



RF TEST REPORT

For

Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi

Product Name: Wireless Mouse

Test Model(s): A9

Applicant's Name : Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi

Address : Building 1, 8J, No. 9 Zhongxin Road, Queshan, Taoyuan
Community, Dalang Street, Longhua District, Shenzhen, China

Prepared by : Shenzhen NTT Testing Technology Co.,Ltd.

Address : 1B, Building 2, Factory Building & 103, Building 3, Factory
Building, Dayang Industrial Park, No.4, Industrial Avenue,
Tangwei Community, Fuhai Sub-district, Bao 'an District,
Shenzhen City, Guangdong, China

Test Specification Standard : Article 2-1, Item 19
MIC Notice No.88 Appendix No. 43

Report No. : SZNTT26028415E1-1

Date of Test : July 13, 2026 to July 31, 2026

Data of Issue : July 31, 2026

Result : Pass



Shenzhen NTT Testing Technology Co.,Ltd.

Applicant: Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi
Address: Building 1, 8J, No. 9 Zhongxin Road, Queshan, Taoyuan Community, Dalang Street, Longhua District, Shenzhen, China

Manufacturer: Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi
Address: Building 1, 8J, No. 9 Zhongxin Road, Queshan, Taoyuan Community, Dalang Street, Longhua District, Shenzhen, China

E.U.T: Wireless Mouse

Model Number: A9

Trade Name: N/A **Serial No.:** N/A

Date of Receipt: July 13, 2026 **Date of Test:** July 13, 2026 to July 31, 2026

Test Result: The equipment under test was found to be compliance with the requirements of the standards applied.

Issue Date: July 31, 2026

Tested by :

Reviewer by:

Zhao Di

Zhao Di / Engineer

Ken Wu

Ken Wu / Supervisor

Approved by:



Abel Yu / Supervisor

Other Aspects: None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen NTT Testing Technology Co.,Ltd.

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1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

Article 2-1, Item 19 : 2.4GHz for SRD/BT/WIFI

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Tolerance of Frequency	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Occupied Bandwidth (99%)	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Antenna Power and Tolerance	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Spurious Emission Intensity	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Secondary Radiated Emissions	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Dwell Time	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
Interference Prevention Function	Article 2-1, Item 19	MIC Notice No.88 Appendix No. 43	Article 2-1, Item 19	Pass
RF Accessibility	Article 2-1, Item 19	/	Article 49-20, paragraph 1(a)	Pass

Note:1. N/A-- Not applicable to the this test clause.

2. The results of all conduction method tests include cable loss.

1.3 Test Facility

EMC Lab.	:	Accredited by CNAS, 2026.03.30 The certificate is valid until 2032.03.29 The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017) The Certificate Registration Number is L25606
Name of Firm	:	Shenzhen NTT Testing Technology Co., Ltd.
Site Location	:	1B, Building 2, Factory Building & 103, Building 3, Factory Building, Dayang Industrial Park, No.4, Industrial Avenue, Tangwei Community, Fuhai Sub-district, Bao'an District, Shenzhen City, Guangdong, China

1.4 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10 ⁻⁶
Bandwidth	± 1.5 x 10 ⁻⁶
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(9KHz~30MHz)	±4.51dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB

Remark:When making a conformity declaration based on test results for regulations/standards or specifications,the default is to use Clause 4.2.1of ILAC-G8:09/2019 and the guidelines on decision rules and conformity declaration in IEC Guide 115:2023.

1.5 Test Environmental conditions

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

Temperature	Normal Temperature:	25°C
Voltage	Normal Voltage	DC3.7V
	Low Voltage	DC3.3V
	High Voltage	DC4.1V
Other	Relative Humidity	55 %
	Air Pressure	101 kPa

When the external power supply voltage is normal Voltage/ low Voltage/ high Voltage, in the RF circuit, monitor the RF module power supply voltage, the voltage is as follows:

External power supply	module input power	RF chip voltage	Tolerance (%)
DC3.7V	DC 3.3V	DC 3.3V	0
DC3.3V	DC 3.3V	DC 3.3V	0
DC4.1V	DC 3.3V	DC 3.3V	0

Note: The power supply supplies the voltage rating and the voltage rating ±10%. However, when it can be confirmed that the change of the input voltage to the wireless part circuit of the testing machine is ±1% or less when the input voltage to the testing machine from the external source changes at ±10%, examines it only by the voltage rating.

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi
Address : Building 1, 8J, No. 9 Zhongxin Road, Queshan, Taoyuan Community, Dalang Street, Longhua District, Shenzhen, China

Manufacturer : Shenzhen Shi Qingchun Wuxian Dianzi Youxian Gongsi
Address : Building 1, 8J, No. 9 Zhongxin Road, Queshan, Taoyuan Community, Dalang Street, Longhua District, Shenzhen, China

2.2 Description of Device (EUT)

Product Name:	Wireless Mouse
Model/Type reference:	A9
Trade Mark:	N/A
Product Description:	Wireless Mouse
Power Supply:	Li-ion battery DC 3.7V 500mAh from Battery; Charge by DC 5V 500mA for adapter
Operation Frequency:	2402-2480MHz
Number of Channels:	79
Modulation Type:	GFSK, Pi/4-DQPSK, 8DPSK
Antenna Type:	PCB antenna
Antenna Gain:	2.48dBi
Hardware Version:	V1
Software Version:	V1.0

Channel list:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	21	2422MHz	41	2442MHz	61	2462MHz
2	2403MHz	22	2423MHz	42	2443MHz	62	2463MHz
3	2404MHz	23	2424MHz	43	2444MHz	63	2464MHz
4	2405MHz	24	2425MHz	44	2445MHz	64	2465MHz
5	2406MHz	25	2426MHz	45	2446MHz	65	2466MHz
6	2407MHz	26	2427MHz	46	2447MHz	66	2467MHz
7	2408MHz	27	2428MHz	47	2448MHz	67	2468MHz
8	2409MHz	28	2429MHz	48	2449MHz	68	2469MHz
9	2410MHz	29	2430MHz	49	2450MHz	69	2470MHz
10	2411MHz	30	2431MHz	50	2451MHz	70	2471MHz
11	2412MHz	31	2432MHz	51	2452MHz	71	2472MHz
12	2413MHz	32	2433MHz	52	2453MHz	72	2473MHz
13	2414MHz	33	2434MHz	53	2454MHz	73	2474MHz
14	2415MHz	34	2435MHz	54	2455MHz	74	2475MHz
15	2416MHz	35	2436MHz	55	2456MHz	75	2476MHz

16	2417MHz	36	2437MHz	56	2457MHz	76	2477MHz
17	2418MHz	37	2438MHz	57	2458MHz	77	2478MHz
18	2419MHz	38	2439MHz	58	2459MHz	78	2479MHz
19	2420MHz	39	2440MHz	59	2460MHz	79	2480MHz
20	2421MHz	40	2441MHz	60	2461MHz	/	/

the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)	
	BR(DH5)	EDR(2DH5/3DH5)
Lowest channel	2402MHz	2402MHz
Middle channel	2441MHz	2441MHz
Highest channel	2480MHz	2480MHz
All channel	DH5/DH3/DH1 Hopping mode	2DH5/2DH32/DH1 3DH5/3DH3/3DH1 Hopping mode

2.3 Description of Test Modes

No	Title	Description
TM1	TX mode	Keep EUT in transmitting mode
TM2	RX mode	Keep EUT in receiving mode
TM3	un-modulation	Keep EUT in Un-modulation TX mode

2.4 Description of Support Units

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

Title	Manufacturer	Model No.	Serial No.
/	/	/	/

2.5 Equipments Used During The Test

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Cal. Date	Calibration Method
MXG Signal Analyzer	N9020A	MY50510202	Agilent	2025/9/08	2026/9/07	c
MXG Vector Signal Generator	N5182A	MY50140020	Agilent	2025/9/08	2026/9/07	c
Attenuation	PCL-10dB	221126	HTEC	2025/9/08	2026/9/07	c
MXG Analog Signal Generator	N5181A	MY47420919	Agilent	2025/9/08	2026/9/07	c
Power Sensor	TR1029-2	512364	Techoy	2025/9/08	2026/9/07	c
RF Swith	TR1029-1	512364	Techoy	2025/9/08	2026/9/07	c
Power Meter	ML2495A	10084	Anritu	2025/9/08	2026/9/07	c



Oscilloscope	TDS3032B	/	Tektronix	2025/9/08	2026/9/07	c
D.C. Power Supply	LongWei	TPR-6405D	N/A	2025/9/08	2026/9/07	c

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.

Note: The test equipment is calibrated by Guangzhou LiSai Metrology & Test Co., Ltd.

3 Evaluation Results (Evaluation)

3.1 Interference Prevention Function

Test Requirement:	The EUT shall support one of the following functions: - Automatic identification transmission - Automatic identification reception
Test Method:	Notification No.88 of MIC, 2004
Procedure:	(1) For EUTs capable of automatically transmitting identification data a. Transmit identification data from EUT to Demodulator b. Confirm identification data is correctly received by Demodulator (2) For EUTs capable of automatically receiving identification data a. Transmit identification data from Link Partner to EUT b. Confirm communication link is established c. Link Partner shall respond by transmitting different identification data back to the EUT d. Confirm EUT stops transmitting, or confirm EUT recognizes that the two identification data are different

3.1.1 Conclusion:

The detected ID of the device is below:
MAC:E34B891DAA02

Test result: The device meet the requirements
PASS



3.2 RF Accessibility

Test 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.

3.2.1 Conclusion:

Tamper proof declaration:

- ☐ Sealed with special screws.
- ☐ Plastic chassis is being welded using ultrasonic waves.
- ☐ Chassis is glued using a special adhesive
- ☐ Metal covers are spot-fused.
- ☐ Cover is specially interlocked.
- ☐ RF and modulation components are covered with shielding case and this shielding case is soldered.
- ☐ Shielded case is welded at RF and modulation parts, and ID-ROM is welded using the BGA method.
- ☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive.
- ☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued with a non-transparent laminating agent.
- ☒ 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.

4 Radio Spectrum Matter Test Results (RF)

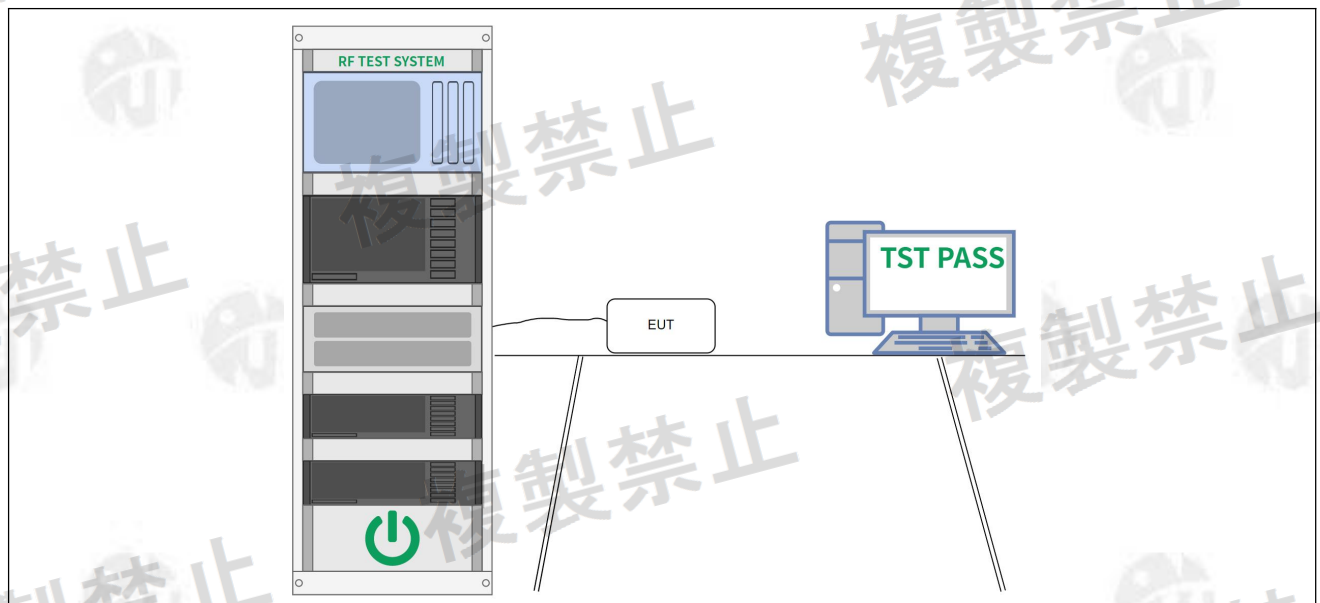
4.1 Tolerance of Frequency

Test Requirement:	Article 2-1, Item 19	
Test Limit:	±50ppm or less.	
Test Method:	MIC Notice No.88 Appendix No. 43	
Procedure:	Center frequency:	Test frequency
	Span:	1 MHz
	RBW:	10 kHz
	VBW:	30 kHz
	Sweep data points:	1001 or greater
	Sweep time:	Auto
	Detector mode:	Positive peak
	Indication mode:	Max hold
	(1) Find the peak carrier signal and measure its frequency (2) For multiple antenna systems each antenna shall be measured (3) For an EUT with multiple antennas it is permissible to test a single antenna only, provided all the antenna measurement values are expected to be same for either of the following reasons: a) The frequency of all antenna transmissions are phase-synchronized to a common (fundamental) oscillator b) The antenna transmissions share a common clock signal	

4.1.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.2 °C	Humidity:	54 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM3				
Final test mode:	TM3				

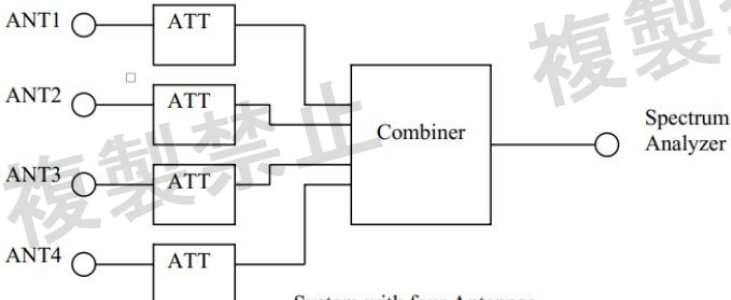
4.1.2 Test Setup Diagram:



4.1.3 Test Data:

Please Refer to Appendix for Details.

4.2 Occupied Bandwidth (99%)

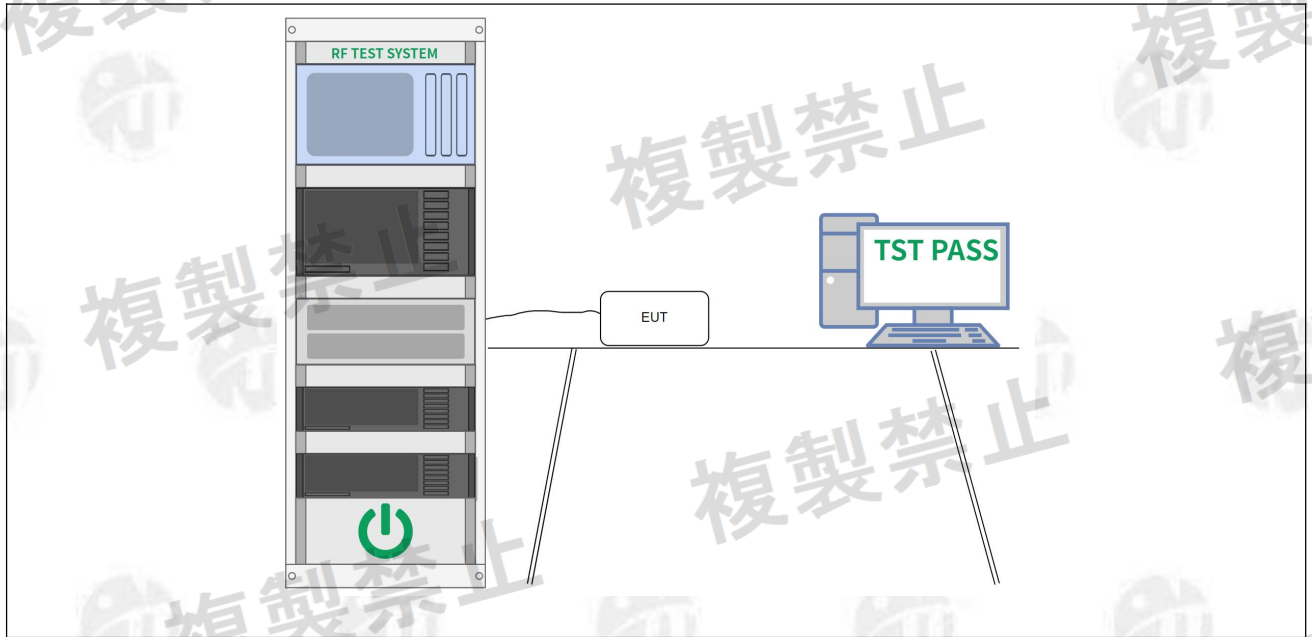
Test Requirement:	Article 2-1, Item 19	
Test Limit:	For FHSS or FHSS and other modulation Hybrid: 83.5 MHz or less: The measured bandwidth at the low and high channels shall meet the following requirements: - The lowest frequency of the measured bandwidth shall not be less than 2400 MHz - The highest frequency of the measured bandwidth shall not be greater than 2483.5 MHz [Occupied Bandwidth] 83.5 MHz or less	
Test Method:	MIC Notice No.88 Appendix No. 43	
Procedure:	Center Frequency:	Test frequency
	Span:	2 - 3.5 times the technical standard
	RBW:	Within 3% of the technical standard
	VBW:	Same as RBW
	Sweep time:	Auto
	Sweep data points:	1001 or greater
	Detector mode:	Positive peak
	Indication mode:	Max hold
	BW setting:	99%
	(1) Measure the signal bandwidth using a spectrum analyzer	
(2) For multiple antenna systems:		
a) Each antenna shall be individually measured		
b) If the measured occupied bandwidth for any antenna exceeds [(Occupied Bandwidth Limit) – 100kHz] then, in addition, the occupied bandwidth shall be measured with all antennas combined – see diagram below:		
 System with four Antennas		

4.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.5 °C	Humidity:	52 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				



4.2.2 Test Setup Diagram:



4.2.3 Test Data:

Please Refer to Appendix for Details.

