



JAPAN RADIO TEST REPORT

Applicant: SWIFF TECHNOLOGY CO., LTD.

Address: Room 1703, Building T1, Shenzhen Bay Innovation and Technology Center, No. 3156
Keyuan South Road, Gaoxin Community, Yuehai Subdistrict, Nanshan District, Shenzhen

Manufacturer: SWIFF TECHNOLOGY CO., LTD.

Address: Room 1703, Building T1, Shenzhen Bay Innovation and Technology Center, No. 3156
Keyuan South Road, Gaoxin Community, Yuehai Subdistrict, Nanshan District, Shenzhen

Product Name: Wireless Transceiver Set

Trade Mark: SWIFF AUDIO

Model Number: WT09a Electric

Date of Receipt: Mar. 04, 2026

Test Date: Mar. 04, 2026 - Mar. 21, 2026

Date of Report: Mar. 21, 2026

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

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Applicable Standards: MIC Notice No.88 Annex 43
Article2 Paragraph 1, item 19

Test Result: Pass

Report Number: DLE-260316001R

Prepared (Test Engineer): Pxing Huang

Reviewer (Supervisor): Jack Bu

Approved (Manager): Jade Yang



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 DL Testing Technology Co., Ltd.



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Notice No. 88 of Annex 43			
Standard Section	Test Item	Judgment	Remark
General provisions			
5	Frequency Error	PASS	
6	Occupied Bandwidth	PASS	
7	Spurious Emissions Intensity	PASS	
8	Carrier Sense Capability	N/A ^{Note1}	
9	Interference Prevention Function	PASS	
Transmitting equipment			
14	Antenna Power	PASS	
Transmitting antenna			
20	Type, Configuration, etc., of Transmitting Antenna	PASS	
22	Direction Pattern of Transmitting Antenna (Provided at Individual Antenna Report)	PASS	
Receiving antenna			
24	Limitation of Collateral Emission of Receiver	PASS	
26	Refer to All Articles for Transmitting Antenna	PASS	
Operating frequency 2400~2483MHz			
49.20(1);a	RF Shielding Method	PASS	
49.20(1);a	Communication Method	PASS	
49.20(1);b	Spread-spectrum Method	PASS	
49.20(1);c	Antenna Power	PASS	
49.20(1); d	EIRP power	PASS	
4.10	Construction Protection Confirmation	PASS	
4.7	Transmission Radiation Angle Width (3dB Bandwidth)	N/A ^{Note2}	

NOTE:

- Application to transmitting devices which EIRP is less than (2.14dBi+ antenna power limit)
- 1 and the shortage of EIRP is compensated by the antenna power. Not applicable to this product.
 - 2 Not applicable since the EIRP Power is less than 12.14dBm.

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	RF power,conducted	$\pm 0.16\text{dB}$
2	Spurious emissions,conducted	$\pm 0.21\text{dB}$
3	frequency error ppm	$\pm 0.5\text{ppm}$
4	Occupied Bandwidth	$\pm 0.2\text{MHz}$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	Wireless Transceiver Set	
Trade Mark:	SWIFF AUDIO	
Model Number:	WT09a Electric	
Model Difference:	N/A	
Product Description:	Operation Frequency:	2402~2479 MHz
	Modulation:	GFSK
	Number Of Channel:	18 CH
	Antenna Designation:	Please see Note 3.
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.	
Channel List:	Please refer to the Note 2.	
Power Supply:	DC 5V from Adapter DC 3.85V from Battery	
Adapter:	/	
Hardware Version:	HV1.2	
Software Version:	SV1.0	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2. **Description of Channel:**

Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402MHz	10	2442MHz
02	2406MHz	11	2446MHz
03	2410MHz	12	2450MHz
04	2414MHz	13	2455MHz
05	2420MHz	14	2460MHz
06	2424MHz	15	2465MHz
07	2430MHz	16	2470MHz
08	2434MHz	17	2474MHz
09	2438MHz	18	2479MHz

3. Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	SWIFF TECHNOLOGY CO., LTD.	WT09a Electric	LDS Antenna	N/A	-0.58	



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description	
Mode1	CH01	GFSK
Mode2	CH10	
Mode3	CH18	
Mode4	RX	

Pretest Mode	Conducted Emission	
Mode1	CH01	GFSK
Mode2	CH10	
Mode3	CH18	
Mode4	RX	

2.3 TEST CONDITIONS

The EUT tested while in a continuous transmitter/receiver mode.

The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all Modes to determine worst case levels.

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage (Normal temperature)	High Voltage +10% of Normal Voltage (High temperature)	Low Voltage -10% of Normal Voltage (Low temperature)
Input DC Power	3.85V	4.235V	3.465V
RF Chip Voltage	3.301V	3.38V	3.24V
Voltage Variation (%)	Ref.level	2.39	-1.85

Note:

Voltage Variation (%)

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

During the input supply voltage to the EUT from the external power source is varied by +/- 10%, if output voltage had been confirmed that the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%. Exempt extremely high and low supply voltage condition test, EUT only operated in normal voltage to test all regulations.

During the input supply voltage to the EUT from the external power source is varied by ±10%, the fluctuation of input voltage to the circuit of RF unit of test equipment is exceed ±1%. So, all measurement has been conducted by normal and limit voltage.

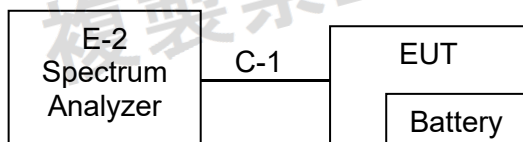


2.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of BLE

Test software Name	/		
Frequency	2402 MHz	2442 MHz	2479 MHz
Max output power parameters setting of software	4	4	4

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED





2.6 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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	Mfr/Brand	Model/Type No.	Series No.	Note

