

FCC CERTIFICATION TEST REPORT

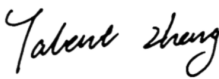
Applicant:	Guangzhou Shirui Electronics Co., Ltd.
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China
Manufacturer:	Guangzhou Shirui Electronics Co., Ltd.
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China
Product Description:	Wireless Lavalier Microphone
Brand Name:	MAXHUB
Tested Model:	LM50
FCC ID:	2AFG6-LM50
Report No.:	JCF260617083-001
Received Date:	Jun. 17, 2026
Tested Date:	Jun. 17, 2026 - Aug. 06, 2026
Issued Date:	Aug. 06, 2026
Test Standards:	FCC Rules and Regulations Part 15 Subpart C,
Test Procedure:	ANSI C63.10-2020, 558074 D01 15.247 Meas Guidance v05r02, 662911 D01 Multiple Transmitter Output v02r01,
Test Result:	Pass

Prepared By:

Kennys Zhang/Engineer **Date:** Aug. 06, 2026

Reviewed By:

Roger Li/Engineer **Date:** Aug. 06, 2026

Approved By:

Talent Zhang/Engineer **Date:** Aug. 06, 2026

Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Guangzhou Jingce Testing Technology Co., Ltd. the test report shall not be reproduced except in full.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
--	/	Aug. 06, 2026	Original Report	/

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1. Test Report Declare

Applicant:	Guangzhou Shirui Electronics Co., Ltd.
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China
Manufacturer:	Guangzhou Shirui Electronics Co., Ltd.
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China
Product Name:	Wireless Lavalier Microphone
Brand Name:	MAXHUB
Model Name:	LM50, LM50***(*=0-9, or A-Z or a-z or "-" or blank, for marketing purpose use only, no technical difference)
Difference Description:	The difference in model names is only for sales purposes, while the EUT remains unchanged.

We Declare:

The equipment described above is tested by Guangzhou Jingce Testing Technology Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangzhou Jingce Testing Technology Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests except as provided information by clients.

2. Summary of Test Results

Summary of Test Results			
Clause	Test Items	FCC/ISED Rules	Test Results
1	6dB Bandwidth and 99 % Occupied Bandwidth	FCC Part 15.247 (a) (2)	Pass
2	Peak Conducted Output Power	FCC Part 15.247 (b) (3)	Pass
3	Power Spectral Density	FCC Part 15.247 (e)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d)	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205	Pass
6	Conducted Emission Test For AC Power Port	FCC Part 15.207	Pass
7	Antenna Requirement	FCC Part 15.203	Pass
Note: This report was tested strictly in accordance with the standards, without any additions, deviations or omissions to the standard content.			

3. Test Laboratory

Guangzhou Jingce Testing Technology Co., Ltd.

Add.: No.10, Hefeng No.1 street, Huangpu District, Guangzhou, Guangdong, People's Republic of China

Association for Laboratory Accreditation(A2LA). Certificate Number: 6594.03

FCC Designation Number: CN1381. Test Firm Registration Number: 486550

IC Test Firm Registration Number: 31808

Conformity Assessment Body identifier: CN0173

4. Equipment Under Test

4.1. Description of EUT

EUT Name:	Wireless Lavalier Microphone
Model Number:	LM50
EUT Function Description:	Please refer to user manual of this device
Power Supply:	Input: 5V $\Rightarrow$ 2A Output: 5V $\Rightarrow$ 0.7A (Optional) For microphone: Supply by USB
Sample No.:	260617083-01-01
Hardware Version:	N/A
Software Version:	N/A
Radio Specification:	SRD 2.4G
Operation Frequency:	2.4G SRD: 2406MHz—2474MHz
Modulation:	GFSK
Antenna Type:	FPC Antenna, MAX. Gain: 2.4 dBi

Note 1: EUT is the ab. of equipment under test.

Note 2: The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain.

