

MIC public notice 88

TEST REPORT

Client Name : Shenzhen Xiaohu Xingtong Technology Co., Ltd.

Address : Room 1209, Yichuang International Center, Building 2B, No. 8, Golf Avenue, Guangpei Community, Guanlan Street, Longhua District, Shenzhen, China

Product Name : XTEINK X4 Classic

Test Model No. : XTEINK X4 Classic

Report No. : CCTI260518183W3

Issued Date : Jul. 10, 2026

Prepared By : Shenzhen CCTI Technology Co., Ltd.

Address : A1-1, Building B1&B2, No.45 Gangtuo Road, Bogang District, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

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Scan code for report

TEST REPORT VERIFICATION

Applicant : Shenzhen Xiaohu Xingtong Technology Co., Ltd.
Address : Room 1209, Yichuang International Center, Building 2B, No. 8, Golf Avenue,
Guangpei Community, Guanlan Street, Longhua District, Shenzhen, China
Manufacturer : Shenzhen Xiaohu Xingtong Technology Co., Ltd.
Address : Room 1209, Yichuang International Center, Building 2B, No. 8, Golf Avenue,
Guangpei Community, Guanlan Street, Longhua District, Shenzhen, China
Product Name : XTEINK X4 Classic
Test Model No. : XTEINK X4 Classic
Series No. : N/A
Trade Mark : N/A
Power Supply : Input: DC 5V From Adapter, DC 3.8V From Battery
Test Date : Jun. 25, 2026 to Jul. 10, 2026

Test Standard(s) :

MIC public notice 88:2004, annex 43 and annex 1, Article 2, Paragraph 1, Item 19

Test Result : PASS

The device described above is tested by CCTI to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the MIC public notice 88:2004, annex 43 and annex 1 limits both conducted and radiated emissions. The results shown in this test report refer only to the sample(s) tested unless other wise stated and the sample(s) are retained for 30 days only.

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Producer By : 
(Betty Liang / Engineer)

Date : Jul. 10, 2026

Authorized Signer : 
(Corey Mao / Manager)

Date : Jul. 10, 2026

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Revision History

Revision	Description	Issued Data	Remark
V0	Initial Test Report Release	Jul. 10, 2026	Corey Mao

1. TEST SUMMARY

Test procedures according to the technical standards:

MIC Notice No.88 Appendix No. 43

Second-Generation Low-Power Data Communication System/Wireless LAN System.

Clause	Test Item	Result
Transmitter Parameters		
3.2 (2)	Antenna Power	P
3.2 (3)	Tolerances for Antenna Power	P
3.2 (4)	Frequency Tolerance	P
3.2 (7)	Occupied Frequency Bandwidth	P
3.2 (8)	Spread Bandwidth	N/A(3)
3.2 (10)	Number of Carriers	P
3.2 (11)	Dwell Time	N/A(4)
3.2 (6)	Spurious Emissions	P
/	Interference prevention function	P
/	Carrier Sensing function	N/A(5)
/	Equivalent Isotropic Radiated Power	P
/	3dB Beam Bandwidth	N/A(6)
Receiver Parameters		
3.2 (1)	Secondary Radiated Emissions	P

NOTE:

- (1) P is an abbreviation for Pass, F is an abbreviation for Fail, N/A is an abbreviation for Not Applicable.
- (2) Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.
- (3) This test item is only for FHSS products.
- (4) This test item is only for FHSS products.
- (5) Application to transmitting devices which EIRP is less than [2.14dBi antenna power limit] and the shortage of EIRP is compensated by the antenna power. Not applicable to this product. Application to transmitting devices with OFDM modulation and the occupied bandwidth greater than 26MHz.
- (6) The EIRP less than 12.14dBm/MHz.

1.1. Test Facility

Shenzhen CCTI Technology Co., Ltd.

A1-1, Building B1&B2, No.45 Gangtuo Road, Bogang District, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

1.2. Test Uncertainty

Item	MU	Remark
Bandwidth	± 0.20 ppm	/
Antenna Power	± 0.33 dB	/
Frequency Tolerance	± 5.02 ppm	/
Conducted spurious emission	± 0.13 dB	/
Spurious emissions, radiated(>1 G)	± 2.83 dB	/
Spurious emissions, radiated(<1 G)	± 3.01 dB	/
(95% Confidence Levels, $k=2$)		

2. GENERAL INFORMATION

2.1. General Description of EUT

EUT	: XTEINK X4 Classic
Trademark	: N/A
Model Number	: XTEINK X4 Classic
Serial Model	: N/A
Model Difference	: N/A
Power Supply	: Input: DC 5V From Adapter, DC 3.8V From Battery
Radio Technology	: Bluetooth BLE
Operation frequency	: 2402-2480MHz
Channel No.	: 40 Channels
Channel Separation	: 2MHz
Data rate	: 1Mbps/2Mbps
Modulation	: GFSK
Antenna Gain (Peak)	: Maximum Gain is 5.19dBi
Antenna Type	: Internal Antenna
Hardware Version	: V1.0
Software Version	: V1.0
Intend use environment	: Residential, commercial and light industrial environment

Remark:

- (1) XTEINK X4 Classic was selected as the test model and the data have been recorded in this report.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.2. Test Mode

The test software is used to control the operation of the EUT in the continuous transmission mode, and select the test channel and wireless mode:

Tested mode, channel, and data rate information			
Mode	Data rate	Channel	Frequency (MHz)
Carrier Tx Mode	1Mbps/2Mbps	CH0	2402
		CH19	2440
		CH39	2480
GFSK Rx Mode		CH0	2402
		CH19	2440
		CH39	2480
GFSK Tx Mode		CH0	2402
		CH19	2440
		CH39	2480

2.3. Test Conditions

Temperature range	5-35℃
Humidity range	45-85%
Pressure range	86-106kPa

2.4. Test Voltage

Voltage mode	Input Voltage	Radio Unit Voltage
DC	DC 3.42V	DC 3.3V
	DC 3.8V	DC 3.3V
	DC 4.18V	DC 3.3V

Note:

(1) The radio unit Voltage with the IC.

(2) The radio unit less than 1%, so the test only rated voltage (Normal voltage DC 3.8V).

2.5. Description of Test Setup



2.6. Description Test Peripheral and EUT Peripheral

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.

Item	Equipment	Trade Mark	Model/Type No.	Series No.	Note
1	PC Computer	HP	14s	/	/

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

2.7. Description of Test Equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last Cal.	Next Cal.
1	Attenuator6dB	YFC	6dB	ZJE-017	2025.07.12	2026.07.11
2	Spectrum Analyzer	Agilent	N9020A	ZJE-024	2025.07.12	2026.07.11
3	Vector Signal Generator	Agilent	N5182A	ZJE-037	2025.07.12	2026.07.11
4	Analog signal generator	Agilent	N5181A	ZJE-038	2025.07.12	2026.07.11
5	Power Supply	Agilent	E3632A	ZJE-039	2025.07.12	2026.07.11
6	Power meter	KEYSIGHT	E4419B	ZJE-028	2025.07.12	2026.07.11
7	Attenuator6dB	Weinschel Associates	WA1-6-34	ZJE-040	2025.07.12	2026.07.11
8	RF Automatic Test System	TST	TSTRF562	ZJE-042	/	/

(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 102-18paragraph (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 Article102-18 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).

We used the (c) method for equipment calibration.

3. Antenna Power

3.1. Applied Procedures / Limit

Type	Limit
OFDM OBW<26MHz, DS	10mW
OFDM OBW 26-38MHz	5mW
Other Method	10mW
Tolerance	20%

3.2. Test Setup



3.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 3.3;
- (2) Set EUT work in test mode as described in clause 2.4;
- (3) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, set the Spectrum Analyzer as below:
Centre Frequency: The centre frequency of the channel under test.
Resolution BW: 1 MHz.
Video BW: 1 MHz.
Span: Wide enough to cover the complete power envelope of the signal of the EUT.
Detector: Peak.
Trace Mode: Max Hold.
- (4) When the trace is complete, find the peak value of the power envelope and record.

