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TEST REPORT

For Bluetooth-EDR

Report No..... : CHTW26035174
Project No : SHT2602032401W
Applicant's name : Mirai Speaker Inc.
Address..... : 8F,2-22-1,Higashi-nihonbashi,Chuo-ku,Tokyo,103-0004,Japan
Product Name : Earphone
Trade Mark..... : -
Model No..... : MSE-MIRAI01-EP
Listed Model(s) : -
Standard : **Article 2 paragraph 1 item 19 (WW)**
Date of receipt of test sample..... : 2026/2/26
Date of testing..... : 2026/2/26- 2026/3/17
Date of issue..... : 2026/3/19
Result..... : **Pass**



Compiled by
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Supervised by
(Position+Printed name+Signature) : Project Engineer Kiki Kong *Kiki Kong*
Approved by
(Position+Printed name+Signature) : RF Manager Xu Yang *Xu Yang*

Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**
Address..... : Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

[Article 2 paragraph 1 item 19](#): Low power data communications system in the 2.4GHz band.

Test method: [MIC Notification 88, ANNEX 43](#)

1.2. Report version

Revision No.	Date of issue	Description
N/A	2026-03-19	Original

2. TEST DESCRIPTION

Report clause	Test Item	Result	Test Engineer
5.1	Frequency Error	PASS	Xiangyu Wei
5.2	Antenna Power	PASS	Xiangyu Wei
5.3	Occupied bandwidth(99%)	PASS	Xiangyu Wei
5.4	Spread spectrum bandwidth(90%)	PASS	Xiangyu Wei
5.5	Dwell time	PASS	Xiangyu Wei
5.6	Spurious Emissions Intensity	PASS	Xiangyu Wei
5.7	Limit of secondary radiated emissions	PASS	Xiangyu Wei
5.8	Radio Interference Prevention Capability Measurement	PASS	Xiangyu Wei

3. SUMMARY

3.1. Client Information

Applicant:	Mirai Speaker Inc.
Address:	8F,2-22-1,Higashi-nihonbashi,Chuo-ku,Tokyo,103-0004,Japan
Manufacturer:	Mirai Speaker Inc.
Address:	8F,2-22-1,Higashi-nihonbashi,Chuo-ku,Tokyo,103-0004,Japan

3.2. Product Description

Main unit information:	
Product Name:	Earphone
Trade Mark:	-
Model No.:	MSE-MIRAIS01-EP
Listed Model(s):	-
Power supply:	DC 3.7V from battery
Hardware version:	V2
Software version:	V1.0.0.2
Accessory unit information:	
Battery information:	3.7V 55mAh 0.203Wh

3.3. Radio Specification Description

Bluetooth version:	V5.4
Support function ^{*1} :	EDR
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	FPC Antenna
Antenna gain:	2.44dBi
RF Rated output power:	GFSK: 0.03mW/MHz
	$\pi/4$ DQPSK: 0.02mW/MHz
	8DPSK: 0.02mW/MHz

Note:

*1: only show the RF function associated with this report.

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China
Contact information:	Tel: 400-963-0755 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn

4. TEST CONFIGURATION

4.1. Test frequency list

Test Channel	Channel No.	Frequency (MHz)
CH _L	00	2402
-	01	2403
-	⋮	⋮
CH _M	39	2441
-	⋮	⋮
-	77	2479
CH _H	78	2480

4.2. Descriptions of Test mode

Preliminary tests were performed in different data rates, final test modes are considering the modulation and worse data rates as below table.

Modulation	Data rate
GFSK	1Mbps
$\pi/4$ DQPSK	2Mbps
8DPSK	3Mbps

4.3. EUT operation mode

For RF test items
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.

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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

Whether support unit is used?			
✓ No			
Item	Equipment	Trade Name	Model No.
1			

4.5. Modifications

No modifications were implemented to meet testing criteria.

4.6. Environmental conditions

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

Battery Voltage	Normal Voltage / N_V	DC 3.7V
	Low Voltage / L_V	DC 3.33V
	High Voltage / H_V	DC 4.07V
Other	Normal Temperature/ T_{nor} :	25°C
	Relative Humidity	55 %
	Air Pressure	989 hPa

The RF unit is supplied DC1.7V. The fluctuation of input voltage to the circuit of RF unit of test equipment is under $\pm 1\%$, when input voltage DC3.7V is fluctuated $\pm 10\%$. So all measurement has been conducted by only rated voltage.

DC Input	RF_IC Input	Rate of fluctuation(%)
3.70V	1.7V	0.0
3.33V	1.7V	0.0
4.07V	1.7V	0.0

4.7. Statement of the measurement uncertainty

Parameter	Uncertainty
Frequency Error	0.05ppm
Total RF power, conducted	1.07dB
Spurious emissions, conducted	1.68 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).

4.8. Equipments Used during the Test

● RF Test Software					
Used	Test Item	Software Name	Manufacturer	Equipment No.	Version
●	RF Conducted	JS1120-3 RF Test Software	Tonscend	-	V3.6.21

● RF Conducted test item							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Signal and spectrum Analyzer	R&S	HTWE0242	FSV40	100048	2025/8/19	2026/8/18
●	Vector signal generator	R&S	HTWE0244	SMBV100A	260790	2026/3/13	2027/3/12
●	OSP	R&S	HTWE0243	OSP120	101317	2025/8/19	2026/8/18
●	10dB Attenuator	R&S	HTWE0250-01	10dB Attenuator-1	N/A	2025/8/22	2026/8/21
●	10dB Attenuator	R&S	HTWE0250-02	10dB Attenuator-2	N/A	2025/8/22	2026/8/21
●	10dB Attenuator	R&S	HTWE0250-03	10dB Attenuator-3	N/A	2025/8/22	2026/8/21
●	10dB Attenuator	R&S	HTWE0250-04	10dB Attenuator-4	N/A	2025/8/22	2026/8/21
●	30dB Attenuator	R&S	HTWE0250-05	30dB Attenuator-5	N/A	2025/8/22	2026/8/21

● Auxiliary Equipment							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	DC Power Supply	Gwinstek	HTWE0274	SPS-2415	GER835793	N/A	N/A
○	DC Power Supply	MESTEK	HTWE0705	DP6010	00230820197	N/A	N/A

The Calibration Bodies is confirm to the article 24-2, 4, 2(c) paragraph (1).

Calibration Body: CCIC(Shenzhen) Metrology&Testing Service Co.,Ltd.

(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 Article 102-18 paragraph (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).

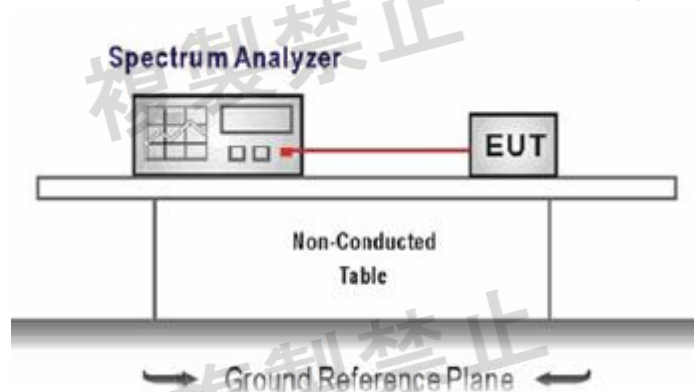
5. TEST CONDITIONS AND RESULTS

5.1. Frequency Error

LIMIT

$\pm 50\text{ppm}$

TEST CONFIGURATION



TEST CONDITION

Without modulation, continuously transmitting

SPECTRUM SET:

Test Frequency= test channel,

RBW=VBW=10KHz, Span=3MHz, Sweep time=Auto, Detector mode=Positive peak

TEST RESULTS

☒ Passed ☐ Not Applicable

Refer to the appendix report on the section 8

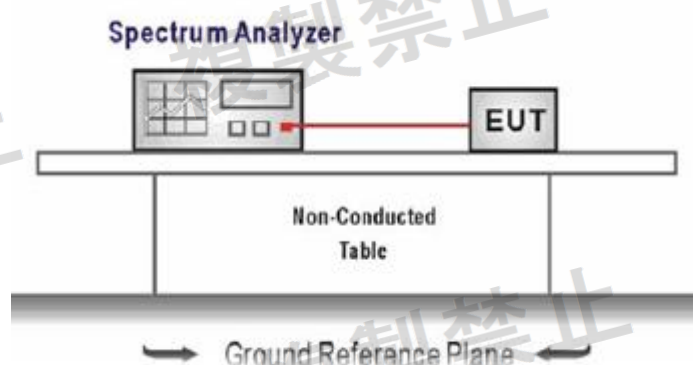
5.2. Antenna Power

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 – 40MHz)	5mW/MHz
4	Other than (1) & (2)&(3)	10mW

Tolerance: +20%

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=1MHz, Span=0Hz, Sweep time=Auto, Detector mode=RMS
- 3) Antenna power= average burst power

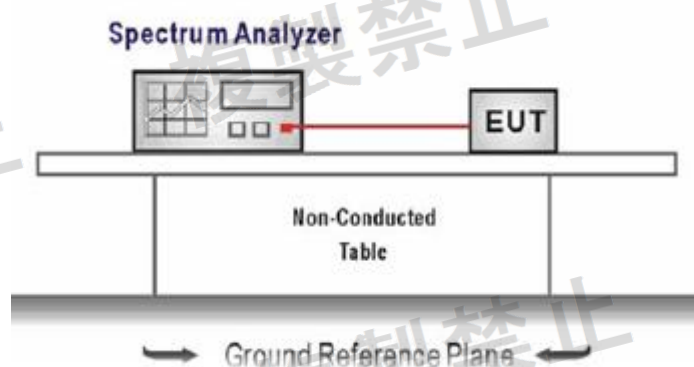
TEST RESULTS

☒ Passed ☐ Not Applicable

Refer to the appendix report on the section 8

5.3. Occupy Bandwidth (99%)**LIMIT**

Moduation type	Limit
FH	83.5MHz or less
FH + DS	83.5MHz or less
FH + OFDM	83.5MHz or less
DSSS	26MHz or less (802.11b)
OFDM	26MHz or less (802.11g/n(HT20))
OFDM	40MHz or less (802.11n(HT40))
Others	26MHz or less

TEST CONFIGURATION**TEST CONDITION**

- Hopping on
- Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

Test Frequency: test channel,
 RBW=VBW=1MHz, Span=200MHz, Sweep time=Auto, Detector mode=Positive peak

TEST RESULTS

☒ Passed ☐ Not Applicable

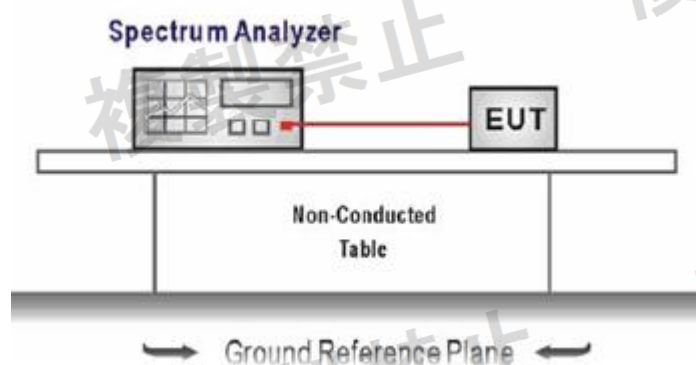
Refer to the appendix report on the section 8

5.4. Spread spectrum bandwidth (90%)

LIMIT

-

TEST CONFIGURATION



TEST CONDITION

- Hopping on
- Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

Test Frequency: test channel,

RBW=VBW=1MHz, Span=200MHz, Sweep time=Auto, Detector mode=Positive peak

TEST RESULTS

☒ Passed ☐ Not Applicable

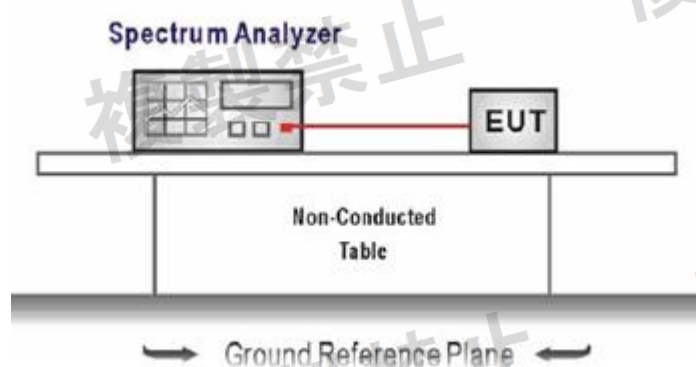
Refer to the appendix report on the section 8

5.5. Dwell time

LIMIT

0.4 second or less

TEST CONFIGURATION



TEST CONDITION

- Hopping on
- Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

Test Frequency: test channel,
RBW=1MHz ,VBW=3MHz, Span=0MHz, Detector mode=Positive peak

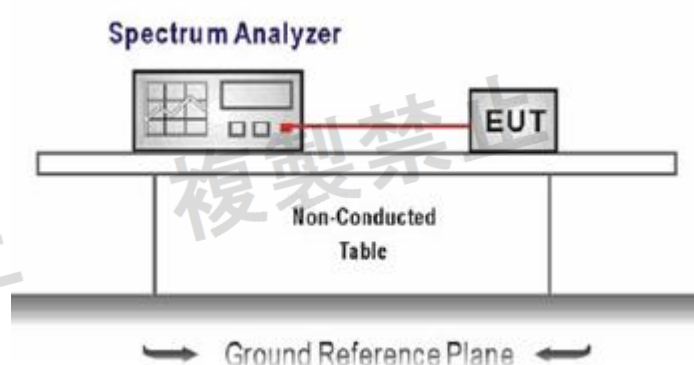
TEST RESULTS

☒ Passed ☐ Not Applicable

Refer to the appendix report on the section 8

5.6. Spurious emission intensity**LIMIT**

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

TEST CONFIGURATION**TEST CONDITION**

Test diffusion code and modulate with standard coding test signal

SPECTRUM SET:

Test Frequency: test channel,

RBW=1MHz ,VBW=3MHz, Sweep time=Auto, Detector mode=Positive peak

TEST RESULTS

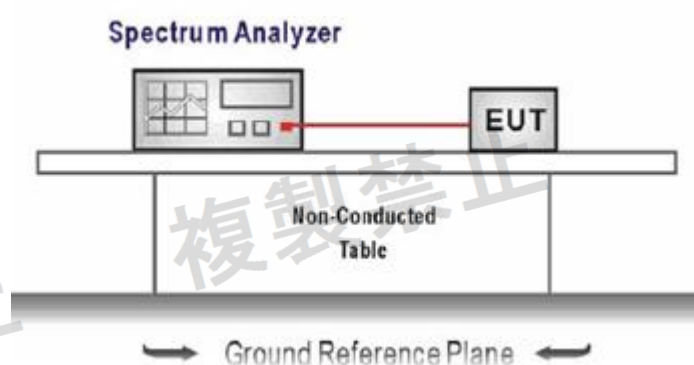
☒ Passed

☐ Not Applicable

Refer to the appendix report on the section 8

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=300KHz;
 Above 1GHz, RBW=1MHz ,VBW=3MHz,
 Sweep time=Auto, Detector mode=Positive peak

TEST RESULTS

☒ Passed ☐ Not Applicable

Refer to the appendix report on the section 8

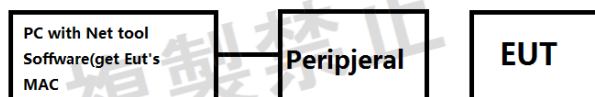
5.8. Radio Interference Prevention Capability Measurement

LIMIT

Identification code: 48bits or more

Mac IP Lits: MAC Scan

TEST CONFIGURATION



TEST CONDITION

Test diffusion code and modulate with standard coding test signal

TEST PROCEDURE

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

TEST RESULTS

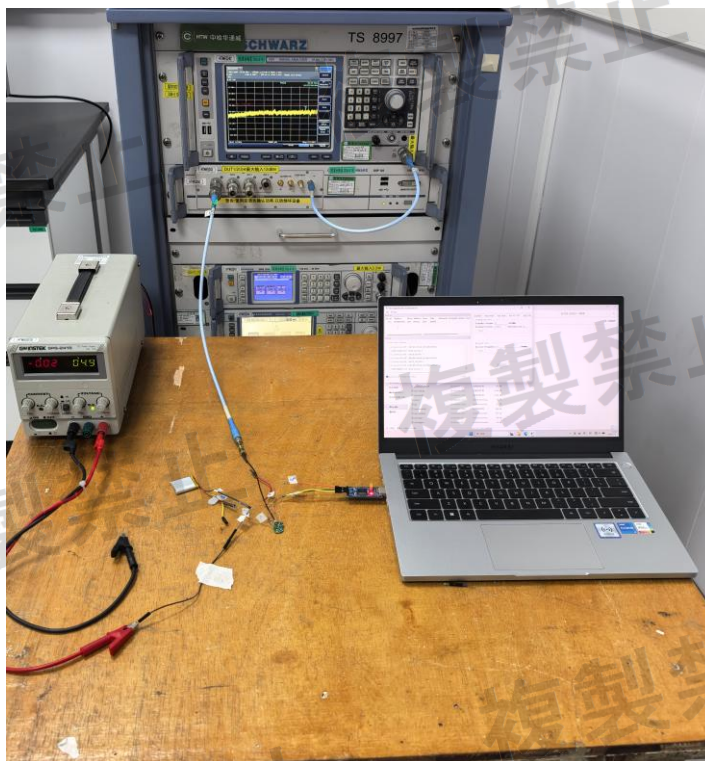
☒ Passed ☐ Not Applicable

Note: Radio interference prevention capability was conformed.

Bluetooth Device address: 00:60:37:5D:B4:4D

00:60:37:5D:B4:4D

6. TEST SETUP PHOTOS OF THE EUT



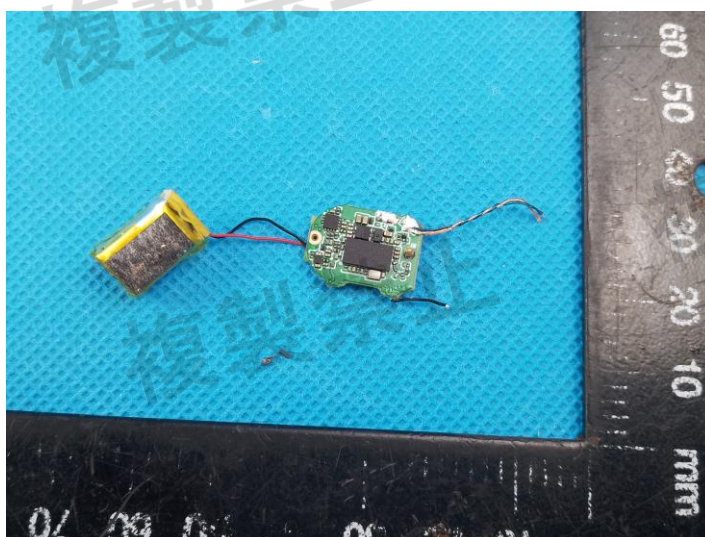
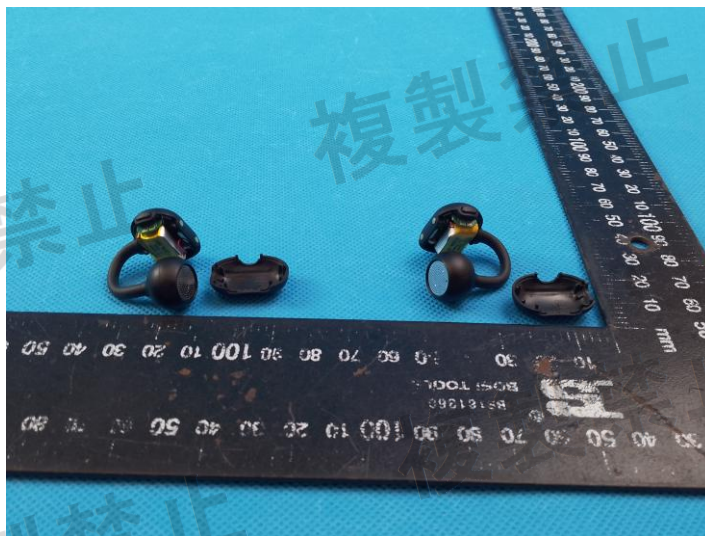
7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

