



REPORT No.: SZ25030198W01

TEST REPORT

APPLICANT : Guangzhou Robustel Co., Ltd.

PRODUCT NAME : Industrial Cellular VPN Router

MODEL NAME : R1510-4L, R1511-4L-A04JP-A,
R1511-4L-A04JP-B

BRAND NAME :  robustel

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

RECEIPT DATE : 2025-03-14

TEST DATE : 2025-04-09 to 2025-04-25

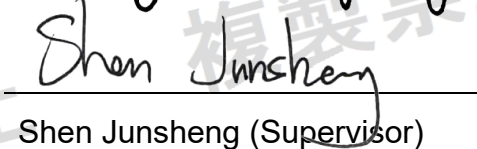
ISSUE DATE : 2025-05-12



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REPORT No.: SZ25030198W01

Change History		
Version	Date	Reason for change
1.0	2025-05-12	First edition

1. Summary of Test Results

No.	Description of Test	Test Engineer	Result	Method determination /Remark
1	Frequency Error	Li Xinpeng	PASS	No deviation
2	Occupied Bandwidth	Li Xinpeng	PASS	No deviation
3	Unwanted Emission Intensity	Li Xinpeng	PASS	No deviation
4	Antenna Power Error	Li Xinpeng	PASS	No deviation
5	Limitation of Collateral Emission of Receiver	Li Xinpeng	PASS	No deviation
6	E.I.R.P.	Li Xinpeng	PASS	No deviation
7	Radiation Angle of Antenna	Li Xinpeng	PASS	No deviation
8	Radio Interference Prevention Capability	Li Xinpeng	PASS	No deviation
9	Carrier Sense Function	Li Xinpeng	PASS	No deviation
10	Construction Protection Confirmation	N/A	PASS	No deviation

Note 1: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 2: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

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	2025.01.15	2026.01.14	SMQ	c
DC Power Supply	IVYTECH	IV3610	1709D361010	2024.09.11	2025.09.10	CCIC	c
Power Sensor	Agilent	U2021XA	MY54180008	2024.09.11	2025.09.10	SMQ	c
Radio Communication Tester	R&S	CMW500	108950	2025.01.06	2026.01.05	SMQ	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).



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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
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2. General Description

2.1. Information of Applicant and Manufacturer

Applicant	Guangzhou Robustel Co., Ltd.
Applicant Address	501, Building #2,63 Yongan Road, Huangpu District, Guangzhou, China
Manufacturer	Guangzhou Robustel Co., Ltd.
Manufacturer Address	501, Building #2,63 Yongan Road, Huangpu District, Guangzhou, China

2.2. Information of EUT

Product Name	Industrial Cellular VPN Router		
Sample No.	1#		
Hardware Version	V2.0		
Software Version	5.3		
Modulation Technology	DSSS, OFDM		
Modulation Type and Data Rate	Refer to 2.5.2		
Operating Frequency Range	802.11b/g/ n (HT20): 2412MHz–2472MHz 802.11n (HT40): 2422MHz–2462MHz		
Channel List	Please refer as chapter 2.4 in this report.		
Power Supply	Type	Adapter	
	Voltage (V)	Low	9
		Rated	12
		High	36

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: According to the certificate holder, they declared that the models R1510-4L, R1511-4L-A04JP-A, R1511-4L-A04JP-B have differences in serial protocol and slightly different circuits in the serial part, while the rest are the same. The main measuring model is R1510-4L, only the results for R1510-4L were recorded in this report.

Note 3: The EUT supports a MIMO function. Physically, the EUT provides two completed transmitters and two receivers for 802.11n modulation mode. For the test item Antenna Power Error, we recorded the test result of two antennas separately, for other test items both of the two antennas were tested separately, we only recorded the worst test result(ANT2) in this report.

Note 4: 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	ANT1: Glue Stick Antenna / Suction Cup Antenna ANT2: PCB Antenna
Antenna Gain	ANT1: 4.55dBi / 2.7dBi ANT2: 0.05dBi

Note: Antenna 1 has two kinds of antenna. Both of the two antennas were evaluated separately, only the worst test result (Glue Stick Antenna) were recorded in the test report.

2.4. Channel List of EUT

Test Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11b/g/n (HT20)	1	2412	8	2447
	2	2417	9	2452
	3	2422	10	2457
	4	2427	11	2462
	5	2432	12	2467
	6	2437	13	2472
	7	2442		
Test Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11n (HT40)	3	2422	8	2447
	4	2427	9	2452
	5	2432	10	2457
	6	2437	11	2462
	7	2442		

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	1/7/13
Occupied Bandwidth	CCK	1/7/13
Unwanted Emission Intensity	CCK	1/7/13
Antenna Power and Antenna Power Error	CCK	1/7/13
Limitation of Collateral Emission of Receiver	CCK	1/7/13
Transmission Radiation Angle Width	CCK	1/7/13
Carrier Sense Function	OFDM	Normal Use
Radio Interference Prevention Capability	CCK	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:

Modulation Technology	Modulation Type	Data Rate (Mbps)	Power Setting		
			ANT 1	ANT 2	ANT 1+2
DSSS (802.11b)	DBPSK	1	25	25	-
	DQPSK	2			
	CCK	5.5 / 11			
OFDM (802.11g)	BPSK	6 / 9	25	24	-
	QPSK	12 / 18			
	16QAM	24 / 36			
	64QAM	48 / 54			
OFDM (802.11n (HT20))	BPSK	6.5	23.5	23.5	23.5
	QPSK	13 / 19.5			
	16QAM	26 / 39			
	64QAM	52 / 58.5 / 65			
OFDM (802.11n (HT40))	BPSK	13.5	23.5	23.5	23.5
	QPSK	27 / 40.5			
	16QAM	54 / 81			
	64QAM	108 / 121.5 / 135			

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



2.6. Test Conditions

2.6.1. Environment Condition

Temperature (°C)	24.1
Relative Humidity (%)	47

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	Adapter	12	V_{EL}	10.800	3.30	3.291	0.27%
			V_{EH}	13.200		3.324	0.73%