4.2. Channel List

Channel List for 2.4G SRD							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2406	4	2422	8	2446	12	2462
1	2410	5	2434	9	2450	13	2466
2	2414	6	2438	10	2454	14	2470
3	2418	7	2442	11	2458	15	2474

4.3. Test Channel Configuration

Tested mode, channel and rand data rate information			
Mode	Data rate (Mbps) (see Note)	Channel	Frequency (MHz)
802.2.4G SRD	1	Low: CH0	2406
	1	Middle: CH7	2442
	1	High: CH15	2474

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

4.4. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25 °C
Humidity range:	40-75%
Pressure range:	86-106 kPa

4.5. Description of Available Antennas

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band			
Test Software		Telink BDT	
Modulation Mode	Transmit Antenna Number	Test Software Setting Level	
		Channel	ANT1
2.4G SRD	1	CH0	1.7
		CH7	1.7
		CH15	1.7

4.6. Description of Available Antennas

Test Mode	Transmit and Receive Mode	Description
2.4G SRD	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

5. Description of Test Setup

5.1. Accessory

Description of Accessories	Manufacturer	Model Number	Description	Remark
/	/	/	/	/

5.2. Support Equipment

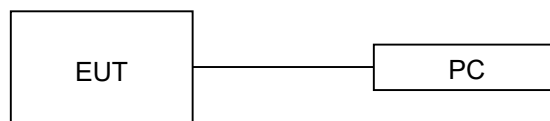
Equipment	Brand Name	Model Name	P/N
PC	Lenovo	T480	/

5.3. Test Setup

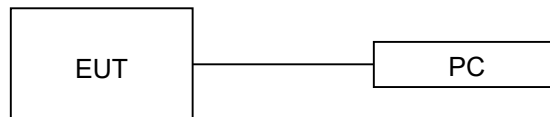
The EUT can work in Fixed Frequency mode.

5.4. Setup Diagram for Tests

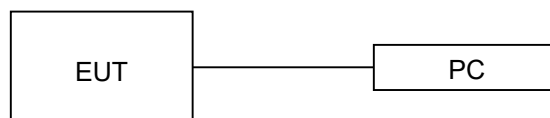
RF Connect Test:



Radiated Emission Test:



AC Power Line Conducted Emissions Test:



6. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
AC Power Conduction emission	1.37 dB
All Radiated emissions	5.4dB
Conducted emissions	3.09 dB
Occupied Channel Bandwidth	1.1%
Conducted Output power	0.82dB
Power Spectral Density	0.82dB
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k = 2.	

7. Measuring Instrument and Software Used

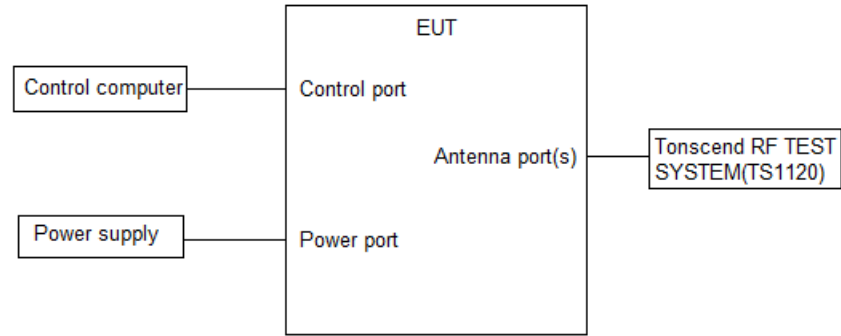
TS Test System						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	Spectrum Analyzer	Keysight	N9030B	MY56320512	Jul. 31, 2025	Jul. 30, 2026
☒	Spectrum Analyzer	Keysight	N9030B	MY56320512	Jun. 23, 2026	Jun. 22, 2027
☒	Vector Signal Generator	Keysight	N5182B	MY57300334	Jul. 31, 2025	Jul. 30, 2026
☒	Vector Signal Generator	Keysight	N5182B	MY57300334	Jun. 23, 2026	Jun. 22, 2027
☒	Signal Generator	Keysight	N5171B	MY57280639	Jul. 31, 2025	Jul. 30, 2026
☒	Signal Generator	Keysight	N5171B	MY57280639	Jun. 23, 2026	Jun. 22, 2027
☒	DC POWER	Keysight	E342A	MY59020356	Jul. 31, 2025	Jul. 30, 2026
☒	DC POWER	Keysight	E342A	MY59020356	Jun. 24, 2026	Jun. 23, 2027
☒	Incubator thermometer	GWS	EL-02JA	21107288	Jul. 31, 2025	Jul. 30, 2026
☒	Incubator thermometer	GWS	EL-02JA	21107288	Jun. 23, 2026	Jun. 22, 2027
☒	Control unit(Power sensor)	Tonscend	JS0806-2	20L8060342	Jul. 31, 2025	Jul. 30, 2026
☒	Control unit(Power sensor)	Tonscend	JS0806-2	20L8060342	Jun. 24, 2026	Jun. 23, 2027
☒	Spectrum Analyzer	Keysight	N9020B	MY60112206	Aug. 29, 2025	Aug. 30, 2026
☒	Control unit(Power sensor)	Tonscend	JS0806-2	21H8060465	Aug. 01, 2025	Jul. 31, 2026
☒	Control unit(Power sensor)	Tonscend	JS0806-2	21H8060465	Jun. 24, 2026	Jun. 23, 2027
☒	Spectrum Analyzer	Keysight	N9020B	MY60112811	Jul. 31, 2025	Jul. 30, 2026
☒	Spectrum Analyzer	Keysight	N9020B	MY60112811	Jun. 23, 2026	Jun. 22, 2027