3.4. Test Result

1Mbps

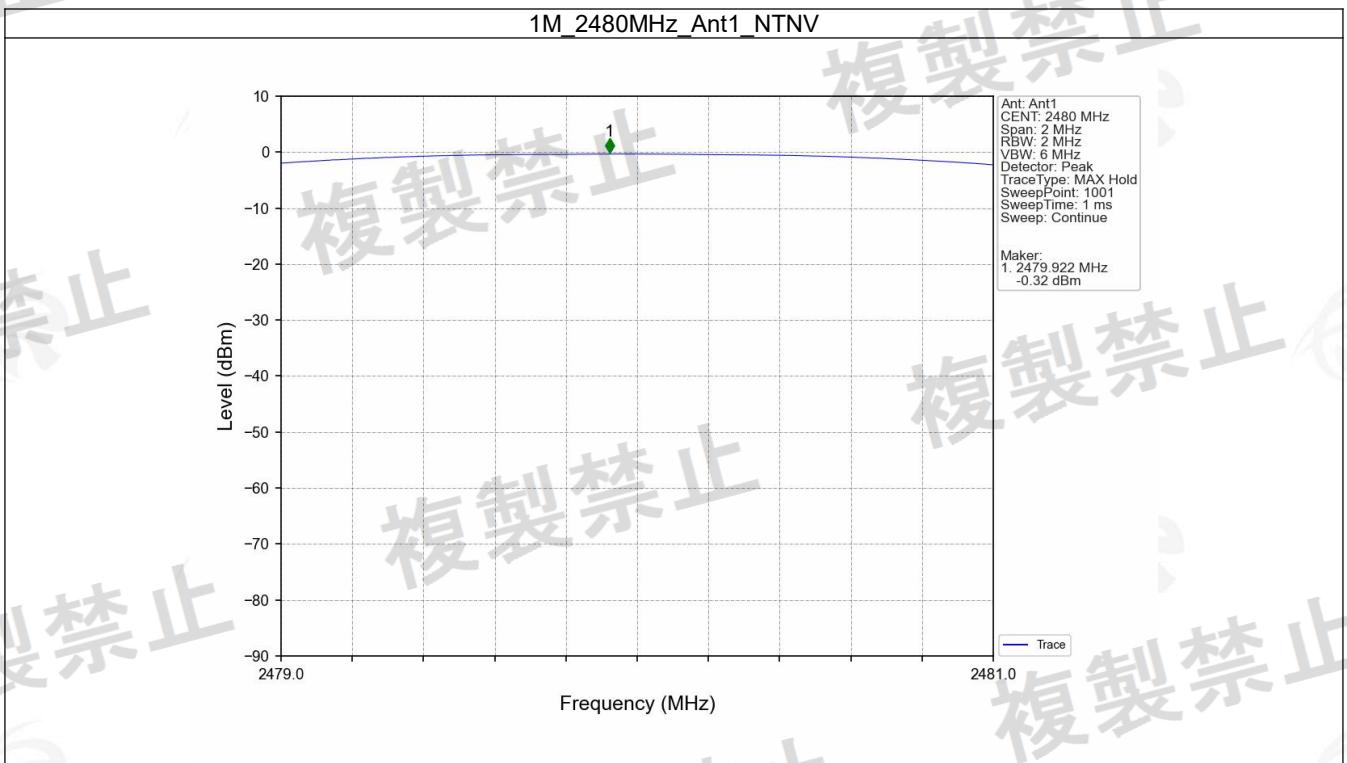
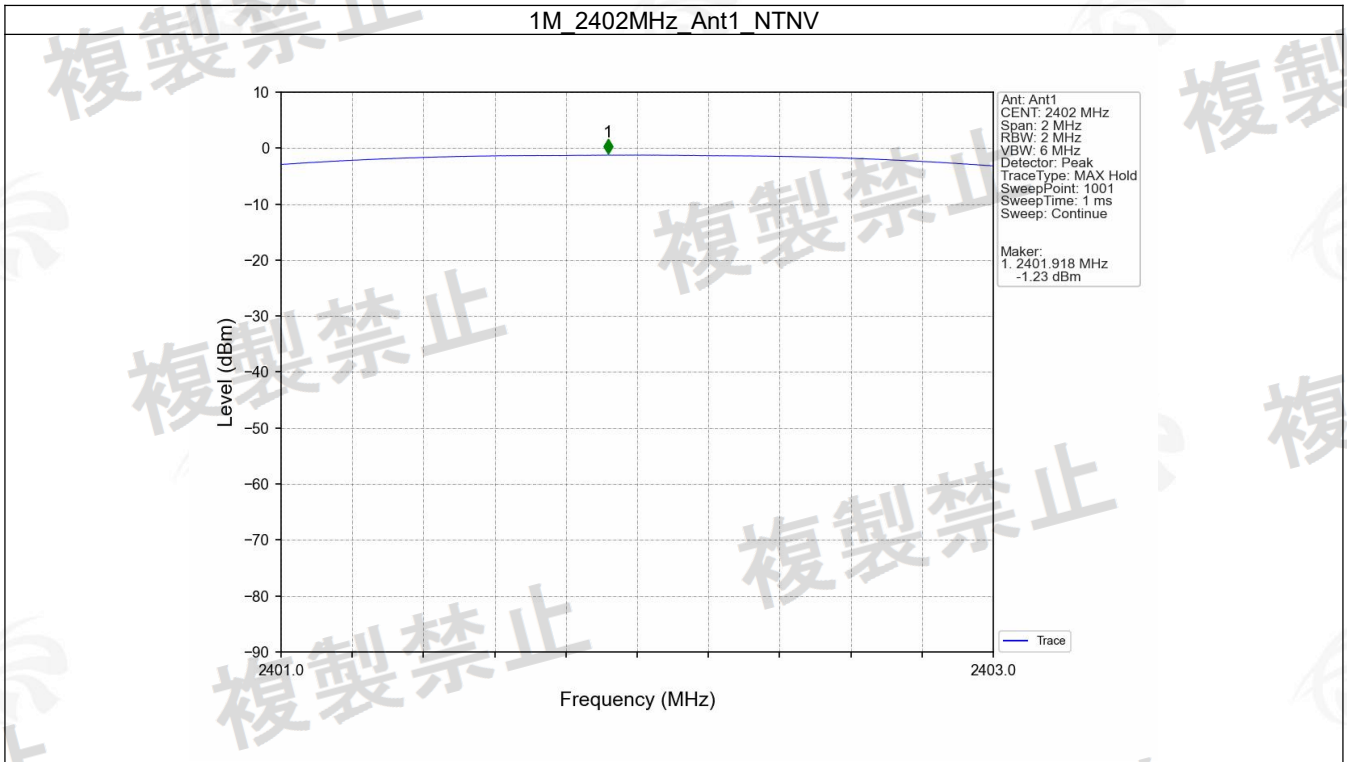
Mode	Condition	CH	Result	Result	Limit
			(dBm)	(mW)	(mW)
GFSK	Normal	CH0	-1.23	0.750	10
		CH39	-0.32	0.930	10
Conclusion: Pass					

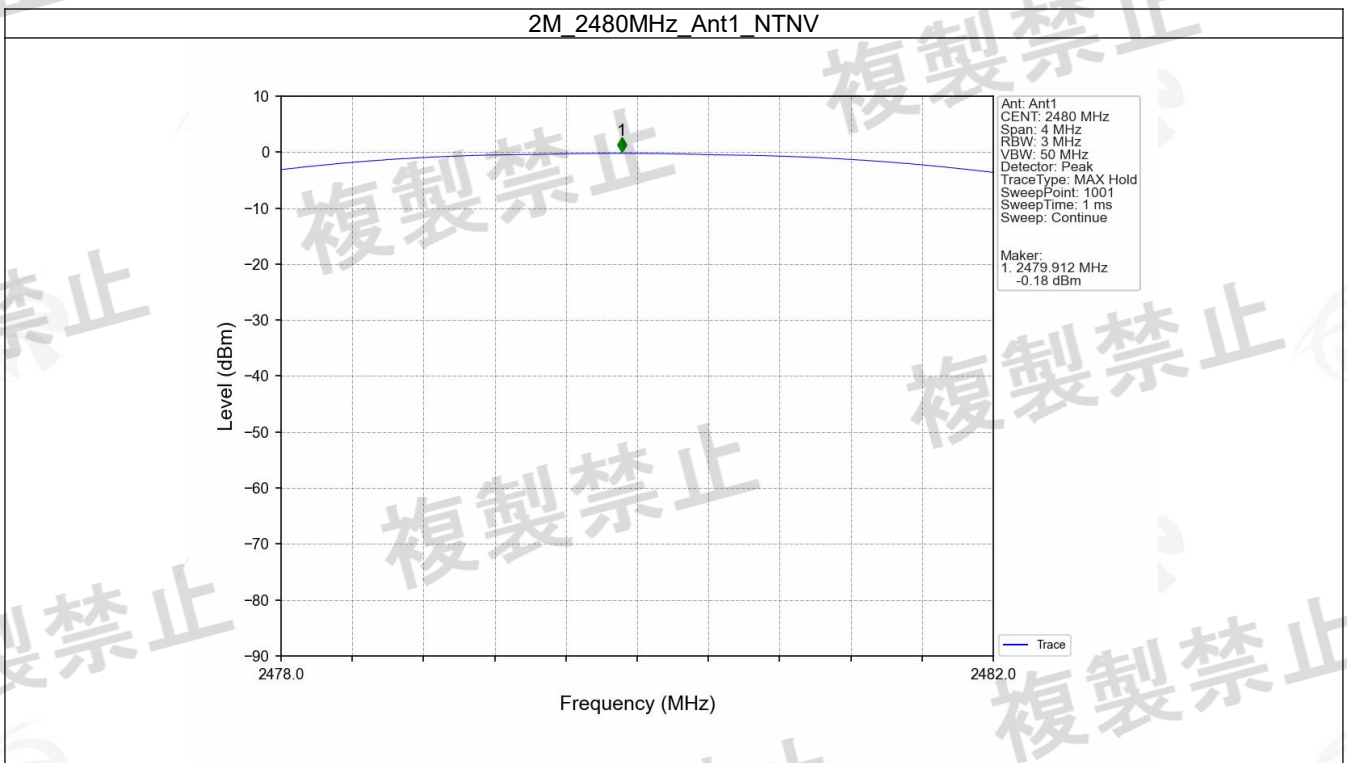
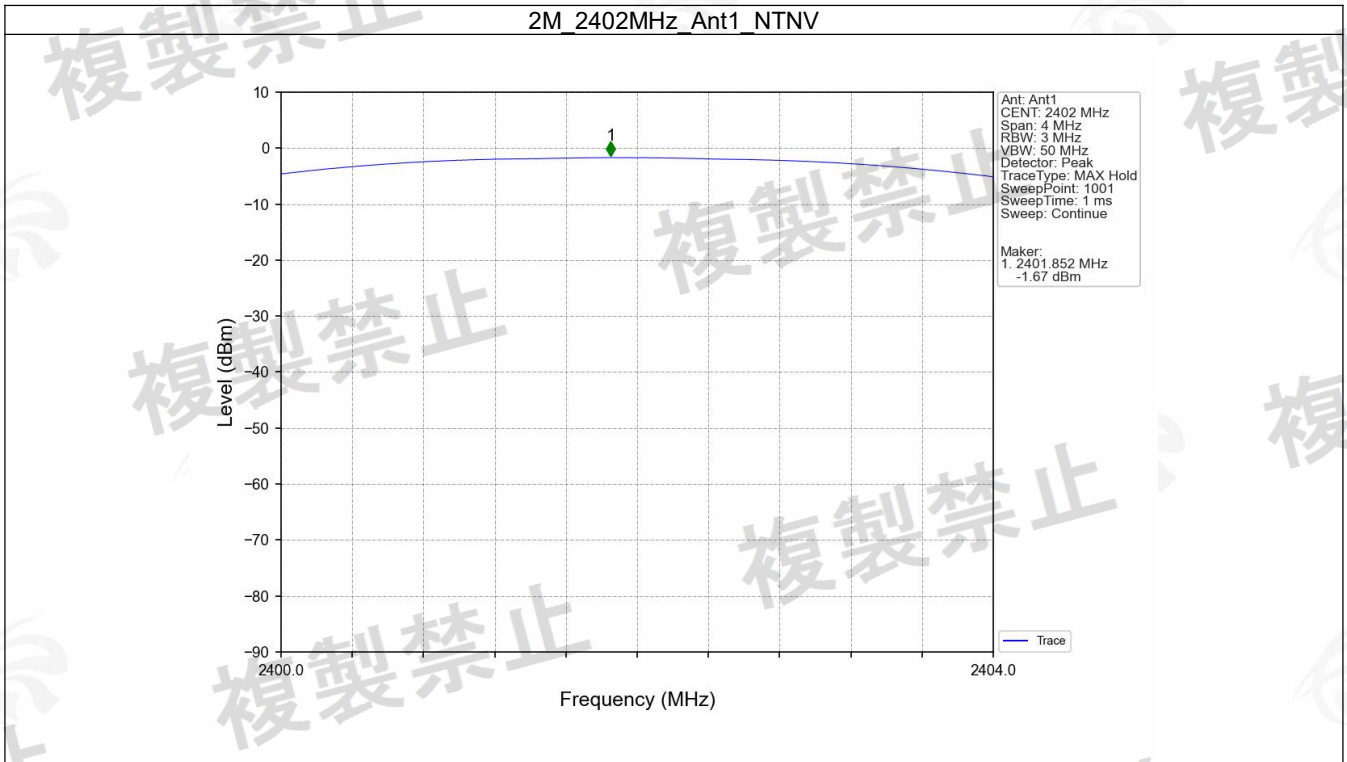
Mode	CH	Stated power	Result	Tolerance	Limit
		(mW)	(mW)	%	%
GFSK	CH0	0.830	0.750	-9.64	20%
	CH39	0.830	0.930	12.05	20%
Conclusion: Pass					