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 EQUIPMENTS LIST FOR ALL TEST ITEMS**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated until
1	SPECTRUM ANALYZER	AGILENT	E4407B	160400005	Oct. 25, 2025	Oct. 24, 2026
2	TEST RECEIVER	R&S	ESPI	101318	Oct. 25, 2025	Oct. 24, 2026
3	BILOG ANTENNA	TESEQ	CBL6111D	31216	Oct. 25, 2025	Oct. 24, 2026
4	50Ω COAXIAL SWITCH	ANRITSU	MP59B	6200264416	Oct. 25, 2025	Oct. 24, 2026
5	SPECTRUM ANALYZER	ADVANTEST	R3132	150900201	Oct. 25, 2025	Oct. 24, 2026
6	HORN ANTENNA	EM	EM-AH-10180	2011071402	Oct. 25, 2025	Oct. 24, 2026
7	HORN ANT	SCHWARZBECK	BBHA 9170	9170-181	Oct. 25, 2025	Oct. 24, 2026
8	AMPLIFIER	EM	EM-30180	060538	Oct. 25, 2025	Oct. 24, 2026
9	LOOP ANTENNA	ARA	PLA-1030/B	1029	Oct. 25, 2025	Oct. 24, 2026
10	POWER METER	R&S	NRVS	100696	Oct. 25, 2025	Oct. 24, 2026
11	TEST RECEIVER	R&S	ESCI	101160	Oct. 25, 2025	Oct. 24, 2026
12	SPECTRUM ANALYZER	AGILENT	N9020A	MY55370280	Oct. 25, 2025	Oct. 24, 2026
13	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	106504	Oct. 25, 2025	Oct. 24, 2026
14	50Ω COAXIAL SWITCH	ANRITSU	MP59B	6200264417	Oct. 25, 2025	Oct. 24, 2026
15	DC POWER SUPPLY	AGILENT	E3632A	MY50120052	Oct. 25, 2025	Oct. 24, 2026
16	OSCILLOSCOPE	SIGLENT	SDS1202X-E	SDSEBBQ1 R 5533	Oct. 25, 2025	Oct. 24, 2026

Other

Item	Kind of Equipment	Manufacturer	Type No.	Software version
1	RF TEST SYSTEM	MAIWEI	MTS8310	2.0.0.0
2	RF COMMUNICATION TEST SYSTEM	MAIWEI	MTS8200	2.0.0.0

Note: 1. Calibration by the calibration agencies listed in the table correspond to paragraph 4 (ii) (c) of Article 24-2 in the Radio Law.

2. Calibration Laboratory: Guangzhou Lisai Metrology & Test Co., Ltd

3. ☐ (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.



3. RF SHIELDING METHOD

We apply the product for Japan RF certification. The RF chip is soldered on the PCB, making it very difficult for anyone to remove it.





4. TEST RESULT FOR BLUETOOTH

4.1 FREQUENCY ERROR

4.2 LIMIT

Item	Limits
Frequency Error	$\leq \pm 50 \text{ ppm}$

4.3 MEASURING INSTRUMENTS AND SETTING

The following table is the setting of Spectrum Analyzer.

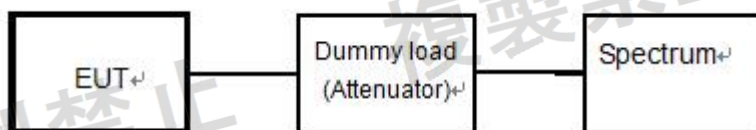
Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	10KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.4 TEST PROCEDURES

- (1) In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a frequency meter.
- (2) In the case of burst waves, the measurement shall be done for enough time in order to obtain the enough measuring accuracy, and the average of the measured values becomes the final value.
- (3) In the case of a test mode with a specific frequency spectrum, measure the frequency of the specific spectrum by a spectrum analyzer.
- (4) In the cases above, if the frequency equivalent to the test frequency is not directly measured in principle, it shall be obtained by necessary calculation.

In the case of modulated signal, if there is no specific spectrum measurable by a spectrum analyzer but a specific dip is observed, it is allowed to measure the frequency with the signal generator (synthesized). That is, observe a signal of the signal generator concurrently (or alternately) with the tested signal using the spectrum analyzer while setting the frequency of the signal generator to the position of the dip on the screen of the spectrum analyzer, and determine the frequency of the signal generator at the time as a measured value.

4.5 TEST SETUP LAYOUT





4.6 TEST RESULT

Temperature:	25.6 °C	Relative Humidity:	55.8%	Pressure:	1010mbar
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Voltage	Frequency	Reading	Tolerance	Limit
Normal	MHz	MHz	ppm	(ppm)
	2402	2401.992	-3.331	$\leq \pm 50$ ppm
	2442	2441.992	-3.276	$\leq \pm 50$ ppm
	2479	2478.992	-3.227	$\leq \pm 50$ ppm

Voltage	Frequency	Reading	Tolerance	Limit
Low	MHz	MHz	ppm	(ppm)
	2402	2401.990	-4.163	$\leq \pm 50$ ppm
	2442	2441.991	-3.686	$\leq \pm 50$ ppm
	2479	2478.991	-3.630	$\leq \pm 50$ ppm

Voltage	Frequency	Reading	Tolerance	Limit
High	MHz	MHz	ppm	(ppm)
	2402	2401.991	-3.747	$\leq \pm 50$ ppm
	2442	2441.992	-3.276	$\leq \pm 50$ ppm
	2479	2478.991	-3.630	$\leq \pm 50$ ppm

Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst Normal Voltage test plot.





5. ANTENNA POWER

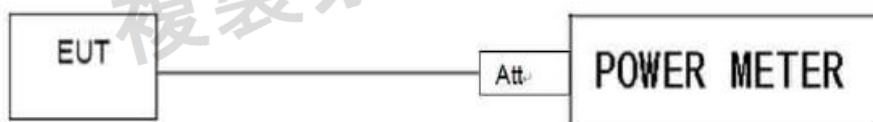
5.1 LIMIT

Item	Limits
Antenna Power Density	$\leq 3\text{mW/MHz}$ (FH form 2427 - 2470.75 MHz) $\leq 10\text{mW/MHz}$ (OFDM,DS from 2400~2483.5MHz) $\leq 10\text{mW}$ (Other from 2400~2483.5MHz)
Antenna Power Error	+20%(Base on manufacturer declare antenna power density)

5.2 TEST PROCEDURES

The EUT was directly connected to the power meter.

5.3 TEST SETUP LAYOUT



5.4 TEST DEVIATION

There is no deviation with the original standard.

5.5 TEST DEVIATION

The EUT was programmed to be in continuously transmitting mode.

