

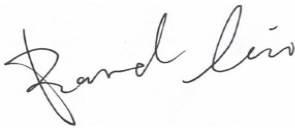
**FCC PART 15.247
TEST REPORT**

For

Zhejiang Yihe Sanitary Ware Co., Ltd.

District A, No. 102 East Taihe Road, Haimen street, Jiaojiang, Taizhou, Zhejiang, China

FCC ID: 2AQBGRCB02

Report Type: Original Report	Product Name: Remote Control
Report Number: <u> RSHA250912001-00B </u>	
Report Date: <u> 2025-10-28 </u>	
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA250912001-00B	R1V1	2025-10-28	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Zhejiang Yihe Sanitary Ware Co., Ltd.
Product Name:	Remote Control
Tested Model:	RCB02
Power Supply:	DC 3 V from battery
Maximum Output Power:	-11.88 dBm
RF Function:	2.4G SRD
Operating Band/Frequency:	2405-2470 MHz
Channel Number:	4
Modulation Type:	GFSK
★Maximum Antenna Gain:	-1.14 dBi

Note: The maximum antenna gain was provided by the applicant.

All measurement and tested data in this report was gathered from production sample serial number: RSHA250912001-1 (Assigned by BACL (Kunshan). The EUT supplied by the applicant was received on 2025-09-12.)

Objective

This test report is prepared for *Zhejiang Yihe Sanitary Ware Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules.

The tests were performed in order to determine Compliant with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and 558074 D01 15.247 Meas Guidance v05r02.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No.: CN5055.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2405	3	2450
2	2422	4	2470

EUT was tested with Channel 1, 3 and 4.

EUT Exercise Software

RF Test Tool: EMI_TEST_TOOL

★Power level: 0.6 dBm

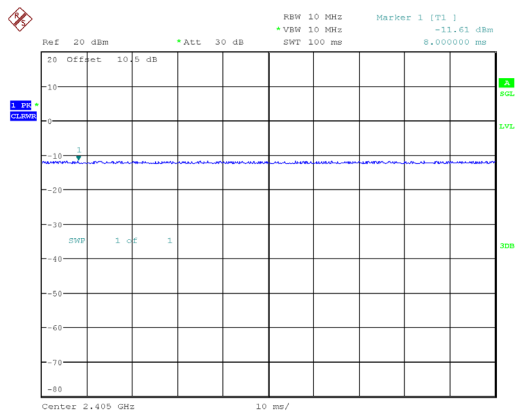
Note: The power level was declared by the applicant.

Environmental Conditions & Test Information

Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

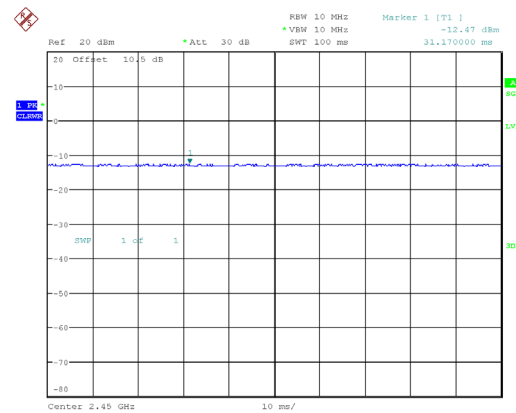
Duty Cycle:

Low Channel



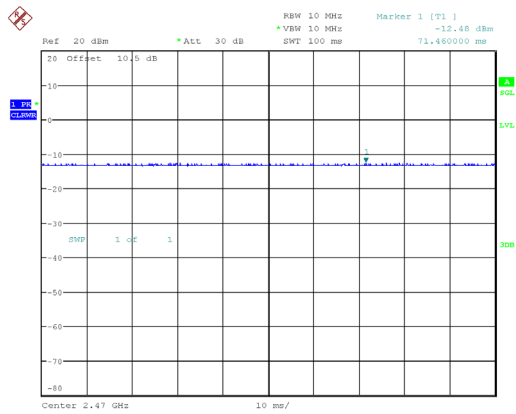
ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:35:56

Middle Channel



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:44:55

High Channel



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 10:26:19

Channel	Duty Cycle (%)	Ton (ms)	Ton+off (ms)	Duty Cycle Factor(dB)
Low	100	100	100	/
Middle	100	100	100	/
High	100	100	100	/

Note: Note: Offset (10.5dB) = Attenuator (10dB)+cable loss(0.5dB)

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

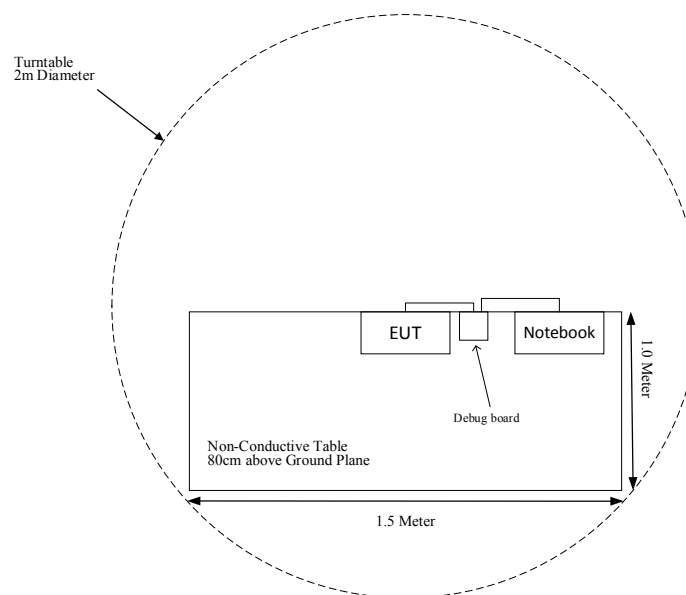
Manufacturer	Description	Model	Serial Number
/	Debug board	/	/
Lenovo	Notebook	Y700P	PF2B7PL5

External I/O Cable

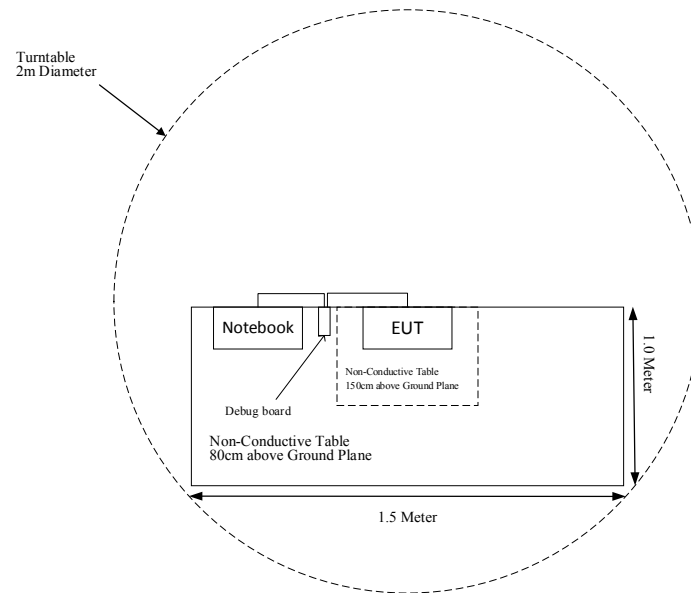
Cable Description	Length (m)	From Port	To Port
RF cable	0.2	EUT	Debug board
Data cable	1.0	Debug board	Notebook

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310 & §2.1093	RF exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Not Applicable (See Note)
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(d)	Conducted Spurious Emission	Compliant
§15.247(e)	Power Spectral Density	Compliant

Note: The EUT is powered by batteries.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2025-04-09	2026-04-08
Sunol Sciences	Hybrid Antenna	JB3	A090314-2	2024-10-29	2027-10-28
BACL	Active Loop Antenna	1313-1A	4041511	2024-11-22	2027-11-21
Narda	6 dB Attenuator	771-6	10690812-2-1	2024-10-29	2027-10-28
Sonoma Instrument	Pre-amplifier	310N	171205	2025-04-09	2026-04-08
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-9	009	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-10	010	2025-04-09	2026-04-08
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2025-04-09	2026-04-08
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2024-11-03	2027-11-02
ETS-LINDGREN	Horn Antenna	3116	2516	2024-12-12	2027-12-11
A.H.Systems,inc	Amplifier	PAM-0118P	512	2025-04-09	2026-04-08
MICRO-TRONICS	Band Reject Filter	BRC50718	G034	2025-08-05	2026-08-04
Narda	Attenuator	10dB	010	2025-04-08	2026-04-07
SELECTOR	Amplifier	EM18G40G	60726	2025-04-09	2026-04-08
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-11	011	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-12	012	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-13	013	2025-04-09	2026-04-08
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2025-04-09	2026-04-08
Narda	Attenuator	10dB	010	2025-04-08	2026-04-07
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

§1.1310 & §2.1093 - RF EXPOSURE

Applicable Standard

According to §2.1093 and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Calculated Data:

Mode	Max Tune-up Conducted Power★		Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
	(dBm)	(mW)				
SRD	-11.50	0.07	5	0.02	3.0	Yes

Note:

1. For the above tune up power were declared by the manufacturer.

Result: No SAR test is required.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine Compliant with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

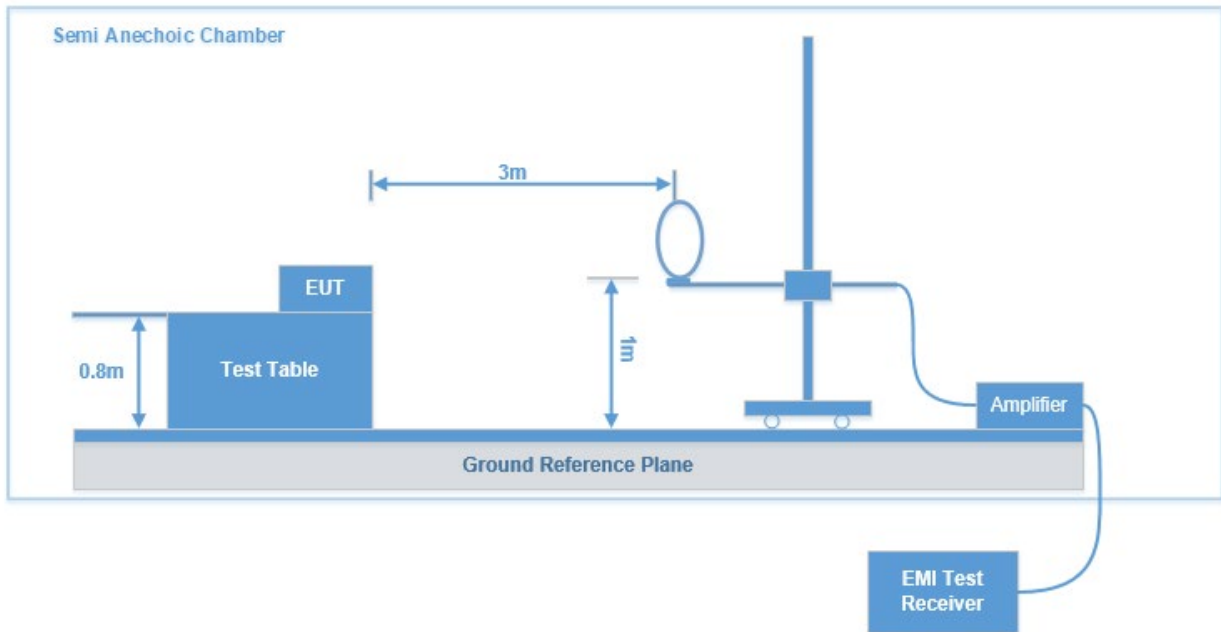
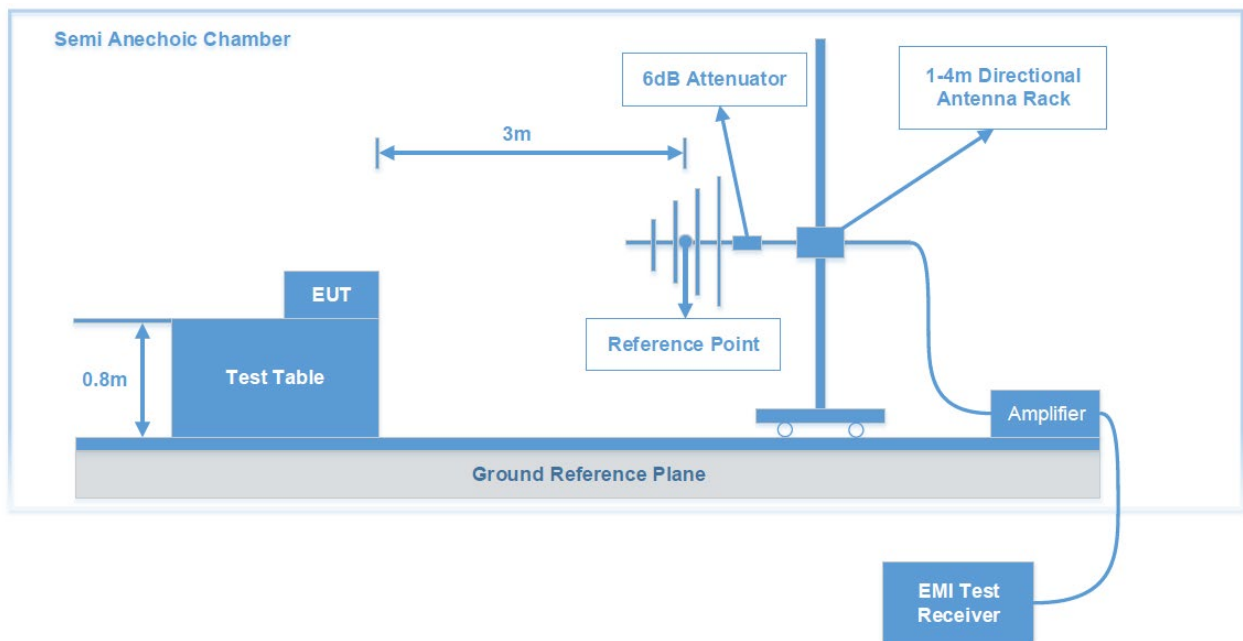
Antenna Connector Construction

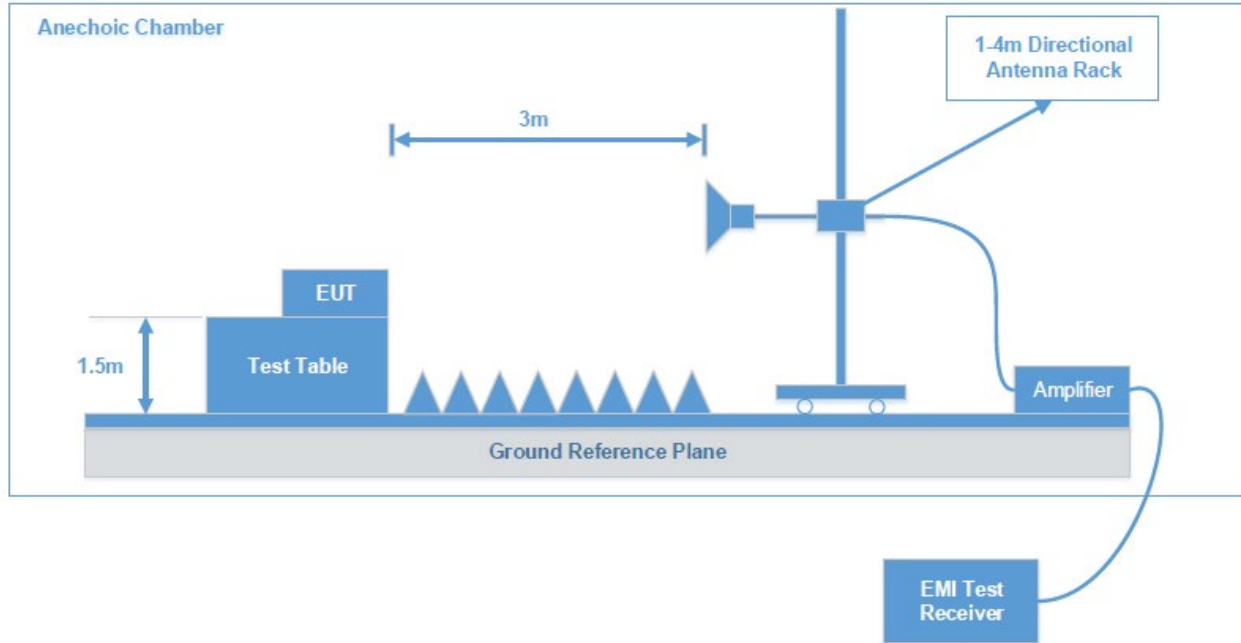
The EUT has a PCB antenna for SRD, and the antenna gain is -1.14 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

FCC §15.205, §15.209 & §15.247(d) – RADIATED EMISSIONS**Applicable Standard**

FCC §15.205; §15.209; §15.247(d)

Test System Setup**9 kHz – 30 MHz:****30 MHz - 1 GHz:**

Above 1 GHz:

The radiated emission tests were performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209 and FCC 15.247 limits.

EMI Test Receiver Setup

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	VBW	IF B/W	Measurement	Detector
9 kHz - 150 kHz	200 Hz	1 kHz	200 Hz	Peak/QP/Average	Peak/QP/Average
150 kHz - 30 MHz	9 kHz	30 kHz	9 kHz	Peak/QP/Average	Peak/QP/Average
30 MHz - 1000 MHz	100 kHz	300 kHz	/	Peak	Peak
	/	/	120 kHz	QP	QP
Above 1 GHz	1MHz	3 MHz	/	Peak	Peak
	1MHz	3 MHz	/	Average	Average

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude (dB}\mu\text{V/m)} = \text{Meter Reading (dB}\mu\text{V)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Corrected Amplitude (dB}\mu\text{V/m)}$$

Note: The QuasiPeak (dB μ V/m), MaxPeak (dB μ V/m), Average (dB μ V/m) which shown in the data table are all Corrected Amplitude.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

Test Data: See Appendix

FCC §15.247(A) (2) - 6 DB EMISSION BANDWIDTH

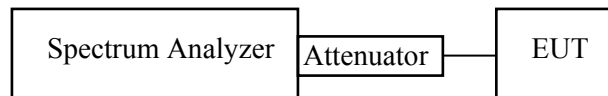
Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

According to ANSI C63.10:2020 sub-clause 11.8.1

- a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- b) Set the VBW $\geq [3 \times \text{RBW}]$.
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “–6 dB down amplitude”. If a marker is below this “–6 dB down amplitude” value, then it shall be as close as possible to this value.



Note: Offset (10.5dB) = Attenuator(10dB) + Cable loss(0.5dB)

Test Data: See Appendix

FCC §15.247(B) (3) - MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, Compliant with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

According to ANSI C63.10:2020 sub-clause 11.9.1.1

- a) Set the RBW $\geq$ DTS bandwidth.
- b) Set VBW $\geq [3 \times \text{RBW}]$.
- c) Set span $\geq [3 \times \text{RBW}]$.
- d) Sweep time = No faster than coupled (auto) time.
- e) Detector = peak.
- f) Trace mode = max-hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.



Note: Offset (10.5dB) = Attenuator (10dB) + cable loss (0.5dB)

Test Data: See Appendix

FCC §15.247(D) - 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

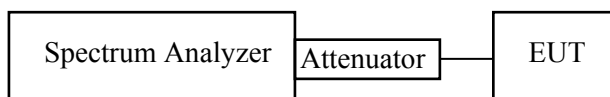
Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates Compliant with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

According to ANSI C63.10:2020 sub-clause 6.10.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



Note: Offset (10.5dB) = Attenuator(10dB)+Cable loss(0.5dB)

Conducted Spurious Emission

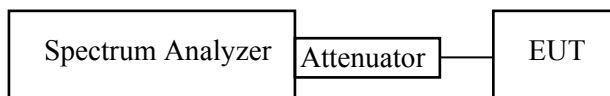
Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

Test Method: ANSI C63.10-2020 Section 11.11

- a) Set the center frequency and span to encompass frequency range to be measured
 - b) Set the RBW = 100 kHz.
 - c) Set the VBW $\geq [3 \times \text{RBW}]$.
 - d) Detector = peak.
 - e) Sweep time = No faster than coupled (auto) time.
 - f) Trace mode = max hold.
 - g) Allow trace to fully stabilize.
 - h) Use the peak marker function to determine the maximum amplitude level.
- Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.



Note: Offset (11dB) = Attenuator(10dB) + Cable loss(1dB)

Test Data: See Appendix

FCC §15.247(E) - POWER SPECTRAL DENSITY

Applicable Standard

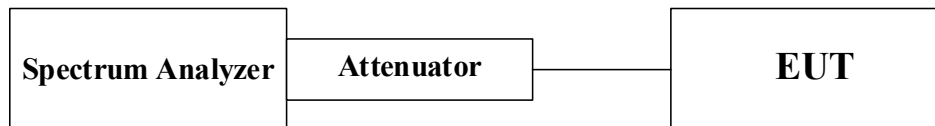
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

According to ANSI C63.10:2020 sub-clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine Compliant, and it is optional if the maximum conducted (average) output power was used to determine Compliant:

1. Set the RBW to: $3\text{kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
2. Set the VBW $\geq 3 * \text{RBW}$.
3. Set the span > 1.5 times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level within the RBW.
9. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.



Note: Offset (10.5dB) = Attenuator (10dB) + cable loss (0.5dB)

Test Data: See Appendix

APPENDIX - TEST DATA

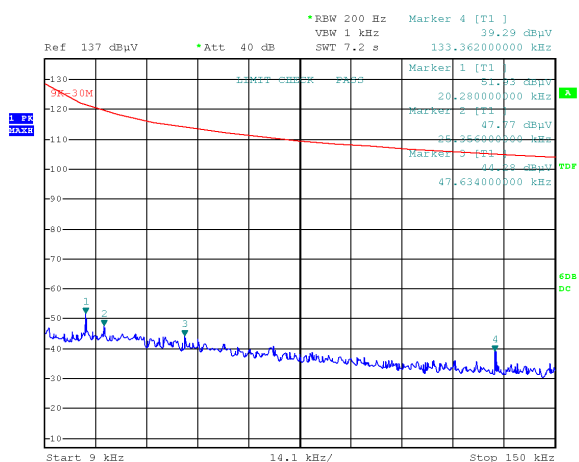
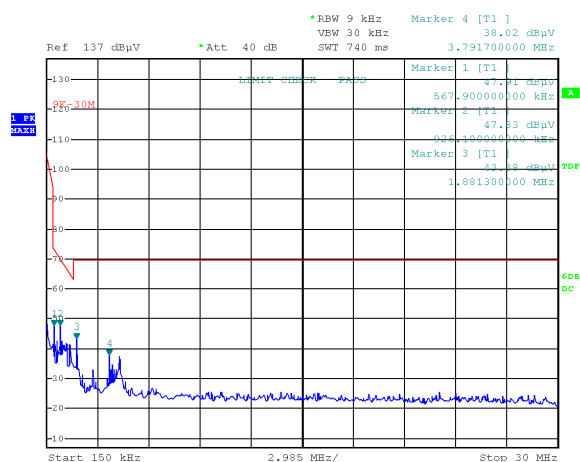
SPURIOUS EMISSIONS & RESTRICTED BANDS EMISSIONS

Environmental Conditions & Test Information

Frequency Range:	9 kHz - 1 GHz	1 GHz - 18 GHz	18 GHz - 25 GHz
Test Date:	2025-09-26	2025-09-30	2025-10-13
Temperature:	24.1 °C	25.9 °C	26 °C
Relative Humidity:	50 %	54 %	55 %
ATM Pressure:	102.0 kPa	101.5 kPa	101.7 kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Link Xia	Destine Hu	Hugh Wu

EUT operation mode: Transmitting

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

9 kHz-30 MHz: (Transmitting maximum output power SRD Mode low channel)**Parallel(worst case)****9kHz-150kHz****150kHz-30MHz**

Project No.RSHA250912001
 Date: 26.SEP.2025 16:21:16

Tester:Link Xia

Project No.RSHA250912001
 Date: 26.SEP.2025 16:26:55

Tester:Link Xia

9 kHz - 150 kHz:

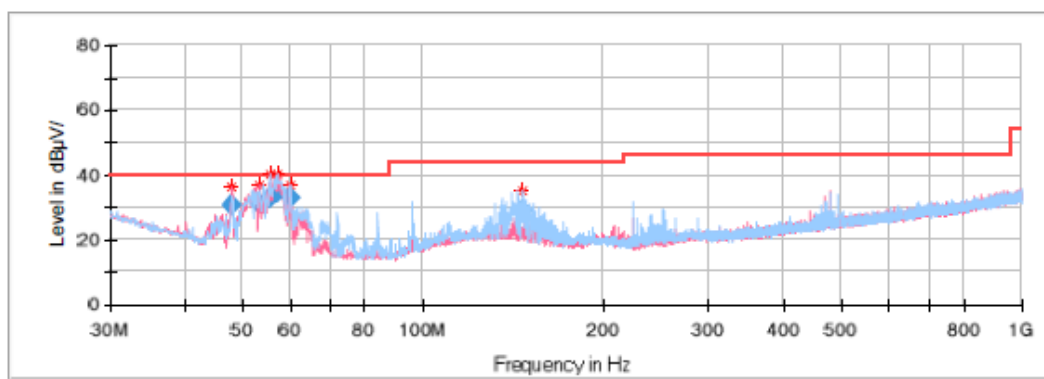
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.020280	51.93	PK	-0.56	121.46	69.53
0.025356	47.77	PK	-0.59	119.52	71.75
0.047634	44.28	PK	-3.43	114.05	69.77
0.133362	39.29	PK	-10.63	105.10	65.81

150 kHz - 30 MHz:

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.56790	47.91	PK	-23.27	72.52	24.61
0.92610	47.83	PK	-27.09	68.27	20.44
1.88130	43.38	PK	-30.52	69.54	26.16
3.79170	38.02	PK	-31.81	69.54	31.52

30 MHz - 1 GHz**Low Channel: 2405 MHz****Common Information**

Project No: RSHA250912001
EUT Model: RCB02
Test Mode: Transmitting in SRD mode low channel
Standard: FCC Part 15.247 & FCC Part 15.205 & FCC Part 15.209
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 50%
Barometric Pressure: 102.0Pa
Test Engineer: Link Xia
Test Date: 2025/9/26

**Final Result**

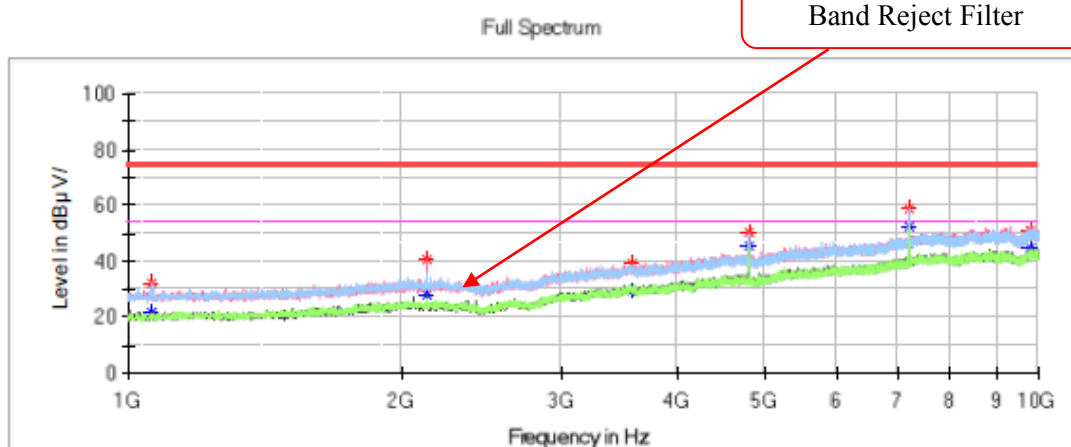
Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
47.945000	30.44	40.00	9.56	V	-15.9
53.280000	31.04	40.00	8.96	V	-17.0
55.462500	32.90	40.00	7.10	H	-17.1
57.038750	34.41	40.00	5.59	H	-17.1
59.948750	33.08	40.00	6.92	H	-17.1
147.127500	28.77	43.50	14.73	H	-11.6

1 GHz - 10 GHz:

Low Channel: 2405 MHz

Common Information

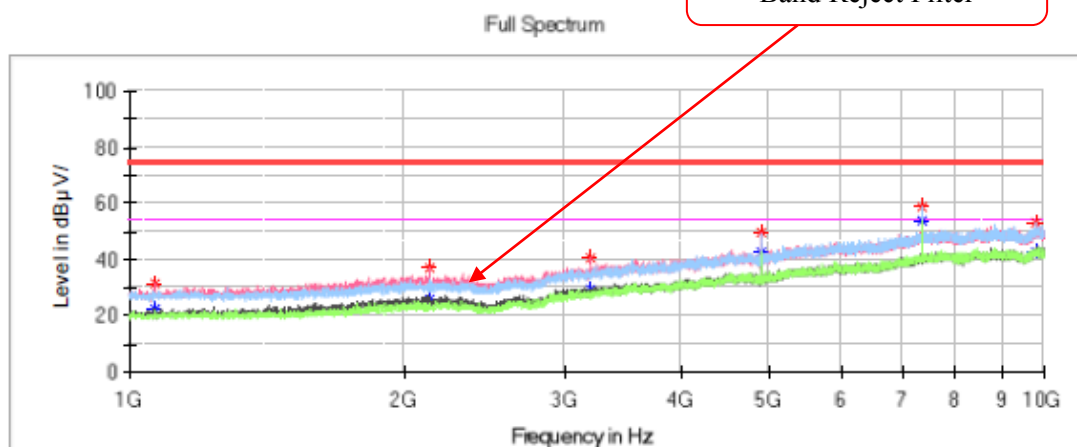
Project No.:	RSHA250912001
EUT Model:	RCB02
Test Mode:	Transmitting in low channel
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	25.9℃
Humidity:	54%
Atmospheric Pressure:	101.5kPa
Test Engineer:	Destine Hu
Test Date:	2025/9/30

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1063.000000	---	21.35	54.00	32.65	V	-15.0
1063.000000	32.12	---	74.00	41.88	V	-15.0
2132.200000	---	27.80	54.00	26.20	V	-9.9
2132.200000	40.23	---	74.00	33.77	V	-9.9
3574.900000	---	29.50	54.00	24.50	V	-6.1
3574.900000	39.06	---	74.00	34.94	V	-6.1
4810.600000	---	45.27	54.00	8.73	H	-3.4
4810.600000	50.68	---	74.00	23.32	H	-3.4
7213.600000	---	52.47	54.00	1.53	H	2.1
7213.600000	58.45	---	74.00	15.55	H	2.1
9811.900000	50.81	---	74.00	23.19	V	5.8
9811.900000	---	44.66	54.00	9.34	V	5.8

Middle Channel: 2450 MHz**Common Information**

Project No.: RSHA250912001
EUT Model: RCB02
Test Mode: Transmitting in middle channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 25.9℃
Humidity: 54%
Atmospheric Pressure: 101.5kPa
Test Engineer: Destine Hu
Test Date: 2025/9/30

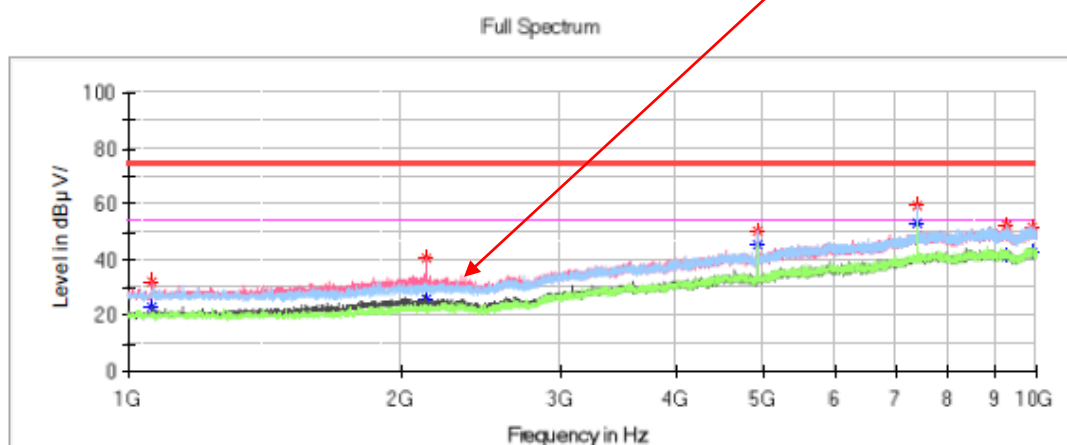
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1064.800000	---	22.14	54.00	31.86	V	-15.0
1064.800000	31.55	---	74.00	42.45	V	-15.0
2127.700000	---	26.11	54.00	27.89	V	-9.9
2127.700000	36.96	---	74.00	37.04	V	-9.9
3187.000000	---	29.53	54.00	24.47	V	-7.4
3187.000000	40.89	---	74.00	33.11	V	-7.4
4898.800000	---	42.49	54.00	11.51	V	-3.2
4898.800000	49.82	---	74.00	24.18	V	-3.2
7351.300000	58.48	---	74.00	15.52	H	2.5
7351.300000	---	53.68	54.00	0.32	H	2.5
9815.500000	---	42.95	54.00	11.05	V	5.8
9815.500000	52.91	---	74.00	21.09	V	5.8

High Channel: 2470 MHz**Common Information**

Project No.:	RSHA250912001
EUT Model:	RCB02
Test Mode:	Transmitting in high channel
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	25.9℃
Humidity:	54%
Atmospheric Pressure:	101.5kPa
Test Engineer:	Destine Hu
Test Date:	2025/9/30

Fundamental Test with
Band Reject Filter

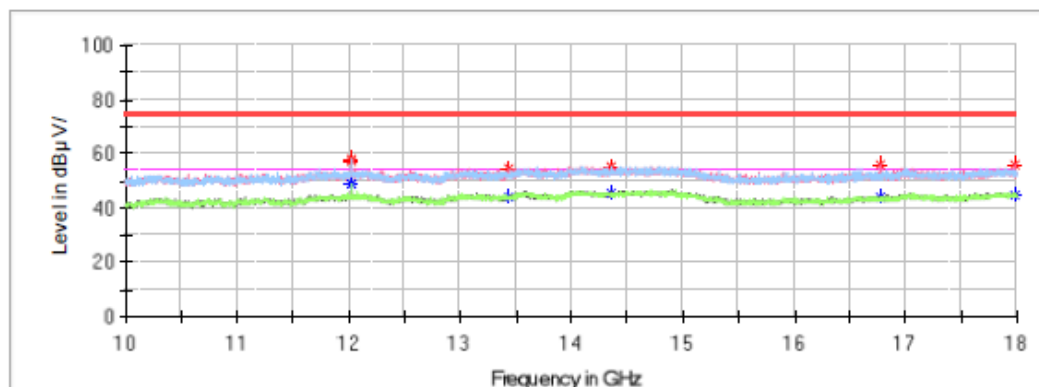
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1063.000000	---	23.34	54.00	30.66	V	-15.0
1063.000000	31.95	---	74.00	42.05	V	-15.0
2133.100000	---	25.57	54.00	28.43	V	-9.9
2133.100000	40.30	---	74.00	33.70	V	-9.9
4941.100000	---	45.52	54.00	8.48	H	-3.1
4941.100000	50.66	---	74.00	23.34	H	-3.1
7411.600000	---	53.47	54.00	0.53	H	2.7
7411.600000	59.49	---	74.00	14.51	H	2.7
9269.200000	---	41.47	54.00	12.53	H	4.7
9269.200000	52.16	---	74.00	21.84	H	4.7
9908.200000	52.05	---	74.00	21.95	H	6.1
9908.200000	---	42.79	54.00	11.21	H	6.1

10 GHz - 18 GHz:**Low Channel: 2405 MHz****Common Information**

Project No.: RSHA250912001
 EUT Model: RCB02
 Test Mode: Transmitting in low channel
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 25.9℃
 Humidity: 54%
 Atmospheric Pressure: 101.5kPa
 Test Engineer: Destine Hu
 Test Date: 2025/9/30

Full Spectrum

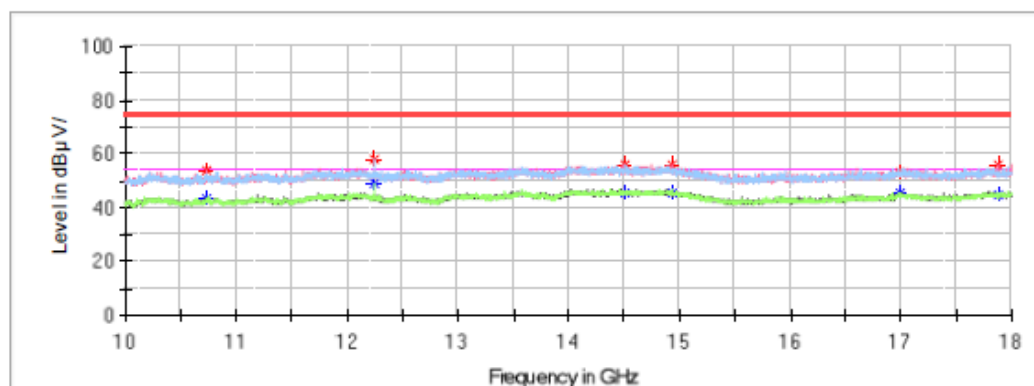
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
12022.400000	---	49.16	54.00	4.84	H	9.1
12022.400000	57.00	---	74.00	17.00	H	9.1
12027.200000	---	48.80	54.00	5.20	H	9.1
12027.200000	57.85	---	74.00	16.15	H	9.1
13433.600000	---	43.95	54.00	10.05	V	9.9
13433.600000	54.71	---	74.00	19.29	V	9.9
14356.800000	---	45.38	54.00	8.62	H	11.7
14356.800000	55.53	---	74.00	18.47	H	11.7
16782.400000	---	44.09	54.00	9.91	V	10.1
16782.400000	55.87	---	74.00	18.13	V	10.1
17984.000000	---	44.52	54.00	9.48	V	11.7
17984.000000	55.65	---	74.00	18.35	V	11.7

Middle Channel: 2450 MHz**Common Information**

Project No.: RSHA250912001
 EUT Model: RCB02
 Test Mode: Transmitting in middle channel
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 25.9℃
 Humidity: 54%
 Atmospheric Pressure: 101.5kPa
 Test Engineer: Destine Hu
 Test Date: 2025/9/30

Full Spectrum

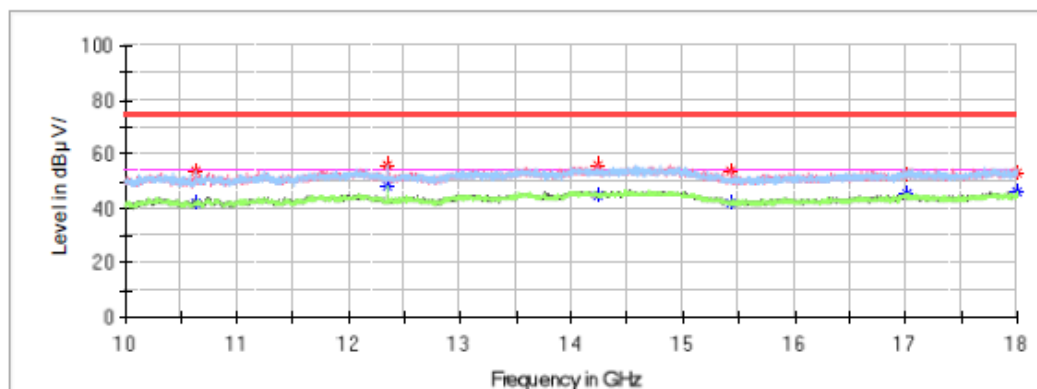
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
10736.000000	---	43.03	54.00	10.97	V	6.7
10736.000000	53.67	---	74.00	20.33	V	6.7
12248.000000	58.14	---	74.00	15.86	H	8.9
12248.000000	---	49.04	54.00	4.96	H	8.9
14507.200000	56.21	---	74.00	17.79	H	11.9
14507.200000	---	45.22	54.00	8.78	H	11.9
14928.000000	---	45.79	54.00	8.21	H	10.5
14928.000000	55.82	---	74.00	18.18	H	10.5
16996.800000	53.46	---	74.00	20.54	V	10.9
16996.800000	---	45.54	54.00	8.46	V	10.9
17883.200000	---	44.81	54.00	9.19	V	11.5
17883.200000	55.77	---	74.00	18.23	V	11.5

High Channel: 2470 MHz**Common Information**

Project No.: RSHA250912001
 EUT Model: RCB02
 Test Mode: Transmitting in high channel
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 25.9℃
 Humidity: 54%
 Atmospheric Pressure: 101.5kPa
 Test Engineer: Destine Hu
 Test Date: 2025/9/30

Full Spectrum

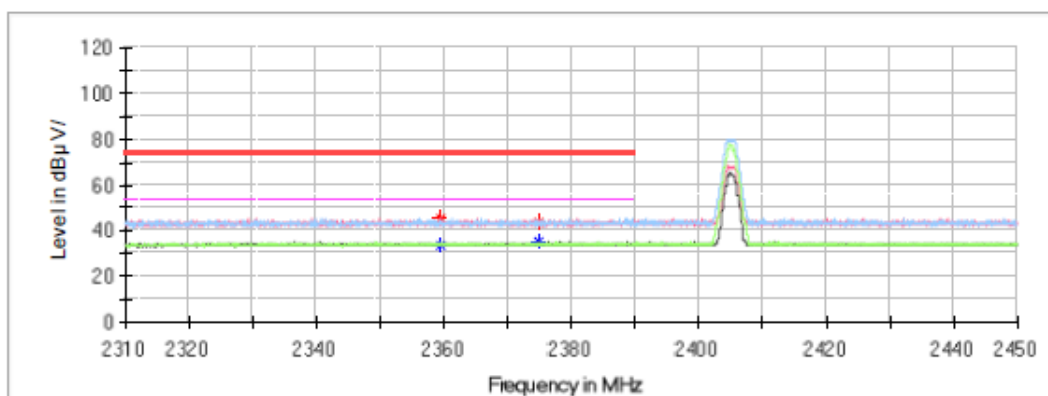
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
10632.000000	53.58	---	74.00	20.42	H	6.7
10632.000000	---	42.23	54.00	11.77	H	6.7
12352.000000	---	48.19	54.00	5.81	H	8.9
12352.000000	55.69	---	74.00	18.31	H	8.9
14235.200000	---	44.94	54.00	9.06	H	11.5
14235.200000	55.89	---	74.00	18.11	H	11.5
15436.800000	53.68	---	74.00	20.32	V	9.0
15436.800000	---	42.01	54.00	11.99	V	9.0
17006.400000	52.79	---	74.00	21.21	V	11.0
17006.400000	---	45.39	54.00	8.61	V	11.0
17996.800000	---	46.44	54.00	7.56	H	11.8
17996.800000	53.35	---	74.00	20.65	H	11.8

Band Edge:**Left Side****Common Information**

Project No.: RSHA250912001
EUT Model: RCB02
Test Mode: Transmitting in low channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 25.9°C
Humidity: 54%
Atmospheric Pressure: 101.5kPa
Test Engineer: Destine Hu
Test Date: 2025/9/30

Full Spectrum

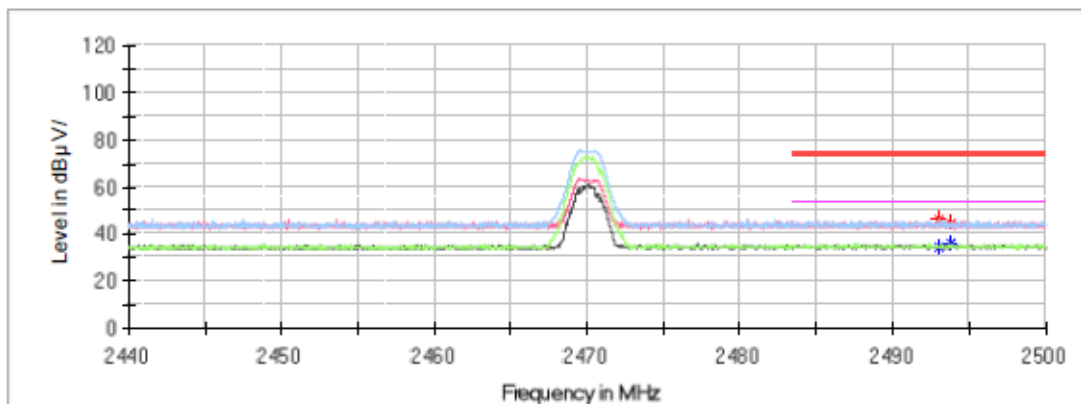
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2359.392000	45.72	---	74.00	28.28	V	0.2
2359.392000	---	33.98	54.00	20.02	V	0.2
2374.736000	44.02	---	74.00	29.98	H	0.2
2374.736000	---	35.40	54.00	18.60	H	0.2

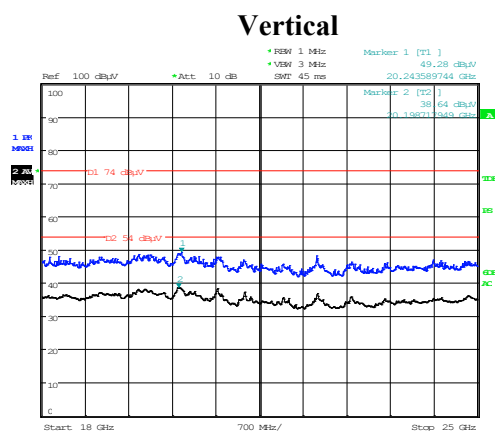
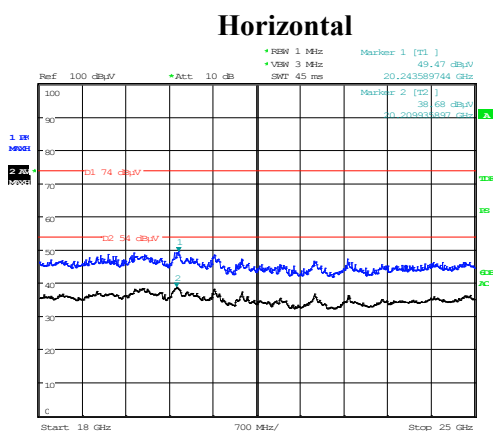
Right Side**Common Information**

Project No.: RSHA250912001
EUT Model: RCB02
Test Mode: Transmitting in high channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 25.9°C
Humidity: 54%
Atmospheric Pressure: 101.5kPa
Test Engineer: Destine Hu
Test Date: 2025/9/30

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2493.064000	---	34.43	54.00	19.57	H	0.4
2493.064000	45.93	---	74.00	28.07	H	0.4
2493.832000	---	35.86	54.00	18.14	V	0.4
2493.832000	44.76	---	74.00	29.24	V	0.4

18 GHz - 25 GHz (Transmitting maximum output power SRD Mode low channel):

Project No.: RSHA250912001 Tester: Hugh Wu
Date: 13.OCT.2025 09:55:05

Project No.: RSHA250912001 Tester: Hugh Wu
Date: 13.OCT.2025 10:27:36

Frequency (GHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
20.20	---	38.64	54	15.36	V	12.46
20.24	49.28	---	74	24.72	V	12.5
20.21	---	38.68	54	15.32	H	12.47
20.24	49.47	---	74	24.53	H	12.50

Note: The test distance is 3m. The limit is 74dBμV/m(Peak) and 54dBμV/m(Average).

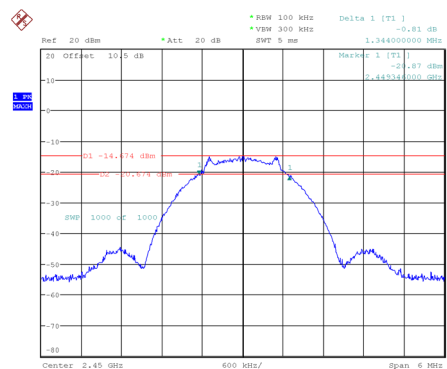
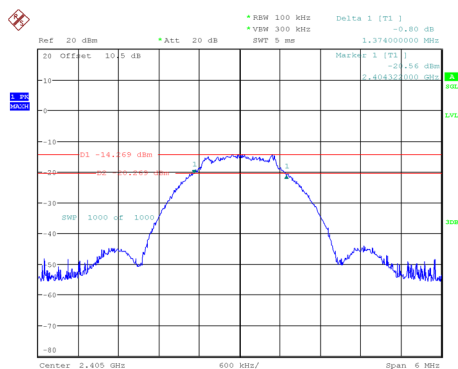
Environmental Conditions & Test Information

Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
Low	2405	1.374	≥ 0.5
Middle	2450	1.344	≥ 0.5
High	2470	1.368	≥ 0.5

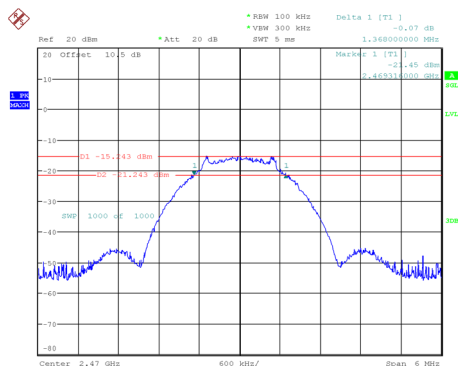
Middle Channel



ProjectNo.:RSA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:39:25

ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:46:10

High Channel



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:55:16

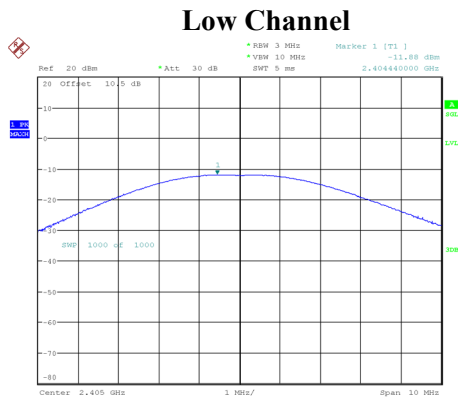
MAXIMUM CONDUCTED OUTPUT POWER

Environmental Conditions & Test Information

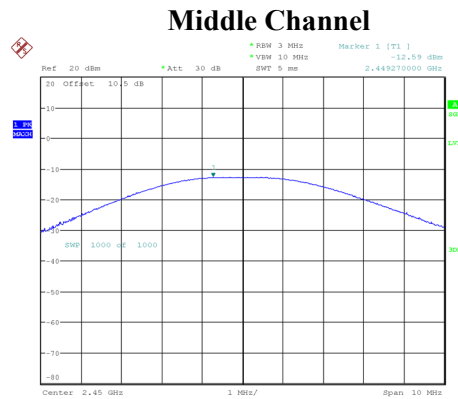
Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

EUT operation mode: Transmitting
Test Result: Compliant.

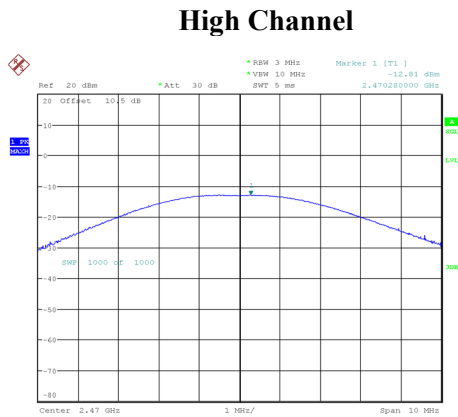
Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
Low	2405	-11.88	30	Pass
Middle	2450	-12.59	30	Pass
High	2470	-12.81	30	Pass



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:40:52



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:48:07



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:56:12

100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

Environmental Conditions & Test Information

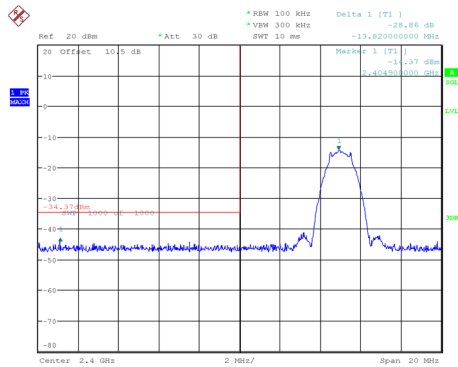
Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Channel	Result (dB)	Limit (dB)
Low	28.86	20
High	28.69	20

EUT operation mode: Transmitting

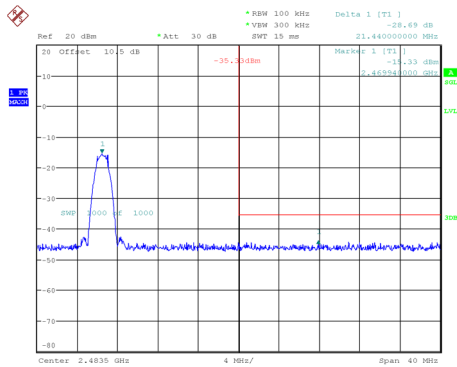
Test Result: Compliant.

Left Side



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:41:50

Right Side



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:58:04

POWER SPECTRAL DENSITY

Environmental Conditions & Test Information

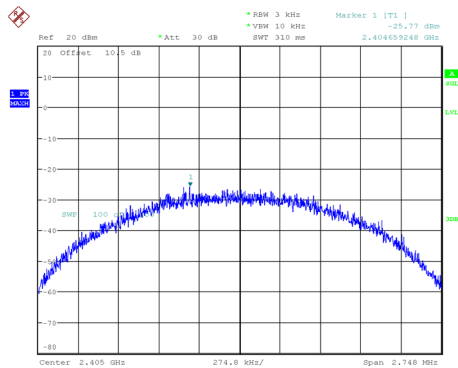
Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

EUT operation mode: Transmitting

Test Result: Compliant.

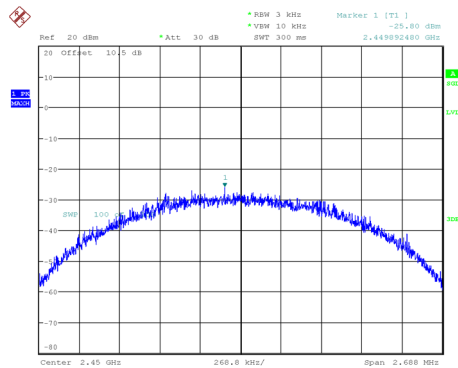
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2405	-25.77	≤ 8
Middle	2450	-25.80	≤ 8
High	2470	-26.89	≤ 8

Low Channel



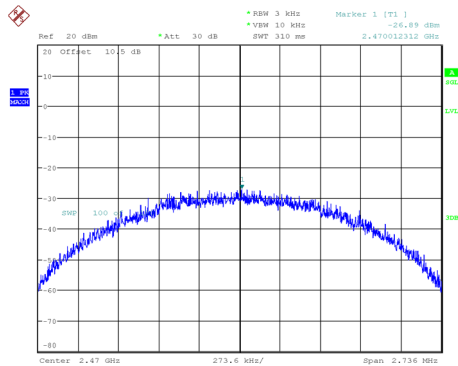
ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:42:59

Middle Channel



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:49:27

High Channel



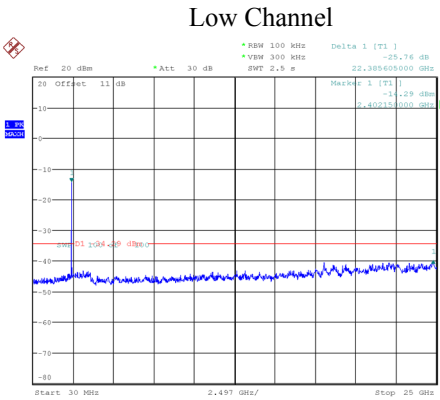
ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 09:59:36

CONDUCTED SPURIOUS EMISSION

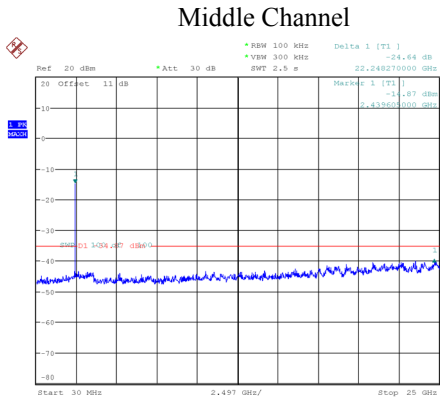
Environmental Conditions & Test Information

Test Date:	2025-10-16
Temperature:	25.9 °C
Relative Humidity:	62 %
ATM Pressure:	102.0 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

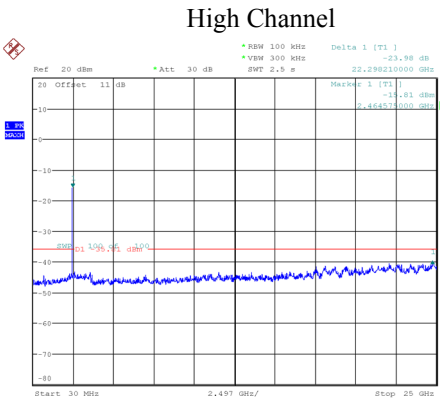
Channel	Result (dB)	Limit (dB)	Verdict
Low	25.76	20	Pass
Middle	24.64	20	Pass
High	23.98	20	Pass



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 10:06:32



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 10:11:33



ProjectNo.:RSHA250912001 Tester:Neil Zhou
Date: 16.OCT.2025 10:16:49

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A - EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B - EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT C - TEST SETUP PHOTOGRAPHS.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95.45% confidence interval.

******* END OF REPORT *******