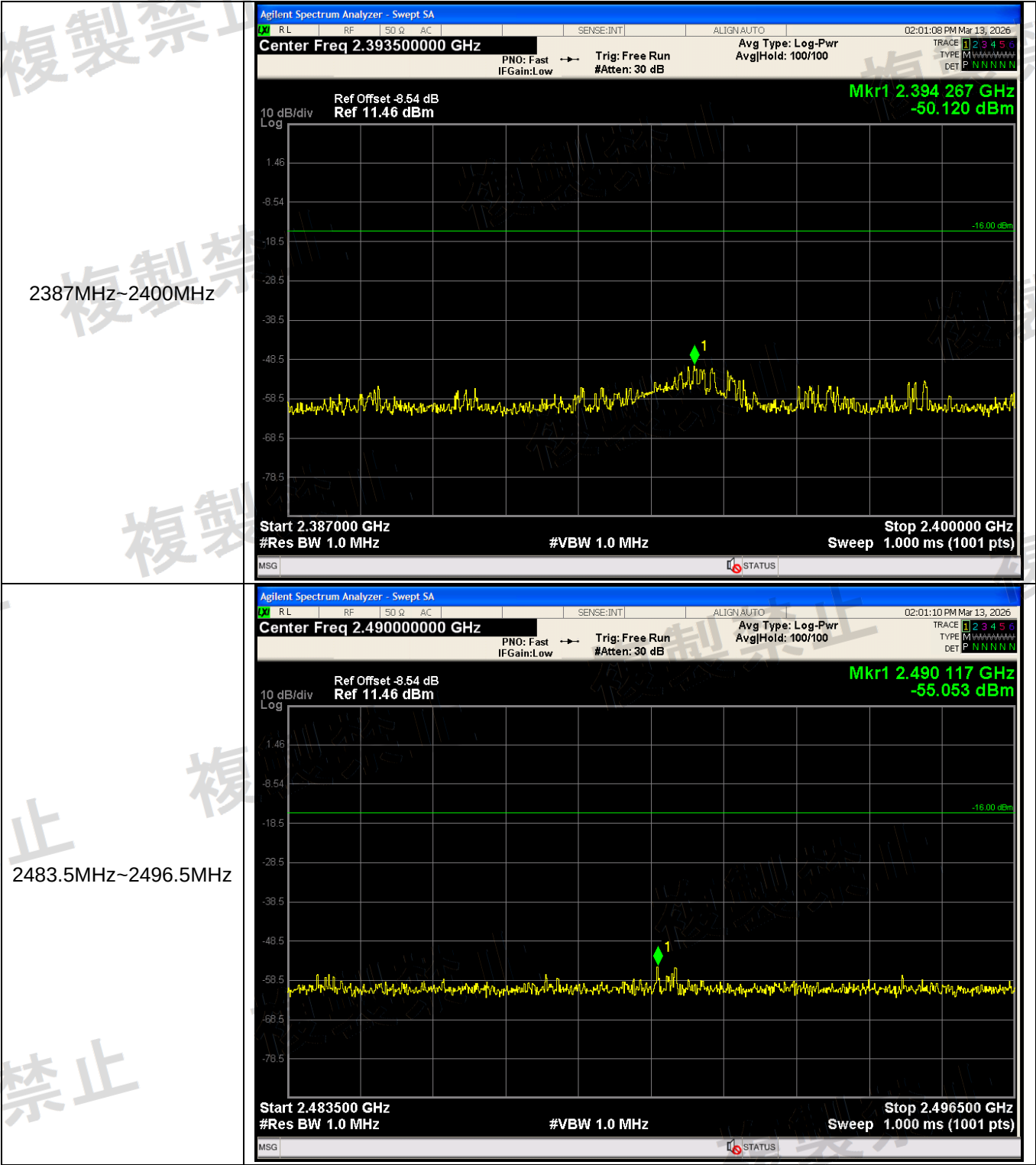
2483.5MHz~2496.5MHz

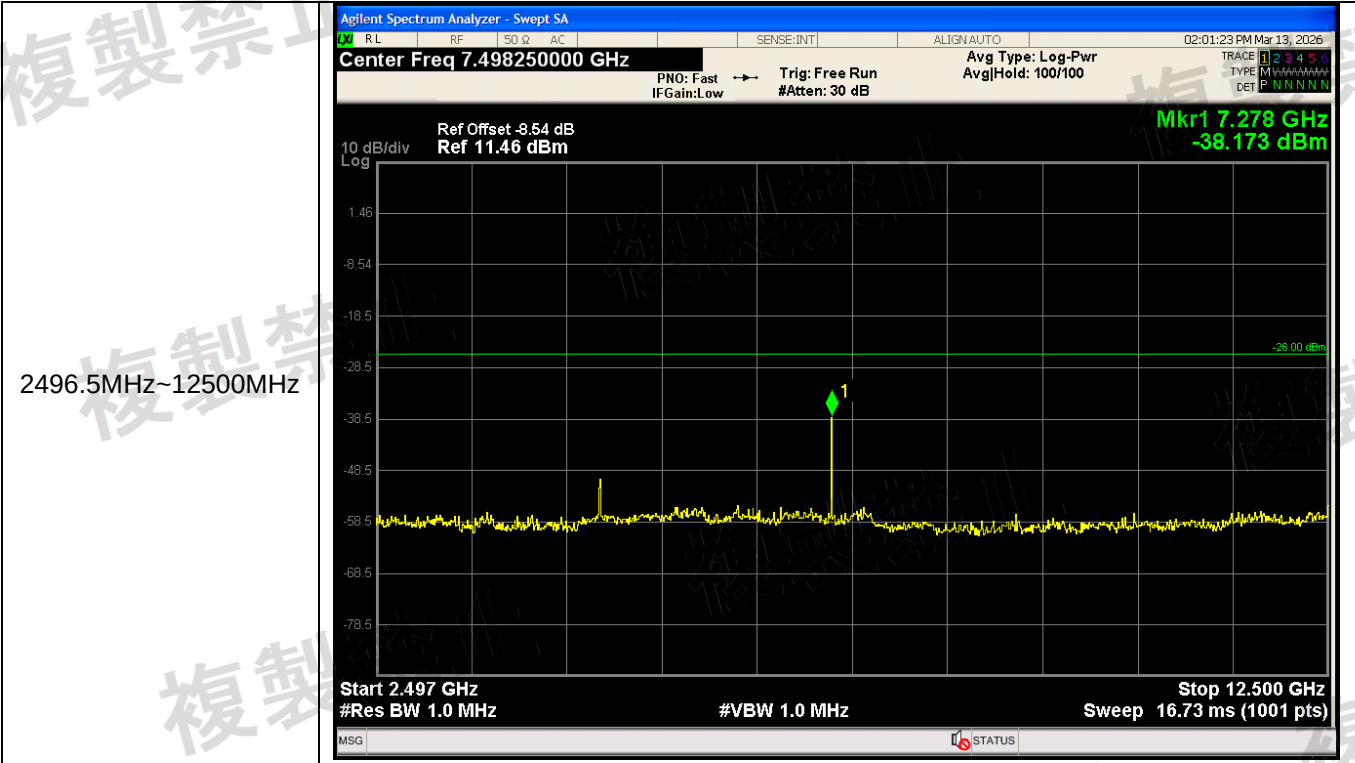




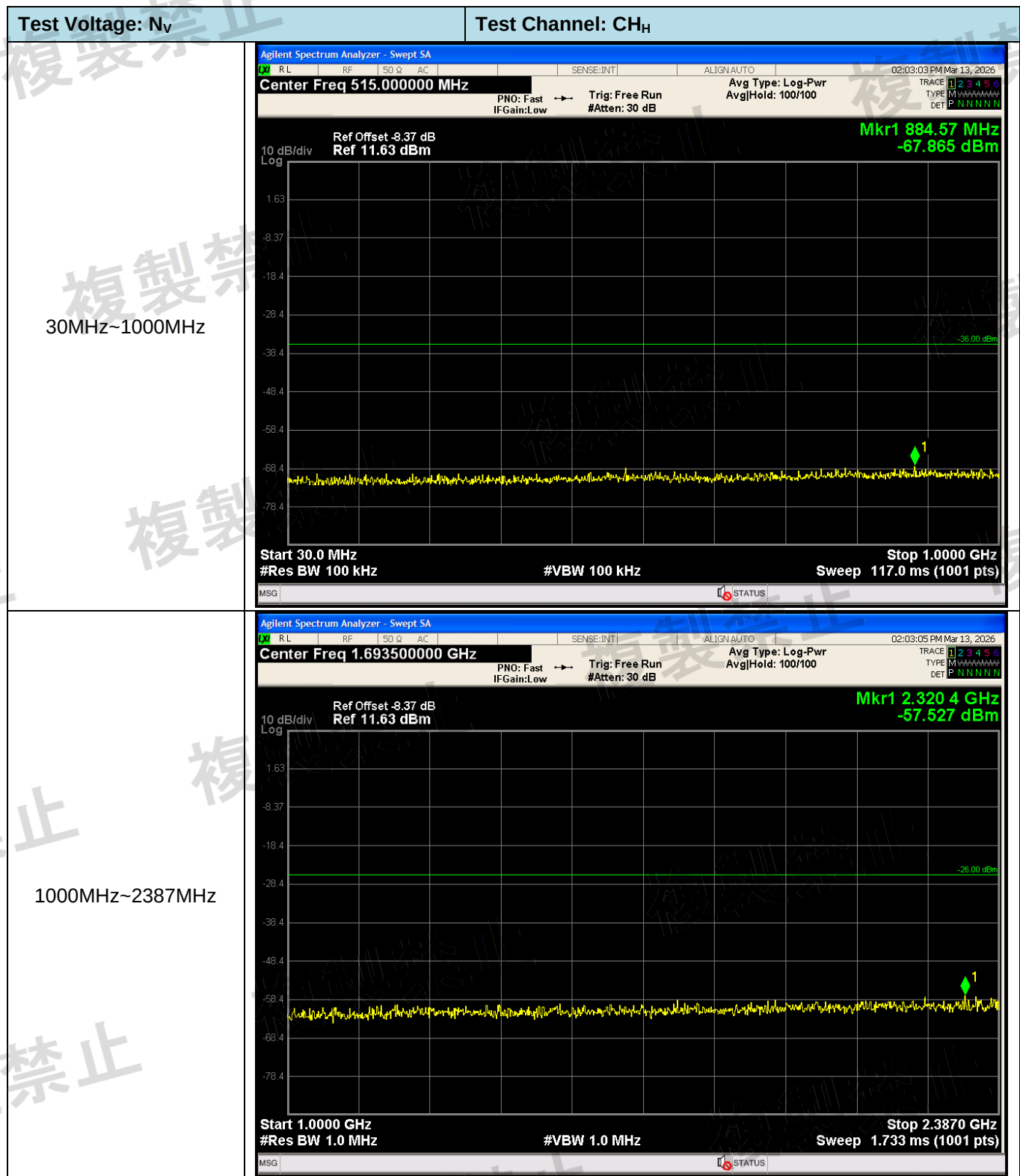
Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measure ment Level	Measurement Level (μW/MHz)	Limit	Result
Nv	CH _L	30MHz~1000MHz	830.25	-68.120 dBm/KHz	0.002	≤2.5μW/MHz	Pass
		1000MHz~2387MHz	2385.613	-50.529 dBm/MHz	0.009	≤2.5μW/MHz	
		2387MHz~2400MHz	2399.961	-34.468 dBm/MHz	0.357	≤25μW/MHz	
		2483.5MHz~2496.5MHz	2485.502	-57.394 dBm/MHz	0.002	≤25μW/MHz	
		2496.5MHz~12500MHz	7208.148	-38.909 dBm/MHz	0.129	≤2.5μW/MHz	