V_{EN} : Normal Voltage

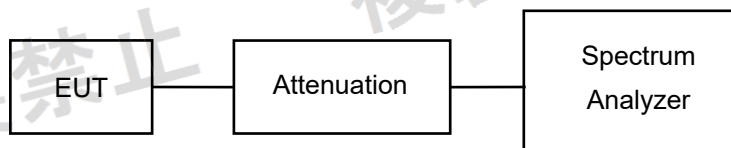
V_{EL} : V_{EL} is the declared low voltage provided that $V_{EN} \times 90\%$ is less than the declared low voltage, otherwise it is $V_{EN} \times 90\%$

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 $V_{EN} \times 110\%$

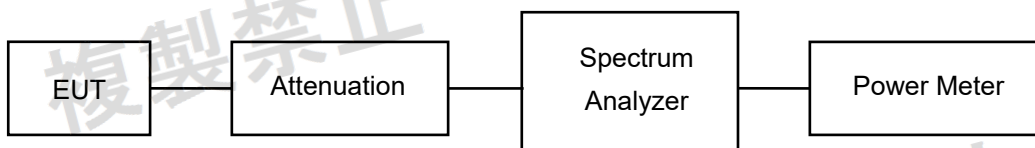
V_{IN} : The voltage supply to the radio unit.

2.7. Test Setup Layout Diagram

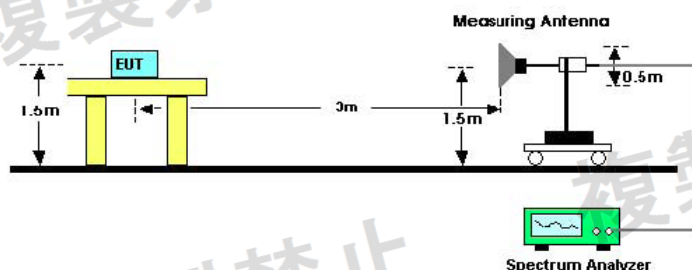
2.7.1. General Measurement



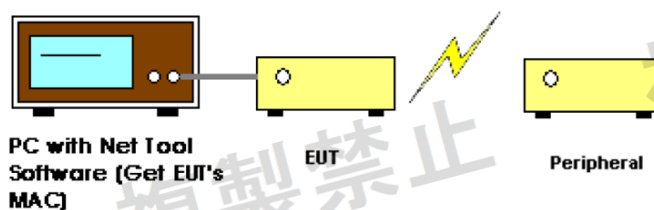
2.7.2. Antenna Power Measurement



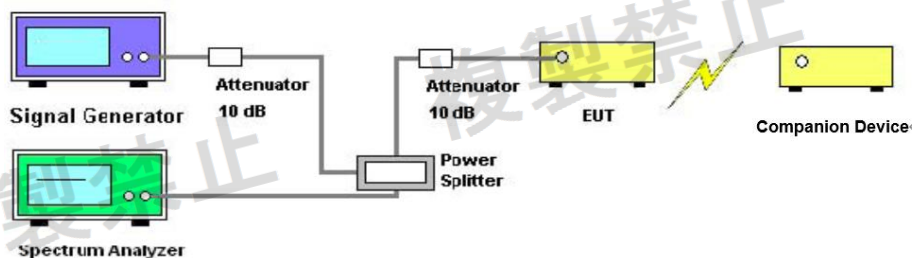
2.7.3. Radiation Angle of Antenna



2.7.4. Radio Interference Prevention Capability Measurement



2.7.5.Carrier Sense Function





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. Occupied Bandwidth

3.2.1. Limits

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

3.2.2. Test Procedures

According to MIC Notice No.88 Annex 43.

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. Unwanted Emission Intensity

3.3.1. 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	$\leq 2.5 \mu\text{W}/\text{MHz}$

3.3.2. 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.

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).



3.4. Antenna Power Error

3.4.1. 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	

3.4.1. Test Procedures

According to MIC Notice No.88 Annex 43.

3.4.2. Test Setup Layout

Refer to chapter 2.7.2 in this report.

3.4.3. Test Deviation

There is no deviation with the original standard.

3.4.4. Test Results

Refer to Annex A.4 in this report.



3.5. Limitation of Collateral Emission of Receiver

3.5.1. Limits

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

3.5.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.5.3. Test Setup Layout

Refer to chapter 2.7.1 in this report.

3.5.4. Test Deviation

There is no deviation with the original standard.

3.5.5. Test Results

Refer to Annex A.5 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).



3.6.E.I.R.P.

3.6.1.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

3.6.2.Test Procedures

Add antenna gain to the value P which got in chapter 3.4.1 to calculate E.I.R.P. value.

3.6.3.Test Setup Layout

Refer to chapter 2.7.2 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.



3.7. Radiation Angle of Antenna

3.7.1. 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

3.7.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.7.3. Test Setup Layout

Refer to chapter 2.7.3 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.

Note: Each of these EUT operation modes mentioned in clause 2.2 has been evaluated respectively in pre-scanning, only the data of worst case was included in this report.



3.8. Radio Interference Prevention Capability

3.8.1. Limits

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

3.8.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.8.3. Test Setup Layout

Refer to chapter 2.7.4 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. Carrier Sense Function

3.9.1. Limits

Type	Requirements		
	BW	Required?	Note
FHSS	-	-	
OFDM	40MHz	Y	
	20MHz	-	When the E.I.R.P. shortage is compensated by the antenna power, the transmitter shall have a carrier sensing function. (Excluding "Other method" transmitters that switch frequencies within 4 seconds from the start of transmission)
DSSS	-	-	
Other	-	-	
Good – EUT stop RF transmission signal after carrier inject to EUT. (On 22.79 +AG-20*log(f) dBm) (AG: dBi; f:MHz) or 100mV/m)			

3.9.2. Test Procedures

According to MIC Notice No.88 Annex 43.