2Mbps

Mode	Condition	CH	Result	Result	Limit
			(dBm)	(mW)	(mW)
GFSK	Normal	CH0	-1.67	0.680	10
		CH39	-0.18	0.960	10
Conclusion: Pass					

Mode	CH	Stated power	Result	Tolerance	Limit
		(mW)	(mW)	%	%
GFSK	CH0	0.830	0.680	-18.07	20%
	CH39	0.830	0.960	15.66	20%
Conclusion: Pass					





4. Frequency Tolerance

4.1. Applied Procedures / Limit

$\pm 50 \times 10^{-6}$ or less(50ppm)

4.2. Test Setup



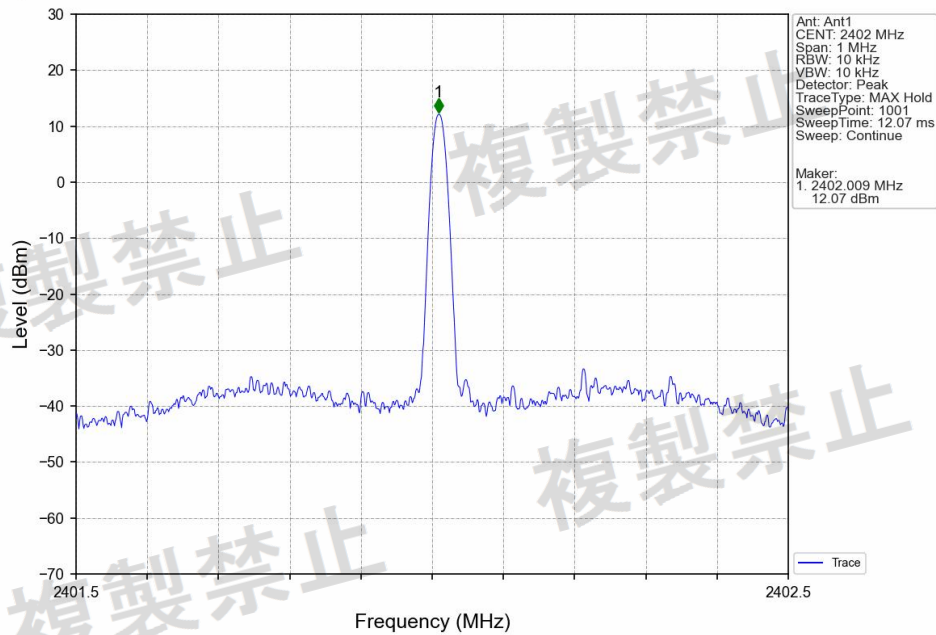
4.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 4.3;
- (2) Set EUT work in carrier Tx mode as described in clause 2.4;
- (3) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, set the Spectrum Analyzer as below:
Centre Frequency: The centre frequency of the channel under test.
Resolution BW: 10 KHz.
Video BW: 30 KHz.
Span: 1MHz.
Detector: Peak.
Trace Mode: Max Hold.
- (4) When the trace is complete, find the peak value of the power envelope and record the frequency.

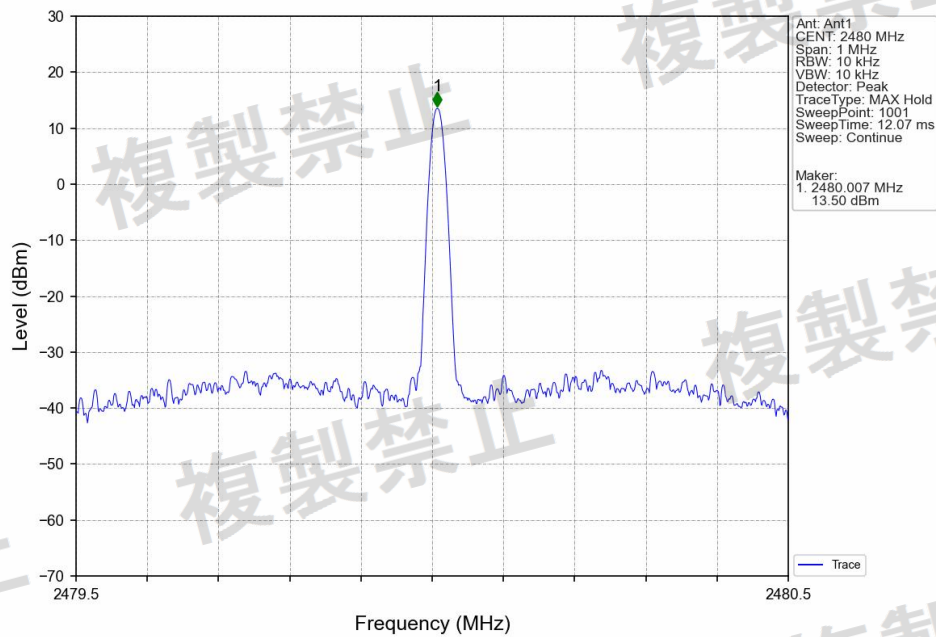
4.4. Test Result

Mode	CH	Measured	Tolerance	Result	Limit
		MHz	MHz	ppm	ppm
Carrier TX Mode	CH0	2402.009	0.009	3.75	± 50
	CH39	2480.007	0.007	3.63	± 50
Conclusion: Pass					

Frequency Error NTN_V Carrier Wave_2402MHz_Ant1 NTN_V



Frequency Error NTN_V Carrier Wave_2480MHz_Ant1 NTN_V



5. Occupied Frequency Bandwidth

5.1. Applied Procedures / Limit

Permissible value for occupied bandwidth using the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining FH and OFDM systems shall be 83.5 MHz or less, while necessary bandwidth (minimum occupied bandwidth sufficient to ensure information transmission of required quality at a required transmission rate for the system used under specified conditions for a given emission type) using a system other than any of the above shall be 26 MHz or less.

5.2. Test Setup



5.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 5.3;
- (2) Set EUT work in test mode as described in clause 2.4;
- (3) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, set the Spectrum Analyzer as below:
 - Centre Frequency: The centre frequency of the channel under test.
 - Resolution BW: 300 KHz
 - Video BW: 300 KHz
 - Span: Wide enough to cover the complete power envelope of the signal of the EUT.
 - Detector: Peak.
 - Trace Mode: Max Hold.
- (4) When the trace is complete, measure the occupied bandwidth (99% bandwidth) with spectrum analyzer's bandwidth measure function.

