JAPAN RADIO TEST REPORT

Applicant:	SHENZHEN XGRIDS-INNOVATION CO., LTD
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Manufacturer:	SHENZHEN XGRIDS-INNOVATION CO., LTD
Address:	2403&2404, 24 Floor, Building 1B, Shenzhen International Innovation Valley, Liuxiandong, Nanshan District, Shenzhen, Guangdong, China
EUT:	Spatial Camera
Trade Mark:	XGRIDS
Model Number:	PortalCam
Date of Receipt:	Aug. 20, 2025
Test Date:	Aug. 20, 2025 - Sep. 15, 2025
Date of Report:	Sep. 15, 2025
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.
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Applicable Standards:	ARIB STD T-66 Ver.3.7(2014) Item 19 of Article 2 Paragraph 1 MIC Notice No.88 Appendix No.43
Test Result:	Pass
Report Number:	DLE-250820056R

Prepared (Test Engineer):	Ken Tan
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	Radio Interference Prevention Capability Measurement	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:

1 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.

2 Not applicable since the EIRP Power is less than 12.14dBm.

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± U**，where expended 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	±0.16dB
2	Spurious emissions,conducted	±0.21dB
3	frequency error ppm	±0.5ppm
4	Occupied Bandwidth	±0.2MHz

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Spatial Camera	
Trademark:	XGRIDS	
Model Name	PortalCam	
Test Model:	PortalCam	
Model Difference	N/A	
Product Description	Operation Frequency:	2402~2480 MHz
	Modulation:	GFSK
	Number Of Channel:	40 CH
	BT Version:	V5.2
	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 7.2V from battery TYPE-C Port from adapter	
Adapter:	Model:GS-W45A0954 Input: 100-240V~50/60Hz,1.2A Output USB-C1/C2: 5V/3A or 9V/3A or 12V/3A or 15V/3A or 20V/2.25A (PPS)3.3V-16V/3A 45W Max Manufacturer: Shenzhen Good-she Technology Co., Ltd.	
Hardware Version	HV01	
Software Version	SV01	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	11	2422	21	2442
02	2404	12	2424	22	2444
03	2406	13	2426	23	2446
~	~	~	~	~	~
09	2418	19	2438	20	2440
10	2420	20	2440	40	2480

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	2.4G	FPC Antenna	N/A	0.98	

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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	CH20	
Mode3	CH40	
Mode4	RX	

Pretest Mode	Conducted Emission	
Mode1	CH01	GFSK
Mode2	CH20	
Mode3	CH40	
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	7.2V	7.92V	6.48V
RF module's voltage	3.3V	3.3V	3.3V
Voltage Variation (%)	0	0	0

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.

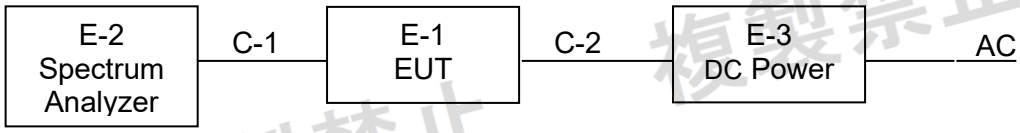
When the input voltage of the product changes within -10% and +10%, the voltage of the module does not change, so the test is only tested under normal voltage.

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 befixed on the firmware of the final end product power parameters of BLE

Test software Name	BT RF Test		
Frequency	2402 MHz	2440 MHz	2480 MHz
Max output power parameters setting of software	4	4	4

2.5 BLOCK DIGRAM 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
E-1	Spatial Camera	N/A	PortalCam	N/A	EUT
E-2	Spectrum Analyzer	Agilent	N9020A	108040	
E-3	DC Power	N/A	PS-305D	010952961	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10cm	RF Cable
C-2	NO	NO	30cm	Mini USB Cable

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

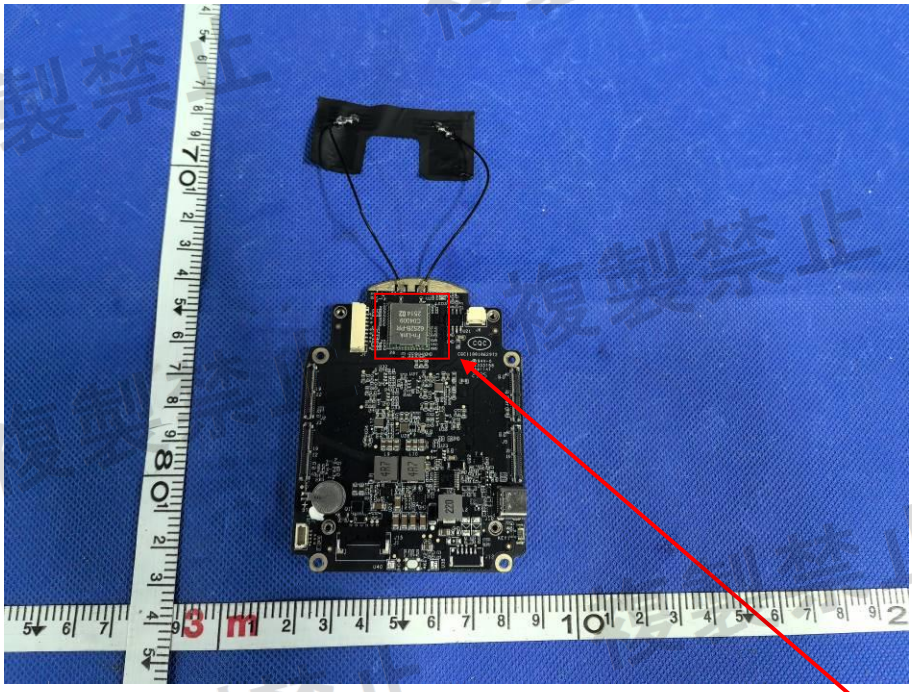
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated until
1	SPECTRUM ANALYZER	AGILENT	E4407B	160400005	Nov. 01, 2024	Oct. 31, 2025
2	TEST RECEIVER	R&S	ESPI	101318	Nov. 01, 2024	Oct. 31, 2025
3	BILOG ANTENNA	TESEQ	CBL6111D	31216	Nov. 01, 2024	Oct. 31, 2025
4	50Ω COAXIAL SWITCH	ANRITSU	MP59B	6200264416	Nov. 01, 2024	Oct. 31, 2025
5	SPECTRUM ANALYZER	ADVANTEST	R3132	150900201	Nov. 01, 2024	Oct. 31, 2025
6	HORN ANTENNA	EM	EM-AH-10180	2011071402	Nov. 01, 2024	Oct. 31, 2025
7	HORN ANT	SCHWARZBECK	BBHA 9170	9170-181	Nov. 01, 2024	Oct. 31, 2025
8	AMPLIFIER	EM	EM-30180	060538	Nov. 01, 2024	Oct. 31, 2025
9	LOOP ANTENNA	ARA	PLA-1030/B	1029	Nov. 01, 2024	Oct. 31, 2025
10	POWER METER	R&S	NRVS	100696	Nov. 01, 2024	Oct. 31, 2025
11	TEST RECEIVER	R&S	ESCI	101160	Nov. 01, 2024	Oct. 31, 2025
12	SPECTRUM ANALYZER	AGILENT	N9020A	MY55370280	Nov. 01, 2024	Oct. 31, 2025
13	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	106504	Nov. 01, 2024	Oct. 31, 2025
14	50Ω COAXIAL SWITCH	ANRITSU	MP59B	6200264417	Nov. 01, 2024	Oct. 31, 2025

Note: 1. All Equipments Calibration In Guangzhou GRE Metrology & Test Co., Ltd,
2. Regarding the measuring device, Article 24-2, Paragraph 4 of the Radio Law.
3. (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .
(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to（C）From JRL Article 24-2, paragraph 4, Item 2

3. RF SHIELDING METHOD

Enclosure:

the product structure is stuck by Special shielding cover, If you do not use a special tool, you will not be able to open it. See below the structure:



Special shielding cover is used on red line for cannot be open easily structure.

Special shielding cover name: C04009

shielding cover type: Aluminum alloy structure

Manufacturer: SHENZHEN XGRIDS-INNOVATION CO., LTD

4. TEST RESULT FOR BLUETOOTH

4.1 FREQUENCY ERROR

4.2 LIMIT

Item	Limits
Frequency Error	≤±50ppm

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.

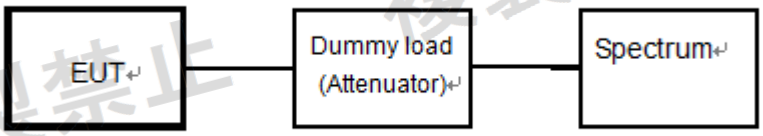
(2)In the case of burst waves, the measurement shall be done for enough time in order to obtain the enough measuring accuracy, and the average of the measured values becomes the final value.

(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



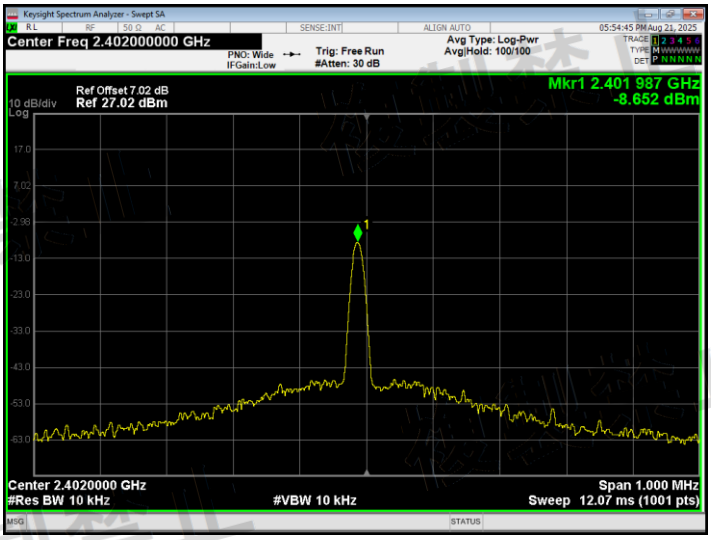
4.5.1 TEST RESULT

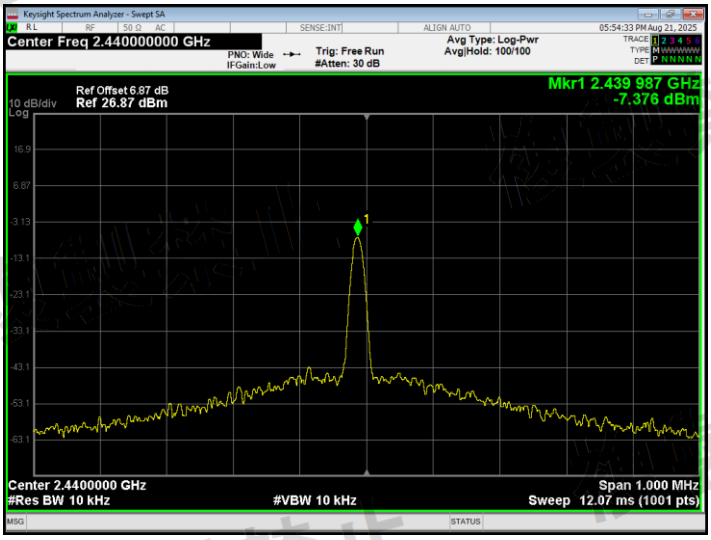
Temperature:	25.6 ℃	Relative Humidity:	55.8%	Pressure:	1010mbar

