



RF Test Report

For

Applicant Name: SHENZHEN LOFREE CULTURE CO., LTD
Address: 202-F8, F518 Idea Land, 1065 Bao Yuan Road, Shenzhen, China
EUT Name: BLOCK 98 Triple Mode Connection Mechanical Keyboard
Brand Name: **lofree**
Model Number: OE918

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park,
Tantou Community, Songgang Street, Bao'an District, Shenzhen,
China
Report Number: BTF231215R00402
Test Standards: Article 2-1, Item 19
Annex 43, Notification No.88 of MIC, 2004
Test Conclusion: Pass
Test Date: 2023-12-18 to 2024-01-04
Date of Issue: 2024-01-05

Prepared By:

Gavin Cui

Date:

Gavin Cui / Project Engineer
2024-01-05

Approved By:

Ryan.CJ

Date:

Ryan.CJ / EMC Manager
2024-01-05



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Test Report Number: BTF231215R00402

Revision History		
Version	Issue Date	Revisions Content
R_V0	2024-01-05	Original
Note: Once the revision has been made, then previous versions reports are invalid.		

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Test Report Number: BTF231215R00402

1 Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.3 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 Product Information

2.1 Application Information

Company Name:	SHENZHEN LOFREE CULTURE CO., LTD
Address:	202-F8, F518 Idea Land, 1065 Bao Yuan Road, Shenzhen, China

2.2 Manufacturer Information

Company Name:	SHENZHEN LOFREE CULTURE CO., LTD
Address:	202-F8, F518 Idea Land, 1065 Bao Yuan Road, Shenzhen, China

2.3 Factory Information

Company Name:	Foshan IF2 ElectronicTechnology Co.,Ltd
Address:	604, 701, 703, 704, Building 10, No.15 Shunye West Road, Xingtan Town, ShundeDistrict, Foshan City, Guangdong Province

2.4 General Description of Equipment under Test (EUT)

EUT Name:	BLOCK 98 Triple Mode Connection Mechanical Keyboard
Test Model Number:	OE918
Hardware Version	V1.4
Software and Firmware Version	V2.51

2.5 Technical Information

Power Supply:	DC 3.7V From Battery
Operation Frequency:	2403-2480MHz
Number of Channels:	16
Modulation Type:	GFSK
Data Rate:	2M
Symbol Rate:	2M
Antenna Type:	PCB Antenna
Antenna Gain [#] :	-2.39dBi
Rated Power:	0.43mW

Note:

[#]: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.

2.6 Channel List

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2403	7	2445	13	2419
2	2426	8	2466	14	2439
3	2441	9	2414	15	2453
4	2463	10	2436	16	2480
5	2407	11	2459		
6	2422	12	2473		

3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:

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

3.2 Uncertainty of Test

Item	Measurement Uncertainty
Occupied Bandwidth	±69kHz

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.3 Summary of Test Result

Item	Standard	Requirement	Result
Tolerance of Frequency	Article 2-1, Item 19	Article 2-1, Item 19	Pass
Occupied Bandwidth (99%)	Article 2-1, Item 19	Article 2-1, Item 19	Pass
Antenna Power and Tolerance	Article 2-1, Item 19	Article 2-1, Item 19	Pass
Spurious Emission Intensity	Article 2-1, Item 19	Article 2-1, Item 19	Pass
Secondary Radiated Emissions	Article 2-1, Item 19	Article 2-1, Item 19	Pass
Interference Prevention Function	Article 2-1, Item 19	Article 2-1, Item 19	Pass
RF Accessibility	Article 2-1, Item 19	Article 49-20, paragraph 1(a)	Pass

4 Test Configuration

4.1 Test Equipment List

Tolerance of Frequency Occupied Bandwidth (99%) Antenna Power and Tolerance Spurious Emission Intensity Secondary Radiated Emissions							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	Cal. By	Remark
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15	CCIC	3
WIDEBAND RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15	CCIC	3
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15	CCIC	3
<p>Remark:</p> <ol style="list-style-type: none"> 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. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No.51 of 1992) 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). 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 (2) to (4). <p style="text-align: right;">From JRL Article 24-2, paragraph 4, Item 2</p>							

4.2 Test Auxiliary Equipment

The EUT was tested as an independent device.

4.3 Test Modes

No.	Test Modes	Description
TM1	TX mode	Keep EUT in transmitting mode
TM2	RX mode	Keep EUT in receiving mode

5 Evaluation Results (Evaluation)

5.1 Interference Prevention Function

Test Requirement:	The EUT shall support one of the following functions: <ul style="list-style-type: none">- Automatic identification transmission- Automatic identification reception
Test Method:	Annex 43, Notification No.88 of MIC, 2004
Procedure:	(1) For EUTs capable of automatically transmitting identification data <ul style="list-style-type: none">a. Transmit identification data from EUT to Demodulatorb. Confirm identification data is correctly received by Demodulator (2) For EUTs capable of automatically receiving identification data <ul style="list-style-type: none">a. Transmit identification data from Link Partner to EUTb. Confirm communication link is establishedc. Link Partner shall respond by transmitting different identification data back to the EUTd. Confirm EUT stops transmitting, or confirm EUT recognizes that the two identification data are different

5.1.1 Conclusion:

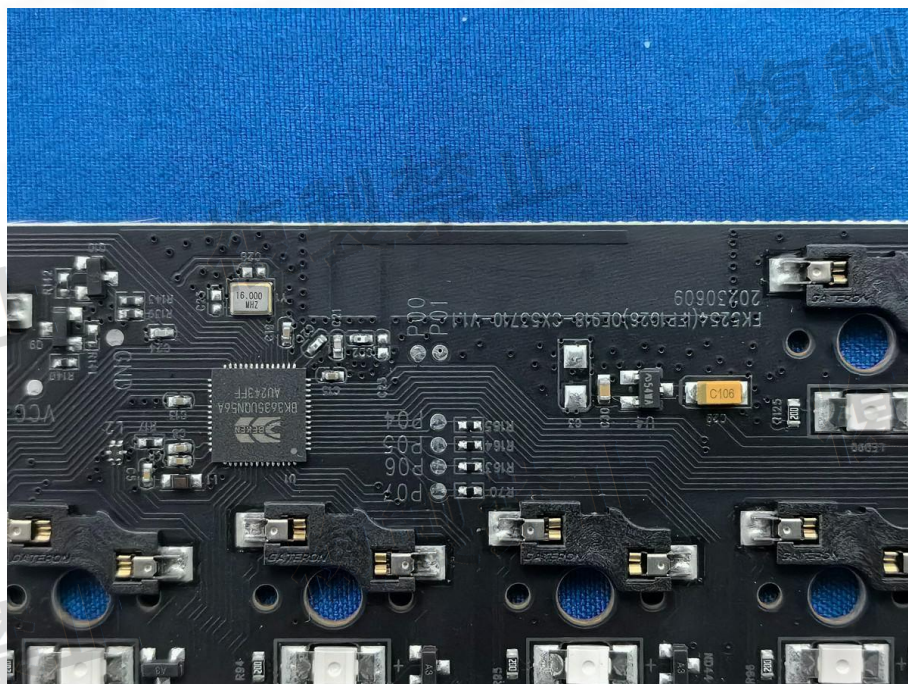
Test result: The device meet the requirements
PASS

5.2 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.
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5.2.1 Conclusion:

We apply the product for Japan RF certification, The number of chip pins is 56, and the distance between the pins is 0.5mm, Package mode is QFP. So the chip is not easily damaged. See the structure below:

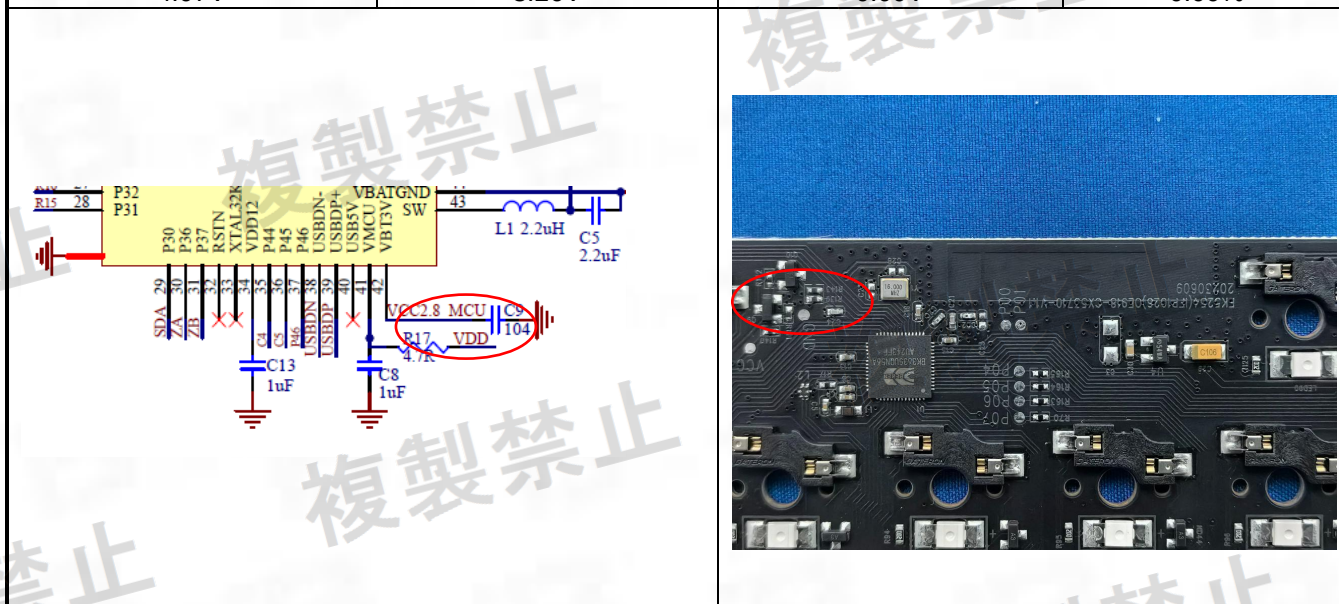


5.1 Environment of test site

Temperature:	22°C
Humidity:	54% RH
Atmospheric Pressure:	1010 mbar
Test Voltage:	Nominal: 3.7Vdc Extreme: 3.33Vdc for low voltage, 4.07Vdc for high voltage

Note: For extreme voltage test, we have tested the relationship between the external power supply and RF IC power supply. Base on the test results, only the normal voltage was selected to perform all items. The details information as below:

External power supply	IC power supply	Deviation from normal	Deviation
3.70V	3.26V	---	---
3.33V	3.26V	0.00V	0.00%
4.07V	3.26V	0.00V	0.00%



6 Radio Spectrum Matter Test Results (RF)

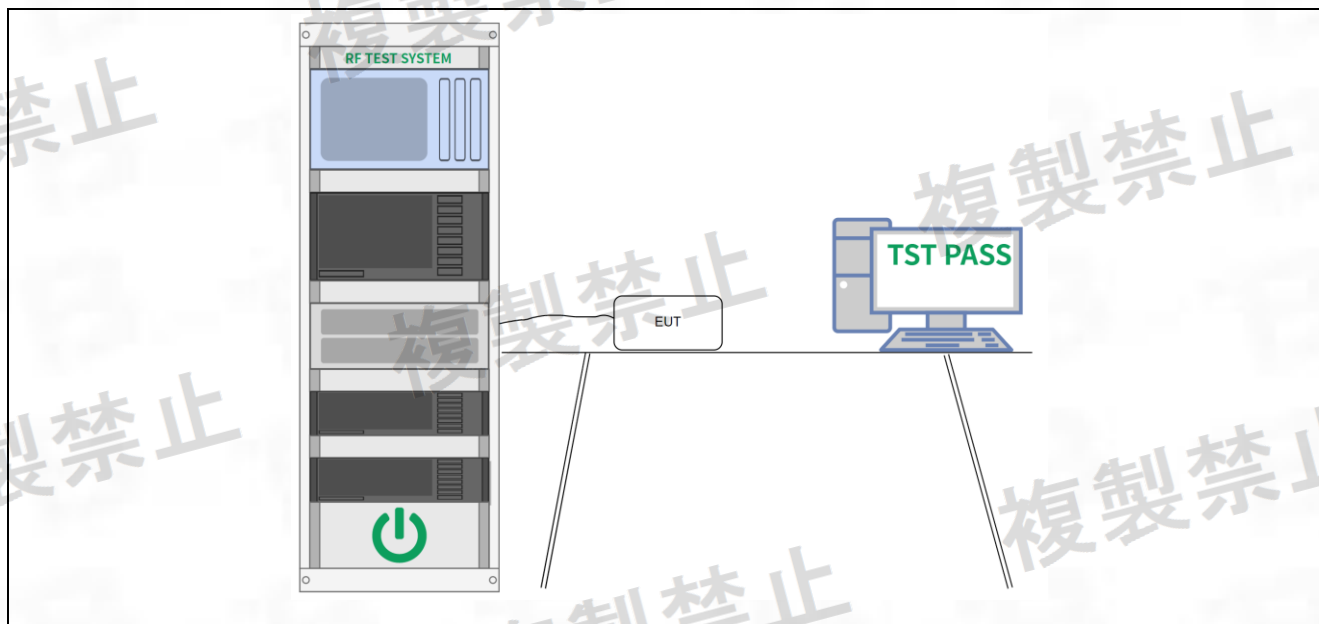
6.1 Tolerance of Frequency

Test Requirement:	Article 2-1, Item 19		
Test Method:	Annex 43, Notification No.88 of MIC, 2004		
Test Limit:	±50ppm or less.		
Procedure:	Center frequency:	Test frequency	
	Span:	2 times channel bandwidth	
	RBW:	100 kHz (Modulation ON)	
	VBW:	100 kHz (Modulation ON)	
	Sweep data points:	1001 or greater	
	Sweep time:	Auto	
	Detector mode:	Positive peak	
	Indication mode:	Max hold	
	If the EUT cannot transmit in un-modulated mode then modulated mode measurements can be made, as follows:		
	If the spectrum observed using the spectrum analyzer has a characteristic dip at the center, then the center frequency of the dip shall be regarded as the center frequency of the carrier.		

6.1.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.4 °C
Humidity:	47.5 %
Atmospheric Pressure:	1010 mbar

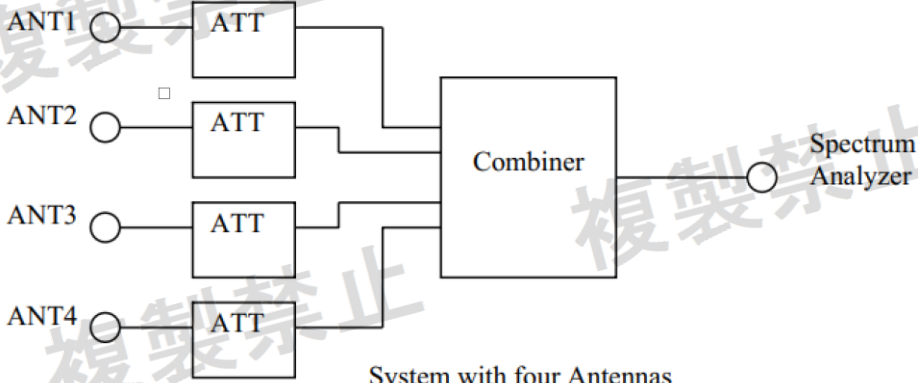
6.1.2 Test Setup Diagram:



6.1.3 Test Data:

Please Refer to Appendix for Details.