3.9.3. Test Setup Layout

Refer to chapter 2.7.5 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

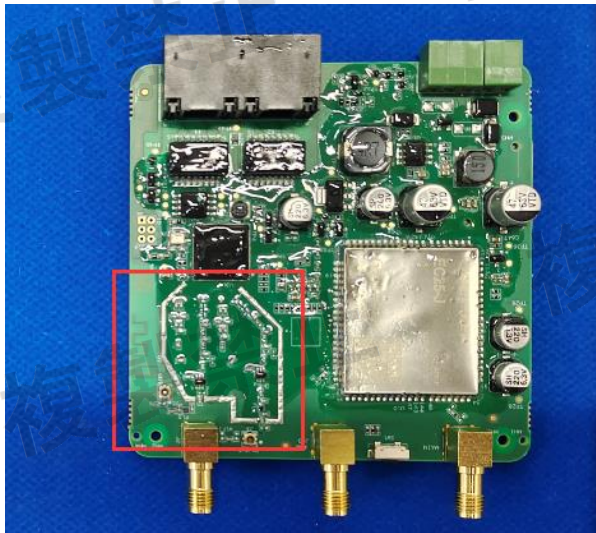
The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

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

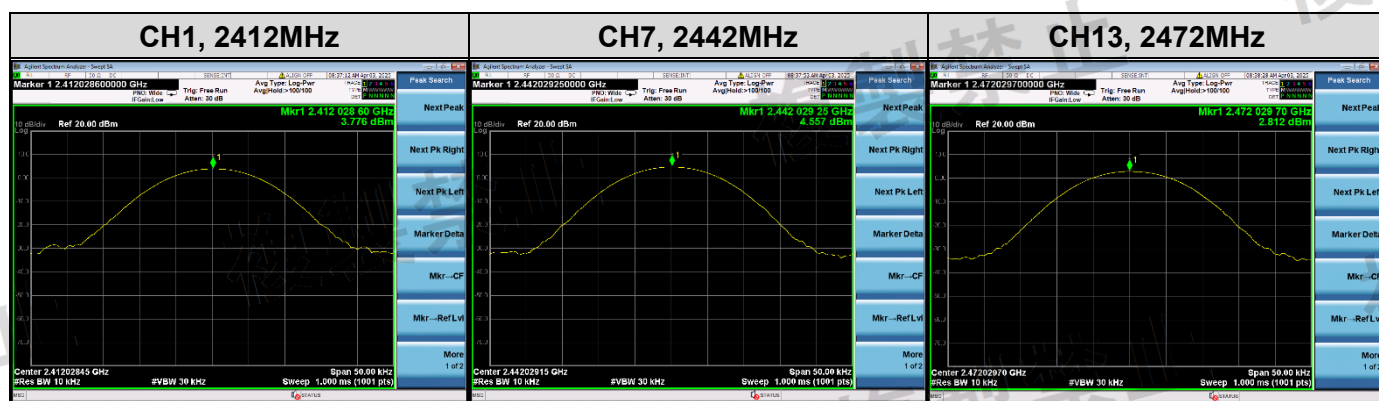
Reference Documents	Item
Photo	



Annex A Test Data and Results

A.1. Frequency Error

Channel	Frequency f_c (MHz)	Test Frequency f (MHz)	Frequency Error (ppm)	Verdict
1	2412	2412.0286	11.86	PASS
7	2442	2442.0293	12.00	PASS
13	2472	2472.0297	12.01	PASS