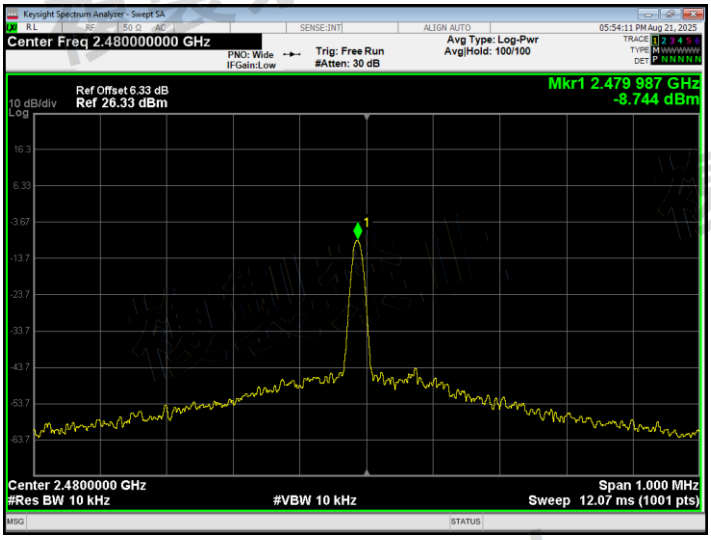
Voltage	Frequecy	Reading	Tolerance	Limit
Normal	MHz	MHz	ppm	(ppm)
	2402	2401.987	-5.41	≤±50ppm
	2440	2439.987	-5.33	≤±50ppm
	2480	2479.987	-5.24	≤±50ppm

複製禁止

Normal volatge







5. ANTENNA POWER

5.1 LIMIT

Item	Limits
Antenna Power Density	≦3mW/MHz (FH form 2427 - 2470.75 MHz) ≦10mW/MHz (OFDM,DS from2400~2483.5MHz) ≦10mW (Other from 2400~2483.5MHz)
Antenna Power Error	+20%(Base on manufacturer declare antenna power density)

5.2 MEASURING INSTRUMENTS AND SETTING

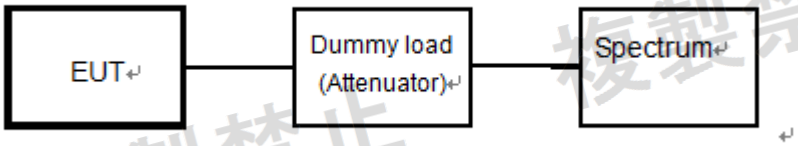
Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	2 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.3 TEST PROCEDURES

1. The EUT is connected on the spectrum analyzer.
2. Adjust the spectrum analyzer to have the center frequency the same with the measured carrier. RBW=VBW=2MHz, detector mode is positive peak. Turn off the averaging function and use zero span.
3. The calibrating signal power shall be reduced to 0 dBm and it shall be verified that the power meter reading also reduces by 10 dB.
4 . Connect the equipment to be measured. Using the following settings of the spectrum analyzer in combination with "max hold" function, find the frequency of highest power output in the power envelope: center frequency equal to operating frequency; RBW & VBW: 2 MHz; detector mode: positive peak; averaging: off; span: 5 times the spectrum width; amplitude: adjust for middle of the instrument' range. The frequency found shall be recorded.
5. Antenna Power Error is definition that actual measure antenna power tolerance between + 20% power range that base on manufacturer declare the conducted power density.

5.4 TEST SETUP LAYOUT



5.5 TEST DEVIATION

There is no deviation with the original standard.

5.6 TEST DEVIATION

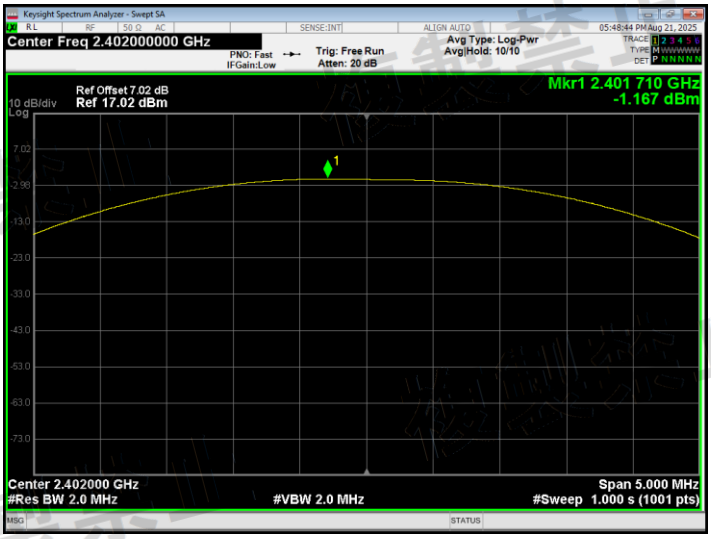
The EUT was programmed to be in continuously transmitting mode.

5.7 TEST RESULT

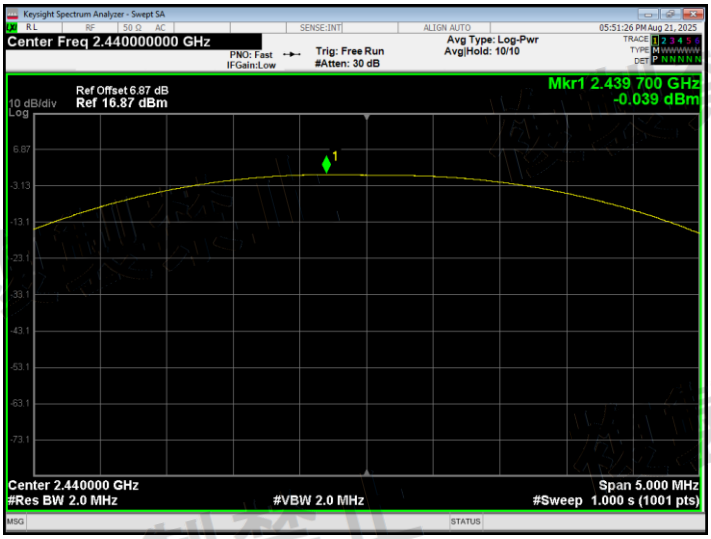
Temperature:	25.4 ℃	Relative Humidity:	55.3%	Pressure:	1010mbar

Voltage	Test Frequency MHz	Conducted RF output power density (mW)	Rated power density (mW)	Limits (mW)	Antenna Power Error (%)
Normal	2402	0.764	1.5	10	-49.07
	2440	0.991	1.5	10	-33.93
	2480	0.718	1.5	10	-52.13
Limit: +20%(Base on manufacturer declare antenna power density)					

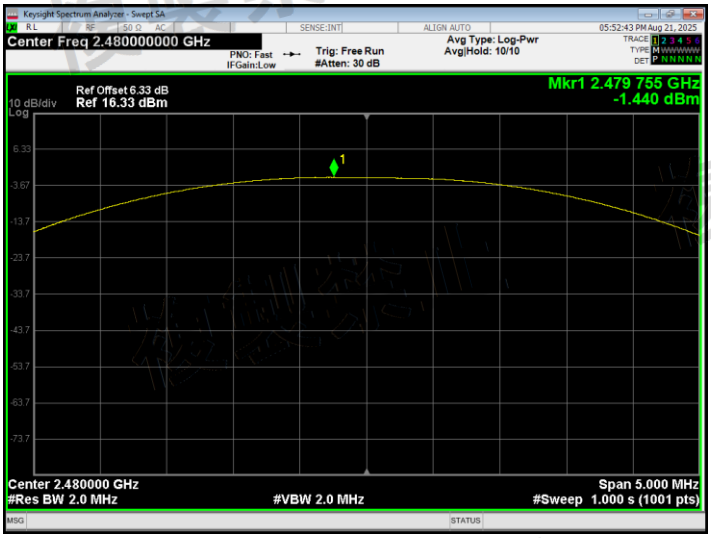
Normal voltage
2402MHz



2440MHz



2480MHz



6. EIRP POWER

6.1 LIMIT

Item	Limits
Radiation power EIRP	FH form 2427-2470,75 MHz, EIRP≦6.91dBm CCK/OFDM/DBPSK(2400-2483.5MHz) OFDM or DS other than(802.11b/g/n HT20) EIRP≦12.14dBm OFDM or DS other than(802.11n HT40) EIRP≦9.13dBm 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 ℃	Relative Humidity:	55.8%	Pressure:	1010mbar

Test Frequency MHz	Conducted RF output power density		Antenna Gain	EIRP	Limits
	(mW)	(dBm)	dBi	(dBm)	(dBm)
2402	0.764	-1.167	0.98	-0.187	≦12.14
2440	0.991	-0.039	0.98	0.941	
2480	0.718	-1.440	0.98	-0.46	
Limit : +20% (Base on manufacturer declare antenna power density)					

7. OCCUPIED BANDWITH

7.1 TEST PROCEDURES

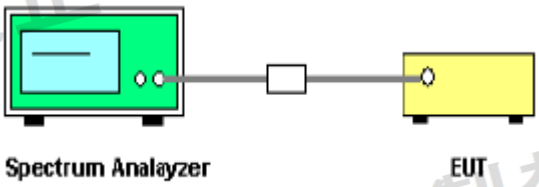
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	300KHz
VB	≥RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
Limit	Occupied Band Width: FH 83.5MHz; OFDM,DS ≦26MHz; Others≦26MHz

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= 300KHz, VBW≥ RBW, Sweep time = Auto.

7.2 DEVIATION FROM STANDARD

No deviation.

7.3 TEST SETUP LAYOUT



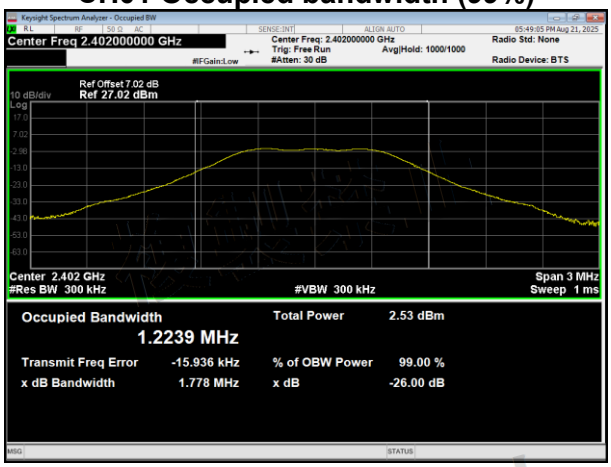
7.4 TEST RESULT

Temperature:	25.4 ℃	Relative Humidity:	55.2%	Pressure:	1010mbar

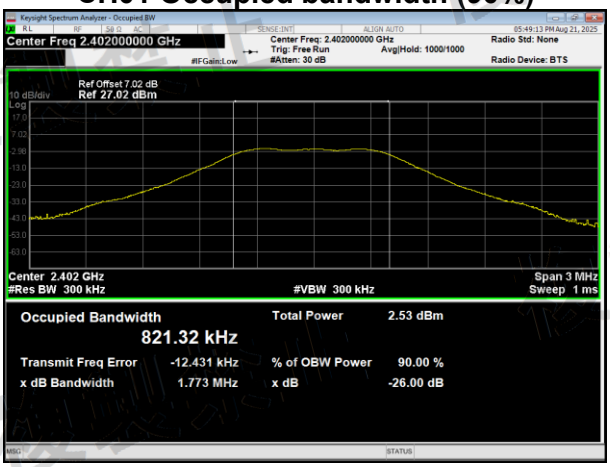
Voltage	Frequecy MHz	99%Occupied bandwidth MHz	90%Occupied bandwidth MHz
Normal	2402	1.224	0.821
	2440	1.226	0.823
	2480	1.228	0.823