☒	Signal Generator	Keysight	N5173B	MY62220145	Jul. 31, 2025	Jul. 30, 2026
☒	Signal Generator	Keysight	N5173B	MY62220145	Jun. 23, 2026	Jun. 22, 2027
☒	Vector Signal Generator	Keysight	N5182B	MY61252859	Jul. 31, 2025	Jul. 30, 2026
☒	Vector Signal Generator	Keysight	N5182B	MY61252859	Jun. 23, 2026	Jun. 22, 2027
☒	DC POWER	Keysight	E3642A	MY40005294	Jul. 31, 2025	Jul. 30, 2026
☒	DC POWER	Keysight	E3642A	MY40005294	Jun. 24, 2026	Jun. 23, 2027
☒	Control unit(Power sensor)	Tonscend	JS0806-2	24F80620865	Aug. 01, 2025	Jul. 31, 2026
☒	Control unit(Power sensor)	Tonscend	JS0806-2	24F80620865	Jun. 25, 2026	Jun. 24, 2027
Software						
Used	Description	Manufacturer	Name		Version	
☒	Test software	Tonscend	JS1120-3		V3.3.10	
RSE Test System						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	EMI Receiver	R&S	ESR26	101424	Nov. 25, 2025	Nov. 24, 2026
☒	Hybrid Antenna	Schwarzbeck	VULB9163	01361	May. 26, 2026	May. 25, 2027
☒	Horn Antenna 1	Schwarzbeck	BBHA 9120 D	02910	Aug. 31, 2025	Aug. 30, 2026
☒	Horn Antenna 2	ETS	BBHA 9170	1090	Aug. 31, 2025	Aug. 30, 2026
☒	loop-antenna	Schwarzbeck	FMZB 1513-60	00030	Jan. 11, 2026	Jan. 10, 2027
☒	Test path	/	Path2: WIFI-2.4G 1-3GHz	/	Jul. 31, 2025	Jul. 30, 2026
☒	Test path	/	Path2: WIFI-2.4G 1-3GHz	/	Jun. 24, 2026	Jun. 23, 2027
☒	Test path	/	Path7: ALL PASS 1-18GHz	/	Jul. 31, 2025	Jul. 30, 2026
☒	Test path	/	Path7: ALL PASS 1-18GHz	/	Jun. 24, 2026	Jun. 23, 2027
☒	Test path	/	Path9: 3GHz High PASS 3-18GHz	/	Jul. 31, 2025	Jul. 30, 2026
☒	Test path	/	Path9: 3GHz High PASS 3-18GHz	/	Jun. 24, 2026	Jun. 23, 2027
☒	Test path	/	Path16: 30MHz-1GHz ALL PASS NO AMP	/	Jul. 31, 2025	Jul. 30, 2026
☒	Test path	/	Path16: 30MHz-1GHz ALL PASS NO AMP	/	Jun. 24, 2026	Jun. 23, 2027
☒	Signal Pre-Amplifier	ETS	3116C-PA	00217677	Jul. 31, 2025	Jul. 30, 2026