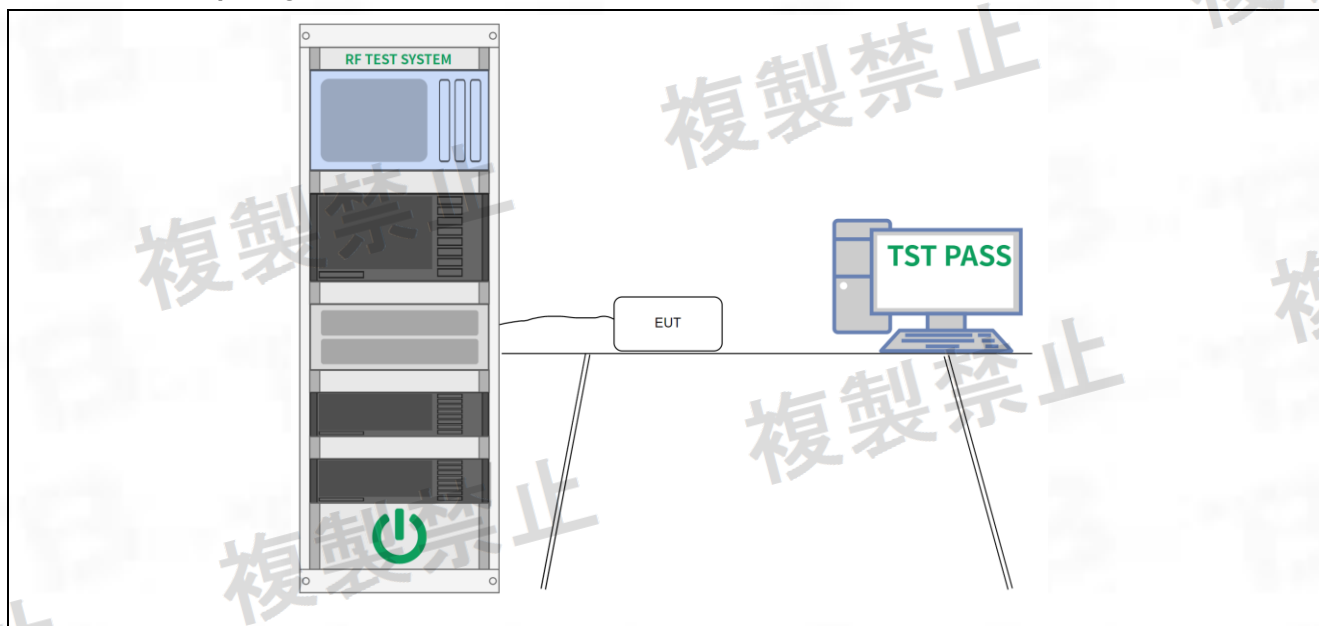
6.2 Occupied Bandwidth (99%)

Test Requirement:	Article 2-1, Item 19																		
Test Method:	Annex 43, Notification No.88 of MIC, 2004																		
Test Limit:	<p>The measured bandwidth at the low and high channels shall meet the following requirements:</p> <ul style="list-style-type: none"> - 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 <p>[Occupied Bandwidth] 26 MHz or less</p>																		
Procedure:	<table border="1"> <tr> <td>Center Frequency:</td><td>Test frequency</td></tr> <tr> <td>Span:</td><td>2 - 3.5 times the technical standard</td></tr> <tr> <td>RBW:</td><td>Within 3% of the technical standard</td></tr> <tr> <td>VBW:</td><td>Same as RBW</td></tr> <tr> <td>Sweep time:</td><td>Auto</td></tr> <tr> <td>Sweep data points:</td><td>1001 or greater</td></tr> <tr> <td>Detector mode:</td><td>Positive peak</td></tr> <tr> <td>Indication mode:</td><td>Max hold</td></tr> <tr> <td>BW setting:</td><td>99%</td></tr> </table> <p>(1) Measure the signal bandwidth using a spectrum analyzer</p> <p>(2) For multiple antenna systems:</p> <ul style="list-style-type: none"> 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:  <p style="text-align: center;">System with four Antennas</p>	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%
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%																		

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.4 °C
Humidity:	47.5 %
Atmospheric Pressure:	1010 mbar

6.2.2 Test Setup Diagram:



6.2.3 Test Data:

Please Refer to Appendix for Details.

6.3 Antenna Power and Tolerance

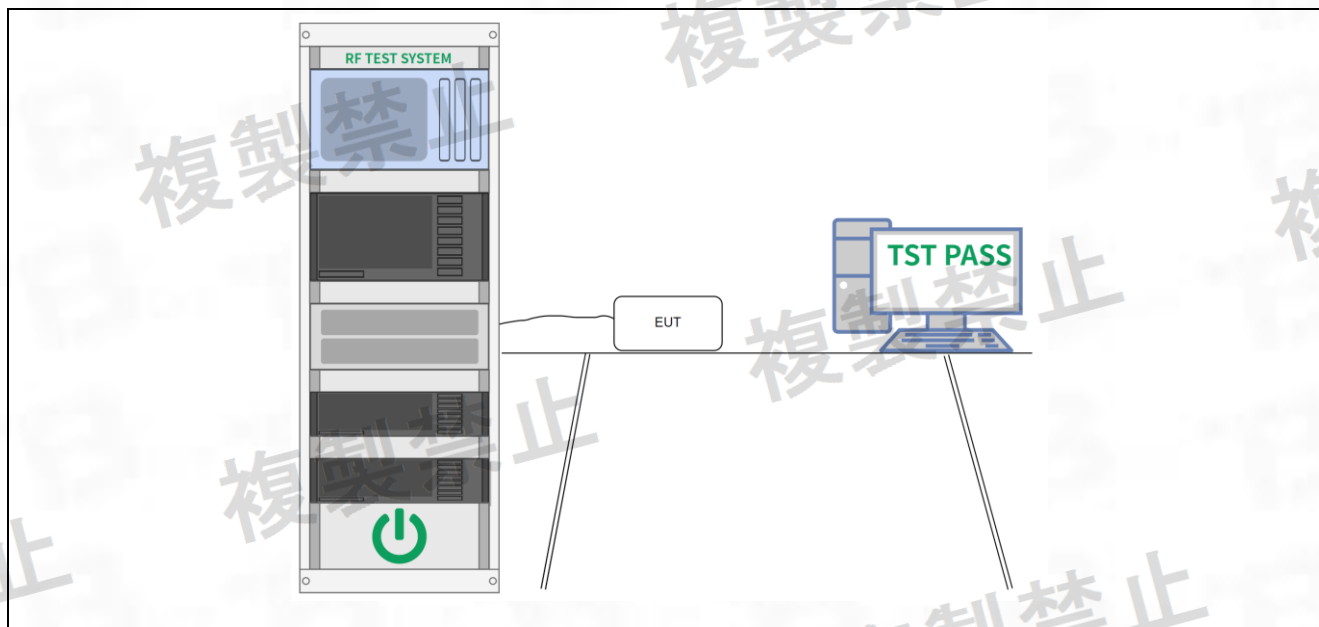
Test Requirement:	Article 2-1, Item 19	
Test Method:	Annex 43, Notification No.88 of MIC, 2004	
Test Limit:	10 mW or less Tolerance: -80% ~ +20%	
Procedure:	[Setting 1] – Search for peak power frequency	
	Center Frequency:	Test frequency
	Span:	Approximately twice the occupied bandwidth
	RBW:	1MHz
	VBW:	Approximately three times the RBW
	Sweep time:	Auto
	Sweep data points:	1001 or greater
	Detector mode:	Positive peak
	Indication mode:	Max hold
	[Setting 2] – Measurement of average antenna power for FHSS, DSSS, OFDM	
	Frequency:	Frequency of peak power found using [Setting 1]
	Span:	0 Hz
	RBW:	3 MHz (FHSS-Channel Spacing $\leq$ 1MHz) 1MHz (DSSS, OFDM, FHSS-Channel Spacing > 1MHz)
	Detector mode:	Sample
	Sweep:	Minimum time required to make an accurate measurement.
		For burst type (intermittent) transmission sweep time shall be greater than one burst interval
	Sweep data points:	1001 or greater
	[Setting 3] – Measurement of average antenna power other than for FHSS, DSSS, OFDM	
	Frequency:	Frequency of peak power found using [Setting 1]
	Span:	0 Hz
	RBW:	Bandwidth sufficient to cover that occupied by the carrier
	VBW:	Bandwidth sufficient to cover that occupied by the carrier
	Detector mode:	Sample
	Sweep:	Minimum time required to make an accurate measurement.
		For burst type (intermittent) transmission sweep time shall be greater than one burst interval
	Sweep data points:	1001 or greater
	(1) After configuring the spectrum analyzer to [Setting 1], find the frequency of maximum transmitted power	
	(2) After configuring the spectrum analyzer to [Setting 3], measure the Average Burst Power of the frequency found in (1)	
	Antenna Power (Watts) = Average Burst Power	

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.4 °C

Humidity:	47.5 %
Atmospheric Pressure:	1010 mbar

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Please Refer to Appendix for Details.

6.4 Spurious Emission Intensity

Test Requirement:	Article 2-1, Item 19	
Test Method:	Annex 43, Notification No.88 of MIC, 2004	
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	
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:

$$\text{Calculated Value} = (\text{Measured Value using (3)} + 15.2\text{dB})$$

Note: 15.2dB adjustment is derived from the Conversion Factor of RBW

$$\text{Conversion Factor of RBW} = 10 \times \text{Log} (\text{Reference Bandwidth} / \text{RBW of measurement}) = 15.2 [\text{dB}]$$

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)

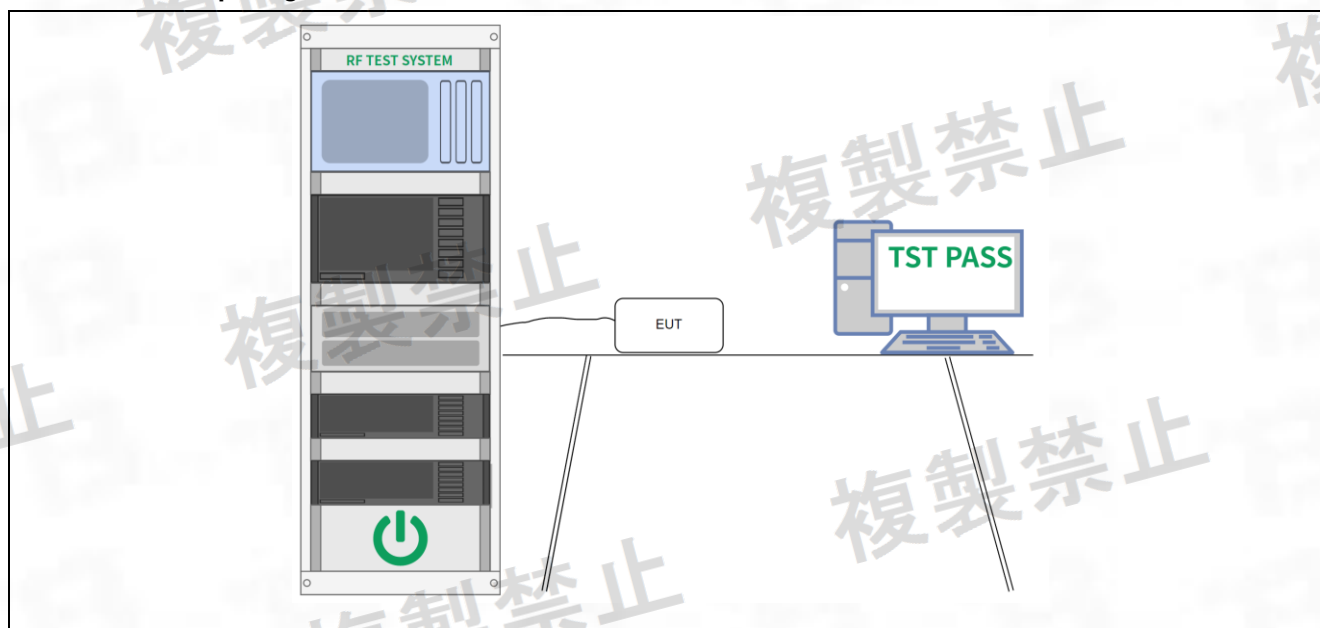
(14) Configuring the spectrum analyzer using [Setting 3] and measure the spurious

	emissions with all the antennas electrically combined
--	---

6.4.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.4 °C
Humidity:	47.5 %
Atmospheric Pressure:	1010 mbar

6.4.2 Test Setup Diagram:



6.4.3 Test Data:

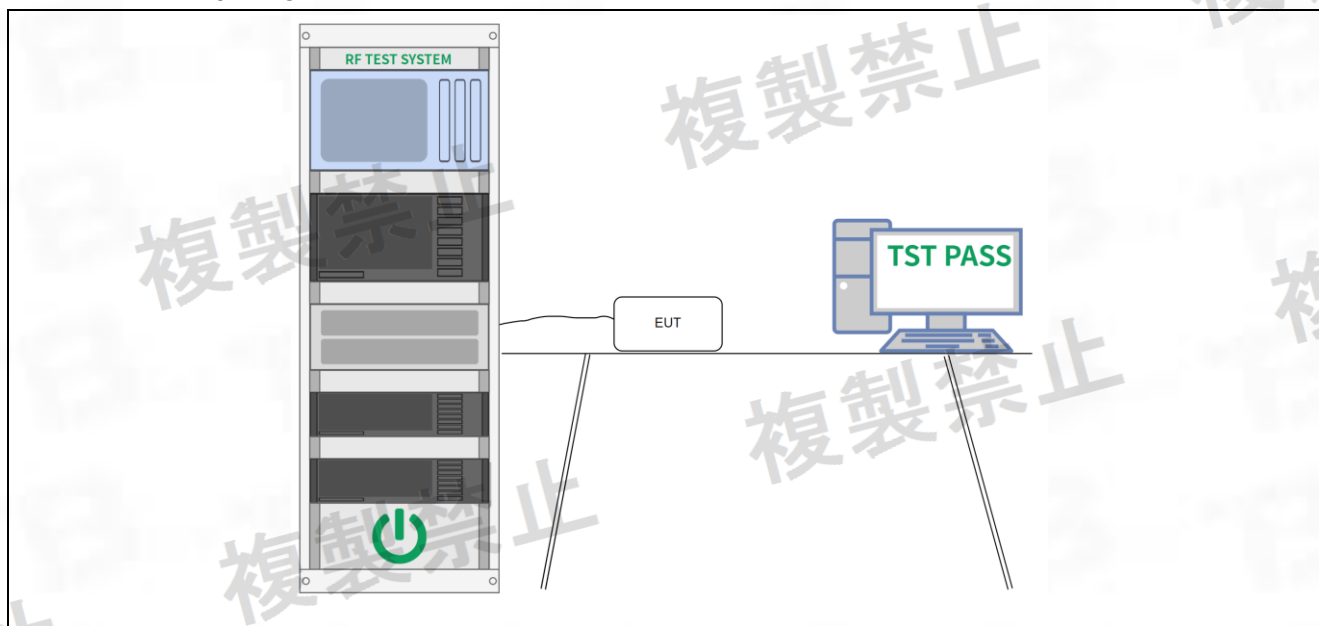
Please Refer to Appendix for Details.

6.5 Secondary Radiated Emissions

Test Requirement:	Article 2-1, Item 19	
Test Method:	Annex 43, Notification No.88 of MIC, 2004	
Test Limit:	(1) Below 1 GHz: 4 nW (-54dBm) or less (2) Above 1 GHz: 20 nW (-47dBm) or less	
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	

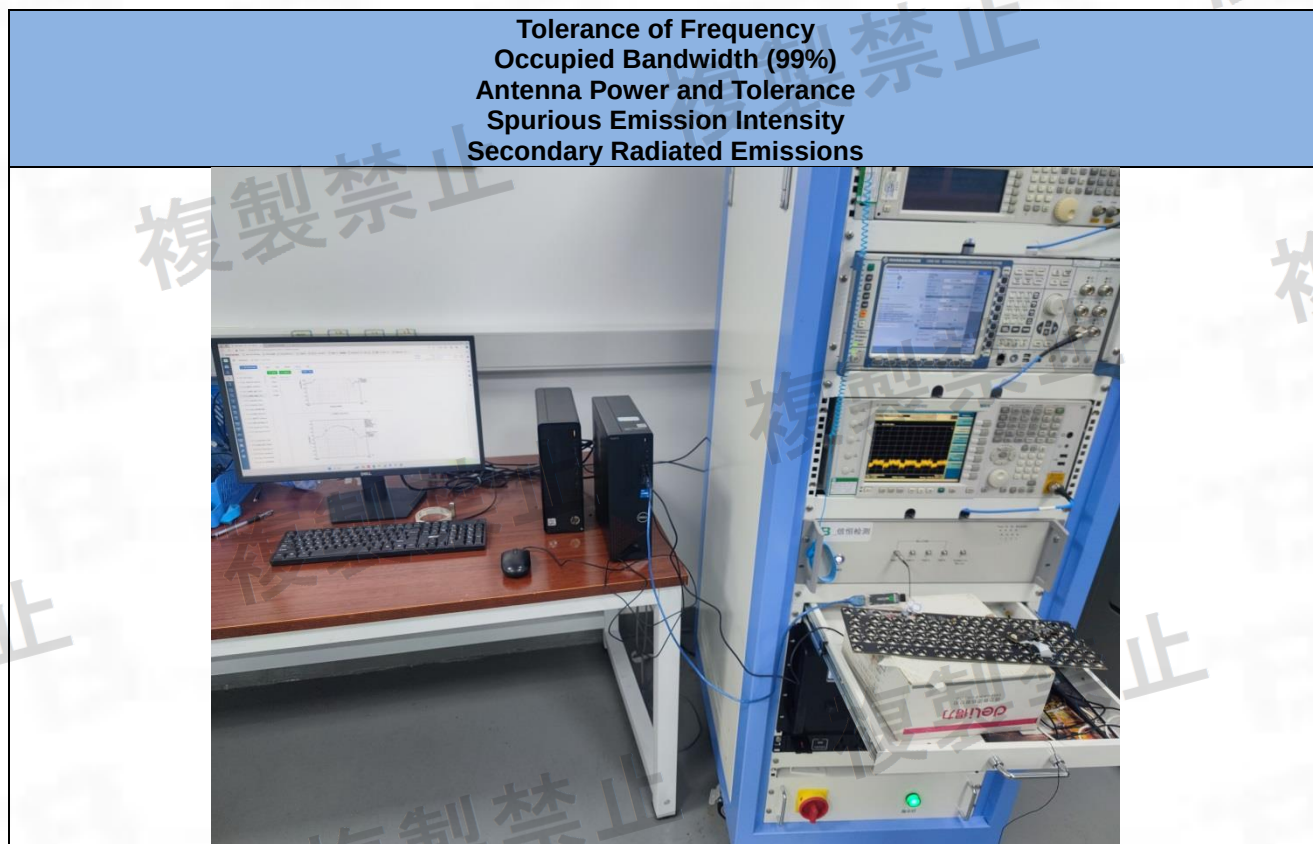
6.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.4 °C
Humidity:	47.5 %
Atmospheric Pressure:	1010 mbar

