

FCC PART 15.247

TEST REPORT

For

Shanghai XZT Fluid Technology Co.,LTD

Room 2019, No. 5475, WenChuan Road, Baoshan, Shanghai, China

FCC ID: 2BVEH-XZW25

Report Type: Original Report	Product Name: Bluetooth Pressure Transmitter
Report Number: RKSA260529002-00A	
Report Date: 2026-06-18	
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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	RKSA260529002-00A	R1V1	2026-06-18	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Shanghai XZT Fluid Technology Co.,LTD
Tested Model:	XZW25
Product Name:	Bluetooth Pressure Transmitter
Power Supply:	DC 3V from battery
RF Function:	BLE
Maximum Output Power:	BLE (1 Mbps): 2.41 dBm
Operating Band /Frequency:	2402-2480 MHz
Modulation Type:	GFSK
Channel Number:	40
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	-5.43 dBi

All measurement and test data in this report was gathered from production sample serial number: RKSA260529002-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2026-05-29.)

Objective

This report is prepared for *Shanghai XZT Fluid 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, 15.209 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 for BLE mode:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	/	/
13	2428	27	2456	/	/

EUT was tested with channel 0, 19 and 39.

EUT Exercise Software

The system was configured for testing in an engineering mode, which was provided by manufacturer

RF Test Tool: nRF Connect for Desktop v5.2.0

★Power level: 10

Note: The power level was declared by the applicant.

Special Accessories

No special accessory.

Equipment Modifications

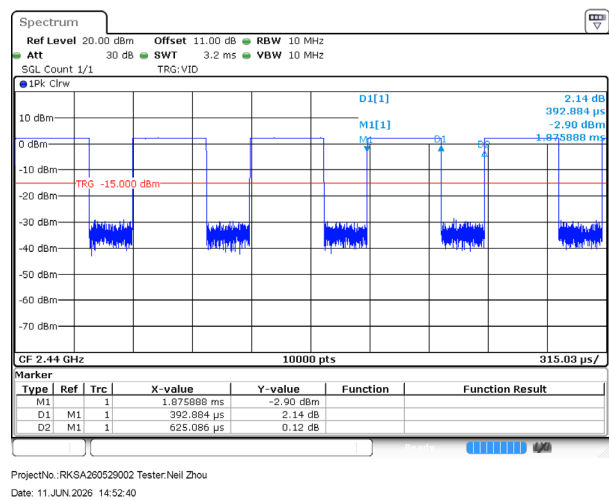
No modification was made to the EUT tested.

Environmental Conditions & Test Information

Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Engineer:	Neil Zhou

Duty Cycle:

BLE (1 Mbps): Middle Channel



Mode	T _{on} (ms)	T _{on+off} (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)
BLE (1 Mbps)	0.393	0.625	62.88	2.01

Note: Offset(11dB) = Attenuator(10dB)+Cable loss(1.0dB)

Support Equipment List and Details

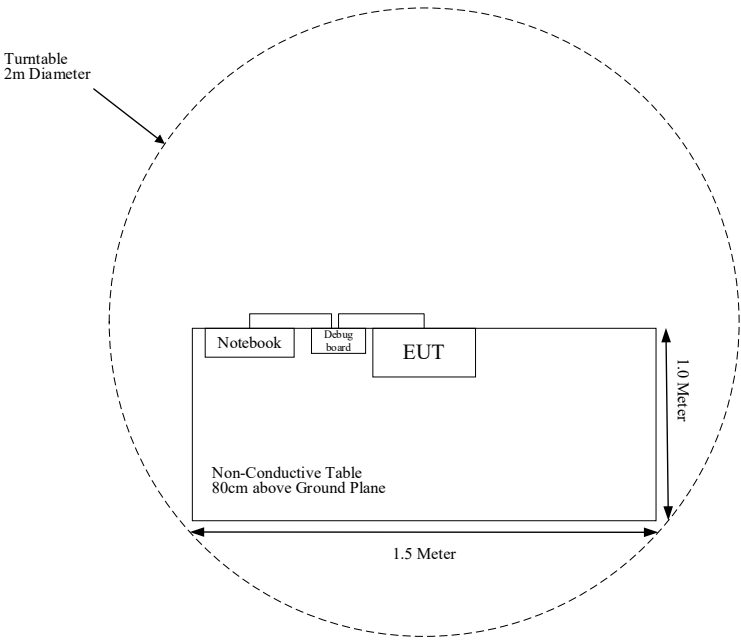
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Y700P	PF2B7PL5
/	Debug board	/	/

External I/O Cable

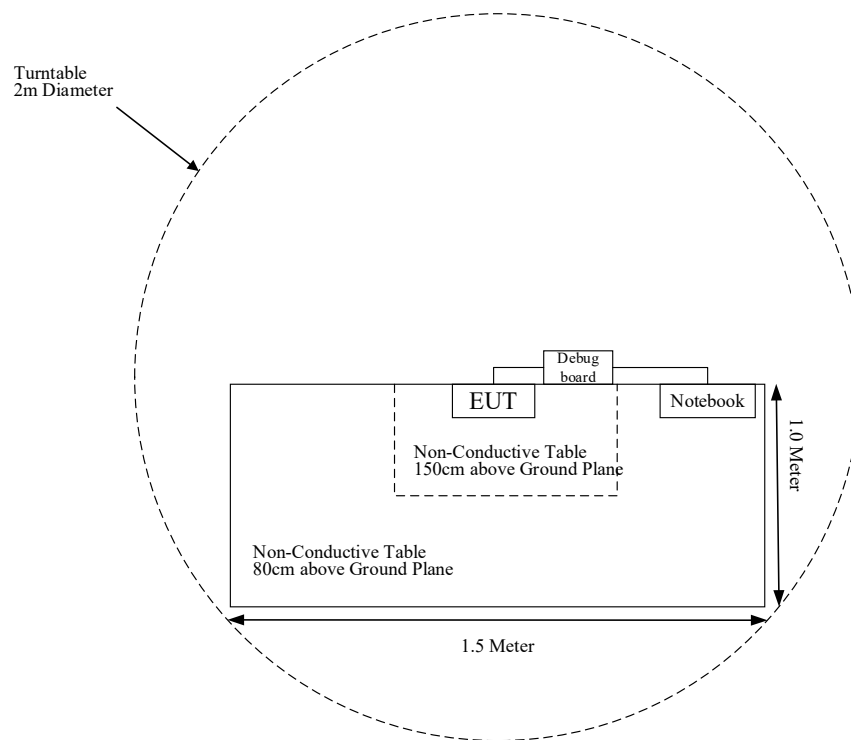
Cable Description	Length (m)	From Port	To Port
Data Cable	0.2	Debug board	EUT
USB Cable	1.5	Debug board	Notebook

Block Diagram of Test Setup

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	2026-03-13	2027-03-12
Sunol Sciences	Hybrid Antenna	JB3	A090314-2	2024-10-29	2027-10-28
BACL	Active Loop Antenna	1313-1A	4041511	2025-08-10	2028-08-09
Narda	6 dB Attenuator	771-6	10690812-2-1	2024-10-29	2027-10-28
Sonoma Instrument	Amplifier	310N	171205	2026-03-13	2027-03-12
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-7	007	2026-03-16	2027-03-15
MICRO-COAX	Coaxial Cable	Cable-8	008	2026-03-13	2027-03-12
MICRO-COAX	Coaxial Cable	Cable-9	009	2026-03-13	2027-03-12
MICRO-COAX	Coaxial Cable	Cable-10	010	2026-03-13	2027-03-12
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2026-03-16	2027-03-15
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	2026-03-16	2027-03-15
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2026-03-16	2027-03-15
Narda	Attenuator	10dB	010	2026-03-16	2027-03-15
SELECTOR	Amplifier	EM18G40G	60726	2026-03-16	2027-03-15
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-25	025	2026-03-12	2027-03-11
MICRO-COAX	Coaxial Cable	Cable-11	011	2026-03-16	2027-03-15
MICRO-COAX	Coaxial Cable	Cable-12	012	2026-03-16	2027-03-15
MICRO-COAX	Coaxial Cable	Cable-13	013	2026-03-16	2027-03-15
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40-N	103298	2026-03-13	2027-03-12
Narda	Attenuator	10dB	010	2026-03-16	2027-03-15
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).