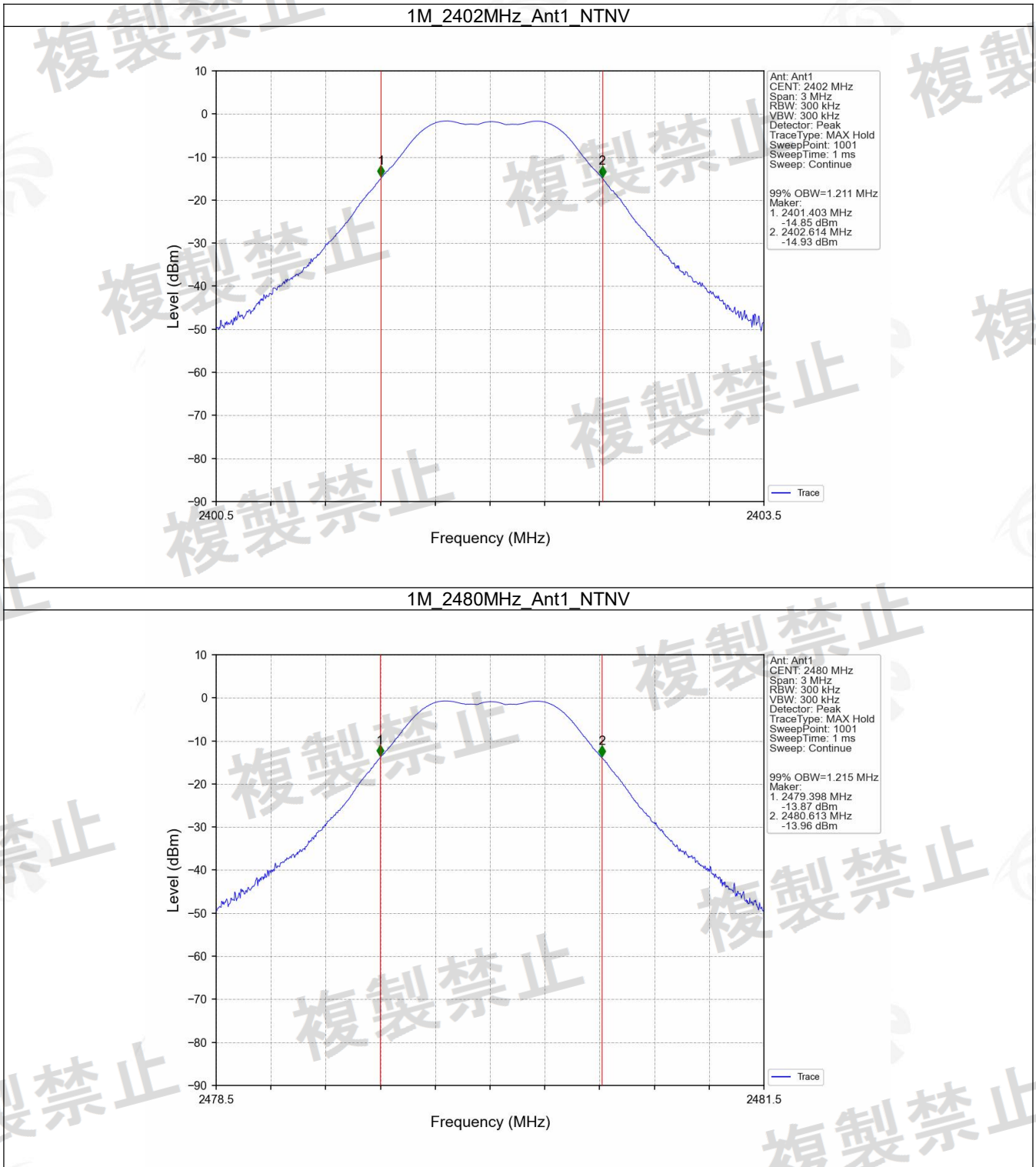
5.4. Test Result

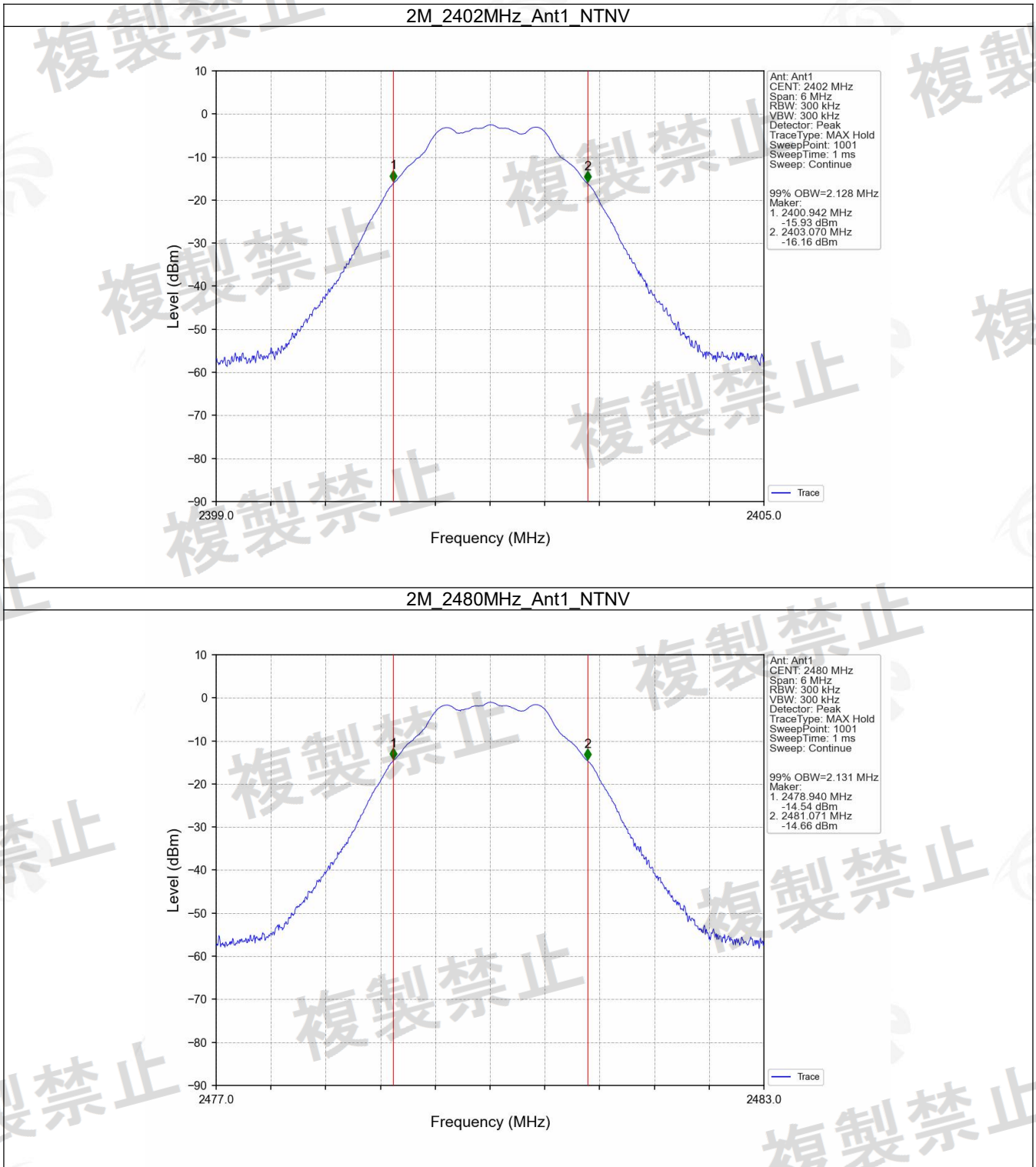
1Mbps

Mode	Condition	CH	Result	Limit
			(MHz)	(MHz)
GFSK Tx Mode	Normal	CH0	1.211	26
		CH39	1.215	26
Conclusion: Pass				

2Mbps

Mode	Condition	CH	Result (MHz)	Limit (MHz)
GFSK Tx Mode	Normal	CH0	2.128	26
		CH39	2.131	26
Conclusion: Pass				





6. Transmitter Spurious Emissions (Conducted)

6.1. Applied Procedures / Limit

Permissible mean power of spurious emission of each frequency supplied to a feeder, that is, mean power of spurious emission in the 1 MHz bandwidth at frequency f other than frequency band used shall be as follows:

- a. $2,387\text{MHz} \leq f \leq 2,400\text{MHz}$ and $2,483.5\text{MHz} < f \leq 2,496.5\text{MHz}$ 25 $\mu\text{W}/\text{MHz}$ or less
- b. $2,387\text{MHz} > f$ and $2,496.5\text{MHz} < f$ 2.5 $\mu\text{W}/\text{MHz}$ or less

6.2. Test Setup



6.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 6.3;
- (2) Set EUT work in test mode as described in clause 2.4;
- (3) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, set the Spectrum Analyzer as below:
 - Resolution BW: 1MHz.
 - Video BW: 1MHz.
 - Detector: Peak.
 - Trace Mode: Max Hold.
- (4) All the emissions from 30MHz to 13GHz were measured and record.