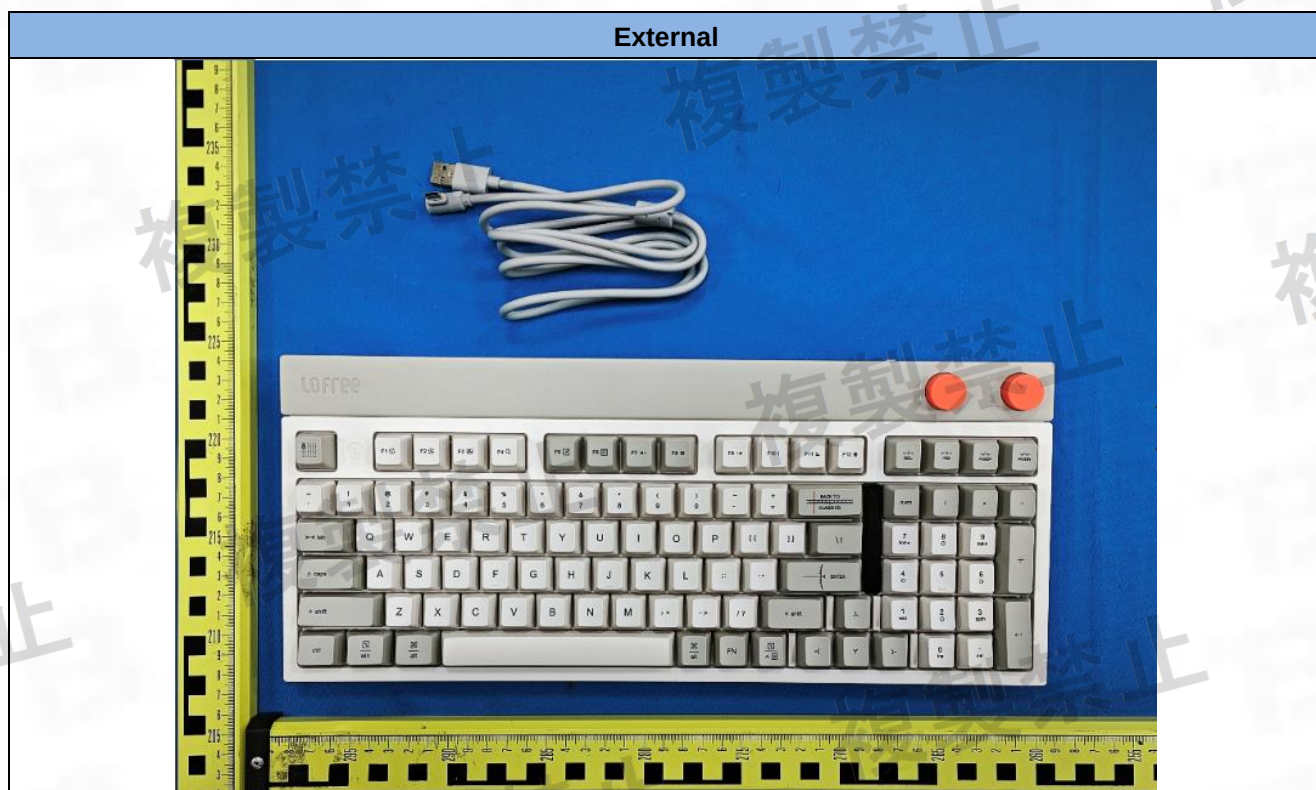
6.5.2 Test Setup Diagram:**6.5.3 Test Data:**

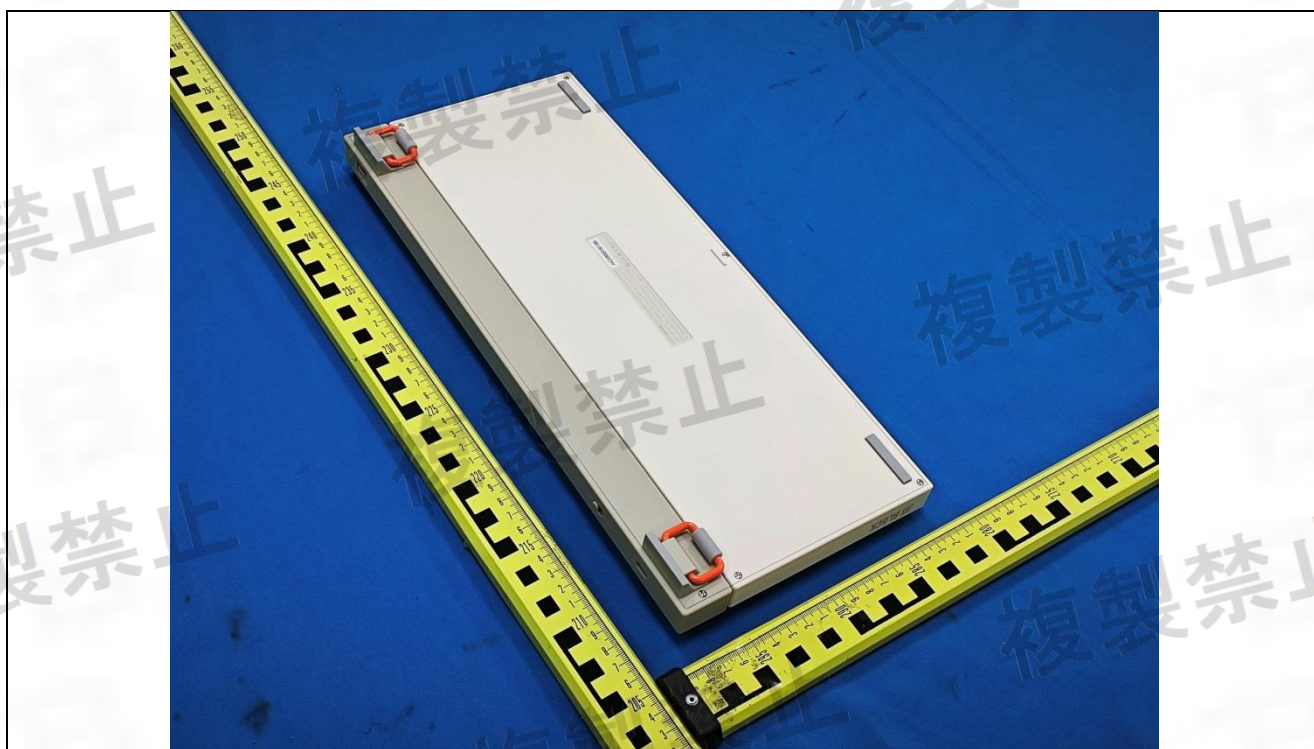
Please Refer to Appendix for Details.

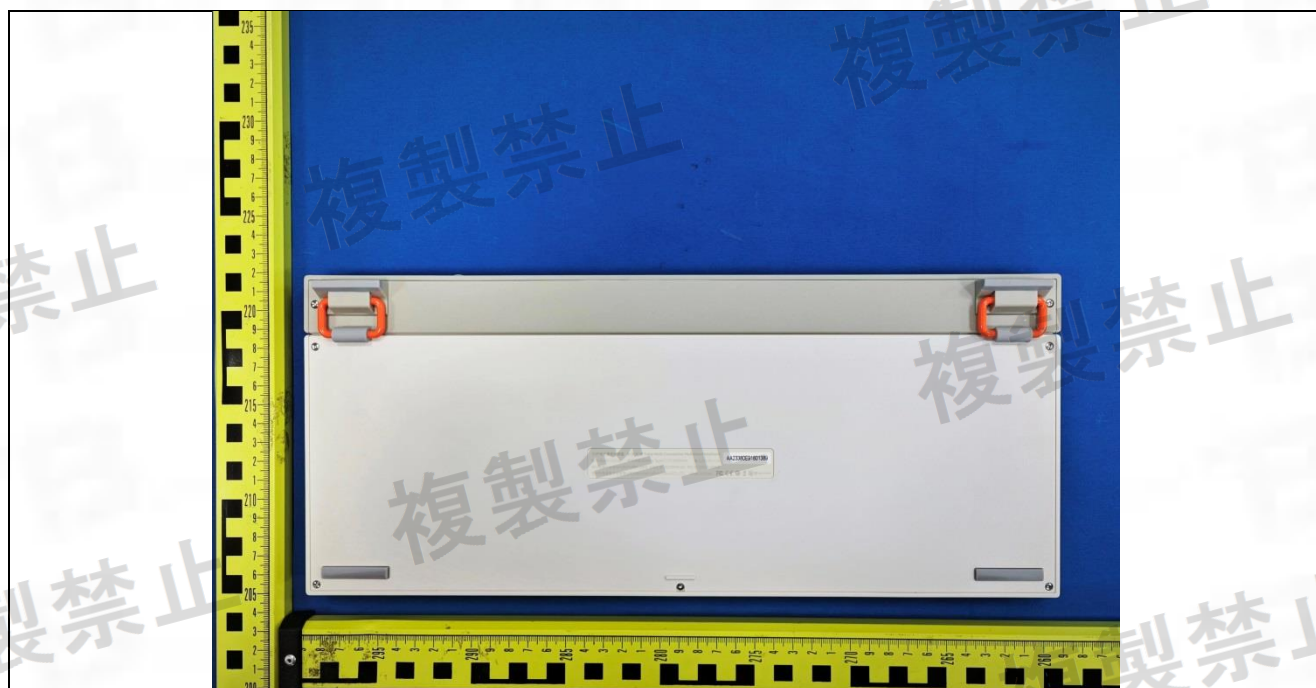
7 Test Setup Photos



8 EUT Constructional Details (EUT Photos)



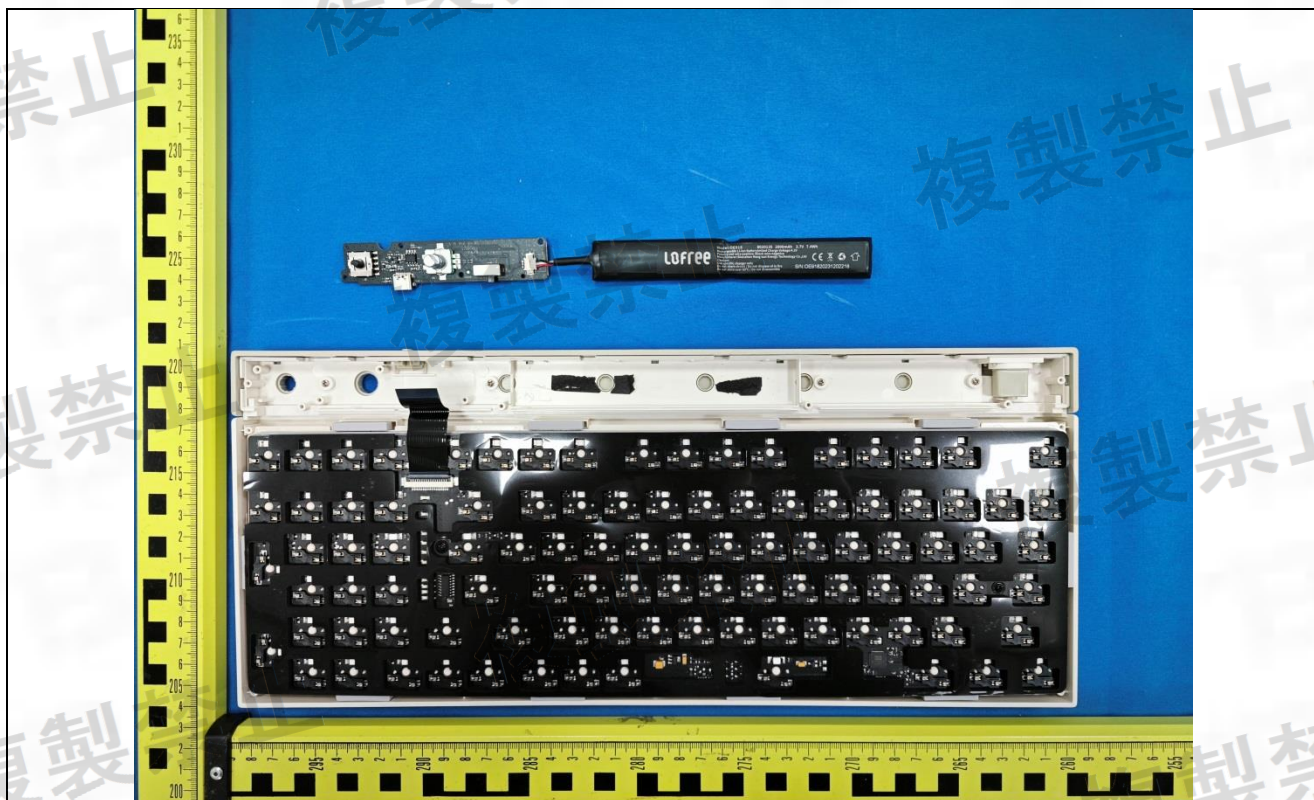




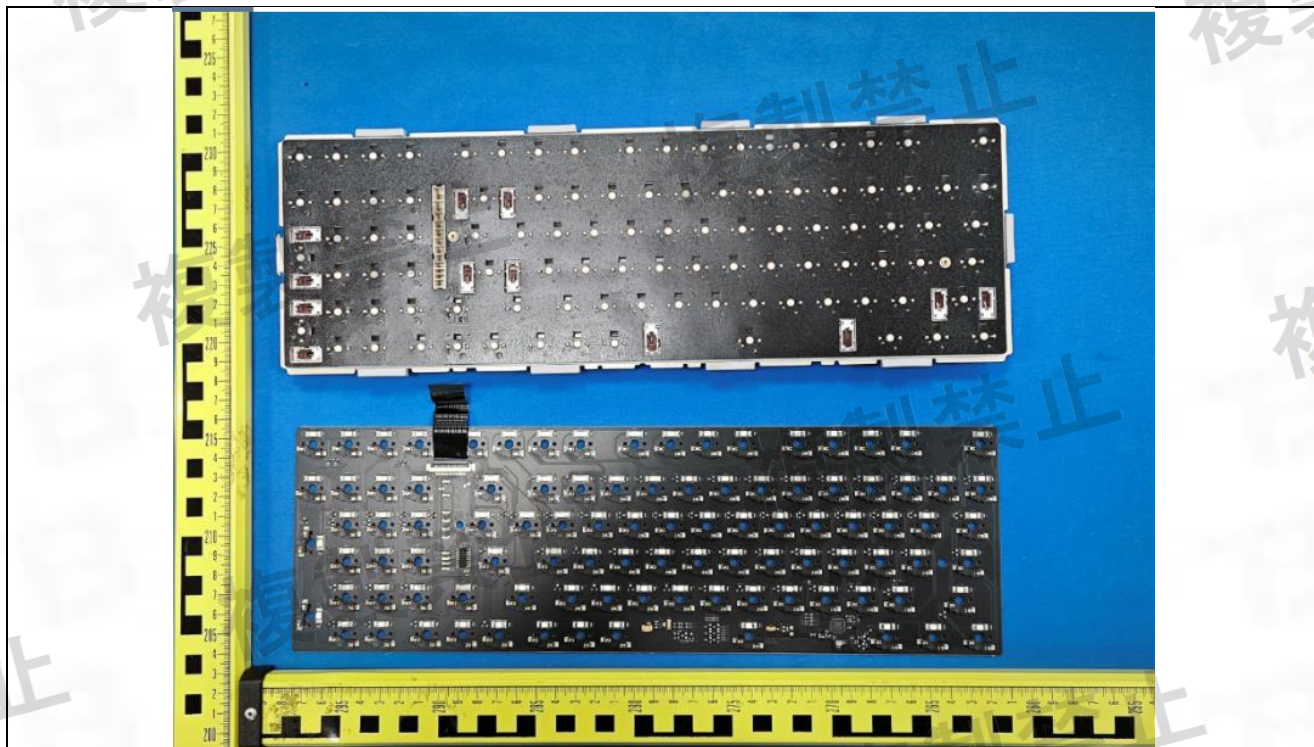
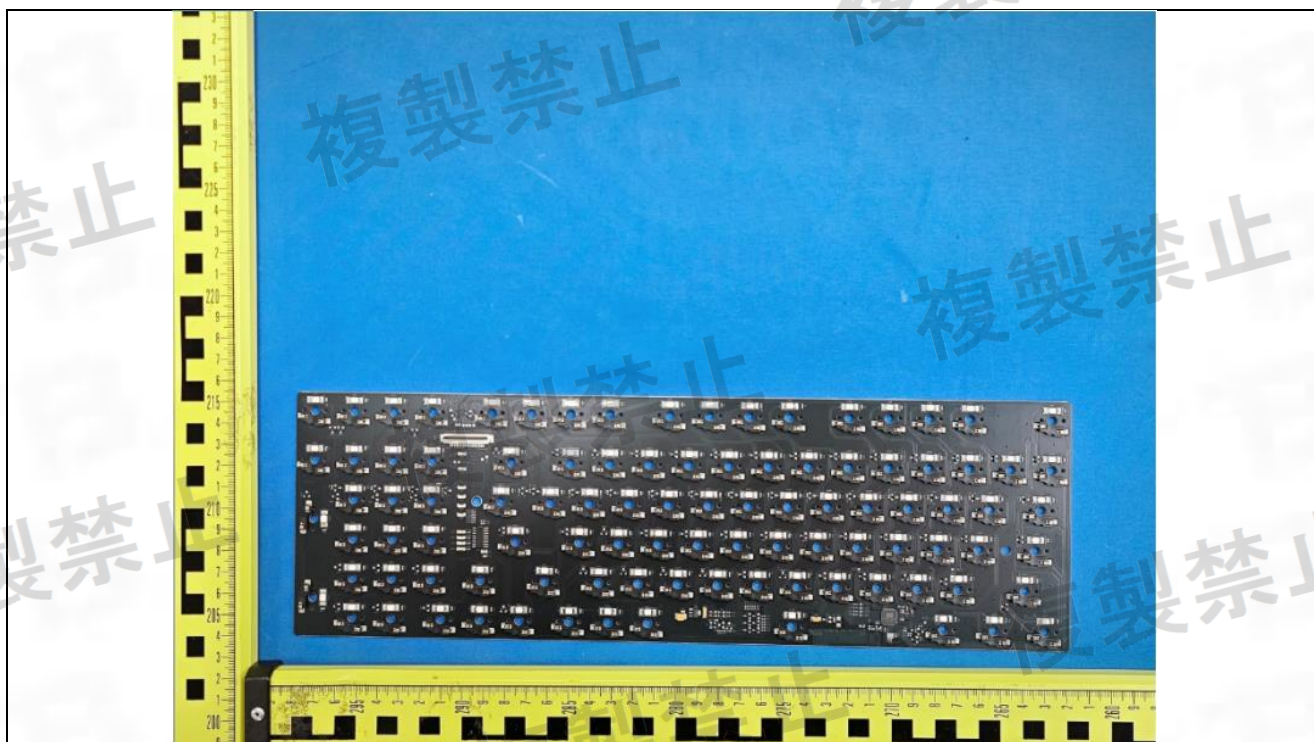


