

TEST REPORT

Application No.: KSCR2310001813AT

Applicant: Hangzhou Hikvision Digital Technology Co., Ltd.

Address of Applicant: No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China

Manufacturer: Hangzhou Hikvision Digital Technology Co., Ltd.

Address of Manufacturer: No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China

Factory:

1. Hangzhou Hikvision Technology Co., Ltd.
2. Hangzhou Hikvision Electronics Co., Ltd.
3. Chongqing Hikvision technology Co., Ltd.

Address of Factory:

1. No.700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China.
2. No.299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang, 311500, China.
3. No. 118, Haikang Road, Area C, Jianqiao Industrial Park, Dadukou District, Chongqing, 401325, China.

Equipment Under Test (EUT):

EUT Name: NETWORK CAMERA

Model No.: DS-2CV1143G2-IDW, IPC-D140HA-D/W, HWI-D140HA-D/W ♣

♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.

Standard(s) : MIC Item 19 of Article 2 Paragraph 1

Date of Receipt: 2023-10-17

Date of Test: 2023-10-26 to 2023-11-03

Date of Issue: 2023-11-06

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR231000181301

Page: 2 of 139

Revision Record			
Version	Description	Date	Remark
00	Original	2023-11-06	/

Authorized for issue by:			
Tested By			
		Eric_Liu/Project Engineer	
Approved By			
		Terry Hou /Reviewer	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	MIC Item 19 of Article 2 Paragraph 1	N/A	MIC Item 19 of Article 2 Paragraph 1	Customer Declaration
Interference prevention capability		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Carrier sense capability		N/A	MIC Item 19 of Article 2 Paragraph 1	Pass
RF accessibility		N/A	MIC Item 19 of Article 2 Paragraph 1	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Frequency Error	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Occupied Bandwidth(99%)		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Spread spectrum Bandwidth(90%)		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Antenna Power		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Spurious emission Intensity		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Limit of secondary radiated emissions		MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass

Model No.: DS-2CV1143G2-IDW,IPC-D140HA-D/W,HWI-D140HA-D/W

Only the model DS-2CV1143G2-IDW was tested.

There are series models mentioned in this report, and they are the Identical in electrical and electronic characters. Only the model DS-2CV1143G2-IDW was tested since their differences were the model number and appearance.

3 Contents

	Page
1 COVER PAGE.....	1
2 Test Summary.....	3
3 Contents.....	4
4 General Information.....	5
4.1 Details of E.U.T.	5
4.2 Description of Support Units	5
4.3 Measurement Uncertainty.....	6
4.4 Test Location.....	7
4.5 Test Facility.....	7
4.6 Deviation from Standards	7
4.7 Abnormalities from Standard Conditions	7
5 Equipment List.....	8
6 Radio Spectrum Technical Requirement.....	9
6.1 Radio Technical Requirements Specification.....	9
6.2 E.U.T. test conditions.....	9
6.3 Antenna Requirement.....	12
6.4 Interference prevention capability	13
6.5 Carrier sense capability	14
6.6 RF accessibility.....	16
7 Radio Spectrum Matter Test Results	17
7.1 Frequency Error.....	17
7.2 Occupied Bandwidth(99%).....	19
7.3 Spread spectrum Bandwidth(90%).....	21
7.4 Antenna Power	23
7.5 Spurious emission Intensity	25
7.6 Limit of secondary radiated emissions.....	27
8 Test Setup Photo	29
9 EUT Constructional Details (EUT Photos)	30
10 Appendix	31

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 12V by adapter Model: ADS-12FG-12N 12012EPG Input: 100-240V~50/60Hz Output: 12.0V 1.0A
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2472MHz, 802.11n(HT40): 2422MHz to 2462MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK), 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Channel Spacing:	5MHz
Number of Channels:	802.11b/g/n(HT20): 13, 802.11n(HT40):9
Antenna Type:	Dipole Antenna
Antenna Gain:	1.85dBi (Provided by the manufacturer)

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR231000181301

Page: 7 of 139

4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date	Cal body	Certifier
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/24/2023	08/23/2024	LISAI*	(c)
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/24/2023	08/23/2024	LISAI*	(c)
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	02/03/2023	02/02/2024	LISAI*	(c)
4	Signal Generator	R&S	SMBV100B	KSEM032	03/16/2023	03/15/2024	GRGTEST*	(c)
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/24/2023	08/23/2024	LISAI*	(c)
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/24/2023	08/23/2024	LISAI*	(c)
7	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/24/2023	08/23/2024	LISAI*	(c)
8	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/16/2023	03/15/2024	GRGTEST*	(c)
9	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/24/2023	08/23/2024	LISAI*	(c)
10	Switcher	CCSRF	FY562	KUS2001M001-3	08/24/2023	08/23/2024	LISAI*	(c)
11	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	02/03/2023	02/02/2024	LISAI*	(c)
12	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/24/2023	08/23/2024	LISAI*	(c)
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/22/2023	03/21/2024	GRGTEST*	(c)
14	Software	BST	TST-PASS	/	N/A	N/A	LISAI*	(c)

Remark:

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

From JRL Article 24-2, paragraph 4, Item 2

Notice: Calibration duration for above equipments is 1 year.

6 Radio Spectrum Technical Requirement

6.1 Radio Technical Requirements Specification

Table 1: Radio Technical Requirements Specification for 2.4 GHz band wide-band low-power data communication system (Item 19 of Article 2-1)

Items	Technical standard
Assigned frequency or designated frequency	2400-2483.5MHz
Communication method	One-way communication, simplex, semi-duplex, or duplex operation of digital signal transmission including spread spectrum
Tolerance of frequency ($\times 10^{-6}$)	± 50
Tolerance of occupied bandwidth	FH: 83.5MHz or less FH + DS: 83.5MHz or less FH + OFDM: 83.5MHz or less OFDM: 40MHz or less Others: 26MHz or less
Antenna power	Designated value (1) FH, FH+DS, FH+OFDM: 3mW/MHz (used in the range of 2427 - 2470.75 MHz) (2) OFDM, DS other than (1) 10mW/MHz (3) Other than (1) & (2) 10mW (4) OFDM OBW 26 - 40MHz: 5mW/MHz, Tolerance: +20%, -80%
Antenna gain	1) 12.14 dBi or less in principle 2) In case of directional antenna (1) FH, FH+DS or FH+OFDM using 2427-2470.75 MHz EIRP $\leq$ 16.91 dBm/MHz (2) OFDM or DS other than (1) EIRP $\leq$ 22.14 dBm/MHz (3) Other than (1) and (2): 22.14 dBm or less (4) OFDM OBW 26 - 40MHz: 19.14dBm/MHz (5) Half-power angle of directional antenna (e) in case of the item 2): $e \leq 360/A$ (The A is 10 in maximum.)
Tolerance of spurious emission intensity	(1) Below 2387 MHz: 2.5 μ W/MHz/MHz (2) 2387 to 2400 MHz: 25 μ W/MHz/MHz (3) 2483.5 through 2496.5 MHz: 25 μ W/MHz/MHz (4) Over 2496.5 MHz: 2.5 μ W/MHz/MHz
Spreading bandwidth	DS, FH, FH+DS, FH+OFDM: 500kHz or more
Spreading rate of spectrum	For DS system; (Spreading bandwidth) / (Frequency corresponding to transmission rate) ≥ 5
Limit of secondary radiated emissions	(1) Below 1 GHz: 4nW (2) 1 GHz or higher: 20nW
Interference prevention function	Shall have the function of automatic transmission and reception of identification sign.
Structure	Shall be of the structure that the RF and modulator sections excluding antenna cannot easily be opened.
Note	DS: Direct spread FH: Frequency hopping OFDM: Orthogonal frequency division multiplexing

6.2 E.U.T. test conditions

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR231000181301

Page: 10 of 139

Environment:

Temperature:	5 -35.0 °C
Humidity:	45-85 % RH
Atmospheric Pressure:	99.2 -102.0 kPa

Power supply:

Test Voltage: rated voltage and $\pm 10\%$ of the rated voltage.

The product is supplied by DC 12V. The fluctuation of input voltage to the circuit of RF unit of test equipment is under $\pm 1\%$, when input voltage to the test equipment is fluctuated by $\pm 10\%$. So, all measurement has been conducted by only rated voltage DC 12V.

Test Mode Classify	Power Supply	Measured Value
TM 1	DC 12.0V	DC 3.30V
TM 2	DC 10.8V	DC 3.30V
TM 3	DC 13.2V	DC 3.30V

Test frequencies:

If the EUT can be set to 3 or more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L, M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies.

EUT channels and frequencies list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437	13	2472
7	2442		

Using test software was control EUT work in continuous transmitter mode. And select test channel as below:

Through Preliminary tests were performed in all tests in different data rata and antenna configurations at lowest channel, the data rates of worse case as above were chosen for final test.

802.11 b/g/n(HT20)					
Channel	No.	Frequency	Data rate		
			b	g	n20
Lowest	CH01	2412MHz	11Mbps	54Mbps	144.4Mbps
Middle	CH07	2442MHz	11Mbps	54Mbps	144.4Mbps
Highest	CH13	2472MHz	11Mbps	54Mbps	144.4Mbps
802.11 n(HT40)					
	No.	Frequency	Data rate		
Lowest	CH03	2422MHz	300.0Mbps		
Middle	CH07	2442MHz	300.0Mbps		
Highest	CH11	2462MHz	300.0Mbps		

6.3 Antenna Requirement

6.3.1 Test Requirement:

MIC Item 19 of Article 2 Paragraph 1

6.3.2 Conclusion

Standard requirement:

Applicable for equipment with an antenna terminal, including testing terminals. If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.

EUT Details:

The antenna is dipole antenna. The best case gain of the antenna is 1.85dBi.

Result:

As the antenna and circuits can be separated on the microstrip, all relevant tests are measured on the conducted sample.

6.4 Interference prevention capability

6.4.1 Test Requirement:

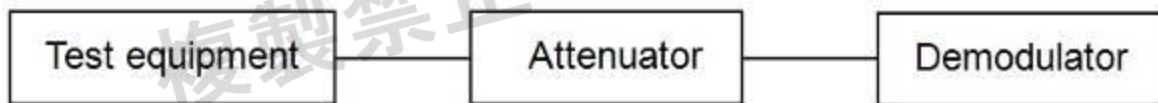
MIC Item 19 of Article 2 Paragraph 1

Limit:

Article 2, Item (19) Notice 88 Appendix 43

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

6.4.2 Test Setup Diagram



6.4.3 Conclusion

Standard Requirement:

- 1) Measurement system diagram as shown above and test equipment keep transmitting identification code.
- 2) Condition of measuring instrument
 - (1) Demodulator must be able to demodulate the transmitting signal emitted by test equipment and to indicate the identification code.
- 3) Condition of test equipment The mode of normal use.
- 4) Measuring operation procedure
 - (1) When test equipment has the function to transmit identification code automatically:
 - A) Transmit the predetermined identification code from test equipment.
 - B) Confirm the transmitted identification code by demodulator.

EUT Details:

The unit does meet the requirements (Good).

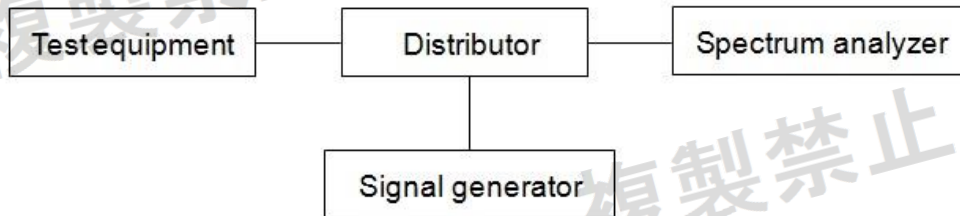
10:BB:F3:39:0A:7F

6.5 Carrier sense capability

6.5.1 Test Requirement:

MIC Item 19 of Article 2 Paragraph 1

6.5.2 Test Setup Diagram



6.5.3 Conclusion

Standard Requirement:

1. Measurement system diagram

(1) Test with test equipment only

2. Condition of measuring instrument

(1) Set the standard signal generator as follows:

Carrier frequency: Center frequency of receiving frequency band of test equipment.

Modulation: No modulation.(note1)

Output level: regulated level on antenna input of test equipment

Note 1: The un-modulated carrier in the center frequency, when the carrier sense function of test equipment is not worked, if necessary, change the frequency or modulate it.

(2) Set the spectrum analyzer as follows:

Center frequency: Center frequency of the bandwidth used.(note2)

Sweep frequency band: 50MHz(note2)

Resolution bandwidth: Approximately 1 MHz

Video bandwidth: Comparable level with resolution bandwidth

Trigger condition: Free-run

Detective mode: positive peak

Note 2: Under 26MHz of OFDM or other modulated method that with transmit function, set sweep frequency band as 0Hz, detective mode as sample, center frequency as the carrier frequency from 13MHz to 19MHz.

3. Condition of test equipment

Set the test equipment at the test frequency and the test spread code, and set it to the receiving mode in the beginning. When using external test device, connect with the test equipment by line connection.

4. Measuring operation procedure

(1) Test with test equipment only:

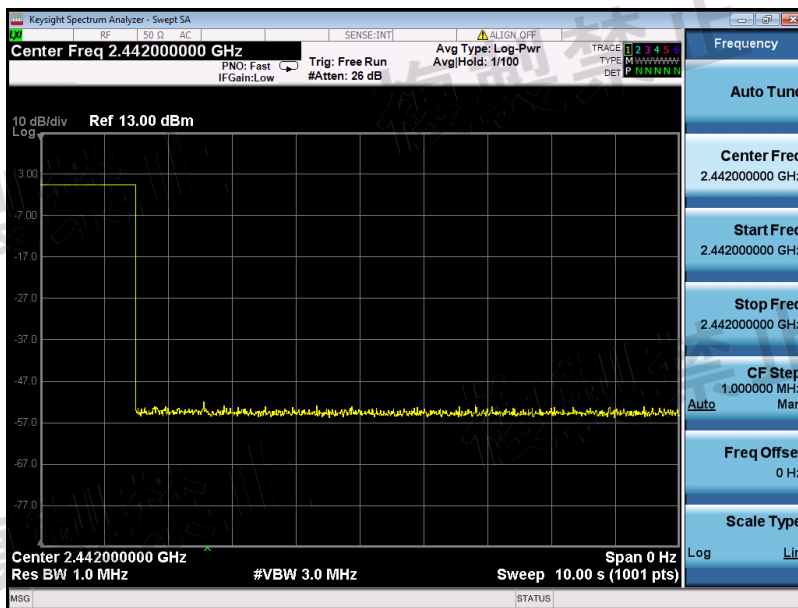
a. Set the spectrum analyzer according to (2) of 2).

b. Set the test equipment to the transmitting operation with the output of standard signal generator OFF and confirm that it emits over 26MHz occupied frequency bandwidth OFDM radio wave, by using spectrum analyzer.

c. Set the test equipment to the receiving mode.

d. With the output of standard signal generator ON, set the test equipment to the transmitting operation, and confirm that it does not emit over 26MHz occupied frequency bandwidth OFDM radio wave, by using spectrum analyzer.

EUT Details:



6.6 RF accessibility

6.6.1 Test Requirement:

MIC Item 19 of Article 2 Paragraph 1

6.6.2 Conclusion

Standard Requirement:

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

EUT Details:

Protective Structure:

☐	1.Sealed with special screws.
☐	2.Plastic chassis is being welded using ultrasonic waves.
☐	3.Chassis is glued using a special adhesive.
☐	4.Metal covers are spot-fused.
☐	5.Cover is specially interlocked
☐	6.RF and Modulation components are covered with shielding case and this shielding case is soldered.
☒	7.Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method.
☐	8.Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive.
☐	9.Shield case is welded at RF and modulation parts, and ID-ROM is glued with a non-transparent laminating agent.
☐	10.RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable parts on PCB or adjustable parts are not exposed.

7 Radio Spectrum Matter Test Results

7.1 Frequency Error

Test Requirement: MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

Tolerance of frequency: $\pm 50\text{E-}6$

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.2 °C

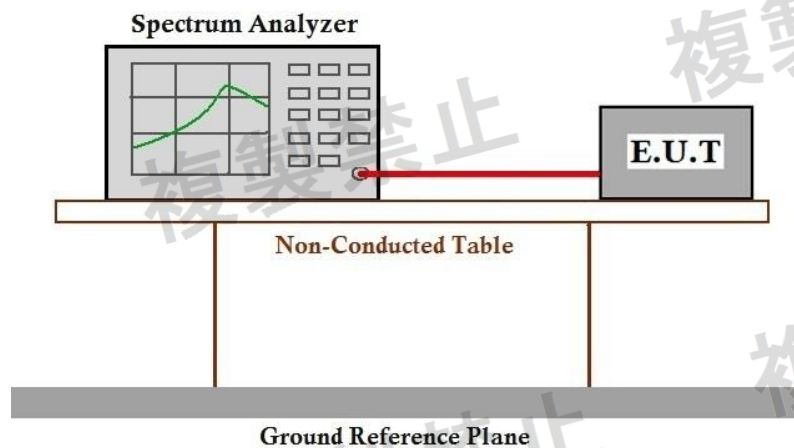
Humidity: 50.0 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping OFF, CW Tx

3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 1MHz

RBW 10 kHz (Modulation OFF),

VBW 10 kHz (Modulation OFF),

Sweep Time Auto

Detector mode Positive peak

Indication mode Max hold

Alternative method:

Frequency: Test Frequency

Span 2 times channel bandwidth

RBW 100 kHz (Modulation ON),

VBW 100 kHz (Modulation ON),

Sweep Time Auto

Detector mode Positive peak

Indication mode Max hold

Please Refer to Appendix for Details

7.2 Occupied Bandwidth(99%)

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

FH: 83.5MHz or less

OFDM: 40MHz or less

Others: 26MHz or less

7.2.1 E.U.T. Operation

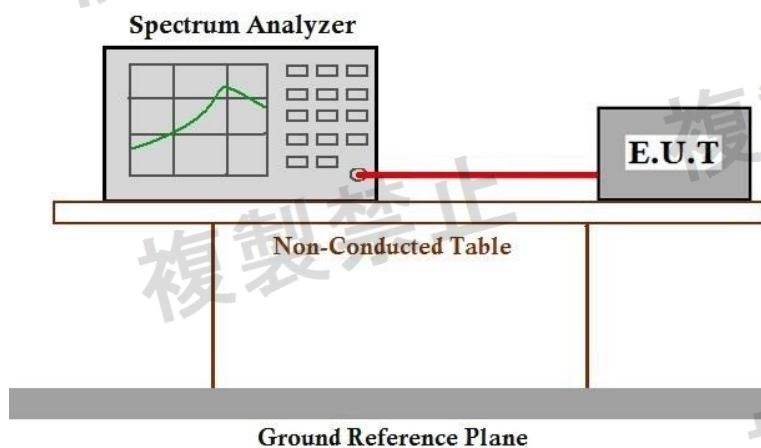
Operating Environment:

Temperature: 25.3 °C Humidity: 50.1 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 83.5 MHz (FHSS); 40/60 MHz (OFDM; DSSS); 2-5 times OBW (Others)

RBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3% OBW (Others)

VBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3 times RBW (Others)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

OBW 99%

Please Refer to Appendix for Details

7.3 Spread spectrum Bandwidth(90%)

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

DS, FH, FH+DS, FH+OFDM: 500kHz or more

For DS system; (Spreading bandwidth) / (Frequency corresponding to transmission rate) ≥ 5

7.3.1 E.U.T. Operation

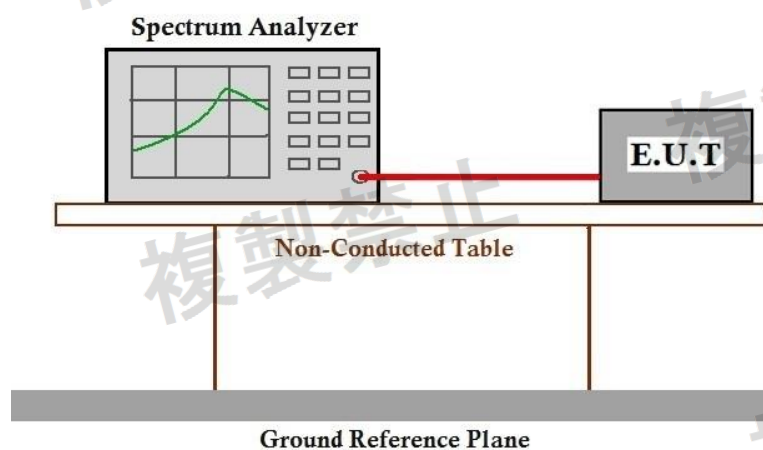
Operating Environment:

Temperature: 25.2 °C Humidity: 50.2 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 83.5 MHz (FHSS); 40/60 MHz (OFDM; DSSS)

RBW 1 MHz (FHSS); 300kHz (OFDM; DSSS)

VBW 1 MHz (FHSS); 300kHz (OFDM; DSSS)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

OBW 90%

Please Refer to Appendix for Details

7.4 Antenna Power

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

Designated value

(1) FH, FH+DS, FH+OFDM: 3mW/MHz

(used in the range of 2427 - 2470.75 MHz)

(2) OFDM, DS other than (1) 10mW/MHz

(3) Other than (1) & (2) 10mW

(4) OFDM OBW 26 - 40MHz: 5mW/MHz

Tolerance: +20%, -80%

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25.3 °C

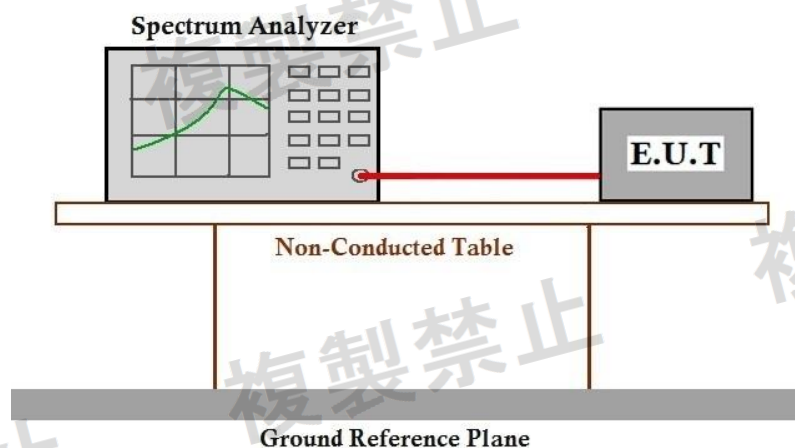
Humidity: 50.1 % RH

Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 25 MHz(FHSS); 40/60 MHz (OFDM; DSSS); Enough to capture the emission (Others)

RBW 1 MHz (FHSS; OFDM; DSSS); More than OBW (Others)

VBW 1 MHz (FHSS; OFDM; DSSS); More than RBW (Others)

Sweep Time Auto

detector mode RMS

Indication mode Max hold

Please Refer to Appendix for Details

7.5 Spurious emission Intensity

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

(1) Below 2387 MHz: 2.5 μ W/MHz

(2) 2387 to 2400 MHz: 25 μ W/MHz

(3) 2483.5 through 2496.5 MHz: 25 μ W/MHz

(4) Over 2496.5 MHz: 2.5 μ W/MHz

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25.2 °C

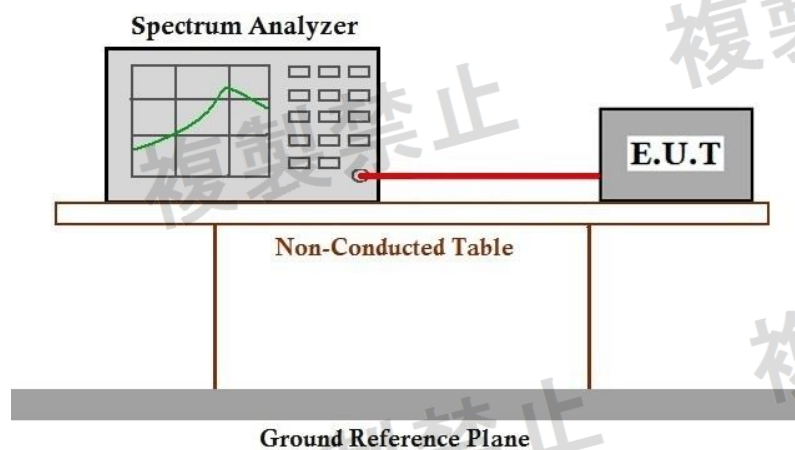
Humidity: 50.3 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, , Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz - 2400 MHz , 2483.5 MHz -13 GHz

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Sample

Indication mode Max hold

Please Refer to Appendix for Details

7.6 Limit of secondary radiated emissions

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

(1) Below 1 GHz : 4 nW or less

(2) 1 GHz and over : 20 nW or less

7.6.1 E.U.T. Operation

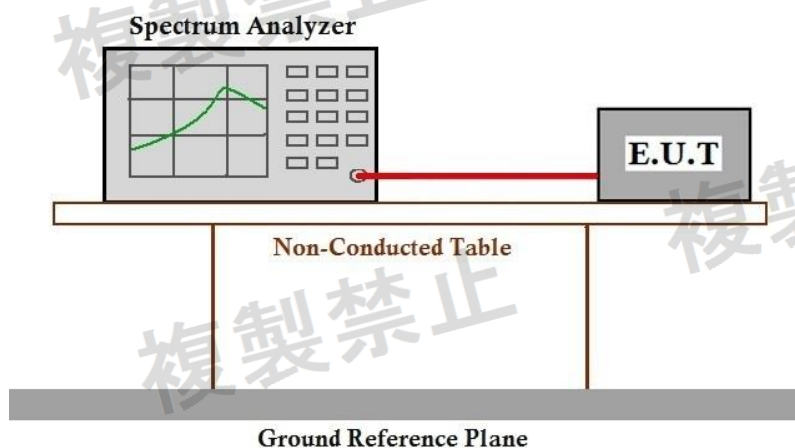
Operating Environment:

Temperature: 25.3 °C Humidity: 50.2 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	RX mode_Keep the EUT in receiving mode. Only the 20MHz channel plan was tested and recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz - 2400 MHz , 2483.5 MHz -13 GHz

RBW 100 kHz (30 - 1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 - 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

Span 0 Hz

RBW 100 kHz (30 - 1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 - 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode Sample

Indication mode Max hold

Please Refer to Appendix for Details

8 Test Setup Photo



9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2310001813AT

10 Appendix

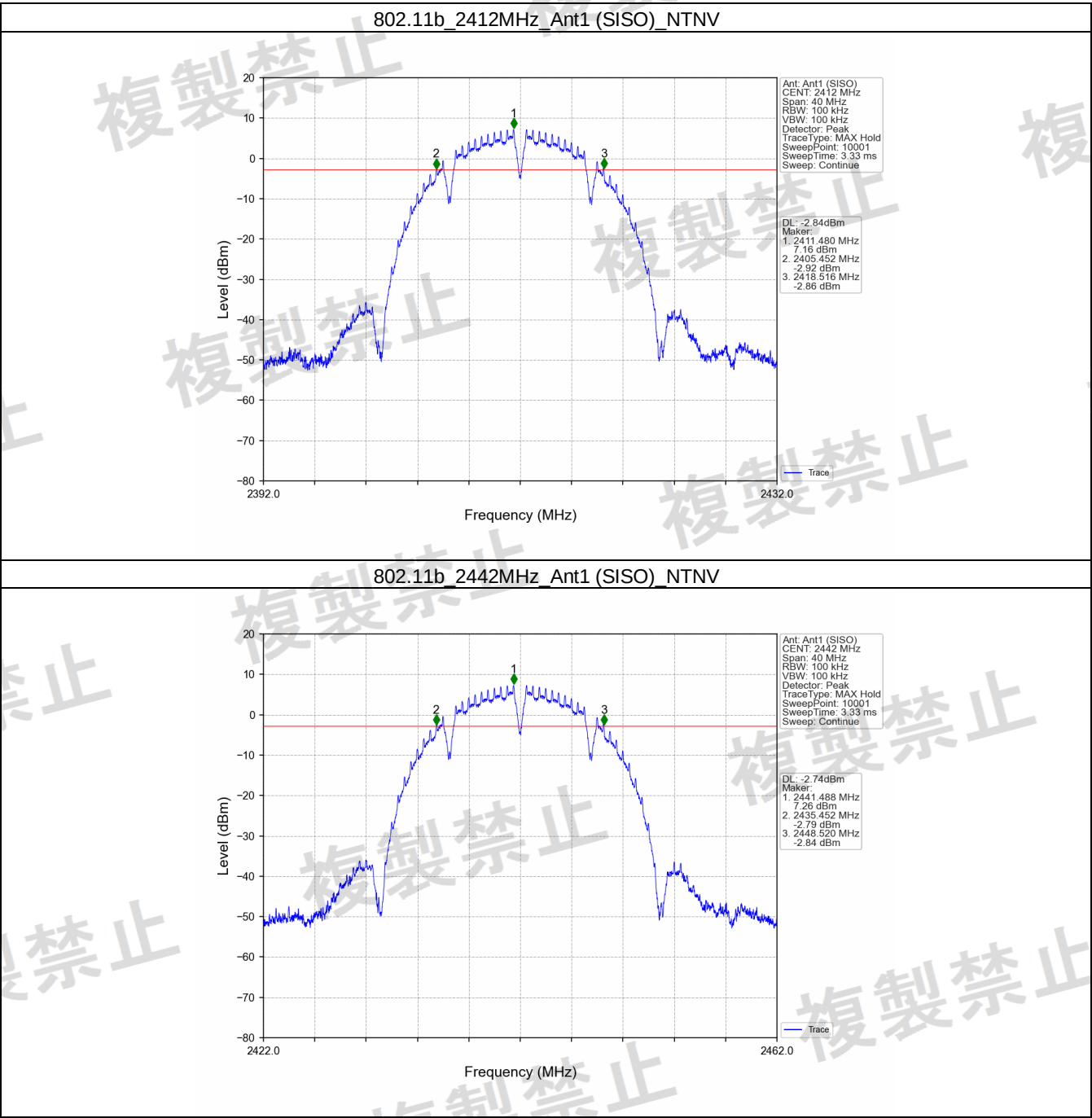
1. Frequency Error

1.1 Ant1

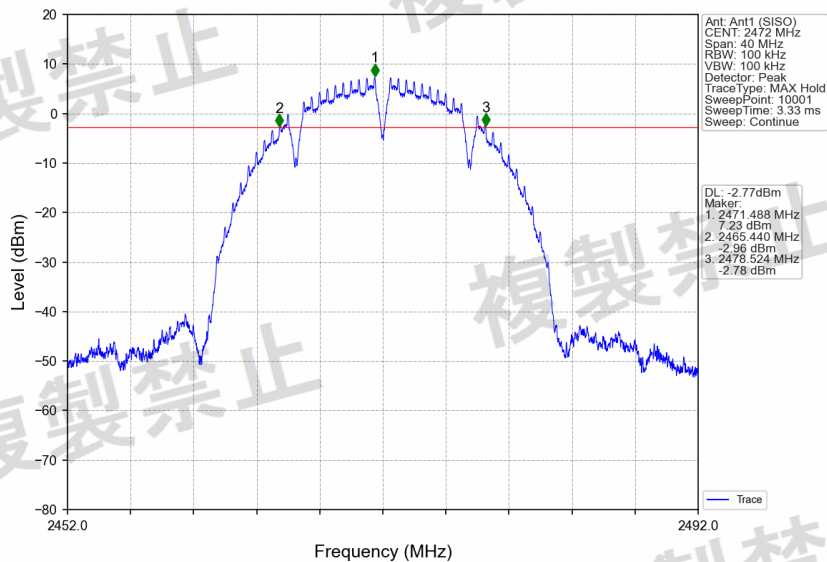
1.1.1 Test Result

Ant1							
ENV	Mode	TX Type	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
					Result	Limit	
NTNV	802.11b	SISO	2412	2411.984	-6.63	-50 to 50	Pass
			2442	2441.986	-5.73	-50 to 50	Pass
			2472	2471.982	-7.28	-50 to 50	Pass
	802.11g	SISO	2412	2411.980	-8.29	-50 to 50	Pass
			2442	2441.978	-9.01	-50 to 50	Pass
			2472	2471.978	-8.90	-50 to 50	Pass
	802.11n (HT20)	MIMO	2412	2411.992	-3.32	-50 to 50	Pass
			2442	2441.988	-4.91	-50 to 50	Pass
			2472	2471.986	-5.66	-50 to 50	Pass
	802.11n (HT40)	MIMO	2422	2421.984	-6.61	-50 to 50	Pass
			2442	2441.984	-6.55	-50 to 50	Pass
			2462	2461.984	-6.50	-50 to 50	Pass