6.4. Test Result

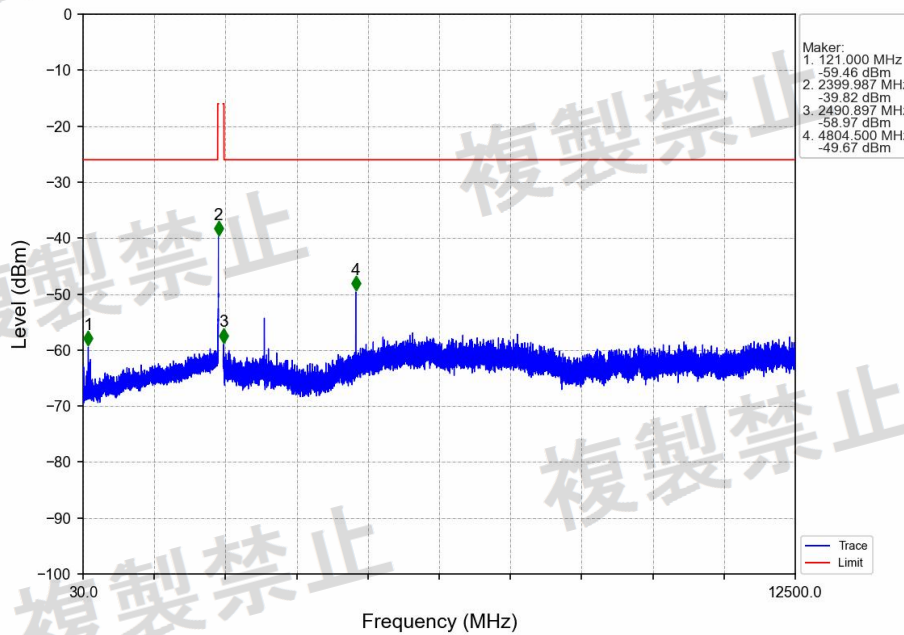
1Mbps

Mode	Condition	CH	Frequency (MHz)	PK Power (dBm /MHz)	PK Power (uW /MHz)	Limit (uW /MHz)	Result
GFSK(1M) Tx Mode	Normal	CH0	30-2387	-59.46	0.001	2.5	PASS
			2387-2400	-39.82	0.104	25	
			2483.5-2496.5	-58.97	0.001	25	
			2496.5-13000	-49.67	0.011	2.5	
		CH39	30-2387	-59.36	0.001	2.5	PASS
			2387-2400	-58.22	0.002	25	
			2483.5-2496.5	-51.64	0.007	25	
			2496.5-13000	-49.94	0.010	2.5	

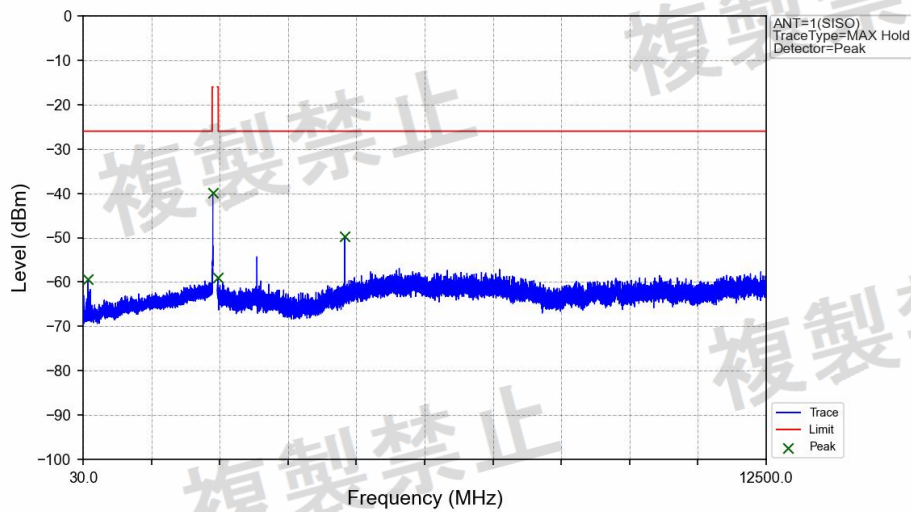
2Mbps

Mode	Condition	CH	Frequency (MHz)	PK Power (dBm /MHz)	PK Power (uW /MHz)	Limit (uW /MHz)	Result
GFSK(2M) Tx Mode	Normal	CH0	30-2387	-59.40	0.001	2.5	PASS
			2387-2400	-27.31	1.858	25	
			2483.5-2496.5	-59.36	0.001	25	
			2496.5-13000	-50.64	0.009	2.5	
		CH39	30-2387	-59.23	0.001	2.5	PASS
			2387-2400	-58.89	0.001	25	
			2483.5-2496.5	-51.90	0.006	25	
			2496.5-13000	-50.61	0.009	2.5	

1M_2402MHz_Ant1_NTNV

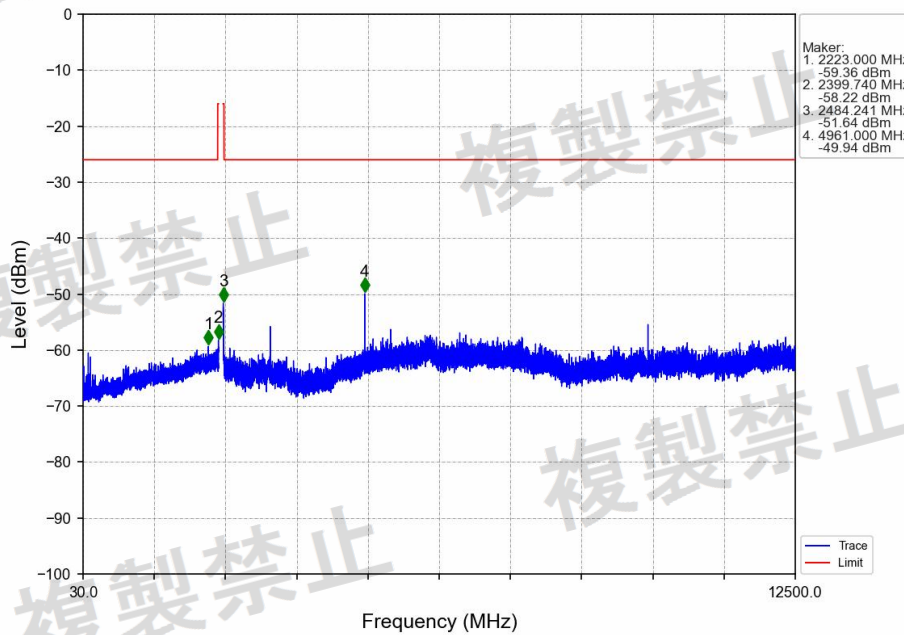


1M_2402MHz_Ant1_NTNV

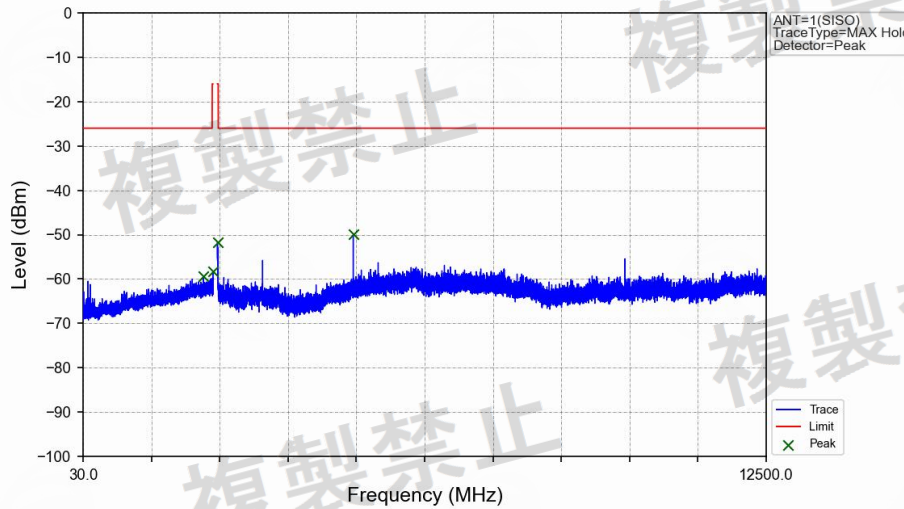


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	121.000	-59.46	/	-26	Pass
2387	2400	1	1	2399.987	-39.82	/	-16	Pass
2483.5	2496.5	1	1	2490.897	-58.97	/	-16	Pass
2496.5	12500	1	1	4804.500	-49.67	/	-26	Pass