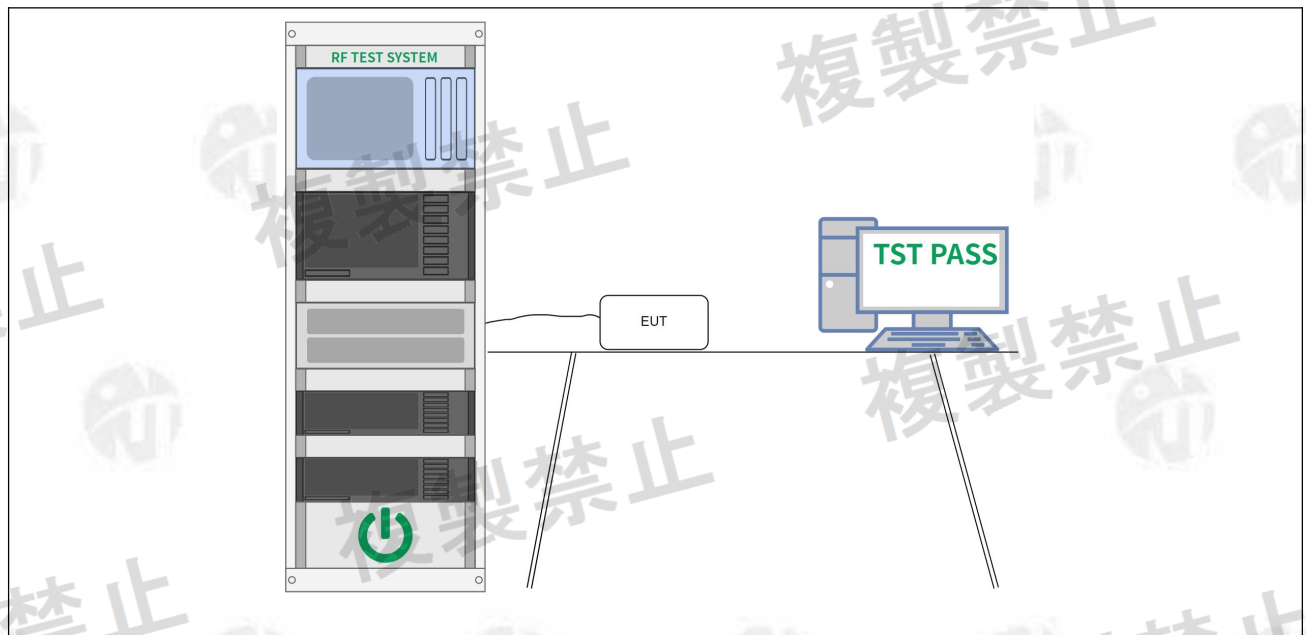
4.3 Antenna Power and Tolerance

Test Requirement:	Article 2-1, Item 19
Test Limit:	Antenna Power: 3 mW/MHz or less Tolerance: +20% or less EIRP: 6.91dBm/MHz
Test Method:	MIC Notice No.88 Appendix No. 43
Procedure:	1. Connect the antenna port of the device to the power meter test port 2. Transmit the frequency hopping signal corresponding to the test mode 3. Read the value of the power meter, which is the total power of the tested signal 4. Divide the total power by the extended bandwidth (frequency width at 90% of the total power) to calculate the average power per 1MHz.

4.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.6 °C	Humidity:	46 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.3.2 Test Setup Diagram:



4.3.3 Test Data:

Please Refer to Appendix for Details.



4.4 Spurious Emission Intensity

Test Requirement:	Article 2-1, Item 19	
Test Limit:	(1) Below 2387 MHz: 2.5 μ W (-26 dBm)/MHz or less (2) 2387 to 2400 MHz: 25.0 μ W (-16 dBm)/MHz or less (3) 2483.5 to 2496.5 MHz: 25.0 μ W (-16 dBm)/MHz or less (4) Over 2496.5 MHz: 2.5 μ W (-26 dBm)/MHz or less	
Test Method:	MIC Notice No.88 Appendix No. 43	
Procedure:	[Setting 1]	
	Frequency range:	(see Note 1)
	RBW:	1 MHz
	VBW:	1 MHz
	Sweep time:	Minimum time required to make an accurate measurement
	Sweep Data Points:	1001 or greater
	Detector mode:	Positive peak
	Indication mode:	Max hold (see Note 2)
	Note 1:	Measurement range shall be 30 MHz to 12.5 GHz, except for the following cases: -FHSS, FHSS+DSSS, FHSS+OFDM:2374 MHz to 2509.5 MHz -Other than FHSS, FHSS+DSSS, FHSS+OFDM: 2400 MHz to 2483.5 MHz
	Note 2:	Sweep shall be repeated until the max hold waveform is stable.
	[Setting 2]	
	Center frequency:	Frequency of spurious emission found using [Setting 1]
	Span:	0 Hz
	RBW:	1 MHz
	VBW:	1 MHz
	Sweep time:	Minimum time required to make an accurate measurement. For burst type (intermittent) spurious emissions, sweep time shall be greater than one burst interval
	Sweep Data Points:	1001 or greater
	Detector mode:	Sample
	[Setting 3]	
	Frequency range:	2374 MHz to 2400 MHz 2483.5 MHz to 2509.5 MHz
	RBW:	30 kHz
	VBW:	30 kHz
	Sweep time:	Minimum time required to make an accurate measurement.
	Sweep data points:	1001 or greater
	Detector mode:	Positive peak



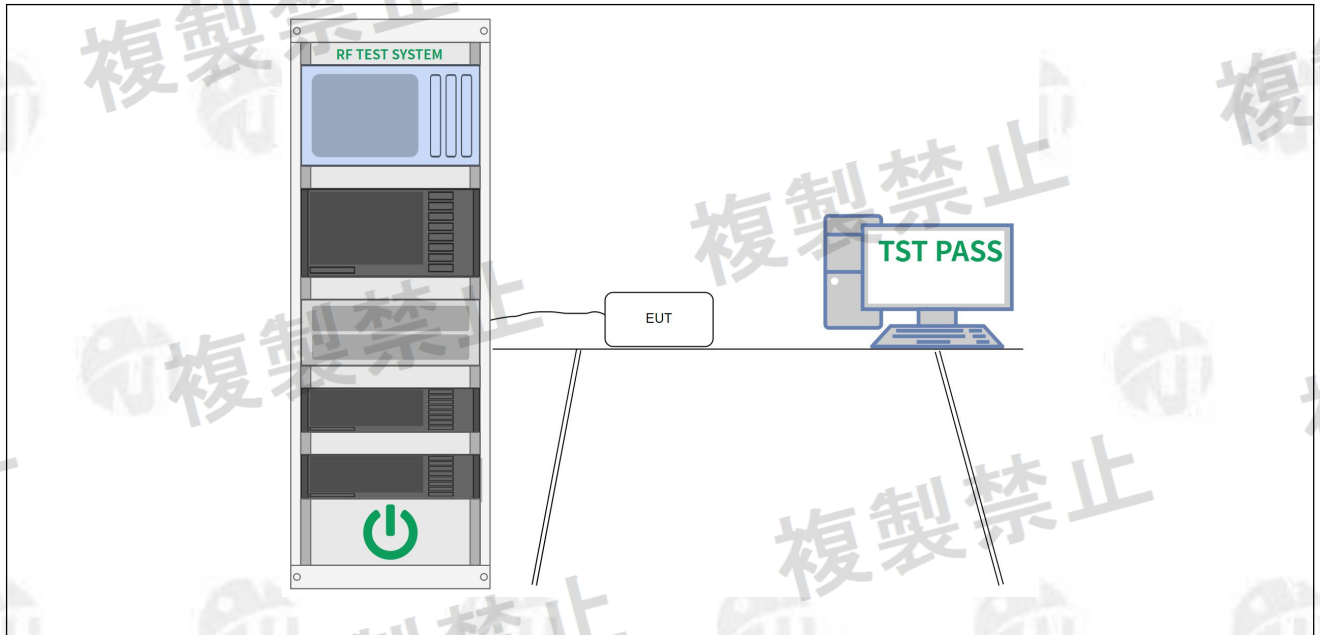
Indication mode:	Max hold
(1) After configuring the spectrum analyzer to [Setting 1], search for spurious emissions from 30 MHz to 12.5 GHz. If the sweep range does not cover the required measurement frequency range then the measurement range will need to be divided into sufficient sections of size [RBW x Sweep Data Points]. If spurious emissions greater than [Limit - 3dB] are found, then more detailed measurements are required, go to step (2) (2) Configure the spectrum analyzer using [Setting 2] and measure the average signal amplitude. If the spurious emission is burst type (intermittent), then the average value shall not include signal OFF time. If spurious emissions ranging from 30 MHz to 2374 MHz and from 2509.5MHz to 12.5GHz are over the limit, then the test result is Fail. If spurious emissions ranging from 2374 MHz to 2400 MHz and from 2483.5 MHz to 2509.5 MHz are over the limit, then further detailed measurements are required, go to step (3) (3) In the following cases, measure the spurious emissions using [Setting 3] - Case1: FHSS, FHSS+DSSS, FHSS+OFDM - Case2: Other than FHSS, FHSS+DSSS, FHSS+OFDM, and the spurious emissions in step (2) are over the limit (4) Calculate the spurious emission value (Calculated Value) using following the formula below: Calculated Value = (Measured Value using (3) + 15.2dB) Note: 15.2dB adjustment is derived from the Conversion Factor of RBW Conversion Factor of RBW = 10 x Log (Reference Bandwidth / RBW of measurement) = 15.2 [dB] Where: Reference Bandwidth = 1 MHz RBW of measurement = 30 kHz (5) If the calculated value using (4) is over the Limit (section 6.7), go to (6) (6) Configure the spectrum analyzer to [Setting 3] then make the following changes: Frequency: Frequency of spurious emission Span: 1 MHz (7) After sweep, send the span data set to the PC (8) Convert measured data from dBm to Watts (9) Sum all the data using the formula below. If the sum is within the limit, the test result is Pass, otherwise, Fail $P_s = \left(\sum_{i=1}^n E_i \right) \times \frac{S_w}{RBW \times k \times n}$ Ps: Sum (Watts) Ei: Measured value at each point in the Span (Watts) Sw: Span (1MHz) n: Number of measurement points in the Span k: Correction factor for Equivalent Noise Bandwidth, specific to each spectrum analyzer, check the instrument user guide RBW: Resolution Bandwidth (MHz). (10) If the EUT has multiple antennas, measure the spurious emission form each individual antenna using steps (1) through (9) (11) Convert the individual antenna spurious level measurements (step (10)) from dB to absolute values (12) Combine (sum) the absolute values of the spurious measurements at each frequency for each antenna (to create a single composite spectrum of spurious emissions) (13) Ensure that the composite spectrum does not exceed the Limit defined in 6.7 (Technical Standard) (14) Configuring the spectrum analyzer using [Setting 3] and measure the spurious emissions with all the antennas electrically combined	



4.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.5 °C	Humidity:	46 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.4.2 Test Setup Diagram:



4.4.3 Test Data:

Please Refer to Appendix for Details.

4.5 Secondary Radiated Emissions

Test Requirement:	Article 2-1, Item 19	
Test Limit:	(1) Below 1 GHz: 4 nW (-54dBm) or less (2) Above 1 GHz: 20 nW (-47dBm) or less	
Test Method:	MIC Notice No.88 Appendix No. 43	
Procedure:	[Setting 1]	
	Frequency range:	30 MHz ~ 12.5 GHz
	RBW:	Below 1 GHz:100 kHz
		Above 1 GHz:1 MHz
	VBW:	Below 1 GHz:100 kHz
		Above 1 GHz:1 MHz
	Sweep time:	Auto
	Sweep data points:	1001 or greater
	Detector mode:	Positive peak
	Indication mode:	Max hold
	[Setting 2]	
	Center Frequency:	Frequency of spurious emission found using [Setting 1]
	Span:	0 Hz
	RBW:	Below 1 GHz:100 kHz
		Above 1 GHz:1 MHz
	VBW:	Below 1 GHz:100 kHz
		Above 1 GHz:1 MHz
	Sweep time:	Auto
	Sweep data points:	1001 or greater
	Detector mode:	Sample
	(1) Configure the spectrum analyzer to [Setting 1] and then search for spurious emissions in the range 30 MHz to 12.5GHz. If the sweep range does not cover the required measurement frequency range then the measurement range will need to be divided into sufficient sections of size [RBW x Sweep Data Points].	
	(2) If spurious emissions are found with an amplitude greater than [Limit - 10dB] then perform further detailed measurements as described in (3)	
	(3) Configure the spectrum analyzer using [Setting 2] and measure the average signal amplitude.	
	If the spurious emission is burst type (intermittent), then the average value shall not include signal OFF time	
	Multiple Antenna Systems	
If the EUT has multiple antennas then emissions from each antenna shall be measured individually, as described below		
(4) For each antenna repeat steps (1) through (3). Convert all spurious level measurements from dB to absolute value		
(5) Combine (sum) the absolute values of the spurious measurements at each frequency for each antenna (to create a single composite spectrum of spurious emissions)		
(6) Ensure that the composite spectrum does not exceed the Limit		

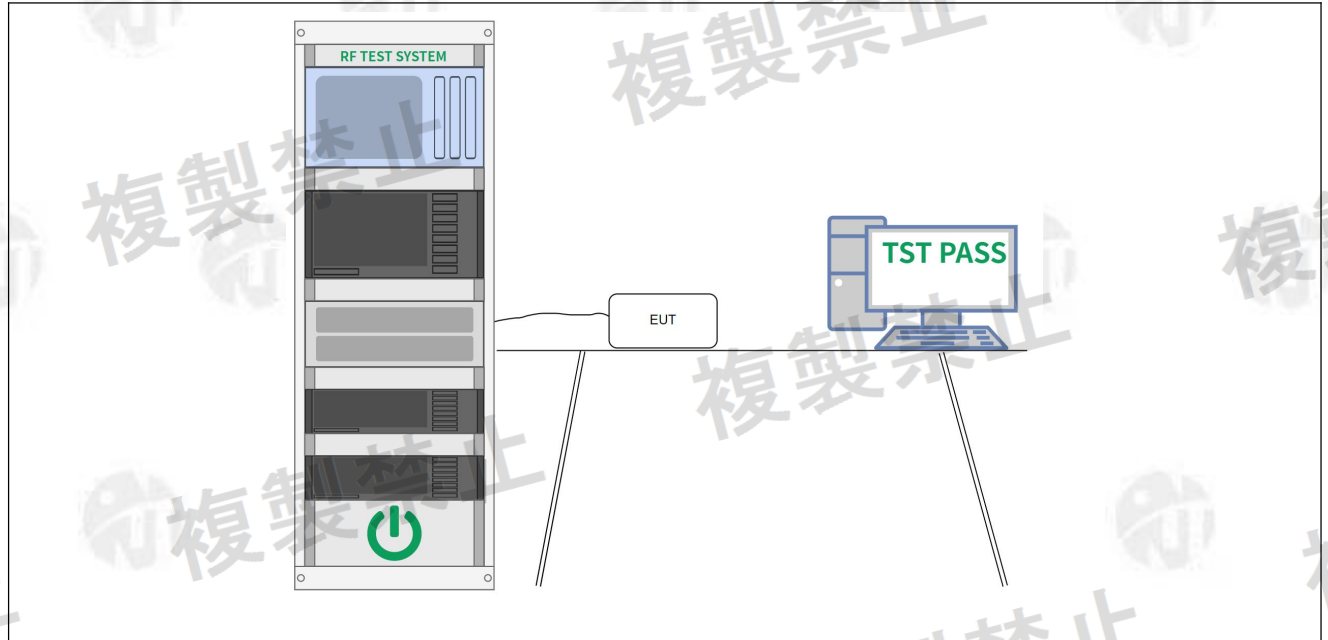
4.5.1 E.U.T. Operation:

Operating Environment:				
Temperature:	22.2 °C	Humidity:	49 %	Atmospheric Pressure: 101.1 kPa



Pretest mode:	TM2
Final test mode:	TM2

4.5.2 Test Setup Diagram:



4.5.3 Test Data:

Please Refer to Appendix for Details.

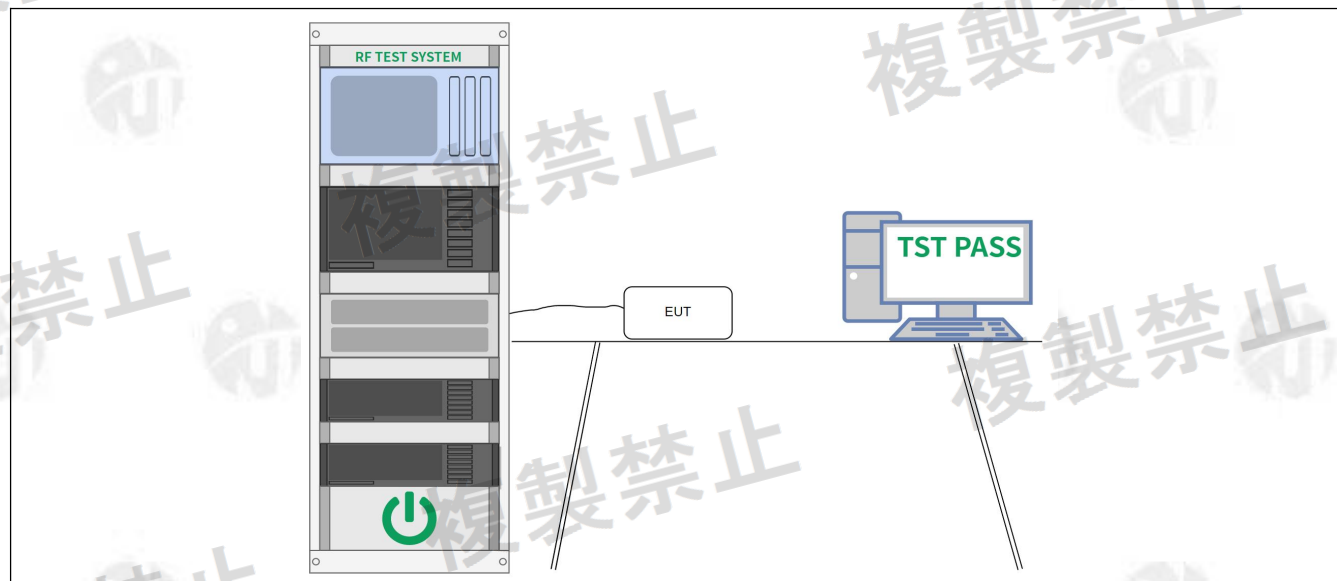
4.6 Dwell Time

Test Requirement:	Article 2-1, Item 19	
Test Limit:	Transmit ON Time shall be less than 0.4 seconds Total Dwell Time shall be less than 0.4 seconds	
Test Method:	MIC Notice No.88 Appendix No. 43	
Procedure:	[Setting 1]	
	Frequency:	Test frequency
	Span:	0 Hz
	RBW:	1 MHz
	VBW:	1 MHz
	Sweep data points:	1001 or greater
	Trigger:	Video trigger
	Detection mode:	Positive peak
	(1) Configure the spectrum analyzer to [Setting 1] (2) Measure the Burst Cycle and Transmit ON Time (3) Total Dwell Time shall be calculated by the following formula: $\text{Total Dwell Time} = (0.4 \times \text{Spreading Rate} \times \text{Transmit ON Time}) / (\text{Burst Cycle} \times \text{Number of Hopping Channels})$ [Notes] a. Spreading Rate = Spread Bandwidth (measured value) / Transmission Rate b. Transmit ON Time and Burst Cycle are both measured in Seconds c. Numerical Coefficient (0.4) is a dimensionless number defined in the technical standard	

4.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.2 °C	Humidity:	50 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.6.2 Test Setup Diagram:

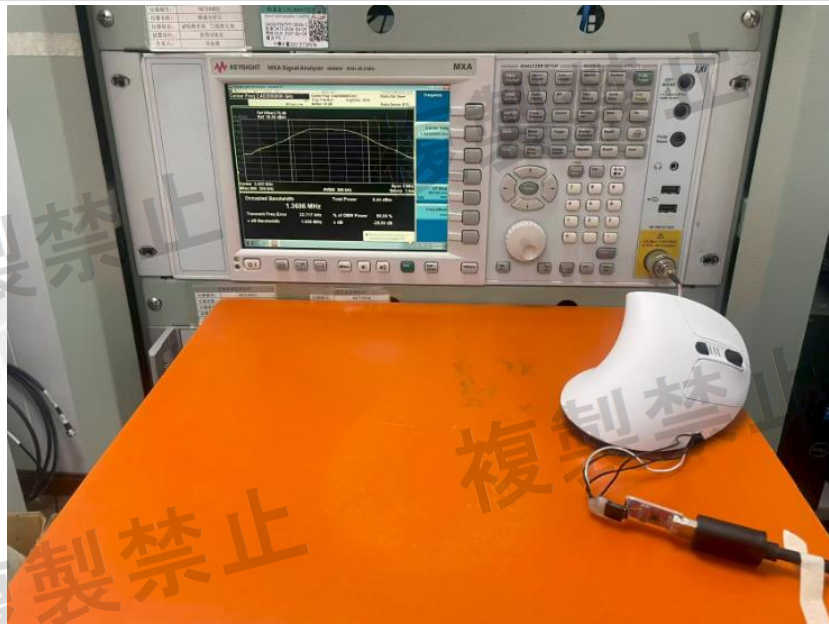


4.6.3 Test Data:

Please Refer to Appendix for Details.