Normal volatge

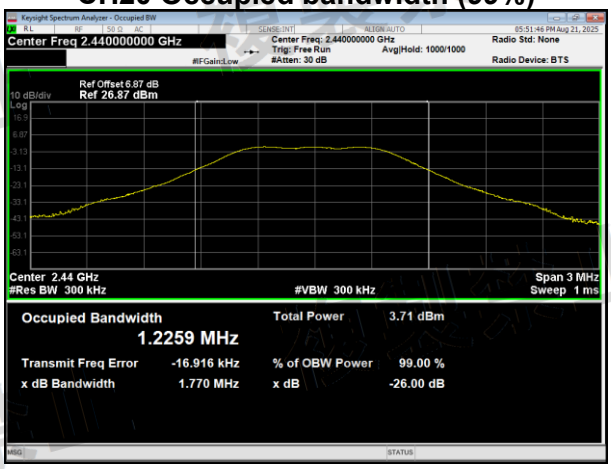
CH01 Occupied bandwidth (99%)



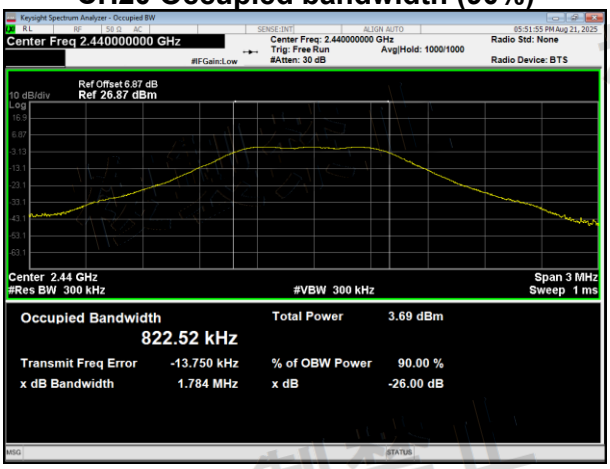
CH01 Occupied bandwidth (90%)



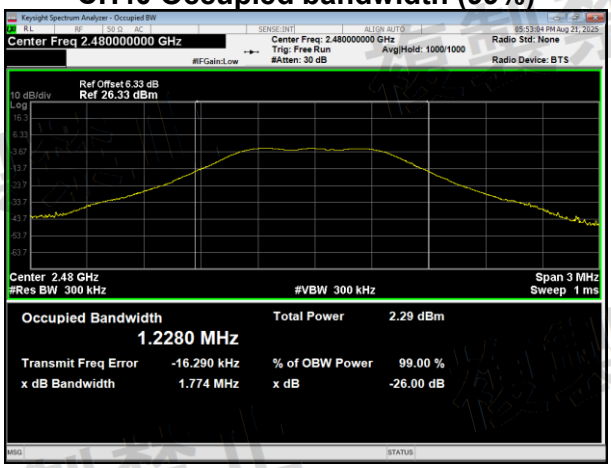
CH20 Occupied bandwidth (99%)



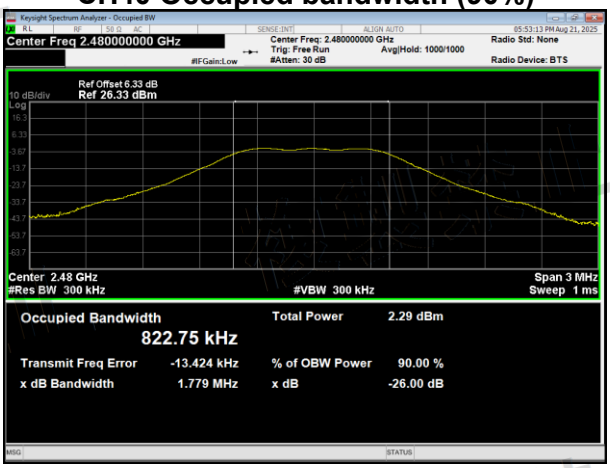
CH20 Occupied bandwidth (90%)



CH40 Occupied bandwidth (99%)



CH40 Occupied bandwidth (90%)



7. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

7.1. LIMIT

Item	Limits
Identification code	≧48 bits

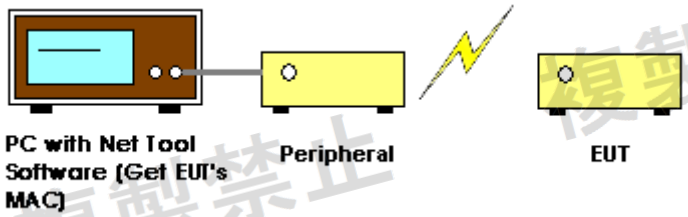
7.2. MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

7.3. TEST PROCEDURES

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

7.4. TEST SETUP LAYOUT



7.5. TEST DEVIATION

There is no deviation with the original standard.

7.6. EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

7.7. TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILIT

Temperature:	25.2 ℃	Relative Humidity:	55.4%	Pressure:	1010mbar

Test result:	CONFORM MAC Address:90:2B:D2:6C:5B:7A

8. UNWANTED EMISSION INTENSITY MEASUREMENT

8.1 LIMIT

Item	Limits
TX Spurious Emission	≦2.5 μW/-26dBm (30MHz≦f≦1000MHz)
	≦2.5 μW/-26dBm (1000MHz<f≦2387MHz)
	≦25 μW/-16dBm (2387MHz<f≦2400MHz)
	≦25 μW/-16dBm (2483.5MHz≦f<2496.5MHz)
	≦2.5 μW/-26dBm (2496.5MHz≦f<12500MHz)

8.2. MEASURING INSTRUMENTS AND SETTING

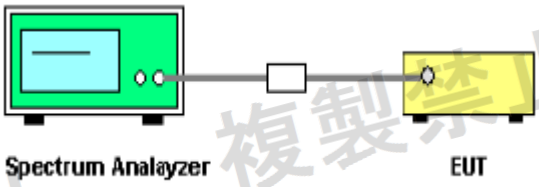
Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

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

8.3 TEST PROCEDURES

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. 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
3. Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 0.25 μW/-26dBm.
4. 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 μW/-26dBm.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μW/-16dBm.
6. 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 μW/-16dBm
7. 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 μW/-26dBm
8. Measure side band spurious as follows: For 2.4GHz band: 2374MHz~2400MHz and 2483.5MHz~2509.5MHz RBW = VBW = 30kHz, Result_Value = Meaured_ Value + 15.2 [dBm]
9. 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.

8.4. TEST SETUP LAYOUT



8.5. TEST DEVIATION

There is no deviation with the original standard.

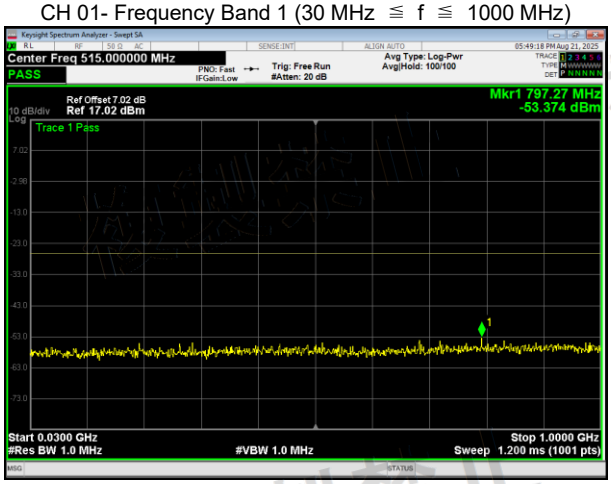
8.6. TEST RESULT

Temperature:	25.4 ℃	Relative Humidity:	55.3%	Pressure:	1010mbar

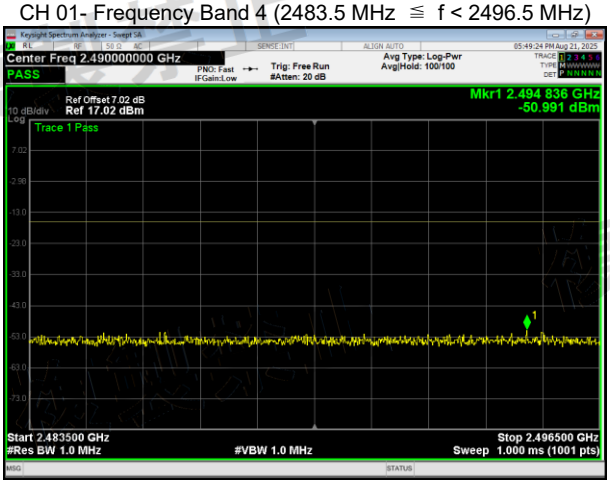
Frequency (MHz)	Antenna	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm/MHz)	Max Value (uW/MHz)	Limit Start (uW/MHz)	Limit Stop (uW/MHz)	Verdict
2402	Ant1	30-1000	797.27	-53.37	0.0046	2.5	2.5	Pass
2402	Ant1	1000-2387	2384.23	-46.55	0.0221	2.5	2.5	Pass
2402	Ant1	2387-2400	2399.88	-35.1	0.309	25	25	Pass
2402	Ant1	2483.5-2496.5	2494.84	-50.99	0.008	25	25	Pass
2402	Ant1	2496.5-13000	7202.07	-47.31	0.0186	2.5	2.5	Pass
2440	Ant1	30-1000	883.6	-53.95	0.004	2.5	2.5	Pass
2440	Ant1	1000-2387	1748.98	-38.16	0.1528	2.5	2.5	Pass
2440	Ant1	2387-2400	2392.43	-48.72	0.0134	25	25	Pass
2440	Ant1	2483.5-2496.5	2488.54	-50.82	0.0083	25	25	Pass
2440	Ant1	2496.5-13000	3494.33	-37.9	0.1622	2.5	2.5	Pass
2480	Ant1	30-1000	816.67	-55.01	0.0032	2.5	2.5	Pass
2480	Ant1	1000-2387	2184.5	-52.05	0.0062	2.5	2.5	Pass
2480	Ant1	2387-2400	2388.74	-52.14	0.0061	25	25	Pass
2480	Ant1	2483.5-2496.5	2483.51	-44.08	0.0391	25	25	Pass
2480	Ant1	2496.5-13000	3410.3	-44.49	0.0356	2.5	2.5	Pass

Normal volatge

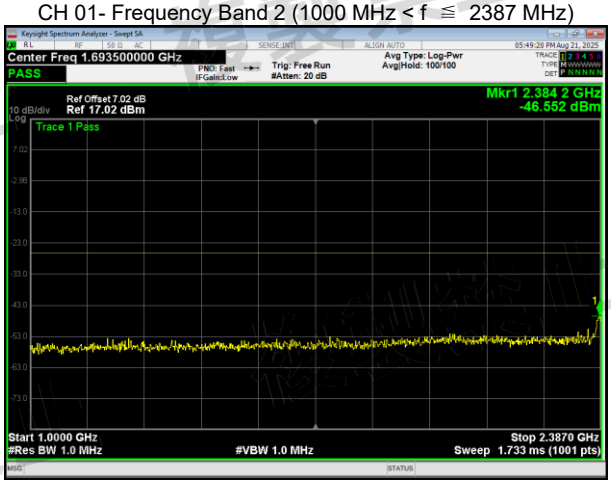
CH 01- Frequency Band 1 (30 MHz ≦ f ≦ 1000 MHz)



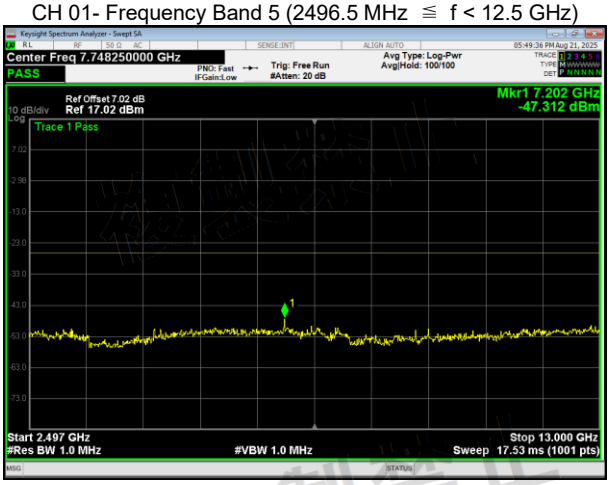
CH 01- Frequency Band 4 (2483.5 MHz ≦ f < 2496.5 MHz)