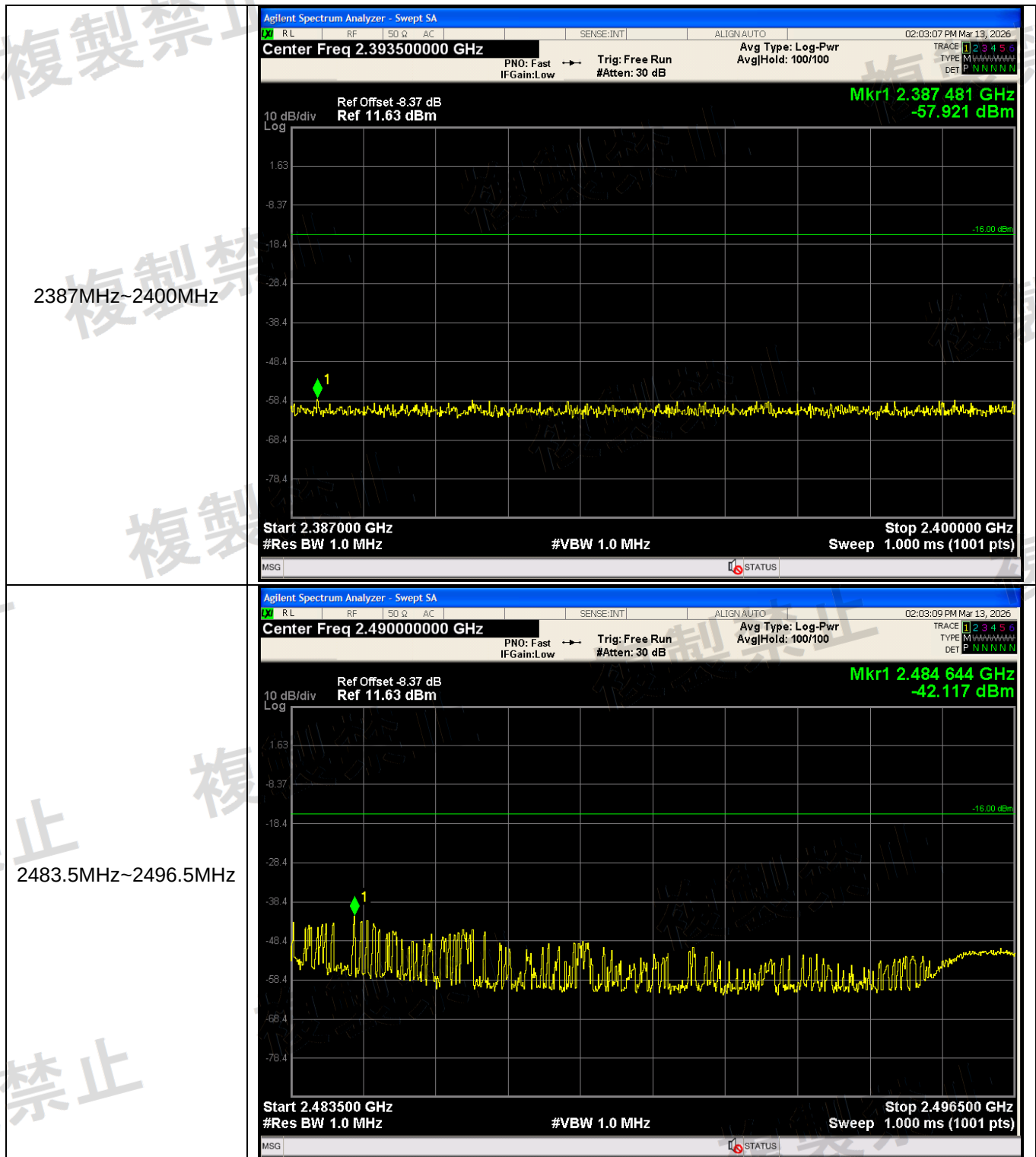


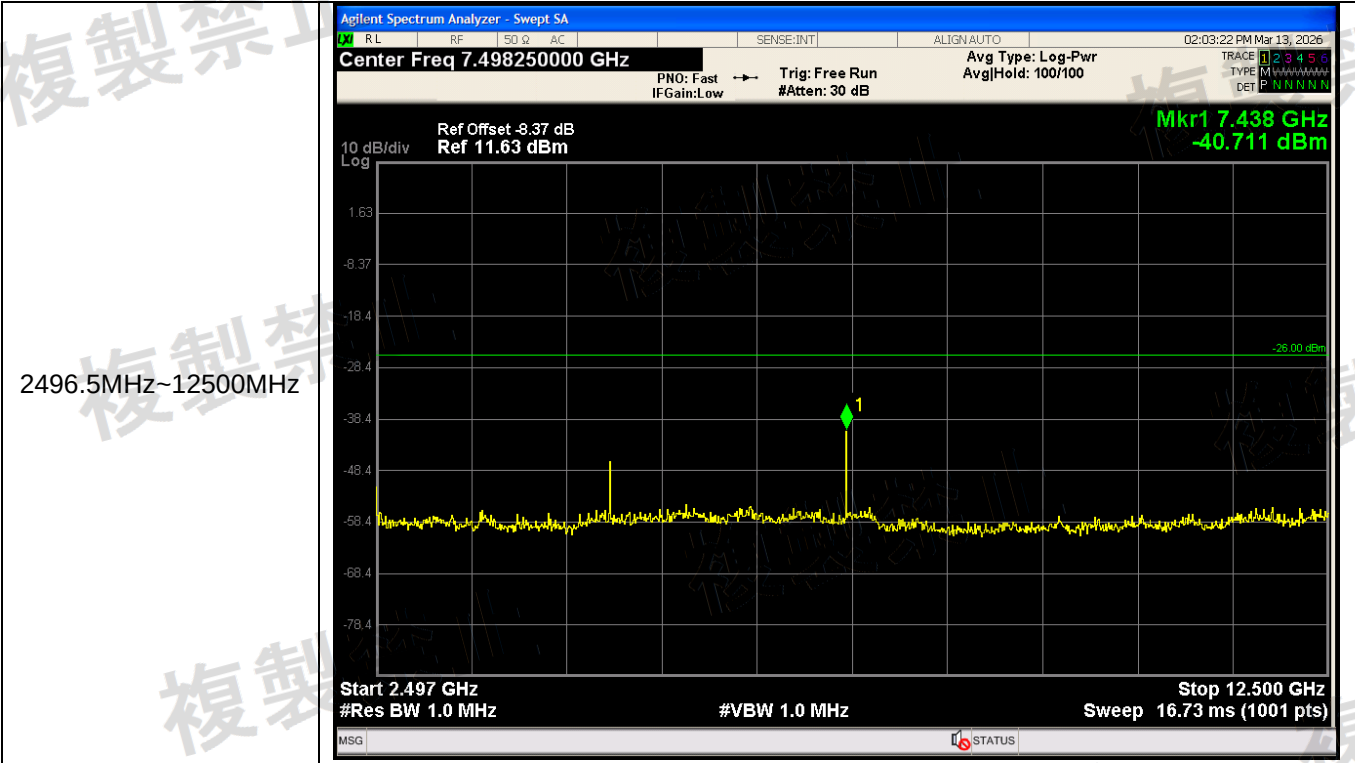




Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measurement Level	Measurement Level (μW/MHz)	Limit	Result
Nv	CH _M	30MHz~1000MHz	961.2	-68.097 dBm/KHz	0.002	≤2.5μW/MHz	Pass
		1000MHz~2387MHz	2233.043	-57.014 dBm/MHz	0.002	≤2.5μW/MHz	
		2387MHz~2400MHz	2394.267	-50.120 dBm/MHz	0.010	≤25μW/MHz	
		2483.5MHz~2496.5MHz	2490.117	-55.053 dBm/MHz	0.003	≤25μW/MHz	
		2496.5MHz~12500MHz	7278.173	-38.173 dBm/MHz	0.152	≤2.5μW/MHz	







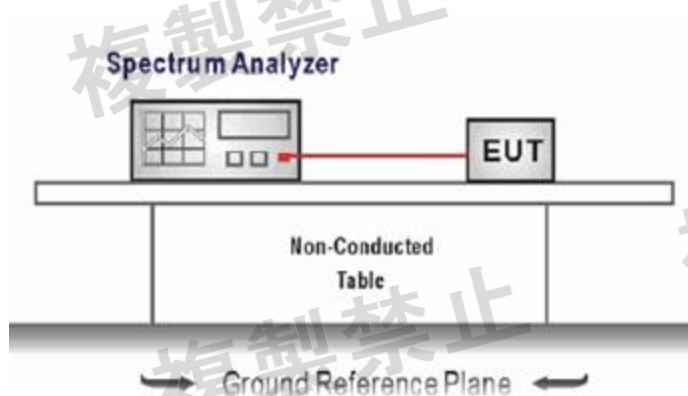
Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measure ment Level	Measurement Level (μW/MHz)	Limit	Result
Nv	CH _H	30MHz~1000MHz	884.57	-67.865 dBm/KHz	0.002	≤2.5μW/MHz	Pass
		1000MHz~2387MHz	2320.424	-57.527 dBm/MHz	0.002	≤2.5μW/MHz	
		2387MHz~2400MHz	2387.481	-57.921 dBm/MHz	0.002	≤25μW/MHz	
		2483.5MHz~2496.5MHz	2484.644	-42.117 dBm/MHz	0.061	≤25μW/MHz	
		2496.5MHz~12500MHz	7438.229	-40.711 dBm/MHz	0.085	≤2.5μW/MHz	

5.7. Limit of secondary radiated emissions

LIMIT

Frequency Range	Limit
≤1GHz	≤4.0nW (-54dBm)
>1GHz	≤20nW (-47dBm)