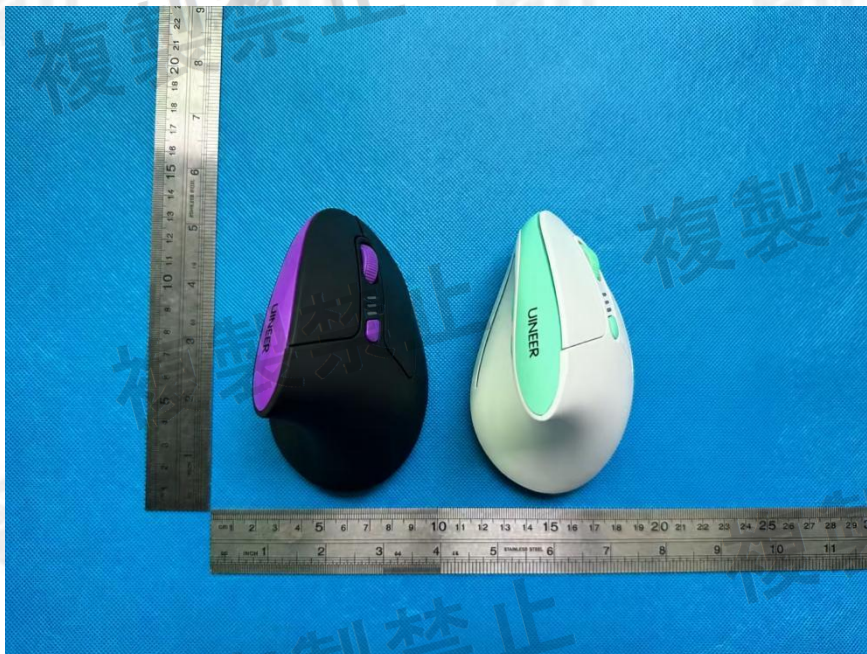
5 TEST SETUP PHOTOS



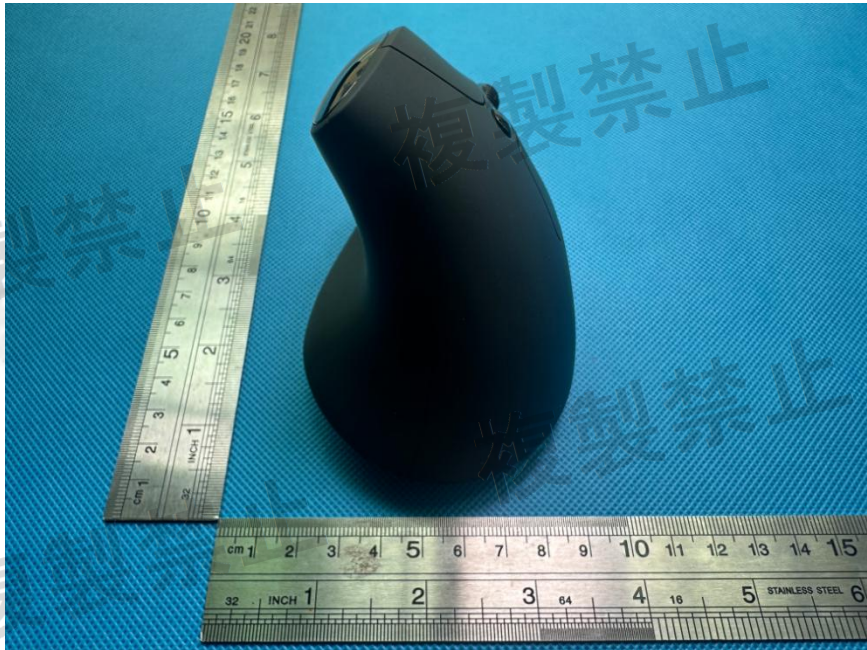


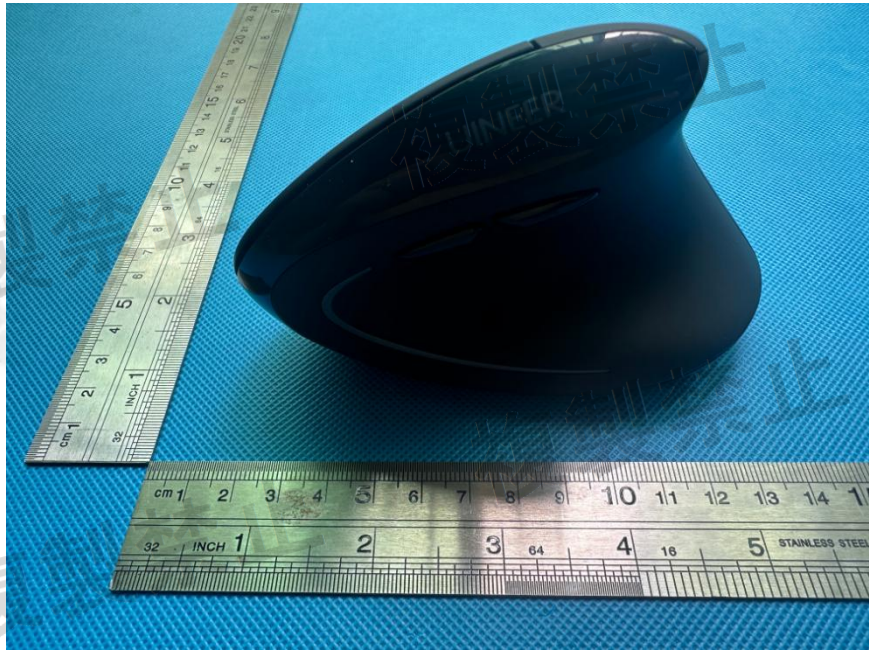
6 PHOTOS OF THE EUT

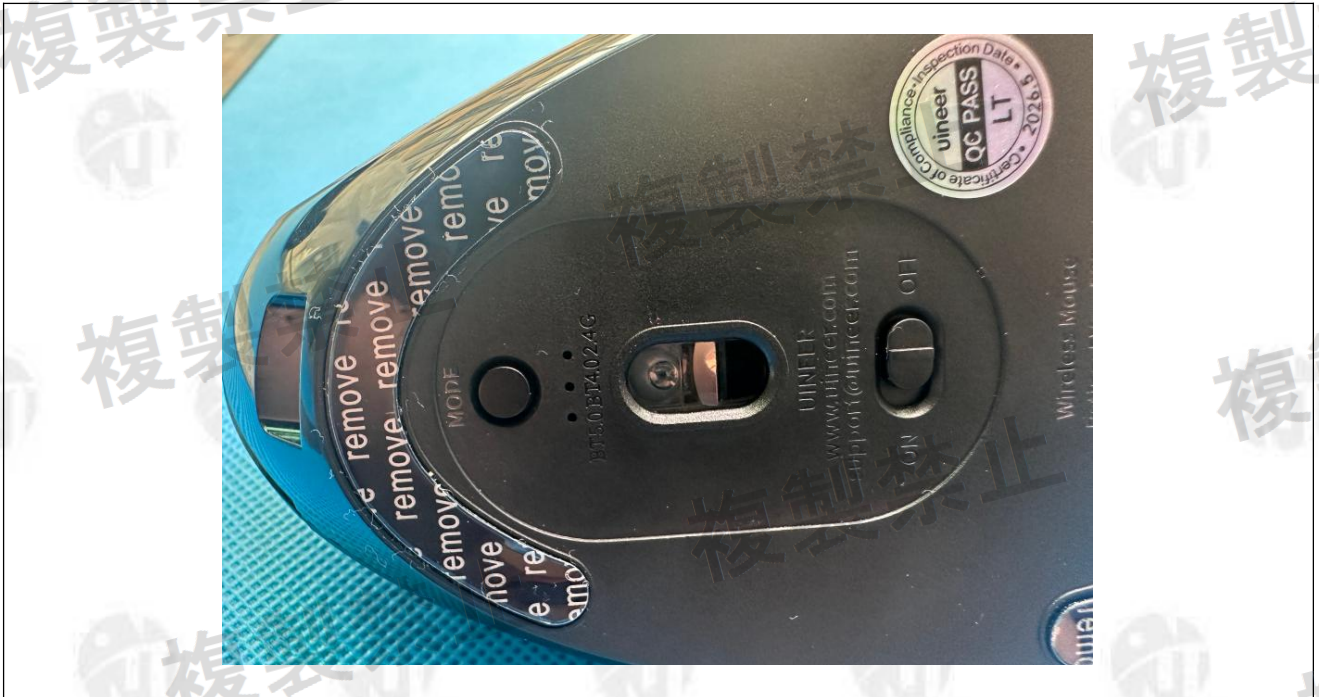
External





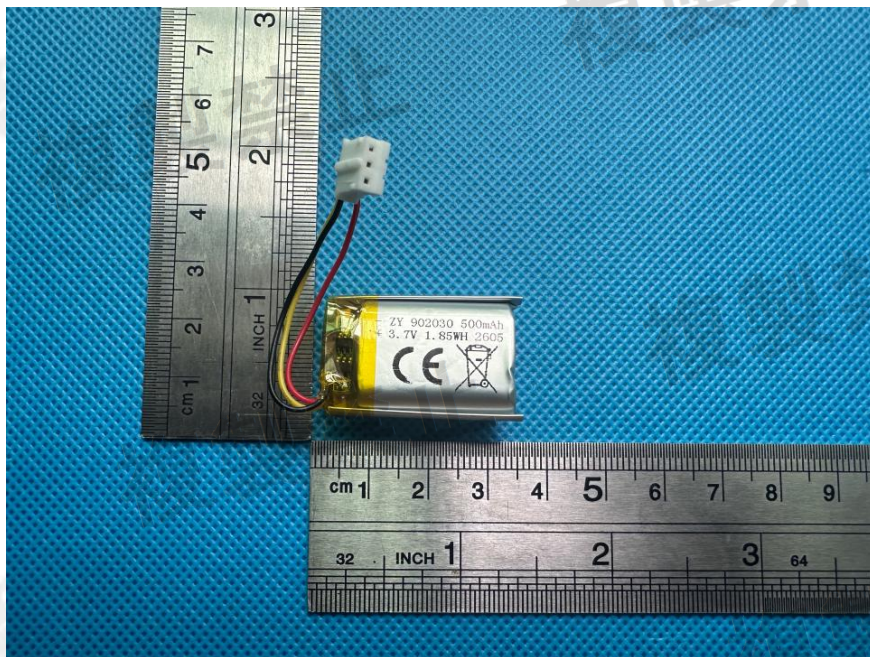


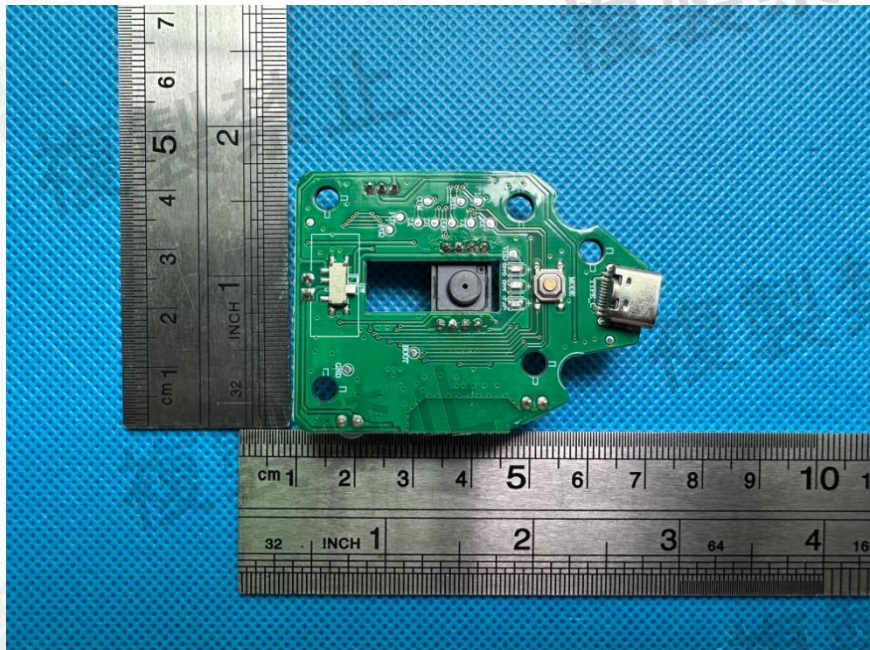
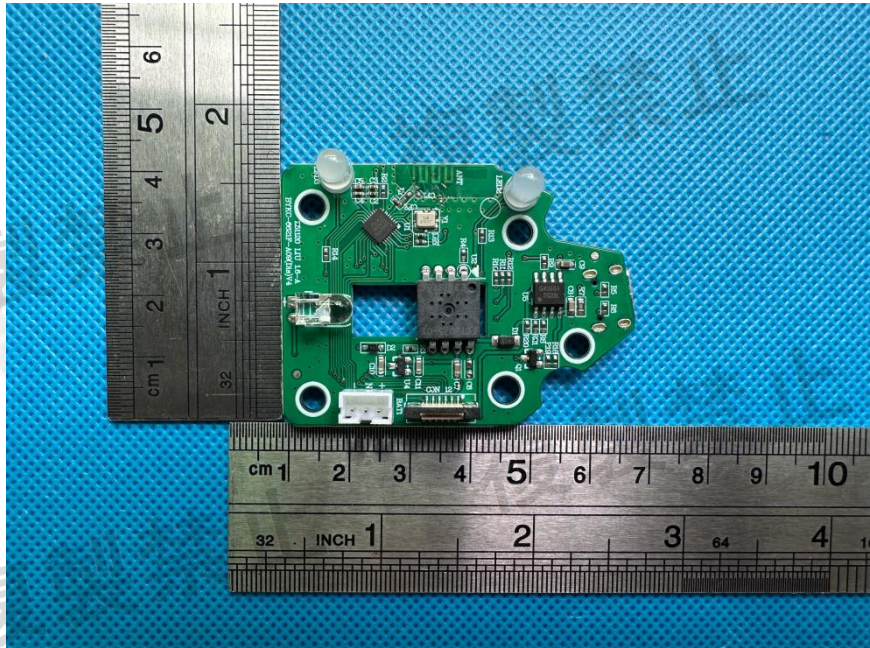


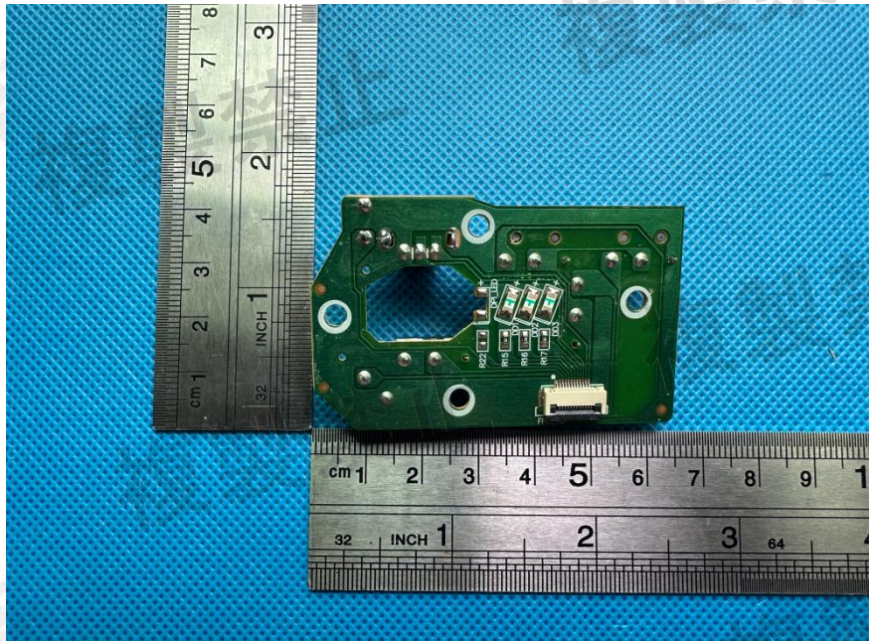
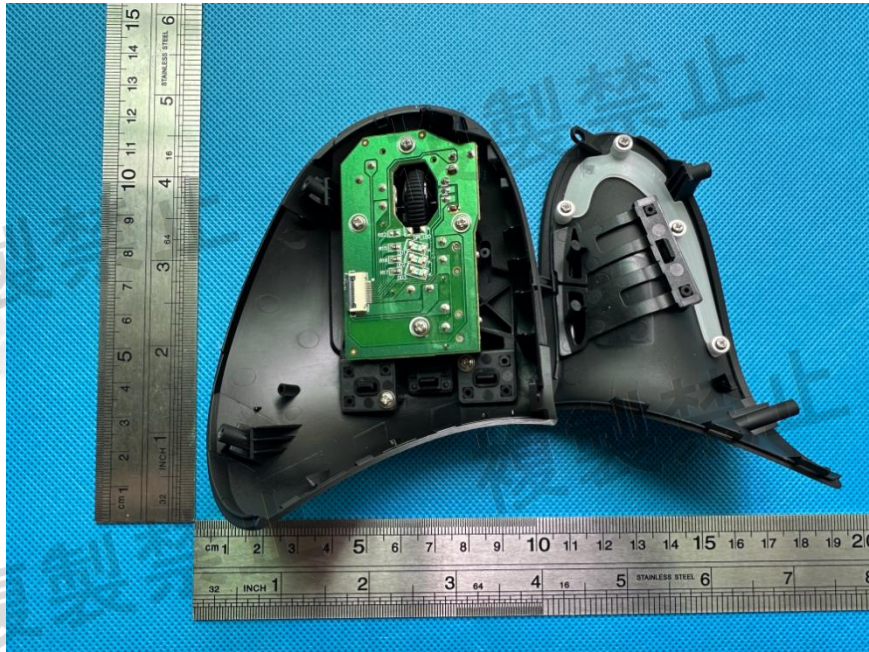