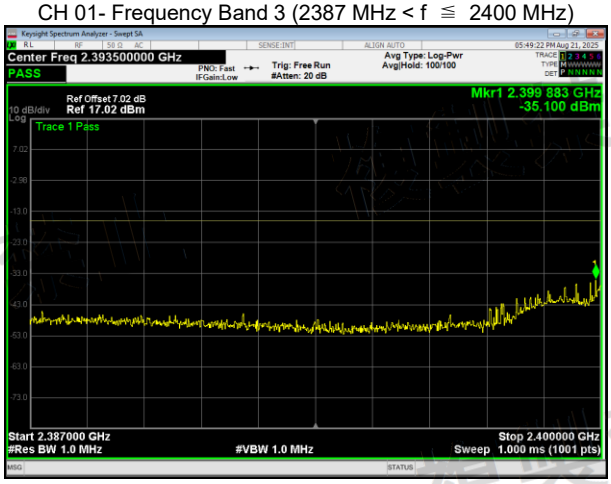
CH 01- Frequency Band 2 (1000 MHz < f ≦ 2387 MHz)



CH 01- Frequency Band 5 (2496.5 MHz ≦ f < 12.5 GHz)

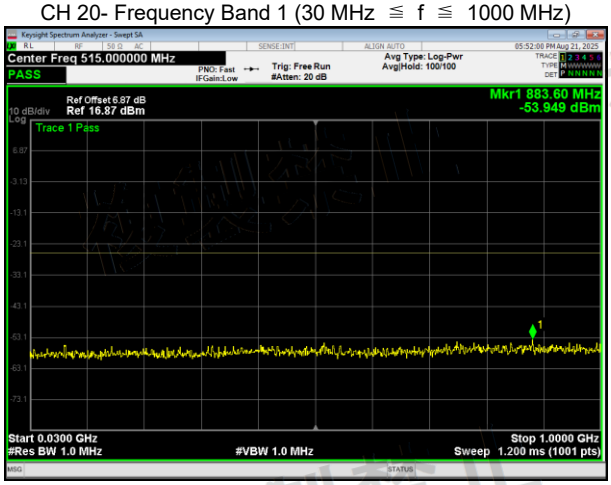


CH 01- Frequency Band 3 (2387 MHz < f ≦ 2400 MHz)

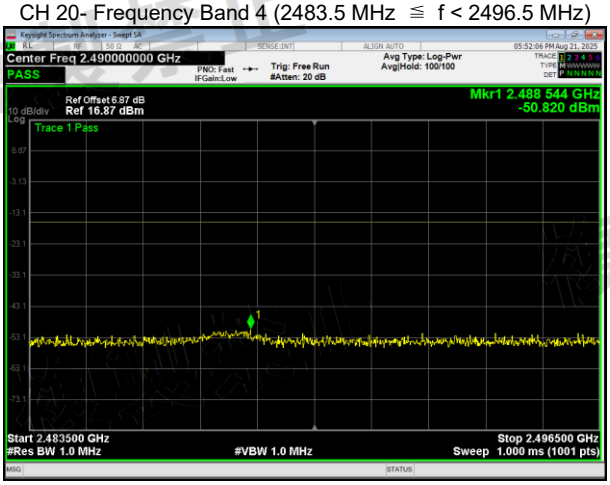


Normal volatge

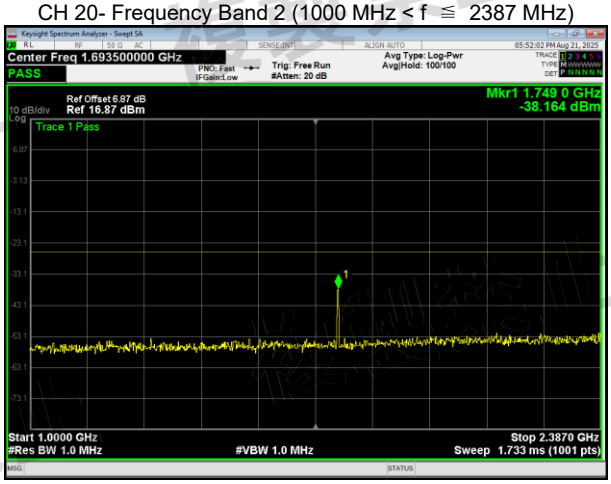
CH 20- Frequency Band 1 (30 MHz ≦ f ≦ 1000 MHz)



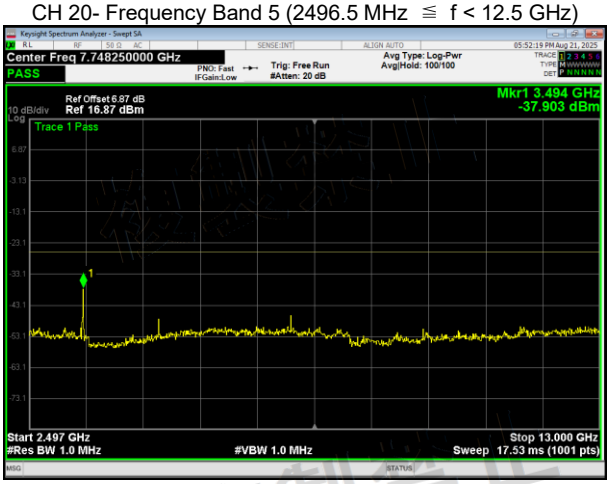
CH 20- Frequency Band 4 (2483.5 MHz ≦ f < 2496.5 MHz)



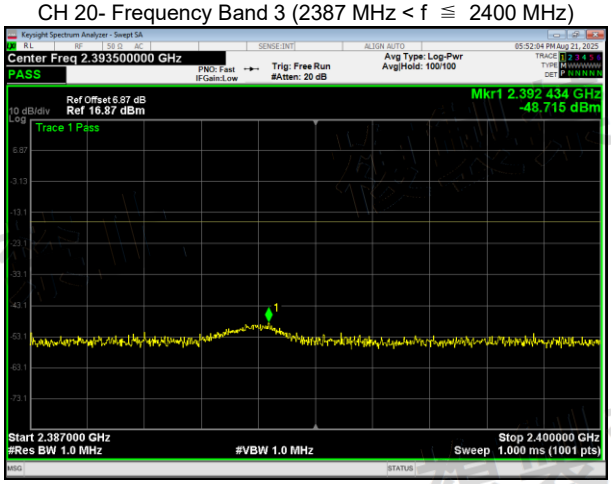
CH 20- Frequency Band 2 (1000 MHz < f ≦ 2387 MHz)



CH 20- Frequency Band 5 (2496.5 MHz ≦ f < 12.5 GHz)

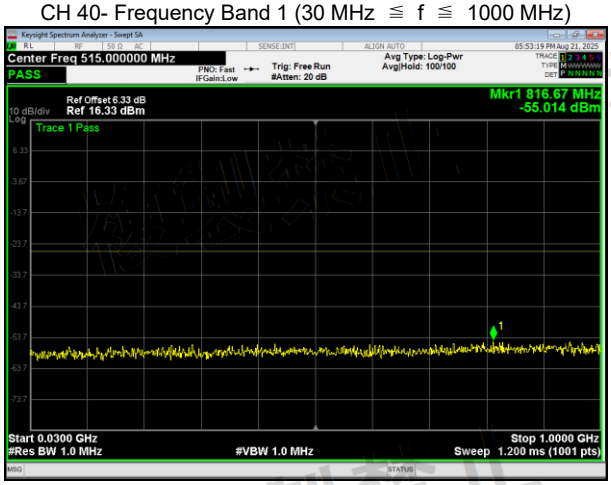


CH 20- Frequency Band 3 (2387 MHz < f ≦ 2400 MHz)

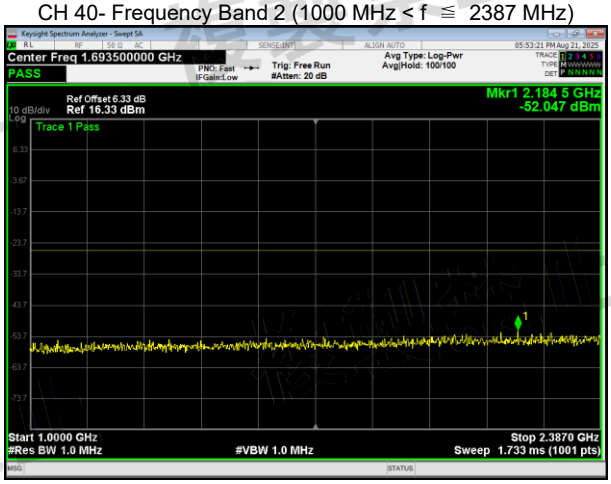


Normal volatge

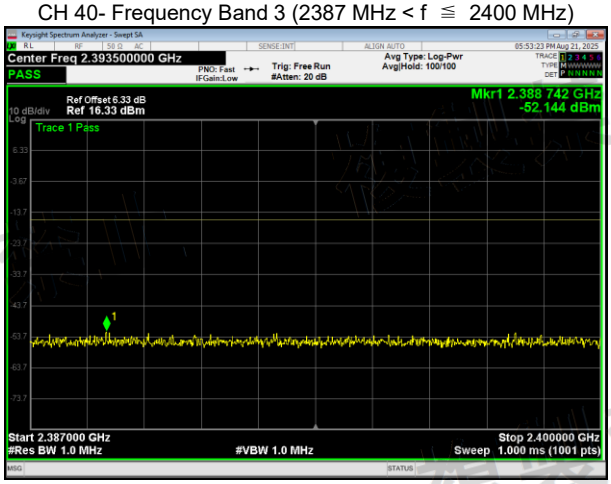
CH 40- Frequency Band 1 (30 MHz ≦ f ≦ 1000 MHz)



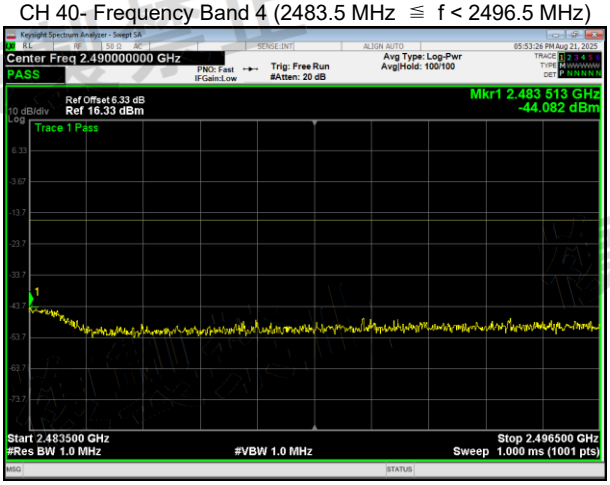
CH 40- Frequency Band 2 (1000 MHz < f ≦ 2387 MHz)



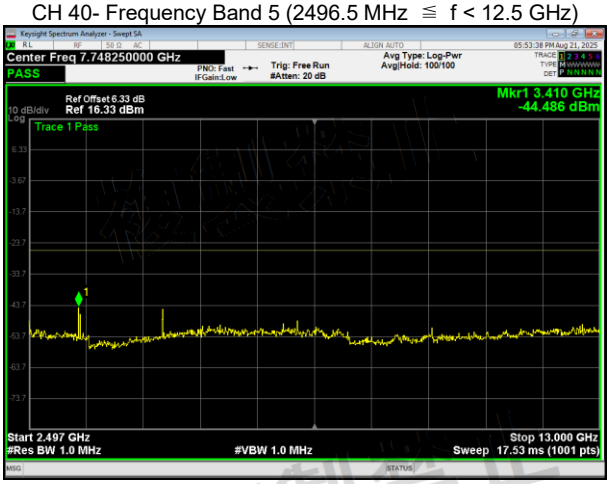
CH 40- Frequency Band 3 (2387 MHz < f ≦ 2400 MHz)



CH 40- Frequency Band 4 (2483.5 MHz ≦ f < 2496.5 MHz)



CH 40- Frequency Band 5 (2496.5 MHz ≦ f < 12.5 GHz)



9. CARRIER SENSE

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

10. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

10.1 LIMIT

Item	Limits
RX Spurious Emission:	≦4nW/-54dBm (f<1GHz)
	≦20nW/-47dBm (1GHz≦f)

10.2 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

10.3 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 < 1GHz, 20nW/-47dBm for f >= 1GHz), 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.