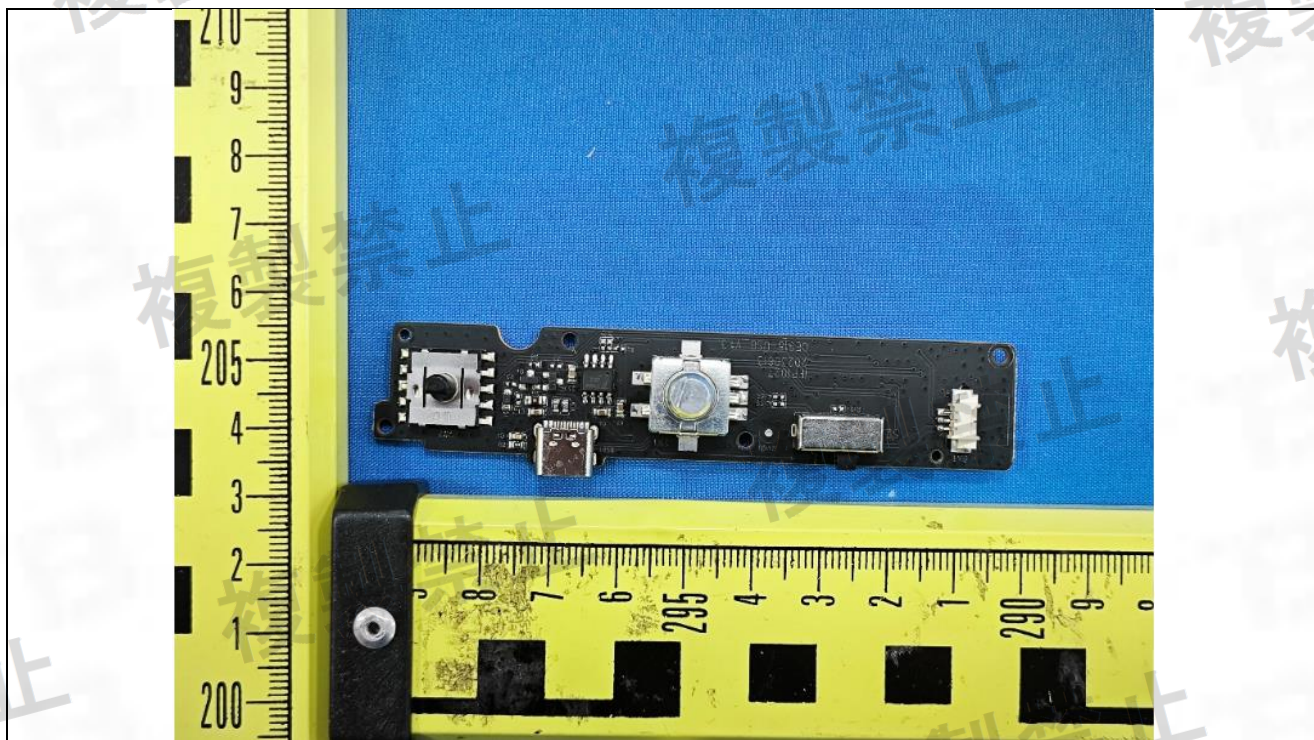
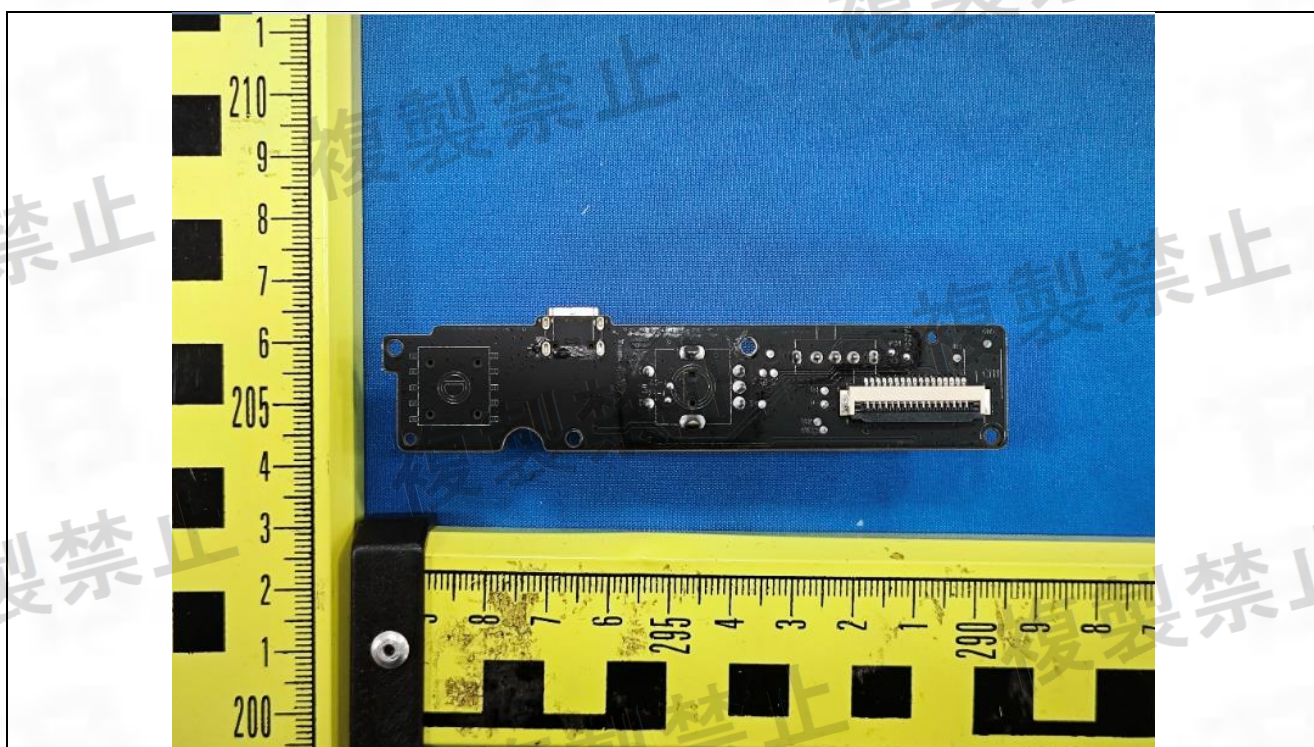


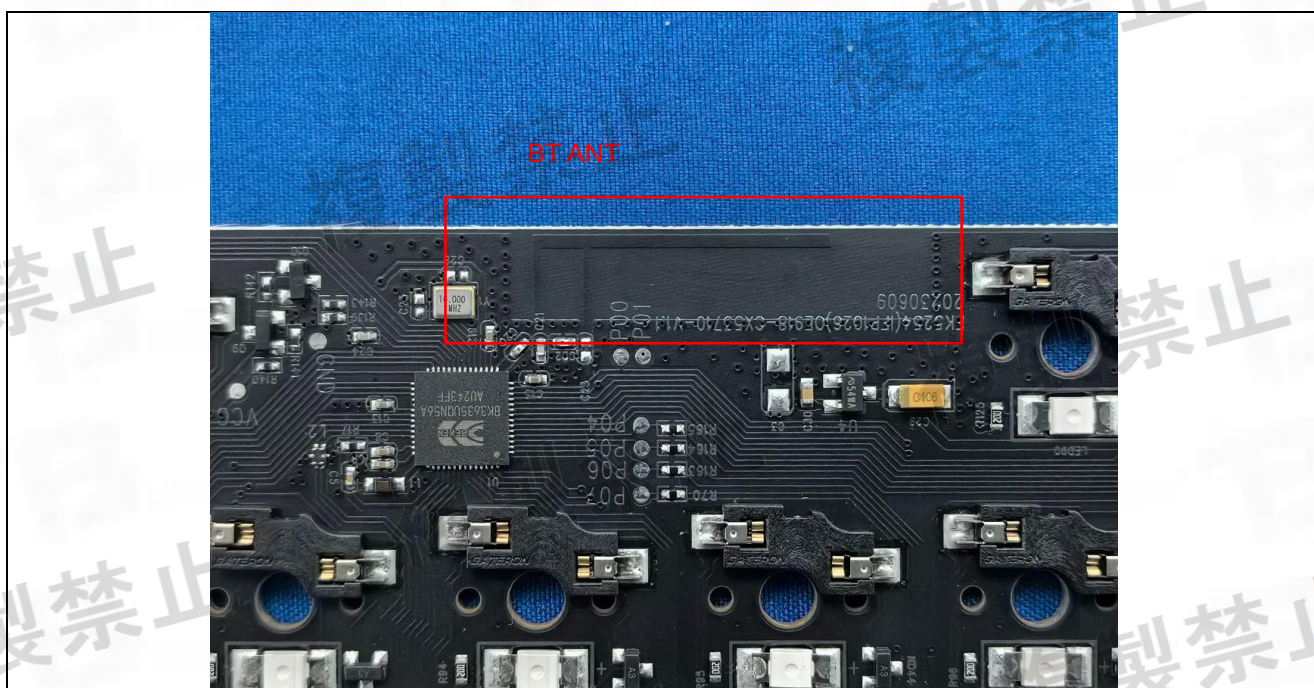
Internal













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Appendix



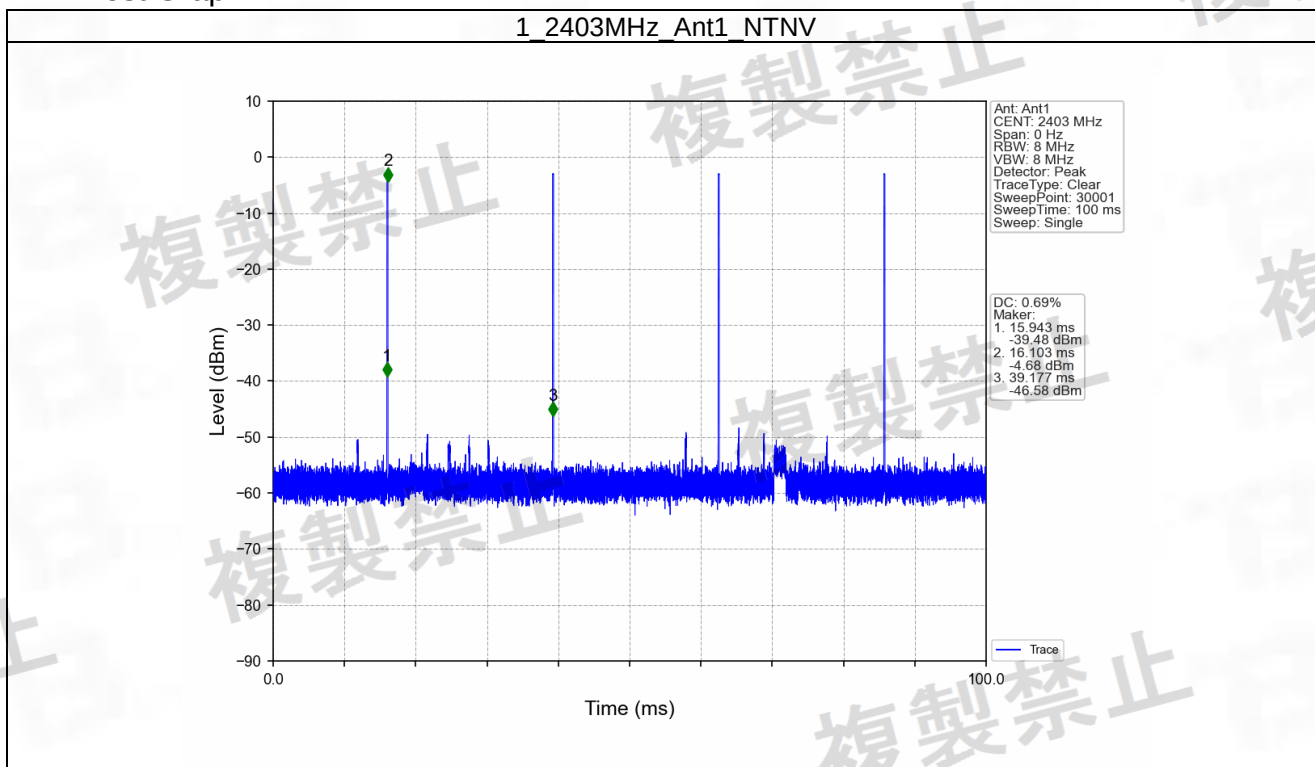
1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

Ant1								
ENV	Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	1	SISO	2403	0.160	23.234	0.69	21.62	0.01