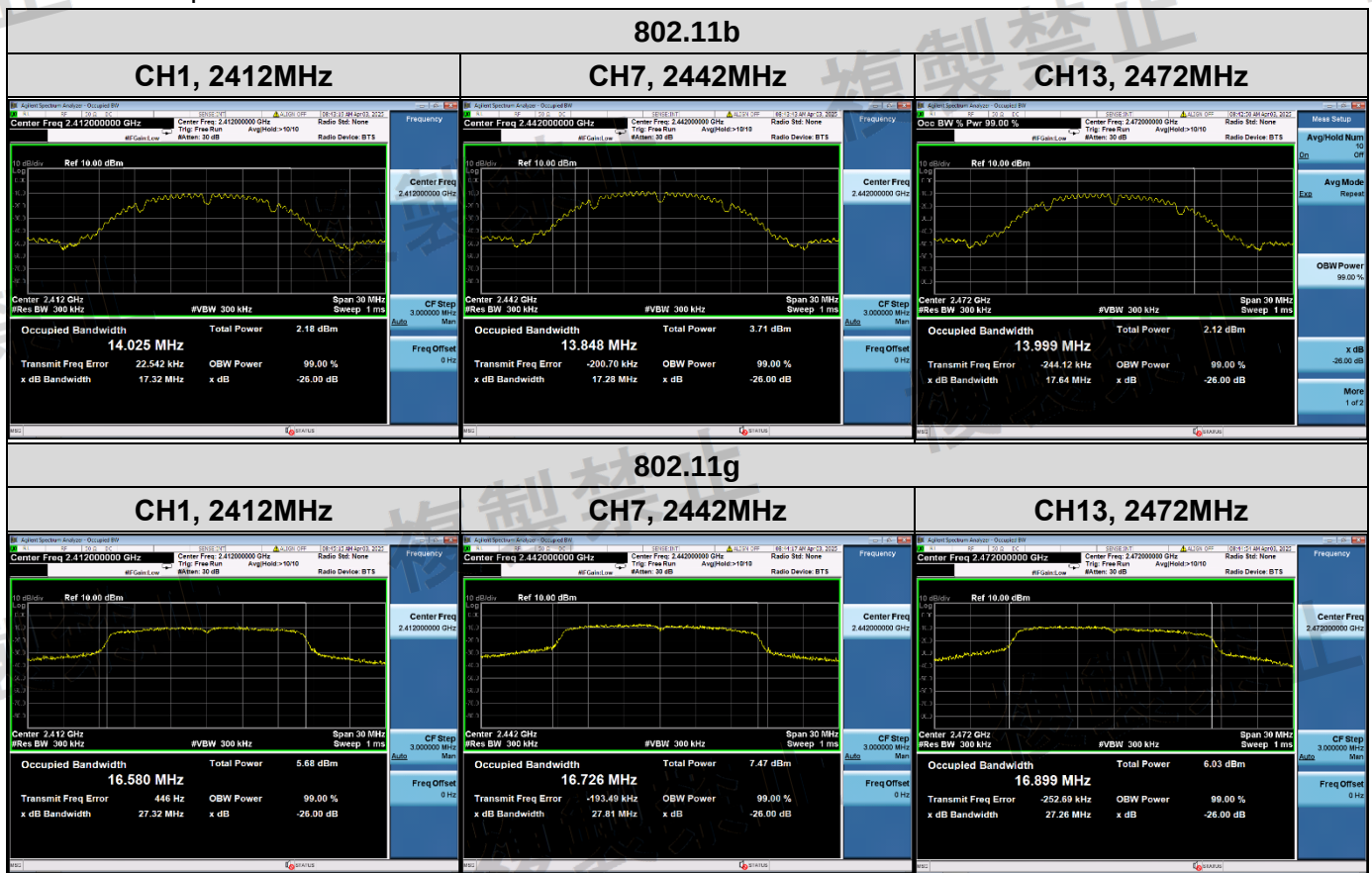




A.2. Occupied Bandwidth

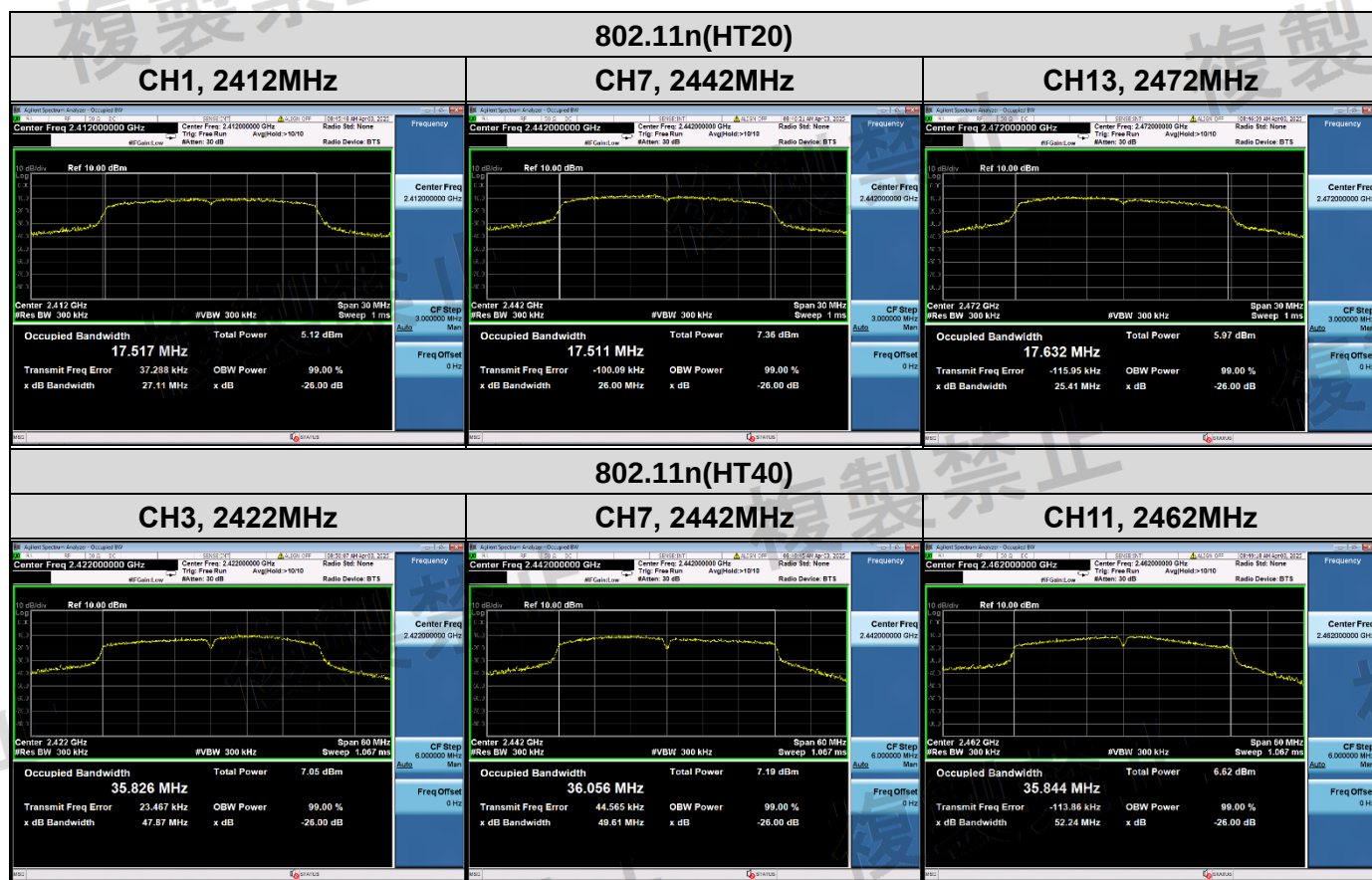
Mode	Channel	Frequency (MHz)	99% OBW(MHz)	Verdict
802.11b	1	2412	14.025	PASS
	7	2442	13.848	PASS
	13	2472	13.999	PASS
802.11g	1	2412	16.580	PASS
	7	2442	16.726	PASS
	13	2472	16.899	PASS
802.11n(HT20)	1	2412	17.517	PASS
	7	2442	17.511	PASS
	13	2472	17.632	PASS
802.11n(HT40)	3	2422	35.826	PASS
	7	2442	36.056	PASS
	11	2462	35.844	PASS

99% Occupied Bandwidth:





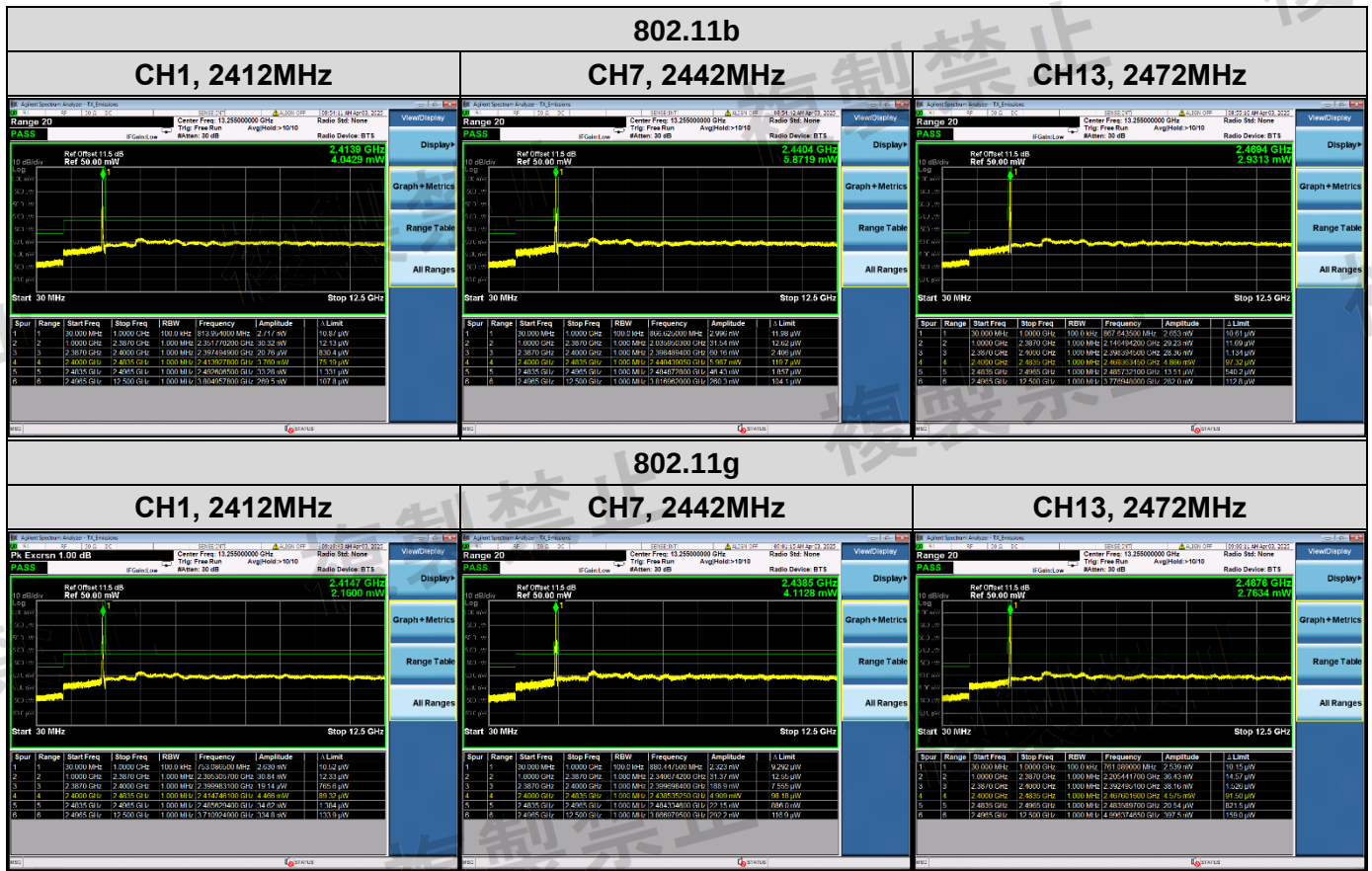
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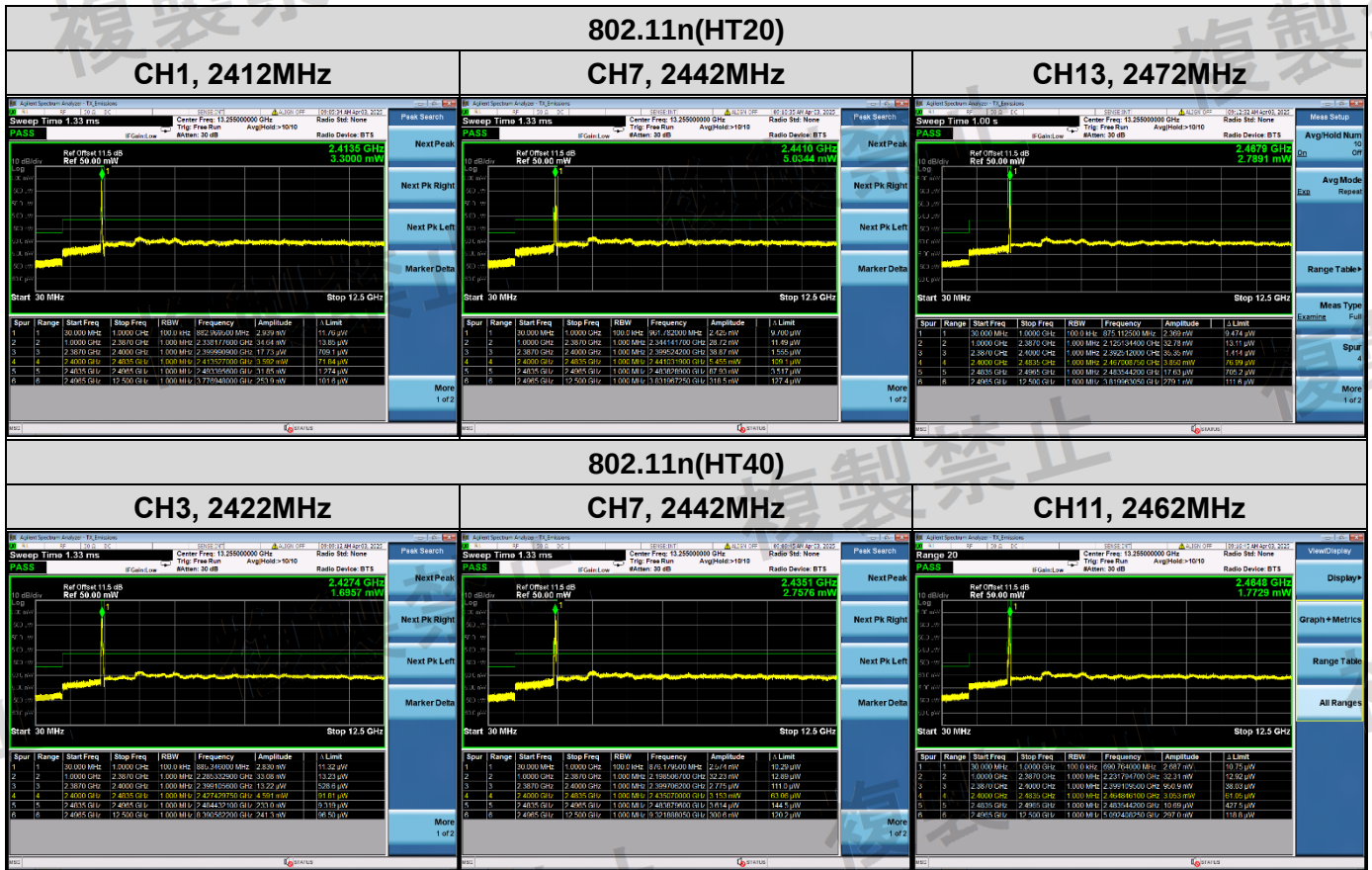