☒	Signal Pre-Amplifier	ETS	3116C-PA	00217677	Jul. 17, 2026	Jul. 16, 2027
☒	3m Fully-anechoic Chamber	YIHENG	9m*6m*6m	001	Sep. 05, 2023	Sep. 04, 2026
Software						
Used	Description	Manufacturer	Name		Version	
☒	Test software	Tonscend	TS+		V5.0.0.0	
Conducted Emission Test For AC Power Port						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	LISN	R&S	ENV216	102509	Aug. 01, 2025	Jul. 31, 2026
☒	LISN	R&S	ENV216	102509	Jun. 23, 2026	Jun. 22, 2027
☒	EMI Receiver	R&S	ESR	102154	Aug. 01, 2025	Jul. 31, 2026
☒	EMI Receiver	R&S	ESR	102154	Jun. 10, 2026	Jun. 09, 2027
Software						
Used	Description	Manufacturer	Name		Version	
☒	Test software	EZ	EZ-EMC		EMEC-3A1	
Other Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	Temperature & Humidity	Temperature	HTC-1	/	Sep. 20, 2025	Sep. 21, 2026

8. On Time and Duty Cycle

8.1. Block diagram of test setup



Note: The EUT is connected to the Control unit, and then the signal is transmitted through internal circuits to the Spectrum Analyzer.

8.2. Limits

None; for reporting purposes only

8.3. Procedure

KDB 558074 Zero-Span Spectrum Analyzer Method

8.4. Results

Test Mode	Ant.	Freq. (MHz)	Transmission Duration (ms)	Transmission Period (ms)	Duty Cycle (%)
2.4G SRD	Ant1	2406	0.20	2.55	7.84
		2442	0.20	2.55	7.84
		2474	0.20	2.54	7.87

Note1: Duty Cycle Correction Factor = 10log (1/x).

Note2: Offset=cable loss + Test system insertion loss

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer, then the next higher Level should be used.

For mode 2.4G SRD, the duty cycle is greater than 98 %, so it can set VBW to 10 Hz.

8.5. Original test data



9. 6 dB DTS Bandwidth and 99 % Occupied Bandwidth

9.1. Block diagram of test setup

Same as section 8.1

9.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
/	99 % Occupied Bandwidth	For reporting purposes only.	2400-2483.5

9.3. Test Procedure

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: 1 % to 5 % of the occupied bandwidth but not less than 100 kHz. For 99 % Occupied Bandwidth :1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth : $\geq 3 \times$ RBW For 99 % Occupied Bandwidth: $\geq 3 \times$ RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB and 99 % relative to the maximum level measured in the fundamental emission.

9.4. Results

6dB bandwidth:

Test Mode	Ant.	Freq. (MHz)	DTS BW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
2.4G SRD	Ant1	2406	1.436	2405.336	2406.772	0.5	PASS
		2442	1.300	2441.392	2442.692	0.5	PASS
		2474	1.172	2473.428	2474.600	0.5	PASS

Note: Offset=cable loss + Test system insertion loss

99 % bandwidth:

Test Mode	Ant.	Channel Freq. (MHz)	OCB (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
2.4G SRD	Ant1	2406	2.0347	2404.9915	2407.0262	---	---
		2442	2.0331	2440.9929	2443.0260	---	---
		2474	2.0470	2472.9952	2475.0422	---	---