1.1.2 Test Graph



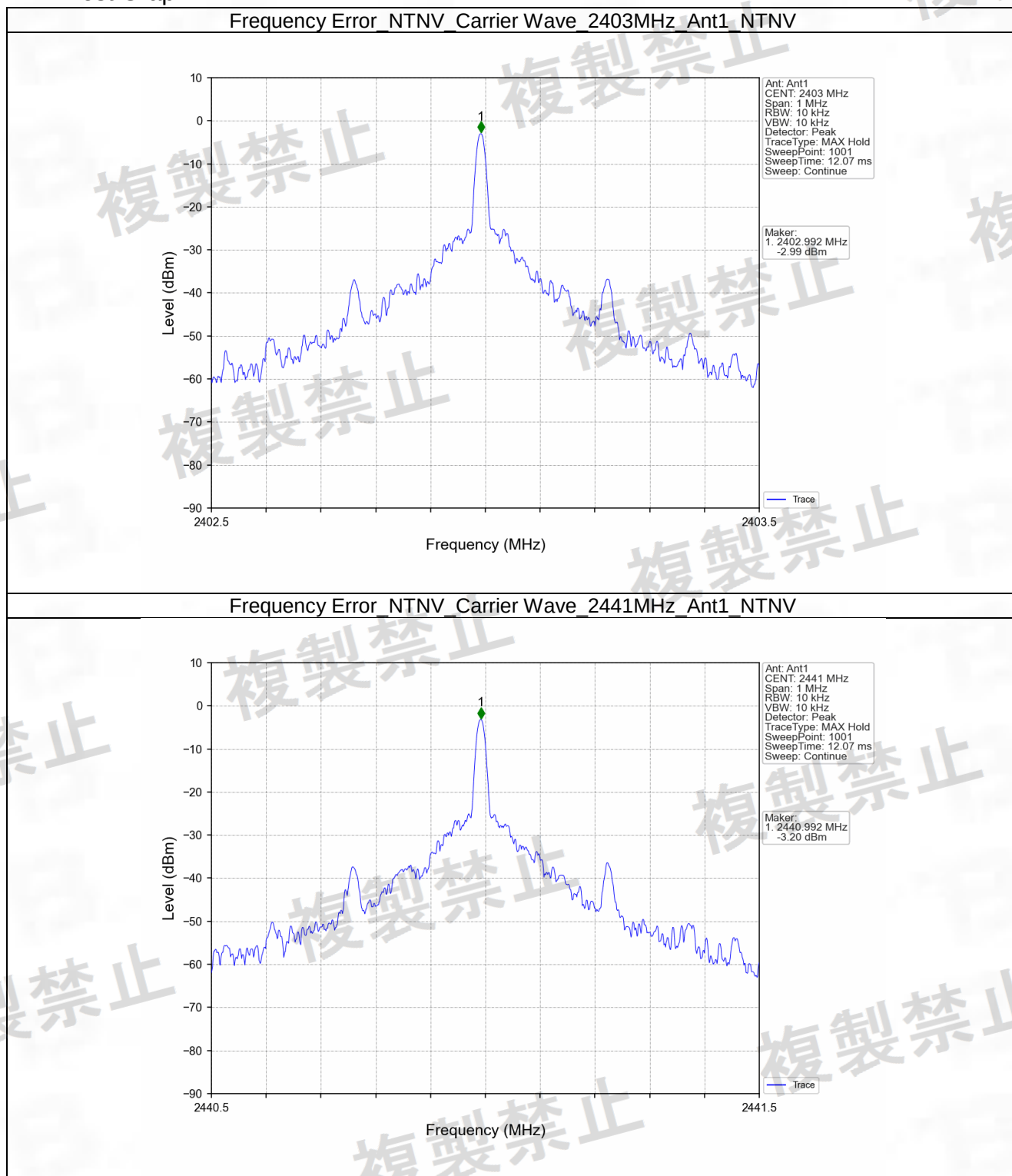
2. Frequency Error

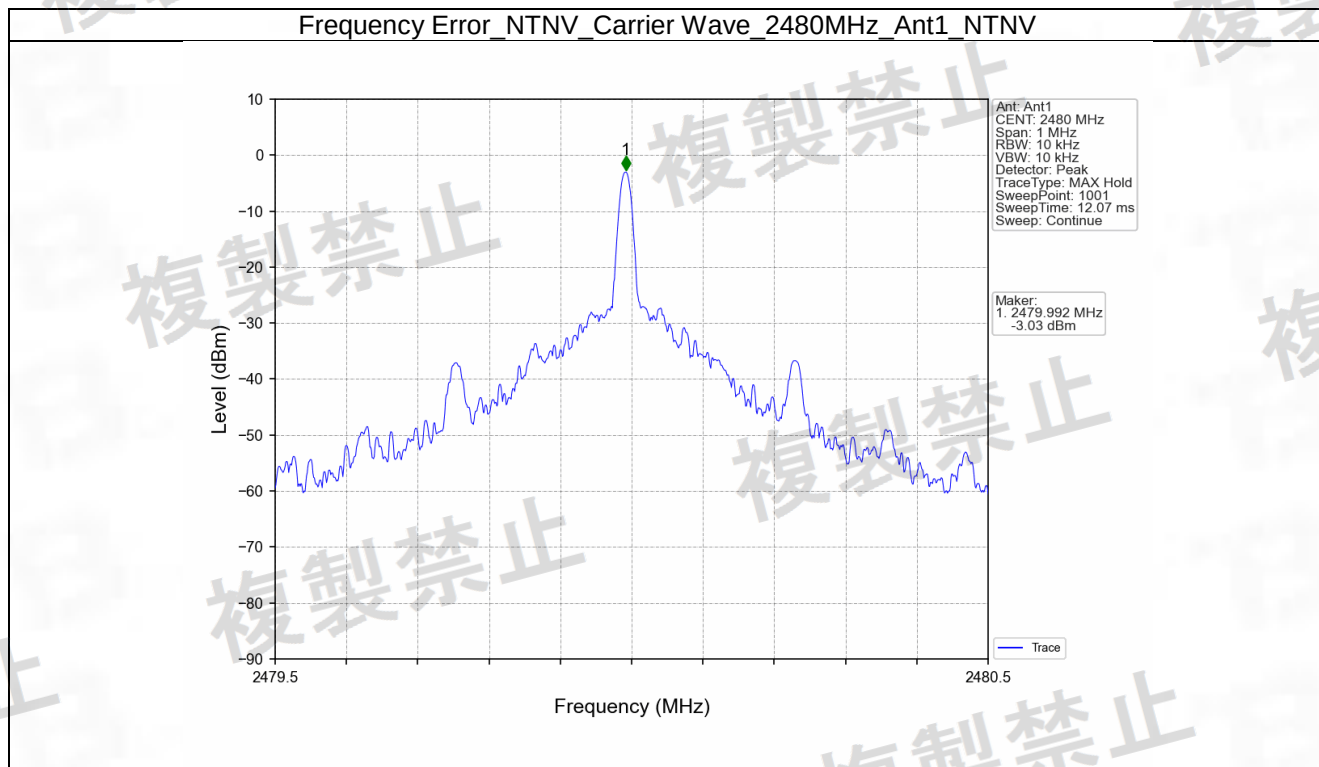
2.1 Ant1

2.1.1 Test Result

Ant1							
ENV	Mode	TX Type	Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)		Verdict
					Result	Limit	
NTNV	Carrier Wave	SISO	2403	2402.992	-3.33	-50 to 50	Pass
			2441	2440.992	-3.28	-50 to 50	Pass
			2480	2479.992	-3.23	-50 to 50	Pass

2.1.2 Test Graph







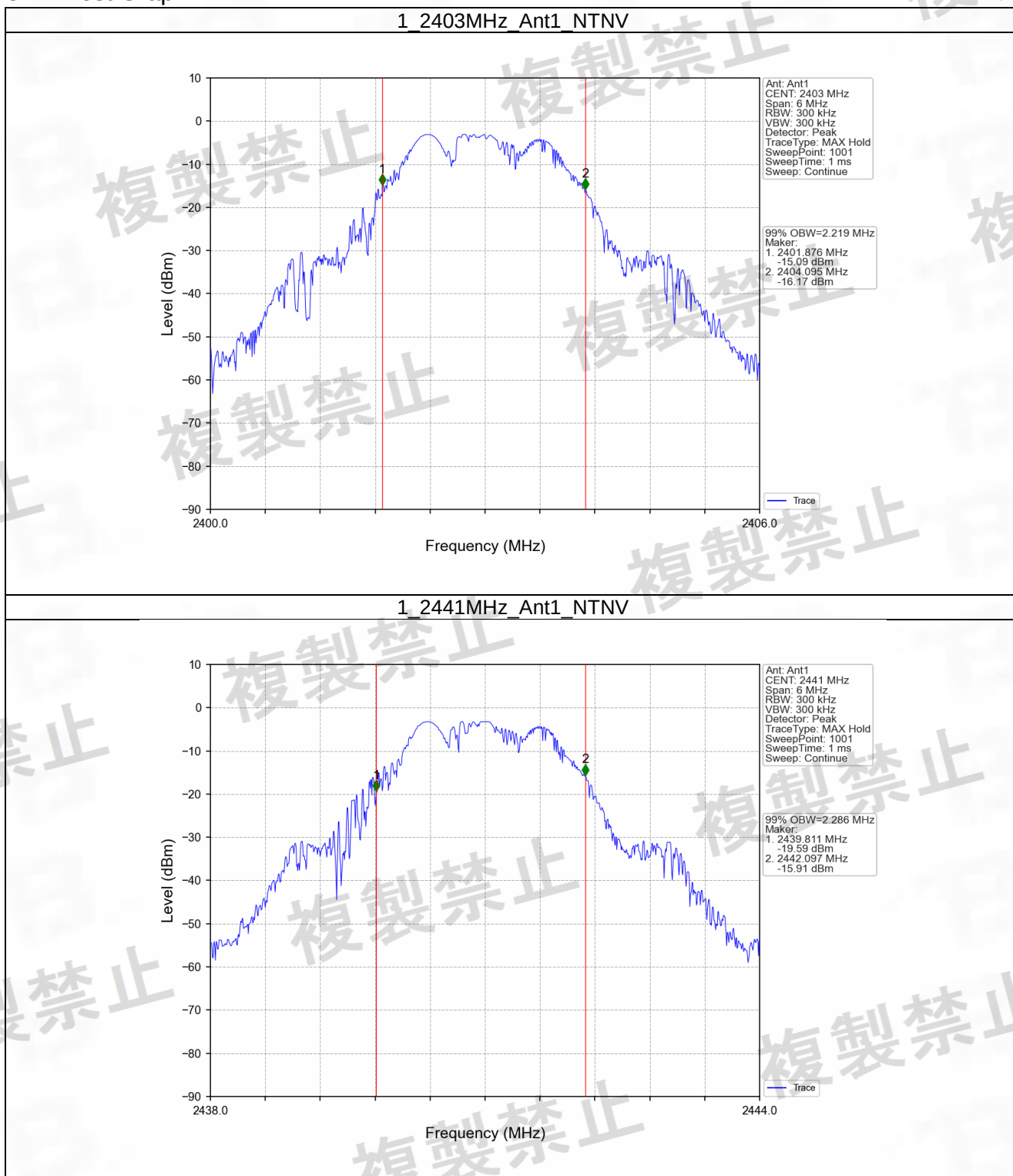
3. Occupied Bandwidth

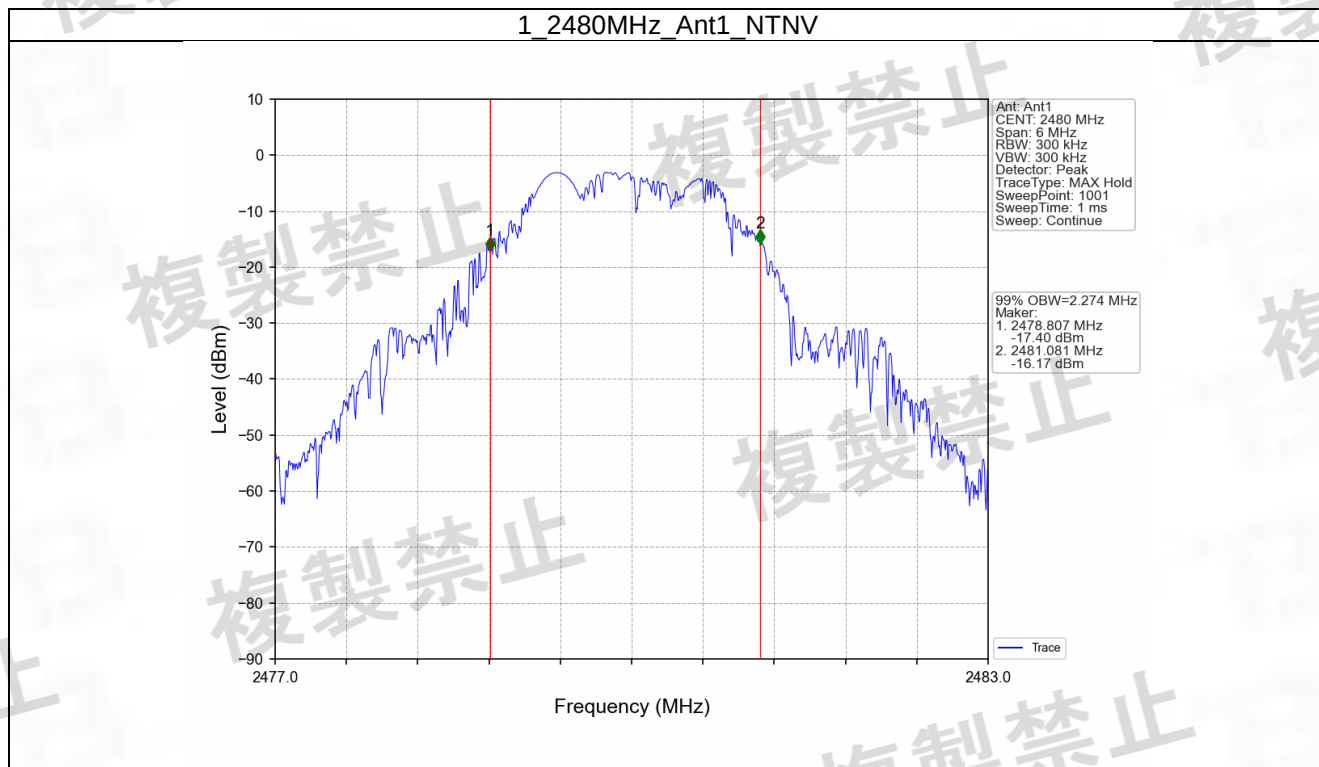
3.1 OBW

3.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
				ANT1	Limit	
NTNV	1	SISO	2403	2.219	≤ 26	Pass
			2441	2.286	≤ 26	Pass
			2480	2.274	≤ 26	Pass