**5.6 TEST RESULT**

Temperature:	25.4 °C	Relative Humidity:	55.3%	Pressure:	1010mbar
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Voltage	Test Frequency MHz	Conducted RF output power density (dBm)	Conducted RF output power density (mW)	Rated power density (mW)	Limits (mW)	Antenna Power Error (%)
Normal	2402	8.97	7.89	9.0	10	-12.33
	2442	9.56	9.04	9.0	10	0.44
	2479	9.68	9.29	9.0	10	3.22
Limit: +20%(Base on manufacturer declare antenna power density)						

Voltage	Test Frequency MHz	Conducted RF output power density (dBm)	Conducted RF output power density (mW)	Rated power density (mW)	Limits (mW)	Antenna Power Error (%)
Low	2402	8.95	7.85	9.0	10	-12.78
	2442	9.53	8.97	9.0	10	-0.33
	2479	9.62	9.16	9.0	10	1.78
Limit: +20%(Base on manufacturer declare antenna power density)						

Voltage	Test Frequency MHz	Conducted RF output power density (dBm)	Conducted RF output power density (mW)	Rated power density (mW)	Limits (mW)	Antenna Power Error (%)
High	2402	8.94	7.83	9.0	10	-13.00
	2442	9.56	9.04	9.0	10	0.44
	2479	9.64	9.20	9.0	10	2.22
Limit: +20%(Base on manufacturer declare antenna power density)						



6. EIRP POWER

6.1 LIMIT

Item	Limits
Radiation power EIRP	FH form 2427-2470,75 MHz, $EIRP \leq 6.91\text{dBm}$ CCK/OFDM/DBPSK(2400-2483.5MHz) OFDM or DS other than(802.11b/g/n HT20) $EIRP \leq 12.14\text{dBm}$ OFDM or DS other than(802.11n HT40) $EIRP \leq 9.13\text{dBm}$ other than 2400-2483.5MHz: 12.14dBm or less

The EIRP power= Conducted RF output power density(dBm/MHz) + Antenna Gain

6.2 TEST RESULT

Temperature:	25.5 °C	Relative Humidity:	55.8%	Pressure:	1010mbar
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Normal Voltage					
Test Frequency MHz	Conducted RF output power density		Antenna Gain	EIRP	Limits
	(dBm)	(mW)	dBi	(dBm)	(dBm)
2402	8.97	7.89	-0.58	8.39	≤ 12.14
2442	9.56	9.04	-0.58	8.98	
2479	9.68	9.29	-0.58	9.10	

Low Voltage					
Test Frequency MHz	Conducted RF output power density		Antenna Gain	EIRP	Limits
	(dBm)	(mW)	dBi	(dBm)	(dBm)
2402	8.95	7.85	-0.58	8.37	≤ 12.14
2442	9.53	8.97	-0.58	8.95	
2479	9.62	9.16	-0.58	9.04	

High Voltage					
Test Frequency MHz	Conducted RF output power density		Antenna Gain	EIRP	Limits
	(dBm)	(mW)	dBi	(dBm)	(dBm)
2402	8.94	7.83	-0.58	8.36	≤ 12.14
2442	9.56	9.04	-0.58	8.98	
2479	9.64	9.20	-0.58	9.06	



7. OCCUPIED BANDWITH

7.1 TEST PROCEDURES

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30KHz
VB	$\geq$ RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
Limit	Occupied Band Width: FH 83.5MHz; OFDM,DS $\leq$ 26MHz; Others $\leq$ 26MHz

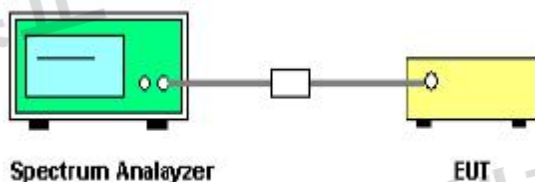
1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

2.Spectrum Setting : RBW= 30KHz, VBW $\geq$ RBW, Sweep time = Auto.

7.2 DEVIATION FROM STANDARD

No deviation.

7.3 TEST SETUP LAYOUT



**7.4 TEST RESULT**

Temperature:	25.4 °C	Relative Humidity:	55.2%	Pressure:	1010mbar
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Voltage	Frequency MHz	99%Occupied bandwidth MHz	90%Occupied bandwidth MHz
Normal	2402	1.442	1.168
	2442	1.443	1.182
	2479	1.447	1.184

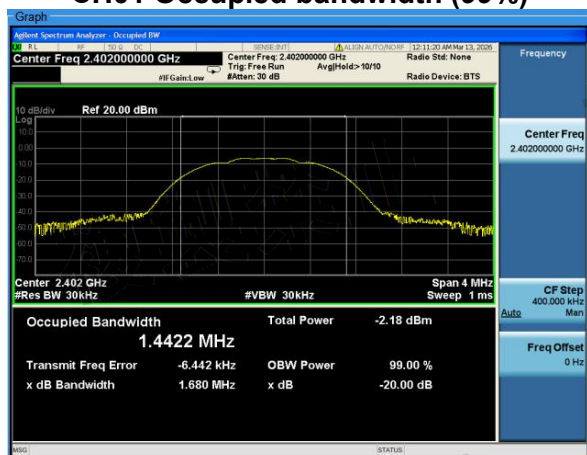
Voltage	Frequency MHz	99%Occupied bandwidth MHz	90%Occupied bandwidth MHz
Low	2402	1.440	1.166
	2442	1.441	1.180
	2479	1.445	1.183

Voltage	Frequency MHz	99%Occupied bandwidth MHz	90%Occupied bandwidth MHz
High	2402	1.441	1.167
	2442	1.442	1.181
	2479	1.446	1.182

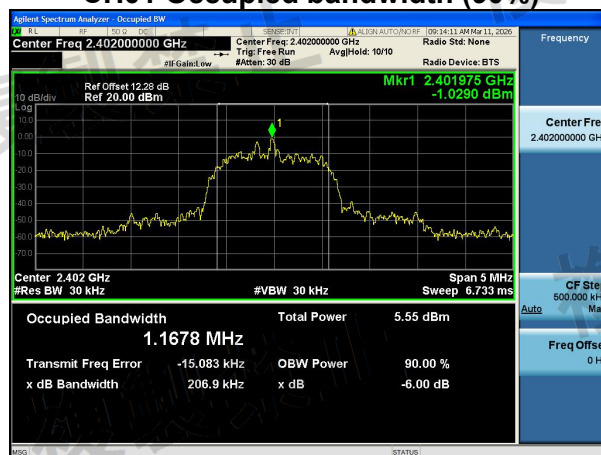
Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst Normal Voltage test plot.