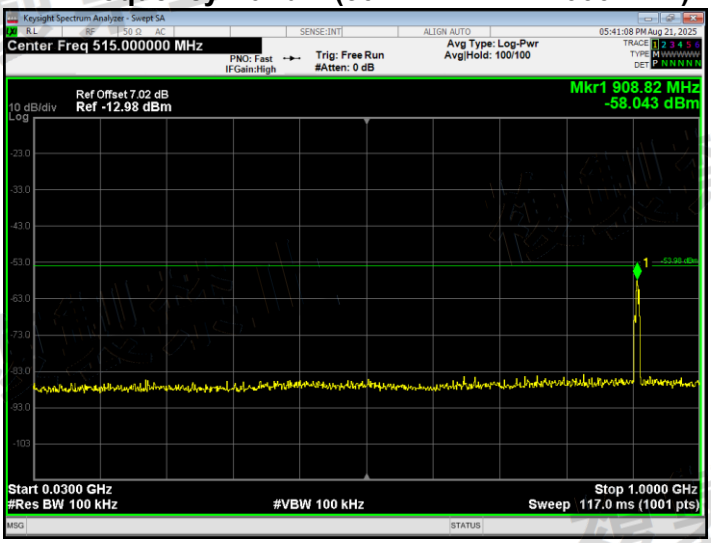
10.4 TEST RESULT

Temperature:	25.3 ℃	Relative Humidity:	55.5%	Pressure:	1010mbar

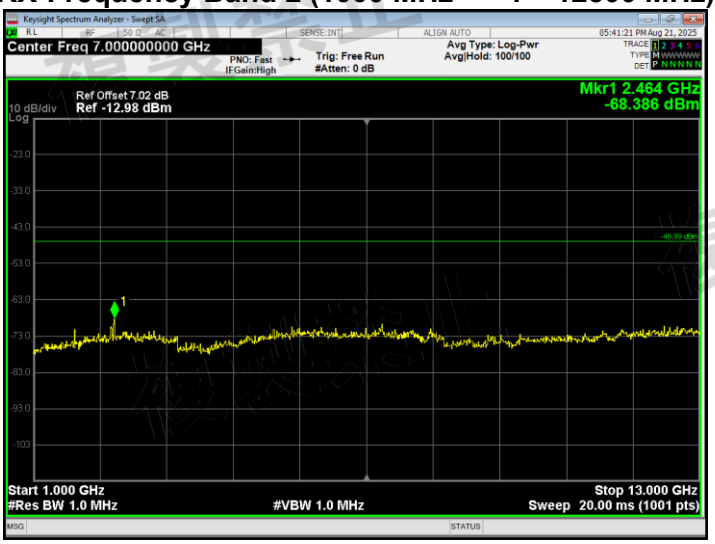
Frequency (MHz)	Antenna	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm/MHz)	Max Value (nW/MHz)	Limit (nW/MHz)	Verdict
2402	Ant1	30-1000	908.82	-58.04	1.5704	4	Pass
2402	Ant1	1000-13000	2464	-68.39	0.1449	20	Pass
2440	Ant1	30-1000	910.76	-57.33	1.8493	4	Pass
2440	Ant1	1000-13000	2416	-67.51	0.1774	20	Pass
2480	Ant1	30-1000	906.88	-59.58	1.1015	4	Pass
2480	Ant1	1000-13000	2416	-62.52	0.5598	20	Pass

Operation Mode:	Low Channel Normal voltage

RX-Frequency Band 1 (30 MHz ≦ f < 1000 MHz)

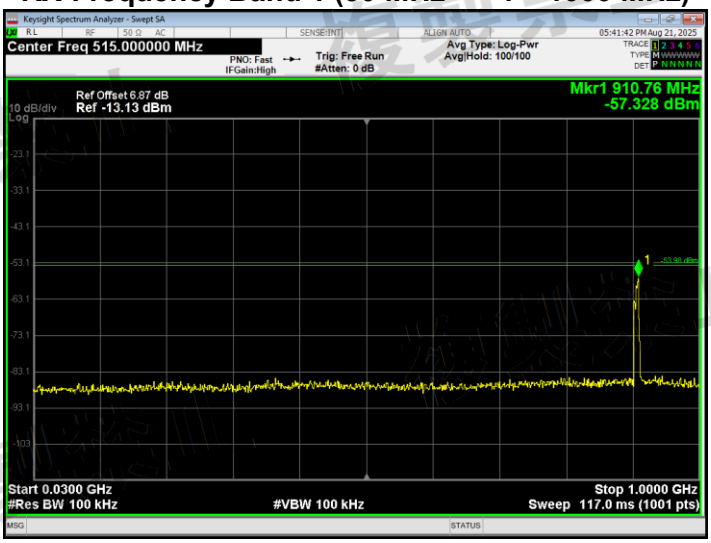


RX-Frequency Band 2 (1000 MHz ≦ f < 12500 MHz)

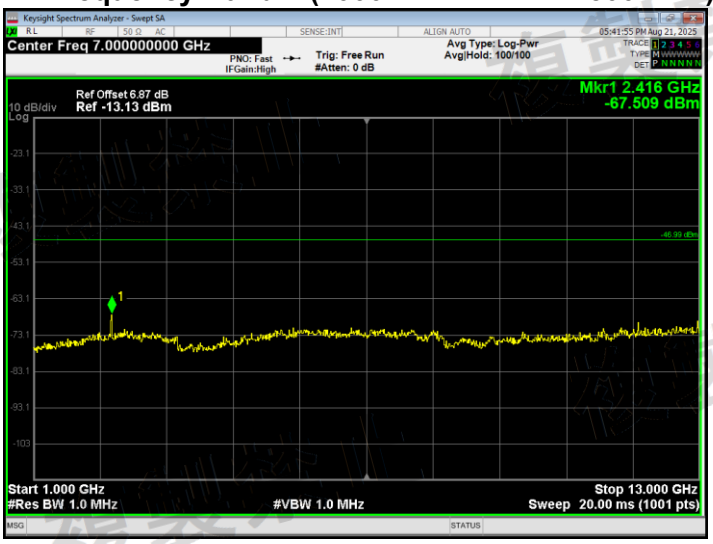


Operation Mode:	Middle Channel Normal voltage

RX-Frequency Band 1 (30 MHz ≦ f < 1000 MHz)

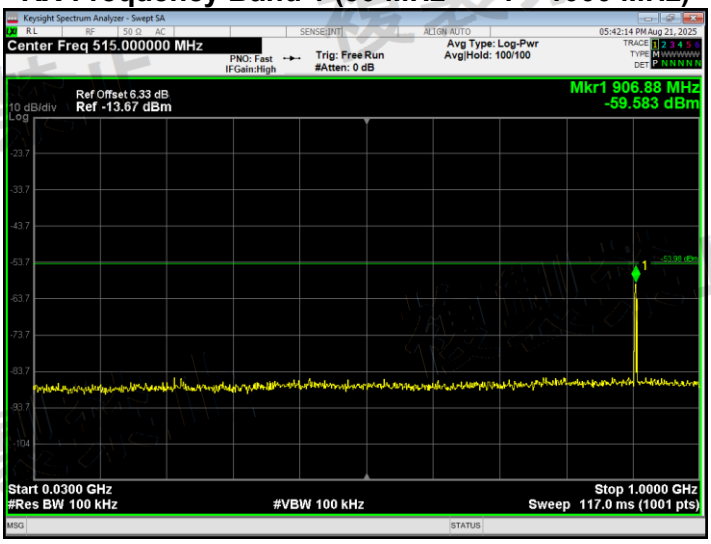


RX-Frequency Band 2 (1000 MHz ≦ f < 12500 MHz)

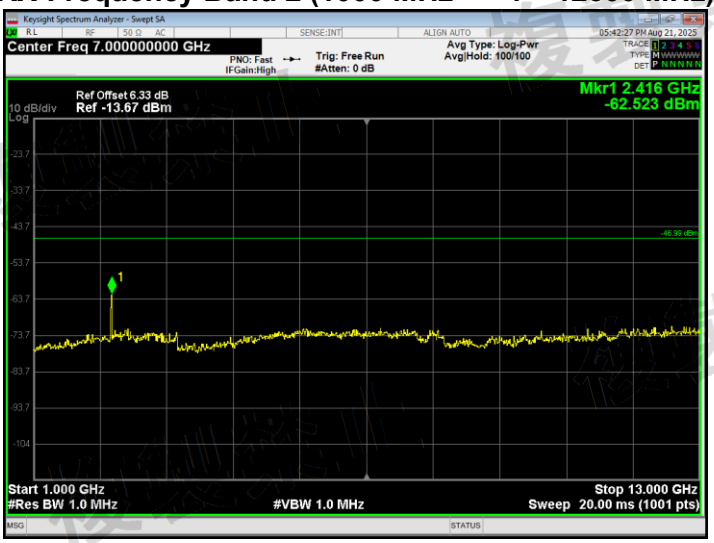


Operation Mode:	High Channel Normal voltage

RX-Frequency Band 1 (30 MHz ≦ f < 1000 MHz)



RX-Frequency Band 2 (1000 MHz ≦ f < 12500 MHz)