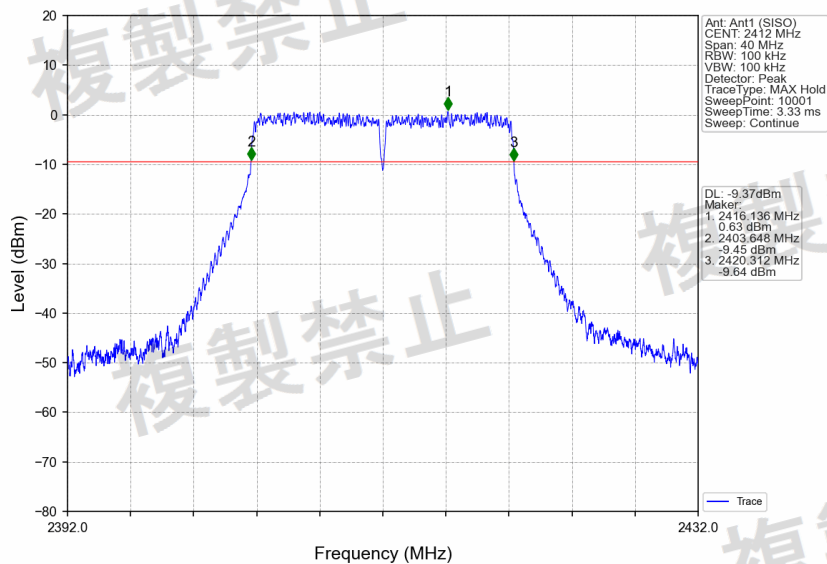
1.1.2 Test Graph



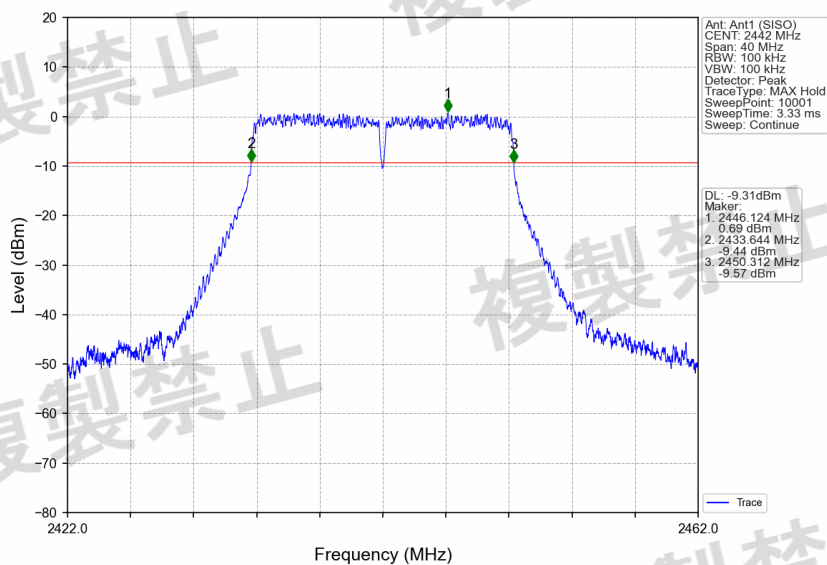
802.11b 2472MHz Ant1 (SISO) NTV



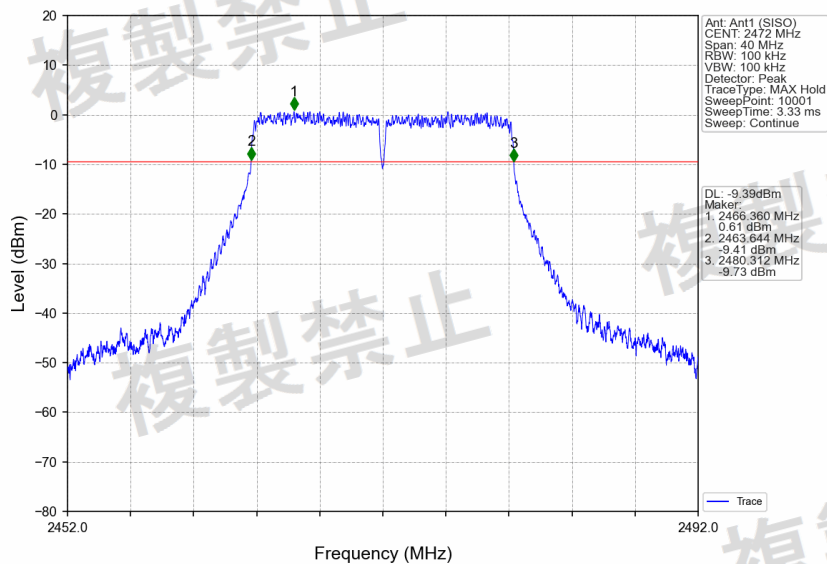
802.11g 2412MHz Ant1 (SISO) NTV



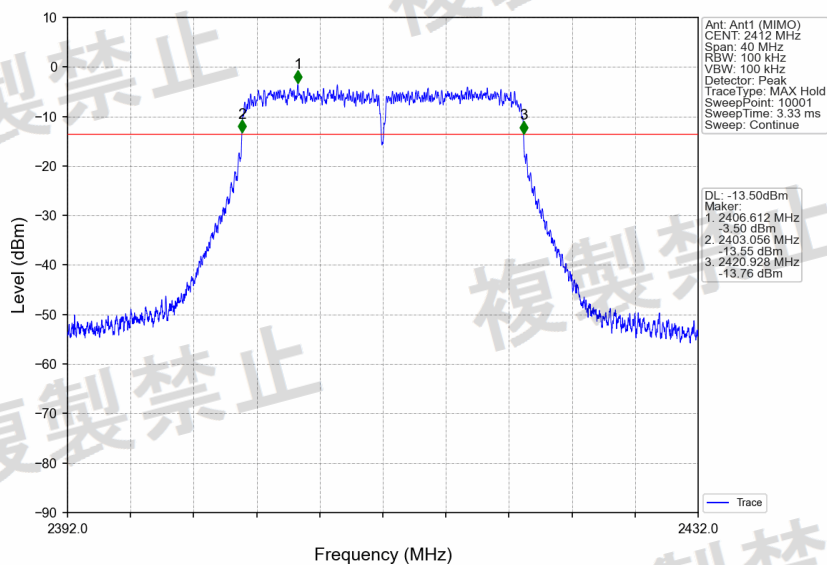
802.11g 2442MHz Ant1 (SISO) NTV



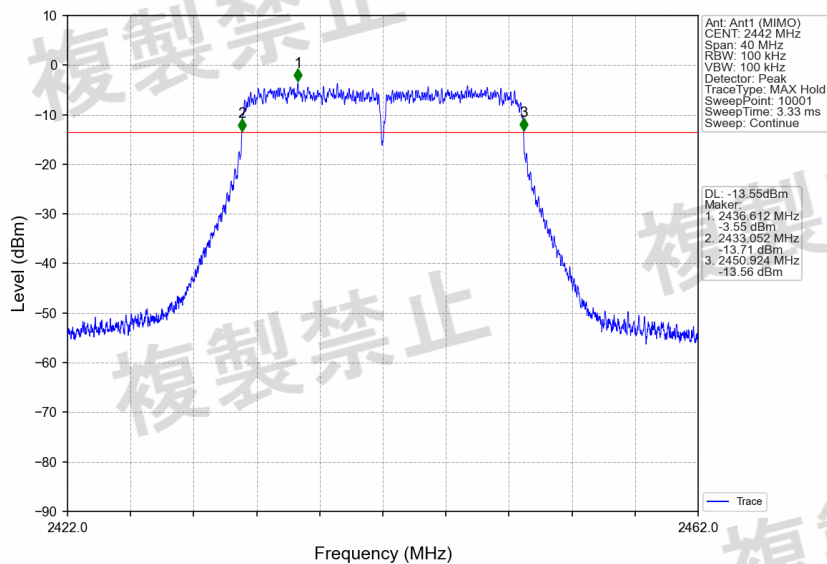
802.11g 2472MHz Ant1 (SISO) NTV



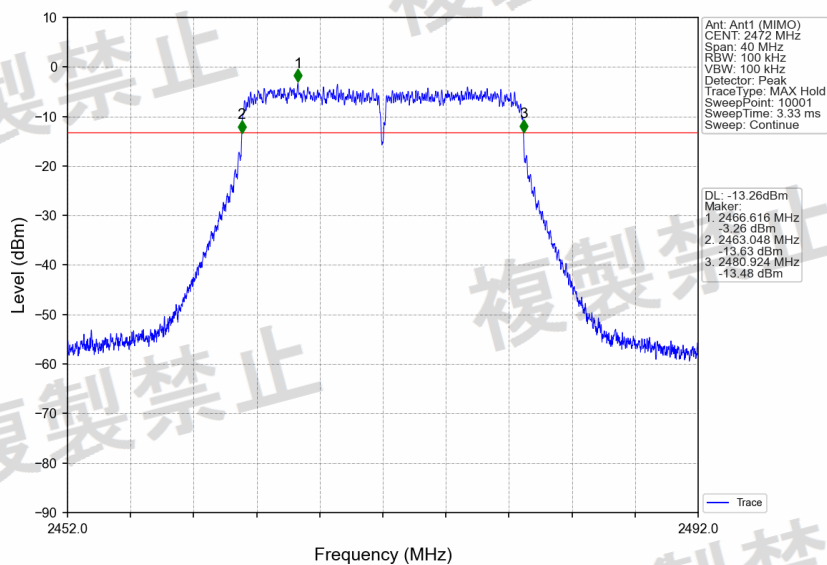
802.11n(HT20) 2412MHz Ant1 (MIMO) NTNV



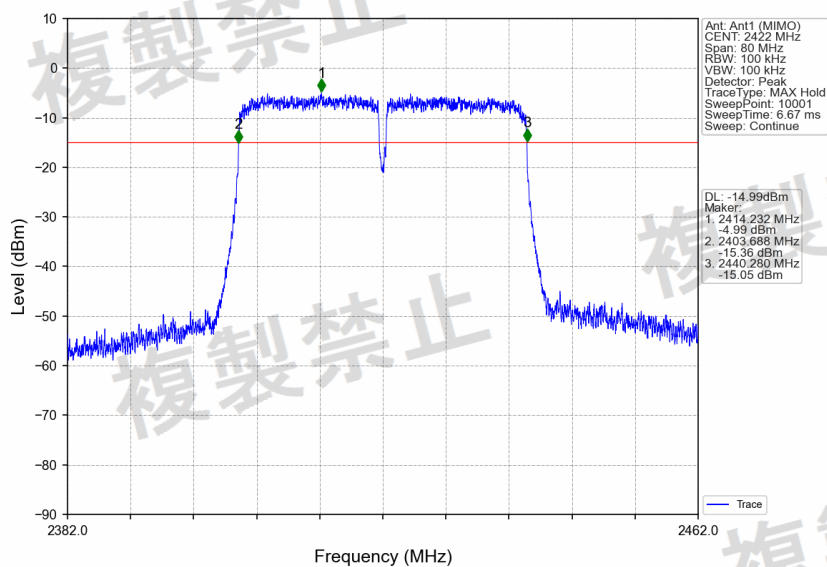
802.11n(HT20) 2442MHz Ant1 (MIMO) NTNV



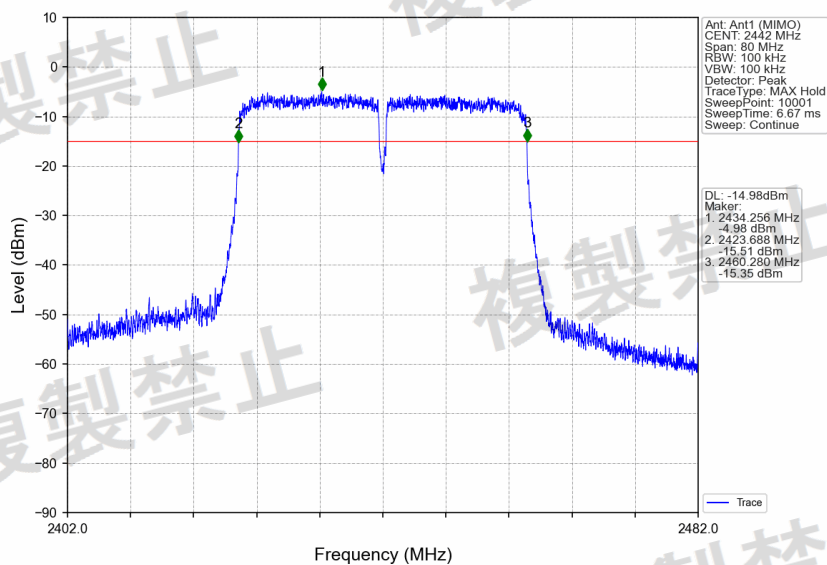
802.11n(HT20) 2472MHz Ant1 (MIMO) NTNV



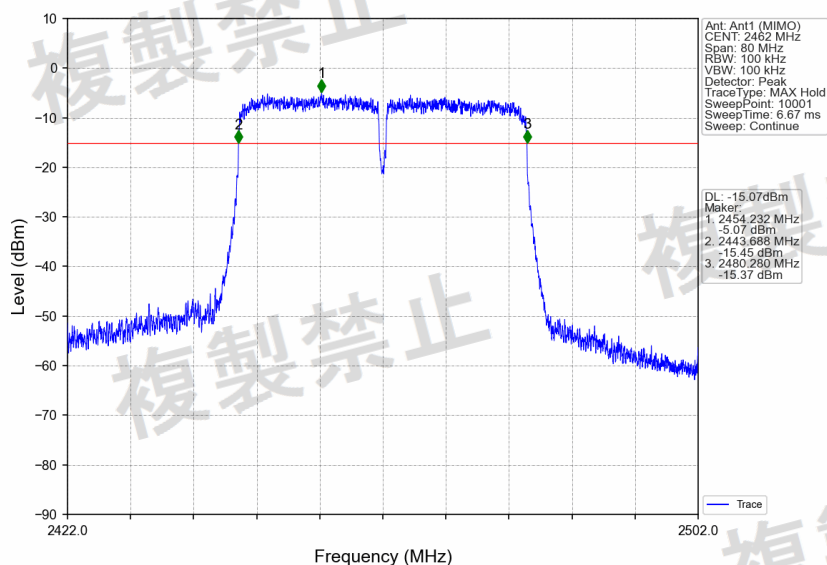
802.11n(HT40) 2422MHz Ant1 (MIMO) NTNV



802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV



802.11n(HT40) 2462MHz Ant1 (MIMO) NTNV



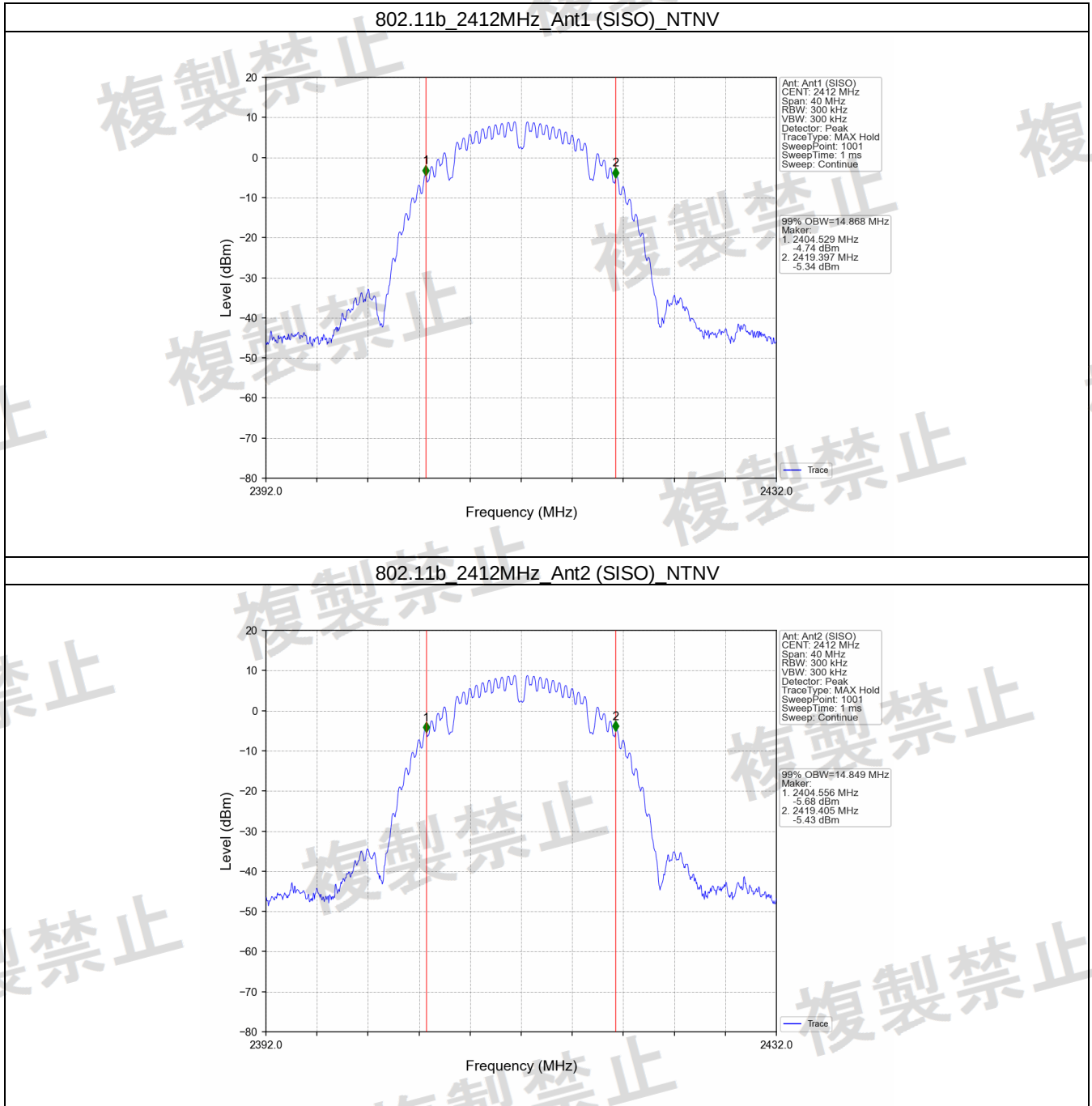
2. Occupied Bandwidth

2.1 OBW

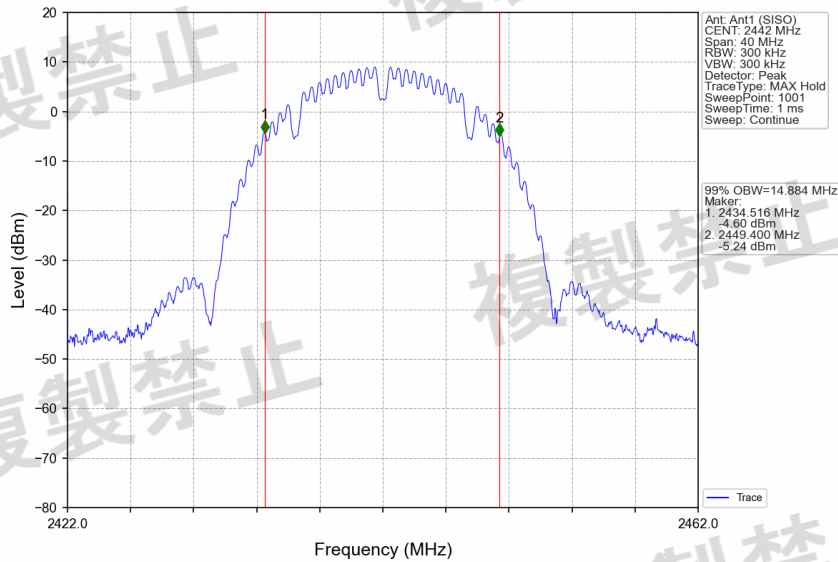
2.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	99% Occupied Bandwidth (MHz)			Verdict
				ANT1	ANT2	Limit	
NTNV	802.11b	SISO	2412	14.868	14.849	≤ 26	Pass
			2442	14.884	14.871	≤ 26	Pass
			2472	15.075	15.041	≤ 26	Pass
	802.11g	SISO	2412	16.710	16.706	≤ 26	Pass
			2442	16.706	16.700	≤ 26	Pass
			2472	16.713	16.689	≤ 26	Pass
	802.11n (HT20)	MIMO	2412	17.696	17.686	≤ 26	Pass
			2442	17.701	17.696	≤ 26	Pass
			2472	17.701	17.690	≤ 26	Pass
	802.11n (HT40)	MIMO	2422	35.787	35.795	≤ 40	Pass
			2442	35.760	35.793	≤ 40	Pass
			2462	35.770	35.782	≤ 40	Pass

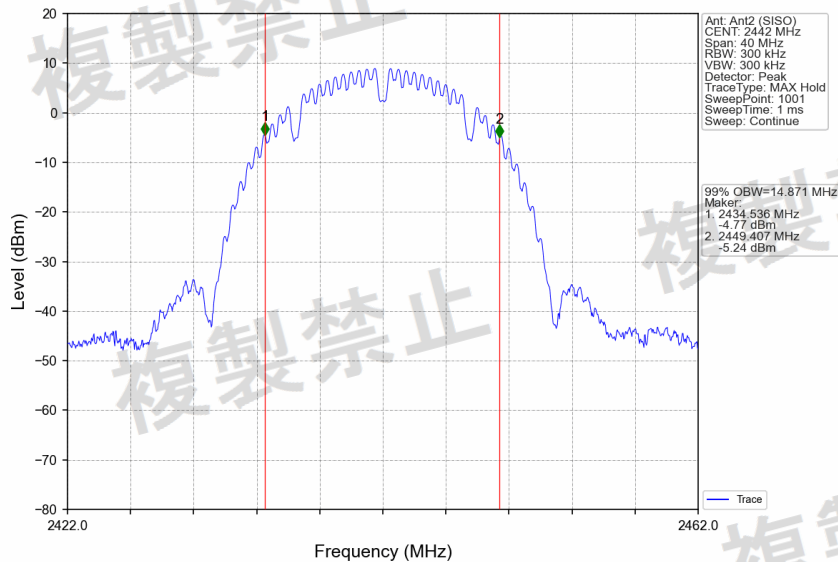
2.1.2 Test Graph



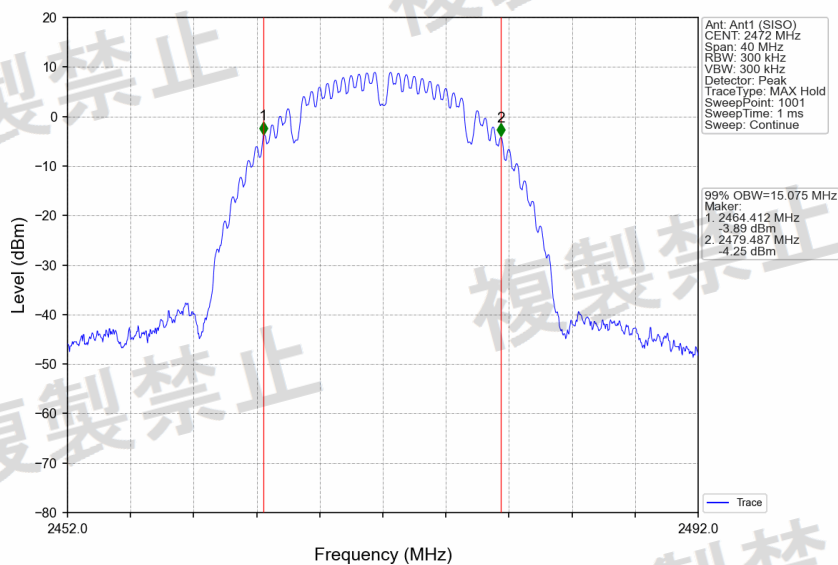
802.11b 2442MHz Ant1 (SISO) NTNV



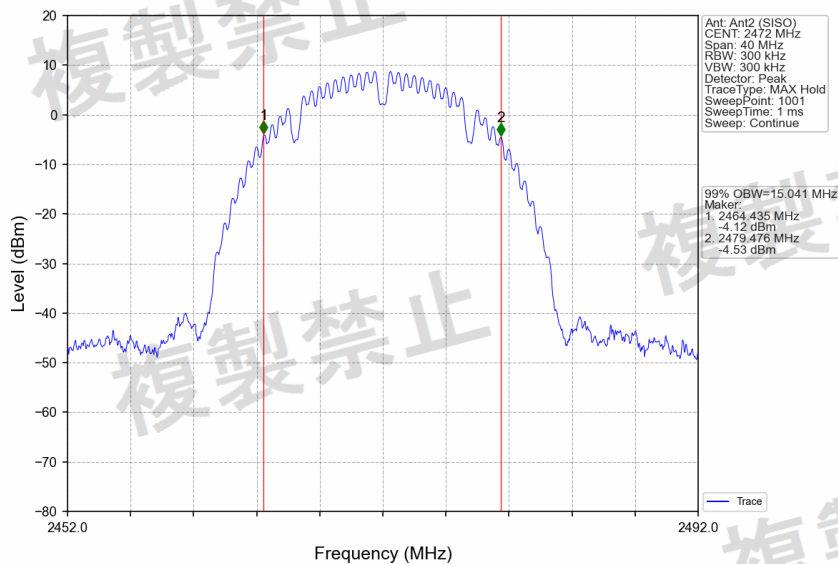
802.11b 2442MHz Ant2 (SISO) NTNV

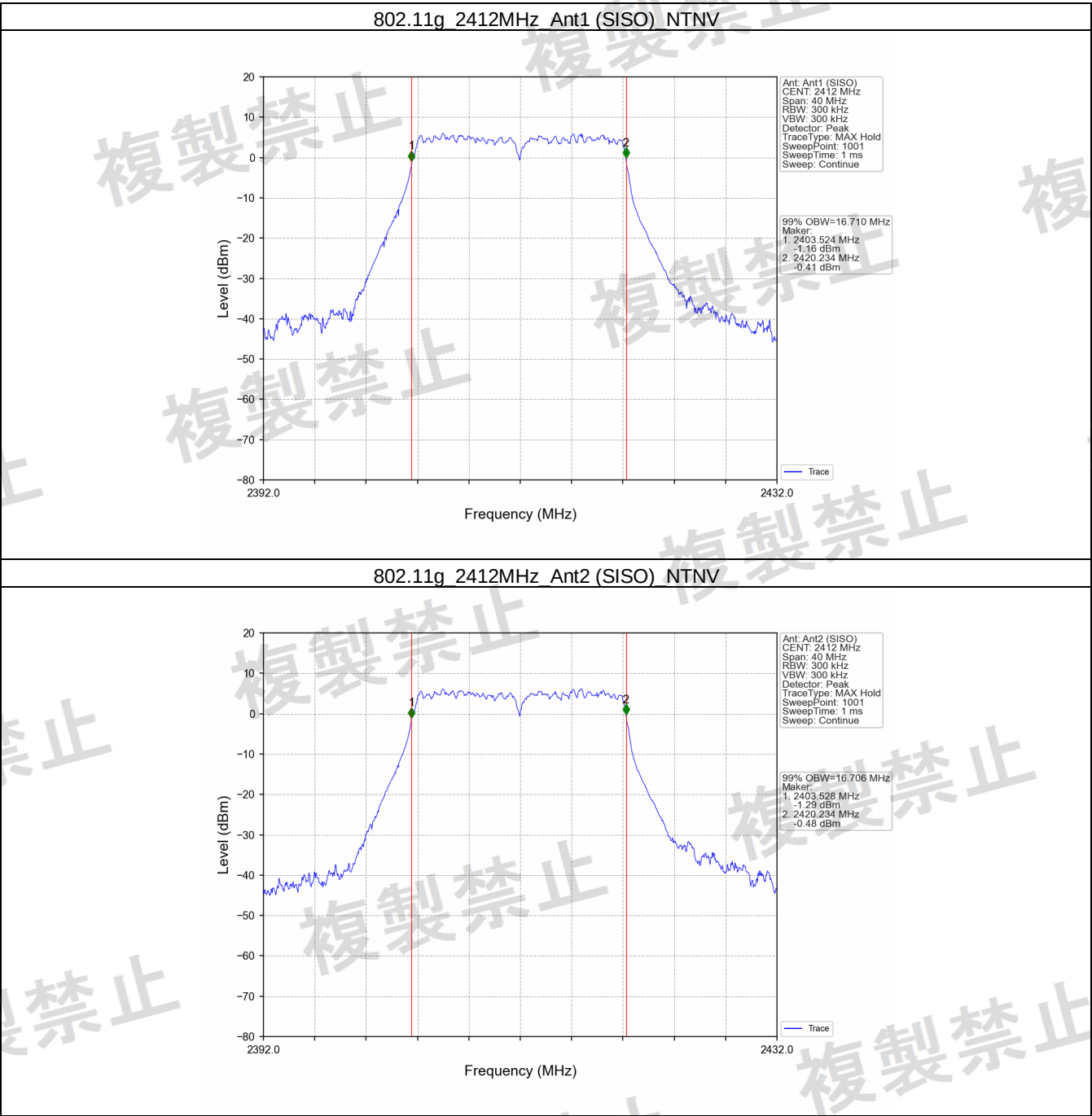


802.11b 2472MHz Ant1 (SISO) NTV

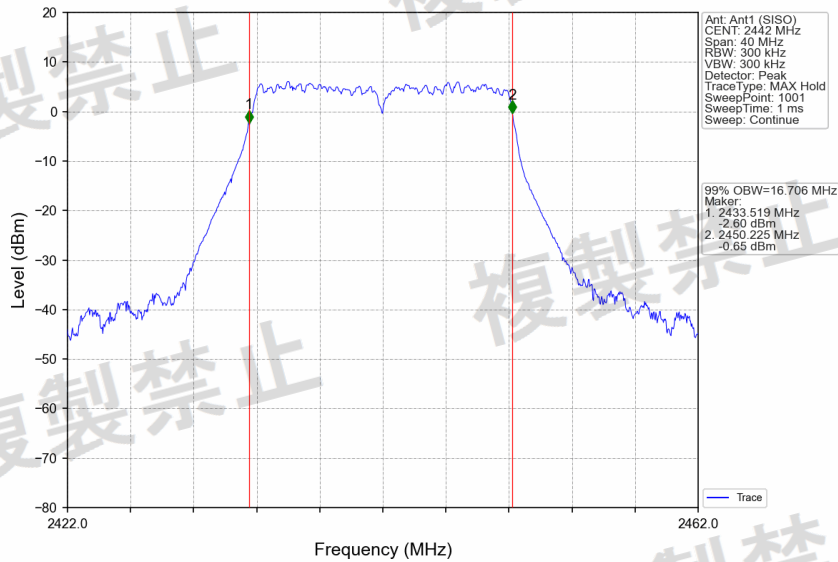


802.11b 2472MHz Ant2 (SISO) NTV

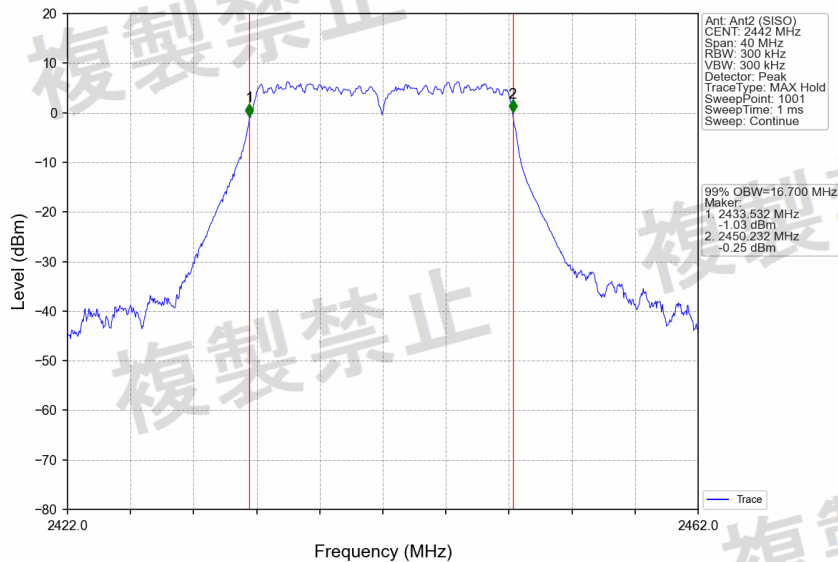




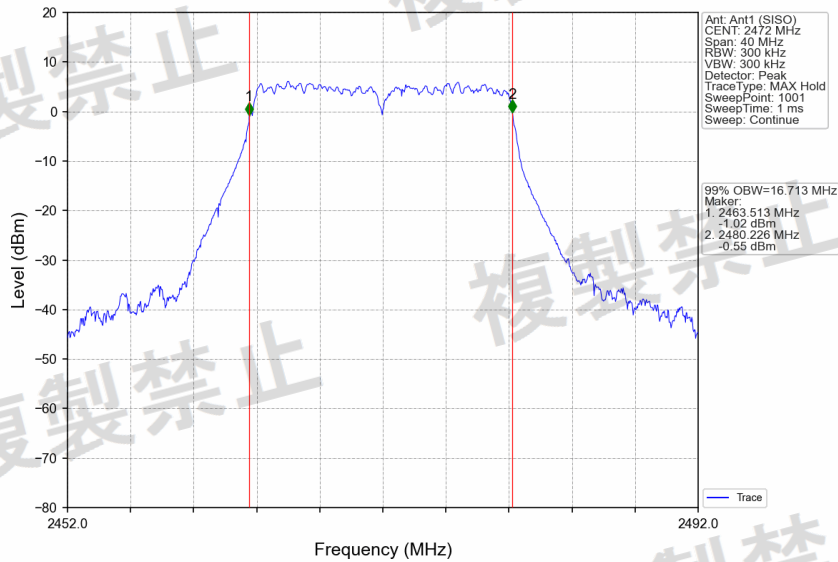
802.11g 2442MHz Ant1 (SISO) NTV



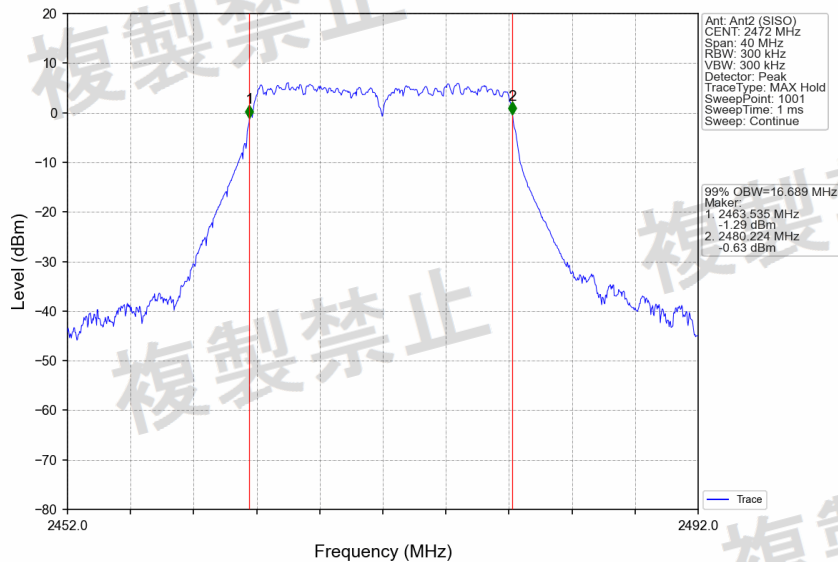
802.11g 2442MHz Ant2 (SISO) NTV



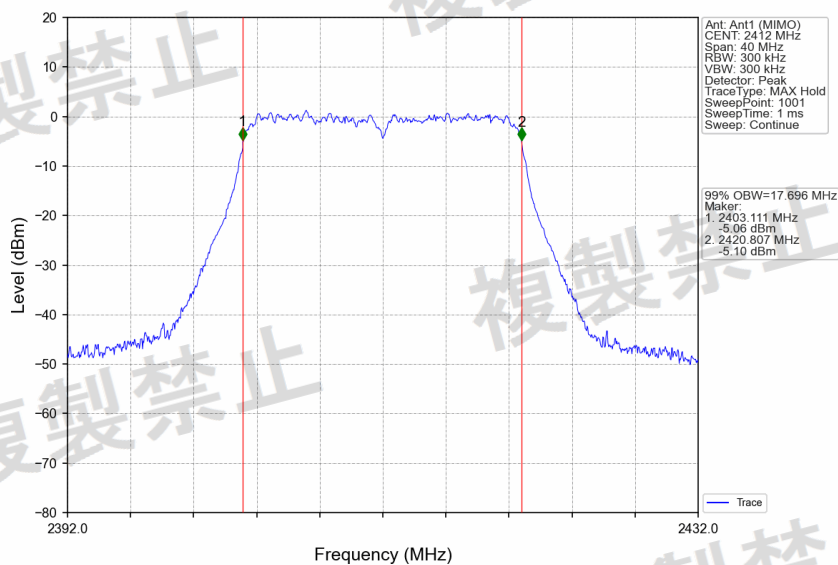
802.11g 2472MHz Ant1 (SISO) NTV



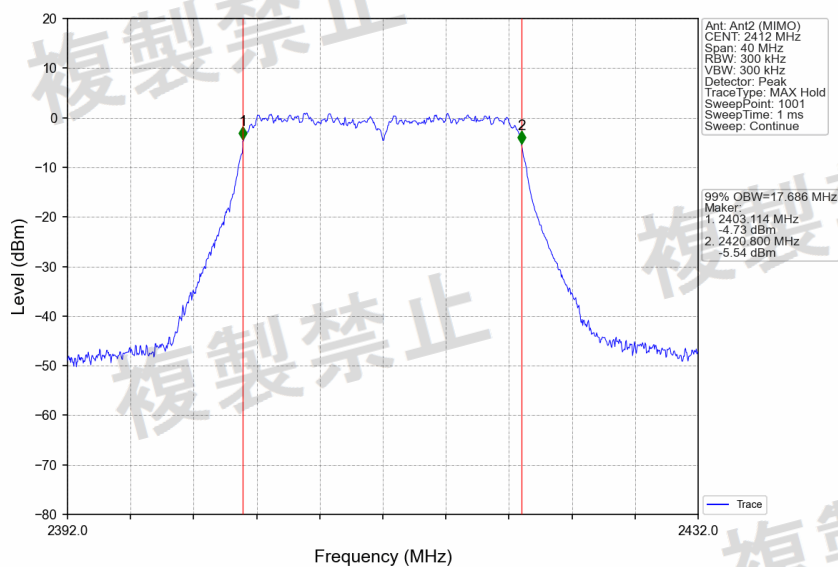
802.11g 2472MHz Ant2 (SISO) NTV



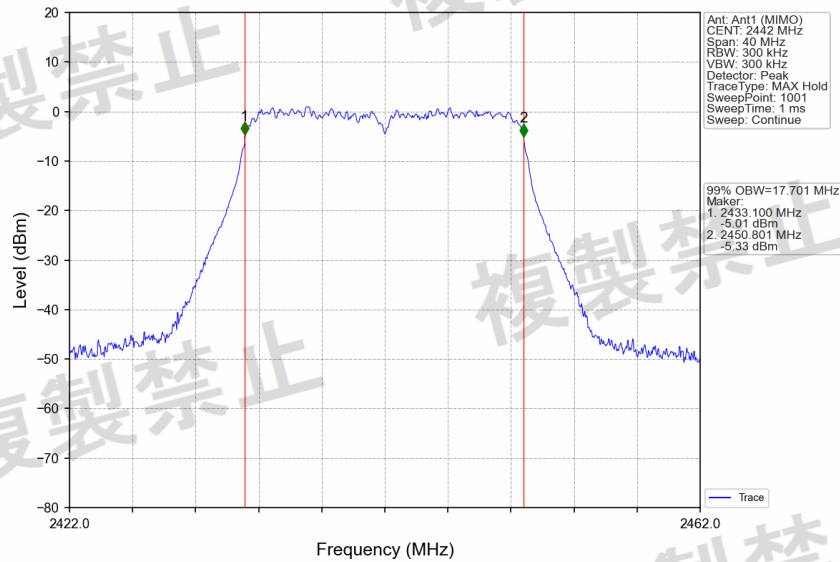
802.11n(HT20) 2412MHz Ant1 (MIMO) NTVN



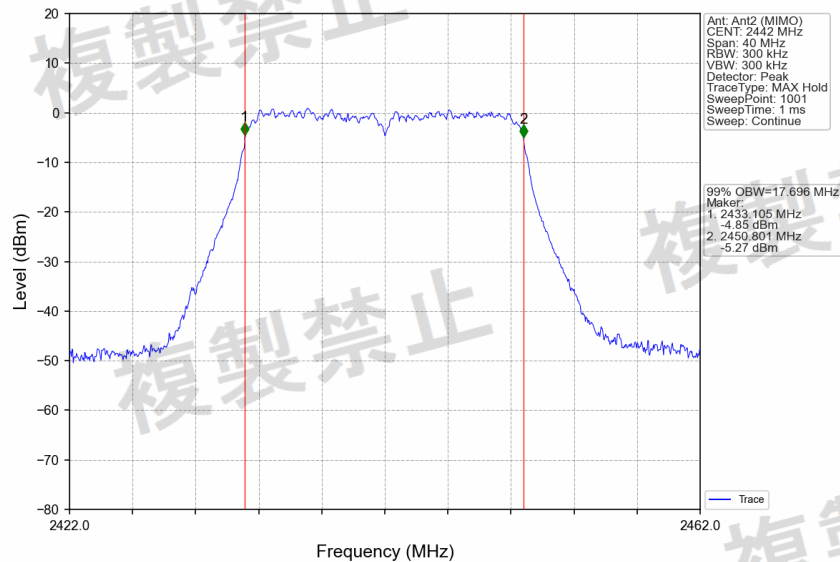
802.11n(HT20) 2412MHz Ant2 (MIMO) NTVN



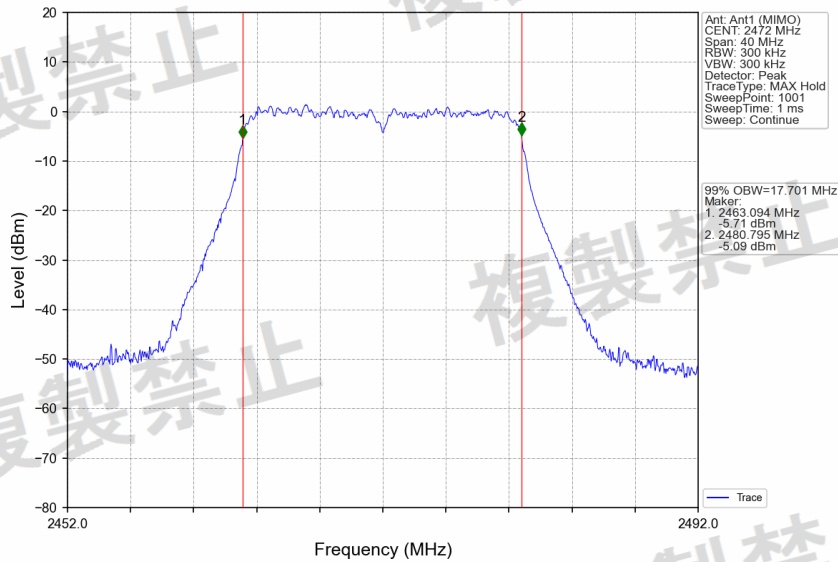
802.11n(HT20) 2442MHz Ant1 (MIMO) NTVN



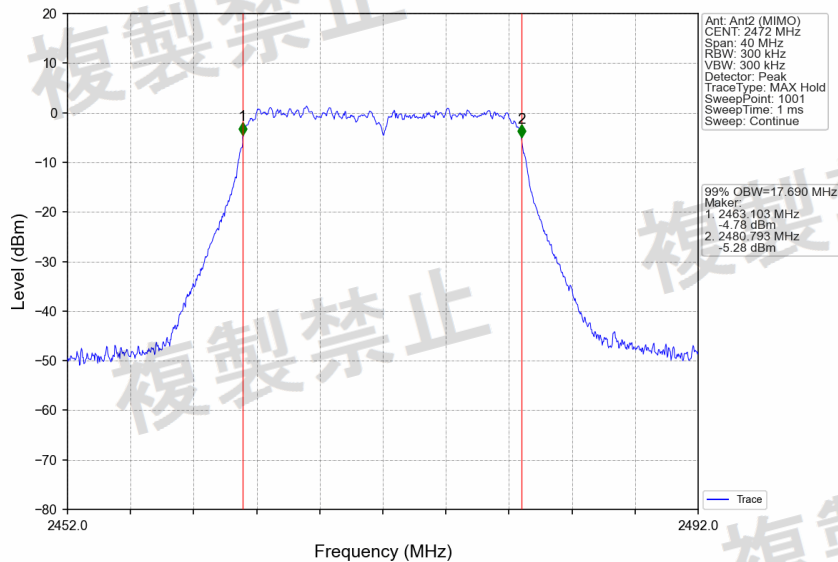
802.11n(HT20) 2442MHz Ant2 (MIMO) NTVN



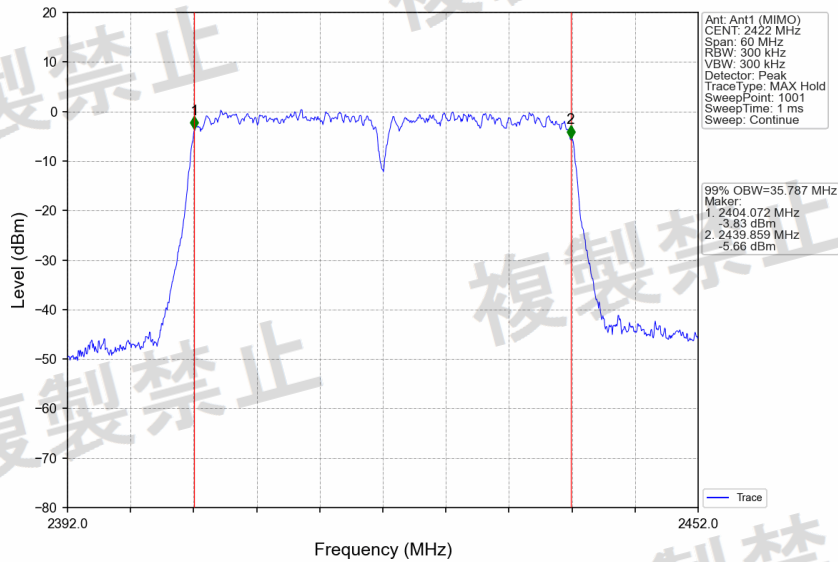
802.11n(HT20) 2472MHz Ant1 (MIMO) NTVN



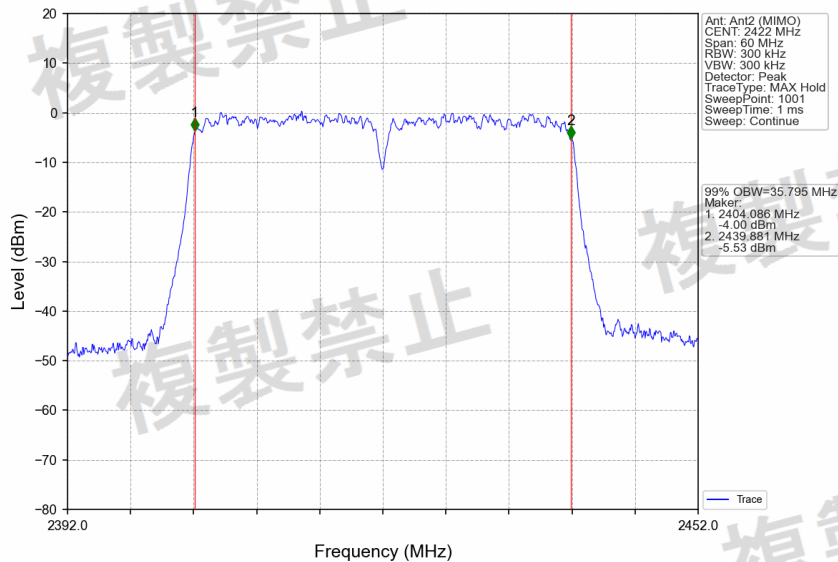
802.11n(HT20) 2472MHz Ant2 (MIMO) NTVN



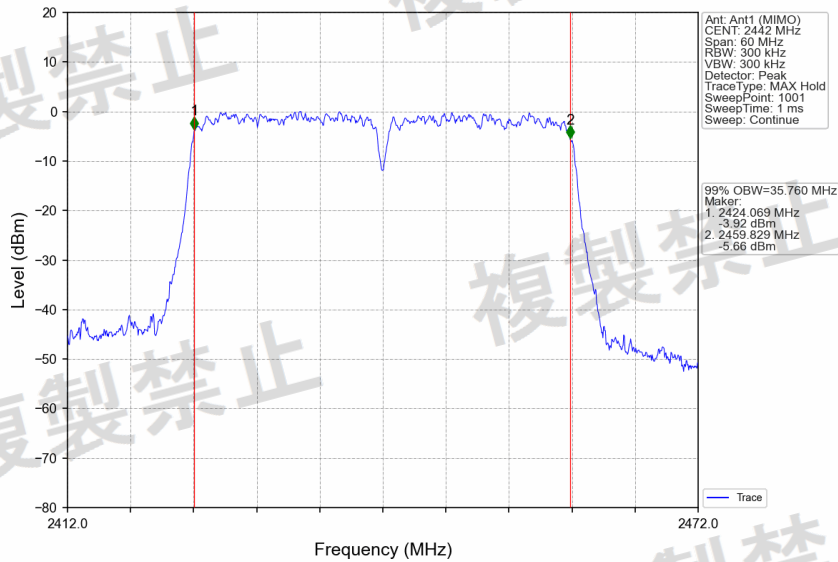
802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN



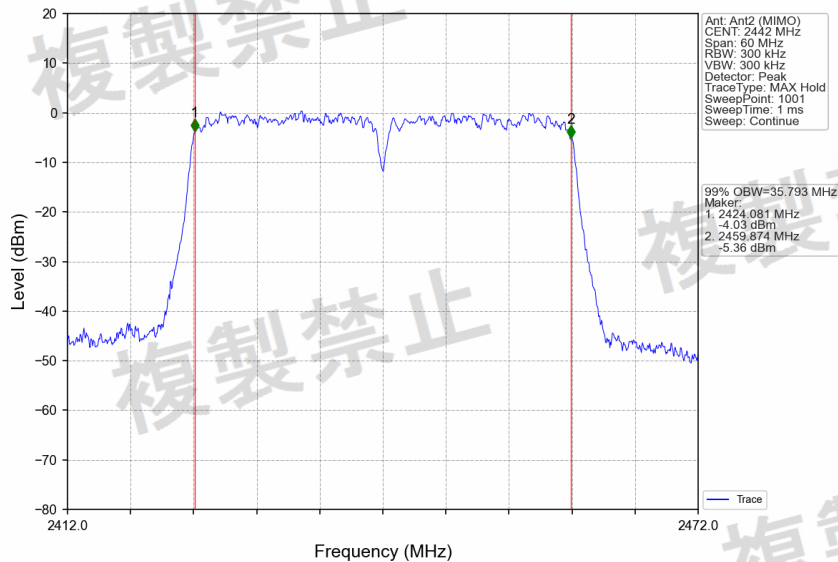
802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN



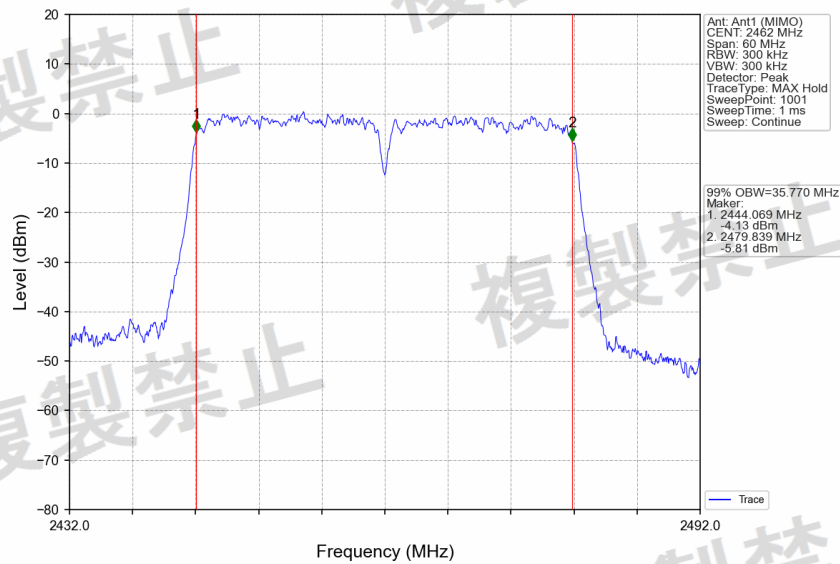
802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV



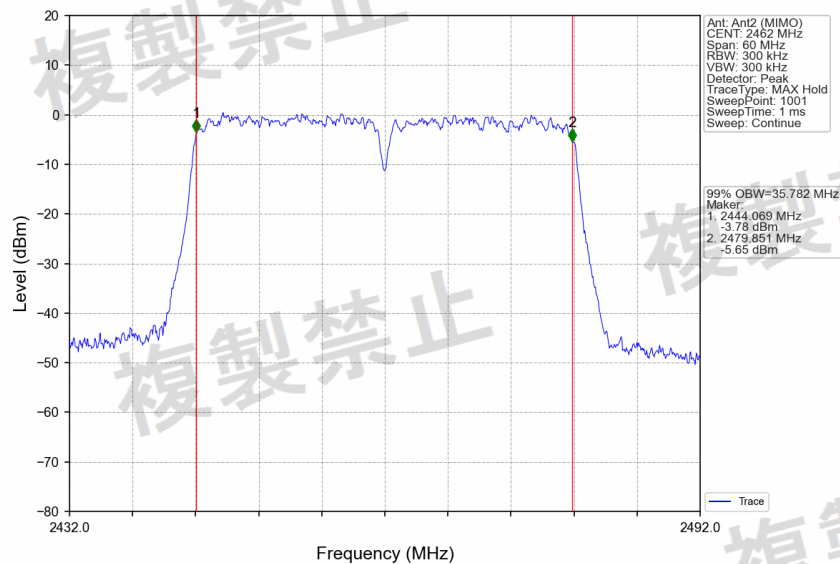
802.11n(HT40) 2442MHz Ant2 (MIMO) NTNV



802.11n(HT40) 2462MHz Ant1 (MIMO) NTVN



802.11n(HT40) 2462MHz Ant2 (MIMO) NTVN



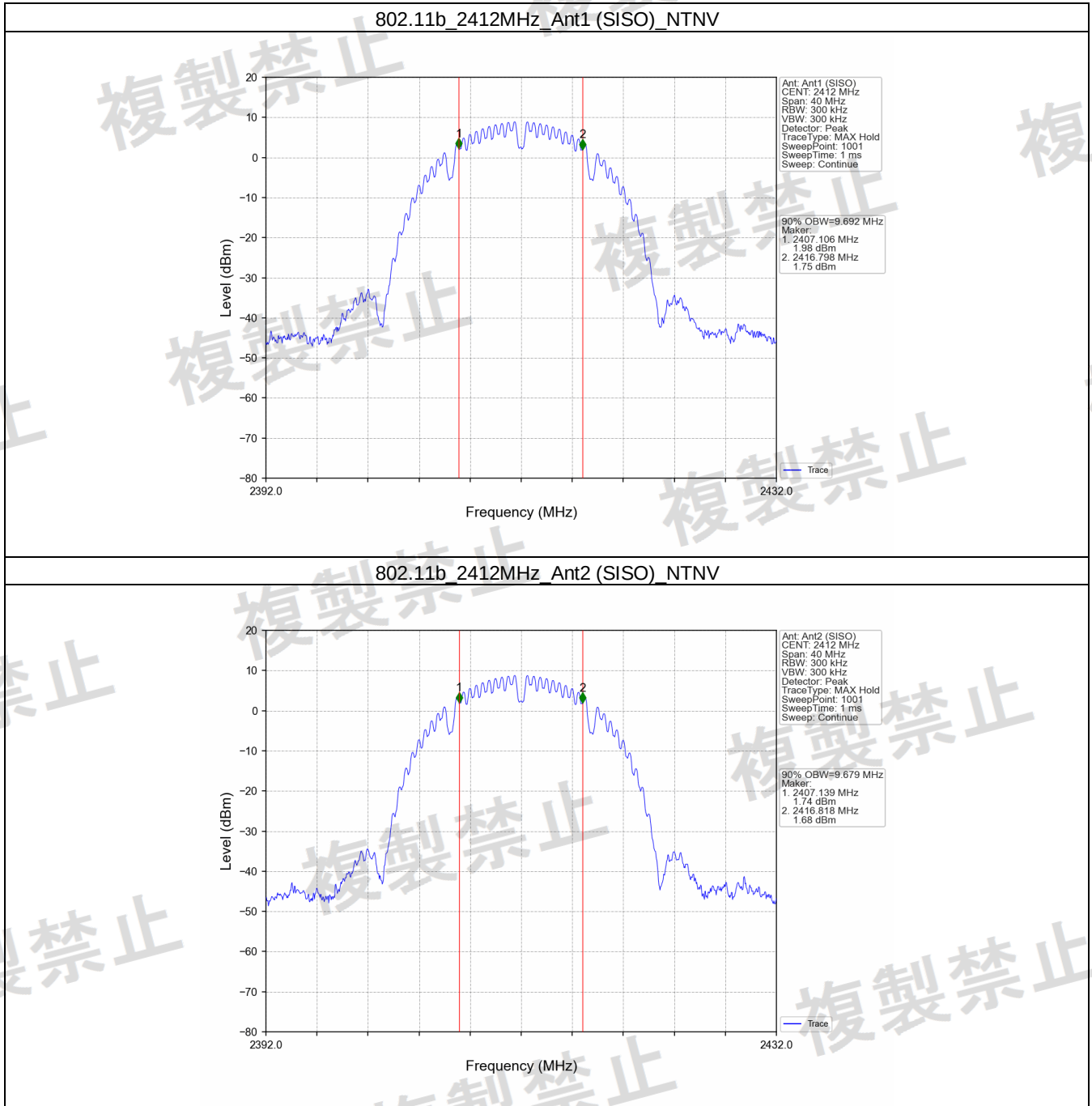
3. Spread Bandwidth

3.1 SPBW

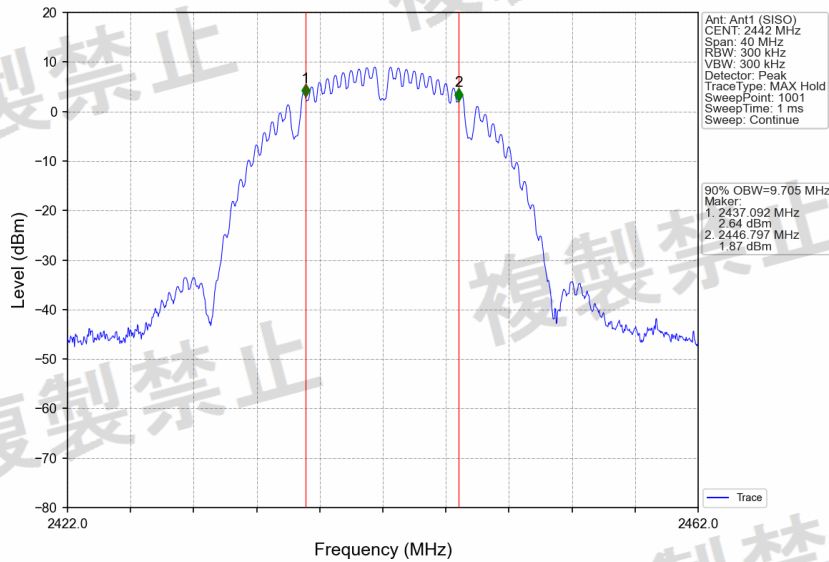
3.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	Spread Bandwidth (MHz)			Verdict
				ANT1	ANT2	Limit	
NTNV	802.11b	SISO	2412	9.692	9.679	≥ 0.5	Pass
			2442	9.705	9.695	≥ 0.5	Pass
			2472	9.830	9.804	≥ 0.5	Pass
	802.11g	SISO	2412	14.833	14.805	≥ 0.5	Pass
			2442	14.815	14.803	≥ 0.5	Pass
			2472	14.805	14.794	≥ 0.5	Pass
	802.11n (HT20)	MIMO	2412	15.625	15.624	≥ 0.5	Pass
			2442	15.609	15.618	≥ 0.5	Pass
			2472	15.599	15.623	≥ 0.5	Pass
	802.11n (HT40)	MIMO	2422	31.802	31.841	≥ 0.5	Pass
			2442	31.839	31.802	≥ 0.5	Pass
			2462	31.899	31.853	≥ 0.5	Pass

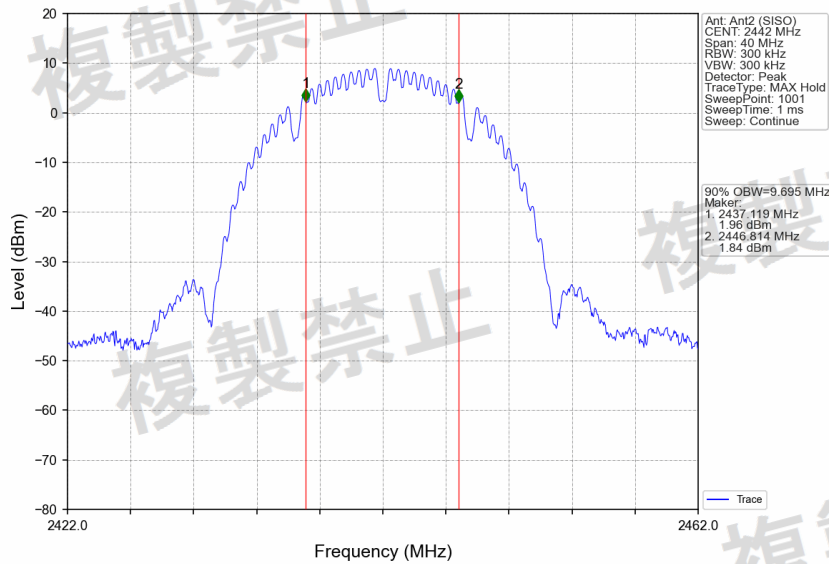
3.1.2 Test Graph



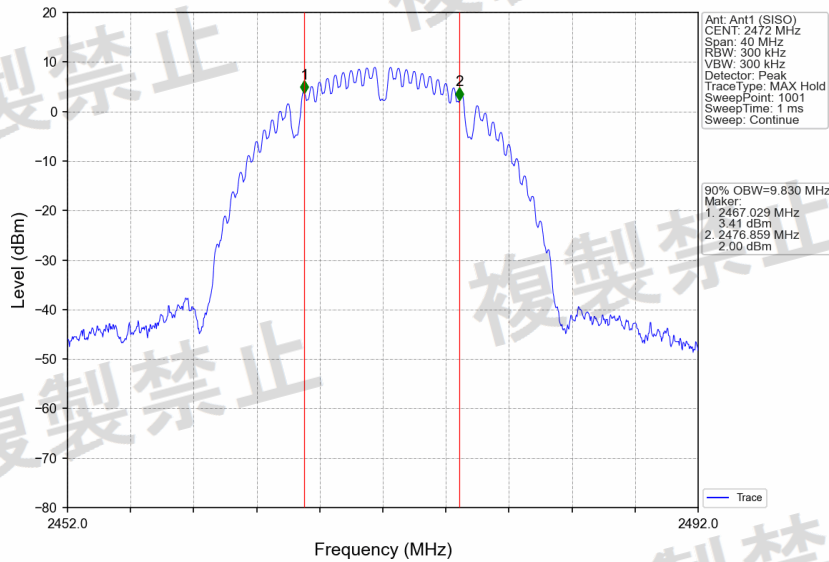
802.11b 2442MHz Ant1 (SISO) NTV



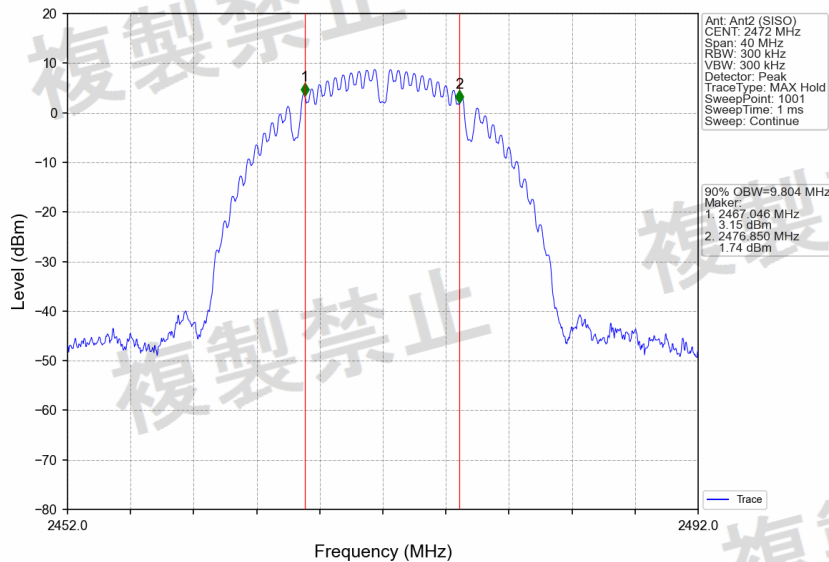
802.11b 2442MHz Ant2 (SISO) NTV



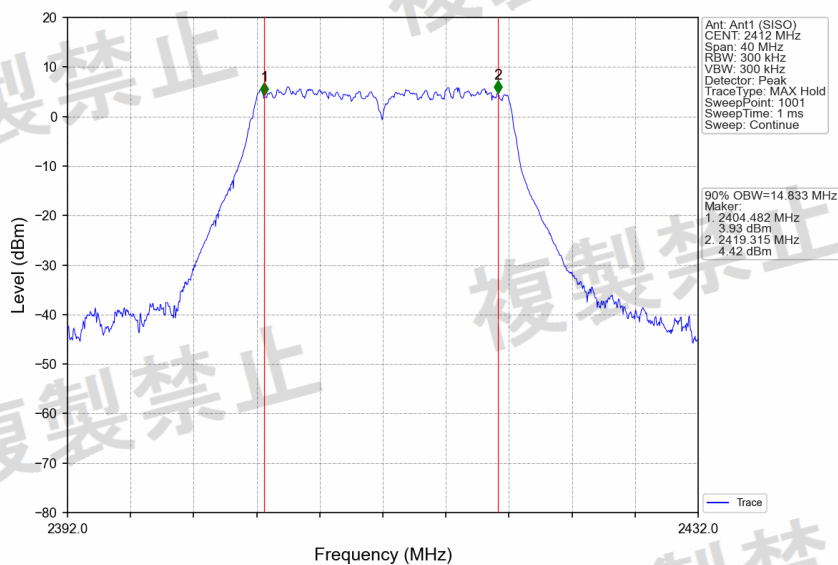
802.11b 2472MHz Ant1 (SISO) NTN



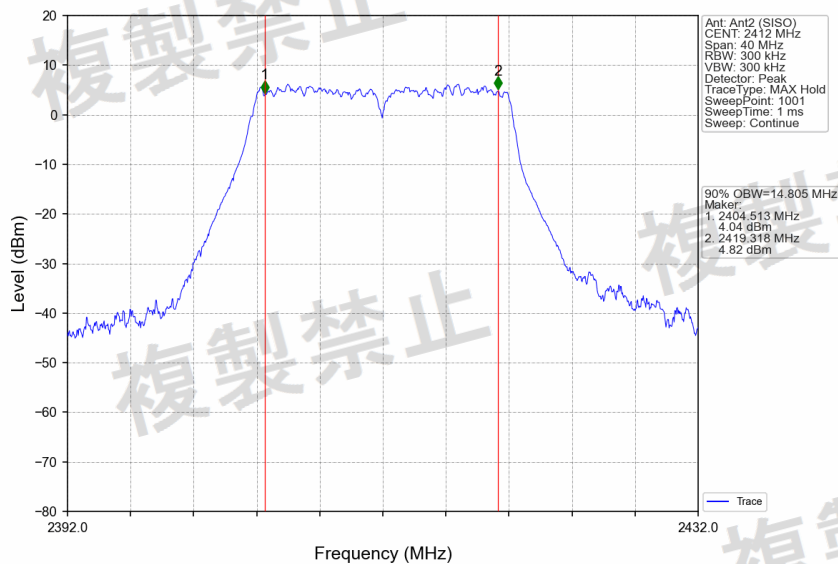
802.11b 2472MHz Ant2 (SISO) NTN



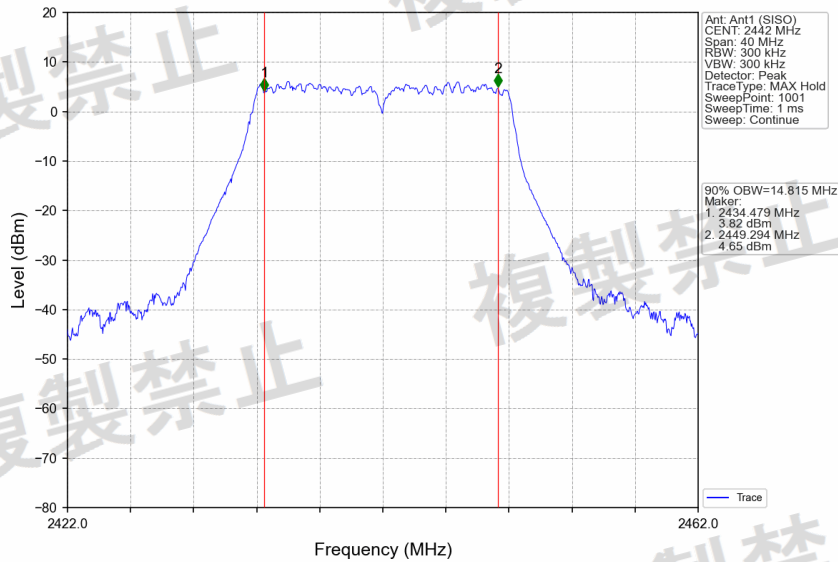
802.11g 2412MHz Ant1 (SISO) NTV



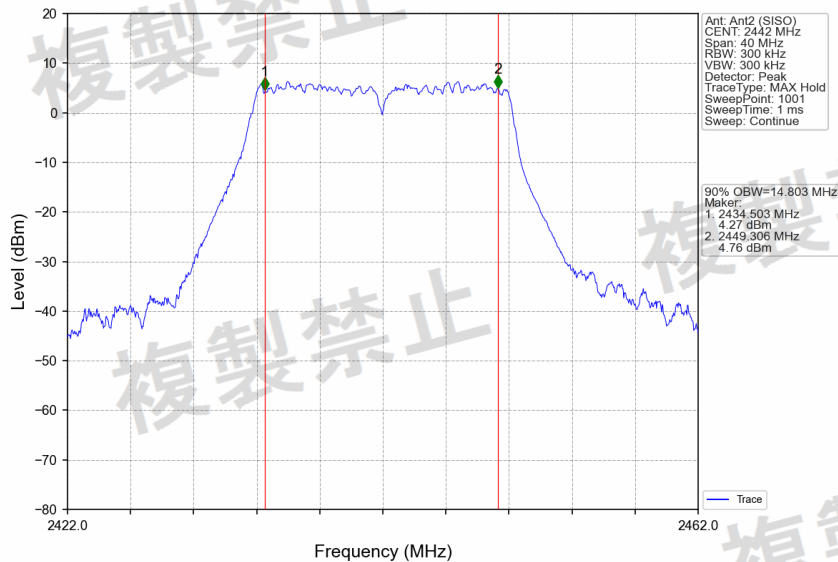
802.11g 2412MHz Ant2 (SISO) NTV



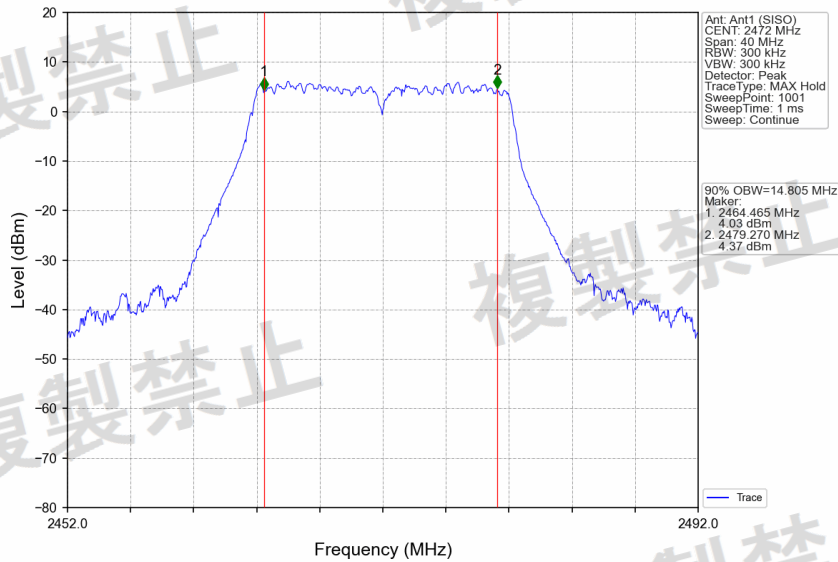
802.11g 2442MHz Ant1 (SISO) NTNV



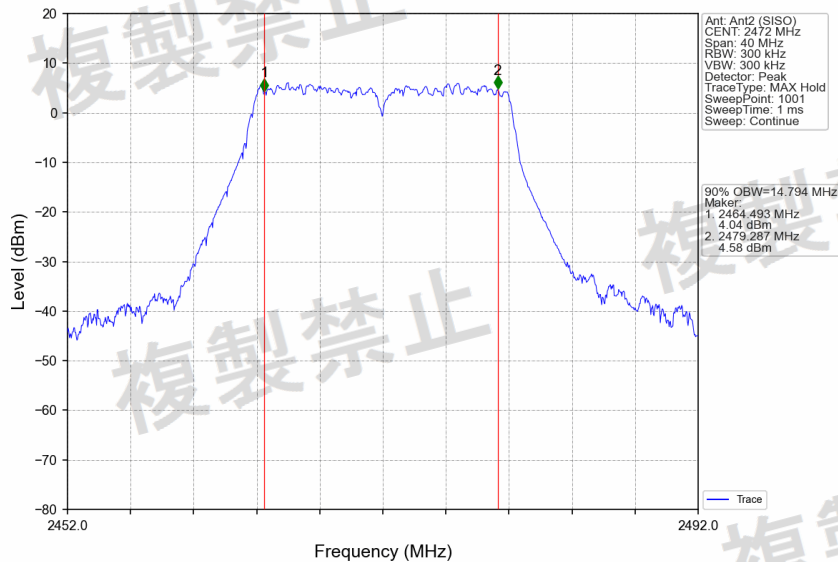
802.11g 2442MHz Ant2 (SISO) NTNV



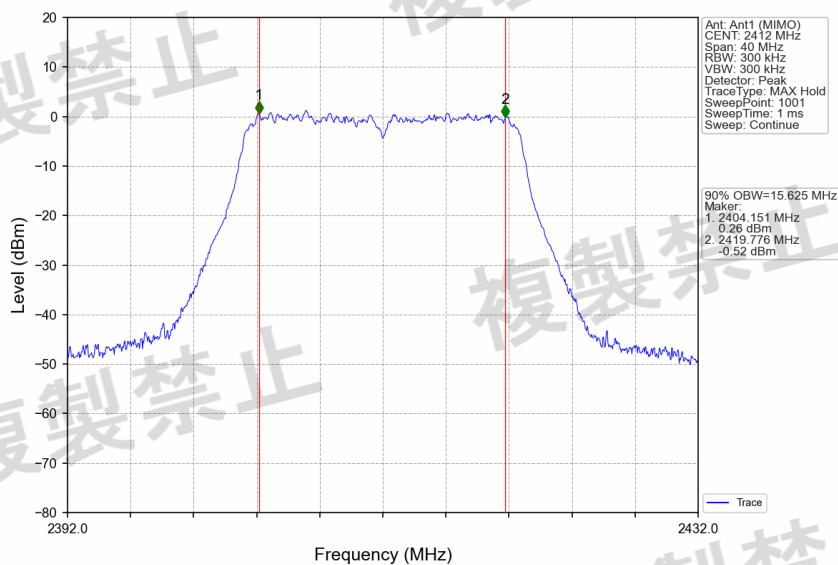
802.11g 2472MHz Ant1 (SISO) NTV



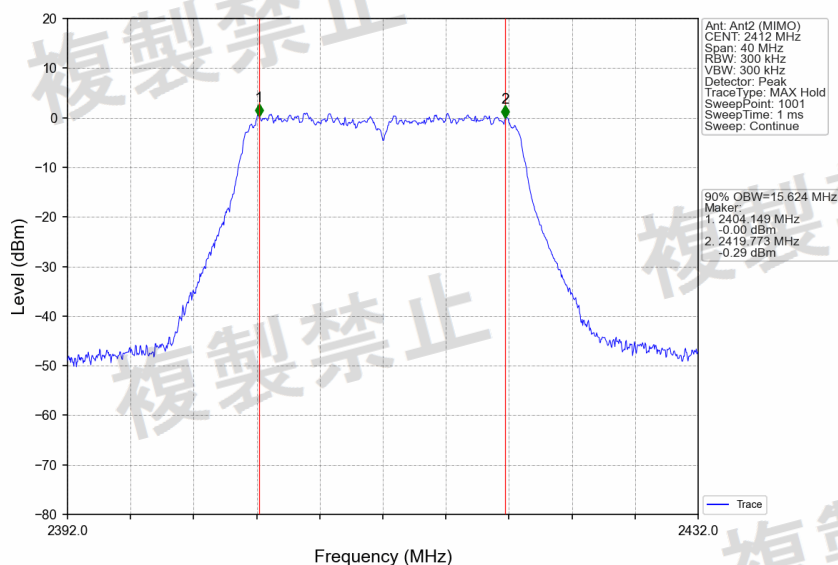
802.11g 2472MHz Ant2 (SISO) NTV



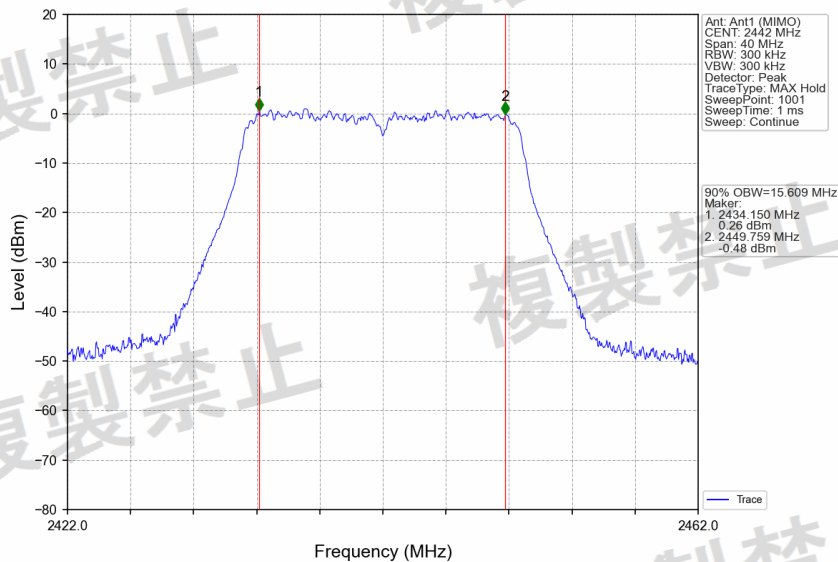
802.11n(HT20) 2412MHz Ant1 (MIMO) NTNV



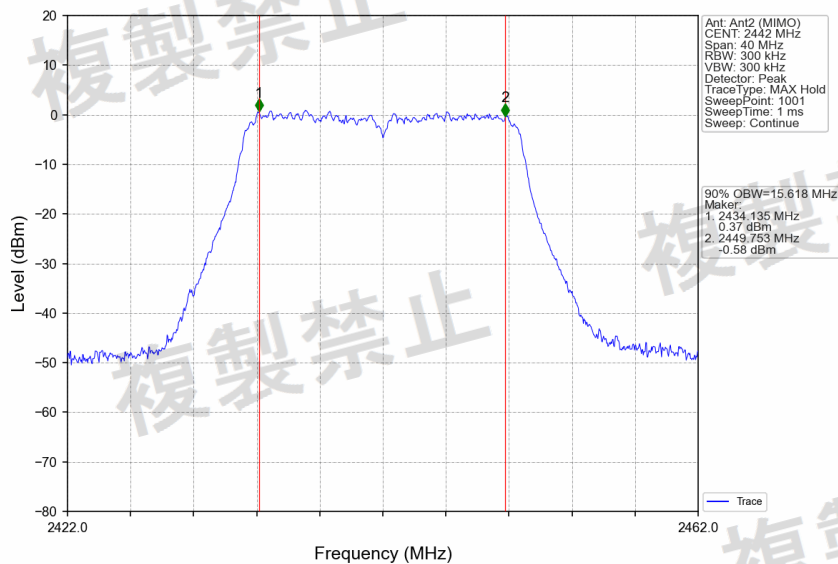
802.11n(HT20) 2412MHz Ant2 (MIMO) NTNV



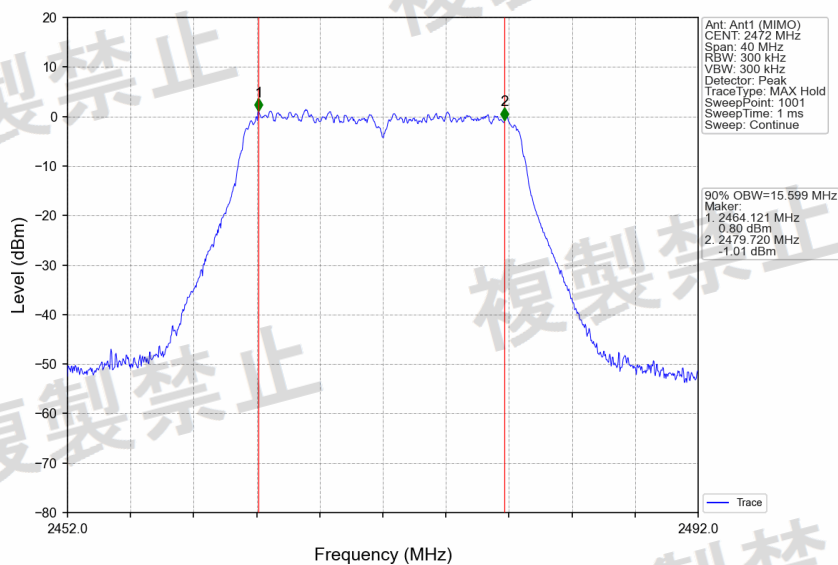
802.11n(HT20) 2442MHz Ant1 (MIMO) NTVN



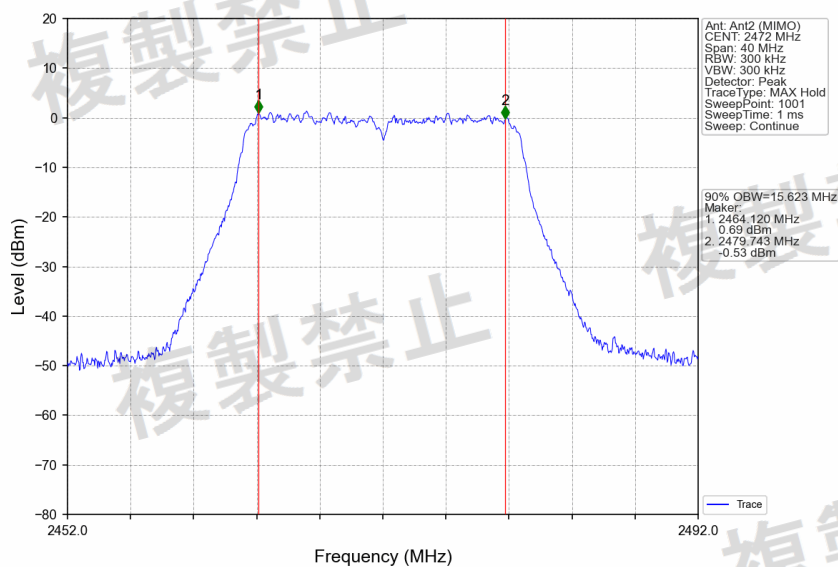
802.11n(HT20) 2442MHz Ant2 (MIMO) NTVN



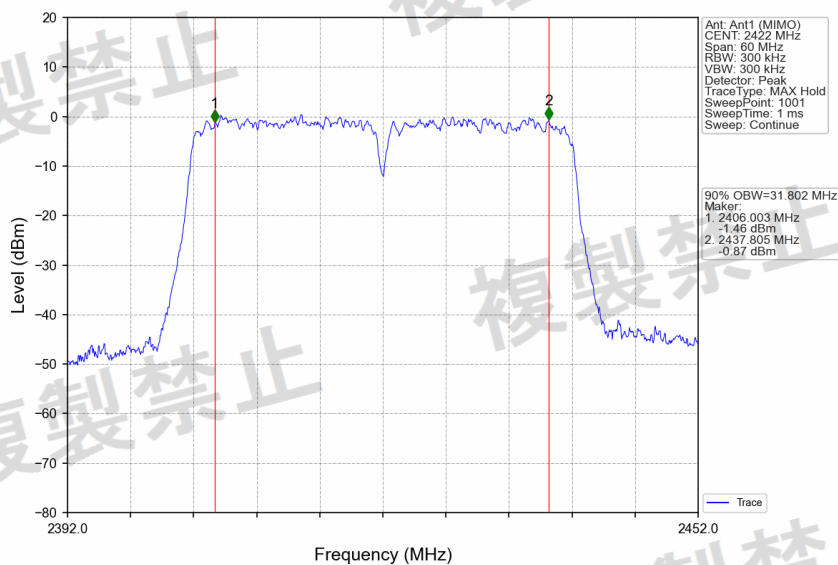
802.11n(HT20) 2472MHz Ant1 (MIMO) NTVN



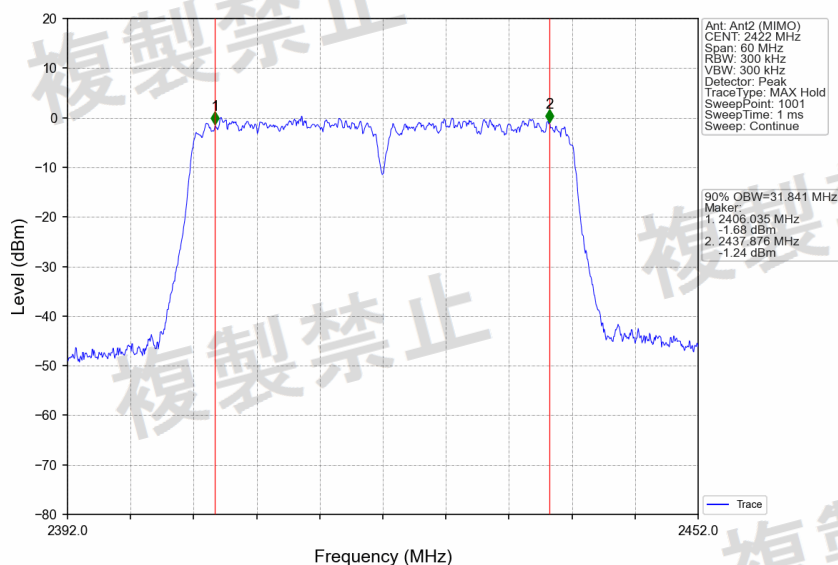
802.11n(HT20) 2472MHz Ant2 (MIMO) NTVN



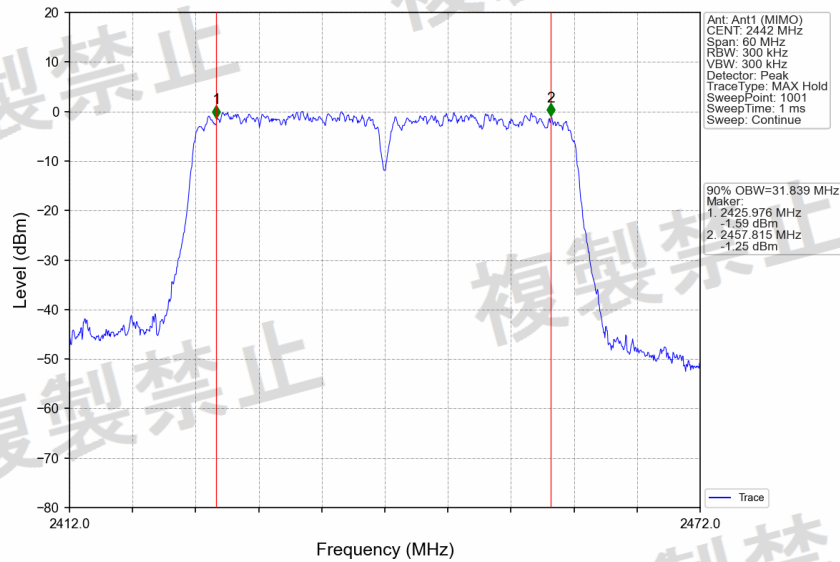
802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN



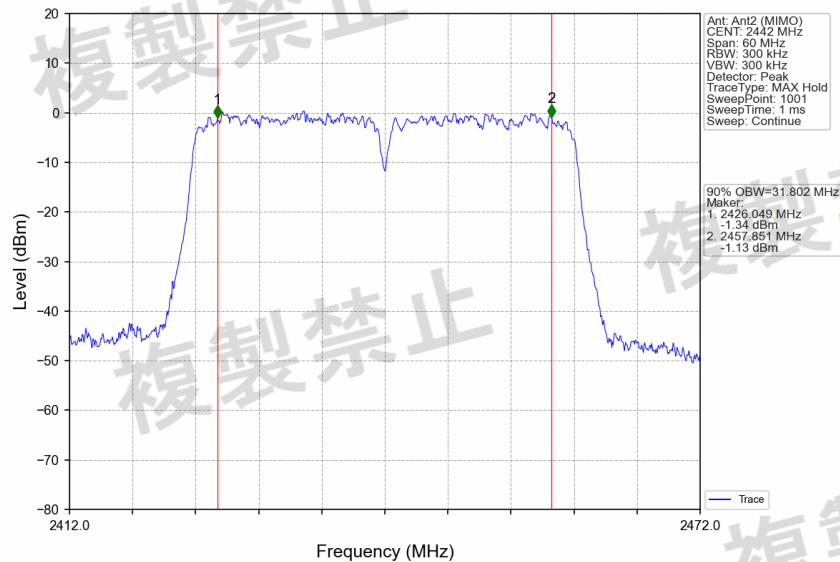
802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN



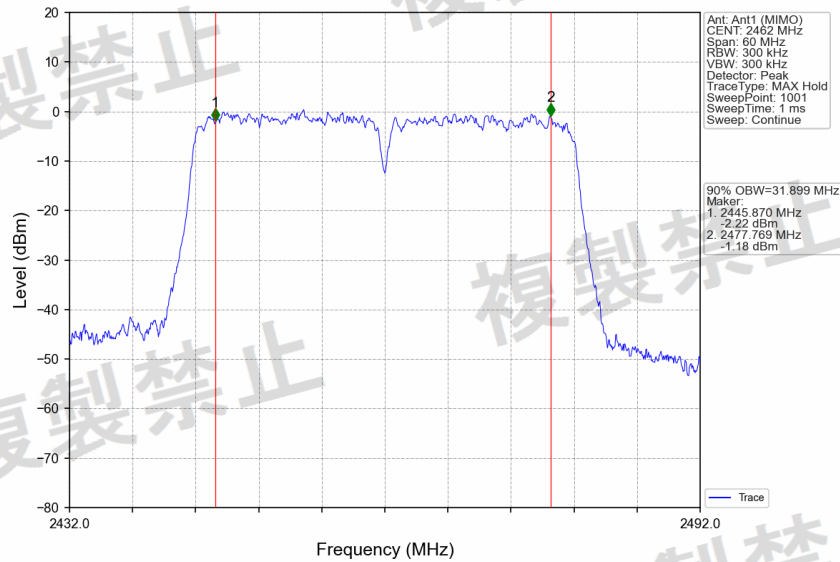
802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV



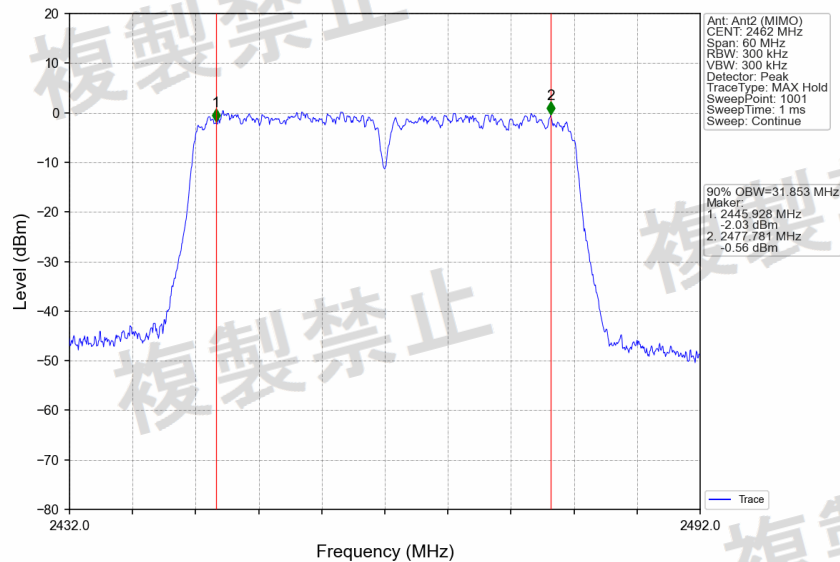
802.11n(HT40) 2442MHz Ant2 (MIMO) NTNV



802.11n(HT40) 2462MHz Ant1 (MIMO) NTVN



802.11n(HT40) 2462MHz Ant2 (MIMO) NTVN



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR231000181301

Page: 64 of 139

3.2 SpreadFactor

3.2.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	Spread Factor			Verdict
				ANT1	ANT2	Limit	
NTNV	802.11b	SISO	2412	7.050	7.040	≥ 5	Pass
			2442	7.060	7.050	≥ 5	Pass
			2472	7.150	7.130	≥ 5	Pass

Note1: Spread Factor = Spread Bandwidth / Symbol Rate, For 802.11b mode, Symbol Rate = 1.375

