



REPORT No.: SZ26020191W01

TEST REPORT

APPLICANT : REMO TECH Co., Ltd.

PRODUCT NAME : OBSBOT Tiny 3 Lite

MODEL NAME : OWB-2410-CE

BRAND NAME : OBSBOT

STANDARD(S) : MIC Notice No.88 Annex 43

RECEIPT DATE : 2026-02-27

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Change History		
Version	Date	Reason for change
1.0	2026-05-09	First edition



1. Summary of Test Results

No.	Description of Test	Test Engineer	Result	Remark
1	Frequency Error	Zhu Peihong	PASS	/
2	Dwell Time	Zhu Peihong	PASS	/
3	Occupied Bandwidth	Zhu Peihong	PASS	/
4	Unwanted Emission Intensity	Zhu Peihong	PASS	/
5	Antenna Power Error	Zhu Peihong	PASS	/
6	Limitation of Collateral Emission of Receiver	Zhu Peihong	PASS	/
7	E.I.R.P.	Zhu Peihong	PASS	/
8	Radiation Angle of Antenna	Zhu Peihong	PASS	/
9	Radio Interference Prevention Capability	Zhu Peihong	PASS	/
10	Construction Protection Confirmation	N/A	PASS	/

Note 1: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

1.1. Testing Applied Methods

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- MIC Notice No.88 Annex 43
- Certification of technical standard conformity for specified radio equipment, etc. Article 2 Paragraph 1 of Item 19
- Radio Equipment Regulations Article 49-20



1.2. Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Due Date	Cal. Body	Cal. Method
EXA Signal Analyzer	Agilent	N9010A	MY53470836	2025.12.23	2026.12.22	SMQ	c
DC Power Supply	IVYTECH	IV3610	1709D361010	2025.09.03	2026.09.02	CCIC	c
Power Sensor	Agilent	U2021XA	MY54180008	2025.09.03	2026.09.02	CCIC	c
Radio Communication Tester	R&S	CMW500	108950	2025.09.03	2026.09.02	CCIC	c

Note 1: The equipment were calibrated by CCIC (Shenzhen) Metrology&Testing Service Co.,Ltd and Shenzhen Academy of Metrology and Quality Inspection.

Note 2: Calibration Method:

- Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1);
- Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992);
- Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1);
- Calibration conducted by using measuring instruments and other equipment listed in the right column of Table No. 3 attached hereto, which shall have been given any of calibration, etc. listed above from a) to c).



1.3. Measurement Uncertainty

No.	Test Items	Uncertainty	Remark
1	Frequency Error / 99% Bandwidth	$\pm 1.75 \times 10^{-6}$	Confidence levels of 95%
2	Antenna Power	$\pm 1.14\text{dB}$	Confidence levels of 95%
3	Spurious Emissions(<1GHz)	$\pm 2.23\text{dB}$	Confidence levels of 95%
4	Spurious Emissions(>1GHz)	$\pm 1.72\text{dB}$	Confidence levels of 95%
5	Transmission Antenna Gain	$\pm 2.49\text{dB}$	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone	+86 755 36698555
Facsimile	+86 755 36698525

2. General Description

2.1. Information of Applicant and Manufacturer

Applicant	REMO TECH Co., Ltd.
Applicant Address	201, B13, North District, Qianhai Shenzhen-Hong Kong Youth Dream Factory, No. 5188 Menghai Avenue, Shenzhen, China
Manufacturer	REMO TECH Co., Ltd.
Manufacturer Address	201, B13, North District, Qianhai Shenzhen-Hong Kong Youth Dream Factory, No. 5188 Menghai Avenue, Shenzhen, China

2.2. Information of EUT

Product Name	OBSBOT Tiny 3 Lite		
Sample No.	6#		
Hardware Version	V200		
Software Version	6.5.0.1		
Modulation Technology	FHSS		
Modulation Type	GFSK(2Mbps)		
Operating Frequency Range	2404MHz – 2478MHz (at interval of 2MHz)		
Channel List	Please refer as chapter 2.4 in this report. (Total 32 chs)		
Power Supply	Type		DC Power
	Voltage (V)	Low	3.5
		Rated	5
		High	5.6

Note 1: The black bold voltage values were selected for test, about the voltage fluctuation evaluation, please refer as chapter 2.6.2 in this report.