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

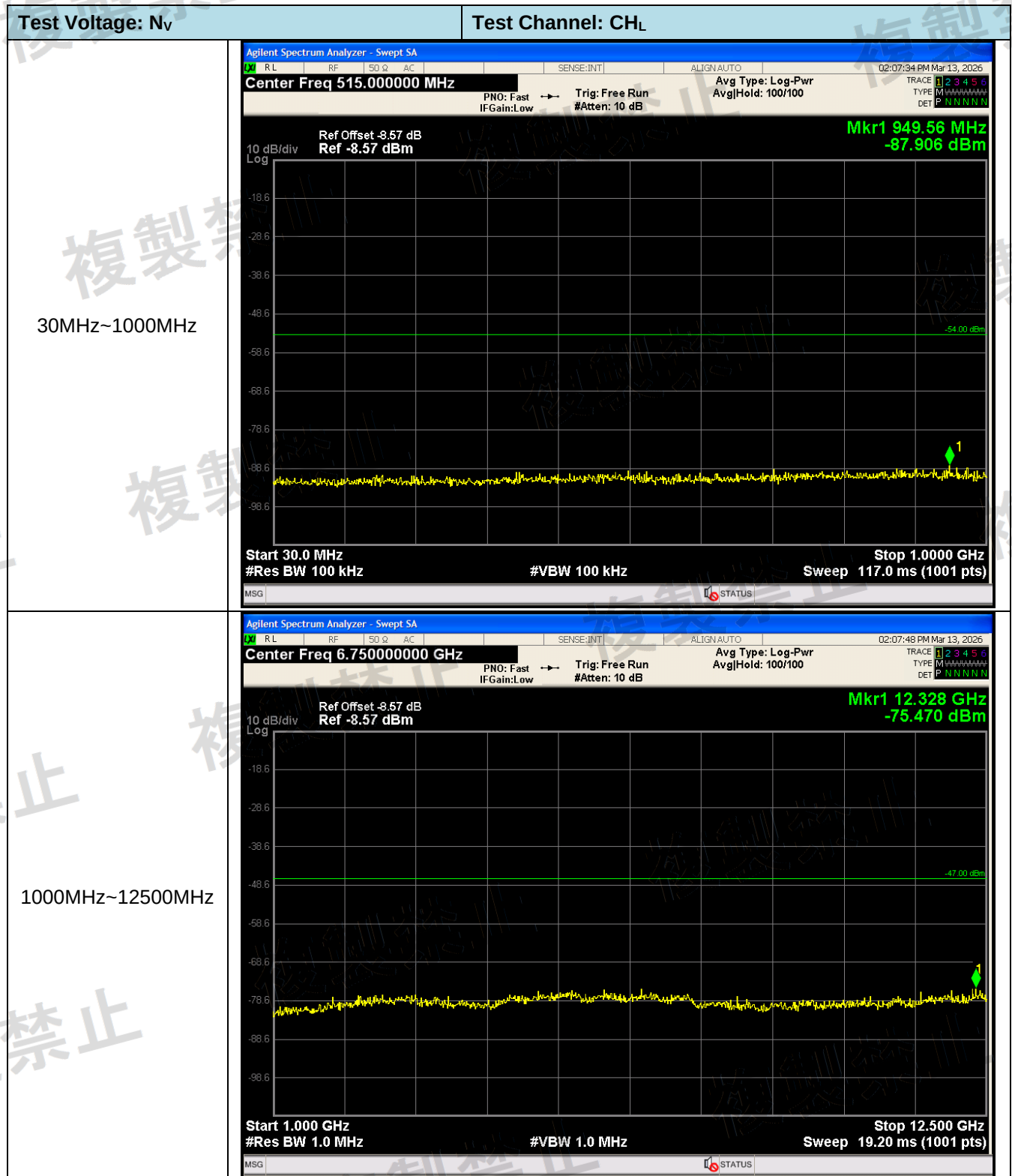
SPECTRUM SET:

Test Frequency: test channel,
Below 1GHz, RBW=100KHz,VBW=100KHz;
Above 1GHz, RBW=VBW=1MHz,
Sweep time=Auto, Detector mode=Positive peak