A.3. Unwanted Emission Intensity

Mode	Frequency Range (MHz)	Test Result Value	Limit	Verdict
802.11b/g/n	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.4. Antenna Power Error

ANT1

Mode	Channel	Test Value P_t (dBm/MHz)	Duty Factor	Antenna Power P (dBm/MHz)	Antenna Power P (mW/MHz)	Declare Power (mW/MHz)	Antenna Power Error	Verdict
802.11b	2412	5.30	0.02	5.32	3.40	5.00	-32.00%	PASS
	2442	7.20		7.22	5.27		5.40%	PASS
	2472	5.41		5.43	3.49		-30.20%	PASS
802.11g	2412	3.58	0.12	3.70	2.34	3.00	-22.00%	PASS
	2442	5.07		5.19	3.30		10.00%	PASS
	2472	3.94		4.06	2.55		-15.00%	PASS
802.11n (HT20)	2412	2.35	0.14	2.49	1.77	3.00	-41.00%	PASS
	2442	4.19		4.33	2.71		-9.67%	PASS
	2472	3.62		3.76	2.38		-20.67%	PASS
802.11n (HT40)	2422	1.85	0.25	2.10	1.62	3.00	-46.00%	PASS
	2442	2.02		2.27	1.69		-43.67%	PASS
	2462	2.01		2.26	1.68		-44.00%	PASS

ANT2

Mode	Channel	Test Value P_t (dBm/MHz)	Duty Factor	Antenna Power P (dBm/MHz)	Antenna Power P (mW/MHz)	Declare Power (mW/MHz)	Antenna Power Error	Verdict
802.11b	2412	9.04	0.02	9.06	8.05	10.00	-19.50%	PASS
	2442	9.81		9.83	9.62		-3.80%	PASS
	2472	8.05		8.07	6.41		-35.90%	PASS
802.11g	2412	6.13	0.12	6.25	4.22	5.00	-15.60%	PASS
	2442	7.40		7.52	5.65		13.00%	PASS
	2472	5.71		5.83	3.83		-23.40%	PASS
802.11n (HT20)	2412	5.43	0.14	5.57	3.61	5.00	-27.80%	PASS
	2442	6.84		6.98	4.99		-0.20%	PASS
	2472	5.06		5.20	3.31		-33.80%	PASS
802.11n (HT40)	2422	1.83	0.25	2.08	1.61	3.00	-46.33%	PASS
	2442	3.44		3.69	2.34		-22.00%	PASS
	2462	1.89		2.14	1.64		-45.33%	PASS