Note 2: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



2.3. Information of Antenna

Antenna Manufacturer	N/A
Brand Name	N/A
Model Name	N/A
Antenna Type	FPC Antenna
Antenna Gain	4.00dBi

2.4. Channel List of EUT

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2404	8	2420	18	2442	28	2462
1	2406	9	2422	19	2444	29	2464
2	2408	12	2430	20	2446	30	2466
3	2410	13	2432	21	2448	31	2468
4	2412	14	2434	22	2450	32	2470
5	2414	15	2436	24	2454	34	2474
6	2416	16	2438	26	2458	35	2476
7	2418	17	2440	27	2460	36	2478

Note 1: The black bold channels were selected for test.



2.5. Test Configuration of EUT

2.5.1. Evaluation of The Worst Case

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Channel
Frequency Error	Unmodulated Single Carrier	0/16/36
Occupied Bandwidth	GFSK	Hopping
Dwell Time		Hopping
Unwanted Emission Intensity		0/16/36
Antenna Power and Antenna Power Error		0/16/36
Limitation of Collateral Emission of Receiver		0/16/36
Transmission Radiation Angle Width		0/16/36
Radio Interference Prevention Capability		Normal Use

2.5.2. Operation and Transmitter Power Setting

The EUT was tested while in a continues transmitter/receiver mode under the control of tool which is provided by manufacturer, all the items of transmitter were tested under the power setting as below:

Mode	Data Rate	Channel	Power Setting
Unmodulated Single Carrier	-	0/16/36	Default
GFSK	2Mbps	0/16/36	4



2.6. Test Conditions

2.6.1. Environment Condition

Temperature (°C)	24.8
Relative Humidity (%)	65

2.6.2. Power Supply Voltage Fluctuation

During the input supply voltage to the EUT from the external power source is varied by +/- 10%, the output voltage had been confirmed that the fluctuation of power supply to the RF unit of EUT is equal to or less +/- 1%.

Power Supply		External Voltage $V_E(V)$			Internal Voltage V_I		
		V_{EN}	V_{EL}/V_{EH}		$V_{IN}(V)$	$V_{IE}(V)$	Variation of V_I
Type1	DC Power	5	V_{EL}	4.500	3.3	3.290	0.30%
			V_{EH}	5.500		3.310	0.30%

V_{EN} : Normal Voltage

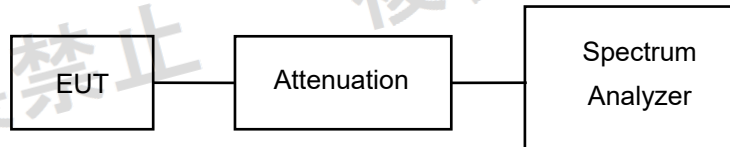
V_{EL} : V_{EL} is the declared low voltage provided that $V_{EN} \times 90\%$ is less than the declared low voltage, otherwise it is $V_{EN} \times 90\%$

V_{EH} : V_{EH} is the declared high voltage provided that $V_{EN} \times 110\%$ is larger than the declared high voltage, otherwise it is $V_{EN} \times 110\%$

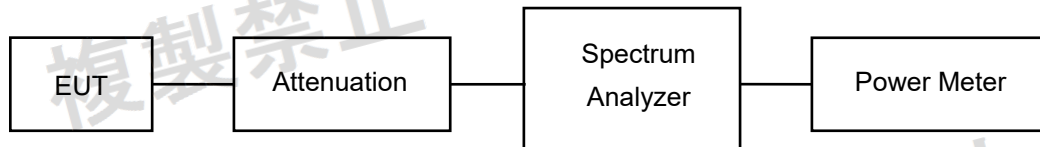
V_{IN} : The voltage supply to the radio unit.

2.7. Test Setup Layout Diagram

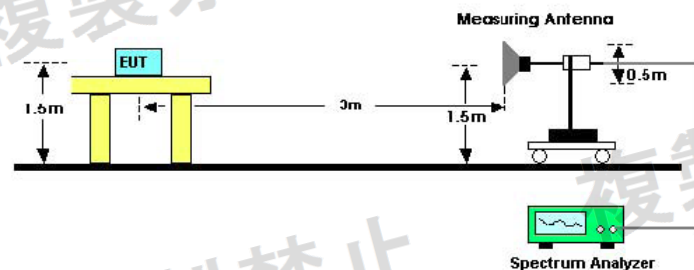
2.7.1. General Measurement



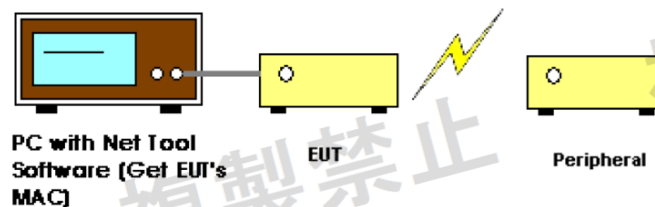
2.7.2. Antenna Power Measurement



2.7.3. Radiation Angle of Antenna



2.7.4. Radio Interference Prevention Capability Measurement





3. Description of Test Items

3.1. Frequency Error

3.1.1. Limits

Within ± 50 ppm.

3.1.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.1.3. Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.1.4. Test Deviation

There is no deviation with the original standard.

3.1.5. Test Results

Refer to Annex A.1 in this report.



3.2. Dwell Time

3.2.1. Limits

The dwell time is the time spent at a particular frequency during any single hop.
The maximum dwell time shall be 0.4 s.

3.2.2. Test Procedures

According to MIC Notice No.88 Annex 43.

Hopping Period	Calculation Formula of Dwell Time
12.8 s	$0.4 \times \text{Spread Factor} / \text{Hopping Period} \times \text{Single Pulse Time} \times \text{Number of times occupied in 12.8 s}$
Can not be determined	$\text{Spread Factor} \times \text{Single Pulse Time} \times \text{Number of times occupied in 0.4 s}$

The value of spread factor is obtained by dividing the spreading bandwidth by the frequency equal to the transmission speed of the modulated signal.

3.2.3. Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.2.4. Test Deviation

There is no deviation with the original standard.

3.2.5. Test Results

Refer to Annex A.2 in this report.



3.3.Occupied Bandwidth

3.3.1.Limits

Item	Type	Limits
Occupied Bandwidth	FHSS	≤83.5MHz
	DSSS	≤26MHz
	OFDM	
	Other	

3.3.2.Test Procedures

According to MIC Notice No.88 Annex 43.

3.3.3.Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.3.4.Test Deviation

There is no deviation with the original standard.

3.3.5.Test Results

Refer to Annex A.3 in this report.



3.4. Unwanted Emission Intensity

3.4.1. Limits

Frequency Range	Limits
30MHz-1000MHz	$\leq 0.25 \mu\text{W}/100\text{kHz}$
1000MHz-2387MHz	$\leq 2.5 \mu\text{W}/\text{MHz}$
2387MHz-2400MHz	$\leq 25 \mu\text{W}/\text{MHz}$
2483.5MHz-2496.5MHz	$\leq 25 \mu\text{W}/\text{MHz}$
2496.5MHz-12500MHz	$\leq 2.5 \mu\text{W}/\text{MHz}$

3.4.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.4.3. Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.4.4. Test Deviation

There is no deviation with the original standard.

3.4.5. Test Results

Refer to Annex A.4 in this report.

Note1: The spurious emissions mask that displayed on the plots is composed of several frequency ranges below:

Range	Start Freq. (MHz)	Stop Freq. (MHz)	RBW	VBW	Detector Type	Trace Mode	Limit (μW)
1	30	1000	100kHz	100kHz	Peak	Max Hold	0.25
2	1000	2387	1MHz	1MHz	Peak	Max Hold	2.5
3	2387	2400	1MHz	1MHz	Peak	Max Hold	25
4	2400	2483.5	1MHz	1MHz	Peak	Max Hold	20000
5	2483.5	2496.5	1MHz	1MHz	Peak	Max Hold	25
6	2496.5	12500	1MHz	1MHz	Peak	Max Hold	2.5

Note 2: Only the spurious with the minimum margin from the limit line will be displayed in the mark table (The lower window on the test plots).



3.5. Antenna Power Error

3.5.1. Limits

Type	Frequency Range	Limits	
		Antenna Power Density	Antenna Power Error
FHSS	2427-2470.75 MHz	≤ 3 mW/MHz	$\leq +20\%$
	2400-2483.5 MHz (except 2427-2470.75 MHz)	≤ 10 mW/MHz	
DSSS	2400-2483.5 MHz	≤ 10 mW/MHz	
OFDM	2400-2483.5 MHz	≤ 10 mW/MHz (20MHz System) ≤ 5 mW/MHz (40MHz System)	
Other	2400-2483.5 MHz	≤ 10 mW	

3.5.1. Test Procedures

According to MIC Notice No.88 Annex 43.

3.5.2. Test Setup Layout

Refer to chapter 2.7.2 in this report.

3.5.3. Test Deviation

There is no deviation with the original standard.

3.5.4. Test Results

Refer to Annex A.5 in this report.



3.6. Limitation of Collateral Emission of Receiver

3.6.1. Limits

Frequency Range	Limits
30MHz-1000MHz	$\leq 4\text{nW}/100\text{kHz}$
1000MHz-12500MHz	$\leq 20\text{nW}/\text{MHz}$

3.6.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.6.3. Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.6.4. Test Deviation

There is no deviation with the original standard.

3.6.5. Test Results

Refer to Annex A.6 in this report.

Note 1: The spurious emissions mask that displayed on the plots is composed of several frequency ranges below:

Range	Start Freq. (MHz)	Stop Freq. (MHz)	RBW	VBW	Detector Type	Trace Mode	Limit (nW)
1	30	1000	100kHz	100kHz	Peak	Max Hold	4
2	1000	12500	1MHz	1MHz	Peak	Max Hold	20

Note 2: Only the spurious with the minimum margin from the limit line will be displayed in the mark table (The lower window on the test plots).



3.7.E.I.R.P.

3.7.1.Limits

Type	Frequency Range	Limits
FHSS	2427-2470.75 MHz	6.91-16.91dBm/MHz
	2400-2483.5 MHz (except 2427-2470.75 MHz)	12.14-22.14dBm/MHz
DSSS	2400-2483.5 MHz	12.14-22.14dBm/MHz
OFDM	2400-2483.5 MHz	12.14-22.14dBm/MHz (20MHz System) 9.13-19.13dBm/MHz (40MHz System)
Other	2400-2483.5 MHz	12.14-22.14dBm (GFSK) 10dBm (except GFSK)

Note: This item not be applied to the transmission antenna which has a gain of 2.14dBi or less

3.7.2.Test Procedures

According to MIC Notice No.88 Annex 43.

3.7.3.Test Setup Layout

Refer to chapter 2.7.2 in this report.

3.7.4.Test Deviation

There is no deviation with the original standard.

3.7.5.Test Results

Refer to Annex A.7 in this report.



3.8. Radiation Angle of Antenna

3.8.1. Limits

Type	Limits
FHSS	360° /A; (A= E.I.R.P./ 6.91, if A<1; then A=1)
DSSS	360° /A; (A= E.I.R.P./ 12.14, if A<1; then A=1)
OFDM	
Other	

Note: This item not be applied to the transmission antenna which has a gain of 2.14dBi or less

3.8.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.8.3. Test Setup Layout

Refer to chapter 2.7.3 in this report.

3.8.4. Test Deviation

There is no deviation with the original standard.

3.8.5. Test Results

Refer to Annex A.8 in this report.



3.9. Radio Interference Prevention Capability

3.9.1. Limits

The one automatically to transmit and to receive identification code with the wireless equipment of the wireless station used in the same premises.

3.9.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.9.3. Test Setup Layout

Refer to chapter 2.7.4 in this report.

3.9.4. Test Deviation

There is no deviation with the original standard.

3.9.5. Test Results

Refer to Annex A.9 in this report.

3.10. Construction Protection Confirmation Method

3.10.1.Limits

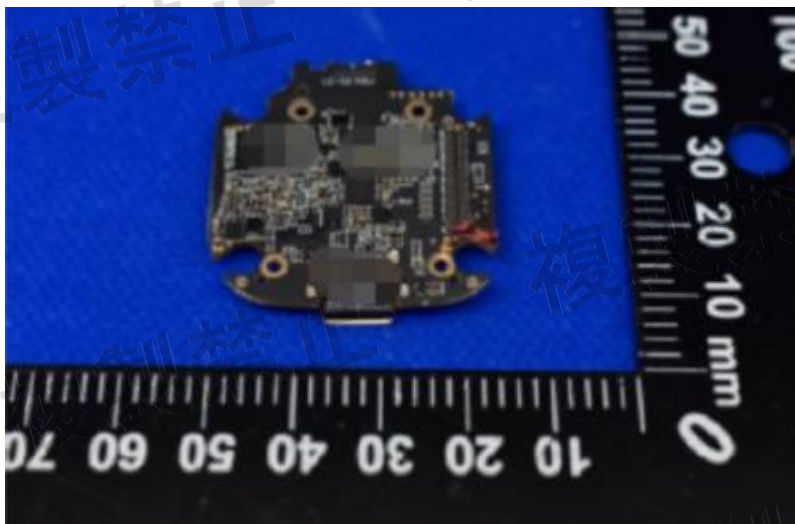
The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

3.10.2.Confirmation Method

The RF and modulation portions are protected against illegal modification as following method:

Protected Method	Description
Surface Mount Technology	RF and Modulation part are mounted on PCB with surface mount technology and there is no any adjustable parts on PCB or adjustable parts are not exposed.

3.10.3.Reference Documents

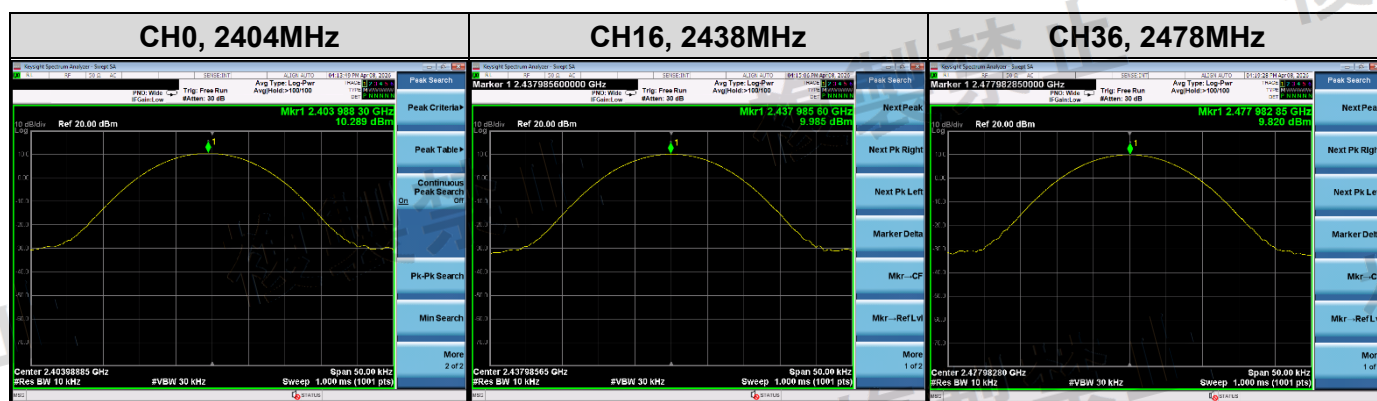
Reference Documents	Item
Photo	



Annex A Test Data and Results

A.1. Frequency Error

Channel	Frequency f_c (MHz)	Test Frequency f (MHz)	Frequency Error (ppm)	Verdict
0	2404	2403.9883	-4.87	PASS
16	2438	2437.9856	-5.91	PASS
36	2478	2477.9829	-6.90	PASS



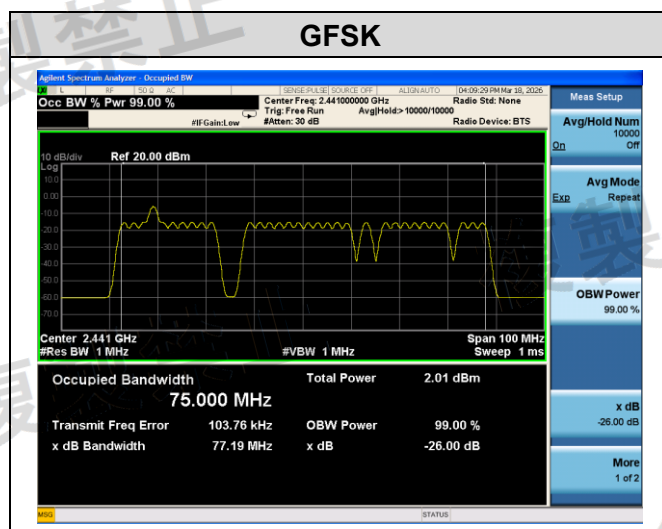


A.2. Dwell Time

Test Mode	Freq. (MHz)	Package Mode	Hopping Period (s)	Single Pulse Time (ms)	Number of times occupied in 12.8s	Dwell Time (s)	Limit (s)	Verdict
GFSK	2404	DH5	12.8	1.020	54	0.055	0.4	PASS

A.3. Occupied Bandwidth

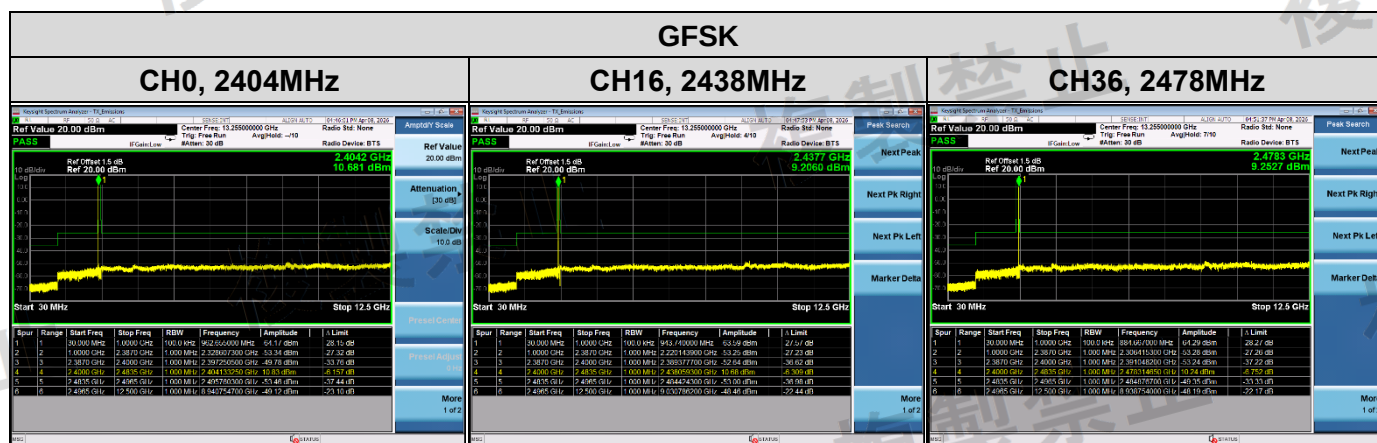
Test Mode	99% Occupied Bandwidth (MHz)	Verdict
GFSK	77.19	PASS





A.4. Unwanted Emission Intensity

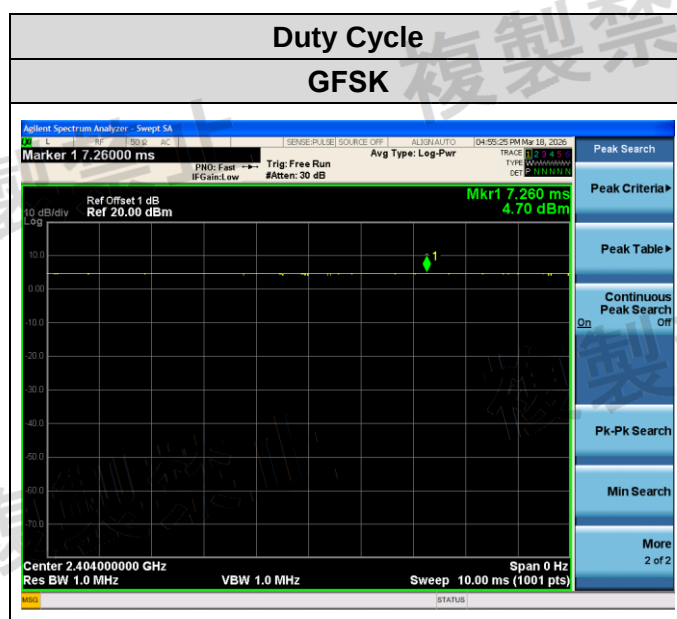
Mode	Frequency Range (MHz)	Test Result Value	Limit	Verdict
GFSK	30~1000	Refer to below plot	0.25 μ W/100kHz	PASS
	1000~2387		2.5 μ W/MHz	PASS
	2387~2400		25 μ W/MHz	PASS
	2483.5~2496.5		25 μ W/MHz	PASS
	2496.5~12500		2.5 μ W/MHz	PASS