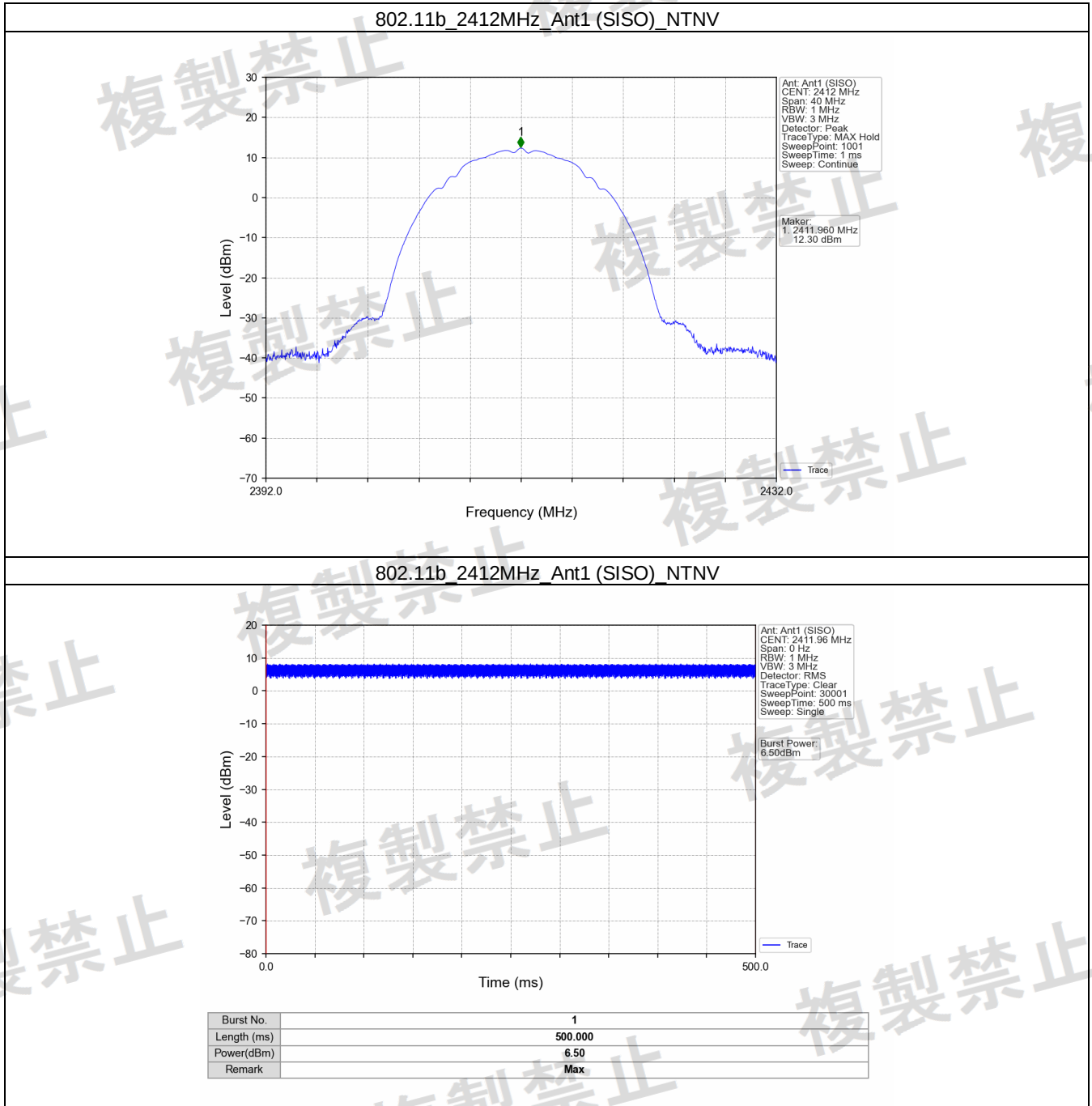
4. Antenna Power

4.1 Power

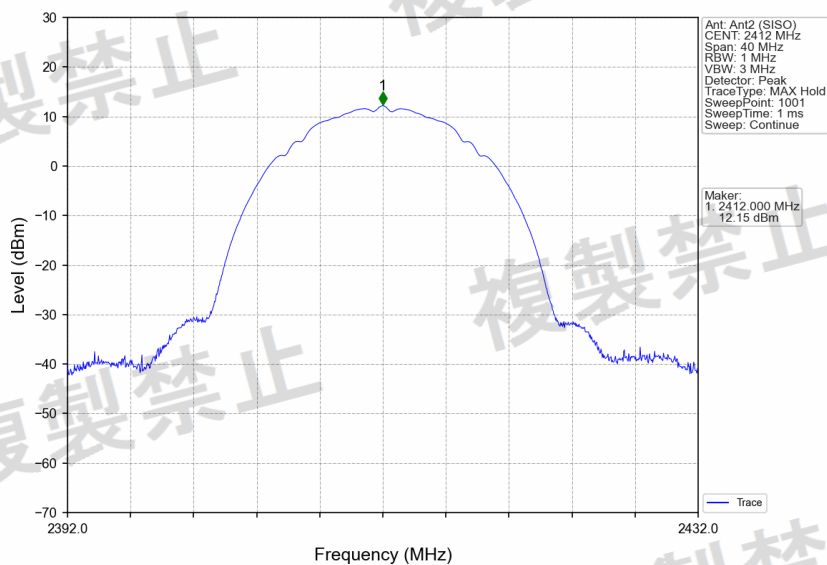
4.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (mW/MHz)		Nominal Power (mW/MHz)	Tolerance (%)		Verdict
					Measured	Limit		Measured	Limit	
NTNV	802.11b	SISO	2412	1	4.470	≤ 10.00	4.500	-0.67	-80 to 20	Pass
				2	4.328	≤ 10.00	4.500	-3.82	-80 to 20	Pass
			2442	1	4.540	≤ 10.00	4.500	0.89	-80 to 20	Pass
				2	4.497	≤ 10.00	4.500	-0.07	-80 to 20	Pass
			2472	1	4.507	≤ 10.00	4.500	0.16	-80 to 20	Pass
				2	4.297	≤ 10.00	4.500	-4.51	-80 to 20	Pass
	802.11g	SISO	2412	1	2.414	≤ 10.00	2.400	0.58	-80 to 20	Pass
				2	2.474	≤ 10.00	2.400	3.08	-80 to 20	Pass
			2442	1	2.465	≤ 10.00	2.400	2.71	-80 to 20	Pass
				2	2.565	≤ 10.00	2.400	6.88	-80 to 20	Pass
			2472	1	2.480	≤ 10.00	2.400	3.33	-80 to 20	Pass
				2	2.469	≤ 10.00	2.400	2.88	-80 to 20	Pass
	802.11n (HT20)	MIMO	2412	1	0.695	≤ 10.00	1.600	-56.56	-80 to 20	Pass
				2	0.698	≤ 10.00	1.600	-56.38	-80 to 20	Pass
				MIMO	1.393	≤ 10.00	1.600	-12.94	-80 to 20	Pass
			2442	1	0.684	≤ 10.00	1.600	-57.25	-80 to 20	Pass
				2	0.672	≤ 10.00	1.600	-58.00	-80 to 20	Pass
				MIMO	1.356	≤ 10.00	1.600	-15.25	-80 to 20	Pass
			2472	1	0.729	≤ 10.00	1.600	-54.44	-80 to 20	Pass
				2	0.721	≤ 10.00	1.600	-54.94	-80 to 20	Pass
				MIMO	1.450	≤ 10.00	1.600	-9.38	-80 to 20	Pass
	802.11n (HT40)	MIMO	2422	1	0.560	≤ 5.00	1.300	-56.92	-80 to 20	Pass
				2	0.541	≤ 5.00	1.300	-58.38	-80 to 20	Pass
				MIMO	1.101	≤ 5.00	1.300	-15.31	-80 to 20	Pass
			2442	1	0.551	≤ 5.00	1.300	-57.62	-80 to 20	Pass
				2	0.556	≤ 5.00	1.300	-57.23	-80 to 20	Pass
				MIMO	1.107	≤ 5.00	1.300	-14.85	-80 to 20	Pass
			2462	1	0.543	≤ 5.00	1.300	-58.23	-80 to 20	Pass
				2	0.575	≤ 5.00	1.300	-55.77	-80 to 20	Pass
				MIMO	1.118	≤ 5.00	1.300	-14.00	-80 to 20	Pass

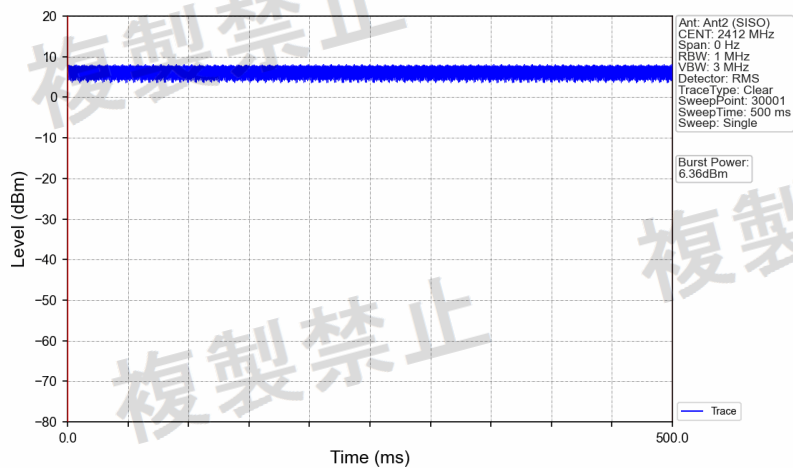
4.1.2 Test Graph



802.11b 2412MHz Ant2 (SISO) NTV

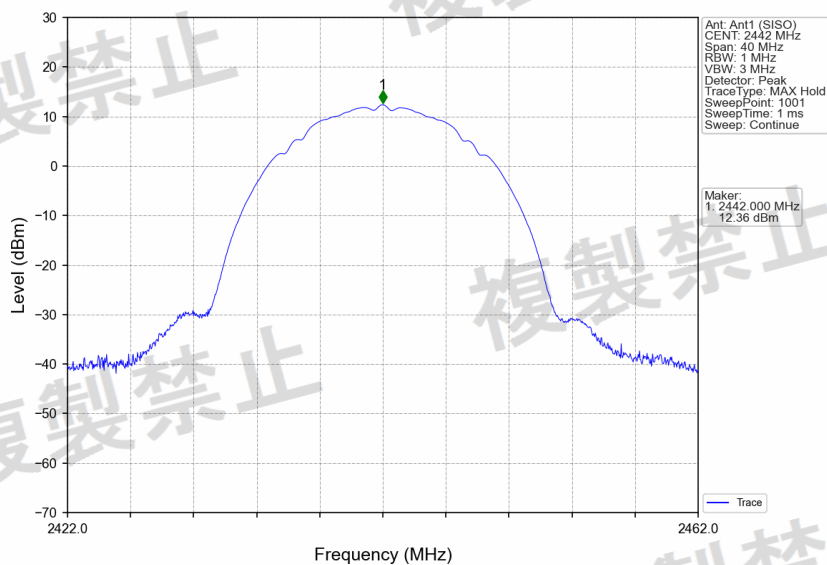


802.11b 2412MHz Ant2 (SISO) NTV

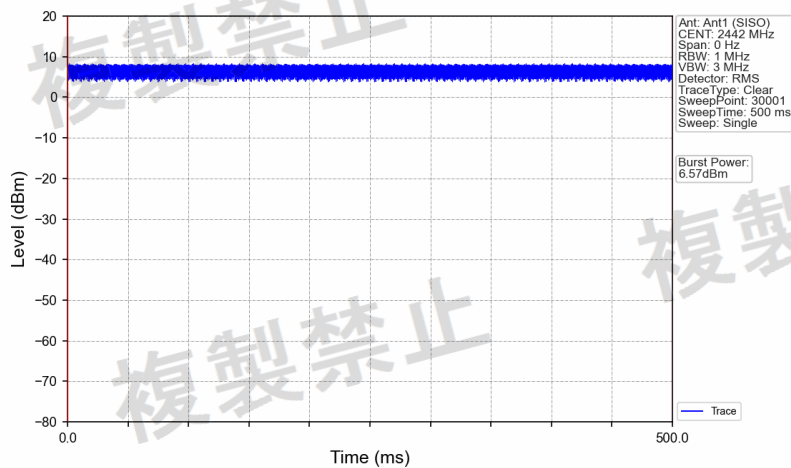


Burst No.	1
Length (ms)	500.000
Power(dBm)	6.36
Remark	Max

802.11b 2442MHz Ant1 (SISO) NTV

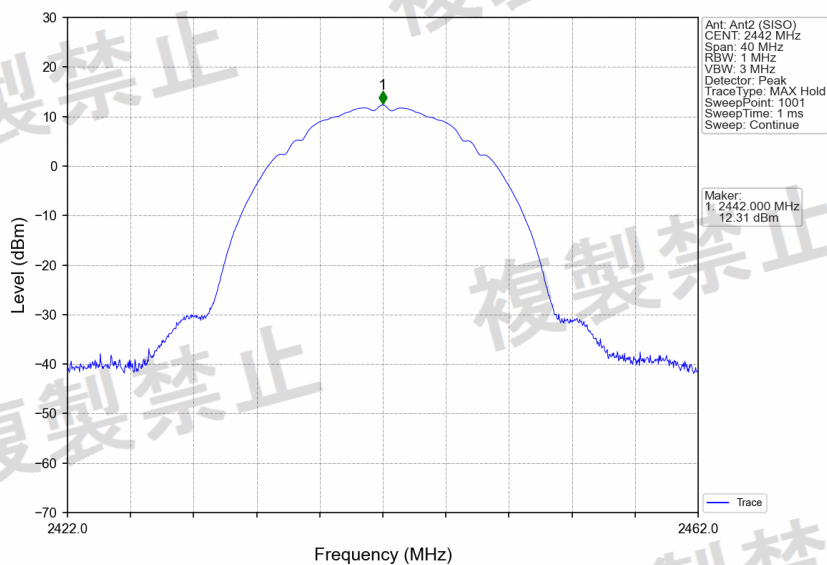


802.11b 2442MHz Ant1 (SISO) NTV

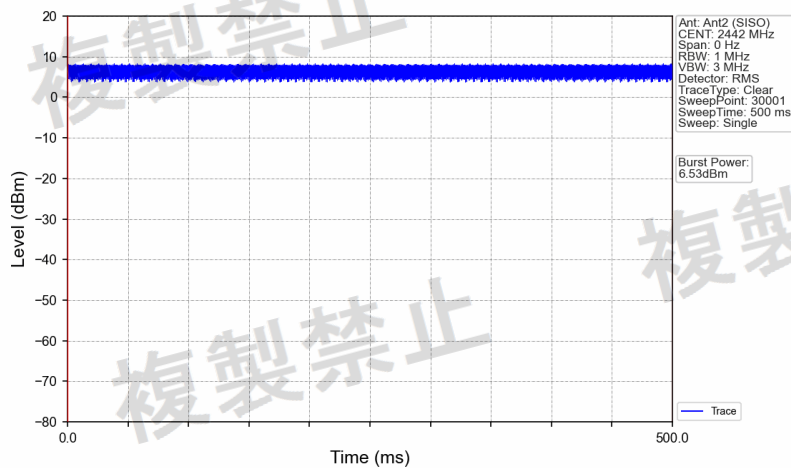


Burst No.	1
Length (ms)	500.000
Power(dBm)	6.57
Remark	Max

802.11b 2442MHz Ant2 (SISO) NTV

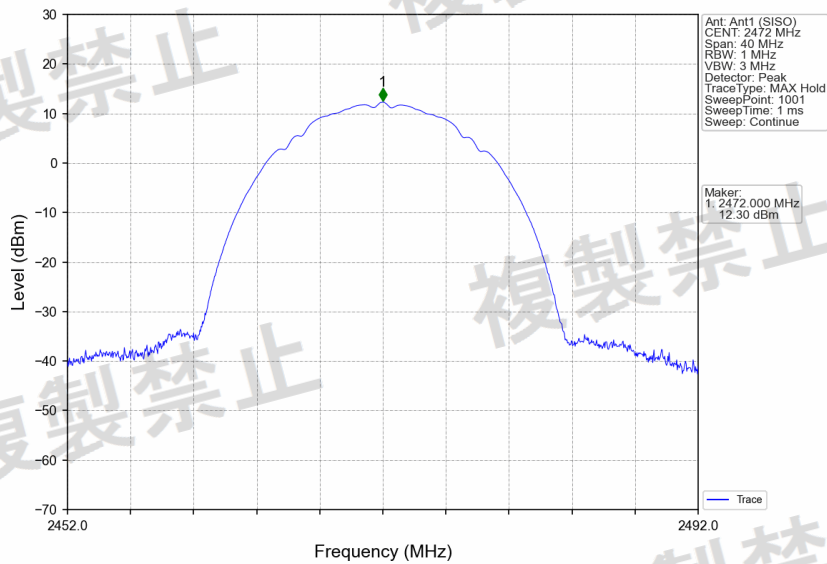


802.11b 2442MHz Ant2 (SISO) NTV

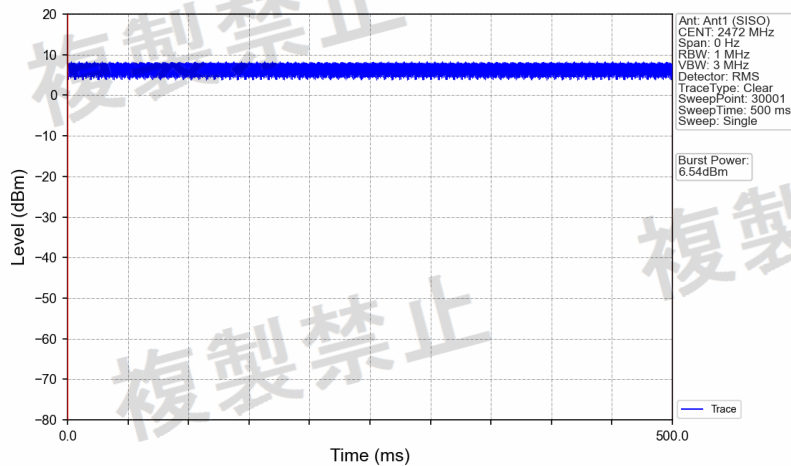


Burst No.	1
Length (ms)	500.000
Power(dBm)	6.53
Remark	Max

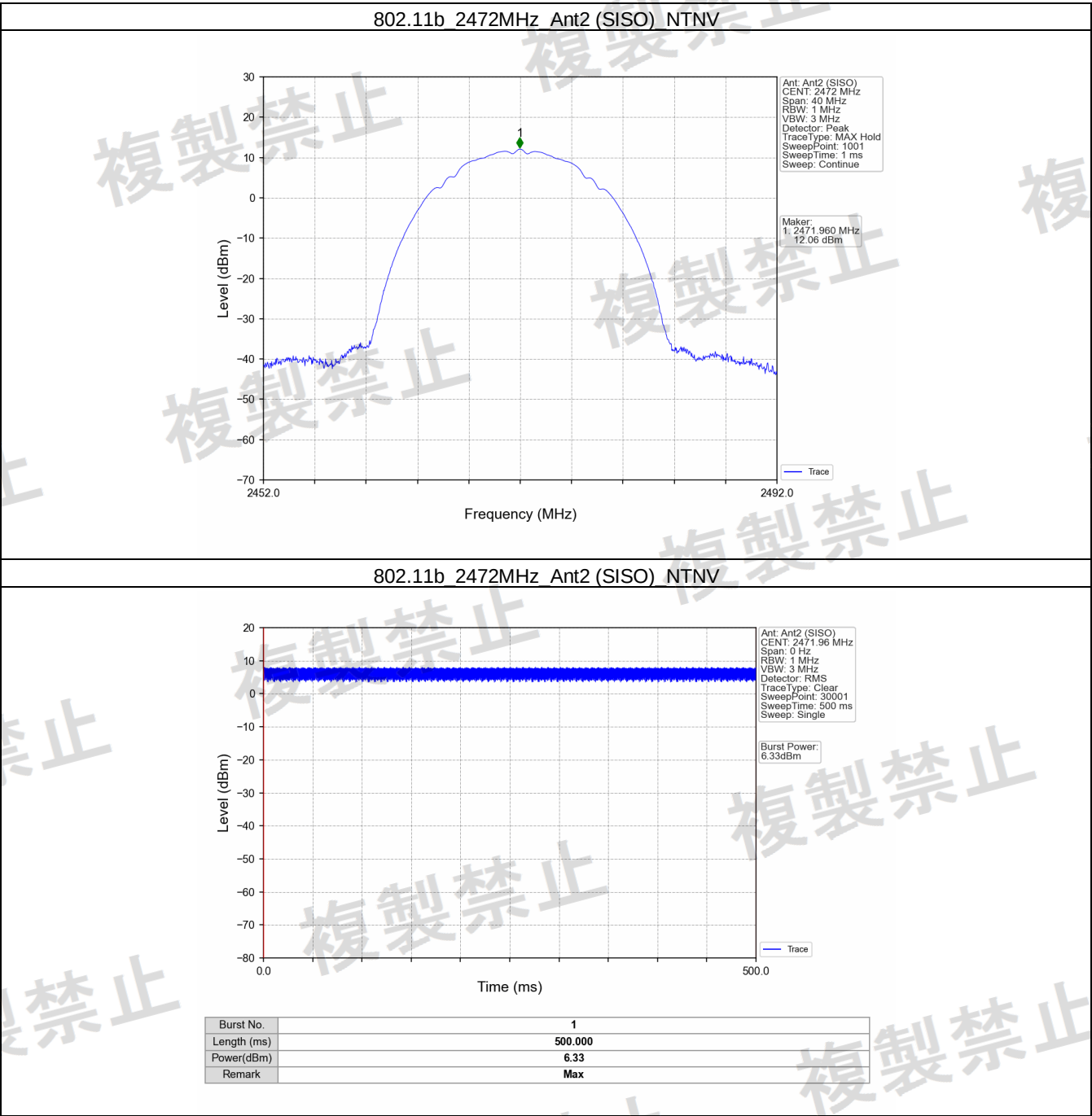
802.11b 2472MHz Ant1 (SISO) NTV



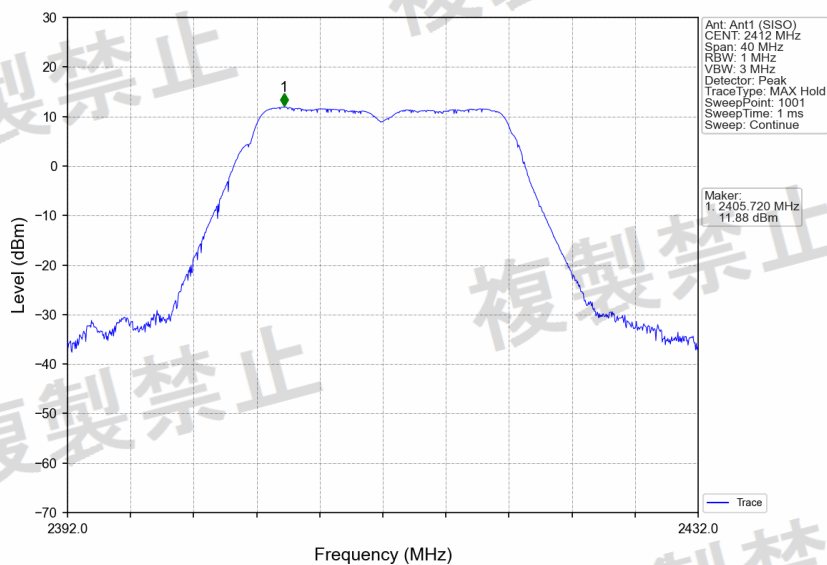
802.11b 2472MHz Ant1 (SISO) NTV



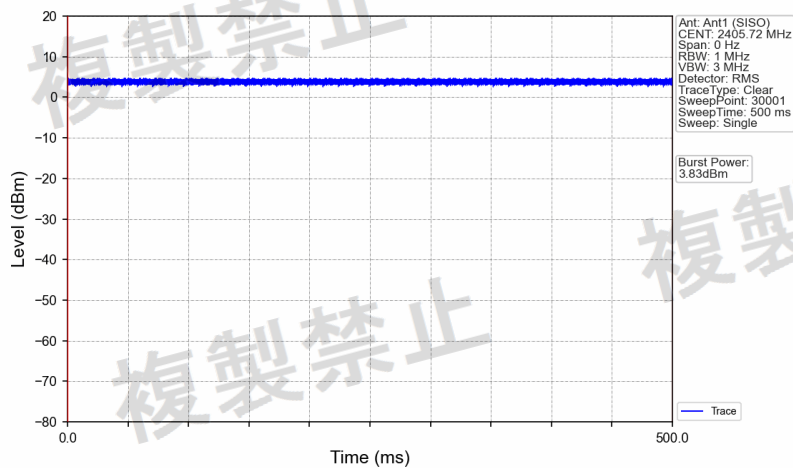
Burst No.	1
Length (ms)	500.000
Power(dBm)	6.54
Remark	Max



802.11g 2412MHz Ant1 (SISO) NTN

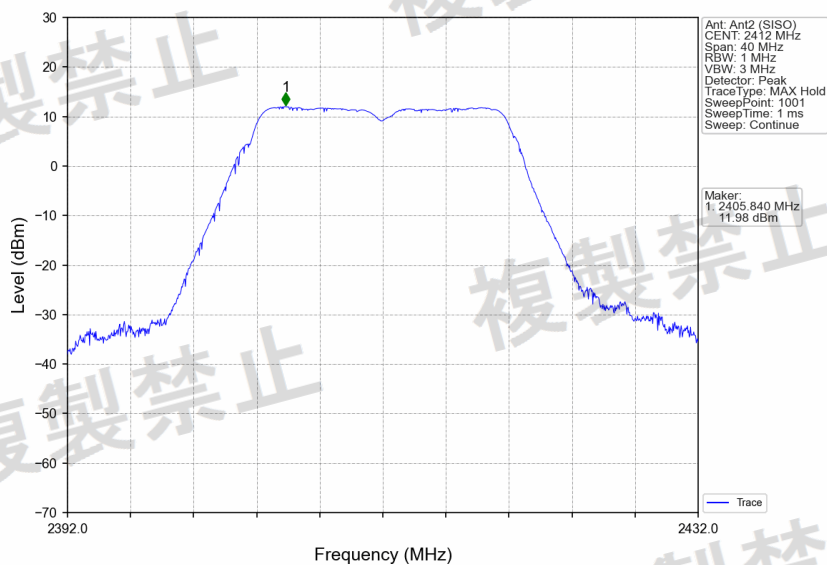


802.11g 2412MHz Ant1 (SISO) NTN

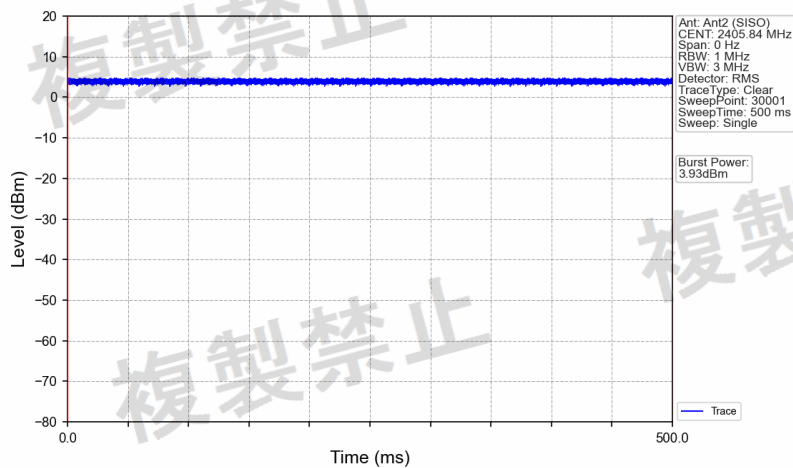


Burst No.	1
Length (ms)	500.000
Power(dBm)	3.83
Remark	Max

802.11g 2412MHz Ant2 (SISO) NTV

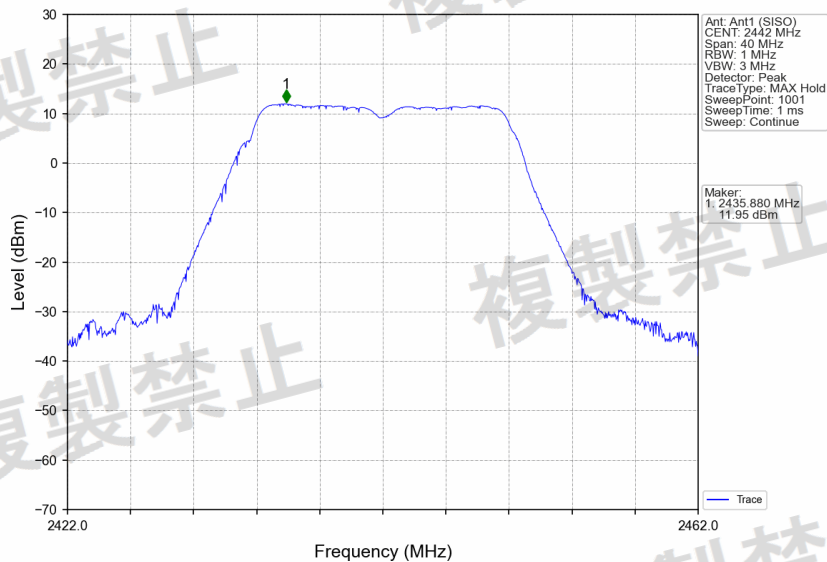


802.11g 2412MHz Ant2 (SISO) NTV

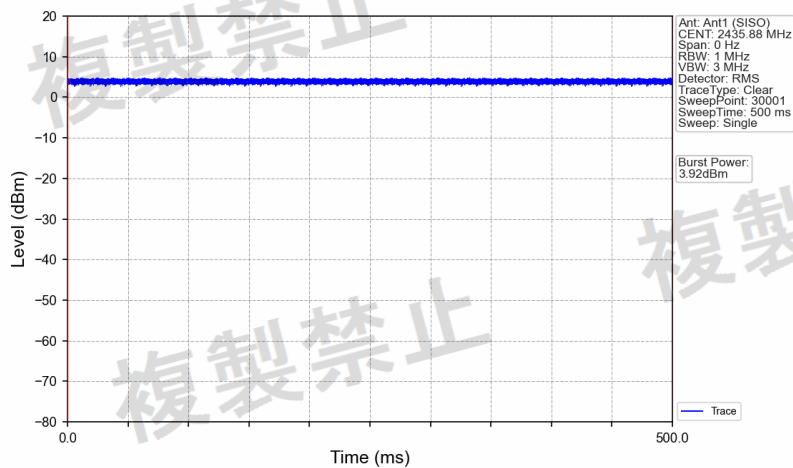


Burst No.	1
Length (ms)	500.000
Power(dBm)	3.93
Remark	Max

802.11g 2442MHz Ant1 (SISO) NTV

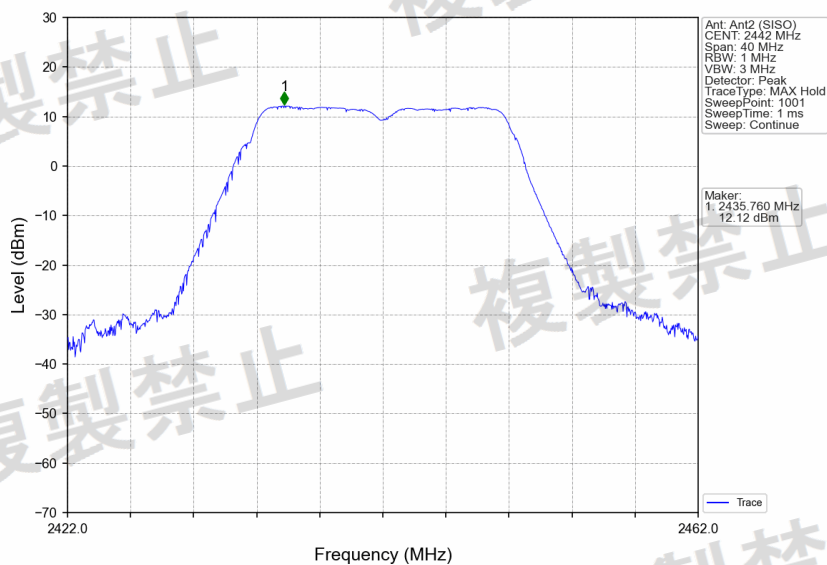


802.11g 2442MHz Ant1 (SISO) NTV

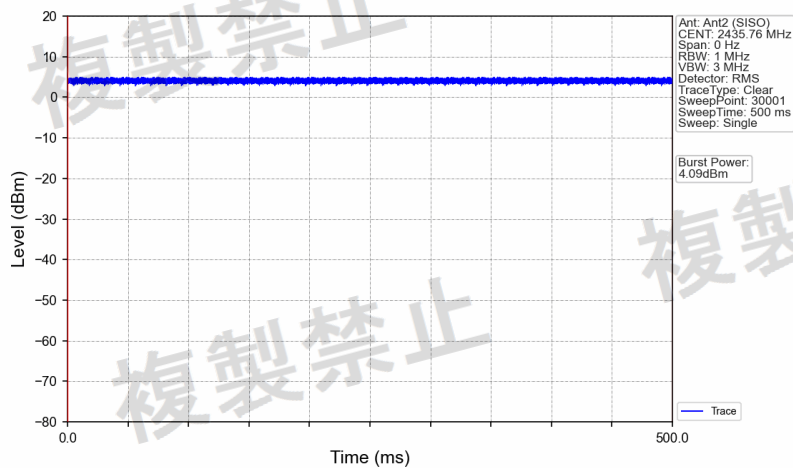


Burst No.	1
Length (ms)	500.000
Power(dBm)	3.92
Remark	Max

802.11g 2442MHz Ant2 (SISO) NTV

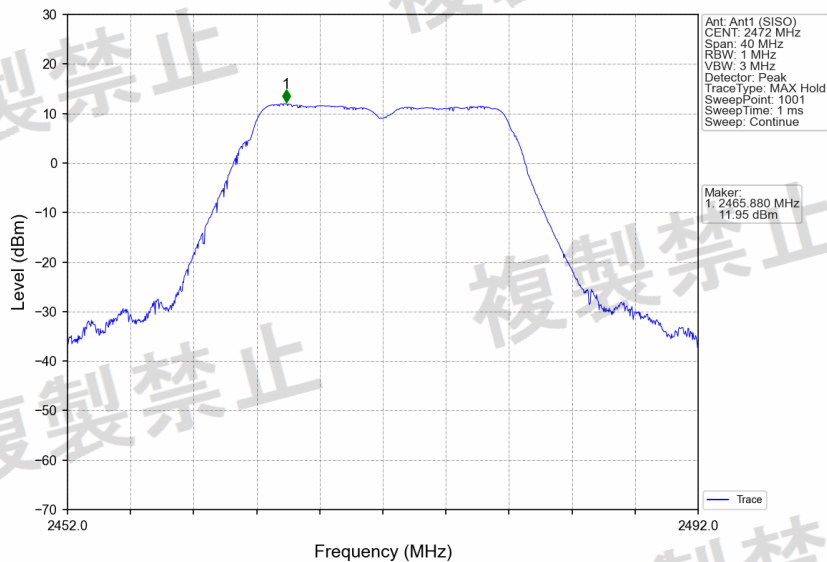


802.11g 2442MHz Ant2 (SISO) NTV

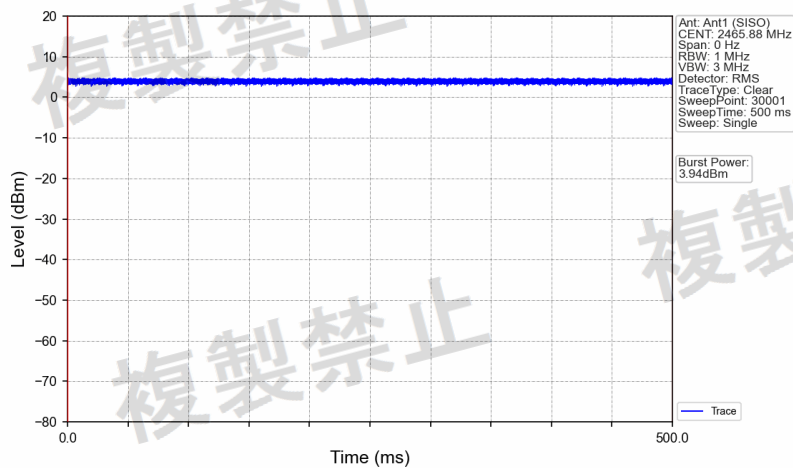


Burst No.	1
Length (ms)	500.000
Power(dBm)	4.09
Remark	Max

802.11g 2472MHz Ant1 (SISO) NTV

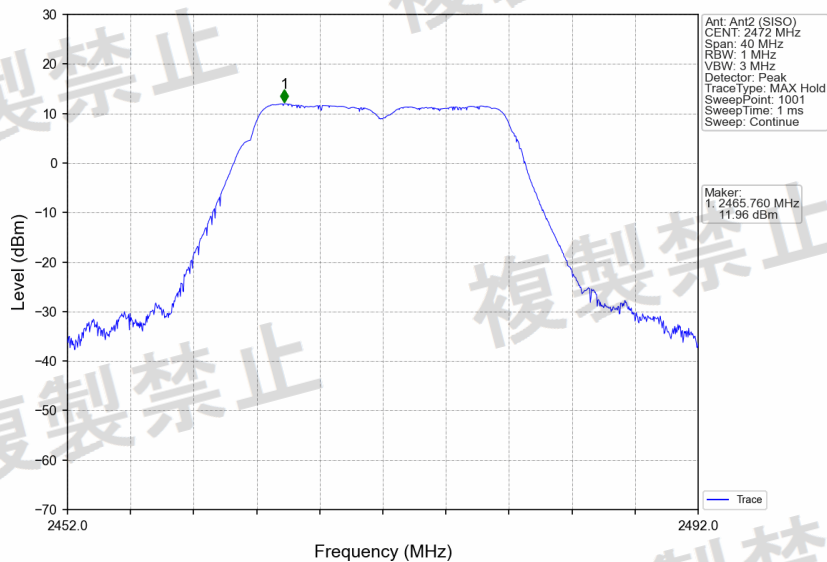


802.11g 2472MHz Ant1 (SISO) NTV

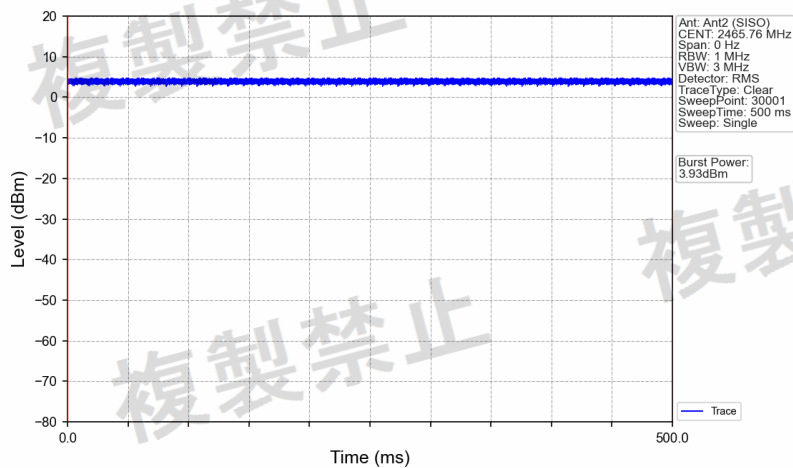


Burst No.	1
Length (ms)	500.000
Power(dBm)	3.94
Remark	Max

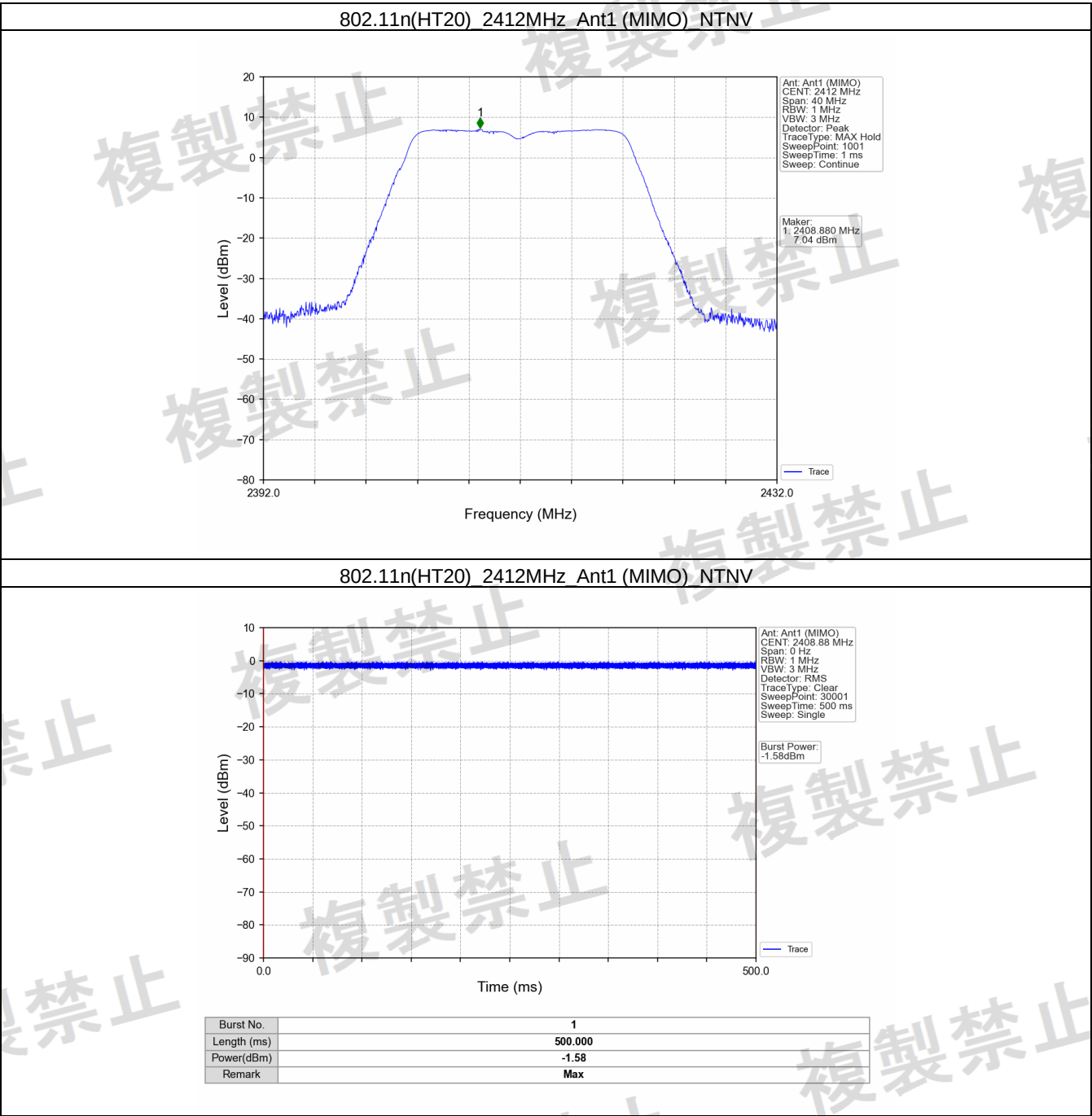
802.11g 2472MHz Ant2 (SISO) NTV



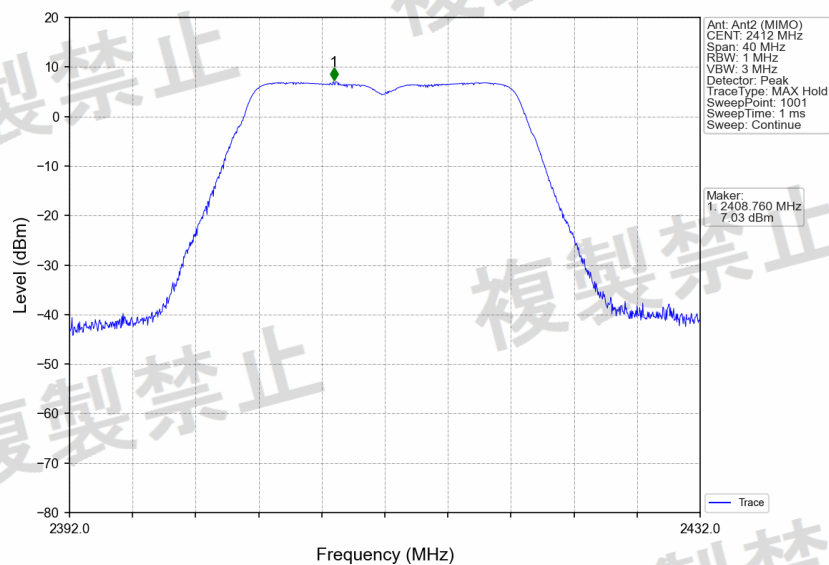
802.11g 2472MHz Ant2 (SISO) NTV



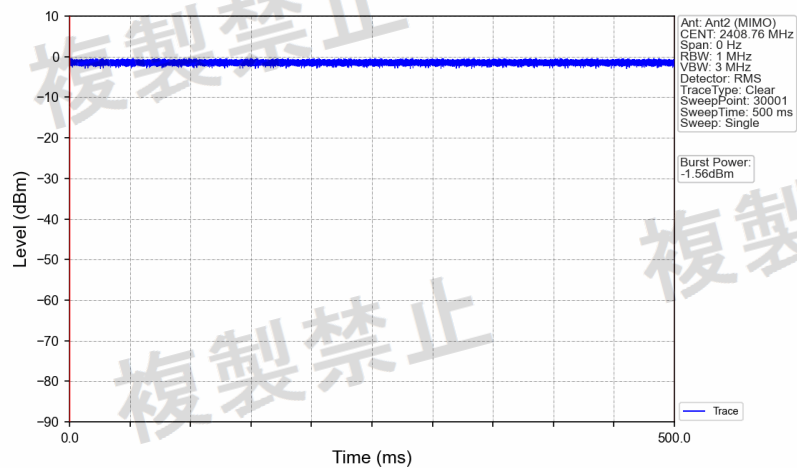
Burst No.	1
Length (ms)	500.000
Power(dBm)	3.93
Remark	Max