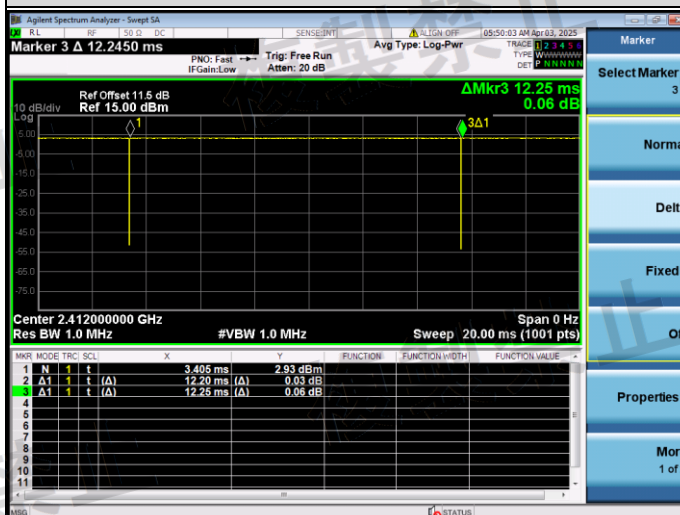
ANT1+ANT2

REPORT No.: SZ25030198W01

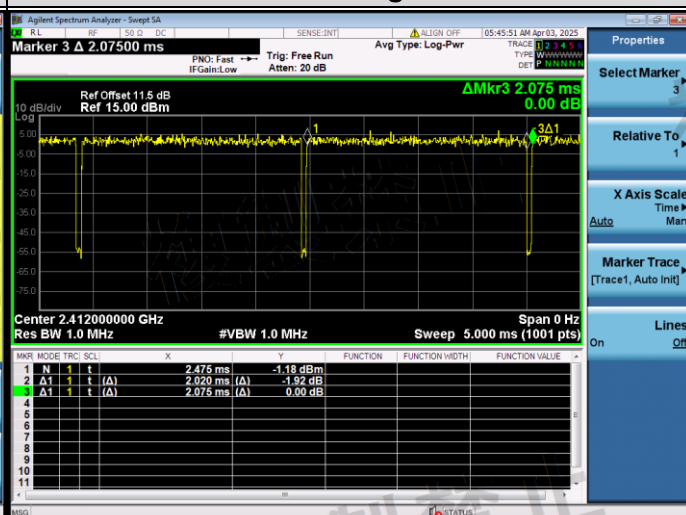
Mode	Channel	Antenna Power P (mW/MHz)	Declare Power (mW/MHz)	Antenna Power Error	Verdict
802.11n (HT20)	2412	5.38	8.00	-32.75%	PASS
	2442	7.70		-3.75%	PASS
	2472	5.69		-28.88%	PASS
802.11n (HT40)	2422	3.23	4.00	-19.25%	PASS
	2442	4.03		0.75%	PASS
	2462	3.32		-17.00%	PASS

Duty Cycle

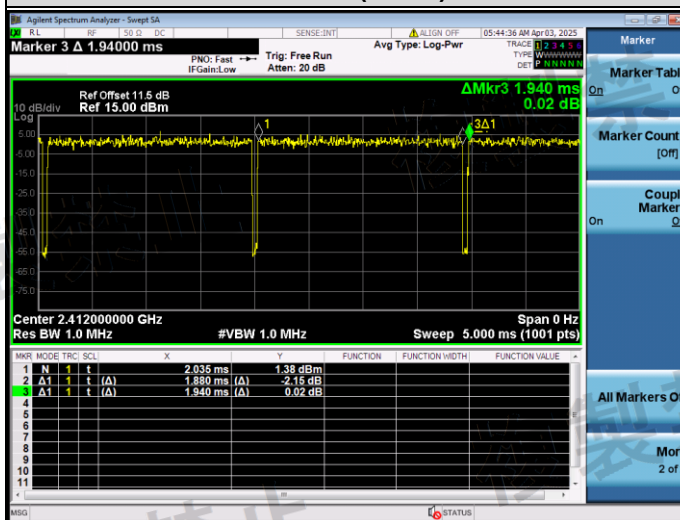
802.11b



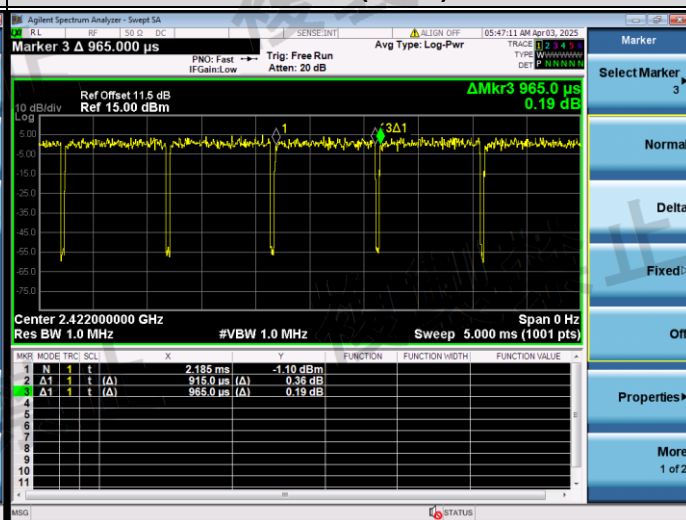
802.11g



802.11n(HT20)



802.11n(HT40)



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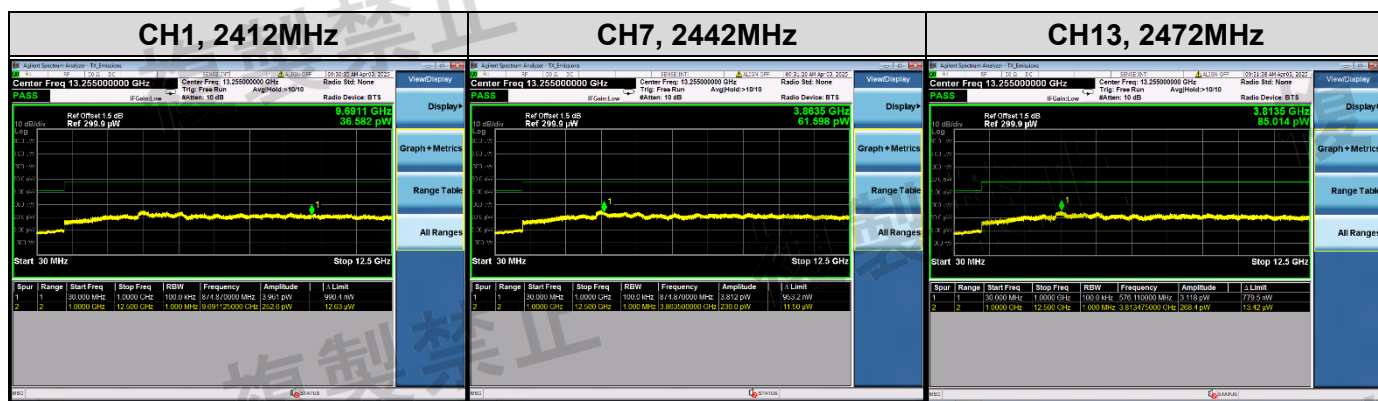
Fax: 86-755-36698525

E-mail: service@morlab.cn



A.5. 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





A.6. E.I.R.P.