11. EUT TEST PHOTO

Measurement Photos

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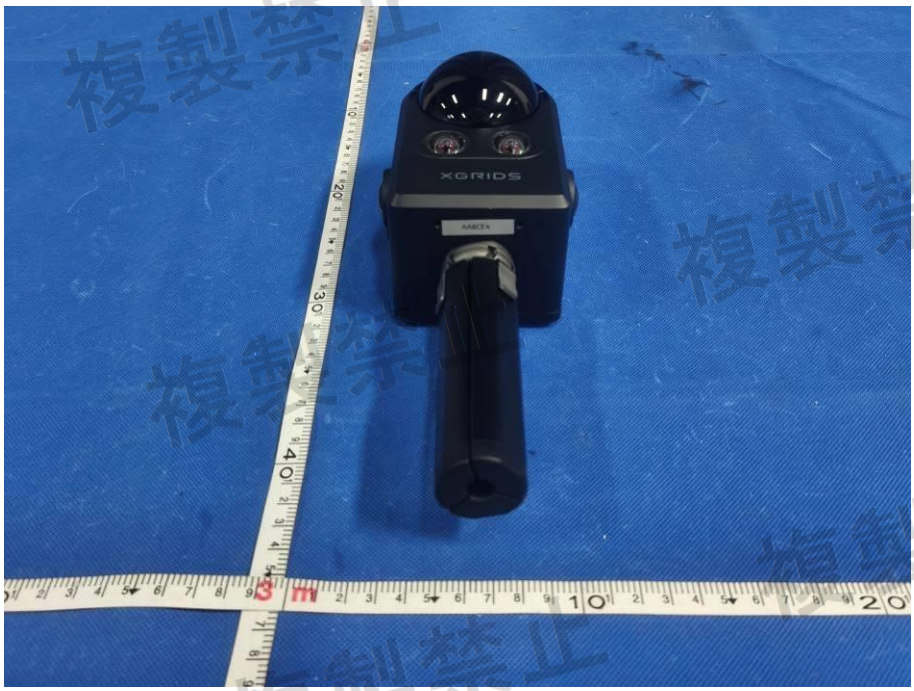
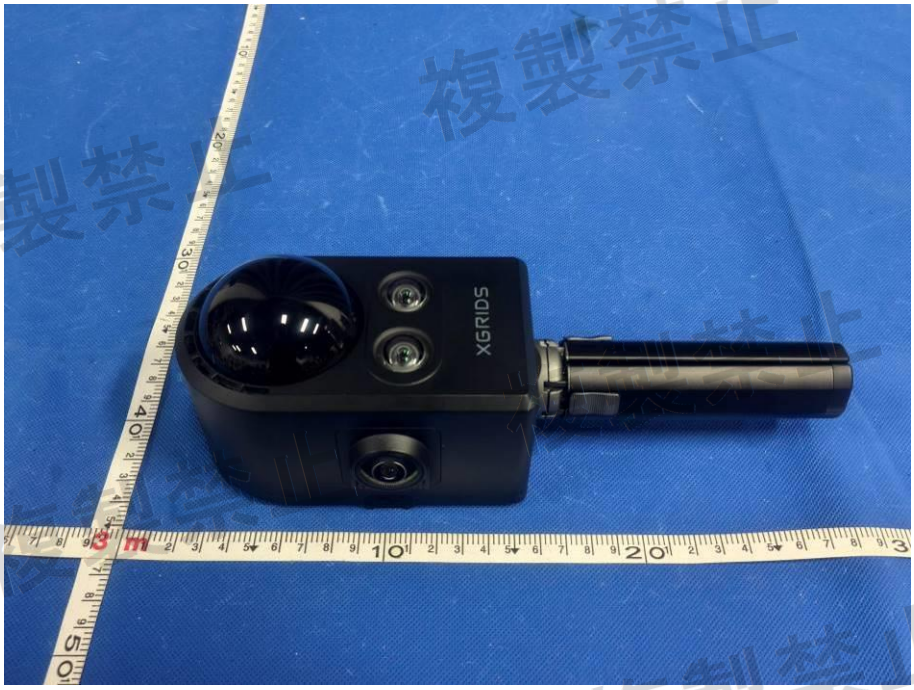
12. EUT PHOTOS


XGRIDS

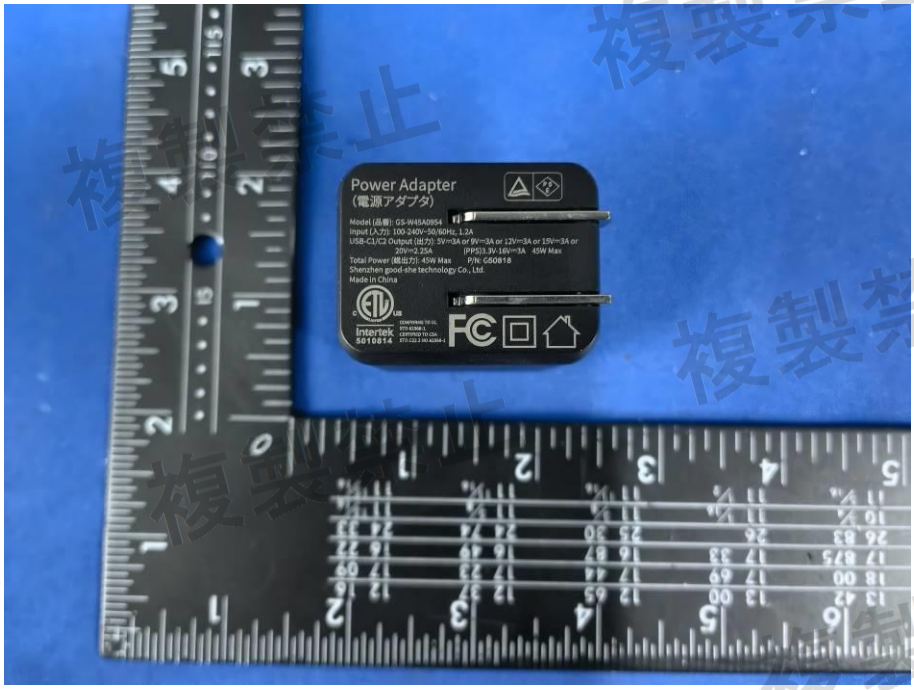
XGRIDS

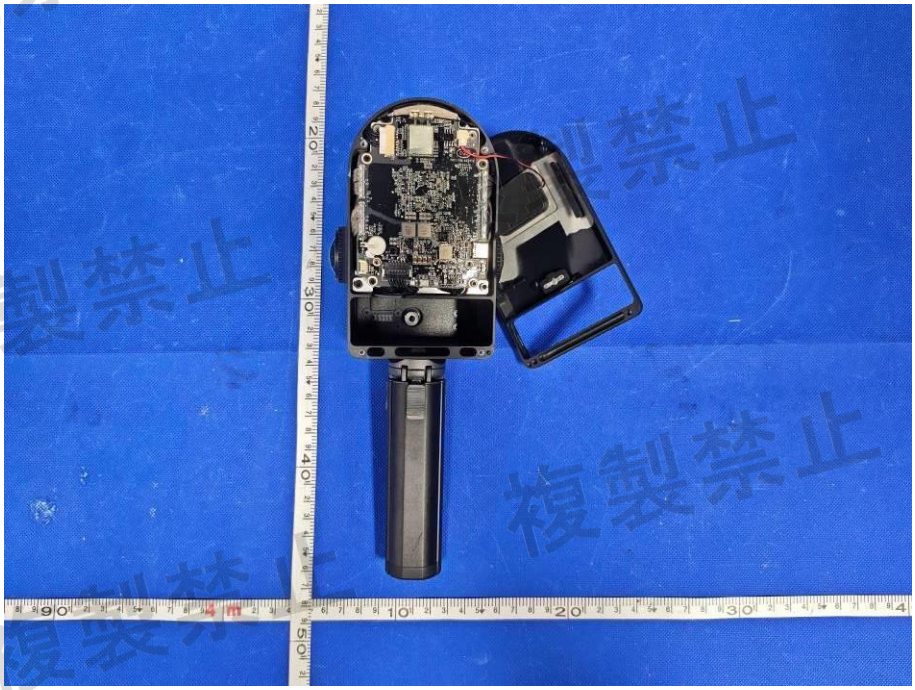
XGRIDS

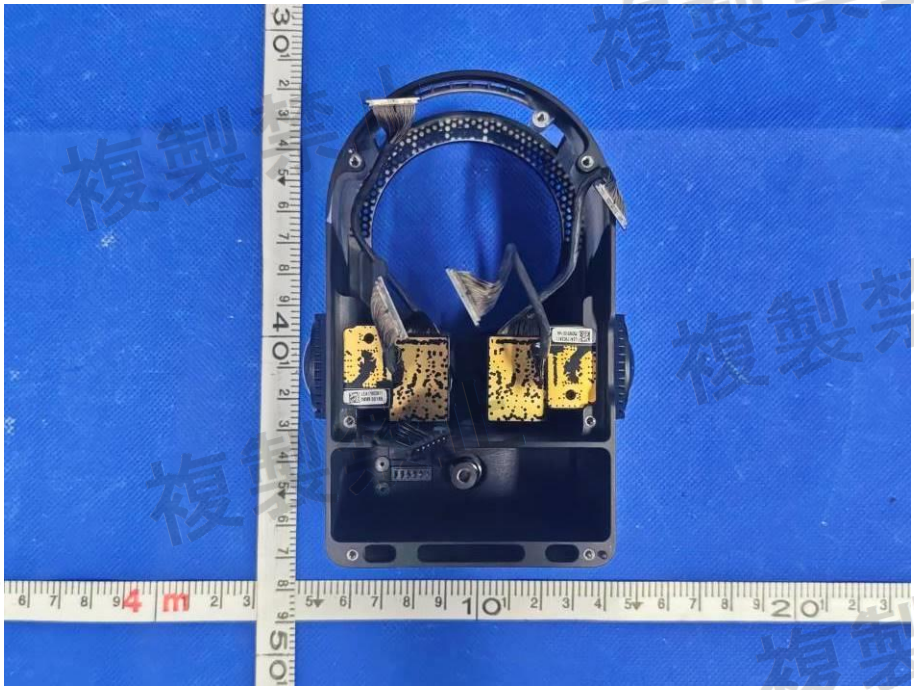

XGRIDS

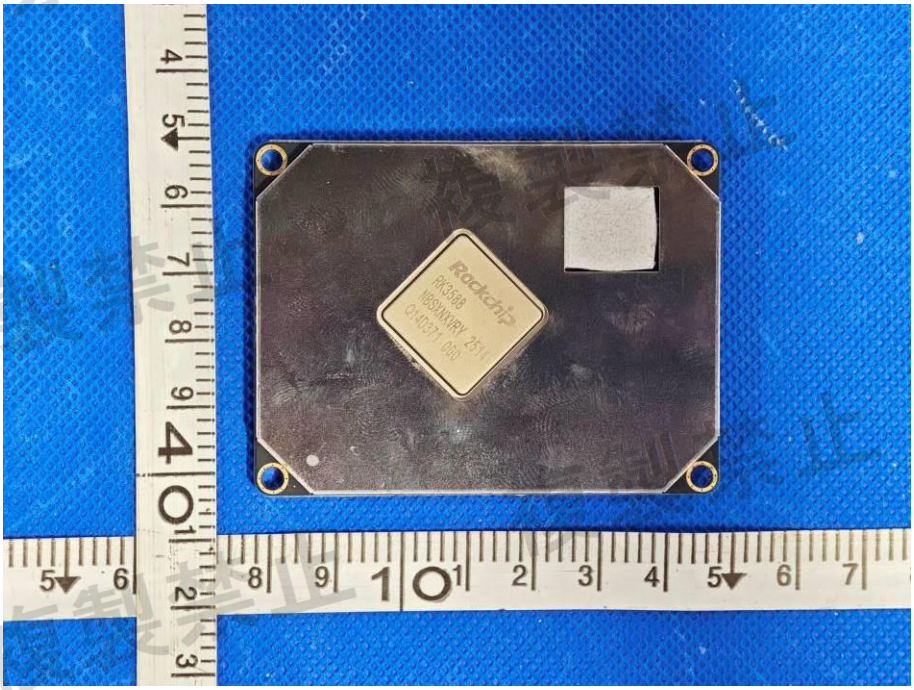
Name: Lithium Battery
Model: 101-1-000001048
Weight: About 152g
Nominal Voltage: 7.2V
Rated Capacity: 3200mAh
Rated Energy: 23.04Wh
Manufacturer: Dongguan CZM Technology Co.,Ltd.
Made in China
Warning: Do not disassemble, bump, crush, or throw into fire.
Do not immerse the battery in water