802.11n(HT20) 2412MHz Ant2 (MIMO) NTNV

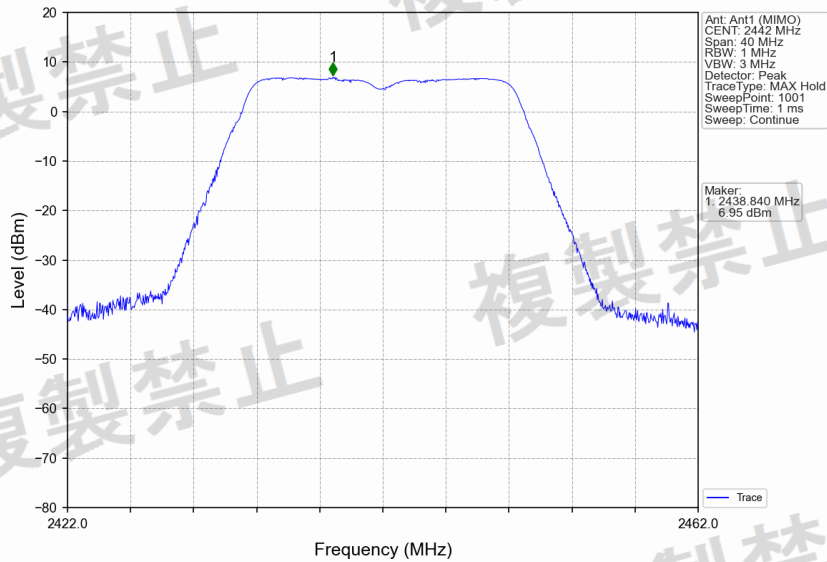


802.11n(HT20) 2412MHz Ant2 (MIMO) NTNV

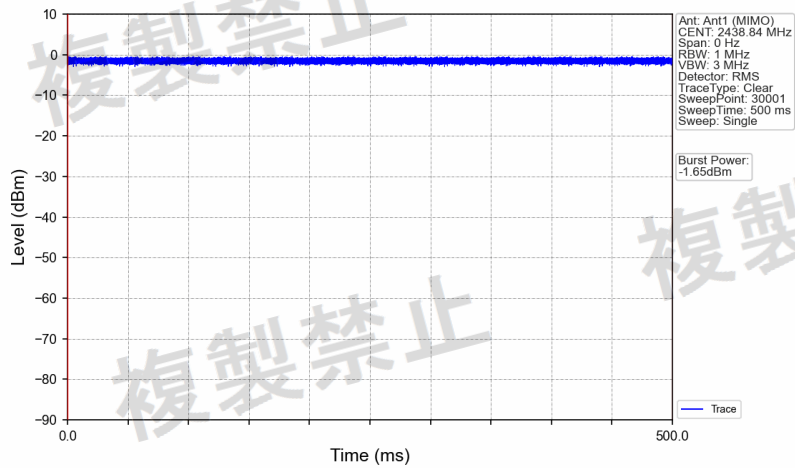


Burst No.	1
Length (ms)	500.000
Power(dBm)	-1.56
Remark	Max

802.11n(HT20) 2442MHz Ant1 (MIMO) NTNV

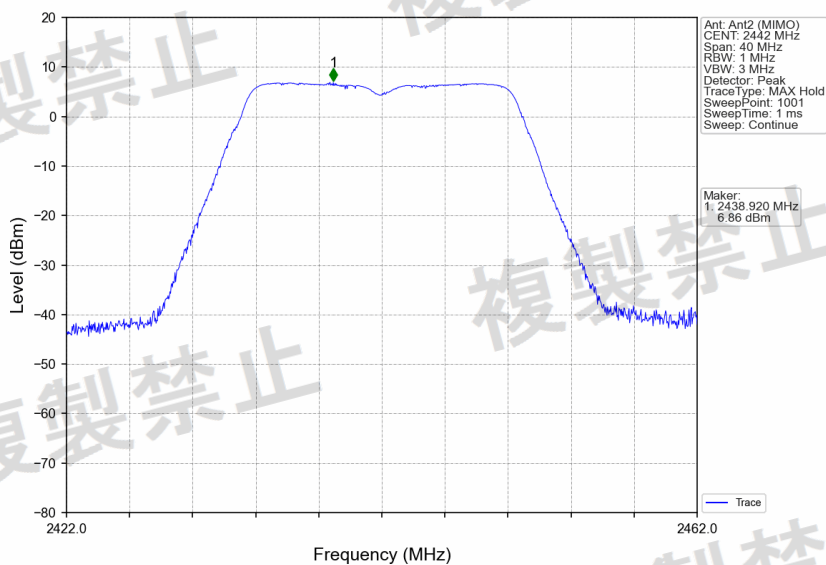


802.11n(HT20) 2442MHz Ant1 (MIMO) NTNV

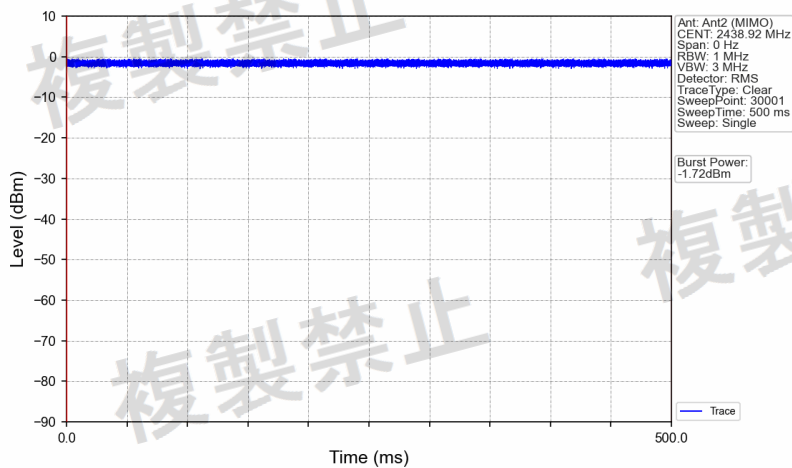


Burst No.	1
Length (ms)	500.000
Power(dBm)	-1.65
Remark	Max

802.11n(HT20) 2442MHz Ant2 (MIMO) NTNV

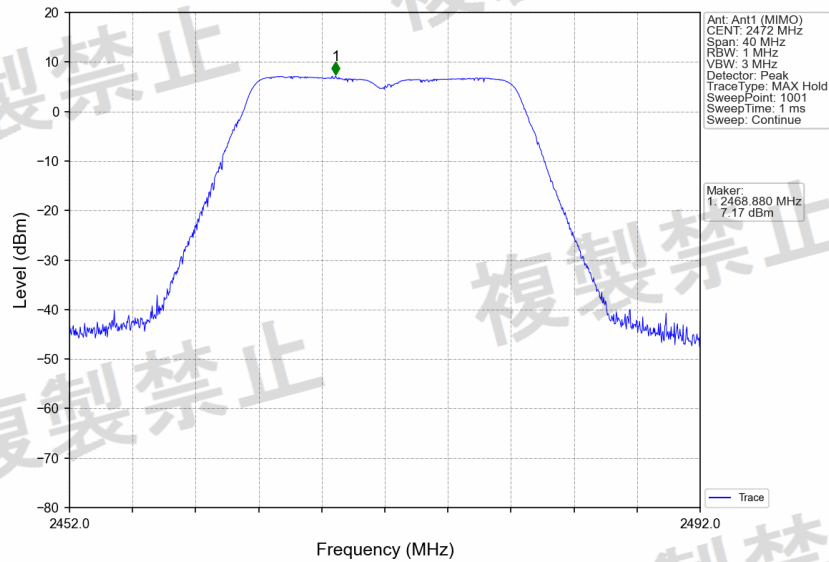


802.11n(HT20) 2442MHz Ant2 (MIMO) NTNV

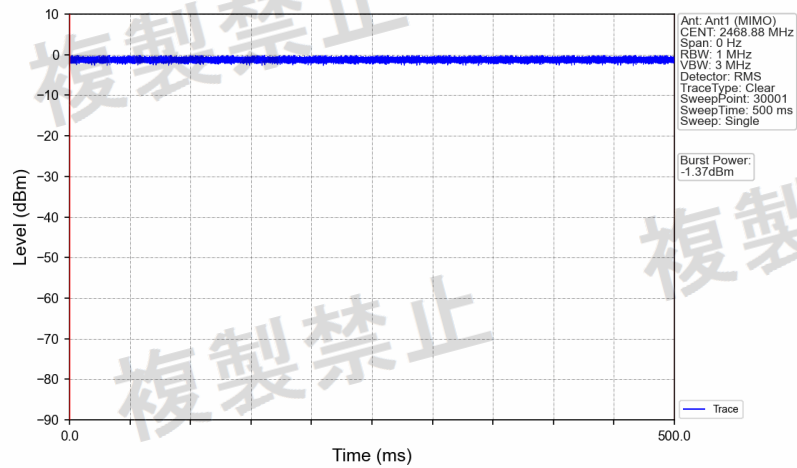


Burst No.	1
Length (ms)	500.000
Power(dBm)	-1.72
Remark	Max

802.11n(HT20) 2472MHz Ant1 (MIMO) NTNV

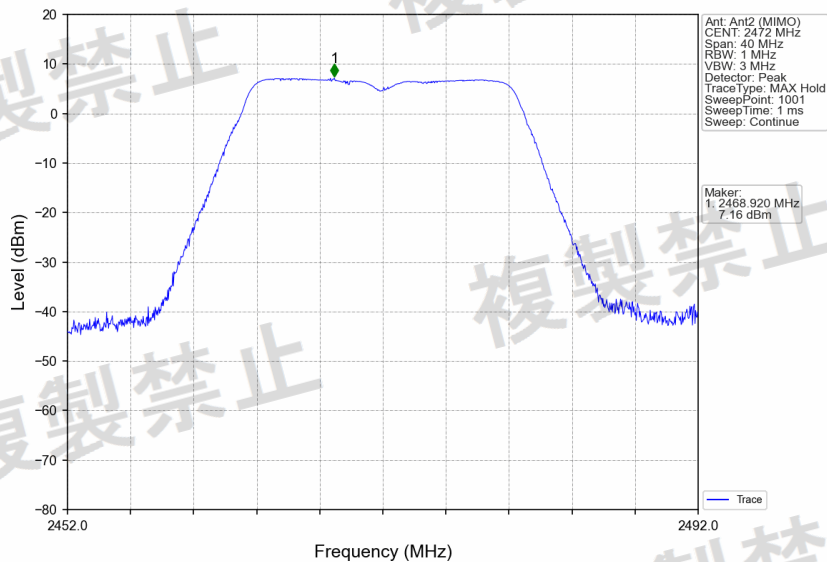


802.11n(HT20) 2472MHz Ant1 (MIMO) NTNV

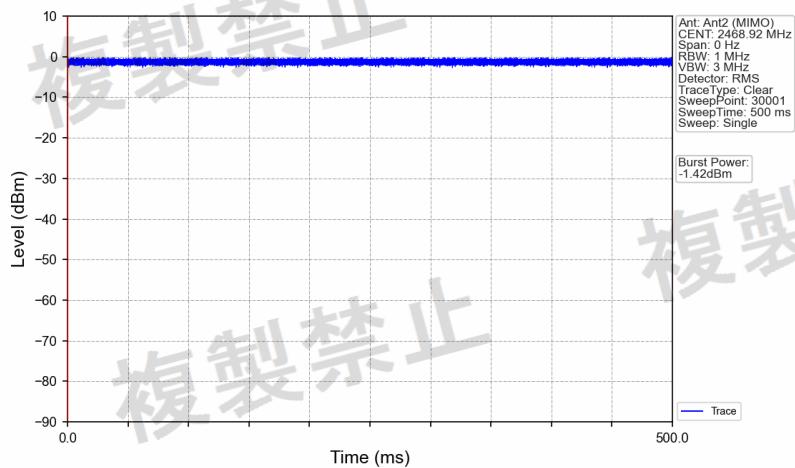


Burst No.	1
Length (ms)	500.000
Power(dBm)	-1.37
Remark	Max

802.11n(HT20) 2472MHz Ant2 (MIMO) NTNV

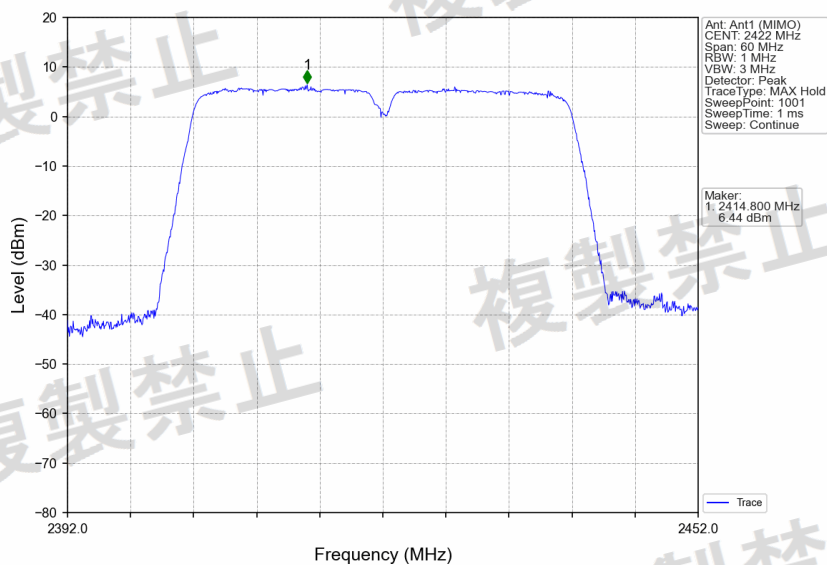


802.11n(HT20) 2472MHz Ant2 (MIMO) NTNV

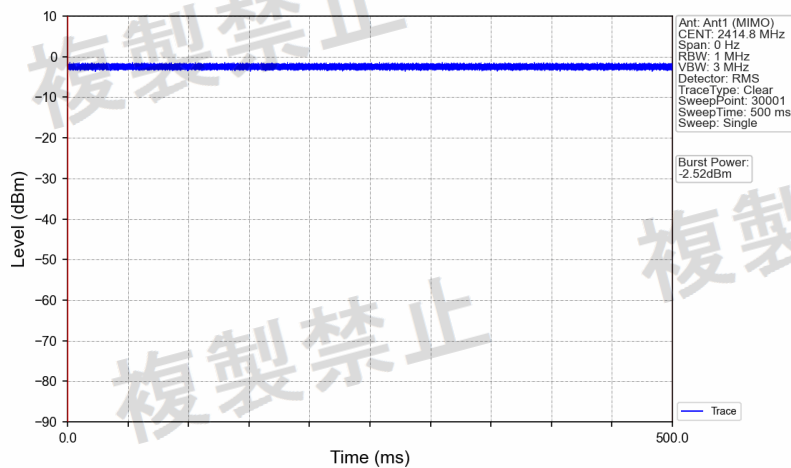


Burst No.	1
Length (ms)	500.000
Power(dBm)	-1.42
Remark	Max

802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN

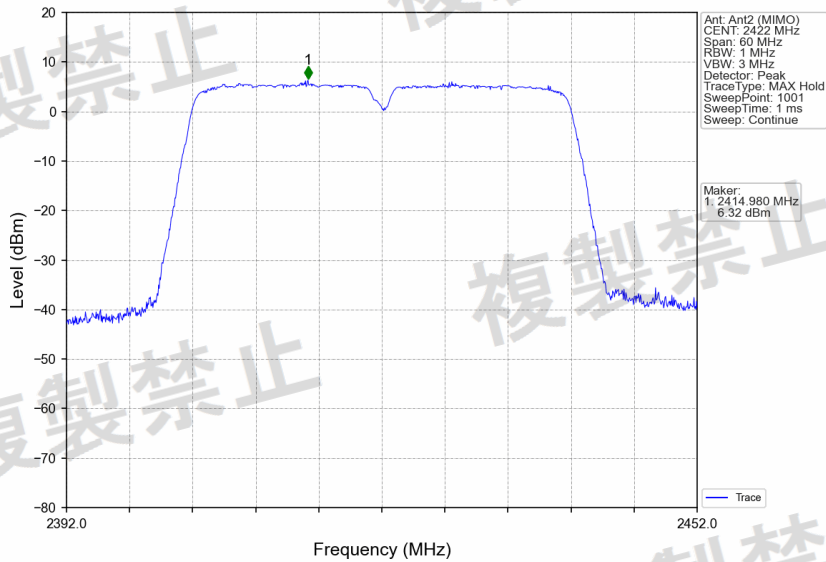


802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN

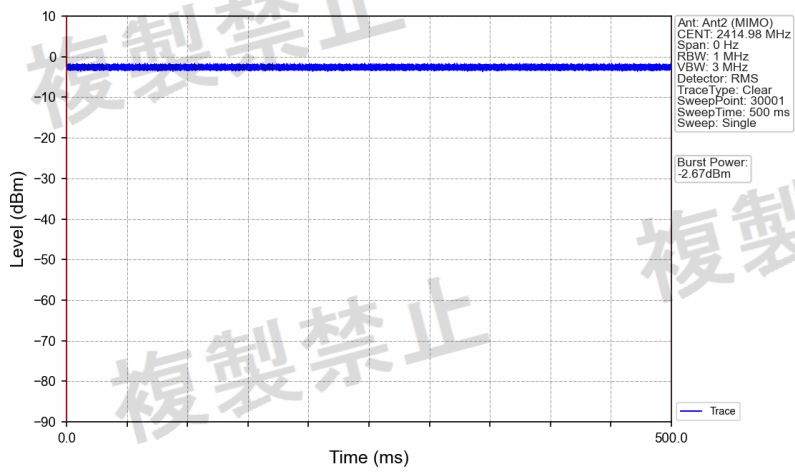


Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.52
Remark	Max

802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN

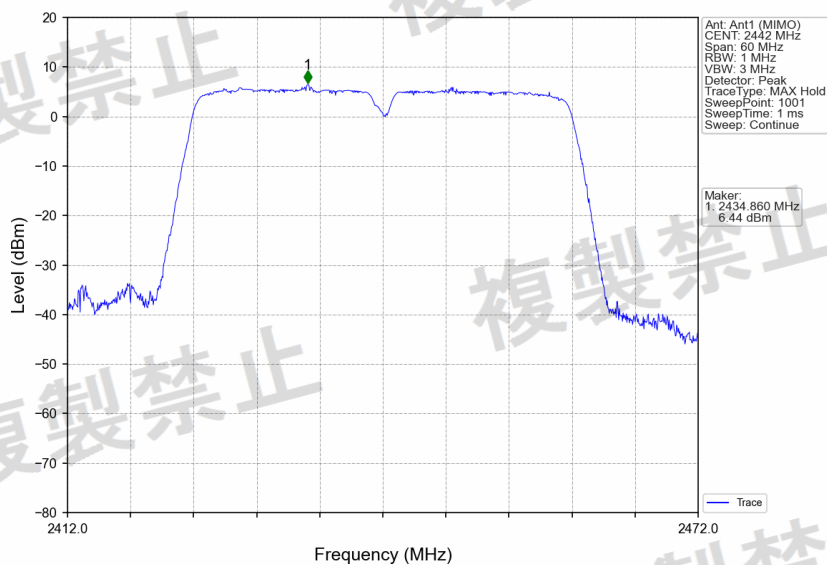


802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN

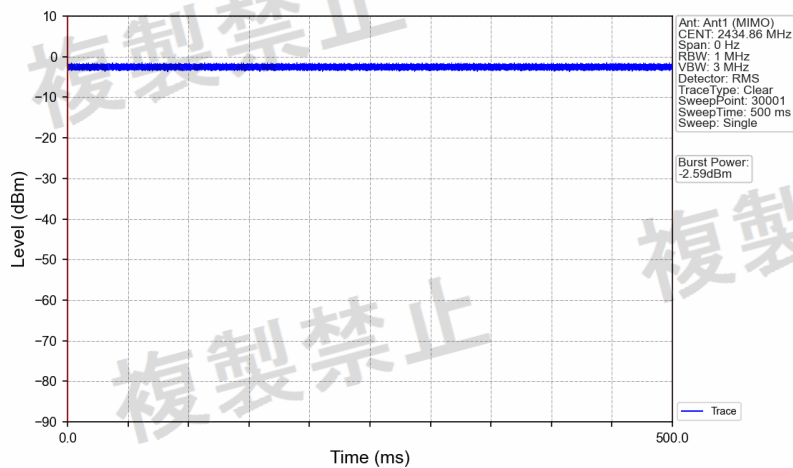


Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.67
Remark	Max

802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV

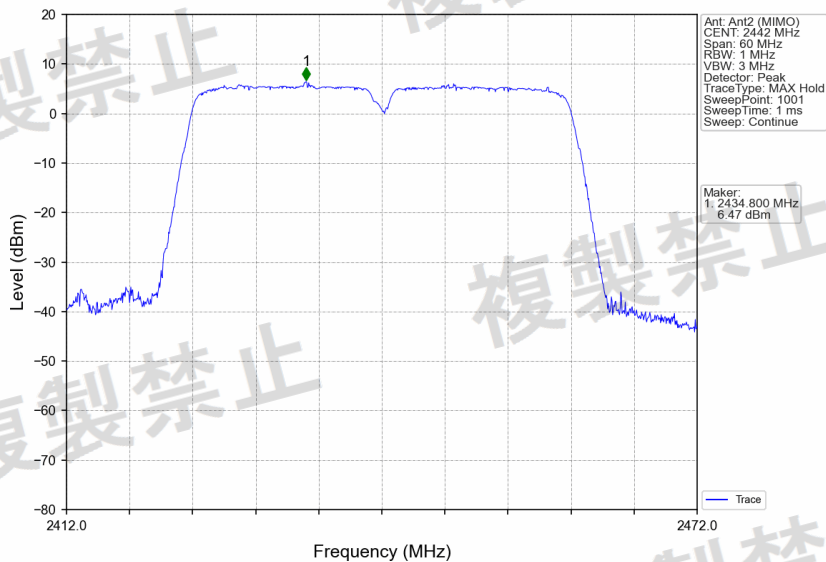


802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV

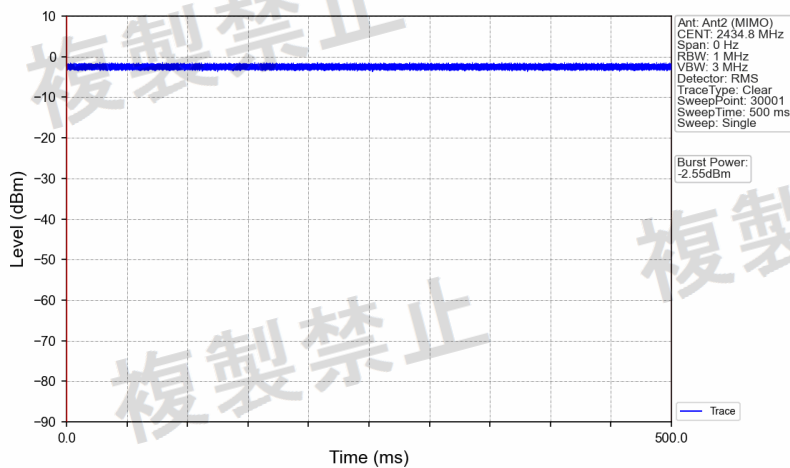


Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.59
Remark	Max

802.11n(HT40) 2442MHz Ant2 (MIMO) NTNV

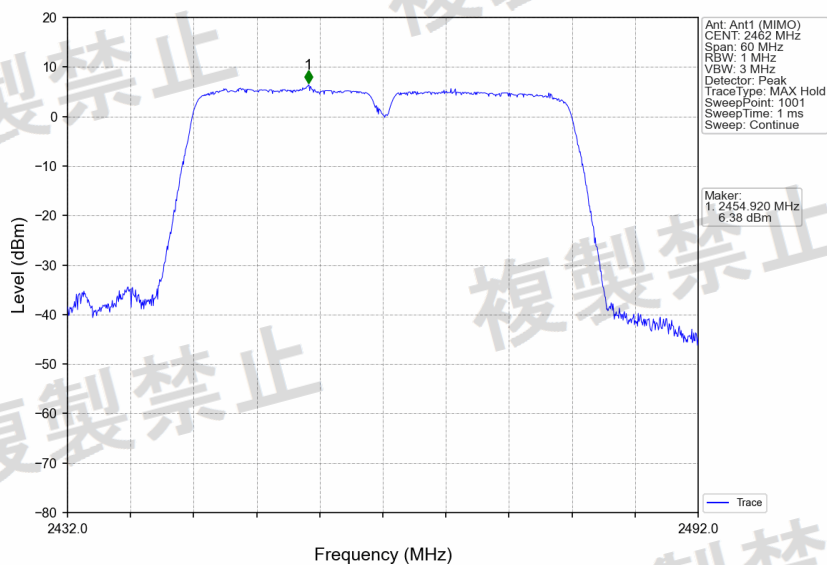


802.11n(HT40) 2442MHz Ant2 (MIMO) NTNV

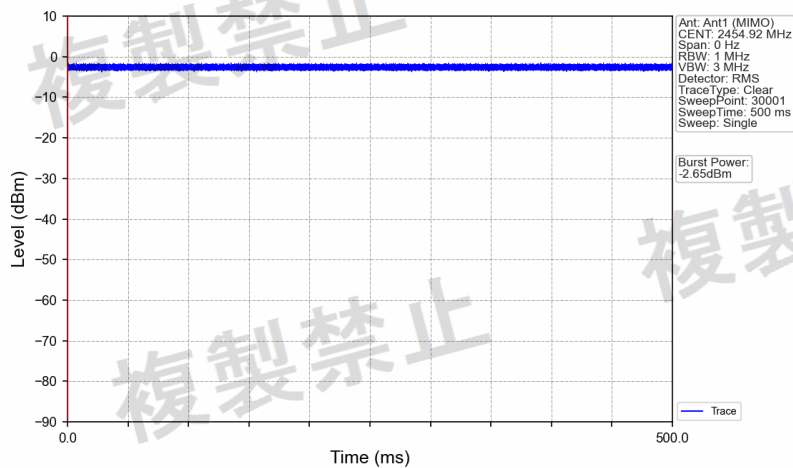


Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.55
Remark	Max

802.11n(HT40) 2462MHz Ant1 (MIMO) NTV

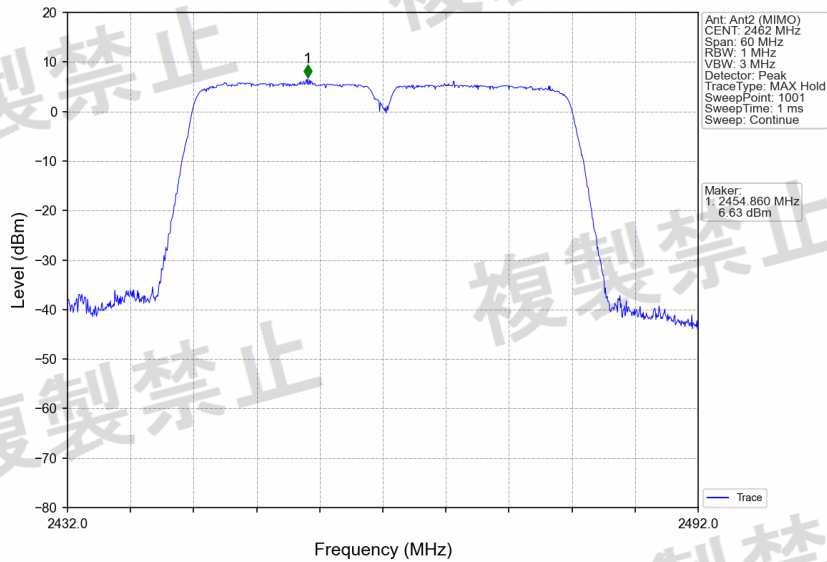


802.11n(HT40) 2462MHz Ant1 (MIMO) NTV

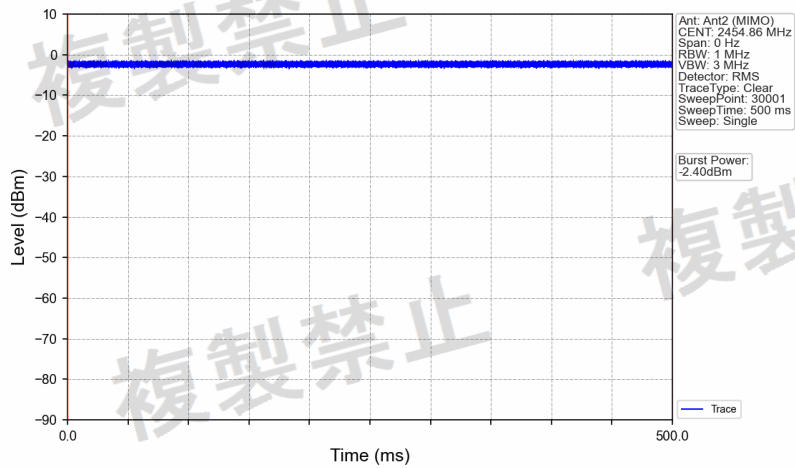


Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.65
Remark	Max

802.11n(HT40) 2462MHz Ant2 (MIMO) NTNV



802.11n(HT40) 2462MHz Ant2 (MIMO) NTNV



Burst No.	1
Length (ms)	500.000
Power(dBm)	-2.40
Remark	Max

4.2 EIRP

4.2.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	EIRP (mW/MHz)		Verdict
						Result	Limit	
NTNV	802.11b	SISO	2412	1	1.85	6.844	Only For Report	Pass
				2	1.85	6.627	Only For Report	Pass
			2442	1	1.85	6.951	Only For Report	Pass
				2	1.85	6.885	Only For Report	Pass
			2472	1	1.85	6.901	Only For Report	Pass
				2	1.85	6.579	Only For Report	Pass
	802.11g	SISO	2412	1	1.85	3.696	Only For Report	Pass
				2	1.85	3.788	Only For Report	Pass
			2442	1	1.85	3.774	Only For Report	Pass
				2	1.85	3.927	Only For Report	Pass
			2472	1	1.85	3.797	Only For Report	Pass
				2	1.85	3.780	Only For Report	Pass
	802.11n (HT20)	MIMO	2412	1	1.85	1.064	Only For Report	Pass
				2	1.85	1.069	Only For Report	Pass
				MIMO	0.00	2.133	Only For Report	Pass
			2442	1	1.85	1.047	Only For Report	Pass
				2	1.85	1.029	Only For Report	Pass
				MIMO	0.00	2.076	Only For Report	Pass
			2472	1	1.85	1.116	Only For Report	Pass
				2	1.85	1.104	Only For Report	Pass
				MIMO	0.00	2.220	Only For Report	Pass
	802.11n (HT40)	MIMO	2422	1	1.85	0.857	Only For Report	Pass
				2	1.85	0.828	Only For Report	Pass
				MIMO	0.00	1.685	Only For Report	Pass
			2442	1	1.85	0.844	Only For Report	Pass
				2	1.85	0.851	Only For Report	Pass
				MIMO	0.00	1.695	Only For Report	Pass
			2462	1	1.85	0.831	Only For Report	Pass
				2	1.85	0.880	Only For Report	Pass
				MIMO	0.00	1.711	Only For Report	Pass

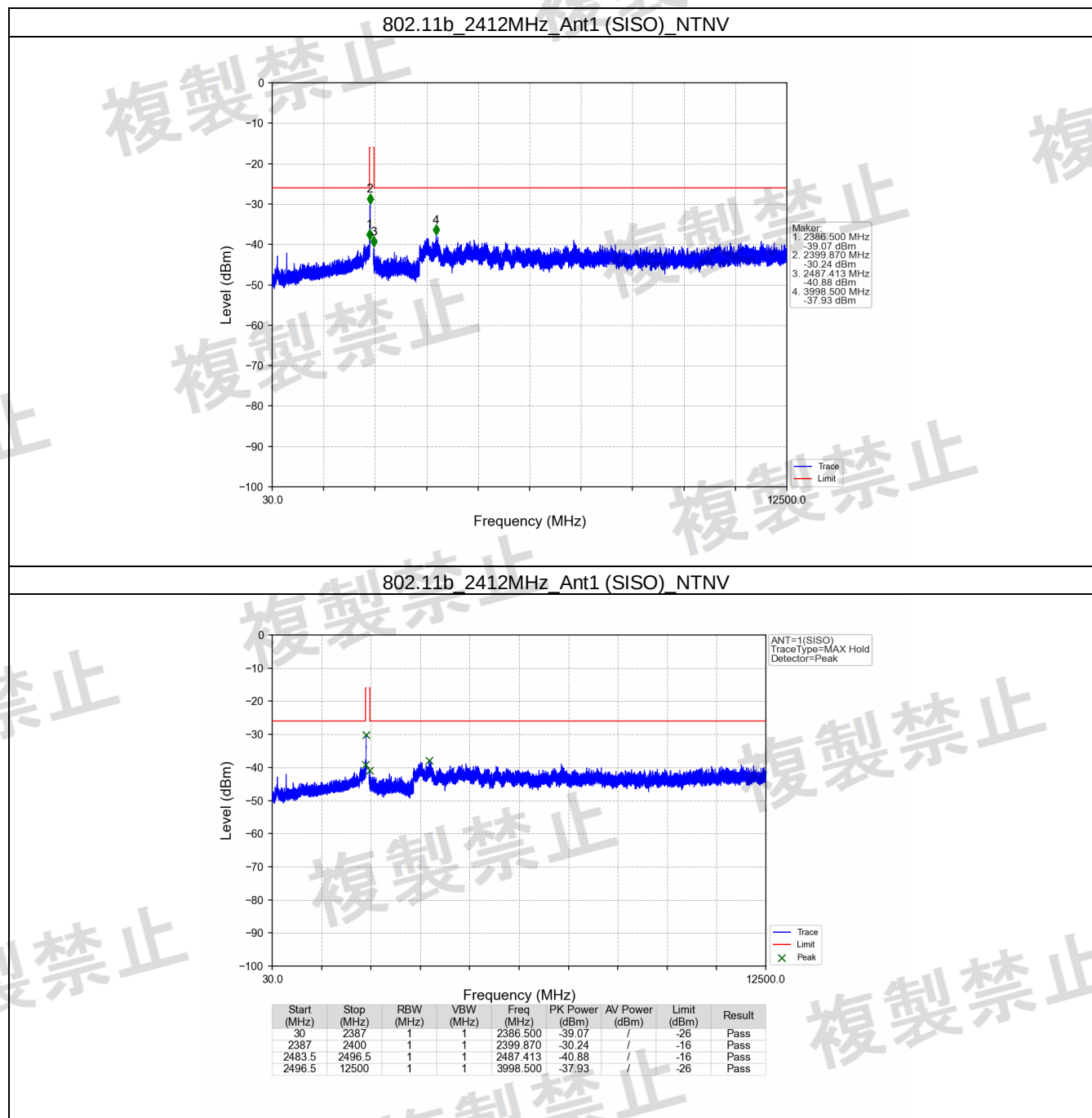
5. Spurious Emission Intensity

5.1 TxSe

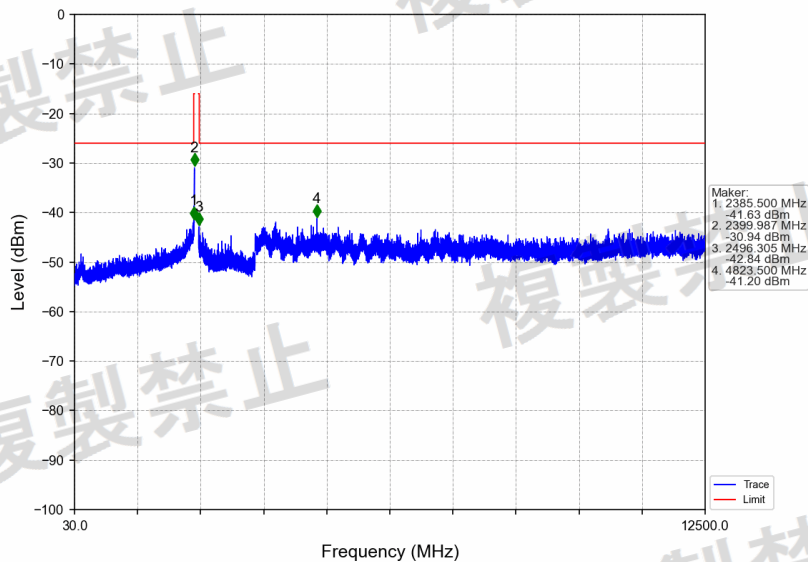
5.1.1 Test Result

ENV	Mode	Tx Type	Frequency (MHz)	ANT	Test Result	Limit	Verdict
NTNV	802.11b	SISO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
	802.11g	SISO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
	802.11n (HT20)	MIMO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
	802.11n (HT40)	MIMO	2422	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2462	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
MIMO			Refer To Test Graph		Pass		

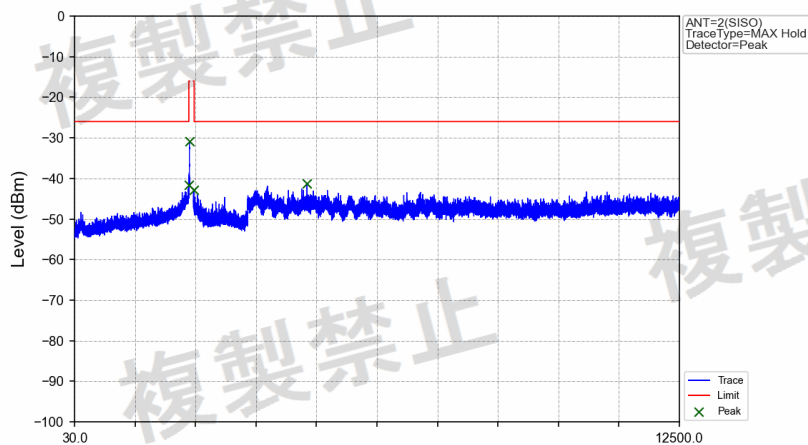
5.1.2 Test Graph



802.11b 2412MHz Ant2 (SISO) NTV



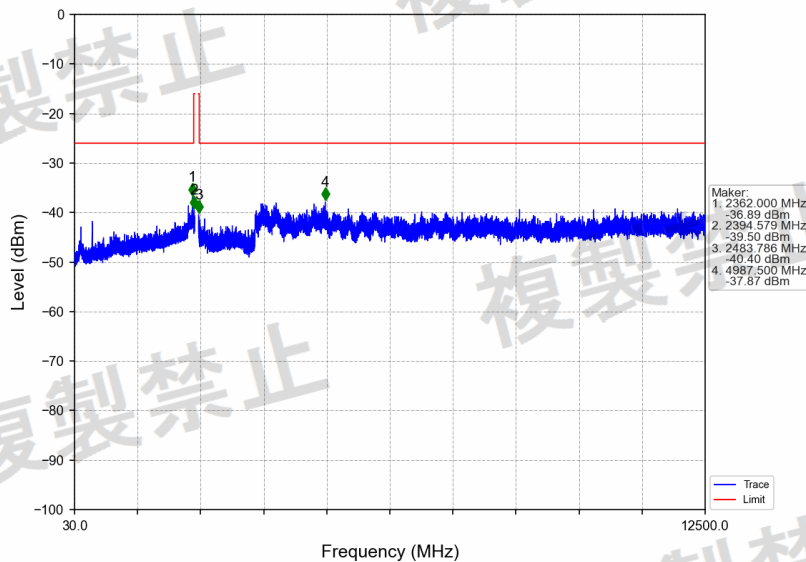
802.11b 2412MHz Ant2 (SISO) NTV



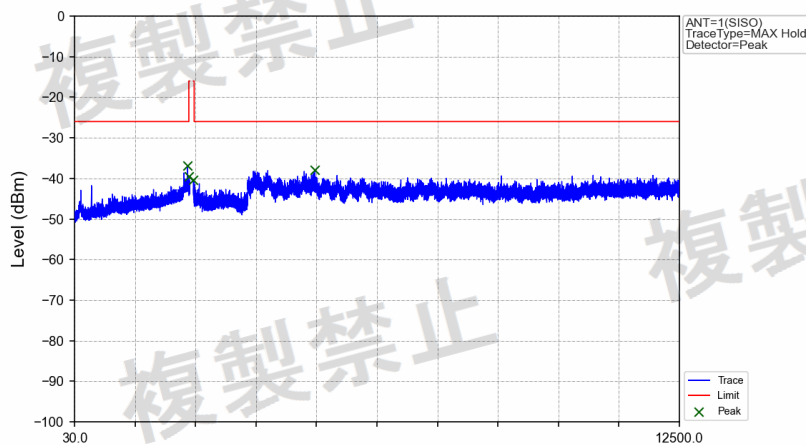
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2385.500	-41.63	/	-26
2387	2400	1	1	2399.987	-30.94	/	-16
2483.5	2496.5	1	1	2496.305	-42.84	/	-16
2496.5	12500	1	1	4823.500	-41.20	/	-26