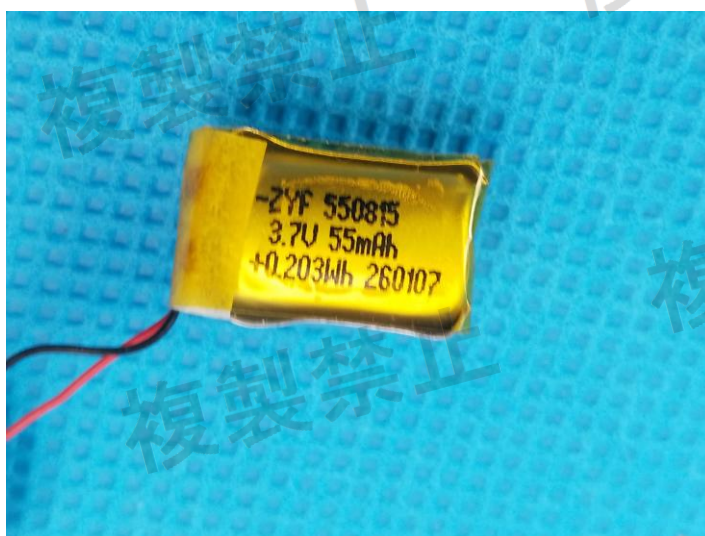
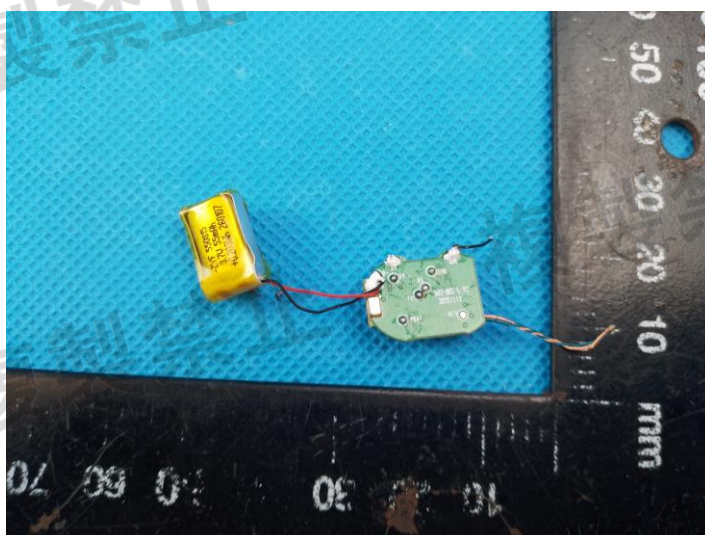
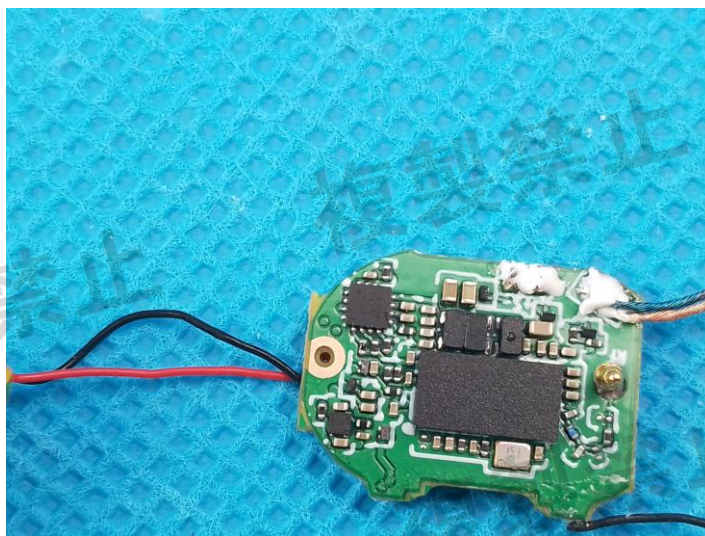
7.1. External Photos

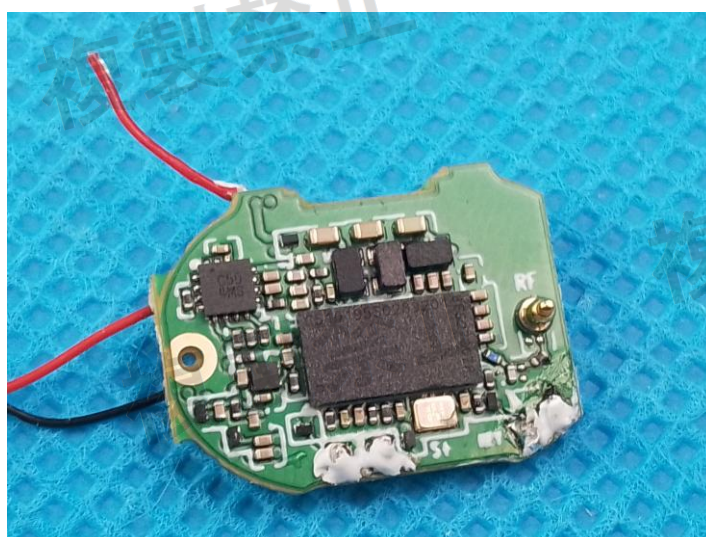
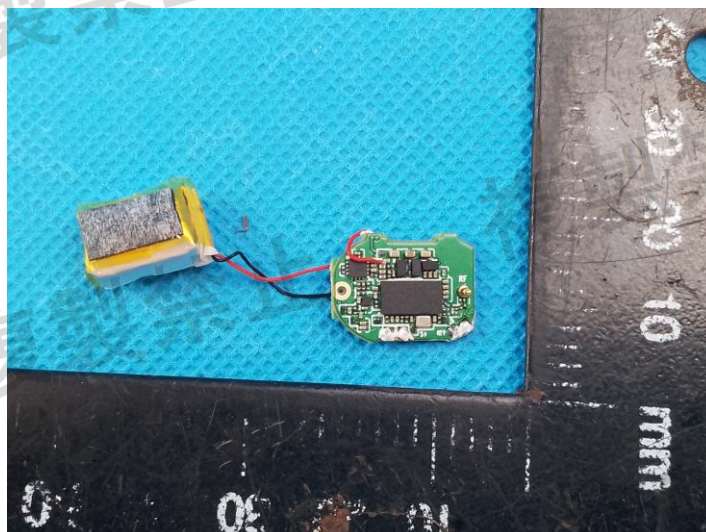
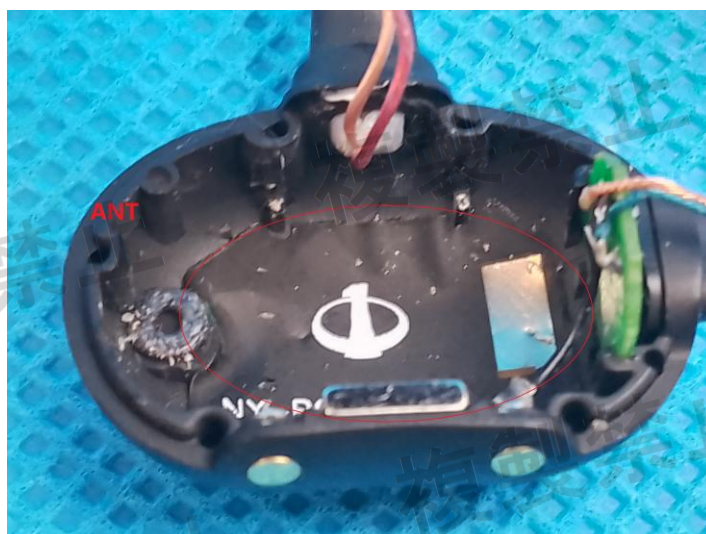


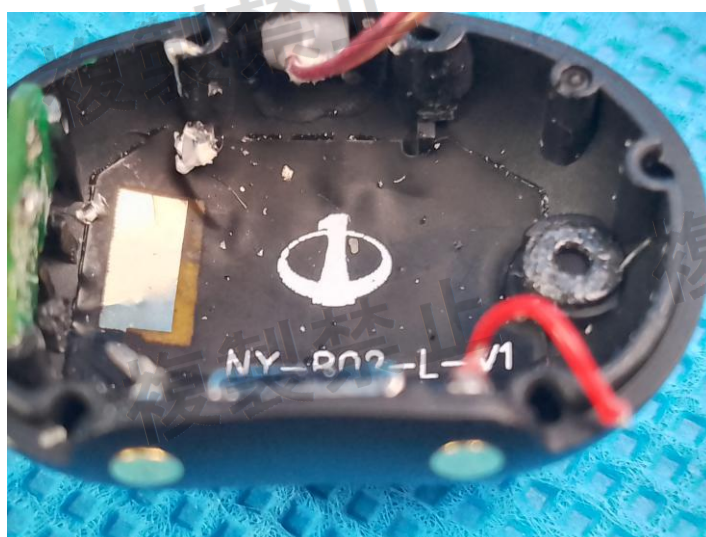
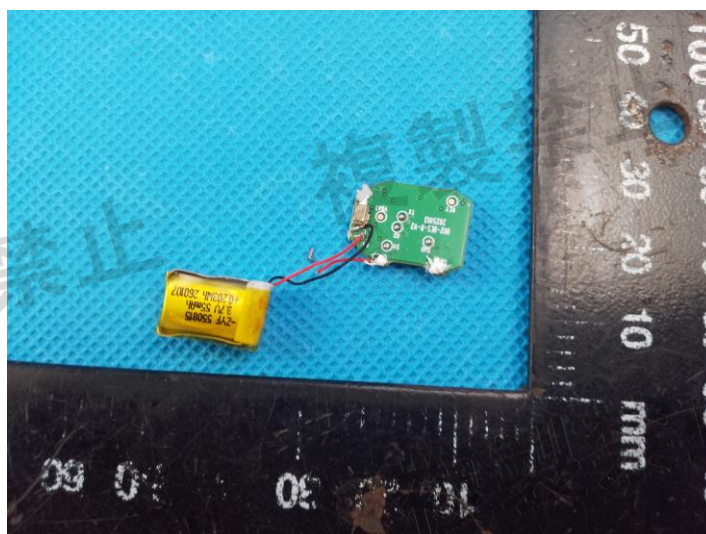


7.2. Internal Photos









8. APPENDIX REPORT

APPENDIX REPORT

Project No.	SHT2602032401W	Radio Specification	Bluetooth EDR
Test sample No.	YPHT26020324003	Model No.	MSE-MIRAI501-EP
Start test date	2026-03-13	Finish date	2026-03-16
Temperature	21.9℃	Humidity	51%
Test Engineer	Xiangyu Wei	Auditor	Xiaodong Zhuo

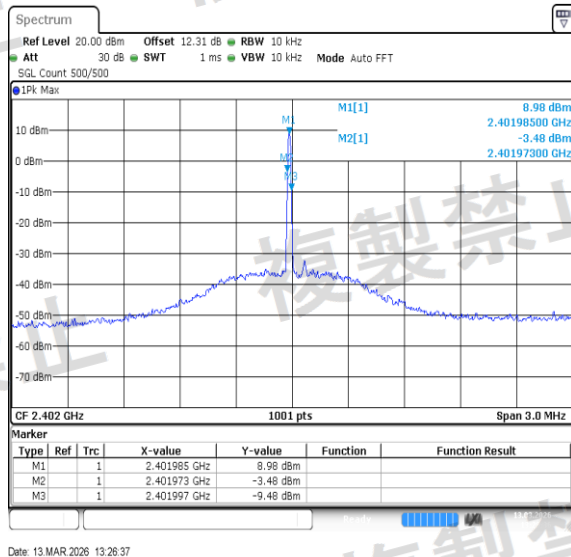
Appendix clause	Test item	Result
A	Frequency Error	PASS
B	Antenna Power and EIRP	PASS
C	Occupy Bandwidth (99%)	PASS
D	Spread spectrum bandwidth (90%)	PASS
E	Dwell time	PASS
F	Spurious emission intensity	PASS
G	Limit of secondary radiated emissions	PASS

Appendix A: Frequency Error

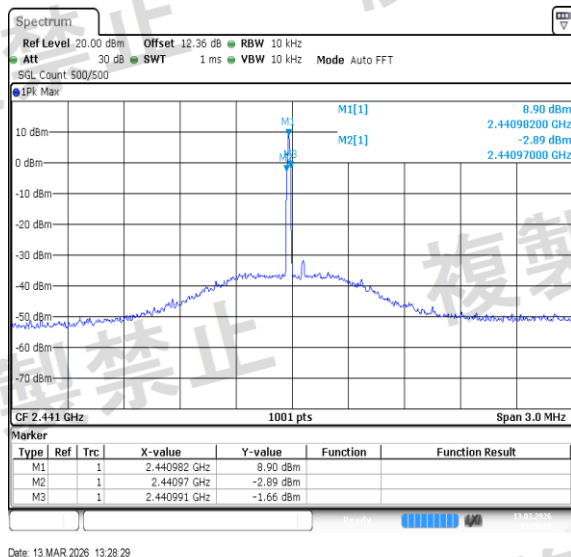
Test Result

Test Condition	Test Mode	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	DH5	2402	-6.24480	±50	PASS
NTNV	DH5	2441	-7.98853	±50	PASS
NTNV	DH5	2480	-8.46774	±50	PASS
NTNV	2DH5	2402	-6.86928	±50	PASS
NTNV	2DH5	2441	-7.98853	±50	PASS
NTNV	2DH5	2480	-7.86290	±50	PASS
NTNV	3DH5	2402	-6.86928	±50	PASS
NTNV	3DH5	2441	-7.98853	±50	PASS
NTNV	3DH5	2480	-7.86290	±50	PASS

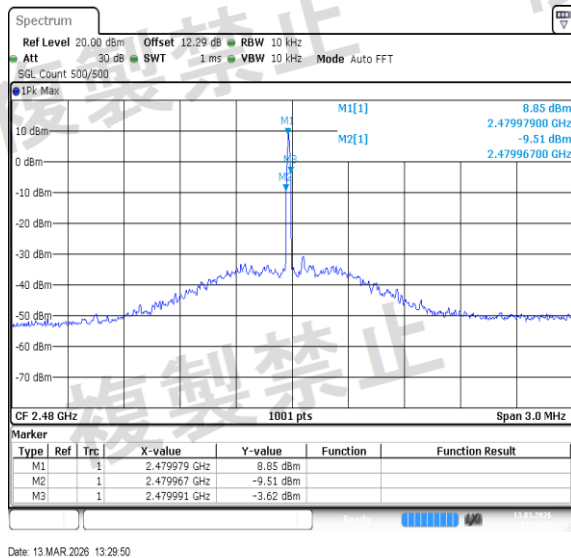
Test Graphs



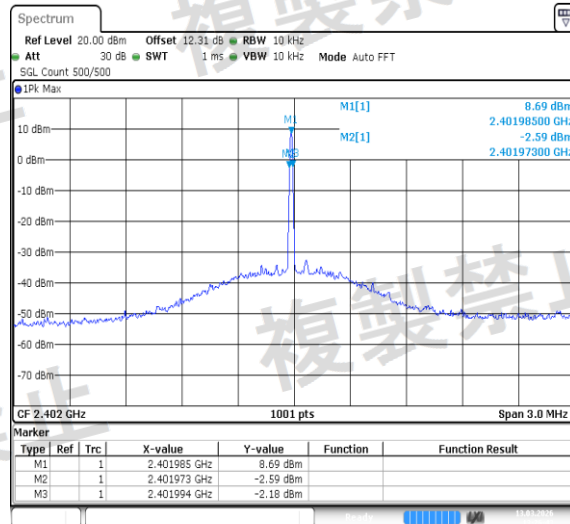
NTVN-DH5-Ant1-2402-PASS



NTVN-DH5-Ant1-2441-PASS

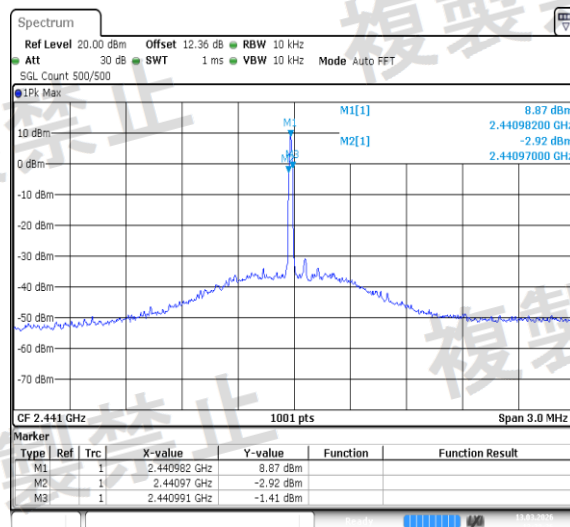


NTVN-DH5-Ant1-2480-PASS



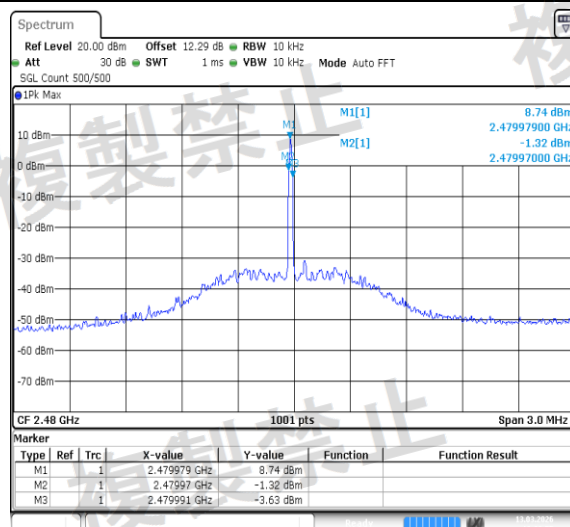
Date: 13 MAR 2026 13:26:43

NTNV-2DH5-Ant1-2402-PASS



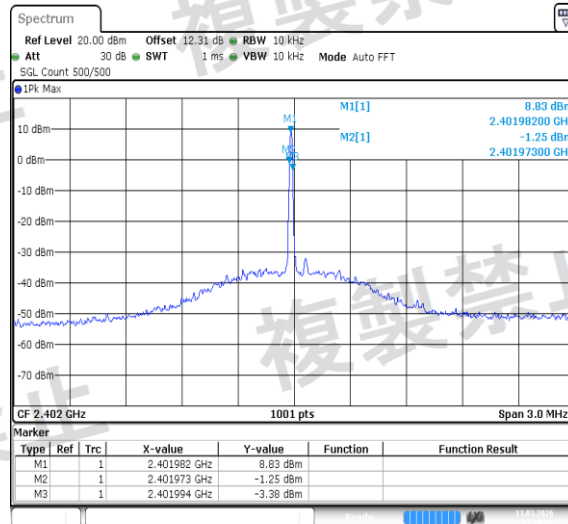
Date: 13 MAR 2026 13:28:36

NTNV-2DH5-Ant1-2441-PASS



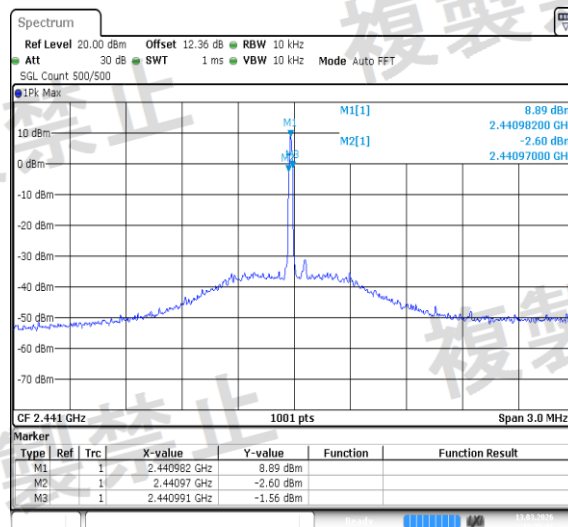
Date: 13 MAR 2026 13:29:55

NTNV-2DH5-Ant1-2480-PASS



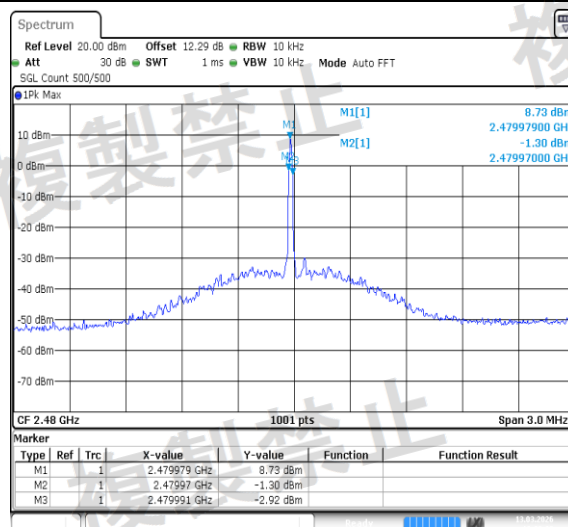
Date: 13 MAR 2026 13:26:52

NTNV-3DH5-Ant1-2402-PASS



Date: 13 MAR 2026 13:28:41

NTNV-3DH5-Ant1-2441-PASS



Date: 13 MAR 2026 13:30:00

NTNV-3DH5-Ant1-2480-PASS

Appendix B: Antenna Power and EIRP

Test Result

Test Condition	Test Mode	Freq(MHz)	Power (mW)	Spread bandwidth (MHz)	Burst Rate	Antenna power (mW/MHz)	Rated Power (mW/MHz)	Result (%)	Limit (%)	Verdict
NTNV	DH5	2402	1.32	71.528	1.3	0.024	0.03	-20.000	+20	PASS
NTNV	DH5	2441	1.37	71.528	1.3	0.025	0.03	-16.667	+20	PASS
NTNV	DH5	2480	1.29	71.528	1.3	0.023	0.03	-23.333	+20	PASS
NTNV	2DH5	2402	0.52	71.329	1.3	0.009	0.02	-55.000	+20	PASS
NTNV	2DH5	2441	0.55	71.329	1.3	0.010	0.02	-50.000	+20	PASS
NTNV	2DH5	2480	0.52	71.329	1.3	0.009	0.02	-55.000	+20	PASS
NTNV	3DH5	2402	0.53	71.528	1.3	0.010	0.02	-50.000	+20	PASS
NTNV	3DH5	2441	0.55	71.528	1.3	0.010	0.02	-50.000	+20	PASS
NTNV	3DH5	2480	0.52	71.528	1.3	0.009	0.02	-55.000	+20	PASS