3.1.2 Test Graph





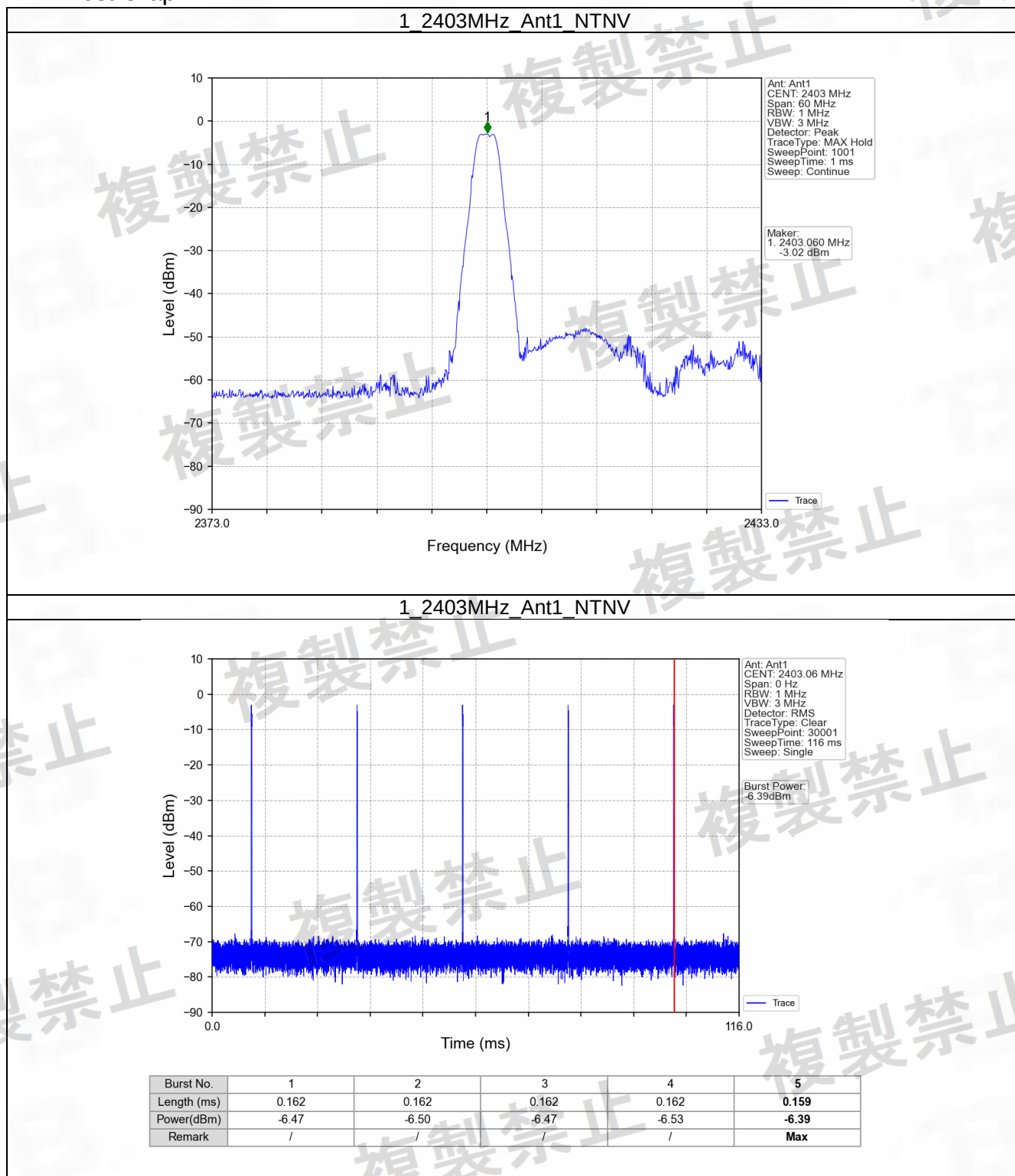
4. Antenna Power

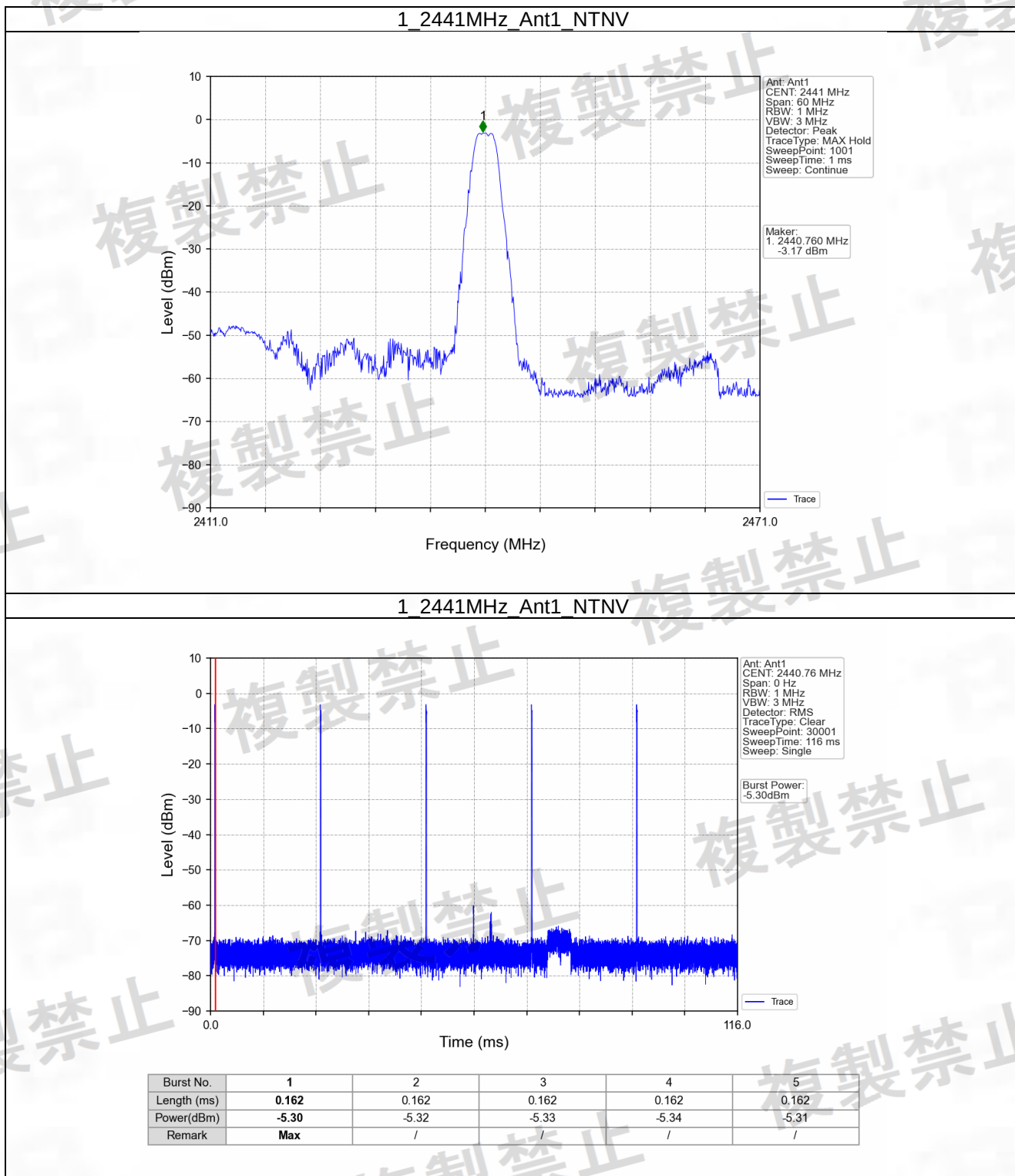
4.1 Power

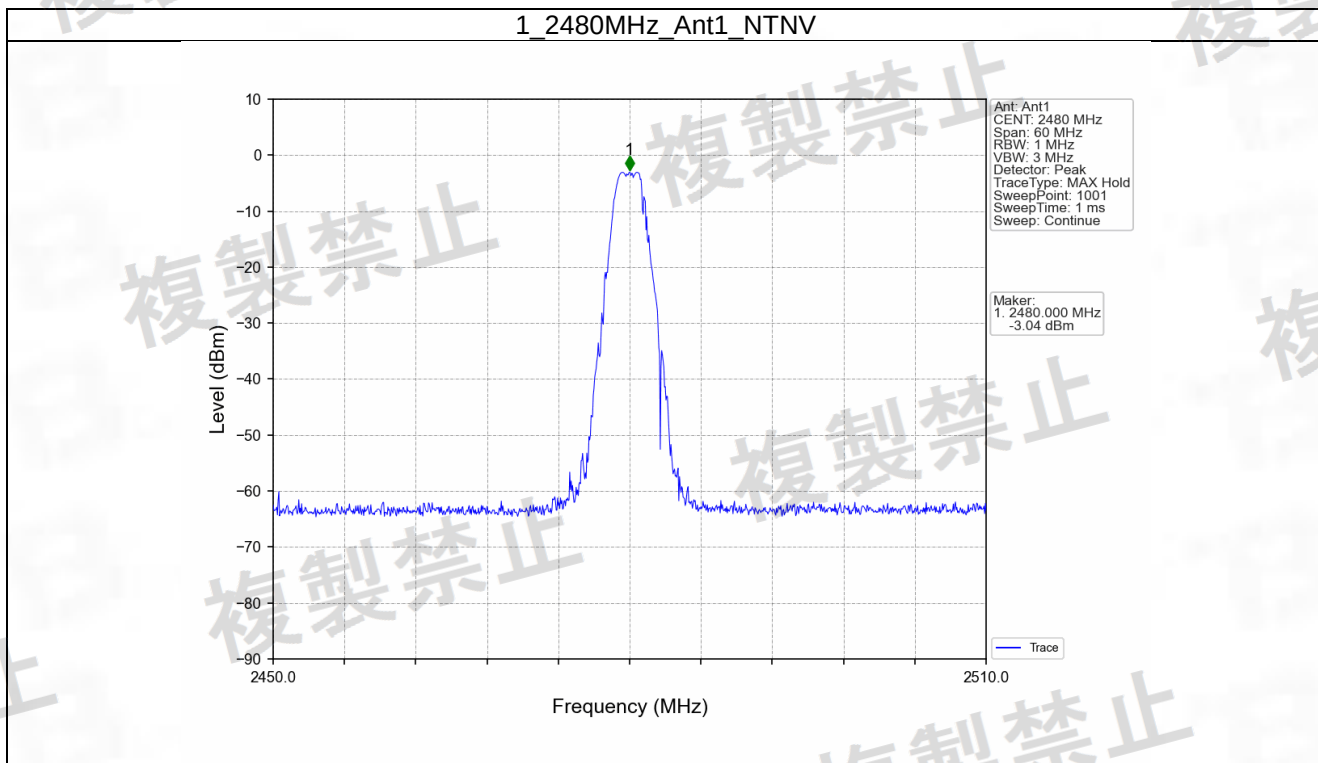
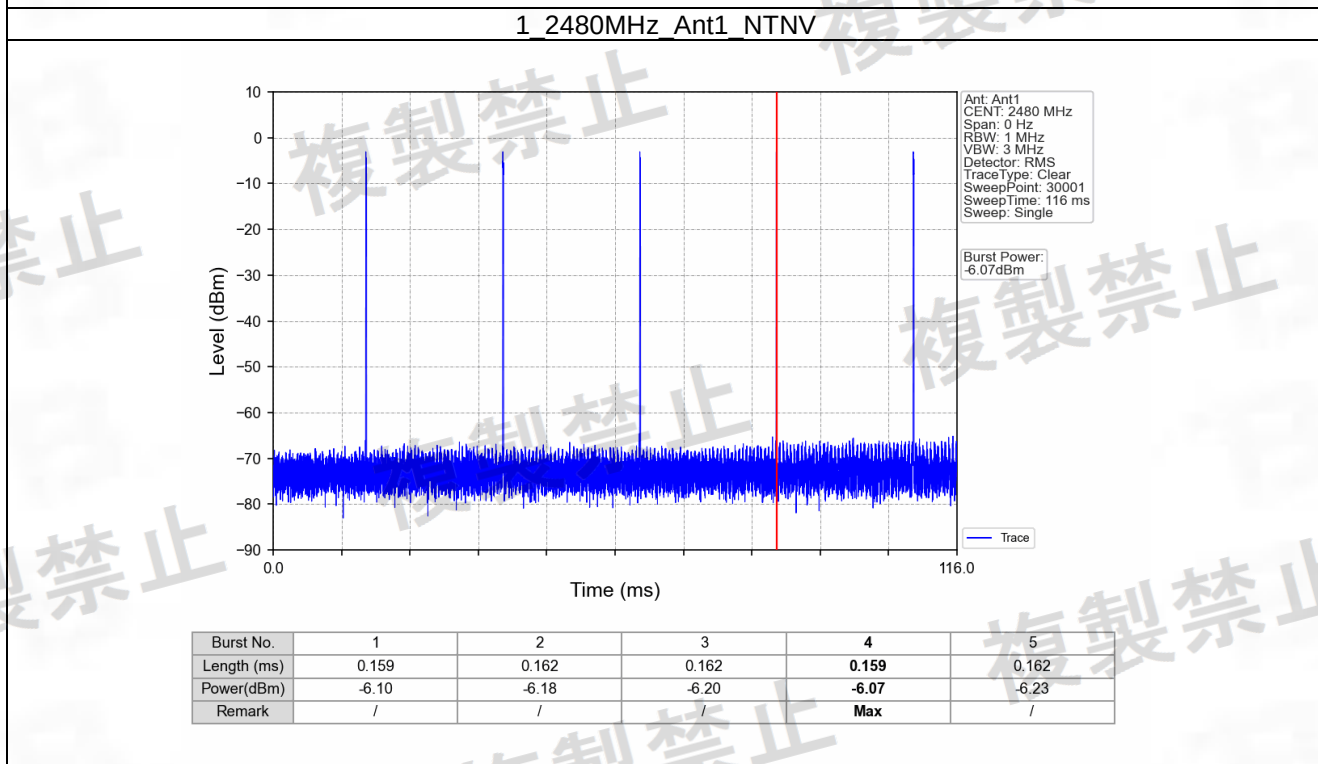
4.1.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	ANT	Antenna Power (mW)		Nominal Power (mW)	Tolerance (%)		Verdict
					Measured	Limit		Measured	Limit	
NTNV	1	SISO	2403	1	0.229	≤ 10.00	0.430	-46.74	-80 to 20	Pass
			2441	1	0.295	≤ 10.00	0.430	-31.40	-80 to 20	Pass
			2480	1	0.247	≤ 10.00	0.430	-42.56	-80 to 20	Pass

4.1.2 Test Graph







4.2 EIRP

4.2.1 Test Result

ENV	Mode	TX Type	Frequency (MHz)	ANT	Gain (dBi)	EIRP (mW)		Verdict
						Result	Limit	
NTNV	1	SISO	2403	1	-2.39	0.132	Only For Report	Pass
			2441	1	-2.39	0.170	Only For Report	Pass
			2480	1	-2.39	0.142	Only For Report	Pass

5. Spurious Emission Intensity

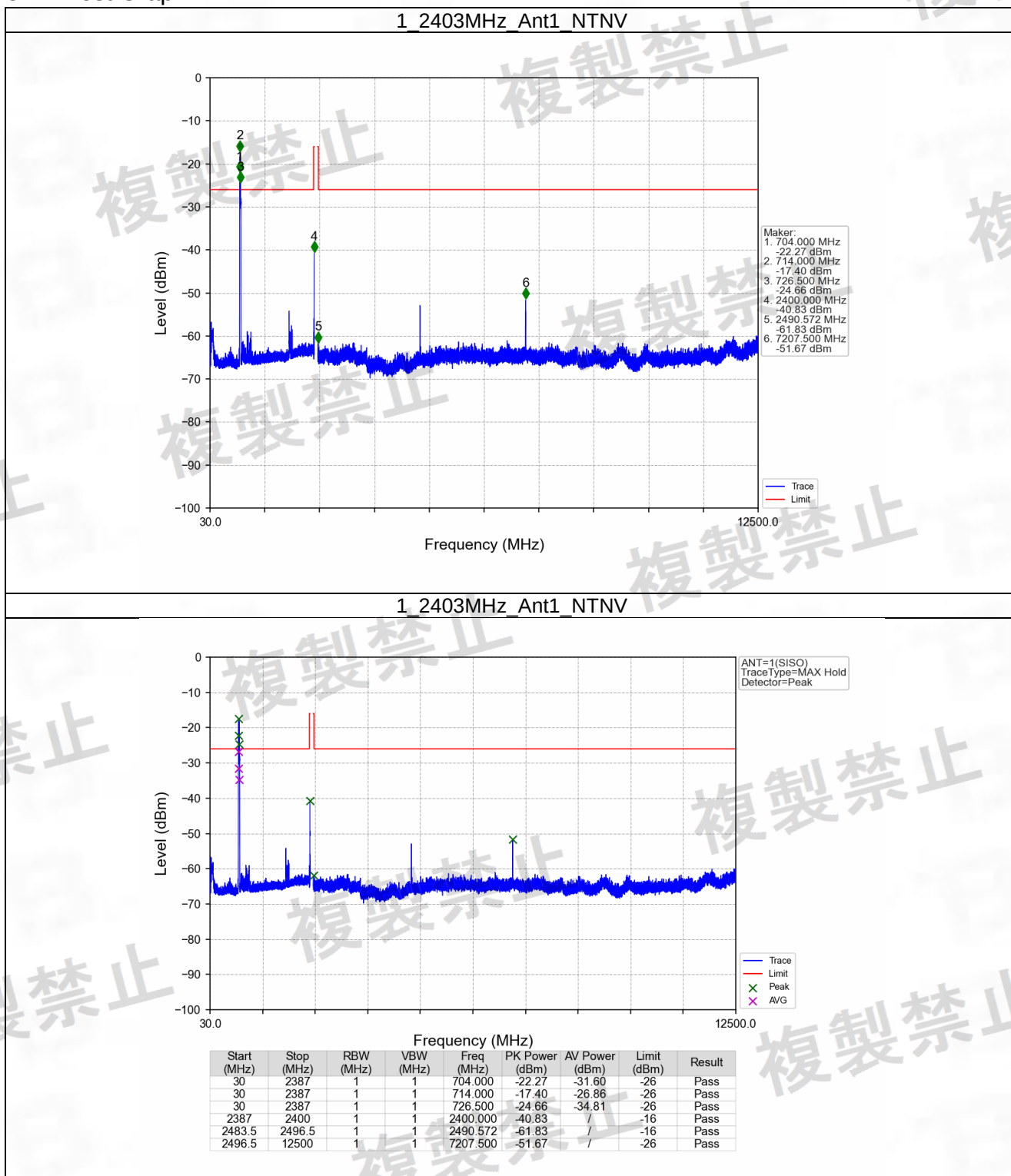
5.1 TxSe

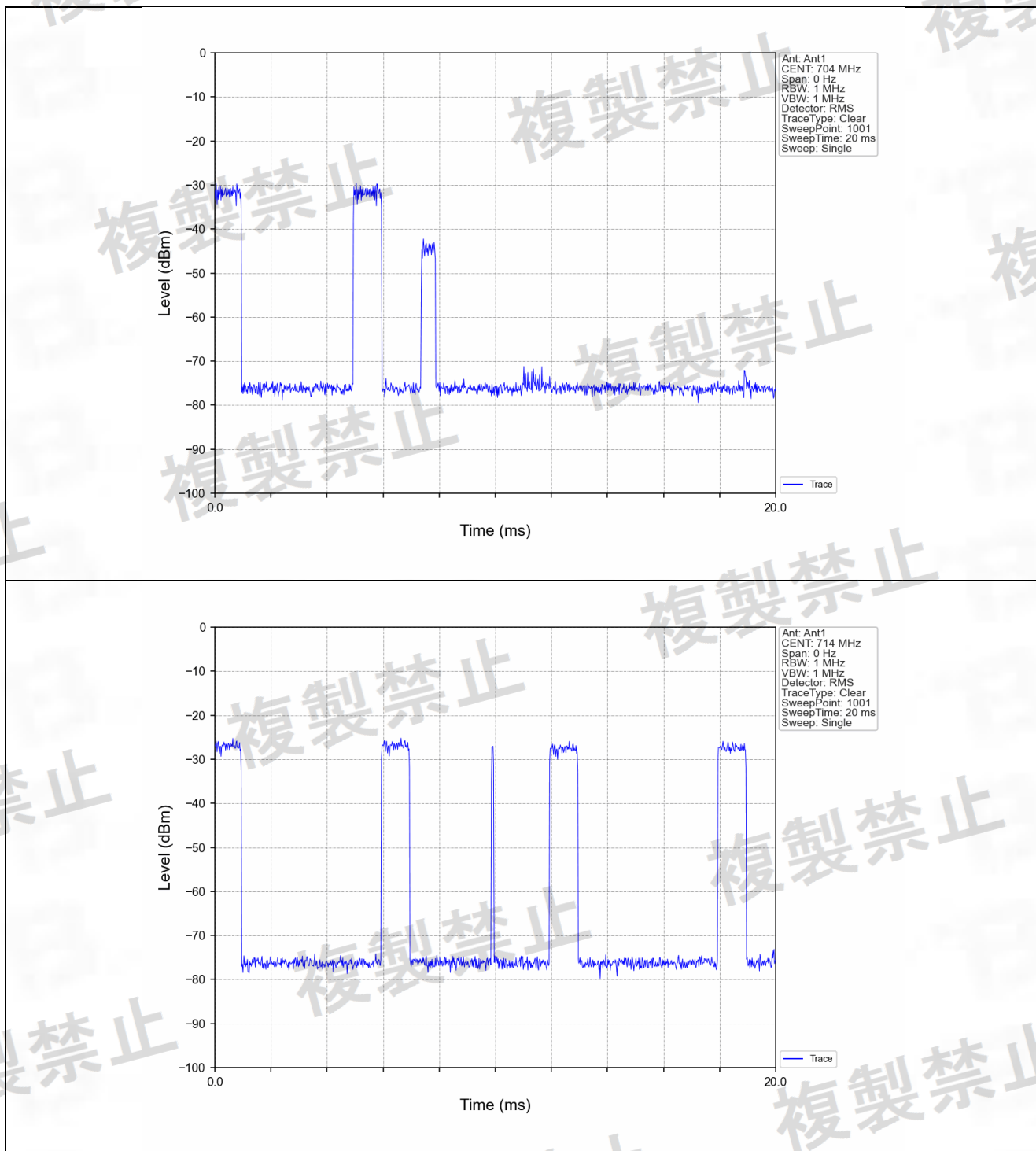
5.1.1 Test Result

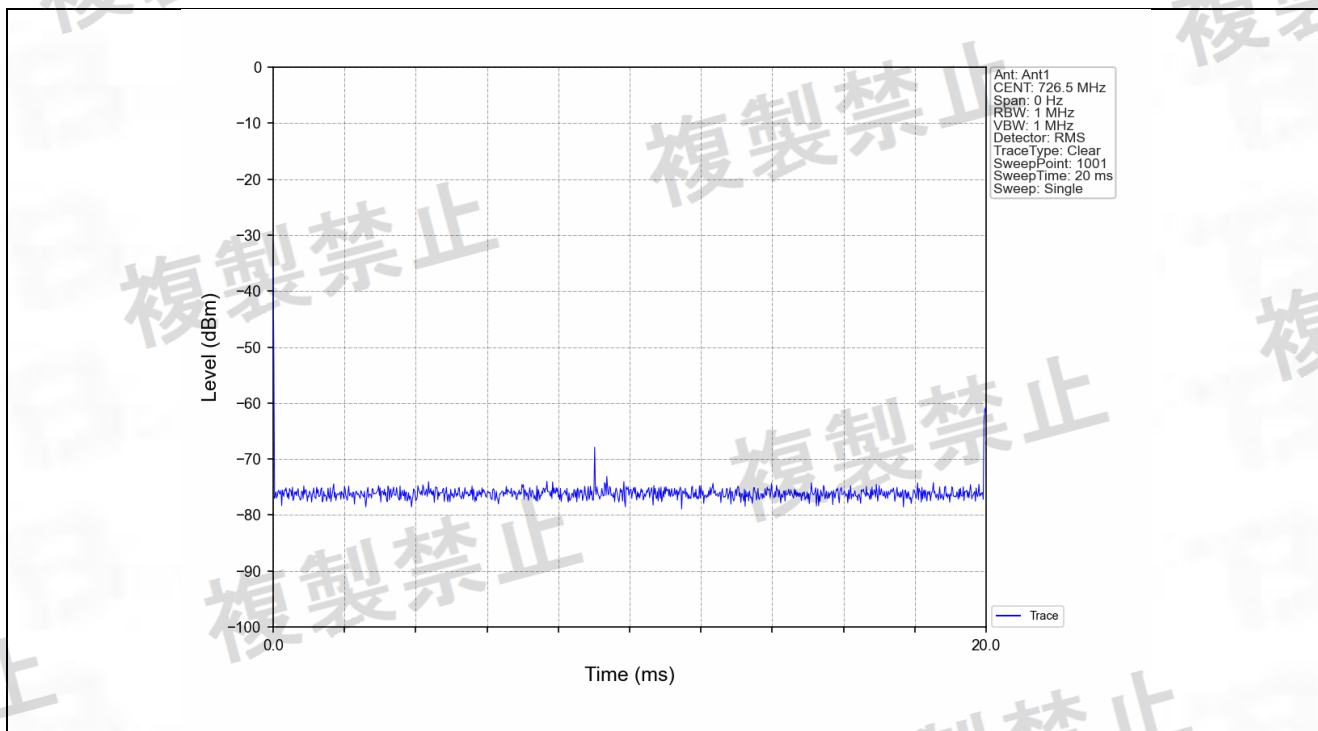
ENV	Mode	Tx Type	Frequency (MHz)	ANT	Test Result	Limit	Verdict
NTNV	1	SISO	2403	1	Refer To Test Graph		Pass
			2441	1	Refer To Test Graph		Pass
			2480	1	Refer To Test Graph		Pass

"Note: The graphs just show the test results at 1MHz RBW, expressed in dBm units, which has the same meaning as dBm/MHz."