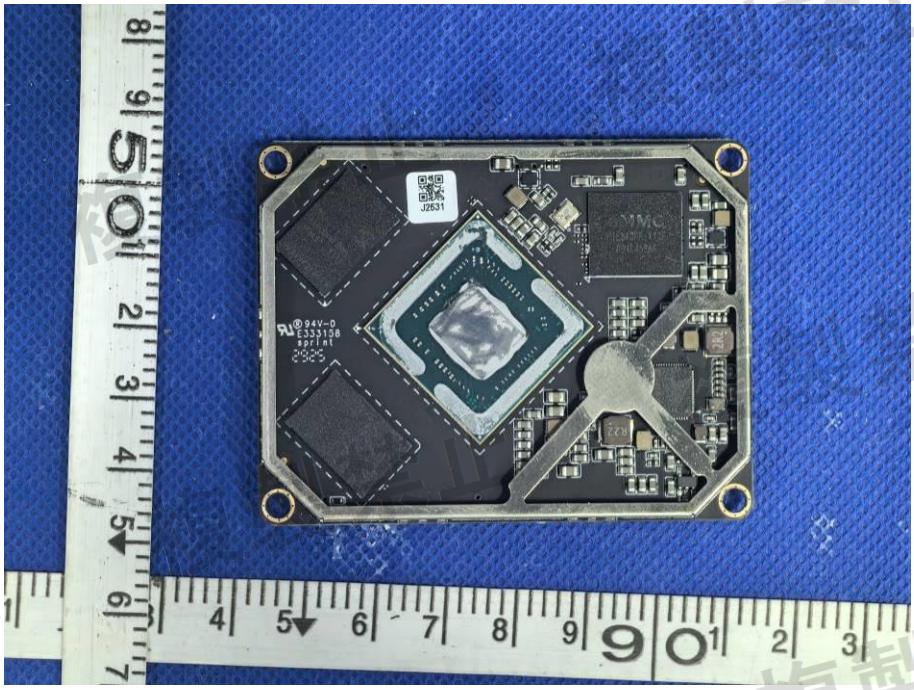
Name: Lithium Battery
Model: 101-1-000001048
Weight: About 152g
Nominal Voltage: 7.2V
Rated Capacity: 3200mAh,
Rated Energy: 23.04Wh
Manufacturer: Dongguan CZM Technology Co.,Ltd.
Made in China
Warning: Do not disassemble, bump, crush, or throw into fire,
Do not immerse the battery in water


Power Adapter
(電源アダプタ)
Made in China






Rockchip
RK3588
NBSXNXRY 2514
Q14D371 000


J2531
94V-0
E333158
sprint

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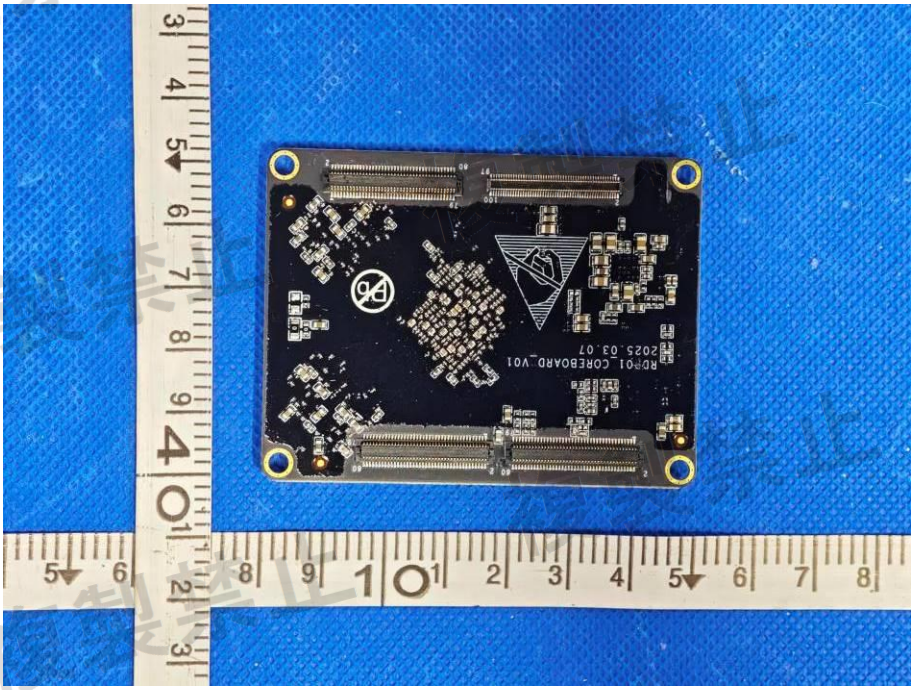

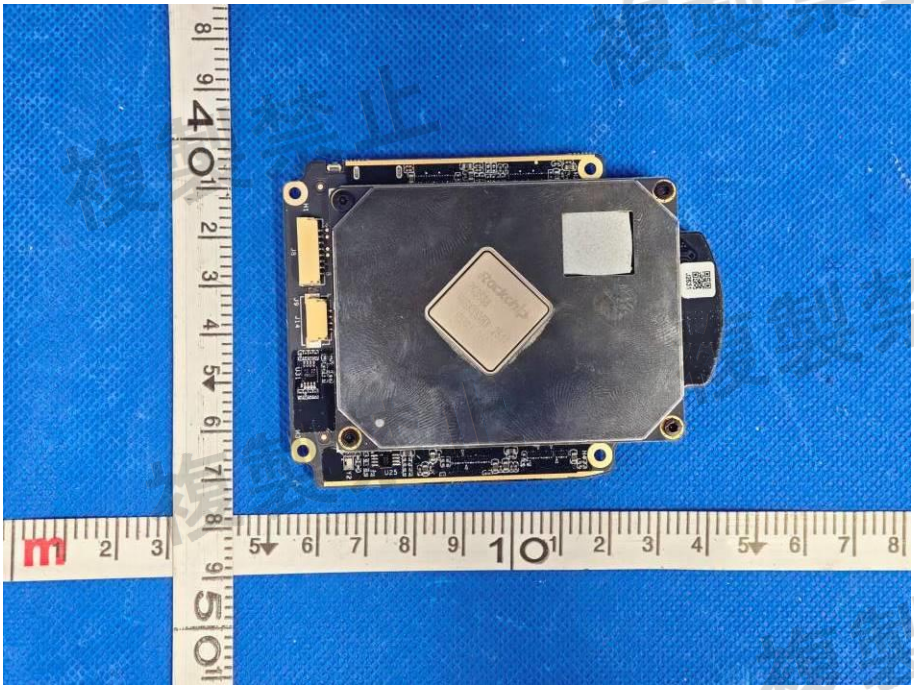

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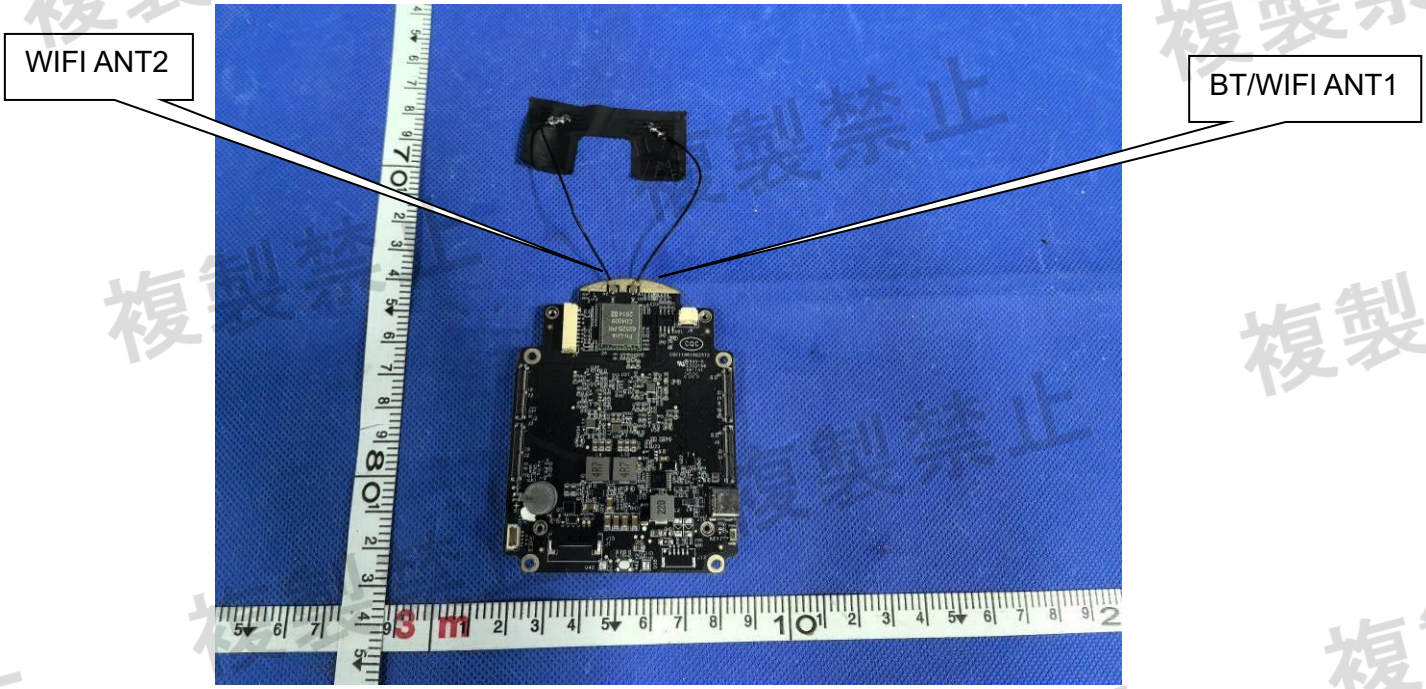

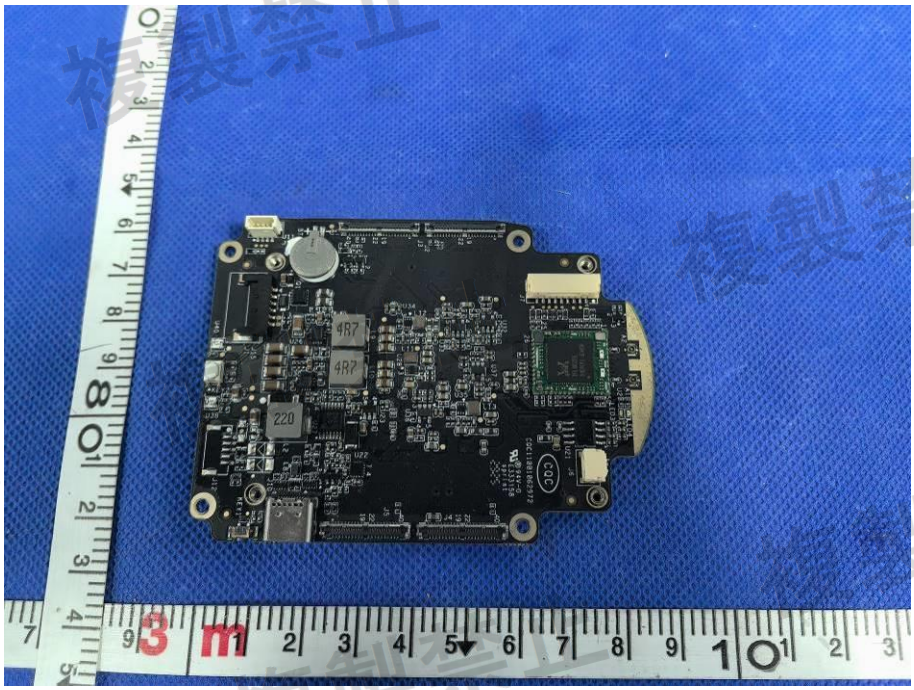

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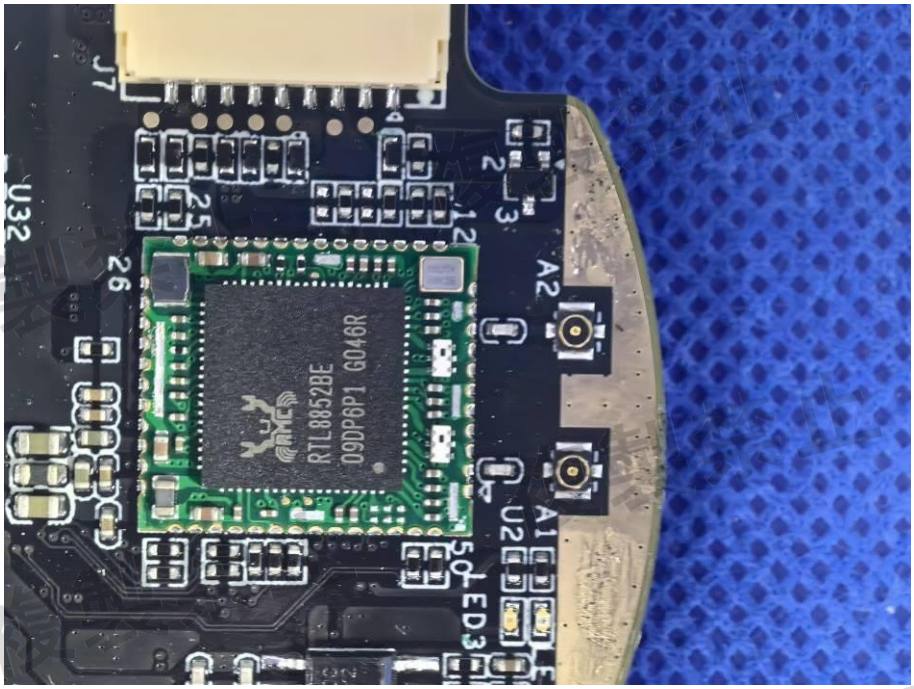