1M_2480MHz_Ant1_NTNV

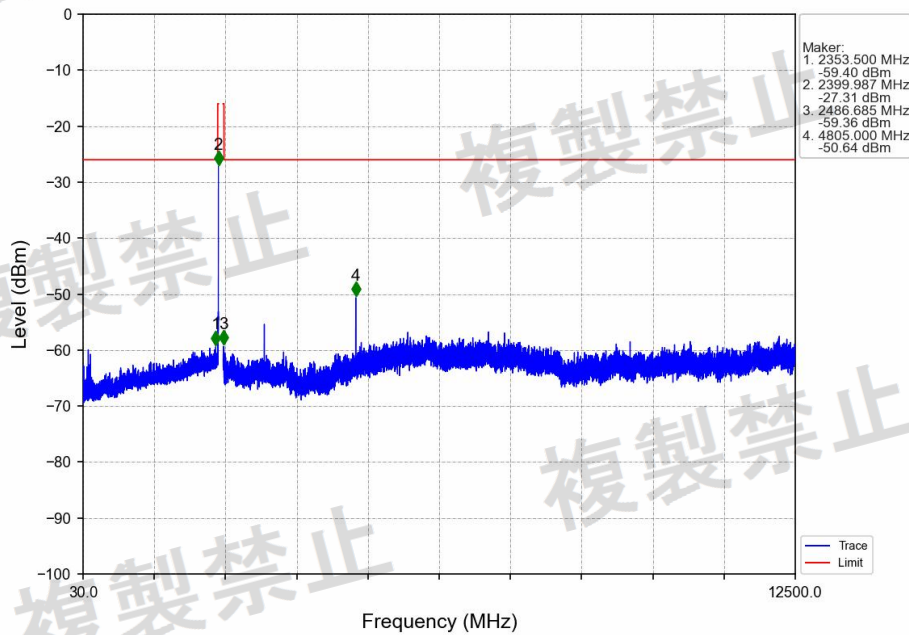


1M_2480MHz_Ant1_NTNV

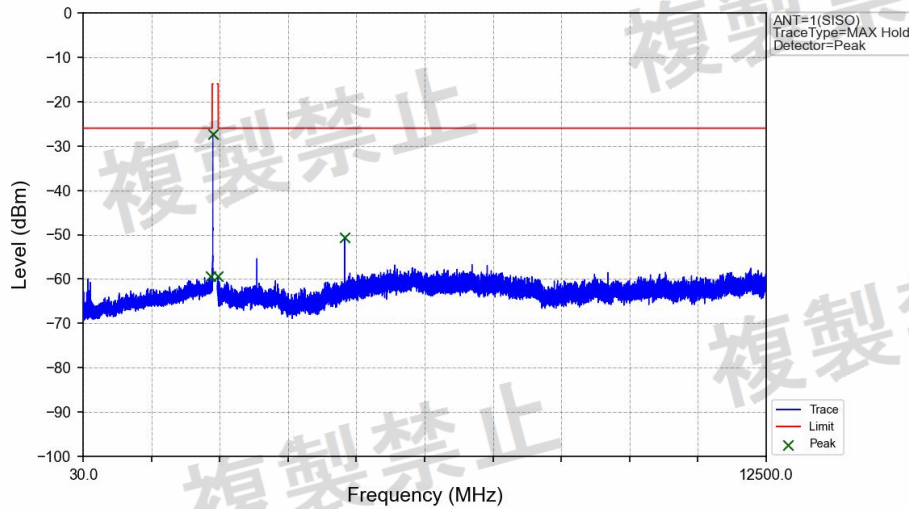


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2223.000	-59.36	/	-26	Pass
2387	2400	1	1	2399.740	-58.22	/	-16	Pass
2483.5	2496.5	1	1	2484.241	-51.64	/	-16	Pass
2496.5	12500	1	1	4961.000	-49.94	/	-26	Pass

2M_2402MHz_Ant1_NTNV

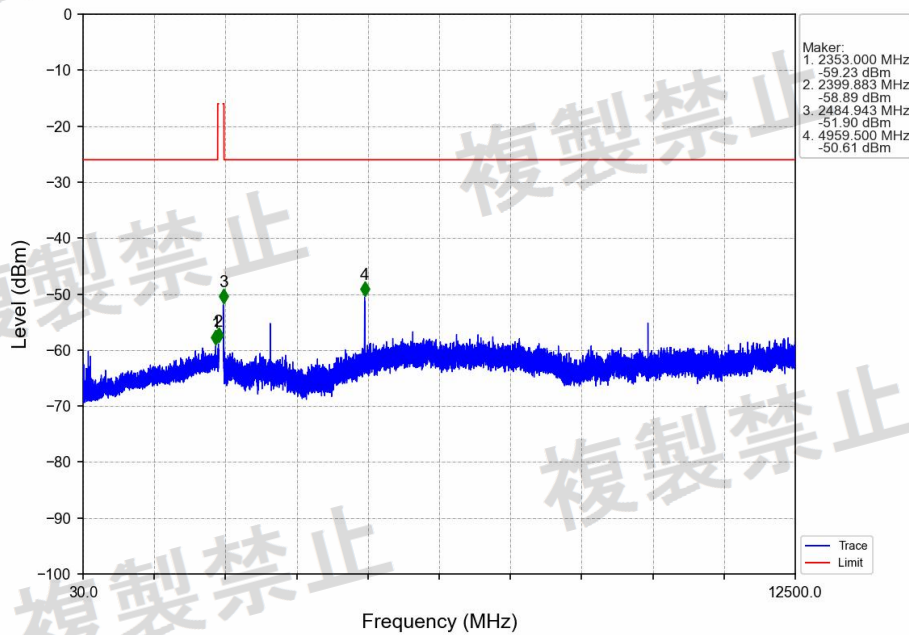


2M_2402MHz_Ant1_NTNV

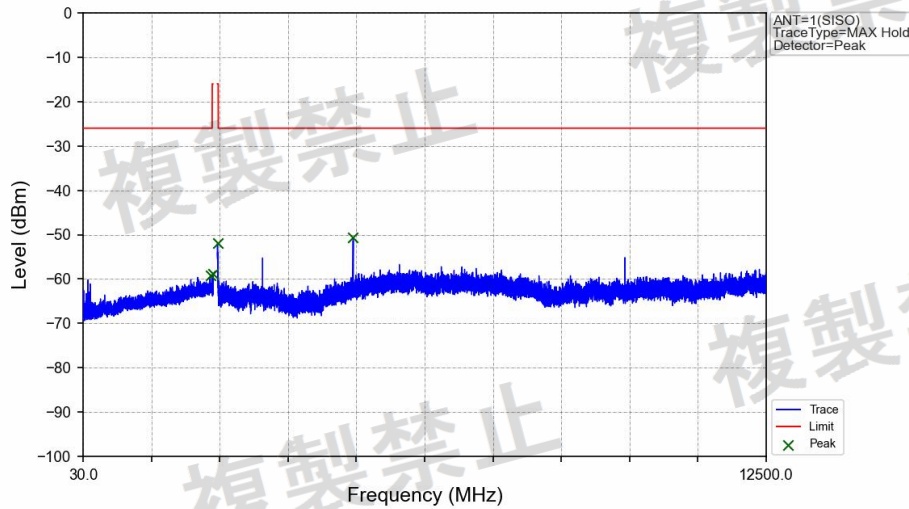


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2353.500	-59.40	/	-26	Pass
2387	2400	1	1	2399.987	-27.31	/	-16	Pass
2483.5	2496.5	1	1	2486.685	-59.36	/	-16	Pass
2496.5	12500	1	1	4805.000	-50.64	/	-26	Pass

2M_2480MHz_Ant1_NTNV



2M_2480MHz_Ant1_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	2387	1	1	2353.000	-59.23	/	-26	Pass
2387	2400	1	1	2399.883	-58.89	/	-16	Pass
2483.5	2496.5	1	1	2484.943	-51.90	/	-16	Pass
2496.5	12500	1	1	4959.500	-50.61	/	-26	Pass

7. Number of Carriers

7.1. Applied Procedures / Limit

The OFDM system shall have one or more carriers per 1 MHz bandwidth.

7.2. Test Setup



7.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 9.3.
- (2) Set EUT work in test mode as described in clause 2.4.

7.4. Test Result

EUT:	XTEINK X4 Classic	Tested by:	Leo Wang
Temperature:	24℃	Humidity:	56%RH
Test result:	PASS		

8. Interference Prevention Function

8.1. Applied Procedures / Limit

Item	Limits
Identification	≥48 bits

8.2. Measuring ID Code Software

Item	Limits
MAC IP List	MAC Scan

8.3. Test Setup



8.4. Test Procedure

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

8.5. Test Result

EUT:	XTEINK X4 Classic	Tested by:	Leo Wang
Temperature:	24℃	Humidity:	56%RH
Mac address:	58:41:45:49:B4:5C		
Test result:	PASS		

9. Secondary Radiated Emissions

9.1. Applied Procedures / Limit

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

9.2. Test Setup



9.3. Test Procedure

- (1) Configure EUT and assistant system according clause 2.3 and 11.3;
- (2) Set EUT work in test mode as described in clause 2.4;
- (3) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, set the Spectrum Analyzer as below:
Resolution BW: 100 KHz for frequency below 1GHz and 1MHz for frequency above 1GHz
Video BW: 100 KHz for frequency below 1GHz and 1MHz for frequency above 1GHz
Detector: Peak.
Trace Mode: Max Hold.
- (4) All the emissions from 30MHz to 12.5GHz were measured and record.

9.4. Test Result

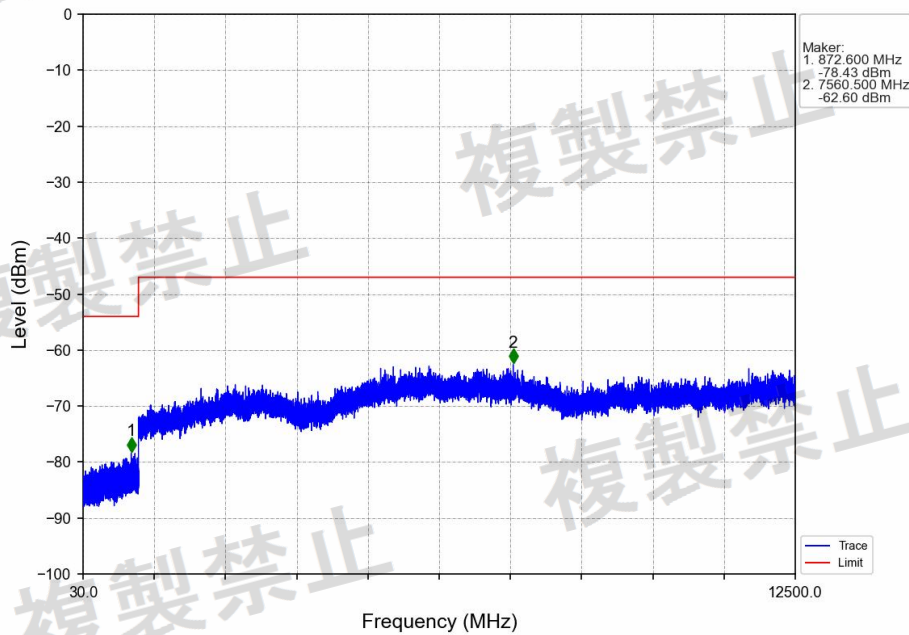
1Mbps

Mode	Condition	CH	Frequency (MHz)	PK Power (dBm)	PK Power (nW)	Limit (nW)	Result
GFSK(1M) Rx Mode	Normal	CH0	30-1000	-78.43	0.014	4	PASS
			1000-12500	-62.60	0.550	20	
		CH39	30-1000	-78.30	0.015	4	PASS
			1000-12500	-62.21	0.601	20	