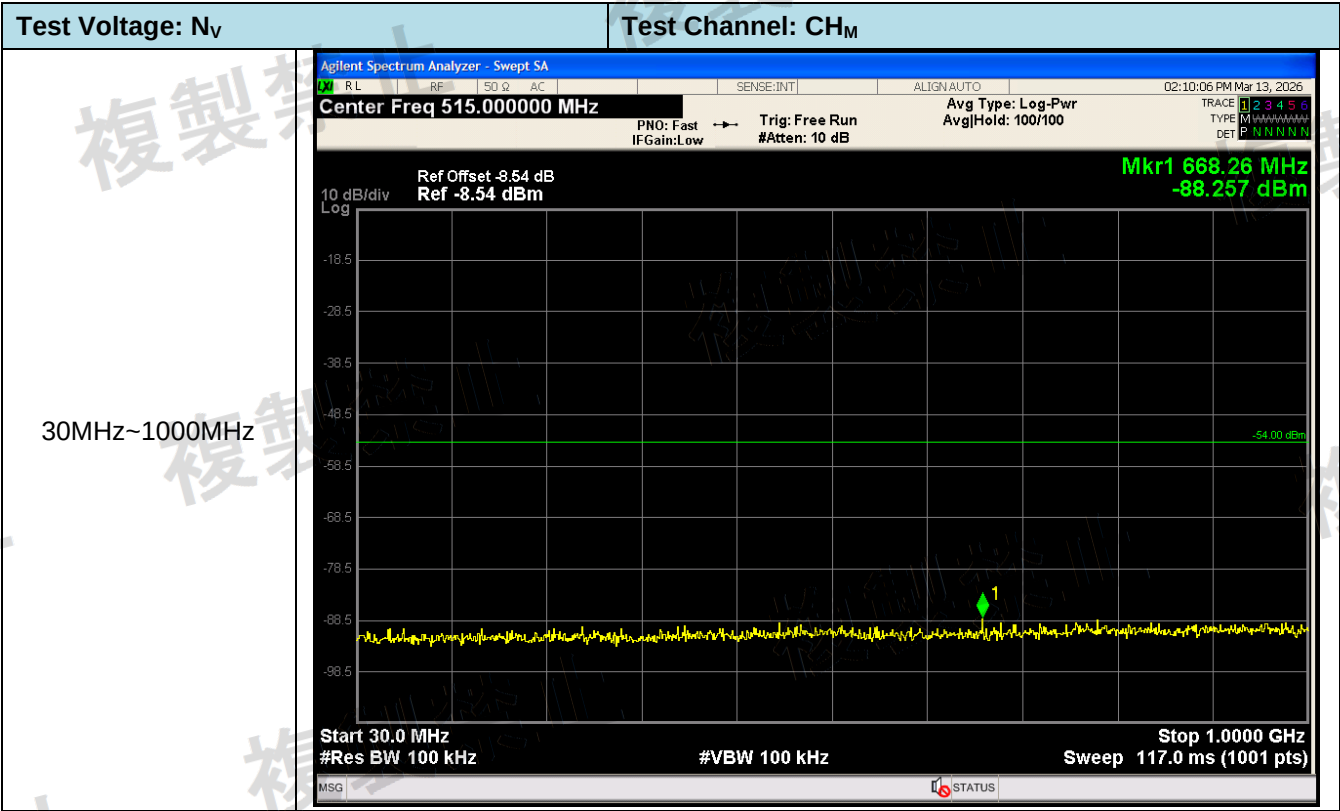
TEST RESULTS

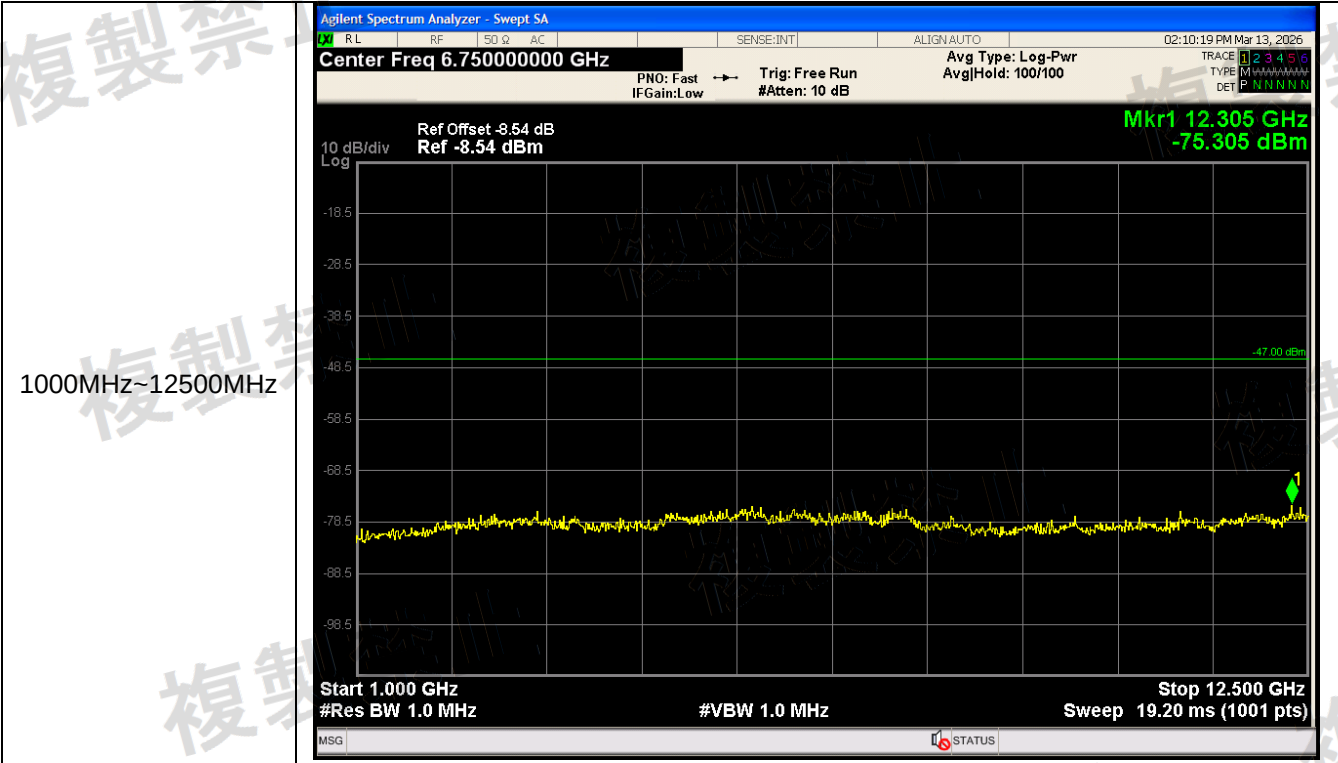
☒ Passed ☐ Not Applicable

Please refer to the below test data:

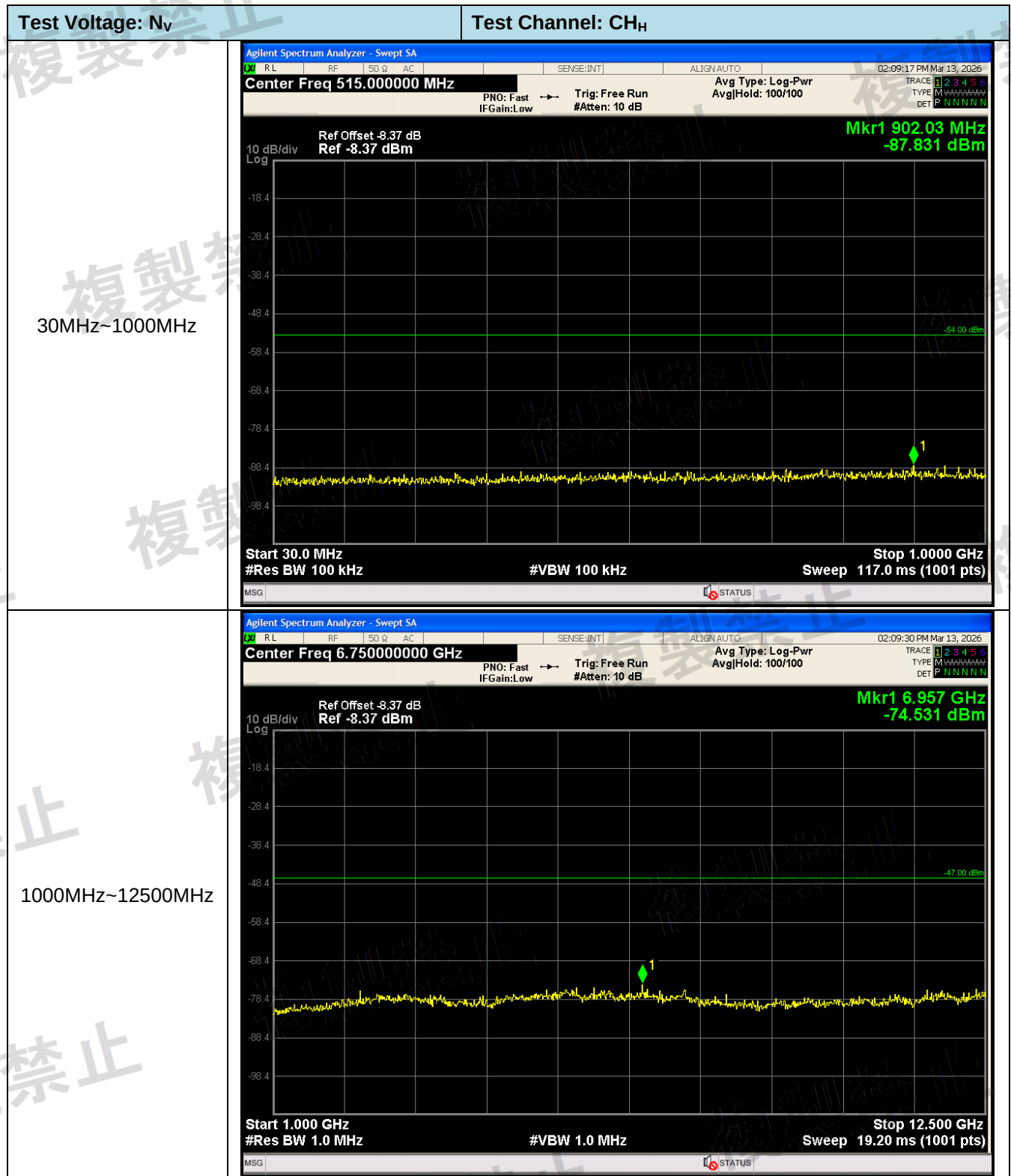


Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measurement Level	Measurement Level (nW)	Limit	Result
N _v	CH _L	30MHz~1000MHz	949.56	-87.906 dBm/KHz	0.02	≤4.0nW	Pass
		1000MHz~12500MHz	12327.5	-75.470 dBm/MHz	0.028	≤20nW	





Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measurement Level	Measurement Level (nW)	Limit	Result
N _v	CH _M	30MHz~1000MHz	668.26	-88.257 dBm/KHz	0.01	≤4.0nW	Pass
		1000MHz~12500MHz	12304.5	-75.305 dBm/MHz	0.029	≤20nW	



Test voltage	Test Channel	Frequency Range	Maximum frequency (MHz)	Measurement Level	Measurement Level (nW)	Limit	Result
N _V	CH _H	30MHz~1000MHz	902.03	-87.831 dBm/KHz	0.02	≤4.0nW	Pass
		1000MHz~12500MHz	6957	-74.531 dBm/MHz	0.035	≤20nW	

5.8. Radio Interference Prevention Capability Measurement

LIMIT

Identification code: 48bits or more

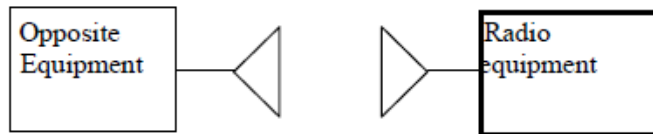
Mac IP Lits: MAC Scan

TEST CONFIGURATION

Transmission of identification code



Reception of identification code



TEST CONDITION

- 1) The demodulator shall be able to demodulate the transmitting signal from the radio equipment and display contents of the identification code.
- 2) The opposite equipment shall be able to transmit the identification code as same as the transmitting signal from the radio equipment
- 3) Set it in the usual operation condition

TEST PROCEDURE

- 1) The radio equipment with automatic transmitting function of identification code
 - A. Transmit the assigned identification code from the radio equipment.
 - B. Confirm the identification code received by the demodulator.
- 2) The radio equipment with automatic receiving function of identification code
 - A. Transmit the assigned identification code from the opposite equipment.
 - B. Confirm that the usual communication is available.
 - C. Transmit the identification code distinct from the assigned one from the opposite equipment.
 - D. Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

Note: Radio interference prevention capability was conformed.

Bluetooth Device address: FFFFFFFF

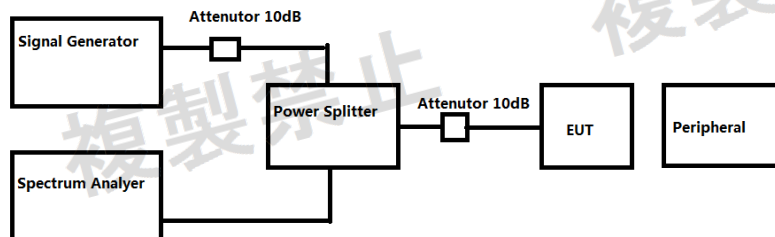


5.9. Carrier Sense Capability Measurement

LIMIT

N/A

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

- 1) SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is $(On\ 22.79 + Gr - 20 \cdot \log(f)) [dBm]$ (Gr: dB; f: MHz). Then turn off the RF signal of SSG.
- 2) EUT have transmitted the maximum modulation signal and fixed channelize.
- 3) Setting of SA is following as: RB:1MHz / VB:1MHz / SPAN: 50MHz / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak.
- 4) SSG RF Signal On.
- 5) EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.