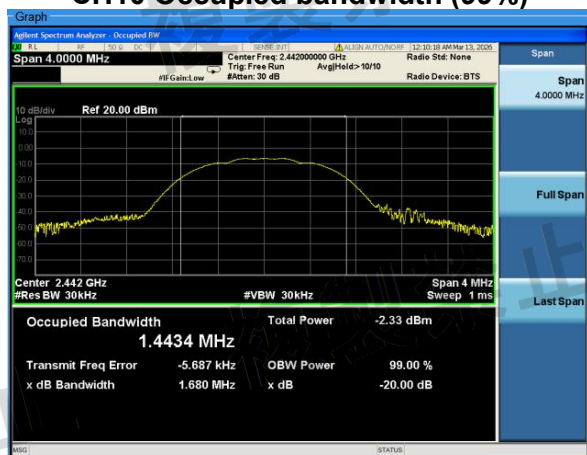
CH01 Occupied bandwidth (99%)



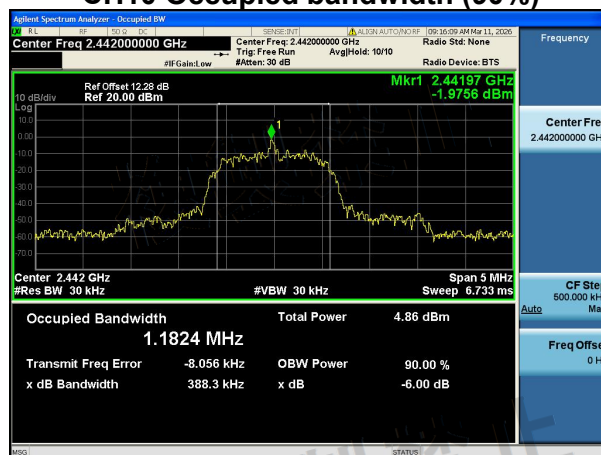
CH01 Occupied bandwidth (90%)



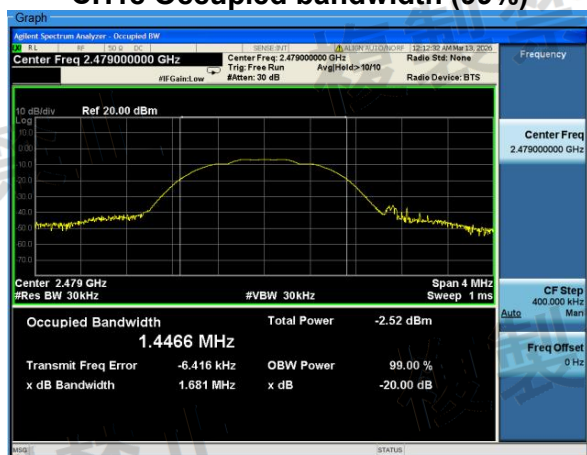
CH10 Occupied bandwidth (99%)



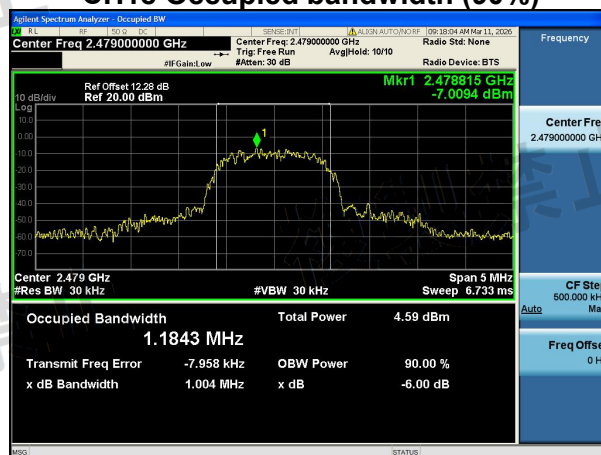
CH10 Occupied bandwidth (90%)



CH18 Occupied bandwidth (99%)



CH18 Occupied bandwidth (90%)





8. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

8.1. LIMIT

Item	Limits
Identification code	≥ 48 bits

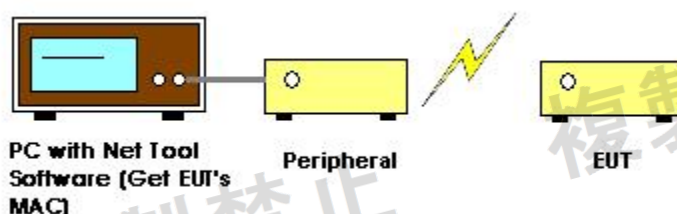
8.2. MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

8.3. TEST PROCEDURES

- 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.
- 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.

8.4. TEST SETUP LAYOUT



8.5. TEST DEVIATION

There is no deviation with the original standard.

8.6. EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

8.7. TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILITY

Temperature:	25.2 °C	Relative Humidity:	55.4%	Pressure:	1010mbar
Test result:	Pass	Address:	HXFB011		



9. UNWANTED EMISSION INTENSITY MEASUREMENT

9.1 LIMIT

Item	Limits
TX Spurious Emission	$\leq 2.5 \mu\text{W}/-26\text{dBm}$ ($30\text{MHz} \leq f \leq 1000\text{MHz}$)
	$\leq 2.5 \mu\text{W}/-26\text{dBm}$ ($1000\text{MHz} < f \leq 2387\text{MHz}$)
	$\leq 25 \mu\text{W}/-16\text{dBm}$ ($2387\text{MHz} < f \leq 2400\text{MHz}$)
	$\leq 25 \mu\text{W}/-16\text{dBm}$ ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$)
	$\leq 2.5 \mu\text{W}/-26\text{dBm}$ ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)

9.2. MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

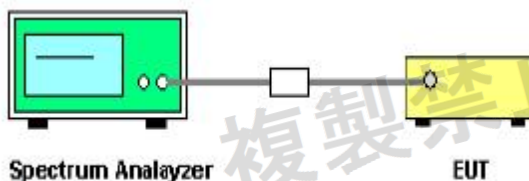
Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

9.3 TEST PROCEDURES

- EUT have transmitted the maximum modulation signal and fixed channelize.
- Setting of SA is following as: Below 1GHz RB:1MHz / VB:1MHz
Above 1GHz RB:1MHz / VB:1MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto
Sweep Mode: Continuous sweep / Detect mode: Positive peak
Trace mode: Max hold
- Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W}/-26\text{dBm}$.
- Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W}/-26\text{dBm}$.
- SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 $\mu\text{W}/-16\text{dBm}$.
- SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 $\mu\text{W}/-16\text{dBm}$
- SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W}/-26\text{dBm}$
- Measure side band spurious as follows: For 2.4GHz band: 2374MHz~2400MHz and 2483.5MHz~2509.5MHz RBW = VBW = 30kHz, Result_Value = Measured_Value + 15.2 [dBm]
- If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.



9.4. TEST SETUP LAYOUT



9.5. TEST DEVIATION

There is no deviation with the original standard.