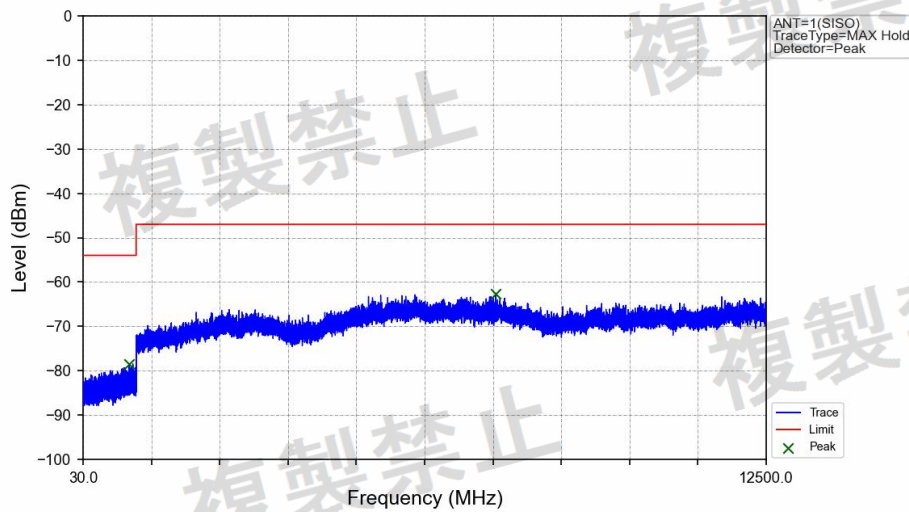
2Mbps

Mode	Condition	CH	Frequency (MHz)	PK Power (dBm)	PK Power (nW)	Limit (nW)	Result
GFSK(2M) Rx Mode	Normal	CH0	30-1000	-78.65	0.014	4	PASS
			1000-12500	-62.66	0.542	20	
		CH39	30-1000	-79.19	0.012	4	PASS
			1000-12500	-60.96	0.802	20	

1M_2402MHz_Ant1_NTNV

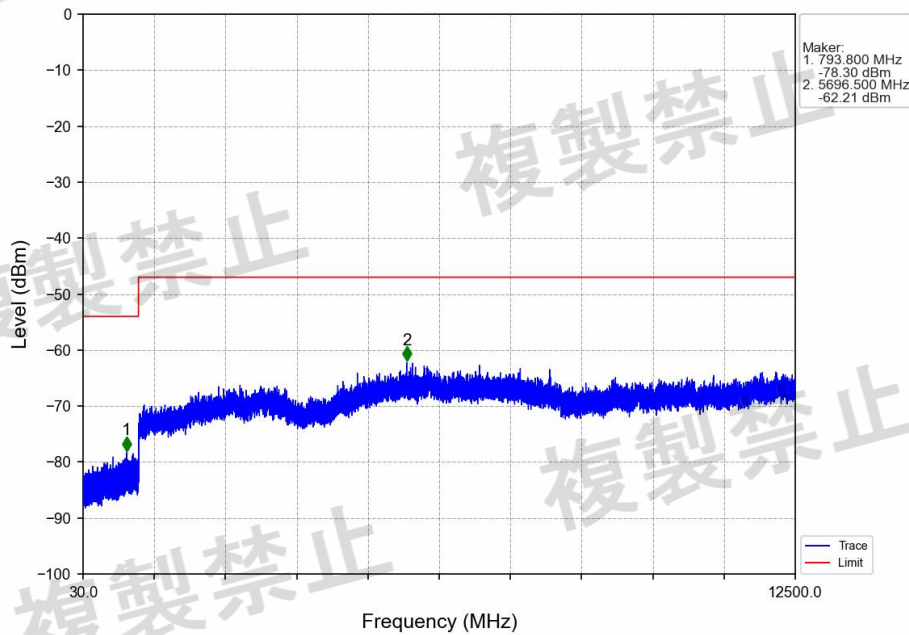


1M_2402MHz_Ant1_NTNV

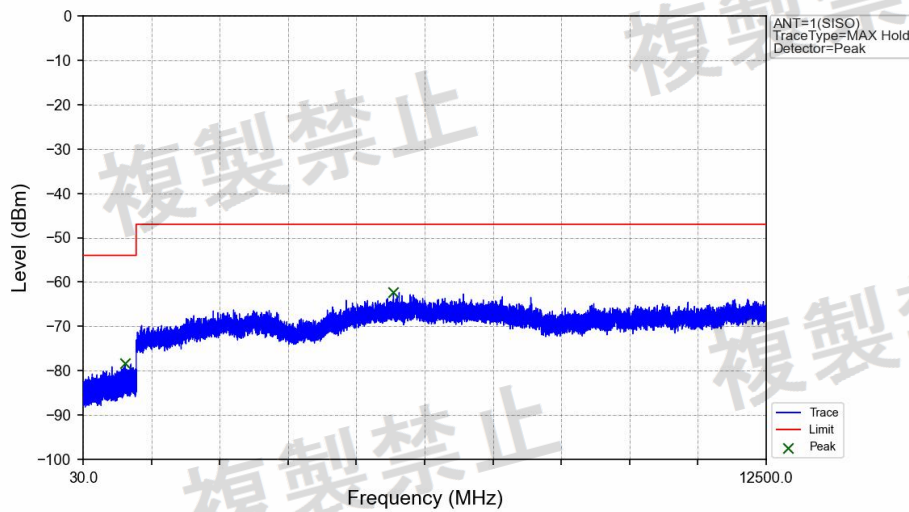


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	872.600	-78.43	/	-54	Pass
1000	12500	1	1	7560.500	-62.60	/	-47	Pass

1M_2480MHz_Ant1_NTNV

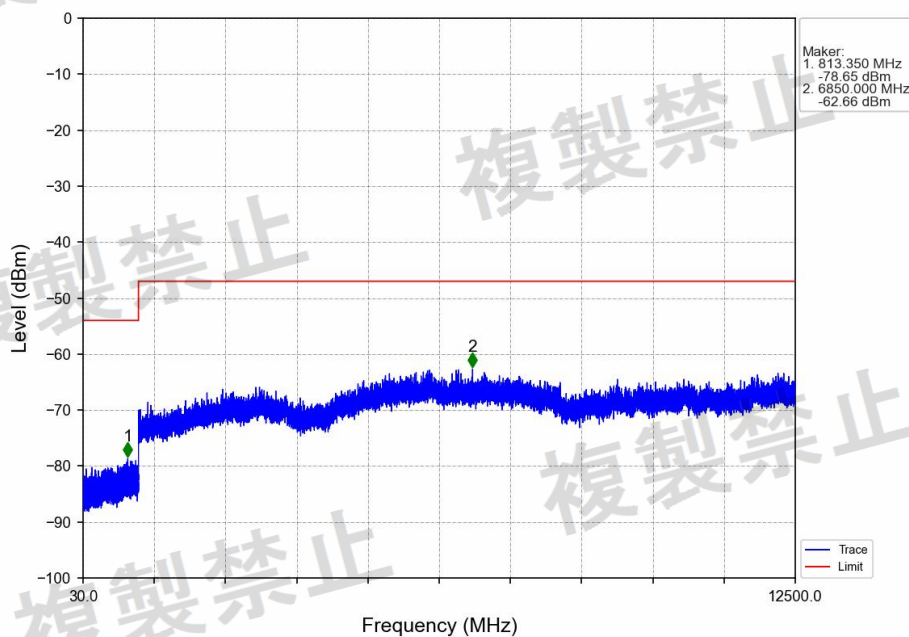


1M_2480MHz_Ant1_NTNV

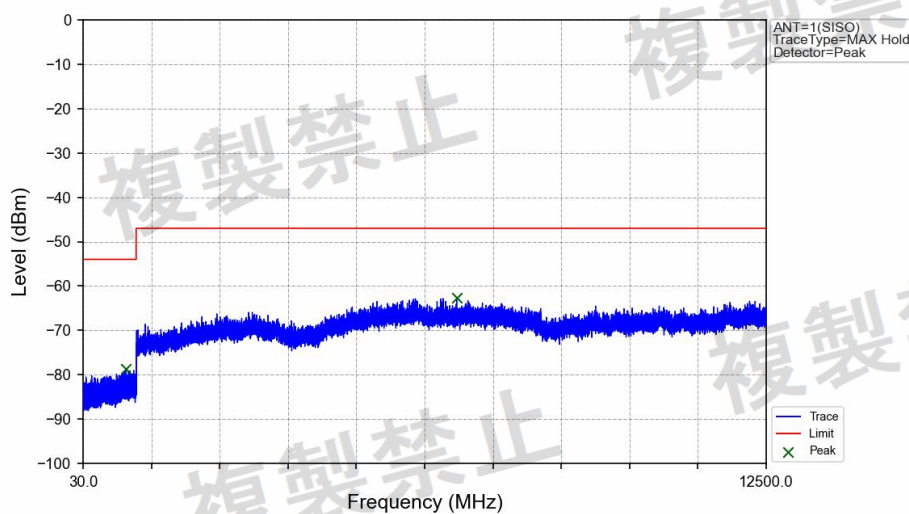


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	793.800	-78.30	/	-54	Pass
1000	12500	1	1	5696.500	-62.21	/	-47	Pass