Test Condition	TestMode	Freq(MHz)	Power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Verdict
NTNV	DH5	2402	1.21	2.44	3.65	≤6.91	PASS
NTNV	DH5	2441	1.36	2.44	3.80	≤6.91	PASS
NTNV	DH5	2480	1.11	2.44	3.55	≤6.91	PASS
NTNV	2DH5	2402	-2.83	2.44	-0.39	≤6.91	PASS
NTNV	2DH5	2441	-2.57	2.44	-0.13	≤6.91	PASS
NTNV	2DH5	2480	-2.83	2.44	-0.39	≤6.91	PASS
NTNV	3DH5	2402	-2.77	2.44	-0.33	≤6.91	PASS
NTNV	3DH5	2441	-2.56	2.44	-0.12	≤6.91	PASS
NTNV	3DH5	2480	-2.80	2.44	-0.36	≤6.91	PASS

Note:

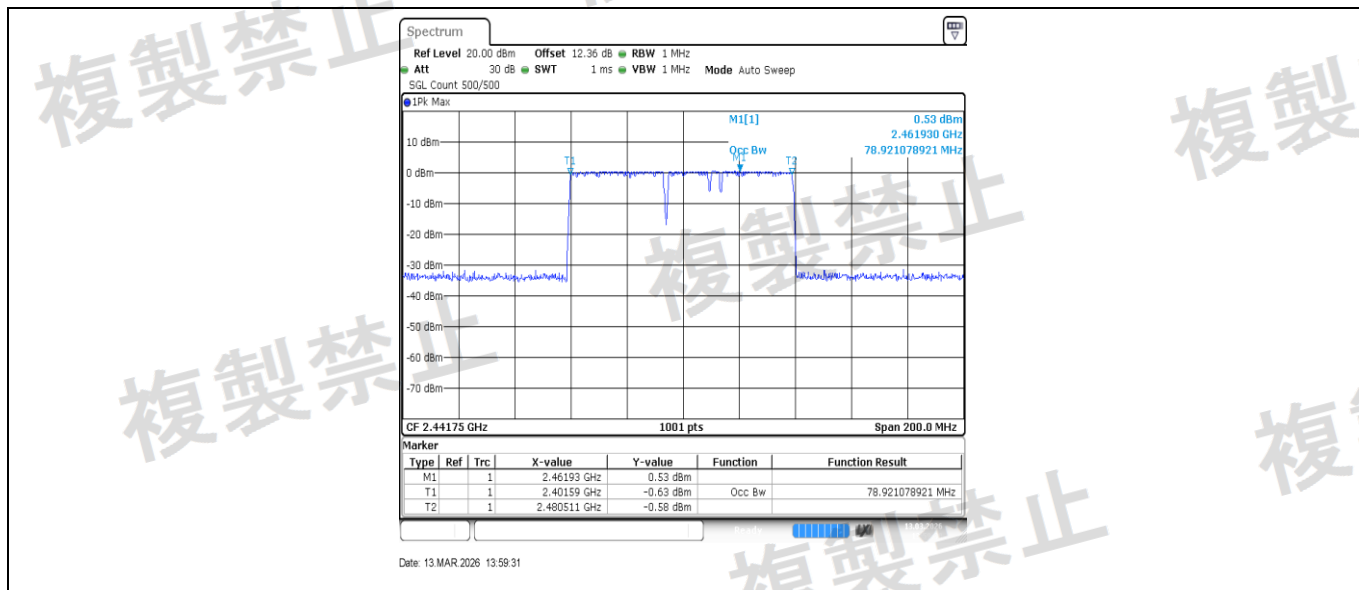
- 1) Result(mW)= $10^{\text{Result(dBm)} / 10}$
- 2) Burst Rate= Period / On Time according to clause 5.6.
- 3) Antenna Power = Result(mW) * Burst Rate / Spread bandwidth
- 4) Tolerance = (Antenna power – Rated power) / Rated power *100%

Appendix C: Occupied Bandwidth

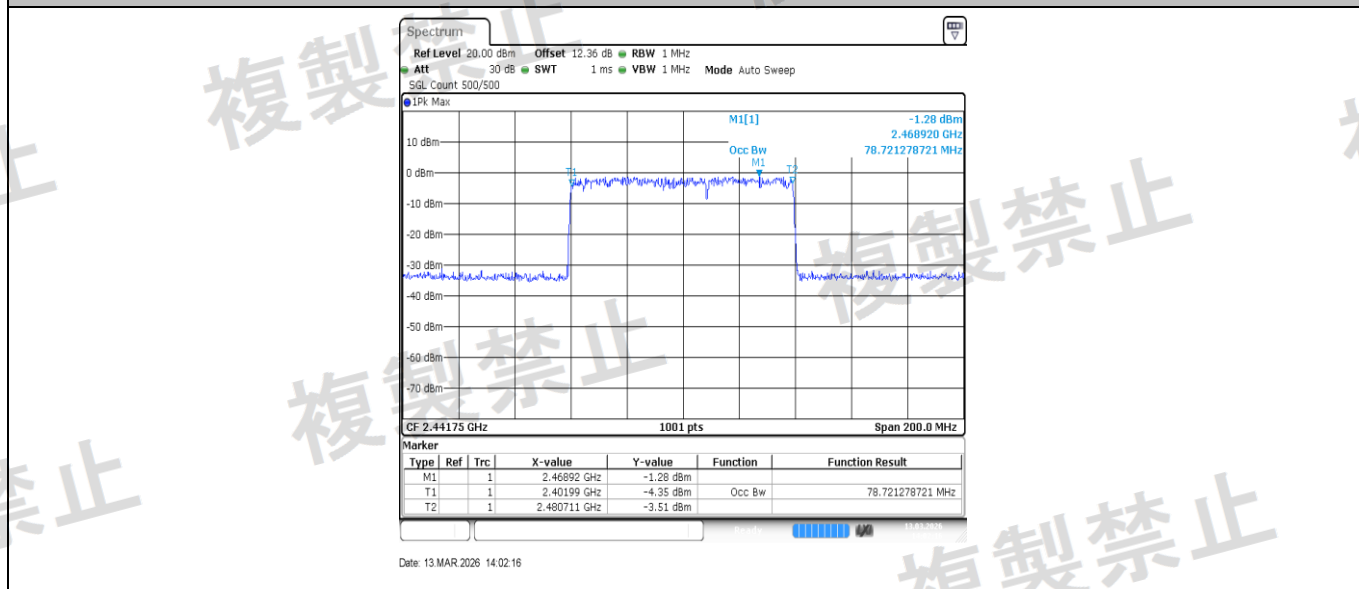
Test Result

Test Condition	Test Mode	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	DH5	2402	2.498	≤83.5	PASS
NTNV	DH5	2441	2.503	≤83.5	PASS
NTNV	DH5	2480	2.508	≤83.5	PASS
NTNV	2DH5	2402	2.862	≤83.5	PASS
NTNV	2DH5	2441	2.857	≤83.5	PASS
NTNV	2DH5	2480	2.862	≤83.5	PASS
NTNV	3DH5	2402	2.847	≤83.5	PASS
NTNV	3DH5	2441	2.842	≤83.5	PASS
NTNV	3DH5	2480	2.847	≤83.5	PASS

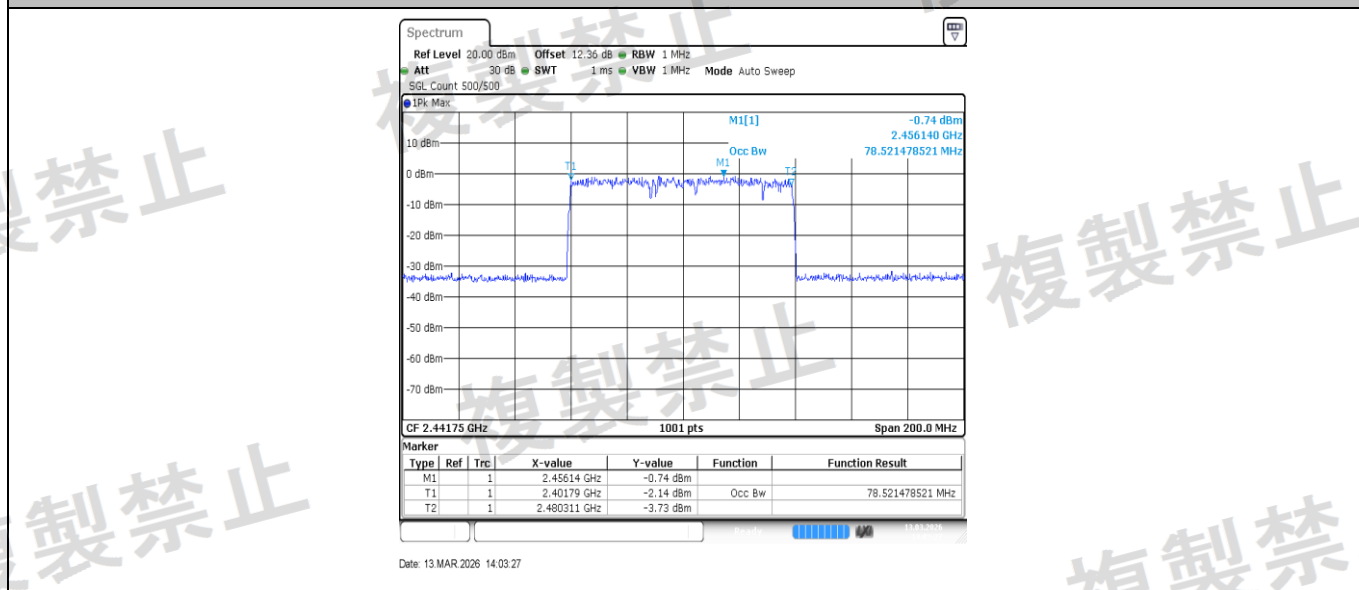
Test Condition	Test Mode	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	DH5	Hop	78.921	≤83.5	PASS
NTNV	2DH5	Hop	78.721	≤83.5	PASS
NTNV	3DH5	Hop	78.521	≤83.5	PASS



NTNV-DH5-Ant1-Hop-PASS



NTNV-2DH5-Ant1-Hop-PASS



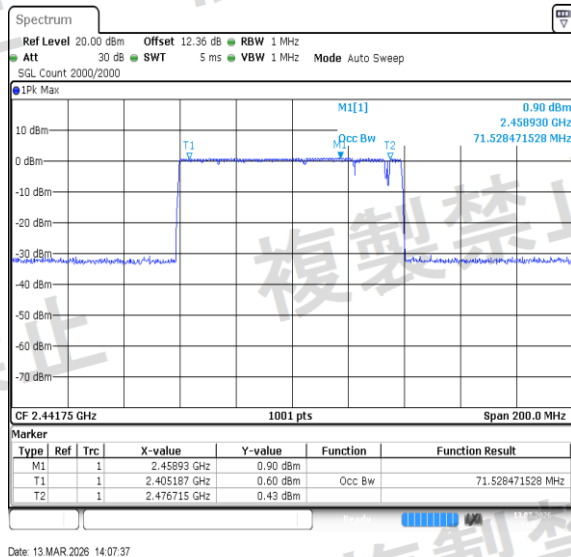
NTNV-3DH5-Ant1-Hop-PASS

Appendix D: Spread spectrum Bandwidth (90%)

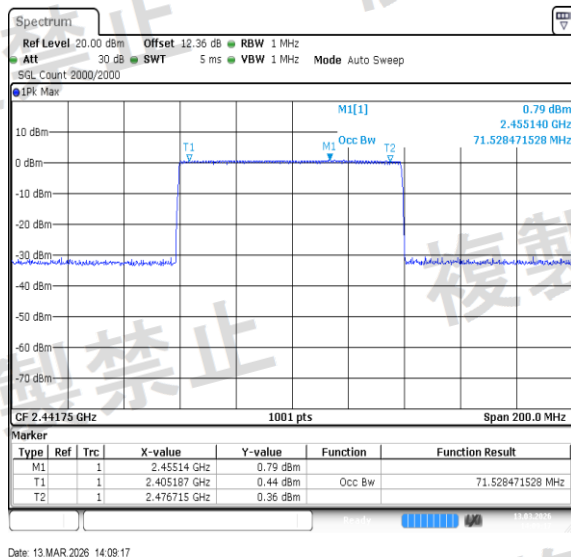
Test Result

Test Condition	Test Mode	Freq(MHz)	Result [MHz]	Limit [MHz]	SpreadFactor	Limit	Verdict
NTNV	DH1	Hop	71.528	≥ 0.5	71.528	>5	PASS
NTNV	DH3	Hop	71.528	≥ 0.5	71.528	>5	PASS
NTNV	DH5	Hop	71.528	≥ 0.5	71.528	>5	PASS
NTNV	2DH1	Hop	71.329	≥ 0.5	71.329	>5	PASS
NTNV	2DH3	Hop	71.329	≥ 0.5	71.329	>5	PASS
NTNV	2DH5	Hop	71.728	≥ 0.5	71.728	>5	PASS
NTNV	3DH1	Hop	71.528	≥ 0.5	71.528	>5	PASS
NTNV	3DH3	Hop	71.528	≥ 0.5	71.528	>5	PASS
NTNV	3DH5	Hop	71.329	≥ 0.5	71.329	>5	PASS

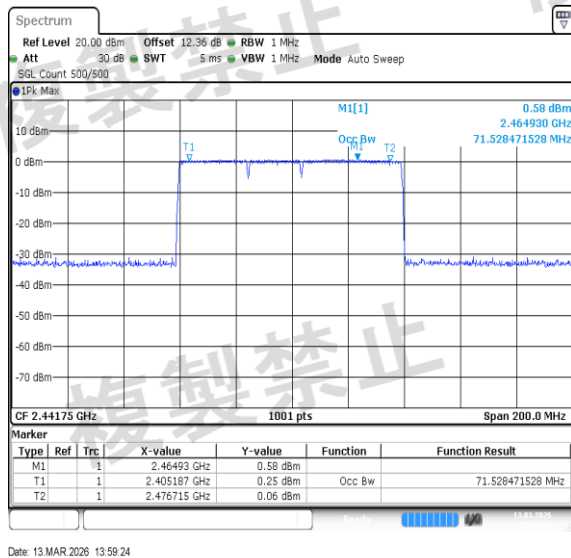
Test Graphs



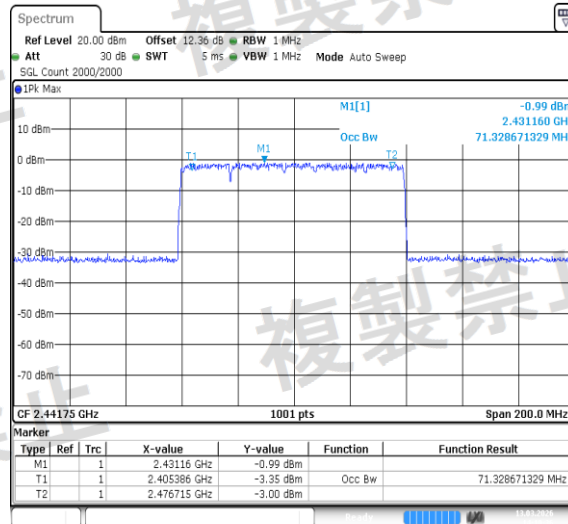
NTVN-DH1-Ant1-Hop-PASS



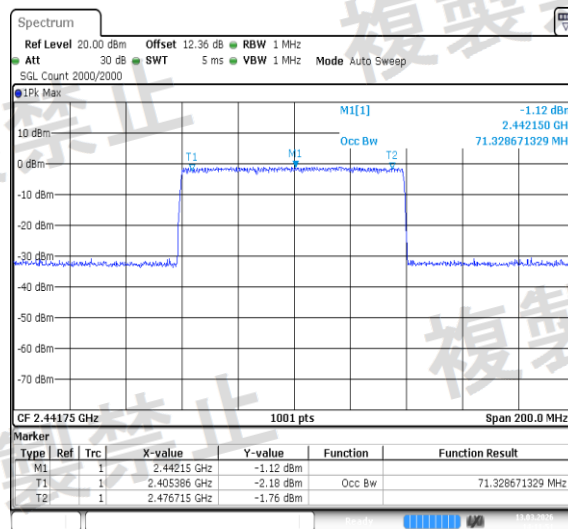
NTVN-DH3-Ant1-Hop-PASS



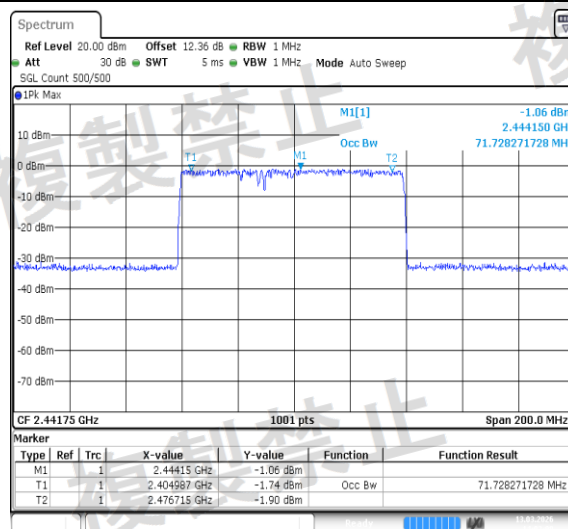
NTVN-DH5-Ant1-Hop-PASS



NTNV-2DH1-Ant1-Hop-PASS



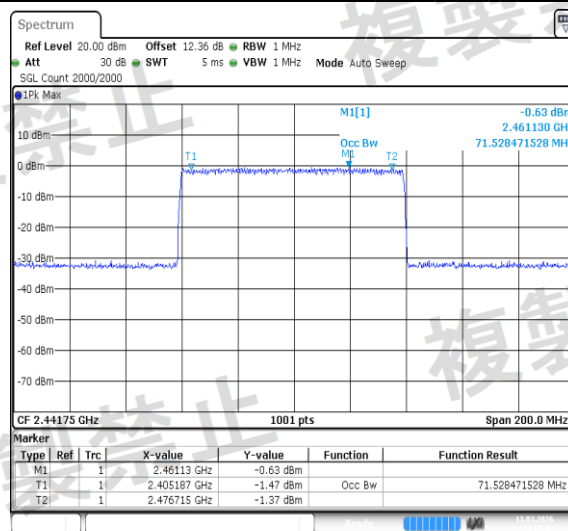
NTNV-2DH3-Ant1-Hop-PASS



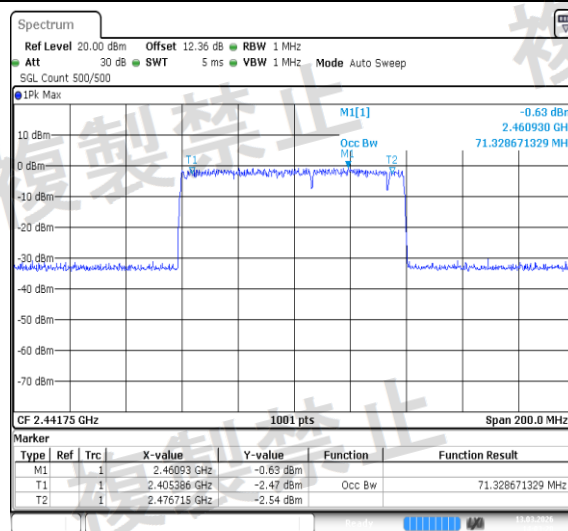
NTNV-2DH5-Ant1-Hop-PASS



NTNV-3DH1-Ant1-Hop-PASS



NTNV-3DH3-Ant1-Hop-PASS



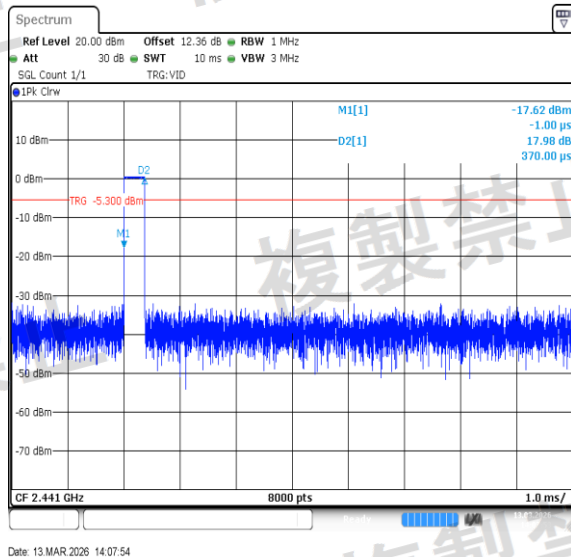
NTNV-3DH5-Ant1-Hop-PASS

Appendix E: Dwell Time

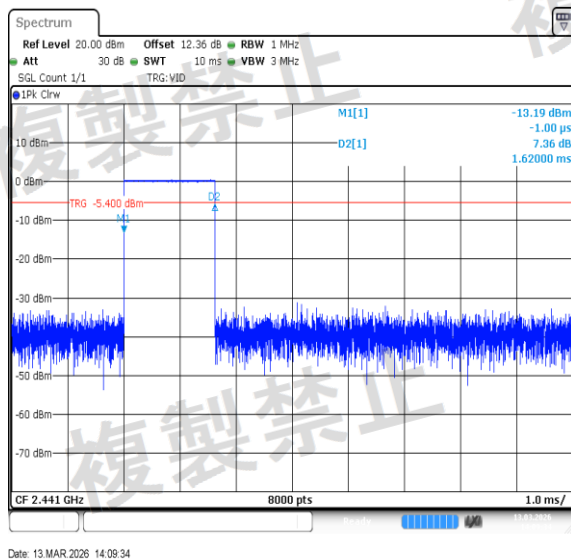
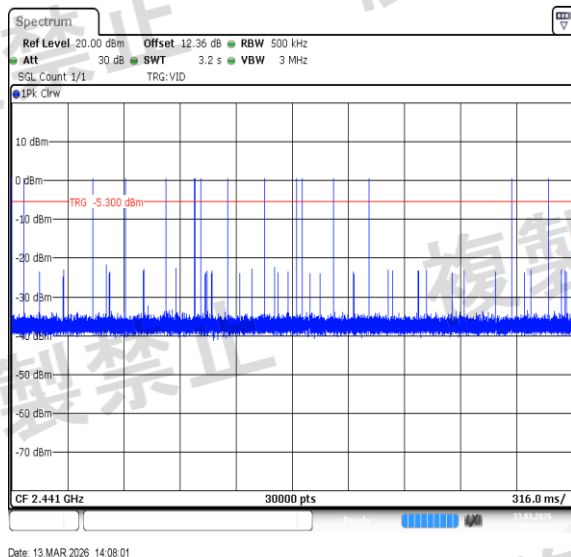
Test Result