9.6. TEST RESULT

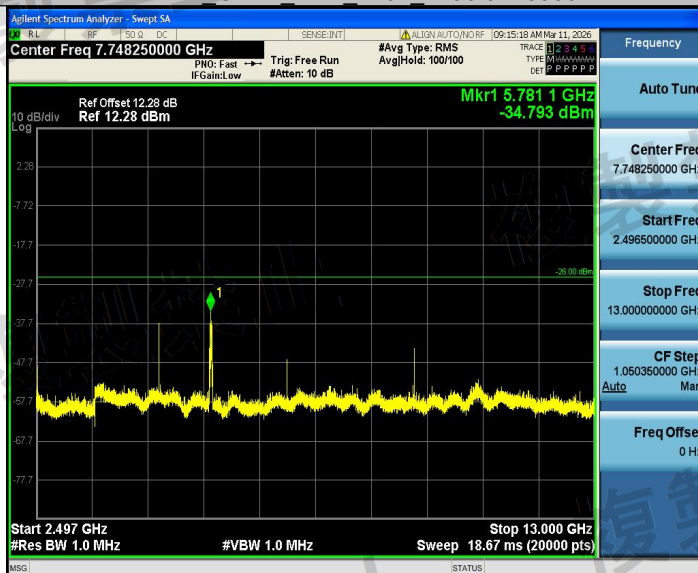
Temperature:	25.4 °C	Relative Humidity:	55.3%	Pressure:	1010mbar
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Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst Normal Voltage test data and plot.

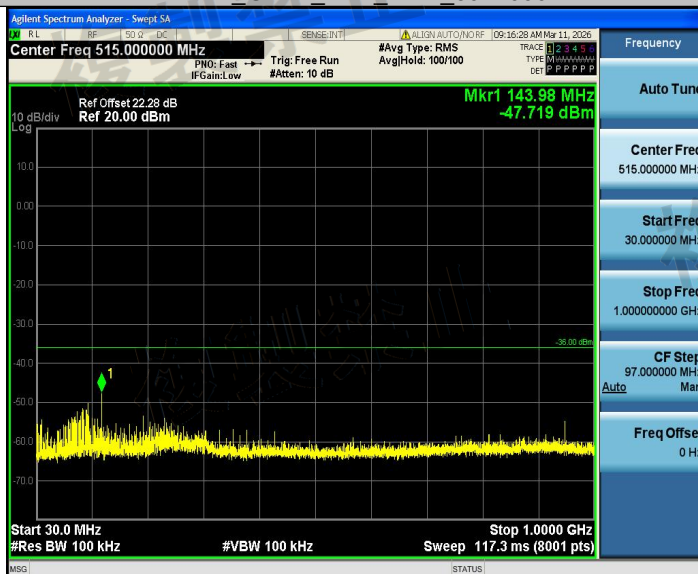
Test Condition	TestMode	Antenna	Channel	Freq.Range [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	GFSK	Ant1	2402	30~1000	-48.36	≤-36	0.01459	≤0.3	PASS
				1000~2387	-54.68	≤-26	0.00340	≤2.5	PASS
				2387~2400	-32.16	≤-16	0.60814	≤25	PASS
				2483.5~2496.5	-55.77	≤-16	0.00265	≤25	PASS
				2496.5~13000	-34.79	≤-26	0.33189	≤2.5	PASS
			2442	30~1000	-47.72	≤-36	0.01690	≤0.3	PASS
				1000~2387	-55.23	≤-26	0.00300	≤2.5	PASS
				2387~2400	-56.30	≤-16	0.00234	≤25	PASS
				2483.5~2496.5	-55.70	≤-16	0.00269	≤25	PASS
				2496.5~13000	-33.17	≤-26	0.48195	≤2.5	PASS
			2479	30~1000	-48.11	≤-36	0.01545	≤0.3	PASS
				1000~2387	-55.37	≤-26	0.00290	≤2.5	PASS
				2387~2400	-56.20	≤-16	0.00240	≤25	PASS
				2483.5~2496.5	-52.31	≤-16	0.00587	≤25	PASS
				2496.5~13000	-39.89	≤-26	0.10257	≤2.5	PASS