A.5. Antenna Power Error

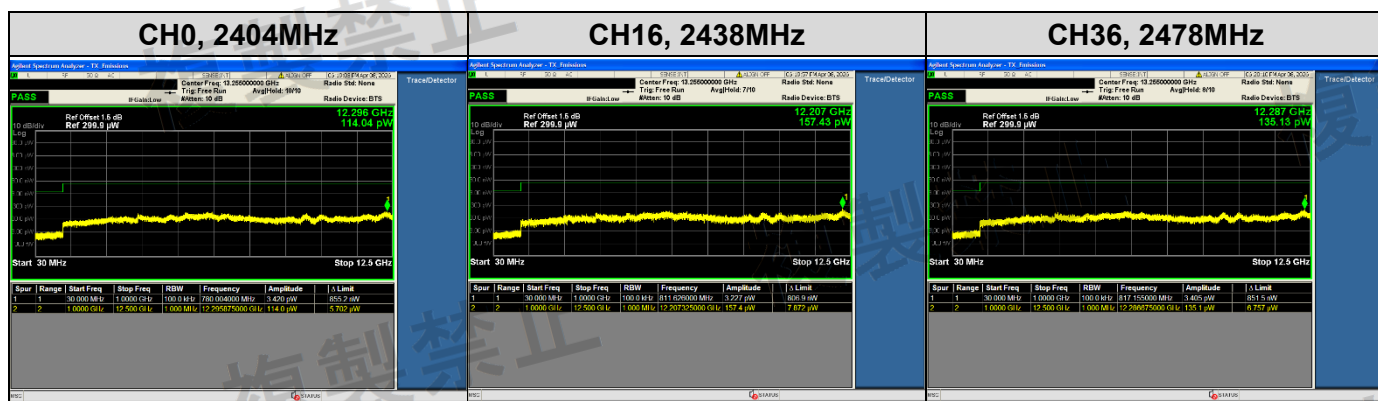
Mode	Power Test Value (dBm)	Spread spectrum BW (MHz)	Duty Factor	Antenna Power Density PD		Declare Power (mW/MHz)	Antenna Power Error	Verdict
				(dBm/M Hz)	(mW/M Hz)			
GFSK	9.32	67.54	0.00	-8.98	0.126	0.13	-3.08%	PASS





A.6. Limitation of Collateral Emission of Receiver

Mode	Frequency Range (MHz)	Test Result Value	Limit	Verdict
Receive	30~1000	Refer to below plot	4nW/100kHz	PASS
	1000~12500		20nW/MHz	PASS





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A.7. E.I.R.P.

Test Mode	Measured E.I.R.P. (dBm/MHz)	Limit (dBm/MHz)	Verdict
GFSK	-4.98	14	PASS

A.8. Radiation Angle of Antenna

Test Mode	3dB Beamwidth (Degree)	Limit (Degree)	Verdict
GFSK	94	360	PASS



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A.9. Radio Interference Prevention Capability

The identification code of the EUT is: 3c:cf:b4:69:49:a3

```
local_info.mac = 3c:cf:b4:69:49:a3
```



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Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5. Conformity declaration:
 - ☒ Morlab issues a statement of conformity based on the corresponding standards (default)
 - ☐ Morlab issues a statement of conformity based on the applicant requirement
6. Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule).

_____ END OF REPORT _____