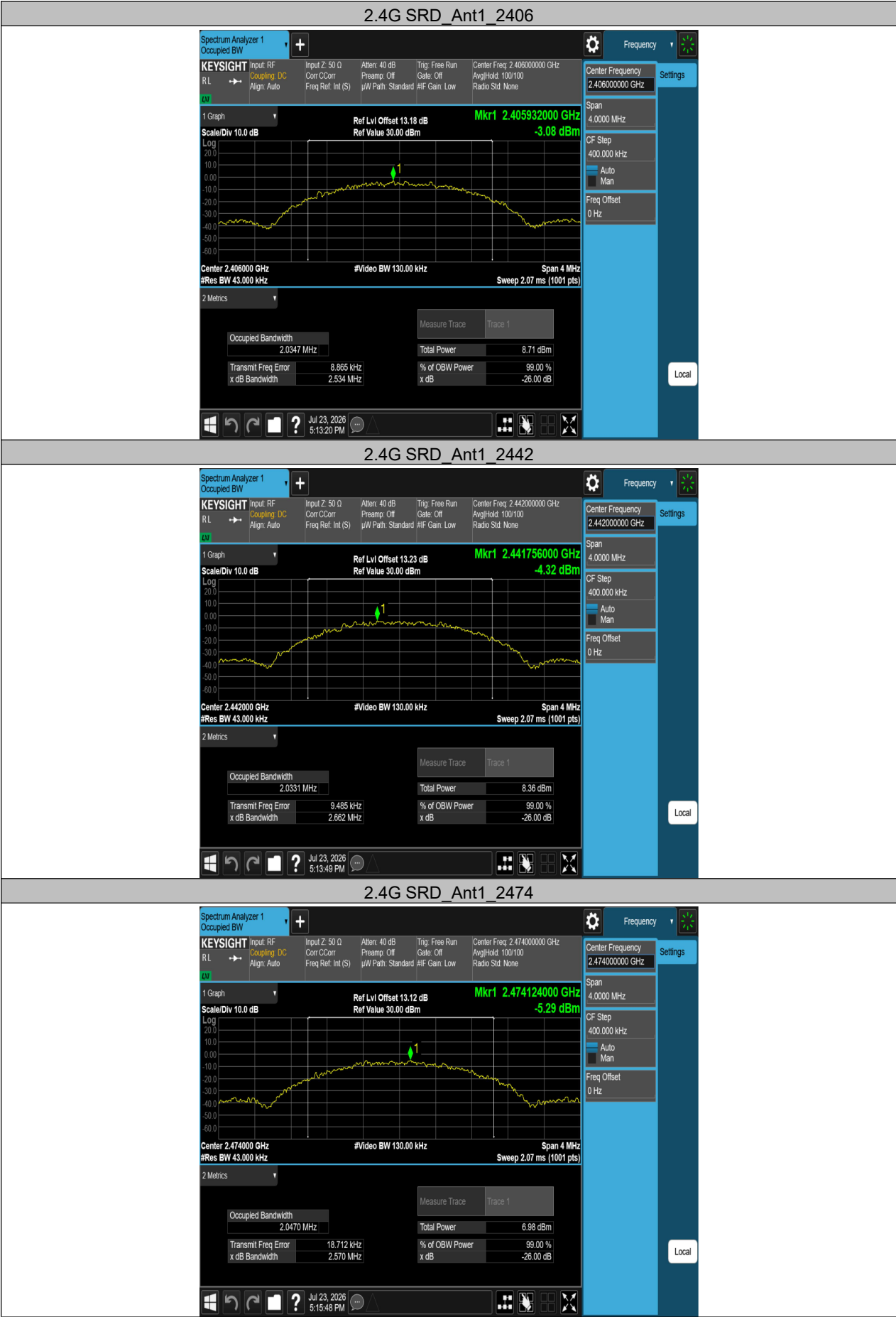
Note: Offset=cable loss + Test system insertion loss

9.5. Original test data

6dB bandwidth:



99 % bandwidth:



10. Conducted Output Power

10.1. Block diagram of test setup

Same as section 8.1

10.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	Average Output Power	1 watt or 30 dBm	2400-2483.5

10.3. Test Procedure

- (1) The test according to ANSI C63.10 clause 11.9.2.3.
- (2) Connect EUT's antenna output to RF power meter by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously, If the transmitter does not transmit continuously, measure the duty cycle, D, of the transmitter output signal.
- (4) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- (5) Adjust the measurement in dBm by adding $[10 \log (1/D)]$, where D is the duty cycle.
- (6) Record the RF average power of each antenna port.