ANT1

Mode	Channel	Frequency (MHz)	Measured E.I.R.P. (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11b	1	2412	9.87	14.55	PASS
	7	2442	11.77		PASS
	13	2472	9.98		PASS
802.11g	1	2412	8.25	14.55	PASS
	7	2442	9.74		PASS
	13	2472	8.61		PASS
802.11n(HT20)	1	2412	7.04	14.55	PASS
	7	2442	8.88		PASS
	13	2472	8.31		PASS
802.11n(HT40)	3	2422	6.65	11.54	PASS
	7	2442	6.82		PASS
	11	2462	6.81		PASS

ANT2

Mode	Channel	Frequency (MHz)	Measured E.I.R.P. (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11b	1	2412	9.11	12.14	PASS
	7	2442	9.88		PASS
	13	2472	8.12		PASS
802.11g	1	2412	6.30	12.14	PASS
	7	2442	7.57		PASS
	13	2472	5.88		PASS
802.11n(HT20)	1	2412	5.62	12.14	PASS
	7	2442	7.03		PASS
	13	2472	5.25		PASS
802.11n(HT40)	3	2422	2.13	12.14	PASS
	7	2442	3.74		PASS
	11	2462	2.19		PASS



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ANT1+ANT2

Mode	Channel	Frequency (MHz)	Measured E.I.R.P. (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11n(HT20)	1	2412	9.40	17.56	PASS
	7	2442	11.06		PASS
	13	2472	10.05		PASS
802.11n(HT40)	3	2422	7.96	14.55	PASS
	7	2442	8.56		PASS
	11	2462	8.10		PASS

**A.7. Radiation Angle of Antenna**

Note: Each of these EUT operation modes mentioned in clause 2.2 has been evaluated respectively in pre-scanning, only the data of worst case was included in this report.

ANT1

Mode	Channel	Frequency (MHz)	3dB Beamwidth (Degree)	Limit (Degree)	Verdict
802.11b	1	2412	92	360	PASS
	7	2442	94	360	PASS
	13	2472	93	360	PASS
802.11 n (HT40)	3	2422	92	360	PASS
	7	2442	97	360	PASS
	11	2462	92	360	PASS

ANT2

Mode	Channel	Frequency (MHz)	3dB Beamwidth (Degree)	Limit (Degree)	Verdict
802.11b	1	2412	93	360	PASS
	7	2442	91	360	PASS
	13	2472	94	360	PASS
802.11 n (HT40)	3	2422	93	360	PASS
	7	2442	95	360	PASS
	11	2462	95	360	PASS



A.8. Radio Interference Prevention Capability

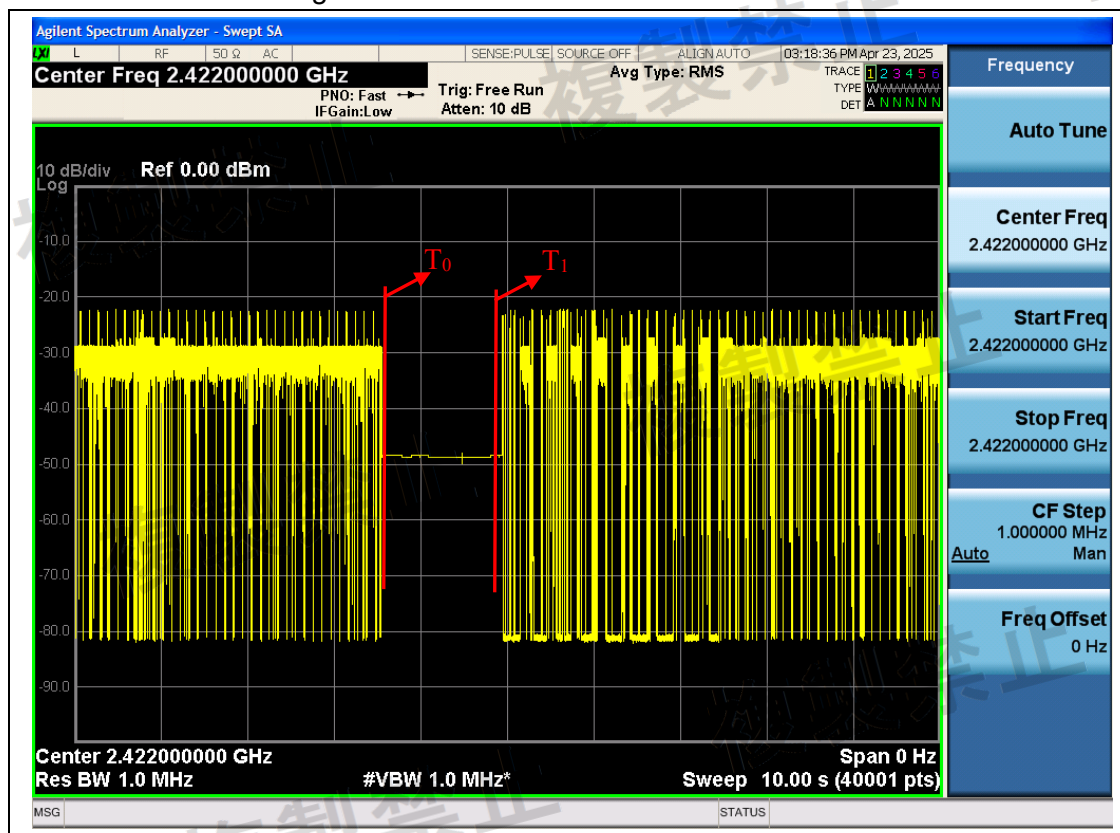
The identification code of the EUT is: 8C:FD:F0:00:C0:DE

DHCP Leases			
Hostname	IPv4-Address		
android-a0aed621d0540f88	192.168.1.127	c0:	
DHCPv6 Leases			
Hostname	IPv6-Address	DUID	
There are no active leases.			
Wireless			
Generic 802.11bgn Wireless Controller (wifi0)		SSID: openwifi	
		Mode: Master	
		Channel: 11 (2.462 GHz)	
100%		Bitrate: 300 Mbit/s	
		BSSID: 8C:FD:F0:00:C0:DE	
		Encryption: None	



A.9. Carrier Sense Function

The carrier sense function is good.



END OF REPORT