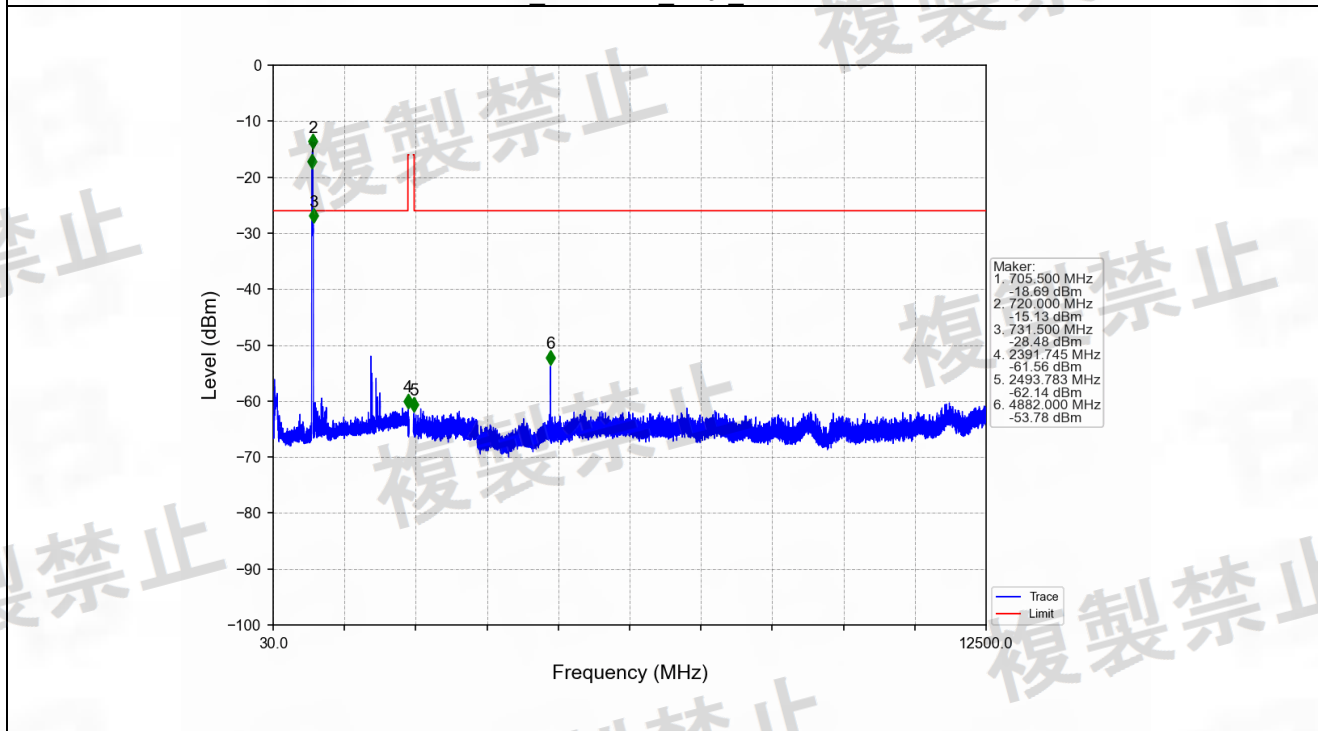
5.1.2 Test Graph

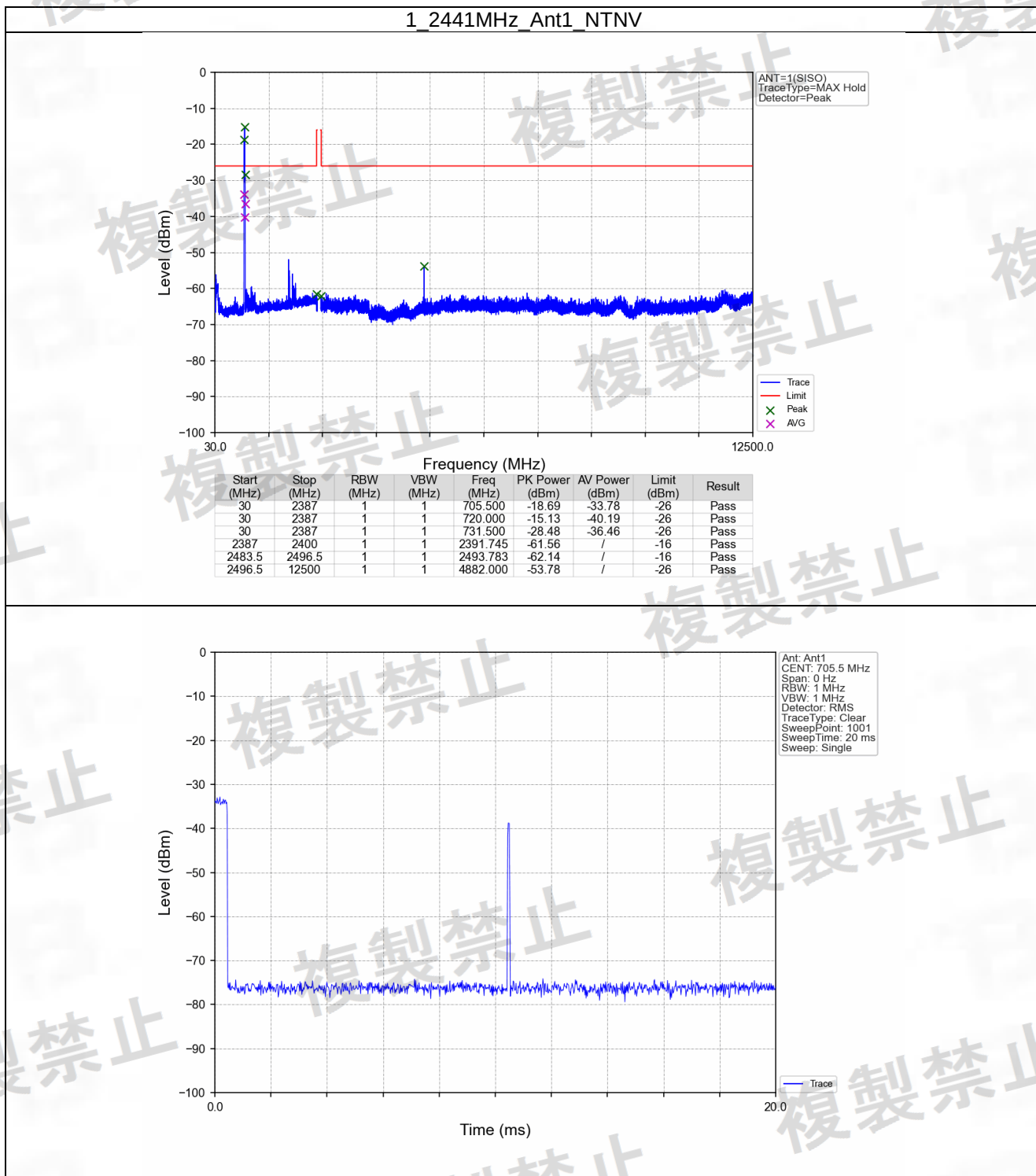


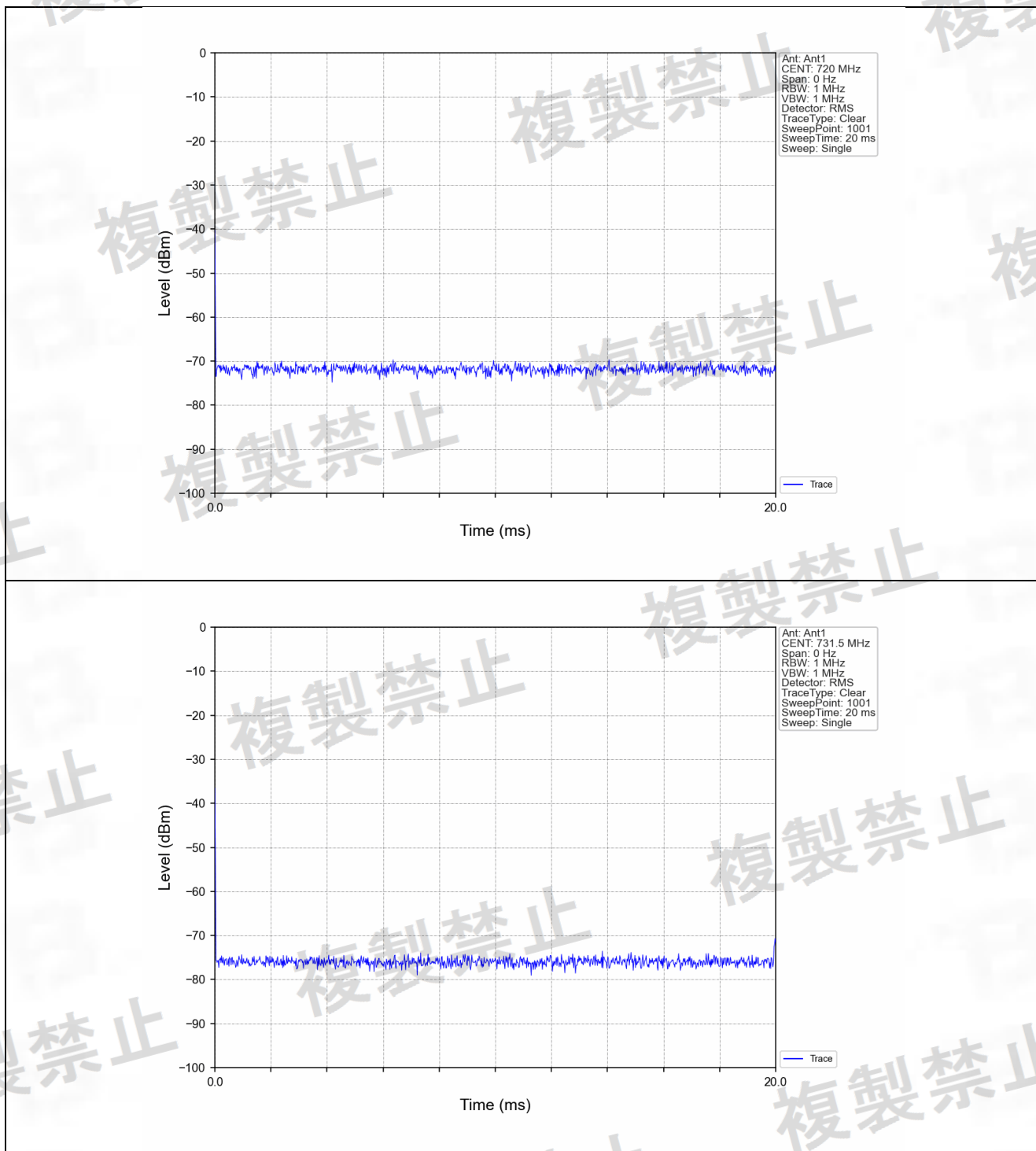


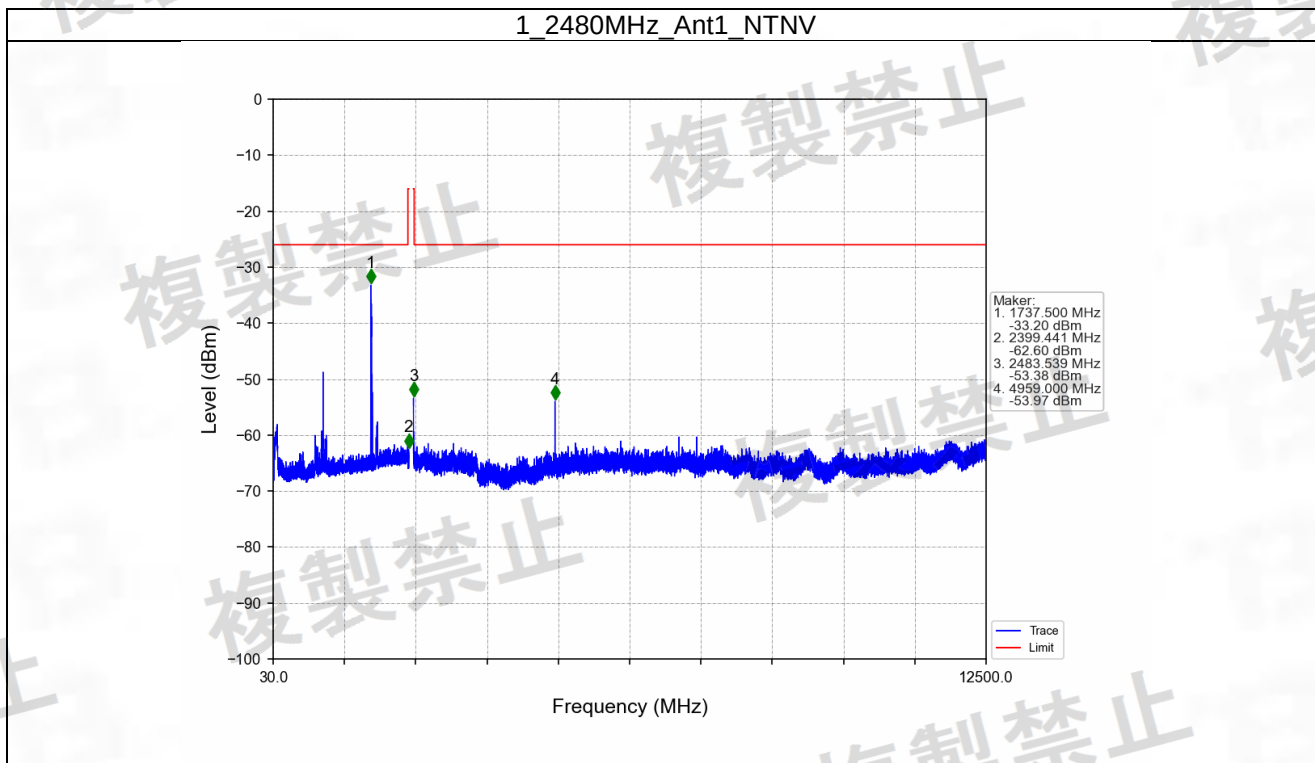
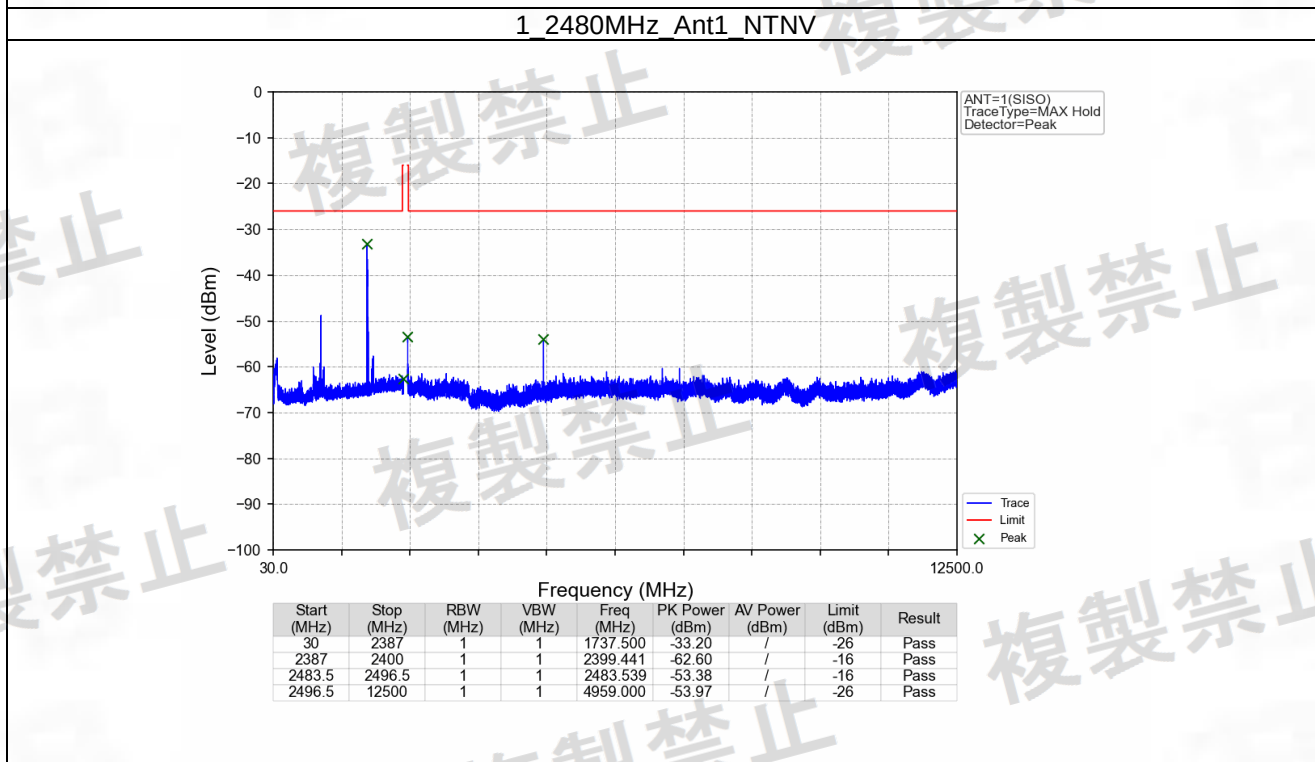