2M_2402MHz_Ant1_NTNV

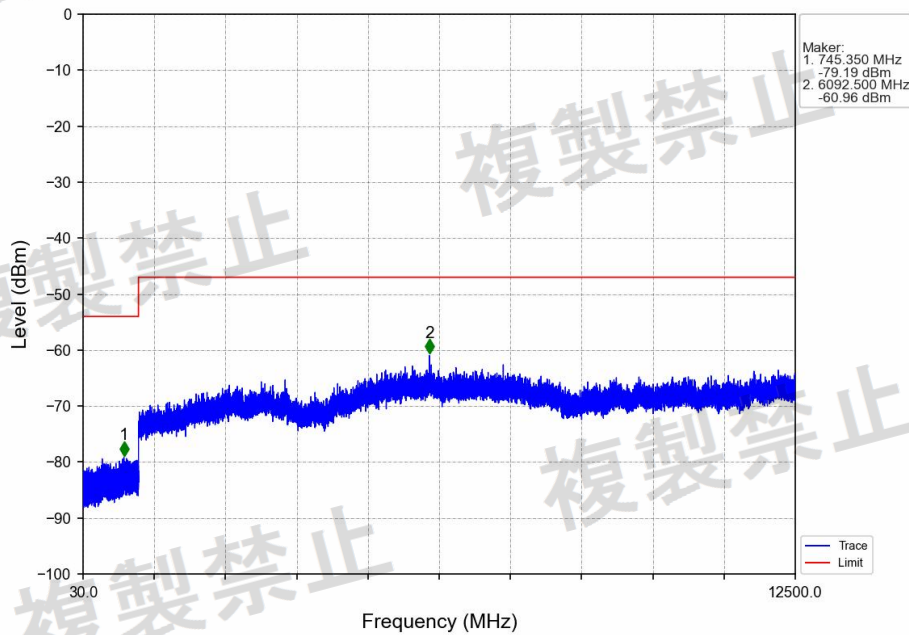


2M_2402MHz_Ant1_NTNV

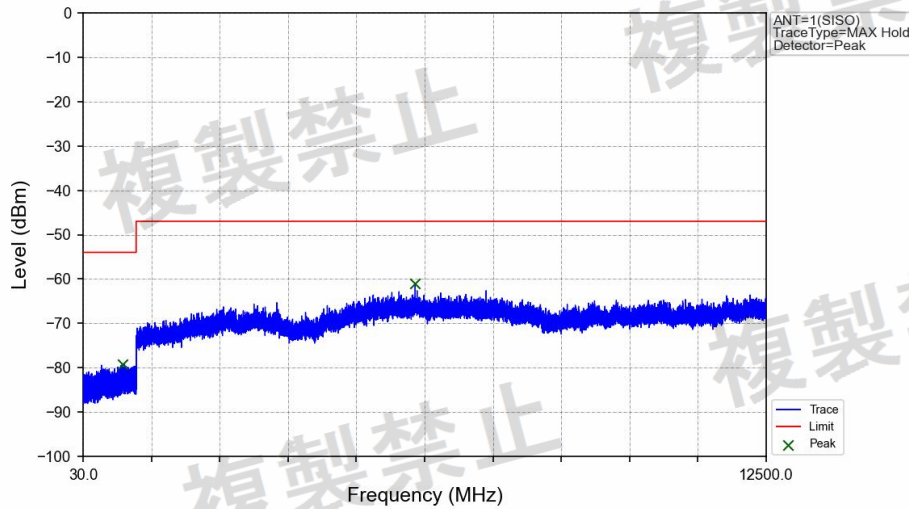


Start (MHz)	Stop (MHz)	RBW (MHz)	VBW (MHz)	Freq (MHz)	PK Power (dBm)	AV Power (dBm)	Limit (dBm)	Result
30	1000	0.1	0.1	813.350	-78.65	/	-54	Pass
1000	12500	1	1	6850.000	-62.66	/	-47	Pass

2M_2480MHz_Ant1_NTNV



2M_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	745.350	-79.19	/	-54	Pass
1000	12500	1	1	6092.500	-60.96	/	-47	Pass

10. Equivalent Isotropic Radiated Power

10.1. Applied Procedures / Limit

Modulation system	Frequency band used	Antenna power (max.)	EIRP	
			Omnidirectional case	Directional case
DS	2400~2483.5MHz	10mW	12.14dBm	22.14dBm

10.2. Test Procedure

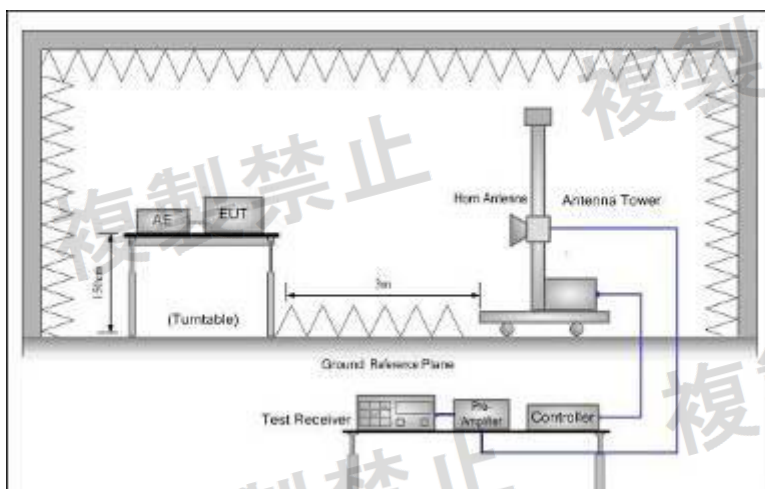
EIRP is obtained through Conducted Power + Antenna Gain.

10.3. Test Result

Mode	Frequency (MHz)	Gain (dBi)	EIRP (dBm)		Verdict
			Result	Limit	
1M	2402	5.19	3.96	<=12.14	Pass
	2480	5.19	4.87	<=12.14	Pass
2M	2402	5.19	3.52	<=12.14	Pass
	2480	5.19	5.01	<=12.14	Pass

11. 3dB Beam Bandwidth

11.1. Test Setup



11.2. Test Procedure

Step 1

Set the test equipment at test frequency, and transmit.

Step 2

Stop the modulation, and make it “continuous transmission of unmodulated wave” in principle. If it is impossible, make it “intermittent burst transmission of unmodulated wave”

Step 3

Polarized wave side of measurement antenna is the same using mode as test equipment.

Step 4

Set the height and direction of test equipment and measurement antenna approximately facing each other.

Step 5

Set the spectrum analyzer according to “Spectrum set” and set as reference level and receive.

Step 6

Adjust at the maximum received power point, turning the test equipment horizontally and vertically.

Step 7

Change the height of the measurement antenna from the ground by $\pm 50\text{cm}$ with a central focus on the antenna of test equipment, and search the location that the power is maximum by adjusting the direction of measurement antenna. Set the indicator of spectrum analyzer at this point as “E”.

Step 8

By using EIRP (P_E) that is measured at 9, calculate allowed main beam angle(θ_0) between the horizontal plane and vertical plane of the test equipment as follows.

Allowed main beam angle (θ_0) = $360/A$

θ_0 : Allowed transmitter antenna beamwidth angle in degree of test equipment

P_E : EIRP of test equipment (dBm)

A: A is defined as EIRP divides by the summation of antenna gain 2.14dBi transmitter antenna and average power 10mW (In case of using ODFM, or DS, or FHSS, or DS and complex with FHSS, or OFDM and complex with FHSS, 10mW/MHz. However, in FHSS or DS and complex with FHSS, or OFDM and complex with FHSS, when using the frequency from 2,427MHz to 2,470.75MHz, 3mW/MHz) antenna power. In case the value is lower than 1, set A as 1.

Step 9

Turn the test equipment in horizontal direction, from main beam direction with the beam angle except main beam angle (θ_0) calculated by (step 8), over all surroundings as much as possible. Confirm that received power is decreased more than 3dB from the maximum point value of received power(E).

Step 10

Return the test equipment to position (step 6), incline the test equipment in vertical direction, from main beam direction with the beam angle except main beam angle (θ_0) calculated by (step 8), widely as much as possible (over 90 degrees. However, it is able to according to "6. other condition", too.) Confirm that received power is 3dB lower than the maximum point value of received power (E).

Step 9

Spectrum Analyzer as below:

Centre Frequency: The centre frequency of the channel under test.

Frequency Span: 0Hz

Resolution BW: 1MHz

Video BW: 1KHz

Y-Axis: 5dB/Div

Detector: Peak.

Sweep mode: Continuous sweep

Input level: the amplitude of transmission signal is set around max. line area of mixer.

11.3. Test Result

Not applicable(The EIRP less than 12.14dBm/MHz for GFSK)

APPENDIX I -- EUT TEST PHOTOGRAPHS

Please see the attachment for details

APPENDIX II -- EUT PHOTOGRAPHS

Please see the attachment for details

APPENDIX III -- STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

***** END OF REPORT *****