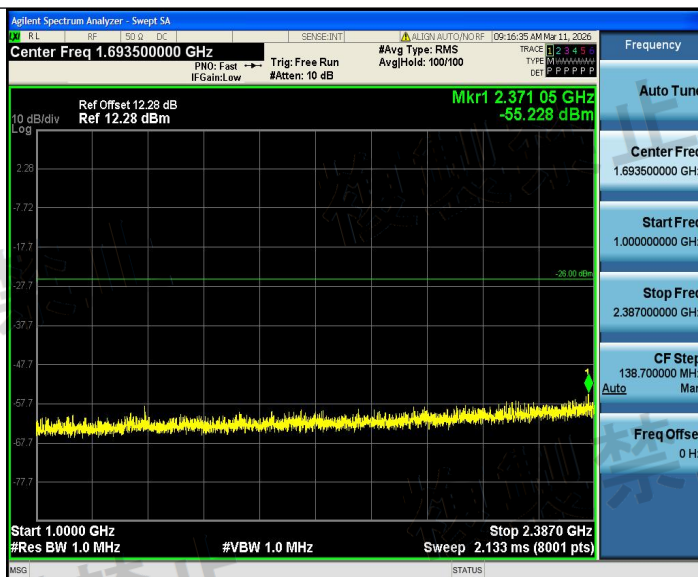
NTNV_GFSK_Ant1_2402_2496.5~13000



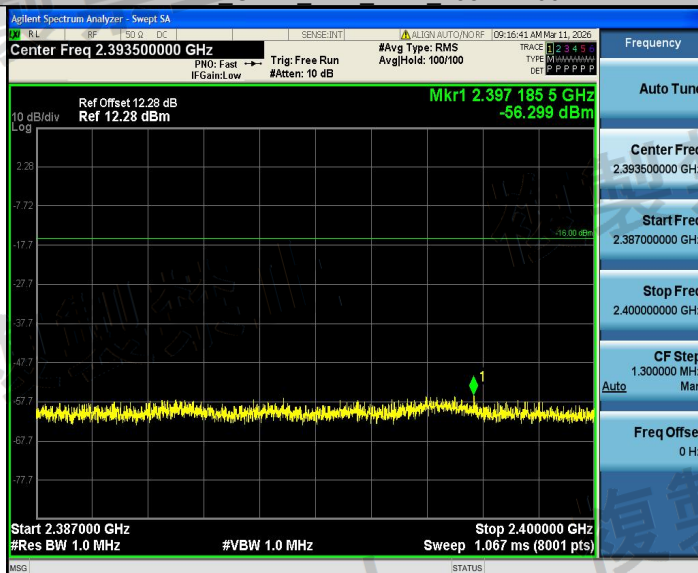
NTNV_GFSK_Ant1_2442_30~1000



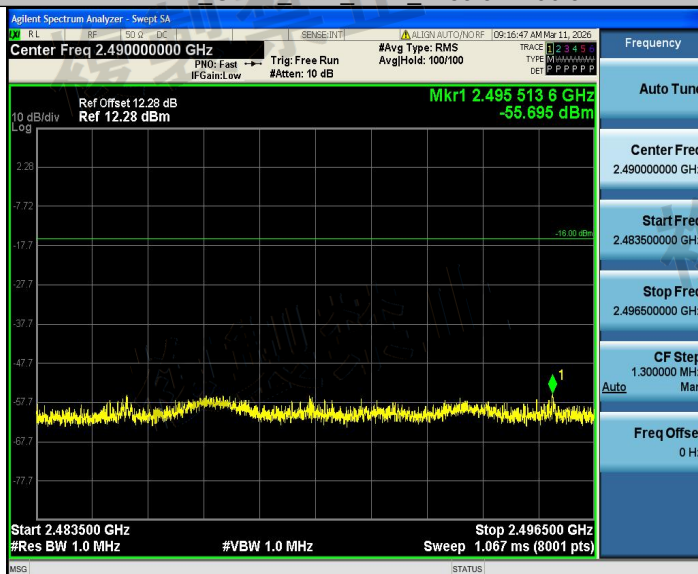
NTNV_GFSK_Ant1_2442_1000~2387



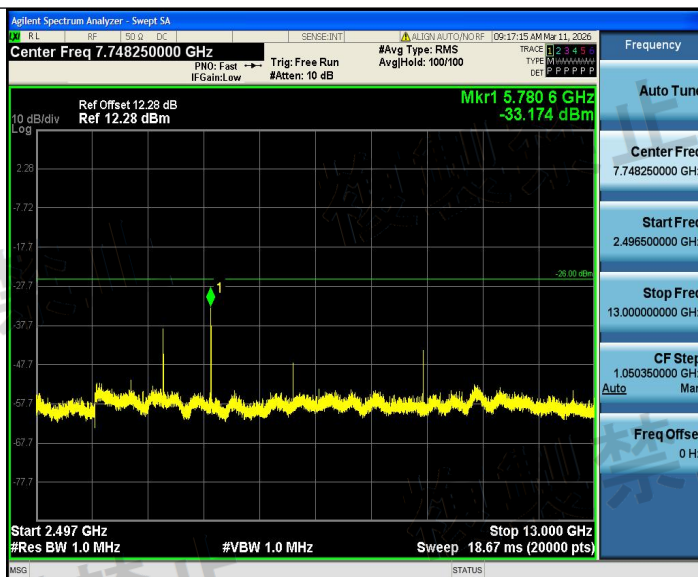
NTNV_GFSK_Ant1_2442_2387~2400



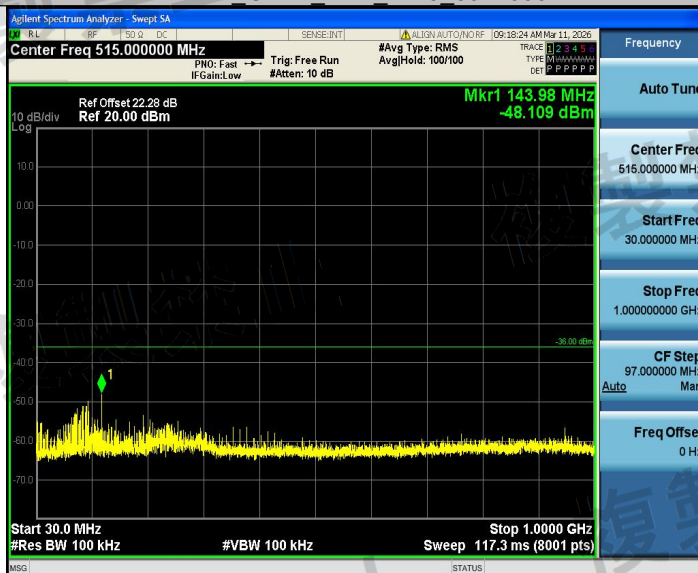
NTNV_GFSK_Ant1_2442_2483.5~2496.5



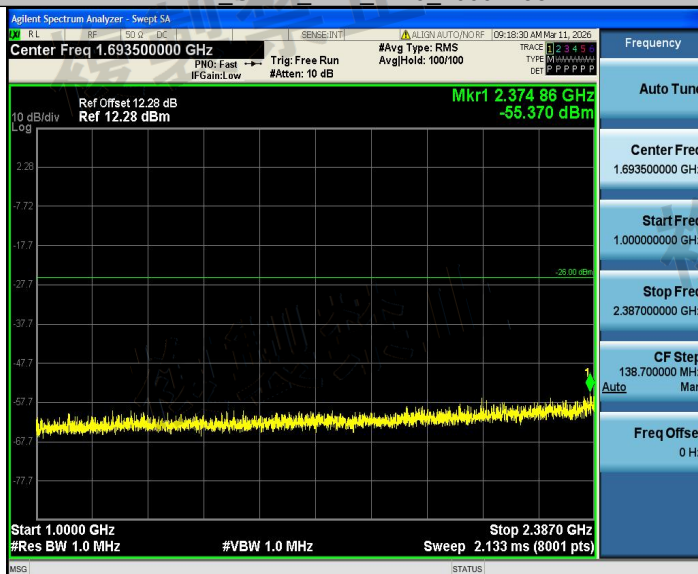
NTNV_GFSK_Ant1_2442_2496.5~13000



NTNV_GFSK_Ant1_2479_30~1000



NTNV_GFSK_Ant1_2479_1000~2387



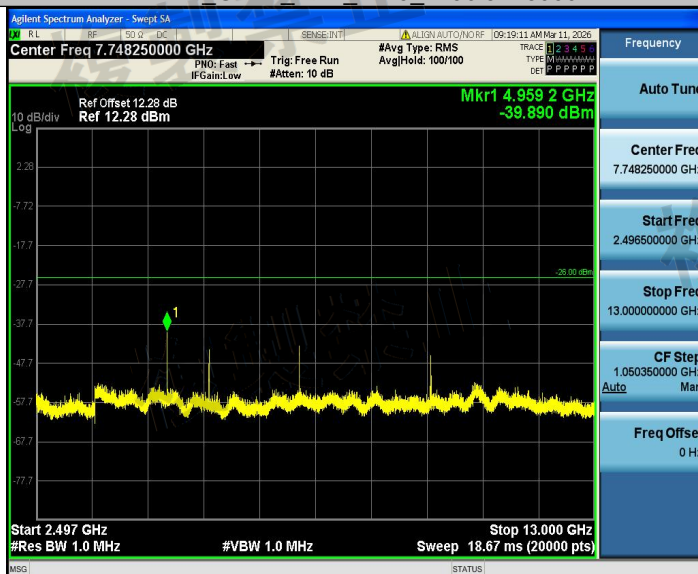
NTNV_GFSK_Ant1_2479_2387~2400



NTNV_GFSK_Ant1_2479_2483.5~2496.5



NTNV_GFSK_Ant1_2479_2496.5~13000



Note: SA set to from 2.4965GHz to 13GHz, plot shows from 2.497GHz to 13GHz as of SA's default format.