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310 & §2.1091	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	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)	Band Edge	Compliant
§15.247(d)	Conducted Spurious Emission	Compliant
§15.247(e)	Power Spectral Density	Compliant

Note: The EUT is powered by battery.

FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Data:

Mode	Frequency Range (MHz)	Antenna Gain		★Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm²)	MPE Limit (mW/cm²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	-5.43	0.29	2.5	1.78	20	0.0001	1.0

Note:

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

Result: The device meet FCC MPE at 20 cm distance

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.

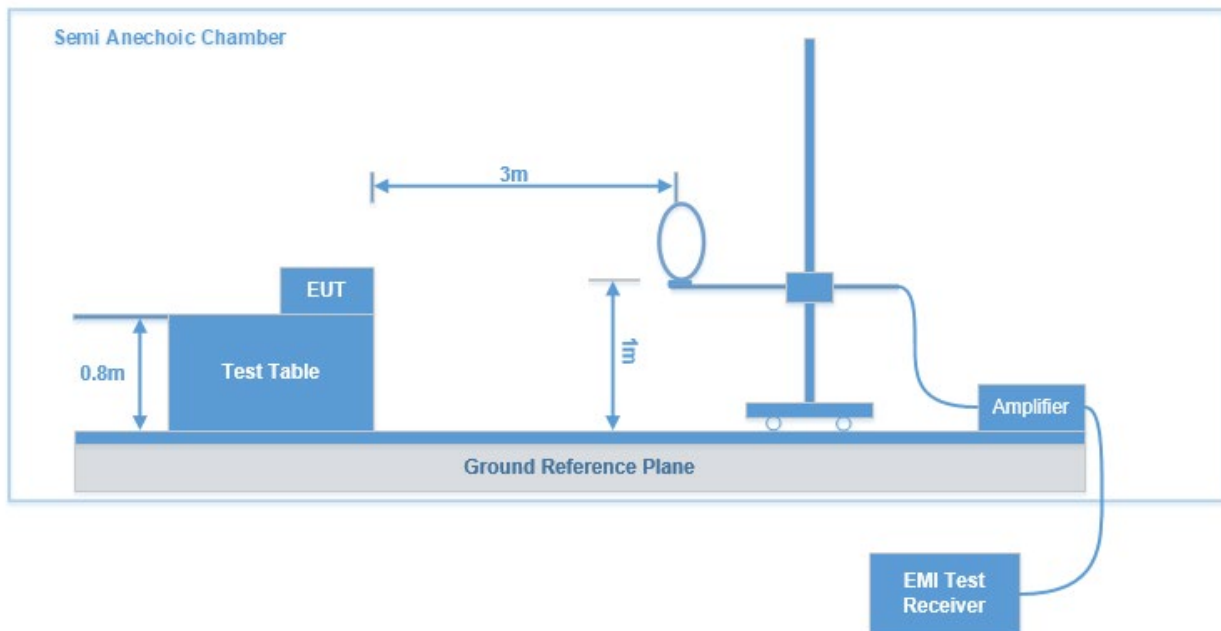
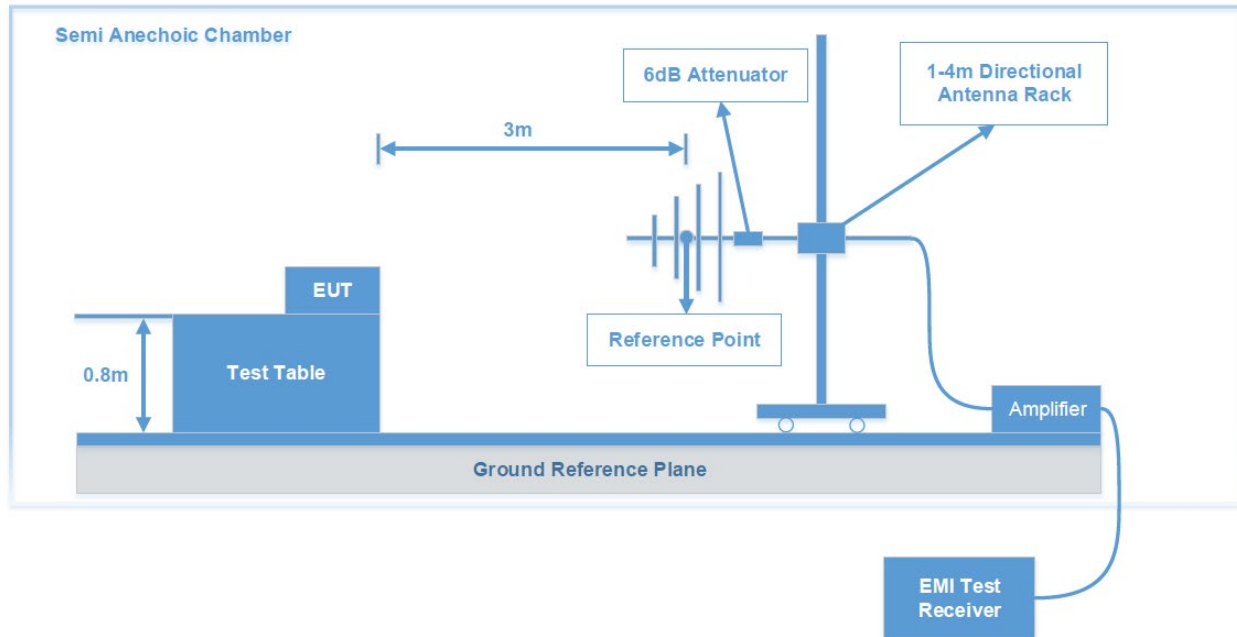
Antenna Connector Construction

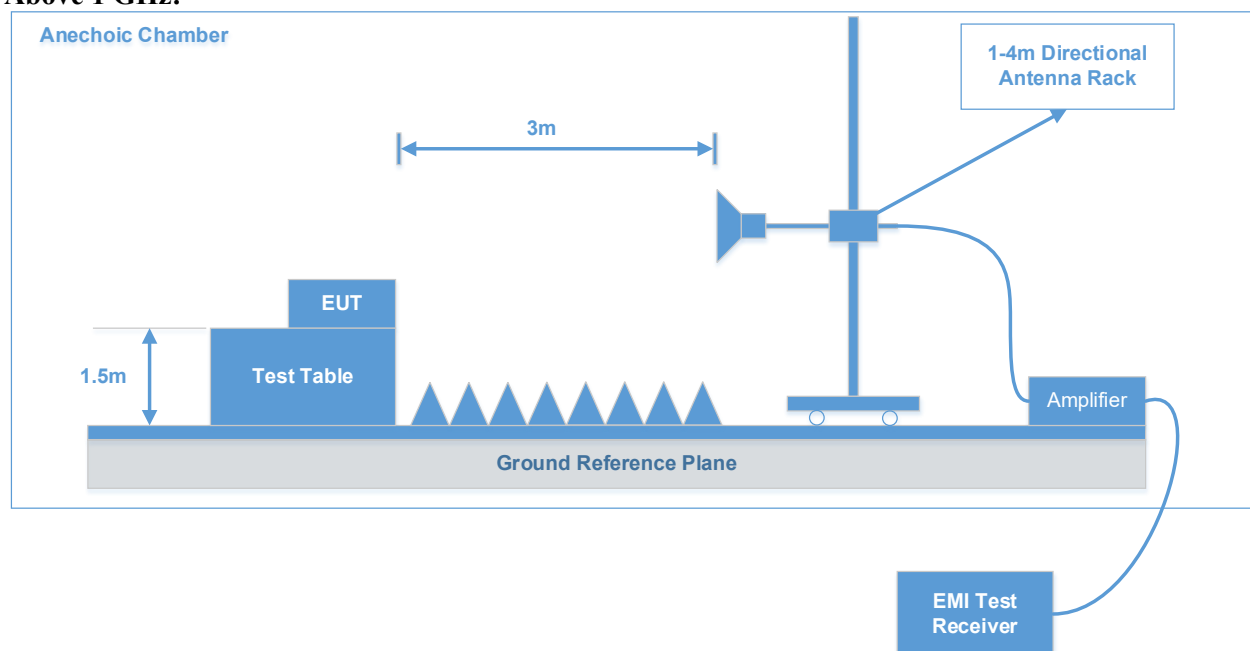
The EUT has a PCB antenna, and the antenna gain is -5.43 dBi, which permanently attached to the EUT, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

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

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

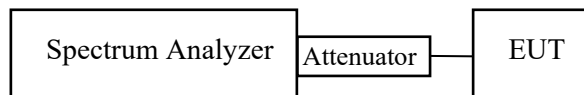
Applicable Standard

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 (11 dB) = Attenuator (10dB) + Cable loss (1.0dB) 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 (11 dB) = Attenuator (10dB) + Cable loss (1.0dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

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

Band Edges

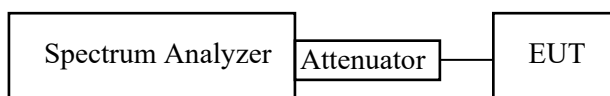
Applicable Standard

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

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 (11 dB) = Attenuator (10dB) + Cable loss (1.0dB) has been added in Spectrum Analyzer.

Conducted Spurious Emission

Applicable Standard

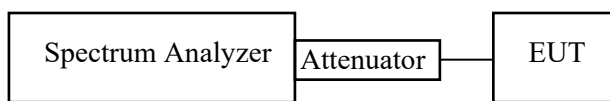
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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: the offset (13 dB) = Attenuator (10dB) + Cable loss (3.0dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

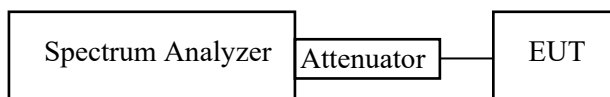
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of 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:

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span >1.5 times the DTS bandwidth.
- c) Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = No faster than coupled (auto) time.
- g) Trace mode = max-hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.



Note: the offset (11 dB) = Attenuator (10dB) + Cable loss (1.0dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

APPENDIX - TEST DATA

SPURIOUS EMISSIONS

Environmental Conditions & Test Information

Frequency Range:	9kHz-30MHz	30MHz - 1GHz	1GHz-18GHz	18 GHz - 25 GHz
Test Date:	2026-06-04	2026-06-04	2026-06-09	2026-06-10
Temperature:	23.8°C	23.8°C	24.1 °C	22.6°C
Relative Humidity:	59 %	59 %	42 %	50 %
ATM Pressure:	100.2 kPa	100.2 kPa	101.1 kPa	102.3 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Scarf Yang	Scarf Yang	Destine Hu	Hugh Wu

Test Result: Compliant.

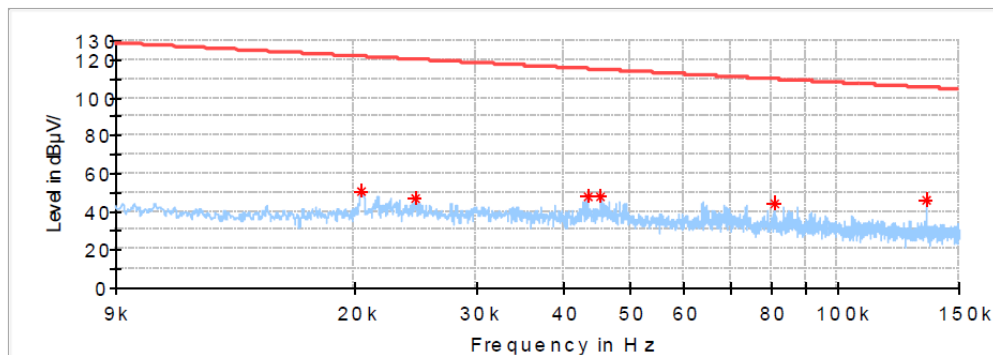
EUT operation mode: Transmitting

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-30MHz: Transmitting in maximum output power mode BLE (1 Mbps) high channel
Parallel(worst case)
9kHz-150kHz

Common Information

Project No:	RKSA260529002
EUT Model:	XZW25
Test Mode:	Transmitting in BLE High Channel
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESCI,1313-1A, 310N
Receiver Setting:	RBW:200 Hz, VBW:1 kHz, Sweep Time: Auto
Temperature:	23.8℃
Humidity:	59%
Barometric Pressure:	100.2kPa
Test Engineer:	Scarf Yang
Check by:	Winnie Yang
Test Date:	2026/6/4

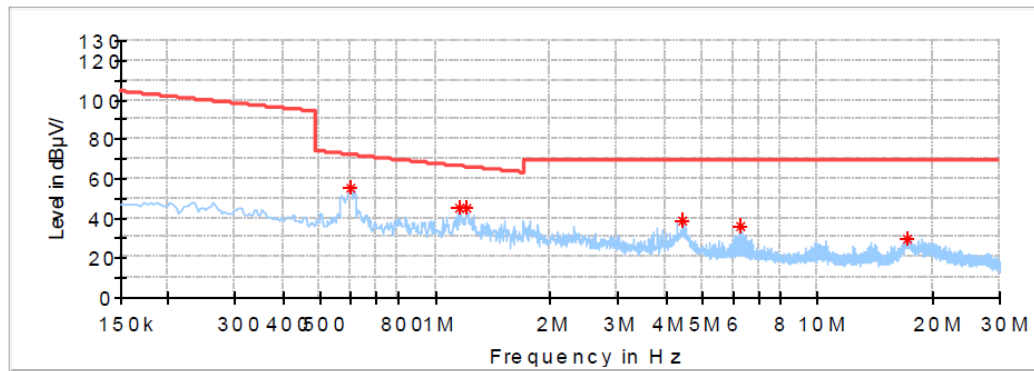


Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
0.020403	50.31	121.40	71.09	Parallel	-0.1
0.024440	47.29	119.83	72.54	Parallel	-0.1
0.043422	47.93	114.84	66.91	Parallel	-2.2
0.045413	47.65	114.46	66.81	Parallel	-2.5
0.080804	43.84	109.45	65.62	Parallel	-6.8
0.134490	45.72	105.03	59.31	Parallel	-10.0

150kHz-30MHz**Common Information**

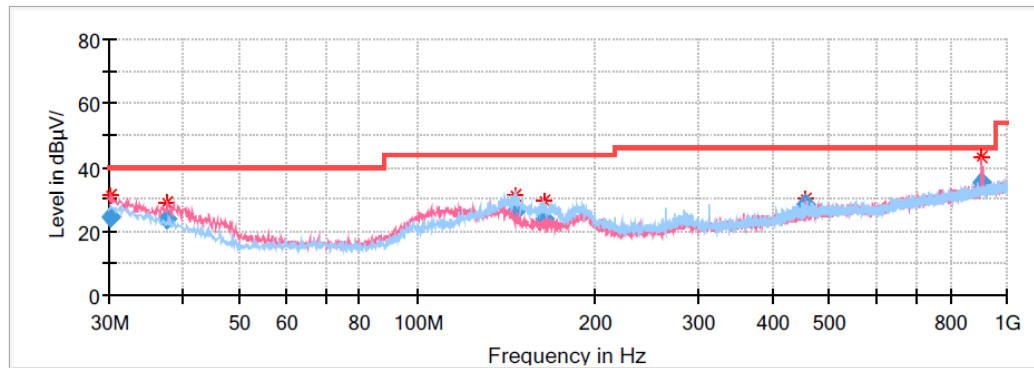
Project No: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE High Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESCI,1313-1A, 310N
Receiver Setting: RBW: 9 kHz, VBW:30 kHz, Sweep Time: Auto
Temperature: 23.8°C
Humidity: 59%
Barometric Pressure: 100.2kPa
Test Engineer: Scarf Yang
Check by: Winnie Yang
Test Date: 2026/6/4

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
0.597750	54.96	71.96	17.00	Parallel	-23.0
1.157438	45.28	66.15	20.87	Parallel	-27.6
1.205944	44.94	65.81	20.87	Parallel	-27.8
4.433475	38.68	69.54	30.86	Parallel	-31.3
6.310294	35.56	69.54	33.98	Parallel	-31.6
17.261512	29.78	69.54	39.76	Parallel	-32.6

30 MHz-1 GHz (Transmitting in maximum output power mode BLE (1 Mbps) high channel:**Low Channel: 2402 MHz****Common Information**

Project No: RKSA260529002
 EUT Model: XZW25
 Test Mode: Transmitting in BLE High 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: 23.8℃
 Humidity: 59%
 Barometric Pressure: 100.2kPa
 Test Engineer: Scarf Yang
 Check by: Winnie Yang
 Test Date: 2026/6/4

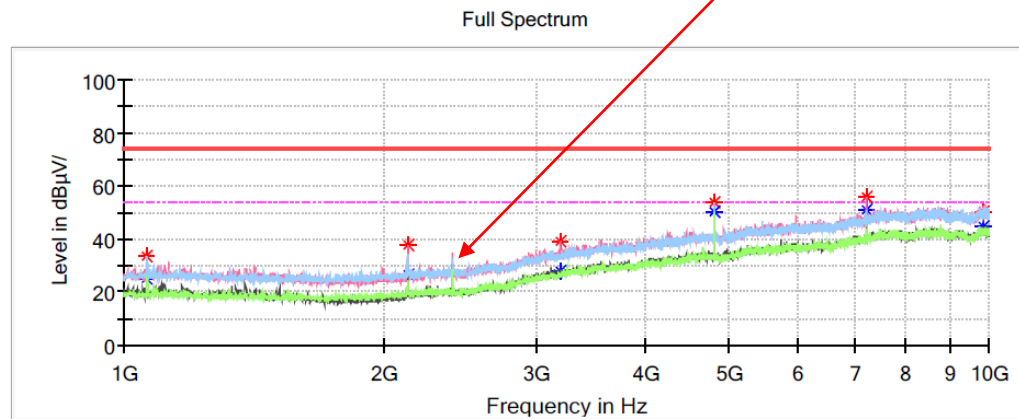
**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.242500	24.40	40.00	15.60	V	-4.7
37.760000	23.89	40.00	16.11	V	-9.7
146.157500	26.09	43.50	17.41	H	-11.3
164.466250	23.91	43.50	19.59	H	-12.1
455.951250	28.19	46.00	17.81	V	-6.2
905.182500	35.24	46.00	10.76	V	1.5

1GHz-10GHz (BLE 1 Mbps):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKSA260529002
EUT Model:	XZW25
Test Mode:	Transmitting in BLE 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:	24.1°C
Humidity:	42%
Atmospheric Pressure:	101.1kPa
Test Engineer:	Destine Hu
Check by:	Bard Liu
Test Date:	2026/6/9

Fundamental test with
Band Reject Filter

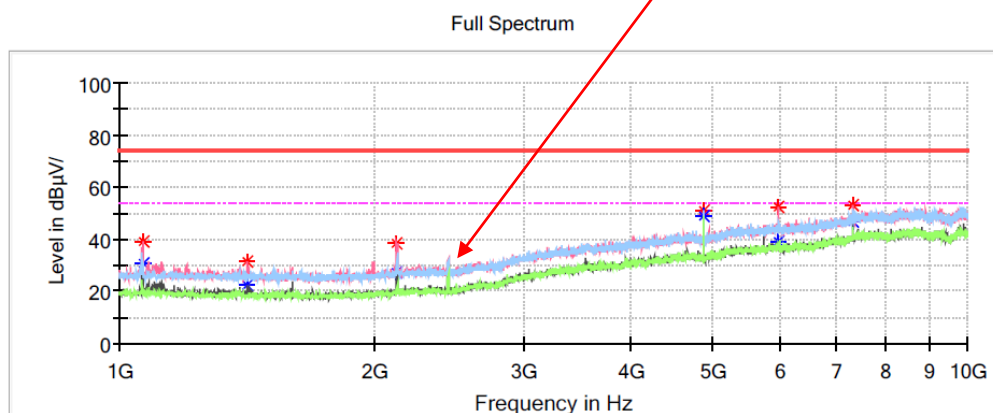
**Critical_Freqs**

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	---	25.16	54.00	28.84	H	-15.9
1063.000000	33.75	---	74.00	40.25	H	-15.9
2130.400000	---	26.81	54.00	27.20	V	-11.3
2130.400000	37.51	---	74.00	36.49	V	-11.3
3195.100000	---	27.82	54.00	26.18	V	-7.6
3195.100000	39.24	---	74.00	34.76	V	-7.6
4804.000000	53.96	---	74.00	20.04	H	-3.4
4804.000000	---	50.65	54.00	3.35	H	-3.4
7206.000000	---	50.71	54.00	3.29	V	2.3
7206.000000	55.71	---	74.00	18.29	V	2.3
9847.900000	---	45.01	54.00	8.99	V	5.9
9847.900000	50.04	---	74.00	23.96	V	5.9

Middle Channel: 2440 MHz**Common Information**

Project No.:	RKSA260529002
EUT Model:	XZW25
Test Mode:	Transmitting in BLE 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:	24.1°C
Humidity:	42%
Atmospheric Pressure:	101.1kPa
Test Engineer:	Destine Hu
Check by:	Bard Liu
Test Date:	2026/6/9

Fundamental test with
Band Reject Filter

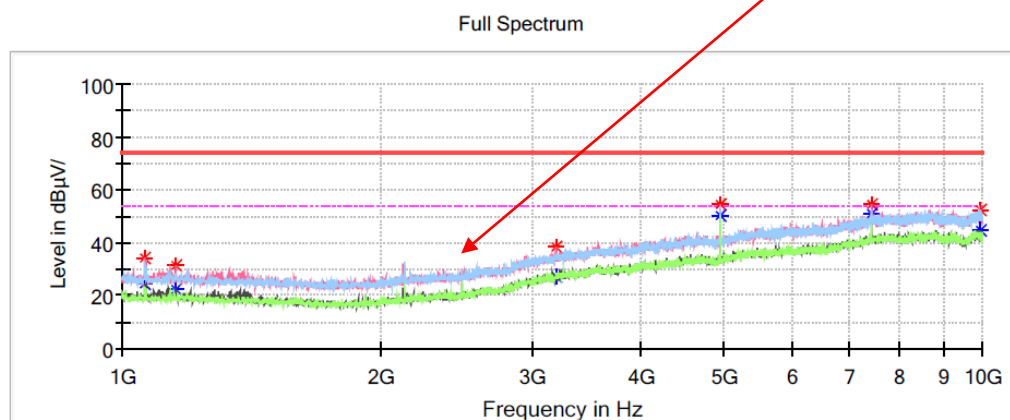
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1065.700000	---	30.92	54.00	23.08	V	-15.9
1065.700000	38.88	---	74.00	35.12	V	-15.9
1413.100000	---	22.36	54.00	31.64	V	-14.4
1413.100000	31.65	---	74.00	42.35	V	-14.4
2124.100000	38.51	---	74.00	35.49	V	-11.3
2124.100000	---	26.96	54.00	27.04	V	-11.3
4880.000000	51.27	---	74.00	22.73	H	-3.2
4880.000000	---	48.91	54.00	5.09	H	-3.2
5981.500000	---	39.35	54.00	14.65	V	-0.7
5981.500000	52.59	---	74.00	21.41	V	-0.7
7320.000000	53.04	---	74.00	20.96	V	2.7
7320.000000	---	47.09	54.00	6.91	V	2.7

High Channel: 2480 MHz**Common Information**

Project No.: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE 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: 24.1℃
Humidity: 42%
Atmospheric Pressure: 101.1kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/6/9

Fundamental test with
Band Reject Filter

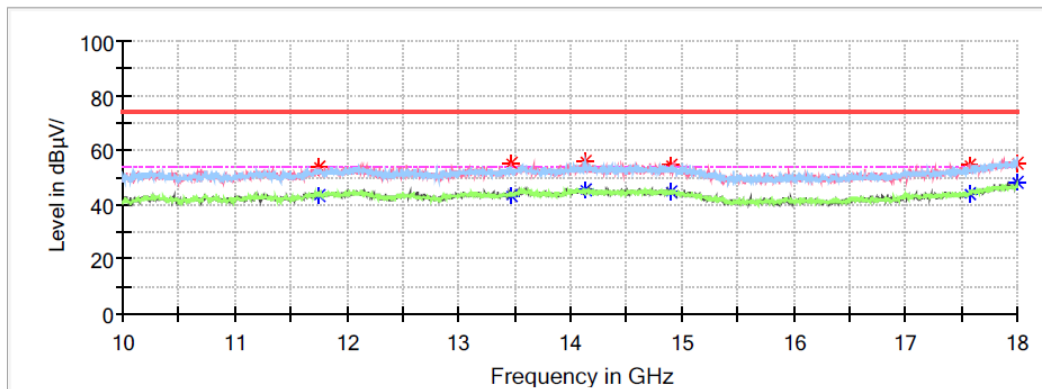
**Critical Freqs**

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	33.92	---	74.00	40.08	V	-15.9
1063.000000	---	24.49	54.00	29.51	V	-15.9
1154.800000	31.25	---	74.00	42.75	V	-15.5
1154.800000	---	22.45	54.00	31.55	V	-15.5
3189.700000	38.79	---	74.00	35.21	V	-7.6
3189.700000	---	27.32	54.00	26.68	V	-7.6
4960.000000	54.71	---	74.00	19.29	V	-2.9
4960.000000	---	50.53	54.00	3.47	V	-2.9
7440.000000	---	51.06	54.00	2.94	V	3.1
7440.000000	54.78	---	74.00	19.22	V	3.1
9929.800000	52.72	---	74.00	21.28	H	6.2
9929.800000	---	44.78	54.00	9.22	H	6.2

10GHz-18GHz (BLE 1 Mbps):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKSA260529002
EUT Model:	XZW25
Test Mode:	Transmitting in BLE 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:	24.1°C
Humidity:	42%
Atmospheric Pressure:	101.1kPa
Test Engineer:	Destine Hu
Check by:	Bard Liu
Test Date:	2026/6/9

Full Spectrum

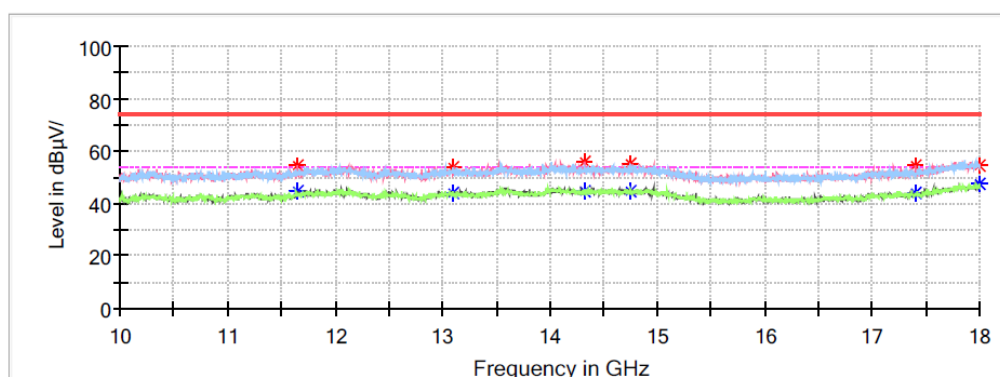
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
11753.600000	53.87	---	74.00	20.13	V	8.6
11753.600000	---	43.46	54.00	10.54	V	8.6
13465.600000	55.26	---	74.00	18.74	V	9.6
13465.600000	---	43.34	54.00	10.66	V	9.6
14144.000000	55.80	---	74.00	18.20	H	10.8
14144.000000	---	45.20	54.00	8.80	H	10.8
14902.400000	---	45.04	54.00	8.96	V	9.7
14902.400000	54.80	---	74.00	19.20	V	9.7
17566.400000	54.44	---	74.00	19.56	V	11.2
17566.400000	---	44.38	54.00	9.62	V	11.2
17992.000000	55.21	---	74.00	18.79	V	13.8
17992.000000	---	47.94	54.00	6.06	V	13.8

Middle Channel: 2440 MHz**Common Information**

Project No.: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE 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: 24.1℃
Humidity: 42%
Atmospheric Pressure: 101.1kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/6/9

Full Spectrum

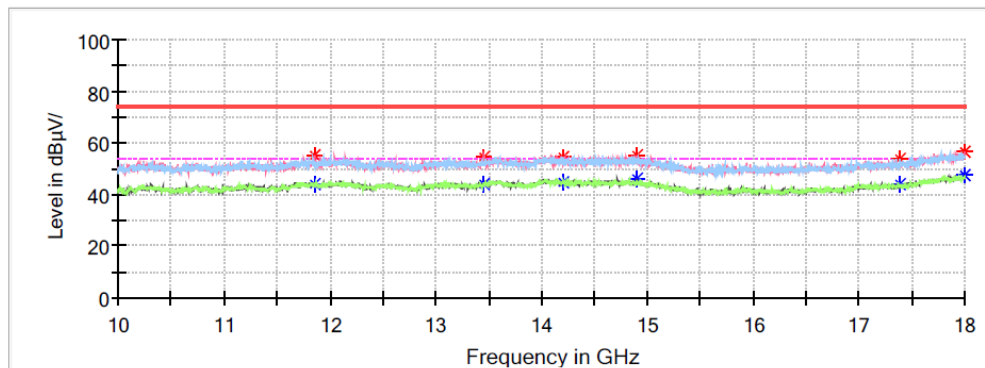
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
11656.000000	---	45.01	54.00	8.99	V	8.4
11656.000000	54.46	---	74.00	19.54	V	8.4
13094.400000	53.97	---	74.00	20.03	V	8.9
13094.400000	---	44.19	54.00	9.81	V	8.9
14331.200000	---	44.73	54.00	9.27	V	10.9
14331.200000	56.18	---	74.00	17.82	V	10.9
14752.000000	---	44.57	54.00	9.43	H	10.2
14752.000000	55.57	---	74.00	18.43	H	10.2
17408.000000	---	43.74	54.00	10.26	V	10.5
17408.000000	54.25	---	74.00	19.75	V	10.5
17996.800000	54.72	---	74.00	19.28	H	13.8
17996.800000	---	47.73	54.00	6.27	H	13.8

High Channel: 2480 MHz**Common Information**

Project No.: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE 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: 24.1℃
Humidity: 42%
Atmospheric Pressure: 101.1kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/6/9

Full Spectrum

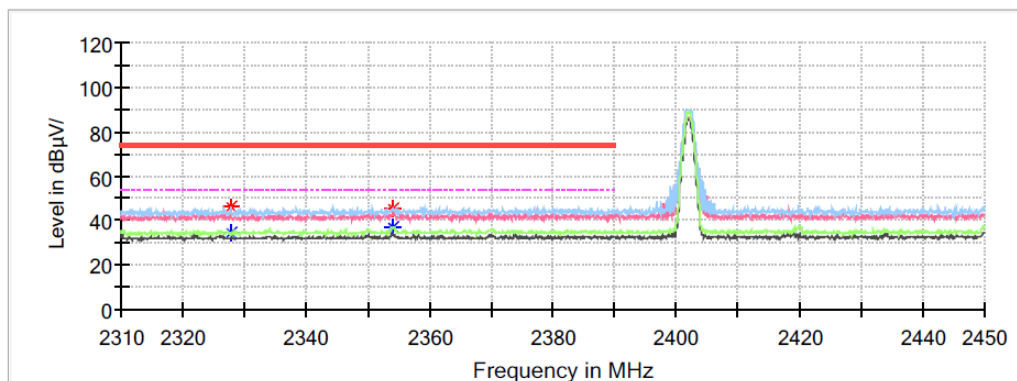
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
11856.000000	---	44.08	54.00	9.92	V	8.8
11856.000000	55.21	---	74.00	18.79	V	8.8
13462.400000	---	44.17	54.00	9.83	H	9.6
13462.400000	54.55	---	74.00	19.45	H	9.6
14201.600000	---	45.04	54.00	8.96	V	10.8
14201.600000	54.70	---	74.00	19.30	V	10.8
14908.800000	---	46.01	54.00	7.99	V	9.7
14908.800000	54.96	---	74.00	19.04	V	9.7
17380.800000	---	44.38	54.00	9.62	H	10.5
17380.800000	53.72	---	74.00	20.28	H	10.5
17998.400000	---	47.58	54.00	6.42	V	13.8
17998.400000	56.30	---	74.00	17.70	V	13.8

Restricted Bands Emission:**Left Side****Common Information**

Project No.: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE 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: 24.1°C
Humidity: 42%
Atmospheric Pressure: 101.1kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/6/9

Full Spectrum

**Critical_Freqs**

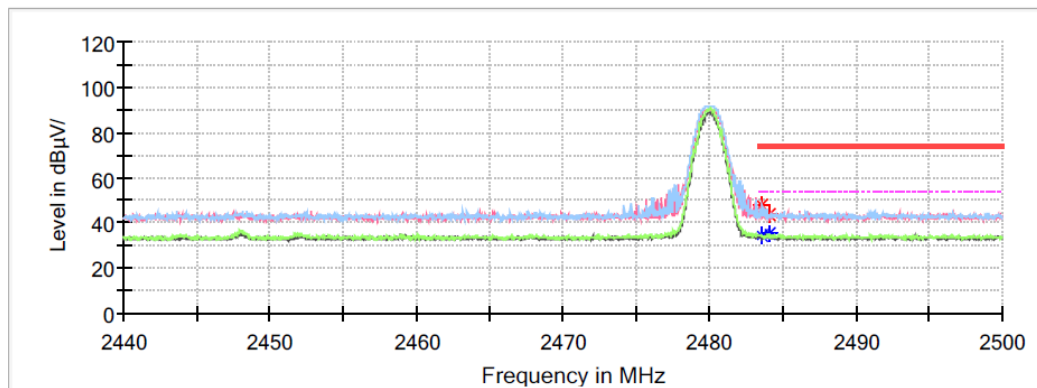
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2327.864000	45.80	---	74.00	28.20	H	-0.7
2327.864000	---	34.22	54.00	19.78	H	-0.7
2354.128000	45.31	---	74.00	28.69	H	-0.7
2354.128000	---	37.23	54.00	16.77	H	-0.7

Right Side

Common Information

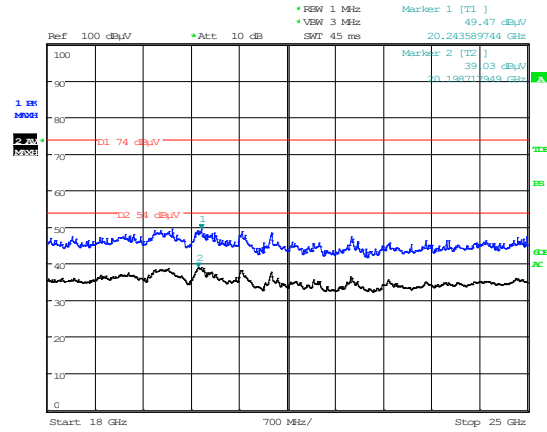
Project No.: RKSA260529002
EUT Model: XZW25
Test Mode: Transmitting in BLE High Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 24.1°C
Humidity: 42%
Atmospheric Pressure: 101.1kPa
Test Engineer: Destine Hu
Check by: Bard Liu
Test Date: 2026/6/9

Full Spectrum



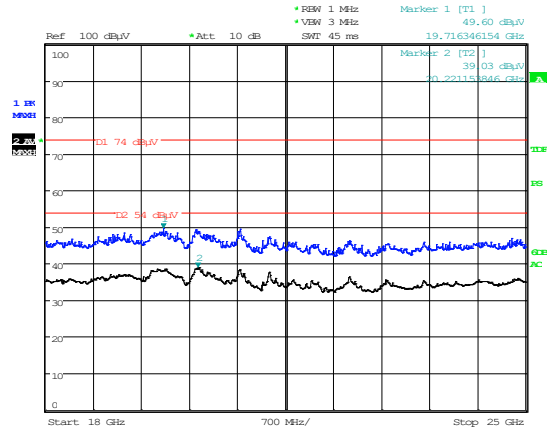
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.632000	47.82	---	74.00	26.18	H	-0.3
2483.632000	---	34.16	54.00	19.84	H	-0.3
2484.112000	43.59	---	74.00	30.41	H	-0.3
2484.112000	---	34.83	54.00	19.17	H	-0.3

18 GHz - 25 GHz (Transmitting in maximum output power mode BLE (1 Mbps) high channel):**Horizontal**

Project No : RKSA260529002
Date: 10.JUN.2026 09:46:37

Tester :Rugh Wu

Vertical

Project No : RKSA260529002
Date: 10.JUN.2026 10:19:15

Tester :Rugh Wu

Frequency (GHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
20.22	---	39.03	54	14.97	V	12.48
19.72	49.6	---	74	24.4	V	11.47
20.20	---	39.03	54	14.97	H	12.46
20.24	49.47	---	74	24.53	H	12.5

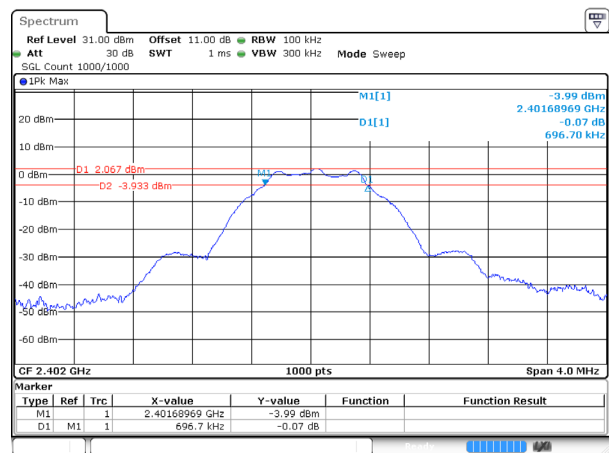
Note: The test distance is 3m. The limit is 74dBμV/m(Peak) and 54dBμV/m(Average).

6 dB EMISSION BANDWIDTH**Environmental Conditions & Test Information**

Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

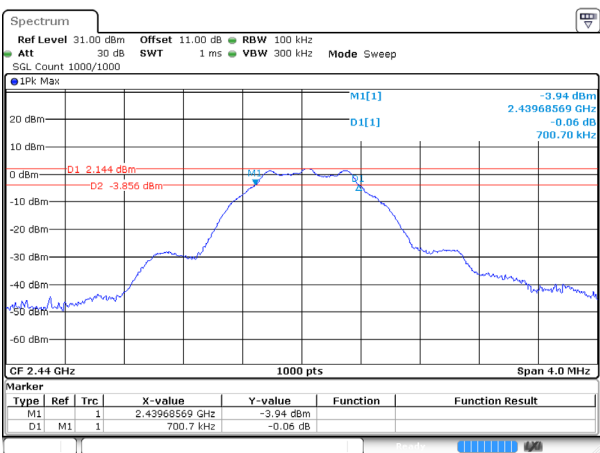
Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
BLE (1 Mbps)	Low	2402	0.697	≥0.5
	Middle	2440	0.701	≥0.5
	High	2480	0.701	≥0.5

BLE (1 Mbps): Low Channel



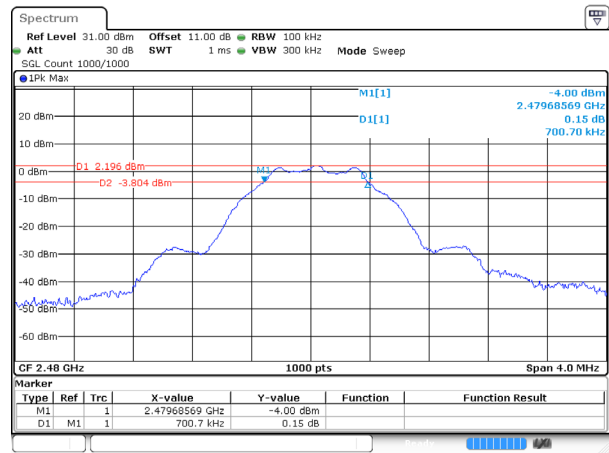
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:45:35

BLE (1 Mbps): Middle Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:49:08

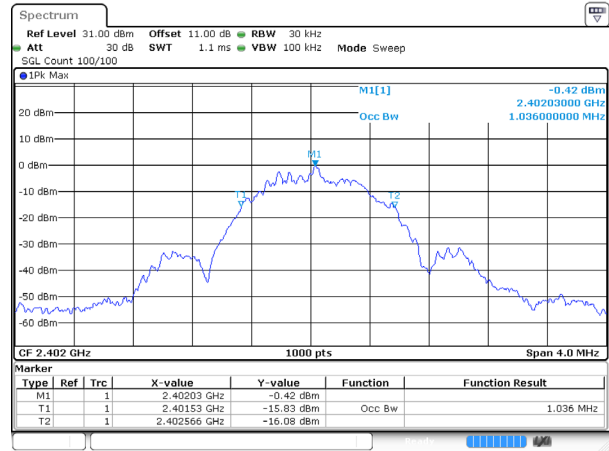
BLE (1 Mbps): High Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:53:10

Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)
BLE (1 Mbps)	Low	2402	1.036
	Middle	2440	1.036
	High	2480	1.040

BLE (1 Mbps): Low Channel



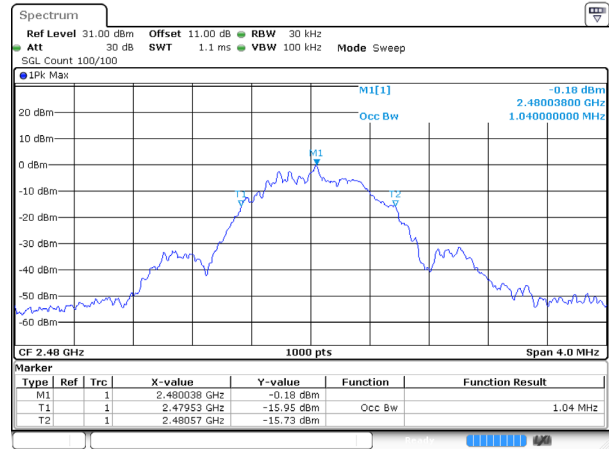
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11 JUN 2026 14:48:47

BLE (1 Mbps): Middle Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11 JUN 2026 14:51:41

BLE (1 Mbps): High Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11 JUN 2026 14:56:00

MAXIMUM CONDUCTED OUTPUT POWER**Environmental Conditions & Test Information**

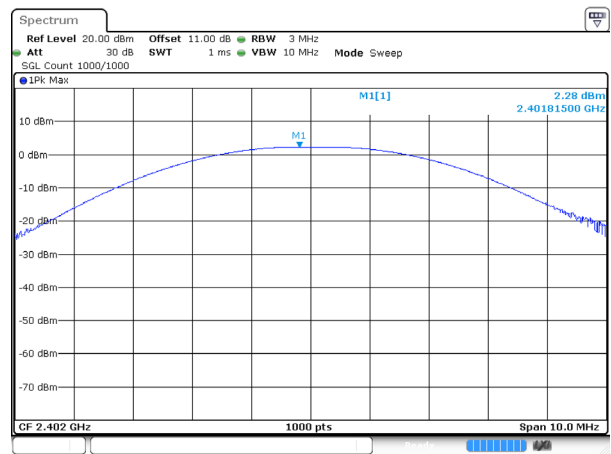
Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.

EUT operation mode: Transmitting

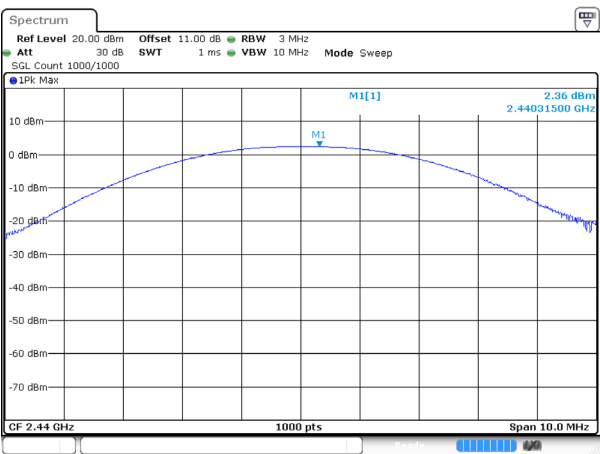
Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (1 Mbps)	Low	2402	2.28	30	Pass
	Middle	2440	2.36	30	Pass
	High	2480	2.41	30	Pass

BLE (1 Mbps): Low Channel



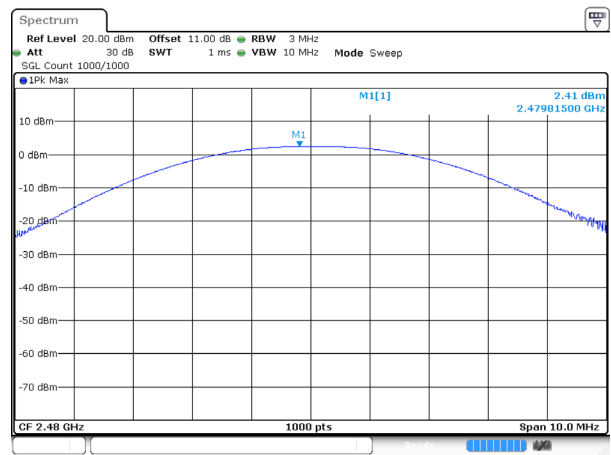
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:44:22

BLE (1 Mbps): Middle Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:49:16

BLE (1 Mbps): High Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:53:21

BAND EDGE

Environmental Conditions & Test Information

Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

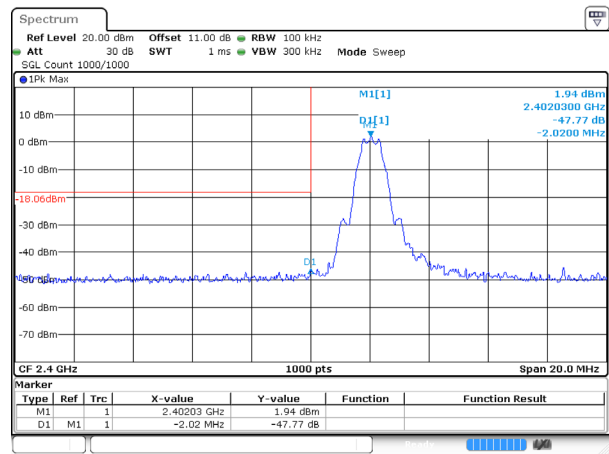
Test Result: Compliant.

EUT operation mode: Transmitting

Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (1 Mbps)	Low	2402	47.77	20
	High	2480	48.09	

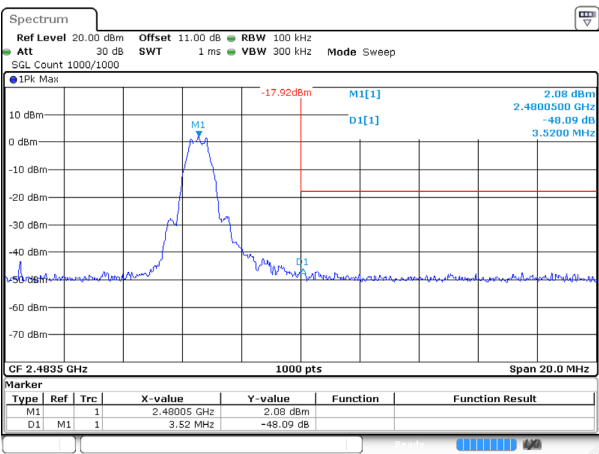
BLE (1 Mbps):

Left Side



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11 JUN 2026 14:44:40

Right Side



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11 JUN 2026 14:53:35

POWER SPECTRAL DENSITY**Environmental Conditions & Test Information**

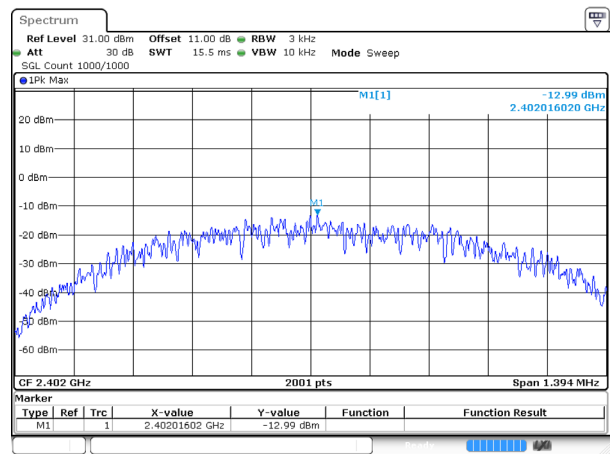
Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.

EUT operation mode: Transmitting

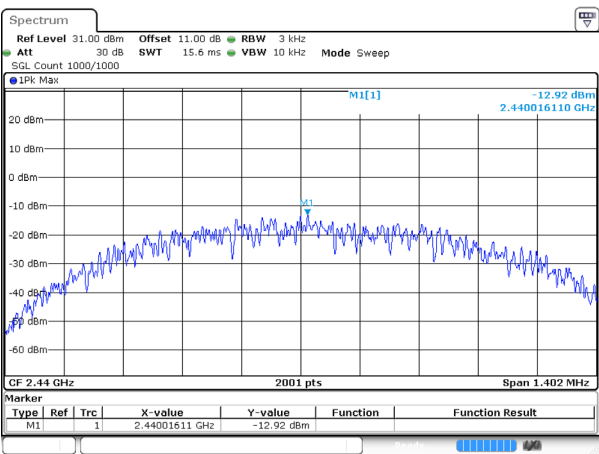
Mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
BLE (1 Mbps)	Low	2402	-12.99	≤8
	Middle	2440	-12.92	≤8
	High	2480	-12.83	≤8

BLE (1 Mbps): Low Channel



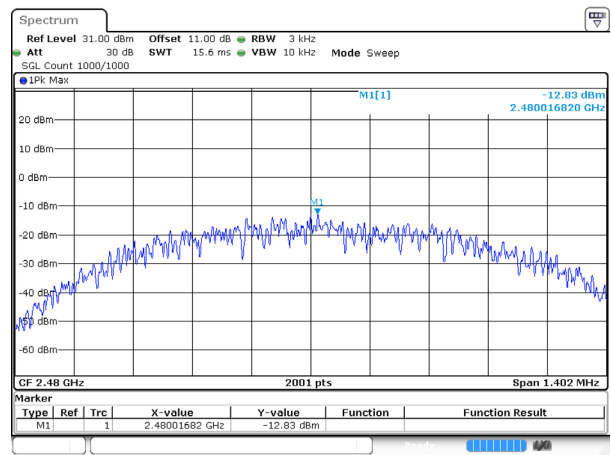
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:46:01

BLE (1 Mbps): Middle Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:49:42

BLE (1 Mbps): High Channel



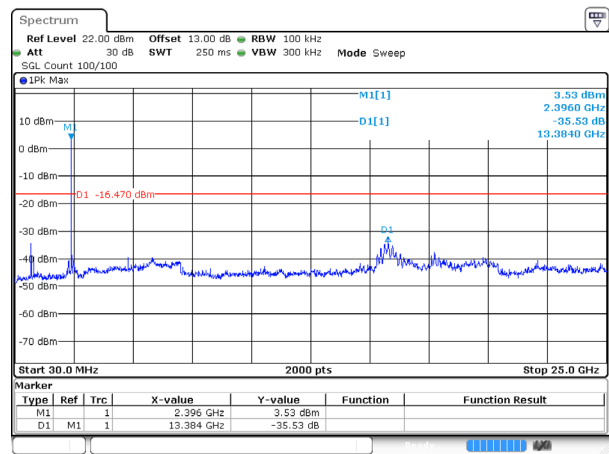
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:54:01

CONDUCTED SPURIOUS EMISSION**Environmental Conditions & Test Information**

Test Date:	2026-06-11
Temperature:	22.4 °C
Relative Humidity:	51 %
ATM Pressure:	101.6kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

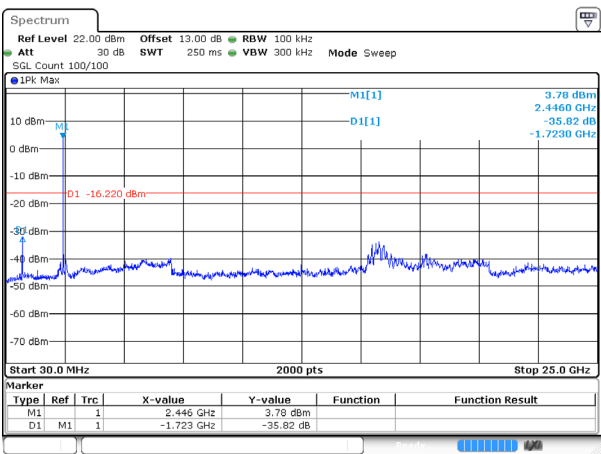
Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (1 Mbps)	Low	2402	35.53	20
	Middle	2440	35.82	
	High	2480	38.47	

BLE (1 Mbps): Low Channel



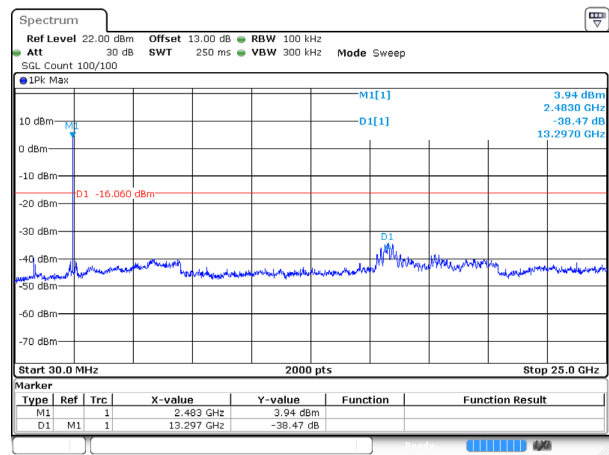
ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:48:42

BLE (1 Mbps): Middle Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:51:35

BLE (1 Mbps): High Channel



ProjectNo.:RKSA260529002 Tester:Neil Zhou
Date: 11.JUN.2026 14:55:55

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A - EUT EXTERNAL 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 *******