Test Condition	Test Mode	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit [s]	Verdict
NTNV	DH1	Hop	0.37	150	0.056	≤0.4	PASS
NTNV	DH3	Hop	1.62	110	0.178	≤0.4	PASS
NTNV	DH5	Hop	2.86	120	0.343	≤0.4	PASS
NTNV	2DH1	Hop	0.38	140	0.053	≤0.4	PASS
NTNV	2DH3	Hop	1.63	140	0.228	≤0.4	PASS
NTNV	2DH5	Hop	2.86	100	0.286	≤0.4	PASS
NTNV	3DH1	Hop	0.38	150	0.057	≤0.4	PASS
NTNV	3DH3	Hop	1.62	80	0.130	≤0.4	PASS
NTNV	3DH5	Hop	2.87	90	0.258	≤0.4	PASS

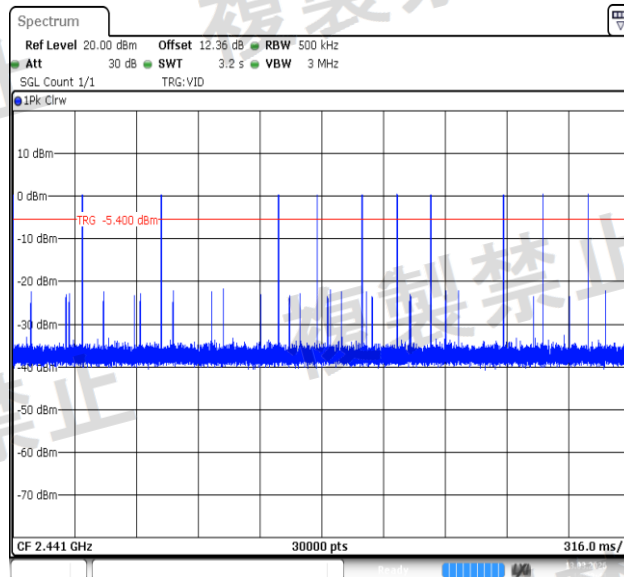
Test Graphs



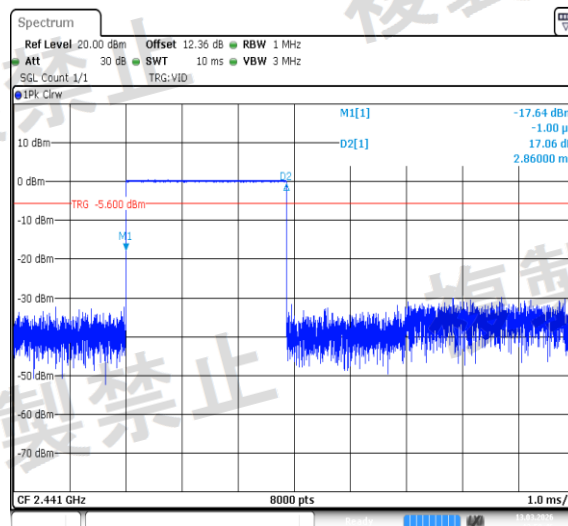
NTVN-DH1-Ant1-Hop-PASS



NTVN-DH3-Ant1-Hop-PASS

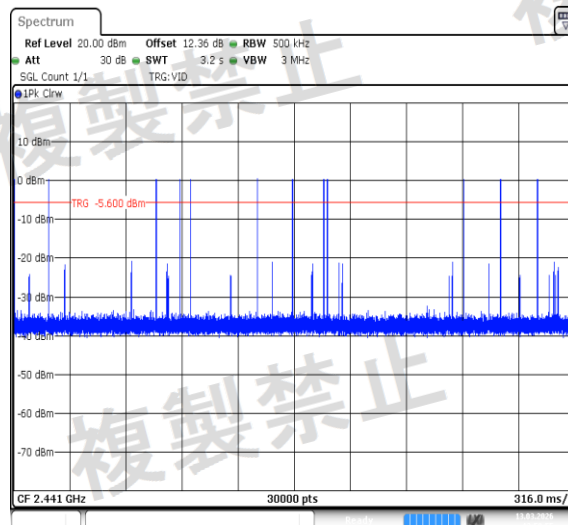


Date: 13.MAR.2026 14:09:41

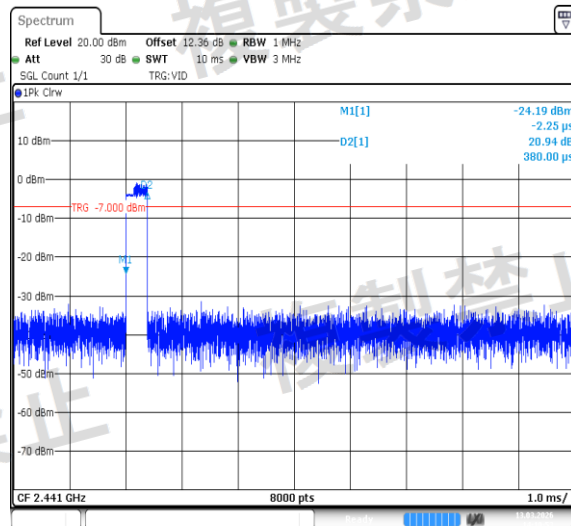


Date: 13.MAR.2026 13:59:47

NTNV-DH5-Ant1-Hop-PASS

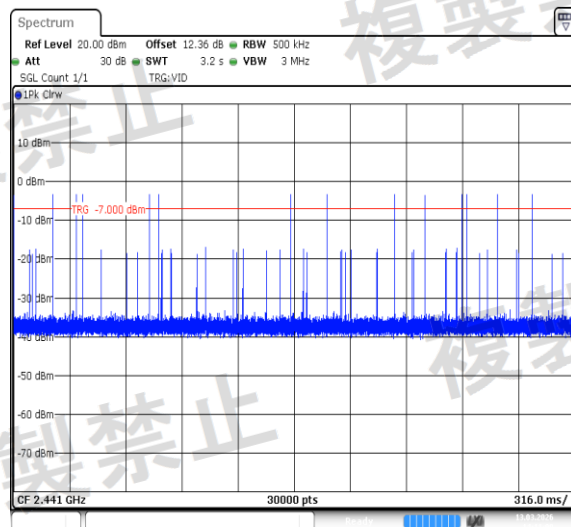


Date: 13.MAR.2026 13:59:55

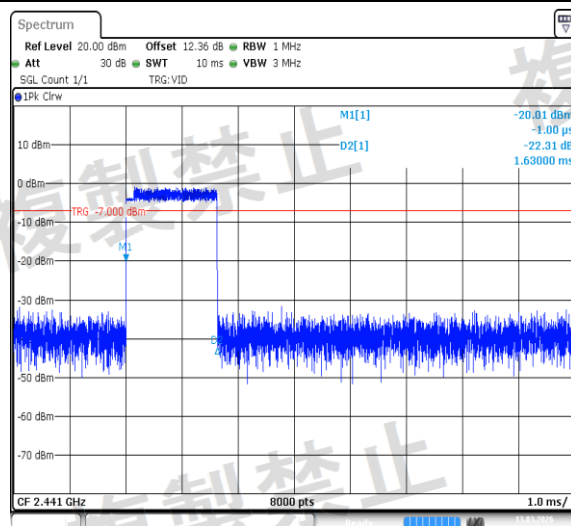


Date: 13 MAR 2026 14:10:53

NTVN-2DH1-Ant1-Hop-PASS

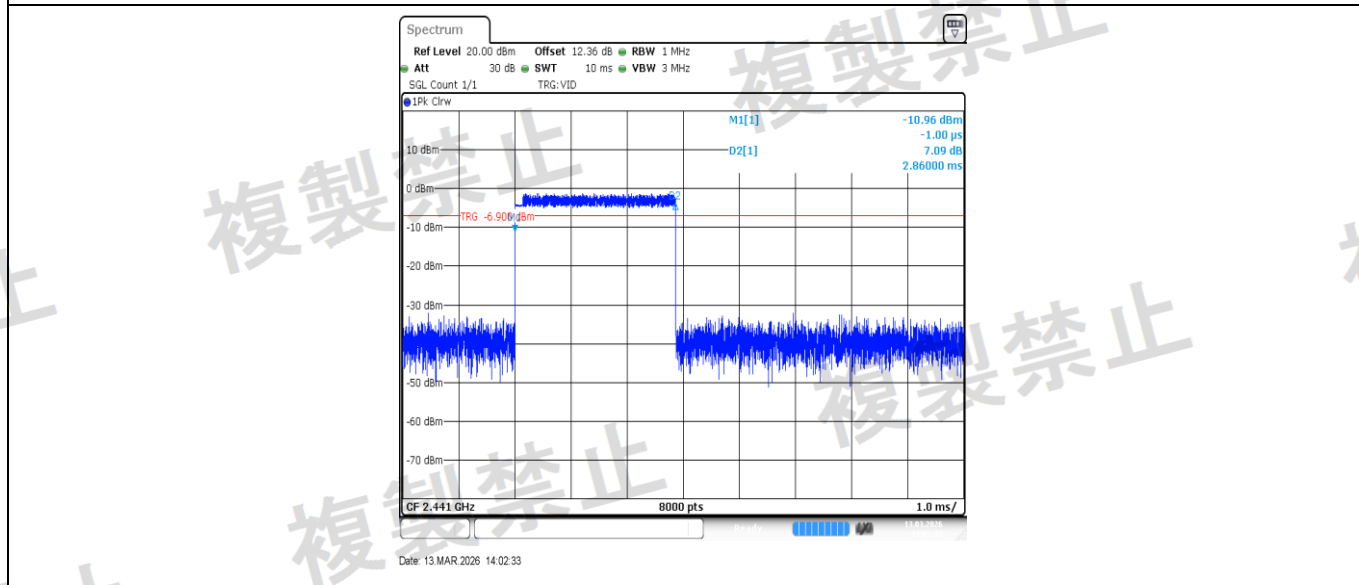
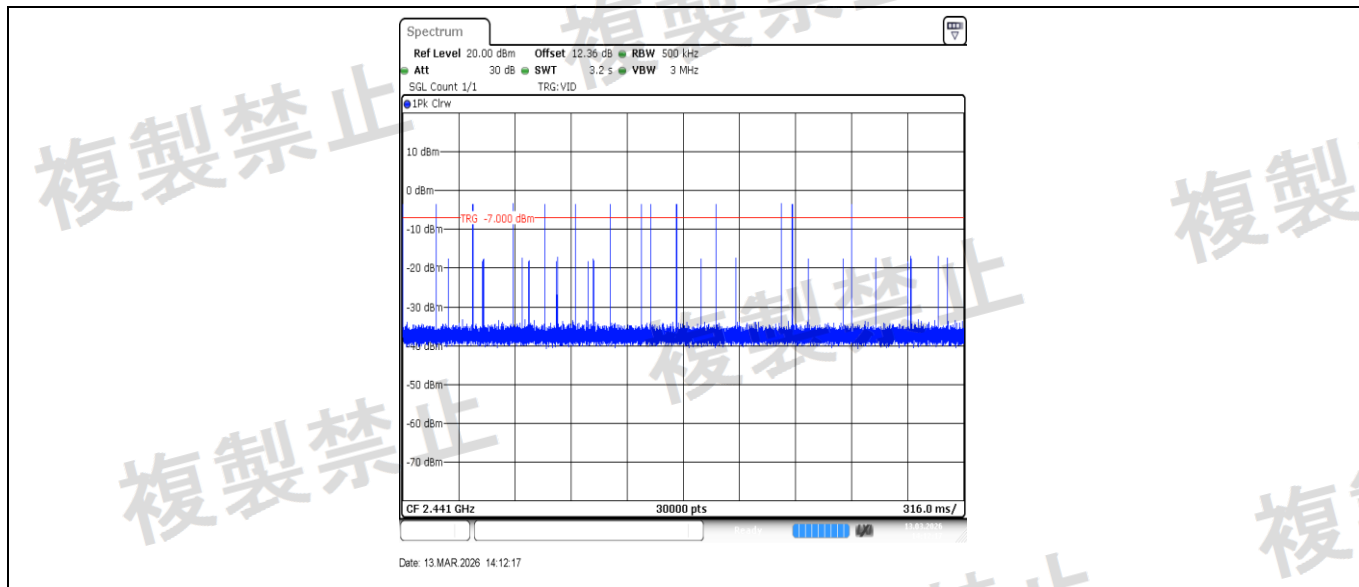