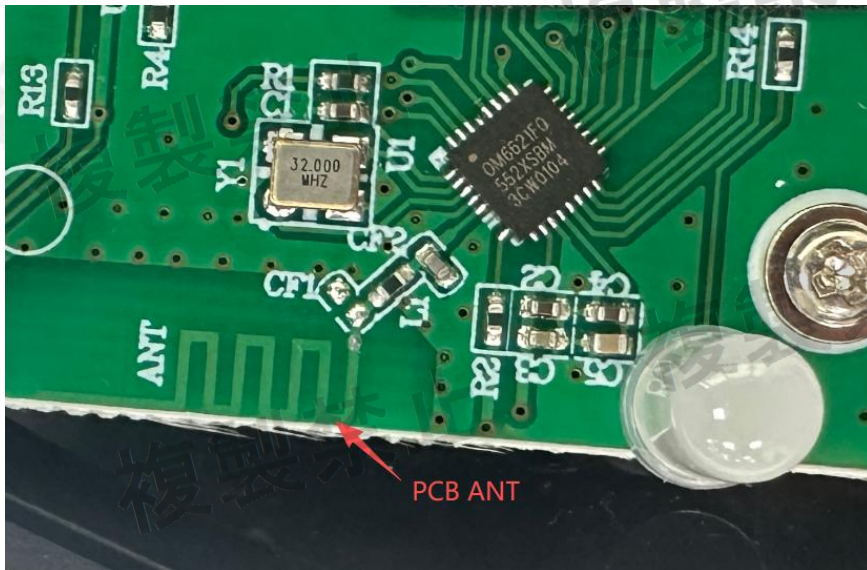
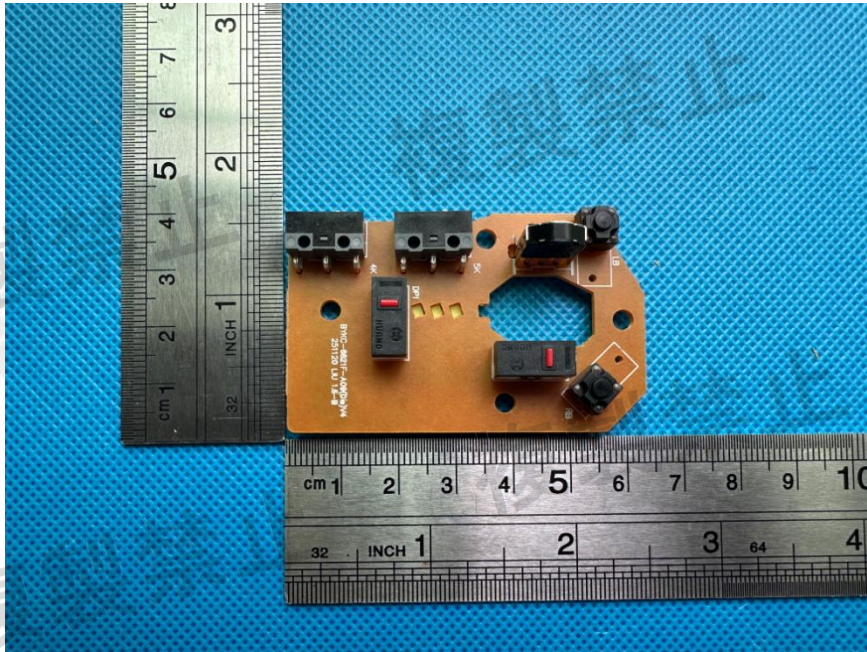


Internal







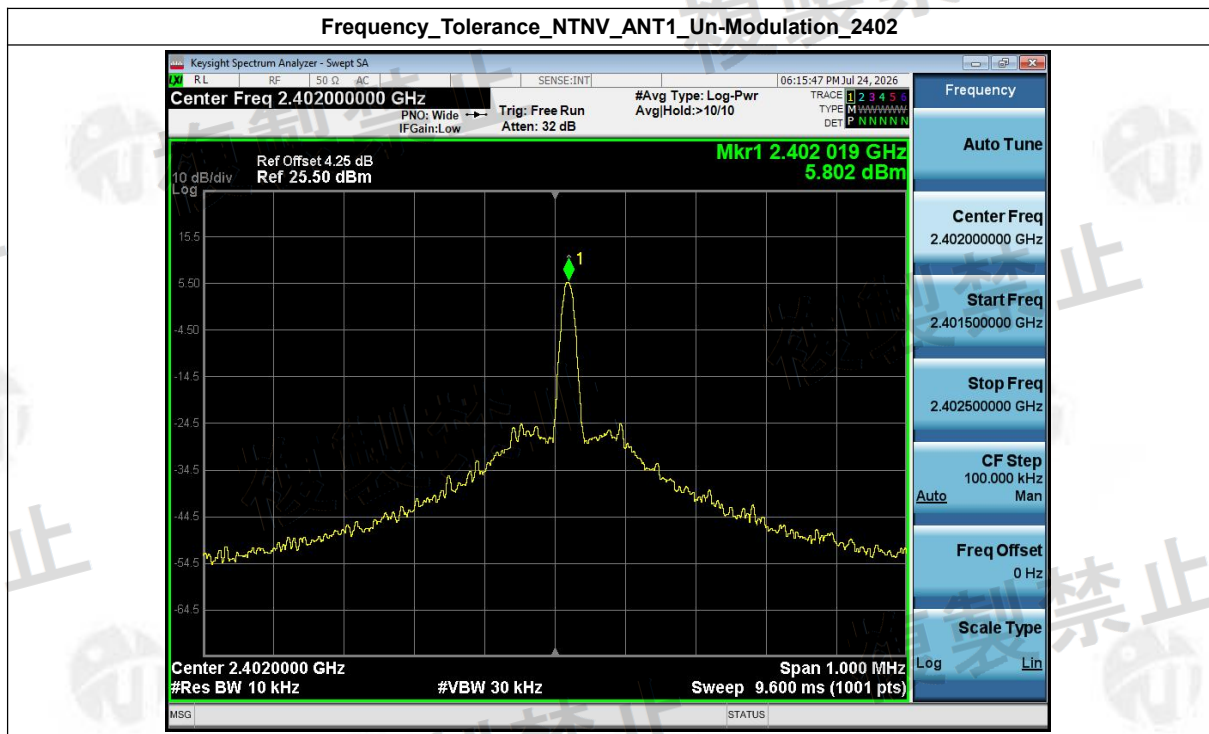




Appendix

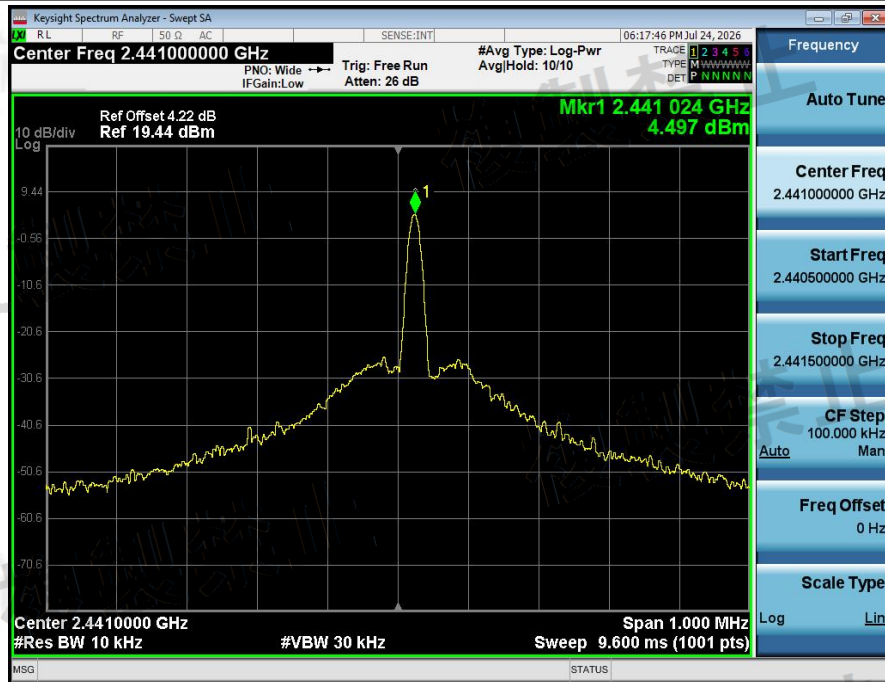
1. Frequency Tolerance

Condition	Antenna	Modulation	Frequency (MHz)	Test Frequency(MHz)	Frequency Tolerance(ppm)	Limit(ppm)	Result
NTNV	ANT1	un-modulation	2402.00	2402.019	7.910	±50	Pass
NTNV	ANT1	un-modulation	2441.00	2441.024	9.832	±50	Pass
NTNV	ANT1	un-modulation	2480.00	2480.028	11.290	±50	Pass





Frequency_Tolerance_NTNV_ANT1_Un-Modulation_2441



Frequency_Tolerance_NTNV_ANT1_Un-Modulation_2480

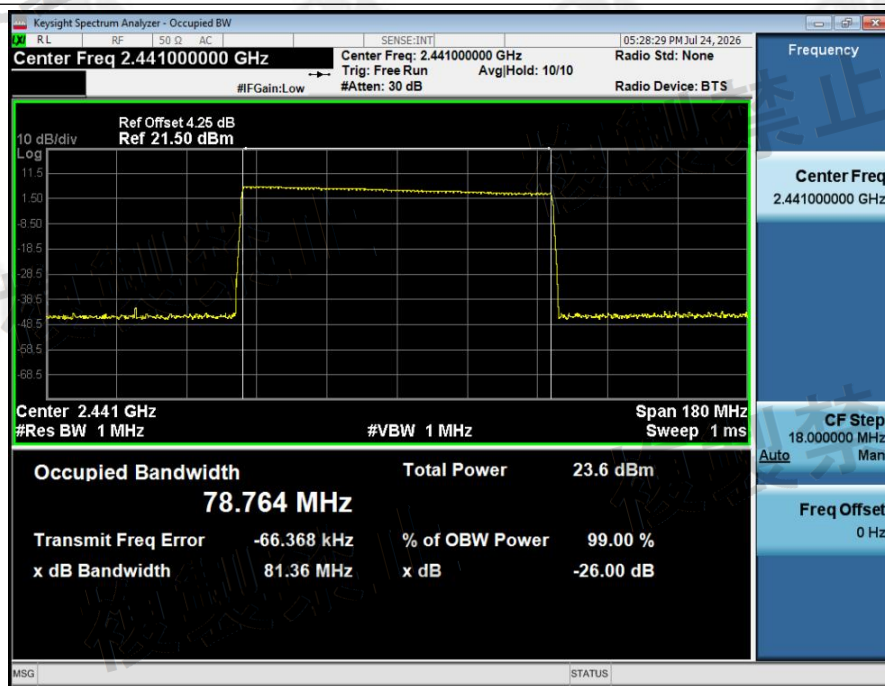




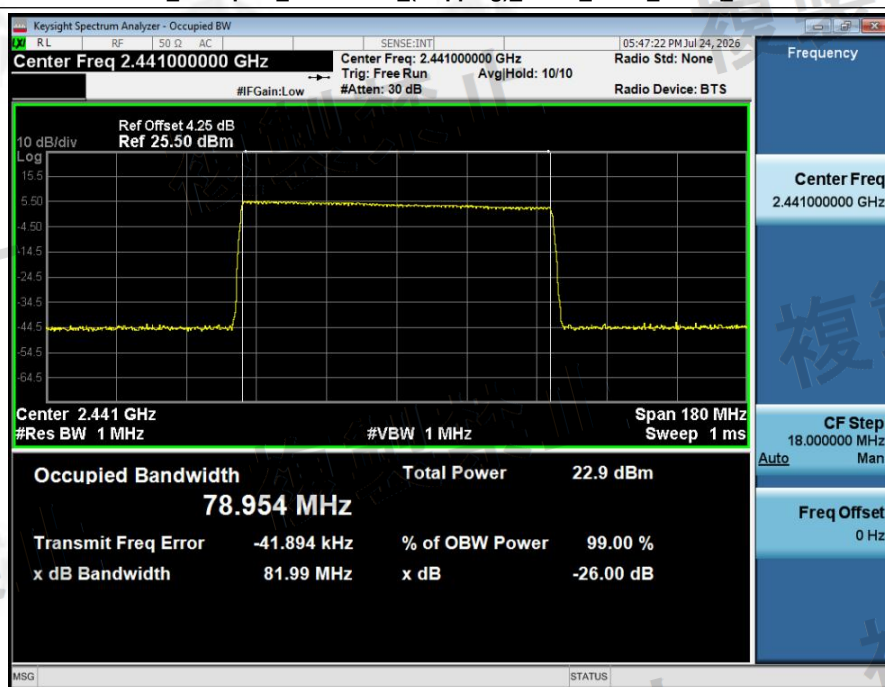
2. 99% Occupied Bandwidth (Hopping)

Condition	Antenna	Modulation	mode	Occupied Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	1-DH5	Hopping	78.764	83.50	Pass
NVNT	ANT1	2-DH5	Hopping	78.954	83.50	Pass
NVNT	ANT1	3-DH5	Hopping	78.922	83.50	Pass

99%_Occupied_Bandwidth_(Hopping)_NVNT_ANT1_1-DH5_2402

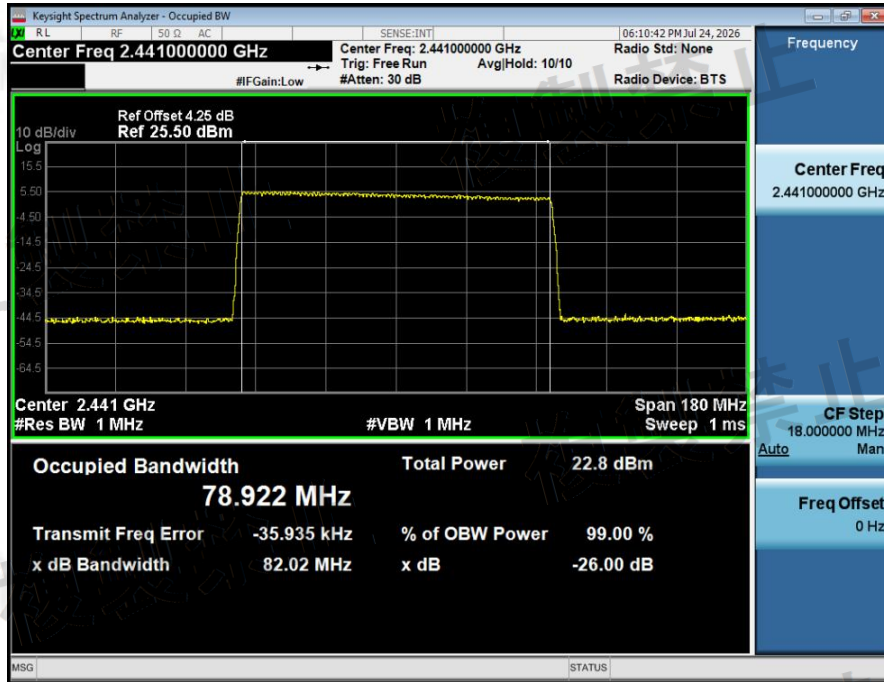


99%_Occupied_Bandwidth_(Hopping)_NVNT_ANT1_2-DH5_2402





99%_Occupied_Bandwidth_(Hopping)_NVNT_ANT1_3-DH5_2402

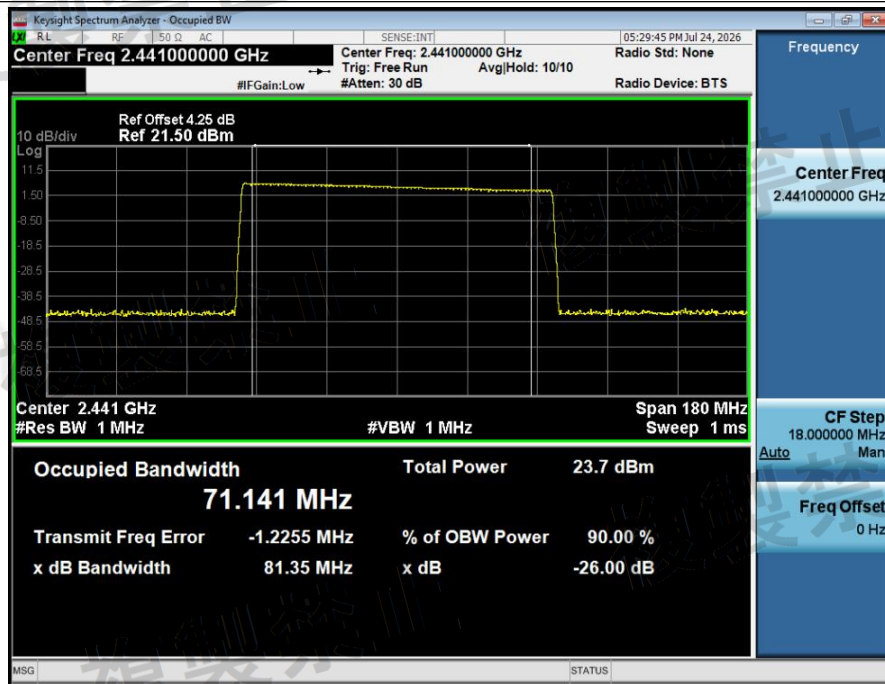




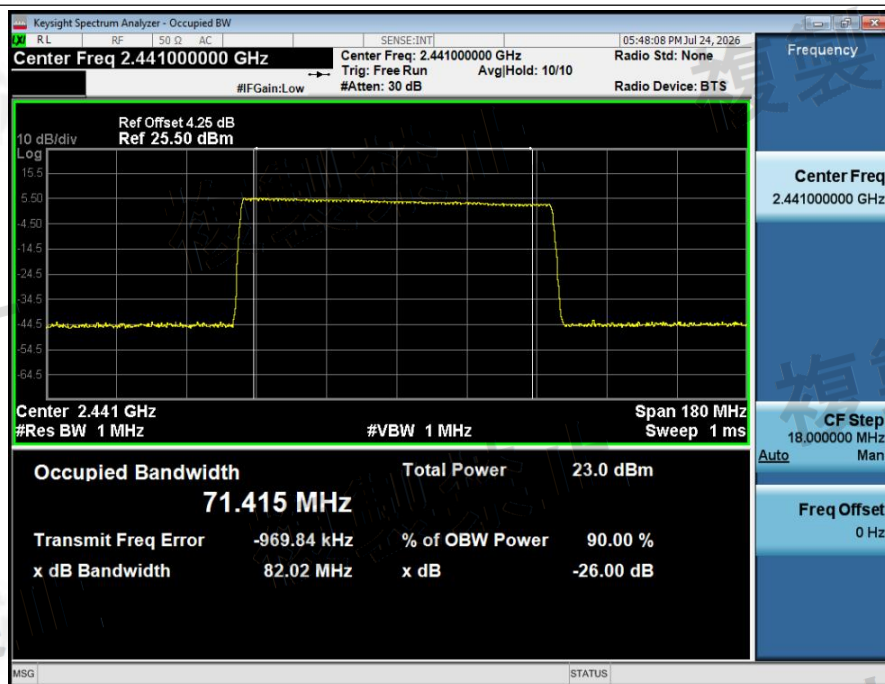
3. Spread Bandwidth (Hopping)

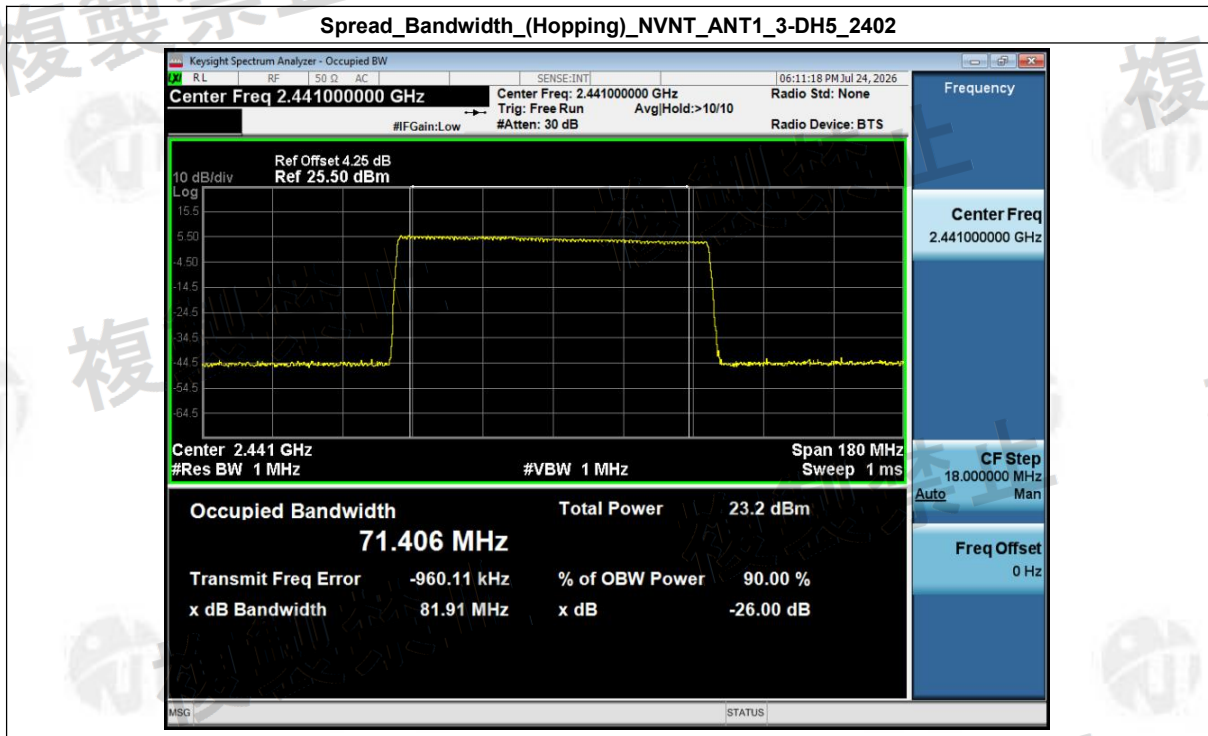
Condition	Antenna	Modulation	mode	Spread Bandwidth(MHz)
NVNT	ANT1	1-DH5	Hopping	71.141
NVNT	ANT1	2-DH5	Hopping	71.415
NVNT	ANT1	3-DH5	Hopping	71.406