TEST RESULTS

☐ Passed ☒ Not Applicable

5.10. Transmission Radiation Angle Width (3DB Beamwidth) Measurement

LIMIT

Item	Limits
	(See Article 49-20, Item1-f of the Ordinance Regulating Radio Equipment)
3dB antenna beam width	360/A (if A<1; then A=1) A= {EIRP Power [mW]/16.36 for DS, OFDM}

MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span	0 MHz
RBW	1 MHz

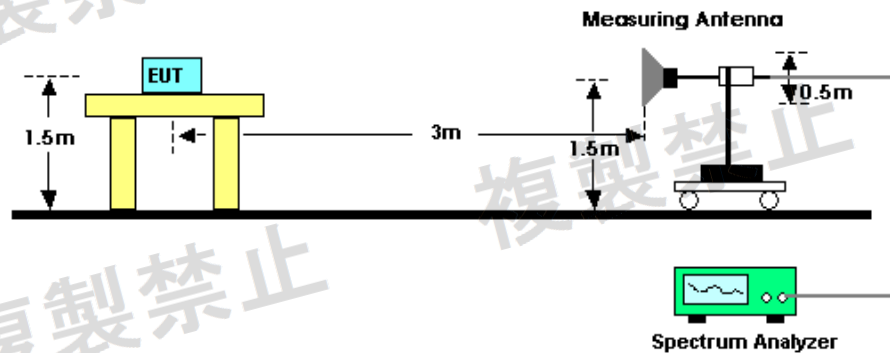
VBW	1 kHz
Y scale	5 dB
Detector	Peak
Trace	Max Hold

TEST PROCEDURES

Test method which surpass to Clause 22 of Annex No.43 of MIC Notification No.88.

1. Set EUT and measuring antenna at the same height and roughly facing each other.
2. Set spectrum analyzer with condition and tune reference level to observe receiving signal position.
3. Rotate directions of the EUT horizontally and vertically to find the maximum receiving power.
4. Move the measuring antenna height up and down within $\pm 50\text{cm}$ of EUT height and swing it to find the maximum output of measuring antenna. The output level at the spectrum analyzer is read as "E"
5. Calculate permitted radiation angle in horizontal and vertical using EIRP measured in another test method.
6. Calculate 3dB antenna beam width by the formula below $360/A$ (If $A < 1$; then $A = 1$).
 $A = \{\text{EIRP Power [mW]} / 16.36 \text{ for DS, OFDM}\}$
 $A = \{\text{EIRP Power [mW]} / 4.9 \text{ for FH}\}$

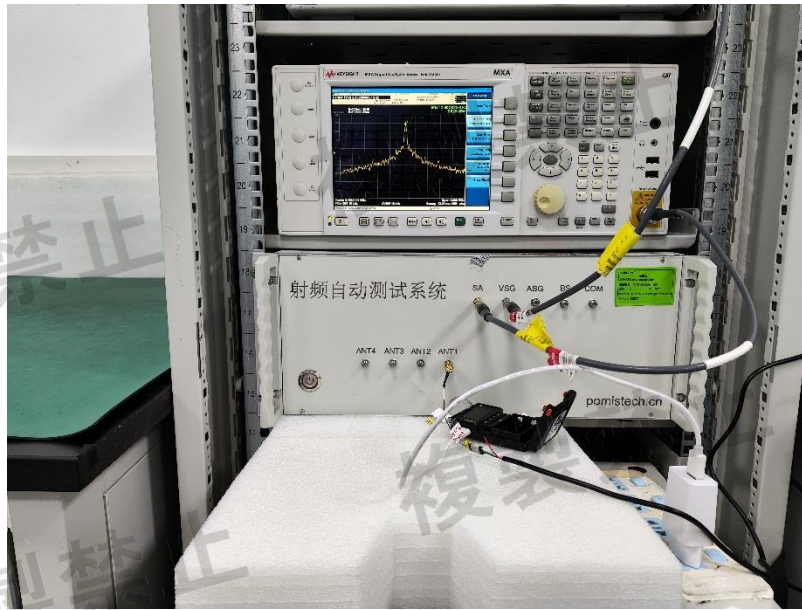
TEST SETUP



TEST RESULT OF TRANSMISSION RADIATION ANGLE WIDTH (3DB BEAMWIDTH)

Method of measurement:	See MIC Notice No.88 Appendix No.43 Clause 22
Results:	Pass

6. Test Setup Photos of the EUT



7. External and Internal Photos of the EUT

Please refer to WTH26H03056177W001 report.

Statement

1. This report is considered invalid without approved signature and special seal;
2. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which HCT hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. The “*” in CNAS logo report means that the test item(s) was (were) currently not applying for CNAS accreditation
5. Without written approval of HCT, this report can't be reproduced except in full.
6. For any claim of the report, just refer to the testing unit in 15 days, in case it is not in the above limited time, the claim shall be dismissed.
7. If not explicitly stated otherwise in the standard, the test is passed if the measured value is equal to or below(above) the limit line, regardless of the measurement uncertainty. If the measured value is above(below) the limit line, the test is not passed.
8. Measurement uncertainties are calculated for all instruments and instrument set-ups given in this report. Calculations are based on the principles given in the standard EA-4/02(Dec.1999), IEC Guide 115:2007,CNAS-GL007:2020, CNAS-CL01-G003:2021and other relevant internal HCT-procedures. Further information about measurement uncertainties will be given on request.
9. All instruments used in the tests given in this test report are calibrated and traceable to national or international standards. Further information about traceability will be given on request.

-----End of Report-----