Date: 13 MAR 2026 14:11:00

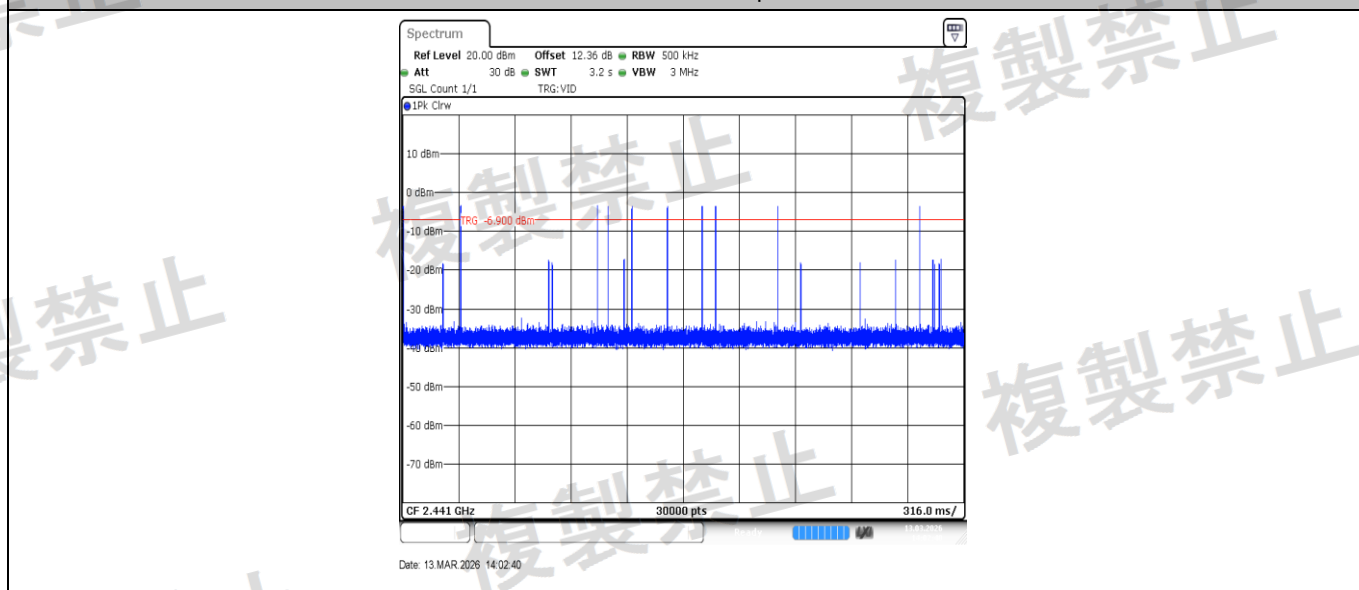


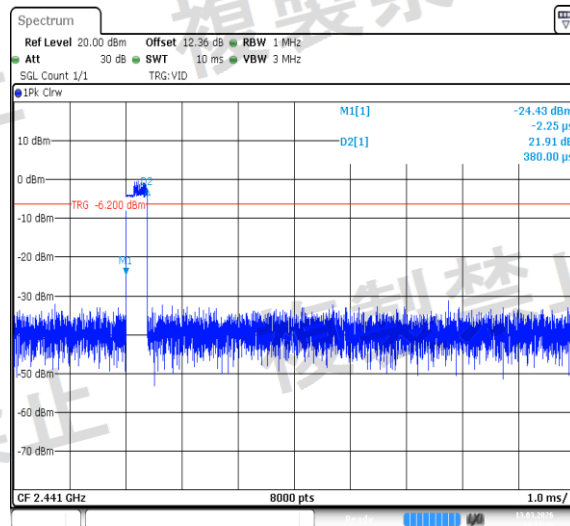
Date: 13 MAR 2026 14:12:08

NTVN-2DH3-Ant1-Hop-PASS



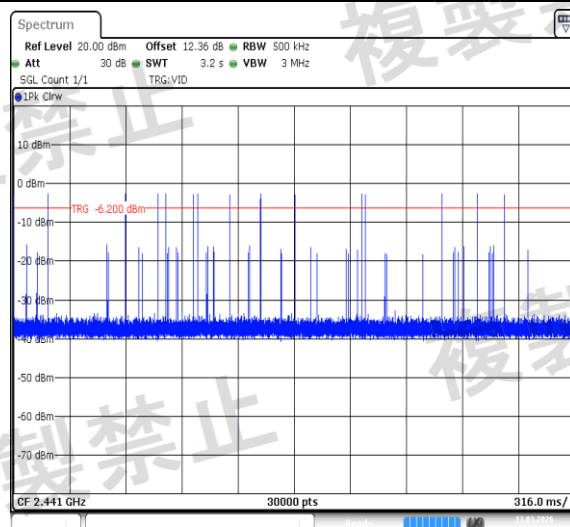
NTNV-2DH5-Ant1-Hop-PASS



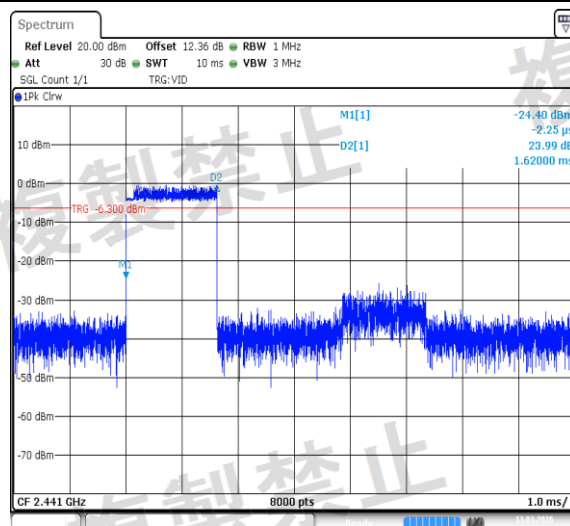


Date: 13 MAR 2026 14:13:37

NTVN-3DH1-Ant1-Hop-PASS

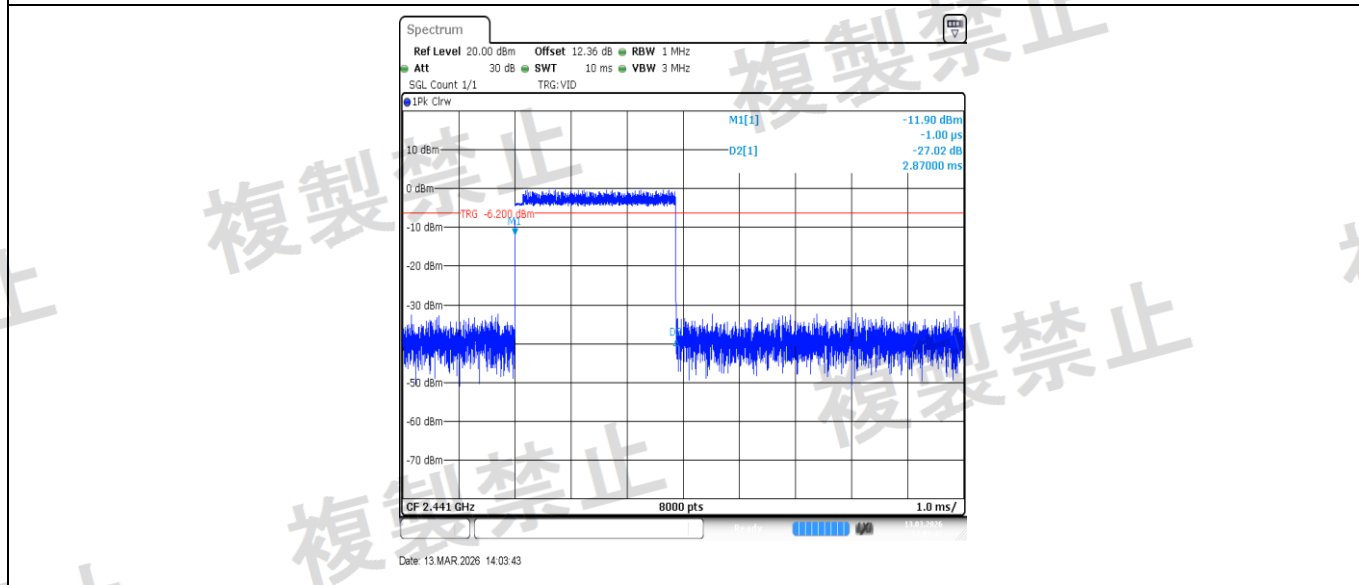
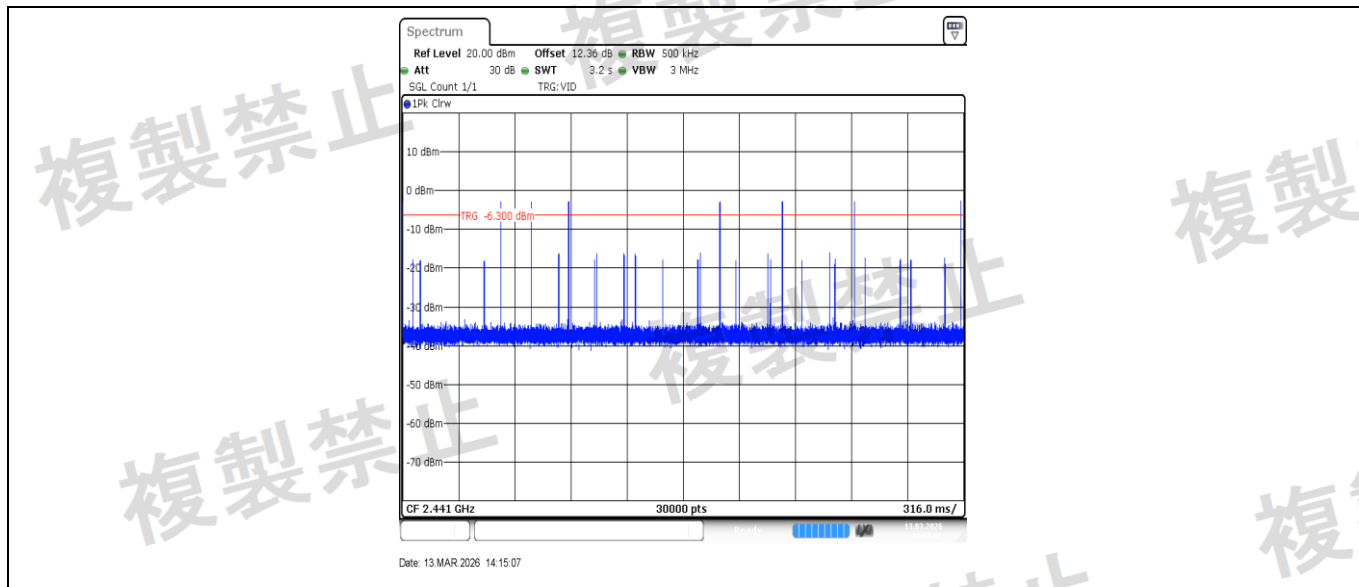


Date: 13 MAR 2026 14:13:44

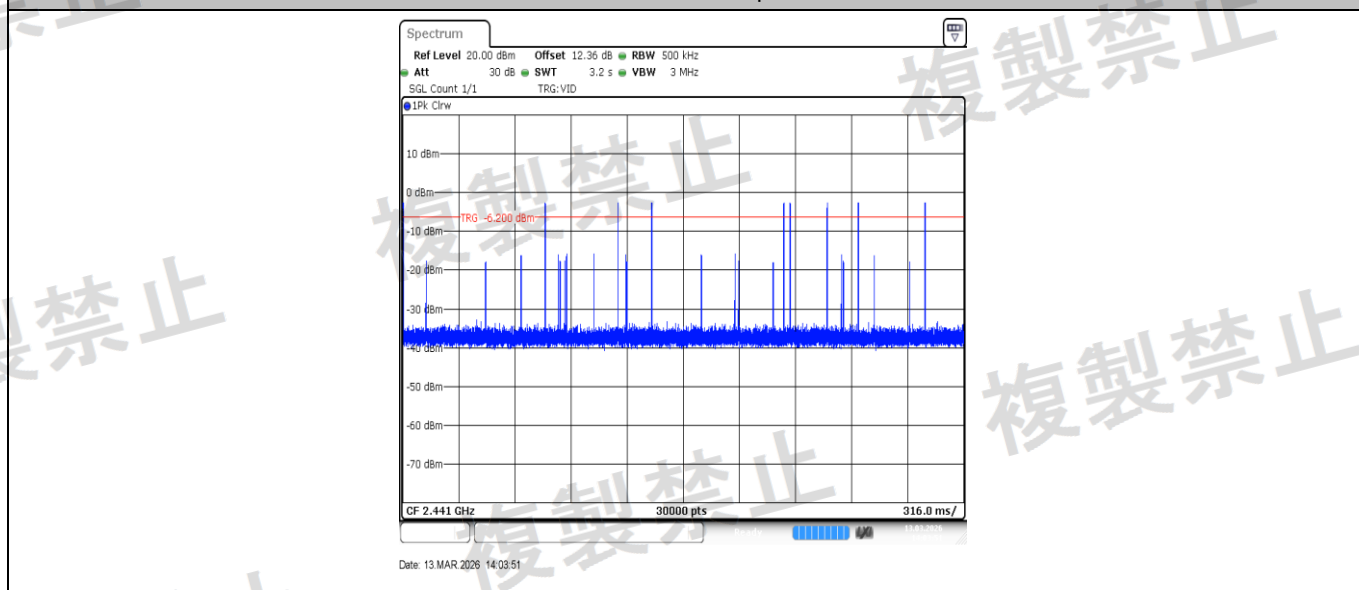


Date: 13 MAR 2026 14:14:59

NTVN-3DH3-Ant1-Hop-PASS



NTNV-3DH5-Ant1-Hop-PASS



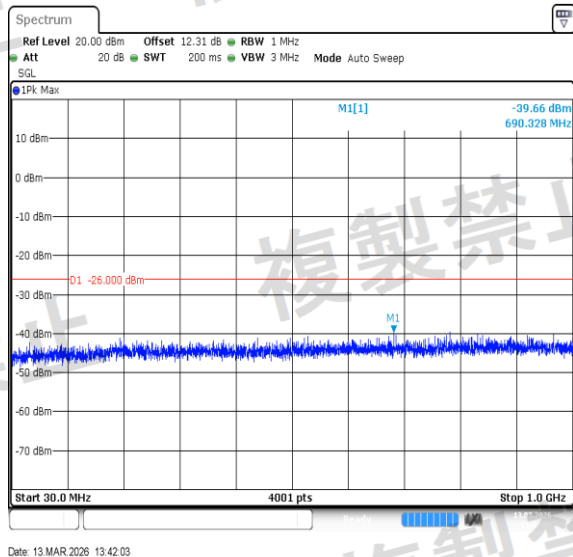
Appendix F: Spurious Emission of TX

Test Result

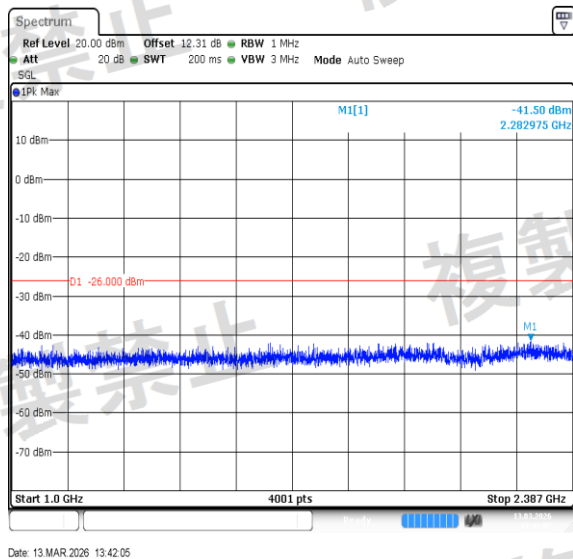
Test Condition	Test Mode	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	DH5	2402	30~1000	690.33	-39.66	≤-26	0.10814	≤2.5	PASS
NTNV	DH5	2402	1000~2387	2282.98	-41.50	≤-26	0.07079	≤2.5	PASS
NTNV	DH5	2402	2387~2400	2391.73	-31.25	≤-16	0.74989	≤25	PASS
NTNV	DH5	2402	2483.5~2496.5	2487.08	-31.13	≤-16	0.77090	≤25	PASS
NTNV	DH5	2402	2496.5~13000	6977.82	-35.18	≤-26	0.30339	≤2.5	PASS
NTNV	DH5	2441	30~1000	997.09	-39.20	≤-26	0.12023	≤2.5	PASS
NTNV	DH5	2441	1000~2387	1983.73	-40.82	≤-26	0.08279	≤2.5	PASS
NTNV	DH5	2441	2387~2400	2392.80	-30.45	≤-16	0.90157	≤25	PASS
NTNV	DH5	2441	2483.5~2496.5	2489.35	-31.11	≤-16	0.77446	≤25	PASS
NTNV	DH5	2441	2496.5~13000	11743.78	-35.29	≤-26	0.29580	≤2.5	PASS
NTNV	DH5	2480	30~1000	760.90	-40.49	≤-26	0.08933	≤2.5	PASS
NTNV	DH5	2480	1000~2387	2235.82	-41.05	≤-26	0.07852	≤2.5	PASS
NTNV	DH5	2480	2387~2400	2391.43	-30.57	≤-16	0.87700	≤25	PASS
NTNV	DH5	2480	2483.5~2496.5	2491.06	-30.47	≤-16	0.89743	≤25	PASS
NTNV	DH5	2480	2496.5~13000	6895.37	-36.04	≤-26	0.24889	≤2.5	PASS
NTNV	2DH5	2402	30~1000	778.60	-40.46	≤-26	0.08995	≤2.5	PASS
NTNV	2DH5	2402	1000~2387	2259.05	-41.13	≤-26	0.07709	≤2.5	PASS
NTNV	2DH5	2402	2387~2400	2399.98	-27.87	≤-16	1.63305	≤25	PASS
NTNV	2DH5	2402	2483.5~2496.5	2493.95	-30.35	≤-16	0.92257	≤25	PASS
NTNV	2DH5	2402	2496.5~13000	11737.48	-35.13	≤-26	0.30690	≤2.5	PASS
NTNV	2DH5	2441	30~1000	993.21	-39.89	≤-26	0.10257	≤2.5	PASS
NTNV	2DH5	2441	1000~2387	2024.30	-41.19	≤-26	0.07603	≤2.5	PASS
NTNV	2DH5	2441	2387~2400	2390.35	-30.79	≤-16	0.83368	≤25	PASS
NTNV	2DH5	2441	2483.5~2496.5	2493.45	-30.82	≤-16	0.82794	≤25	PASS
NTNV	2DH5	2441	2496.5~13000	11768.46	-35.12	≤-26	0.30761	≤2.5	PASS
NTNV	2DH5	2480	30~1000	794.12	-39.97	≤-26	0.10069	≤2.5	PASS
NTNV	2DH5	2480	1000~2387	1957.03	-41.02	≤-26	0.07907	≤2.5	PASS
NTNV	2DH5	2480	2387~2400	2395.50	-31.62	≤-16	0.68865	≤25	PASS
NTNV	2DH5	2480	2483.5~2496.5	2488.04	-30.72	≤-16	0.84723	≤25	PASS
NTNV	2DH5	2480	2496.5~13000	6906.92	-35.91	≤-26	0.25645	≤2.5	PASS
NTNV	3DH5	2402	30~1000	950.77	-39.92	≤-26	0.10186	≤2.5	PASS
NTNV	3DH5	2402	1000~2387	1704.60	-41.64	≤-26	0.06855	≤2.5	PASS
NTNV	3DH5	2402	2387~2400	2399.94	-26.27	≤-16	2.36048	≤25	PASS
NTNV	3DH5	2402	2483.5~2496.5	2494.50	-30.80	≤-16	0.83176	≤25	PASS
NTNV	3DH5	2402	2496.5~13000	11748.51	-36.42	≤-26	0.22803	≤2.5	PASS
NTNV	3DH5	2441	30~1000	894.76	-39.79	≤-26	0.10495	≤2.5	PASS
NTNV	3DH5	2441	1000~2387	1908.49	-40.91	≤-26	0.08110	≤2.5	PASS
NTNV	3DH5	2441	2387~2400	2398.47	-31.26	≤-16	0.74817	≤25	PASS
NTNV	3DH5	2441	2483.5~2496.5	2486.19	-30.48	≤-16	0.89536	≤25	PASS
NTNV	3DH5	2441	2496.5~13000	6959.44	-35.97	≤-26	0.25293	≤2.5	PASS
NTNV	3DH5	2480	30~1000	901.30	-39.09	≤-26	0.12331	≤2.5	PASS

NTNV	3DH5	2480	1000~2387	1929.64	-41.10	≤-26	0.07762	≤2.5	PASS
NTNV	3DH5	2480	2387~2400	2398.11	-30.78	≤-16	0.83560	≤25	PASS
NTNV	3DH5	2480	2483.5~2496.5	2486.57	-30.94	≤-16	0.80538	≤25	PASS
NTNV	3DH5	2480	2496.5~13000	6976.24	-35.50	≤-26	0.28184	≤2.5	PASS

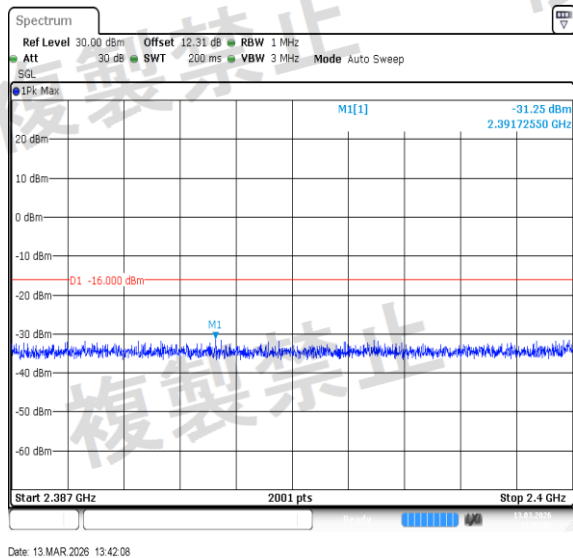
Test Graphs



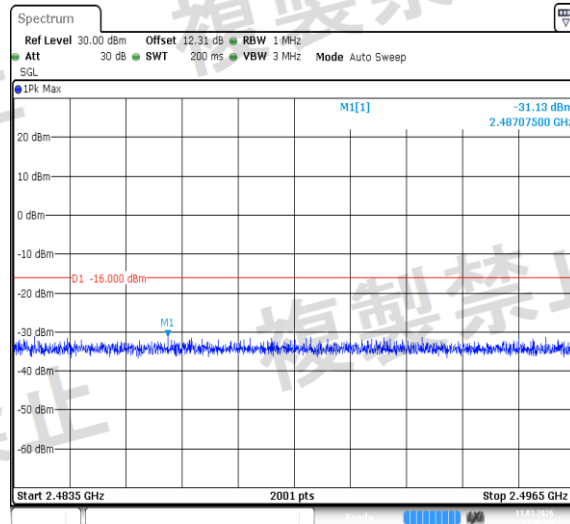
NTNV-DH5-Ant1-2402-30~1000-PASS



NTNV-DH5-Ant1-2402-1000~2387-PASS

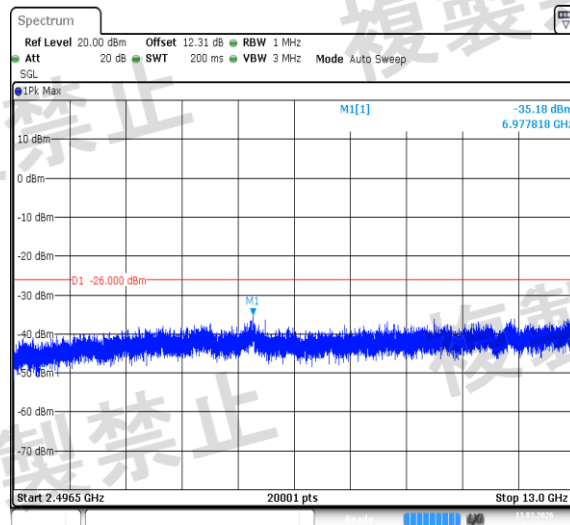


NTNV-DH5-Ant1-2402-2387~2400-PASS



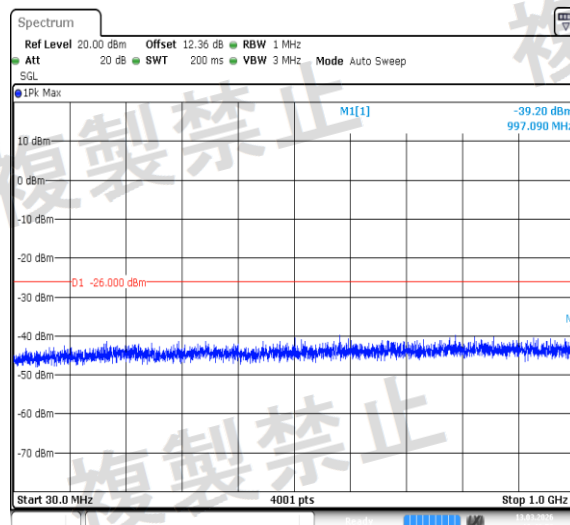
Date: 13 MAR 2026 13:42:11

NTNV-DH5-Ant1-2402-2483.5~2496.5-PASS



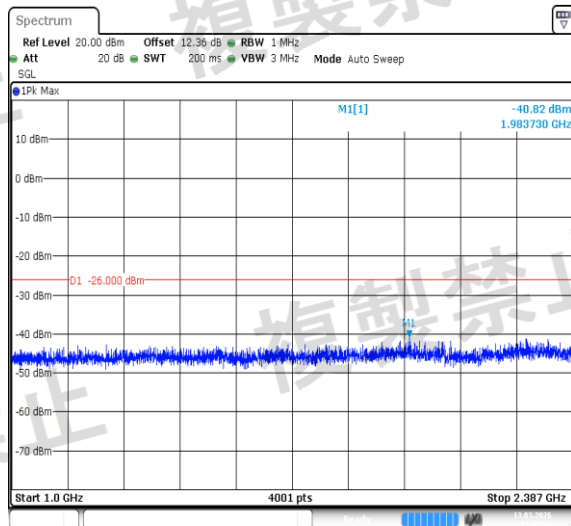
Date: 13 MAR 2026 13:42:14

NTNV-DH5-Ant1-2402-2496.5~13000-PASS



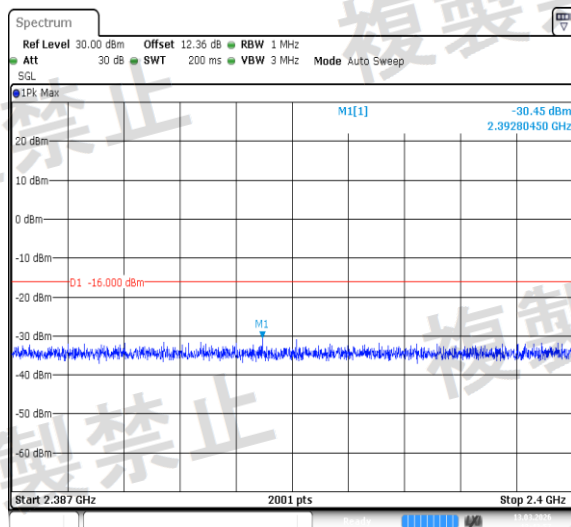
Date: 13 MAR 2026 13:43:52

NTNV-DH5-Ant1-2441-30~1000-PASS



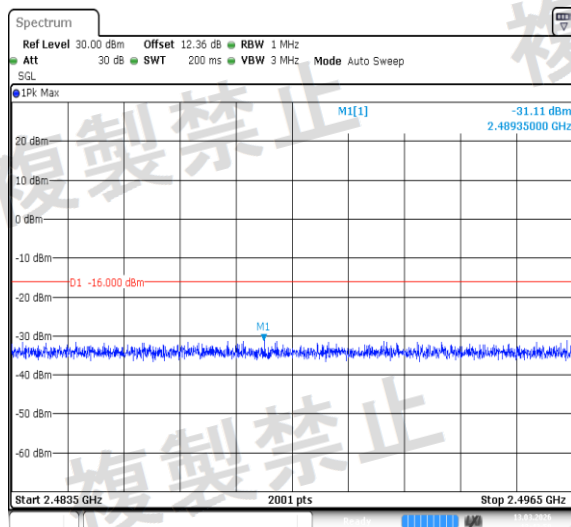
Date: 13 MAR 2026 13:43:55

NTNV-DH5-Ant1-2441-1000~2387-PASS



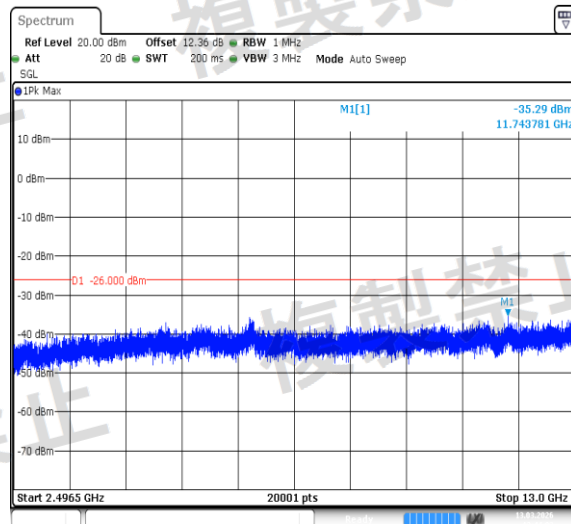
Date: 13 MAR 2026 13:43:58

NTNV-DH5-Ant1-2441-2387~2400-PASS



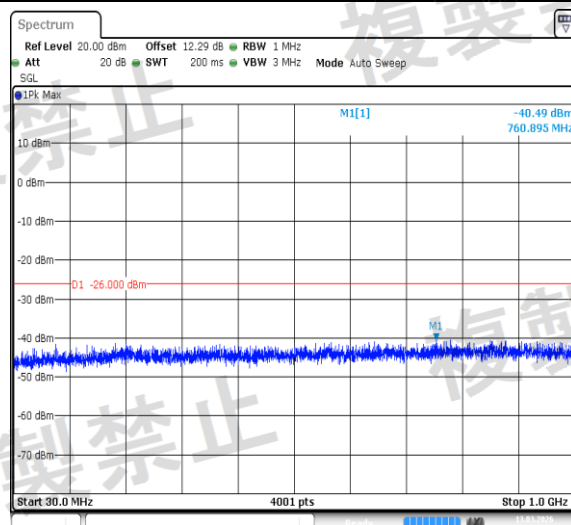
Date: 13 MAR 2026 13:44:00

NTNV-DH5-Ant1-2441-2483.5~2496.5-PASS



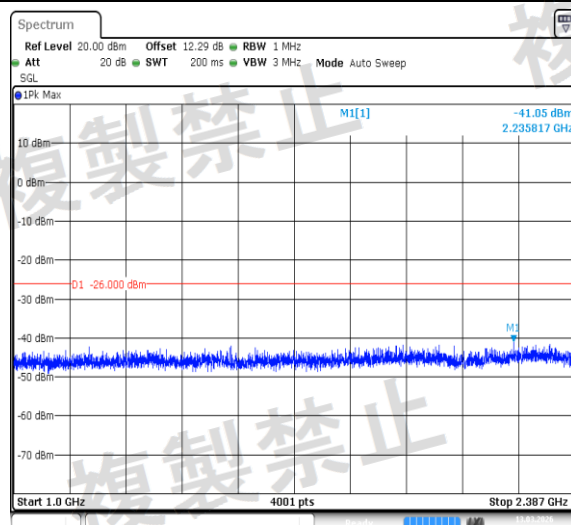
Date: 13 MAR 2026 13:44:03

NTNV-DH5-Ant1-2441-2496.5~13000-PASS



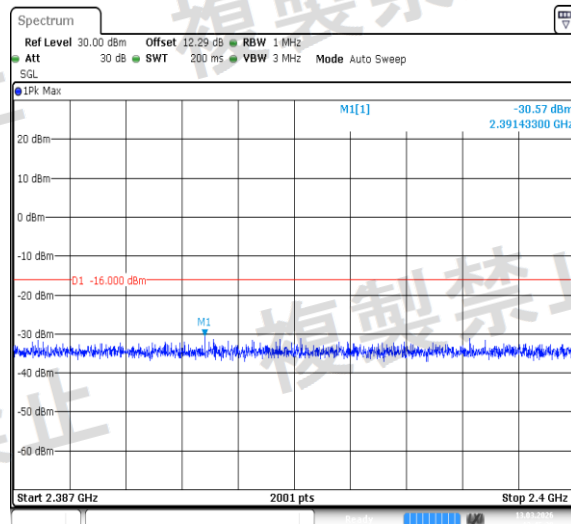
Date: 13 MAR 2026 13:45:24

NTNV-DH5-Ant1-2480-30~1000-PASS



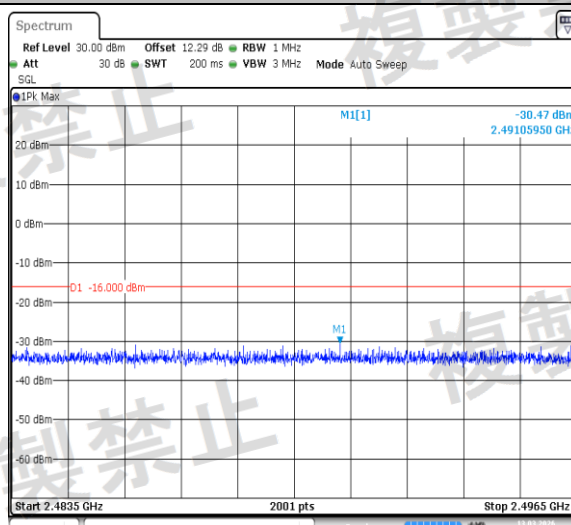
Date: 13 MAR 2026 13:45:26

NTNV-DH5-Ant1-2480-1000~2387-PASS



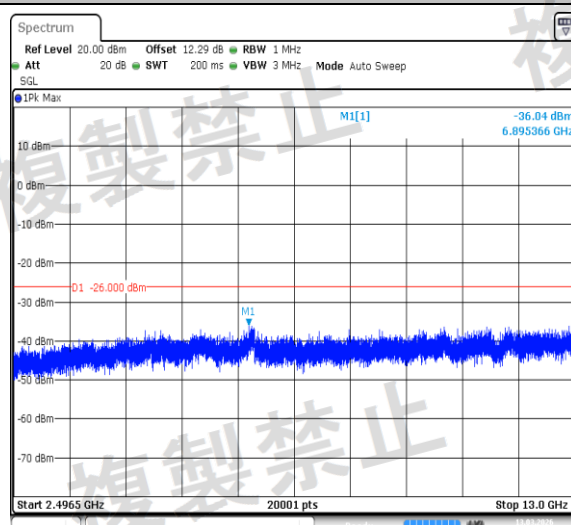
Date: 13 MAR 2026 13:45:29

NTNV-DH5-Ant1-2480-2387~2400-PASS



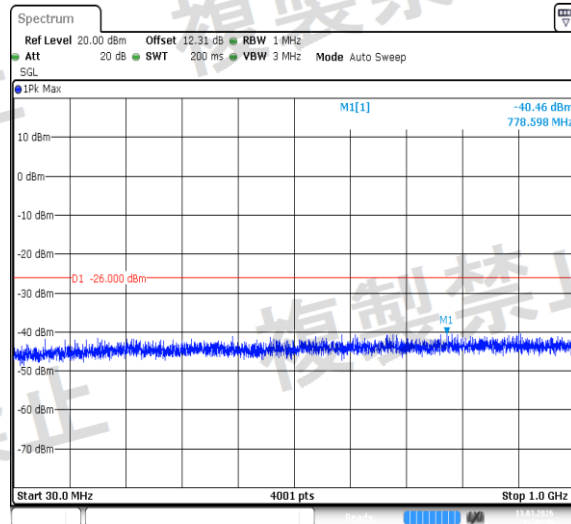
Date: 13 MAR 2026 13:45:32

NTNV-DH5-Ant1-2480-2483.5~2496.5-PASS



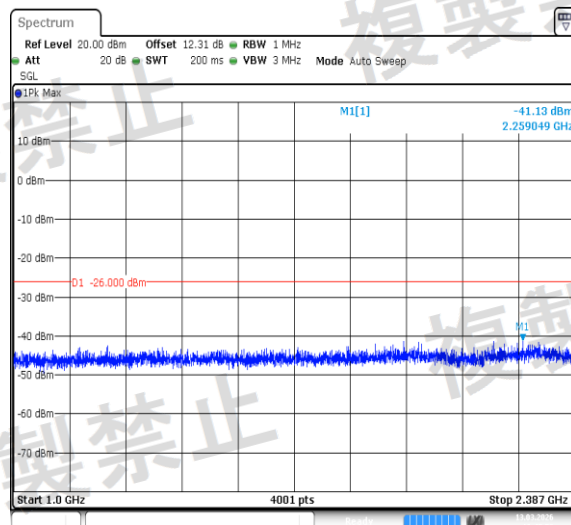
Date: 13 MAR 2026 13:45:35

NTNV-DH5-Ant1-2480-2496.5~13000-PASS



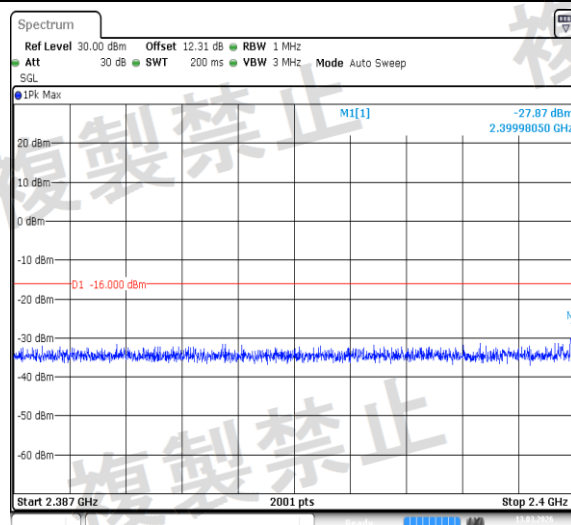
Date: 13 MAR 2026 13:47:56

NTNV-2DH5-Ant1-2402-30~1000-PASS



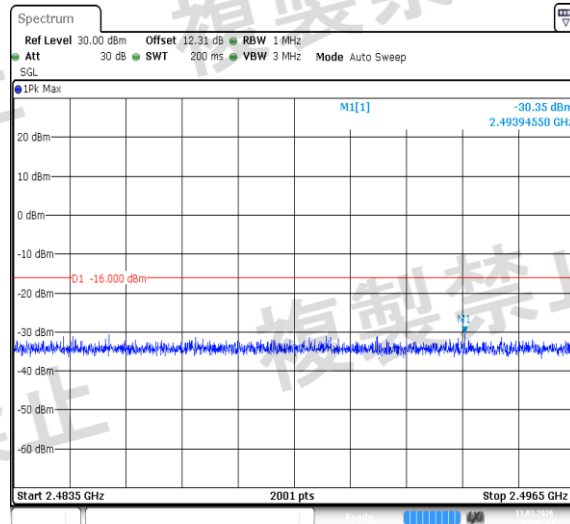
Date: 13 MAR 2026 13:47:59

NTNV-2DH5-Ant1-2402-1000~2387-PASS



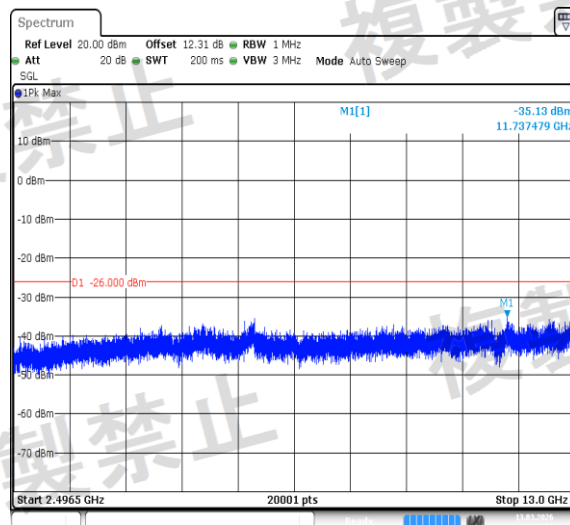
Date: 13 MAR 2026 13:48:02

NTNV-2DH5-Ant1-2402-2387~2400-PASS



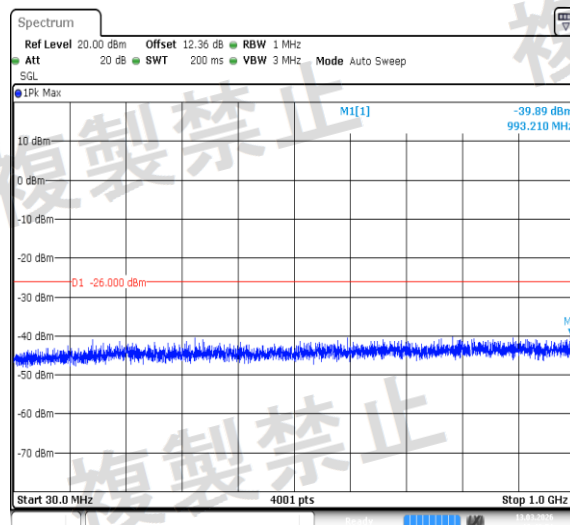
Date: 13 MAR 2026 13:48:04

NTNV-2DH5-Ant1-2402-2483.5~2496.5-PASS



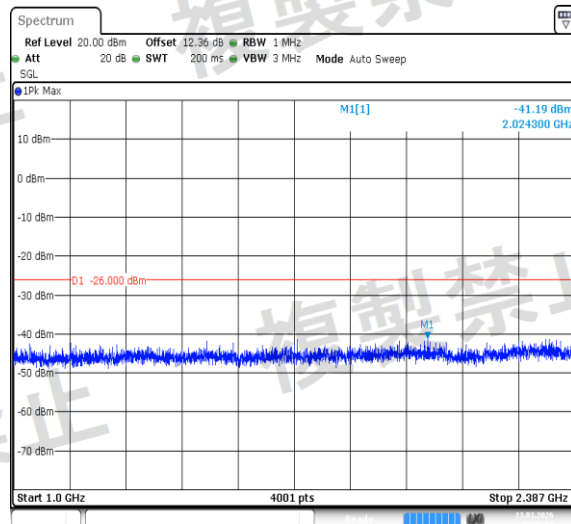
Date: 13 MAR 2026 13:48:08

NTNV-2DH5-Ant1-2402-2496.5~13000-PASS



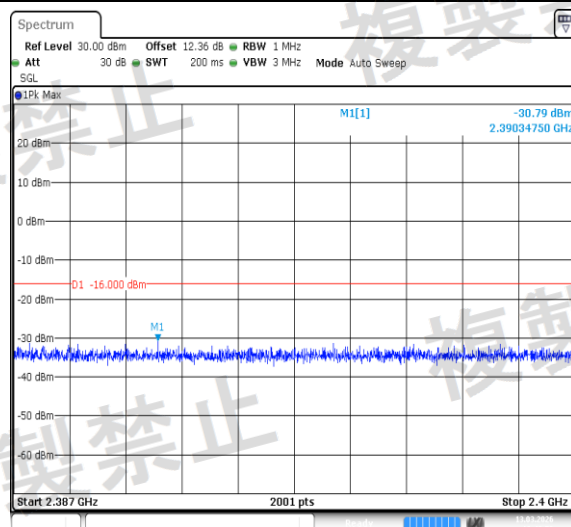
Date: 13 MAR 2026 13:49:52

NTNV-2DH5-Ant1-2441-30~1000-PASS



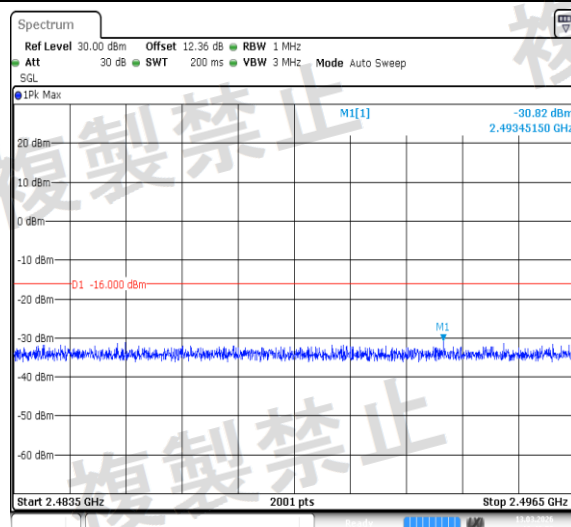
Date: 13 MAR 2026 13:49:54

NTNV-2DH5-Ant1-2441-1000~2387-PASS



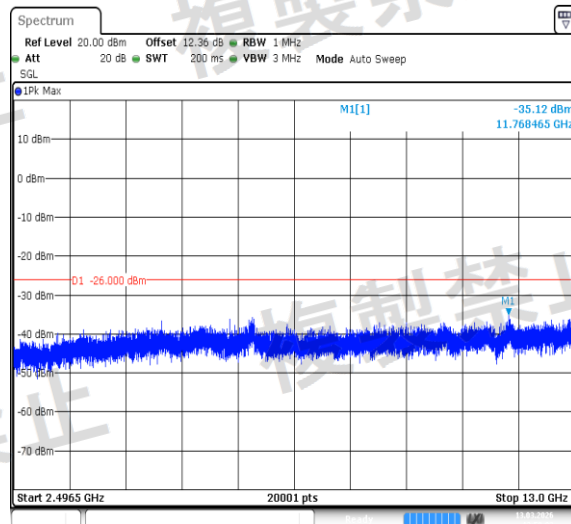
Date: 13 MAR 2026 13:49:57

NTNV-2DH5-Ant1-2441-2387~2400-PASS



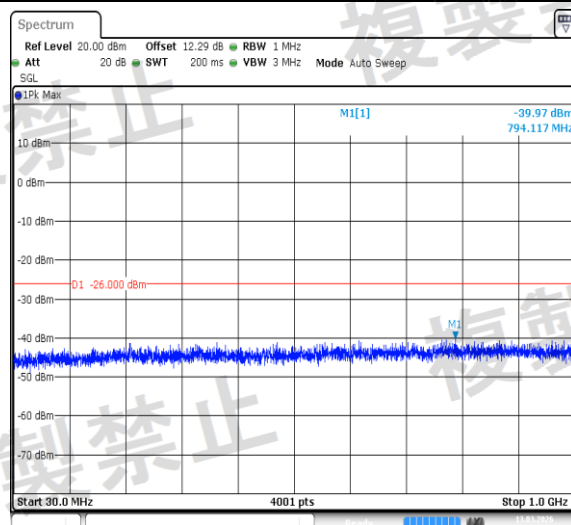
Date: 13 MAR 2026 13:50:00

NTNV-2DH5-Ant1-2441-2483.5~2496.5-PASS



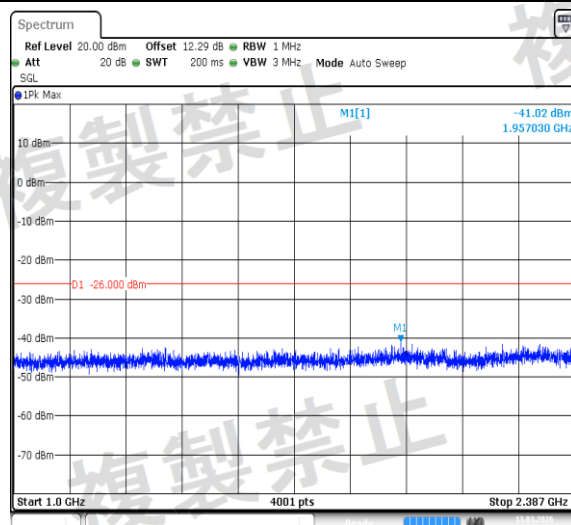