Spread_Bandwidth_(Hopping)_NVNT_ANT1_1-DH5_2402



Spread_Bandwidth_(Hopping)_NVNT_ANT1_2-DH5_2402





4. Antenna Power (Hopping)

Condition	Antenna	Mode	Frequency	Burst Power(dBm)	Burst Power (mW)	Spread BW(MHz)	Antenna Power(mW/MHz)
NVNT	ANT1	1-DH5	Hopping	4.70	2.951	71.141	0.0415
NVNT	ANT1	2-DH5	Hopping	3.76	2.377	71.415	0.0333
NVNT	ANT1	3-DH5	Hopping	3.10	2.042	71.406	0.0286

Condition	Antenna	Modulation	Mode	Antenna Power (mW/MHz)	Rated Power (mW/MHz)	Power Limit (mW/MHz)	Power Tolerance (%)	Tolerance Limit (%)	Result
NVNT	ANT1	1-DH5	Hopping	0.0415	0.042	3.00	-1.190	+20	Pass
NVNT	ANT1	2-DH5	Hopping	0.0333	0.042	3.00	-20.71	+20	Pass
NVNT	ANT1	3-DH5	Hopping	0.0286	0.042	3.00	-31.90	+20	Pass

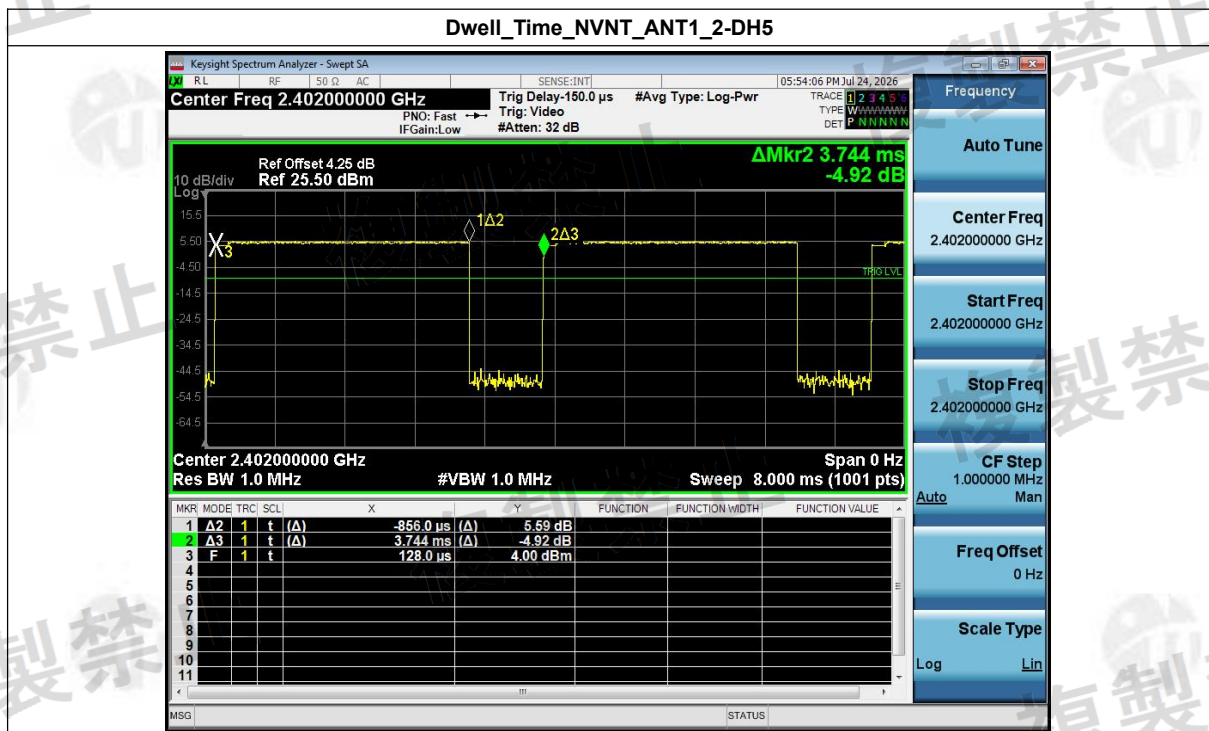
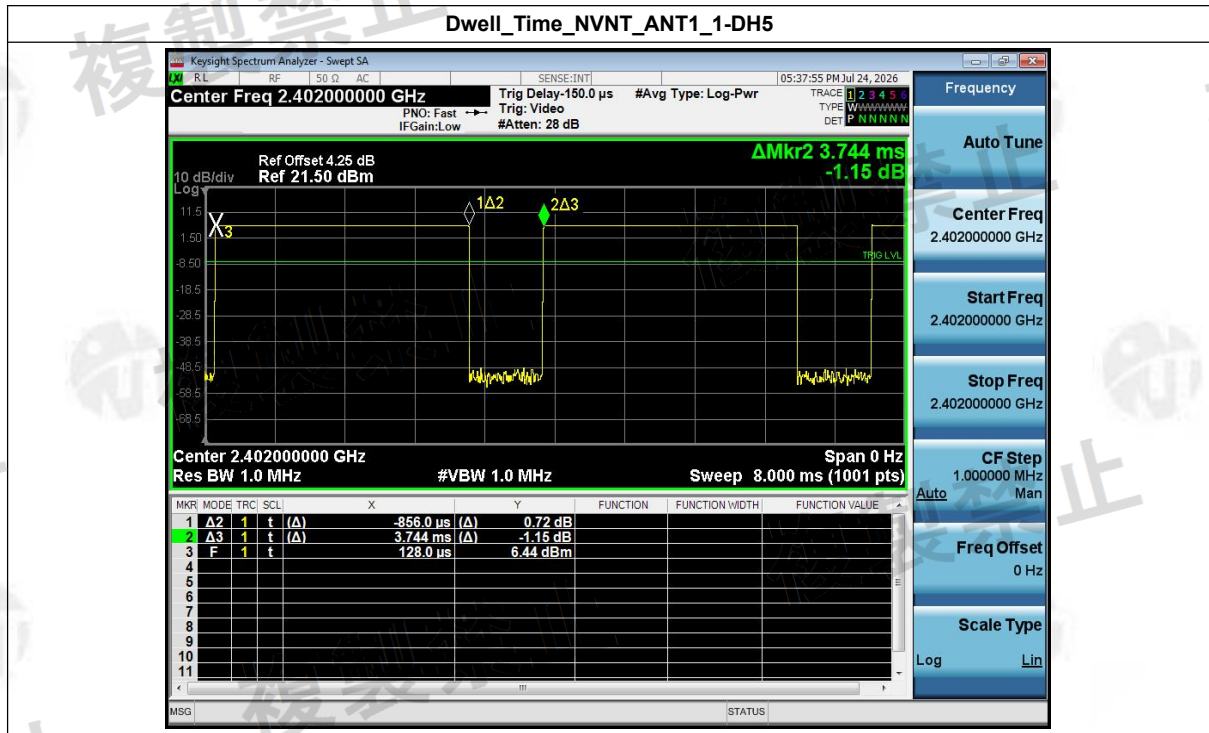
Condition	Antenna	Mode	Frequency	Measured Power (dBm/MHz)	Antenna Gain (dBi)	EIRP (dBm/MHz)	EIRP Limit (dBm/MHz)	Result
NVNT	ANT1	1-DH5	2441.00	-13.82	2.48	-11.34	6.91	Pass
NVNT	ANT1	2-DH5	2441.00	-14.78	2.48	-12.30	6.91	Pass
NVNT	ANT1	3-DH5	2441.00	-15.44	2.48	-12.96	6.91	Pass

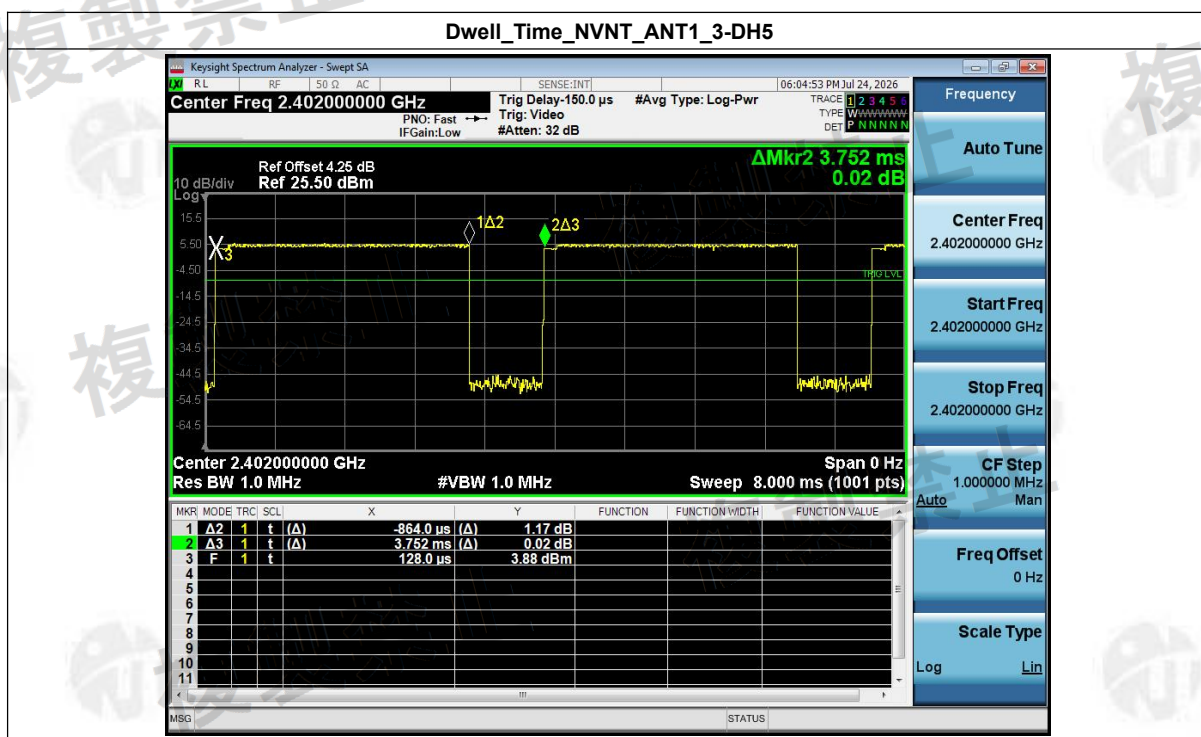
Note: Antenna Power(mW/MHz)= Burst Power(mW) / Spread BW(MHz)



5. Dwell Time

Condition	Antenna	Modulation	mode	Burst Time(ms)	Burst Cycle(ms)	Dwell Time(s)	Limit(s)	Result
NVNT	ANT1	1-DH5	Hopping	2.888	3.744	0.278	0.4	Pass
NVNT	ANT1	2-DH5	Hopping	2.888	3.744	0.279	0.4	Pass
NVNT	ANT1	3-DH5	Hopping	2.888	3.752	0.276	0.4	Pass





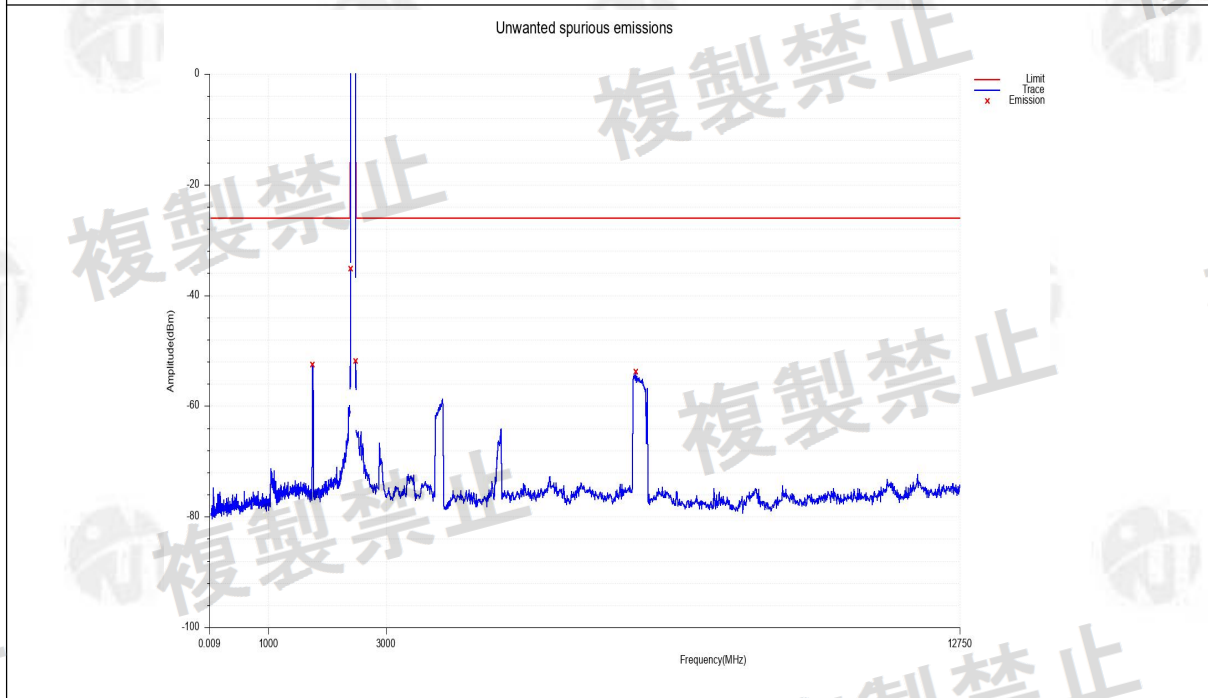
6. Spurious Emissions

Condition	Ant	Mode	Freq. (MHz)	Frequency Area (MHz)	RBW (kHz)	Spur. Fre. (MHz)	Spur. Level (dBm/MHz)	Limit (dBm/MHz)	Spur. Level	Limit	Result
NVNT	ANT1	1-DH5	Hopping	30.00~2387.00	1000	1752.97	-52.54	-26	0.0055μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2387.00~2400.00	1000	2399.97	-35.23	-16	0.2999μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	1-DH5	Hopping	2483.50~2496.50	1000	2484.22	-51.80	-16	0.0066μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	Hopping	2496.50~12750.00	1000	7243.87	-53.83	-26	0.0041μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2402.00	30.00~2387.00	1000	2370.50	-51.96	-26	0.0063μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2402.00	2387.00~2400.00	1000	2400.00	-23.87	-16	4.1056μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2402.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	1-DH5	2402.00	2483.50~2496.50	1000	2490.45	-53.29	-16	0.0046μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2402.00	2496.50~12750.00	1000	7202.86	-49.88	-26	0.0102μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2441.00	30.00~2387.00	1000	2387.00	-51.72	-26	0.0067μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2441.00	2387.00~2400.00	1000	2387.26	-53.88	-16	0.0040μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2441.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	1-DH5	2441.00	2483.50~2496.50	1000	2488.34	-53.76	-16	0.0042μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2441.00	2496.50~12750.00	1000	7325.90	-51.28	-26	0.0074μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2480.00	30.00~2387.00	1000	1752.97	-47.91	-26	0.0161μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	1-DH5	2480.00	2387.00~2400.00	1000	2394.53	-53.43	-16	0.0045μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2480.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	1-DH5	2480.00	2483.50~2496.50	1000	2483.63	-47.60	-16	0.0173μW/MHz	25μW/MHz	Pass
NVNT	ANT1	1-DH5	2480.00	2496.50~12750.00	1000	5777.62	-51.18	-26	0.0076μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	30.00~2387.00	1000	1760.04	-46.62	-26	0.0217μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2387.00~2400.00	1000	2399.95	-28.14	-16	1.5359μW/MHz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	2-DH5	Hopping	2483.50~2496.50	1000	2483.54	-44.65	-16	0.0343μW/MHz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	Hopping	2496.50~12750.00	1000	3962.75	-59.25	-26	0.0011μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2402.00	30.00~2387.00	1000	2212.58	-51.40	-26	0.0072μW/MHz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2402.00	2387.00~2400.00	1000	2400.00	-25.44	-16	2.8597μW/MHz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	2402.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	2-DH5	2402.00	2483.50~2496.50	1000	2486.76	-53.13	-16	0.0048μW/MHz	25μW/MHz	Pass