10.4. Results

Test Mode	Ant.	Freq. (MHz)	Average power (dBm)	Limit (dBm)	Verdict
2.4G SRD	Ant1	2406	1.18	≤30.00	PASS
		2442	0.27	≤30.00	PASS
		2474	-0.65	≤30.00	PASS

11. Power Spectral Density

11.1. Block diagram of test setup

Same as section 8.1

11.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm/3 kHz	2400-2483.5

11.3. Test Procedure

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	3 kHz ≤ RBW ≤100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

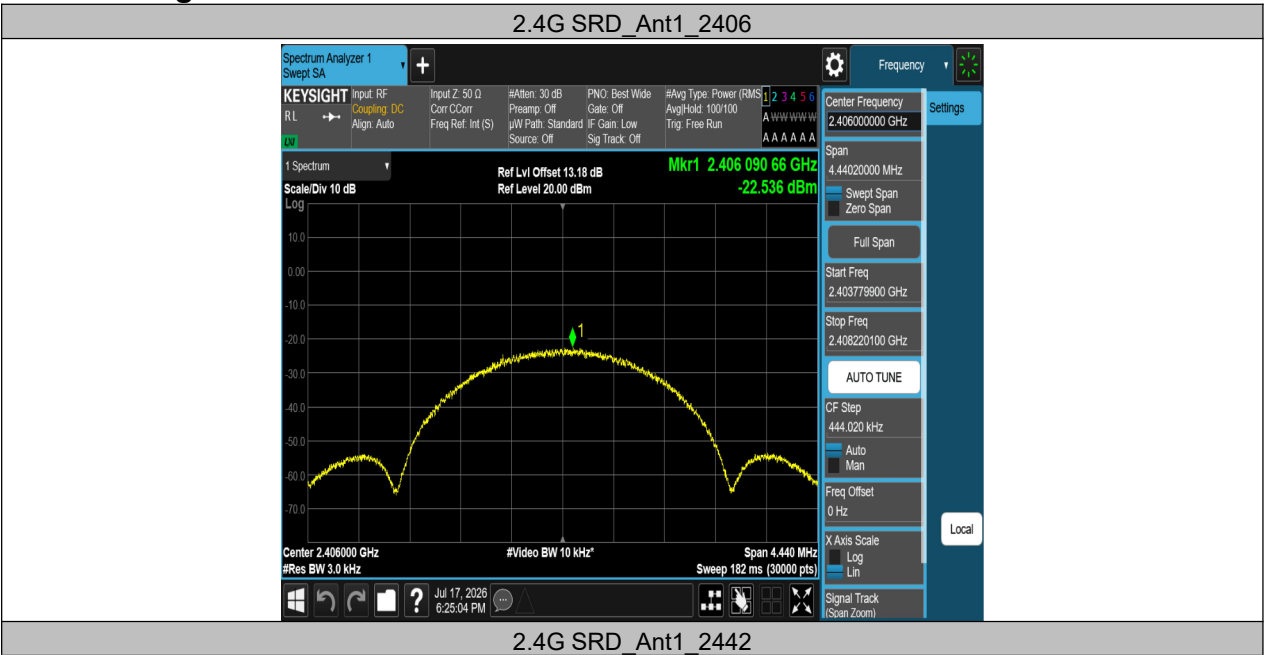
Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.
If measured Level exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

11.4. Results

Test Mode	Ant.	Freq. (MHz)	Result (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
2.4G SRD	Ant1	2406	-11.48	≤8.00	PASS
		2442	-15.59	≤8.00	PASS
		2474	-13.34	≤8.00	PASS

Note: Offset=cable loss + Test system insertion loss

11.5. Original test data





12. Conducted Band edge and Spurious Emissions

12.1. Block diagram of test setup

Same as section 8.1

12.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

12.3. Test Procedure

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Connect the UUT to the spectrum analyzer and use the following settings:

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

12.4. Test result

Test Mode	Ant.	Ch Name	Freq. (MHz)	Ref Level (dBm)	Result (dBm)	Limit (dBm)	Verdict
2.4G SRD	Ant1	Low	2406	3.84	-44.19	≤ -26.16	PASS
		High	2474	2.77	-46.79	≤ -27.24	PASS