10. CARRIER SENSE

Not apply to the test item, since EIRP does not require compensation through Antenna Power.

11. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

11.1 LIMIT

Item	Limits
RX Spurious Emission:	$\leq 4\text{nW}/-54\text{dBm}$ ($f < 1\text{GHz}$)
	$\leq 20\text{nW}/-47\text{dBm}$ ($1\text{GHz} \leq f$)

11.2 MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
VB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

11.3 TEST PROCEDURES

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
3. SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW/-54dBm
4. SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW/-47dBm
5. If power level of lower emissions are more than 1/10 of limit (4nW/-54dBm for $f < 1\text{GHz}$, 20nW/-47dBm for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

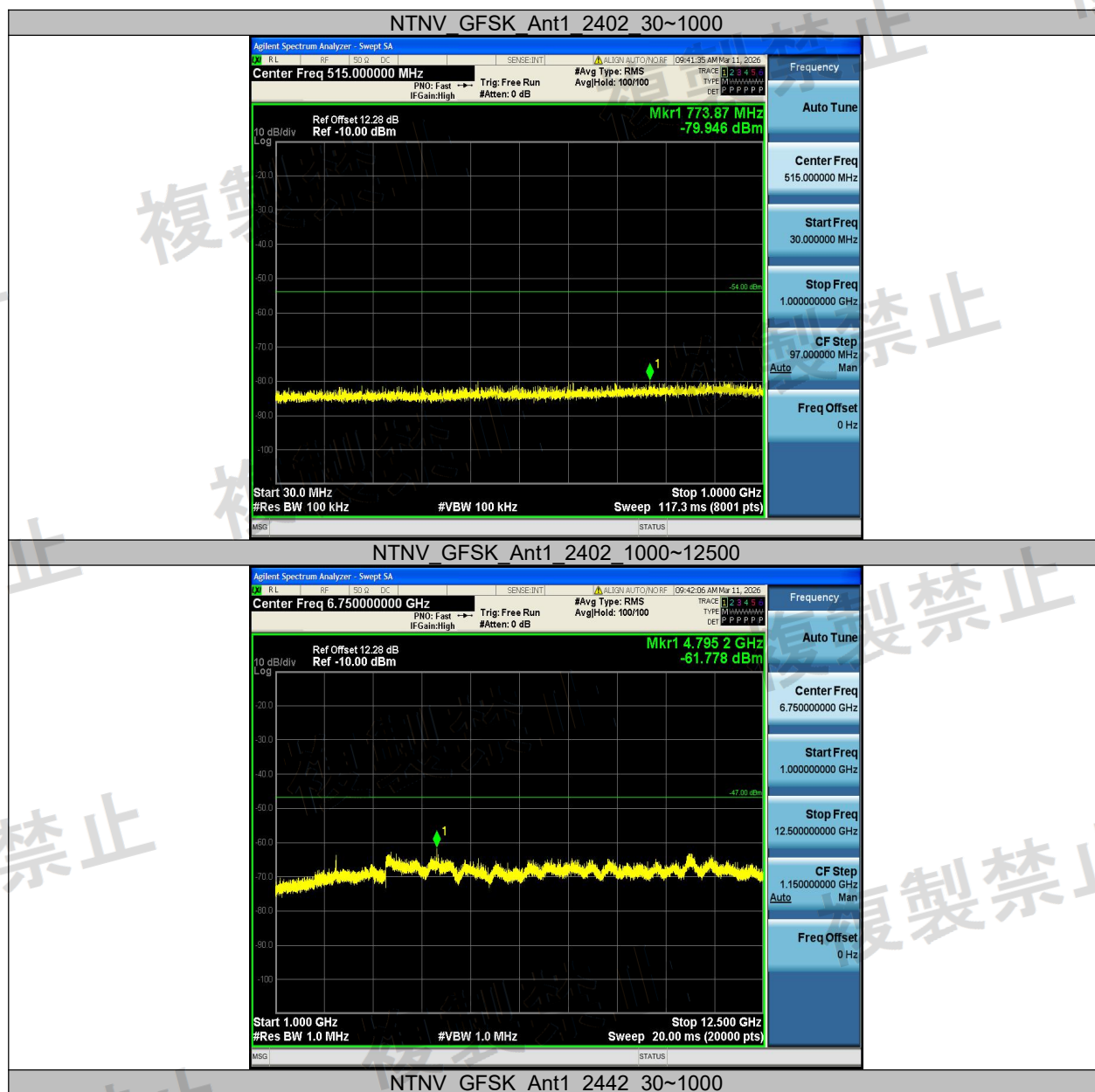


11.4 TEST RESULT

Temperature:	25.3 °C	Relative Humidity:	55.5%	Pressure:	1010mbar
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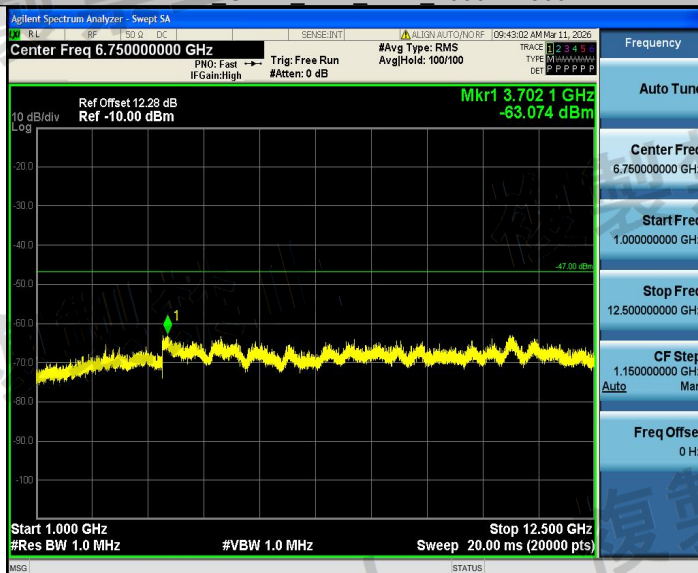
Note: We test Normal Voltage, High Voltage, Low Voltage, and recorded the worst Normal Voltage test data and plot.