Date: 13 MAR 2026 13:50:03

NTNV-2DH5-Ant1-2441-2496.5~13000-PASS



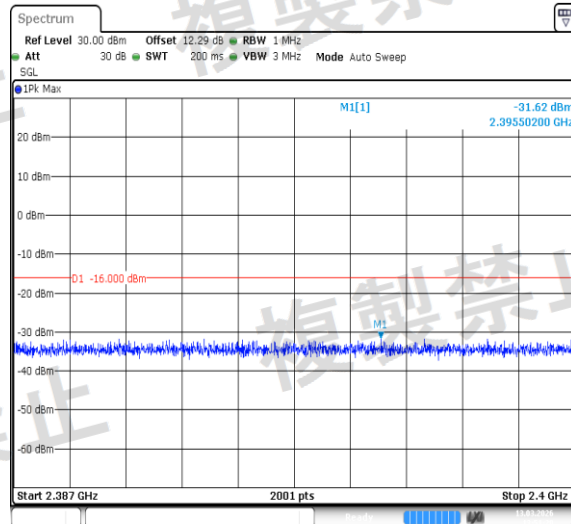
Date: 13 MAR 2026 13:51:16

NTNV-2DH5-Ant1-2480-30~1000-PASS



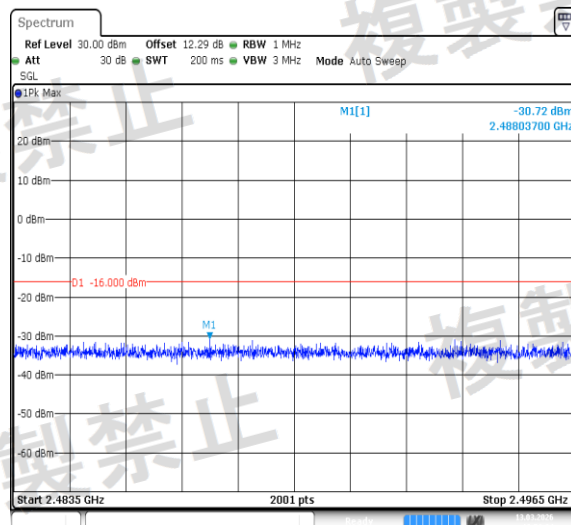
Date: 13 MAR 2026 13:51:18

NTNV-2DH5-Ant1-2480-1000~2387-PASS



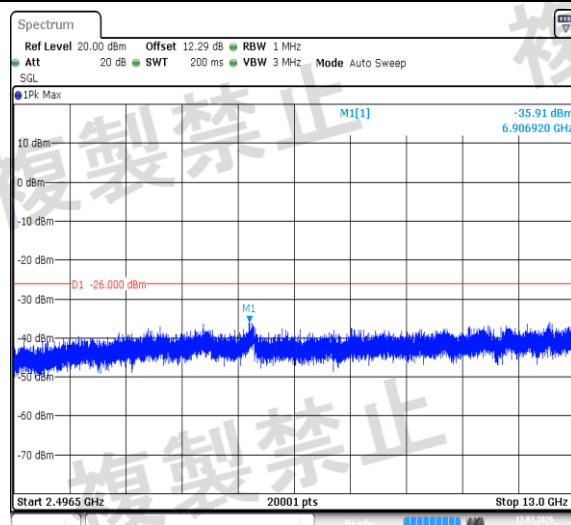
Date: 13 MAR 2026 13:51:21

NTNV-2DH5-Ant1-2480-2387~2400-PASS



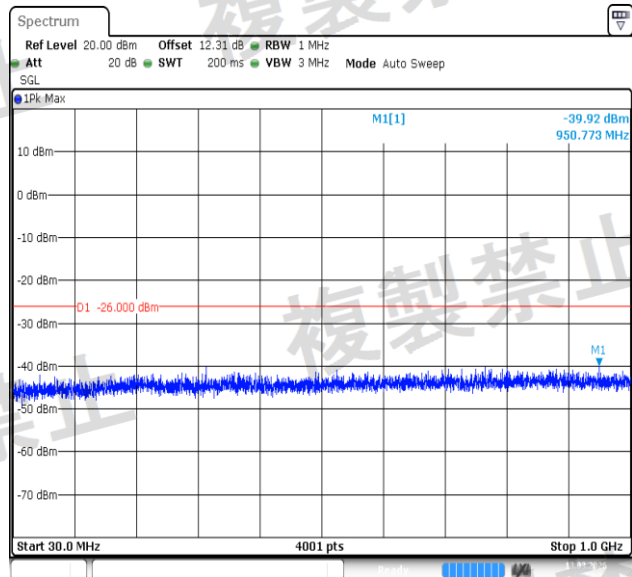
Date: 13 MAR 2026 13:51:24

NTNV-2DH5-Ant1-2480-2483.5~2496.5-PASS



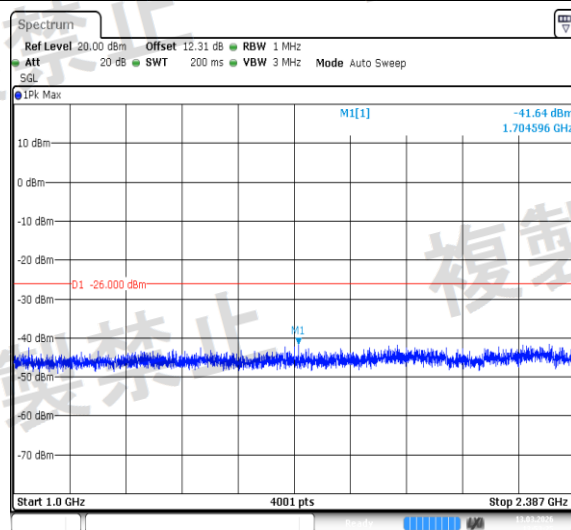
Date: 13 MAR 2026 13:51:27

NTNV-2DH5-Ant1-2480-2496.5~13000-PASS



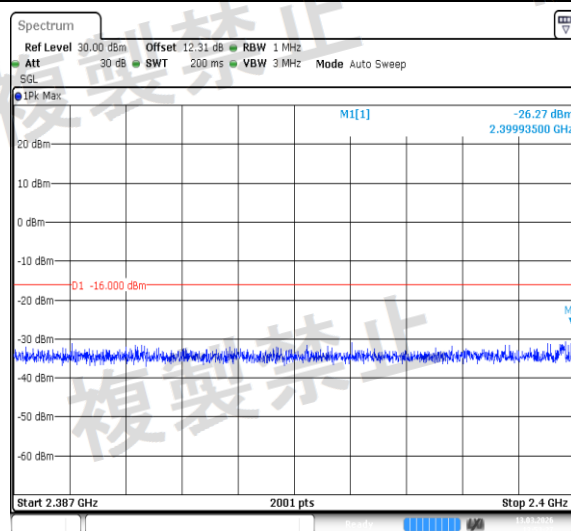
Date: 13.MAR.2026 13:53:23

NTNV-3DH5-Ant1-2402-30~1000-PASS



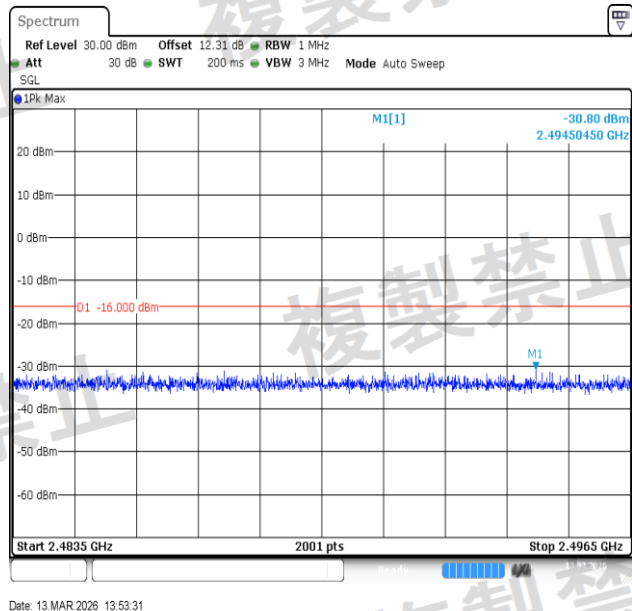
Date: 13.MAR.2026 13:53:25

NTNV-3DH5-Ant1-2402-1000~2387-PASS

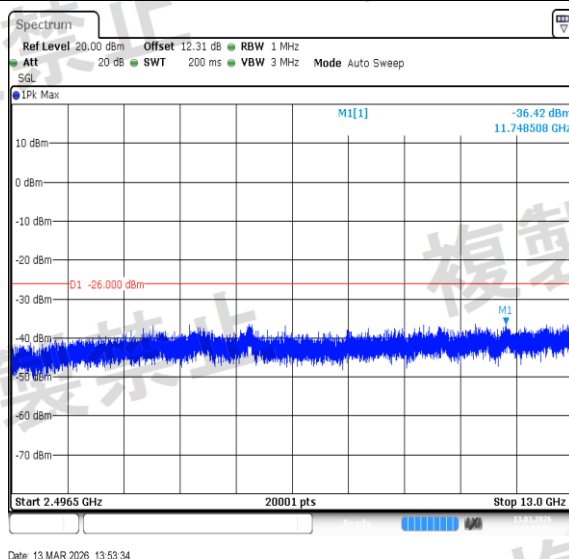


Date: 13.MAR.2026 13:53:28

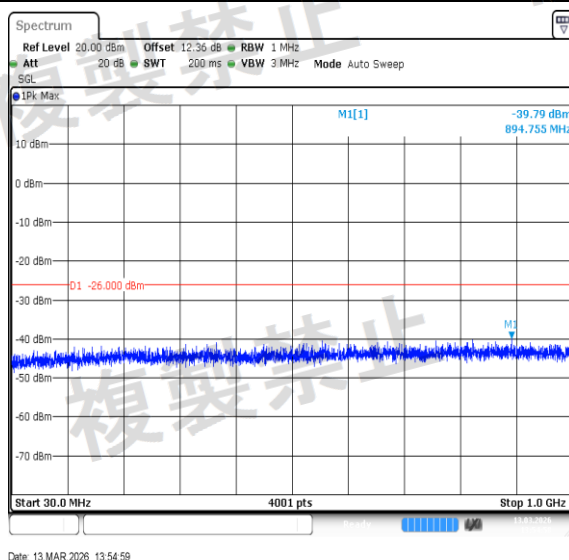
NTNV-3DH5-Ant1-2402-2387~2400-PASS



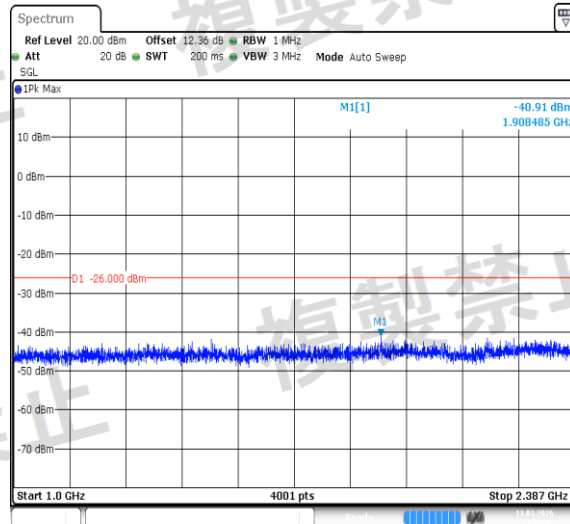
NTVN-3DH5-Ant1-2402-2483.5~2496.5-PASS



NTVN-3DH5-Ant1-2402-2496.5~13000-PASS

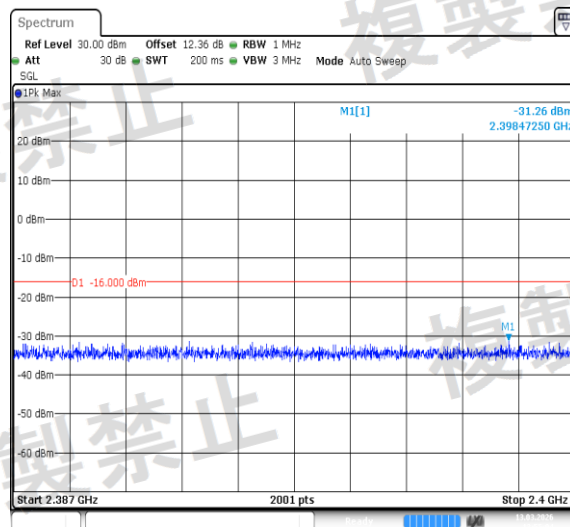


NTVN-3DH5-Ant1-2441-30~1000-PASS



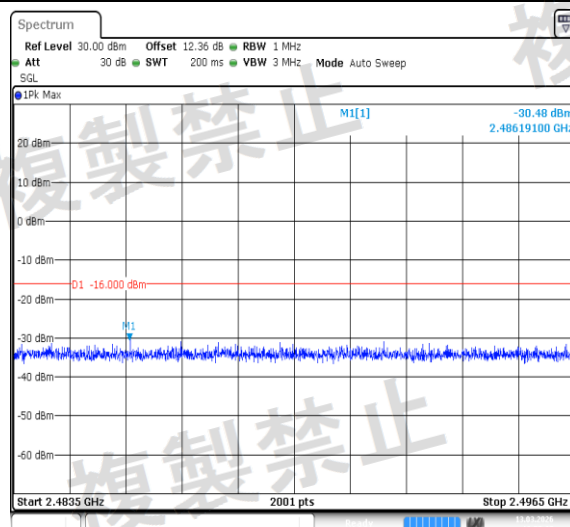
Date: 13 MAR 2026 13:55:02

NTNV-3DH5-Ant1-2441-1000~2387-PASS



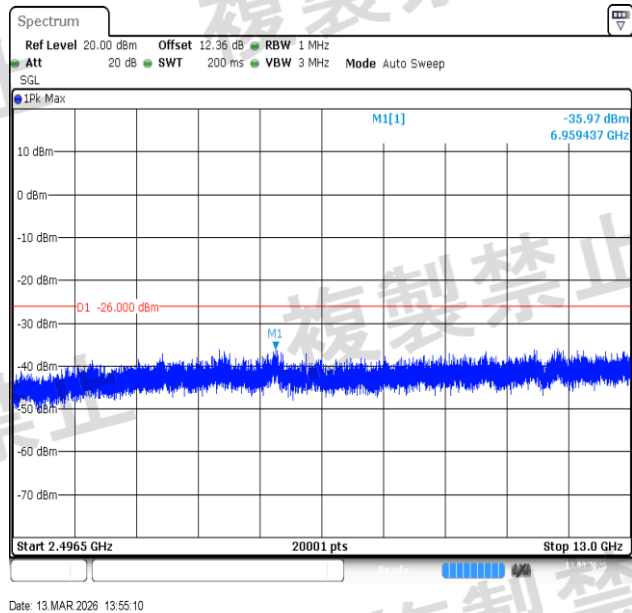
Date: 13 MAR 2026 13:55:04

NTNV-3DH5-Ant1-2441-2387~2400-PASS

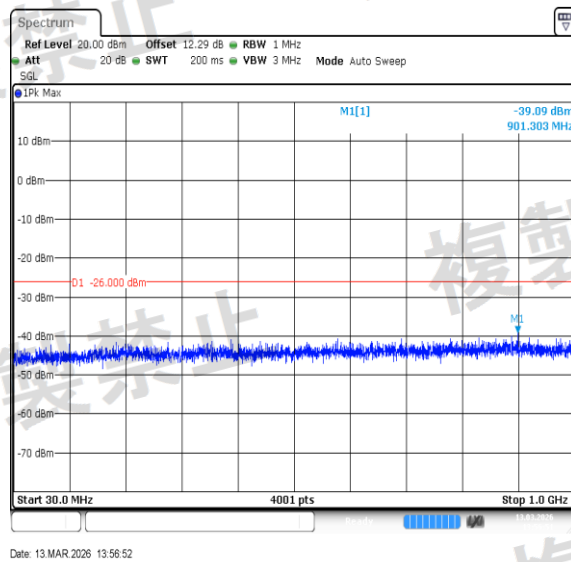


Date: 13 MAR 2026 13:55:07

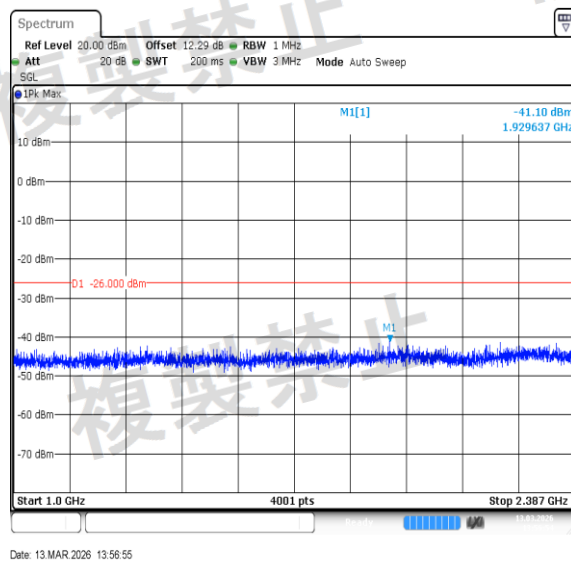
NTNV-3DH5-Ant1-2441-2483.5~2496.5-PASS



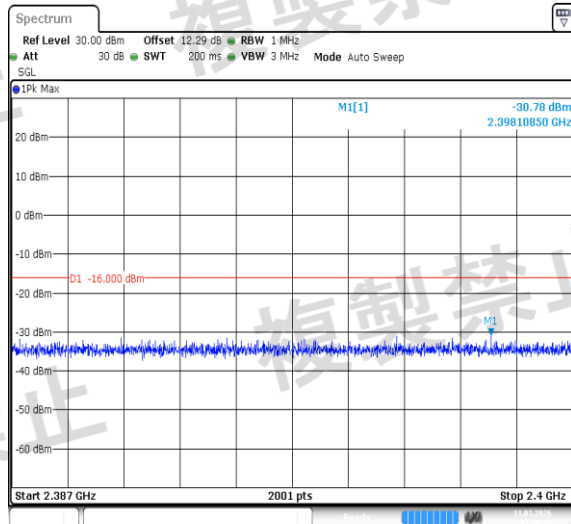
NTVN-3DH5-Ant1-2441-2496.5~13000-PASS



NTVN-3DH5-Ant1-2480-30~1000-PASS

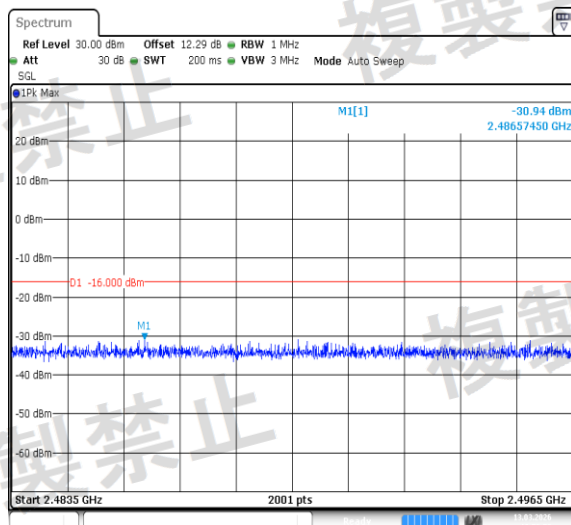


NTVN-3DH5-Ant1-2480-1000~2387-PASS



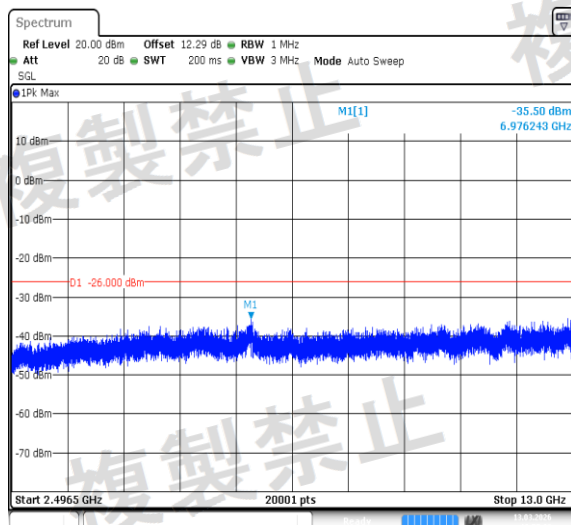
Date: 13 MAR 2026 13:56:57

NTNV-3DH5-Ant1-2480-2387~2400-PASS



Date: 13 MAR 2026 13:57:00

NTNV-3DH5-Ant1-2480-2483.5~2496.5-PASS



Date: 13 MAR 2026 13:57:03

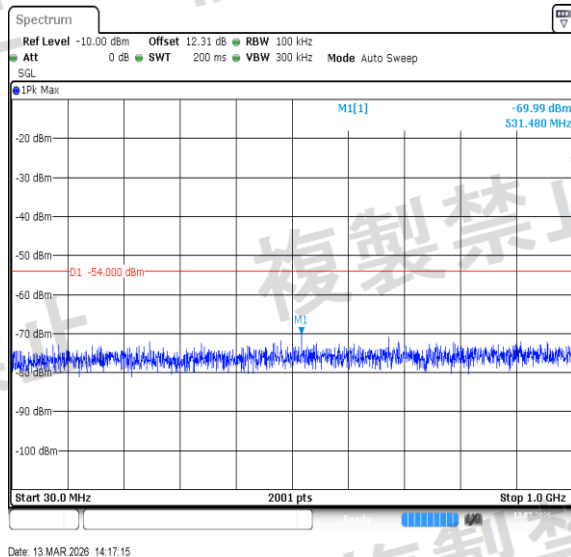
NTNV-3DH5-Ant1-2480-2496.5~13000-PASS

Appendix G: Limit of secondary radiated emissions

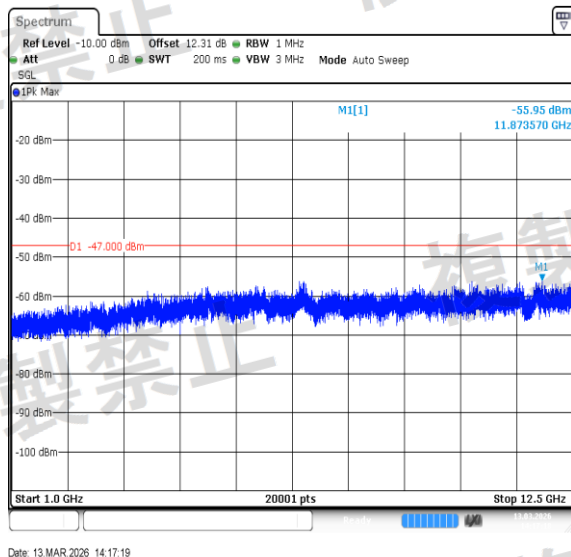
Test Result

Test Condition	Test Mode	Freq(MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	2402	30~1000	531.48	-69.99	≤-54	0.10023	≤4	PASS
NTNV	DH5	2402	1000~12500	11873.57	-55.95	≤-47	2.54097	≤20	PASS
NTNV	DH5	2441	30~1000	680.30	-70.36	≤-54	0.09204	≤4	PASS
NTNV	DH5	2441	1000~12500	11775.82	-54.95	≤-47	3.19890	≤20	PASS
NTNV	DH5	2480	30~1000	858.21	-71.14	≤-54	0.07691	≤4	PASS
NTNV	DH5	2480	1000~12500	6996.09	-55.05	≤-47	3.12608	≤20	PASS
NTNV	2DH5	2402	30~1000	963.40	-71.18	≤-54	0.07621	≤4	PASS
NTNV	2DH5	2402	1000~12500	12013.86	-54.79	≤-47	3.31894	≤20	PASS
NTNV	2DH5	2441	30~1000	849.48	-71.26	≤-54	0.07482	≤4	PASS
NTNV	2DH5	2441	1000~12500	11377.94	-56.17	≤-47	2.41546	≤20	PASS
NTNV	2DH5	2480	30~1000	979.40	-71.29	≤-54	0.07430	≤4	PASS
NTNV	2DH5	2480	1000~12500	12404.84	-56.11	≤-47	2.44906	≤20	PASS
NTNV	3DH5	2402	30~1000	748.65	-71.08	≤-54	0.07798	≤4	PASS
NTNV	3DH5	2402	1000~12500	6975.39	-55.05	≤-47	3.12608	≤20	PASS
NTNV	3DH5	2441	30~1000	917.83	-69.82	≤-54	0.10423	≤4	PASS
NTNV	3DH5	2441	1000~12500	6974.81	-55.04	≤-47	3.13329	≤20	PASS
NTNV	3DH5	2480	30~1000	880.51	-70.09	≤-54	0.09795	≤4	PASS
NTNV	3DH5	2480	1000~12500	6988.61	-55.12	≤-47	3.07610	≤20	PASS

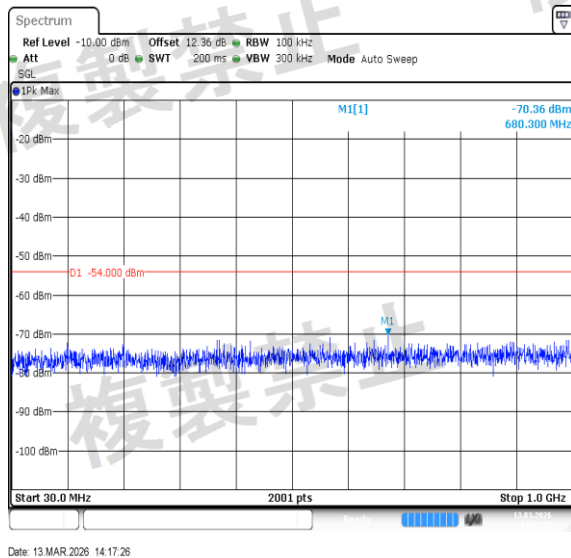
Test Graphs



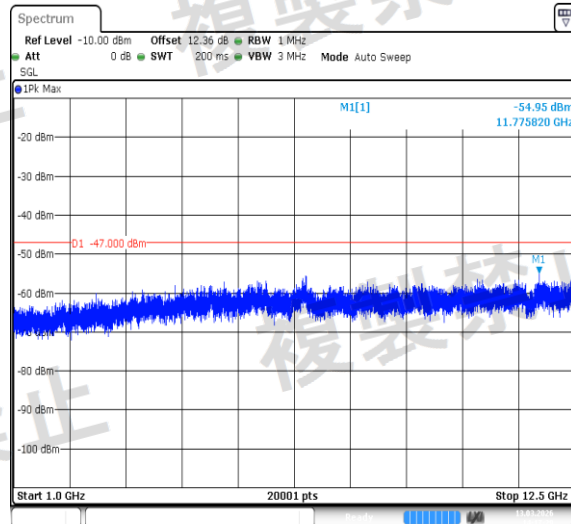
NTNV-DH5-Ant1-2402-30~1000-PASS



NTNV-DH5-Ant1-2402-1000~12500-PASS

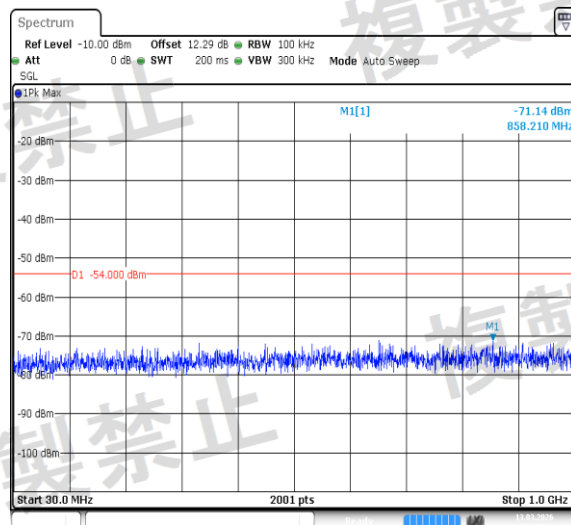


NTNV-DH5-Ant1-2441-30~1000-PASS



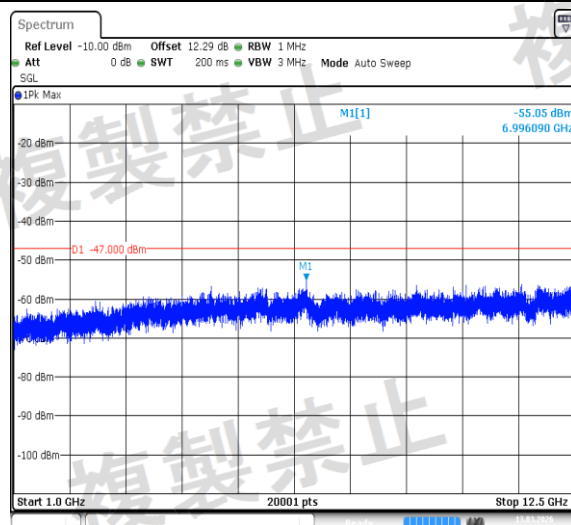
Date: 13 MAR 2026 14:17:29

NTNV-DH5-Ant1-2441-1000~12500-PASS



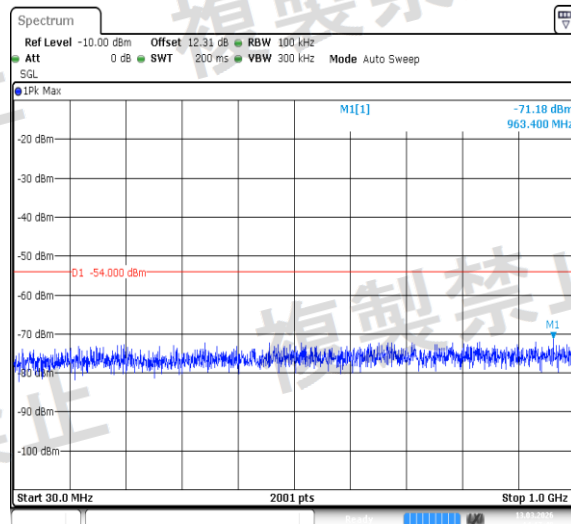
Date: 13 MAR 2026 14:17:41

NTNV-DH5-Ant1-2480-30~1000-PASS



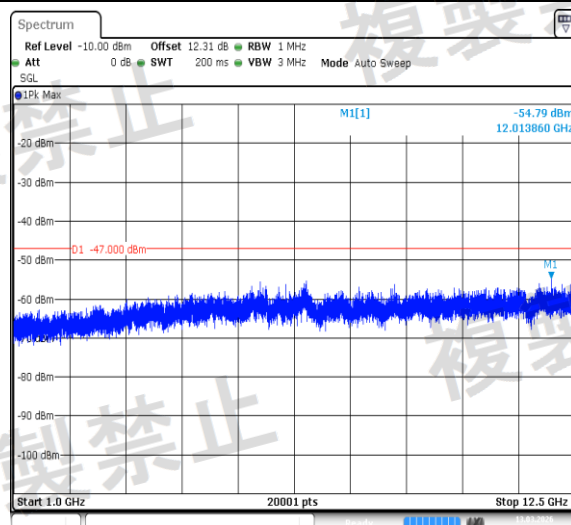
Date: 13 MAR 2026 14:17:44

NTNV-DH5-Ant1-2480-1000~12500-PASS



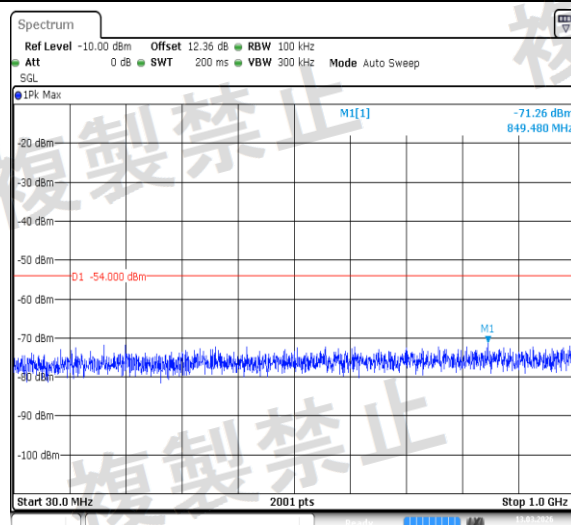
Date: 13 MAR 2026 14:17:49

NTNV-2DH5-Ant1-2402-30~1000-PASS



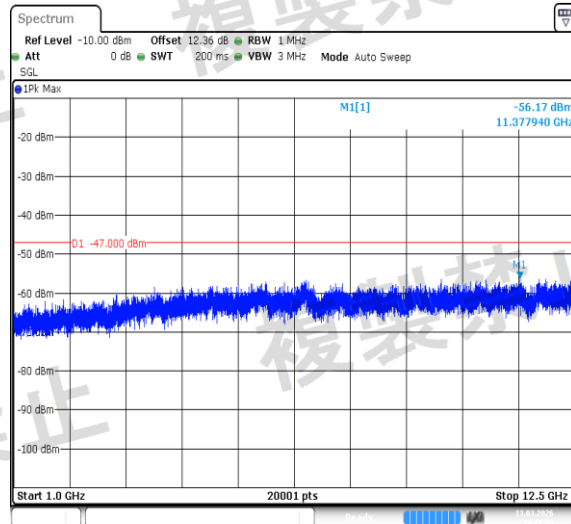
Date: 13 MAR 2026 14:17:52

NTNV-2DH5-Ant1-2402-1000~12500-PASS



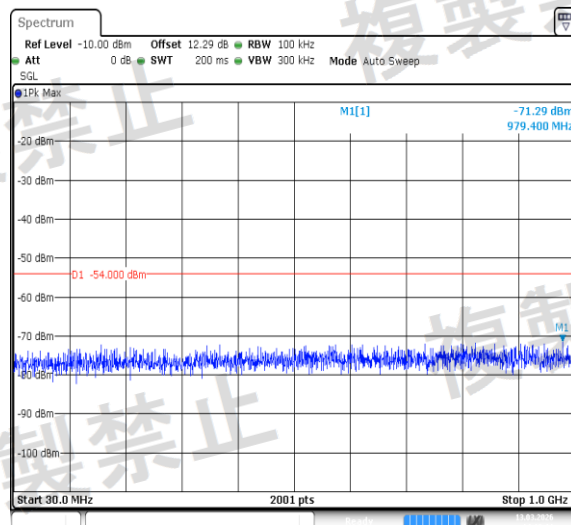
Date: 13 MAR 2026 14:17:57

NTNV-2DH5-Ant1-2441-30~1000-PASS



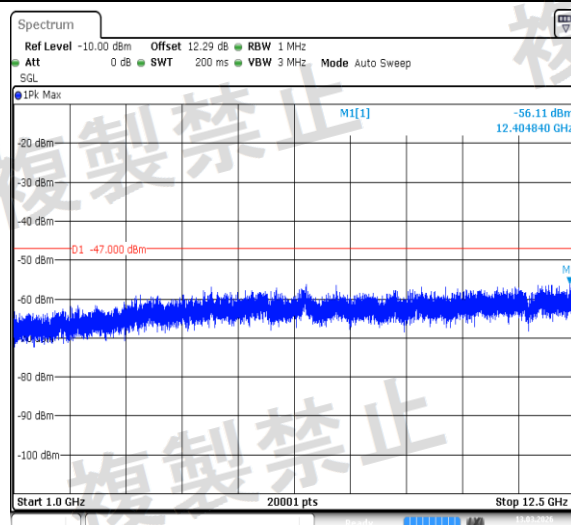
Date: 13 MAR 2026 14:18:00

NTNV-2DH5-Ant1-2441-1000~12500-PASS



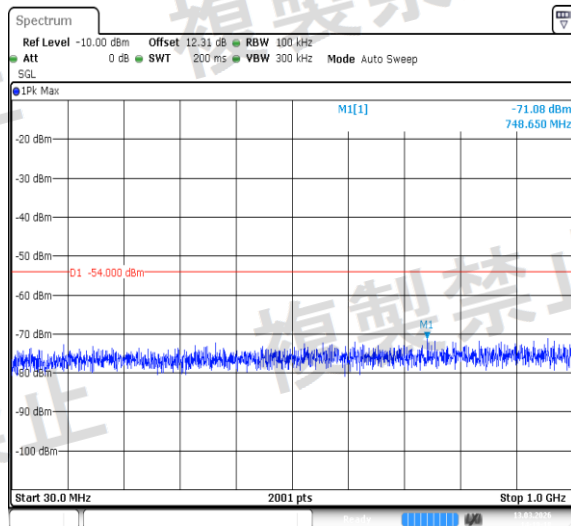
Date: 13 MAR 2026 14:18:11

NTNV-2DH5-Ant1-2480-30~1000-PASS



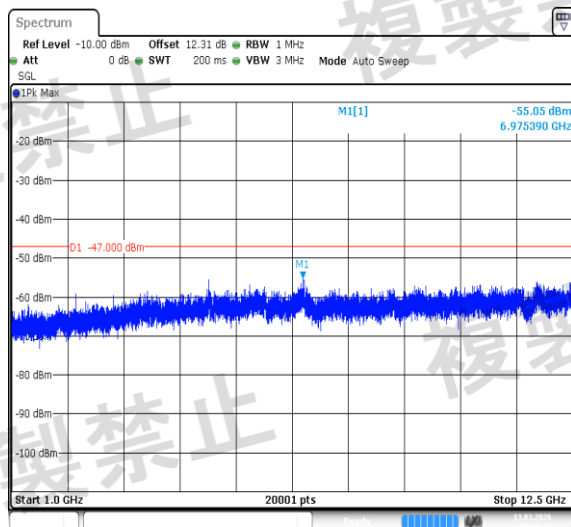
Date: 13 MAR 2026 14:18:14

NTNV-2DH5-Ant1-2480-1000~12500-PASS



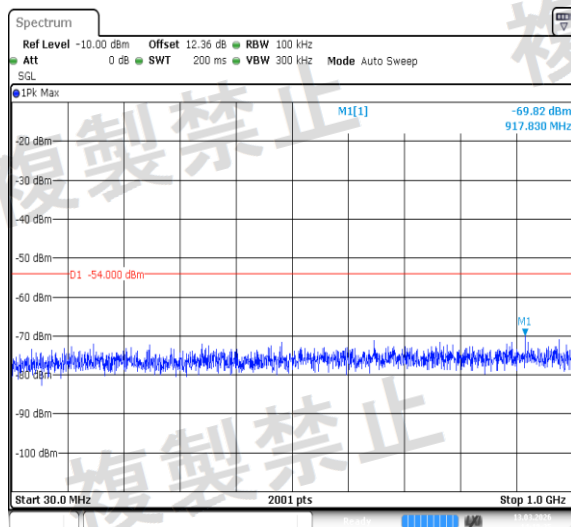
Date: 13 MAR 2026 14:18:19

NTNV-3DH5-Ant1-2402-30~1000-PASS



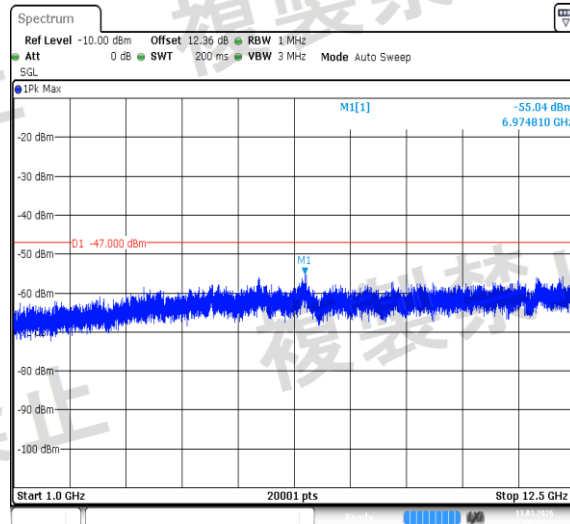
Date: 13 MAR 2026 14:18:22

NTNV-3DH5-Ant1-2402-1000~12500-PASS



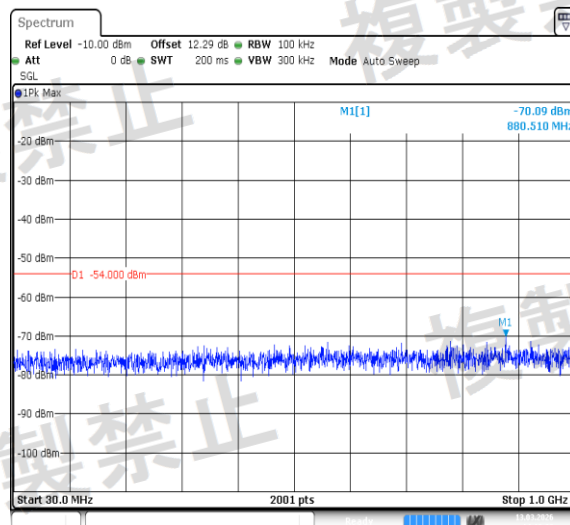
Date: 13 MAR 2026 14:18:26

NTNV-3DH5-Ant1-2441-30~1000-PASS



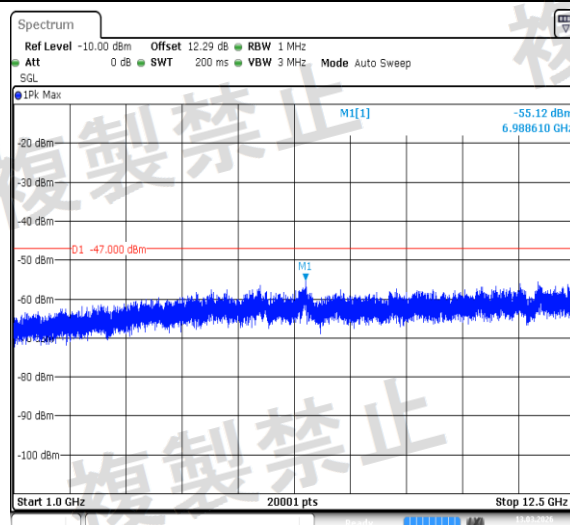
Date: 13 MAR 2026 14:18:29

NTNV-3DH5-Ant1-2441-1000~12500-PASS



Date: 13 MAR 2026 14:18:33

NTNV-3DH5-Ant1-2480-30~1000-PASS



Date: 13 MAR 2026 14:18:36

NTNV-3DH5-Ant1-2480-1000~12500-PASS

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