



TEST REPORT

Report Reference No. :	TZ0032251114TRF06
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Date of issue	2026-01-20
Testing Laboratory Name	Shenzhen Tongzhou Testing Co., Ltd.
Address	1st Floor, Building 1, Haomai High-tech Park, Huating Road 387, Dalang Street, Longhua, Shenzhen, China
Applicant's name	Shenzhen wanbo Technology Co., Ltd.
Address	4th Floor, Building 1, Chuangjian Phase 2 Industrial Park, Yingrenshi Community, Shiyan Street, Baoan District, Shenzhen, China
Manufacturer's name	Shenzhen wanbo Technology Co., Ltd.
Address	4th Floor, Building 1, Chuangjian Phase 2 Industrial Park, Yingrenshi Community, Shiyan Street, Baoan District, Shenzhen, China
Test specification	
Standard..... :	MIC Notice No.88 Appendix No.45 Article 2, paragraph 1, item 19-3
TRF Originator	SZTZ
Master TRF	Dated 2024-08
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Test item description..... :	Wanbo Projector
Trade Mark..... :	wanbo
Model/Type reference	WPC1M4, WPC1M1, WPC1M2, WPC1M3, WPC1M5, Vali 1 mini, Vali 1 Lite, Vali 1 SE, Vali 1 Air, Vali 1 Neo, Vali 1S
Ratings	Input: AC 100-240V 50/60Hz 2A(Max)
Result	PASS





**** Report Revise Record ****

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	2026-01-20	Valid	Initial release





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1. Test Standards and description

1.1. Test Standards

The tests were performed according to following standards:

Regulation: Item I of Article 49-20 and the relevant Articles of the ordinance of Regulatory Radio Equipment.

Test Method: (1)the test method suppressed on is equal to Appendix No.45 of MIC Nofication No 88

1.2. Test description

Test Item	Test Method	Result
Antenna Power	Appendix No.45 of MIC Nofication No 88 section 6	Pass
Frequency Error	Appendix No.45 of MIC Nofication No 88 section 3	Pass
Interference prevention function	Appendix No.45 of MIC Nofication No 88 section 9	Pass
99% Occupied bandwidth	Appendix No.45 of MIC Nofication No 88 section 4	Pass
Spurious Emissions Intensity	Appendix No.45 of MIC Nofication No 88 section 5	Pass
Adjacent channel Emitted Power	Appendix No.45 of MIC Nofication No 88 section 7	Pass
Limit of secondary radiated emissions	Appendix No.45 of MIC Nofication No 88 section 8	Pass
Transmission Burst Length	Appendix No.45 of MIC Nofication No 88 section 10	Pass
Transmission Power Control(TPC)	Appendix No.45 of MIC Nofication No 88 section 11	N/A
Carrier Sensing Function	Appendix No.45 of MIC Nofication No 88 section 12	Pass
Dynamic Frequency Selection (DFS)	Appendix No.45 of MIC Nofication No 88 section 13	N/A

N/A: means not applicable





2. Summary

2.1. General Remarks

Date of receipt of test sample : 2025-11-25
Testing commenced on : 2025-11-25
Testing concluded on : 2026-01-19

2.2. Product Description

Name of EUT	: Wanbo Projector
Trade Mark	: wanbo
Model/Type reference	: WPC1M4, WPC1M1, WPC1M2, WPC1M3, WPC1M5, Vali 1 mini, Vali 1 Lite, Vali 1 SE, Vali 1 Air, Vali 1 Neo, Vali 1S
Test Model	: WPC1M4
Model Declaration	: All the same except for the model name
Hardware Version	: 136_S1_MINI_WB
Software Version	: WB C445AFH031A
Power supply	: Input: AC 100-240V 50/60Hz 2A(Max)

2.3. Wireless Function Tested in this report

WiFi 5GHz Band	
Supported	: IEEE 802.11 a/n/ac
Operation Frequency	: 5180, 5200, 5220, 5240MHz for 20M system 5190, 5230MHz for 40M system 5210MHz for 80M system
Modulation Technology	: 802.11 a/n:(64-QAM, 16-QAM, QPSK, BPSK) OFDM 802.11 ac :(256-QAM, 64-QAM, 16-QAM, QPSK, BPSK) OFDM
Antenna Type And Gain	: PCB Antenna, Antenna 1: 4.07dBi, Antenna 2: 4.56dBi

2.4. 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.

2.5. Test Voltage

Voltage Fluctuation Test	Normal Voltage	High Voltage	Low Voltage
Input To EUT	AC 100V	AC 110V	AC 90
Output To RF Module	DC 3.3V	DC 3.3V	DC 3.3V
Voltage Variation (%)	--	--	--

Note:

Voltage Variation (%)

= (Output high or Low Voltage - Output Normal Voltage)/ Output Normal Voltage* 100

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 $\pm 1\%$. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage to test all regulations.

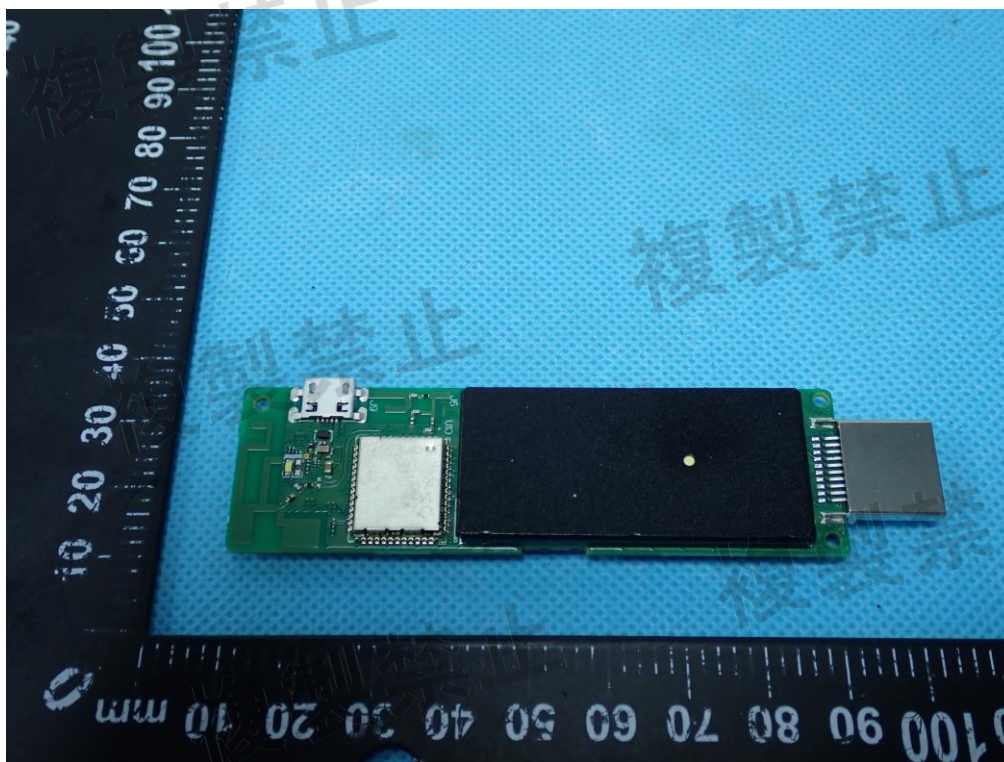
2.6. EUT configuration

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

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

(2) Protective Structure

- ☐ The exterior cover was sealed by Special screws, it can not be easily open.
- ☐ The enclosure was sealed with strong adhesive glue, it can not be easily open.
- ☒ All high-frequency section and modulation section was packaged in one IC, and shield by metal shield, it can not be easily open.
- ☐ The top and the bottom is connected with strong Buckles, it can not be easily open.
- ☐ Others: The top and the bottom is connected with strong Buckles, So We can not open the it easily at the normal condition. The high-frequency section and modulation section can not be capable of being opened easily



2.7. Modifications

No modifications were implemented to meet testing criteria.





3. Test Environment

3.1. Address of the test laboratory

Shenzhen Tongzhou Testing Co.,Ltd

1st Floor, Building 1, Haomai High-tech Park, Huating Road 387, Dalang Street, Longhua, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2014) and CISPR Publication 22.

3.2. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Tongzhou Testing Co.,Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Tongzhou Testing Co.,Ltd is reported:

Test Items	Measurement Uncertainty	Notes
Frequency stability	25 Hz	(1)
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emission 9KHz-12.75 GHz	1.60 dB	(1)
Radiated spurious emission 9KHz-12.75 GHz	2.20 dB	(1)
Conducted Emission 9KHz-30MHz	3.39 dB	(1)
Radiated Emission 30~1000MHz	4.24 dB	(1)
Radiated Emission 1~18GHz	5.16 dB	(1)
Radiated Emission 18-40GHz	5.54 dB	(1)
Occupied Bandwidth	-----	(1)
Emission Mask	-----	(1)
Modulation Characteristic	-----	(1)
Transmitter Frequency Behavior	-----	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.





3.3. Equipments Used during the Test

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Latest Cal.	Next Cal.
1	MXA Signal Analyzer	Keysight	N9020A	MY52091623	2025-12-31	2026-12-30
2	EMI Test Receiver	R&S	ESCI	100849/003	2025-12-31	2026-12-30
3	DC power supply	Chroma	RXN-305D	62012PD02811	2025-12-31	2026-12-30
4	Power Meter	Agilent	NRVD	835843/014	2025-12-31	2026-12-30
5	Wideband Radio Communication Tester	R&S	CMW500	101855	2025-12-31	2026-12-30
6	Oscilloscope	Tektronix	TDS2024C	C044925	2025-12-31	2026-12-30
7	Signal Generator	Keysight	N5182A	MY4620709	2025-12-31	2026-12-30

Full Name of calibration company: Guangzhou Lisai Metrology & Test co., Ltd.

Calibration by the calibration agencies listed in the table correspond to paragraph 4 (ii) (c) of Article 24-2 in the Radio Law.

- ☐ (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act
- ☐ (b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act
- ☒ (c) 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
- ☐ (d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above





4. Test conditions and Results

4.1. Antenna Power

TEST CONFIGURATION



TEST PROCEDURE

Step 1

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency: The center frequency of the UUT test channel

RBW: 1MHz

VBW: 1MHz

Span: Wide enough to cover the total power envelope of the signal of the UUT

Detector: Peak

Trace Mode: Max Hold

Find the Peak value for the power envelope and record the frequency.

Step 2

Change the spectrum analyzer and use the following settings:

Center Frequency: Record frequency of step 1.

RBW: 1MHz

VBW: 1MHz

Span: 0Hz

Sweep time: enough to capture the signal burst.

Detector: RMS

Trace Mode: Single

Capture the burst signal power and record it.



**LIMIT**

Report No.: TZ0032251114TRF06

Band	Item	20MHz system		40MHz system	80MHz system	160MHz system
W52&W53	Antenna Power	DSSS, etc	OFDM	OFDM		
		10mW/MHz(DSSS) 10mW(other)	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz
	Antenna Power Error	+20%, -80% (Base on manufacturer declare antenna power density)				
	E.I.R.P.(W52)	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz	1.25mW/MHz
	E.I.R.P.(W53)	10mW/MHz With TPC 5mW/MHz Without TPC	5mW/MHz With TPC 2.5mW/MHz Without TPC	2.5mW/MHz With TPC 1.25mW/MHz Without TPC	1.25mW/MHz With TPC 0.625mW/MHz Without TPC	1.25mW/MHz With TPC 0.625mW/MHz Without TPC
W56	Antenna Power	10mW/MHz(DSSS) 10mW(other)	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz
	Antenna Power Error	+50%, -50% (Base on manufacturer declare antenna power density)				
	E.I.R.P.	50mW/MHz With TPC 25mW/MHz Without TPC	25mW/MHz With TPC 12.5mW/MHz Without TPC	12.5mW/MHz With TPC 6.25mW/MHz Without TPC	6.25mW/MHz With TPC 3.125mW/MHz Without TPC	3.125mW/MHz With TPC 1.5625mW/MHz Without TPC



Test Condition	Test Mode	Antenna	Frequency [MHz]	Result (dBm/MHz)	Result (mW/MHz)	Limit (mW/MHz)	Verdict
NTNV	11A	Ant1	5180	-4.49	0.3556	≤10	PASS
NTNV	11A	Ant2	5180	-3.25	0.4732	≤10	PASS
NTNV	11A	Ant1	5200	-5.36	0.2911	≤10	PASS
NTNV	11A	Ant2	5200	-1.81	0.6592	≤10	PASS
NTNV	11A	Ant1	5240	-6.58	0.2198	≤10	PASS
NTNV	11A	Ant2	5240	-1.43	0.7194	≤10	PASS
NTNV	11N20MIMO	Ant1	5180	-8.18	0.1521	≤10	PASS
NTNV	11N20MIMO	Ant2	5180	-5.25	0.2985	≤10	PASS
NTNV	11N20MIMO	total	5180	-3.46	0.4506	≤10	PASS
NTNV	11N20MIMO	Ant1	5200	-7.20	0.1905	≤10	PASS
NTNV	11N20MIMO	Ant2	5200	-3.95	0.4027	≤10	PASS
NTNV	11N20MIMO	total	5200	-2.27	0.5932	≤10	PASS
NTNV	11N20MIMO	Ant1	5240	-8.38	0.1452	≤10	PASS
NTNV	11N20MIMO	Ant2	5240	-2.97	0.5047	≤10	PASS
NTNV	11N20MIMO	total	5240	-1.87	0.6499	≤10	PASS
NTNV	11N40MIMO	Ant1	5190	-10.14	0.0968	≤5	PASS
NTNV	11N40MIMO	Ant2	5190	-6.05	0.2483	≤5	PASS
NTNV	11N40MIMO	total	5190	-4.62	0.3451	≤5	PASS
NTNV	11N40MIMO	Ant1	5230	-11.10	0.0776	≤5	PASS
NTNV	11N40MIMO	Ant2	5230	-9.08	0.1236	≤5	PASS
NTNV	11N40MIMO	total	5230	-6.96	0.2012	≤5	PASS
NTNV	11AC20MIMO	Ant1	5180	-7.16	0.1923	≤10	PASS
NTNV	11AC20MIMO	Ant2	5180	-4.84	0.3281	≤10	PASS
NTNV	11AC20MIMO	total	5180	-2.84	0.5204	≤10	PASS
NTNV	11AC20MIMO	Ant1	5200	-7.16	0.1923	≤10	PASS
NTNV	11AC20MIMO	Ant2	5200	-3.77	0.4198	≤10	PASS
NTNV	11AC20MIMO	total	5200	-2.13	0.6121	≤10	PASS
NTNV	11AC20MIMO	Ant1	5240	-8.52	0.1406	≤10	PASS
NTNV	11AC20MIMO	Ant2	5240	-3.58	0.4385	≤10	PASS
NTNV	11AC20MIMO	total	5240	-2.37	0.5791	≤10	PASS
NTNV	11AC40MIMO	Ant1	5190	-6.94	0.2023	≤5	PASS
NTNV	11AC40MIMO	Ant2	5190	-3.95	0.4027	≤5	PASS
NTNV	11AC40MIMO	total	5190	-2.18	0.6050	≤5	PASS
NTNV	11AC40MIMO	Ant1	5230	-8.56	0.1393	≤5	PASS
NTNV	11AC40MIMO	Ant2	5230	-3.65	0.4315	≤5	PASS
NTNV	11AC40MIMO	total	5230	-2.44	0.5708	≤5	PASS
NTNV	11AC80MIMO	Ant1	5210	-15.51	0.0281	≤2.5	PASS
NTNV	11AC80MIMO	Ant2	5210	-9.71	0.1069	≤2.5	PASS
NTNV	11AC80MIMO	total	5210	-8.70	0.1350	≤2.5	PASS

Test Condition	Test Mode	Antenna	Frequency[MHz]	Power (mW/MHz)	Rated Power (mW/MHz)	Result (%)	Limit (%)	Verdict
NTNV	11A	Ant1	5180	0.3556	1	-64.44	-80 to +20	PASS
NTNV	11A	Ant2	5180	0.4732	1	-52.68	-80 to +20	PASS
NTNV	11A	Ant1	5200	0.2911	1	-70.89	-80 to +20	PASS
NTNV	11A	Ant2	5200	0.6592	1	-34.08	-80 to +20	PASS
NTNV	11A	Ant1	5240	0.2198	1	-78.02	-80 to +20	PASS
NTNV	11A	Ant2	5240	0.7194	1	-28.06	-80 to +20	PASS
NTNV	11N20MIMO	total	5180	0.4506	1	-54.94	-80 to +20	PASS
NTNV	11N20MIMO	total	5200	0.5932	1	-40.68	-80 to +20	PASS
NTNV	11N20MIMO	total	5240	0.6499	1	-35.01	-80 to +20	PASS
NTNV	11N40MIMO	total	5190	0.3451	1	-65.49	-80 to +20	PASS





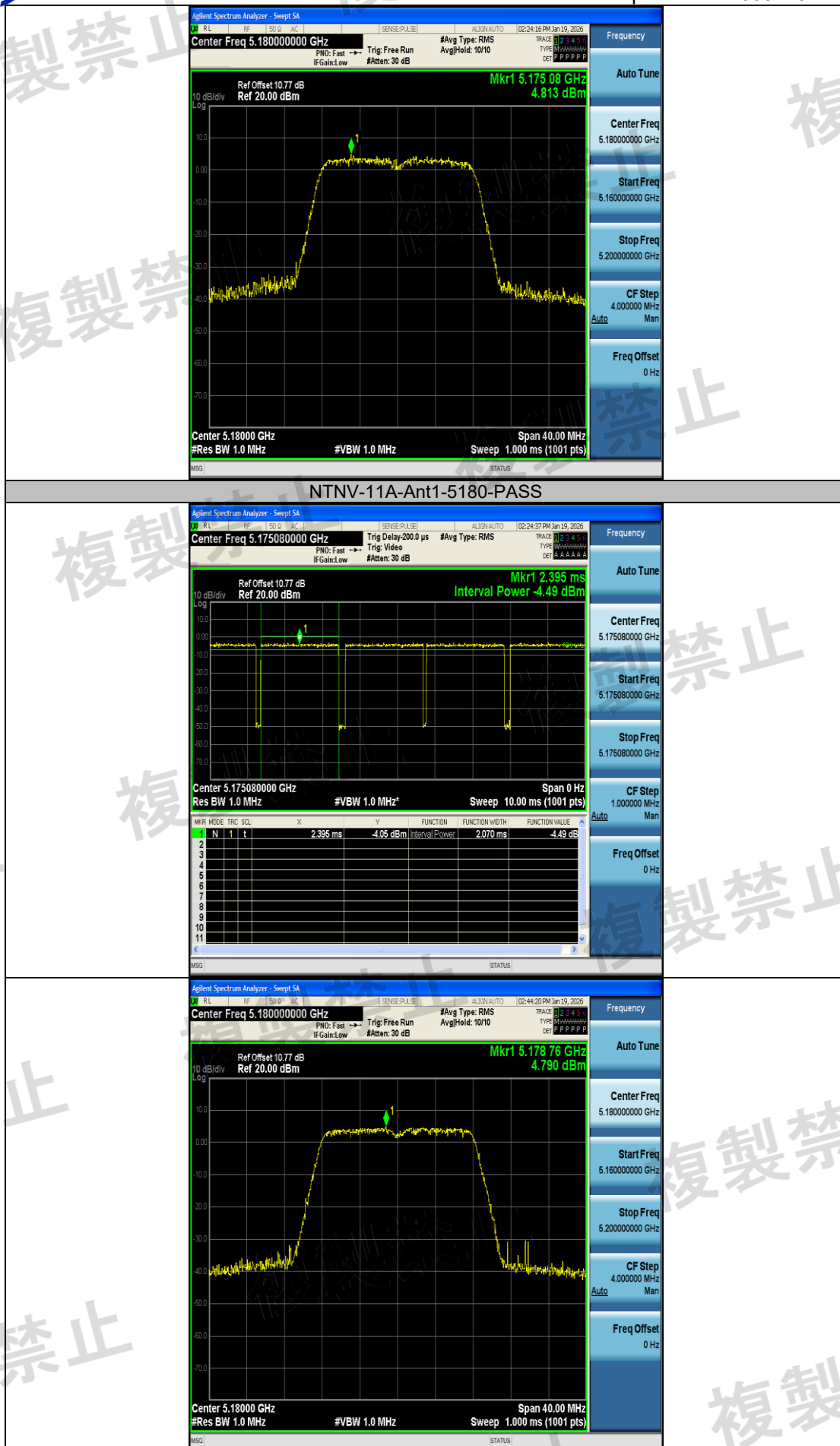
							+20	
NTNV	11N40MIMO	total	5230	0.2012	0.5	-59.76	-80 to +20	PASS
NTNV	11AC20MIMO	total	5180	0.5204	1	-47.96	-80 to +20	PASS
NTNV	11AC20MIMO	total	5200	0.6121	1	-38.79	-80 to +20	PASS
NTNV	11AC20MIMO	total	5240	0.5791	1	-42.09	-80 to +20	PASS
NTNV	11AC40MIMO	total	5190	0.6050	1	-39.50	-80 to +20	PASS
NTNV	11AC40MIMO	total	5230	0.5708	0.5	14.16	-80 to +20	PASS
NTNV	11AC80MIMO	total	5210	0.1350	0.25	-46.00	-80 to +20	PASS

Test Condition	Test Mode	Antenna	Frequency [MHz]	Result (mW/MHz)	EIRP (mW/MHz)	Limit (mW/MHz)	Verdict
NTNV	11A	Ant1	5180	0.3556	0.9078	≤10	PASS
NTNV	11A	Ant2	5180	0.4732	1.3521	≤10	PASS
NTNV	11A	Ant1	5200	0.2911	0.7430	≤10	PASS
NTNV	11A	Ant2	5200	0.6592	1.8836	≤10	PASS
NTNV	11A	Ant1	5240	0.2198	0.5610	≤10	PASS
NTNV	11A	Ant2	5240	0.7194	2.0559	≤10	PASS
NTNV	11N20MIMO	Ant1	5180	0.1521	0.3882	≤10	PASS
NTNV	11N20MIMO	Ant2	5180	0.2985	0.8531	≤10	PASS
NTNV	11N20MIMO	total	5180	0.4506	1.2413	≤10	PASS
NTNV	11N20MIMO	Ant1	5200	0.1905	0.4864	≤10	PASS
NTNV	11N20MIMO	Ant2	5200	0.4027	1.1508	≤10	PASS
NTNV	11N20MIMO	total	5200	0.5932	1.6372	≤10	PASS
NTNV	11N20MIMO	Ant1	5240	0.1452	0.3707	≤10	PASS
NTNV	11N20MIMO	Ant2	5240	0.5047	1.4421	≤10	PASS
NTNV	11N20MIMO	total	5240	0.6499	1.8128	≤10	PASS
NTNV	11N40MIMO	Ant1	5190	0.0968	0.2472	≤5	PASS
NTNV	11N40MIMO	Ant2	5190	0.2483	0.7096	≤5	PASS
NTNV	11N40MIMO	total	5190	0.3451	0.9568	≤5	PASS
NTNV	11N40MIMO	Ant1	5230	0.0776	0.1982	≤5	PASS
NTNV	11N40MIMO	Ant2	5230	0.1236	0.3532	≤5	PASS
NTNV	11N40MIMO	total	5230	0.2012	0.5514	≤5	PASS
NTNV	11AC20MIMO	Ant1	5180	0.1923	0.4909	≤10	PASS
NTNV	11AC20MIMO	Ant2	5180	0.3281	0.9376	≤10	PASS
NTNV	11AC20MIMO	total	5180	0.5204	1.4285	≤10	PASS
NTNV	11AC20MIMO	Ant1	5200	0.1923	0.4909	≤10	PASS
NTNV	11AC20MIMO	Ant2	5200	0.4198	1.1995	≤10	PASS
NTNV	11AC20MIMO	total	5200	0.6121	1.6904	≤10	PASS
NTNV	11AC20MIMO	Ant1	5240	0.1406	0.3589	≤10	PASS
NTNV	11AC20MIMO	Ant2	5240	0.4385	1.2531	≤10	PASS
NTNV	11AC20MIMO	total	5240	0.5791	1.6120	≤10	PASS
NTNV	11AC40MIMO	Ant1	5190	0.2023	0.5164	≤5	PASS
NTNV	11AC40MIMO	Ant2	5190	0.4027	1.1508	≤5	PASS
NTNV	11AC40MIMO	total	5190	0.6050	1.6672	≤5	PASS
NTNV	11AC40MIMO	Ant1	5230	0.1393	0.3556	≤5	PASS
NTNV	11AC40MIMO	Ant2	5230	0.4315	1.2331	≤5	PASS
NTNV	11AC40MIMO	total	5230	0.5708	1.5887	≤5	PASS
NTNV	11AC80MIMO	Ant1	5210	0.0281	0.0718	≤2.5	PASS
NTNV	11AC80MIMO	Ant2	5210	0.1069	0.3055	≤2.5	PASS
NTNV	11AC80MIMO	total	5210	0.1350	0.3773	≤2.5	PASS

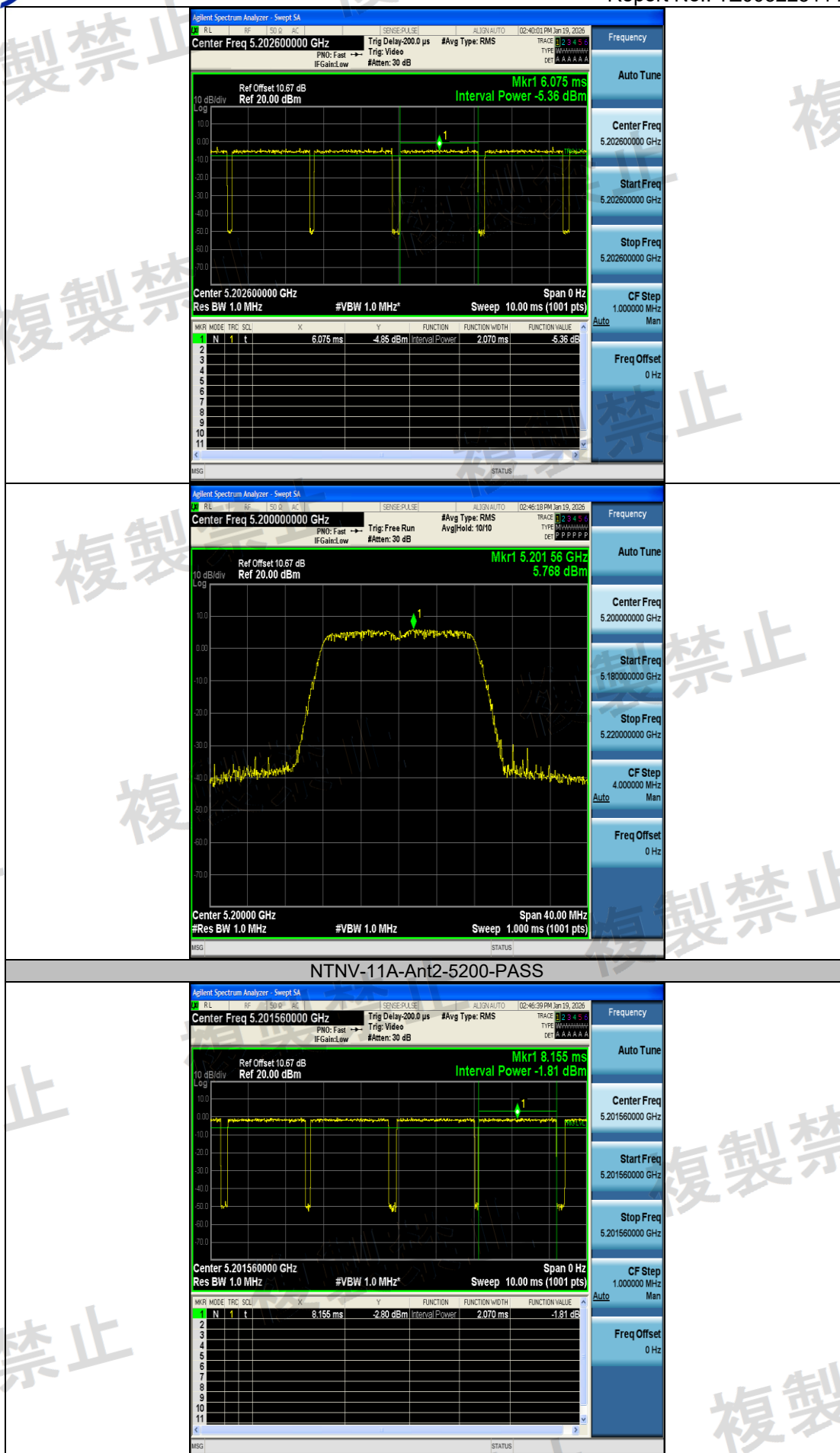
Remark:

1, The item was tested at 25°C and 55% humidity condition;





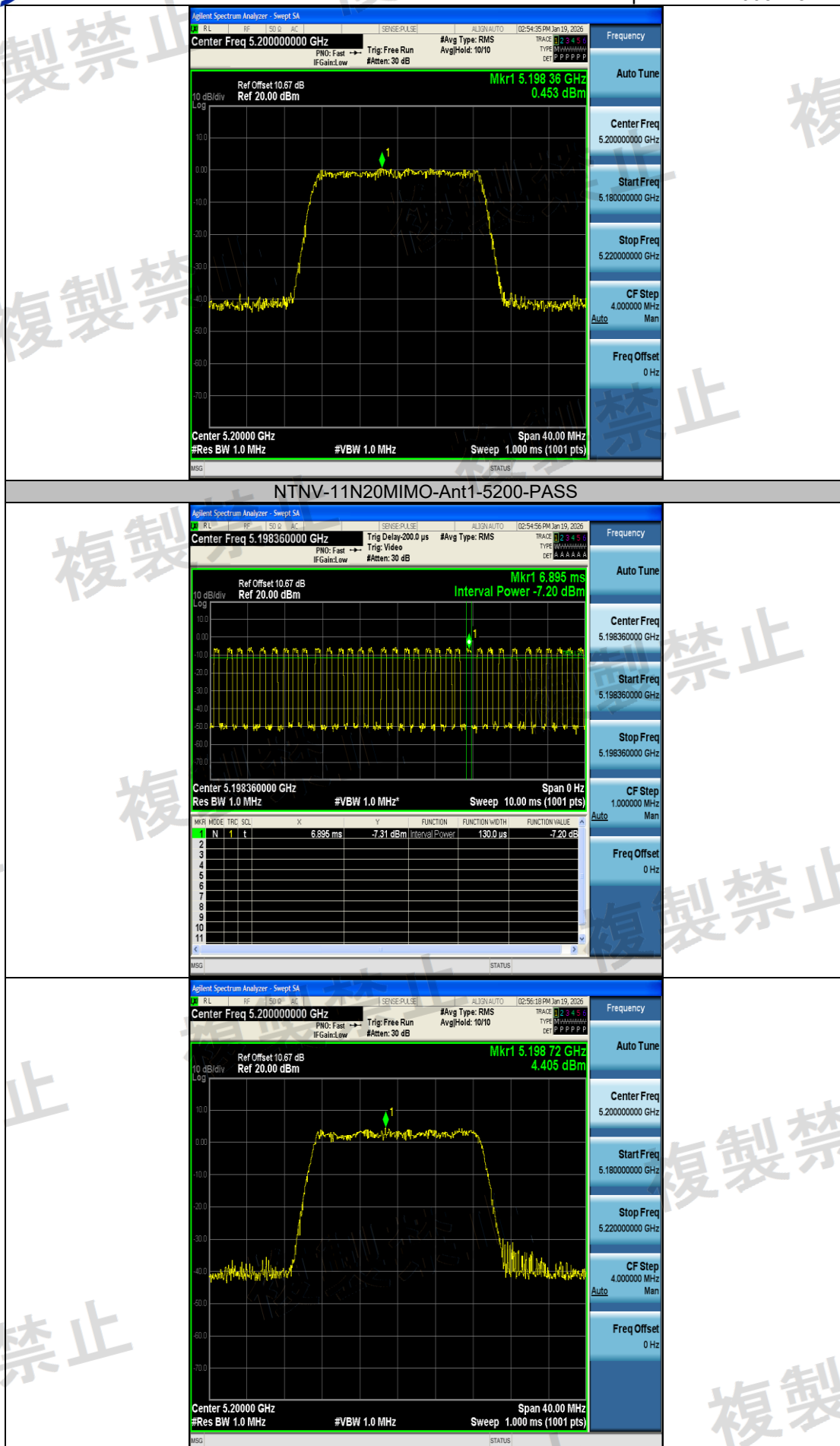


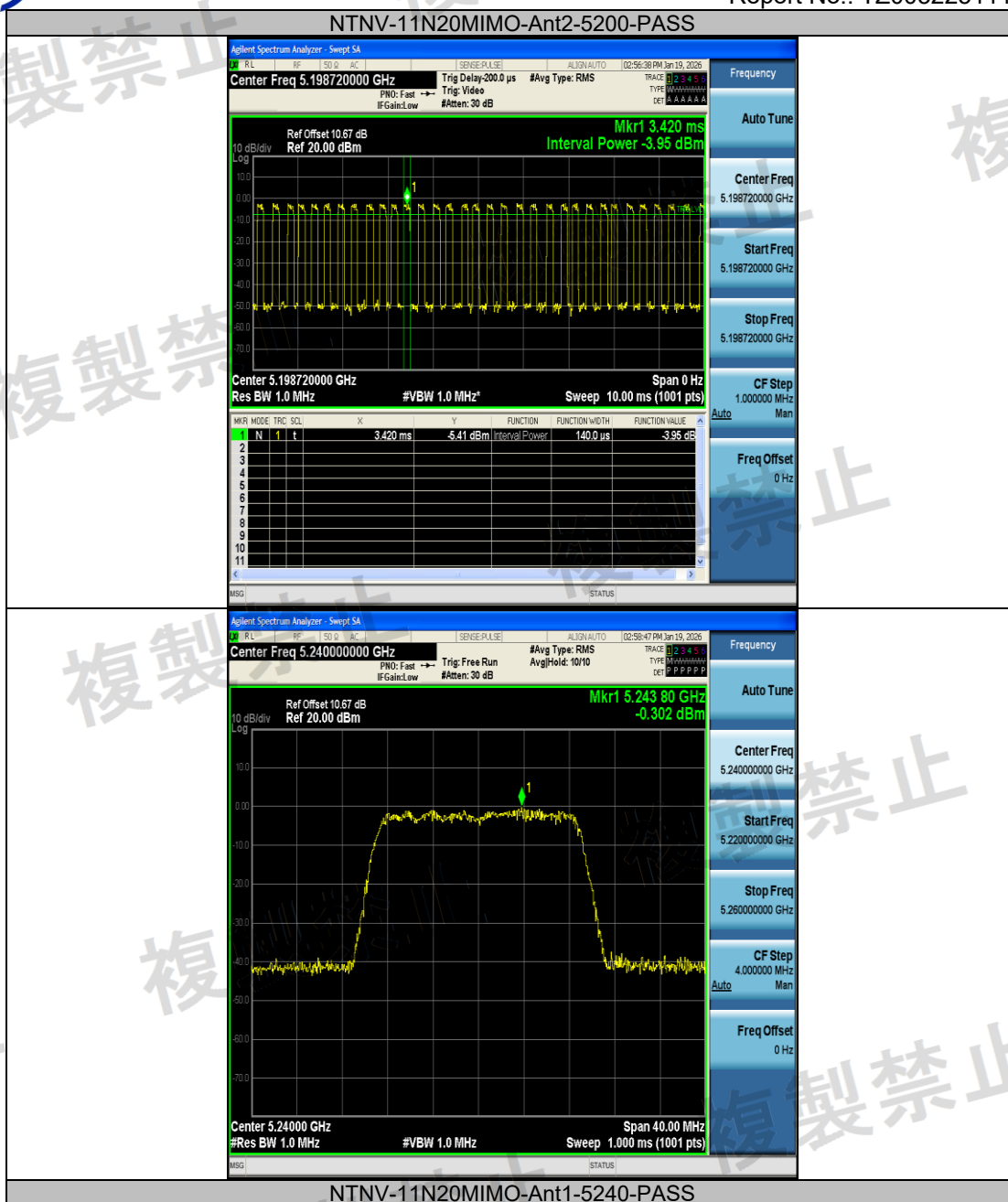






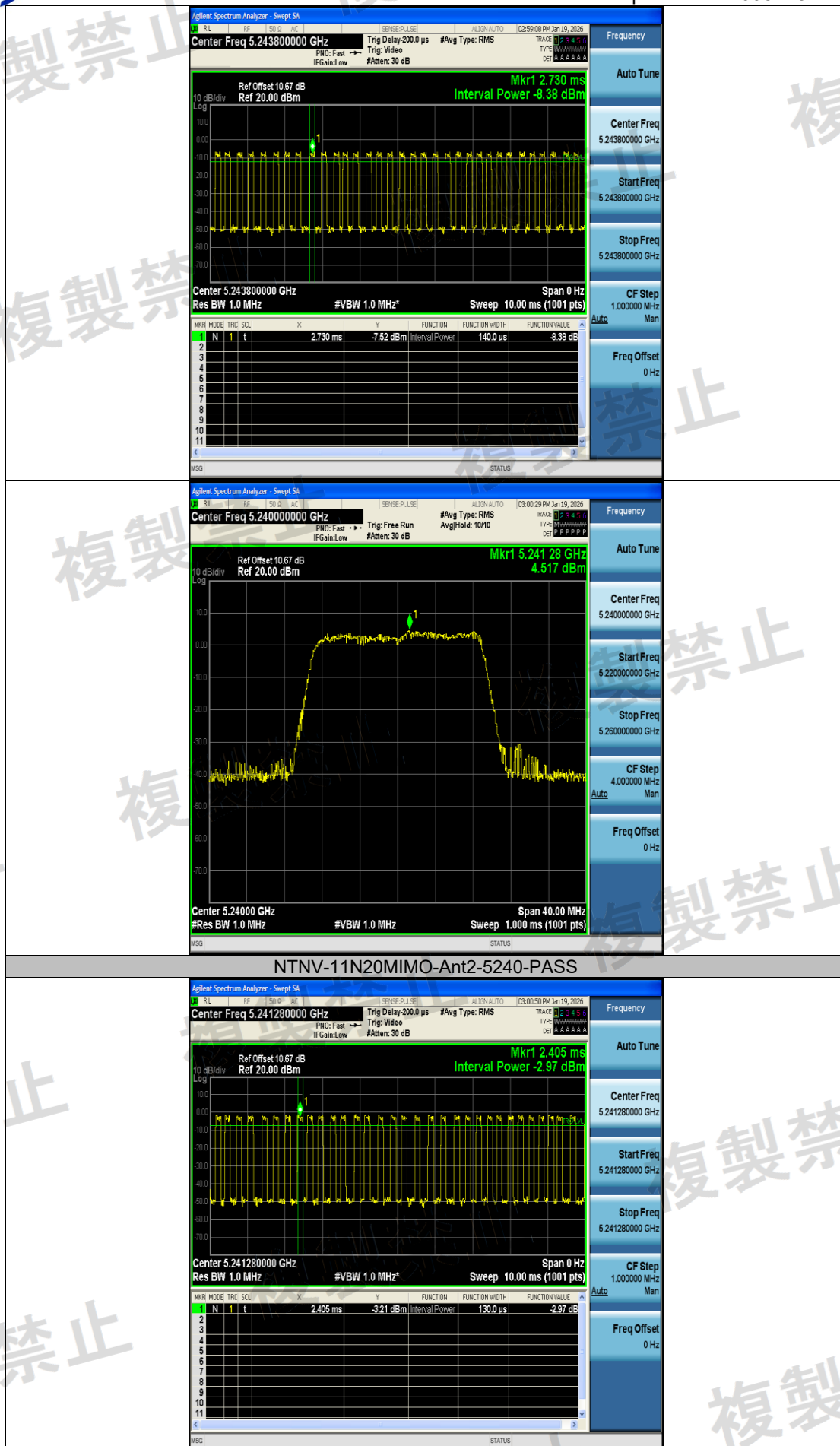


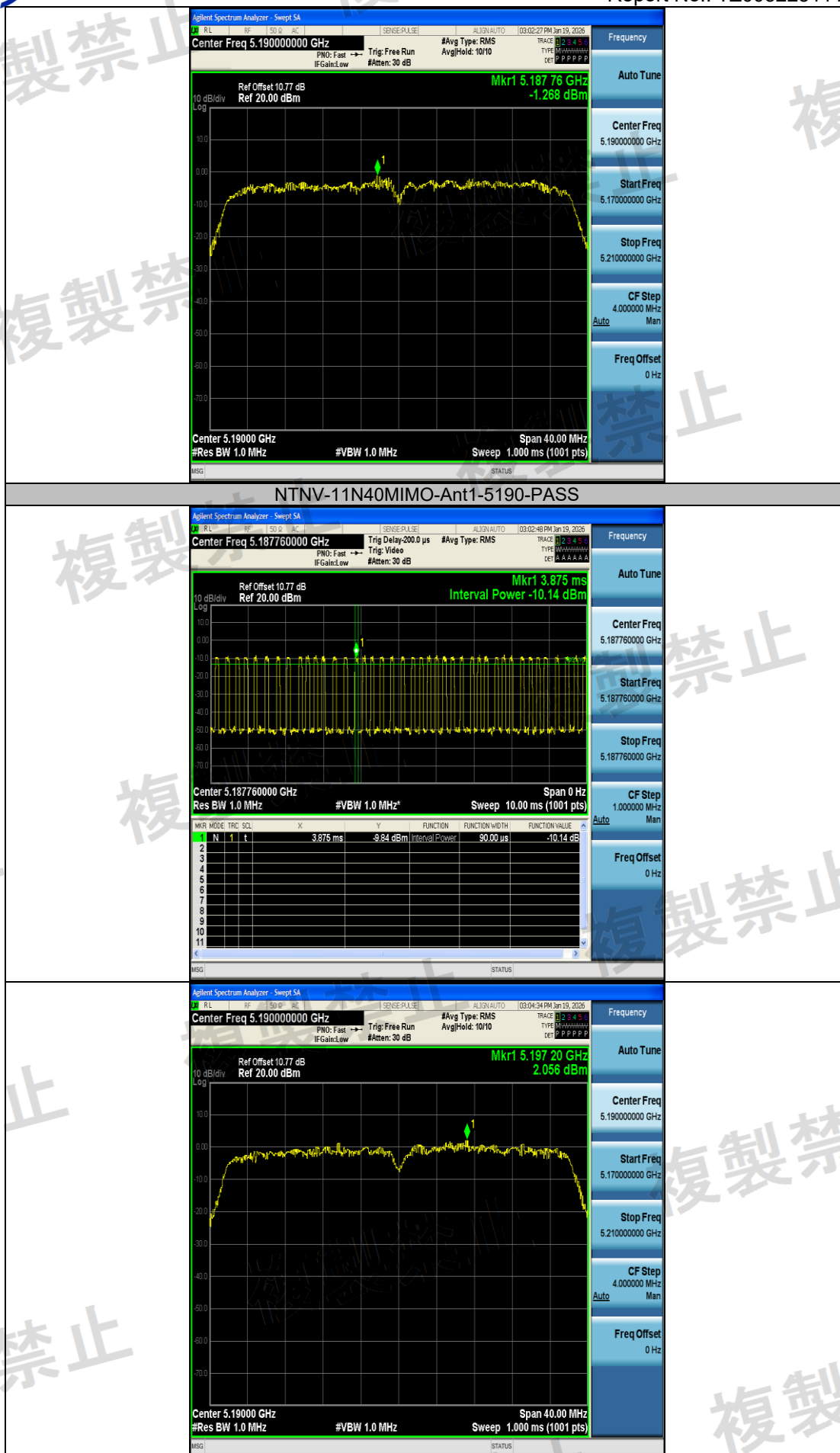


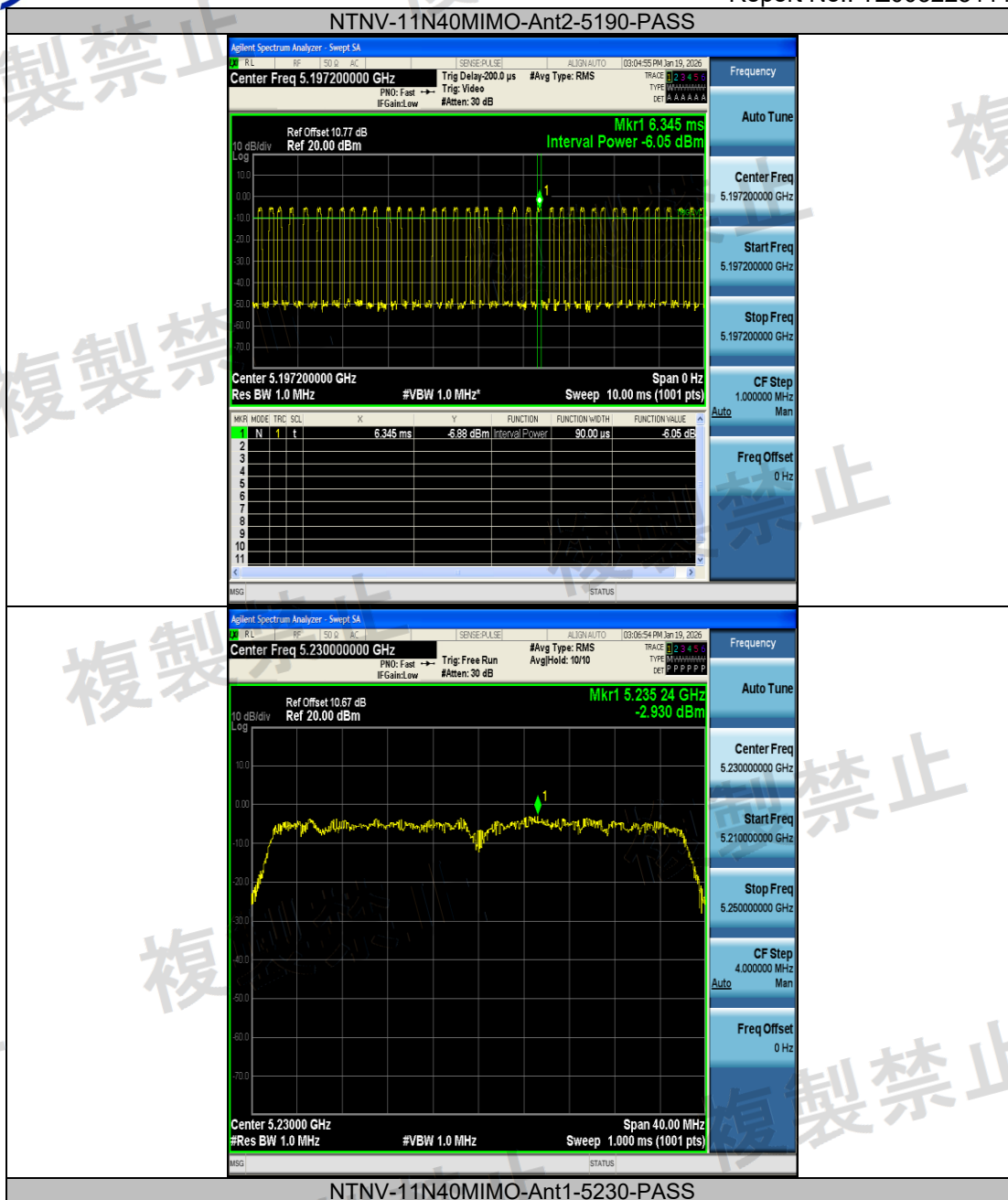


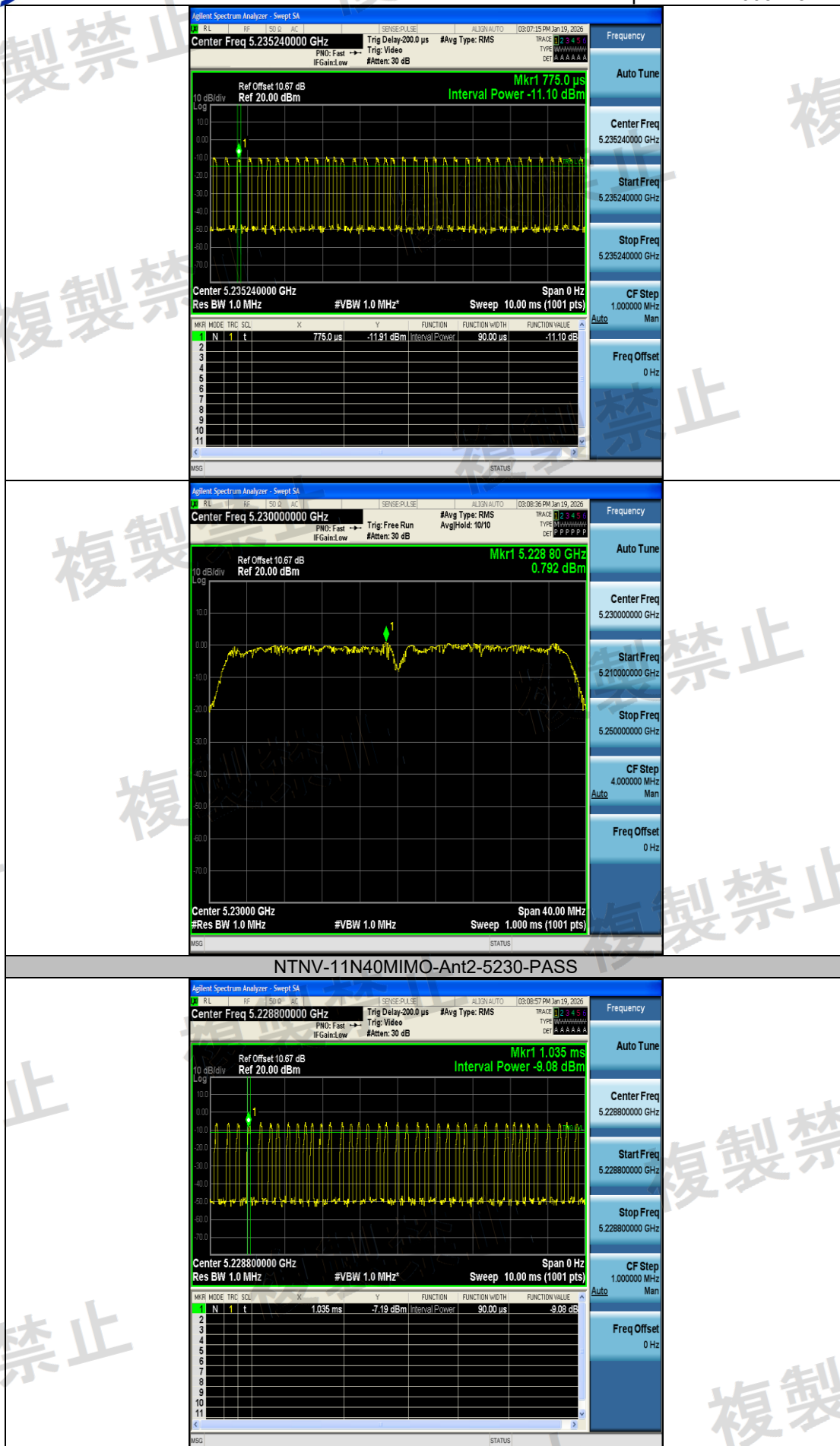
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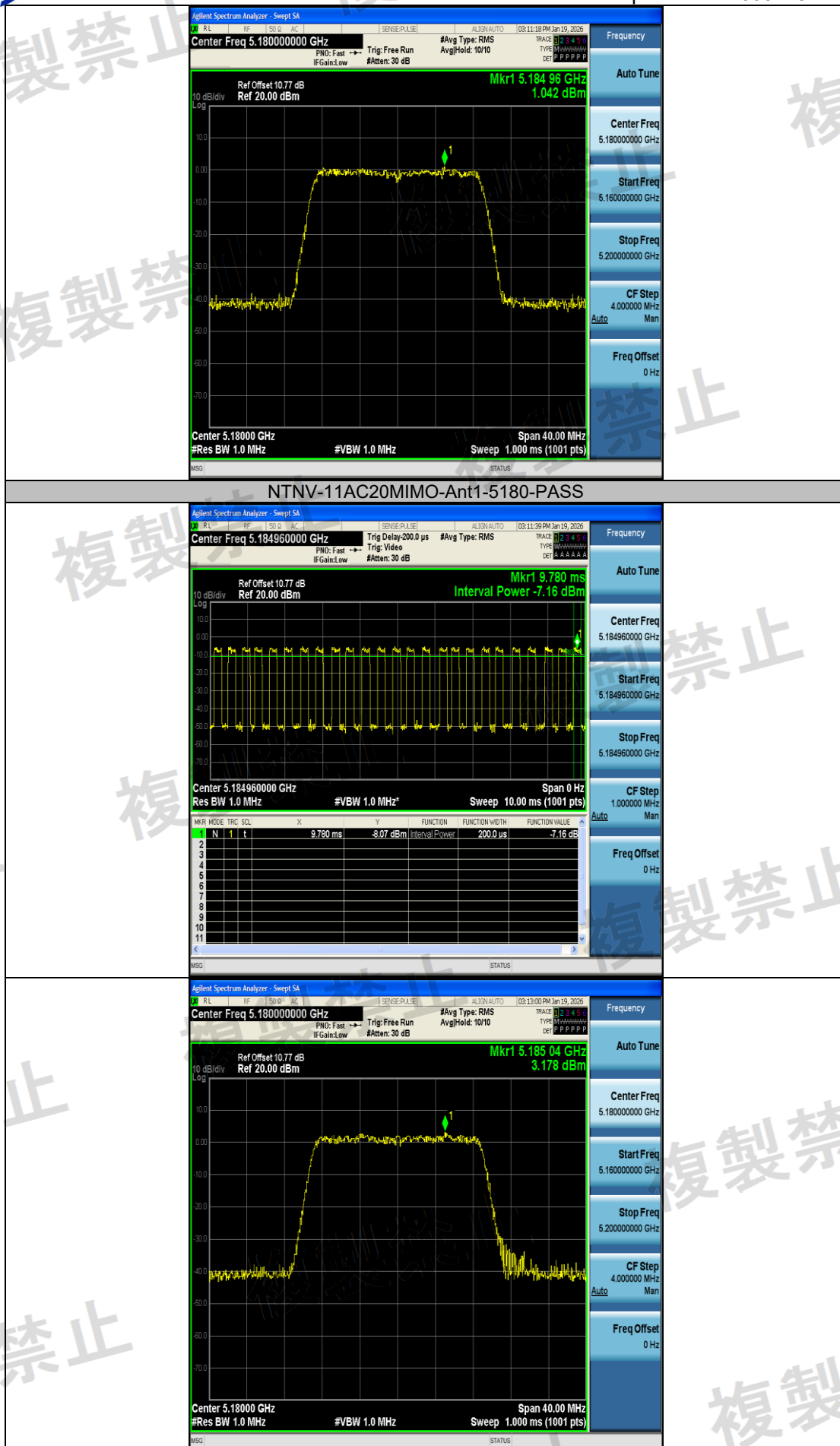