1 2441MHz_Ant1_NTNV









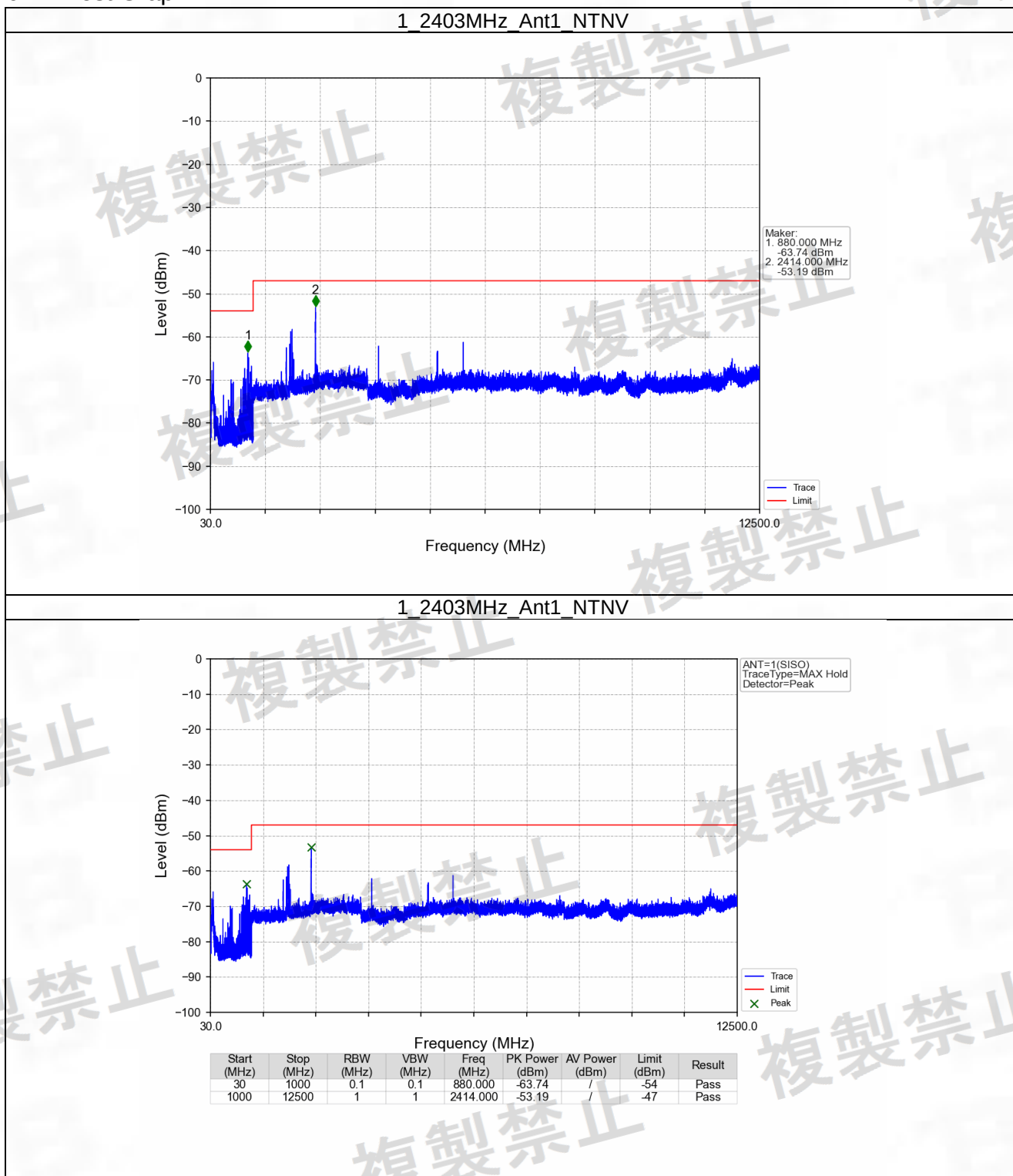
6. Secondary Radiated Emission

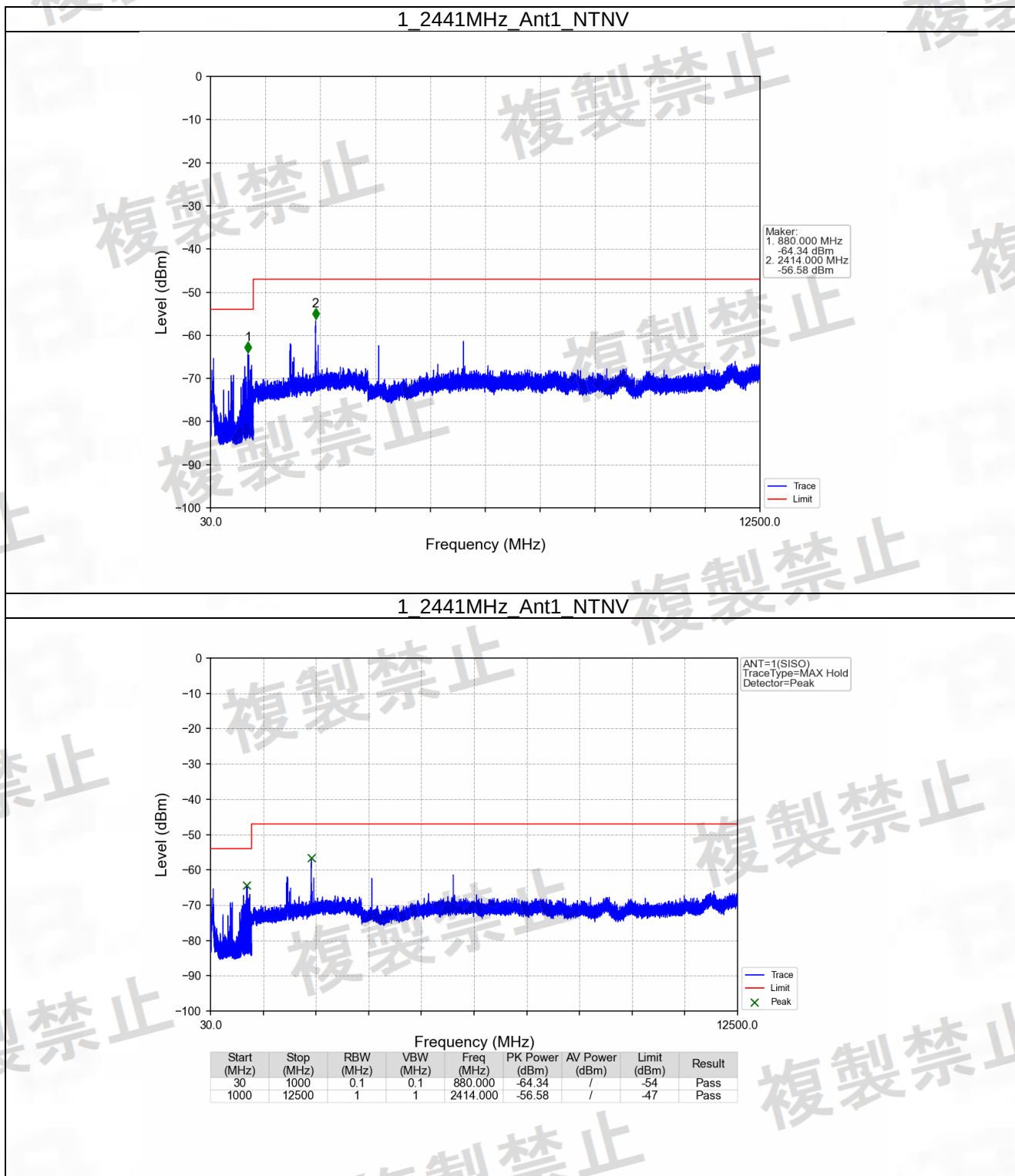
6.1 RxSe

6.1.1 Test Result

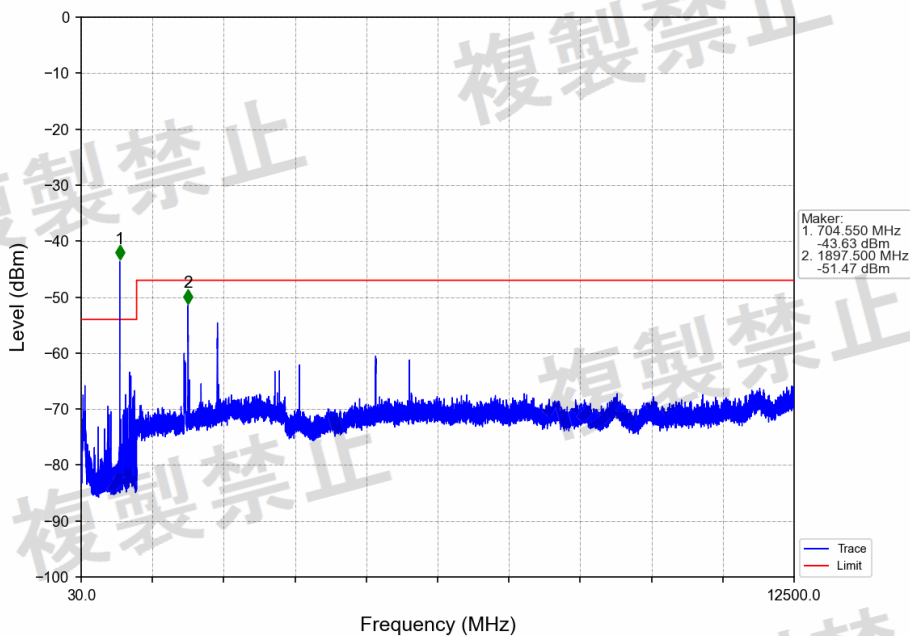
ENV	Mode	TX Type	Frequency (MHz)	ANT	Test Result	Limit	Verdict
NTNV	1	SISO	2403	1	Refer To Test Graph		Pass
			2441	1	Refer To Test Graph		Pass
			2480	1	Refer To Test Graph		Pass

6.1.2 Test Graph

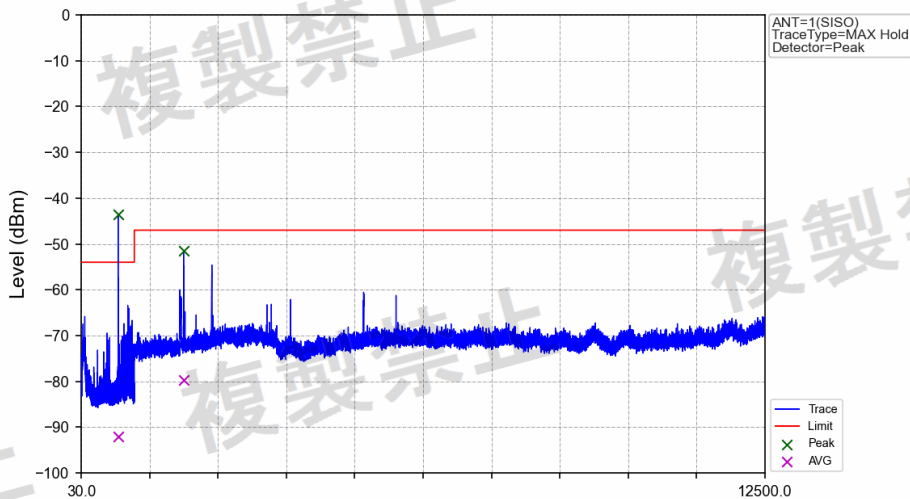




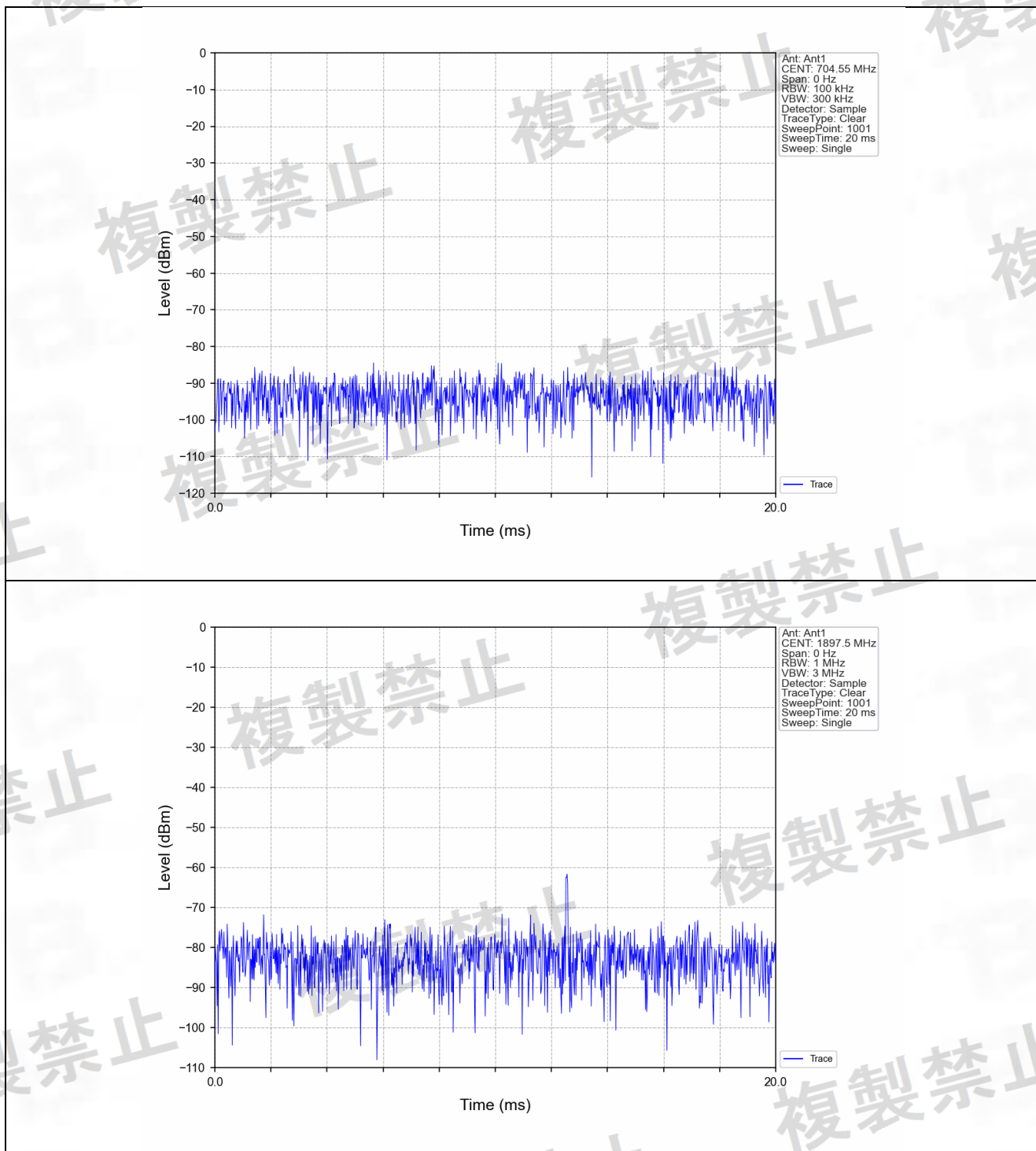
1_2480MHz_Ant1_NTNV



1_2480MHz_Ant1_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	704.550	-43.63	-92.08	-54	Pass
1000	12500	1	1	1897.500	-51.47	-79.73	-47	Pass





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-- END OF REPORT --