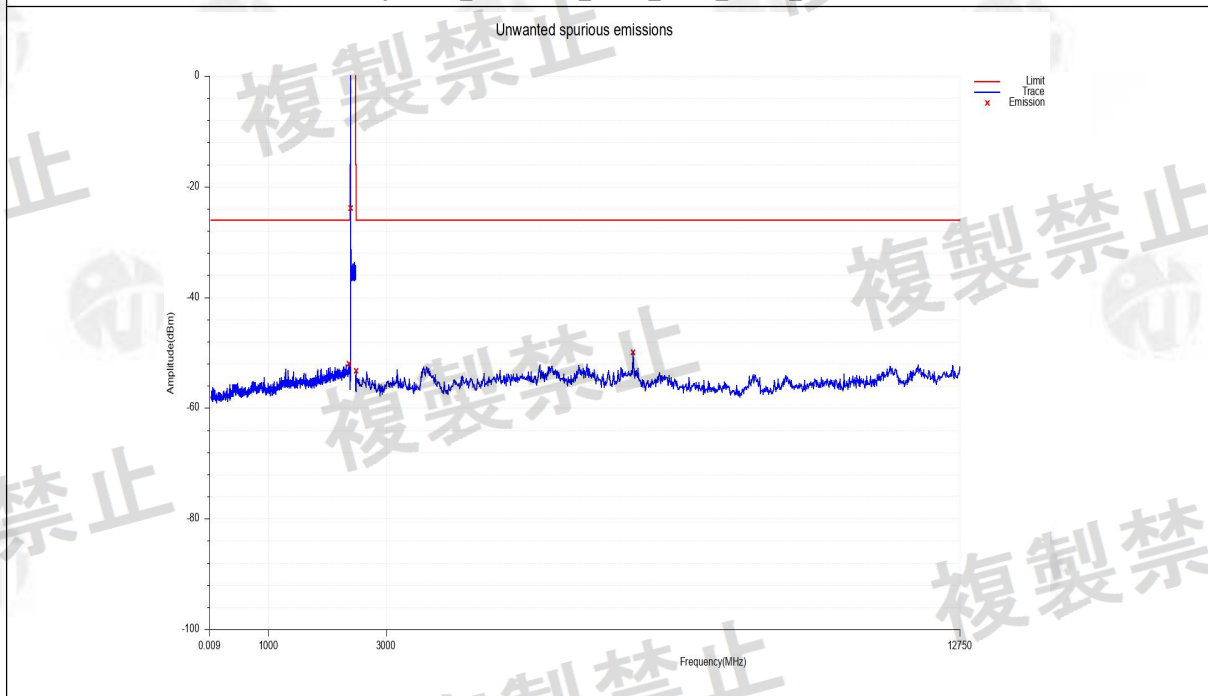
NVNT	ANT1	2-DH5	2402.00	2496.50~12750.00	1000	11601.6 1	-51.51	-26	0.0070μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2441.00	30.00~2387.00	1000	2342.22	-51.60	-26	0.0069μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2441.00	2387.00~2400.00	1000	2388.21	-52.93	-16	0.0050μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	2441.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	2-DH5	2441.00	2483.50~2496.50	1000	2495.16	-53.35	-16	0.0046μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	2441.00	2496.50~12750.00	1000	12473.1 6	-52.29	-26	0.0059μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2480.00	30.00~2387.00	1000	1752.97	-47.49	-26	0.0178μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	2-DH5	2480.00	2387.00~2400.00	1000	2388.27	-53.56	-16	0.0044μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	2480.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	2-DH5	2480.00	2483.50~2496.50	1000	2483.62	-44.31	-16	0.0370μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	2-DH5	2480.00	2496.50~12750.00	1000	6259.53	-51.61	-26	0.0068μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	30.00~2387.00	1000	1757.68	-53.80	-26	0.0041μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2387.00~2400.00	1000	2400.00	-26.05	-16	2.4803μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	3-DH5	Hopping	2483.50~2496.50	1000	2483.62	-44.60	-16	0.0346μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	Hopping	2496.50~12750.00	1000	7356.66	-59.42	-26	0.0011μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2402.00	30.00~2387.00	1000	30.00	-45.46	-26	0.0284μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2402.00	2387.00~2400.00	1000	2400.00	-25.37	-16	2.9067μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2402.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	3-DH5	2402.00	2483.50~2496.50	1000	2484.92	-52.48	-16	0.0056μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2402.00	2496.50~12750.00	1000	3665.40	-51.88	-26	0.0064μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2441.00	30.00~2387.00	1000	1752.97	-46.14	-26	0.0243μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2441.00	2387.00~2400.00	1000	2398.30	-52.71	-16	0.0053μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2441.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	3-DH5	2441.00	2483.50~2496.50	1000	2492.33	-53.44	-16	0.0045μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2441.00	2496.50~12750.00	1000	3634.64	-51.25	-26	0.0075μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2480.00	30.00~2387.00	1000	2313.93	-51.79	-26	0.0066μW/M Hz	2.5μW/MHz	Pass
NVNT	ANT1	3-DH5	2480.00	2387.00~2400.00	1000	2399.09	-53.78	-16	0.0041μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2480.00	2400.00~2483.50	/	/	/	/	/	/	/
NVNT	ANT1	3-DH5	2480.00	2483.50~2496.50	1000	2483.50	-42.78	-16	0.0527μW/M Hz	25μW/MHz	Pass
NVNT	ANT1	3-DH5	2480.00	2496.50~12750.00	1000	5798.13	-51.28	-26	0.0074μW/M Hz	2.5μW/MHz	Pass



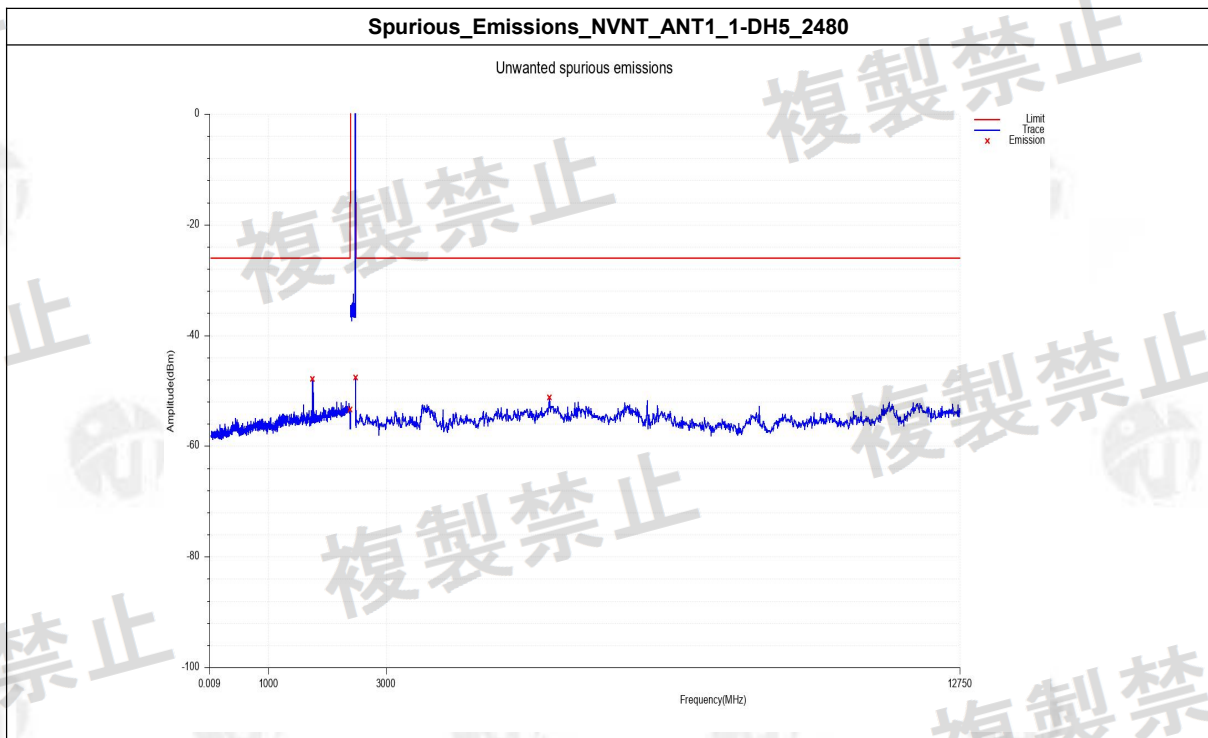
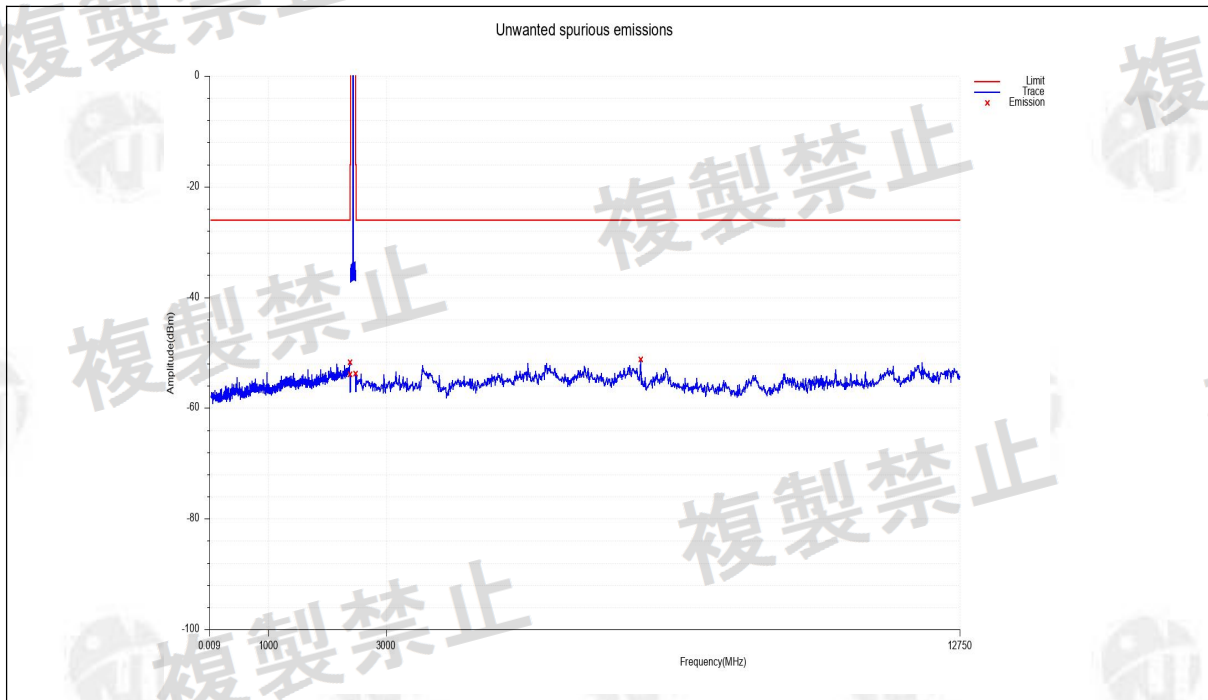
Spurious_Emissions_(Hopping)_NVNT_ANT1_1-DH5_Hopping



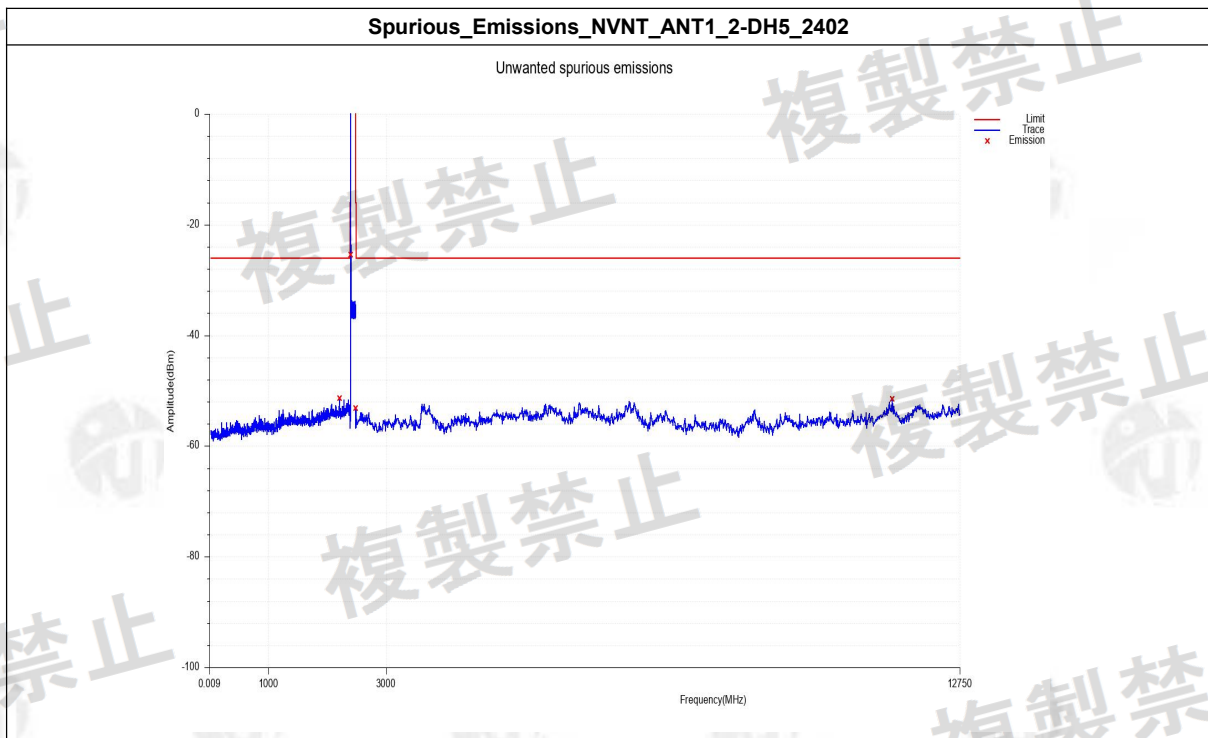
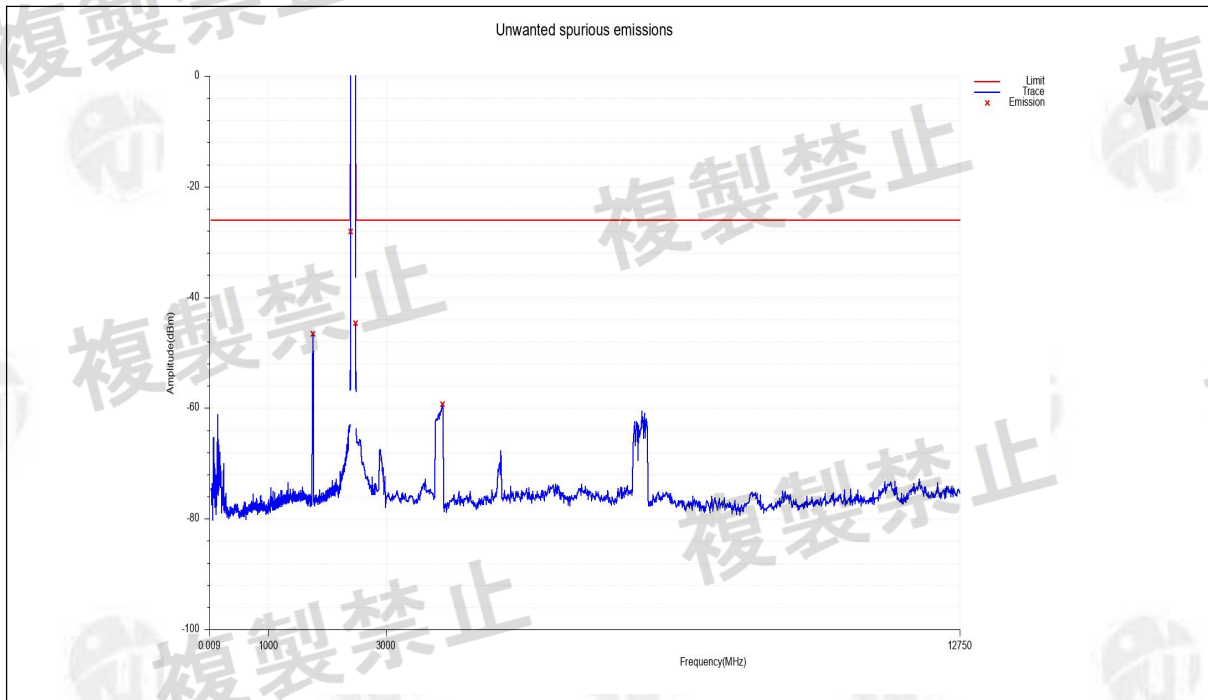
Spurious_Emissions_NVNT_ANT1_1-DH5_2402

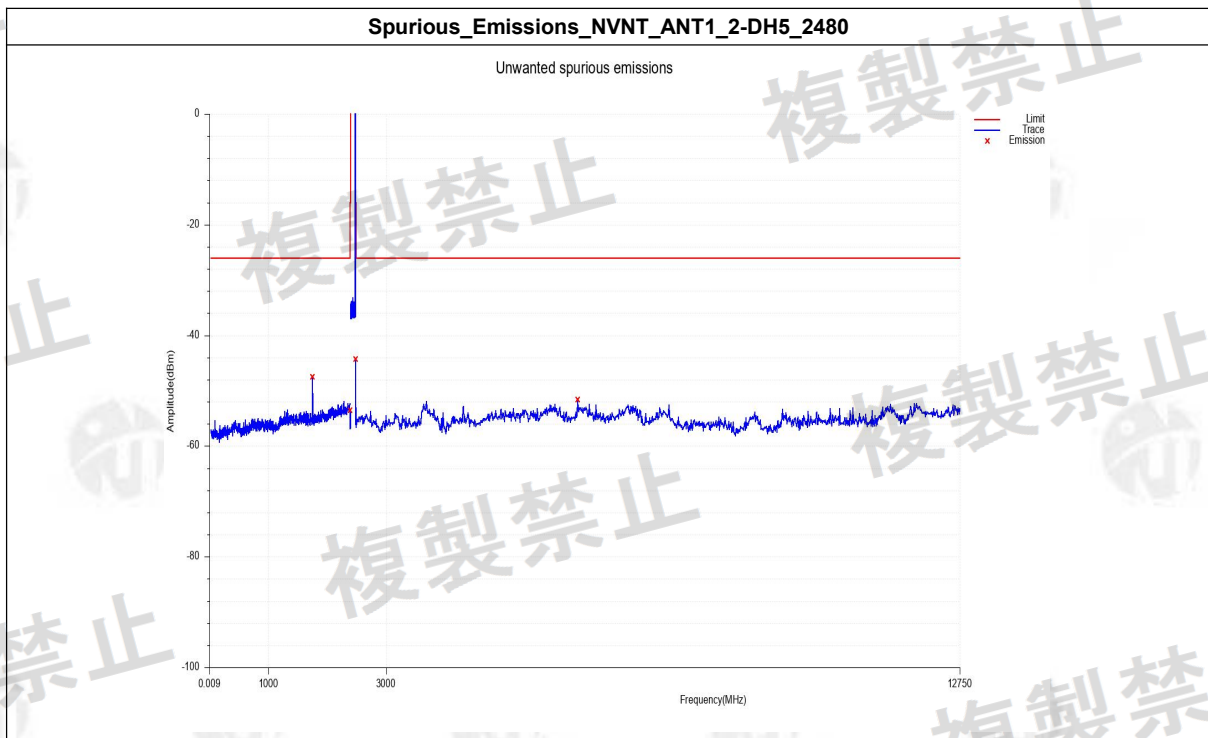
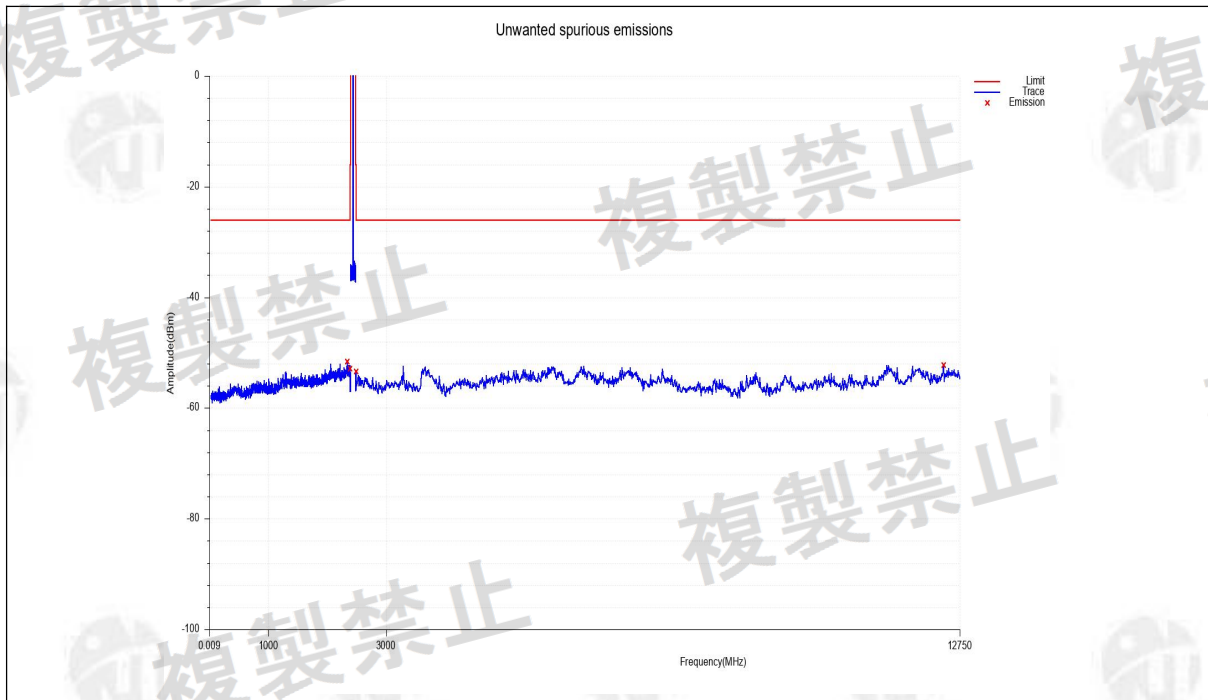