Result
Pass
Pass
Pass
Pass

802.11b 2442MHz Ant1 (SISO) NTVV

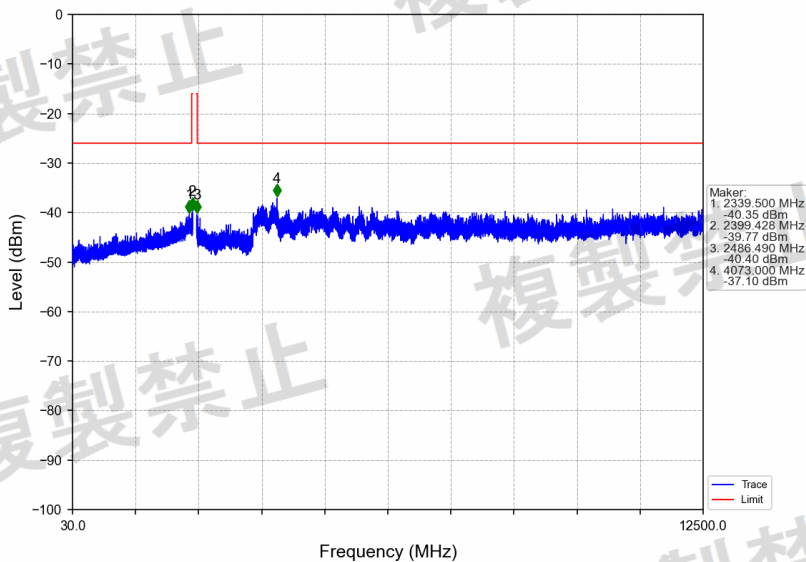


802.11b 2442MHz Ant1 (SISO) NTVV

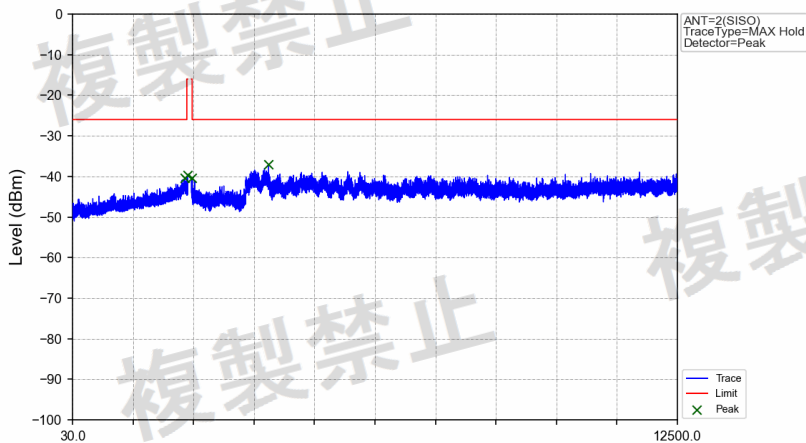


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2362.000	-36.89	/	-26
2387	2400	1	1	2394.579	-39.50	/	-16
2483.5	2496.5	1	1	2483.786	-40.40	/	-16
2496.5	12500	1	1	4987.500	-37.87	/	-26

802.11b 2442MHz Ant2 (SISO) NTVV



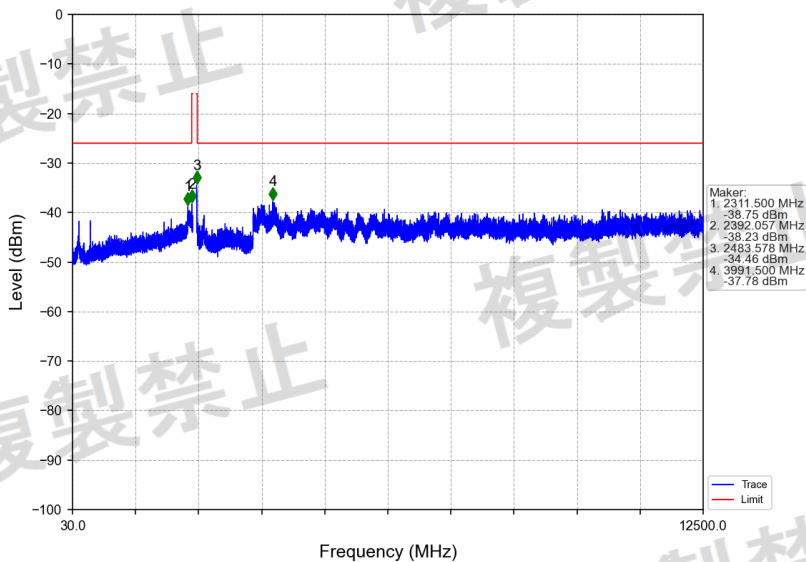
802.11b 2442MHz Ant2 (SISO) NTVV



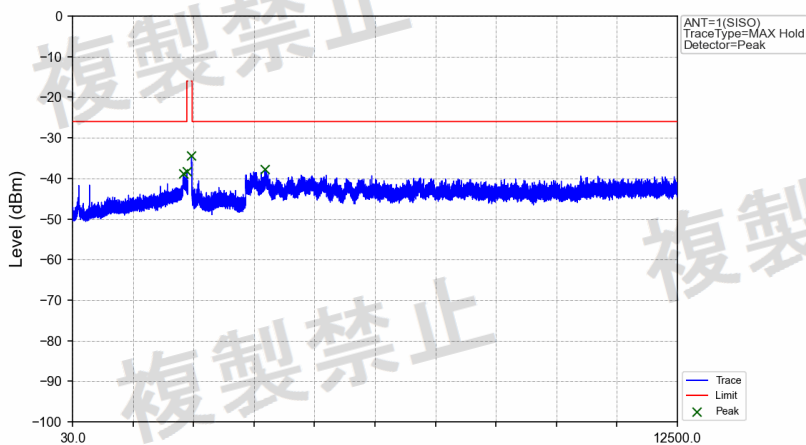
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2339.500	-40.35	/	-26
2387	2400	1	1	2399.428	-39.77	/	-16
2483.5	2496.5	1	1	2486.490	-40.40	/	-16
2496.5	12500	1	1	4073.000	-37.10	/	-26

Result
Pass
Pass
Pass
Pass

802.11b 2472MHz Ant1 (SISO) NTVV

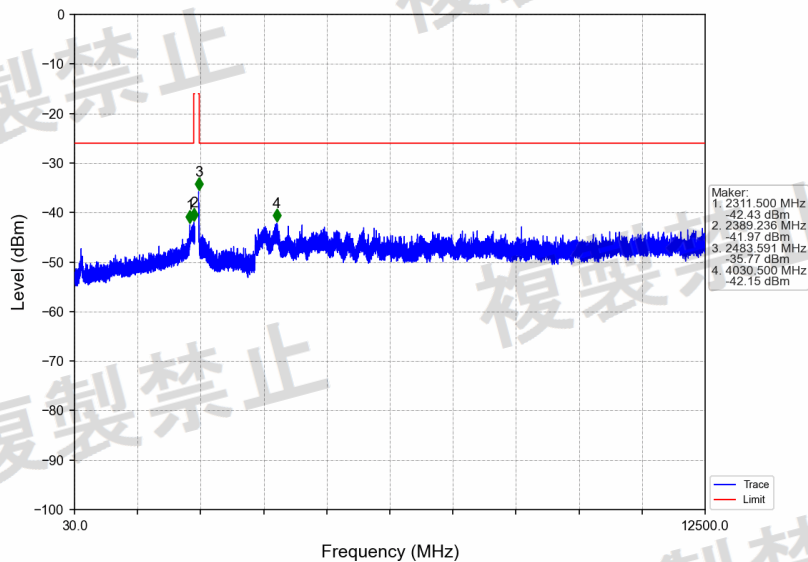


802.11b 2472MHz Ant1 (SISO) NTVV

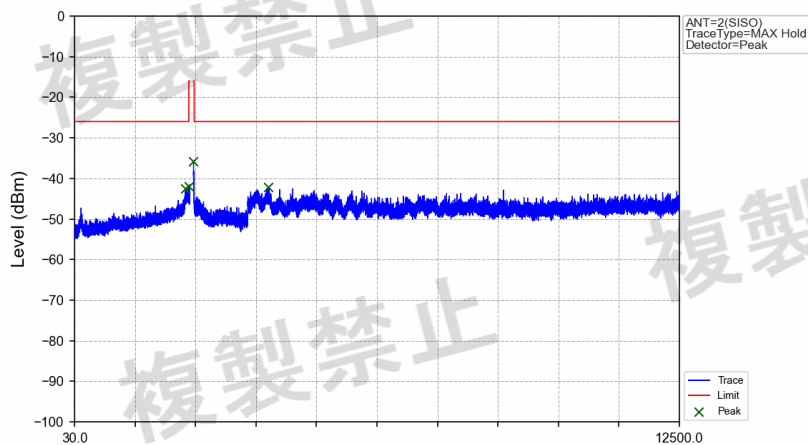


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2311.500	-38.75	/	-26
2387	2400	1	1	2392.057	-38.23	/	-16
2483.5	2496.5	1	1	2483.578	-34.46	/	-16
2496.5	12500	1	1	3991.500	-37.78	/	-26
							Result
							Pass
							Pass
							Pass
							Pass

802.11b 2472MHz Ant2 (SISO) NTV

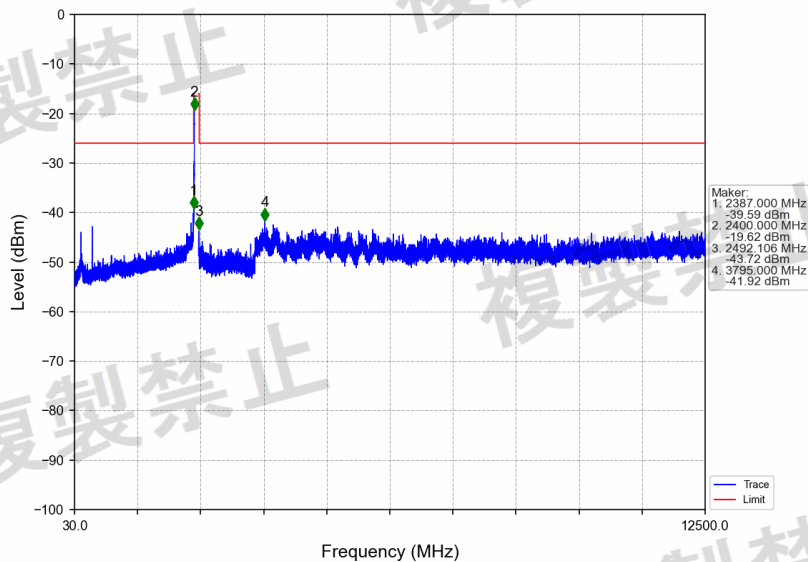


802.11b 2472MHz Ant2 (SISO) NTV

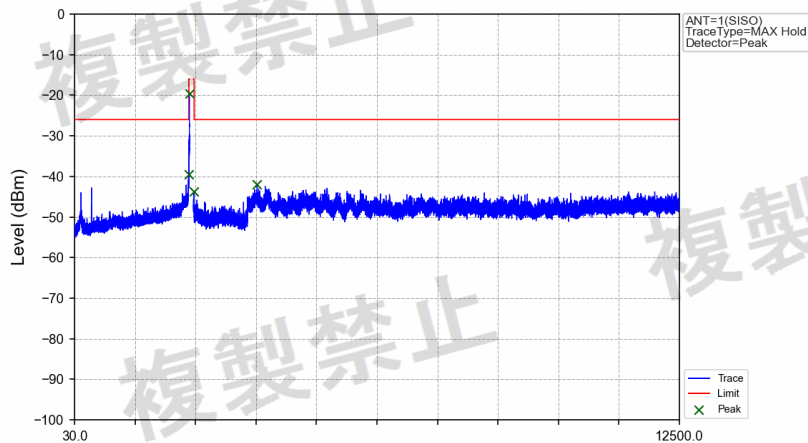


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2311.500	-42.43	/	-26	Pass
2387	2400	1	1	2389.236	-41.97	/	-16	Pass
2483.5	2496.5	1	1	2483.591	-35.77	/	-16	Pass
2496.5	12500	1	1	4030.500	-42.15	/	-26	Pass

802.11g 2412MHz Ant1 (SISO) NTV



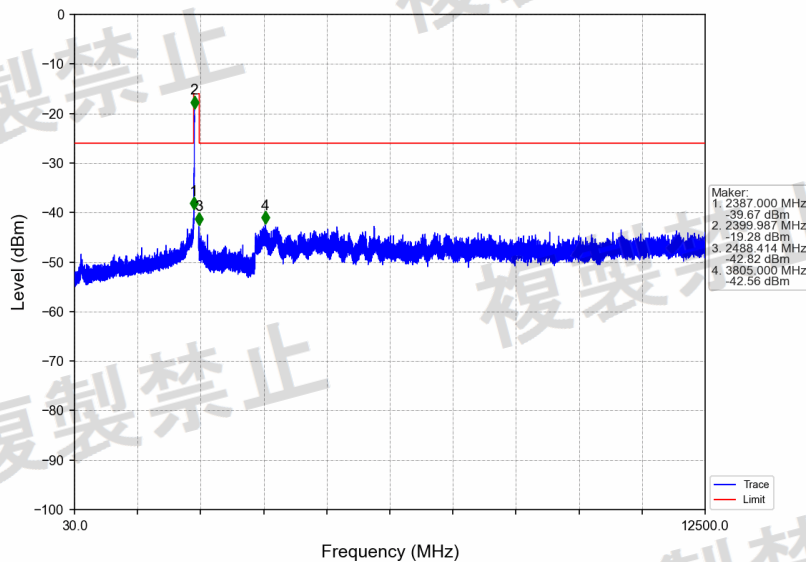
802.11g 2412MHz Ant1 (SISO) NTV



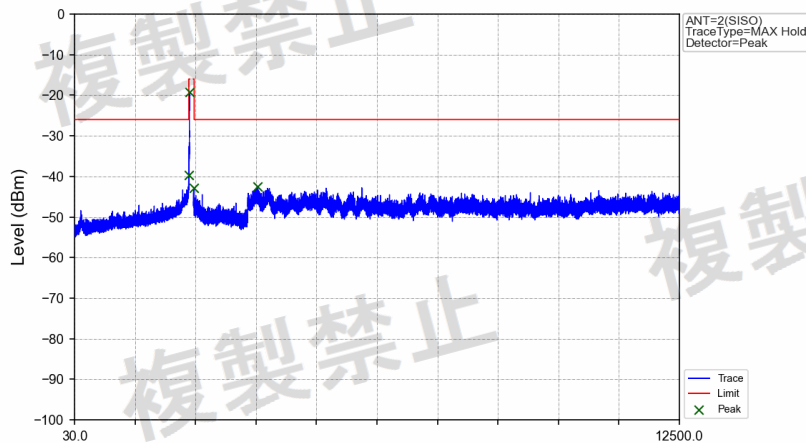
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2387.000	-39.59	/	-26
2387	2400	1	1	2400.000	-19.62	/	-16
2483.5	2496.5	1	1	2492.106	-43.72	/	-16
2496.5	12500	1	1	3795.000	-41.92	/	-26

Result
Pass
Pass
Pass
Pass

802.11g 2412MHz Ant2 (SISO) NTV

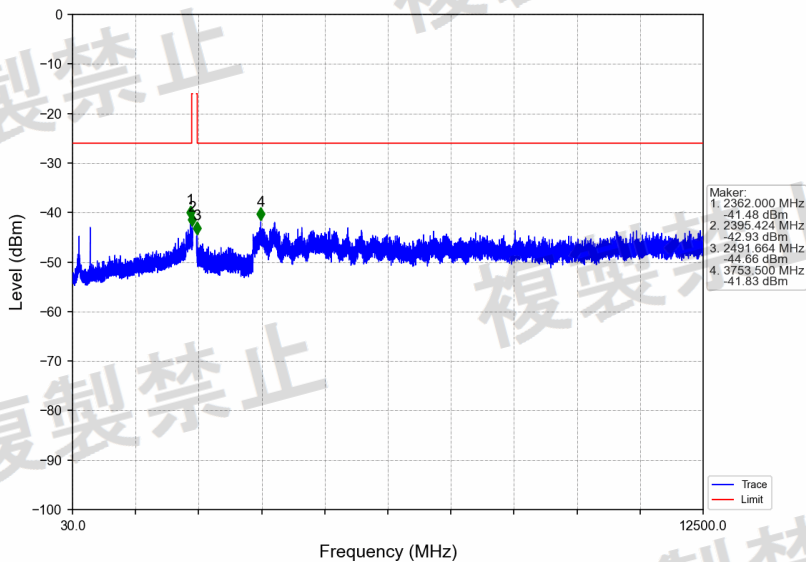


802.11g 2412MHz Ant2 (SISO) NTV

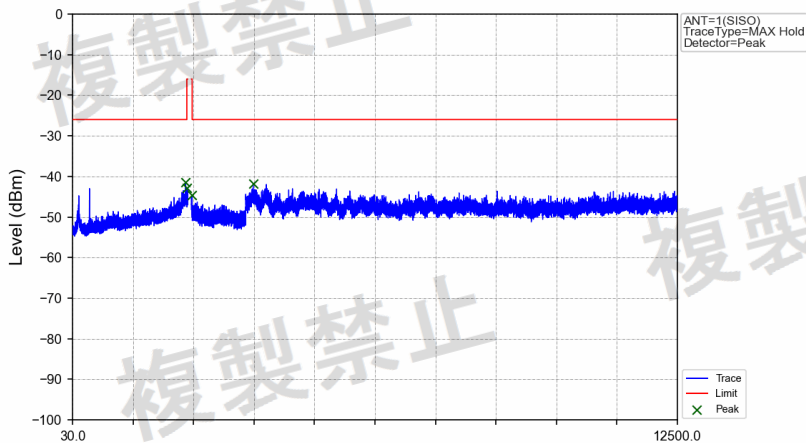


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2387.000	-39.67	/	-26
2387	2400	1	1	2399.987	-19.28	/	-16
2483.5	2496.5	1	1	2488.414	-42.82	/	-16
2496.5	12500	1	1	3805.000	-42.56	/	-26

802.11g 2442MHz Ant1 (SISO) NTV



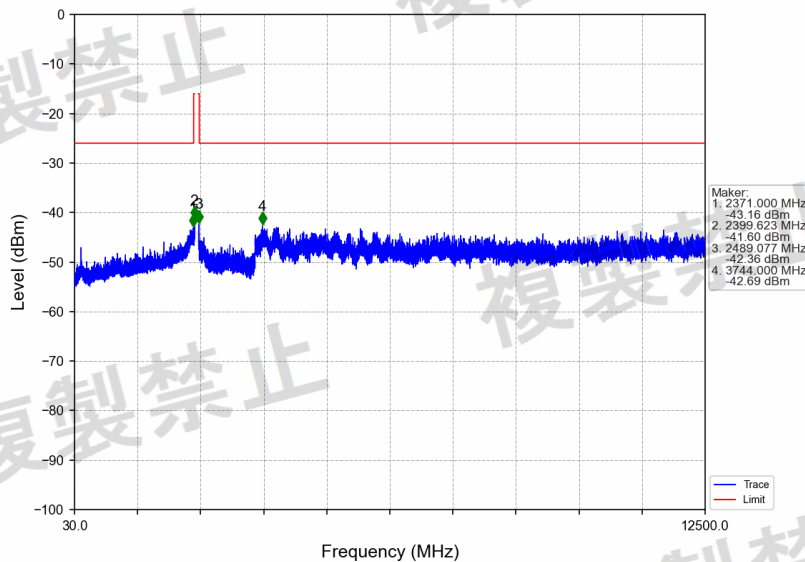
802.11g 2442MHz Ant1 (SISO) NTV



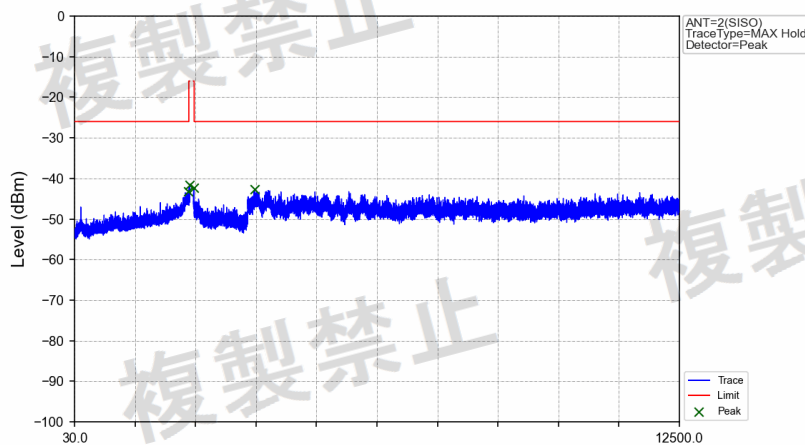
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2362.000	-41.48	/	-26
2387	2400	1	1	2395.424	-42.93	/	-16
2483.5	2496.5	1	1	2491.664	-44.66	/	-16
2496.5	12500	1	1	3753.500	-41.83	/	-26

Result
Pass
Pass
Pass
Pass

802.11g 2442MHz Ant2 (SISO) NTV

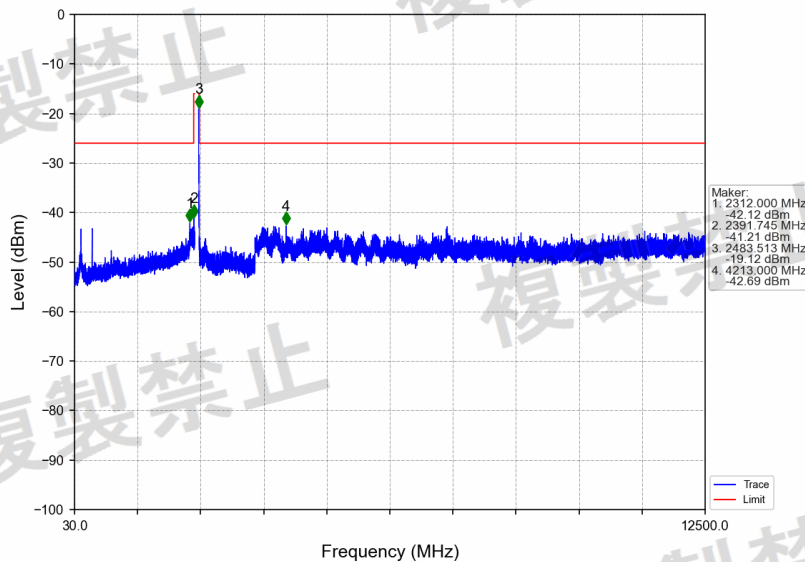


802.11g 2442MHz Ant2 (SISO) NTV

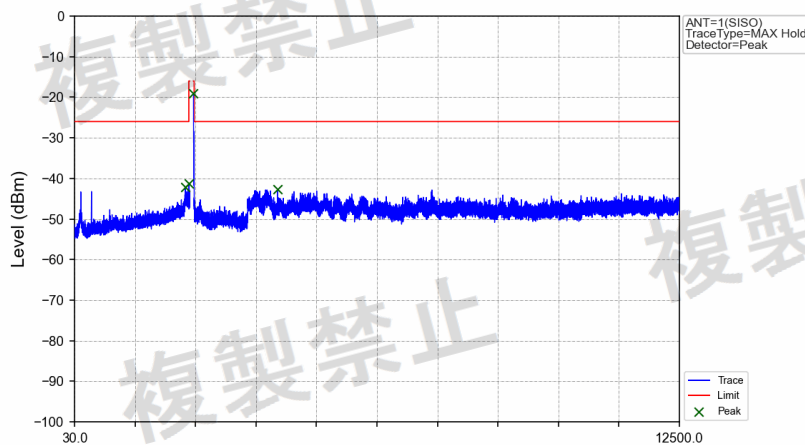


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Result
30	2387	1	1	2371.000	-43.16	/	Pass
2387	2400	1	1	2399.623	-41.60	/	Pass
2483.5	2496.5	1	1	2489.077	-42.36	/	Pass
2496.5	12500	1	1	3744.000	-42.69	/	Pass

802.11g 2472MHz Ant1 (SISO) NTV



802.11g 2472MHz Ant1 (SISO) NTV

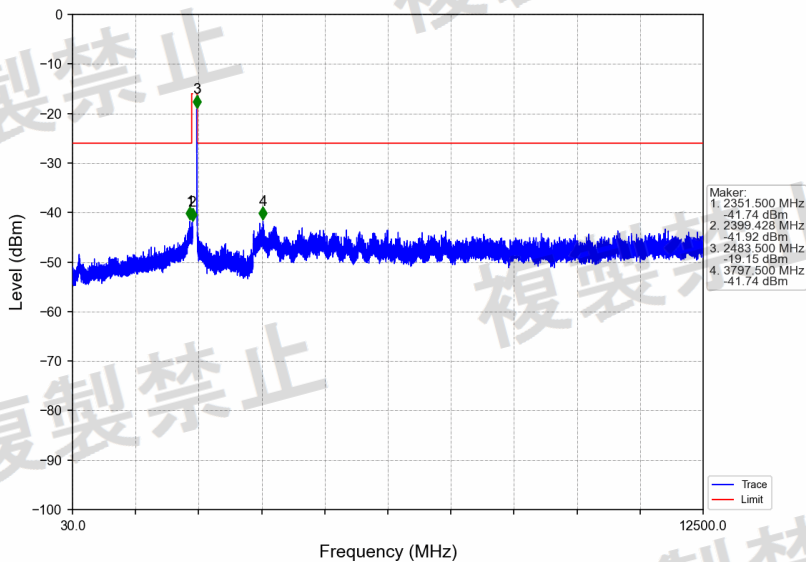


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2312.000	-42.12	/	-26
2387	2400	1	1	2391.745	-41.21	/	-16
2483.5	2496.5	1	1	2483.513	-19.12	/	-16
2496.5	12500	1	1	4213.000	-42.69	/	-26

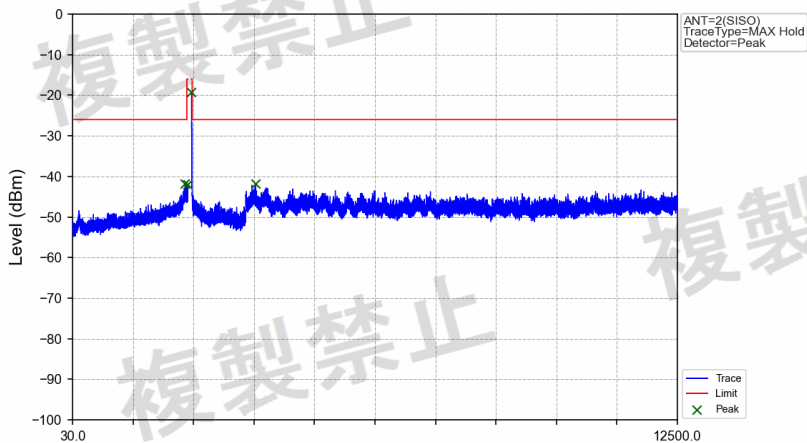
Result

Pass
Pass
Pass
Pass

802.11g 2472MHz Ant2 (SISO) NTV

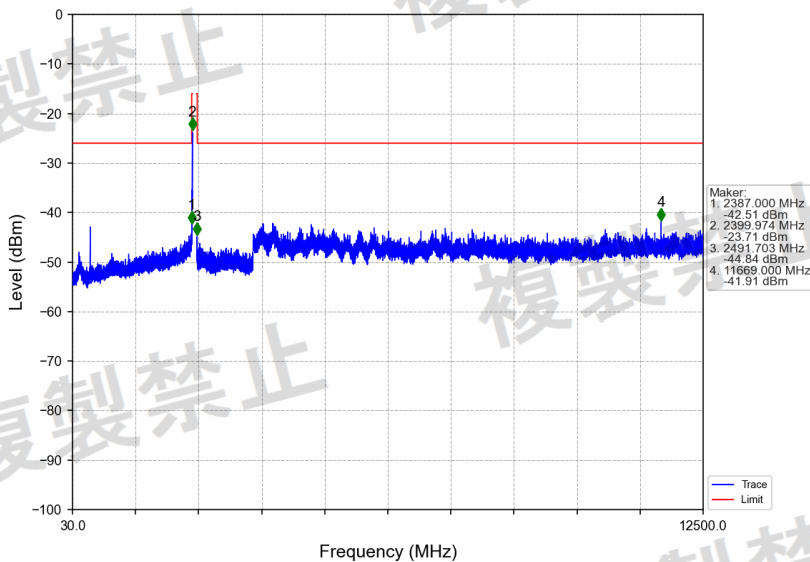


802.11g 2472MHz Ant2 (SISO) NTV

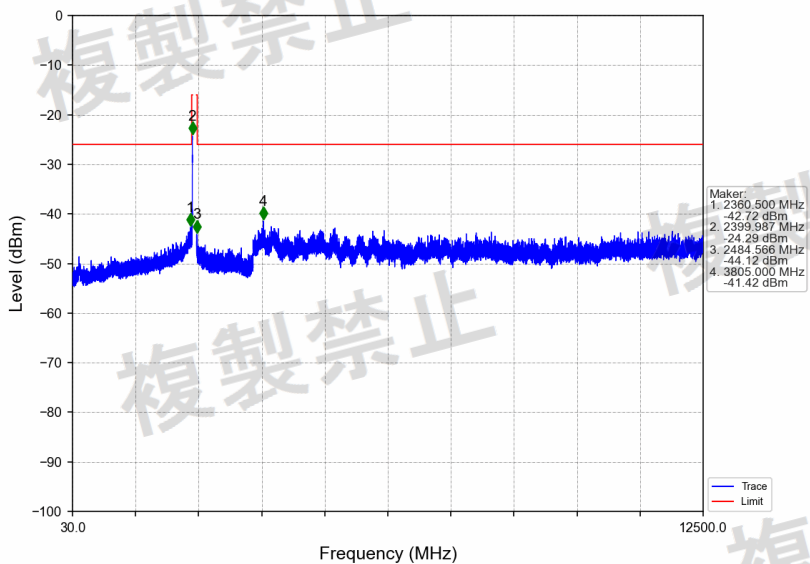


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2351.500	-41.74	/	-26	Pass
2387	2400	1	1	2399.428	-41.92	/	-16	Pass
2483.5	2496.5	1	1	2483.500	-19.15	/	-16	Pass
2496.5	12500	1	1	3797.500	-41.74	/	-26	Pass

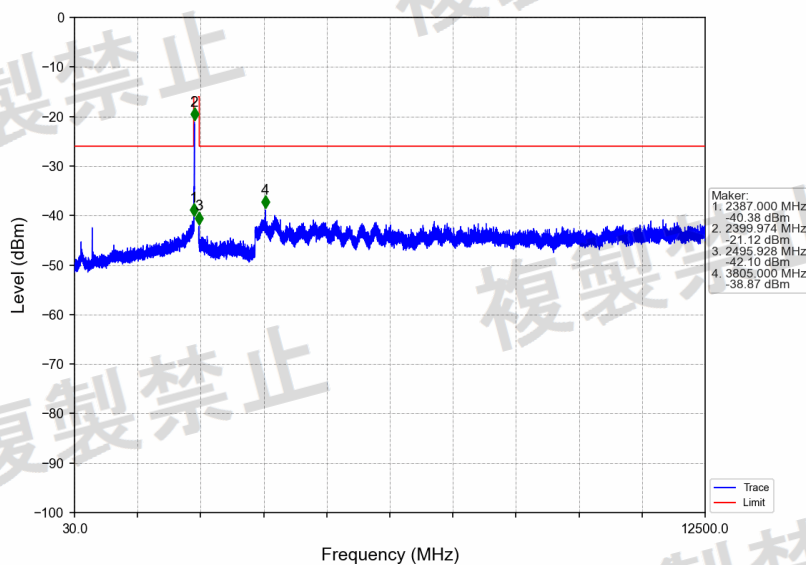
802.11n(HT20) 2412MHz Ant1 (MIMO) NTVN



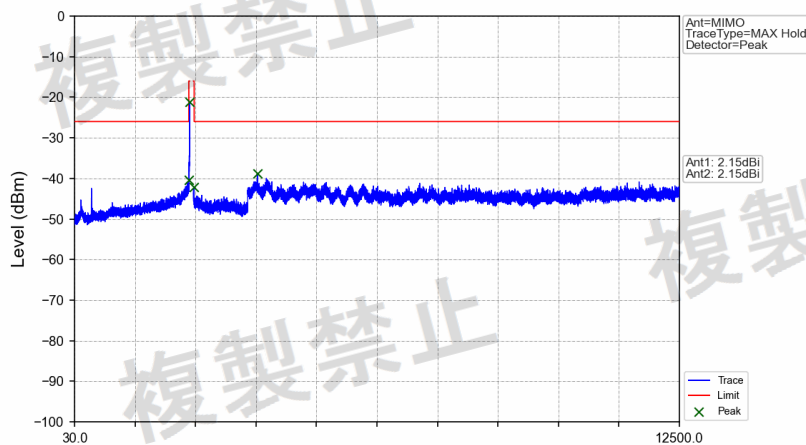
802.11n(HT20) 2412MHz Ant2 (MIMO) NTVN



802.11n(HT20) 2412MHz MIMO NTN

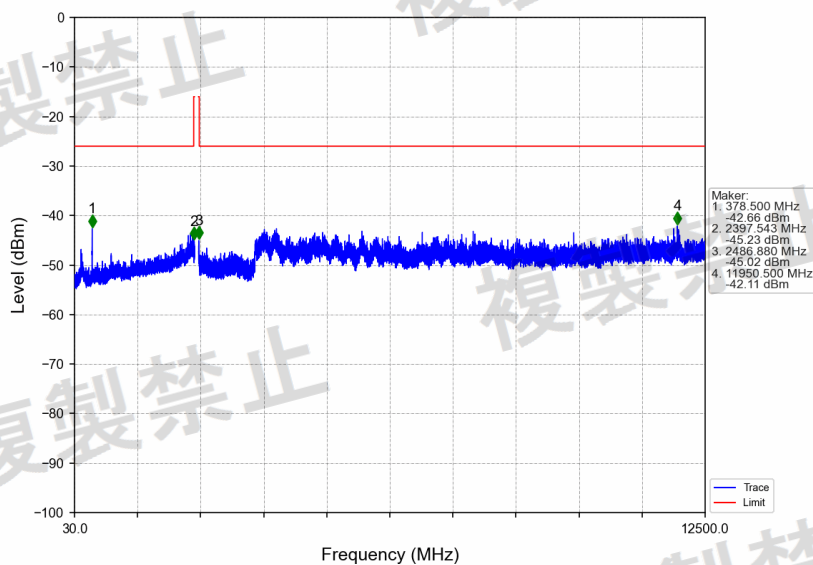


802.11n(HT20) 2412MHz MIMO NTN

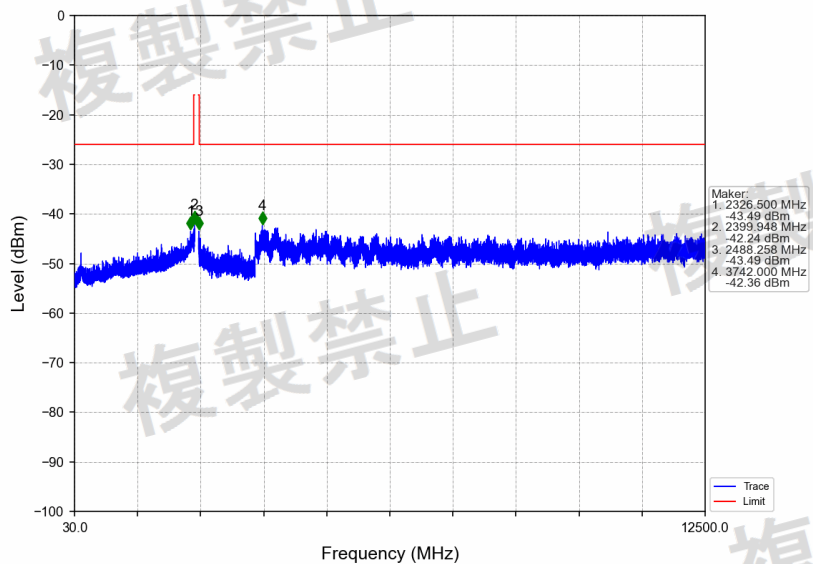


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2387.000	-40.38	/	-26
2387	2400	1	1	2399.974	-21.12	/	-16
2483.5	2496.5	1	1	2495.928	-42.10	/	-16
2496.5	12500	1	1	3805.000	-38.87	/	-26
							Result
							Pass
							Pass
							Pass
							Pass

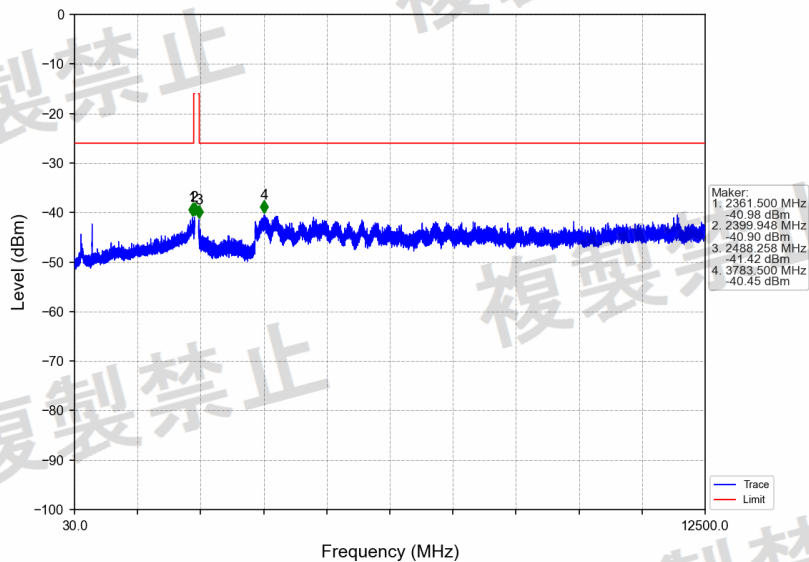
802.11n(HT20) 2442MHz Ant1 (MIMO) NTVN



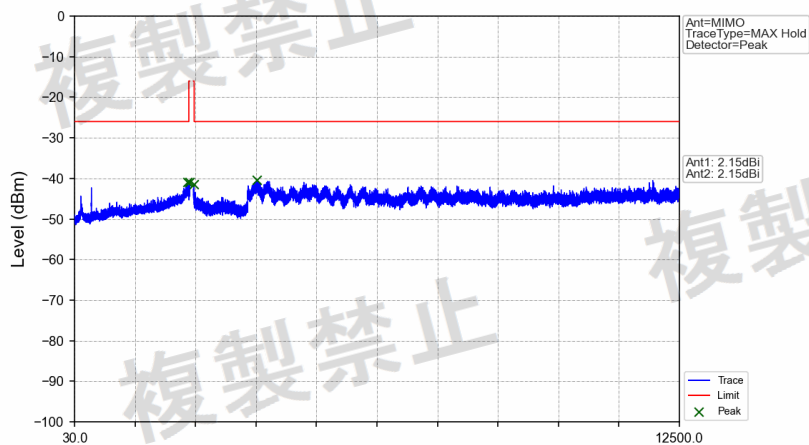
802.11n(HT20) 2442MHz Ant2 (MIMO) NTVN



802.11n(HT20) 2442MHz MIMO NTN



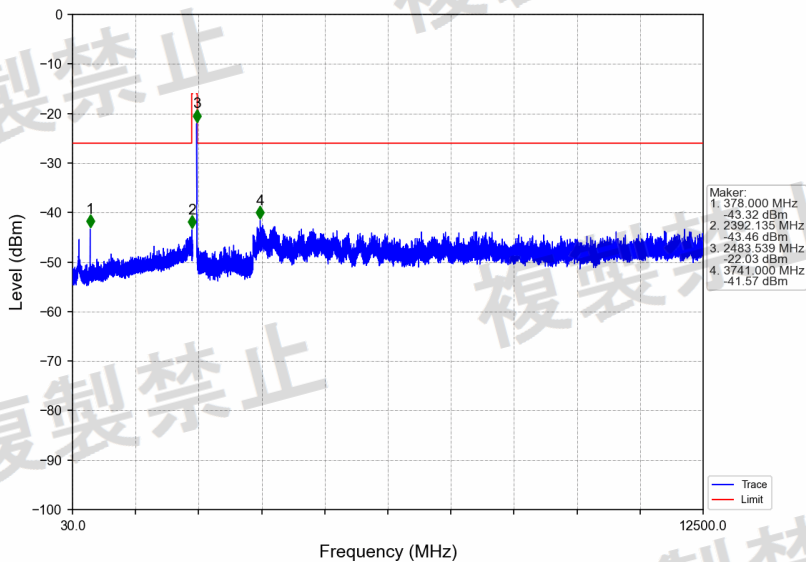
802.11n(HT20) 2442MHz MIMO NTN



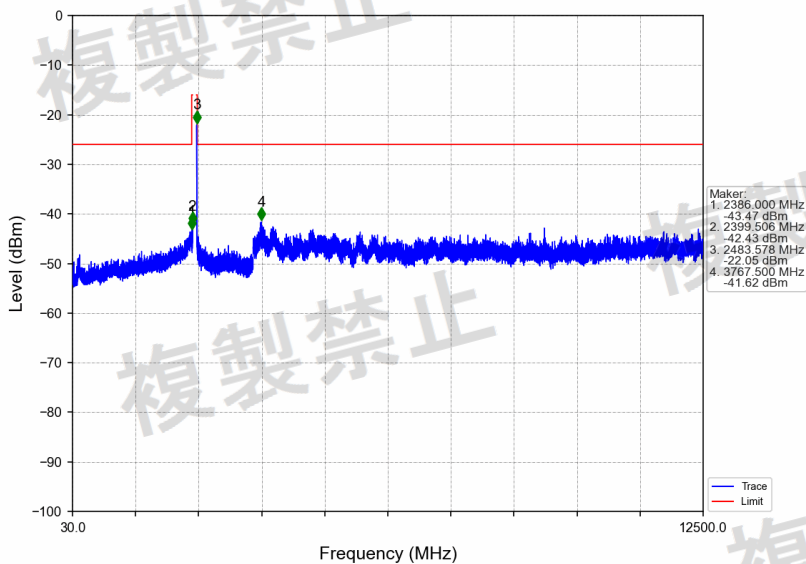
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2361.500	-40.98	/	-26
2387	2400	1	1	2399.948	-40.90	/	-16
2483.5	2496.5	1	1	2488.258	-41.42	/	-16
2496.5	12500	1	1	3783.500	-40.45	/	-26

Result
Pass
Pass
Pass
Pass

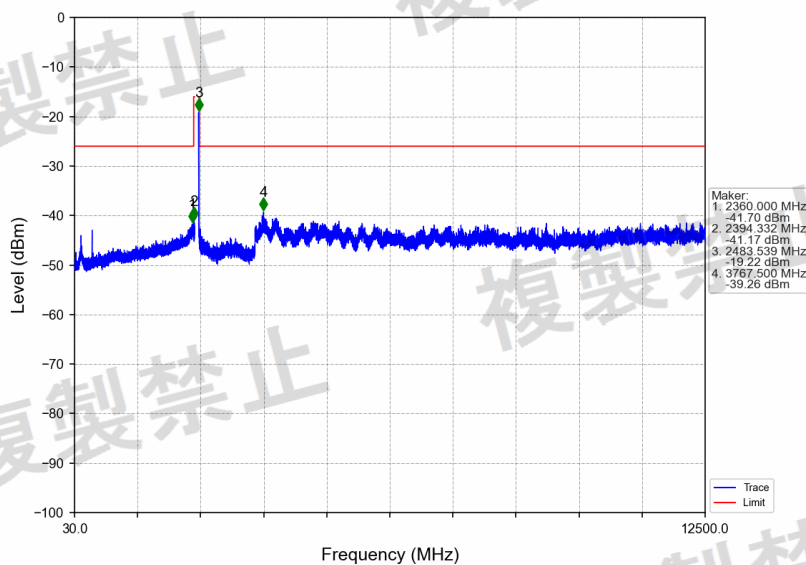
802.11n(HT20) 2472MHz Ant1 (MIMO) NTNV



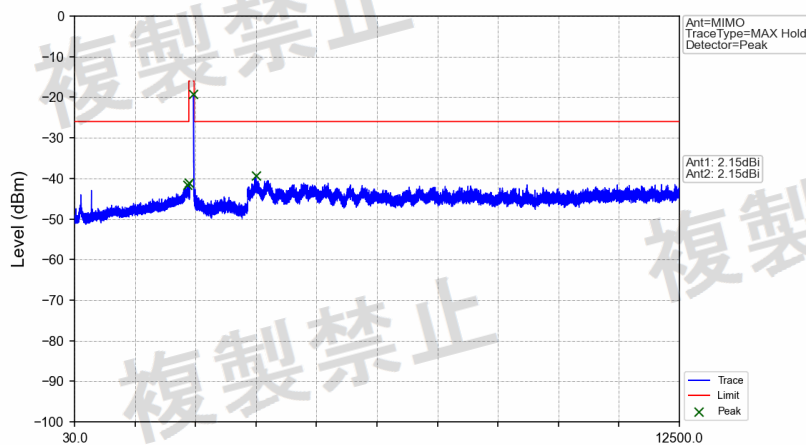
802.11n(HT20) 2472MHz Ant2 (MIMO) NTNV



802.11n(HT20) 2472MHz MIMO NTV



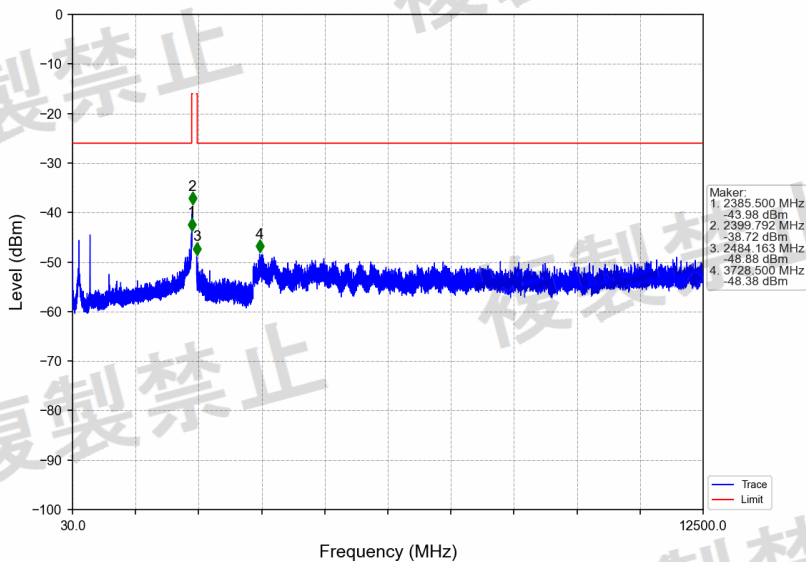
802.11n(HT20) 2472MHz MIMO NTV



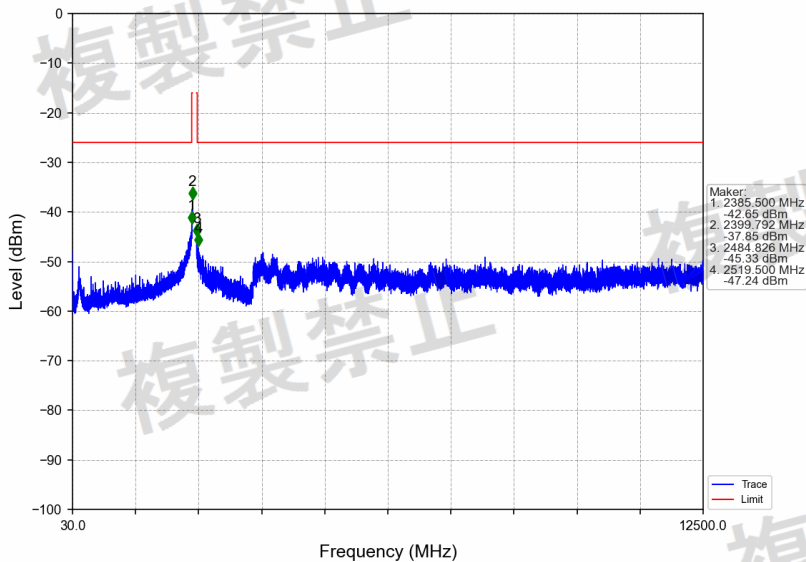
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	2387	1	1	2360.000	-41.70	/	-26
2387	2400	1	1	2394.332	-41.17	/	-16
2483.5	2496.5	1	1	2483.539	-19.22	/	-16
2496.5	12500	1	1	3767.500	-39.26	/	-26

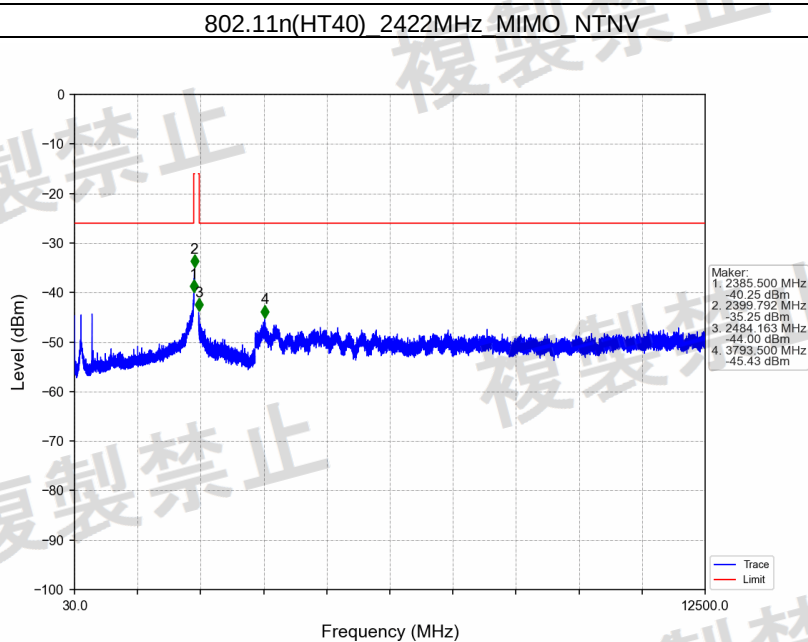
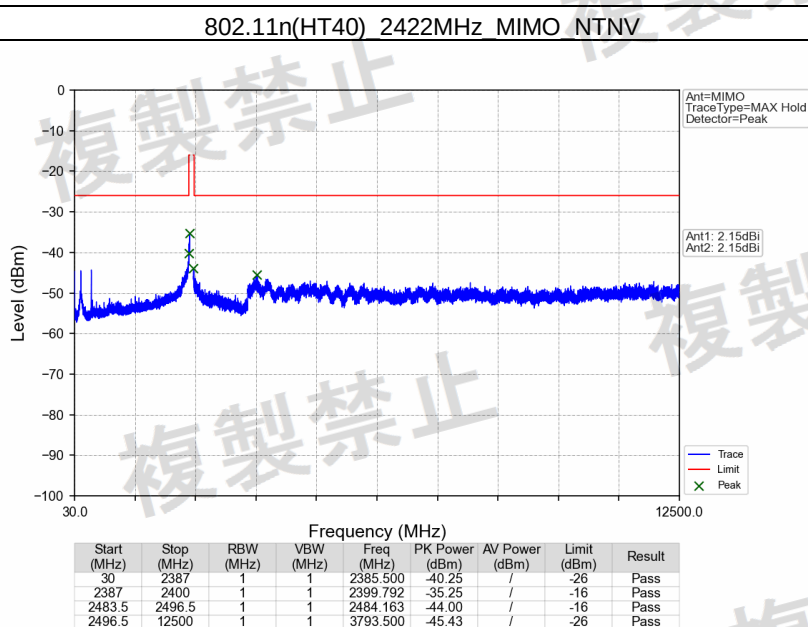
Result
Pass
Pass
Pass
Pass

802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN

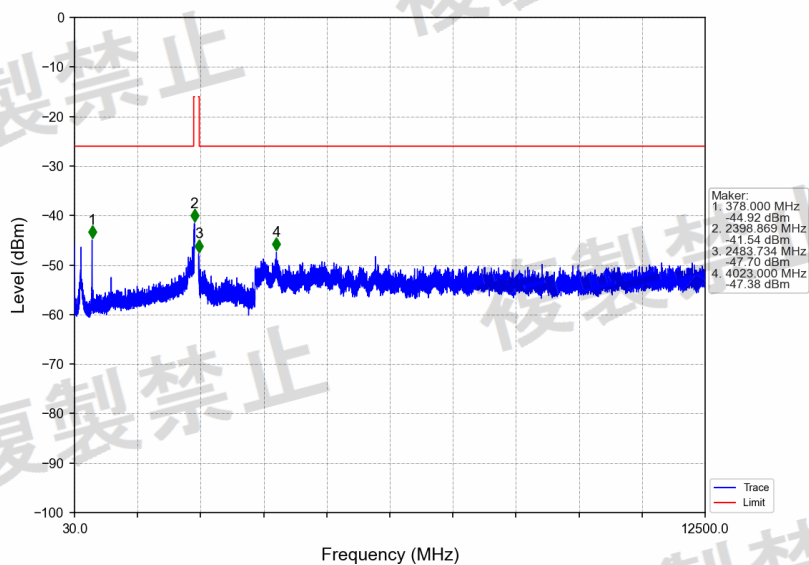


802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN

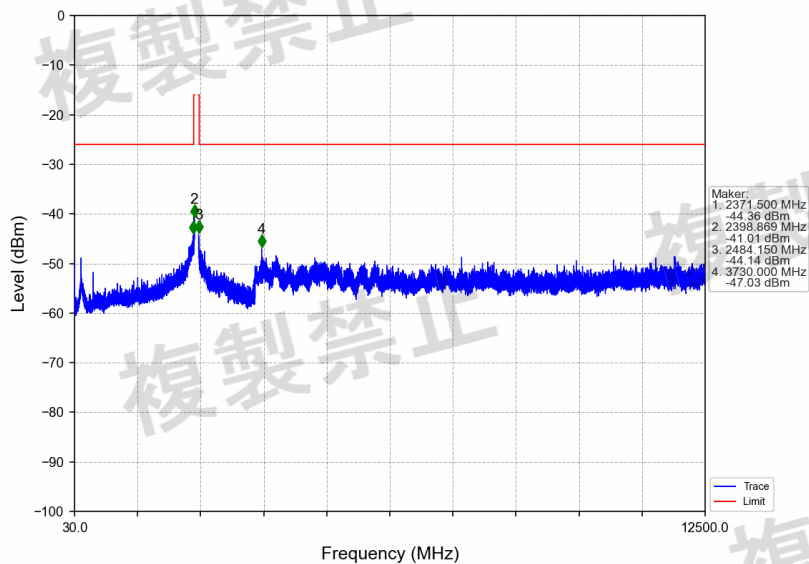


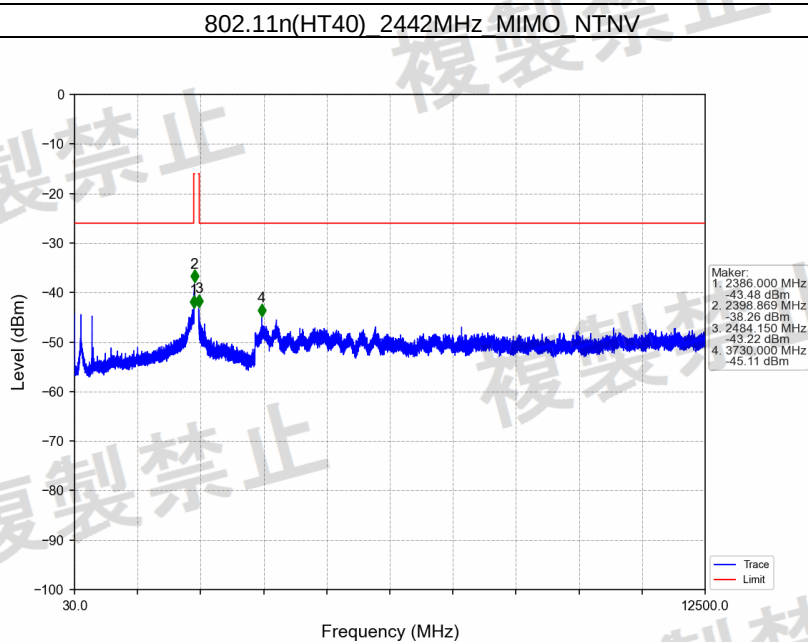
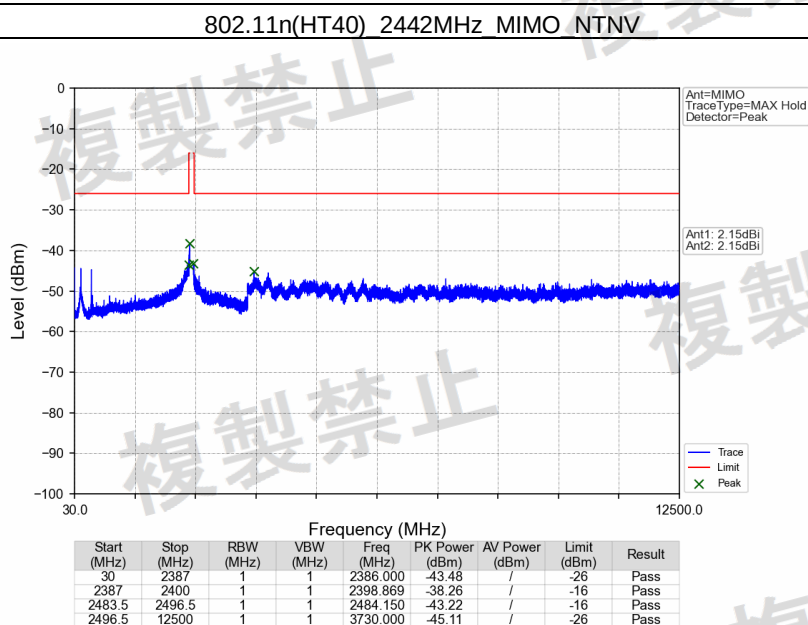


802.11n(HT40) 2442MHz Ant1 (MIMO) NTNV

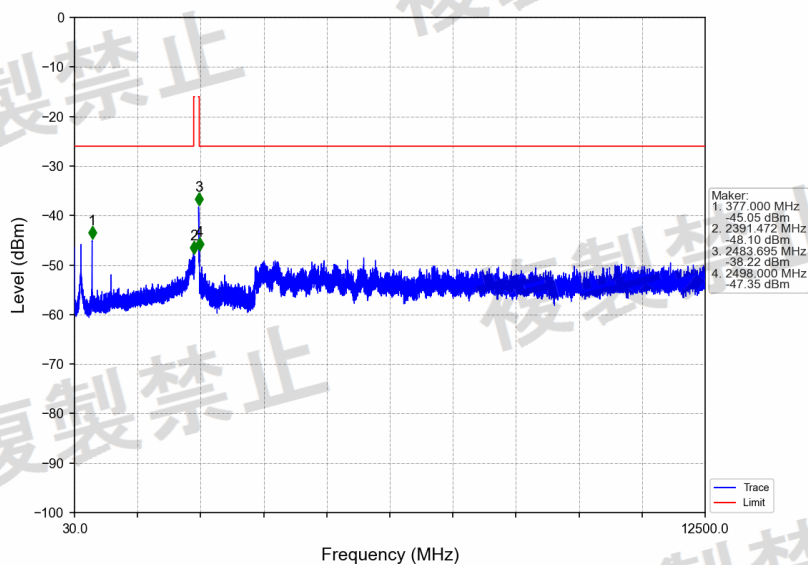


802.11n(HT40) 2442MHz Ant2 (MIMO) NTNV

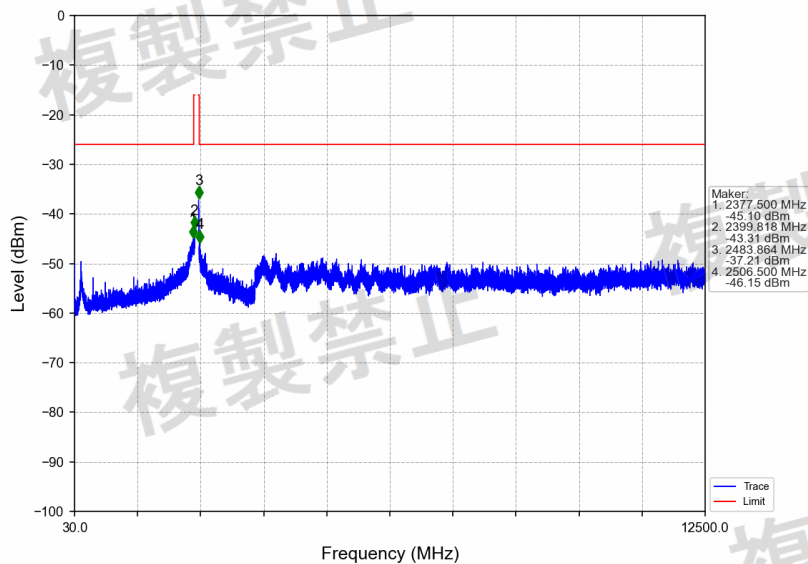




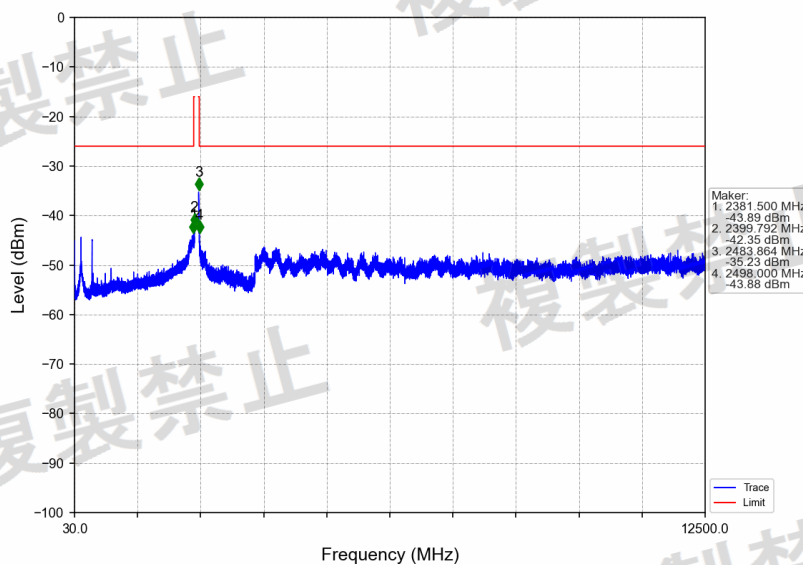
802.11n(HT40) 2462MHz Ant1 (MIMO) NTVN



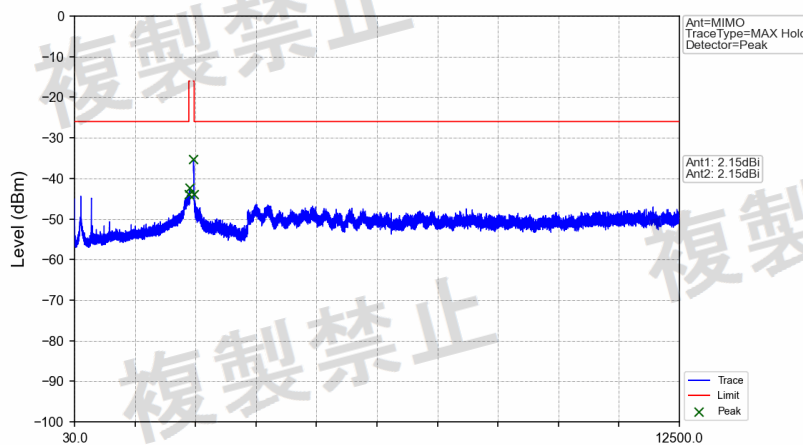
802.11n(HT40) 2462MHz Ant2 (MIMO) NTVN



802.11n(HT40) 2462MHz MIMO NTN



802.11n(HT40) 2462MHz MIMO NTN



Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Result
30	2387	1	1	2381.500	-43.89	/	Pass
2387	2400	1	1	2399.792	-42.35	/	Pass
2483.5	2496.5	1	1	2483.864	-35.23	/	Pass
2496.5	12500	1	1	2498.000	-43.88	/	Pass

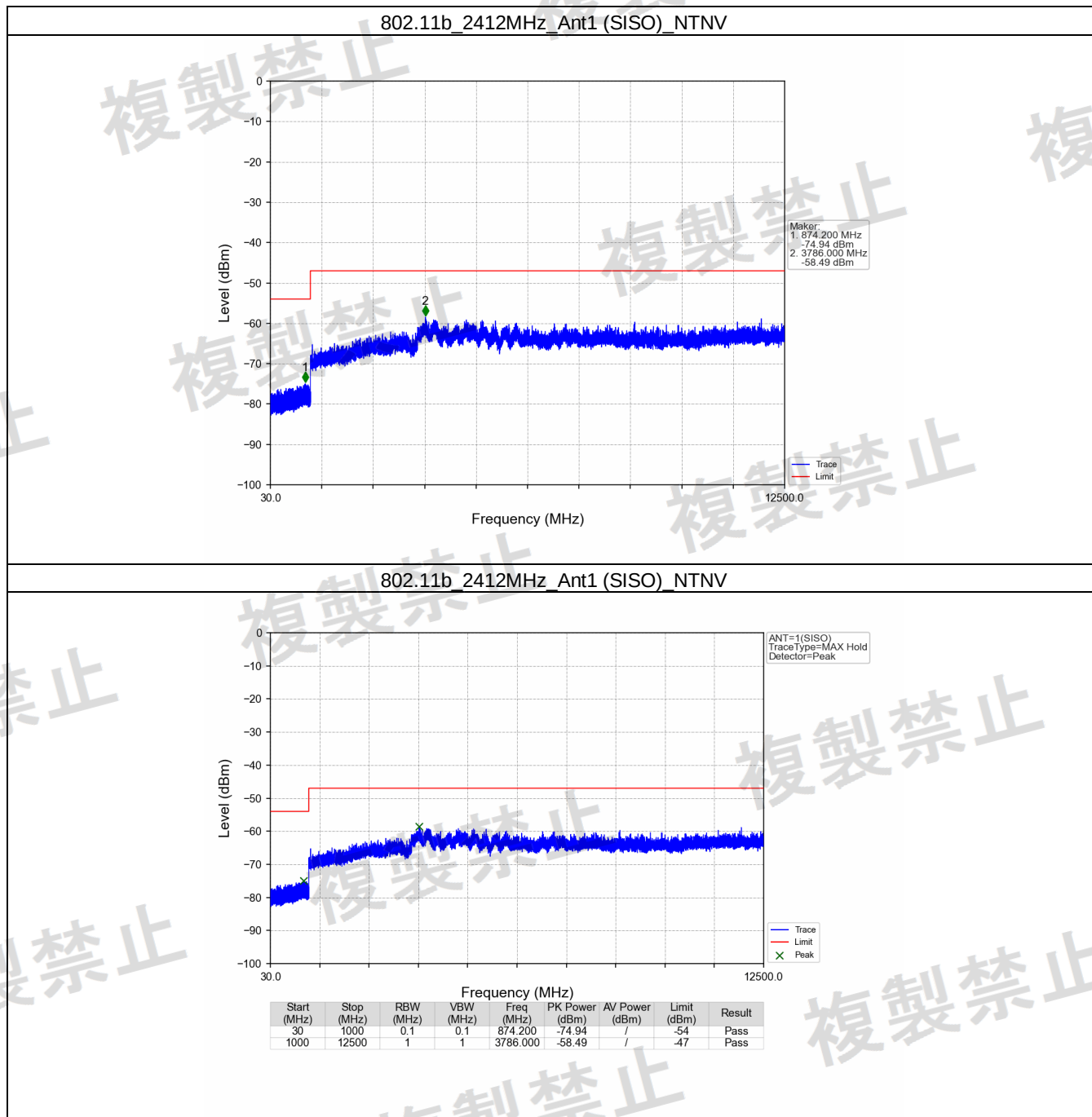
6. Secondary Radiated Emission

6.1 RxSe

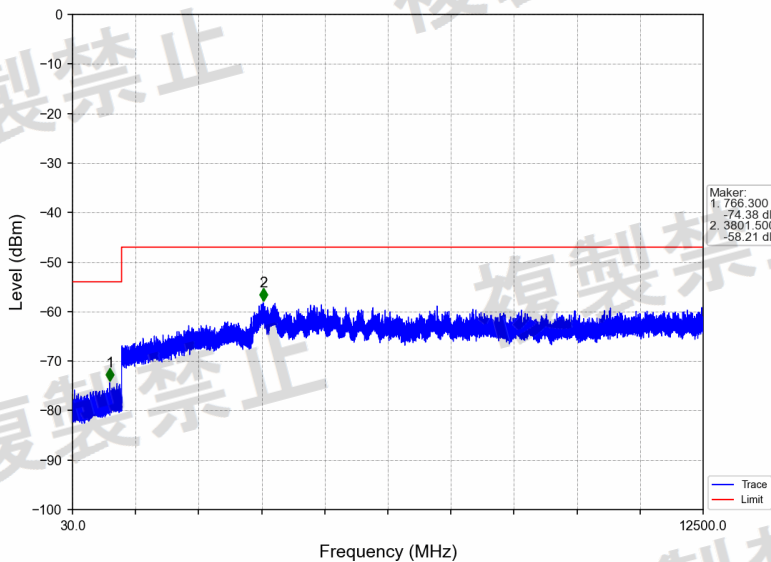
6.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	ANT	Test Result	Limit	Verdict
NTNV	802.11b	SISO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
	802.11g	SISO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
	802.11n (HT20)	MIMO	2412	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2442	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			2472	1	Refer To Test Graph		Pass
				2	Refer To Test Graph		Pass
			MIMO	Refer To Test Graph		Pass	
			802.11n (HT40)	MIMO	2422	1	Refer To Test Graph
	2	Refer To Test Graph					Pass
	MIMO	Refer To Test Graph				Pass	
	2442	1			Refer To Test Graph		Pass
		2			Refer To Test Graph		Pass
	MIMO	Refer To Test Graph				Pass	
	2462	1			Refer To Test Graph		Pass
		2			Refer To Test Graph		Pass
	MIMO	Refer To Test Graph				Pass	

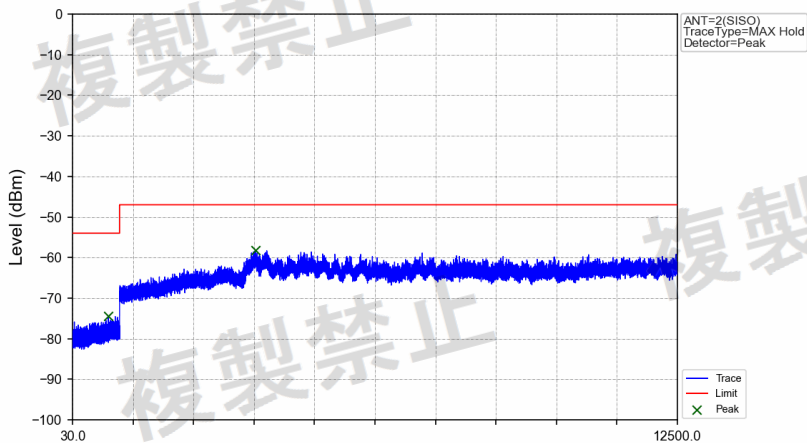
6.1.2 Test Graph



802.11b 2412MHz Ant2 (SISO) NTN



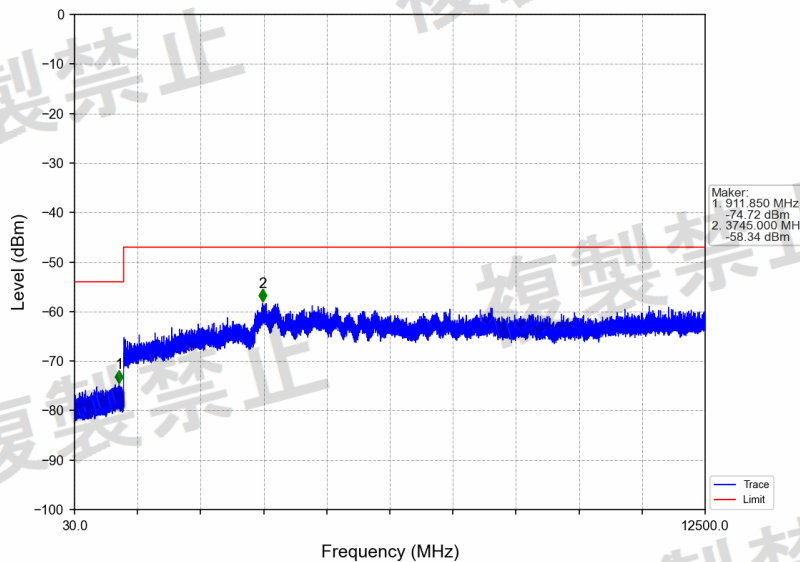
802.11b 2412MHz Ant2 (SISO) NTN



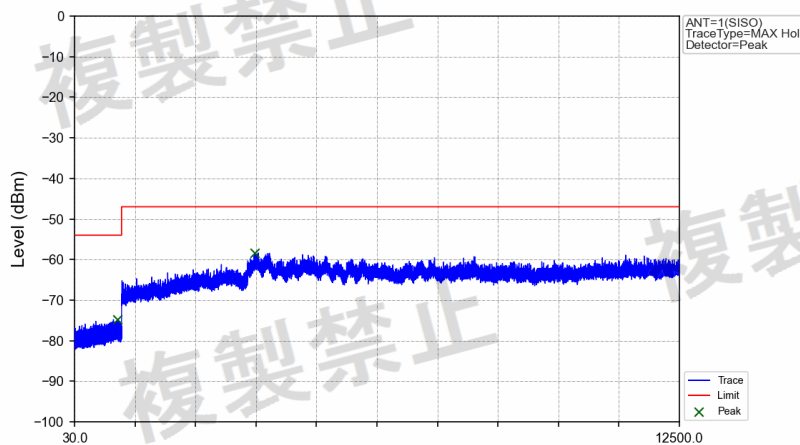
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	766.300	-74.38	/	-54
1000	12500	1	1	3801.500	-58.21	/	-47

Result
Pass
Pass

802.11b 2442MHz Ant1 (SISO) NTNV

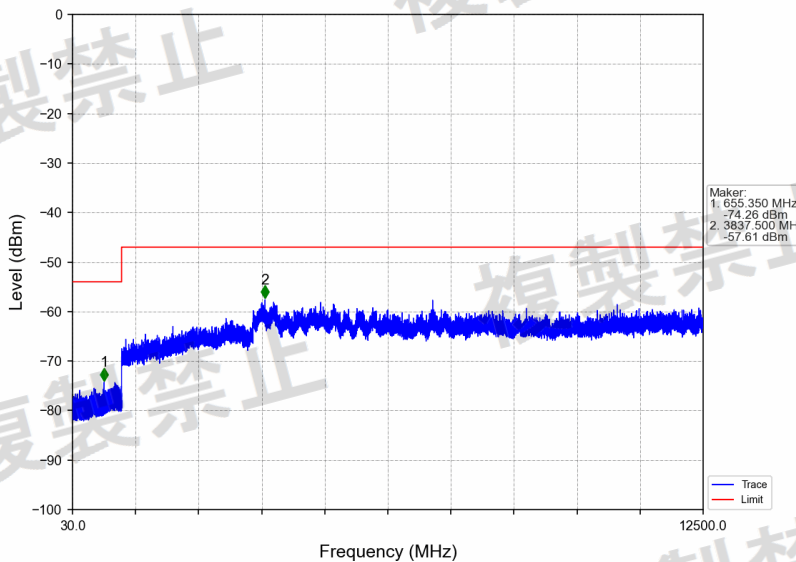


802.11b 2442MHz Ant1 (SISO) NTNV

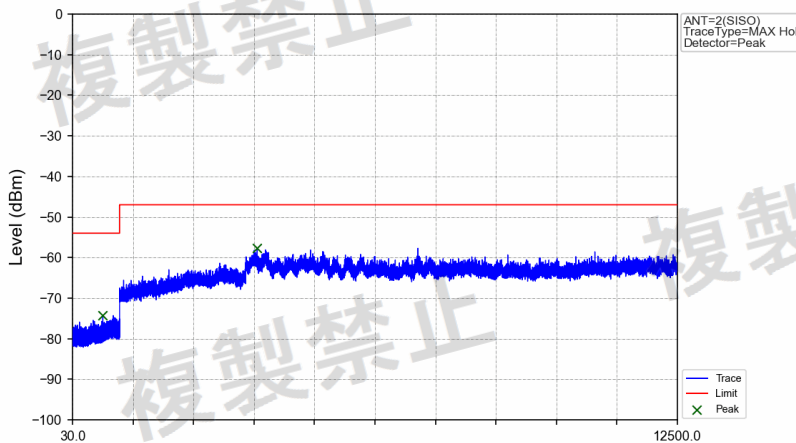


Frequency (MHz)								
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	911.850	-74.72	/	-54	Pass
1000	12500	1	1	3745.000	-58.34	/	-47	Pass

802.11b 2442MHz Ant2 (SISO) NTN



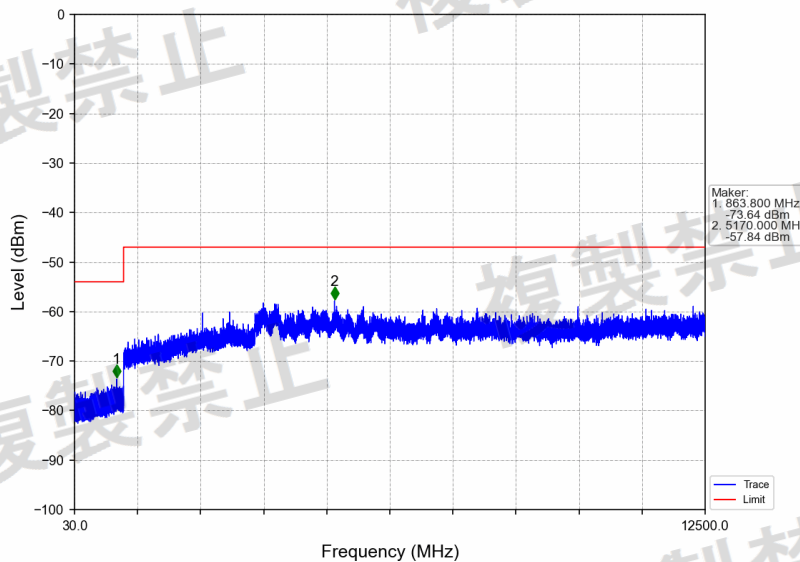
802.11b 2442MHz Ant2 (SISO) NTN



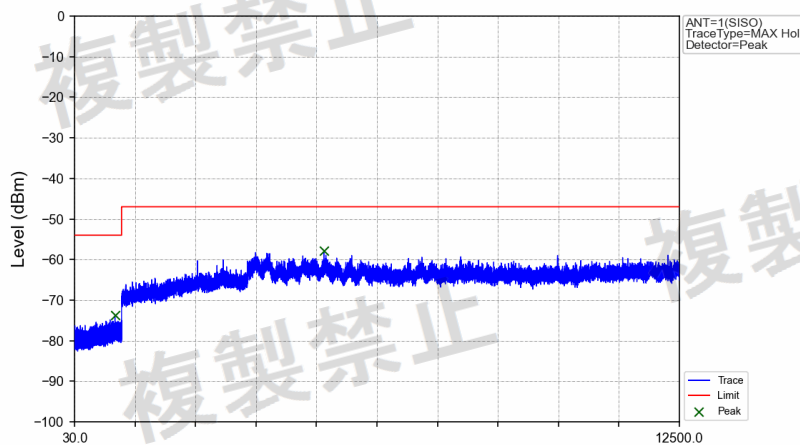
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	655.350	-74.26	/	-54
1000	12500	1	1	3837.500	-57.61	/	-47

Result
Pass
Pass

802.11b 2472MHz Ant1 (SISO) NTN

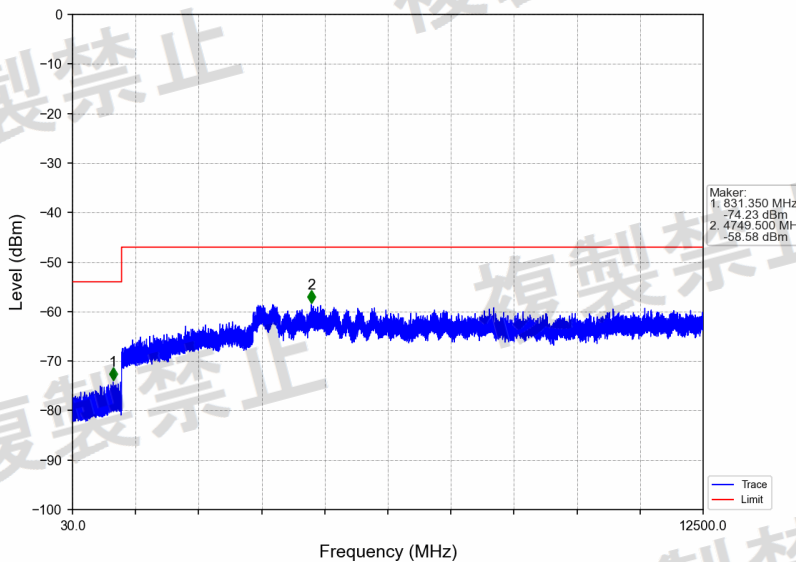


802.11b 2472MHz Ant1 (SISO) NTN

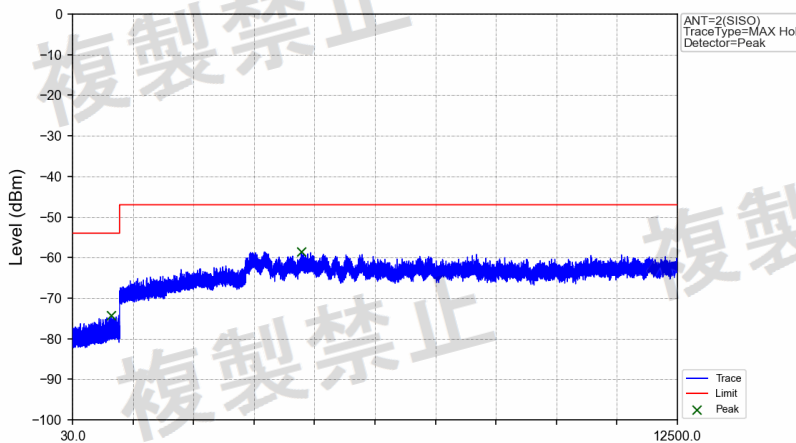


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	863.800	-73.64	/	-54	Pass
1000	12500	1	1	5170.000	-57.84	/	-47	Pass

802.11b 2472MHz Ant2 (SISO) NTNV



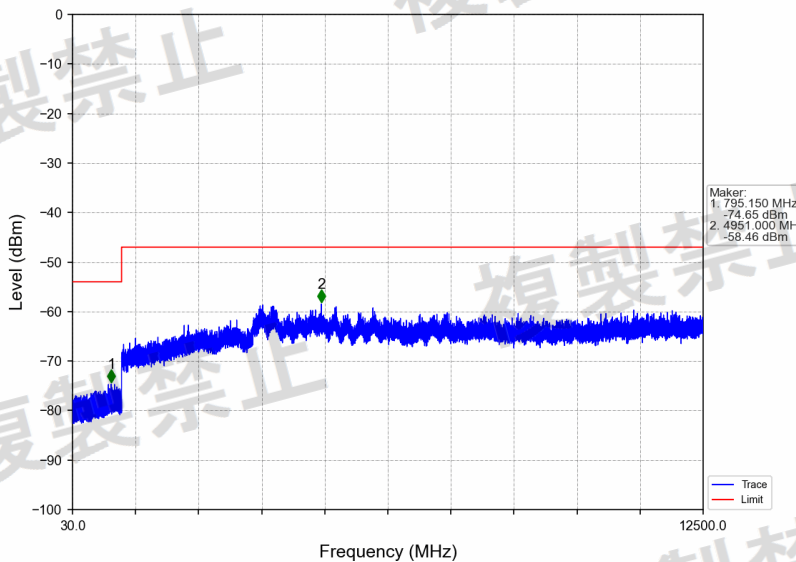
802.11b 2472MHz Ant2 (SISO) NTNV



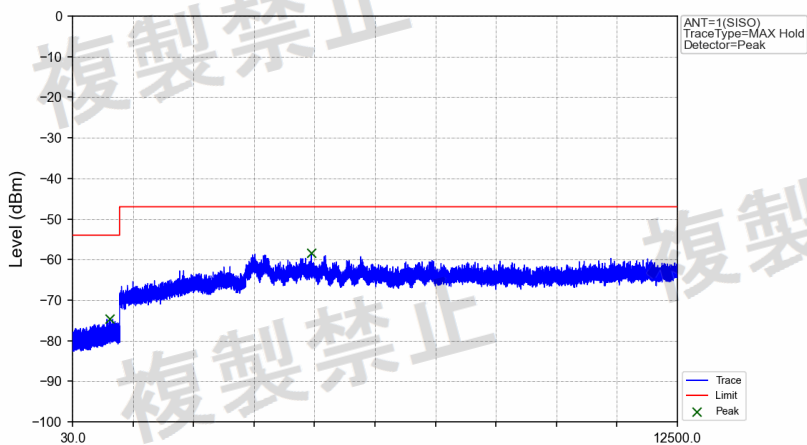
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	831.350	-74.23	/	-54
1000	12500	1	1	4749.500	-58.58	/	-47

Result
Pass
Pass

802.11g 2412MHz Ant1 (SISO) NTNV



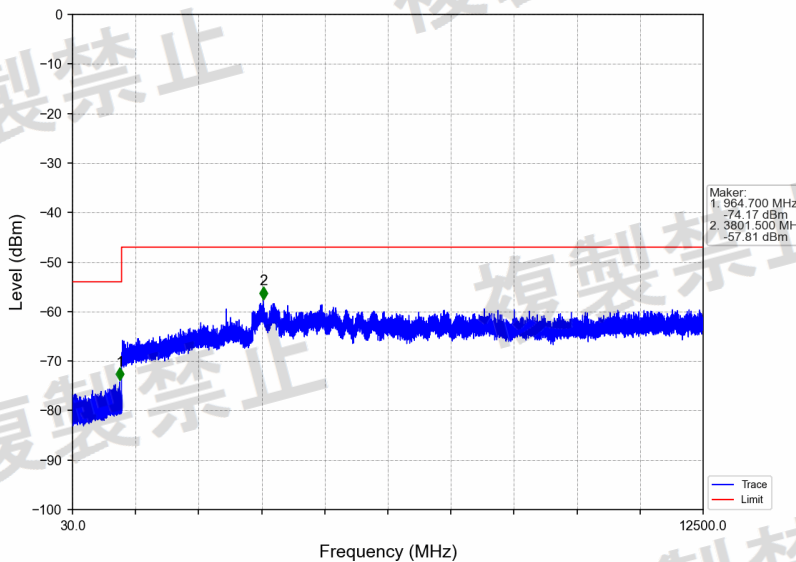
802.11g 2412MHz Ant1 (SISO) NTNV



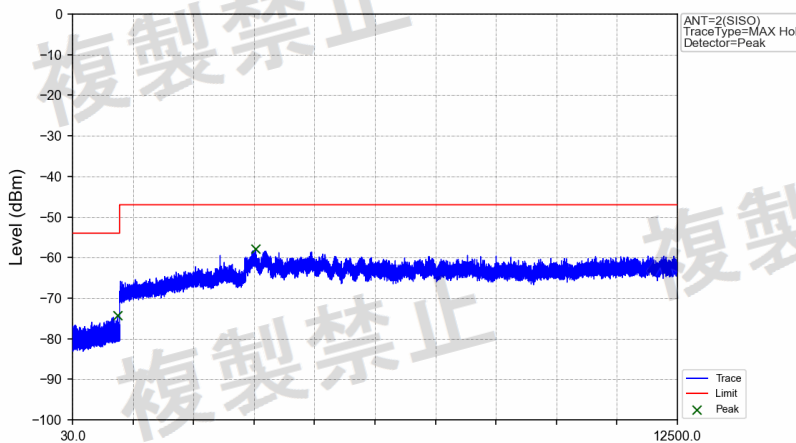
Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	795.150	-74.65	/	-54
1000	12500	1	1	4951.000	-58.46	/	-47

Result
Pass
Pass

802.11g 2412MHz Ant2 (SISO) NTN

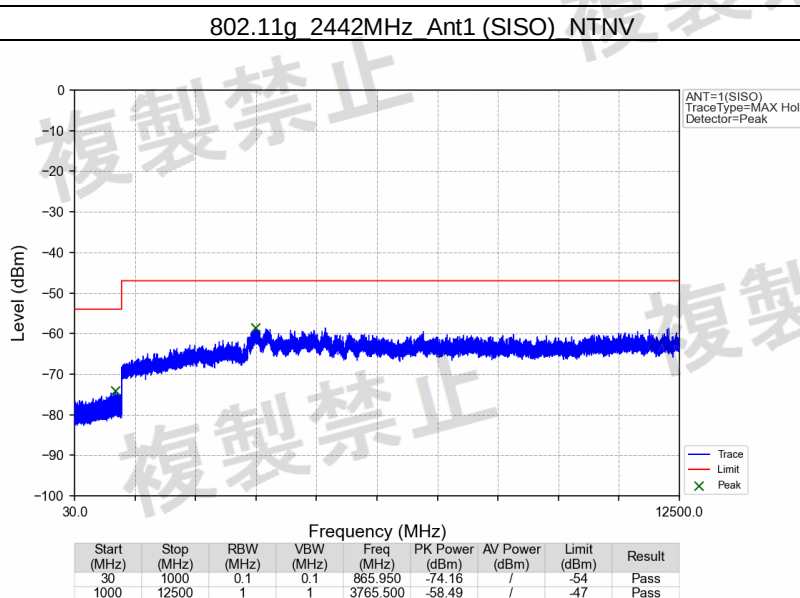


802.11g 2412MHz Ant2 (SISO) NTN

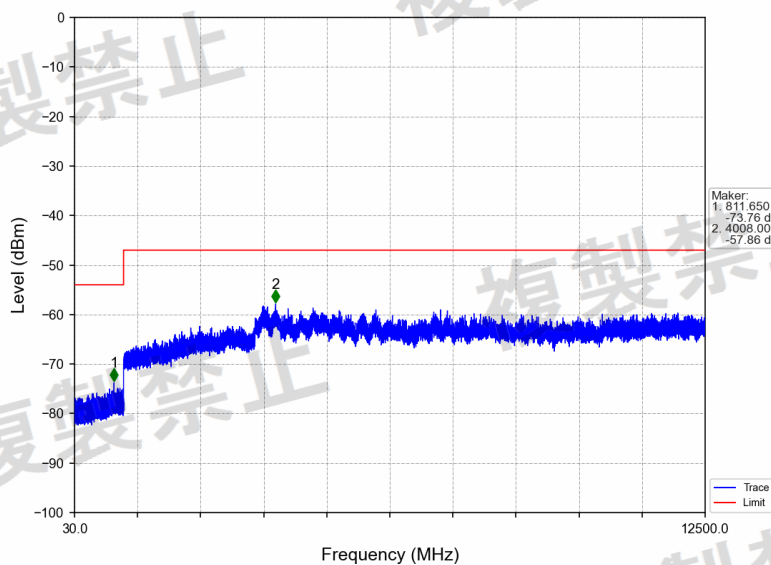


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	964.700	-74.17	/	-54
1000	12500	1	1	3801.500	-57.81	/	-47

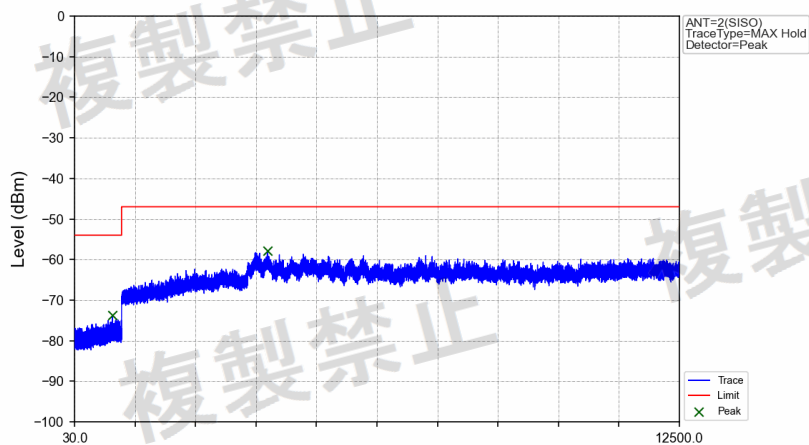
Result
Pass
Pass



802.11g 2442MHz Ant2 (SISO) NTNV

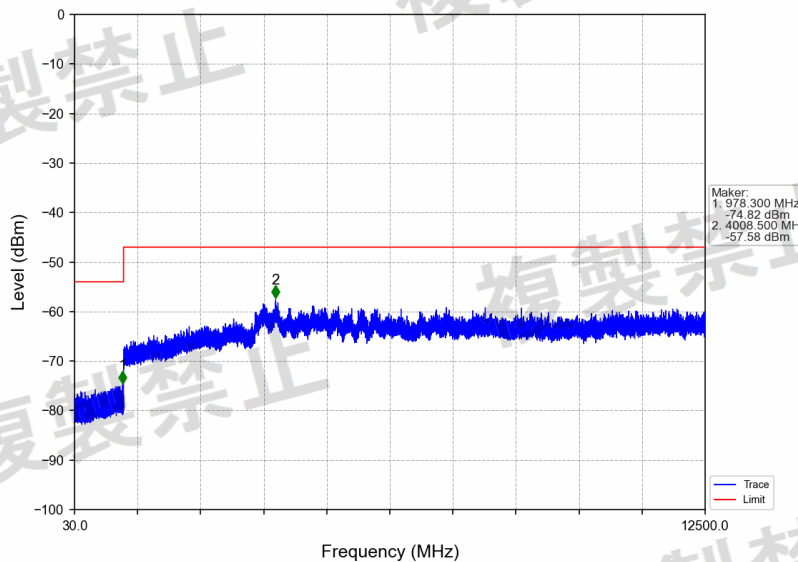


802.11g 2442MHz Ant2 (SISO) NTNV

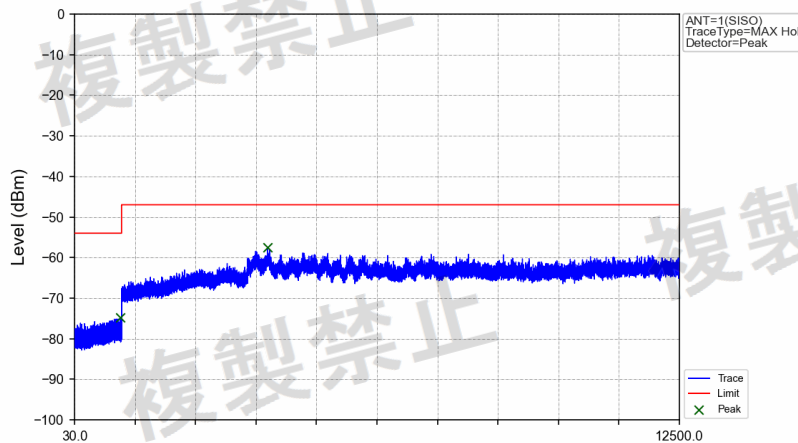


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	811.650	-73.76	/	-54
1000	12500	1	1	4008.000	-57.86	/	-47
							Result
							Pass
							Pass

802.11g 2472MHz Ant1 (SISO) NTN

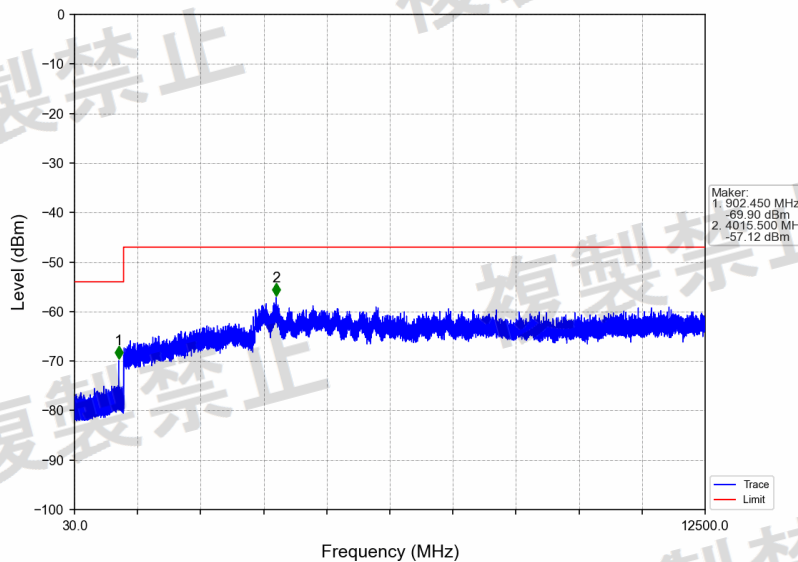


802.11g 2472MHz Ant1 (SISO) NTN

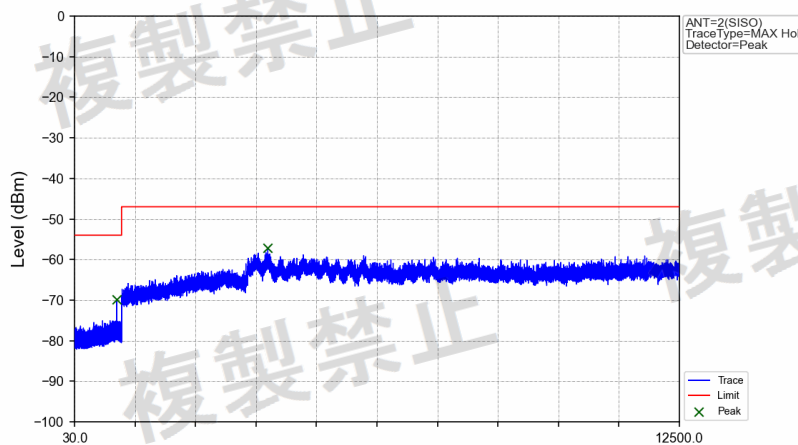


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	978.300	-74.82	/	-54	Pass
1000	12500	1	1	4008.500	-57.58	/	-47	Pass

802.11g 2472MHz Ant2 (SISO) NTNV

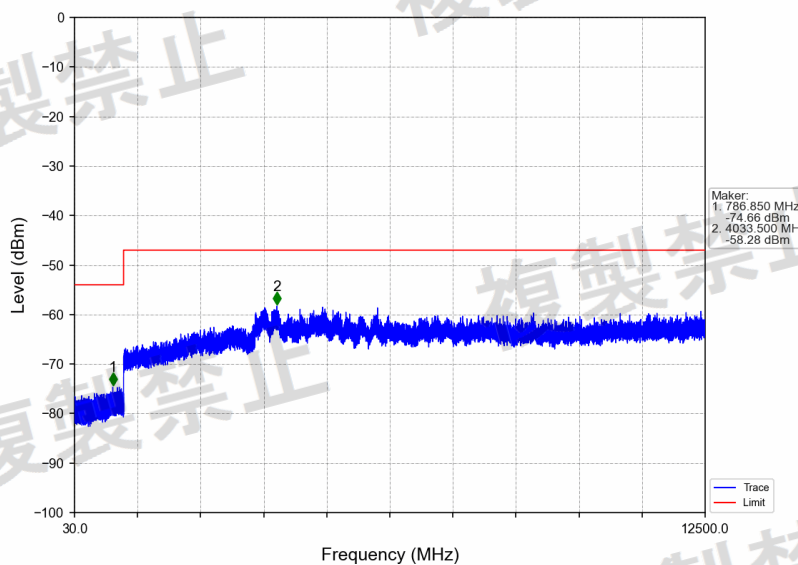


802.11g 2472MHz Ant2 (SISO) NTNV

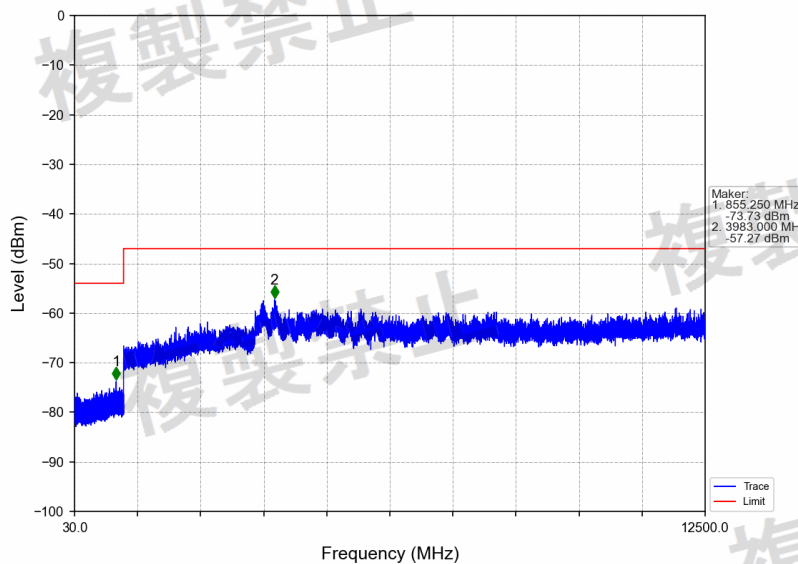


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	902.450	-69.90	/	-54	Pass
1000	12500	1	1	4015.500	-57.12	/	-47	Pass

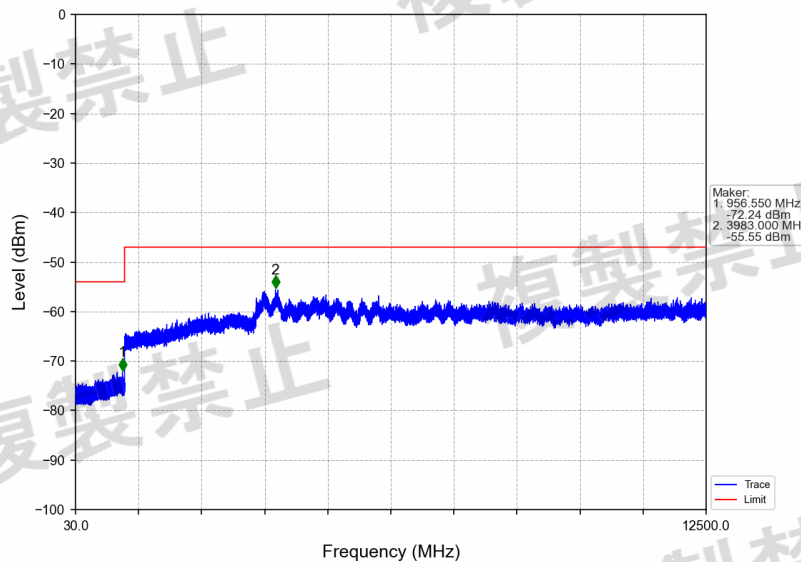
802.11n(HT20) 2412MHz Ant1 (MIMO) NTVN



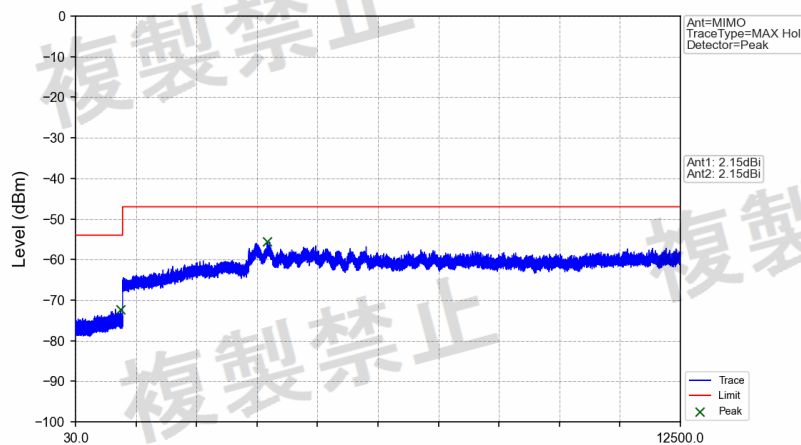
802.11n(HT20) 2412MHz Ant2 (MIMO) NTVN



802.11n(HT20) 2412MHz MIMO NTNV

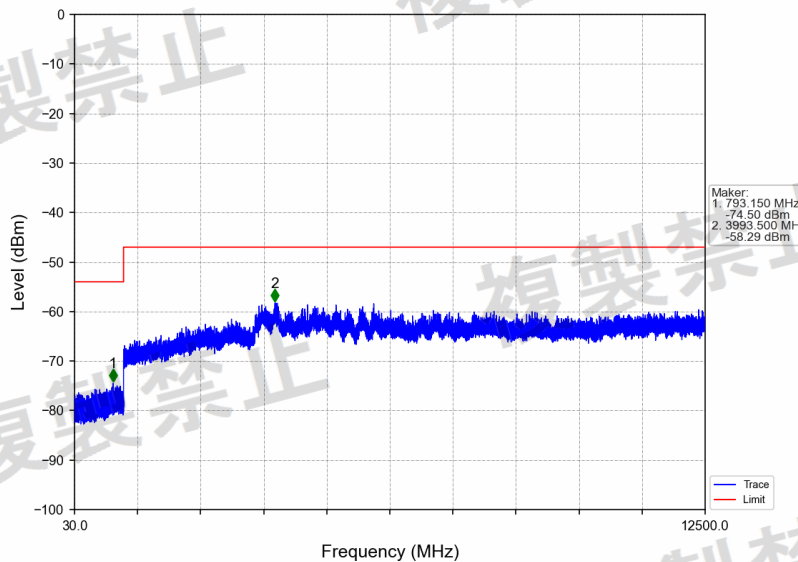


802.11n(HT20) 2412MHz MIMO NTNV

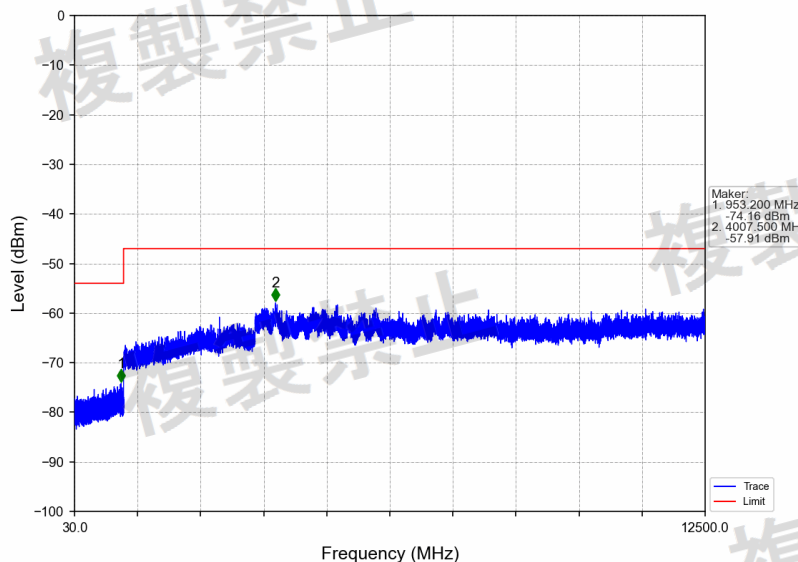


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	956.550	-72.24	/	-54	Pass
1000	12500	1	1	3983.000	-55.55	/	-47	Pass

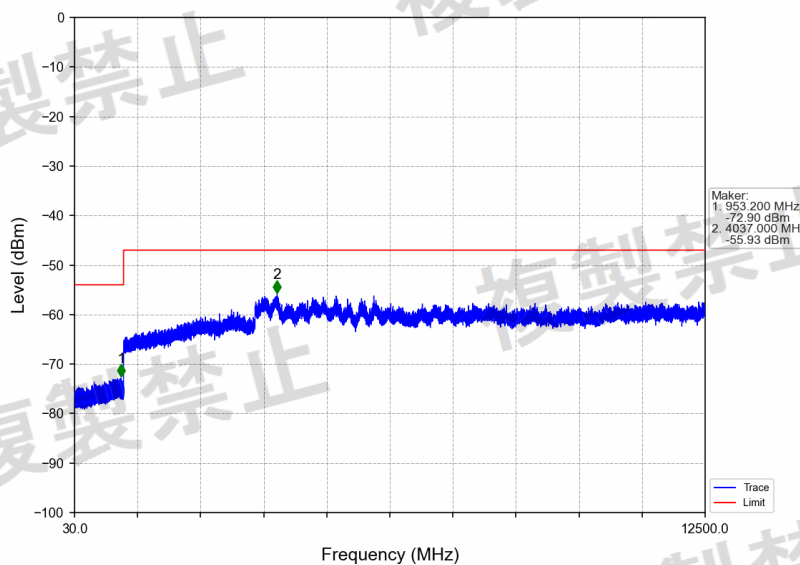
802.11n(HT20) 2442MHz Ant1 (MIMO) NTNV



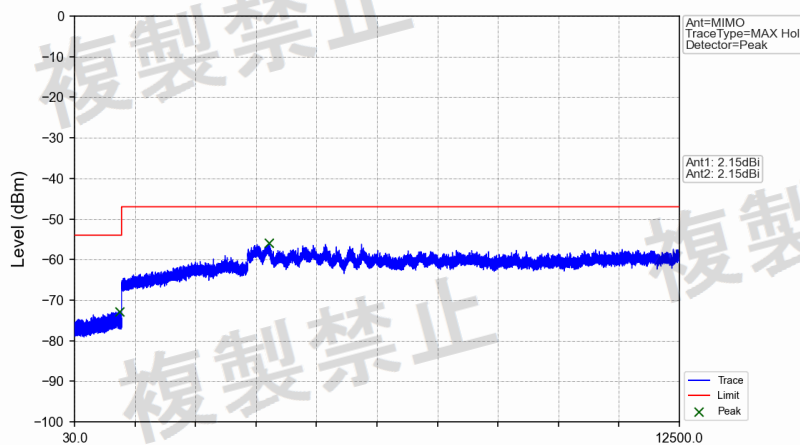
802.11n(HT20) 2442MHz Ant2 (MIMO) NTNV



802.11n(HT20) 2442MHz MIMO NTNV

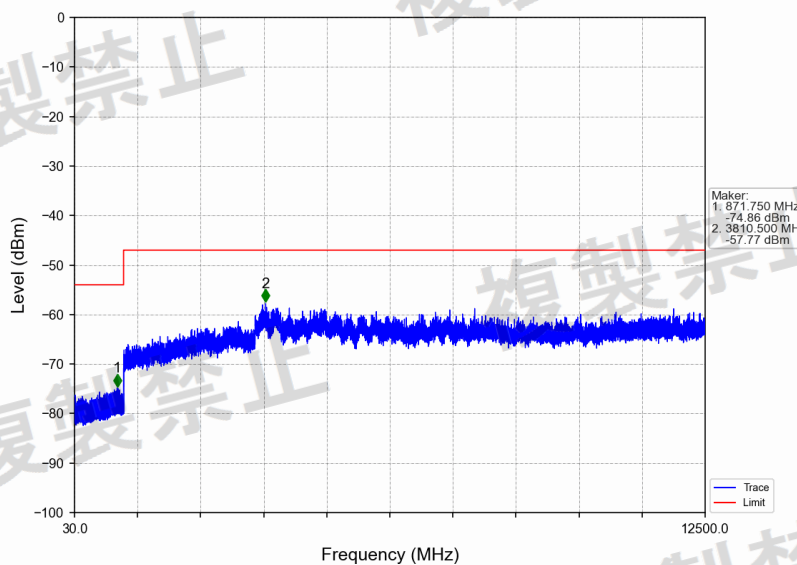


802.11n(HT20) 2442MHz MIMO NTNV

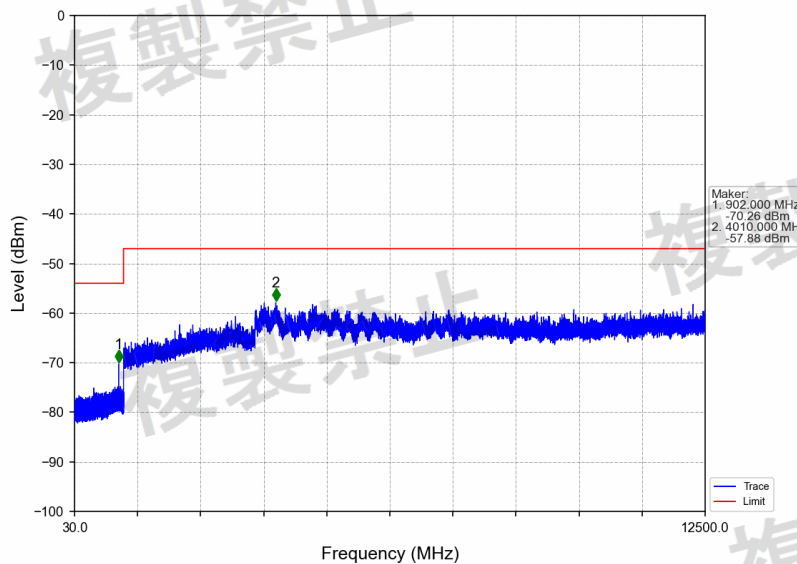


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	953.200	-72.90	/	-54
1000	12500	1	1	4037.000	-55.93	/	-47
							Result
							Pass
							Pass

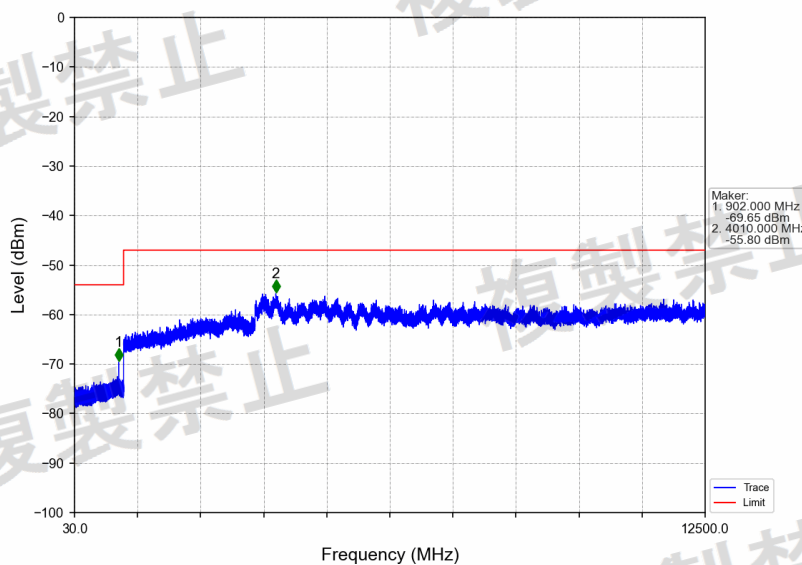
802.11n(HT20) 2472MHz Ant1 (MIMO) NTVN



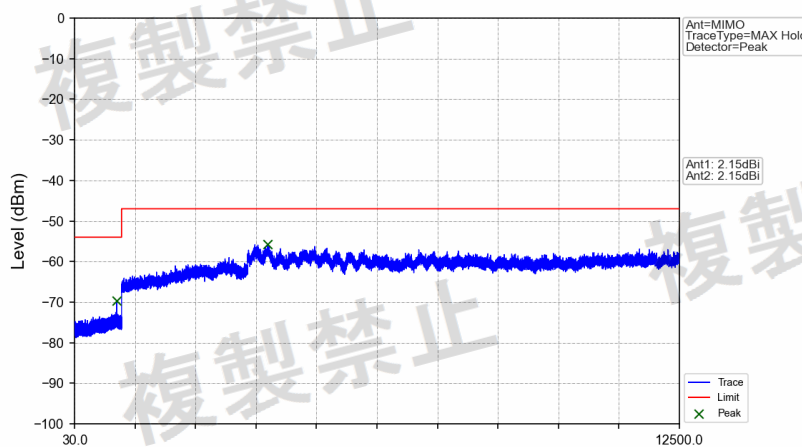
802.11n(HT20) 2472MHz Ant2 (MIMO) NTVN



802.11n(HT20) 2472MHz MIMO NTN

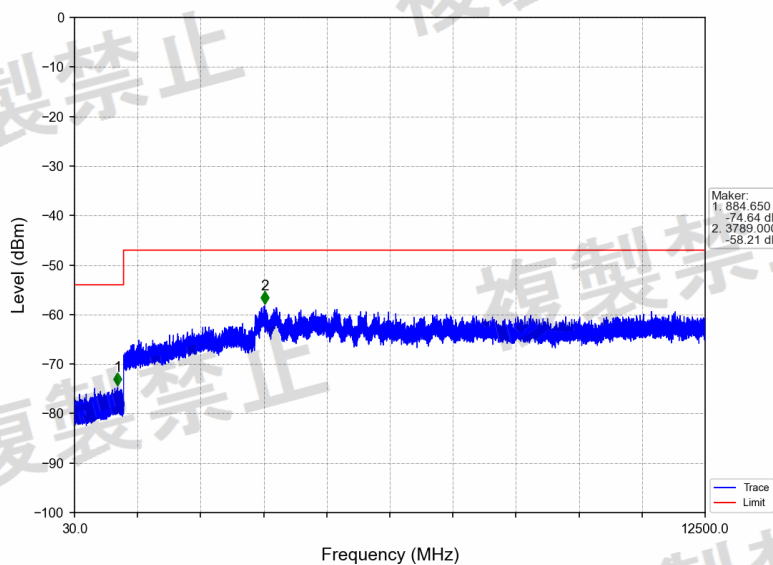


802.11n(HT20) 2472MHz MIMO NTN

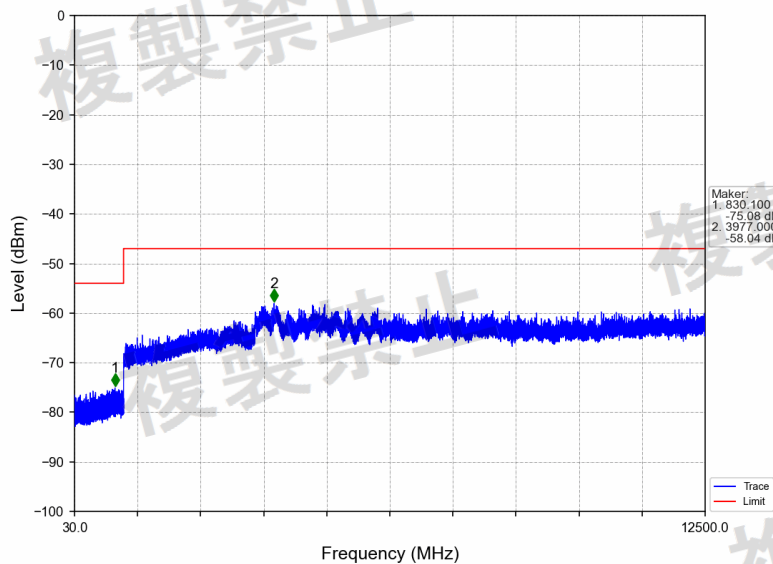


Frequency (MHz)							
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)
30	1000	0.1	0.1	902.000	-69.65	/	-54
1000	12500	1	1	4010.000	-55.80	/	-47
							Result
							Pass
							Pass

802.11n(HT40) 2422MHz Ant1 (MIMO) NTVN

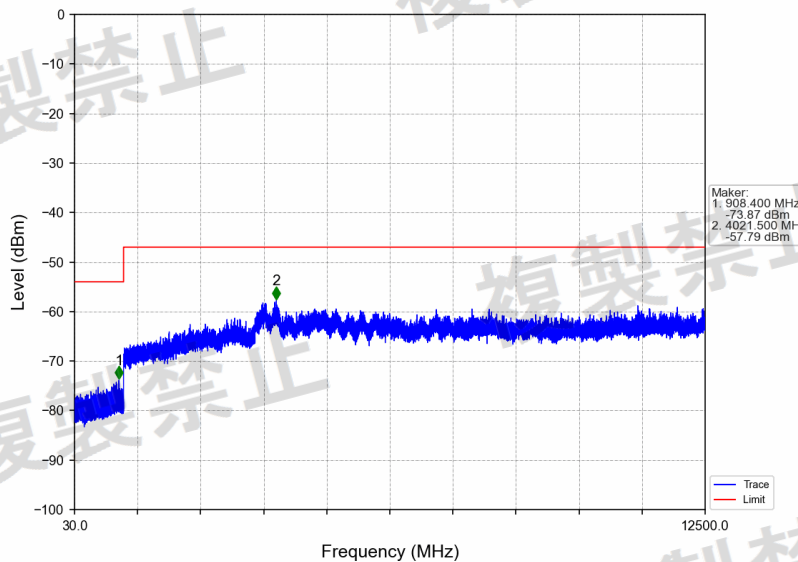


802.11n(HT40) 2422MHz Ant2 (MIMO) NTVN

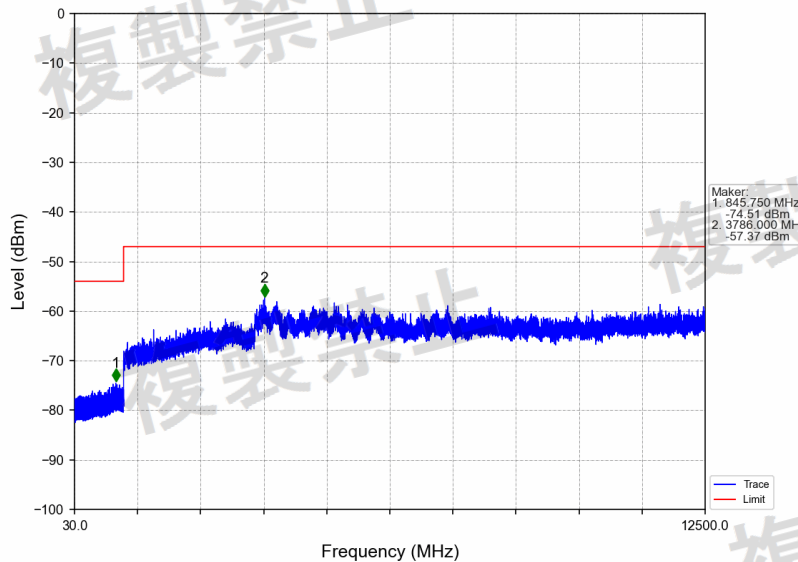


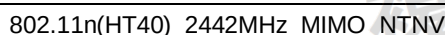
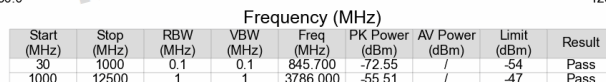
Frequency (MHz)								Result
Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	
30	1000	0.1	0.1	779.900	-72.86	/	-54	Pass
1000	12500	1	1	3789.000	-55.84	/	-47	Pass

802.11n(HT40) 2442MHz Ant1 (MIMO) NTVN

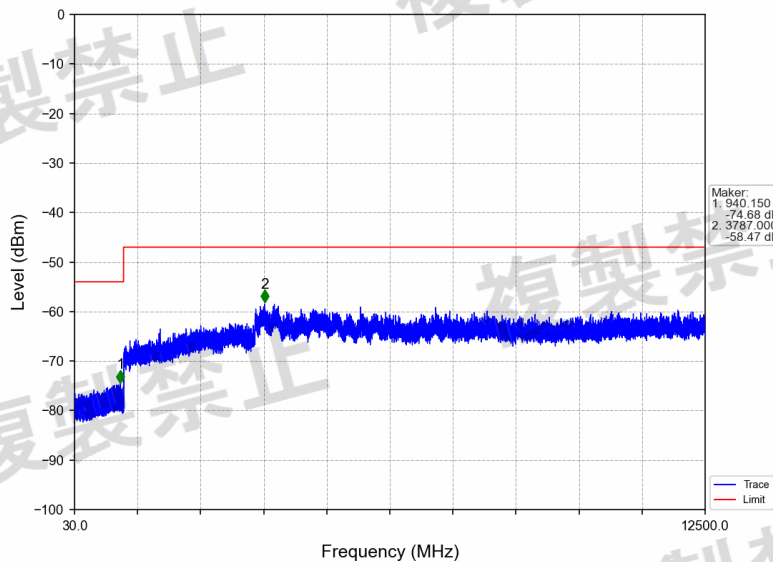


802.11n(HT40) 2442MHz Ant2 (MIMO) NTVN

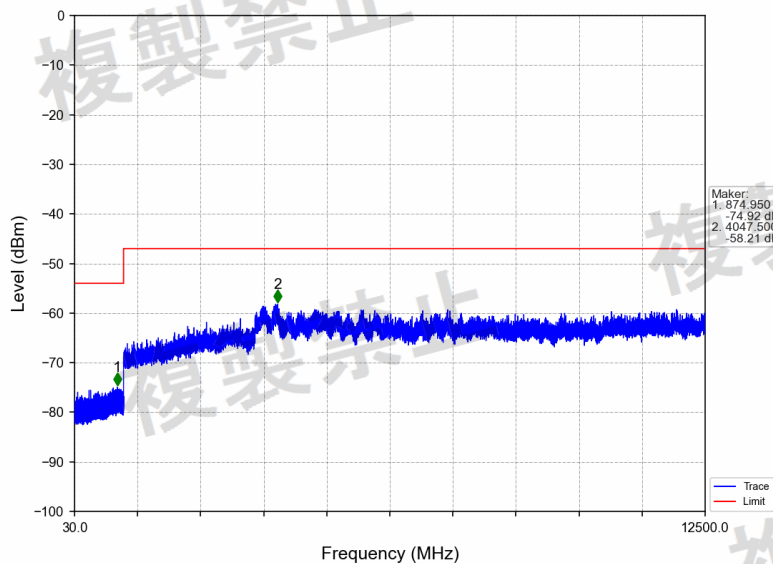




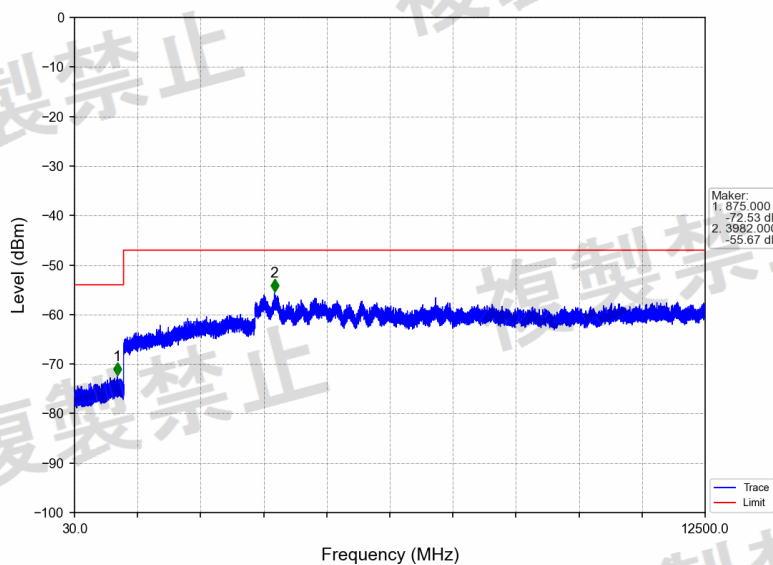
802.11n(HT40) 2462MHz Ant1 (MIMO) NTVN



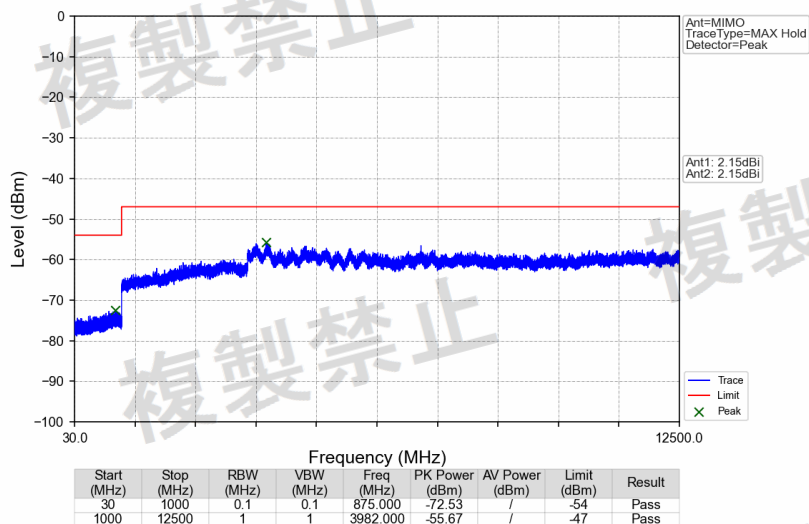
802.11n(HT40) 2462MHz Ant2 (MIMO) NTVN



802.11n(HT40) 2462MHz MIMO NTN



802.11n(HT40) 2462MHz MIMO NTN



- End of the Report -