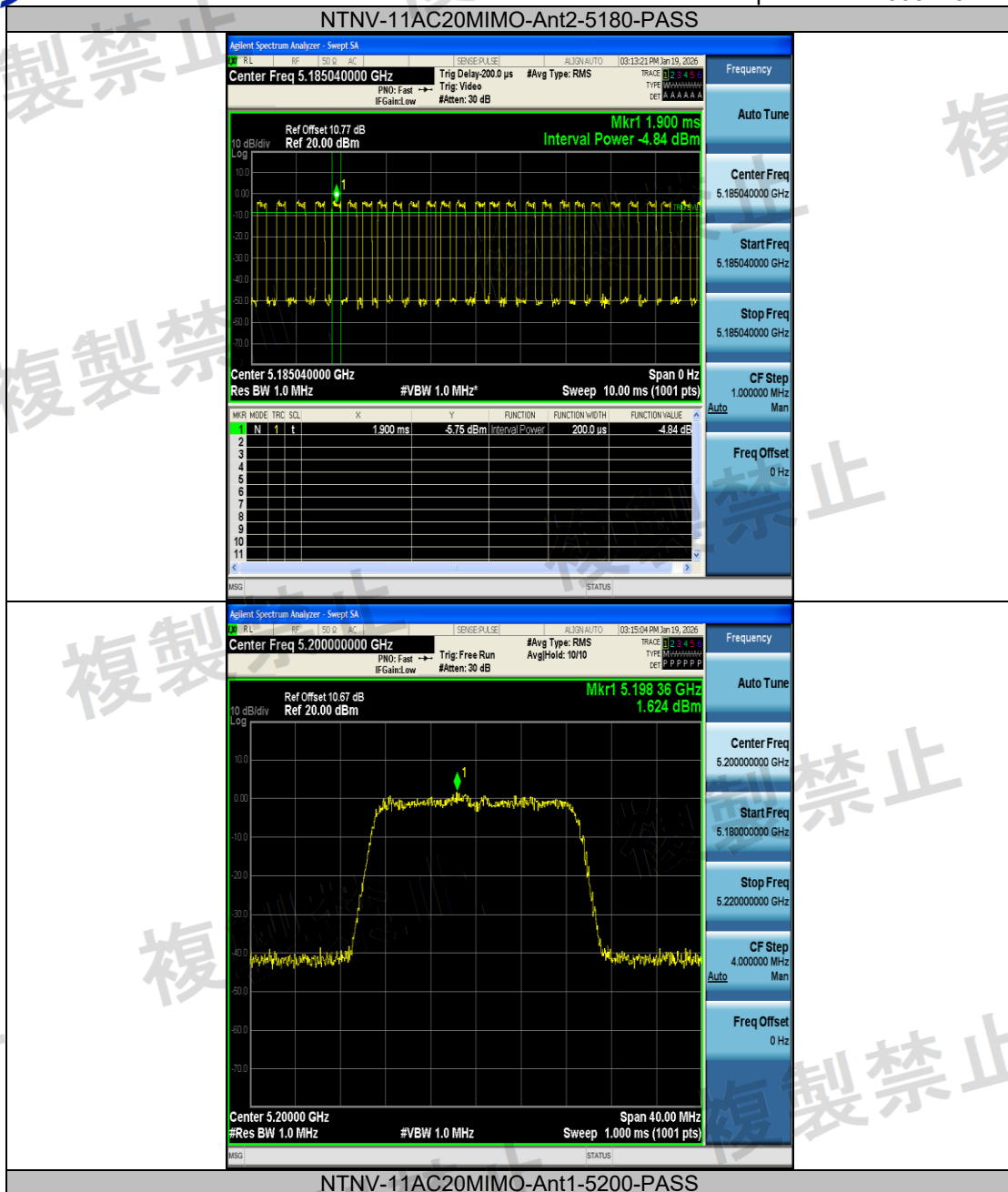




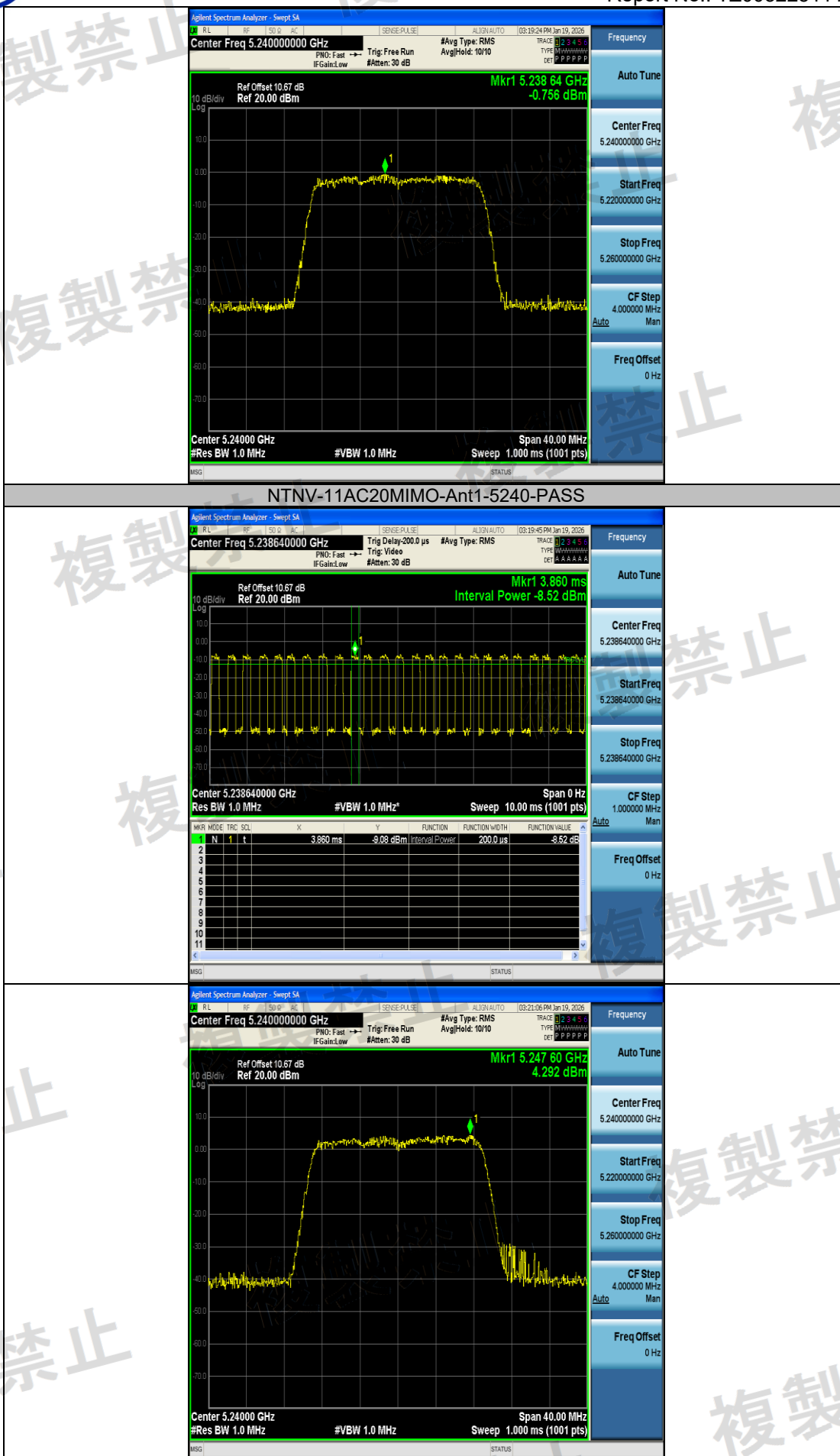




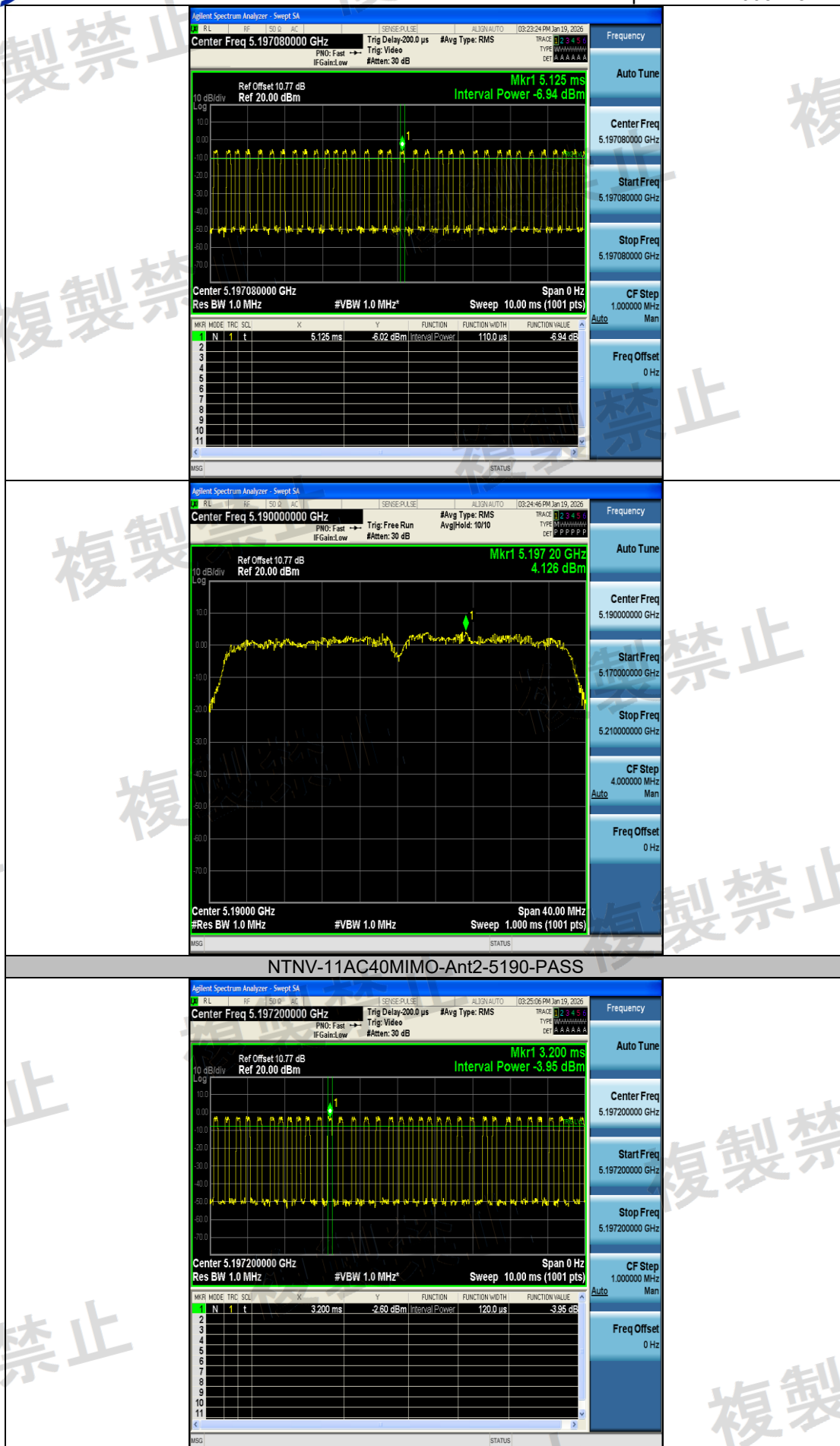


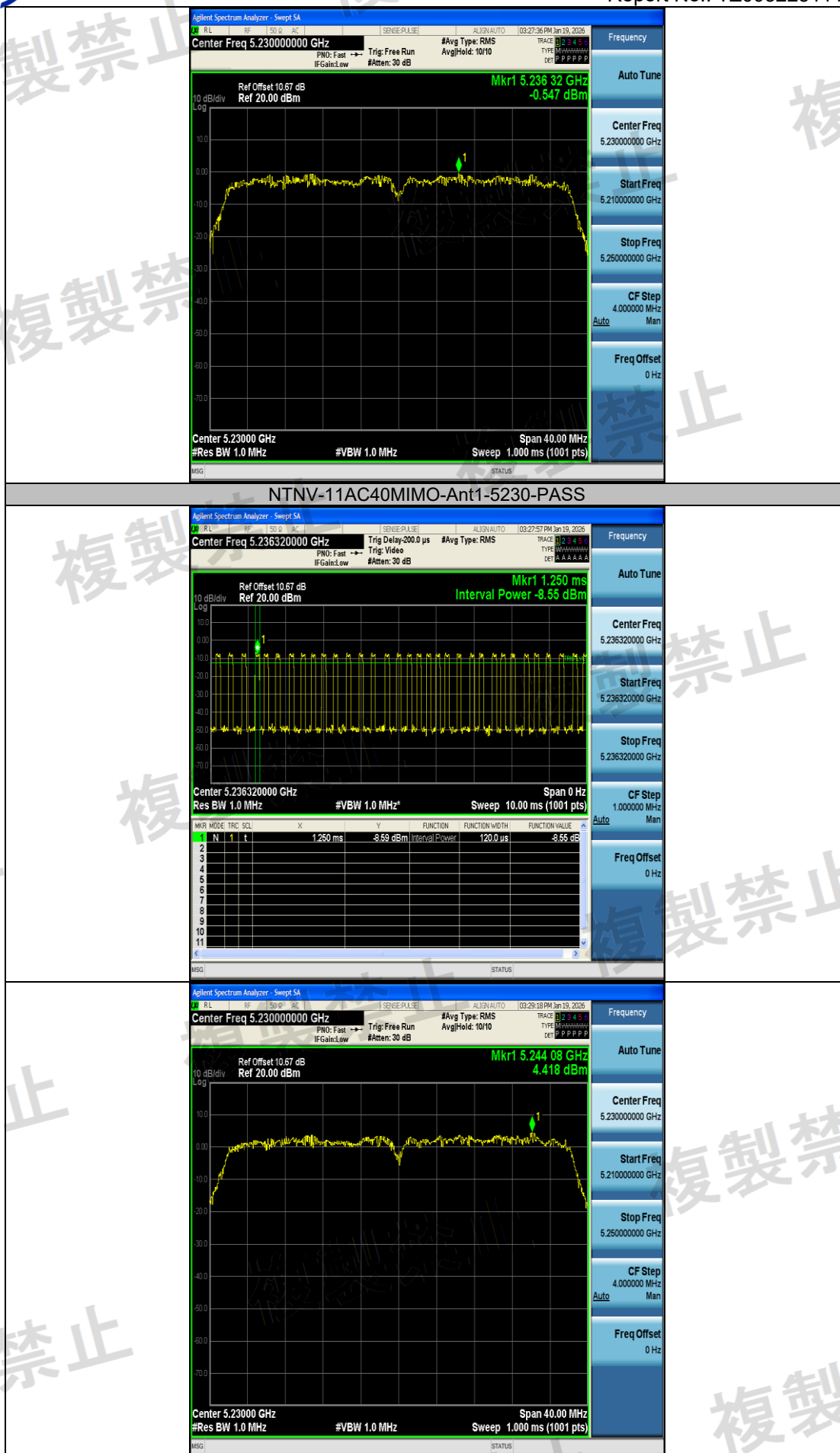


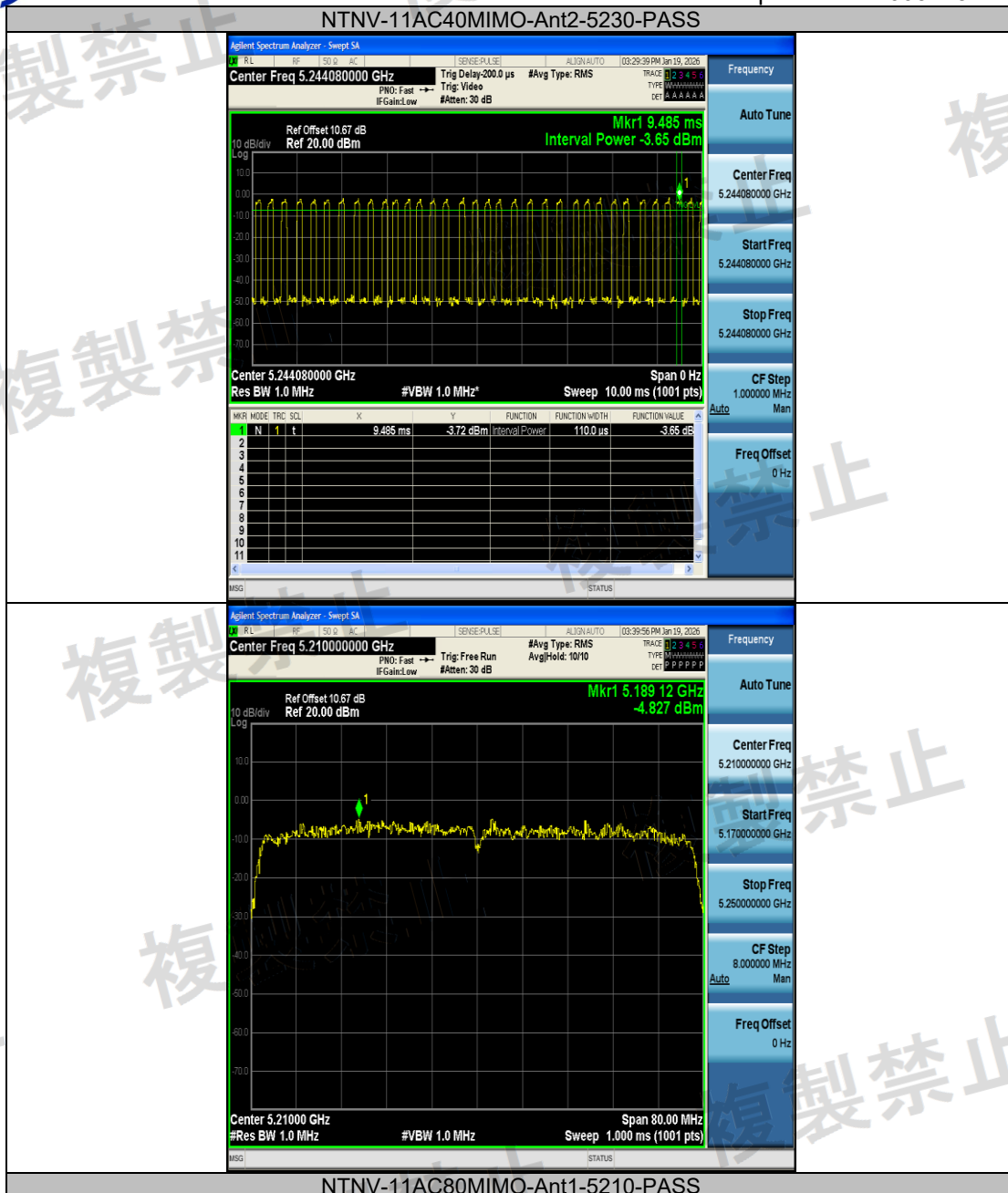


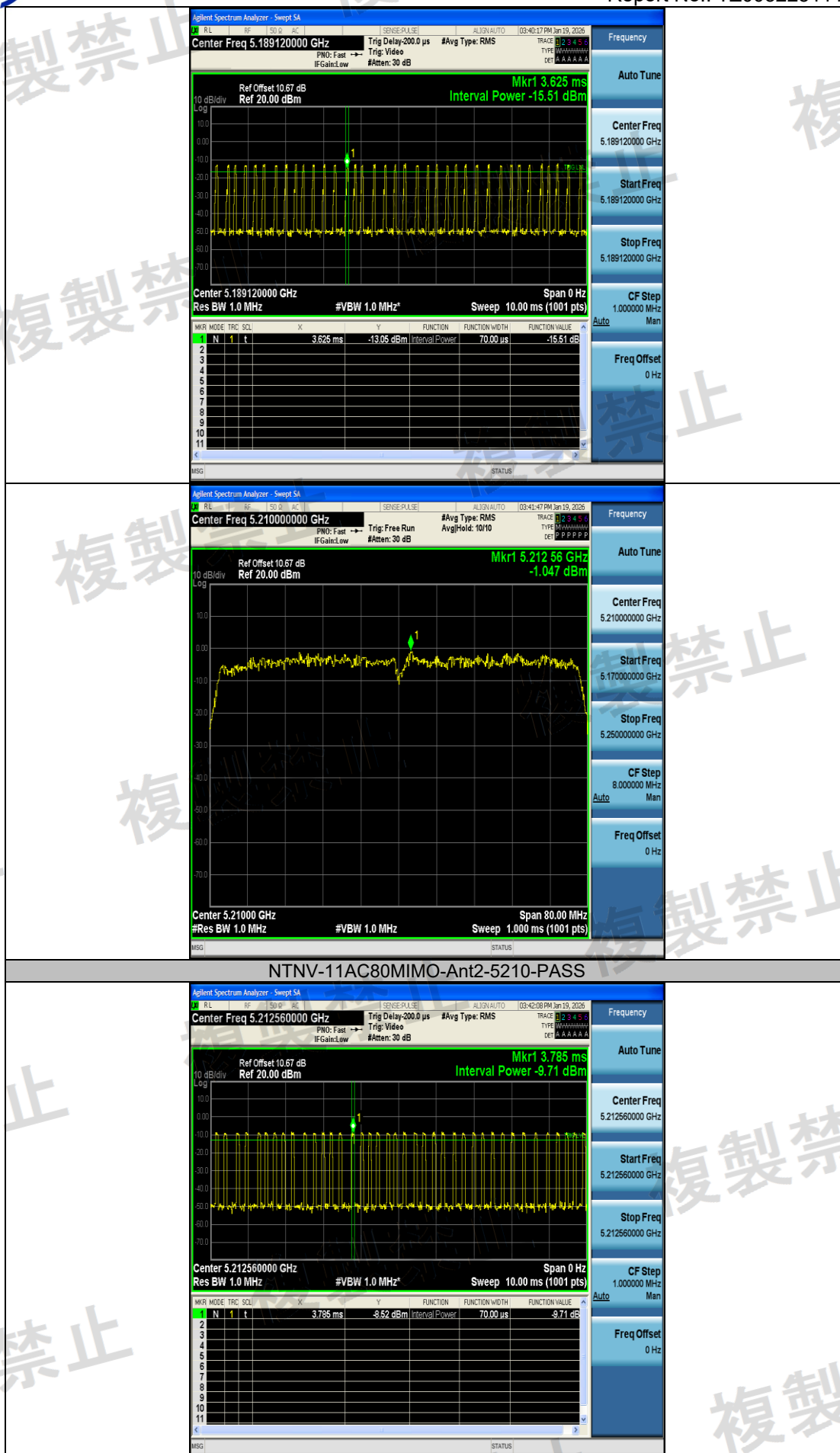








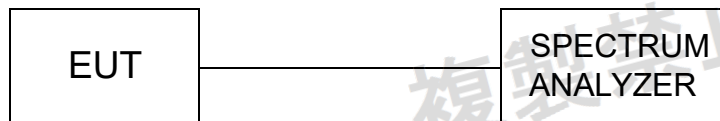






4.2. Frequency Error

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: non-modulation

Spectrum Condition:

Frequency: test frequency

Span:1MHz

Rbw:10KHz

Vbw:10KHz

Sweep time:Auto

Dectector mode: Positive peak

Indication mode: max hold

LIMIT

Tolerance of frequency shall be ± 20 ppm.

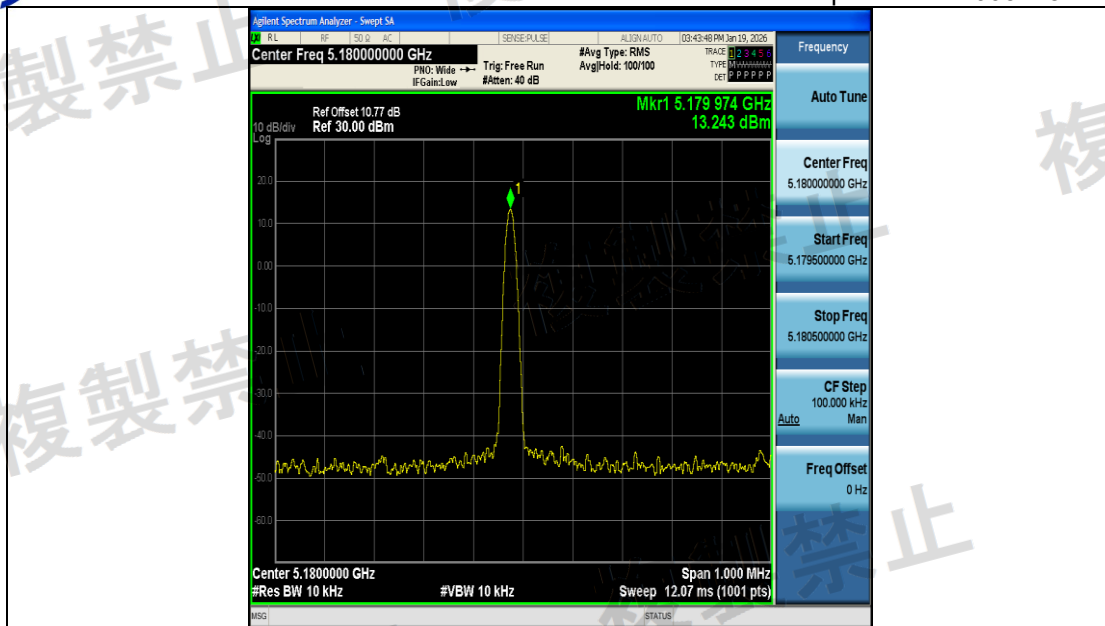
TEST RESULTS

Test Condition	Test Mode	Antenna	Frequency [MHz]	Center Freq [MHz]	Result [ppm]	Limit [ppm]	Verdict
NTNV	CW	Ant1	5180	5179.974	-5.01931	± 20	PASS
NTNV	CW	Ant2	5180	5179.976	-4.63321	± 20	PASS
NTNV	CW	Ant1	5190	5189.988	-2.31214	± 20	PASS
NTNV	CW	Ant2	5190	5189.988	-2.31214	± 20	PASS
NTNV	CW	Ant1	5200	5199.982	-3.46154	± 20	PASS
NTNV	CW	Ant2	5200	5199.983	-3.26923	± 20	PASS
NTNV	CW	Ant1	5210	5209.991	-1.72745	± 20	PASS
NTNV	CW	Ant2	5210	5209.992	-1.53551	± 20	PASS
NTNV	CW	Ant1	5230	5229.989	-2.10325	± 20	PASS
NTNV	CW	Ant2	5230	5229.99	-1.91205	± 20	PASS
NTNV	CW	Ant1	5240	5239.985	-2.86260	± 20	PASS
NTNV	CW	Ant2	5240	5239.987	-2.48092	± 20	PASS

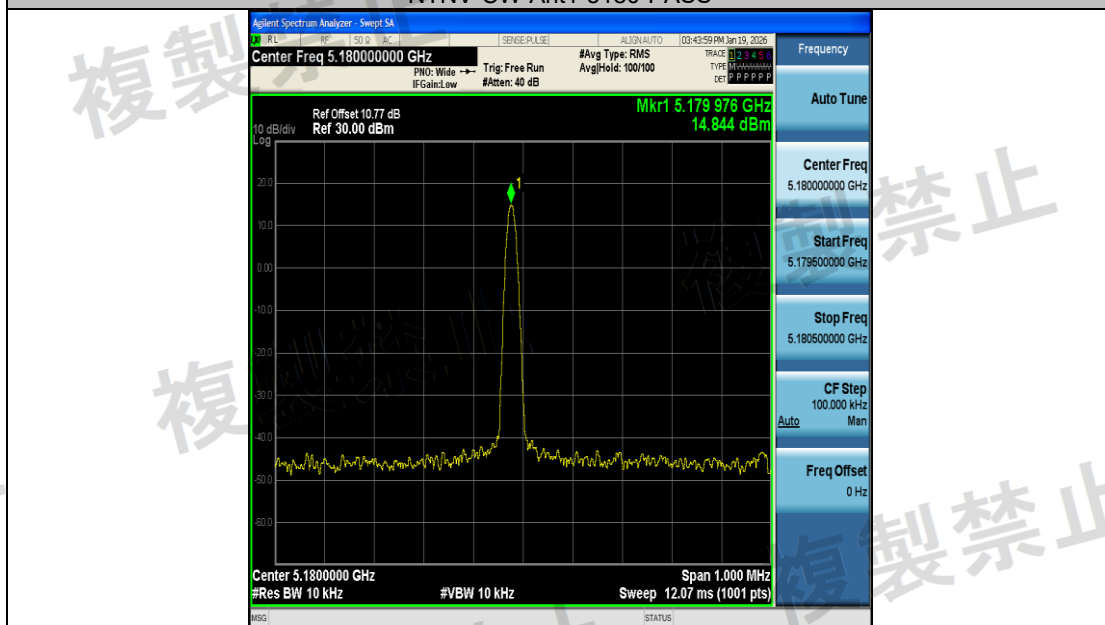
- Note:
1. The test results including the cable lose.
 2. The item was tested at 25℃ and 55% humidity condition;
 - 3.All condition has been testd,list the worst case in this item

Test plot as follows:



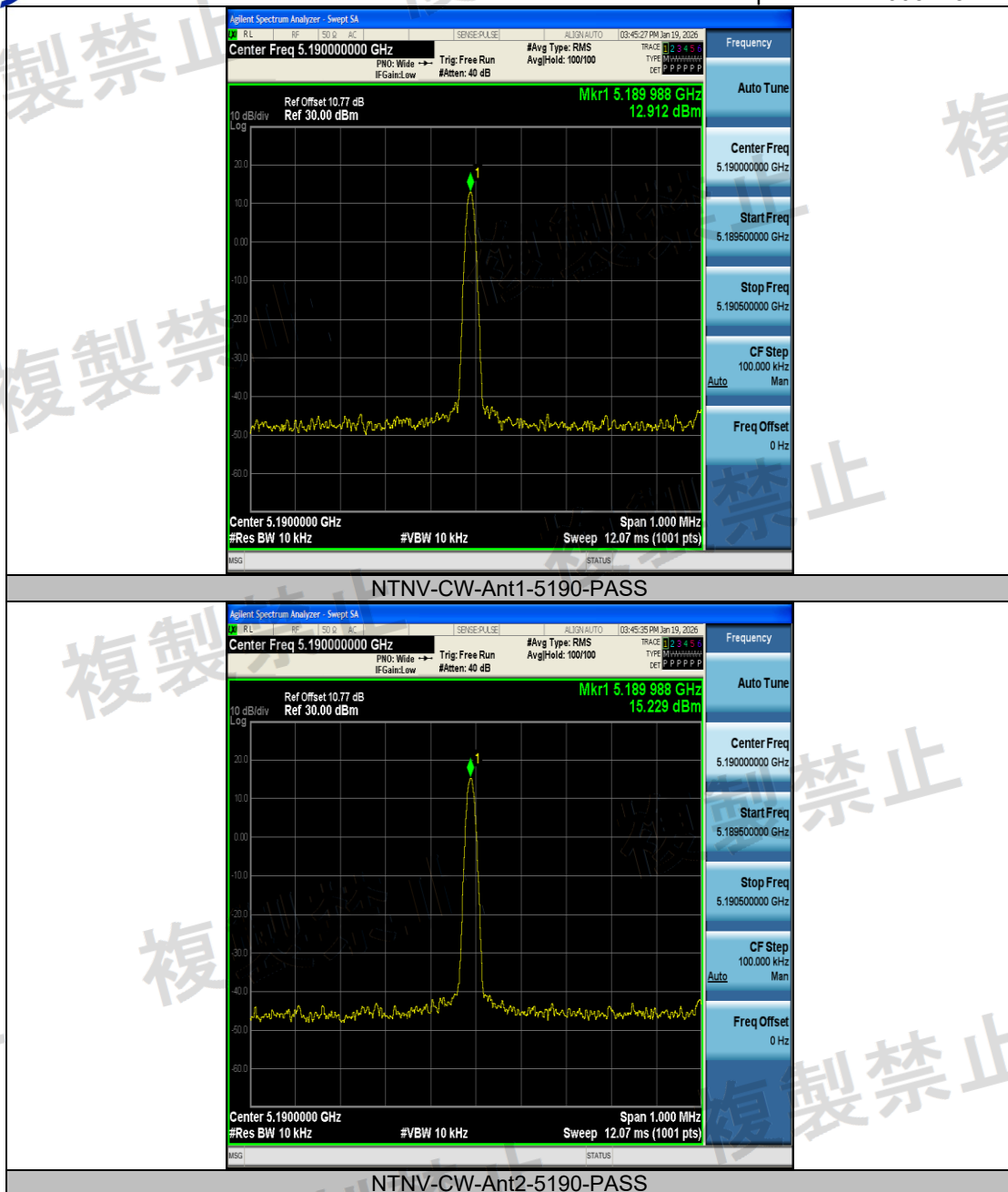


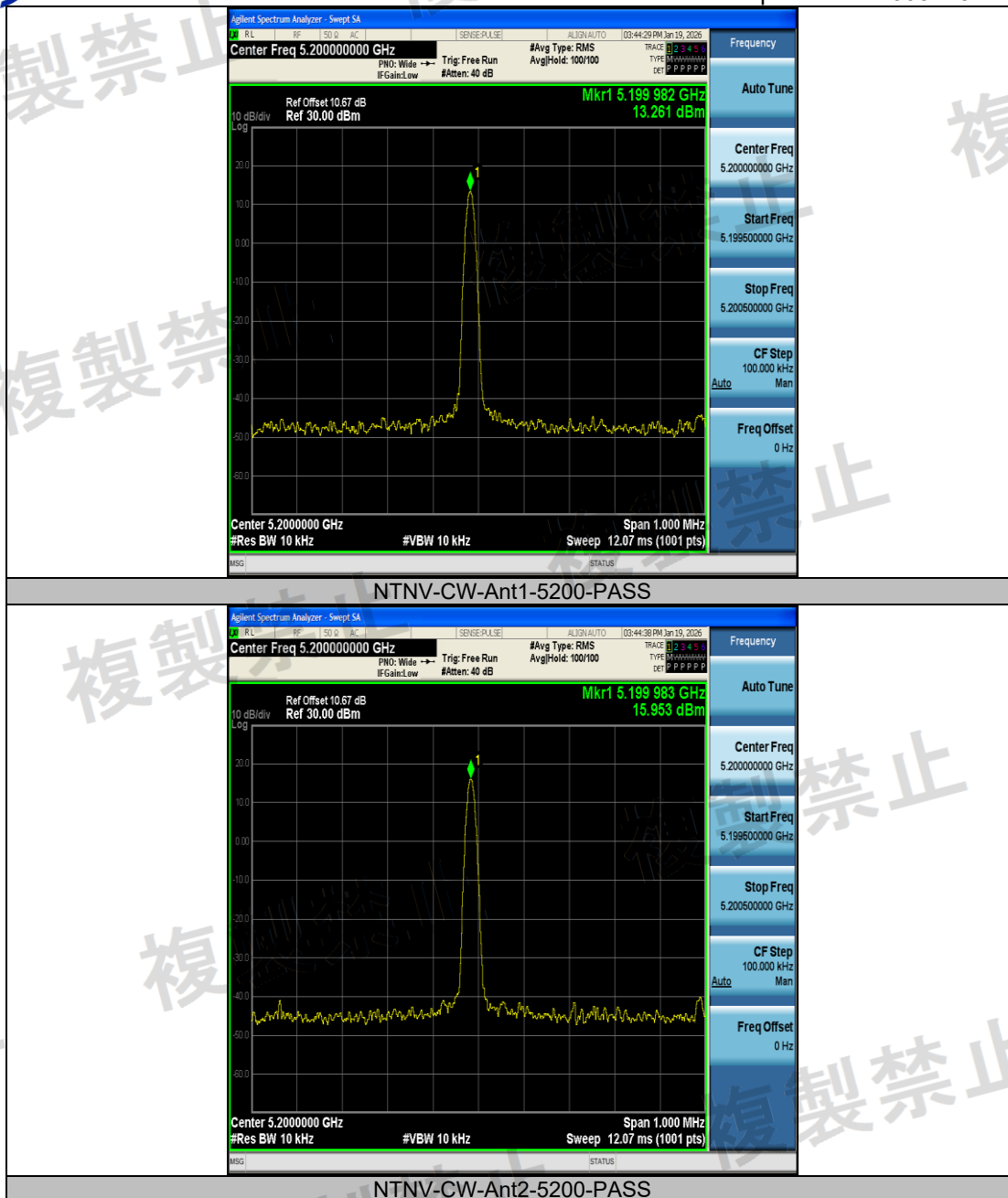
NTNV-CW-Ant1-5180-PASS

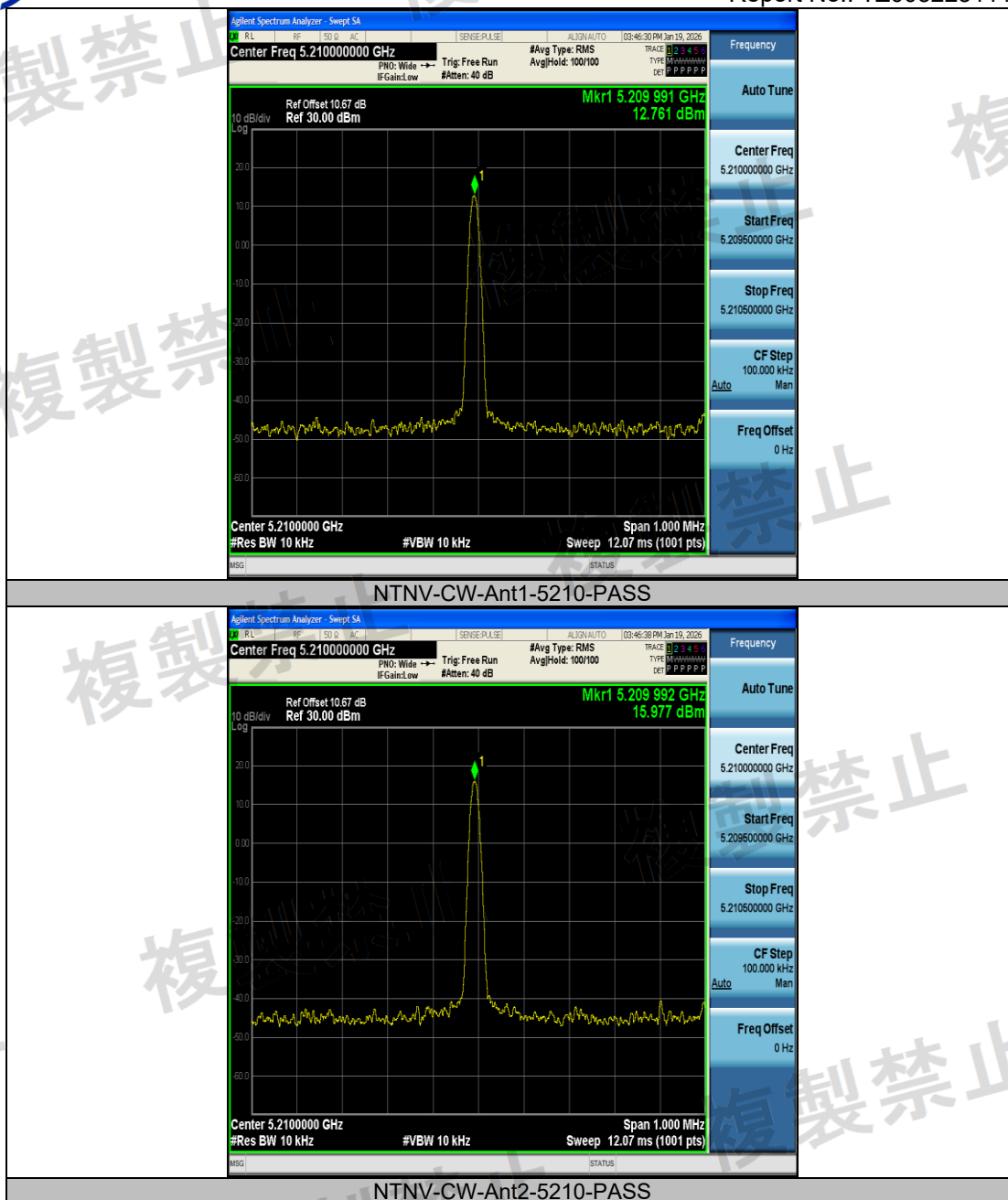


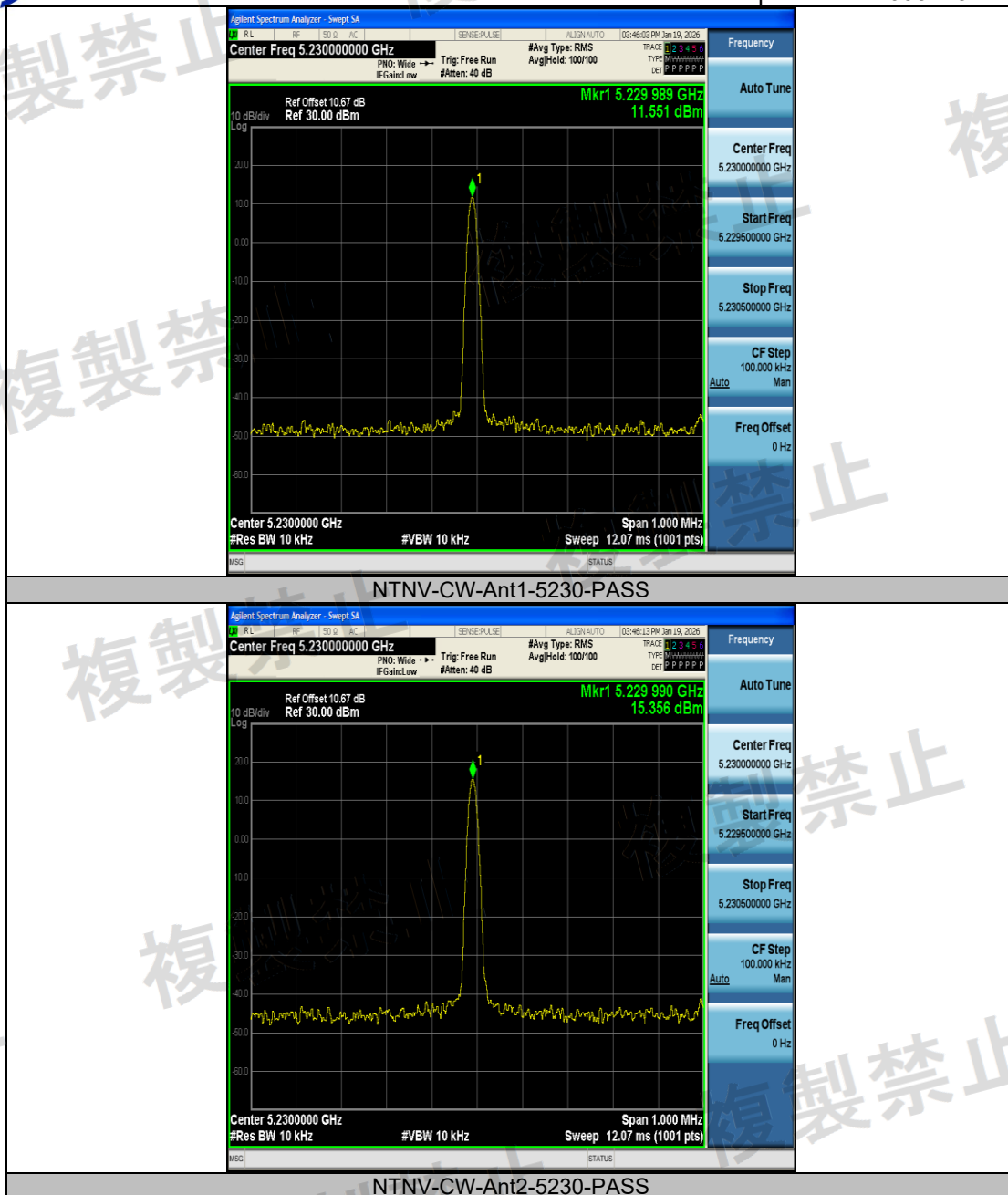
NTNV-CW-Ant2-5180-PASS

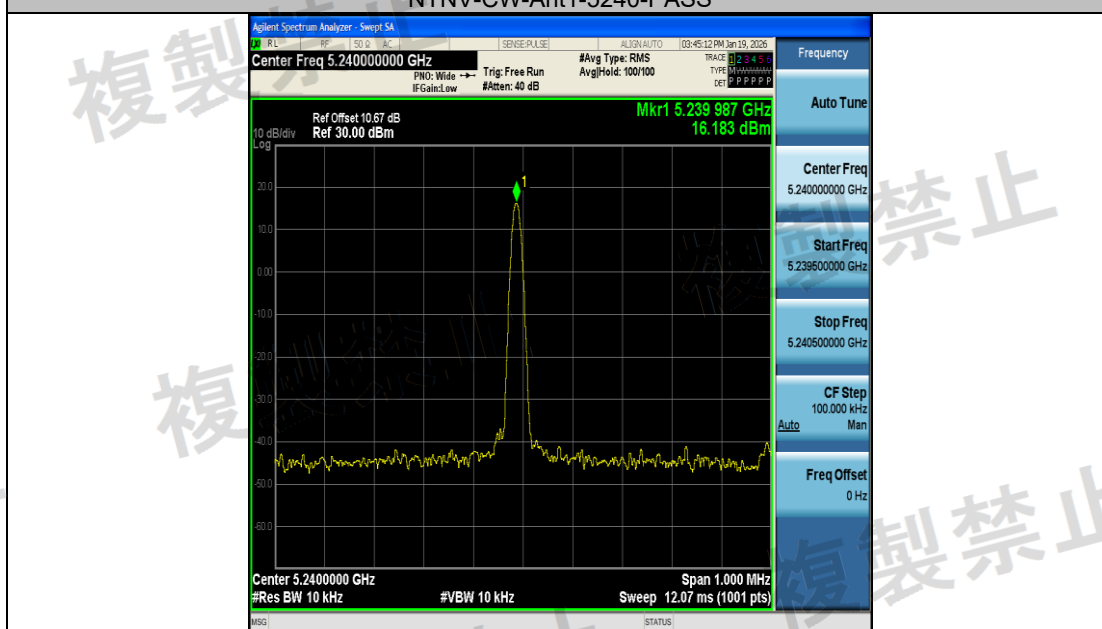
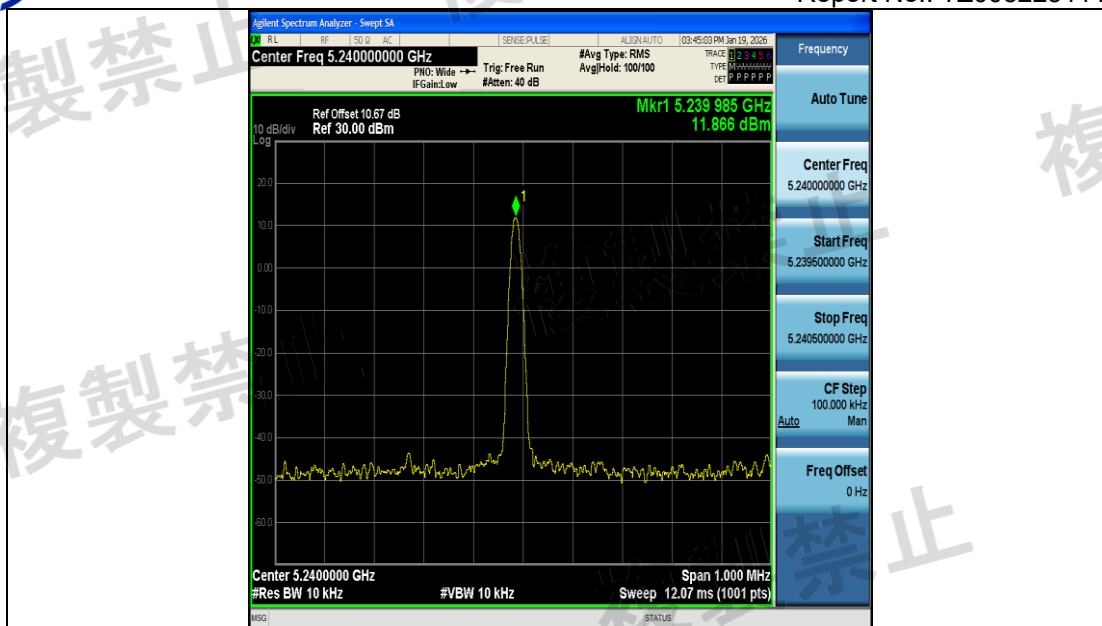














4.3. Interference Prevention Function

The device consists of the Antenna and transmitter module. Component transmitter module also can use the protocol function to protect interference come from outside.

TEST EQUIPMENT

CMW500

TEST SOFTWARE

N/A

TEST PROCEDURE

1. Open the software
2. Scan for EUT, and read the MAC address.

TEST RESULTS

The unit does meet the requirements.

MAC Address: 12:F4:D8:46:3C:90





4.4. Occupied Bandwidth (99%)

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

Frequency: Center frequency in the band to be used

Span:40MHz

RBW:300KHz

VBW:300KHz

Sweep time:Auto

Dectector mode: Positive peak

Indication mode: max hold

LIMIT

Test Item	Limits
Occupied Bandwidth	≤ 20 MHz (20MHz System for OFDM)
	≤ 40 MHz (40MHz System for OFDM)
	≤ 80 MHz (80MHz System for OFDM)
	≤ 160 MHz (160MHz System for OFDM)



**TEST RESULTS**

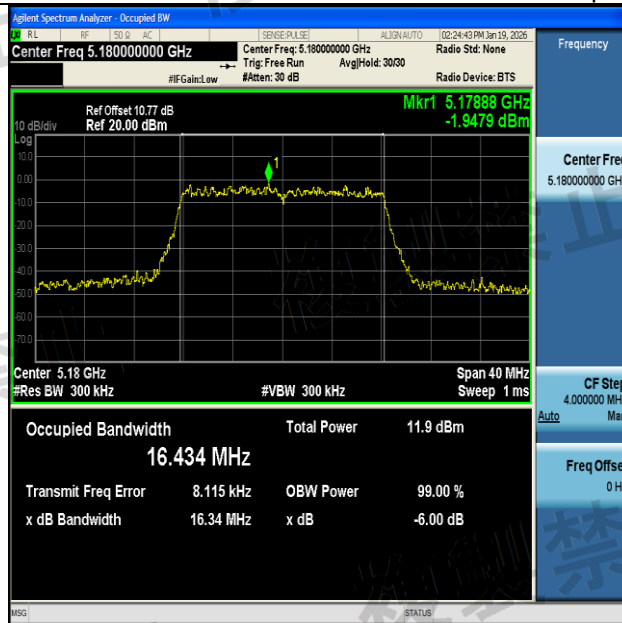
Report No.: TZ0032251114TRF06

Test Condition	Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
NTNV	11A	Ant1	5180	16.434	≤20	PASS
NTNV	11A	Ant2	5180	16.479	≤20	PASS
NTNV	11A	Ant1	5200	16.420	≤20	PASS
NTNV	11A	Ant2	5200	16.393	≤20	PASS
NTNV	11A	Ant1	5240	16.414	≤20	PASS
NTNV	11A	Ant2	5240	16.416	≤20	PASS
NTNV	11N20MIMO	Ant1	5180	17.745	≤20	PASS
NTNV	11N20MIMO	Ant2	5180	17.651	≤20	PASS
NTNV	11N20MIMO	Ant1	5200	17.642	≤20	PASS
NTNV	11N20MIMO	Ant2	5200	17.693	≤20	PASS
NTNV	11N20MIMO	Ant1	5240	17.586	≤20	PASS
NTNV	11N20MIMO	Ant2	5240	17.567	≤20	PASS
NTNV	11N40MIMO	Ant1	5190	36.072	≤40	PASS
NTNV	11N40MIMO	Ant2	5190	36.001	≤40	PASS
NTNV	11N40MIMO	Ant1	5230	36.184	≤40	PASS
NTNV	11N40MIMO	Ant2	5230	36.243	≤40	PASS
NTNV	11AC20MIMO	Ant1	5180	17.594	≤20	PASS
NTNV	11AC20MIMO	Ant2	5180	17.637	≤20	PASS
NTNV	11AC20MIMO	Ant1	5200	17.648	≤20	PASS
NTNV	11AC20MIMO	Ant2	5200	17.610	≤20	PASS
NTNV	11AC20MIMO	Ant1	5240	17.652	≤20	PASS
NTNV	11AC20MIMO	Ant2	5240	17.748	≤20	PASS
NTNV	11AC40MIMO	Ant1	5190	36.098	≤40	PASS
NTNV	11AC40MIMO	Ant2	5190	36.019	≤40	PASS
NTNV	11AC40MIMO	Ant1	5230	35.995	≤40	PASS
NTNV	11AC40MIMO	Ant2	5230	36.047	≤40	PASS
NTNV	11AC80MIMO	Ant1	5210	74.824	≤80	PASS
NTNV	11AC80MIMO	Ant2	5210	75.596	≤80	PASS

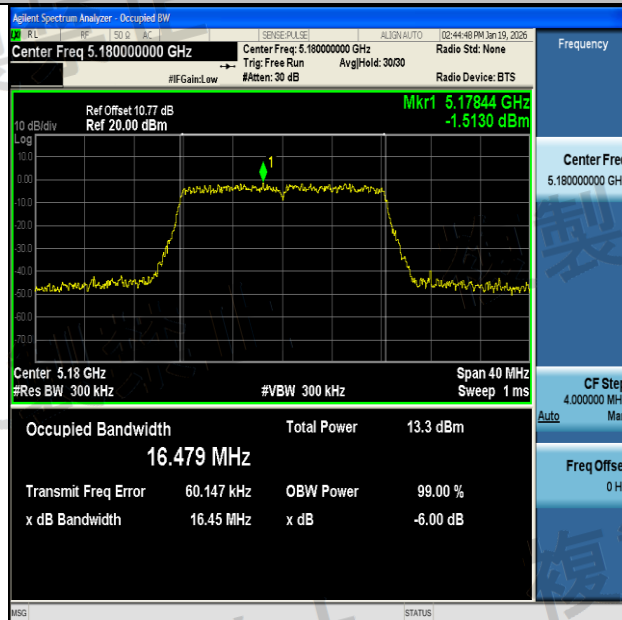
Note: 1. The test results including the cable lose.
2. The item was tested at 25 °C and 55% humidity condition;
3.All condition has been testd,list the worst case in this item

Test plot as follows:



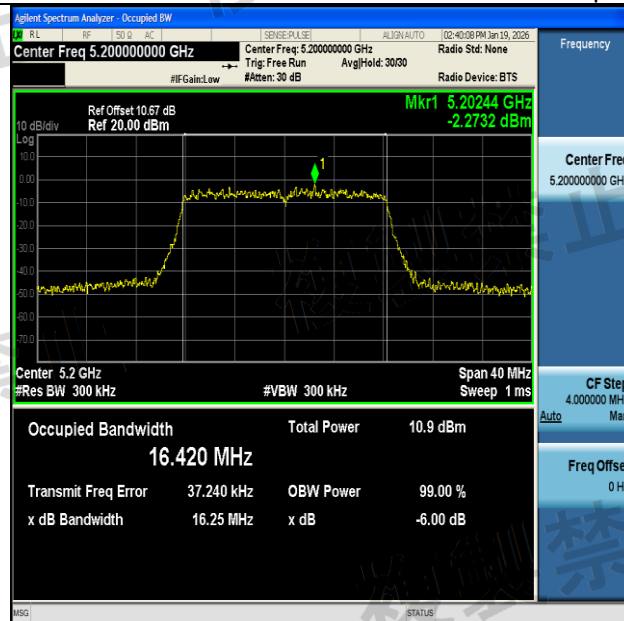


NTNV-11A-Ant1-5180-PASS

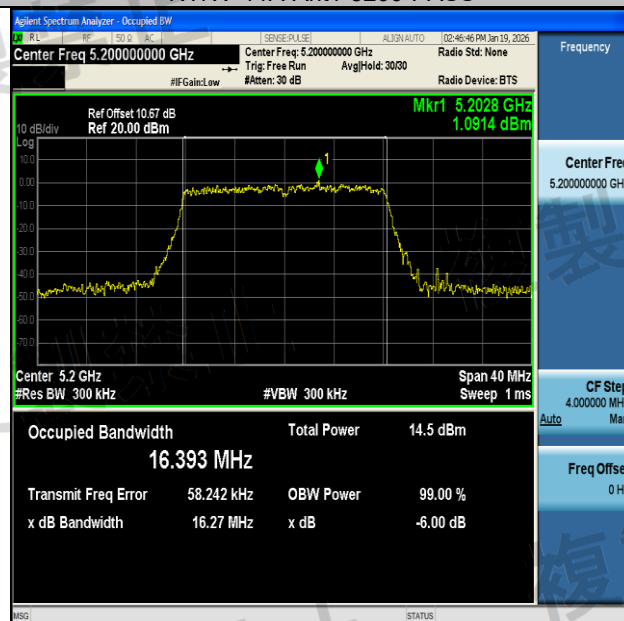


NTNV-11A-Ant2-5180-PASS



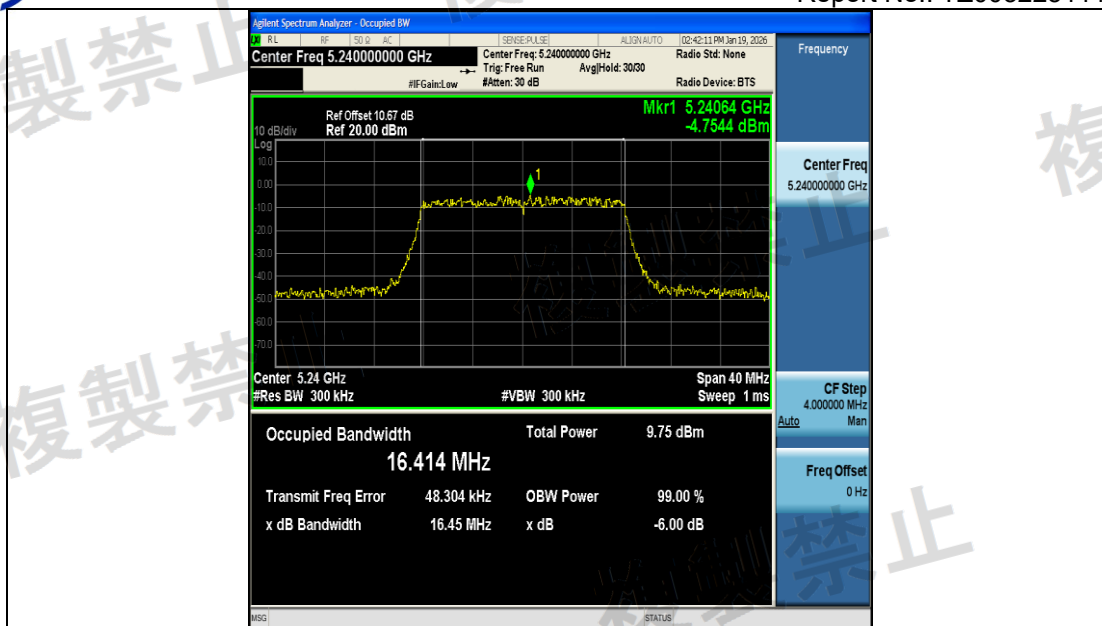


NTNV-11A-Ant1-5200-PASS

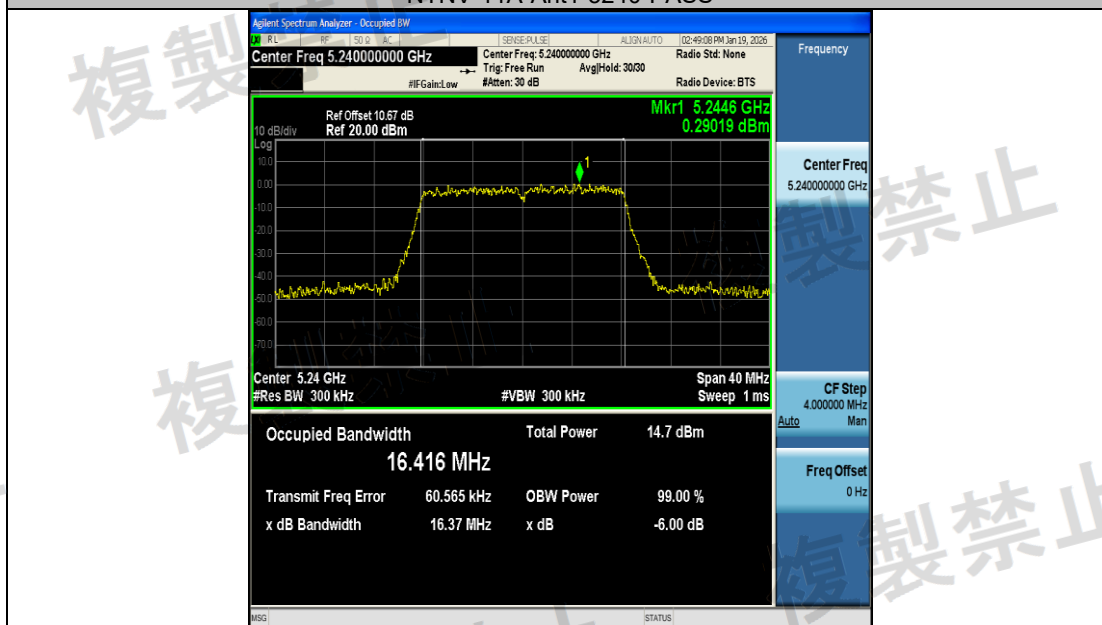


NTNV-11A-Ant2-5200-PASS



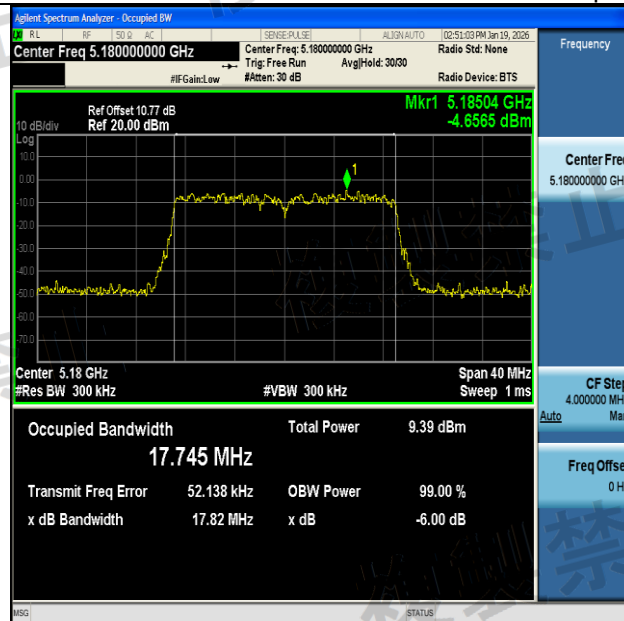


NTNV-11A-Ant1-5240-PASS

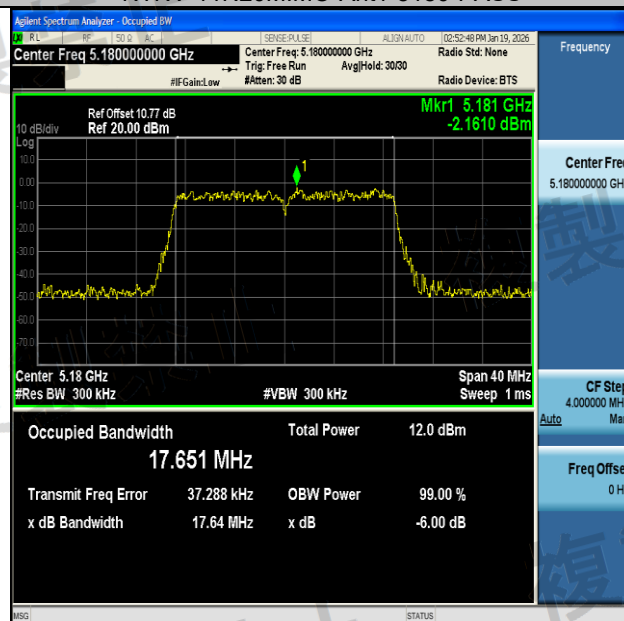


NTNV-11A-Ant2-5240-PASS



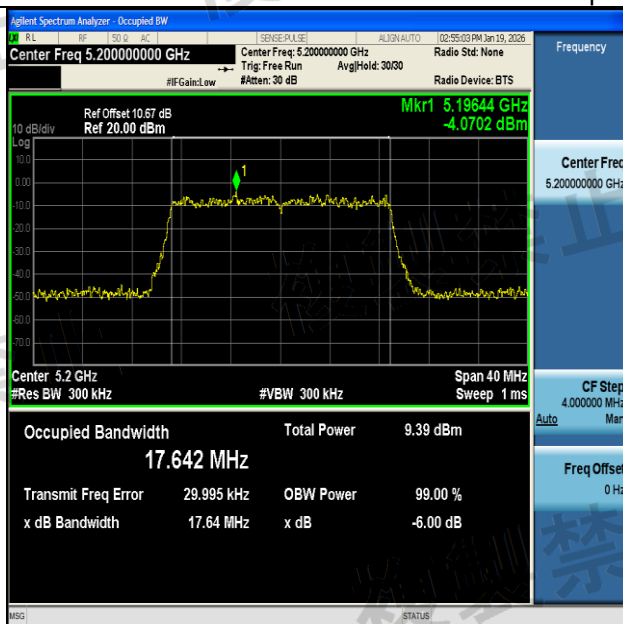


NTNV-11N20MIMO-Ant1-5180-PASS

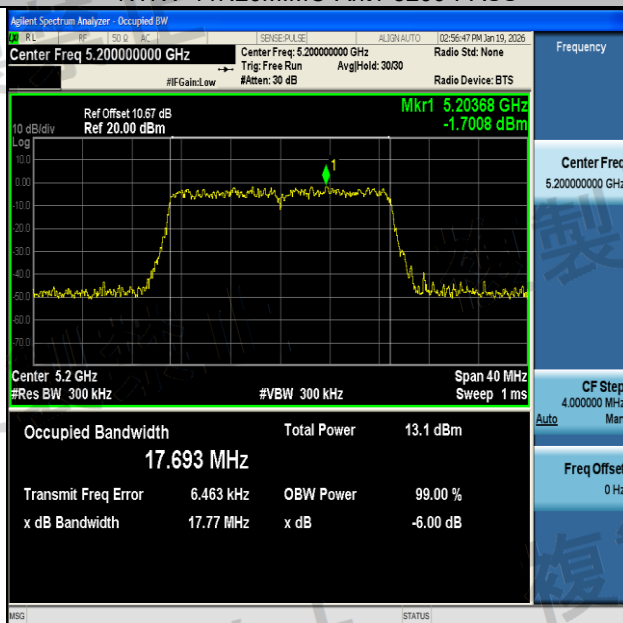


NTNV-11N20MIMO-Ant2-5180-PASS



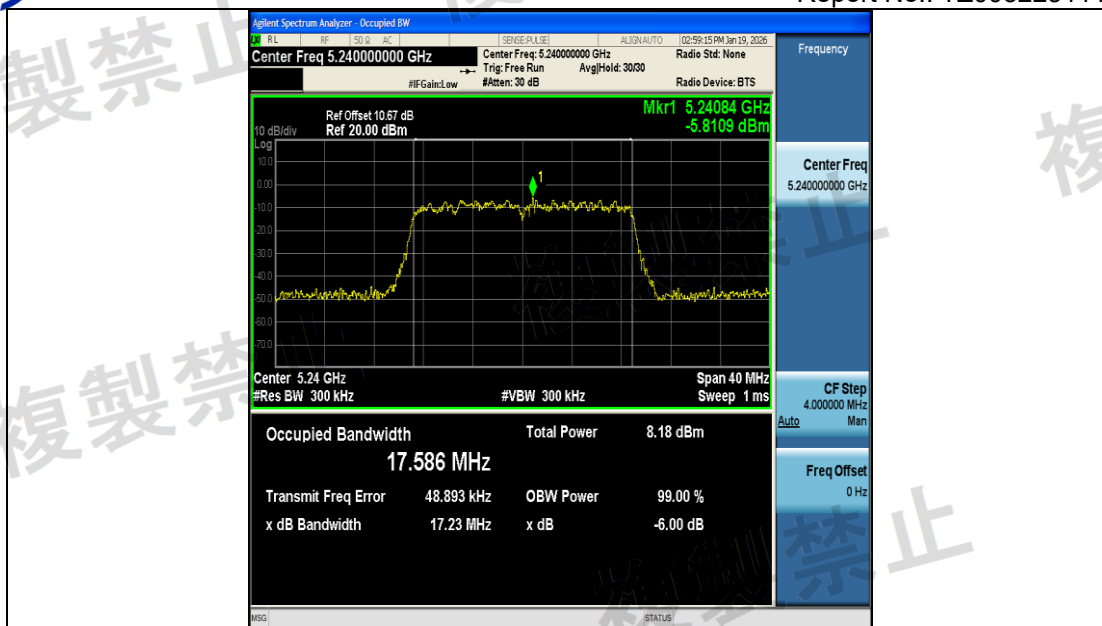


NTNV-11N20MIMO-Ant1-5200-PASS

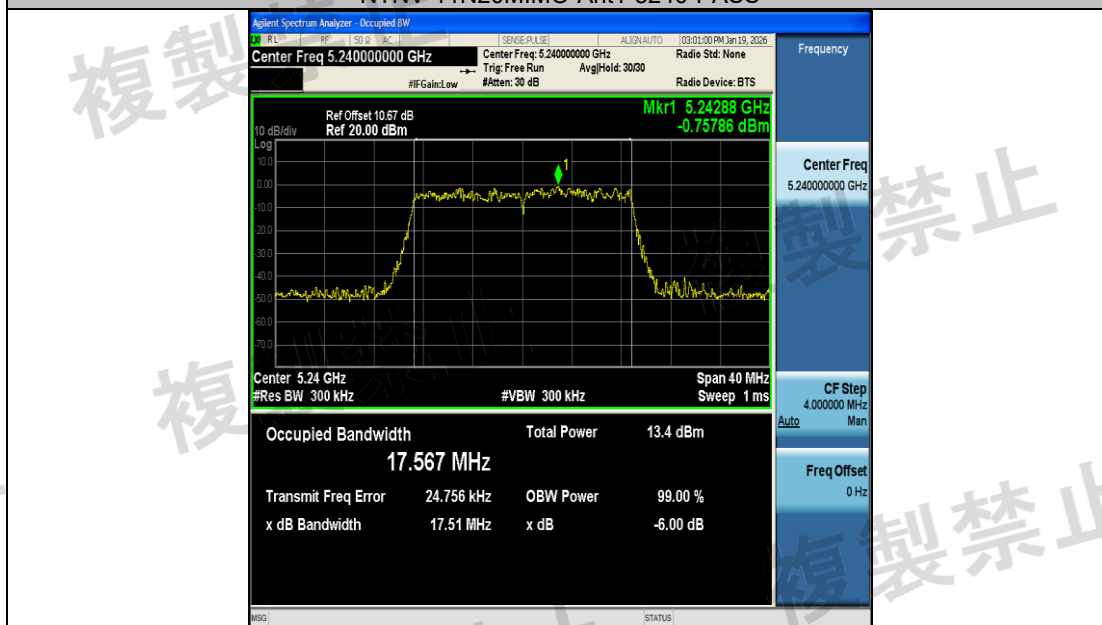


NTNV-11N20MIMO-Ant2-5200-PASS



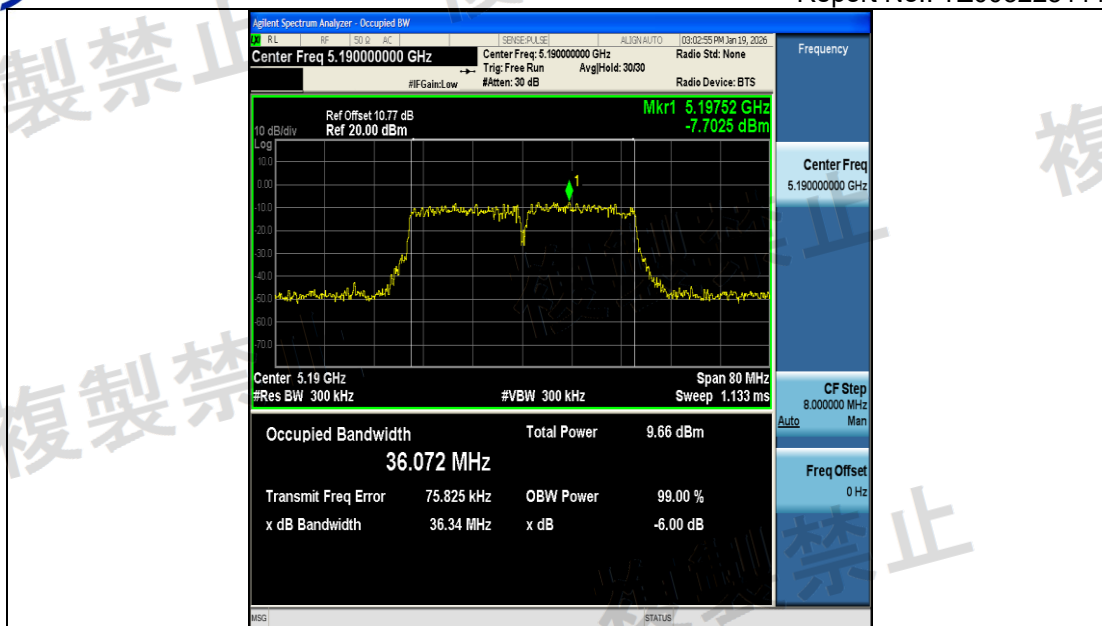


NTNV-11N20MIMO-Ant1-5240-PASS

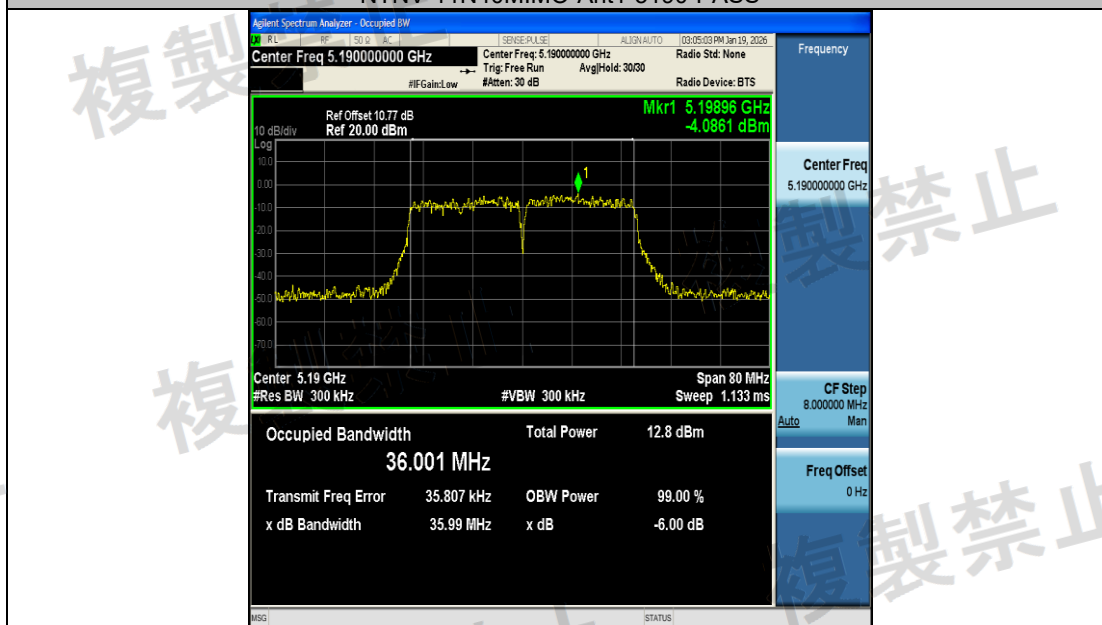


NTNV-11N20MIMO-Ant2-5240-PASS



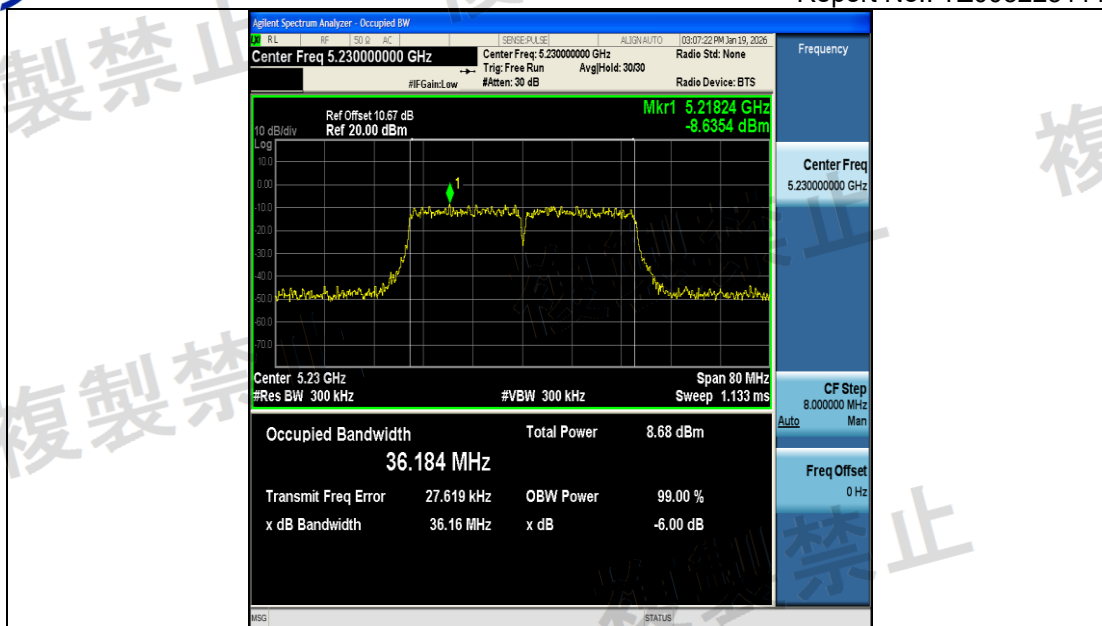


NTNV-11N40MIMO-Ant1-5190-PASS

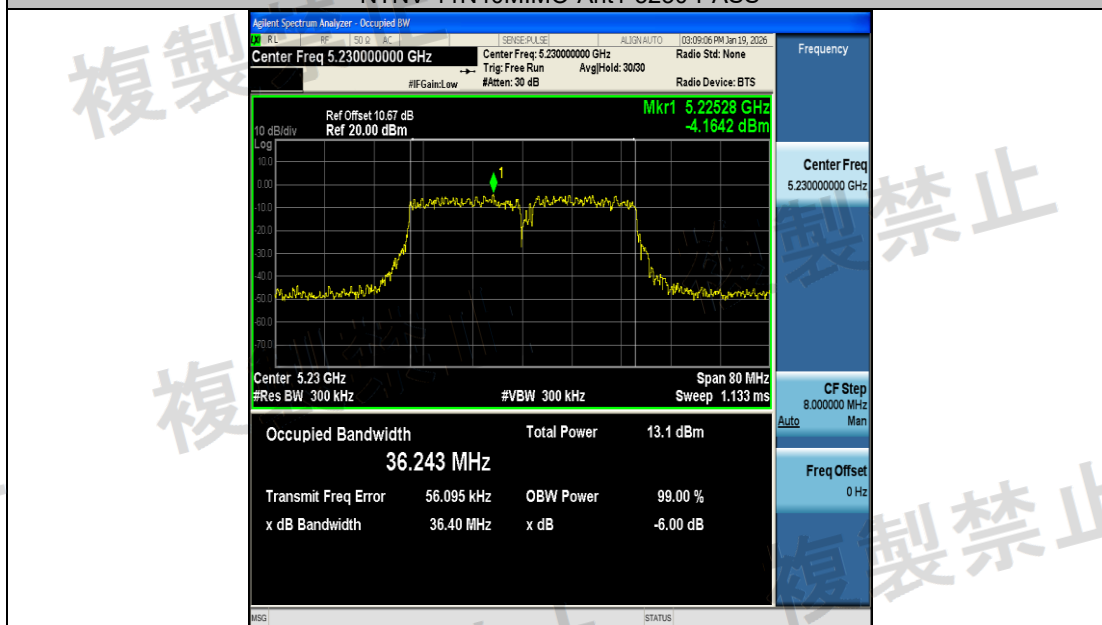


NTNV-11N40MIMO-Ant2-5190-PASS



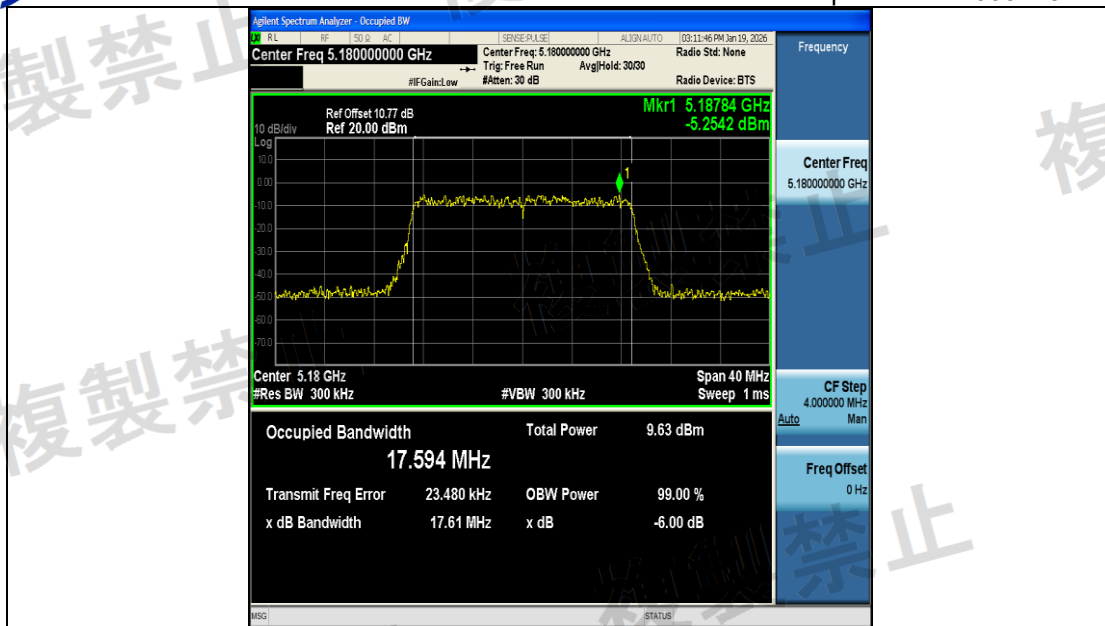


NTNV-11N40MIMO-Ant1-5230-PASS

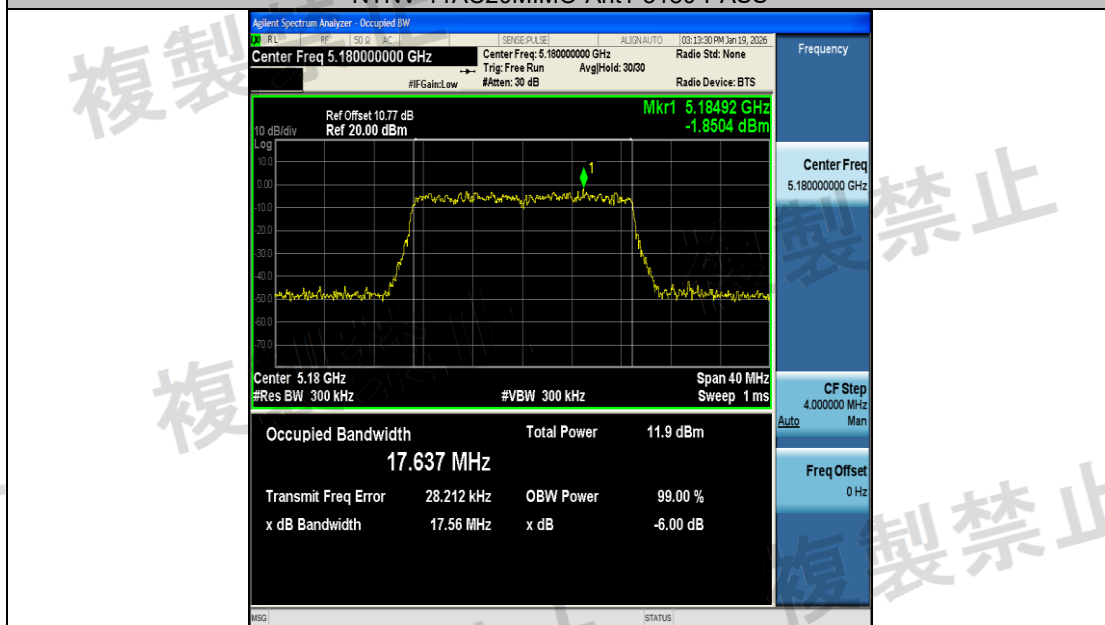


NTNV-11N40MIMO-Ant2-5230-PASS



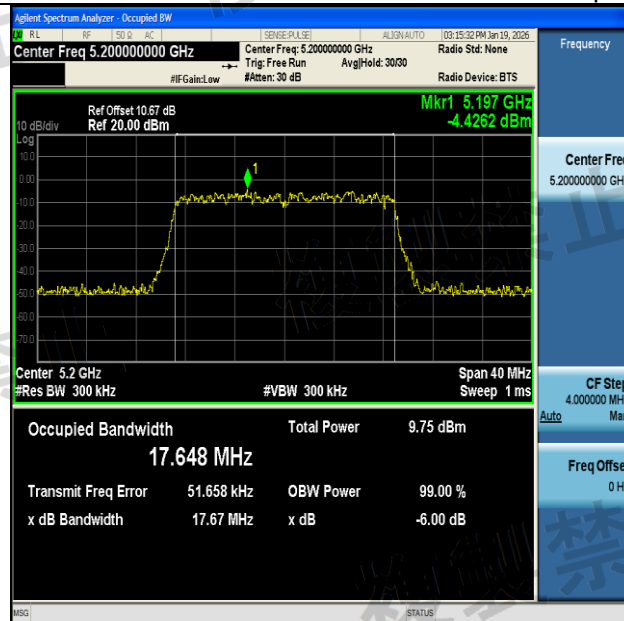


NTNV-11AC20MIMO-Ant1-5180-PASS

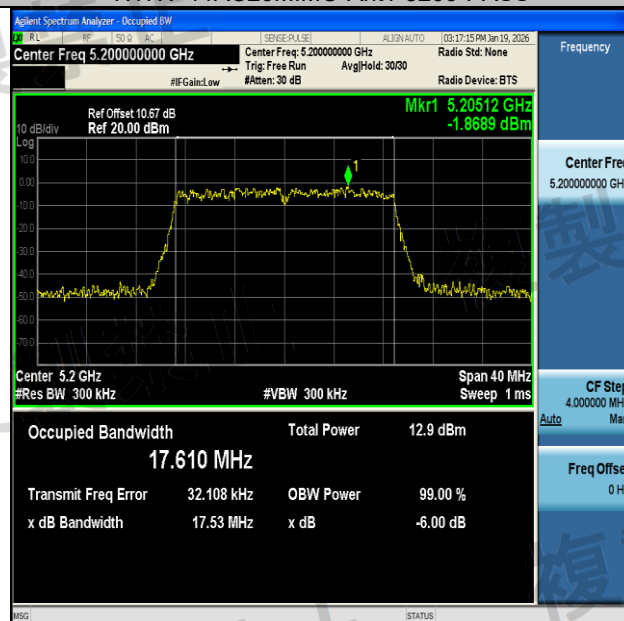


NTNV-11AC20MIMO-Ant2-5180-PASS



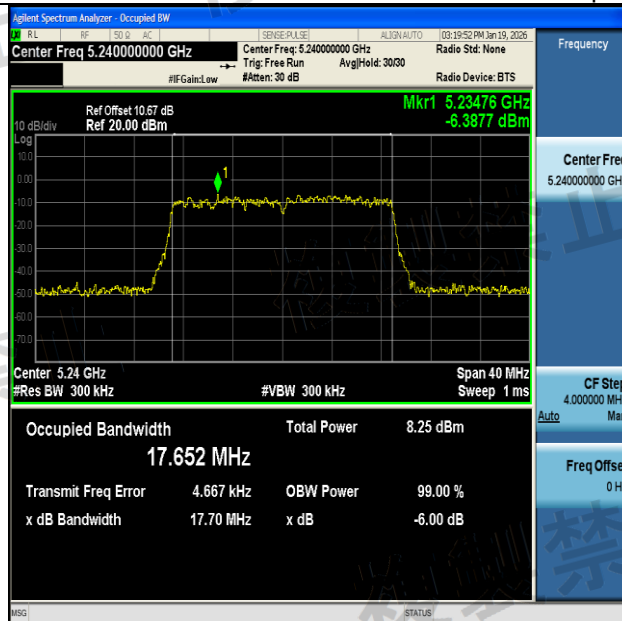


NTNV-11AC20MIMO-Ant1-5200-PASS

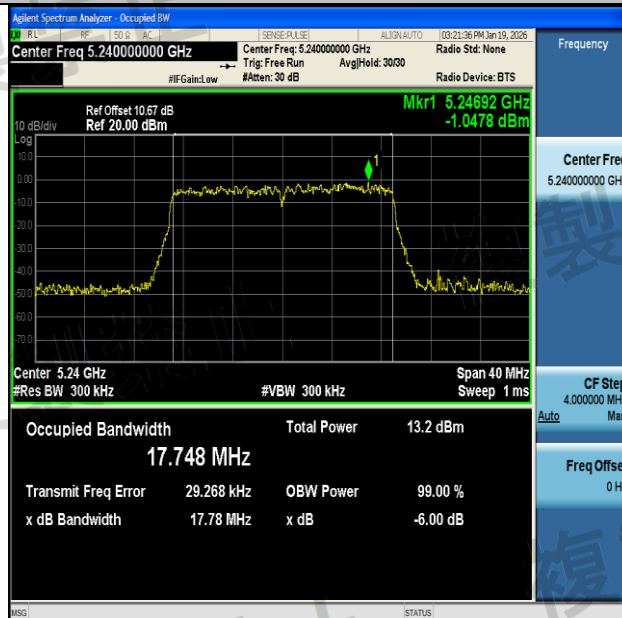


NTNV-11AC20MIMO-Ant2-5200-PASS



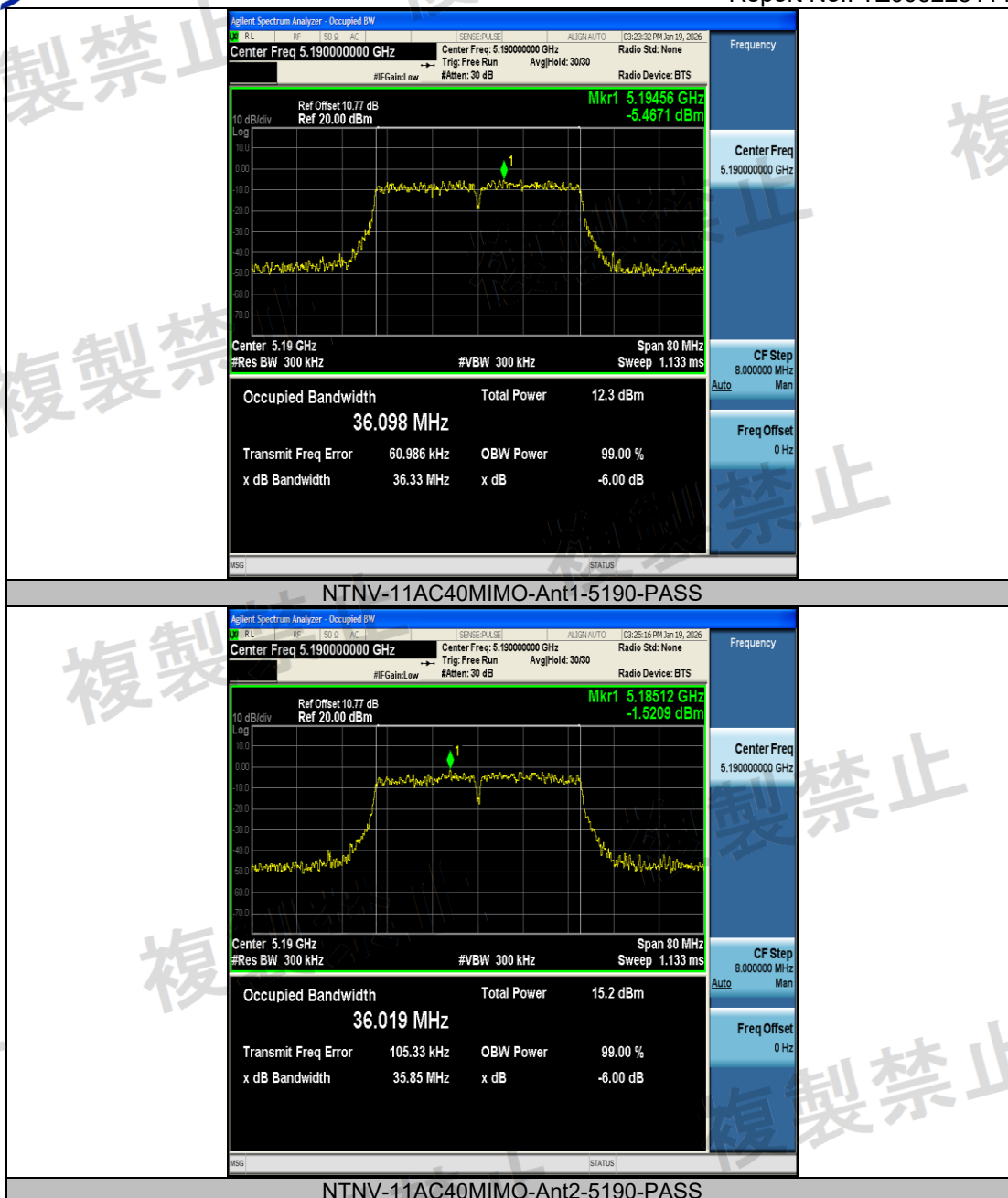


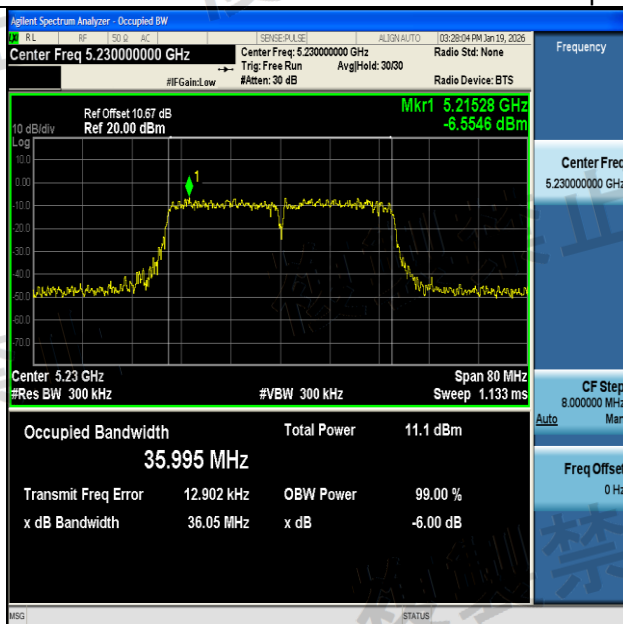
NTNV-11AC20MIMO-Ant1-5240-PASS



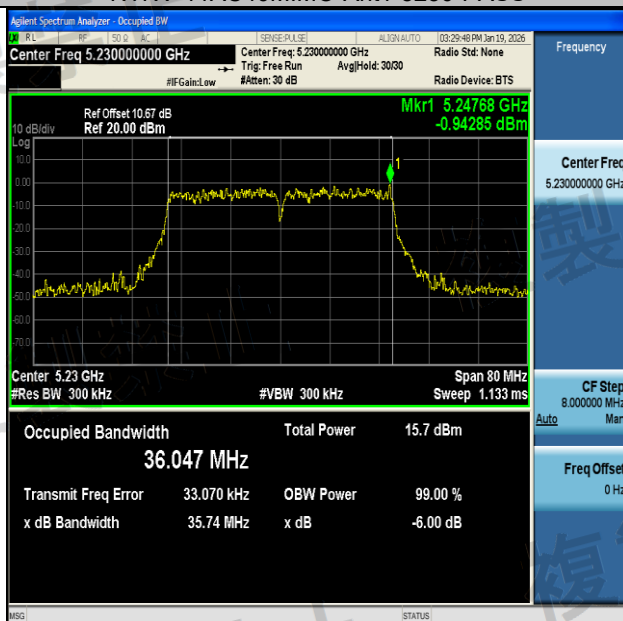
NTNV-11AC20MIMO-Ant2-5240-PASS





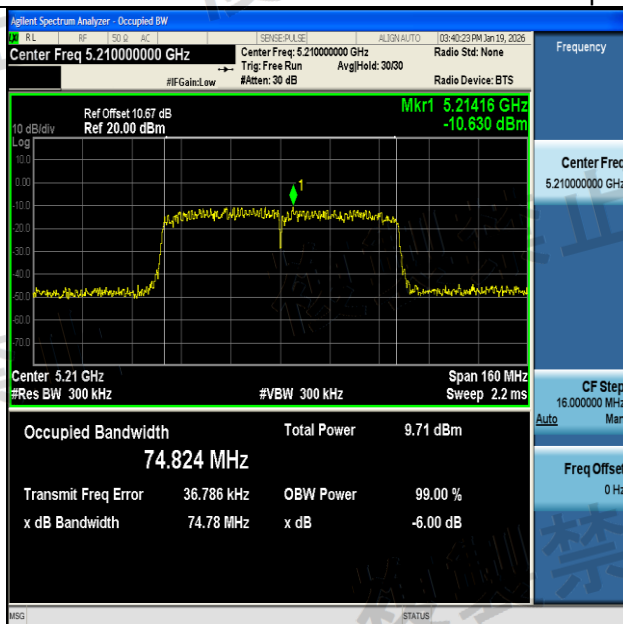


NTNV-11AC40MIMO-Ant1-5230-PASS

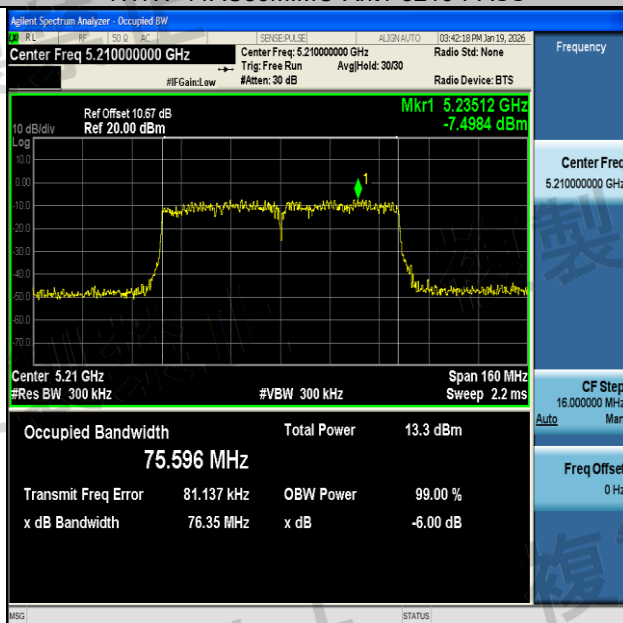


NTNV-11AC40MIMO-Ant2-5230-PASS





NTNV-11AC80MIMO-Ant1-5210-PASS



NTNV-11AC80MIMO-Ant2-5210-PASS





4.5. Spurious emission intensity

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

Frequency: 30MHz-26GHz

RBW: 1MHz (30MHz-1GHz), 1MHz(1GHz-26GHz)

VBW: 1MHz (30MHz-1GHz), 1MHz(1GHz-26GHz)

Sweep time:Auto

Dectector mode: Positive peak

Indication mode: max hold

LIMIT

W52 Band	
20MHz System	
OBW: 18MHz or less	OBW: 18-20 MHz
5142 MHz or less: 2.5 μ W/MHz	5142 MHz or less: 2.5 μ W/MHz
5142 - 5150 MHz: 15 μ W/MHz	5142 - 5150 MHz: 15 μ W/MHz
/	5250 - 5250.2 MHz: $10^{1-(8/3)(f-9.75)}$ mW/MHz
5250 - 5251 MHz: $10^{1-(f-9)}$ mW/MHz	5250.2 - 5251 MHz: $10^{1-(f-9)}$ mW/MHz
5251 - 5260 MHz: $10^{-1-(8/90)(f-11)}$ mW/MHz	5251 - 5260 MHz: $10^{-1-(8/90)(f-11)}$ mW/MHz
5260 - 5266.7 MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz	5260 - 5266.7 MHz: $10^{-1.8-(6/50)(f-20)}$ mW/MHz
5266.7 MHz or more: 2.5 μ W/MHz	5266.7 MHz or more: 2.5 μ W/MHz
f = MHz, Difference from 5240 (MHz)	
40MHz System	80MHz System
5141.6MHz or less: 2.5 μ W/MHz	5123.2MHz or less: 2.5 μ W/MHz
5141.6 - 5150MHz: 15 μ W/MHz	5123.2 - 5150MHz: 15 μ W/MHz
5250 - 5251MHz: $10^{1-(f-20)+\log(1/2)}$ mW/MHz	5250 - 5251MHz: $10^{1-(f-40)+\log(1/4)}$ mW/MHz
5251 - 5270MHz: $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz	5251 - 5290MHz: $10^{-(8/390)(f-41)-1+\log(1/4)}$ mW/MHz
5270 - 5278.4MHz: $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz	5290 - 5296.7MHz: $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz
5278.4MHz or more: 2.5 μ W/MHz	5296.7MHz or more: 2.5 μ W/MHz
f = MHz, Difference from 5230 (MHz)	f = MHz, Difference from 5210 (MHz)



Test Condition	Test Mode	Antenna	Freq (MHz)	Freq. Range [MHz]	Freq. [MHz]	Result [dBm]	Gain [dB]	EIRP [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Verdict
NTNV	11A	Ant1	5180	30~5142	5132.63	-52.94	4.07	-48.87	0.01297	≤2.5	PASS
NTNV	11A	Ant2	5180	30~5142	5094.80	-54.49	4.56	-49.93	0.01016	≤2.5	PASS
NTNV	11A	Ant1	5180	5142~5150	5147.25	-49.08	4.07	-45.01	0.03155	≤15	PASS
NTNV	11A	Ant2	5180	5142~5150	5149.70	-44.84	4.56	-40.28	0.09376	≤15	PASS
NTNV	11A	Ant1	5180	5250~5251	5250.03	-48.52	4.07	-44.45	0.03589	≤933.3	PASS
NTNV	11A	Ant2	5180	5250~5251	5250.37	-47.42	4.56	-42.86	0.05176	≤426.6	PASS
NTNV	11A	Ant1	5180	5251~5260	5257.96	-54.53	4.07	-50.46	0.00899	≤24.1	PASS
NTNV	11A	Ant2	5180	5251~5260	5253.73	-51.73	4.56	-47.17	0.01919	≤57.2	PASS
NTNV	11A	Ant1	5180	5260~5266.7	5262.66	-55.41	4.07	-51.34	0.00735	≤15.8	PASS
NTNV	11A	Ant2	5180	5260~5266.7	5265.40	-51.19	4.56	-46.63	0.02173	≤15.7	PASS
NTNV	11A	Ant1	5180	5266.7~26000	25969.59	-39.09	4.07	-35.02	0.31477	≤2.5	PASS
NTNV	11A	Ant2	5180	5266.7~26000	25051.80	-39.38	4.56	-34.82	0.32961	≤2.5	PASS
NTNV	11A	Ant1	5200	30~5142	3424.54	-41.21	4.07	-37.14	0.19320	≤2.5	PASS
NTNV	11A	Ant2	5200	30~5142	5128.37	-54.36	4.56	-49.80	0.01047	≤2.5	PASS
NTNV	11A	Ant1	5200	5142~5150	5143.34	-52.80	4.07	-48.73	0.01340	≤15	PASS
NTNV	11A	Ant2	5200	5142~5150	5149.57	-52.39	4.56	-47.83	0.01648	≤15	PASS
NTNV	11A	Ant1	5200	5250~5251	5250.36	-49.05	4.07	-44.98	0.03177	≤436.5	PASS
NTNV	11A	Ant2	5200	5250~5251	5250.59	-47.47	4.56	-42.91	0.05117	≤257.0	PASS
NTNV	11A	Ant1	5200	5251~5260	5259.69	-54.99	4.07	-50.92	0.00809	≤16.9	PASS
NTNV	11A	Ant2	5200	5251~5260	5257.08	-50.81	4.56	-46.25	0.02371	≤28.8	PASS
NTNV	11A	Ant1	5200	5260~5266	5263.7	-	4.0	-51.45	0.0071	≤15.8	PASS





Report No.: TZ0032251114TRF06

			0	.7	5	55.5 2	7		6		S
NTNV	11A	Ant2	520 0	5260~5266 .7	5260.4 6	51.8 6	4.5 6	-47.30	0.0186 2	≤15.8	PAS S
NTNV	11A	Ant1	520 0	5266.7~26 000	25033. 83	39.0 9	4.0 7	-35.02	0.3147 7	≤2.5	PAS S
NTNV	11A	Ant2	520 0	5266.7~26 000	25955. 08	38.8 8	4.5 6	-34.32	0.3698 3	≤2.5	PAS S
NTNV	11A	Ant1	524 0	30~5142	5055.7 8	55.2 8	4.0 7	-51.21	0.0075 7	≤2.5	PAS S
NTNV	11A	Ant2	524 0	30~5142	5133.9 9	53.6 6	4.5 6	-49.10	0.0123 0	≤2.5	PAS S
NTNV	11A	Ant1	524 0	5142~5150	5144.0 6	55.1 2	4.0 7	-51.05	0.0078 5	≤15	PAS S
NTNV	11A	Ant2	524 0	5142~5150	5149.8 6	54.7 7	4.5 6	-50.21	0.0095 3	≤15	PAS S
NTNV	11A	Ant1	524 0	5250~5251	5250.0 4	26.5 5	4.0 7	-22.48	5.6493 7	≤912.0	PAS S
NTNV	11A	Ant2	524 0	5250~5251	5250.0 0	20.4 2	4.5 6	-15.86	25.941 79	≤1000. 0	PAS S
NTNV	11A	Ant1	524 0	5251~5260	5251.5 9	35.9 7	4.0 7	-31.90	0.6456 5	≤88.6	PAS S
NTNV	11A	Ant2	524 0	5251~5260	5251.0 4	35.6 8	4.5 6	-31.12	0.7726 8	≤99.2	PAS S
NTNV	11A	Ant1	524 0	5260~5266 .7	5261.1 2	47.8 4	4.0 7	-43.77	0.0419 8	≤15.8	PAS S
NTNV	11A	Ant2	524 0	5260~5266 .7	5260.2 3	45.7 6	4.5 6	-41.20	0.0758 6	≤15.8	PAS S
NTNV	11A	Ant1	524 0	5266.7~26 000	25953. 00	39.1 1	4.0 7	-35.04	0.3133 3	≤2.5	PAS S
NTNV	11A	Ant2	524 0	5266.7~26 000	25018. 62	36.8 7	4.5 6	-32.31	0.5874 9	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	518 0	30~5142	5114.5 7	54.7 2	4.0 7	-50.65	0.0086 1	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	518 0	30~5142	5110.4 8	55.0 5	4.5 6	-50.49	0.0089 3	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	518 0	5142~5150	5149.3 4	52.1 4	4.0 7	-48.07	0.0156 0	≤15	PAS S
NTNV	11N20MIM O	Ant2	518 0	5142~5150	5145.9 8	51.0 0	4.5 6	-46.44	0.0227 0	≤15	PAS S
NTNV	11N20MIM O	Ant1	518 0	5250~5251	5250.3 4	48.4 5	4.0 7	-44.38	0.0364 8	≤457.1	PAS S
NTNV	11N20MIM O	Ant2	518 0	5250~5251	5250.2 4	47.6 1	4.5 6	-43.05	0.0495 5	≤575.4	PAS S
NTNV	11N20MIM O	Ant1	518 0	5251~5260	5254.4 1	55.3 2	4.0 7	-51.25	0.0075 0	≤49.8	PAS S





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NTNV	11N20MIM O	Ant2	518 0	5251~5260	5252.9 7	- 51.4 9	4.5 6	-46.93	0.0202 8	≤66.8	PAS S
NTNV	11N20MIM O	Ant1	518 0	5260~5266 .7	5260.7 3	- 55.8 1	4.0 7	-51.74	0.0067 0	≤15.8	PAS S
NTNV	11N20MIM O	Ant2	518 0	5260~5266 .7	5260.1 3	- 51.9 8	4.5 6	-47.42	0.0181 1	≤15.8	PAS S
NTNV	11N20MIM O	Ant1	518 0	5266.7~26 000	25505. 86	- 38.5 2	4.0 7	-34.45	0.3589 2	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	518 0	5266.7~26 000	25529. 35	- 38.2 0	4.5 6	-33.64	0.4325 1	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	520 0	30~5142	5127.8 6	- 54.4 5	4.0 7	-50.38	0.0091 6	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	520 0	30~5142	5130.5 8	- 54.4 5	4.5 6	-49.89	0.0102 6	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	520 0	5142~5150	5147.3 2	- 52.3 9	4.0 7	-48.32	0.0147 2	≤15	PAS S
NTNV	11N20MIM O	Ant2	520 0	5142~5150	5149.7 0	- 52.2 4	4.5 6	-47.68	0.0170 6	≤15	PAS S
NTNV	11N20MIM O	Ant1	520 0	5250~5251	5250.3 2	- 48.7 4	4.0 7	-44.67	0.0341 2	≤478.6	PAS S
NTNV	11N20MIM O	Ant2	520 0	5250~5251	5250.2 7	- 47.5 3	4.5 6	-42.97	0.0504 7	≤537.0	PAS S
NTNV	11N20MIM O	Ant1	520 0	5251~5260	5252.0 5	- 54.9 4	4.0 7	-50.87	0.0081 8	≤80.7	PAS S
NTNV	11N20MIM O	Ant2	520 0	5251~5260	5251.8 3	- 50.3 3	4.5 6	-45.77	0.0264 9	≤84.4	PAS S
NTNV	11N20MIM O	Ant1	520 0	5260~5266 .7	5263.4 6	- 54.6 3	4.0 7	-50.56	0.0087 9	≤15.8	PAS S
NTNV	11N20MIM O	Ant2	520 0	5260~5266 .7	5265.1 3	- 51.6 4	4.5 6	-47.08	0.0195 9	≤15.7	PAS S
NTNV	11N20MIM O	Ant1	520 0	5266.7~26 000	25917. 07	- 38.1 4	4.0 7	-34.07	0.3917 4	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	520 0	5266.7~26 000	25522. 44	- 38.6 3	4.5 6	-34.07	0.3917 4	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	524 0	30~5142	1752.9 1	- 51.3 6	4.0 7	-47.29	0.0186 6	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	524 0	30~5142	5140.8 1	- 55.3 6	4.5 6	-50.80	0.0083 2	≤2.5	PAS S
NTNV	11N20MIM O	Ant1	524 0	5142~5150	5144.6 1	- 53.5 6	4.0 7	-49.49	0.0112 5	≤15	PAS S
NTNV	11N20MIM O	Ant2	524 0	5142~5150	5146.9 0	- 54.0 5	4.5 6	-49.49	0.0112 5	≤15	PAS S
NTNV	11N20MIM O	Ant1	524 0	5250~5251	5250.0 0	- 21.6 1	4.0 7	-17.54	17.619 76	≤1000. 0	PAS S
NTNV	11N20MIM O	Ant2	524 0	5250~5251	5250.0 1	- 16.4	4.5 6	-11.91	64.416 93	≤977.2	PAS S





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NTNV	11N20MIM O	Ant1	524 0	5251~5260	5251.6 7	- 38.6 0	4.0 7	-34.53	0.3523 7	≤87.2	PAS S
NTNV	11N20MIM O	Ant2	524 0	5251~5260	5251.4 8	- 31.7 8	4.5 6	-27.22	1.8967 1	≤90.6	PAS S
NTNV	11N20MIM O	Ant1	524 0	5260~5266 .7	5260.4 9	- 46.6 6	4.0 7	-42.59	0.0550 8	≤15.8	PAS S
NTNV	11N20MIM O	Ant2	524 0	5260~5266 .7	5266.5 1	- 40.4 7	4.5 6	-35.91	0.2564 5	≤15.7	PAS S
NTNV	11N20MIM O	Ant1	524 0	5266.7~26 000	25890. 80	- 39.4 8	4.0 7	-35.41	0.2877 4	≤2.5	PAS S
NTNV	11N20MIM O	Ant2	524 0	5266.7~26 000	25971. 66	- 38.0 5	4.5 6	-33.49	0.4477 1	≤2.5	PAS S
NTNV	11N40MIM O	Ant1	519 0	30~5141.6	5140.7 5	- 44.2 6	4.0 7	-40.19	0.0957 2	≤2.5	PAS S
NTNV	11N40MIM O	Ant2	519 0	30~5141.6	5125.0 7	- 48.8 6	4.5 6	-44.30	0.0371 5	≤2.5	PAS S
NTNV	11N40MIM O	Ant1	519 0	5141.6~51 50	5149.5 7	- 43.9 5	4.0 7	-39.88	0.1028 0	≤15	PAS S
NTNV	11N40MIM O	Ant2	519 0	5141.6~51 50	5146.6 0	- 39.4 1	4.5 6	-34.85	0.3273 4	≤15	PAS S
NTNV	11N40MIM O	Ant1	519 0	5250~5251	5250.4 2	- 47.1 0	4.0 7	-43.03	0.0497 7	≤190.1	PAS S
NTNV	11N40MIM O	Ant2	519 0	5250~5251	5250.3 8	- 42.1 7	4.5 6	-37.61	0.1733 8	≤208.4	PAS S
NTNV	11N40MIM O	Ant1	519 0	5251~5270	5255.1 0	- 48.8 1	4.0 7	-44.74	0.0335 7	≤33.6	PAS S
NTNV	11N40MIM O	Ant2	519 0	5251~5270	5251.0 8	- 43.7 4	4.5 6	-39.18	0.1207 8	≤49.6	PAS S
NTNV	11N40MIM O	Ant1	519 0	5270~5278 .4	5270.1 0	- 52.3 6	4.0 7	-48.29	0.0148 3	≤7.8	PAS S
NTNV	11N40MIM O	Ant2	519 0	5270~5278 .4	5270.7 6	- 49.7 7	4.5 6	-45.21	0.0301 3	≤7.1	PAS S
NTNV	11N40MIM O	Ant1	519 0	5278.4~26 000	24990. 86	- 38.6 6	4.0 7	-34.59	0.3475 4	≤2.5	PAS S
NTNV	11N40MIM O	Ant2	519 0	5278.4~26 000	25998. 62	- 38.6 7	4.5 6	-34.11	0.3881 5	≤2.5	PAS S
NTNV	11N40MIM O	Ant1	523 0	30~5141.6	5134.9 5	- 53.7 6	4.0 7	-49.69	0.0107 4	≤2.5	PAS S
NTNV	11N40MIM O	Ant2	523 0	30~5141.6	5136.3 2	- 52.5 8	4.5 6	-48.02	0.0157 8	≤2.5	PAS S
NTNV	11N40MIM O	Ant1	523 0	5141.6~51 50	5149.0 8	- 50.5 9	4.0 7	-46.52	0.0222 8	≤15	PAS S
NTNV	11N40MIM O	Ant2	523 0	5141.6~51 50	5144.5 6	- 48.0 7	4.5 6	-43.51	0.0445 7	≤15	PAS S
NTNV	11N40MIM	Ant1	523	5250~5251	5250.0	-	4.0	-20.44	9.0364	≤500.0	PAS





	O		0		0	24.5 1	7		9		S
NTNV	11N40MIM O	Ant2	523 0	5250~5251	5250.0 3	- 18.8 8	4.5 6	-14.32	36.982 82	≤466.6	PAS S
NTNV	11N40MIM O	Ant1	523 0	5251~5270	5251.0 6	- 30.2 8	4.0 7	-26.21	2.3933 2	≤49.7	PAS S
NTNV	11N40MIM O	Ant2	523 0	5251~5270	5251.0 2	- 23.5 2	4.5 6	-18.96	12.705 74	≤49.9	PAS S
NTNV	11N40MIM O	Ant1	523 0	5270~5278 .4	5270.2 4	- 45.6 7	4.0 7	-41.60	0.0691 8	≤7.7	PAS S
NTNV	11N40MIM O	Ant2	523 0	5270~5278 .4	5273.4 7	- 38.9 0	4.5 6	-34.34	0.3681 3	≤4.9	PAS S
NTNV	11N40MIM O	Ant1	523 0	5278.4~26 000	25091. 70	- 38.9 7	4.0 7	-34.90	0.3235 9	≤2.5	PAS S
NTNV	11N40MIM O	Ant2	523 0	5278.4~26 000	25821. 79	- 38.5 3	4.5 6	-33.97	0.4008 7	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	518 0	30~5142	5106.9 0	- 53.7 4	4.0 7	-49.67	0.0107 9	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	518 0	30~5142	5135.0 1	- 54.8 5	4.5 6	-50.29	0.0093 5	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	518 0	5142~5150	5145.3 7	- 51.3 0	4.0 7	-47.23	0.0189 2	≤15	PAS S
NTNV	11AC20MI MO	Ant2	518 0	5142~5150	5146.1 7	- 51.0 4	4.5 6	-46.48	0.0224 9	≤15	PAS S
NTNV	11AC20MI MO	Ant1	518 0	5250~5251	5250.8 0	- 48.3 3	4.0 7	-44.26	0.0375 0	≤158.5	PAS S
NTNV	11AC20MI MO	Ant2	518 0	5250~5251	5250.3 8	- 47.4 2	4.5 6	-42.86	0.0517 6	≤416.9	PAS S
NTNV	11AC20MI MO	Ant1	518 0	5251~5260	5254.3 1	- 54.3 1	4.0 7	-50.24	0.0094 6	≤50.8	PAS S
NTNV	11AC20MI MO	Ant2	518 0	5251~5260	5252.5 6	- 51.2 0	4.5 6	-46.64	0.0216 8	≤72.7	PAS S
NTNV	11AC20MI MO	Ant1	518 0	5260~5266 .7	5261.6 3	- 54.5 9	4.0 7	-50.52	0.0088 7	≤15.8	PAS S
NTNV	11AC20MI MO	Ant2	518 0	5260~5266 .7	5263.3 8	- 52.3 0	4.5 6	-47.74	0.0168 3	≤15.8	PAS S
NTNV	11AC20MI MO	Ant1	518 0	5266.7~26 000	25997. 93	- 38.9 9	4.0 7	-34.92	0.3221 1	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	518 0	5266.7~26 000	24980. 61	- 39.5 0	4.5 6	-34.94	0.3206 3	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	520 0	30~5142	5045.2 1	- 55.5 2	4.0 7	-51.45	0.0071 6	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	520 0	30~5142	5136.8 9	- 55.3 1	4.5 6	-50.75	0.0084 1	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	520 0	5142~5150	5147.7 8	- 51.9 6	4.0 7	-47.89	0.0162 6	≤15	PAS S





NTNV	11AC20MI MO	Ant2	520 0	5142~5150	5147.9 4	- 52.9 1	4.5 6	-48.35	0.0146 2	≤15	PAS S
NTNV	11AC20MI MO	Ant1	520 0	5250~5251	5250.5 6	- 48.3 1	4.0 7	-44.24	0.0376 7	≤275.4	PAS S
NTNV	11AC20MI MO	Ant2	520 0	5250~5251	5250.2 4	- 46.6 3	4.5 6	-42.07	0.0620 9	≤575.4	PAS S
NTNV	11AC20MI MO	Ant1	520 0	5251~5260	5254.0 1	- 54.8 0	4.0 7	-50.73	0.0084 5	≤54.0	PAS S
NTNV	11AC20MI MO	Ant2	520 0	5251~5260	5258.0 7	- 50.7 3	4.5 6	-46.17	0.0241 5	≤23.5	PAS S
NTNV	11AC20MI MO	Ant1	520 0	5260~5266 .7	5263.9 1	- 54.2 0	4.0 7	-50.13	0.0097 1	≤15.8	PAS S
NTNV	11AC20MI MO	Ant2	520 0	5260~5266 .7	5260.0 1	- 51.5 9	4.5 6	-47.03	0.0198 2	≤15.8	PAS S
NTNV	11AC20MI MO	Ant1	520 0	5266.7~26 000	25970. 97	- 39.1 2	4.0 7	-35.05	0.3126 1	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	520 0	5266.7~26 000	24990. 29	- 38.7 2	4.5 6	-34.16	0.3837 1	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	524 0	30~5142	1768.2 5	- 50.6 2	4.0 7	-46.55	0.0221 3	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	524 0	30~5142	5099.4 0	- 55.0 6	4.5 6	-50.50	0.0089 1	≤2.5	PAS S
NTNV	11AC20MI MO	Ant1	524 0	5142~5150	5147.4 6	- 54.6 6	4.0 7	-50.59	0.0087 3	≤15	PAS S
NTNV	11AC20MI MO	Ant2	524 0	5142~5150	5149.9 5	- 54.0 7	4.5 6	-49.51	0.0111 9	≤15	PAS S
NTNV	11AC20MI MO	Ant1	524 0	5250~5251	5250.0 0	- 22.5 5	4.0 7	-18.48	14.190 58	≤1000. 0	PAS S
NTNV	11AC20MI MO	Ant2	524 0	5250~5251	5250.0 3	- 17.8 3	4.5 6	-13.27	47.097 73	≤933.3	PAS S
NTNV	11AC20MI MO	Ant1	524 0	5251~5260	5251.1 4	- 38.2 0	4.0 7	-34.13	0.3863 7	≤97.2	PAS S
NTNV	11AC20MI MO	Ant2	524 0	5251~5260	5251.2 3	- 29.1 8	4.5 6	-24.62	3.4514 4	≤95.4	PAS S
NTNV	11AC20MI MO	Ant1	524 0	5260~5266 .7	5260.3 8	- 43.8 5	4.0 7	-39.78	0.1052 0	≤15.8	PAS S
NTNV	11AC20MI MO	Ant2	524 0	5260~5266 .7	5265.0 1	- 41.7 7	4.5 6	-37.21	0.1901 1	≤15.7	PAS S
NTNV	11AC20MI MO	Ant1	524 0	5266.7~26 000	25939. 18	- 39.0 6	4.0 7	-34.99	0.3169 6	≤2.5	PAS S
NTNV	11AC20MI MO	Ant2	524 0	5266.7~26 000	25519. 68	- 38.8 3	4.5 6	-34.27	0.3741 1	≤2.5	PAS S
NTNV	11AC40MI MO	Ant1	519 0	30~5141.6	5128.8 2	- 46.7 0	4.0 7	-42.63	0.0545 8	≤2.5	PAS S
NTNV	11AC40MI MO	Ant2	519 0	30~5141.6	5133.4 2	- 43.5	4.5 6	-39.00	0.1258 9	≤2.5	PAS S





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NTNV	11AC40MI MO	Ant1	519 0	5141.6~51 50	5141.8 8	- 42.9 0	4.0 7	-38.83	0.1309 2	≤15	PAS S
NTNV	11AC40MI MO	Ant2	519 0	5141.6~51 50	5146.4 5	- 39.1 0	4.5 6	-34.54	0.3515 6	≤15	PAS S
NTNV	11AC40MI MO	Ant1	519 0	5250~5251	5250.1 2	- 47.4 4	4.0 7	-43.37	0.0460 3	≤379.3	PAS S
NTNV	11AC40MI MO	Ant2	519 0	5250~5251	5250.5 1	- 42.4 1	4.5 6	-37.85	0.1640 6	≤154.5	PAS S
NTNV	11AC40MI MO	Ant1	519 0	5251~5270	5253.4 3	- 50.2 3	4.0 7	-46.16	0.0242 1	≤39.5	PAS S
NTNV	11AC40MI MO	Ant2	519 0	5251~5270	5251.1 9	- 45.4 2	4.5 6	-40.86	0.0820 4	≤49.1	PAS S
NTNV	11AC40MI MO	Ant1	519 0	5270~5278 .4	5278.0 9	- 52.1 6	4.0 7	-48.09	0.0155 2	≤2.6	PAS S
NTNV	11AC40MI MO	Ant2	519 0	5270~5278 .4	5273.8 1	- 46.4 8	4.5 6	-41.92	0.0642 7	≤4.7	PAS S
NTNV	11AC40MI MO	Ant1	519 0	5278.4~26 000	25023. 32	- 38.8 0	4.0 7	-34.73	0.3365 1	≤2.5	PAS S
NTNV	11AC40MI MO	Ant2	519 0	5278.4~26 000	24467. 98	- 38.5 2	4.5 6	-33.96	0.4017 9	≤2.5	PAS S
NTNV	11AC40MI MO	Ant1	523 0	30~5141.6	5128.9 9	- 54.6 1	4.0 7	-50.54	0.0088 3	≤2.5	PAS S
NTNV	11AC40MI MO	Ant2	523 0	30~5141.6	5127.1 2	- 53.3 9	4.5 6	-48.83	0.0130 9	≤2.5	PAS S
NTNV	11AC40MI MO	Ant1	523 0	5141.6~51 50	5145.5 4	- 49.1 5	4.0 7	-45.08	0.0310 5	≤15	PAS S
NTNV	11AC40MI MO	Ant2	523 0	5141.6~51 50	5144.3 3	- 49.3 0	4.5 6	-44.74	0.0335 7	≤15	PAS S
NTNV	11AC40MI MO	Ant1	523 0	5250~5251	5250.0 1	- 23.1 7	4.0 7	-19.10	12.302 69	≤488.6	PAS S
NTNV	11AC40MI MO	Ant2	523 0	5250~5251	5250.0 2	- 17.7 5	4.5 6	-13.19	47.973 34	≤477.5	PAS S
NTNV	11AC40MI MO	Ant1	523 0	5251~5270	5251.1 7	- 29.2 9	4.0 7	-25.22	3.0060 8	≤49.2	PAS S
NTNV	11AC40MI MO	Ant2	523 0	5251~5270	5251.0 0	- 23.3 6	4.5 6	-18.80	13.182 57	≤50	PAS S
NTNV	11AC40MI MO	Ant1	523 0	5270~5278 .4	5271.3 6	- 45.6 2	4.0 7	-41.55	0.0699 8	≤6.6	PAS S
NTNV	11AC40MI MO	Ant2	523 0	5270~5278 .4	5273.0 9	- 37.0 1	4.5 6	-32.45	0.5688 5	≤5.2	PAS S
NTNV	11AC40MI MO	Ant1	523 0	5278.4~26 000	25472. 29	- 38.7 5	4.0 7	-34.68	0.3404 1	≤2.5	PAS S
NTNV	11AC40MI MO	Ant2	523 0	5278.4~26 000	25542. 05	- 39.3 2	4.5 6	-34.76	0.3342 0	≤2.5	PAS S
NTNV	11AC80MI	Ant1	521	30~5123.2	5119.8	-	4.0	-47.97	0.0159	≤2.5	PAS





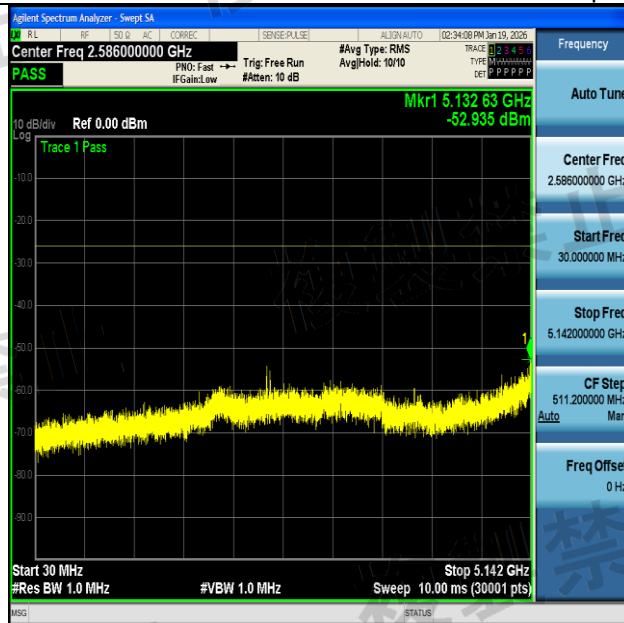
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	MO		0		0	52.0 4	7		6		S
NTNV	11AC80MI MO	Ant2	521 0	30~5123.2	5104.3 6	- 53.6 2	4.5 6	-49.06	0.0124 2	≤2.5	PAS S
NTNV	11AC80MI MO	Ant1	521 0	5123.2~51 50	5130.1 1	- 47.3 2	4.0 7	-43.25	0.0473 2	≤15	PAS S
NTNV	11AC80MI MO	Ant2	521 0	5123.2~51 50	5148.0 2	- 42.7 1	4.5 6	-38.15	0.1531 1	≤15	PAS S
NTNV	11AC80MI MO	Ant1	521 0	5250~5251	5250.0 2	- 28.0 8	4.0 7	-24.01	3.9719 2	≤238.7	PAS S
NTNV	11AC80MI MO	Ant2	521 0	5250~5251	5250.0 1	- 22.3 1	4.5 6	-17.75	16.788 04	≤244.3	PAS S
NTNV	11AC80MI MO	Ant1	521 0	5251~5290	5251.1 2	- 33.9 2	4.0 7	-29.85	1.0351 4	≤24.9	PAS S
NTNV	11AC80MI MO	Ant2	521 0	5251~5290	5251.2 3	- 26.4 5	4.5 6	-21.89	6.4714 3	≤24.7	PAS S
NTNV	11AC80MI MO	Ant1	521 0	5290~5296 .7	5293.6 2	- 51.4 6	4.0 7	-47.39	0.0182 4	≤3.1	PAS S
NTNV	11AC80MI MO	Ant2	521 0	5290~5296 .7	5295.8 0	- 46.9 8	4.5 6	-42.42	0.0572 8	≤2.7	PAS S
NTNV	11AC80MI MO	Ant2	521 0	5296.7~26 000	24367. 89	- 38.5 3	4.5 6	-33.97	0.4008 7	≤2.5	PAS S
NTNV	11AC80MI MO	Ant1	521 0	5296.7~26 000	25575. 58	- 38.2 7	4.0 7	-34.20	0.3801 9	≤2.5	PAS S

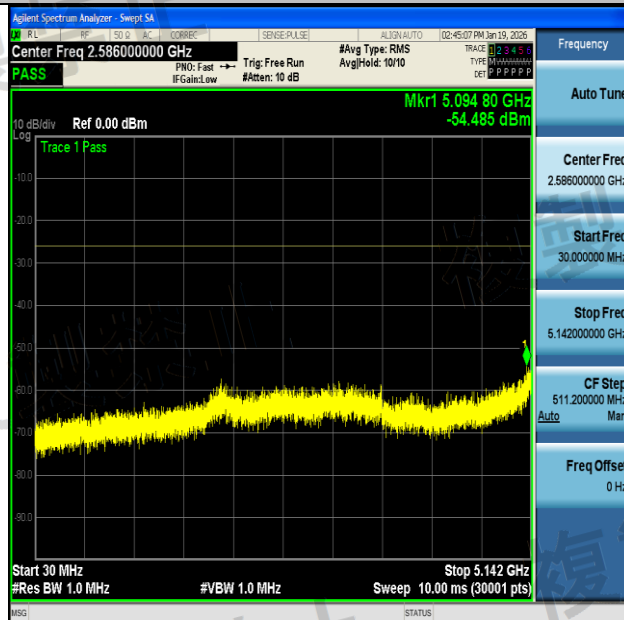
Note: 1. The product was tested at 25°C and 55% humidity condition;