Spurious_Emissions_NVNT_ANT1_1-DH5_2441

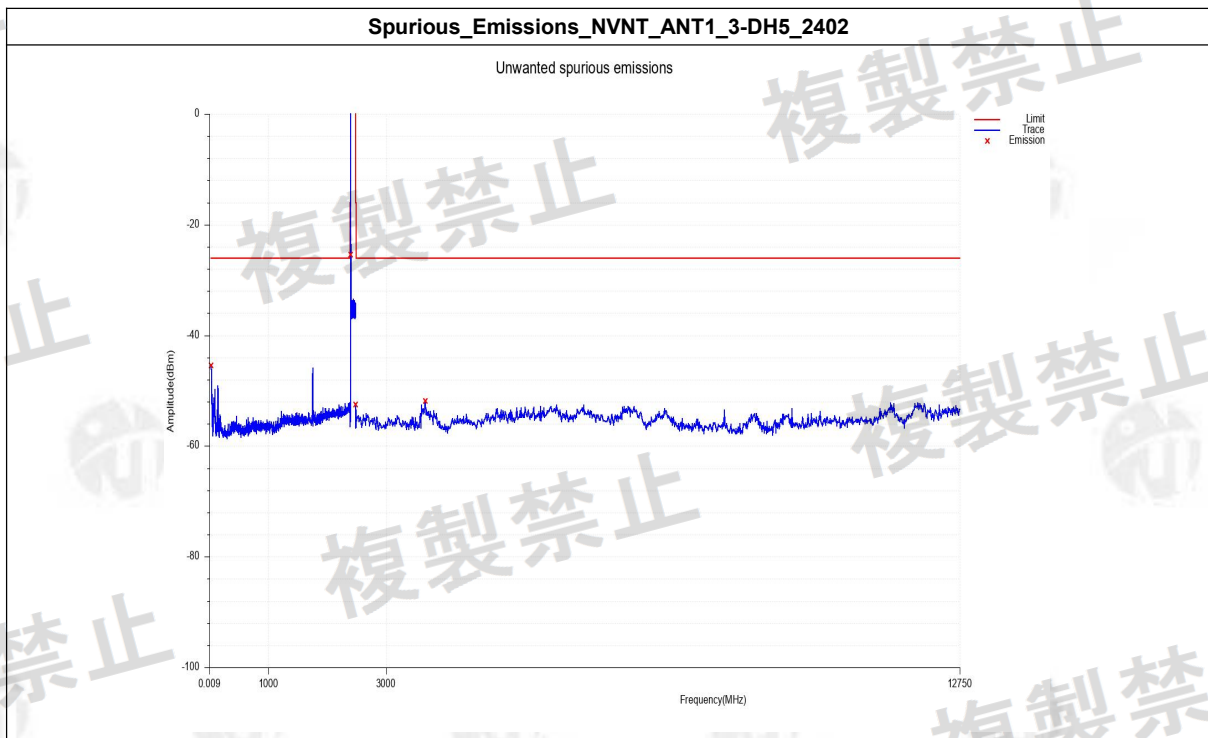
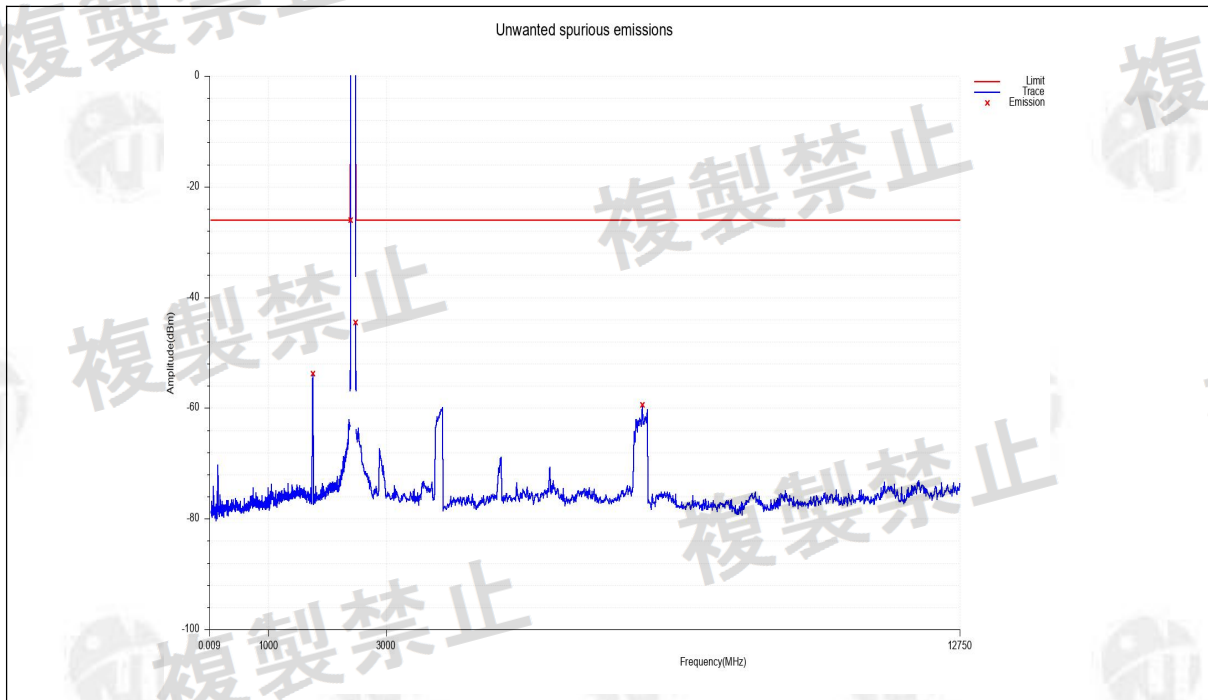


Spurious_Emissions_(Hopping)_NVNT_ANT1_2-DH5_Hopping

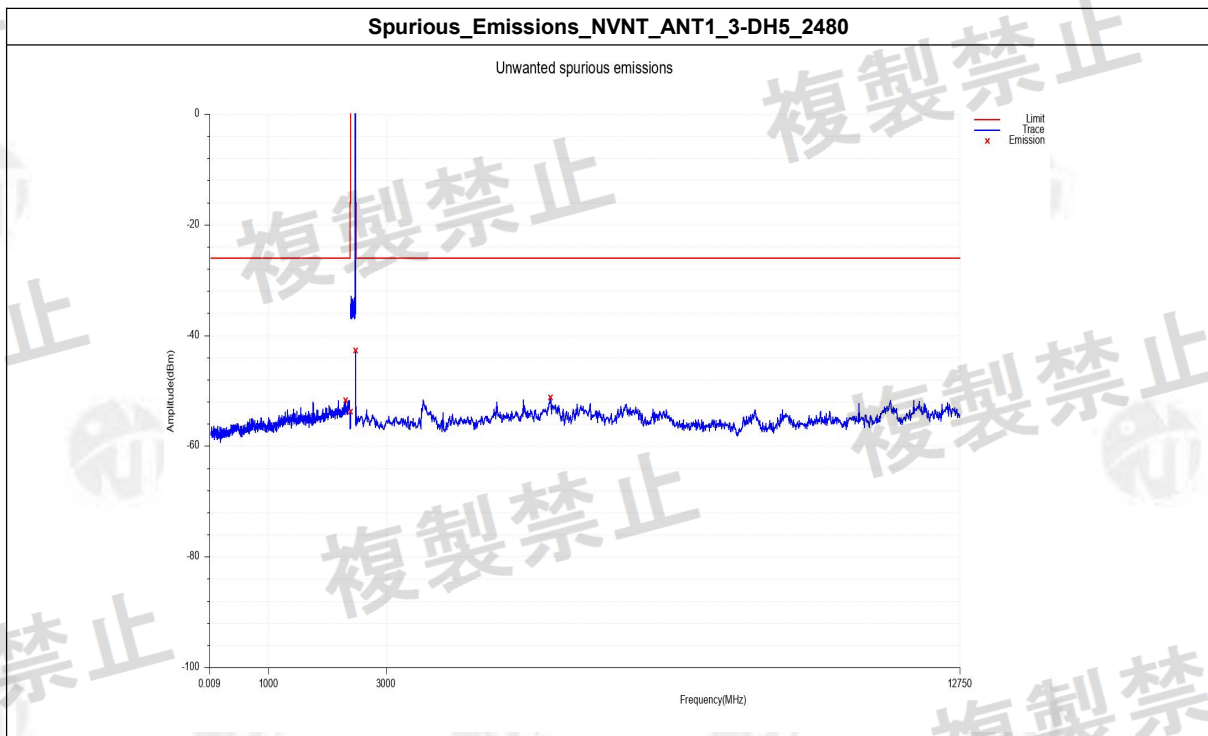
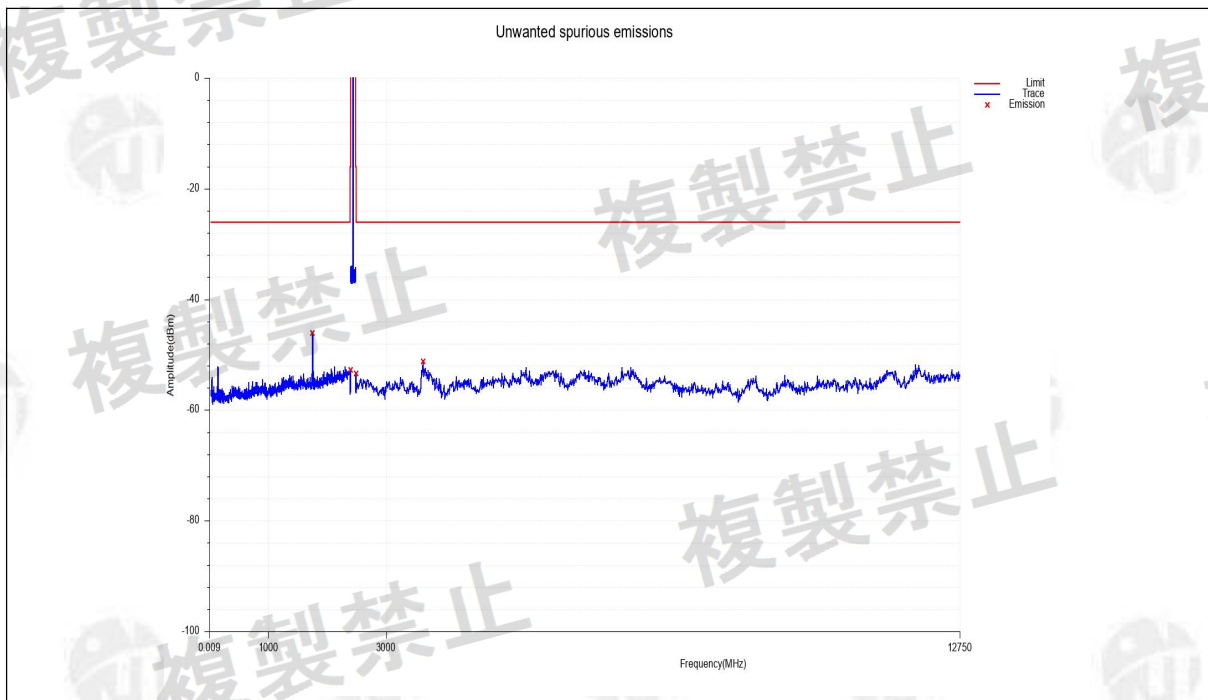




Spurious_Emissions_(Hopping)_NVNT_ANT1_3-DH5_Hopping



Spurious_Emissions_NVNT_ANT1_3-DH5_2441

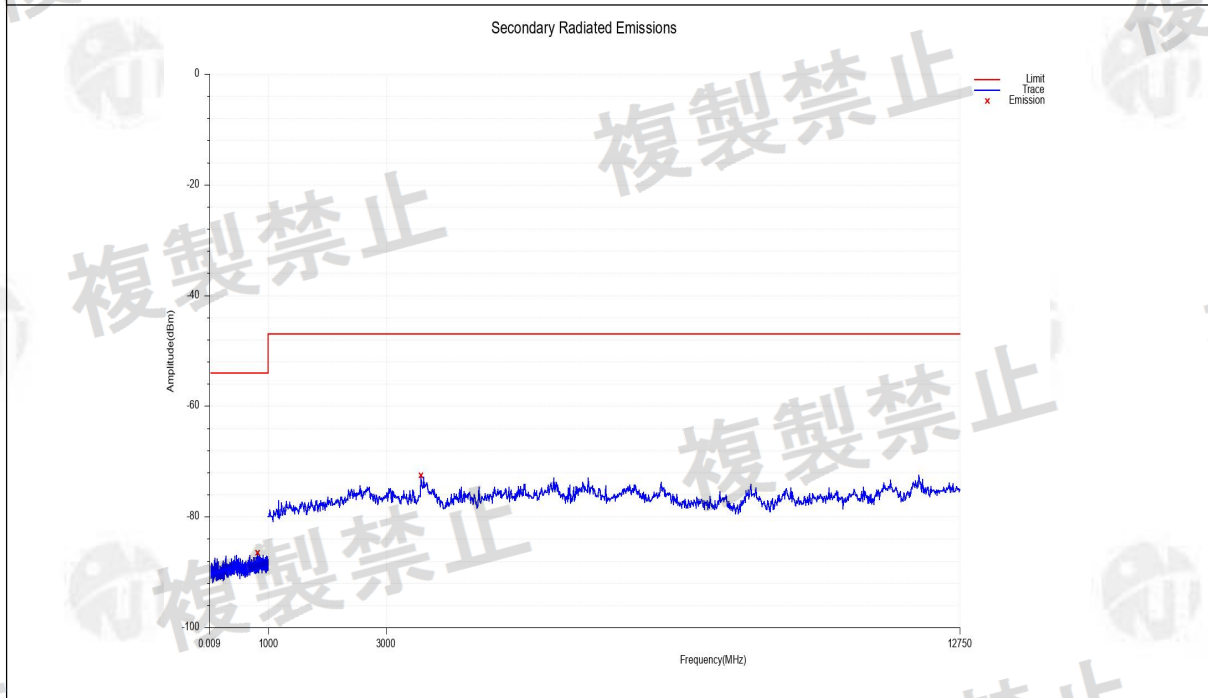


7. Secondary emission of radio wave

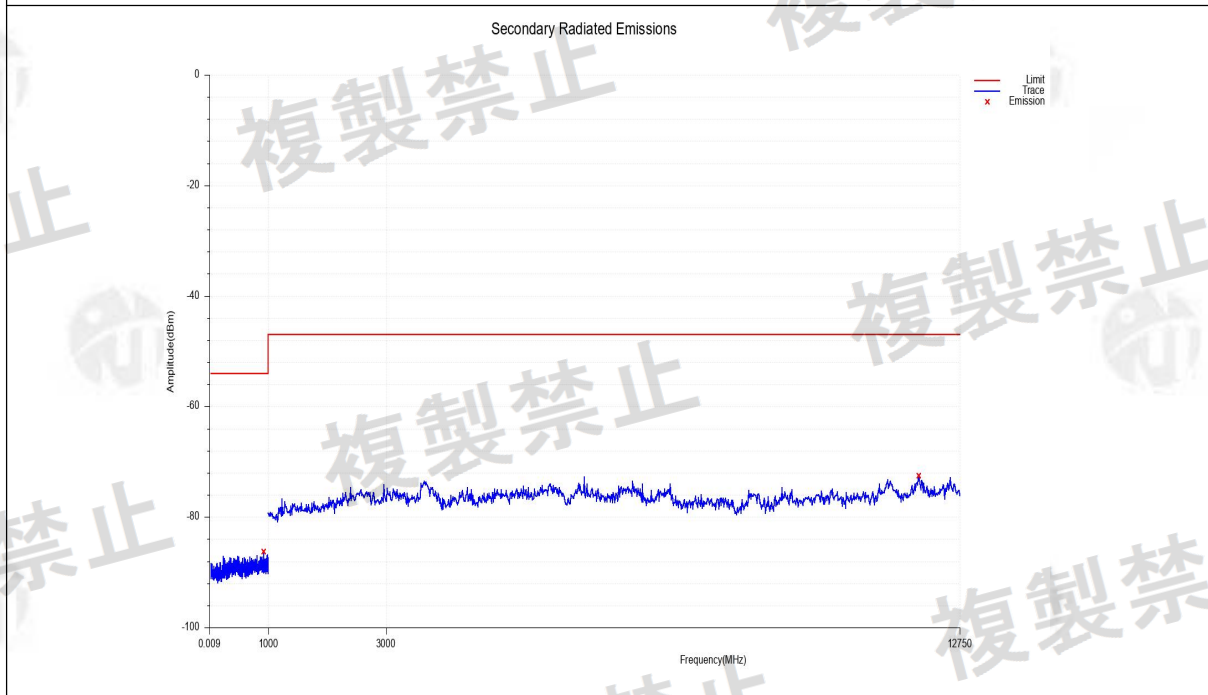
Condition	ANT	Mode	Channel	Range(MHz)	RBW(kHz)	Spur. Freq.(MHz)	Spur. Lev.(dBm)	Spur. Lev	Limit	Over 1/10 Limit	Read Lev.(dBm)	Read Lev.	Result
NVNT	ANT1	1-DH5	LCH	30.0~1000.0	100	818.61	-86.49	0.0022nW	4nW	NO	/	/	Pass
NVNT	ANT1	1-DH5	LCH	1000.0~12750.0	1000	3596.75	-72.50	0.0561nW	20nW	NO	/	/	Pass
NVNT	ANT1	1-DH5	MCH	30.0~1000.0	100	924.34	-86.31	0.0023nW	4nW	NO	/	/	Pass
NVNT	ANT1	1-DH5	MCH	1000.0~12750.0	1000	12056.75	-72.56	0.0554nW	20nW	NO	/	/	Pass
NVNT	ANT1	1-DH5	HCH	30.0~1000.0	100	667.29	-85.78	0.0026nW	4nW	NO	/	/	Pass
NVNT	ANT1	1-DH5	HCH	1000.0~12750.0	1000	7239.25	-72.72	0.0535nW	20nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	LCH	30.0~1000.0	100	672.14	-86.67	0.0021nW	4nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	LCH	1000.0~12750.0	1000	3655.50	-71.95	0.0639nW	20nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	MCH	30.0~1000.0	100	917.55	-86.16	0.0024nW	4nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	MCH	1000.0~12750.0	1000	3632.00	-72.61	0.0547nW	20nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	HCH	30.0~1000.0	100	905.91	-85.64	0.0027nW	4nW	NO	/	/	Pass
NVNT	ANT1	2-DH5	HCH	1000.0~12750.0	1000	1752.00	-67.26	0.1879nW	20nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	LCH	30.0~1000.0	100	863.23	-85.63	0.0027nW	4nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	LCH	1000.0~12750.0	1000	12080.25	-72.27	0.0592nW	20nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	MCH	30.0~1000.0	100	826.37	-75.33	0.0293nW	4nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	MCH	1000.0~12750.0	1000	12033.25	-72.31	0.0586nW	20nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	HCH	30.0~1000.0	100	835.10	-71.41	0.0723nW	4nW	NO	/	/	Pass
NVNT	ANT1	3-DH5	HCH	1000.0~12750.0	1000	3596.75	-71.45	0.0715nW	20nW	NO	/	/	Pass

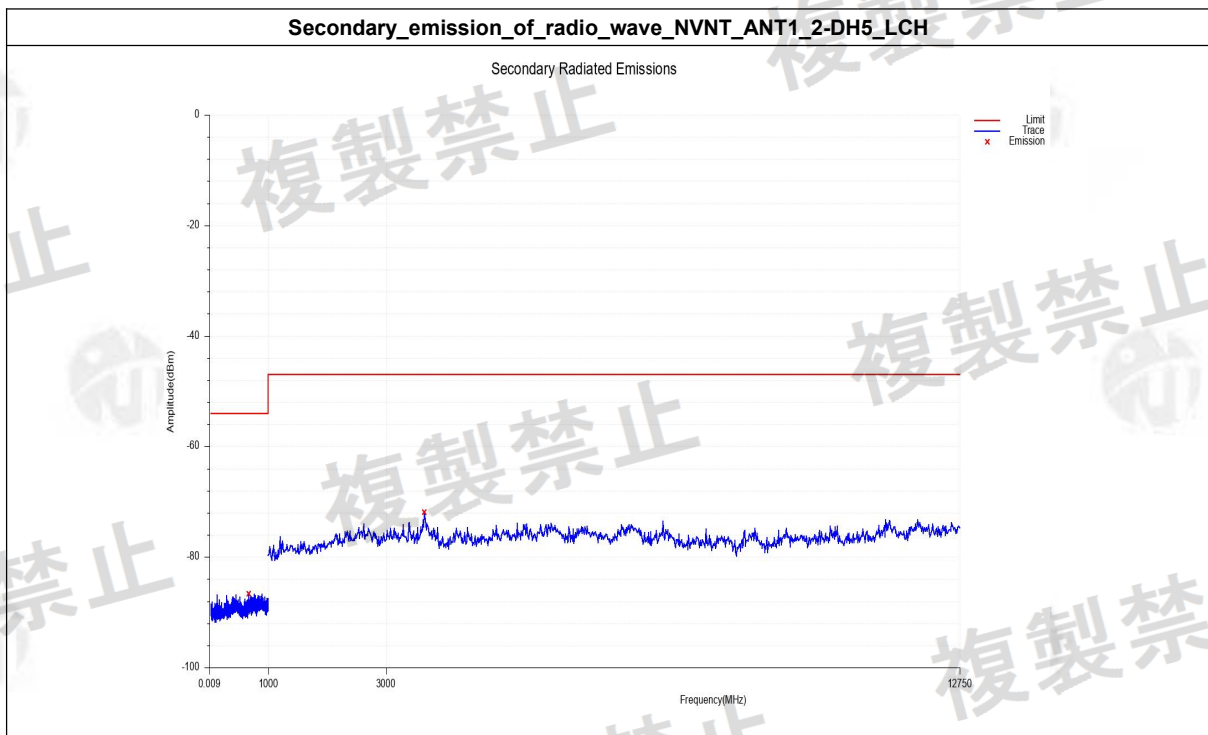
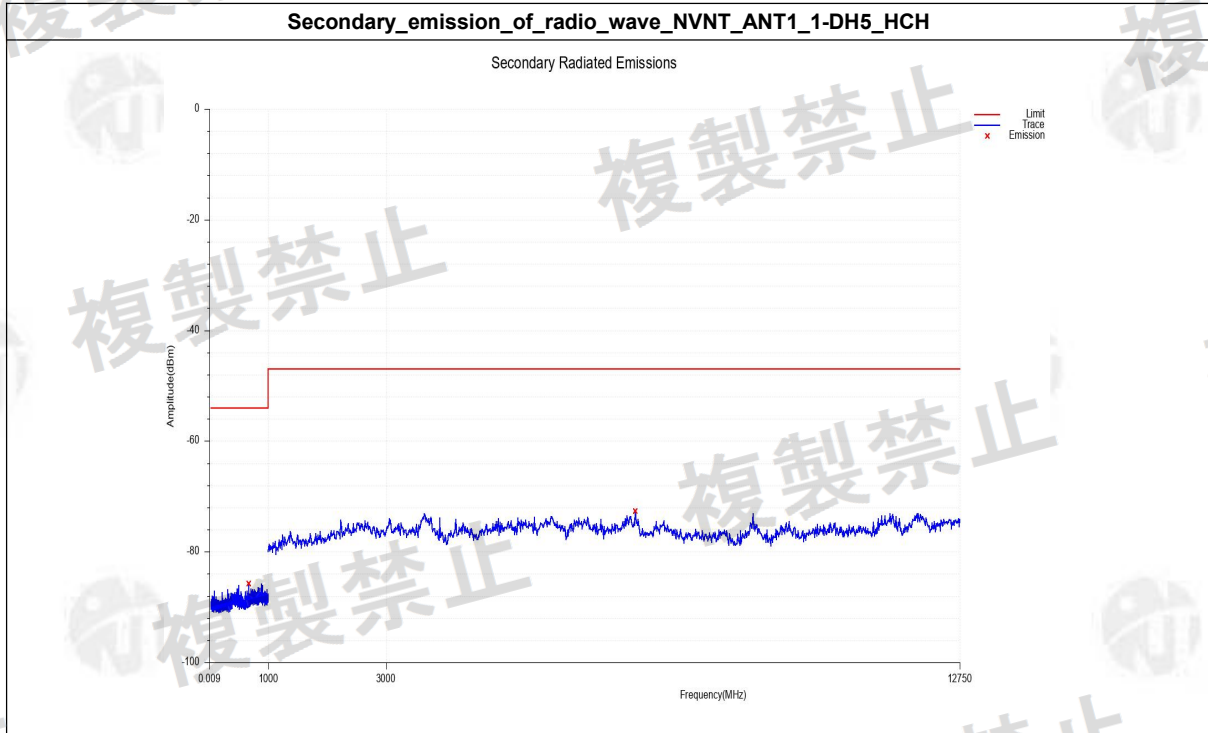


Secondary_emission_of_radio_wave_NVNT_ANT1_1-DH5_LCH



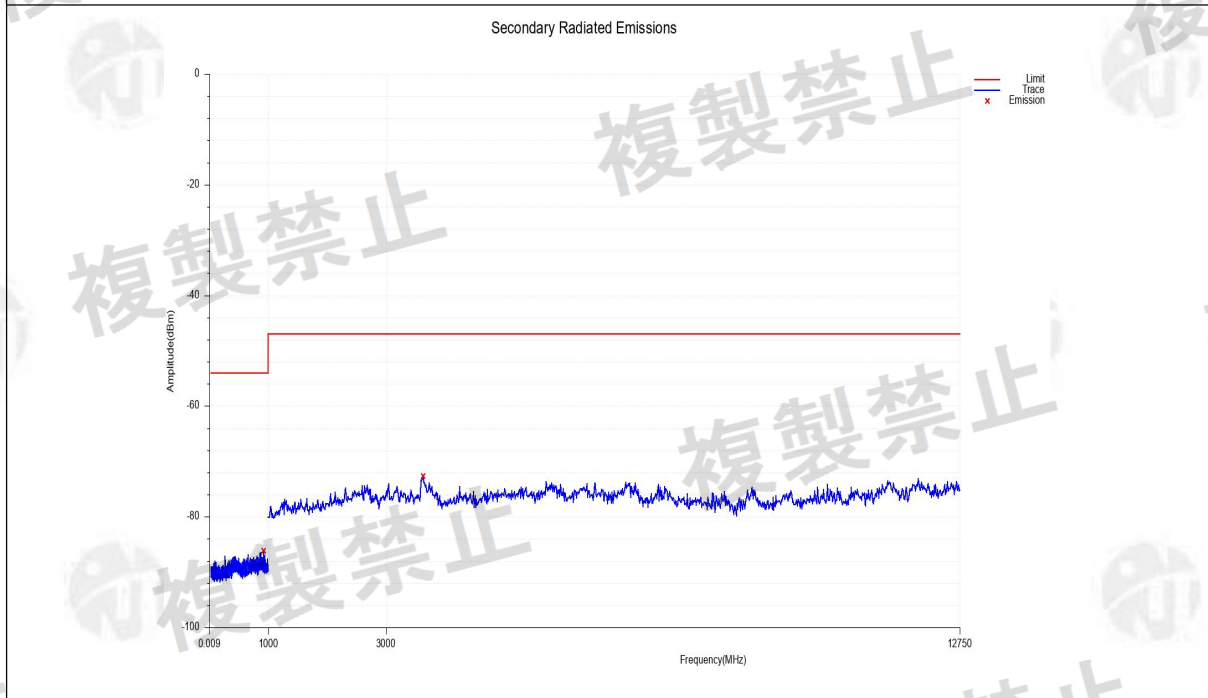
Secondary_emission_of_radio_wave_NVNT_ANT1_1-DH5_MCH



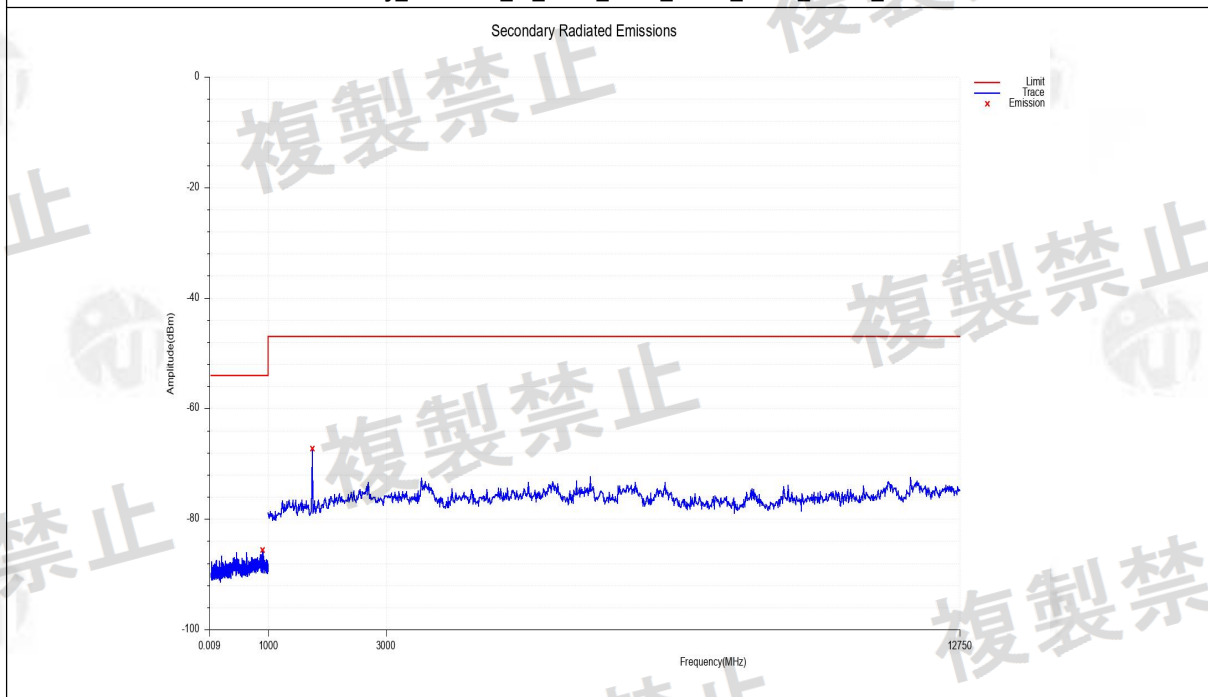




Secondary_emission_of_radio_wave_NVNT_ANT1_2-DH5_MCH

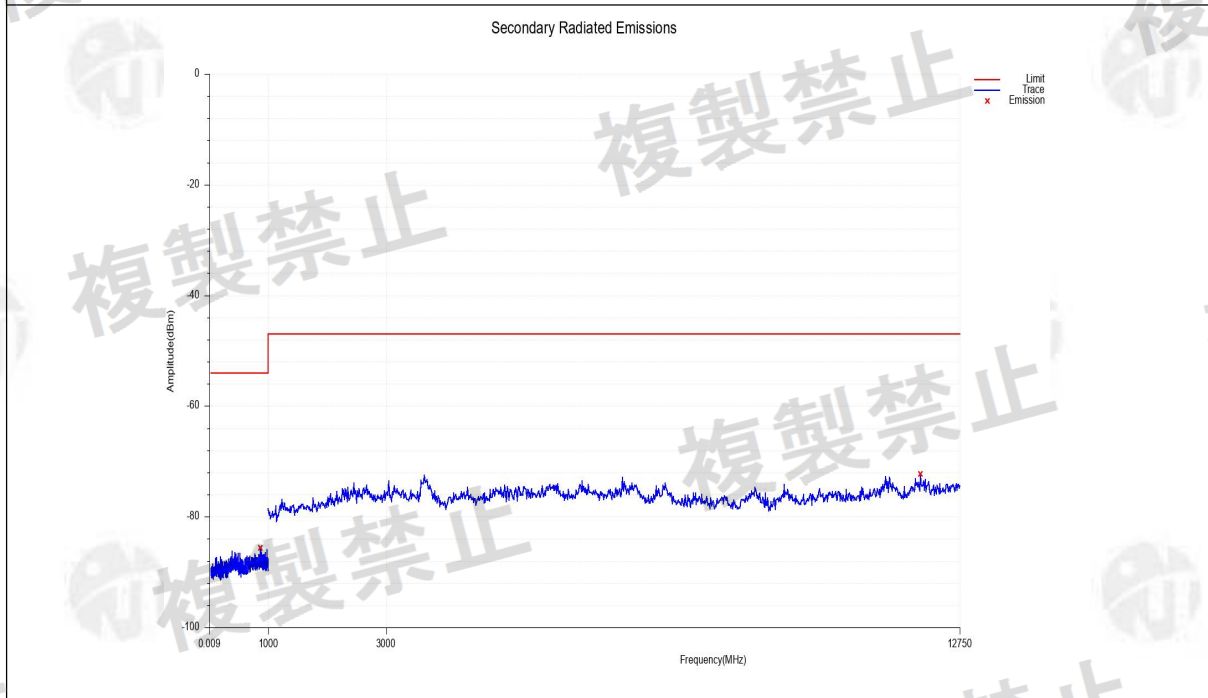


Secondary_emission_of_radio_wave_NVNT_ANT1_2-DH5_HCH

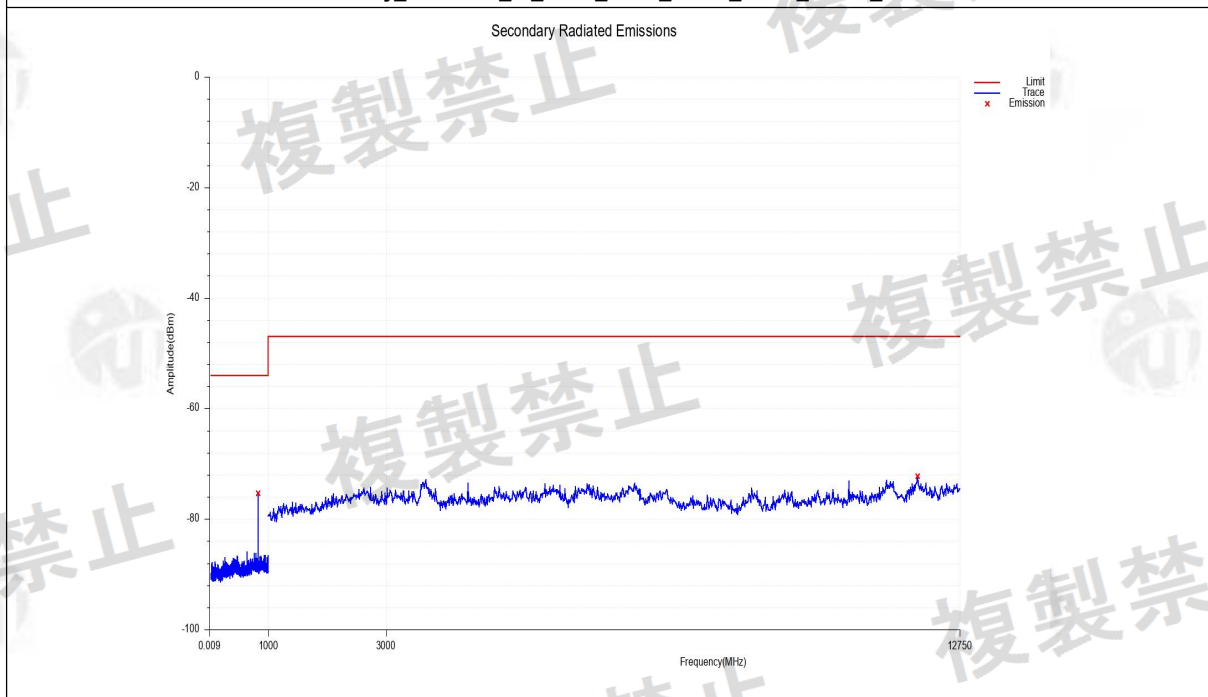


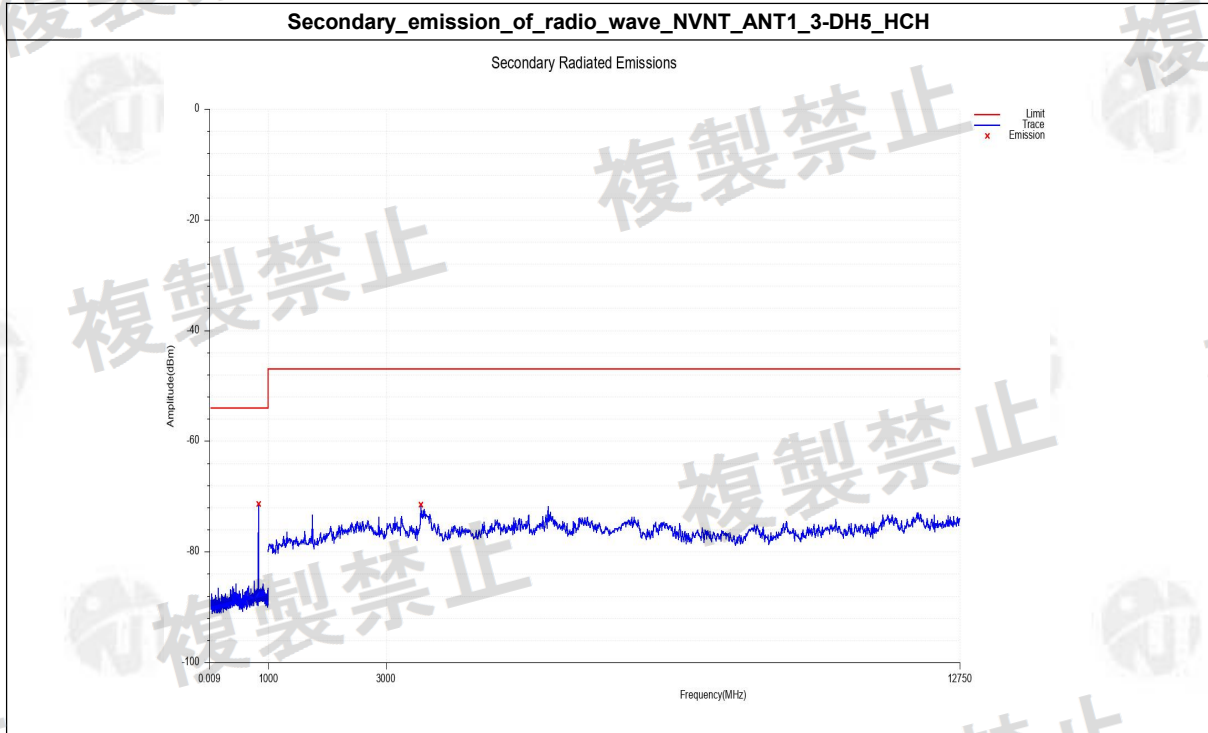


Secondary_emission_of_radio_wave_NVNT_ANT1_3-DH5_LCH



Secondary_emission_of_radio_wave_NVNT_ANT1_3-DH5_MCH





***** End of Report *****