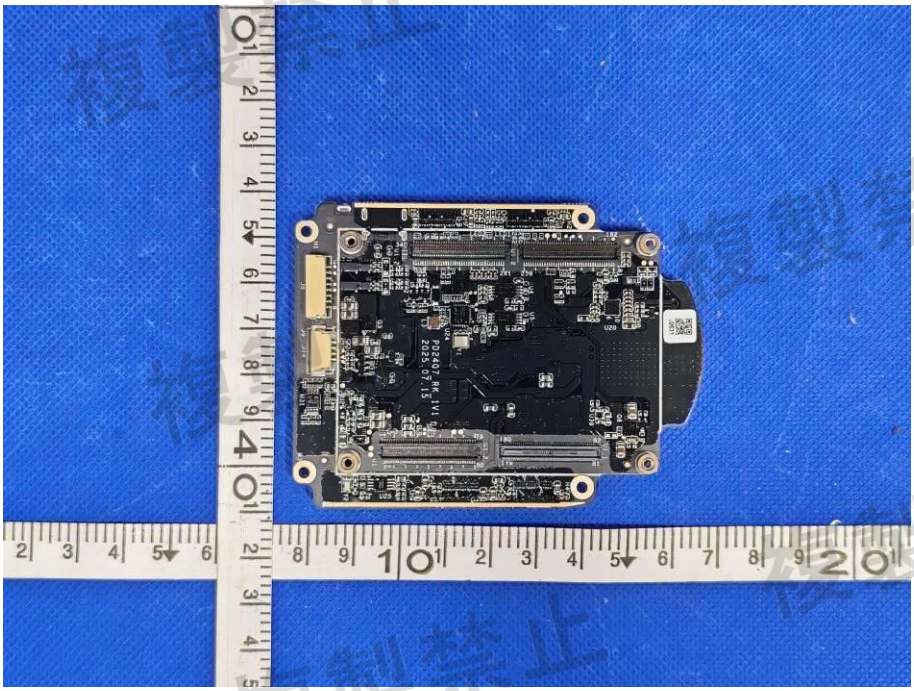

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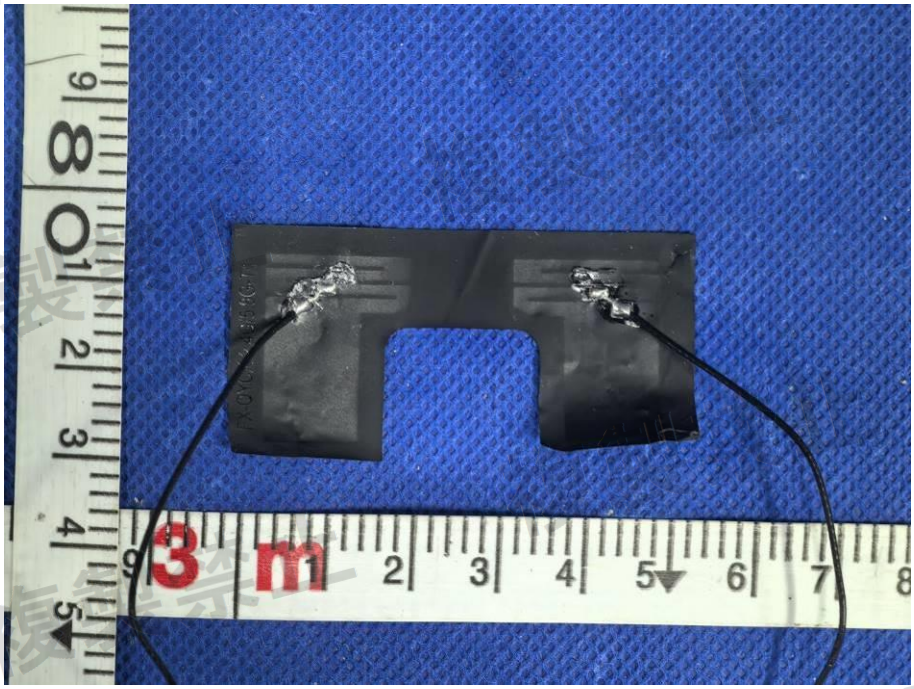

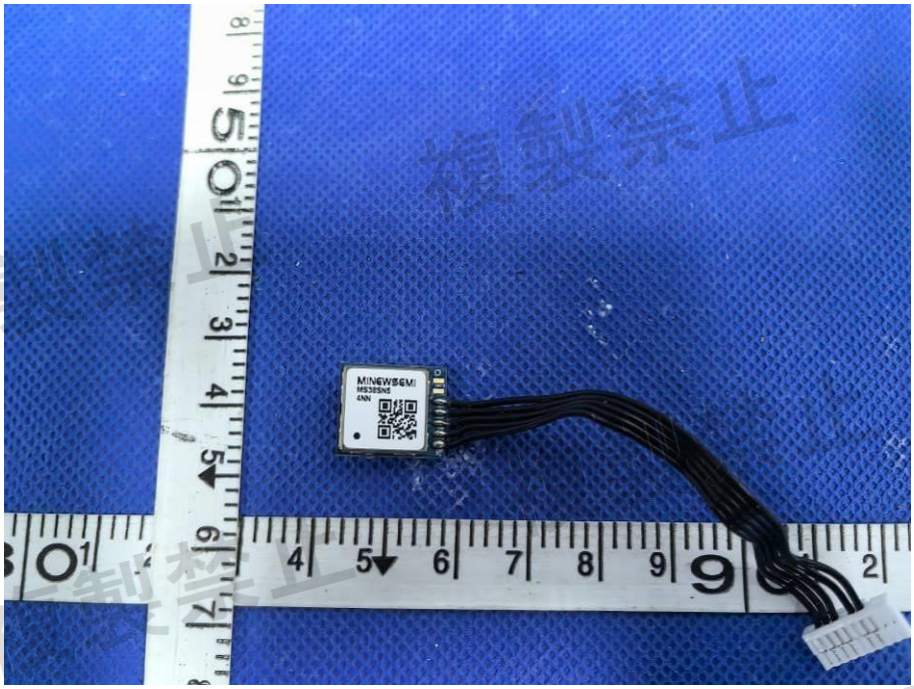

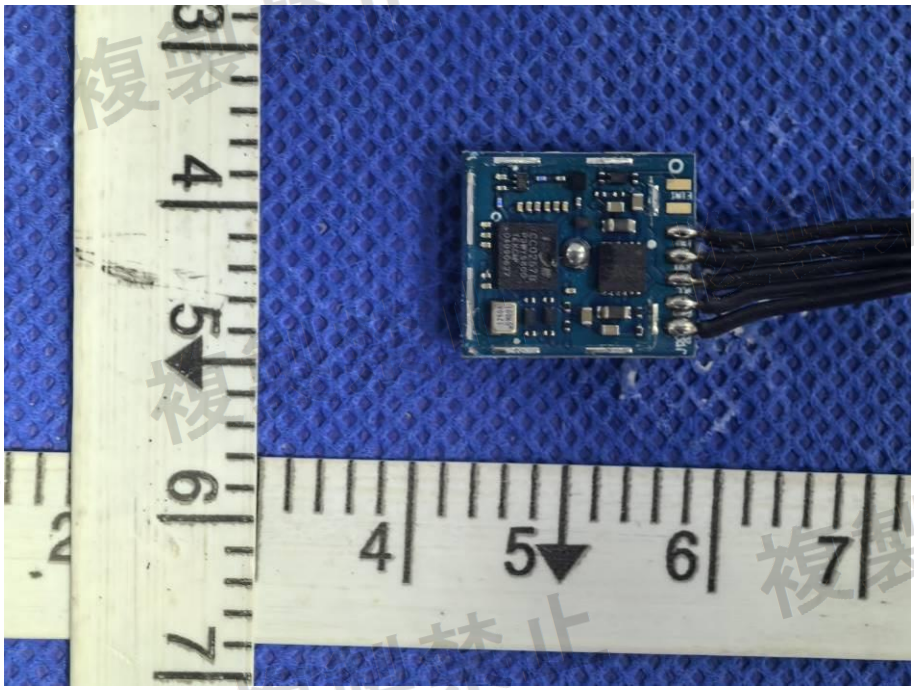

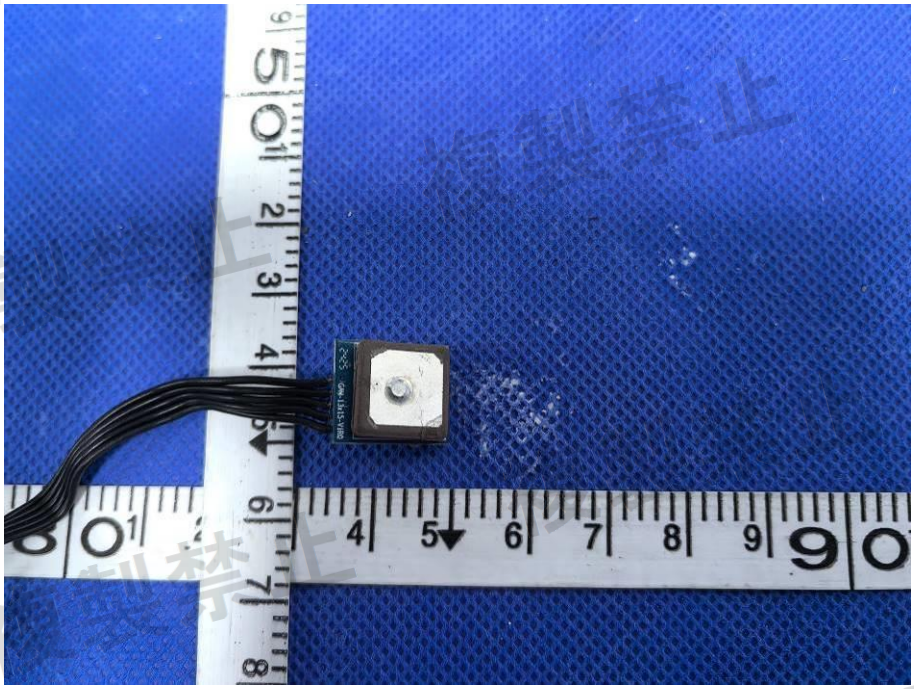

---END OF THE REPORT---