Note: Offset=cable loss + Test system insertion loss

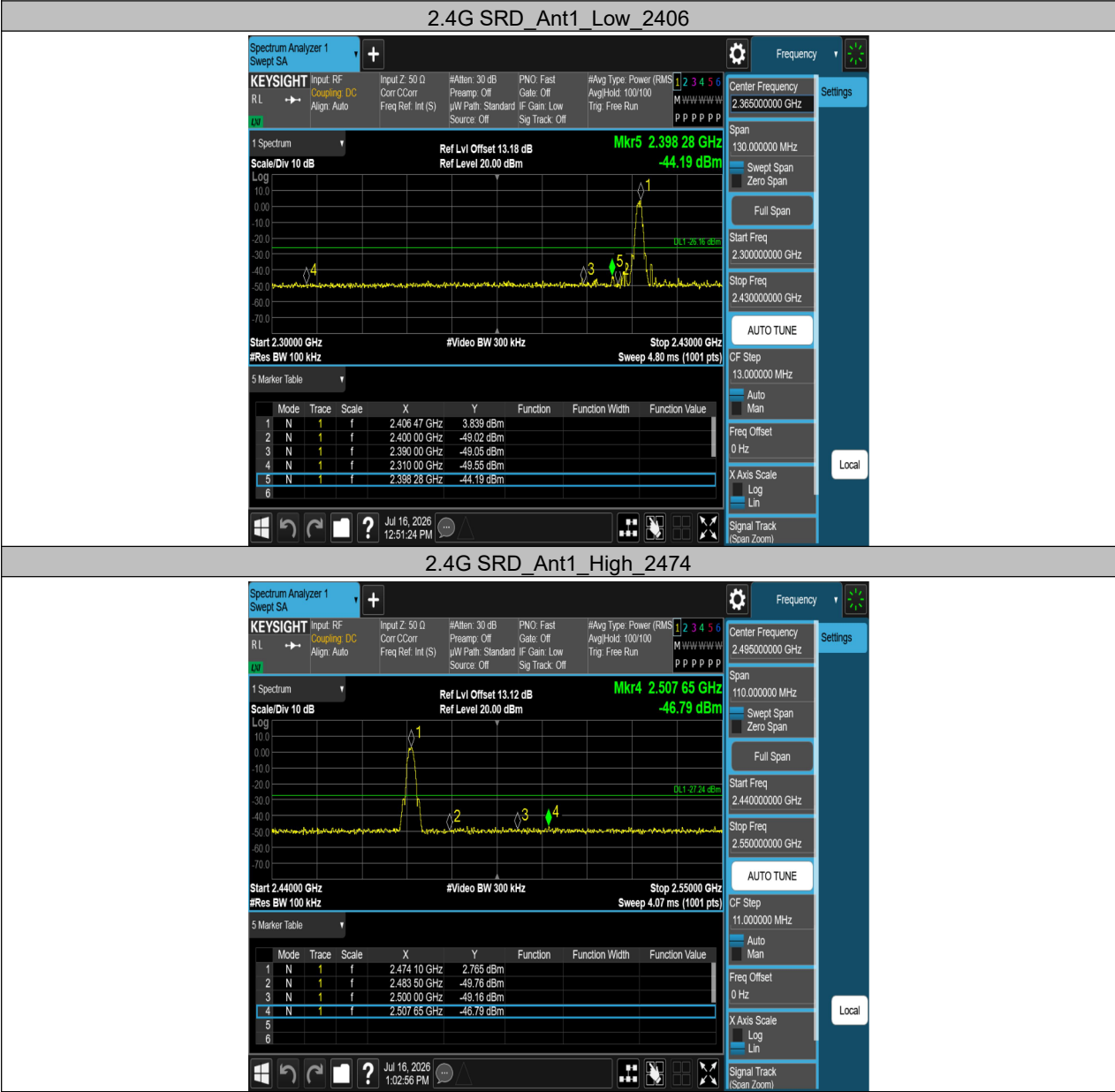
Test Mode	Ant.	Freq. (MHz)	Freq Range (Mhz)	Ref Level (dBm)	Result (dBm)	Limit (dBm)	Verdict
2.4G SRD	Ant1	2406	Reference	6.71	6.71	---	PASS
			30~1000	6.71	-59.32	≤ -23.29	PASS
			1000~26500	6.71	-43.37	≤ -23.29	PASS
		2442	Reference	5.36	5.36	---	PASS
			30~1000	5.36	-60.89	≤ -24.64	PASS
			1000~26500	5.36	-42.67	≤ -24.64	PASS

		2474	Reference	2.67	2.67	---	PASS
			30~1000	2.67	-60.93	≤-27.33	PASS
			1000~26500	2.67	-43.83	≤-27.33	PASS

Note: Offset=cable loss + Test system insertion loss

12.5. Original test data

Band edge:



Spurious Emission:

