

FCC PART 15.247

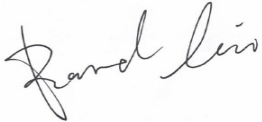
TEST REPORT

For

Jiangsu Shushi Technology Co., Ltd.

NO.9 Nanxu Road, RunZhou District, Zhenjiang, Jiangsu, China

FCC ID: 2BAGQ-3RSB01085Z

Report Type: Original Report	Product Name: Smart Button ZB2
Report Number:	RKSB251230001-00B
Report Date:	2026-03-17
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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	RKSB251230001-00B	R1V1	2026-03-17	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Jiangsu Shushi Technology Co., Ltd.
Tested Model:	3RSB01085Z
Product Name:	Smart Button ZB2
Power Supply:	DC 5V from USB port or DC 3.7V from battery
RF Function:	ZigBee
Maximum Output Power:	-3.48 dBm
Operating Band /Frequency:	2405-2480 MHz
Modulation Type:	OQPSK
Channel Number:	16
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	1.83 dBi

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

All measurement and test data in this report was gathered from production sample serial number: RKSB251230001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-12-30.)

Objective

This report is prepared for *Jiangsu Shushi Technology Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communications Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 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 FCC KDB 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 emissions	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)
11	2405	19	2445
12	2410	20	2450
13	2415	21	2455
14	2420	22	2460
15	2425	23	2465
16	2430	24	2470
17	2435	25	2475
18	2440	26	2480

EUT was tested with channel 11, 18 and 26.

EUT Exercise Software

RF Test Tool: EMI_TEST

Power Level Setting:

Channel	Frequency(MHz)	★Power Level
Low	2405	0
Middle	2440	0
High	2480	0

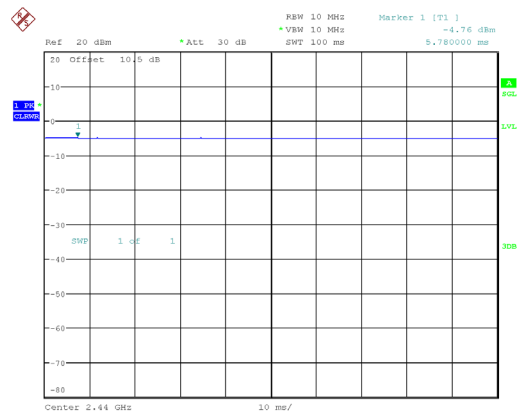
Note: The power level was declared by the applicant.

Duty Cycle:

Environmental Conditions & Test Information

Test Date:	2026-03-12
Temperature:	17.5 °C
Relative Humidity:	41 %
ATM Pressure:	103.5 kPa
Test Engineer:	Neil Zhou

Middle Channel



ProjectNo.:RKSB251230001 Tester:Neil Zhou
Date: 12.MAR.2026 09:59:05

Mode	Duty Cycle (%)	T _{on} (ms)	T _{on+off} (ms)	10log(1/x)(dB)
Zigbee	100	100	100	0

Note:

1. “x” means the Duty Cycle.
2. 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

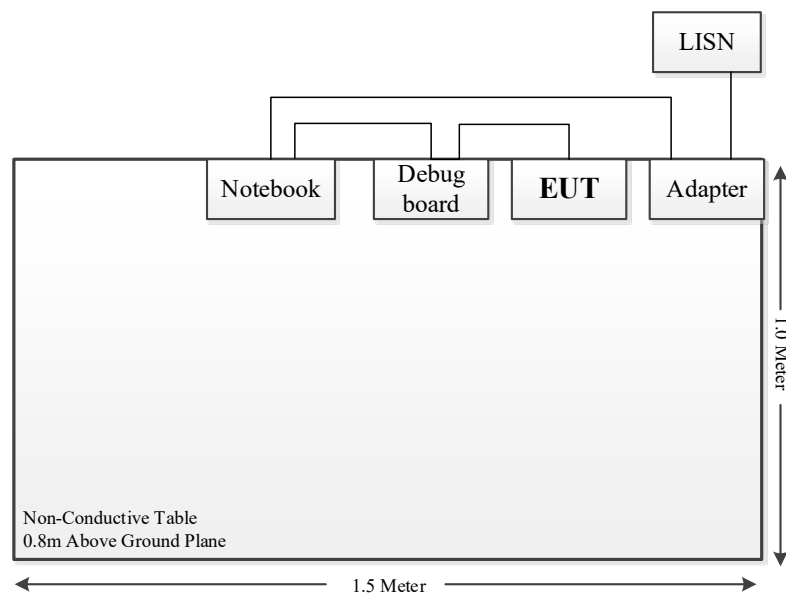
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	ZQ-202000905OLIT	003290000000003AA658
/	Debug board	/	/
/	Adapter	/	/

External I/O Cable

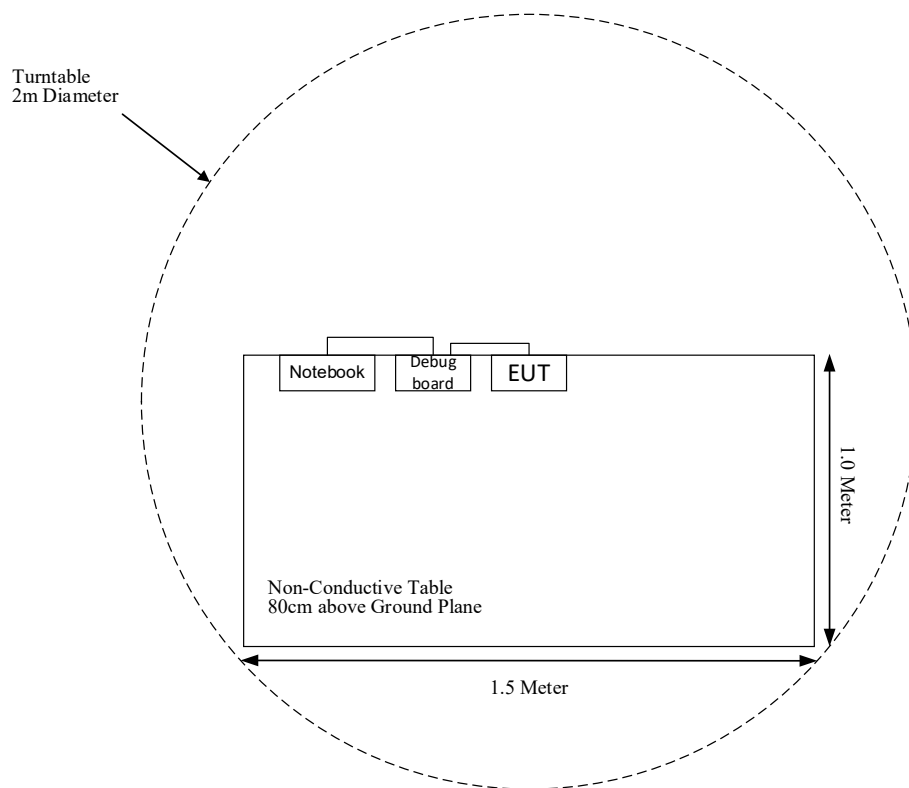
Cable Description	Length (m)	From Port	To Port
Data Cable	0.2	EUT	Debug board
USB Cable	1.5	Debug board	Notebook
Power Cable1	1.0	Notebook	Adapter
Power Cable2	1.0	Adapter	LISN

Block Diagram of Test Setup

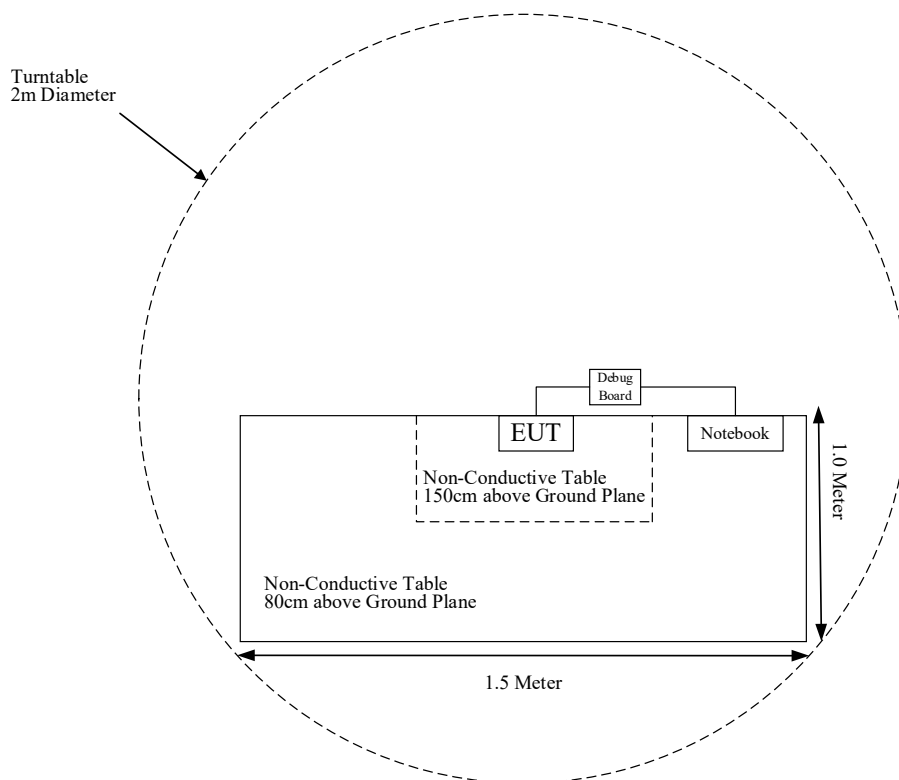
For Conducted Emissions:



For Radiated Emissions(Below 1 GHz):



For Radiated Emissions(Above 1 GHz):



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
EMCO	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	2026-04-09
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2025-04-09	2026-04-09
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	RG178 Coaxial Cable	SMA-178	XHF-1102	Each time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	101746	2025-09-01	2026-08-31
Rohde & Schwarz	LISN	ENV216	101115	2025-04-08	2026-04-07
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	0357.8810.54	2025-04-08	2026-04-07
MICRO-COAX	Coaxial Cable	Cable-15	015	2025-04-09	2026-04-08

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).

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307(b) & §2.1093	RF exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§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)	Band Edge& Conducted Spurious Emission	Compliant
§15.247(e)	Power Spectral Density	Compliant

FCC §1.1307(b) & §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 v06

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:

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

1. f (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.

Measurement Result

Mode	Frequency Range (MHz)	Max Tune-up Conducted Power★		Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
		(dBm)	(mW)				
Zigbee	2405~2480	-3.0	0.5	5	0.2	3.0	Yes

Note:

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

Conclusion: The device meets the exemption requirement.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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 use of a standard antenna jack or electrical connector is prohibited.

Antenna Connector Construction

The EUT has a PCB antenna for Zigbee, and the antenna gain is 1.83 dBi, which permanently attached to the EUT, fulfill the requirement of this section. Please refer to the EUT photos.

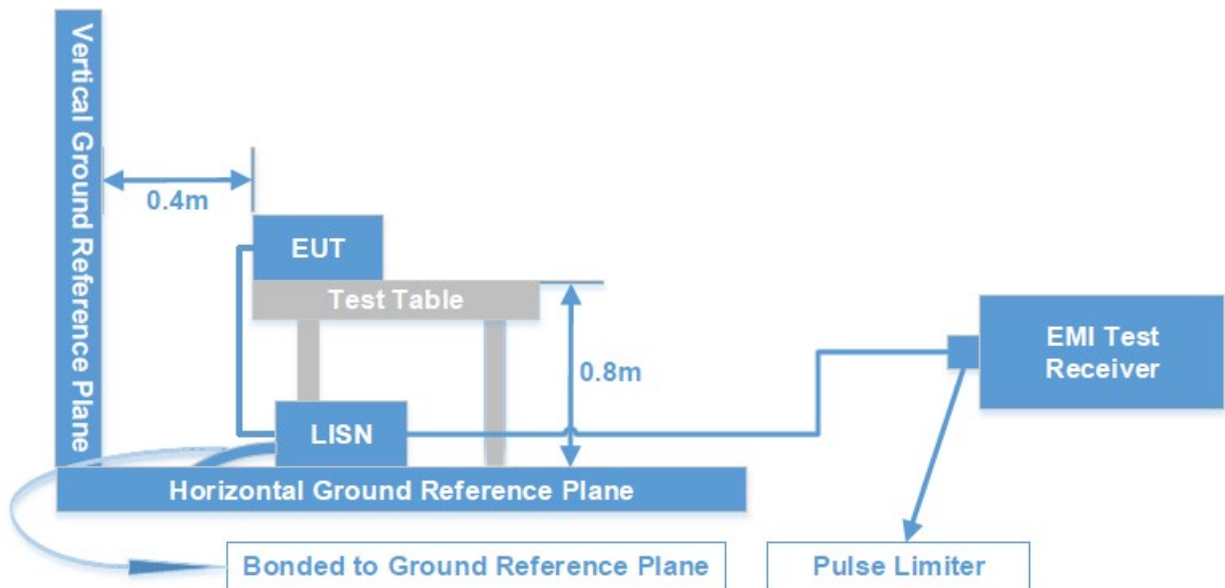
Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

Test System Setup



The measurement procedure of EUT setup is according with ANSI C63.10-2020. The related limit was specified in FCC Part 15.207.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

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

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

ANSI C63.10-2020 clause 6.2

During the conducted emission test, the EUT was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

Level & Over Limit Calculation

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

Level (dBμV) = Read level (dBμV) + Factor (dB)

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

Over Limit (dB) = Level (dBμV) - Limit (dBμV)

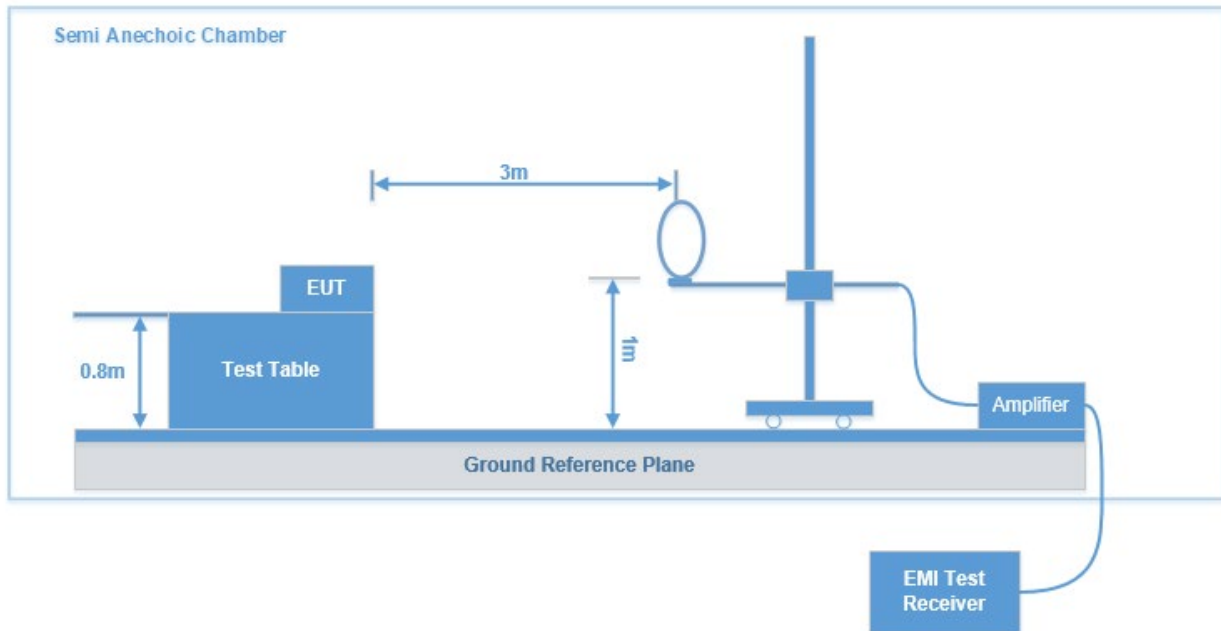
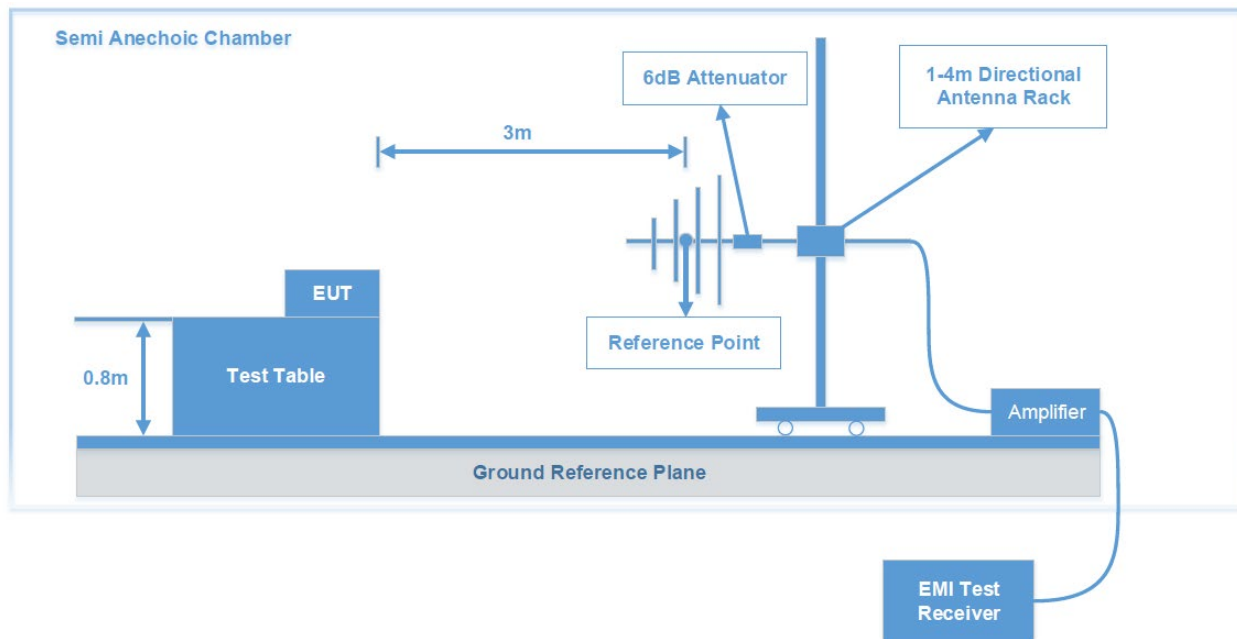
Test Results Summary

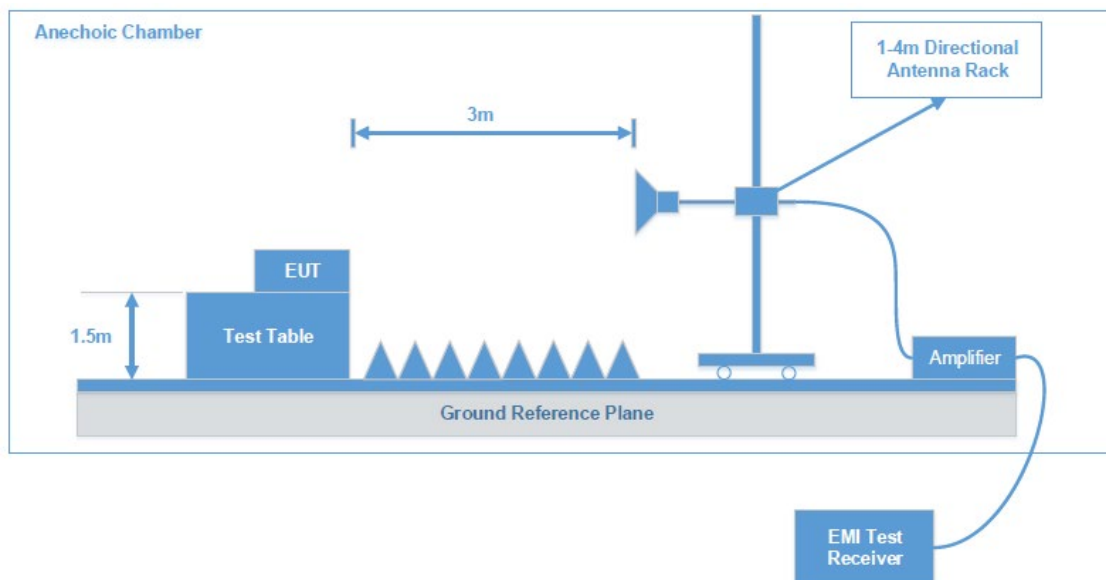
According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data: See Appendix

FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS**Applicable Standard**

FCC §15.247 (d); §15.209; §15.205;

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

Above 1 GHz:

The radiated emission tests were performed in the 3 meters test site, 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

The system was investigated from 9 kHz to 25 GHz.

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 1GHz	1MHz	3 MHz	/	Peak	Peak
	1MHz	3 MHz	/	Average	Average

For 9 kHz-30 MHz 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.

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.

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:

Corrected Amplitude (dB μ V/m) = Meter Reading (dB μ V) + Antenna Factor (dB/m) + Cable Loss (dB) - 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:

Margin (dB) = Limit (dB μ V/m) – Corrected Amplitude (dB μ 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

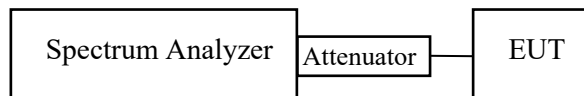
Applicable Standard

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: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

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

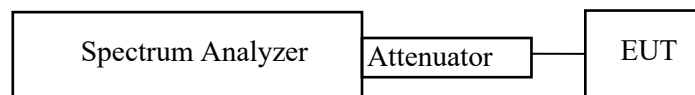
Applicable Standard

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, compliance 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

1. Set the RBW $\geq$ DTS bandwidth.
2. Set VBW $\geq 3 * \text{RBW}$.
3. Set span $\geq 3 * \text{RBW}$
4. Sweep time = auto couple.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.



Note: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

FCC §15.247(d) – BAND EDGE & CONDUCTED SPURIOUS EMISSION

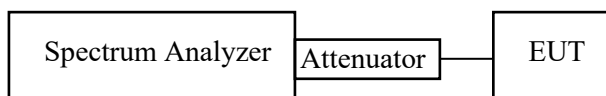
Applicable Standard

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

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: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

Conducted Spurious Emission

Applicable Standard

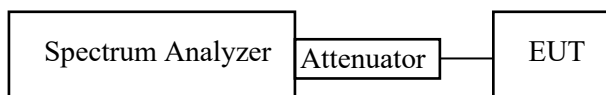
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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

According to 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 (13dB) = Attenuator (10dB) + Cable Loss (3dB)

Test Data: See Appendix

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

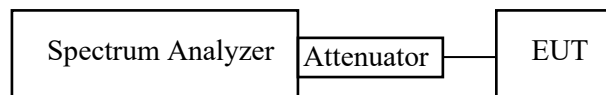
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of 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 compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

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 to 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: the offset=Attenuator (10dB) + Cable loss (0.5dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

APPENDIX - TEST DATA

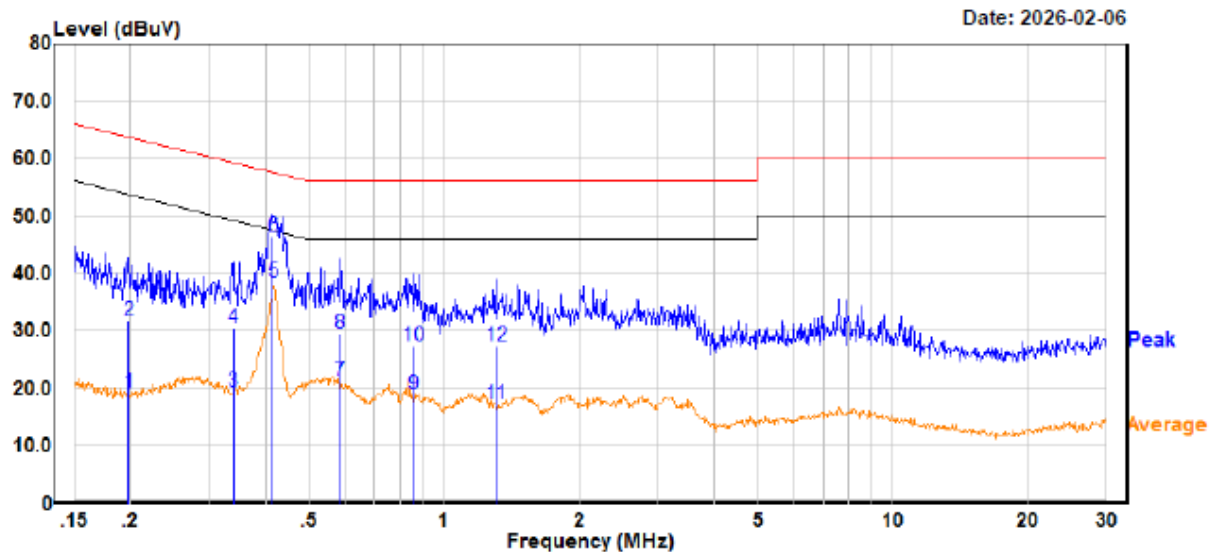
AC LINE CONDUCTED EMISSIONS

Environmental Conditions & Test Information

Test Date:	2026-02-06
Temperature:	15.6 °C
Relative Humidity:	42 %
ATM Pressure:	102.8 kPa
Test Result:	Pass
Test Engineer:	Jack He

EUT operation mode: Transmitting in Zigbee Low channel (maximum output power mode)

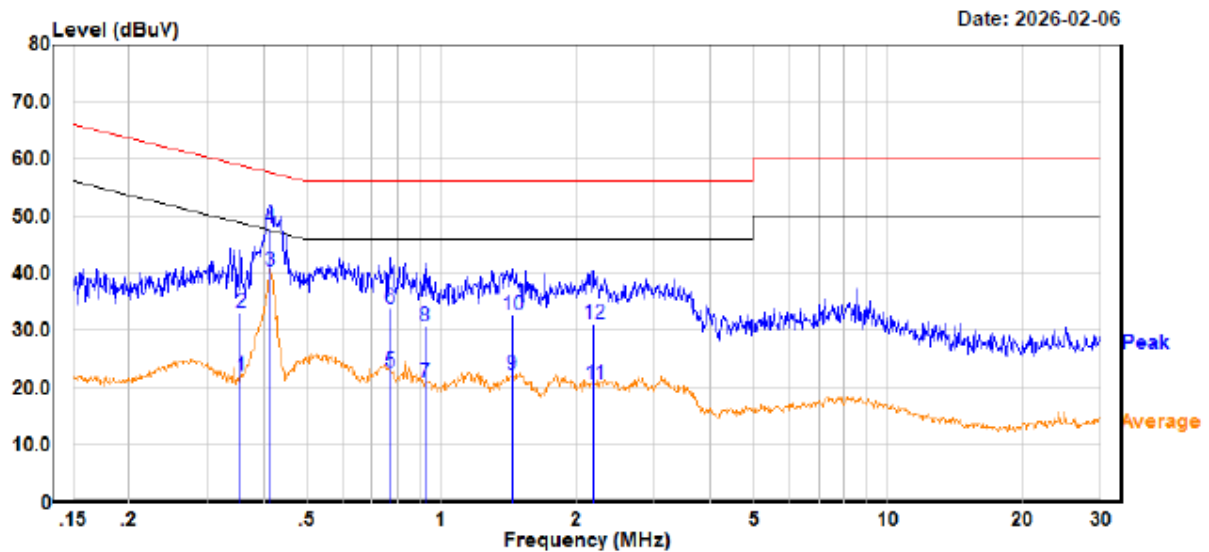
Line:



Trace: 1

Site : CE
 Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Line
 : DET:Peak
 Project No. : RKSB251230001
 Model : 3RSB01085Z
 Phase : L
 Voltage : 120V/60Hz
 Mode : Transmitting
 Test Equipment : ENV216,ESR3
 Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
 Temperature : 15.6°C
 Humidity : 42%
 Atmospheric pressure: 102.8kPa
 Test Engineer : Jack He
 Check by : Bard Liu

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.198	-1.30	20.48	19.18	53.68	-34.50	Average
2	0.198	11.10	20.48	31.58	63.68	-32.10	QP
3	0.340	-0.90	20.35	19.45	49.21	-29.76	Average
4	0.340	10.00	20.35	30.35	59.21	-28.86	QP
5	0.417	18.11	20.29	38.40	47.51	-9.11	Average
6	0.417	26.11	20.29	46.40	57.51	-11.11	QP
7	0.585	0.99	20.22	21.21	46.00	-24.79	Average
8	0.585	9.29	20.22	29.51	56.00	-26.49	QP
9	0.854	-1.40	20.21	18.81	46.00	-27.19	Average
10	0.854	7.00	20.21	27.21	56.00	-28.79	QP
11	1.305	-3.10	20.21	17.11	46.00	-28.89	Average
12	1.305	7.00	20.21	27.21	56.00	-28.79	QP

Neutral:

Trace: 1

Site : CE
 Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Neutral
 : DET:Peak
 Project No. : RKSB251230001
 Model : 3RSB01085Z
 Phase : N
 Voltage : 120V/60Hz
 Mode : Transmitting
 Test Equipment : ENV216, ESR3
 Receiver Setting : RBW: 9 kHz, Sweep Time: Auto
 Temperature : 15.6°C
 Humidity : 42%
 Atmospheric pressure: 102.8kPa
 Test Engineer : Jack He
 Check by : Bard Liu

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.355	1.60	20.34	21.94	48.84	-26.90	Average
2	0.355	12.70	20.34	33.04	58.84	-25.80	QP
3	0.413	20.00	20.31	40.31	47.60	-7.29	Average
4	0.413	27.60	20.31	47.91	57.60	-9.69	QP
5	0.769	2.60	20.22	22.82	46.00	-23.18	Average
6	0.769	13.60	20.22	33.82	56.00	-22.18	QP
7	0.921	0.50	20.19	20.69	46.00	-25.31	Average
8	0.921	10.60	20.19	30.79	56.00	-25.21	QP
9	1.442	2.10	20.23	22.33	46.00	-23.67	Average
10	1.442	12.40	20.23	32.63	56.00	-23.37	QP
11	2.202	0.30	20.27	20.57	46.00	-25.43	Average
12	2.202	11.00	20.27	31.27	56.00	-24.73	QP

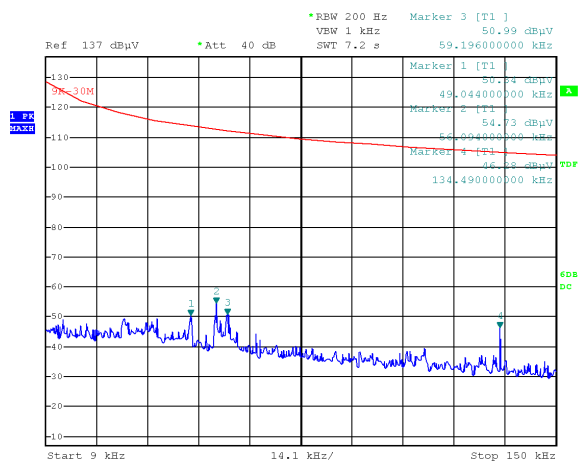
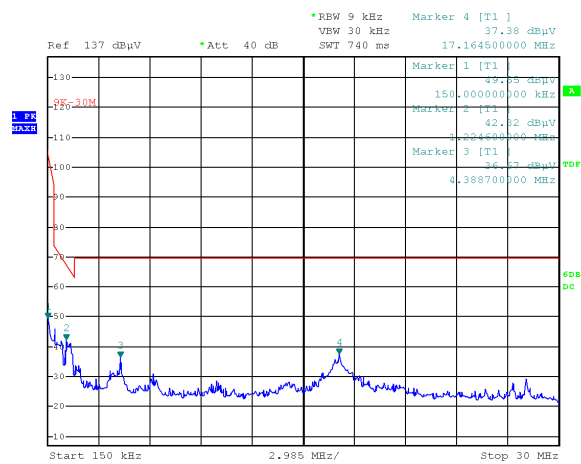
SPURIOUS EMISSIONS**Environmental Conditions & Test Information**

Test Item:	9 kHz – 30 MHz	30 MHz – 1 GHz	1 GHz - 18 GHz	18 GHz - 25 GHz
Test Date:	2026-02-25	2026-02-25	2026-02-27	2026-02-27
Temperature:	15.8 °C	15.8 °C	16.0 °C	16.0 °C
Relative Humidity:	44 %	44 %	50 %	50 %
ATM Pressure:	102.5 kPa	102.5 kPa	101.8 kPa	101.8 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Scarf Yang	Scarf Yang	Destine Hu	Hugh Wu

Test Result: Compliant.

EUT operation mode: Transmitting

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

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

Project No.RKSB251230001
 Date: 25.FEB.2026 11:09:57

Tester:Scarfe Yang

Project No.RKSB251230001
 Date: 25.FEB.2026 11:17:32

Tester:Scarfe Yang

9 kHz - 150 kHz

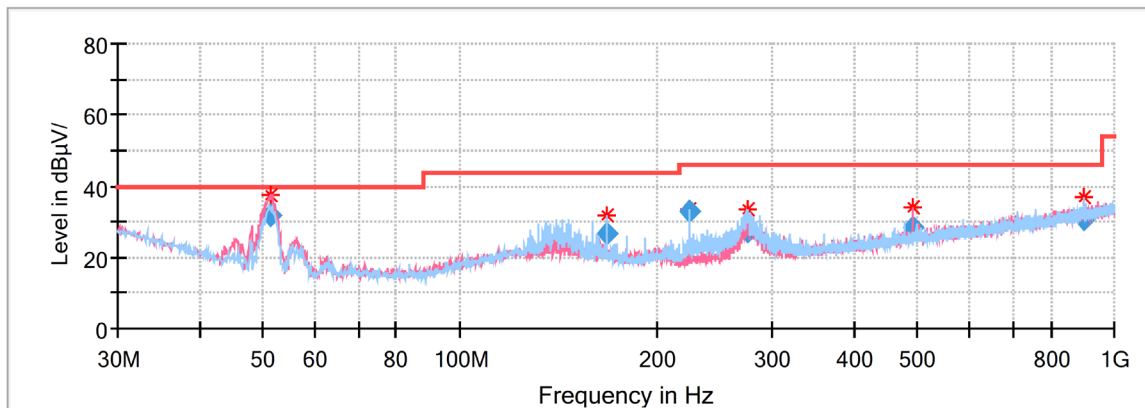
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.049044	50.34	PK	-3.66	113.79	63.45
0.056094	54.73	PK	-4.52	112.63	57.9
0.059196	50.99	PK	-4.88	112.16	61.17
0.134490	46.28	PK	-10.68	105.03	58.75

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)
0.150000	49.55	PK	-11.34	104.08	54.53
1.224600	42.32	PK	-28.35	65.84	23.52
4.388700	36.67	PK	-31.97	69.54	32.87
17.164500	37.38	PK	-33.15	69.54	32.16

30 MHz-1 GHz (Transmitting in maximum output power low channel):**Low Channel: 2405 MHz****Common Information**

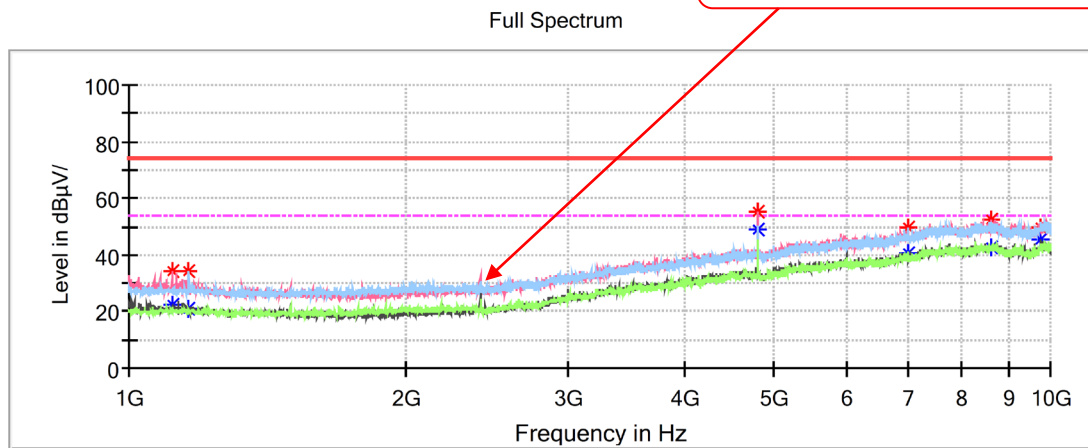
Project No: RKSB251230001
EUT Model: 3RSB01085Z
Test Mode: Transmitting in ZigBee mode low channel
Standard: FCC Part 15.247
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 15.8°C
Humidity: 44%
Barometric Pressure: 102.5kPa
Test Engineer: Scarf Yang
Check Engineer: Hardy Huang
Test Date: 2026/2/25

**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
51.461250	31.59	40.00	8.41	V	-17.0
167.982500	26.79	43.50	16.71	H	-12.5
224.000000	33.03	46.00	12.97	H	-13.2
275.046250	27.01	46.00	18.99	H	-10.7
492.083750	28.25	46.00	17.75	V	-5.6
901.423750	30.64	46.00	15.36	H	1.0

1GHz-10GHz:**Low Channel: 2405 MHz****Common Information**

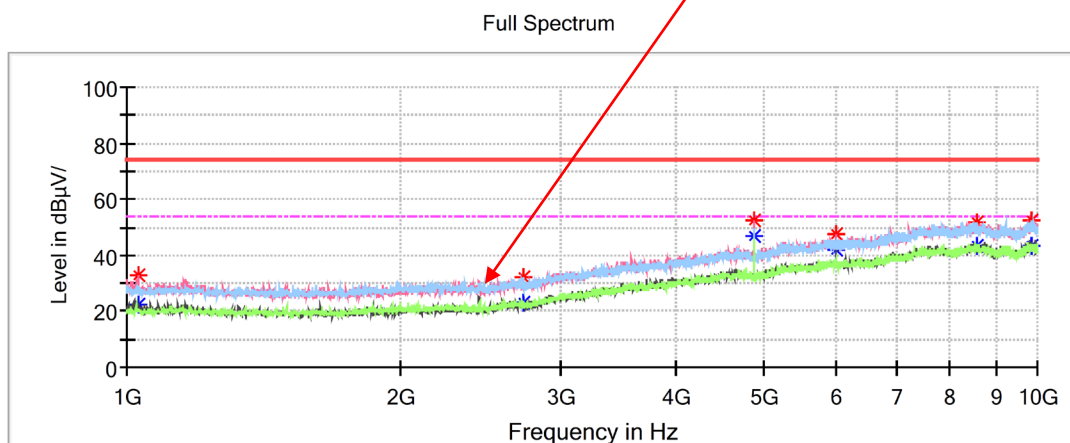
Project No.: RKS251230001
 EUT Model: 3RSB01085Z
 Test Mode: Transmitting in ZigBee Low Channel
 Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 16.0°C
 Humidity: 50%
 Atmospheric Pressure: 101.8kPa
 Test Engineer: Destine Hu
 Check by: Bard Liu
 Test Date: 2026/2/27

**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)
1115.200000	---	22.18	54.00	31.82	V	-14.8
1115.200000	34.20	---	74.00	39.80	V	-14.8
1162.000000	34.54	---	74.00	39.46	H	-14.6
1162.000000	---	20.91	54.00	33.09	H	-14.6
4810.600000	---	49.17	54.00	4.83	V	-3.4
4810.600000	55.19	---	74.00	18.81	V	-3.4
7013.800000	---	40.26	54.00	13.74	H	1.5
7013.800000	49.61	---	74.00	24.39	H	1.5
8605.900000	---	42.82	54.00	11.18	V	4.7
8605.900000	52.25	---	74.00	21.75	V	4.7
9775.000000	---	45.22	54.00	8.78	V	5.7
9775.000000	49.73	---	74.00	24.27	V	5.7

Middle Channel: 2440 MHz**Common Information**

Project No.: RKSB251230001
EUT Model: 3RSB01085Z
Test Mode: Transmitting in ZigBee 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: 16.0°C
Humidity: 50%
Atmospheric Pressure: 101.8kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/2/27

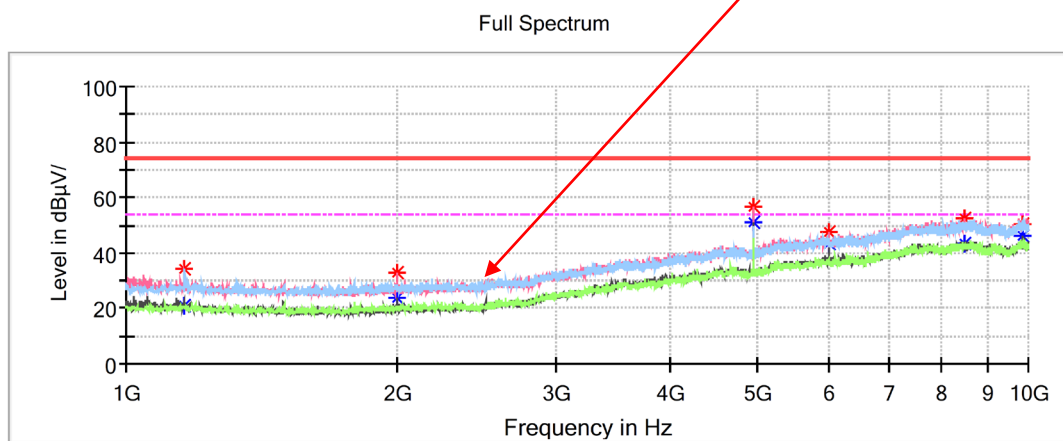
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1029.700000	32.75	---	74.00	41.25	V	-15.1
1029.700000	---	22.65	54.00	31.35	V	-15.1
2729.800000	---	22.99	54.00	31.01	H	-8.8
2729.800000	32.26	---	74.00	41.74	H	-8.8
4880.800000	52.24	---	74.00	21.76	V	-3.2
4880.800000	---	46.51	54.00	7.49	V	-3.2
6000.400000	47.68	---	74.00	26.32	V	-0.6
6000.400000	---	42.14	54.00	11.86	V	-0.6
8578.000000	52.01	---	74.00	21.99	V	4.7
8578.000000	---	43.46	54.00	10.54	V	4.7
9833.500000	52.47	---	74.00	21.53	H	5.8
9833.500000	---	43.13	54.00	10.87	H	5.8

High Channel: 2480 MHz**Common Information**

Project No.: RKSB251230001
 EUT Model: 3RSB01085Z
 Test Mode: Transmitting in ZigBee 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: 16.0°C
 Humidity: 50%
 Atmospheric Pressure: 101.8kPa
 Test Engineer: Destine Hu
 Check by: Bard Liu
 Test Date: 2026/2/27

Fundamental test with Band
Reject Filter

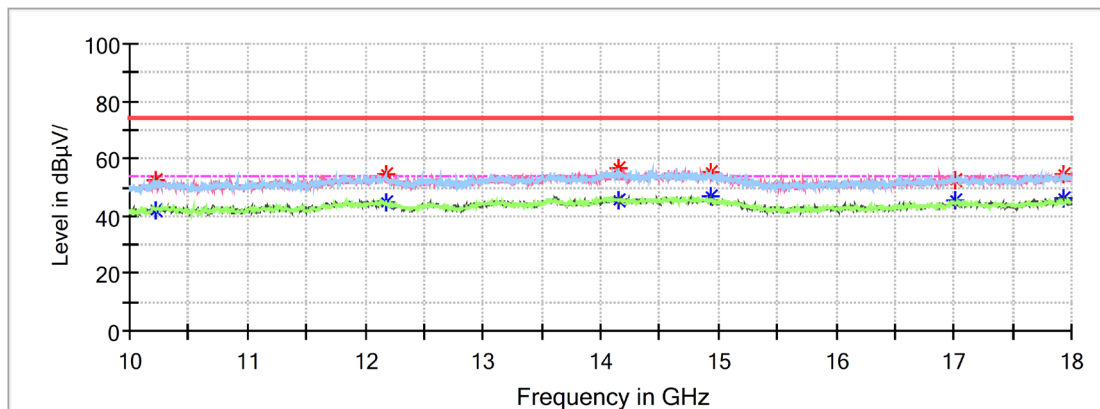
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1162.000000	---	21.28	54.00	32.72	H	-14.6
1162.000000	33.96	---	74.00	40.04	H	-14.6
1998.100000	---	23.59	54.00	30.41	V	-10.0
1998.100000	32.79	---	74.00	41.21	V	-10.0
4959.100000	56.36	---	74.00	17.64	V	-3.0
4959.100000	---	50.98	54.00	3.02	V	-3.0
6000.400000	47.82	---	74.00	26.18	V	-0.6
6000.400000	---	43.67	54.00	10.33	V	-0.6
8481.700000	---	43.07	54.00	10.93	V	4.6
8481.700000	52.21	---	74.00	21.79	V	4.6
9843.400000	50.32	---	74.00	23.68	V	5.9
9843.400000	---	45.86	54.00	8.14	V	5.9

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

Project No.: RKS251230001
 EUT Model: 3RSB01085Z
 Test Mode: Transmitting in ZigBee 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: 16.0℃
 Humidity: 50%
 Atmospheric Pressure: 101.8kPa
 Test Engineer: Destine Hu
 Check by: Bard Liu
 Test Date: 2026/2/27

Full Spectrum

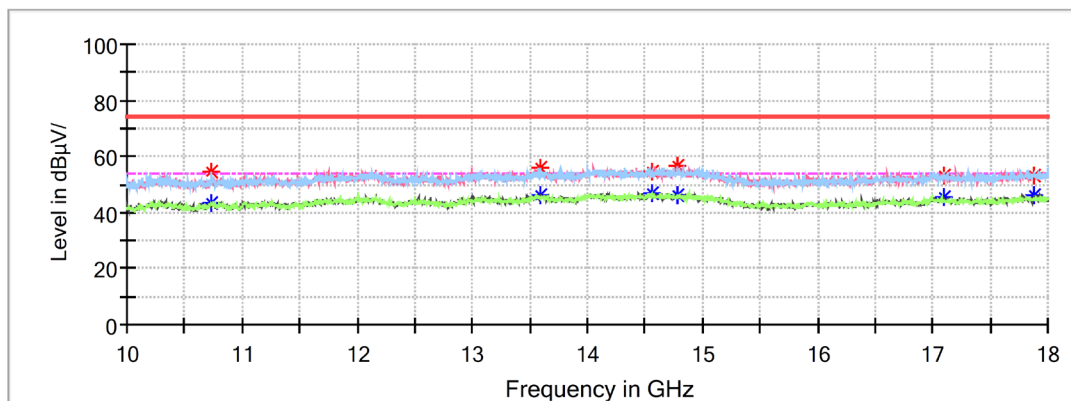
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
10222.400000	---	42.07	54.00	11.93	V	6.5
10222.400000	52.79	---	74.00	21.21	V	6.5
12171.200000	---	44.73	54.00	9.27	V	9.0
12171.200000	54.80	---	74.00	19.20	V	9.0
14153.600000	56.54	---	74.00	17.46	H	11.4
14153.600000	---	45.47	54.00	8.53	H	11.4
14928.000000	55.02	---	74.00	18.98	H	10.5
14928.000000	---	47.18	54.00	6.82	H	10.5
17009.600000	52.31	---	74.00	21.69	V	10.9
17009.600000	---	45.13	54.00	8.87	V	10.9
17924.800000	---	46.40	54.00	7.60	H	11.6
17924.800000	54.54	---	74.00	19.46	H	11.6

Middle Channel: 2440 MHz**Common Information**

Project No.: RKS251230001
 EUT Model: 3RSB01085Z
 Test Mode: Transmitting in ZigBee 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: 16.0°C
 Humidity: 50%
 Atmospheric Pressure: 101.8kPa
 Test Engineer: Destine Hu
 Check by: Bard Liu
 Test Date: 2026/2/27

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)
10737.600000	---	43.22	54.00	10.78	H	6.7
10737.600000	54.31	---	74.00	19.69	H	6.7
13587.200000	---	46.12	54.00	7.88	V	10.2
13587.200000	55.93	---	74.00	18.07	V	10.2
14553.600000	---	47.05	54.00	6.95	H	11.8
14553.600000	54.50	---	74.00	19.50	H	11.8
14784.000000	---	46.13	54.00	7.87	V	11.0
14784.000000	56.55	---	74.00	17.45	V	11.0
17102.400000	53.44	---	74.00	20.56	H	10.8
17102.400000	---	45.52	54.00	8.48	H	10.8
17881.600000	---	46.19	54.00	7.81	V	11.5
17881.600000	53.19	---	74.00	20.81	V	11.5