2. All condition has been tested, list the worst case in this item



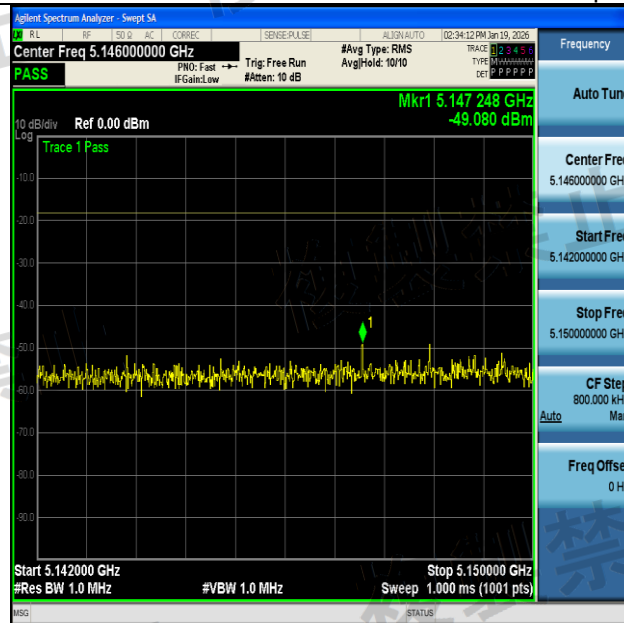


NTNV-11A-Ant1-5180-30~5142-PASS

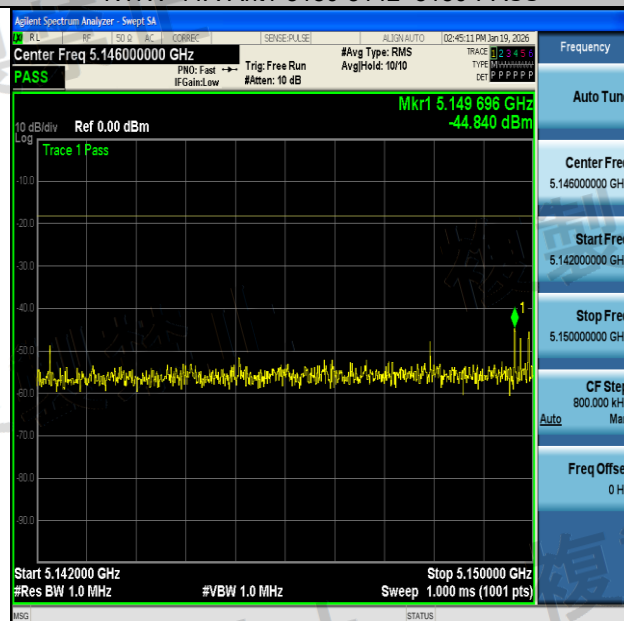


NTNV-11A-Ant2-5180-30~5142-PASS



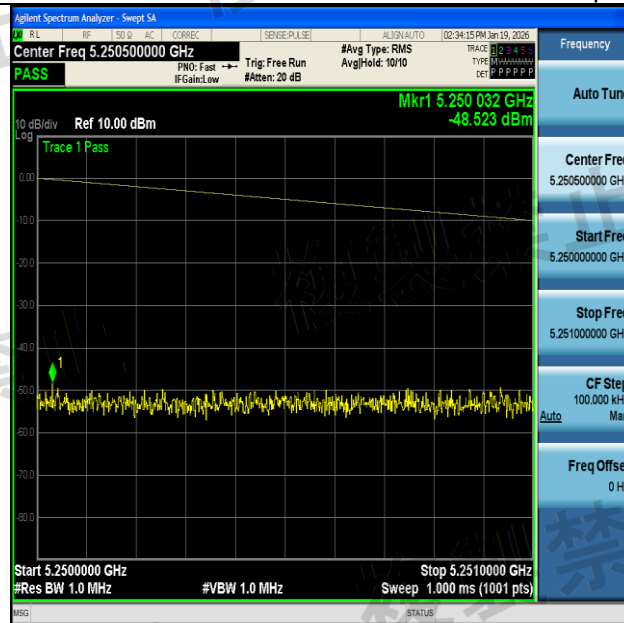


NTNV-11A-Ant1-5180-5142~5150-PASS

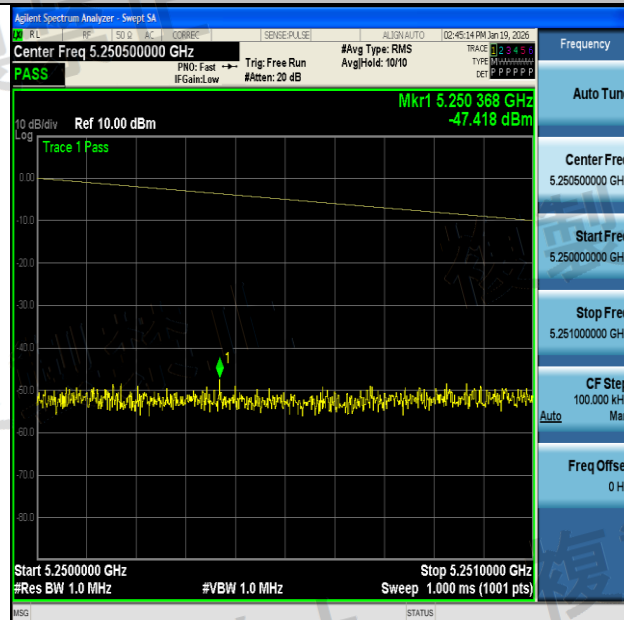


NTNV-11A-Ant2-5180-5142~5150-PASS



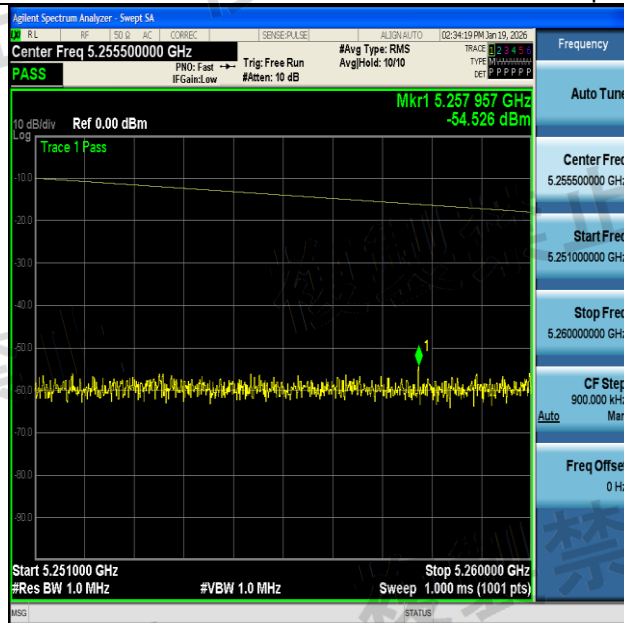


NTNV-11A-Ant1-5180-5250~5251-PASS

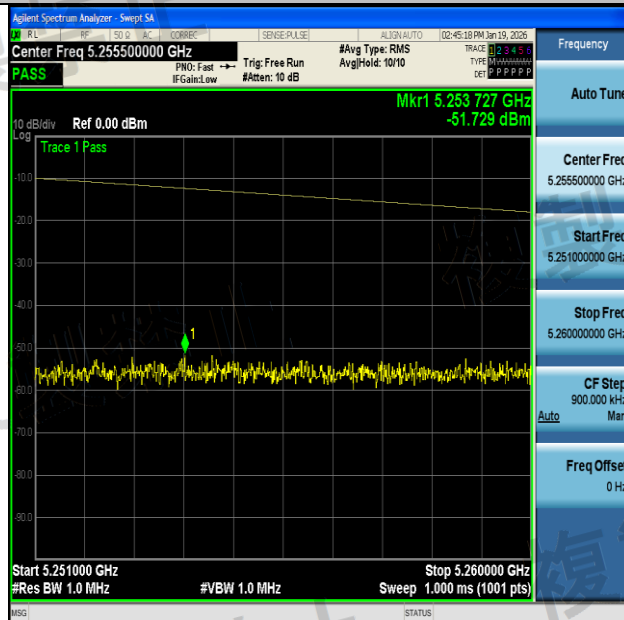


NTNV-11A-Ant2-5180-5250~5251-PASS



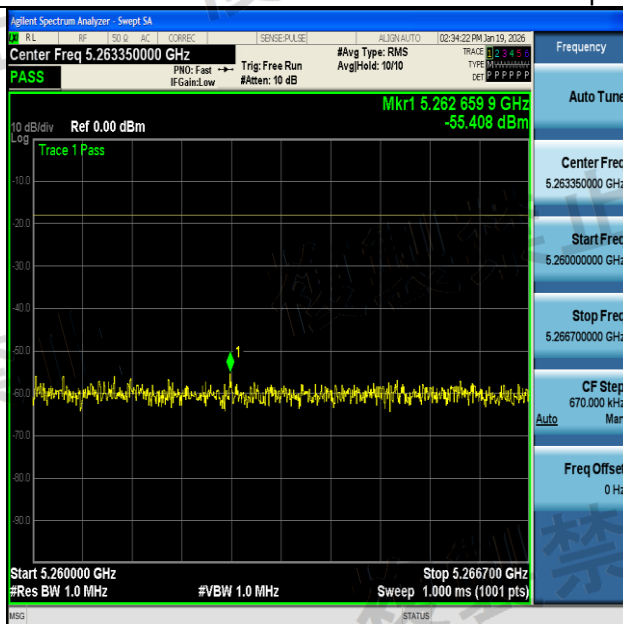


NTNV-11A-Ant1-5180-5251~5260-PASS

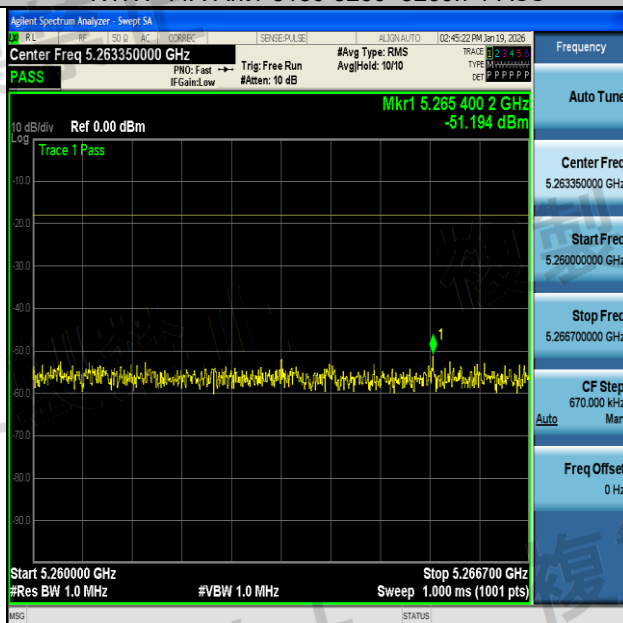


NTNV-11A-Ant2-5180-5251~5260-PASS



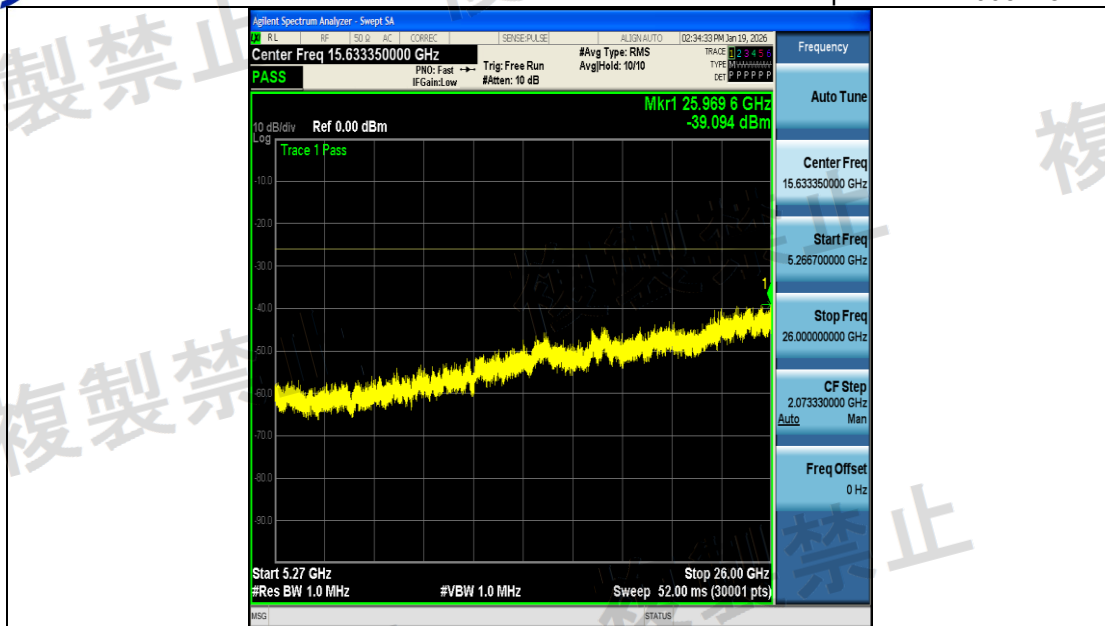


NTNV-11A-Ant1-5180-5260~5266.7-PASS

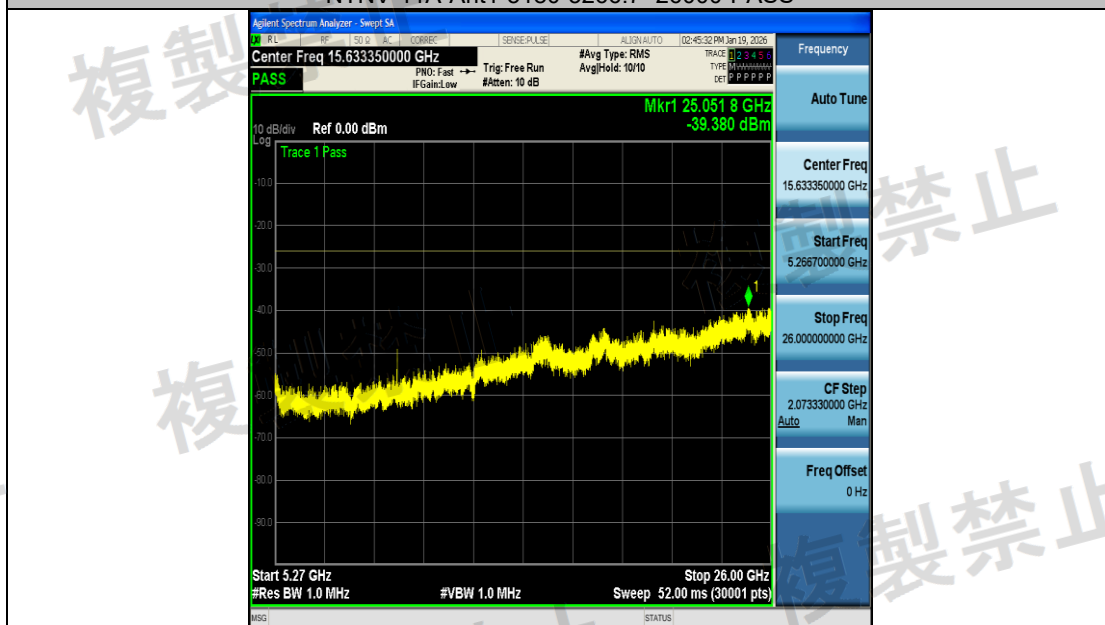


NTNV-11A-Ant2-5180-5260~5266.7-PASS



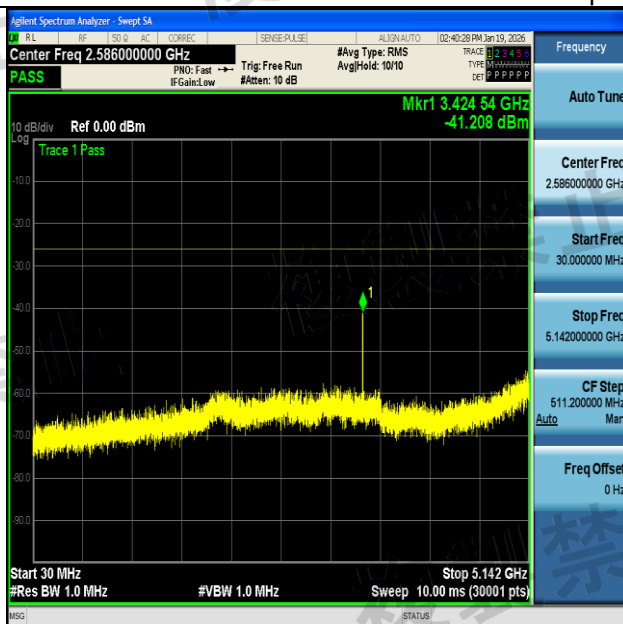


NTNV-11A-Ant1-5180-5266.7~26000-PASS

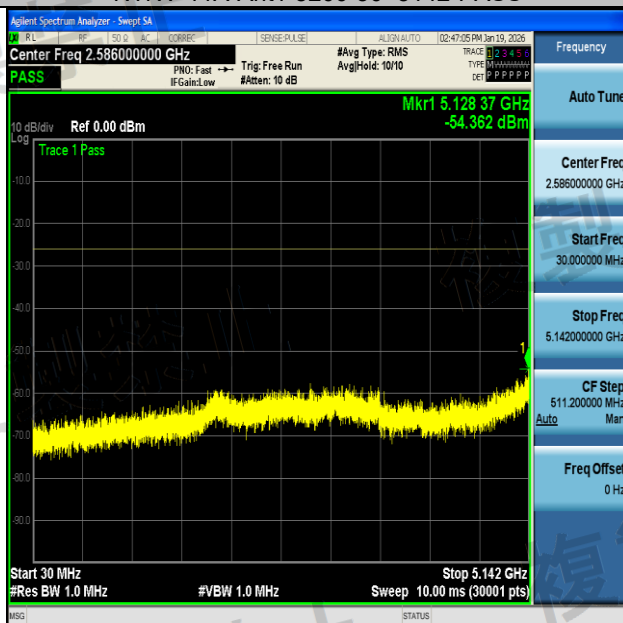


NTNV-11A-Ant2-5180-5266.7~26000-PASS



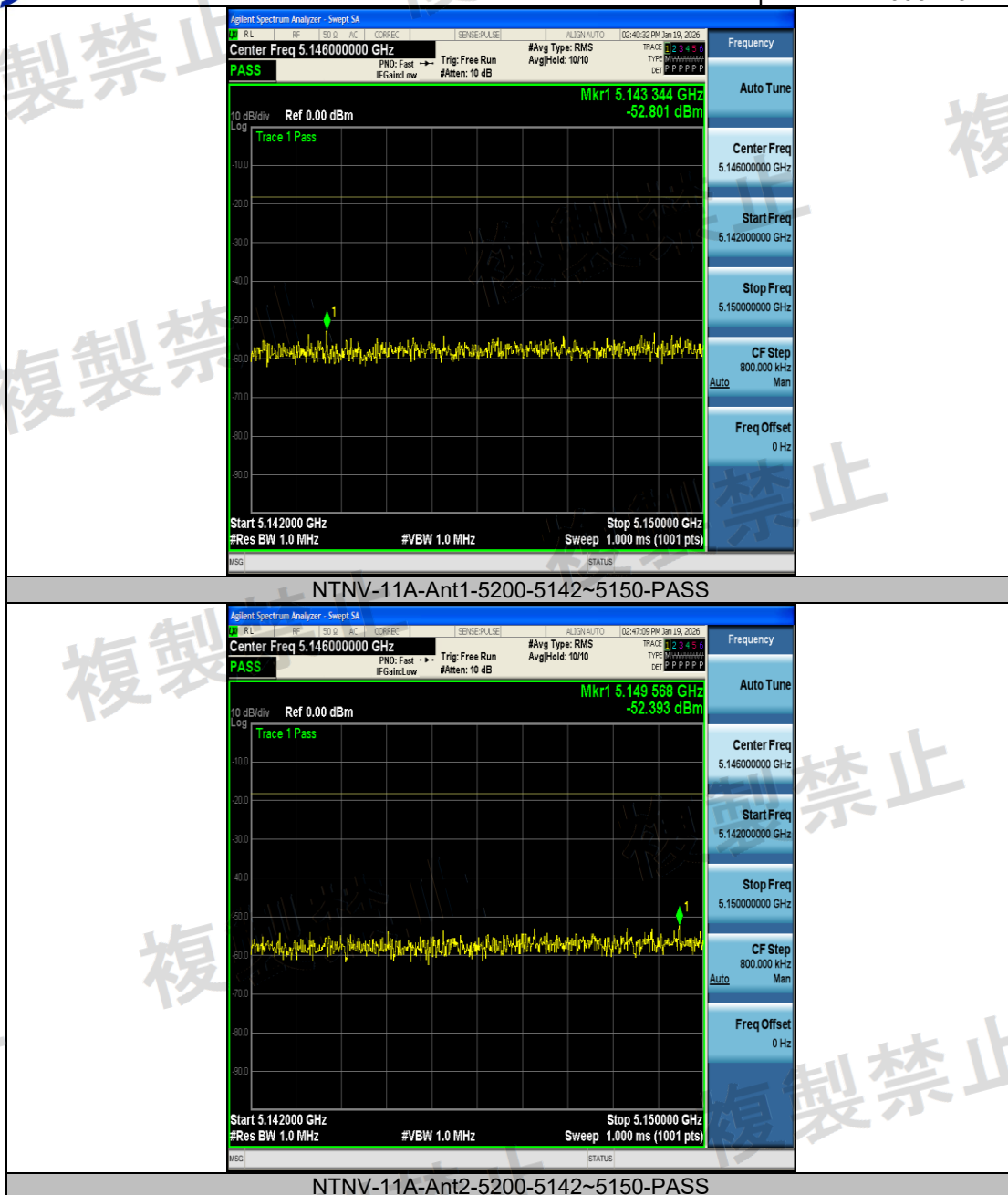


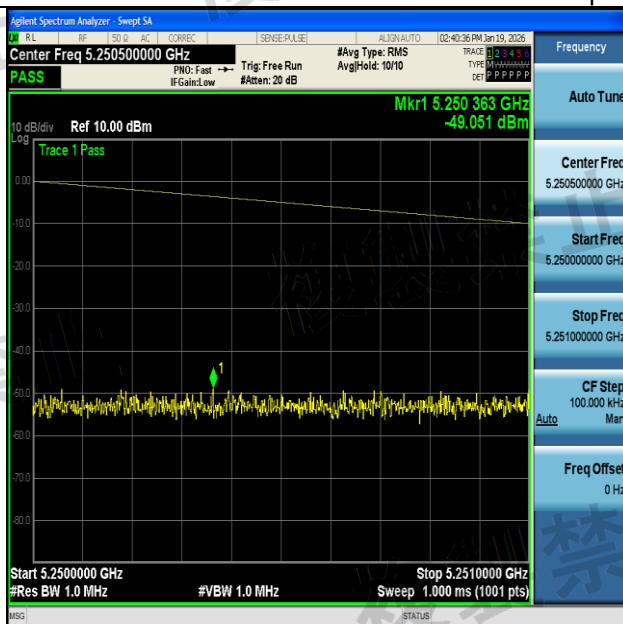
NTNV-11A-Ant1-5200-30~5142-PASS



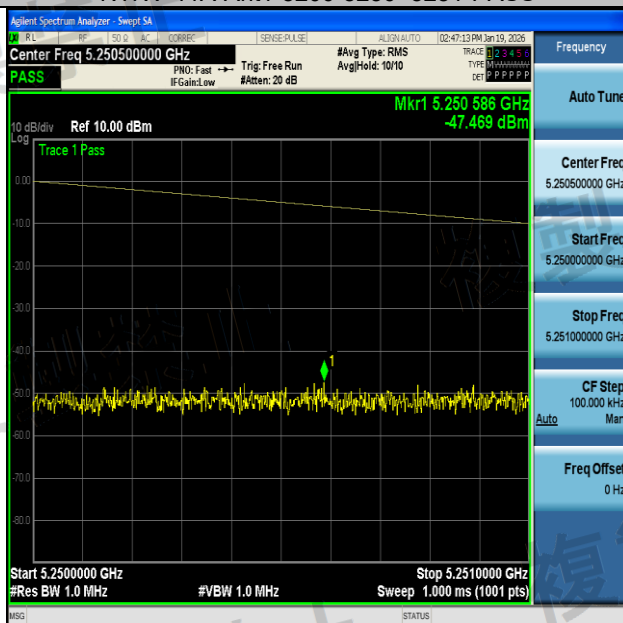
NTNV-11A-Ant2-5200-30~5142-PASS





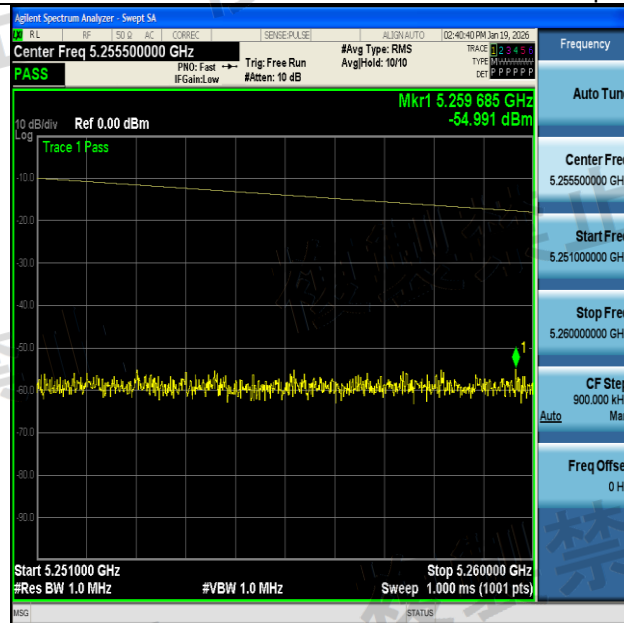


NTNV-11A-Ant1-5200-5250~5251-PASS

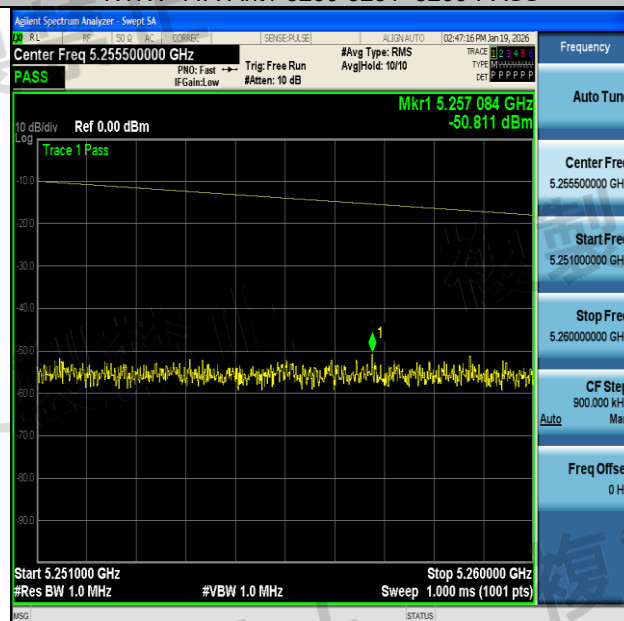


NTNV-11A-Ant2-5200-5250~5251-PASS



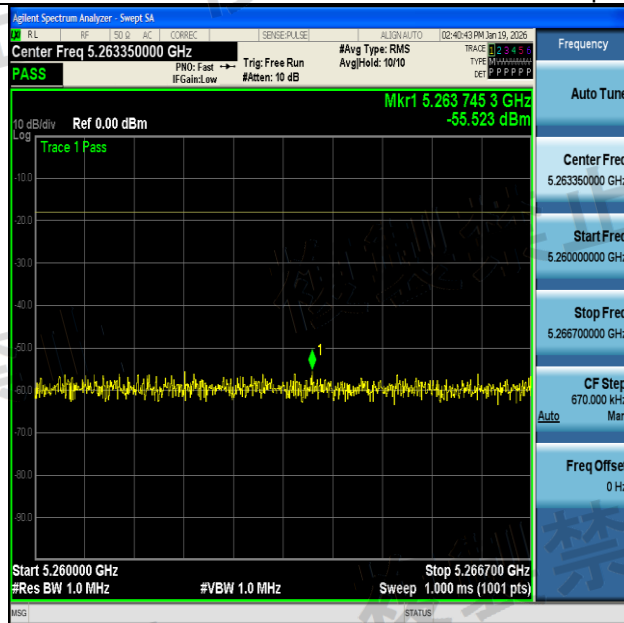


NTNV-11A-Ant1-5200-5251~5260-PASS

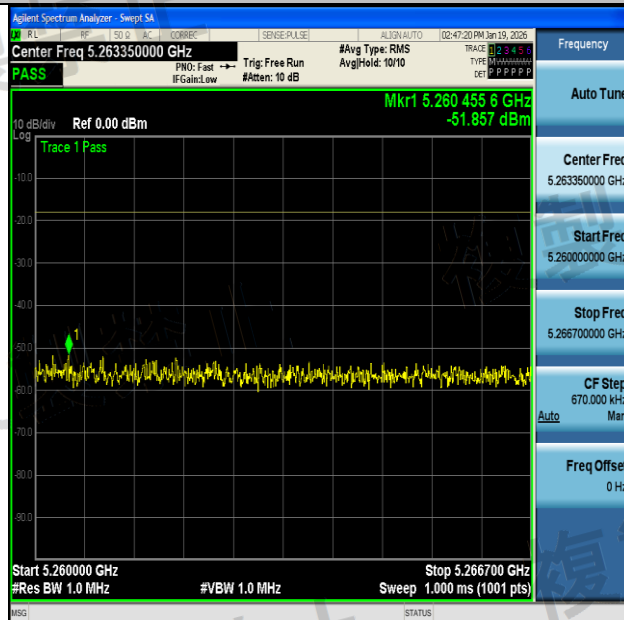


NTNV-11A-Ant2-5200-5251~5260-PASS



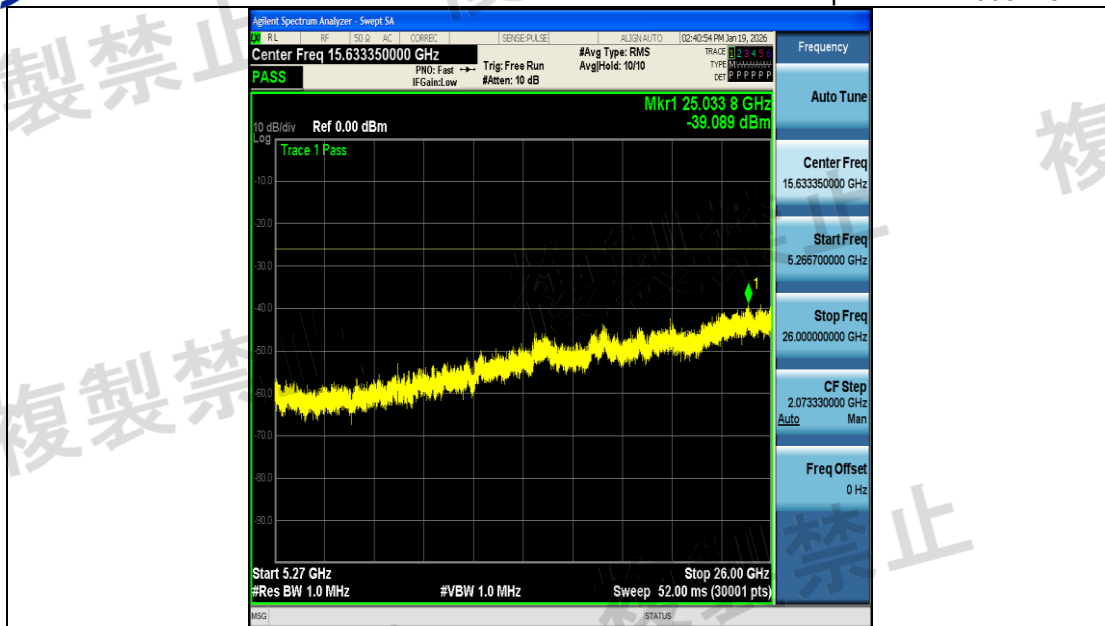


NTNV-11A-Ant1-5200-5260~5266.7-PASS

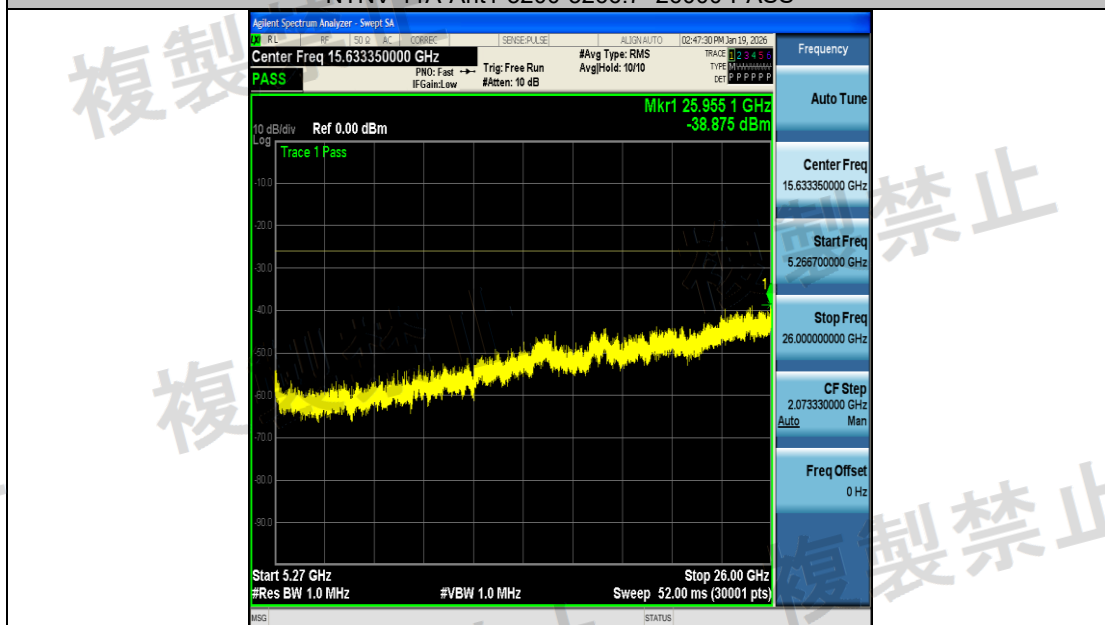


NTNV-11A-Ant2-5200-5260~5266.7-PASS



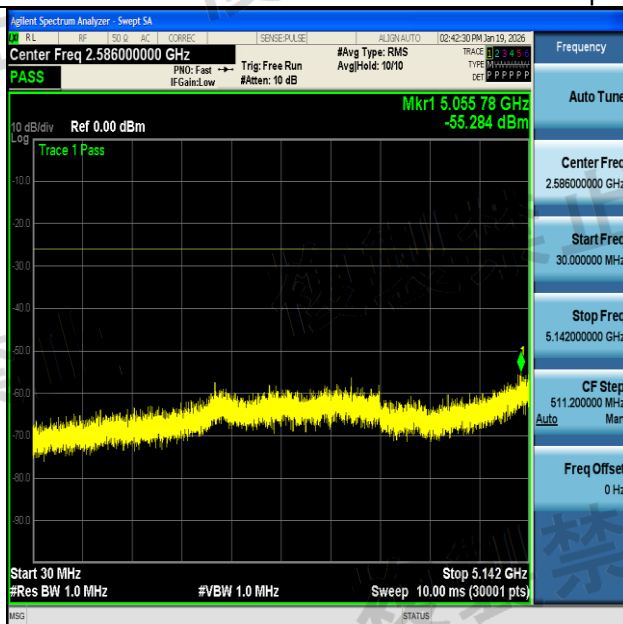


NTNV-11A-Ant1-5200-5266.7~26000-PASS

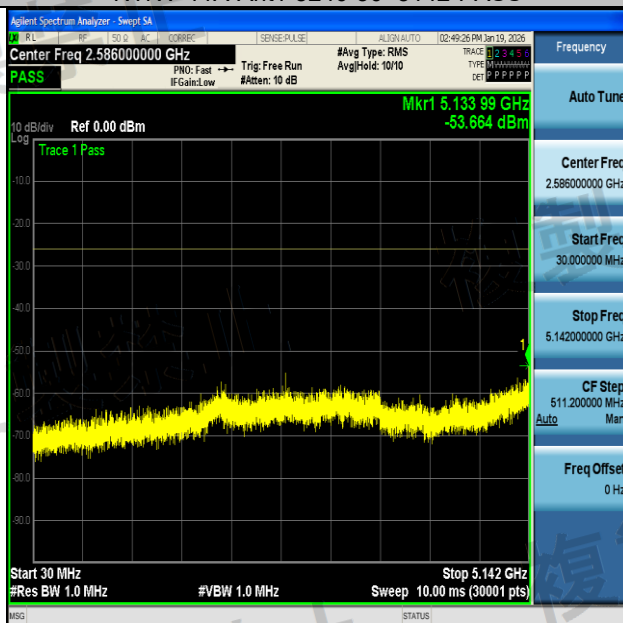


NTNV-11A-Ant2-5200-5266.7~26000-PASS



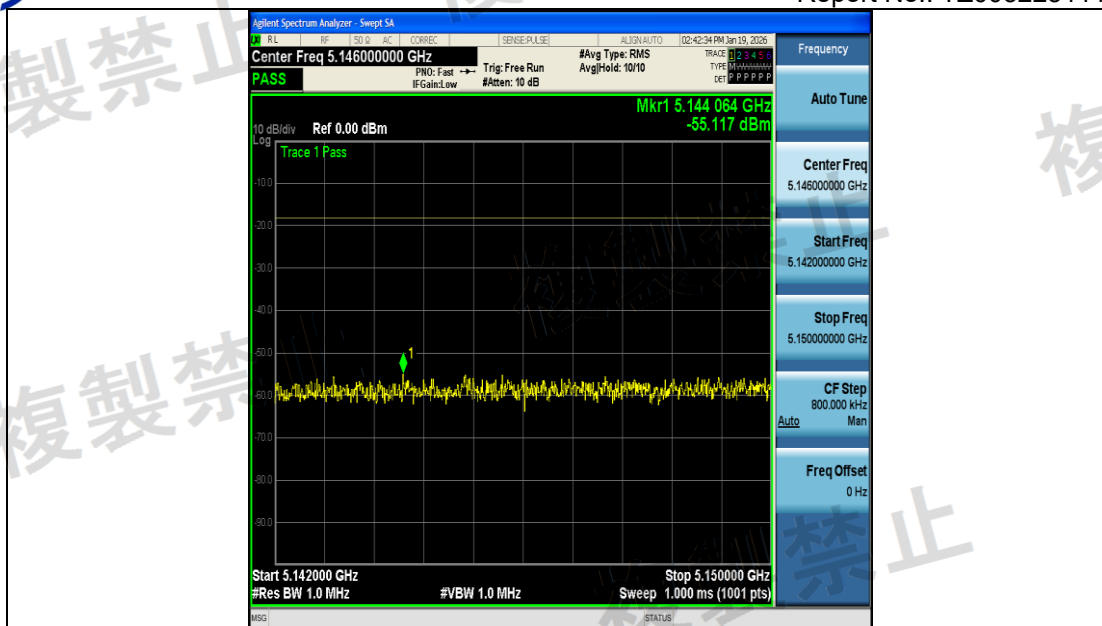


NTNV-11A-Ant1-5240-30~5142-PASS

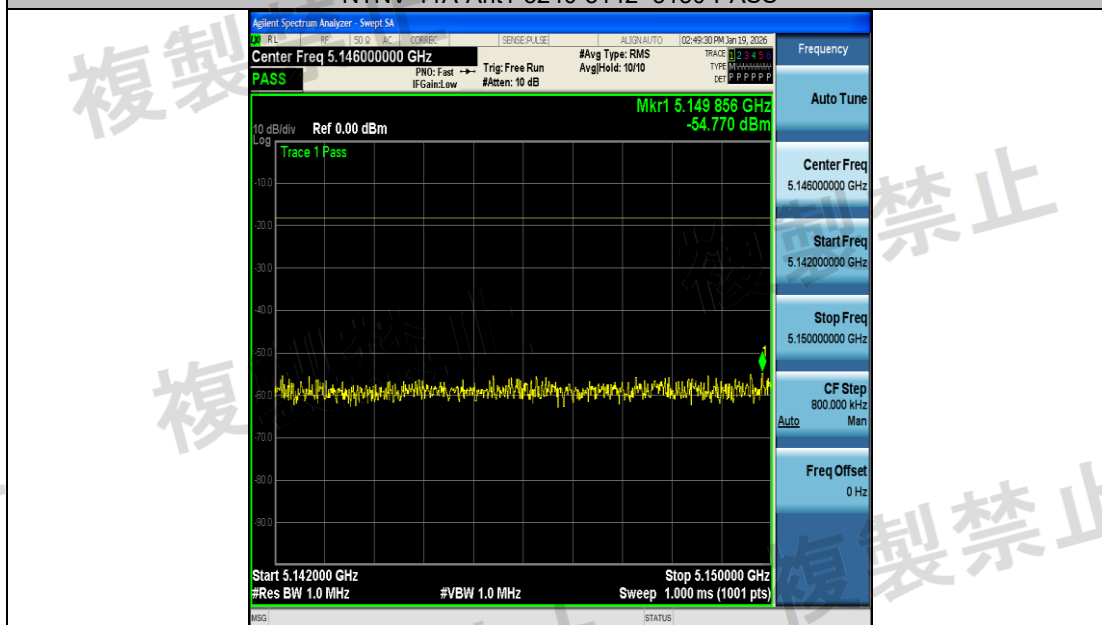


NTNV-11A-Ant2-5240-30~5142-PASS



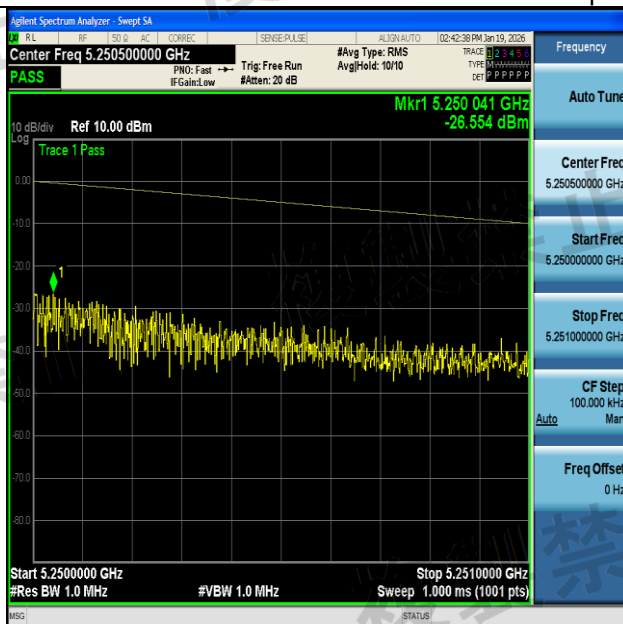


NTNV-11A-Ant1-5240-5142~5150-PASS

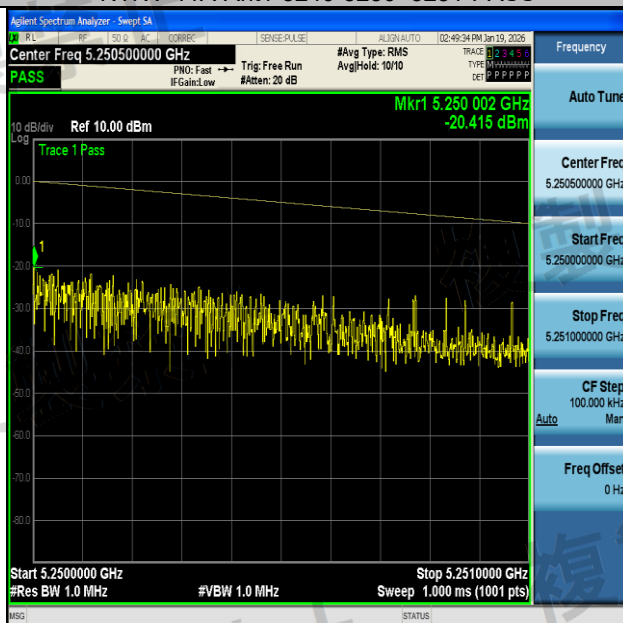


NTNV-11A-Ant2-5240-5142~5150-PASS



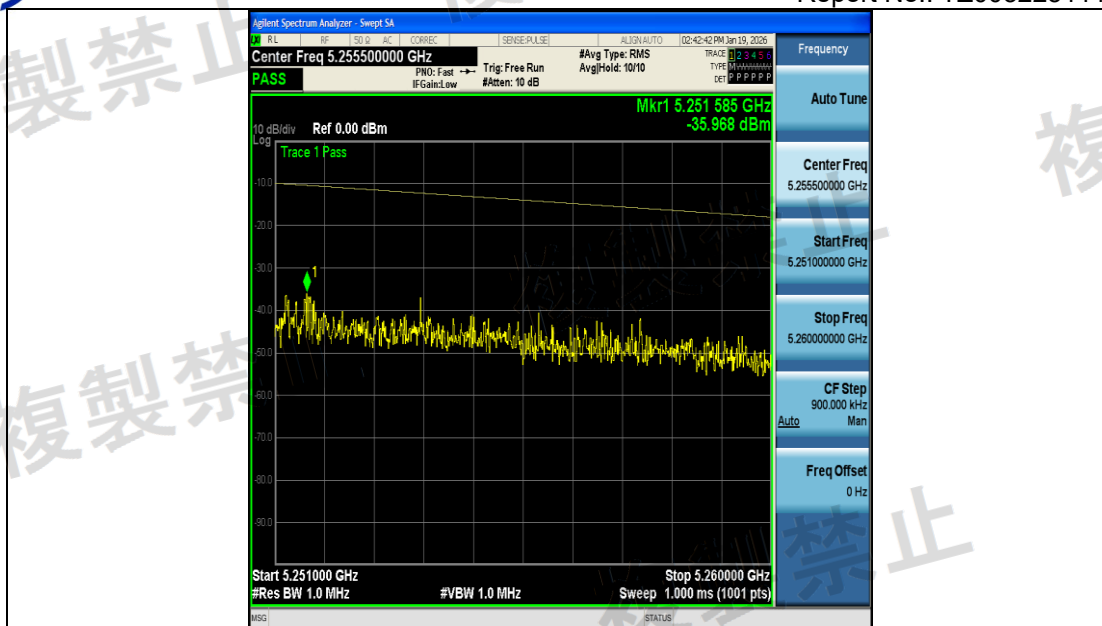


NTNV-11A-Ant1-5240-5250~5251-PASS

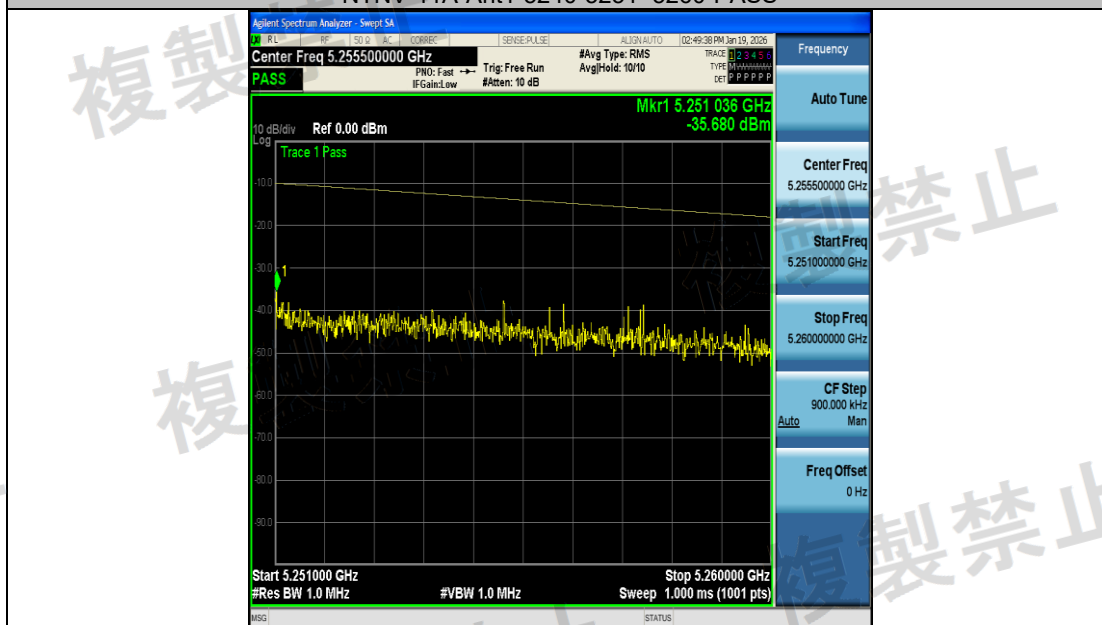


NTNV-11A-Ant2-5240-5250~5251-PASS



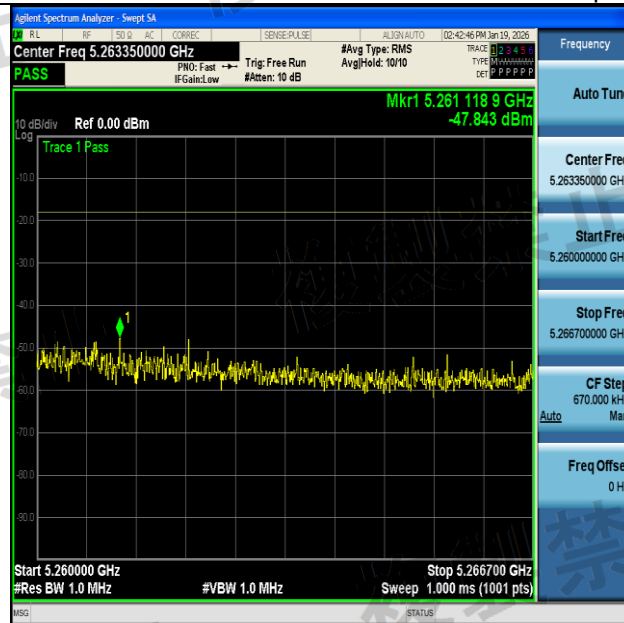


NTNV-11A-Ant1-5240-5251~5260-PASS

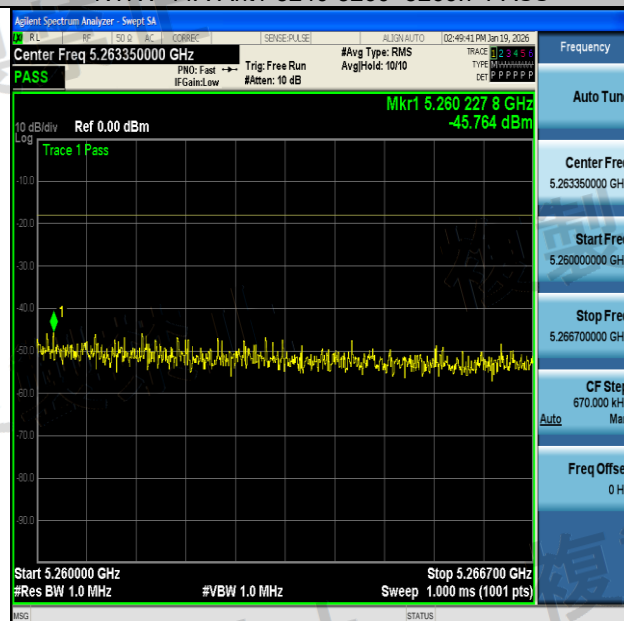


NTNV-11A-Ant2-5240-5251~5260-PASS



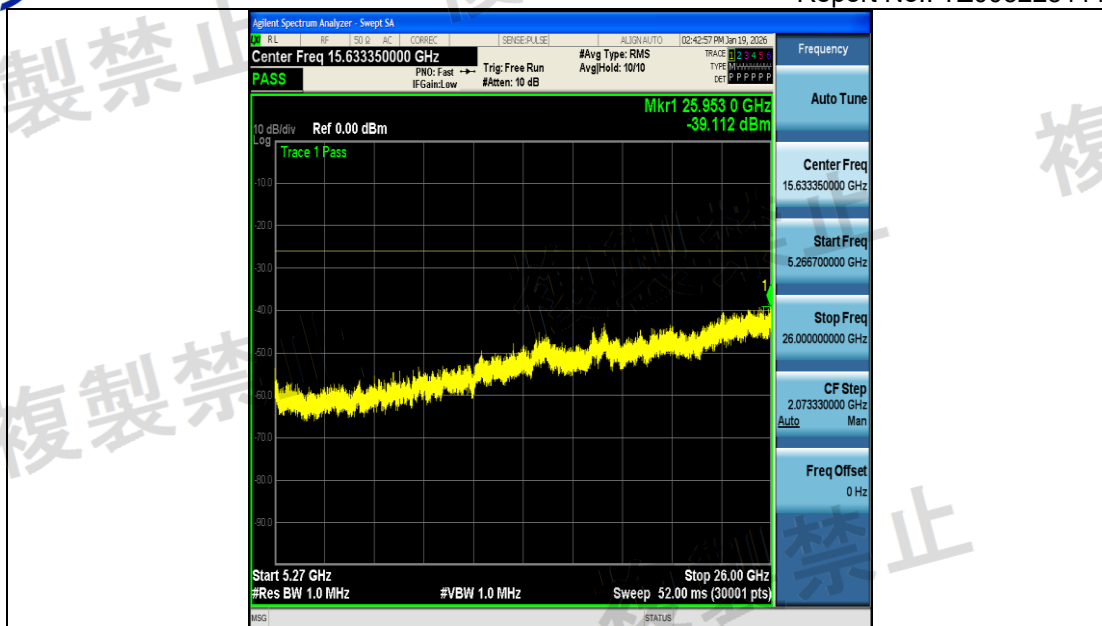


NTNV-11A-Ant1-5240-5260~5266.7-PASS

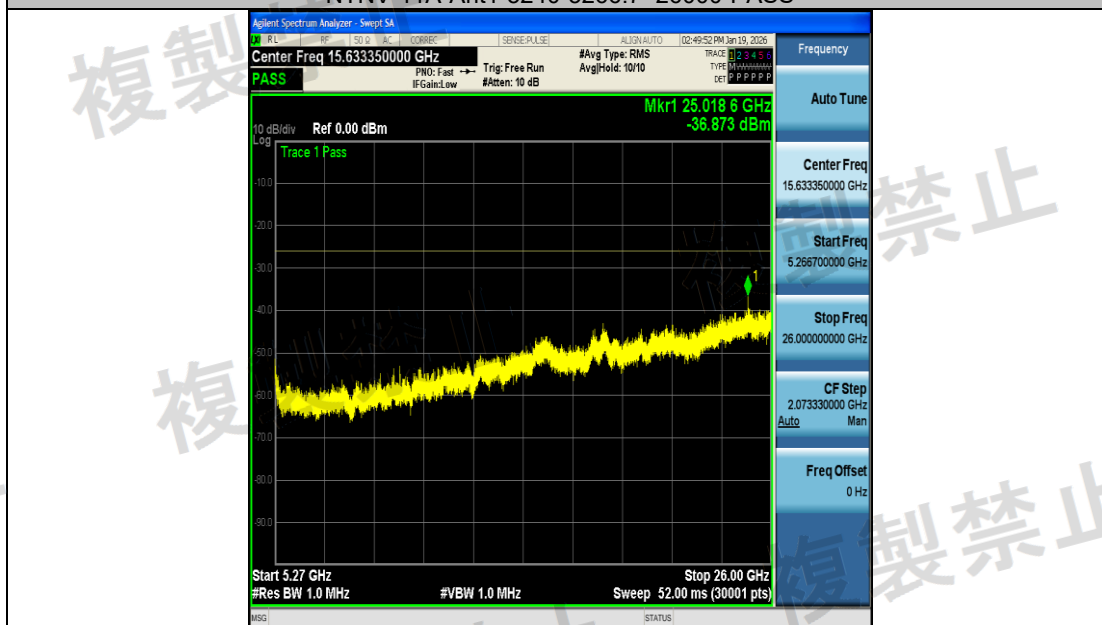


NTNV-11A-Ant2-5240-5260~5266.7-PASS



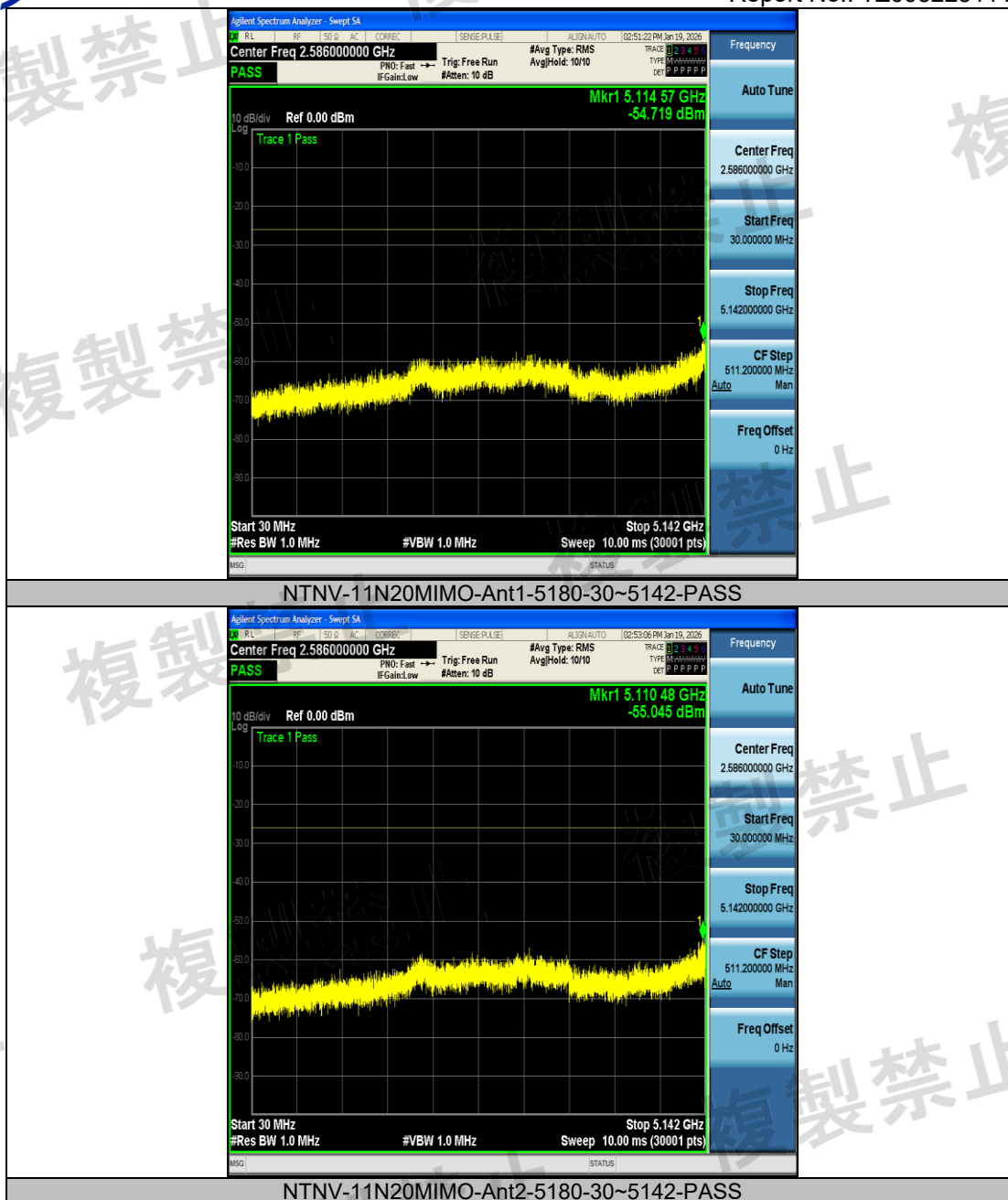


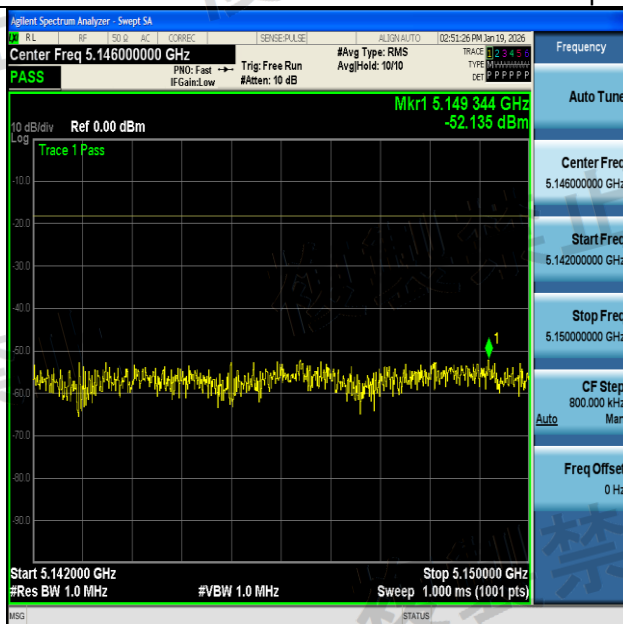
NTNV-11A-Ant1-5240-5266.7~26000-PASS



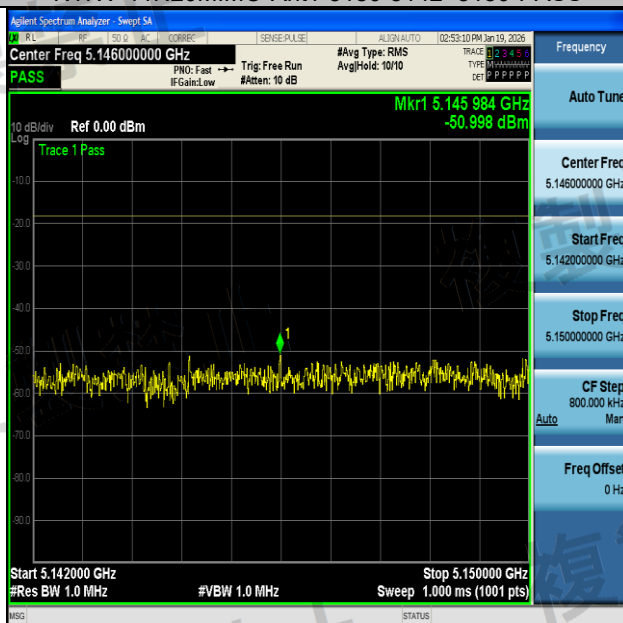
NTNV-11A-Ant2-5240-5266.7~26000-PASS





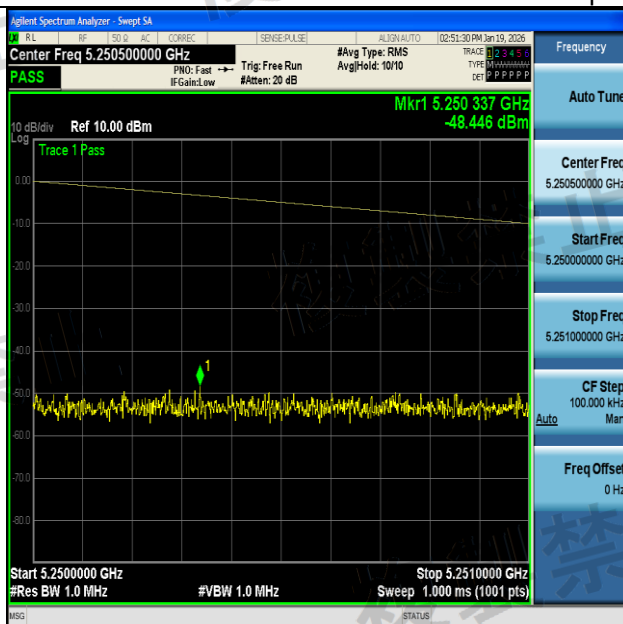


NTNV-11N20MIMO-Ant1-5180-5142~5150-PASS

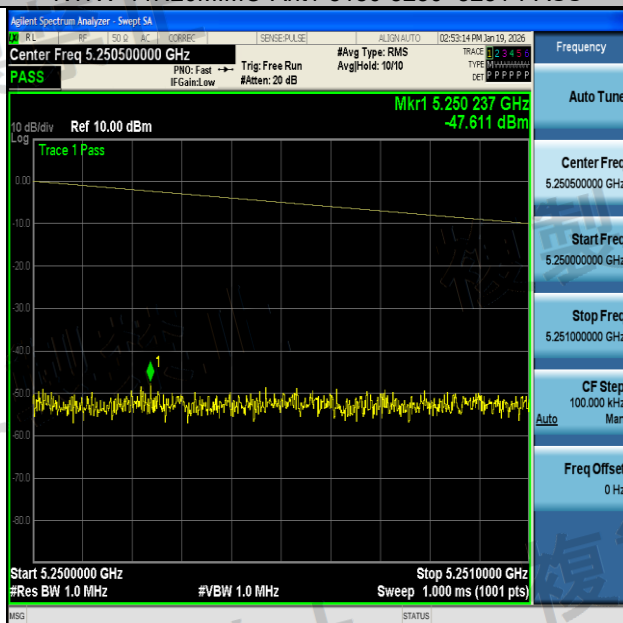


NTNV-11N20MIMO-Ant2-5180-5142~5150-PASS



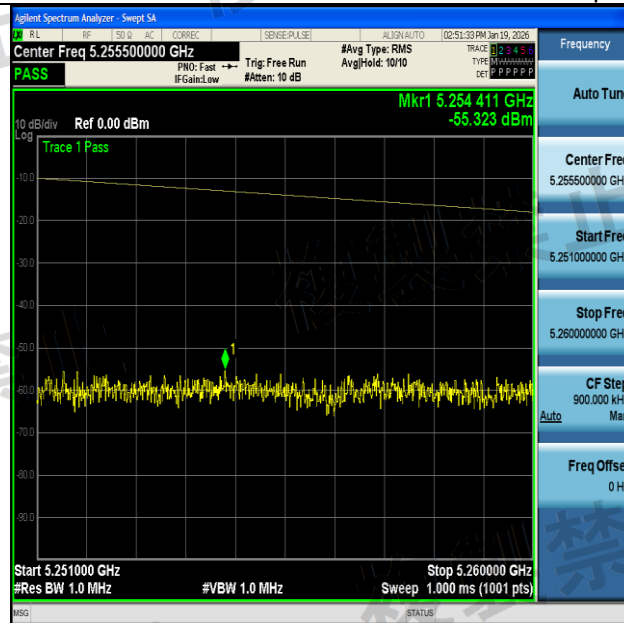


NTNV-11N20MIMO-Ant1-5180-5250~5251-PASS

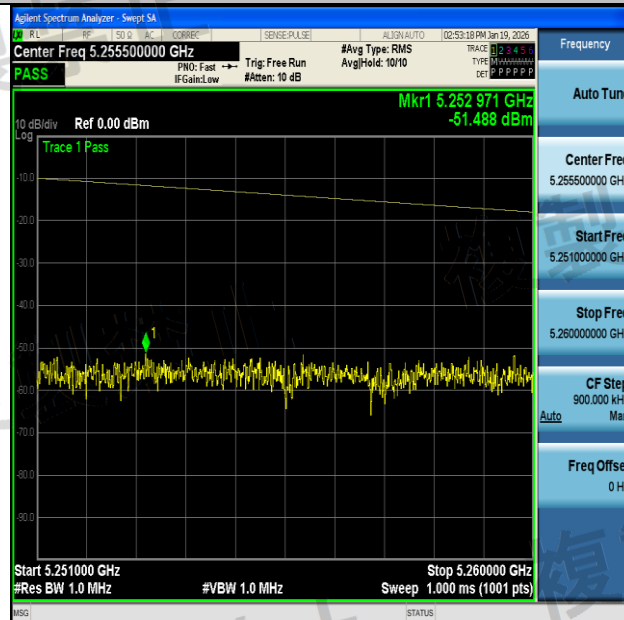


NTNV-11N20MIMO-Ant2-5180-5250~5251-PASS



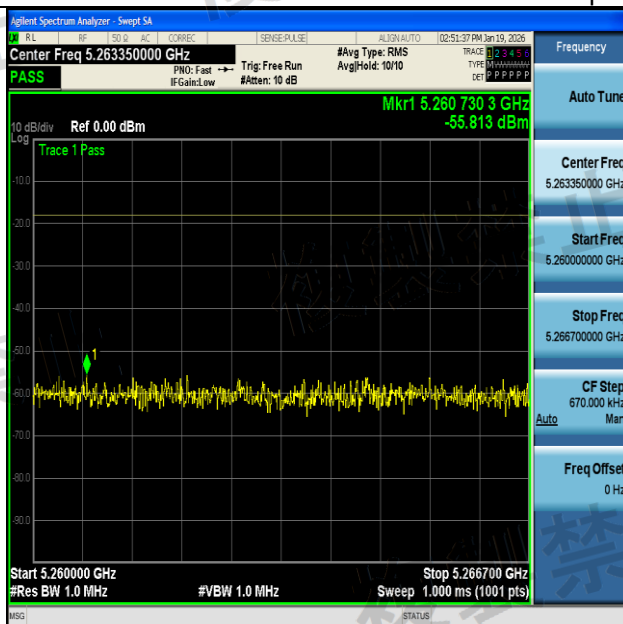


NTNV-11N20MIMO-Ant1-5180-5251~5260-PASS

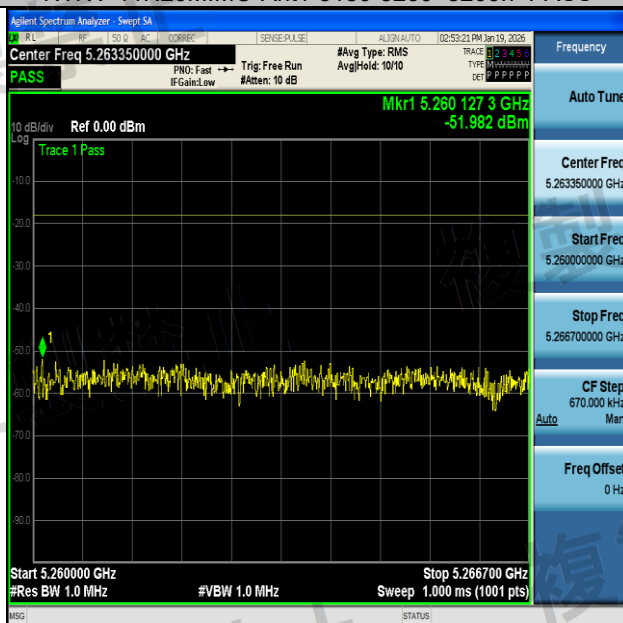


NTNV-11N20MIMO-Ant2-5180-5251~5260-PASS



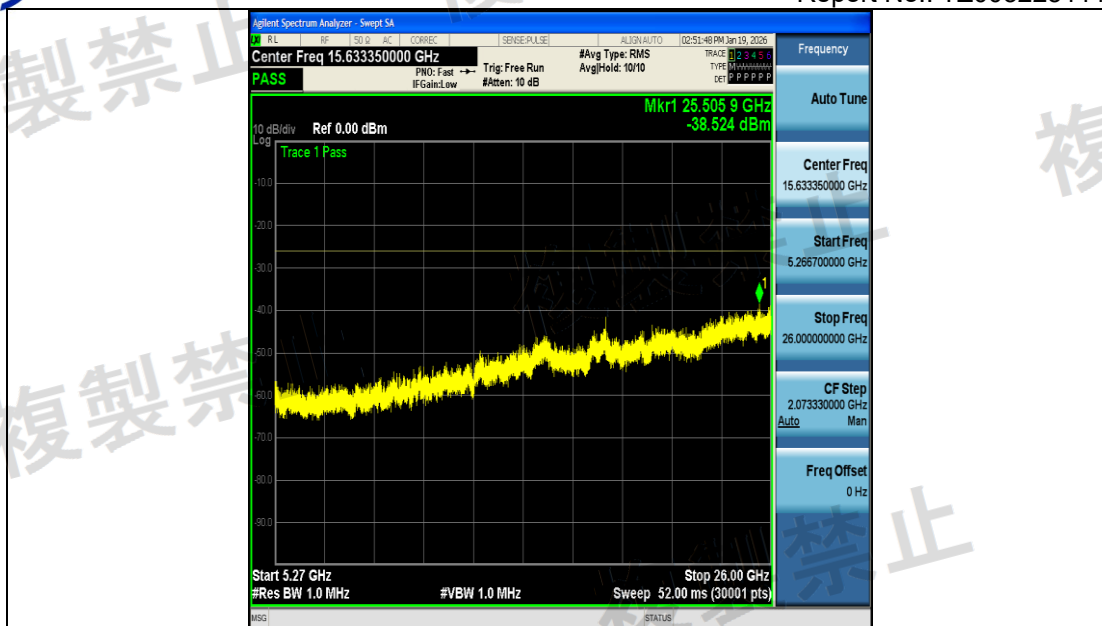


NTNV-11N20MIMO-Ant1-5180-5260~5266.7-PASS

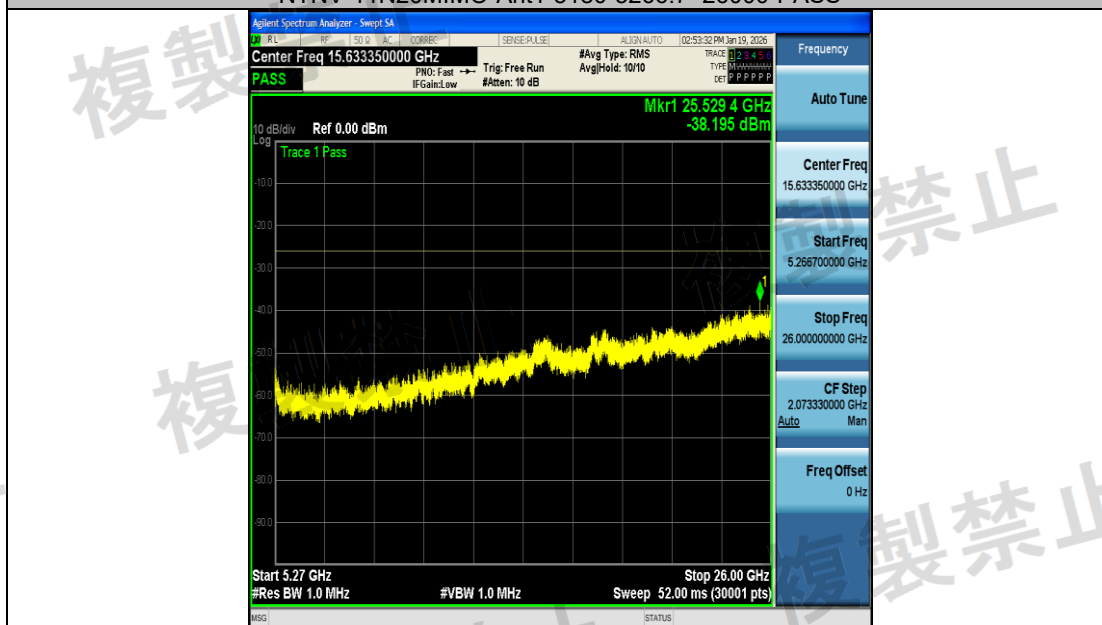


NTNV-11N20MIMO-Ant2-5180-5260~5266.7-PASS



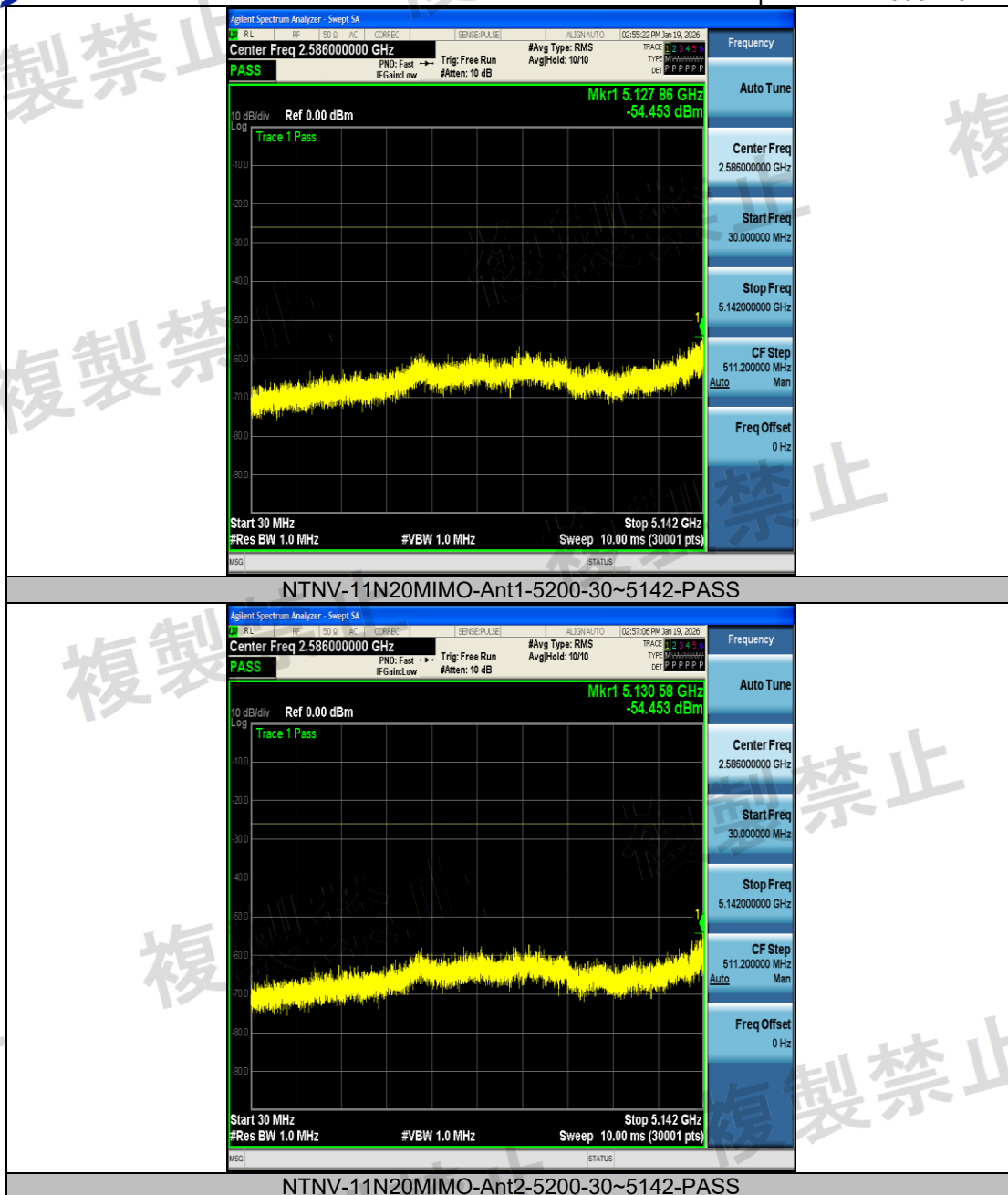


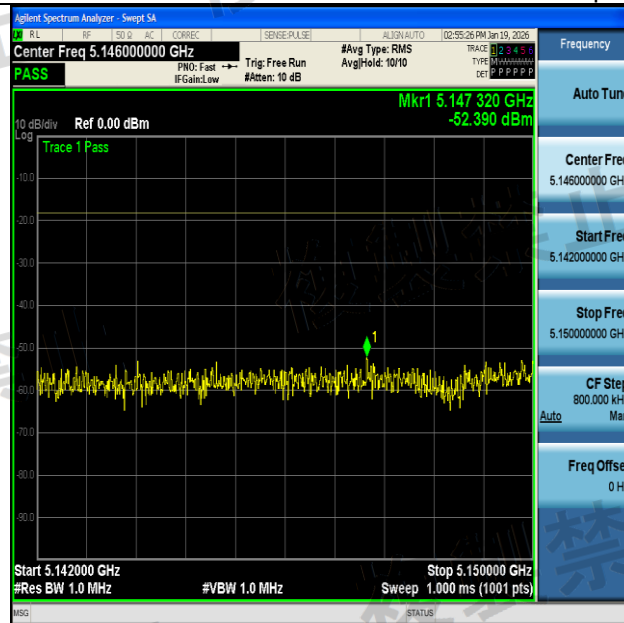
NTNV-11N20MIMO-Ant1-5180-5266.7~26000-PASS



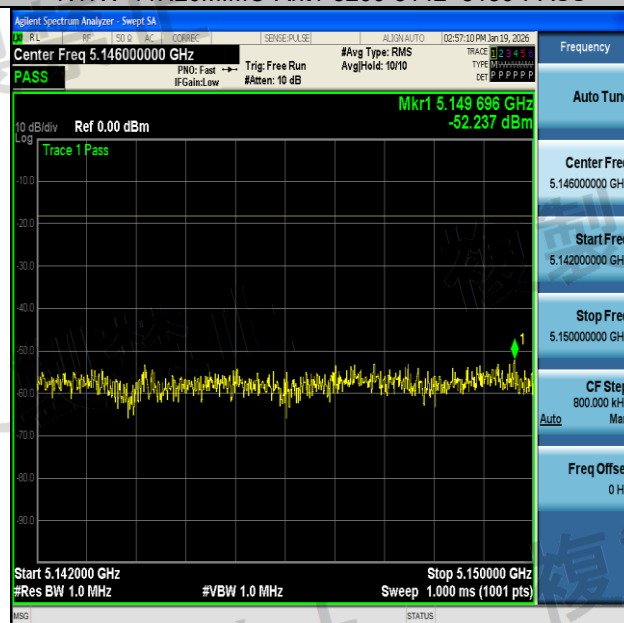
NTNV-11N20MIMO-Ant2-5180-5266.7~26000-PASS





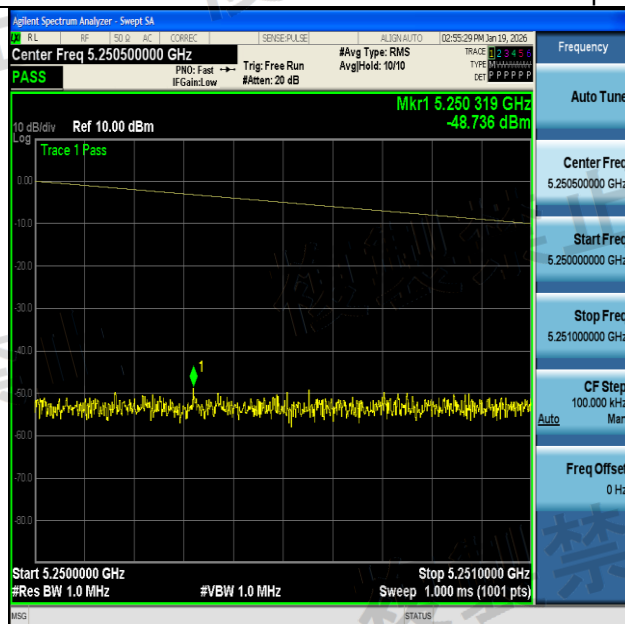


NTNV-11N20MIMO-Ant1-5200-5142~5150-PASS

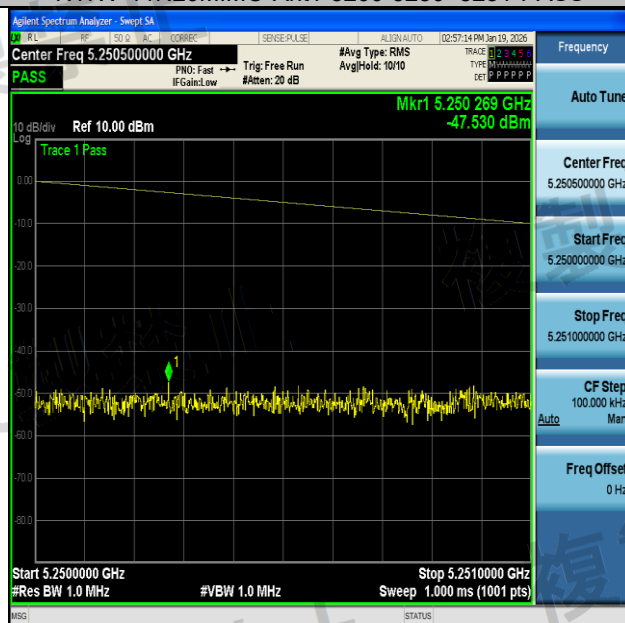


NTNV-11N20MIMO-Ant2-5200-5142~5150-PASS



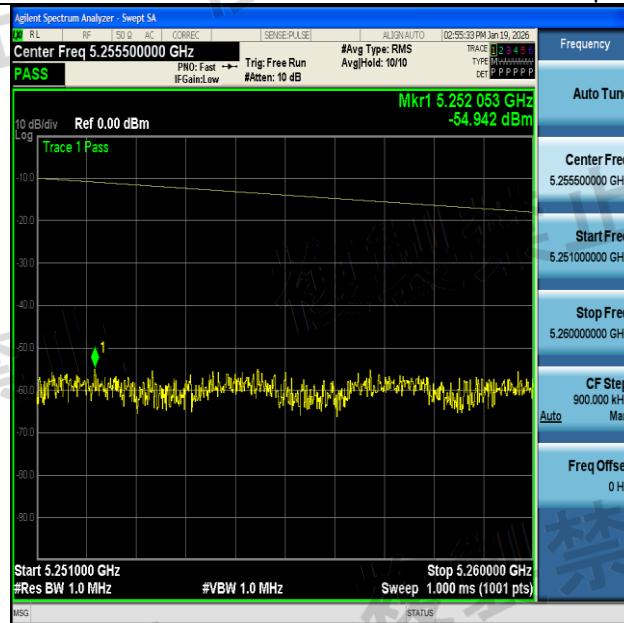


NTNV-11N20MIMO-Ant1-5200-5250~5251-PASS

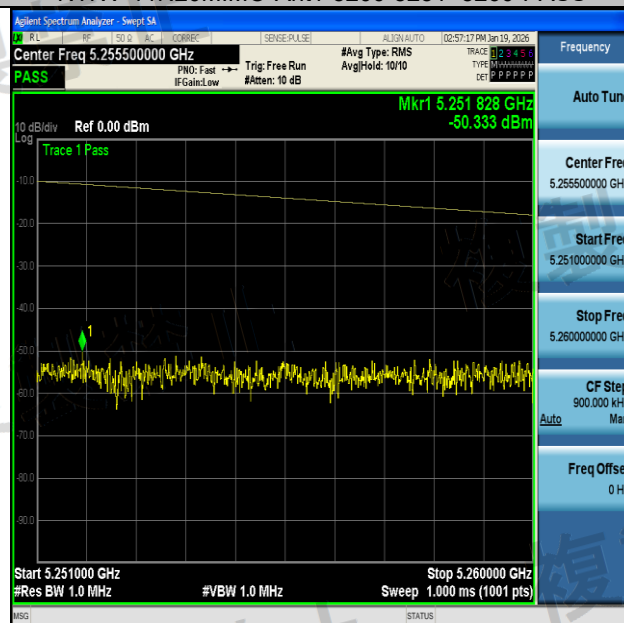


NTNV-11N20MIMO-Ant2-5200-5250~5251-PASS



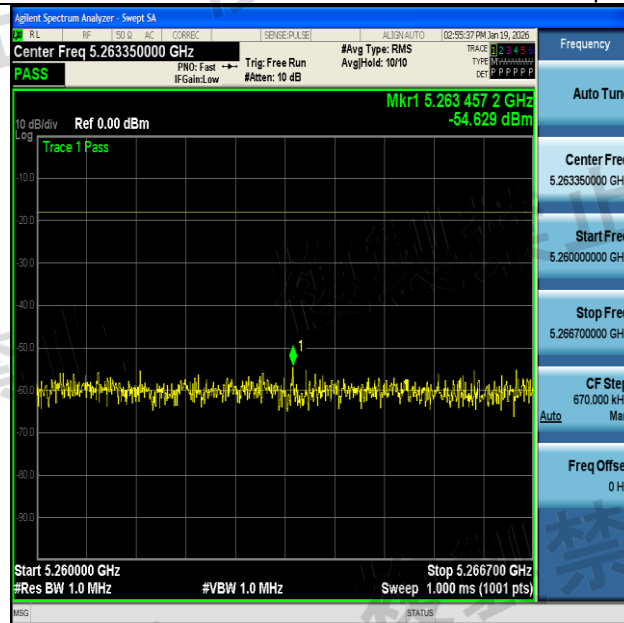


NTNV-11N20MIMO-Ant1-5200-5251~5260-PASS

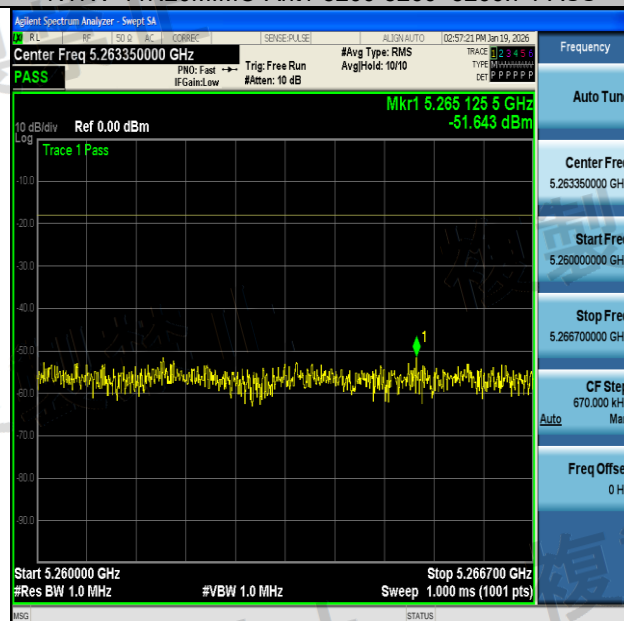


NTNV-11N20MIMO-Ant2-5200-5251~5260-PASS



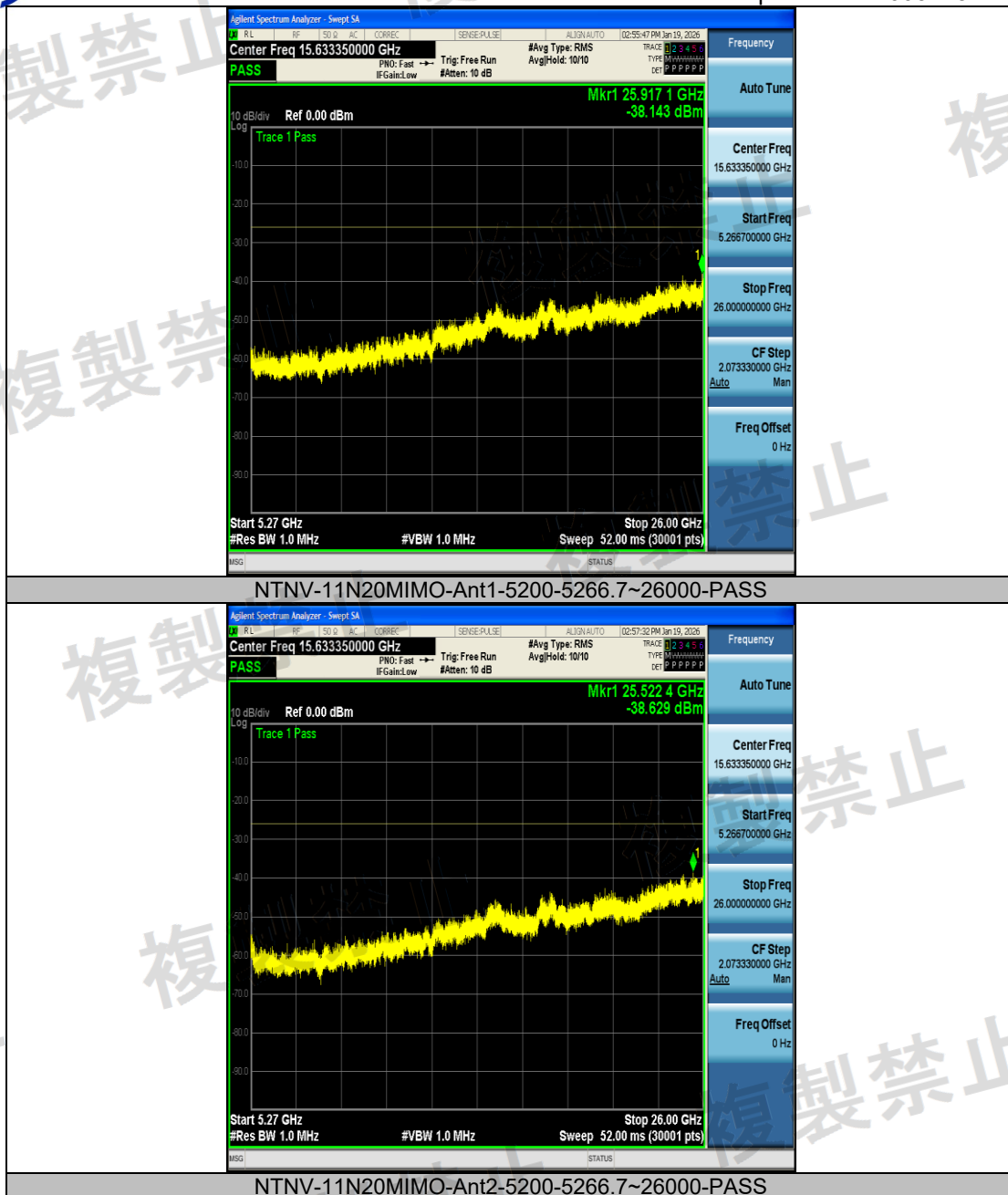


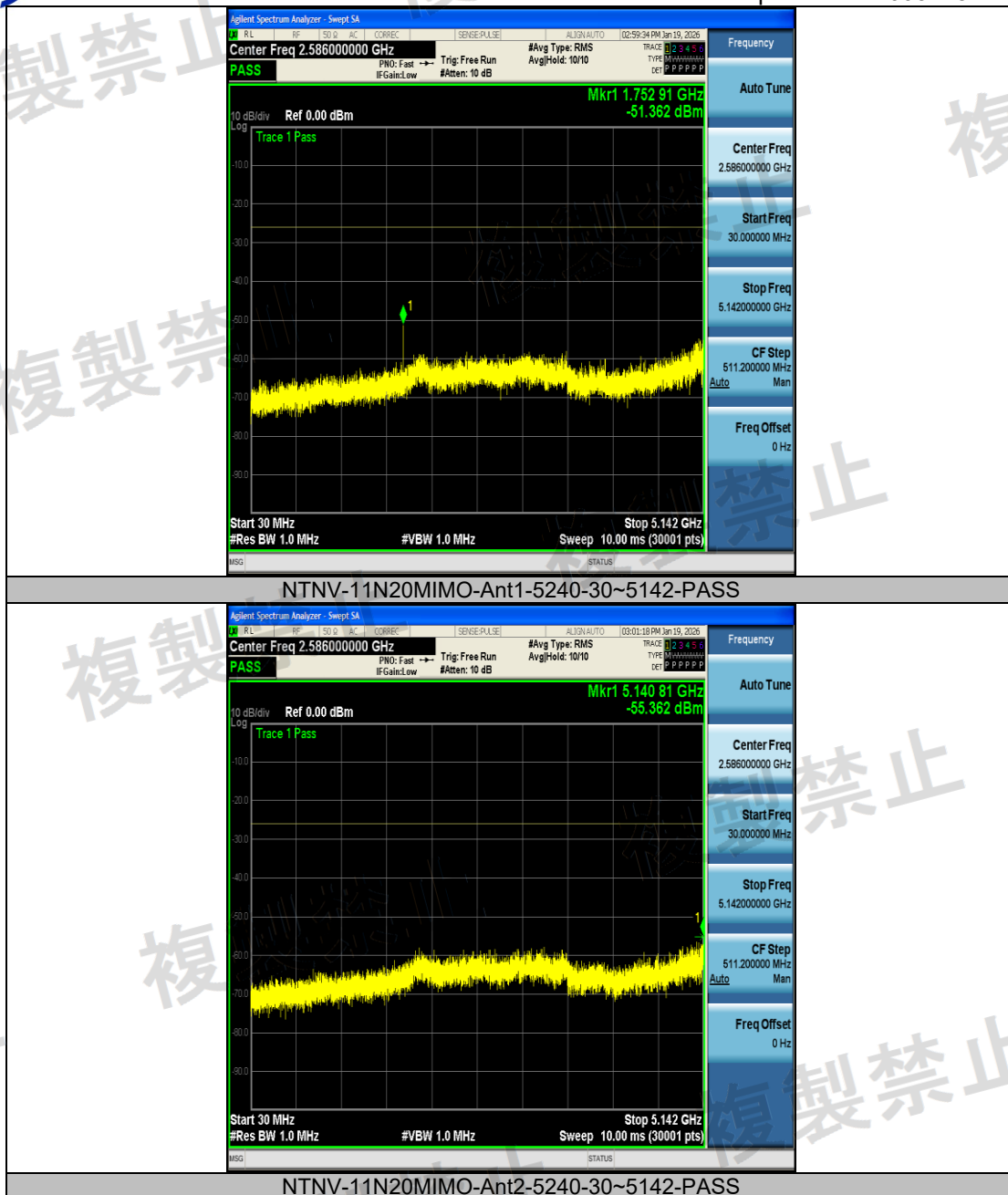
NTNV-11N20MIMO-Ant1-5200-5260~5266.7-PASS

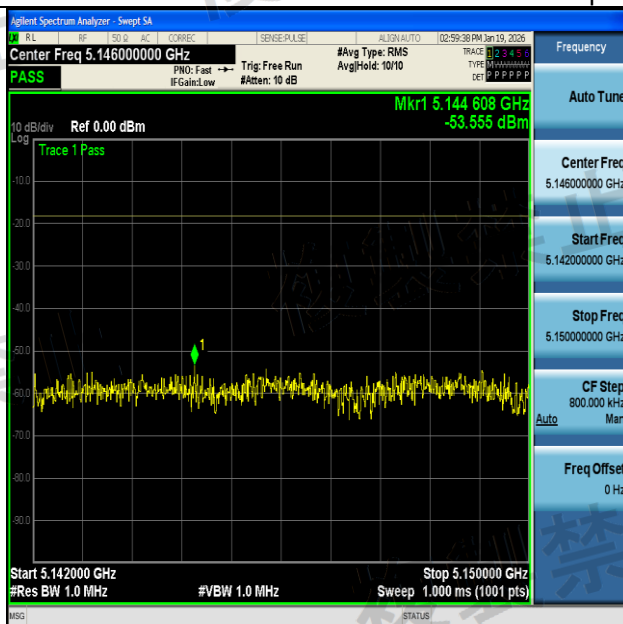


NTNV-11N20MIMO-Ant2-5200-5260~5266.7-PASS

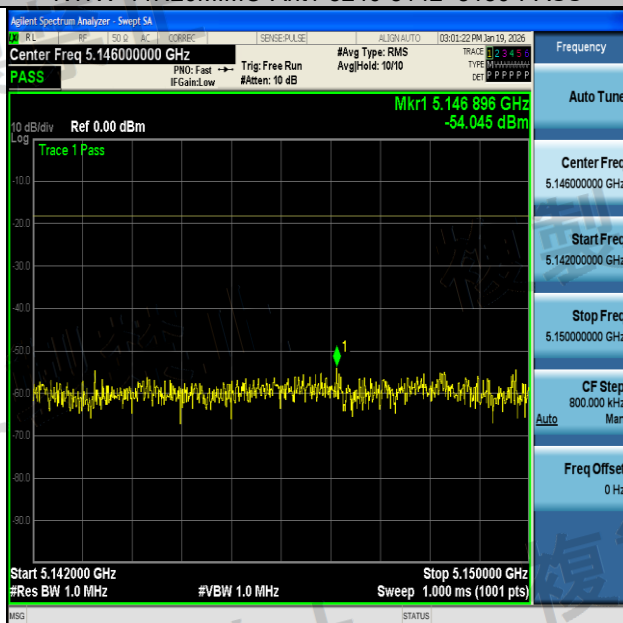






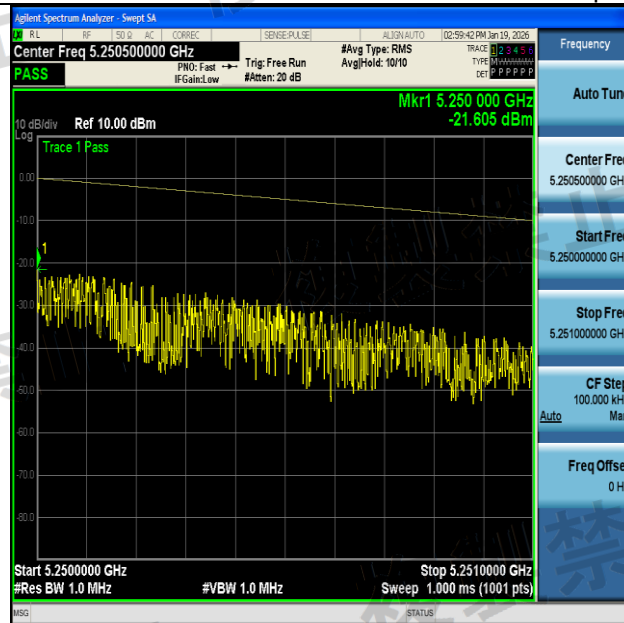


NTNV-11N20MIMO-Ant1-5240-5142~5150-PASS

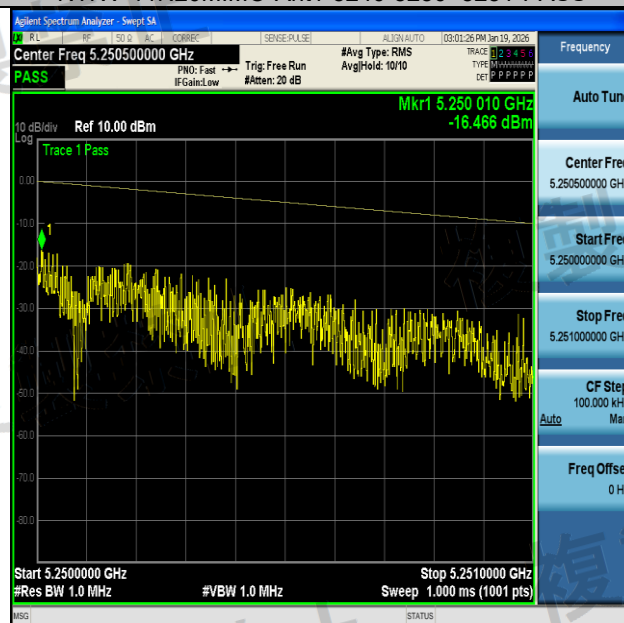


NTNV-11N20MIMO-Ant2-5240-5142~5150-PASS



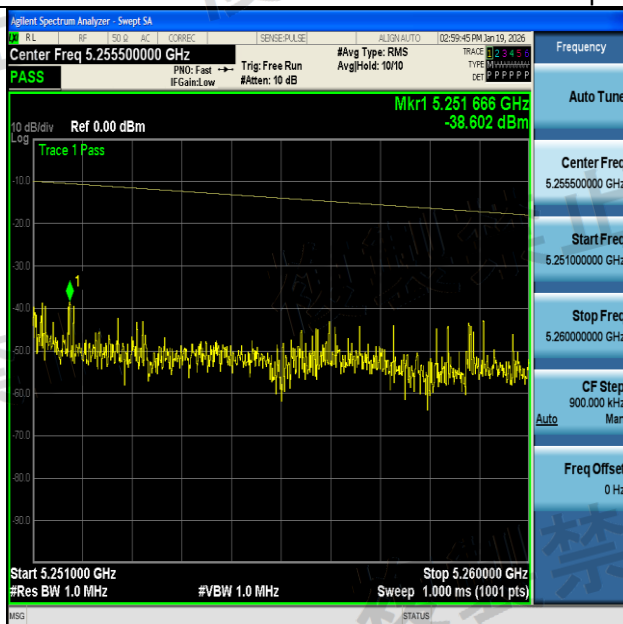


NTNV-11N20MIMO-Ant1-5240-5250~5251-PASS

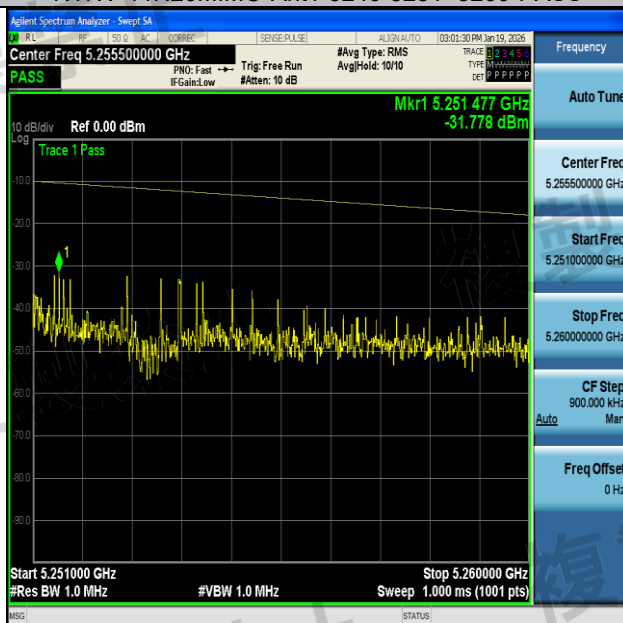


NTNV-11N20MIMO-Ant2-5240-5250~5251-PASS



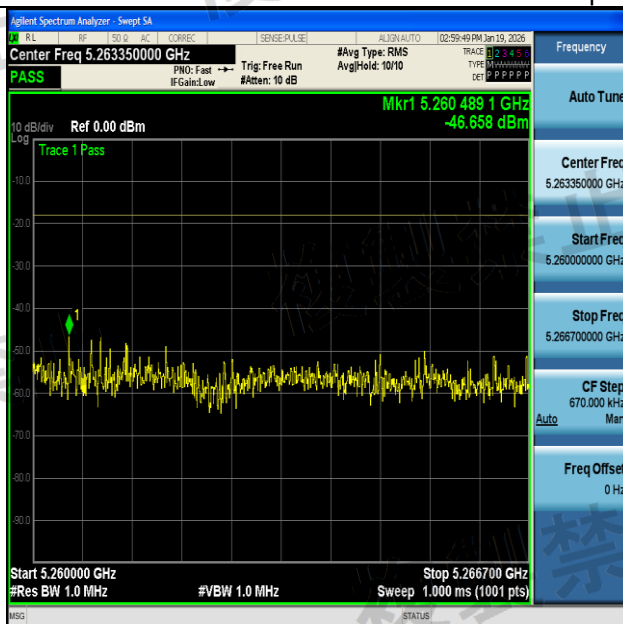


NTNV-11N20MIMO-Ant1-5240-5251~5260-PASS

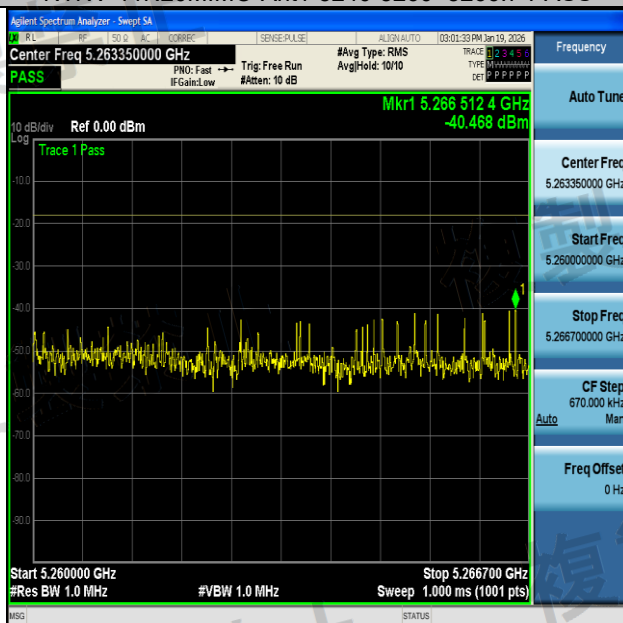


NTNV-11N20MIMO-Ant2-5240-5251~5260-PASS



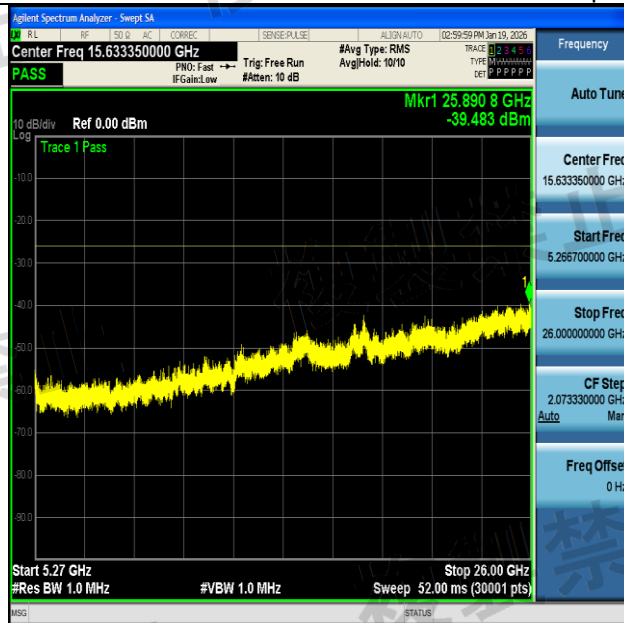


NTNV-11N20MIMO-Ant1-5240-5260~5266.7-PASS

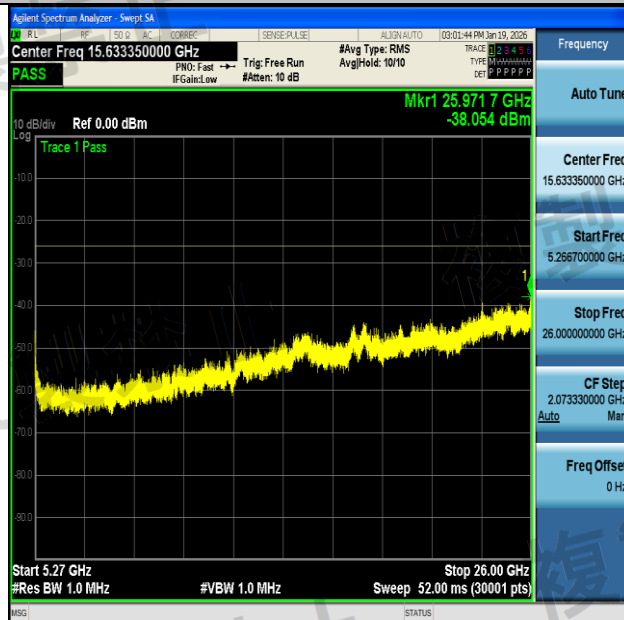


NTNV-11N20MIMO-Ant2-5240-5260~5266.7-PASS



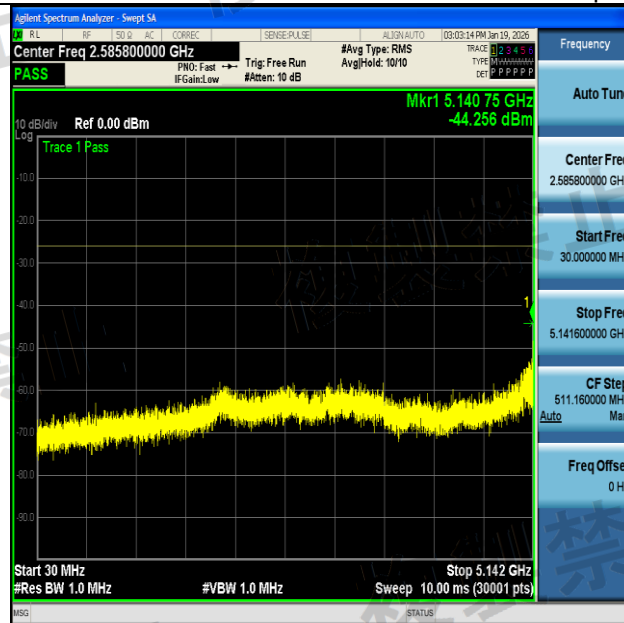


NTNV-11N20MIMO-Ant1-5240-5266.7~26000-PASS

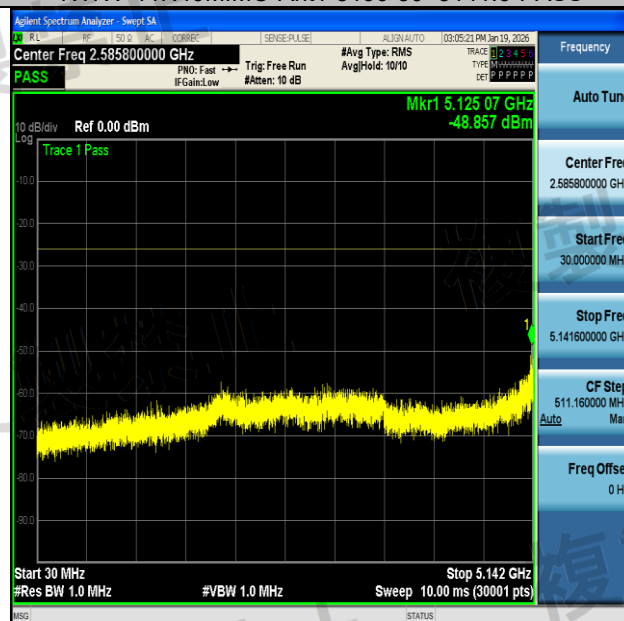


NTNV-11N20MIMO-Ant2-5240-5266.7~26000-PASS



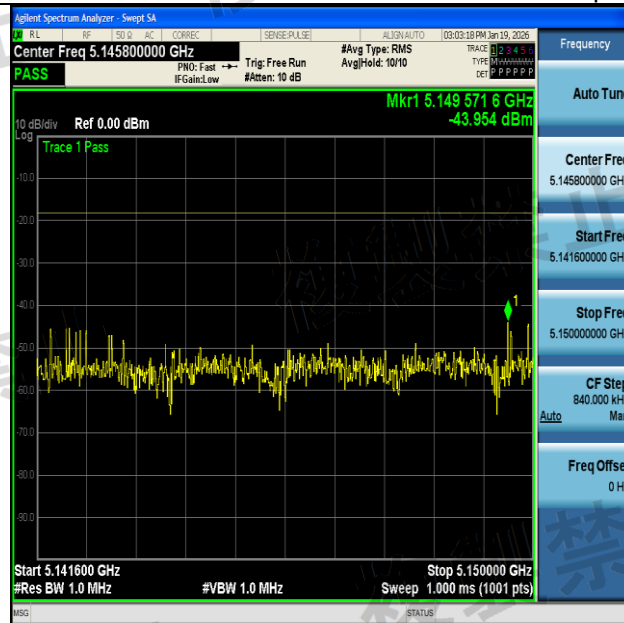


NTNV-11N40MIMO-Ant1-5190-30~5141.6-PASS

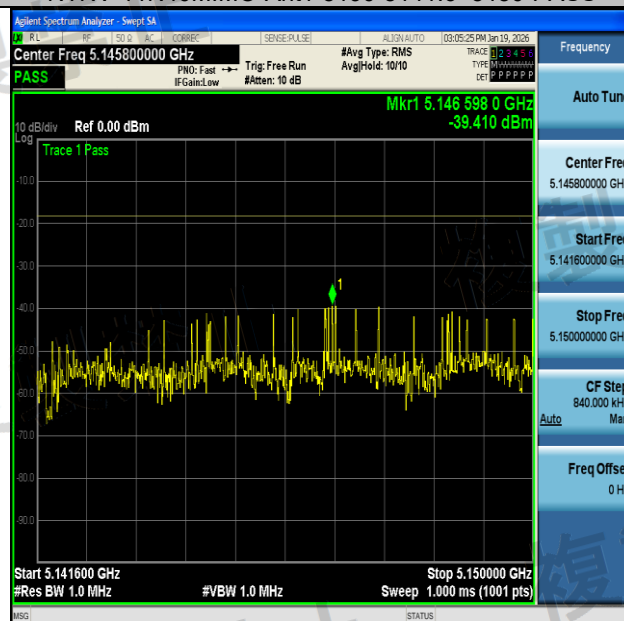


NTNV-11N40MIMO-Ant2-5190-30~5141.6-PASS



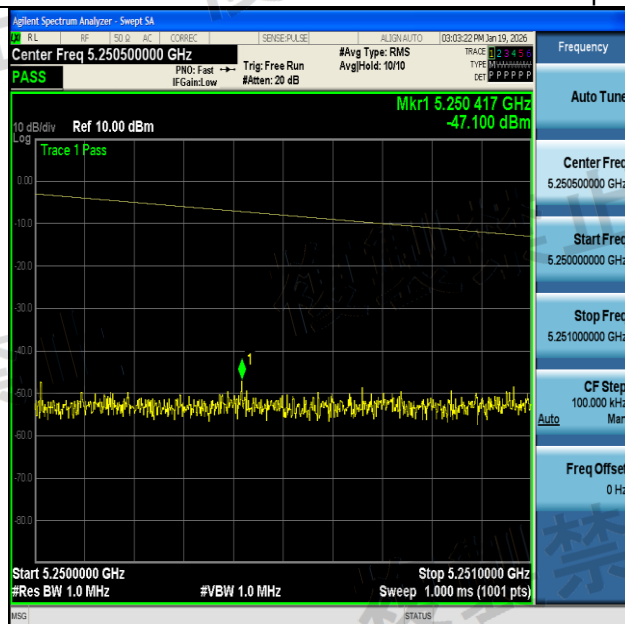


NTNV-11N40MIMO-Ant1-5190-5141.6~5150-PASS

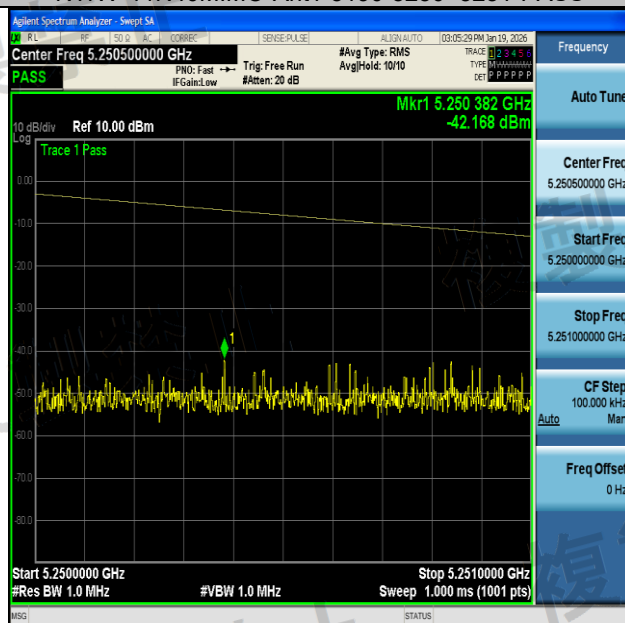


NTNV-11N40MIMO-Ant2-5190-5141.6~5150-PASS



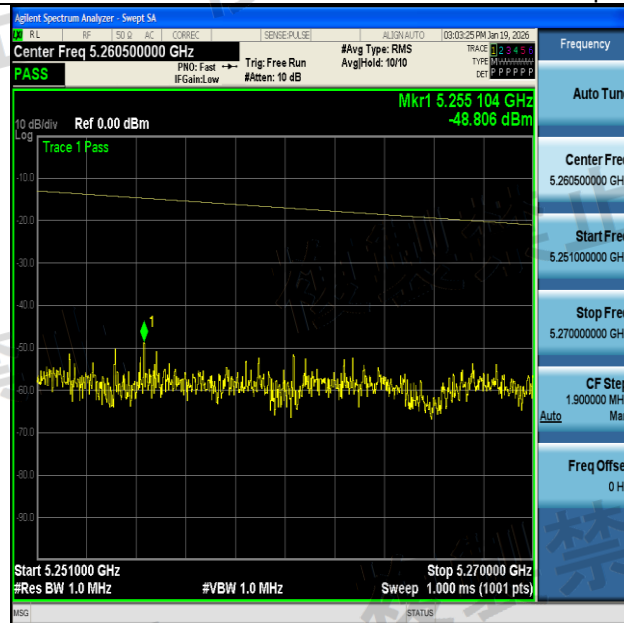


NTNV-11N40MIMO-Ant1-5190-5250~5251-PASS

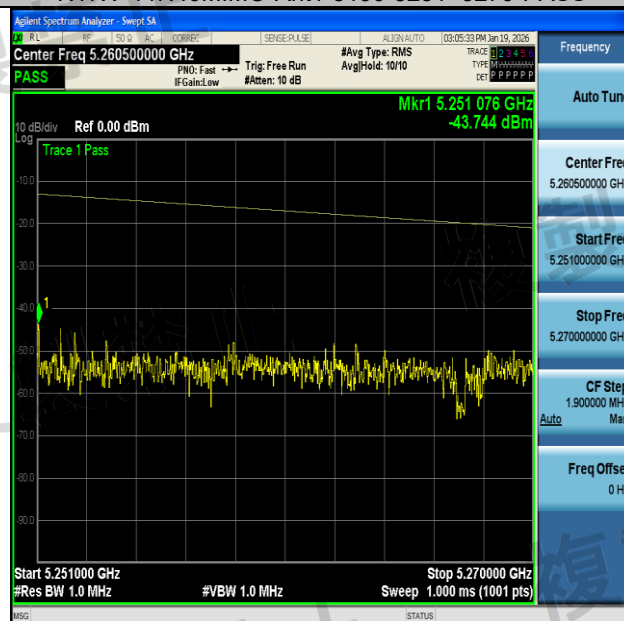


NTNV-11N40MIMO-Ant2-5190-5250~5251-PASS



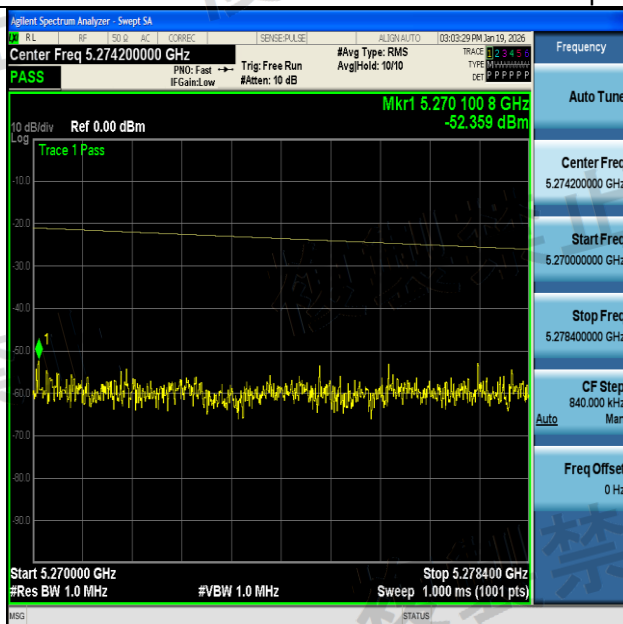


NTNV-11N40MIMO-Ant1-5190-5251~5270-PASS

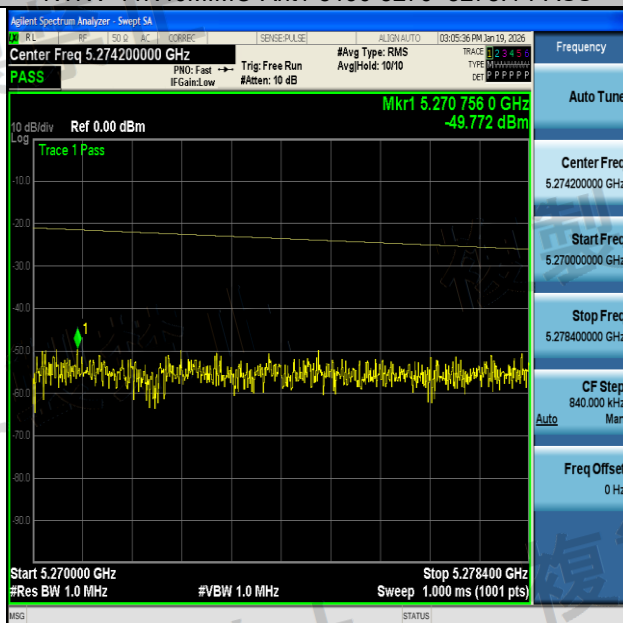


NTNV-11N40MIMO-Ant2-5190-5251~5270-PASS



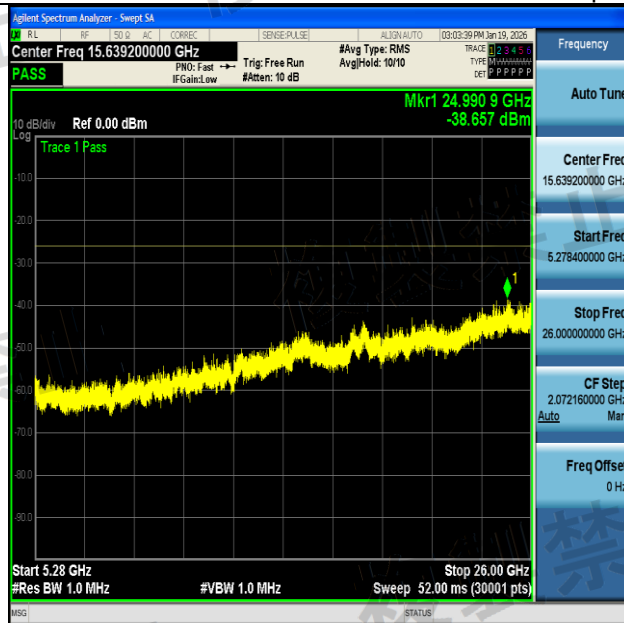


NTNV-11N40MIMO-Ant1-5190-5270~5278.4-PASS

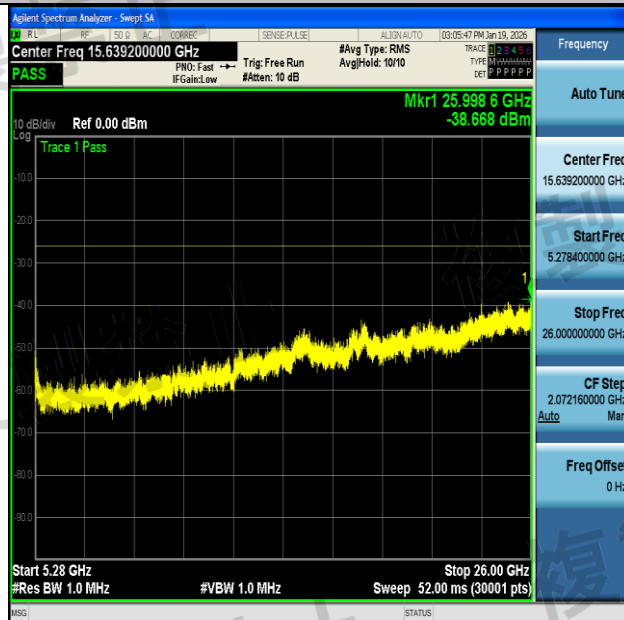


NTNV-11N40MIMO-Ant2-5190-5270~5278.4-PASS



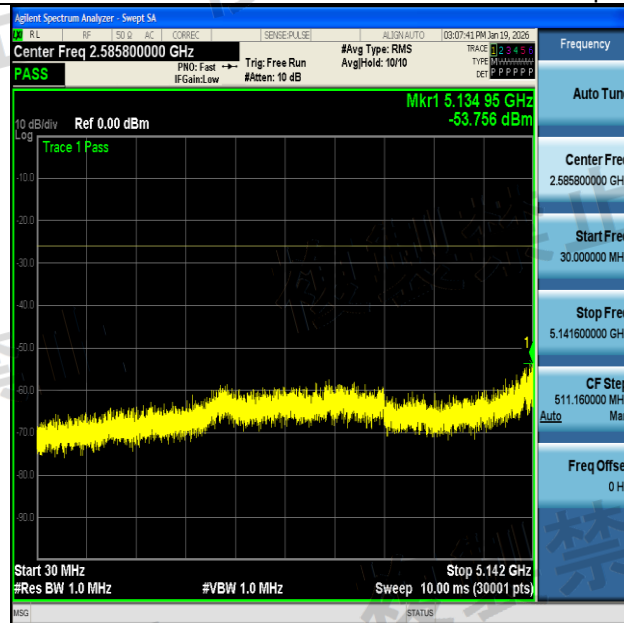


NTNV-11N40MIMO-Ant1-5190-5278.4~26000-PASS

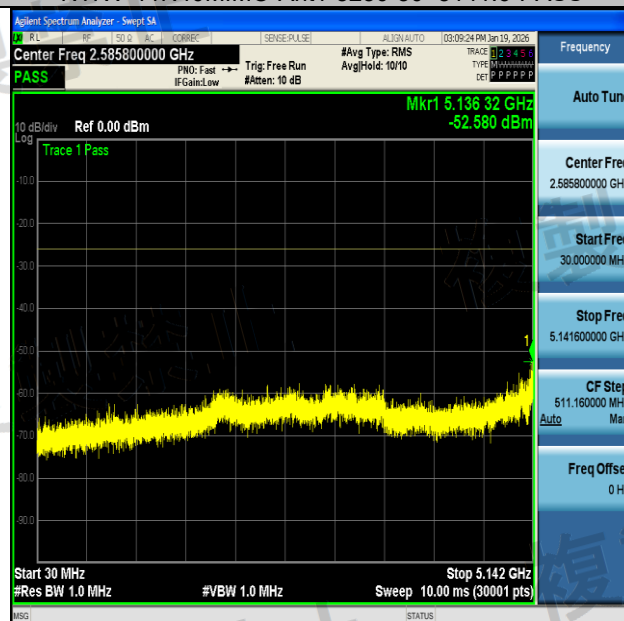


NTNV-11N40MIMO-Ant2-5190-5278.4~26000-PASS



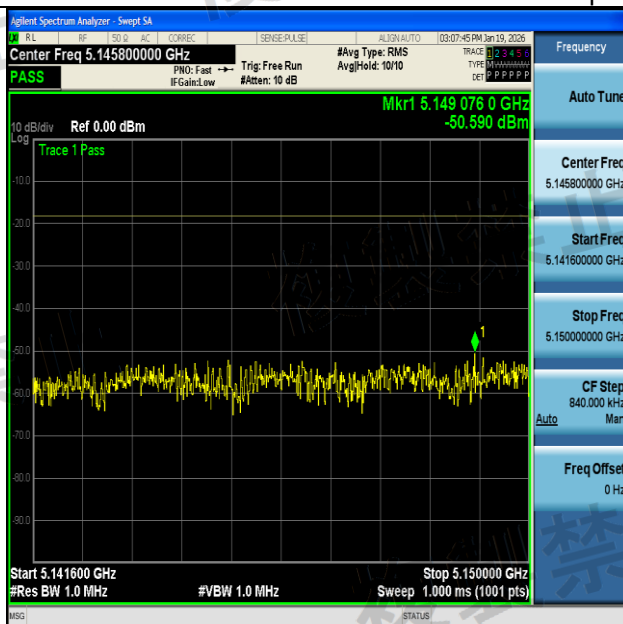


NTNV-11N40MIMO-Ant1-5230-30~5141.6-PASS

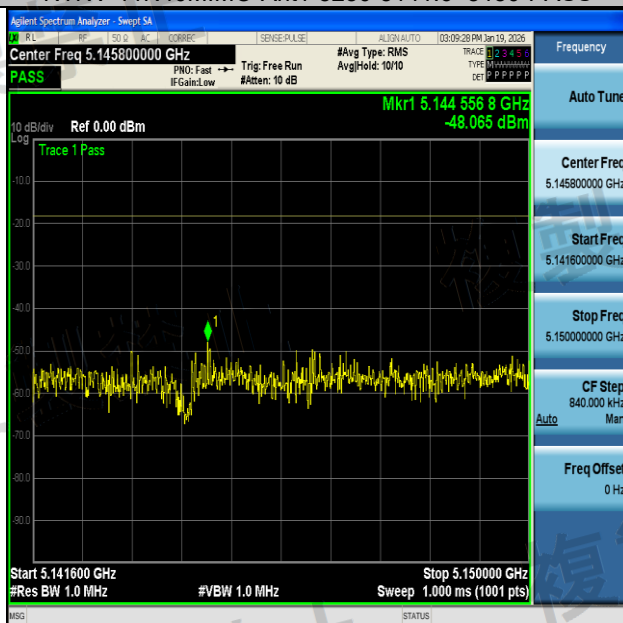


NTNV-11N40MIMO-Ant2-5230-30~5141.6-PASS



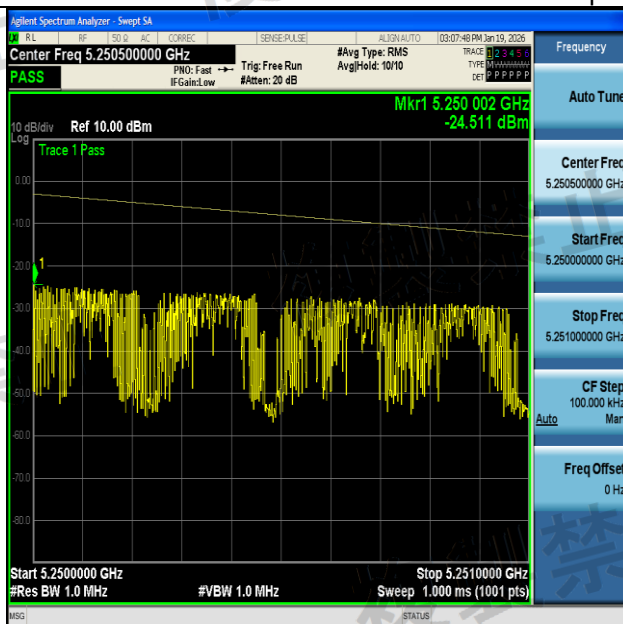


NTNV-11N40MIMO-Ant1-5230-5141.6~5150-PASS

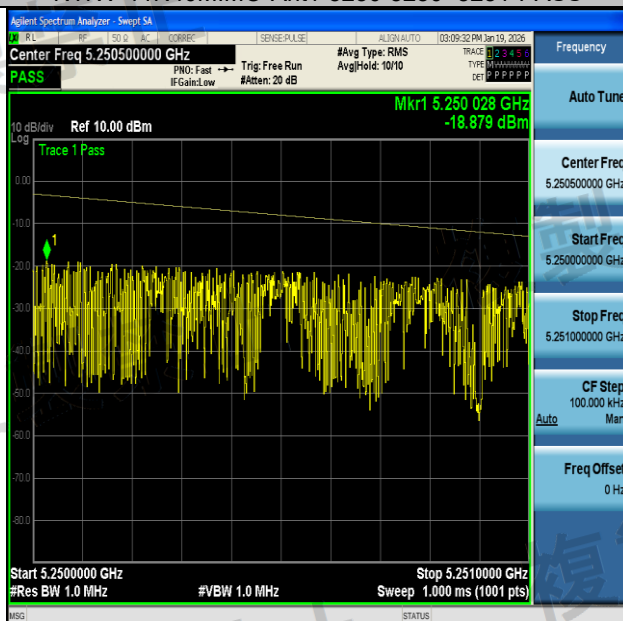


NTNV-11N40MIMO-Ant2-5230-5141.6~5150-PASS



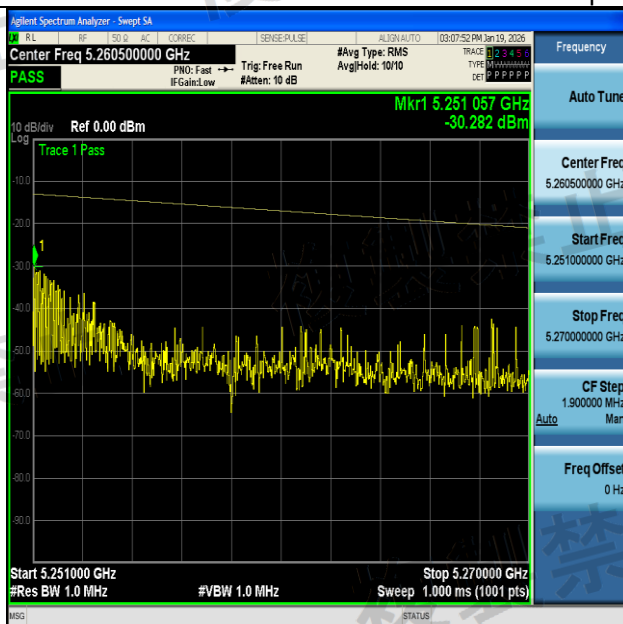


NTNV-11N40MIMO-Ant1-5230-5250~5251-PASS



NTNV-11N40MIMO-Ant2-5230-5250~5251-PASS



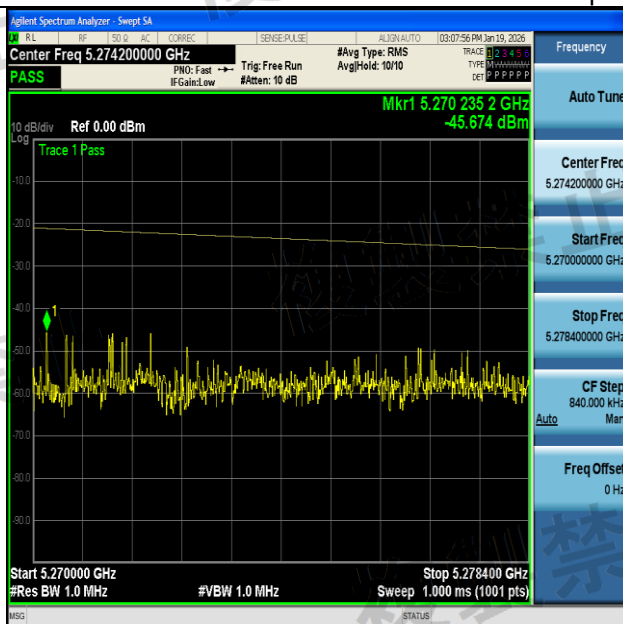


NTNV-11N40MIMO-Ant1-5230-5251~5270-PASS

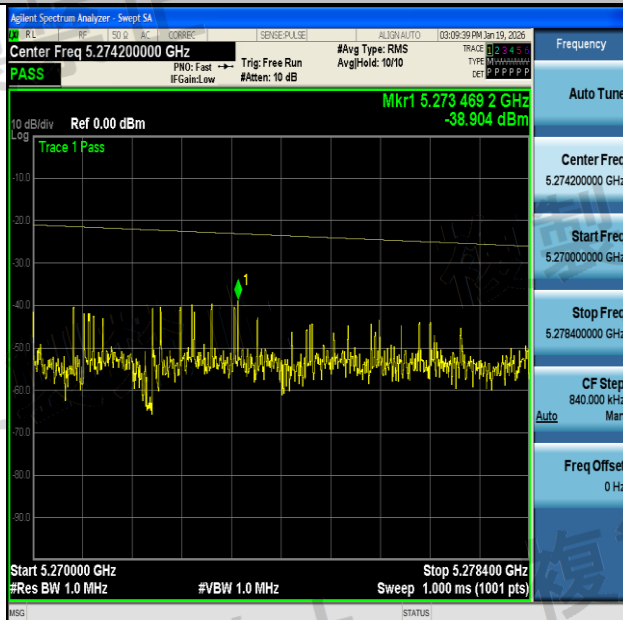


NTNV-11N40MIMO-Ant2-5230-5251~5270-PASS



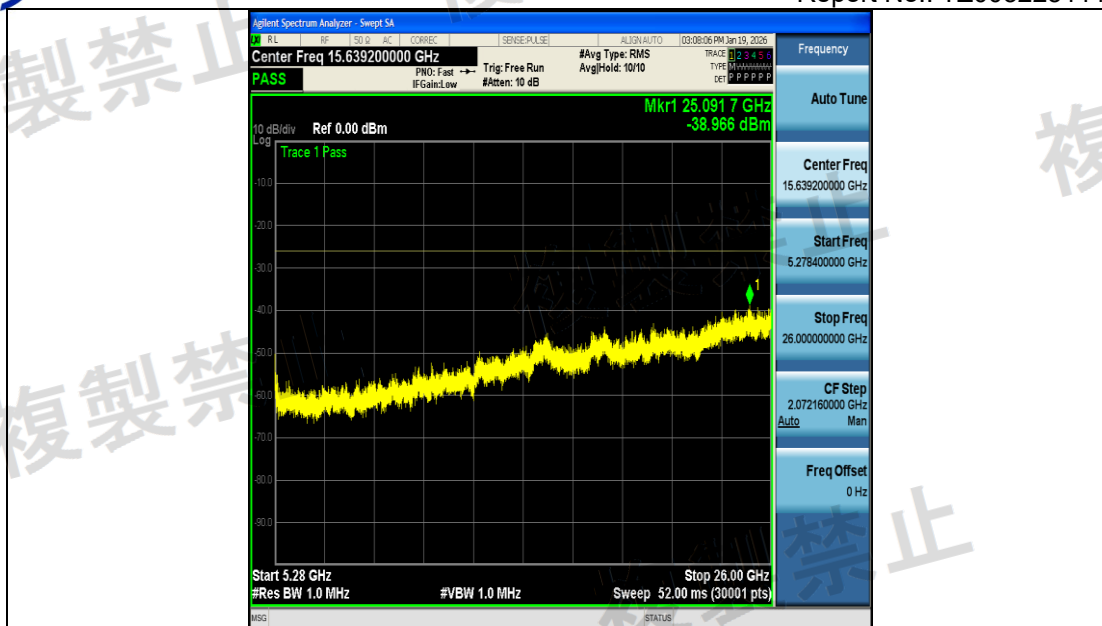


NTNV-11N40MIMO-Ant1-5230-5270~5278.4-PASS

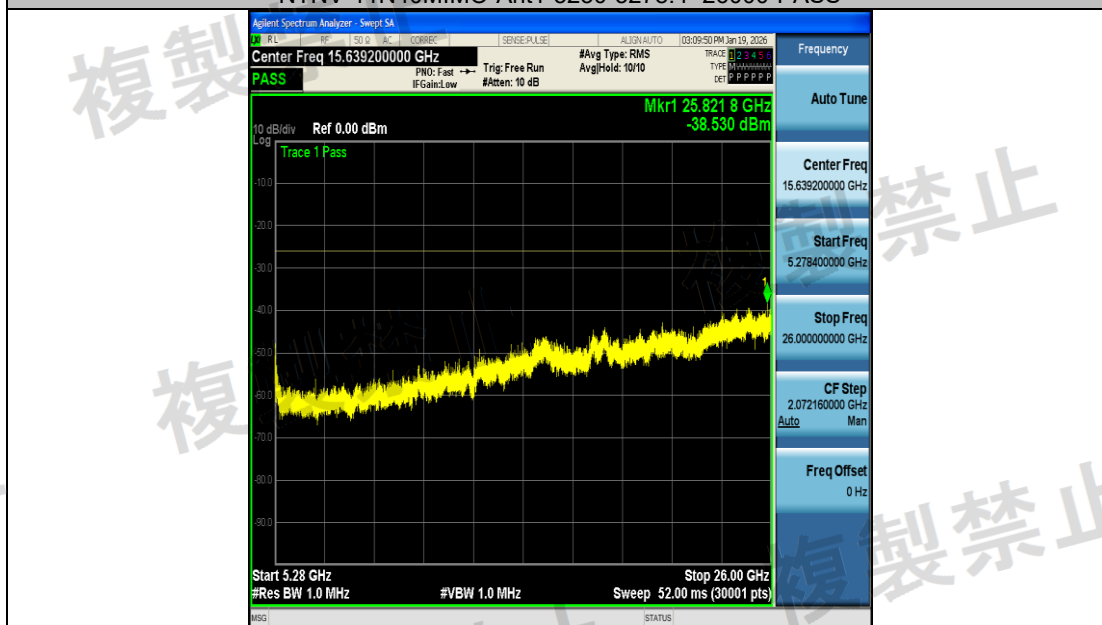


NTNV-11N40MIMO-Ant2-5230-5270~5278.4-PASS



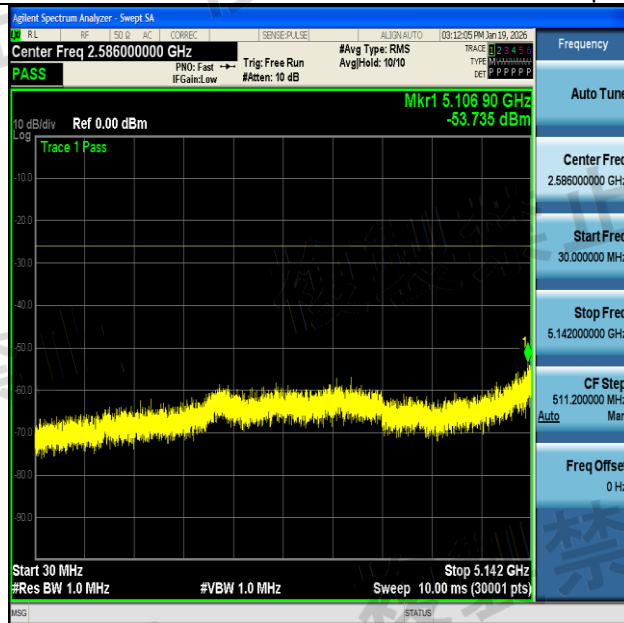


NTNV-11N40MIMO-Ant1-5230-5278.4~26000-PASS

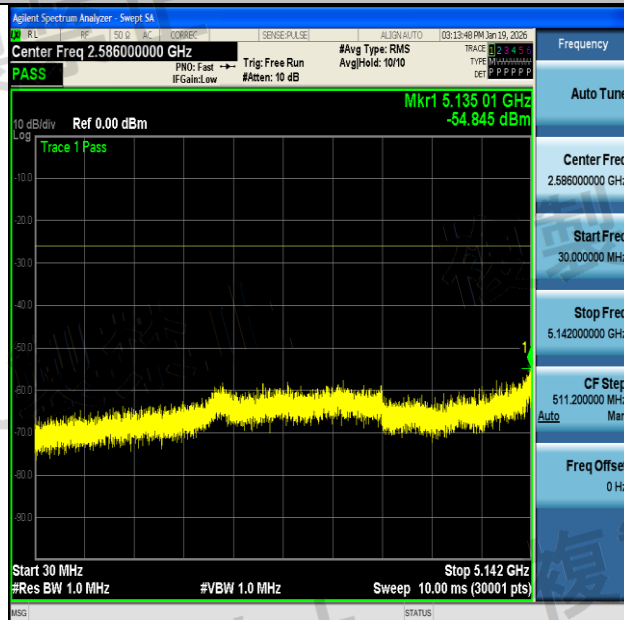


NTNV-11N40MIMO-Ant2-5230-5278.4~26000-PASS



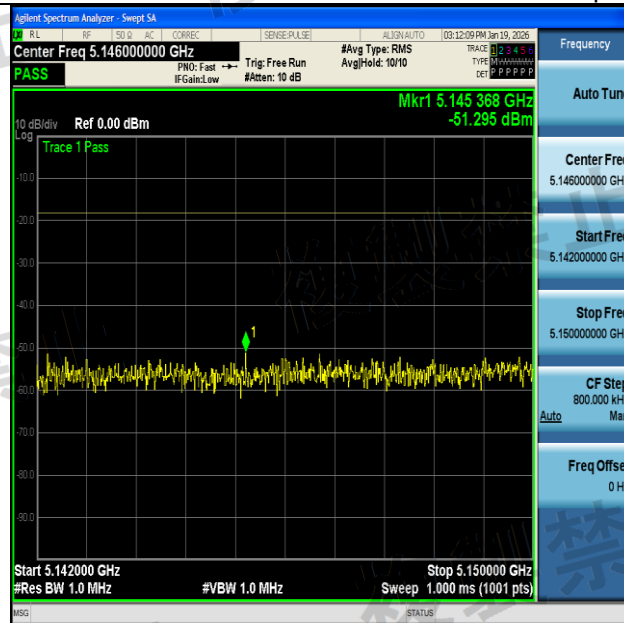


NTNV-11AC20MIMO-Ant1-5180-30~5142-PASS

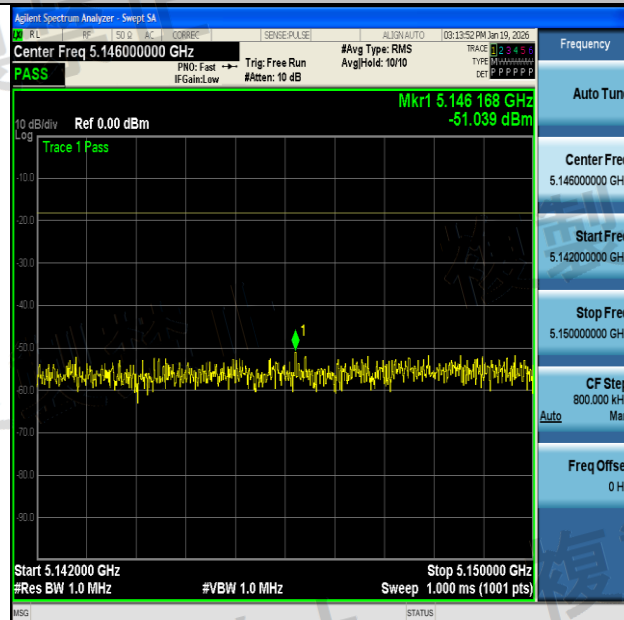


NTNV-11AC20MIMO-Ant2-5180-30~5142-PASS



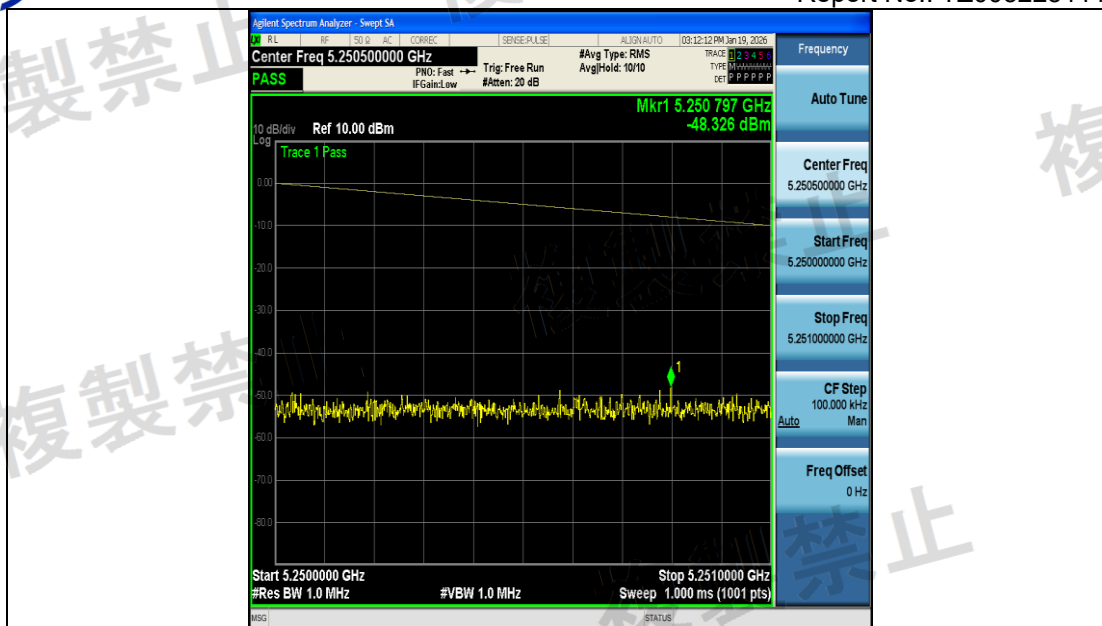


NTNV-11AC20MIMO-Ant1-5180-5142~5150-PASS

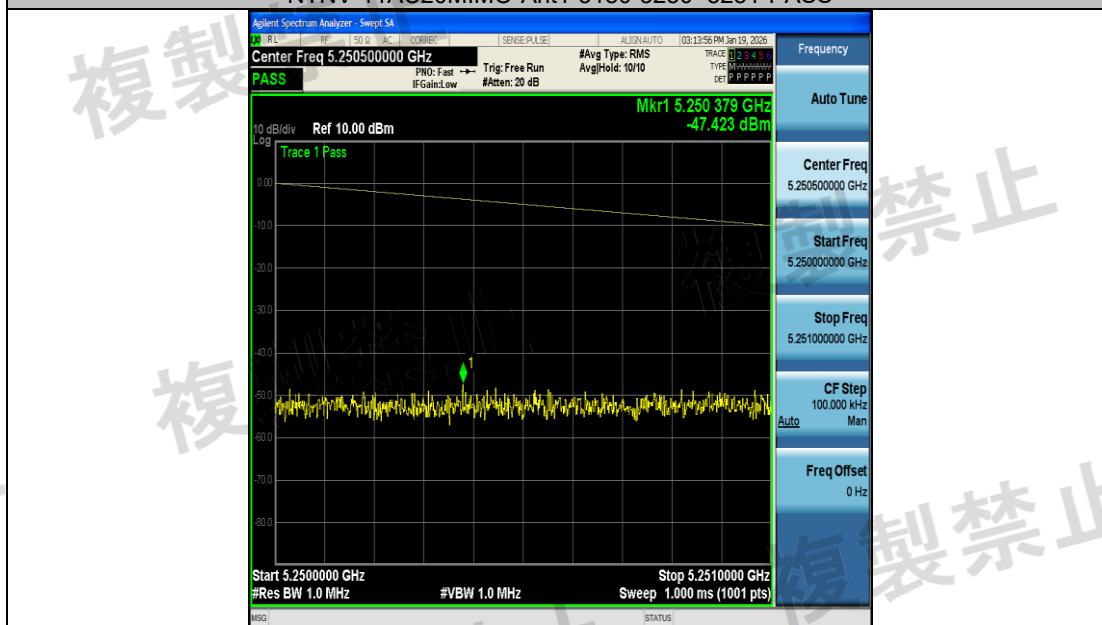


NTNV-11AC20MIMO-Ant2-5180-5142~5150-PASS



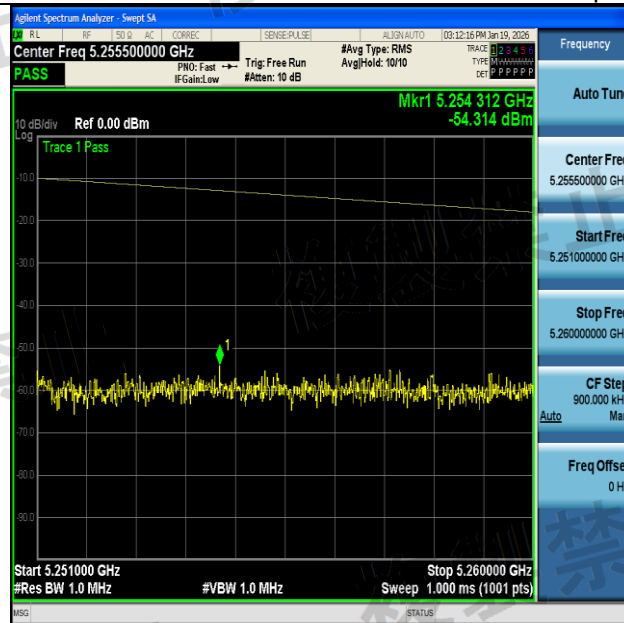


NTNV-11AC20MIMO-Ant1-5180-5250~5251-PASS

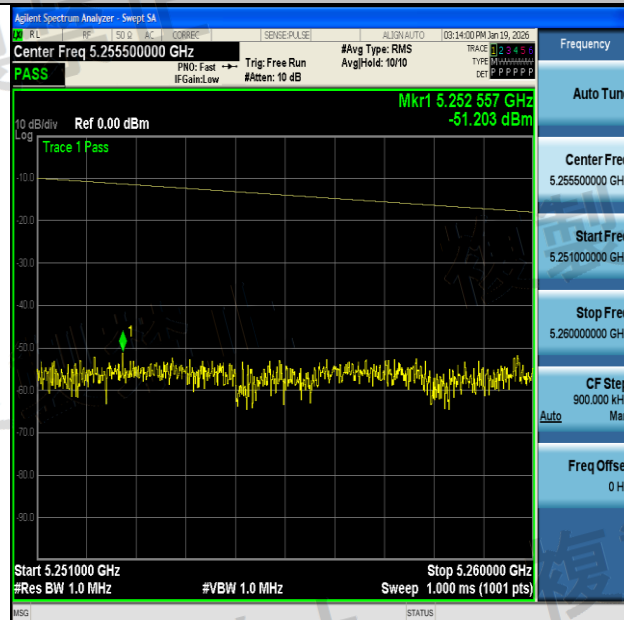


NTNV-11AC20MIMO-Ant2-5180-5250~5251-PASS



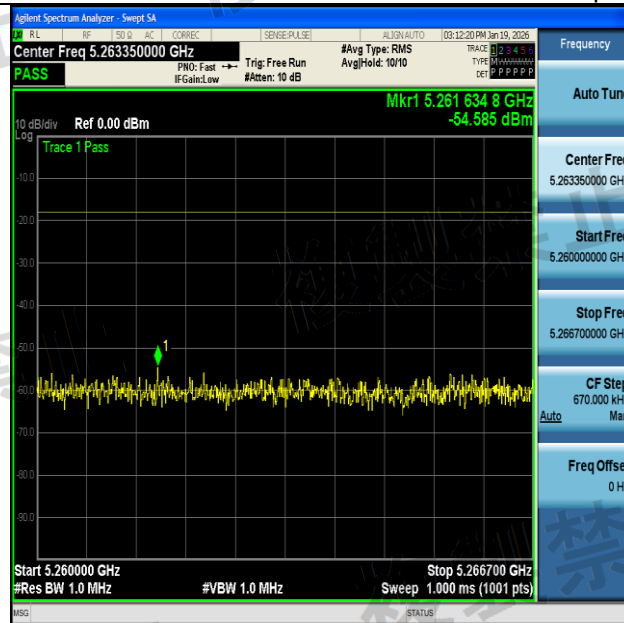


NTNV-11AC20MIMO-Ant1-5180-5251~5260-PASS

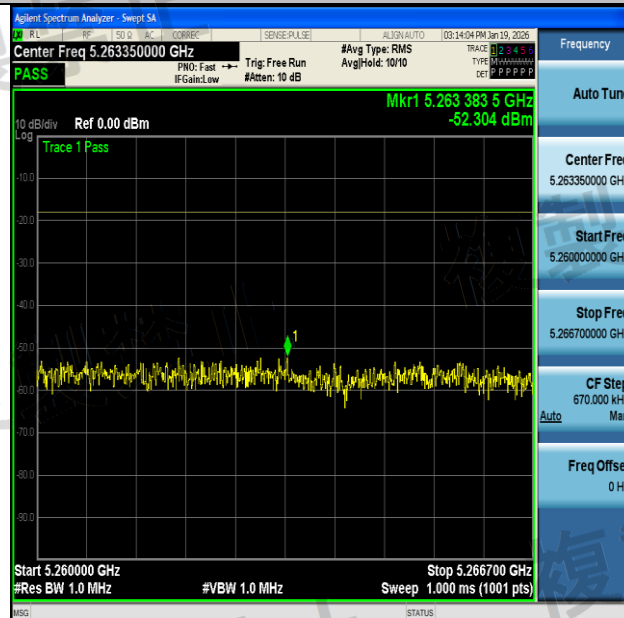


NTNV-11AC20MIMO-Ant2-5180-5251~5260-PASS



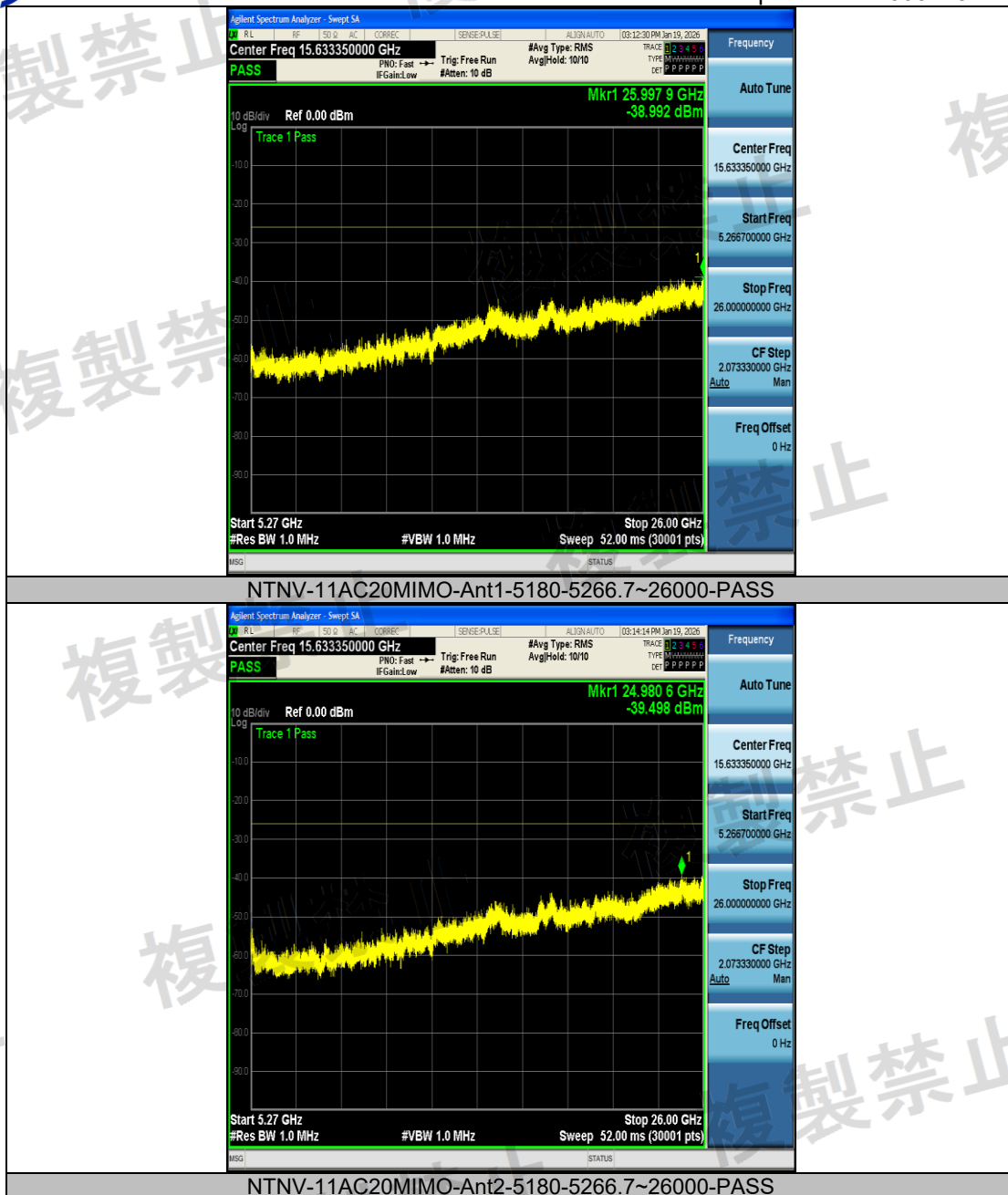


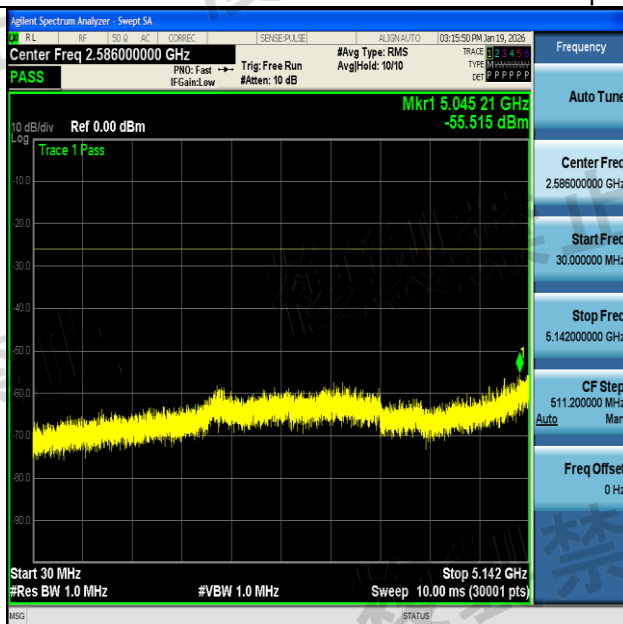
NTNV-11AC20MIMO-Ant1-5180-5260~5266.7-PASS



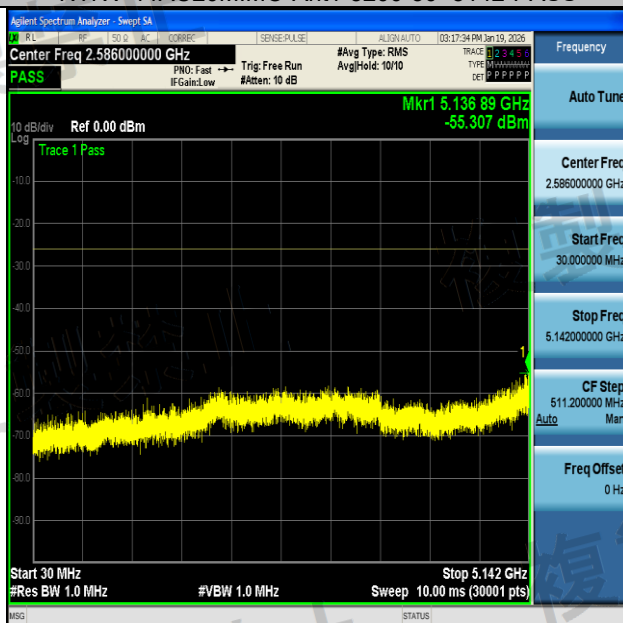
NTNV-11AC20MIMO-Ant2-5180-5260~5266.7-PASS





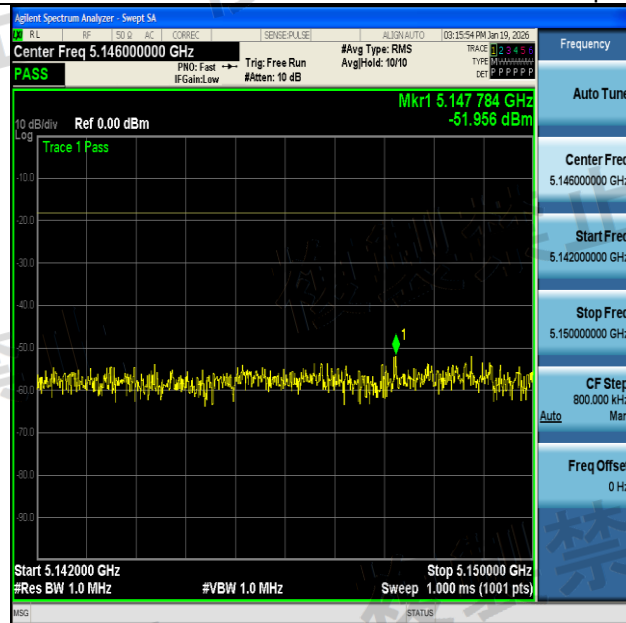


NTNV-11AC20MIMO-Ant1-5200-30~5142-PASS

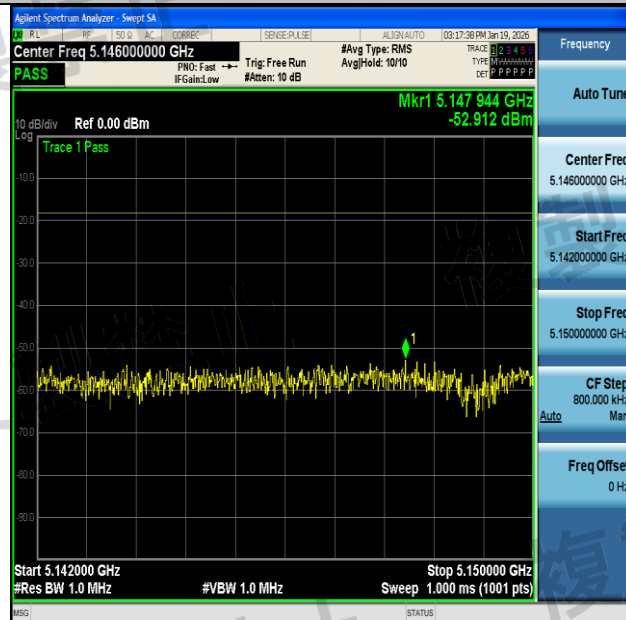


NTNV-11AC20MIMO-Ant2-5200-30~5142-PASS



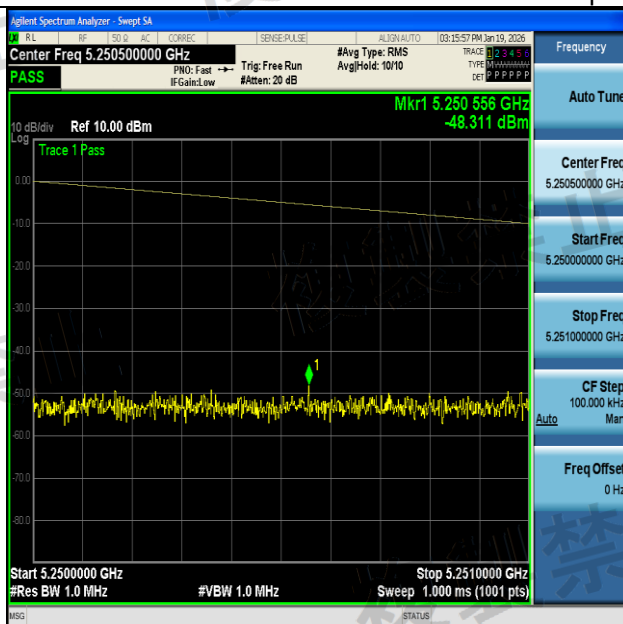


NTNV-11AC20MIMO-Ant1-5200-5142~5150-PASS

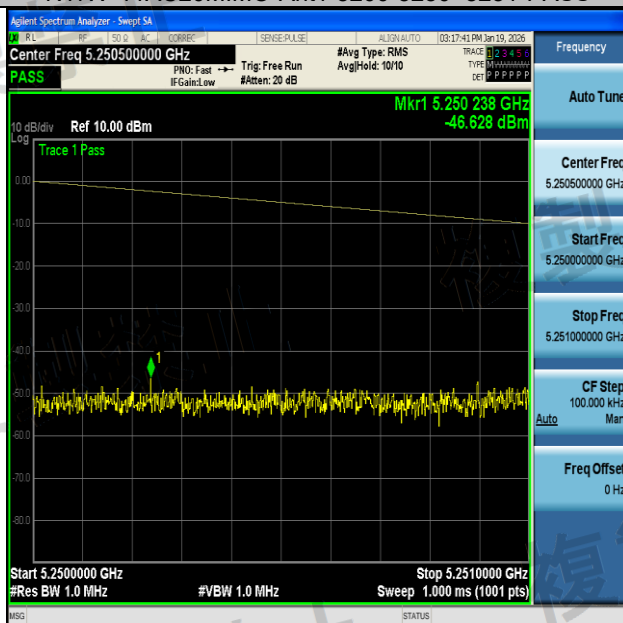


NTNV-11AC20MIMO-Ant2-5200-5142~5150-PASS



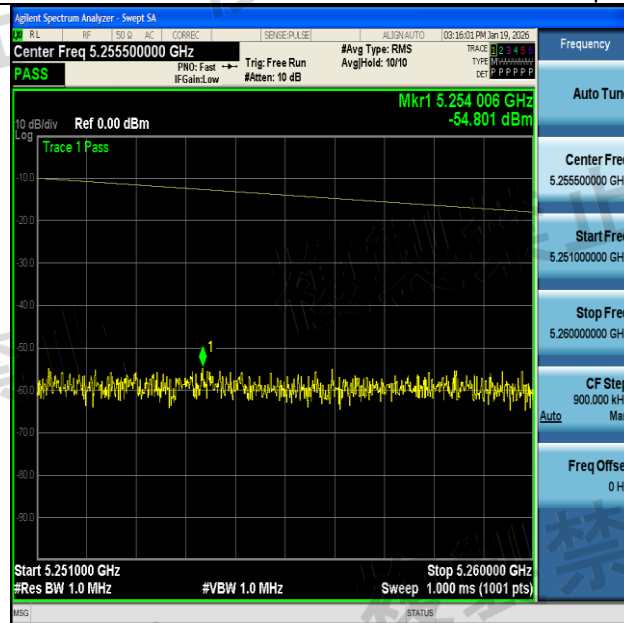


NTNV-11AC20MIMO-Ant1-5200-5250~5251-PASS

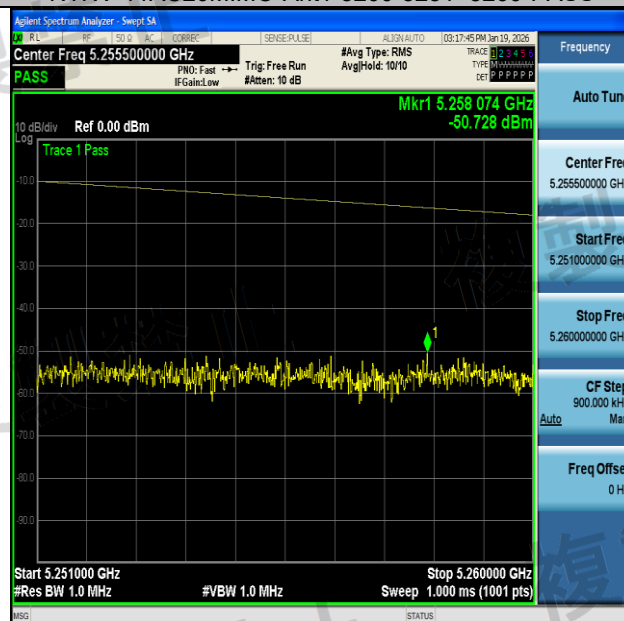


NTNV-11AC20MIMO-Ant2-5200-5250~5251-PASS



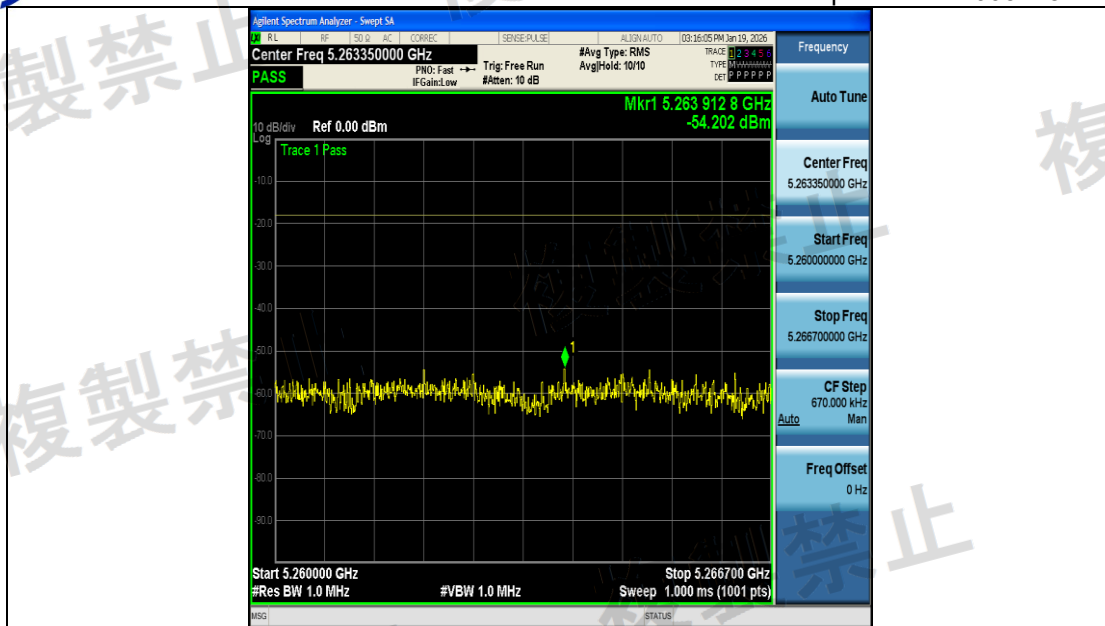


NTNV-11AC20MIMO-Ant1-5200-5251~5260-PASS

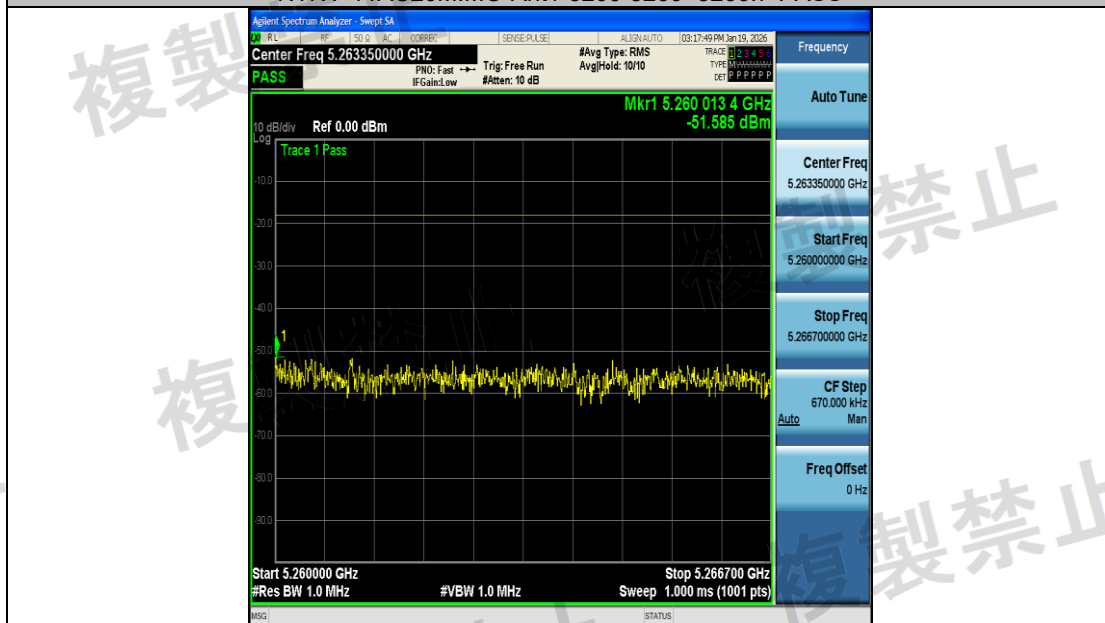


NTNV-11AC20MIMO-Ant2-5200-5251~5260-PASS



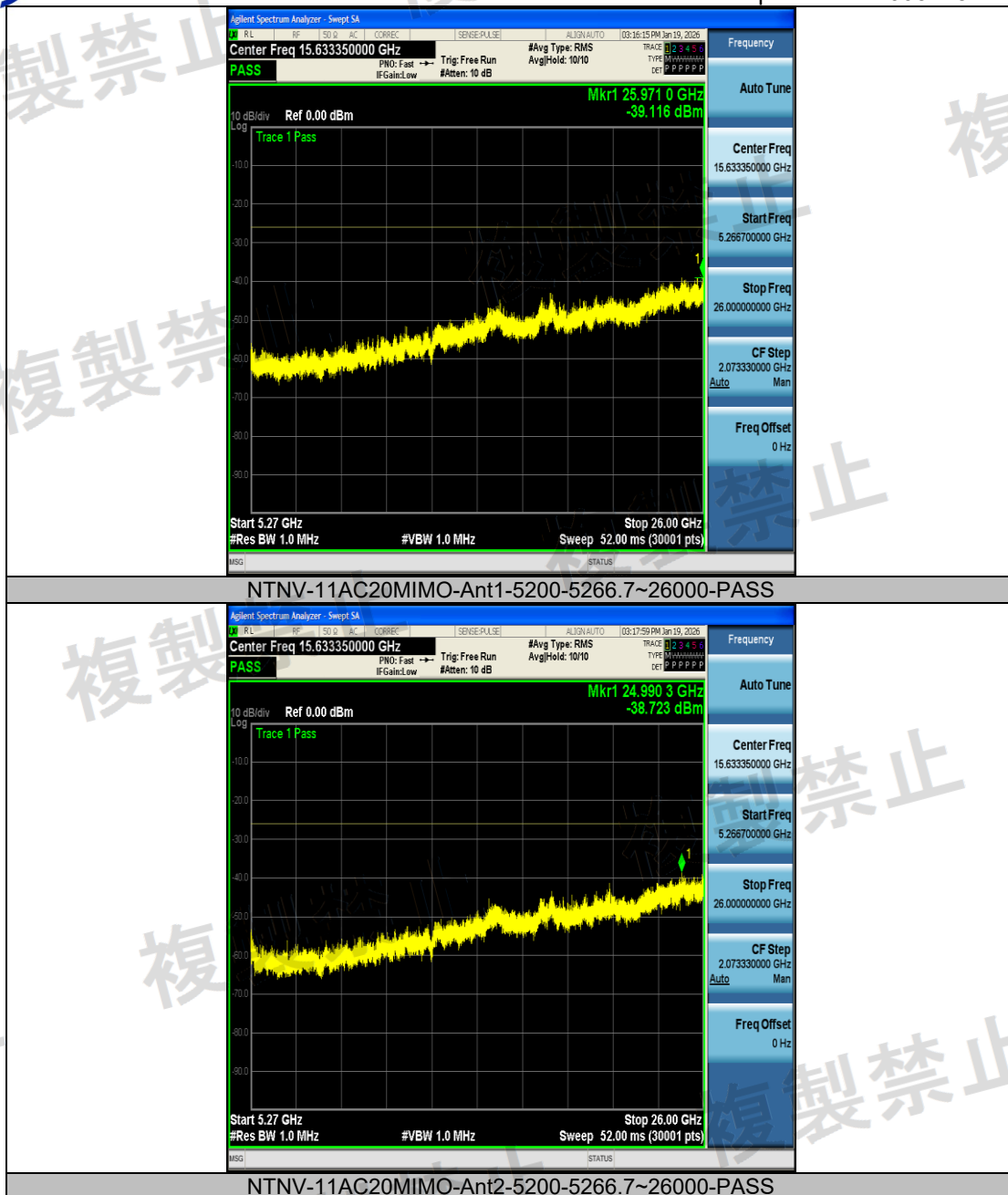


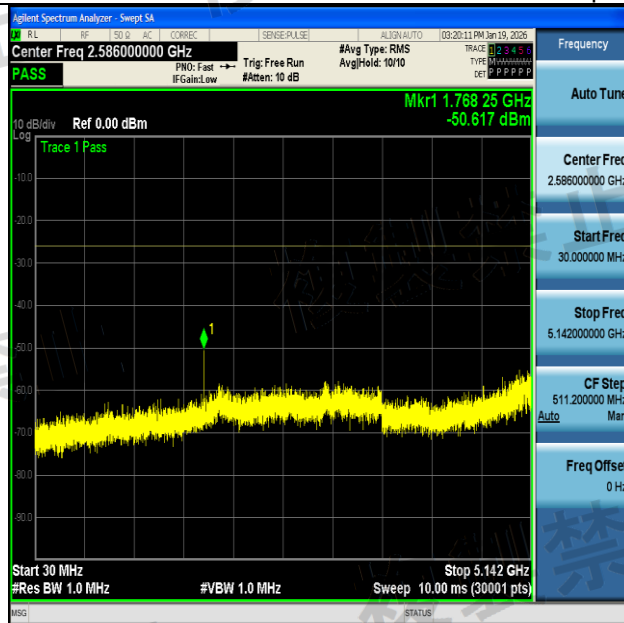
NTNV-11AC20MIMO-Ant1-5200-5260~5266.7-PASS



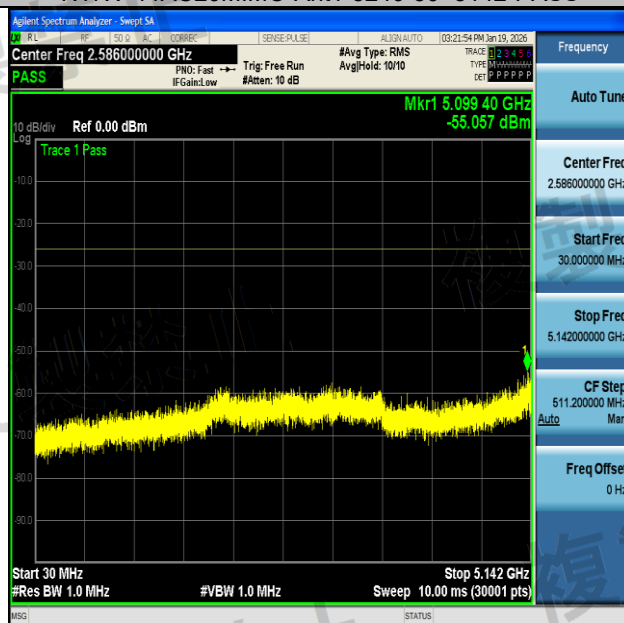
NTNV-11AC20MIMO-Ant2-5200-5260~5266.7-PASS





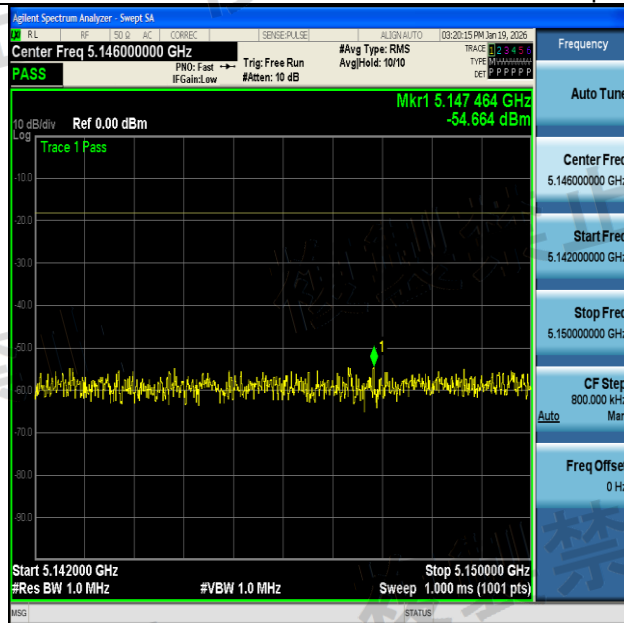


NTNV-11AC20MIMO-Ant1-5240-30~5142-PASS

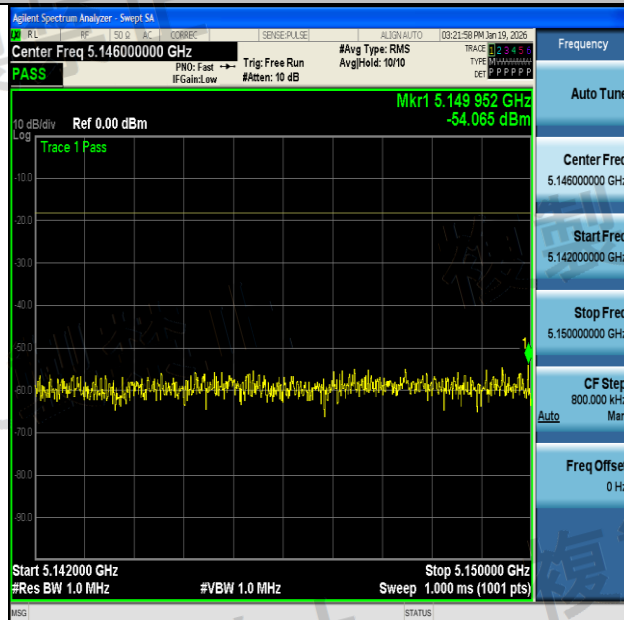


NTNV-11AC20MIMO-Ant2-5240-30~5142-PASS



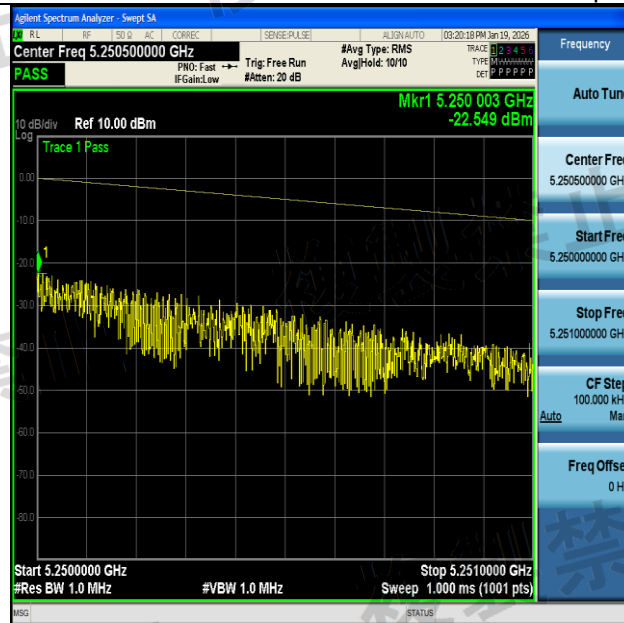


NTNV-11AC20MIMO-Ant1-5240-5142~5150-PASS

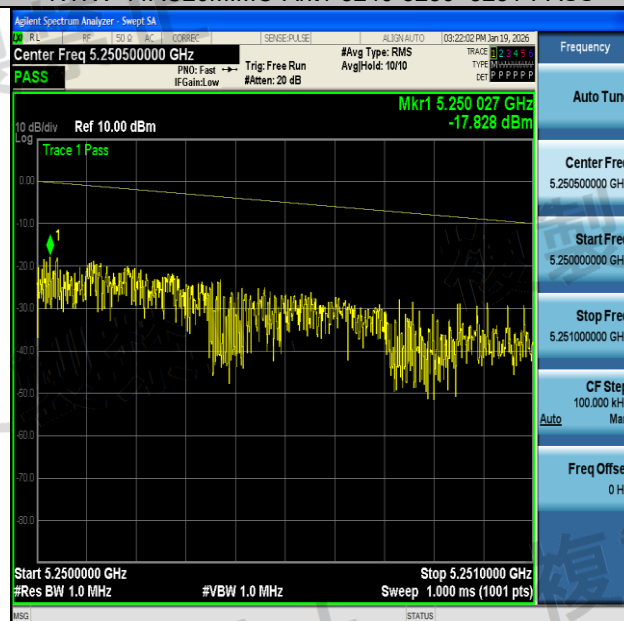


NTNV-11AC20MIMO-Ant2-5240-5142~5150-PASS



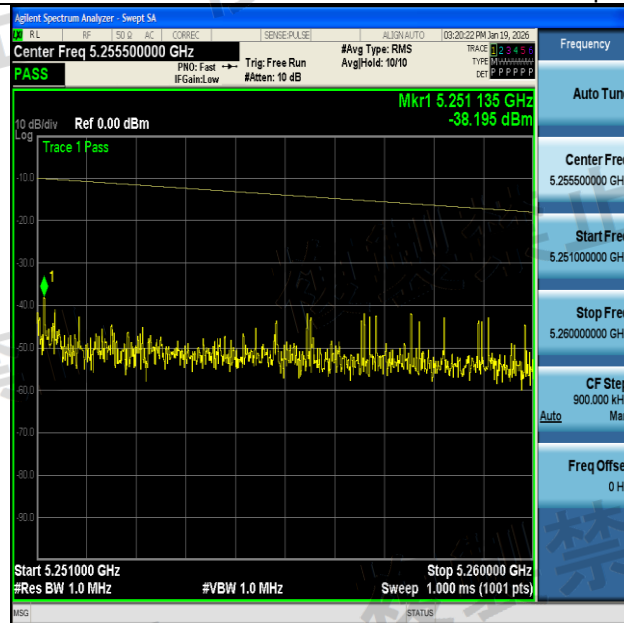


NTNV-11AC20MIMO-Ant1-5240-5250~5251-PASS

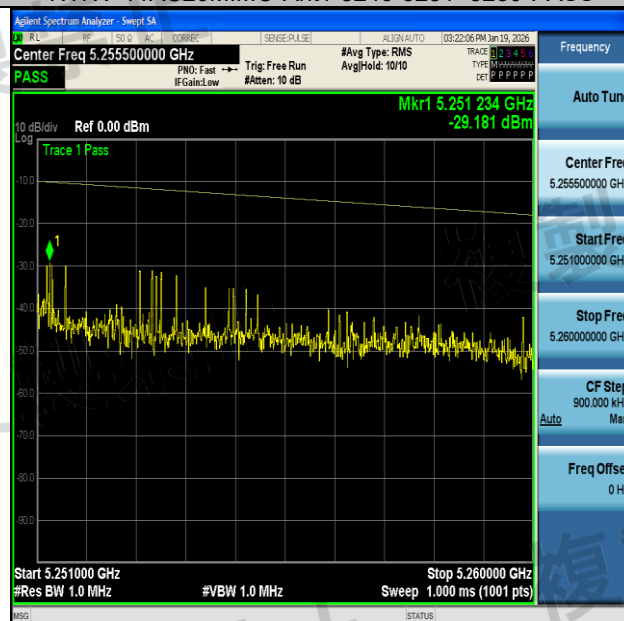


NTNV-11AC20MIMO-Ant2-5240-5250~5251-PASS



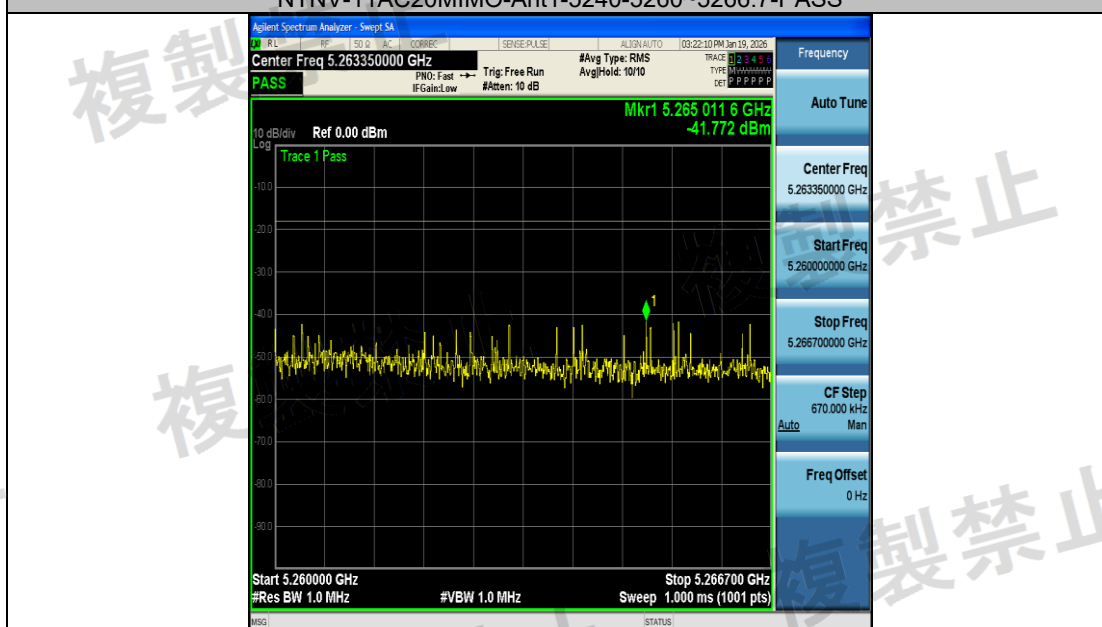
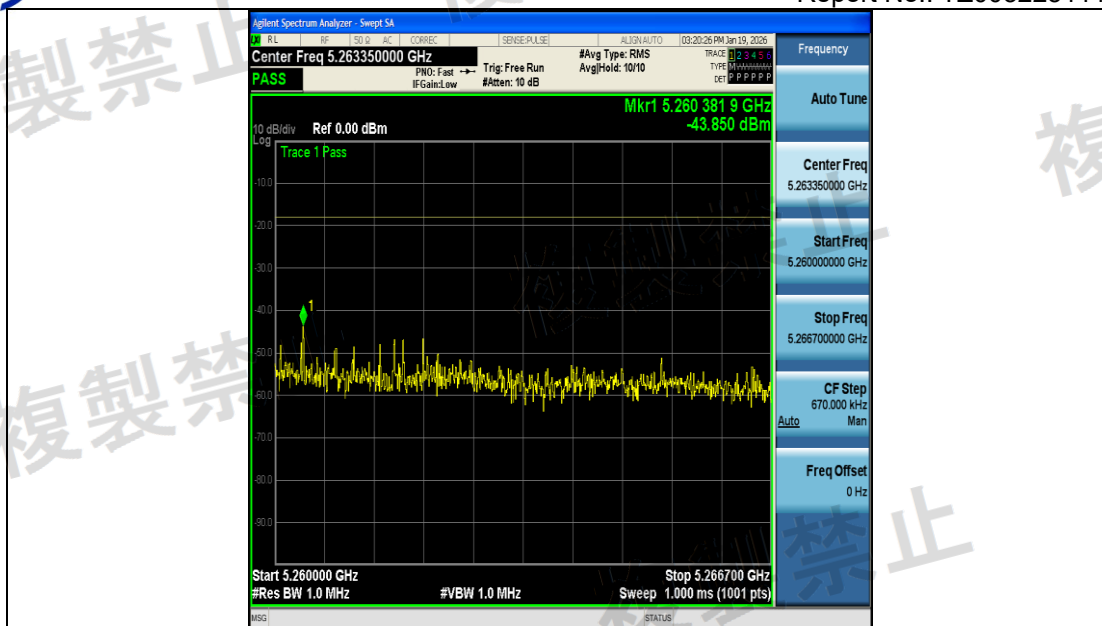


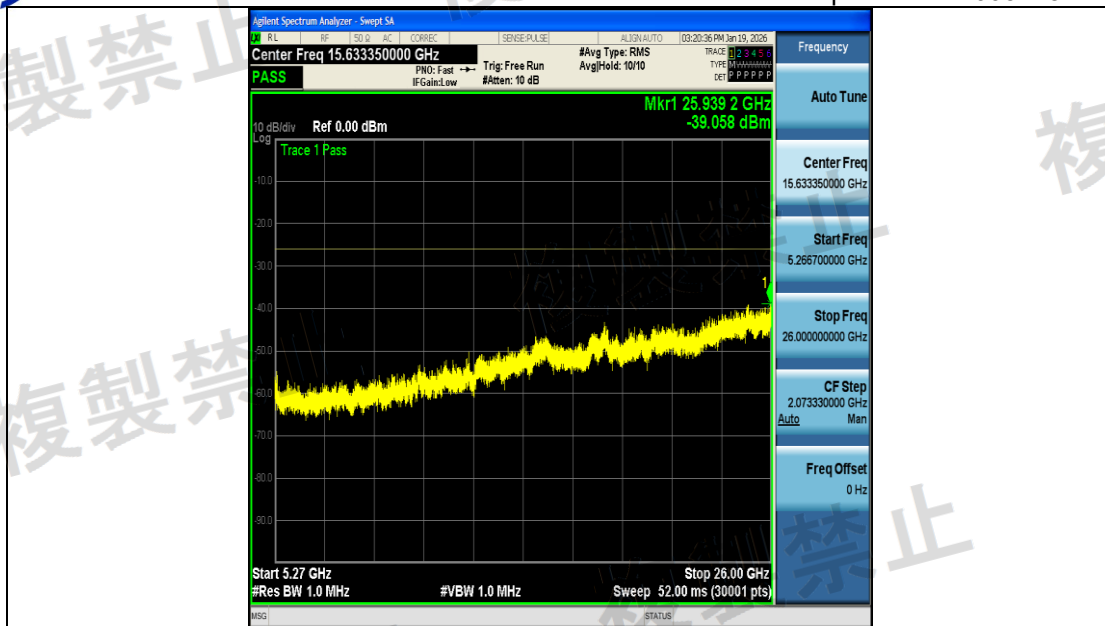
NTNV-11AC20MIMO-Ant1-5240-5251~5260-PASS



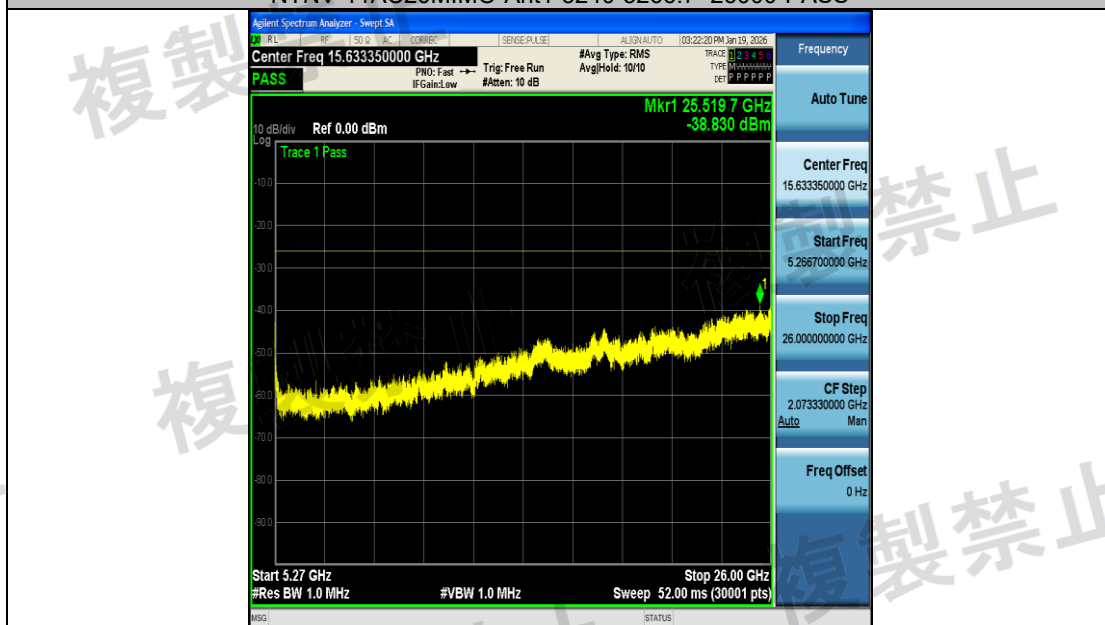
NTNV-11AC20MIMO-Ant2-5240-5251~5260-PASS





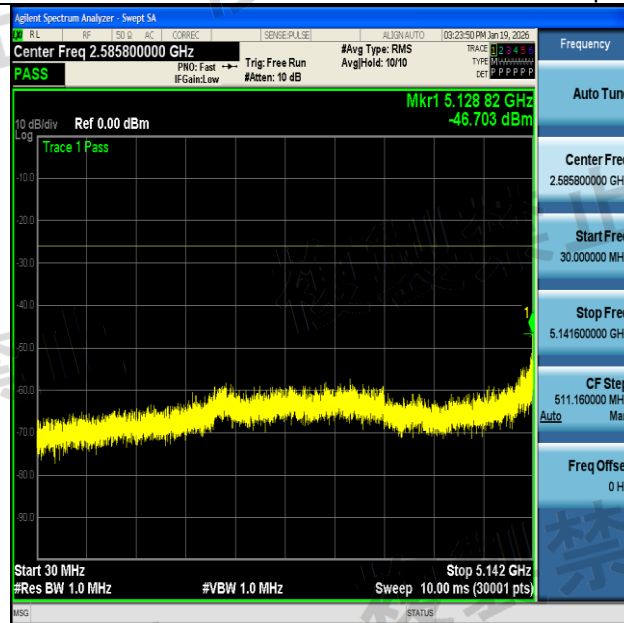


NTNV-11AC20MIMO-Ant1-5240-5266.7~26000-PASS

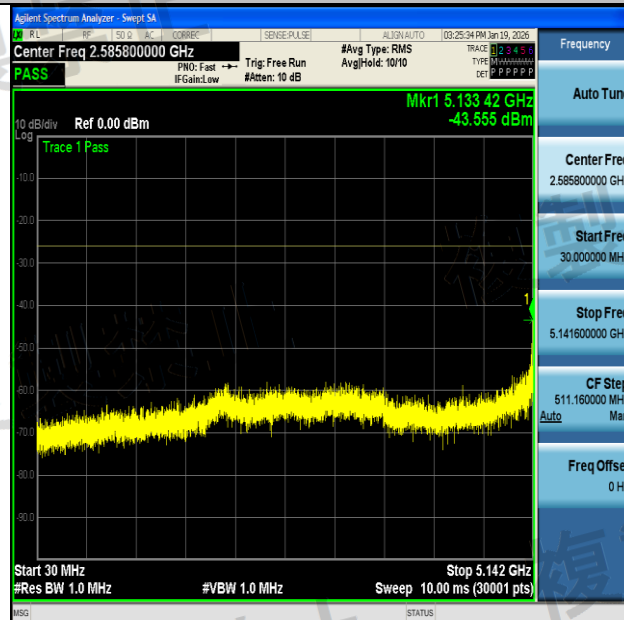


NTNV-11AC20MIMO-Ant2-5240-5266.7~26000-PASS



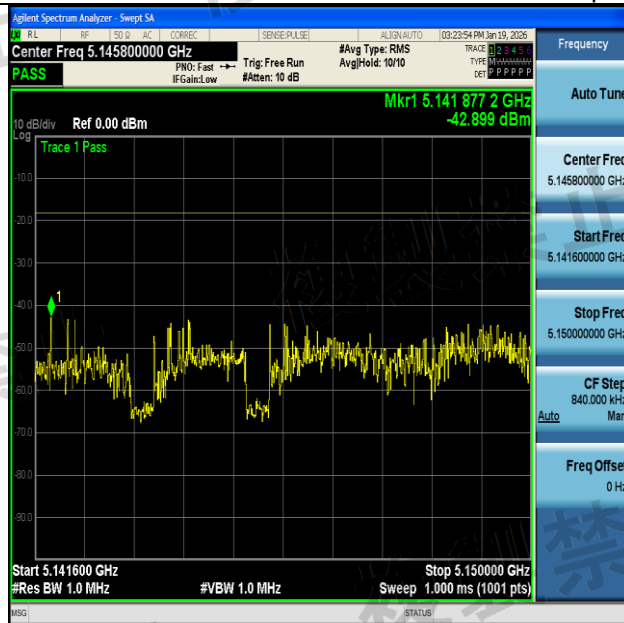


NTNV-11AC40MIMO-Ant1-5190-30~5141.6-PASS

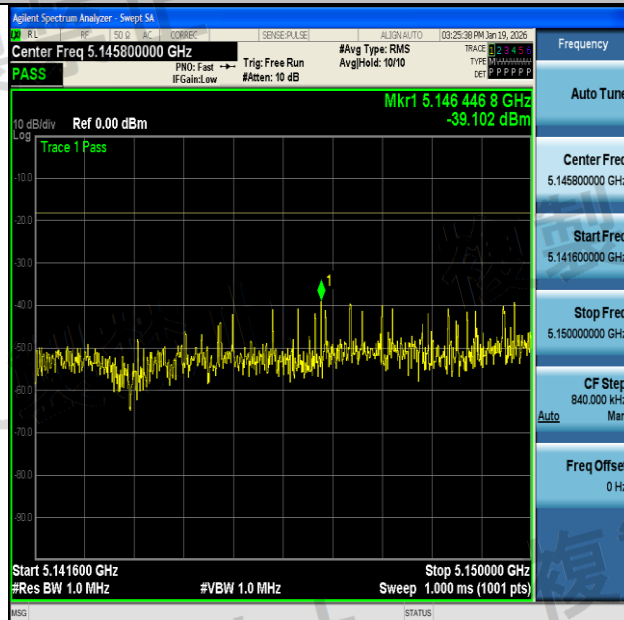


NTNV-11AC40MIMO-Ant2-5190-30~5141.6-PASS



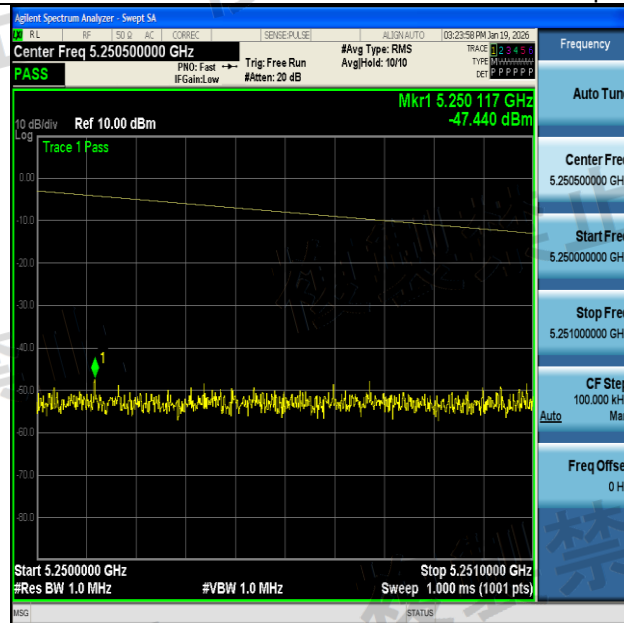


NTNV-11AC40MIMO-Ant1-5190-5141.6~5150-PASS

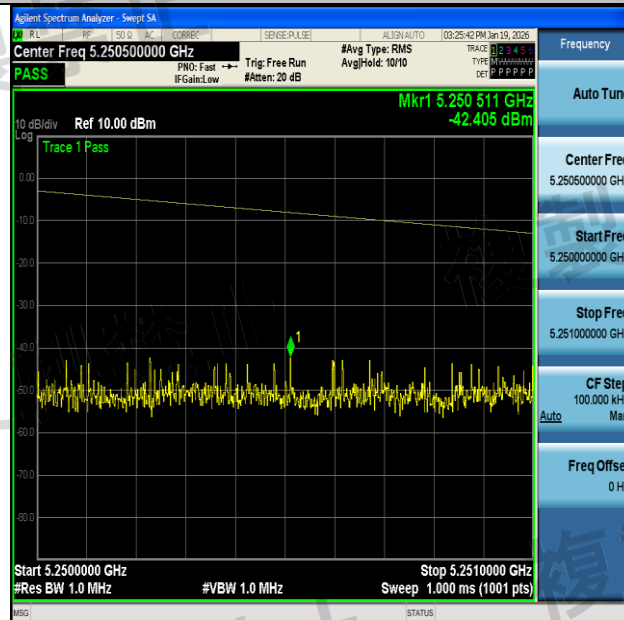


NTNV-11AC40MIMO-Ant2-5190-5141.6~5150-PASS



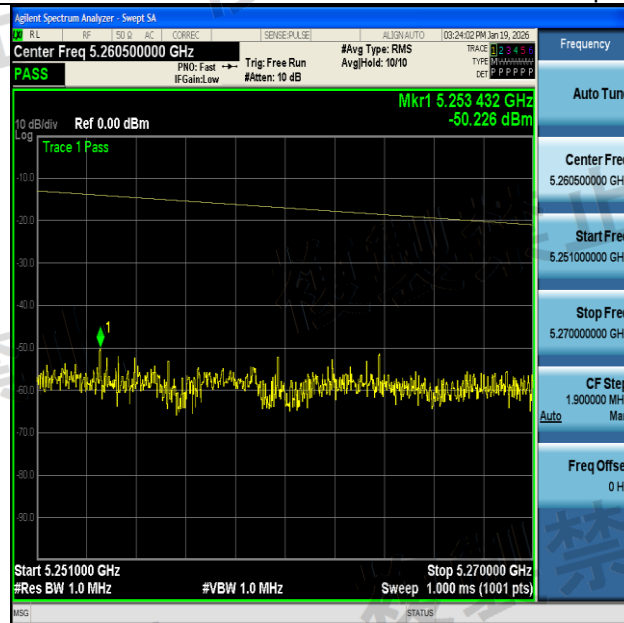


NTNV-11AC40MIMO-Ant1-5190-5250~5251-PASS

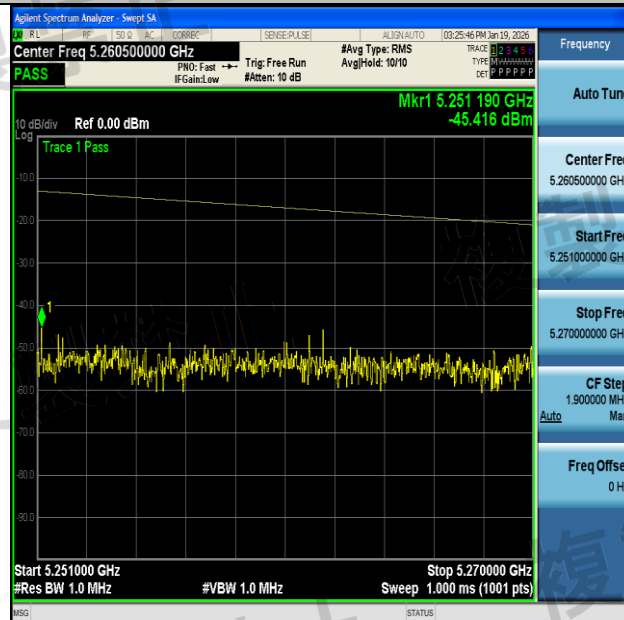


NTNV-11AC40MIMO-Ant2-5190-5250~5251-PASS



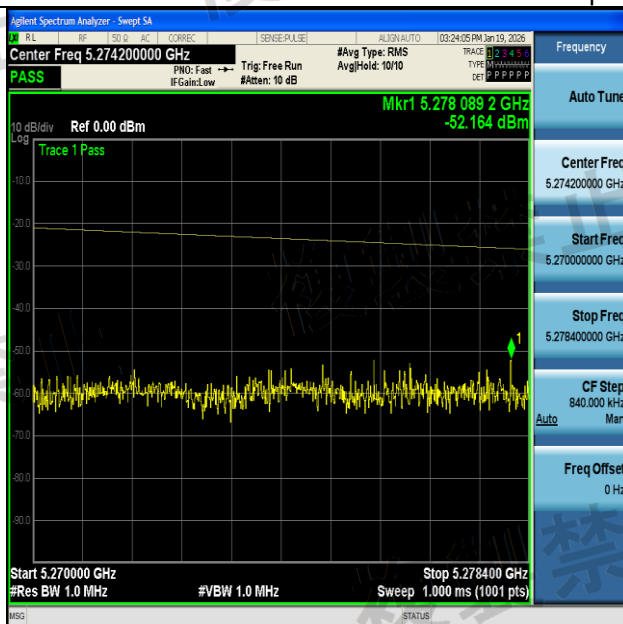


NTNV-11AC40MIMO-Ant1-5190-5251~5270-PASS

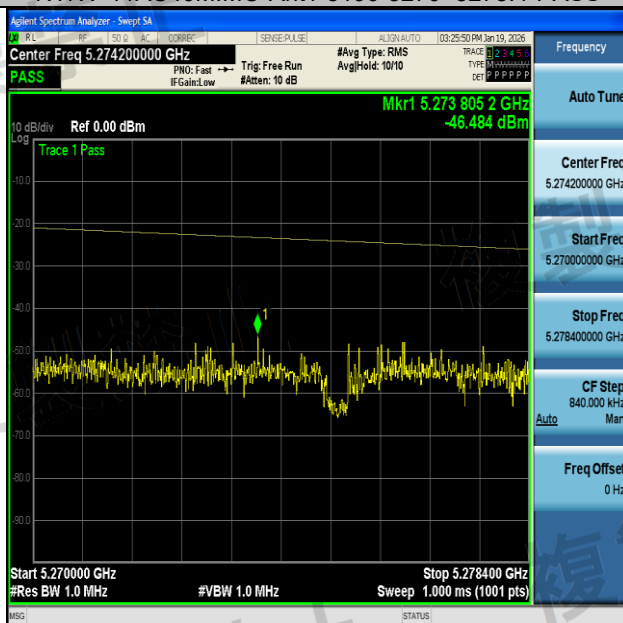


NTNV-11AC40MIMO-Ant2-5190-5251~5270-PASS



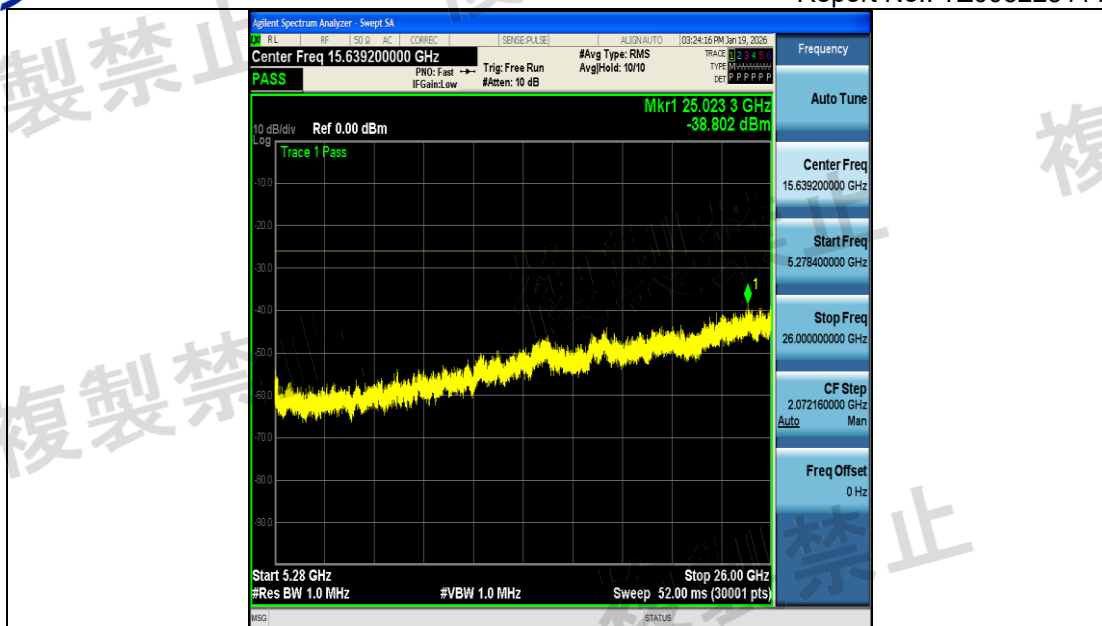


NTNV-11AC40MIMO-Ant1-5190~5270~5278.4-PASS

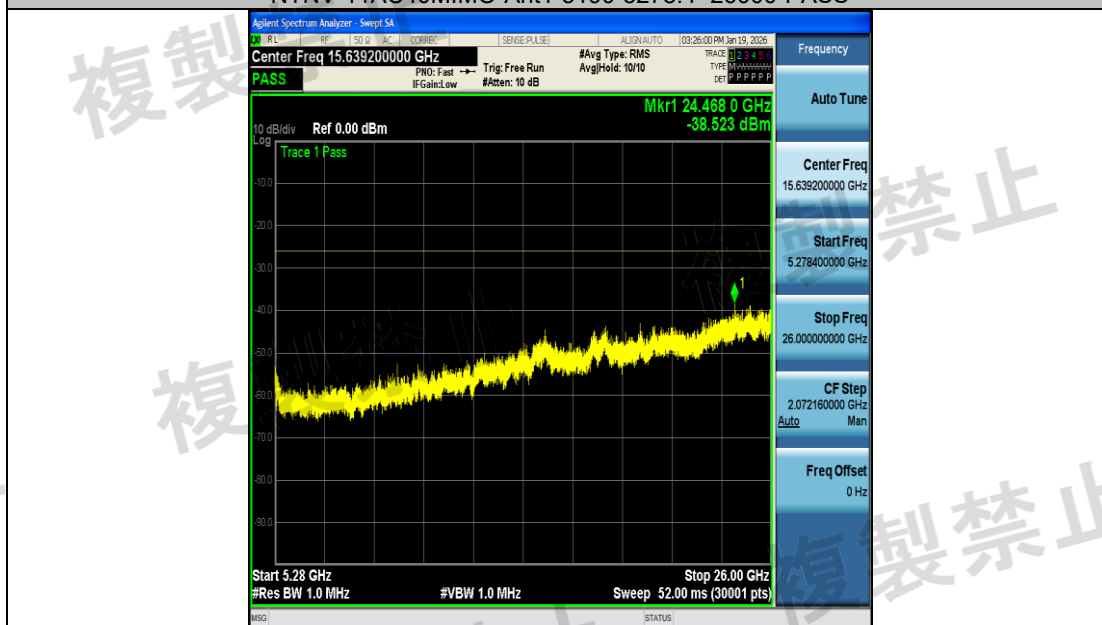


NTNV-11AC40MIMO-Ant2-5190~5270~5278.4-PASS



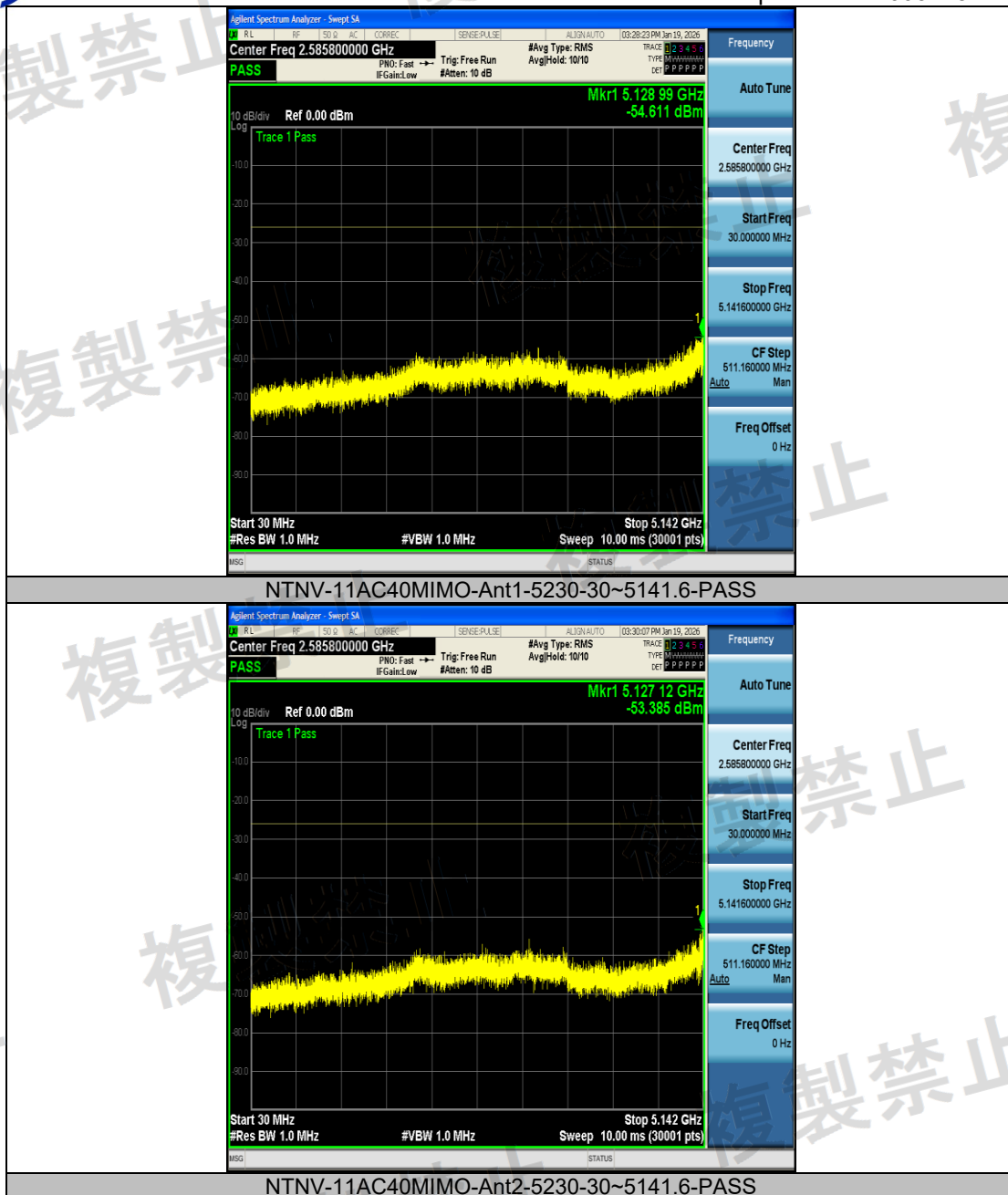


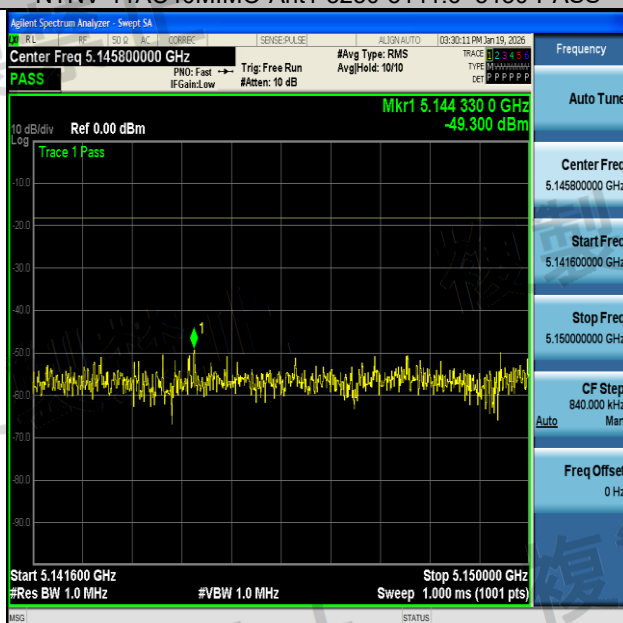
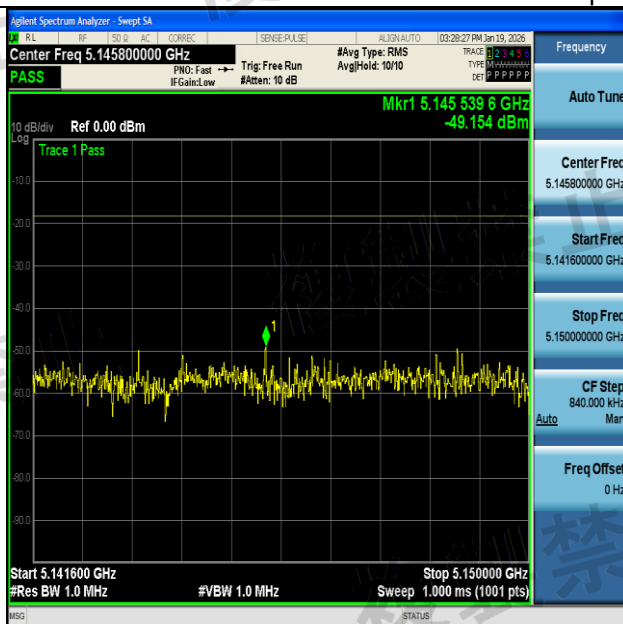
NTNV-11AC40MIMO-Ant1-5190-5278.4~26000-PASS

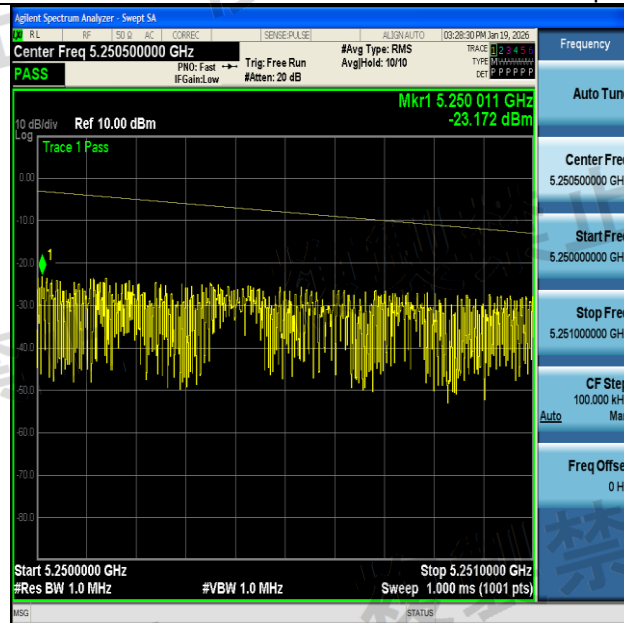


NTNV-11AC40MIMO-Ant2-5190-5278.4~26000-PASS

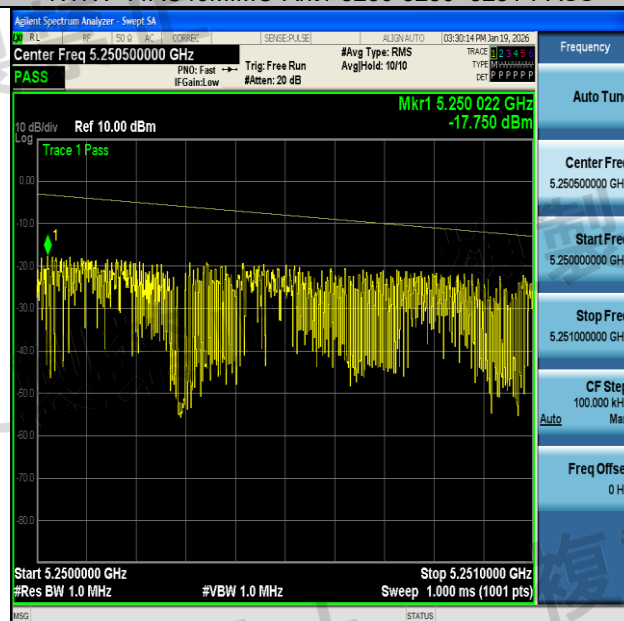






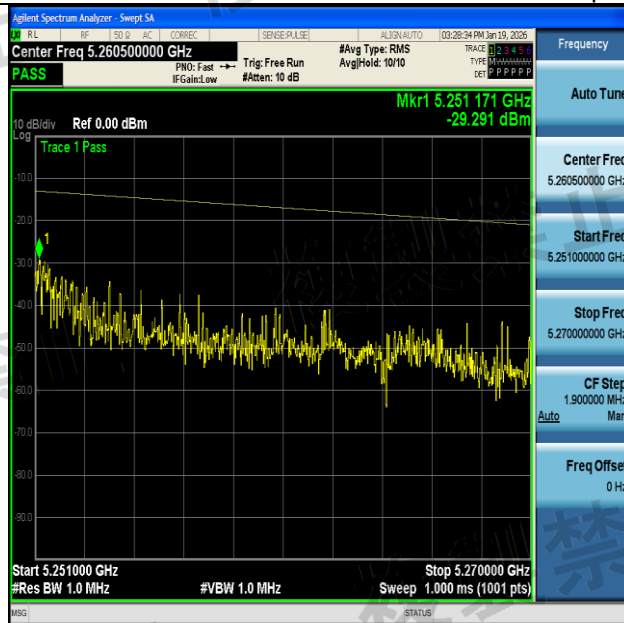


NTNV-11AC40MIMO-Ant1-5230-5250~5251-PASS

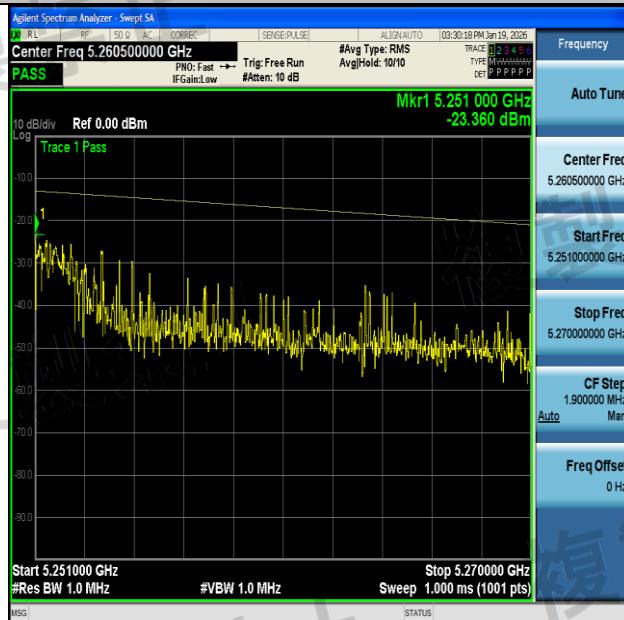


NTNV-11AC40MIMO-Ant2-5230-5250~5251-PASS



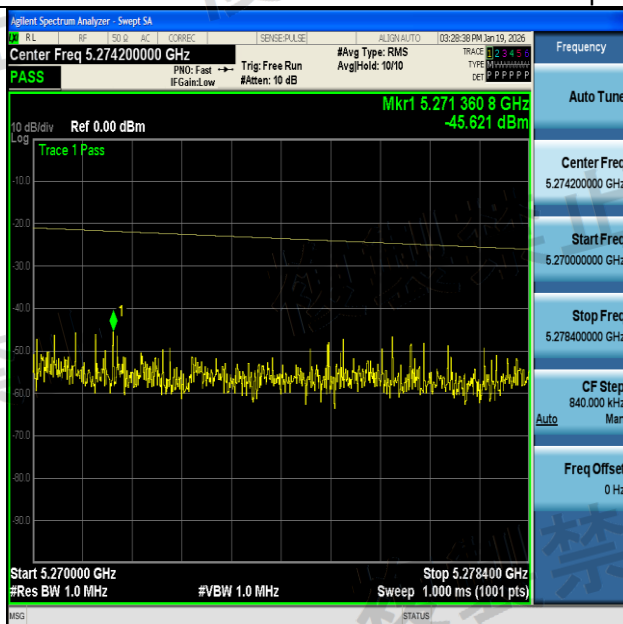


NTNV-11AC40MIMO-Ant1-5230-5251~5270-PASS

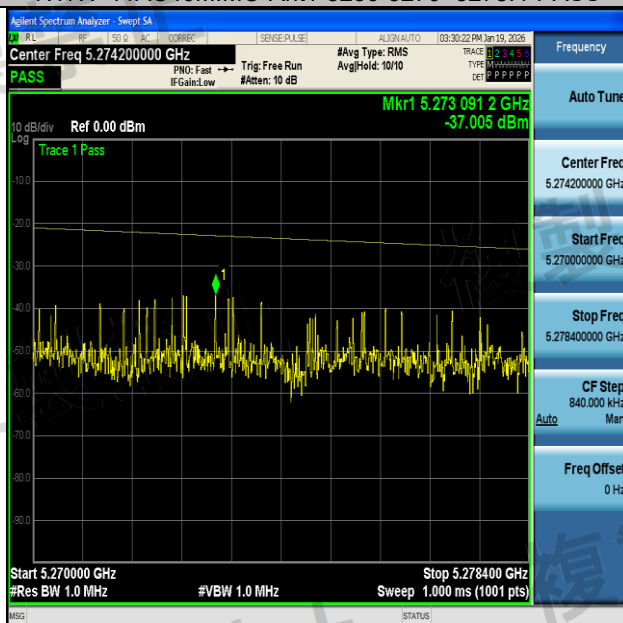


NTNV-11AC40MIMO-Ant2-5230-5251~5270-PASS



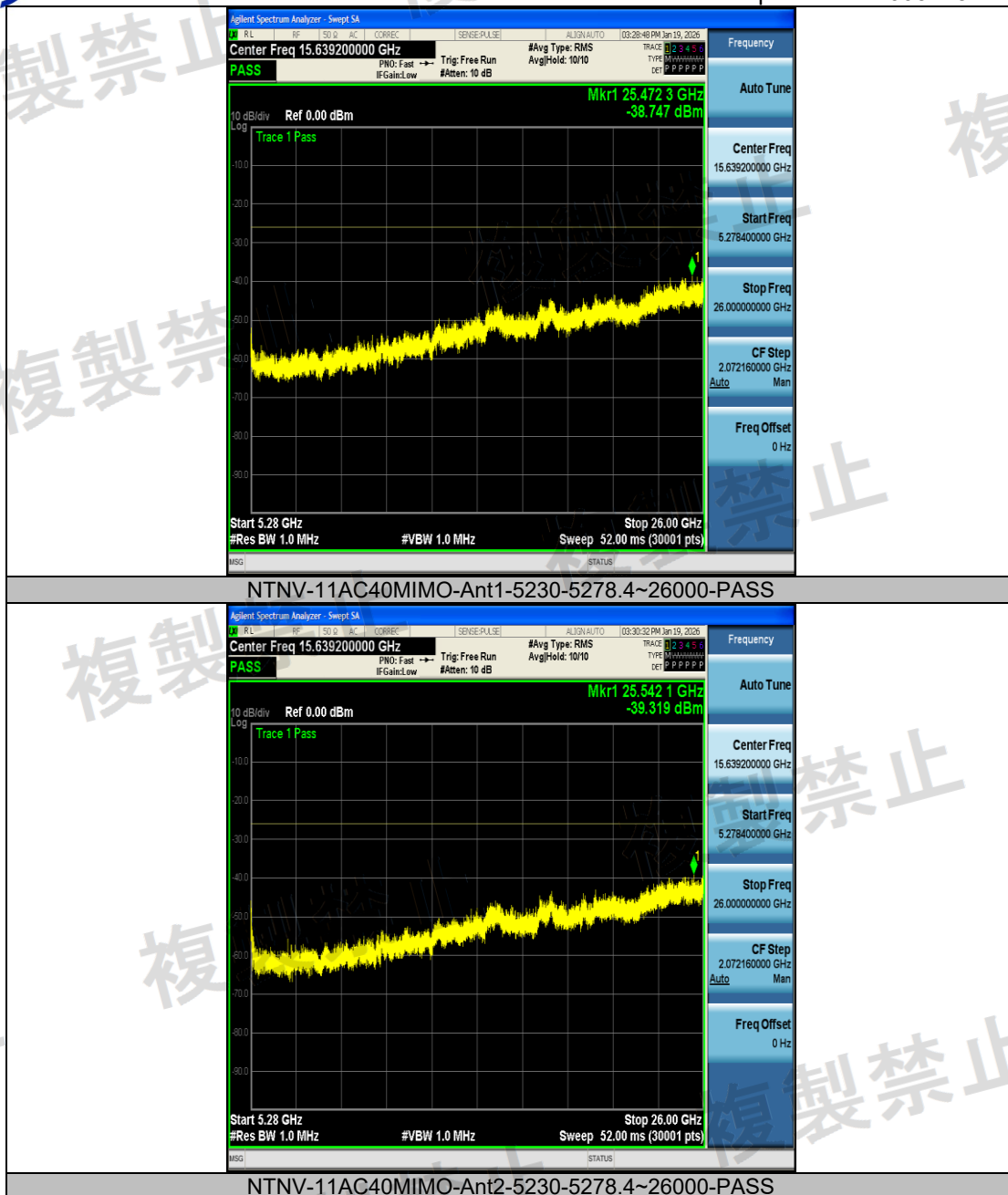


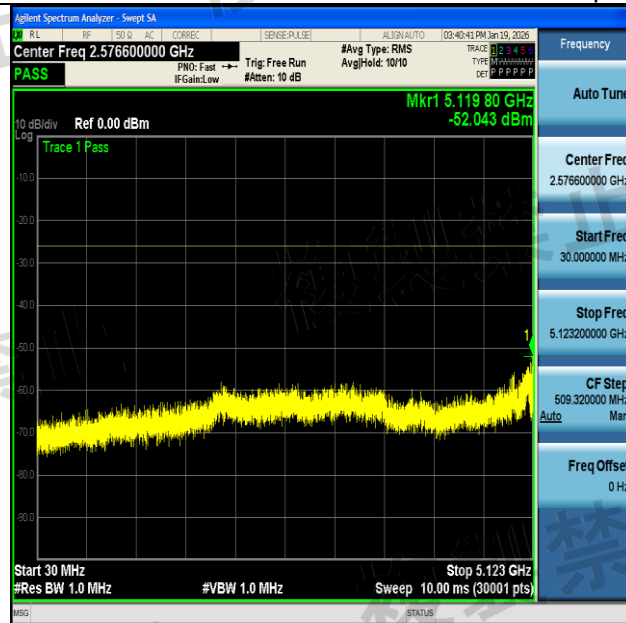
NTNV-11AC40MIMO-Ant1-5230~5270~5278.4-PASS



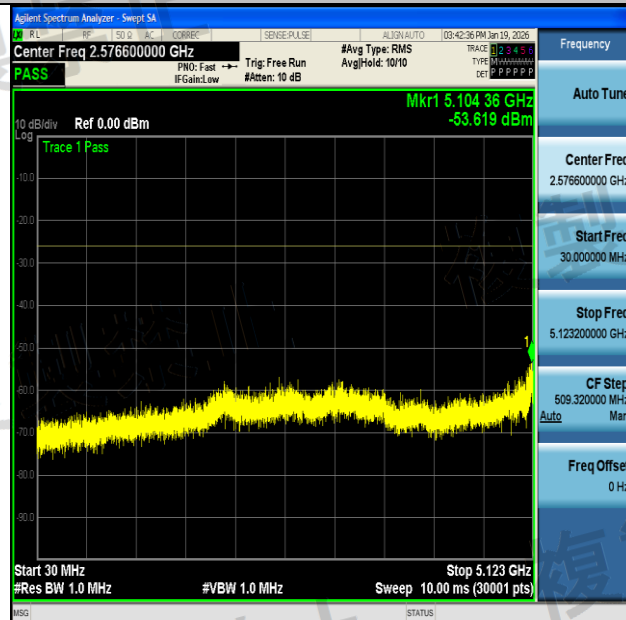
NTNV-11AC40MIMO-Ant2-5230~5270~5278.4-PASS





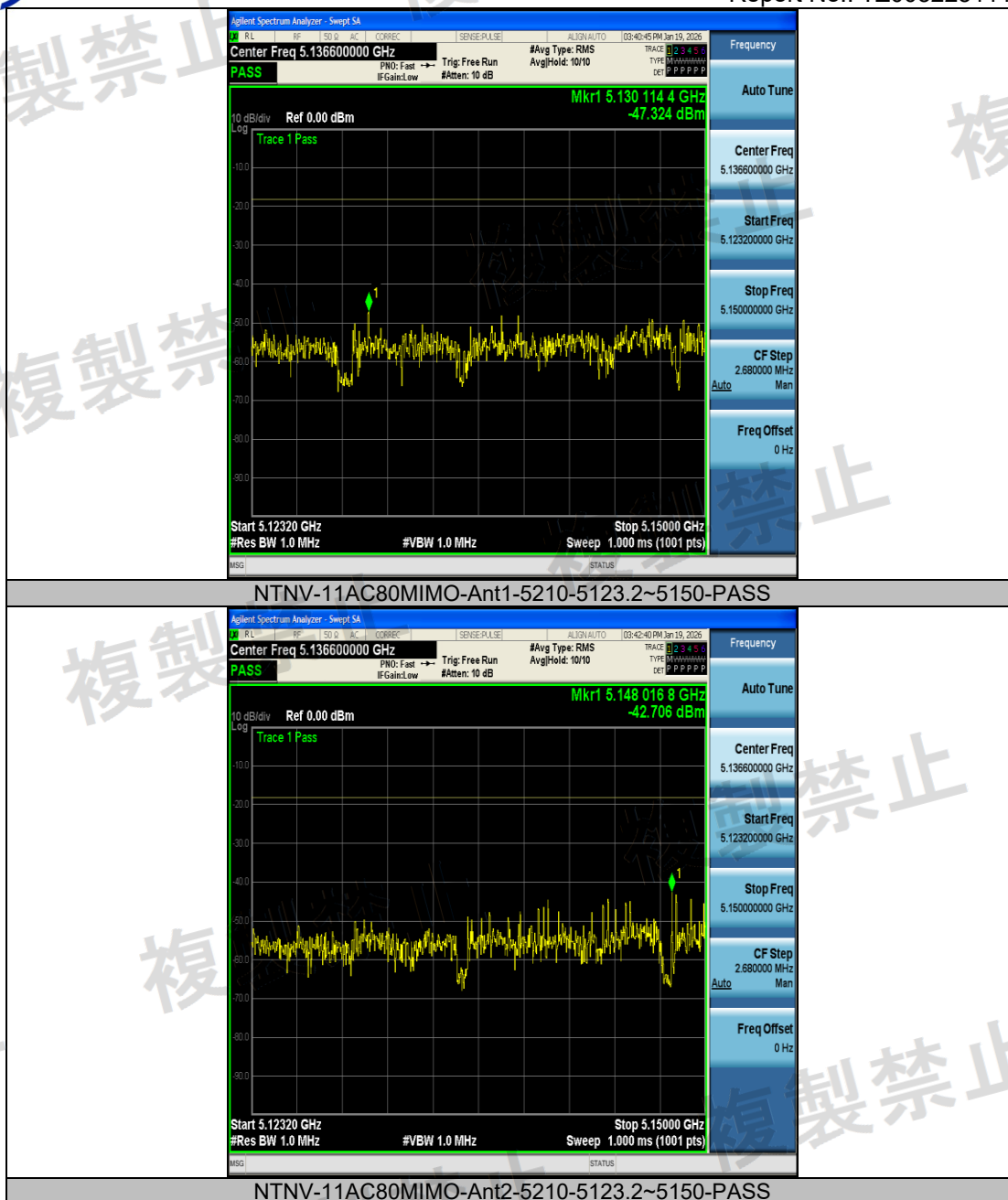


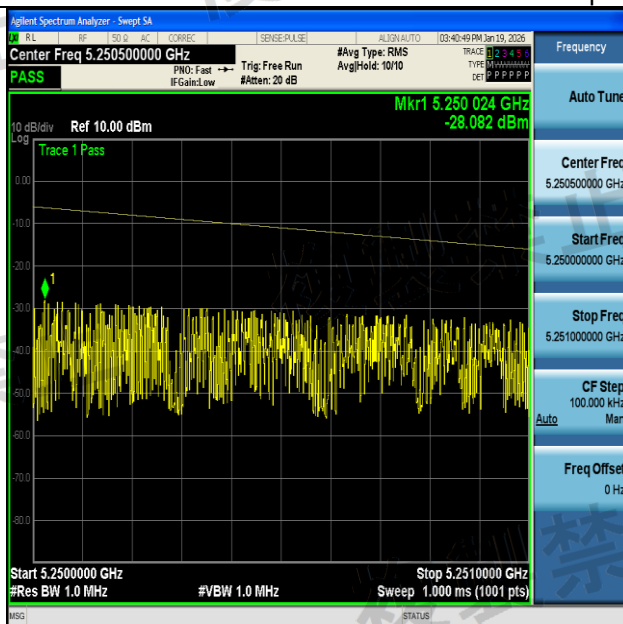
NTNV-11AC80MIMO-Ant1-5210-30~5123.2-PASS



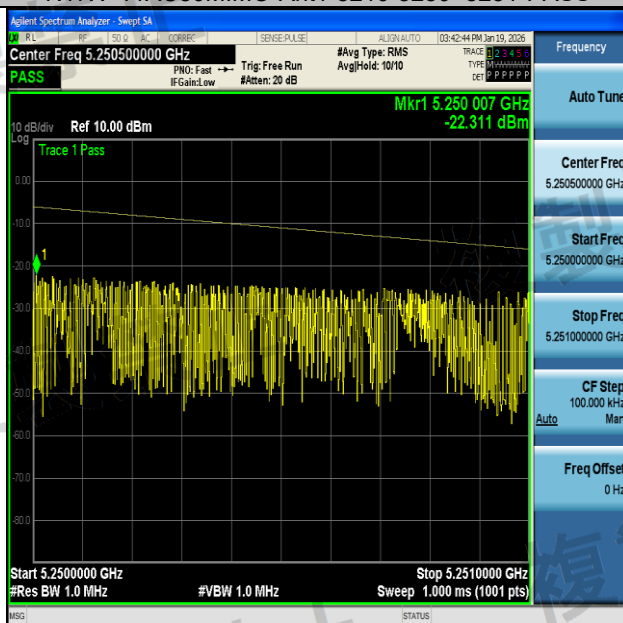
NTNV-11AC80MIMO-Ant2-5210-30~5123.2-PASS