TestCondition	TestMode	Antenna	Channel	Freq.Range [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	GFSK	Ant1	2402	30~1000	-79.95	≤-54	0.01012	≤4	PASS
				1000~12500	-61.78	≤-47	0.66374	≤20	PASS
			2442	30~1000	-79.1	≤-54	0.01230	≤4	PASS
				1000~12500	-63.07	≤-47	0.49317	≤20	PASS
			2479	30~1000	-79.79	≤-54	0.01050	≤4	PASS
				1000~12500	-59.9	≤-47	1.02329	≤20	PASS

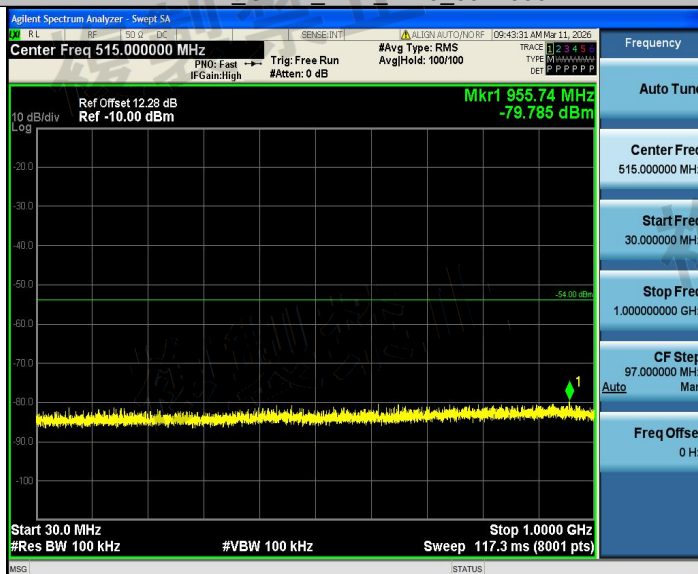




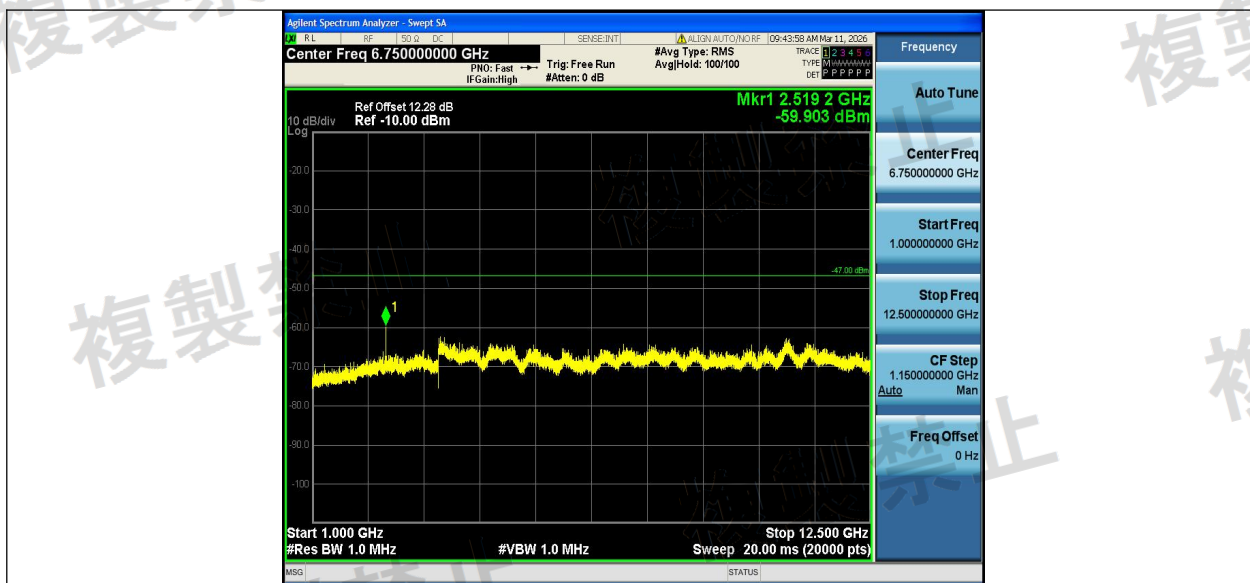
NTNV_GFSK_Ant1_2442_1000~12500



NTNV_GFSK_Ant1_2479_30~1000



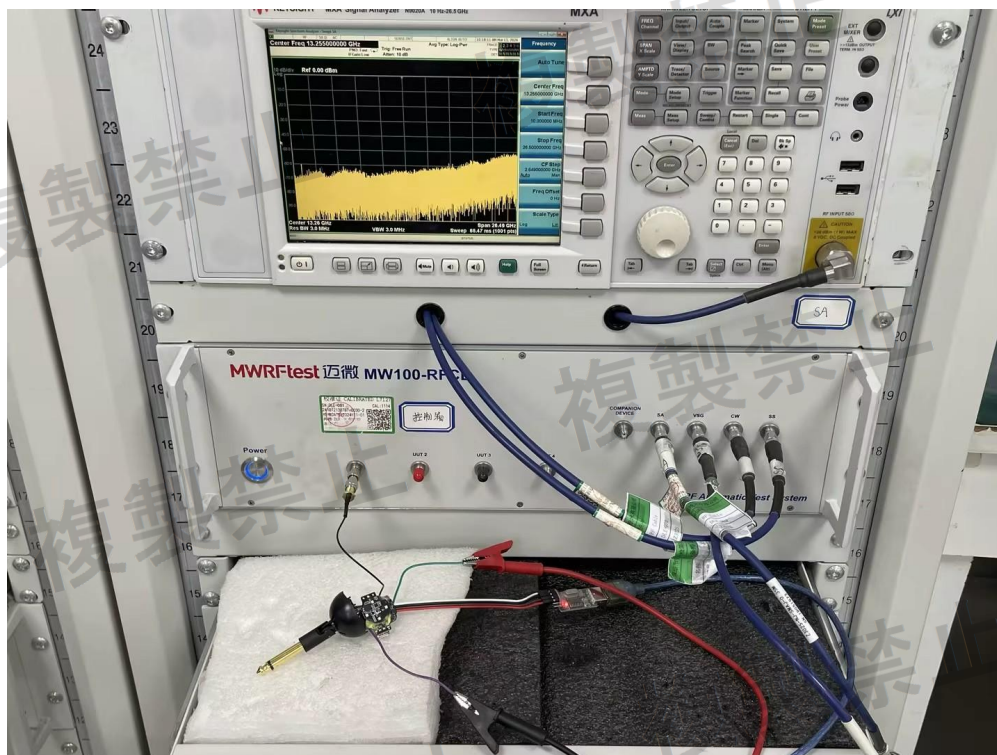
NTNV_GFSK_Ant1_2479_1000~12500





12. EUT TEST PHOTO

Measurement Photos



13. EUT PHOTOS

Please see the attachment for detail.

---END---