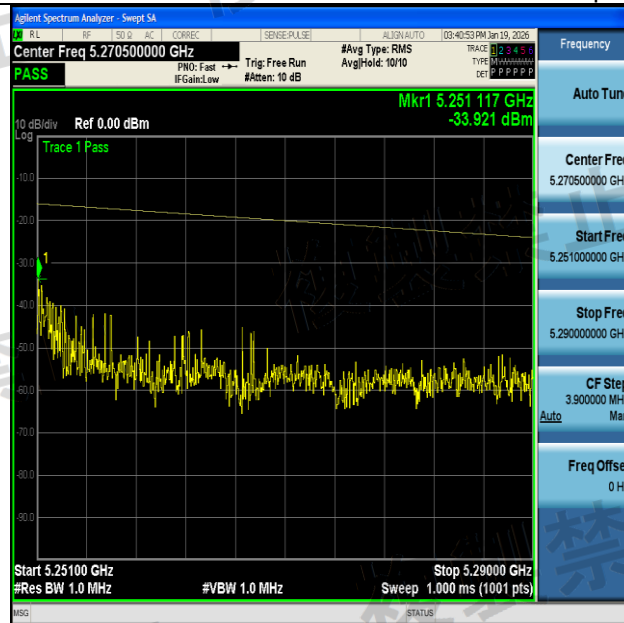


NTNV-11AC80MIMO-Ant1-5210-5250~5251-PASS

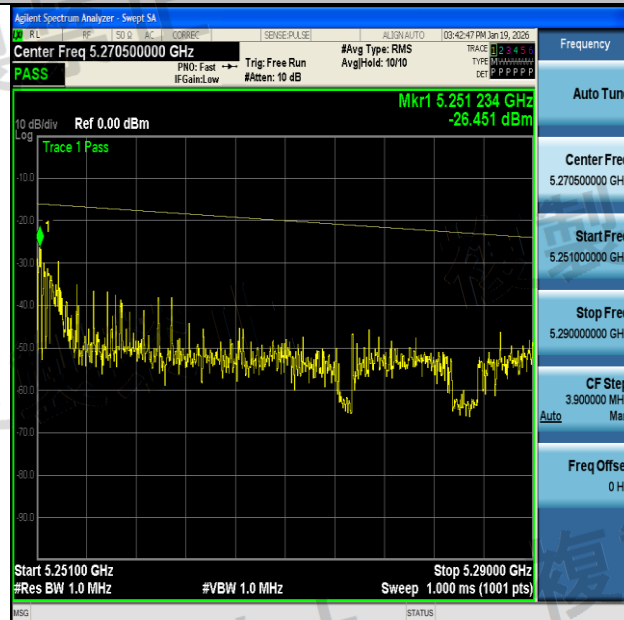


NTNV-11AC80MIMO-Ant2-5210-5250~5251-PASS



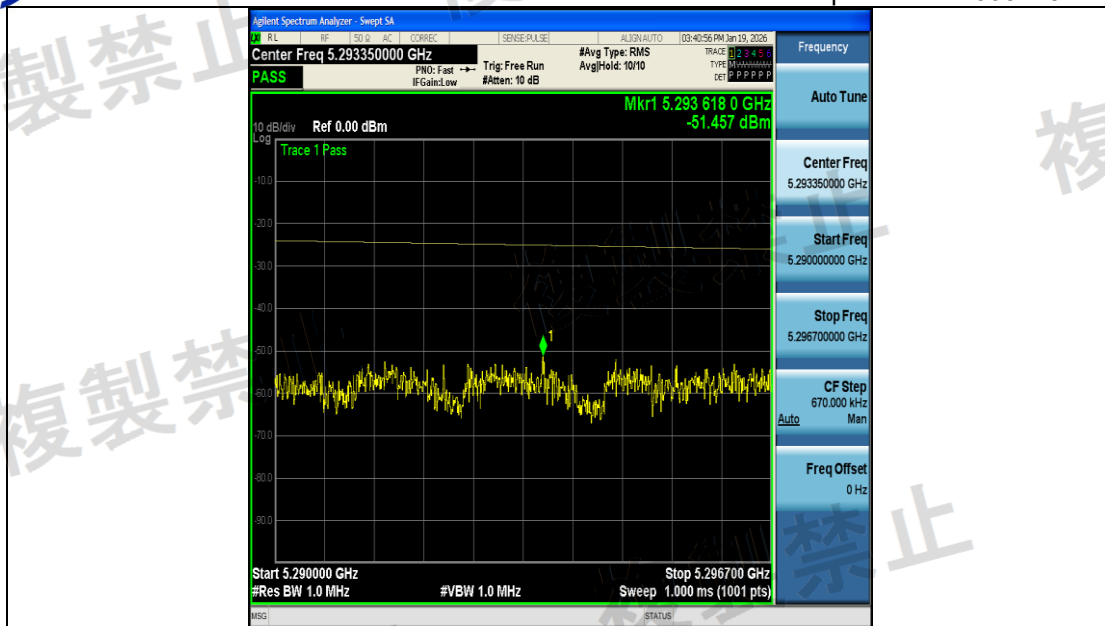


NTNV-11AC80MIMO-Ant1-5210-5251~5290-PASS

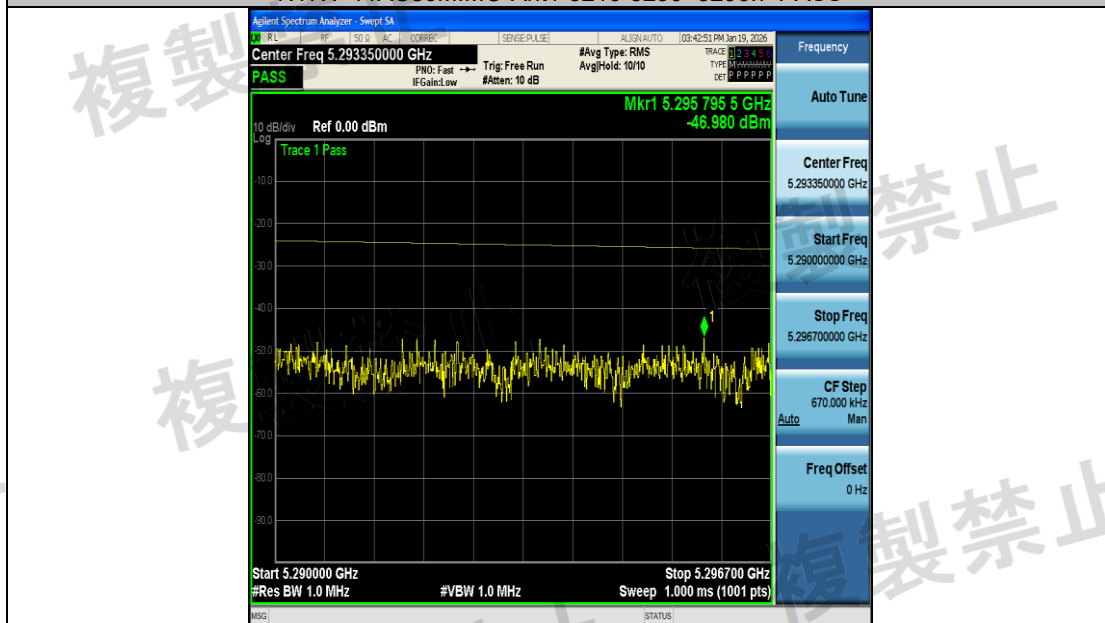


NTNV-11AC80MIMO-Ant2-5210-5251~5290-PASS



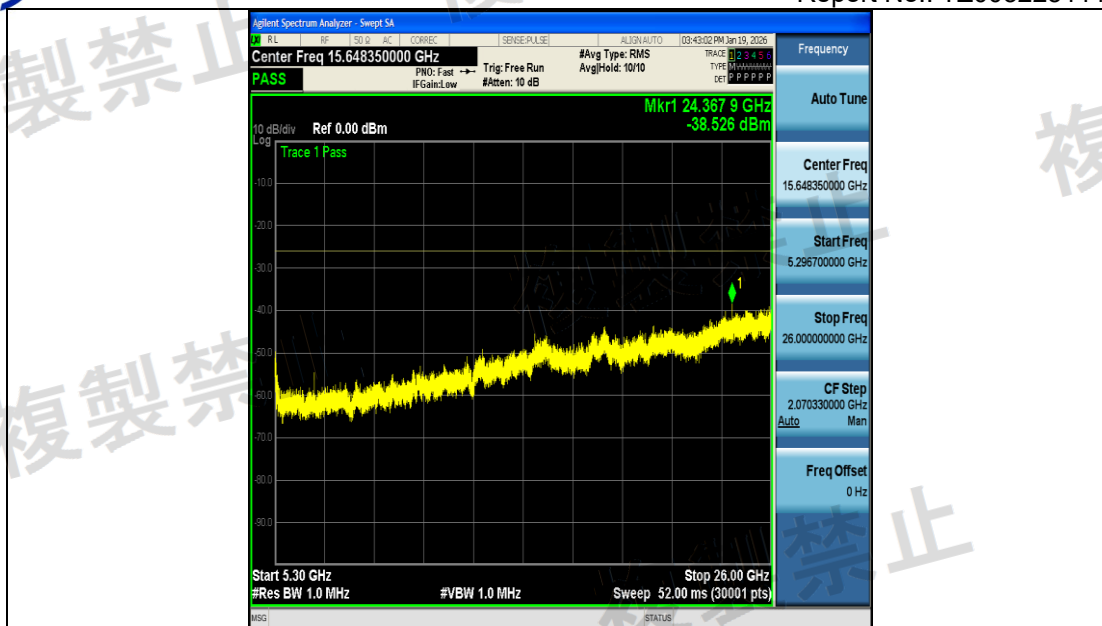


NTNV-11AC80MIMO-Ant1-5210-5290~5296.7-PASS

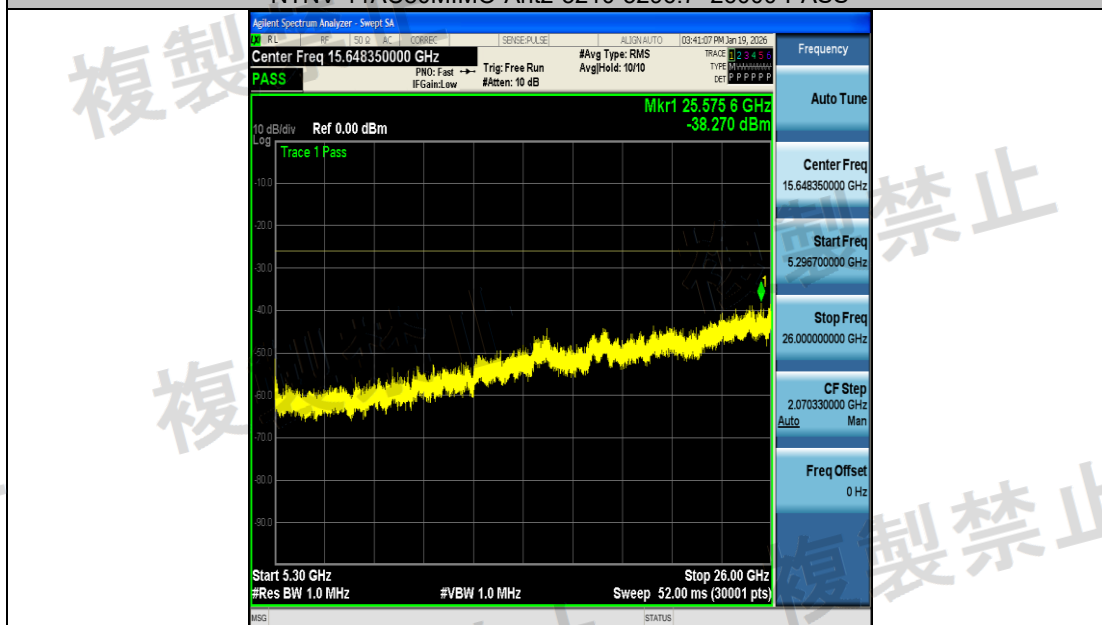


NTNV-11AC80MIMO-Ant2-5210-5290~5296.7-PASS





NTNV-11AC80MIMO-Ant2-5210-5296.7~26000-PASS



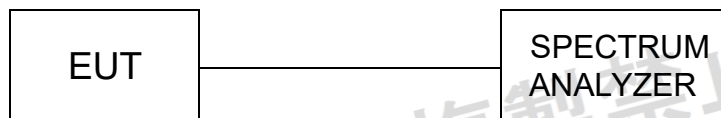
NTNV-11AC80MIMO-Ant1-5210-5296.7~26000-PASS





4.6. Limit of secondary radiated emissions

TEST CONFIGURATION



TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram as TEST CONFIGURATION shows.

EUT Condition: modulation

Spectrum Condition:

Frequency: 30MHz-26GHz

RBW:100KHz(30MHz-1GHz), 1MHz(1GHz-26GHz)

VBW:100KHz(30MHz-1GHz), 1MHz(1GHz-26GHz)

Sweep time:Auto

Dectector mode: Positive peak

Indication mode: max hold

LIMIT

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW or less at a frequency below 1 GHz and 20 nW or less at a frequency of 1 GHz or higher as measured using the circuit

TEST RESULTS

Test Condition	Test Mode	Antenna	Frequency [MHz]	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	11A	Ant1	5180	30~1000	653.10	-79.99	≤-54	0.01002	≤4	PASS
NTNV	11A	Ant2	5180	30~1000	883.36	-79.91	≤-54	0.01021	≤4	PASS
NTNV	11A	Ant1	5180	1000~26500	26403.10	-55.78	≤-47	2.64241	≤20	PASS
NTNV	11A	Ant2	5180	1000~26500	26021.85	-55.37	≤-47	2.90402	≤20	PASS
NTNV	11A	Ant1	5200	30~1000	741.98	-79.46	≤-54	0.01132	≤4	PASS
NTNV	11A	Ant2	5200	30~1000	972.96	-79.51	≤-54	0.01119	≤4	PASS
NTNV	11A	Ant1	5200	1000~26500	25472.30	-56.45	≤-47	2.26464	≤20	PASS
NTNV	11A	Ant2	5200	1000~26500	25974.67	-55.82	≤-47	2.61818	≤20	PASS
NTNV	11A	Ant1	5240	30~1000	824.31	-79.53	≤-54	0.01114	≤4	PASS
NTNV	11A	Ant2	5240	30~1000	857.29	-79.63	≤-54	0.01089	≤4	PASS
NTNV	11A	Ant1	5240	1000~26500	26039.70	-55.53	≤-47	2.79898	≤20	PASS
NTNV	11A	Ant2	5240	1000~26500	26062.65	-56.48	≤-47	2.24905	≤20	PASS
NTNV	11N20MIMO	Ant1	5180	30~1000	921.55	-79.11	≤-54	0.01227	≤4	PASS
NTNV	11N20MIMO	Ant2	5180	30~1000	905.67	-79.05	≤-54	0.01245	≤4	PASS
NTNV	11N20MIMO	Ant1	5180	1000~2650	26039.7	-	≤-47	2.8054	≤20	PASS





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				0	0	55.52		3		
NTNV	11N20MIMO	Ant2	5180	1000~2650 0	25959.3 7	- 56.50	≤-47	2.2387 2	≤20	PASS
NTNV	11N20MIMO	Ant1	5200	30~1000	881.78	- 80.39	≤-54	0.0091 4	≤4	PASS
NTNV	11N20MIMO	Ant2	5200	30~1000	920.22	- 79.89	≤-54	0.0102 6	≤4	PASS
NTNV	11N20MIMO	Ant1	5200	1000~2650 0	26148.0 8	- 56.27	≤-47	2.3604 8	≤20	PASS
NTNV	11N20MIMO	Ant2	5200	1000~2650 0	26095.8 0	- 56.41	≤-47	2.2856 0	≤20	PASS
NTNV	11N20MIMO	Ant1	5240	30~1000	687.66	- 79.67	≤-54	0.0107 9	≤4	PASS
NTNV	11N20MIMO	Ant2	5240	30~1000	904.21	- 79.94	≤-54	0.0101 4	≤4	PASS
NTNV	11N20MIMO	Ant1	5240	1000~2650 0	25955.5 5	- 56.11	≤-47	2.4490 6	≤20	PASS
NTNV	11N20MIMO	Ant2	5240	1000~2650 0	26141.7 1	- 55.61	≤-47	2.7478 9	≤20	PASS
NTNV	11N40MIMO	Ant1	5190	30~1000	910.64	- 78.30	≤-54	0.0147 9	≤4	PASS
NTNV	11N40MIMO	Ant2	5190	30~1000	893.66	- 79.48	≤-54	0.0112 7	≤4	PASS
NTNV	11N40MIMO	Ant1	5190	1000~2650 0	25023.4 8	- 55.25	≤-47	2.9853 8	≤20	PASS
NTNV	11N40MIMO	Ant2	5190	1000~2650 0	26368.6 7	- 56.93	≤-47	2.0276 8	≤20	PASS
NTNV	11N40MIMO	Ant1	5230	30~1000	773.63	- 79.54	≤-54	0.0111 2	≤4	PASS
NTNV	11N40MIMO	Ant2	5230	30~1000	537.80	- 79.63	≤-54	0.0108 9	≤4	PASS
NTNV	11N40MIMO	Ant1	5230	1000~2650 0	25093.6 0	- 56.29	≤-47	2.3496 3	≤20	PASS
NTNV	11N40MIMO	Ant2	5230	1000~2650 0	26025.6 8	- 55.60	≤-47	2.7542 3	≤20	PASS
NTNV	11AC20MIMO	Ant1	5180	30~1000	875.72	- 79.67	≤-54	0.0107 9	≤4	PASS
NTNV	11AC20MIMO	Ant2	5180	30~1000	740.65	- 79.86	≤-54	0.0103 3	≤4	PASS
NTNV	11AC20MIMO	Ant1	5180	1000~2650 0	25071.9 3	- 56.11	≤-47	2.4490 6	≤20	PASS
NTNV	11AC20MIMO	Ant2	5180	1000~2650 0	25028.5 8	- 56.30	≤-47	2.3442 3	≤20	PASS
NTNV	11AC20MIMO	Ant1	5200	30~1000	995.64	- 79.85	≤-54	0.0103 5	≤4	PASS
NTNV	11AC20MIMO	Ant2	5200	30~1000	841.53	- 79.55	≤-54	0.0110 9	≤4	PASS
NTNV	11AC20MIMO	Ant1	5200	1000~2650 0	26000.1 8	- 56.30	≤-47	2.3442 3	≤20	PASS
NTNV	11AC20MIMO	Ant2	5200	1000~2650 0	26343.1 7	- 55.70	≤-47	2.6915 3	≤20	PASS
NTNV	11AC20MIMO	Ant1	5240	30~1000	724.76	- 79.42	≤-54	0.0114 3	≤4	PASS
NTNV	11AC20MIMO	Ant2	5240	30~1000	898.39	- 79.50	≤-54	0.0112 2	≤4	PASS
NTNV	11AC20MIMO	Ant1	5240	1000~2650 0	24531.3 0	- 56.69	≤-47	2.1428 9	≤20	PASS
NTNV	11AC20MIMO	Ant2	5240	1000~2650 0	26086.8 8	- 55.99	≤-47	2.5176 8	≤20	PASS
NTNV	11AC40MIMO	Ant1	5190	30~1000	908.70	- 78.48	≤-54	0.0141 9	≤4	PASS
NTNV	11AC40MIMO	Ant2	5190	30~1000	757.02	- 79.75	≤-54	0.0105 9	≤4	PASS
NTNV	11AC40MIMO	Ant1	5190	1000~2650 0	26139.1 6	- 55.88	≤-47	2.5822 6	≤20	PASS
NTNV	11AC40MIMO	Ant2	5190	1000~2650 0	25000.5 3	- 56.71	≤-47	2.1330 4	≤20	PASS





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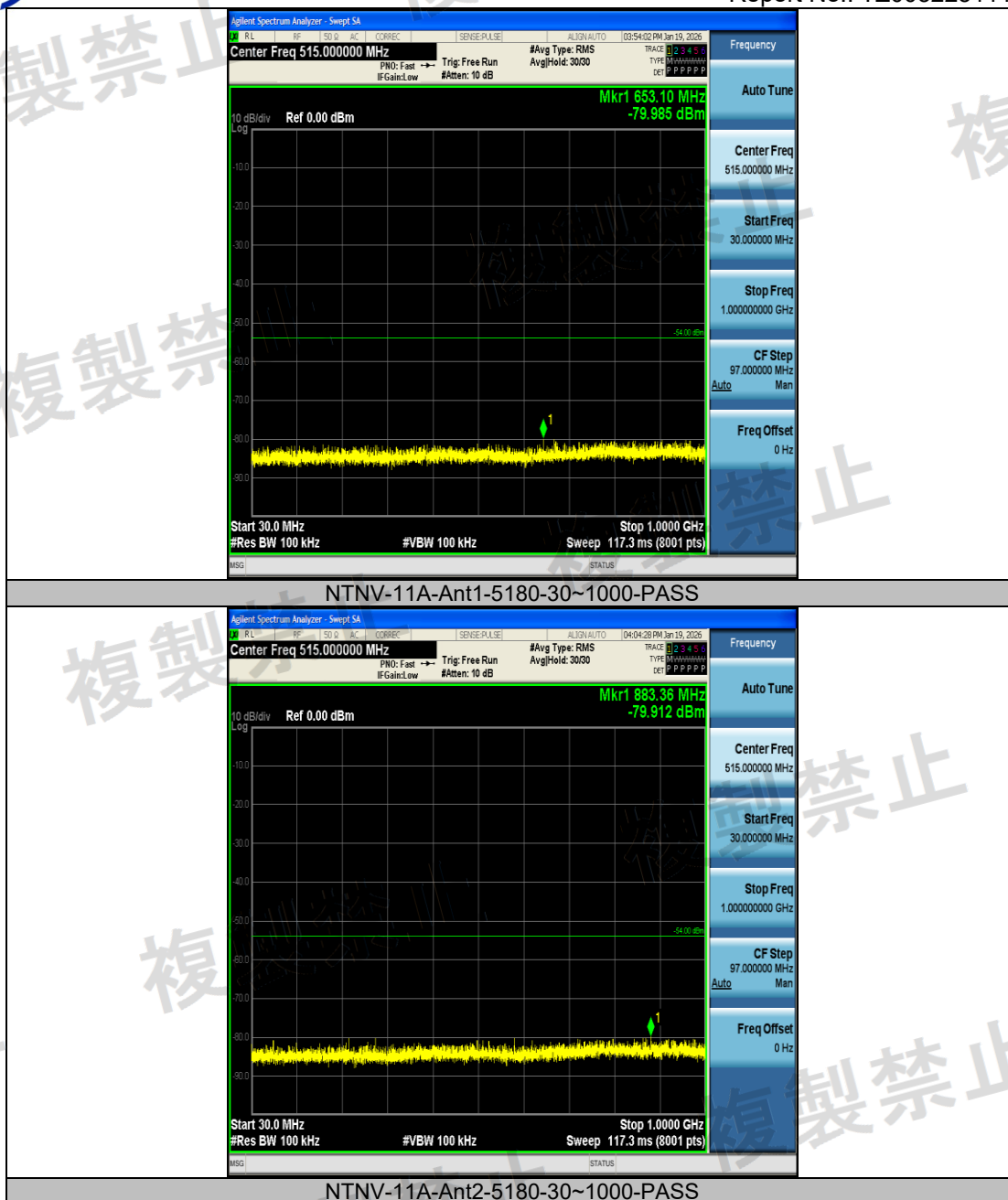
NTNV	11AC40MIM O	Ant1	5230	30~1000	930.52	- 79.59	≤-54	0.0109 9	≤4	PASS
NTNV	11AC40MIM O	Ant2	5230	30~1000	994.91	- 79.71	≤-54	0.0106 9	≤4	PASS
NTNV	11AC40MIM O	Ant1	5230	1000~2650 0	25964.4 7	- 56.29	≤-47	2.3496 3	≤20	PASS
NTNV	11AC40MIM O	Ant2	5230	1000~2650 0	25997.6 2	- 55.88	≤-47	2.5822 6	≤20	PASS
NTNV	11AC80MIM O	Ant1	5210	30~1000	799.82	- 80.01	≤-54	0.0099 8	≤4	PASS
NTNV	11AC80MIM O	Ant2	5210	30~1000	895.12	- 79.23	≤-54	0.0119 4	≤4	PASS
NTNV	11AC80MIM O	Ant1	5210	1000~2650 0	26099.6 3	- 56.29	≤-47	2.3496 3	≤20	PASS
NTNV	11AC80MIM O	Ant2	5210	1000~2650 0	26033.3 3	- 56.05	≤-47	2.4831 3	≤20	PASS

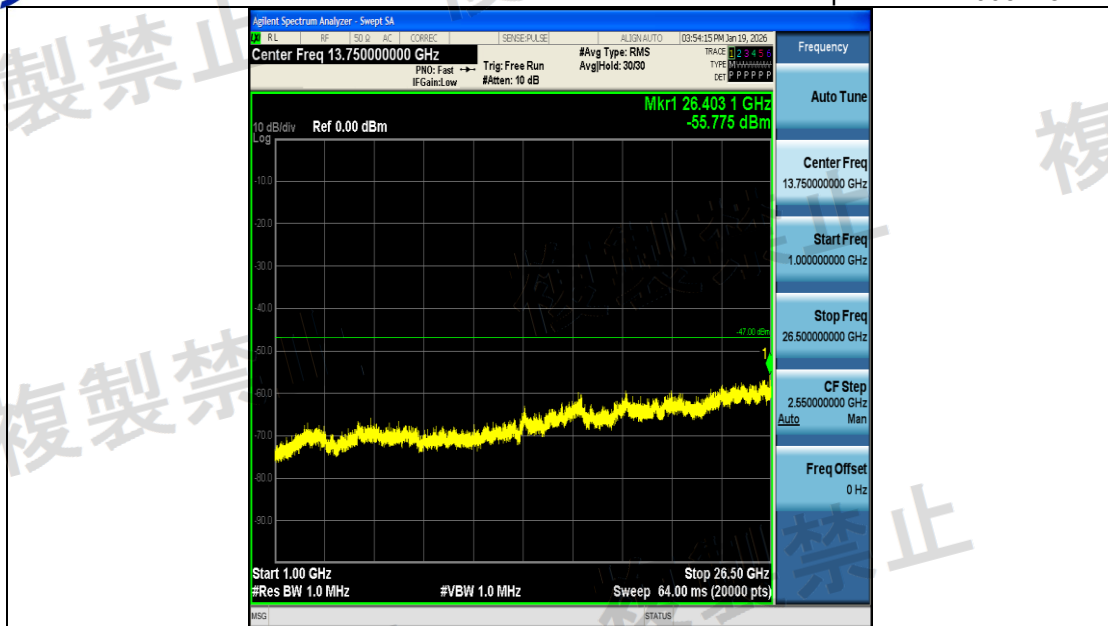
Note: 1. The product was tested at 25 °C and 55% humidity condition;

2. All condition has been tested, list the worst case in this item

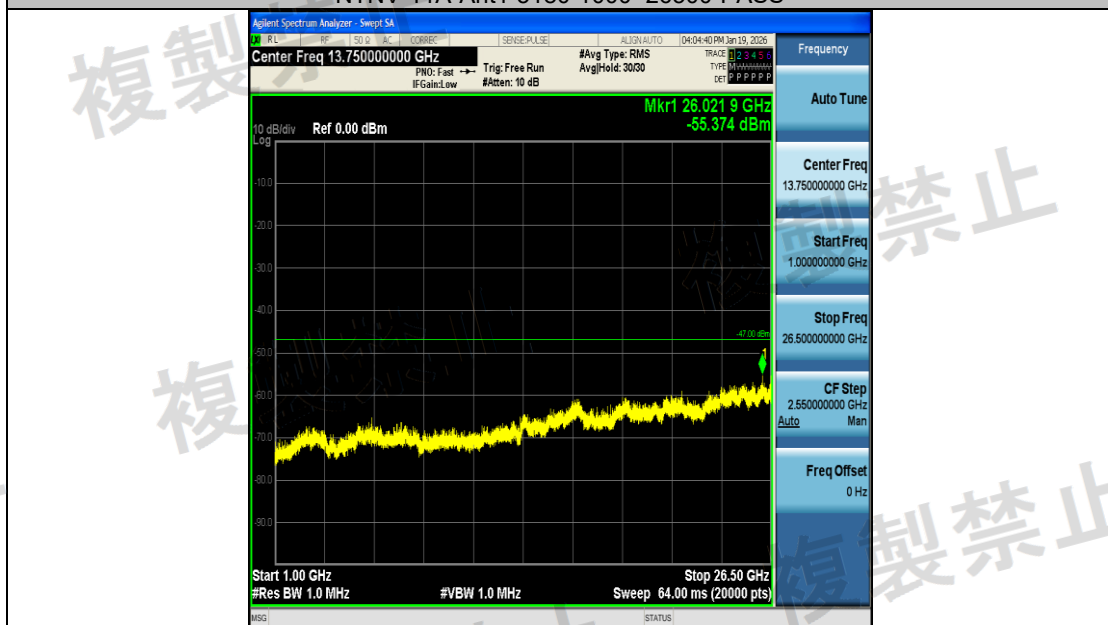
Test plot as follows:





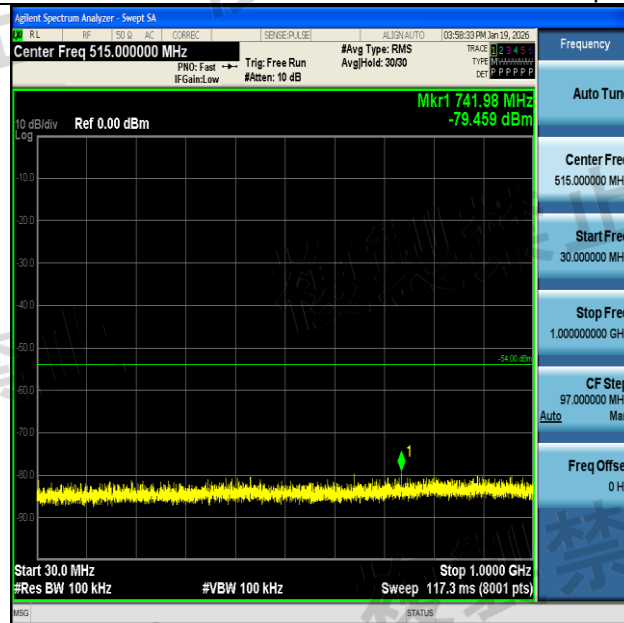


NTNV-11A-Ant1-5180-1000~26500-PASS

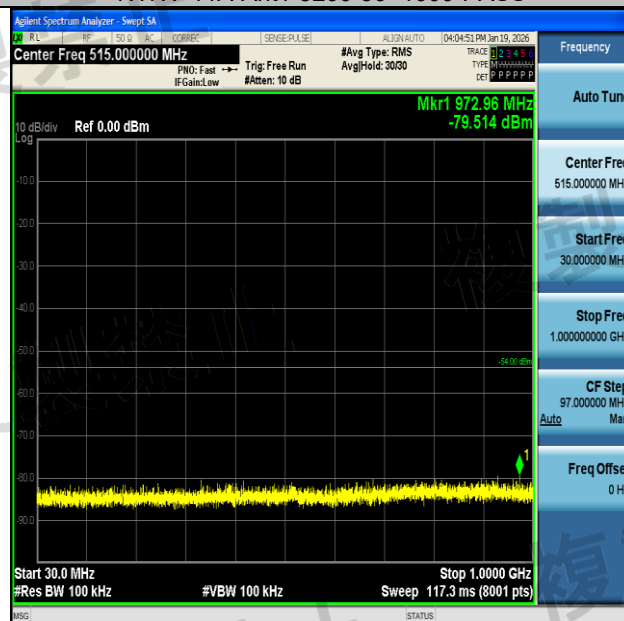


NTNV-11A-Ant2-5180-1000~26500-PASS



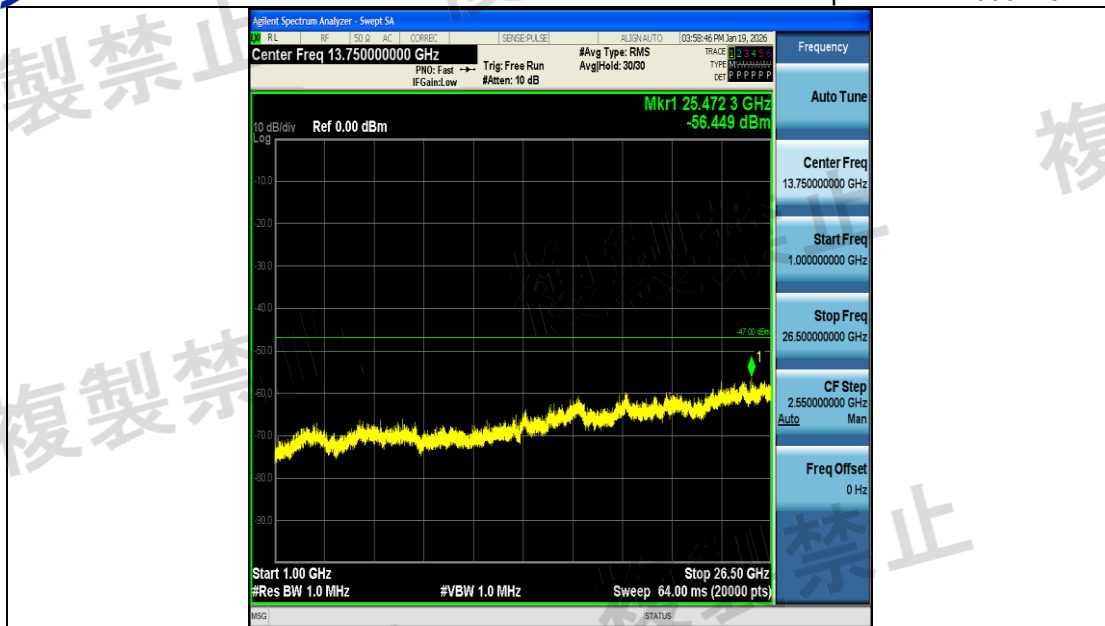


NTNV-11A-Ant1-5200-30~1000-PASS

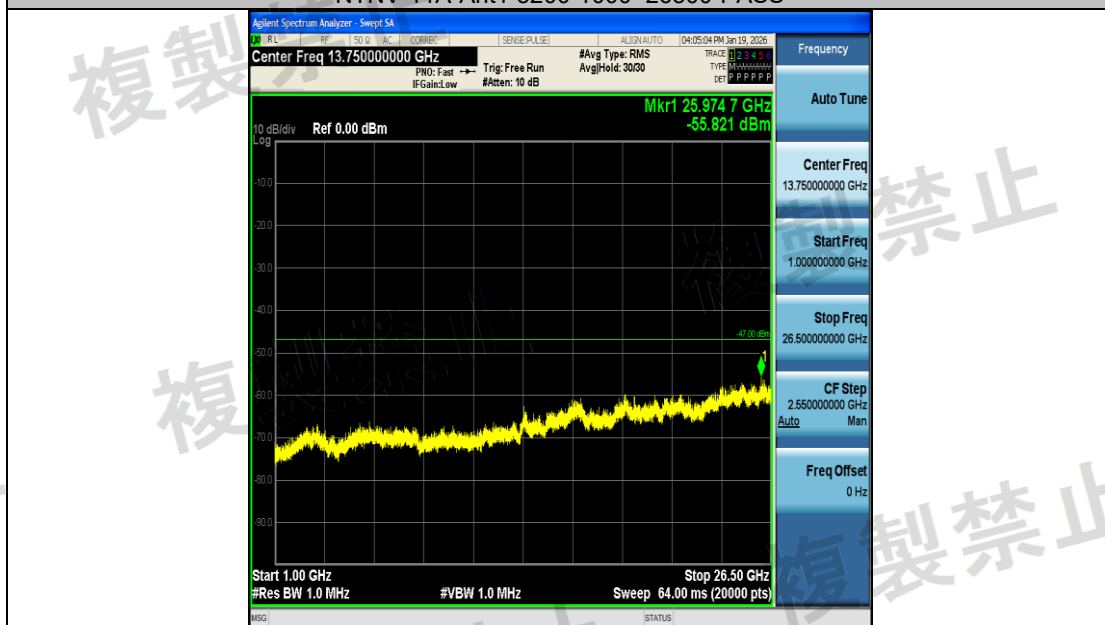


NTNV-11A-Ant2-5200-30~1000-PASS



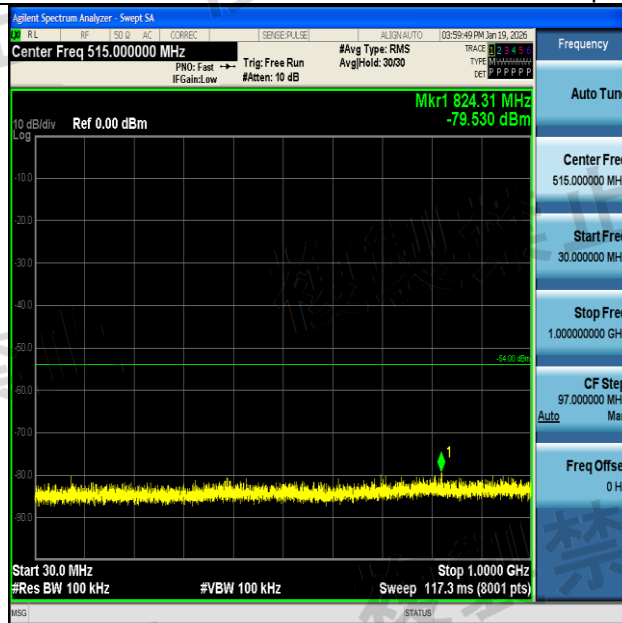


NTNV-11A-Ant1-5200-1000~26500-PASS

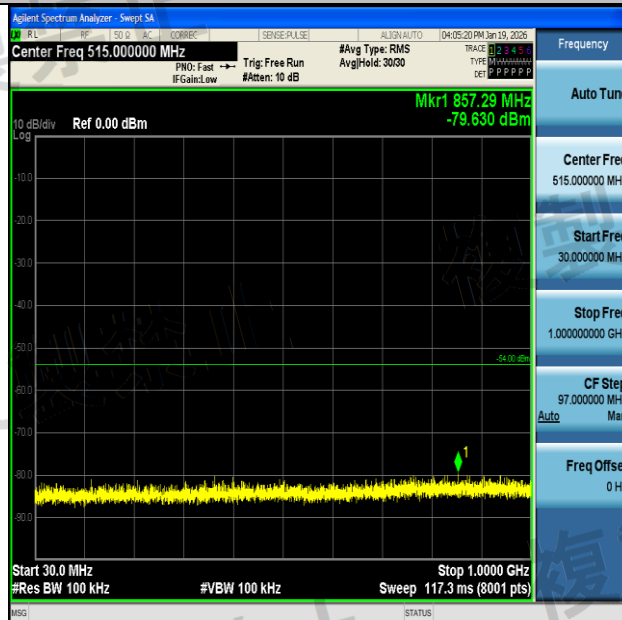


NTNV-11A-Ant2-5200-1000~26500-PASS



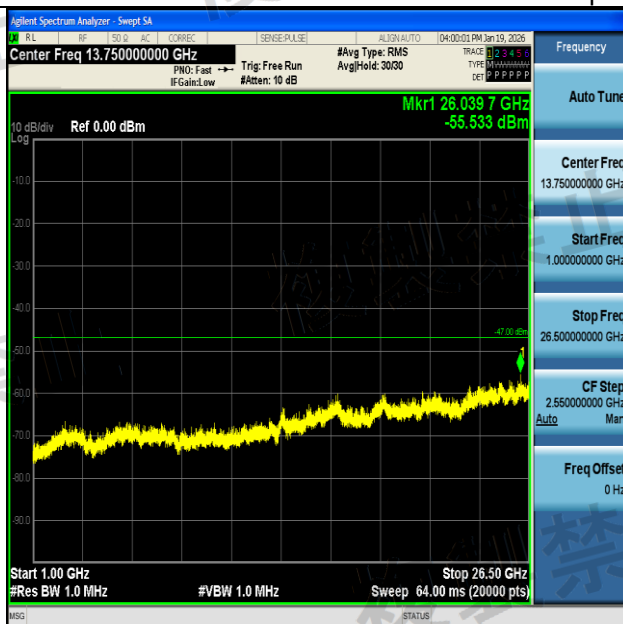


NTNV-11A-Ant1-5240-30~1000-PASS

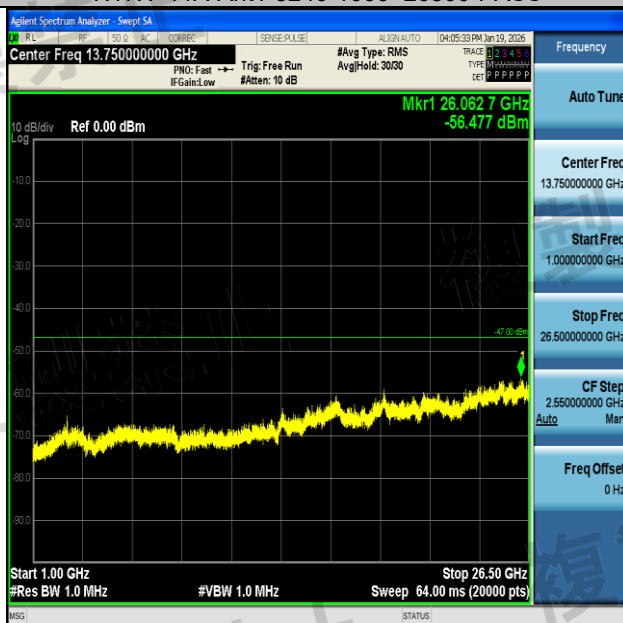


NTNV-11A-Ant2-5240-30~1000-PASS



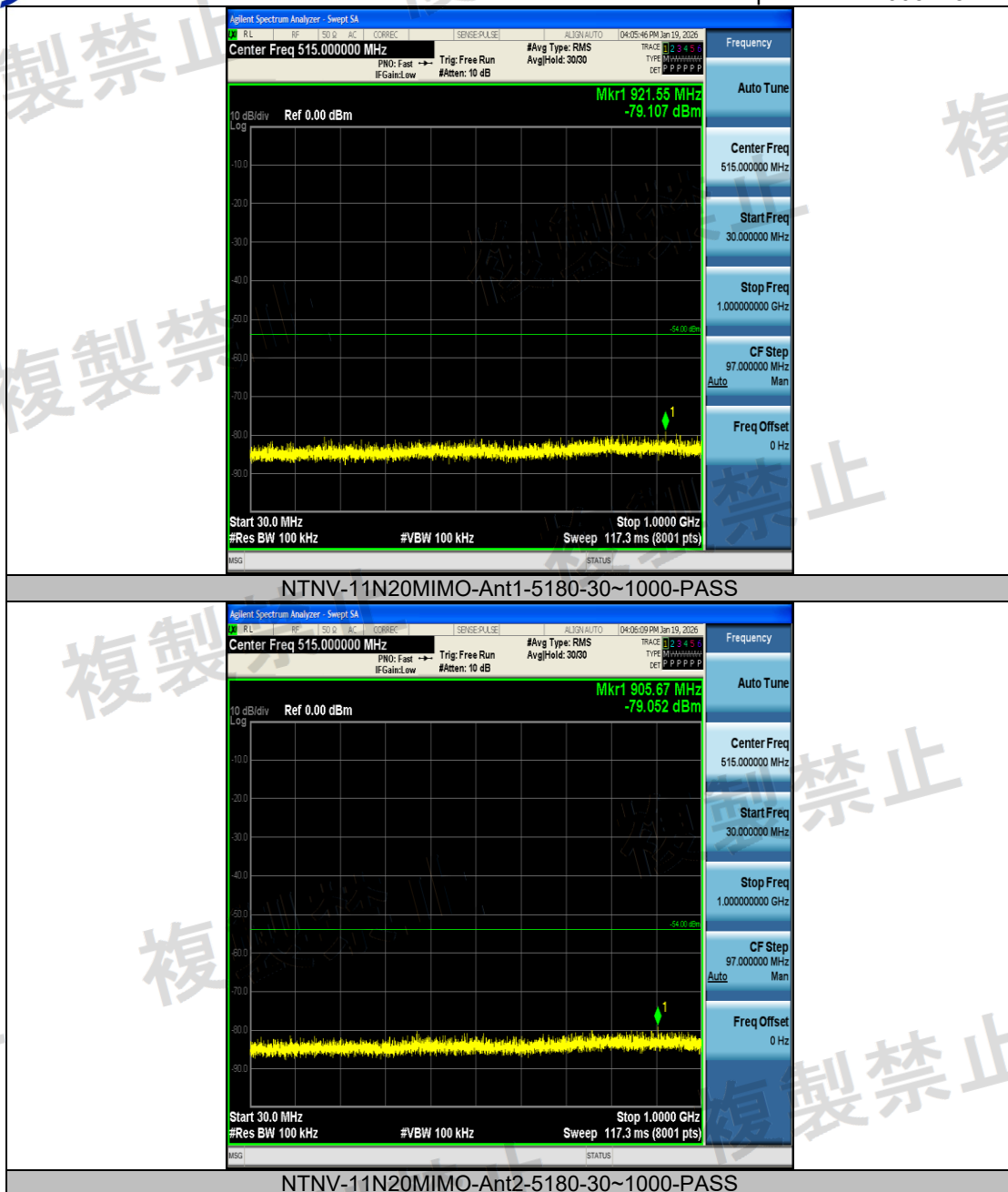


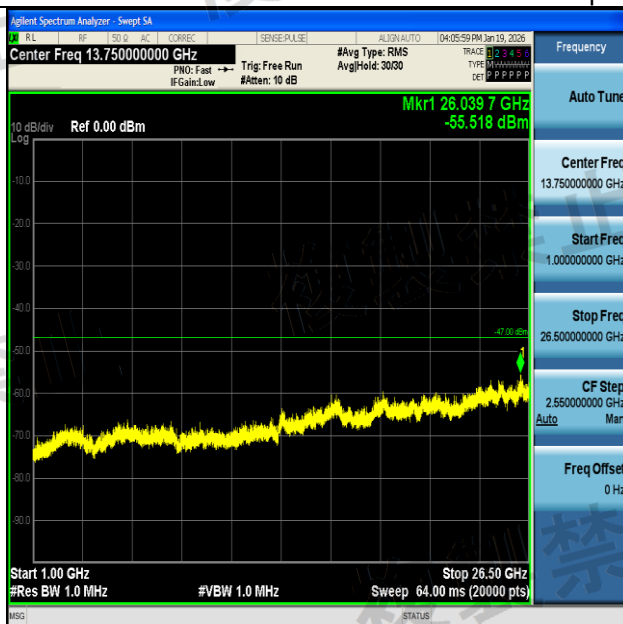
NTNV-11A-Ant1-5240-1000~26500-PASS



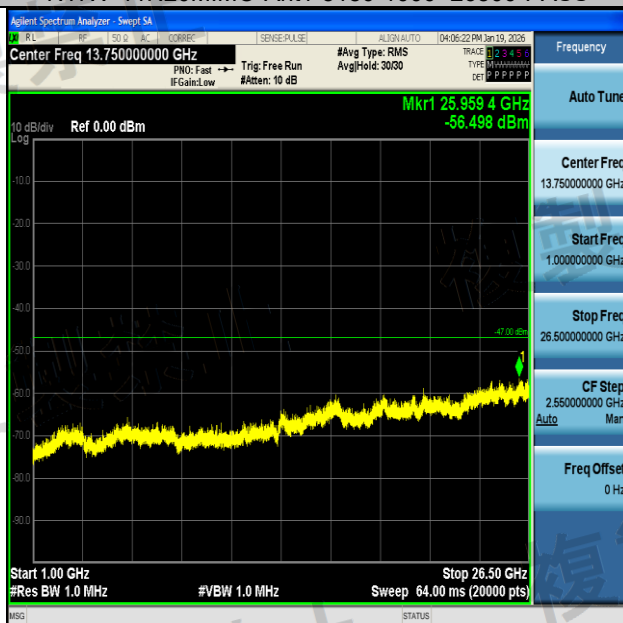
NTNV-11A-Ant2-5240-1000~26500-PASS





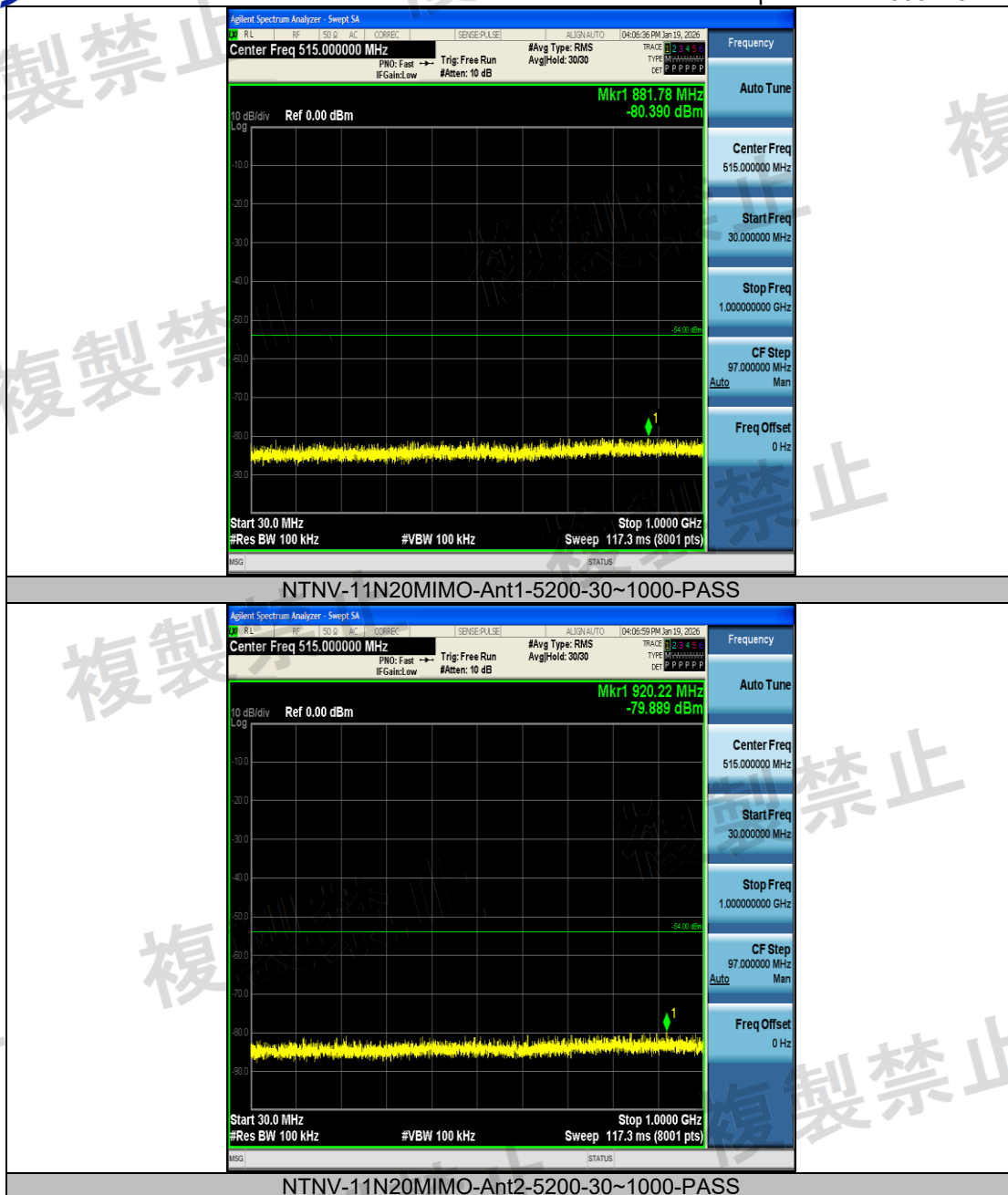


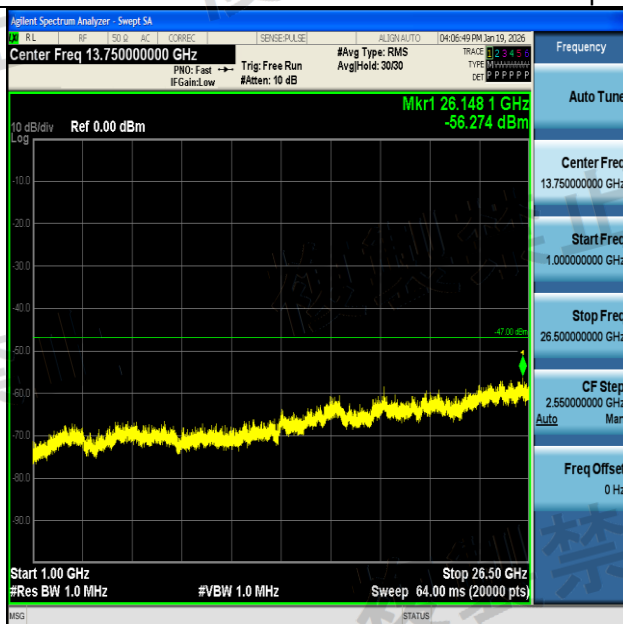
NTNV-11N20MIMO-Ant1-5180-1000~26500-PASS



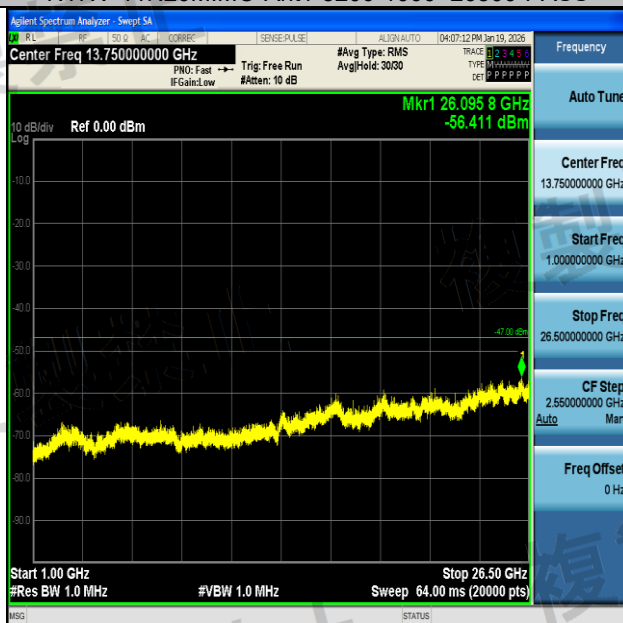
NTNV-11N20MIMO-Ant2-5180-1000~26500-PASS





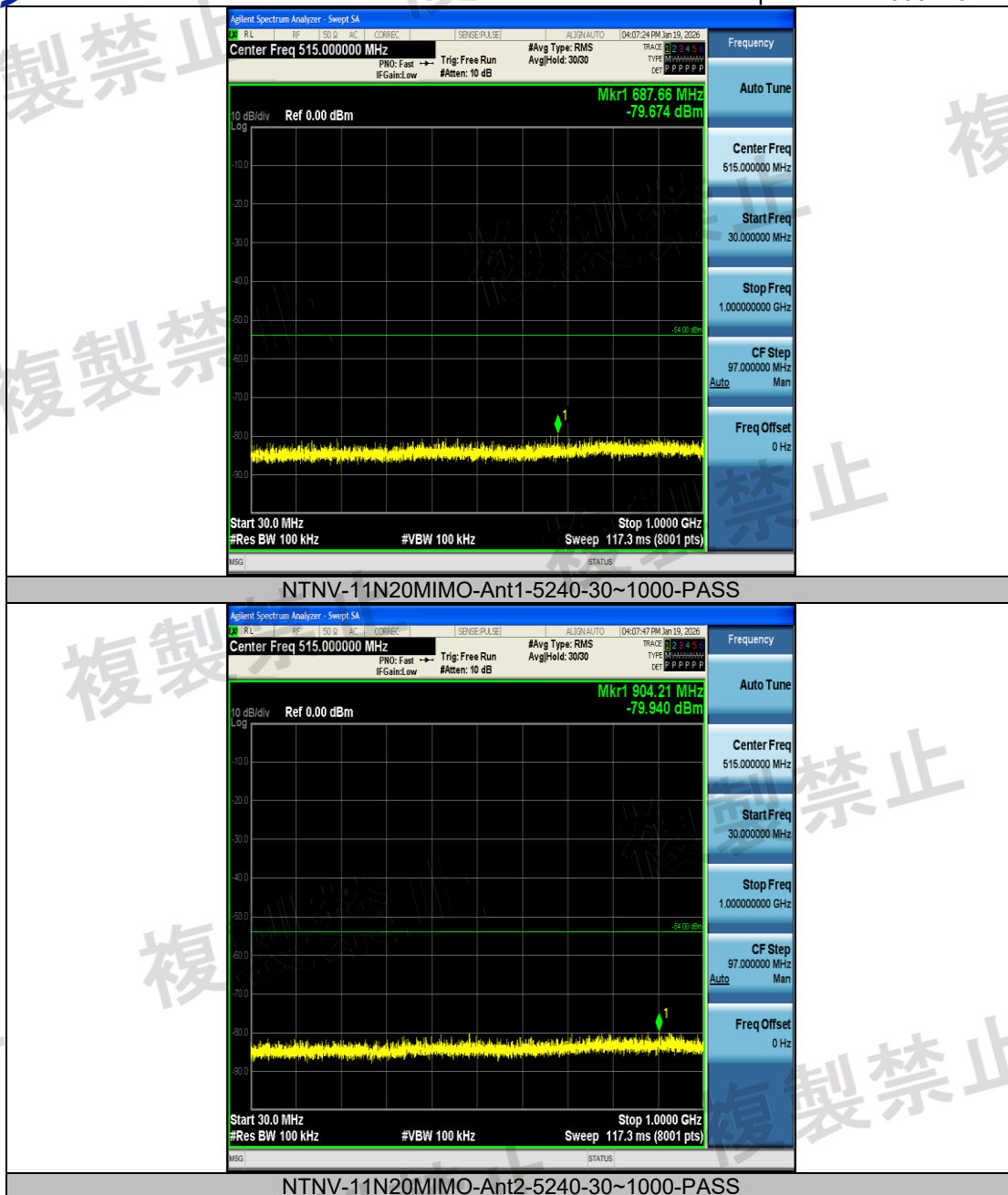


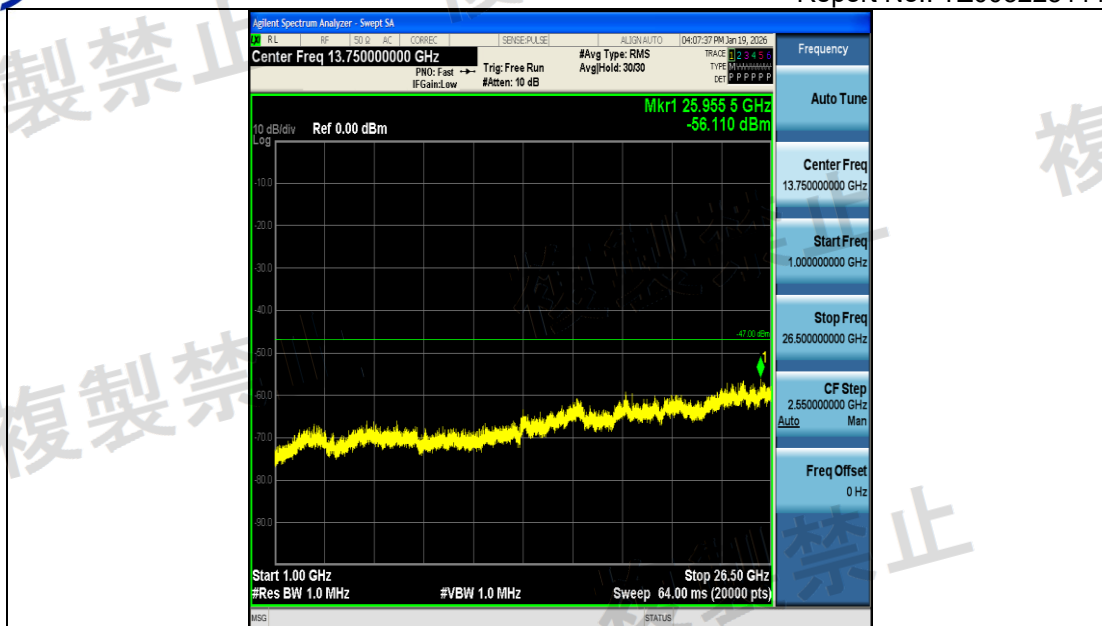
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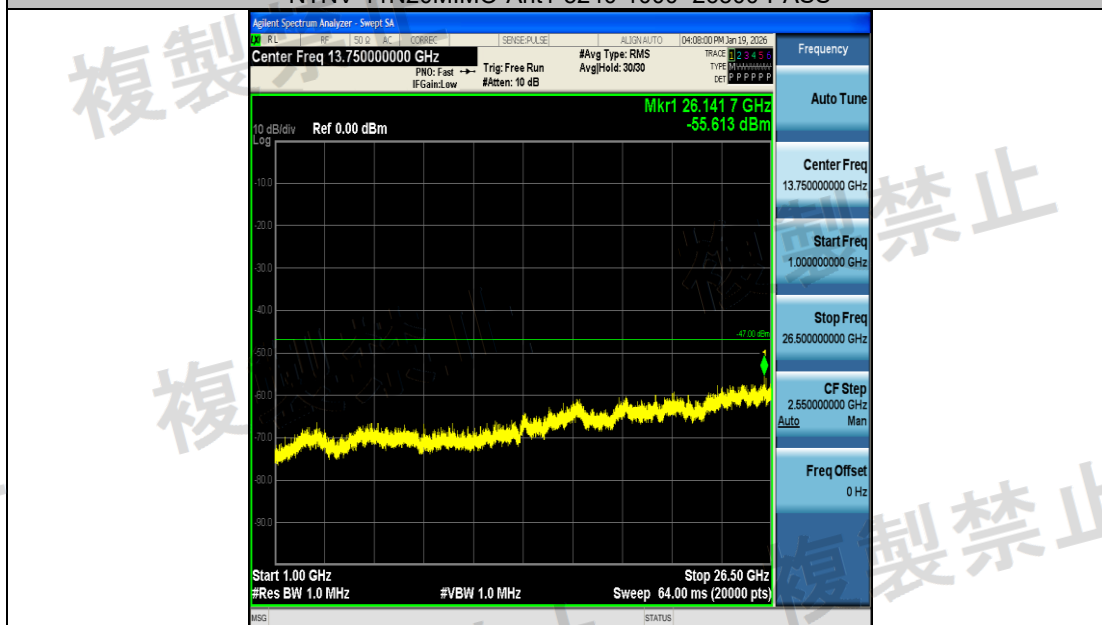
NTNV-11N20MIMO-Ant2-5200-1000~26500-PASS







NTNV-11N20MIMO-Ant1-5240-1000~26500-PASS



NTNV-11N20MIMO-Ant2-5240-1000~26500-PASS

