

FCC PART 15.247

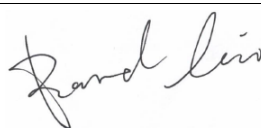
TEST REPORT

For

Signify (China) Investment Co., Ltd.

Building no.9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233, China

FCC ID: 2AGBW9290042915X

Report Type: Original Report	Product Name: LED luminaire
Report Number: RKSB250929008-00B	
Report Date: 2025-12-08	
Reviewed By:	Bard Liu 
Approved By:	Kyle Xu 
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

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.

TABLE OF CONTENTS

REPORT REVISION HISTORY.....	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	5
OBJECTIVE	5
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY	6
TEST FACILITY	6
SYSTEM TEST CONFIGURATION.....	7
DESCRIPTION OF TEST CONFIGURATION	7
EUT EXERCISE SOFTWARE	8
SPECIAL ACCESSORIES.....	8
EQUIPMENT MODIFICATIONS	8
SUPPORT EQUIPMENT LIST AND DETAILS	11
EXTERNAL I/O CABLE.....	11
BLOCK DIAGRAM OF TEST SETUP	11
TEST EQUIPMENT LIST	13
SUMMARY OF TEST RESULTS	14
FCC §1.1310 & §2.1091 –MAXIMUM PERMISSIBLE EXPOSURE (MPE)	15
FCC §15.203 – ANTENNA REQUIREMENT	16
APPLICABLE STANDARD	16
ANTENNA CONNECTOR CONSTRUCTION	16
FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS	17
APPLICABLE STANDARD	17
TEST SYSTEM SETUP.....	17
EMI TEST RECEIVER SETUP.....	17
TEST PROCEDURE	18
TEST RESULTS SUMMARY	18
TEST DATA: SEE APPENDIX	18
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS.....	19
APPLICABLE STANDARD	19
TEST SYSTEM SETUP.....	19
EMI TEST RECEIVER SETUP.....	20
TEST PROCEDURE	20
TEST RESULTS SUMMARY	21
TEST DATA: SEE APPENDIX	21
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH.....	22
APPLICABLE STANDARD	22
TEST PROCEDURE	22
TEST DATA: SEE APPENDIX	22
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER.....	23
APPLICABLE STANDARD	23
TEST PROCEDURE	23
TEST DATA: SEE APPENDIX	23
FCC §15.247(d) – BAND EDGE & CONDUCTED SPURIOUS EMISSION.....	24
APPLICABLE STANDARD	24

TEST PROCEDURE	24
TEST DATA: SEE APPENDIX	25
FCC §15.247(e) - POWER SPECTRAL DENSITY	26
APPLICABLE STANDARD	26
TEST PROCEDURE	26
TEST DATA: SEE APPENDIX	26
APPENDIX - TEST DATA.....	27
AC LINE CONDUCTED EMISSIONS	27
SPURIOUS EMISSIONS.....	32
6 dB EMISSION BANDWIDTH	73
MAXIMUM CONDUCTED OUTPUT POWER.....	77
BAND EDGE	81
POWER SPECTRAL DENSITY	84
CONDUCTED SPURIOUS EMISSION	88
EUT PHOTOGRAPHS	92
TEST SETUP PHOTOGRAPHS	93

REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSB250929008-00B	R1V1	2025-12-08	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Signify (China) Investment Co., Ltd.
Tested Model:	9290042915
Product Name:	LED luminaire
Power Supply:	AC 120V
RF Function:	BLE, ZigBee
Maximum Output Power:	BLE (125 kbps): 10.43 dBm BLE (500 kbps): 10.42 dBm BLE (1 Mbps): 10.41 dBm BLE (2 Mbps): 10.56 dBm ZigBee: 10.41 dBm
Operating Band /Frequency:	BLE: 2402-2480 MHz ZigBee: 2405-2480 MHz
Modulation Type:	BLE: GFSK ZigBee: O-QPSK
Channel Number:	BLE: 40 ZigBee: 16
Antenna Type:	BLE/ZigBee: PCB Antenna
★Maximum Antenna Gain:	BLE/ZigBee: -1.0 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: RKS250929008-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-09-29.)

Objective

This report is prepared for *Signify (China) Investment 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+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024[▲], 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.

Channel List for Zigbee mode:

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

BLE:

RF Test Tool: Hue Approbation tool

★Power level: 10

Zigbee:

RF Test Tool: Hue Approbation tool

★Power level: 10

Note: The power level was declared by the applicant.

Special Accessories

No special accessory.

Equipment Modifications

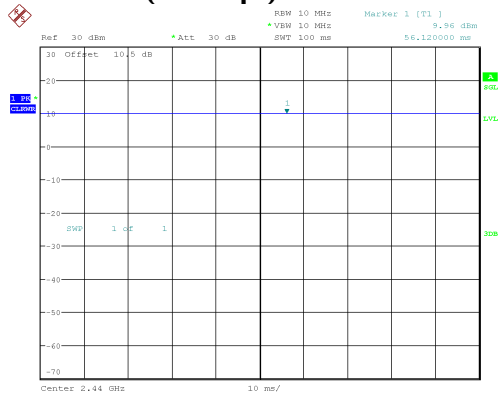
No modification was made to the EUT tested.

Environmental Conditions & Test Information

Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

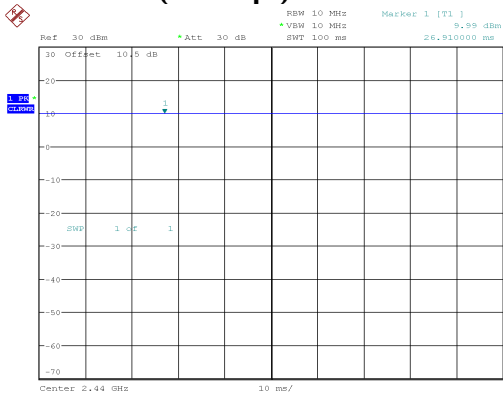
Duty Cycle:

BLE (125 kbps): Middle Channel



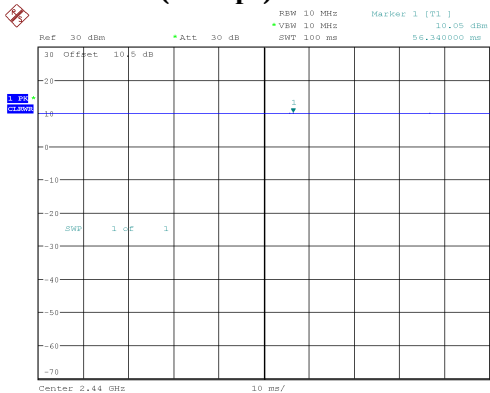
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:51:36

BLE (500 kbps): Middle Channel



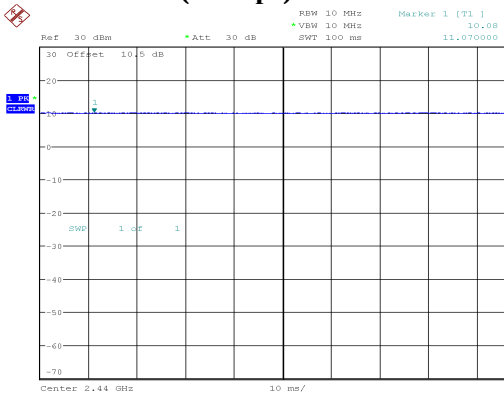
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:14:05

BLE (1 Mbps): Middle Channel

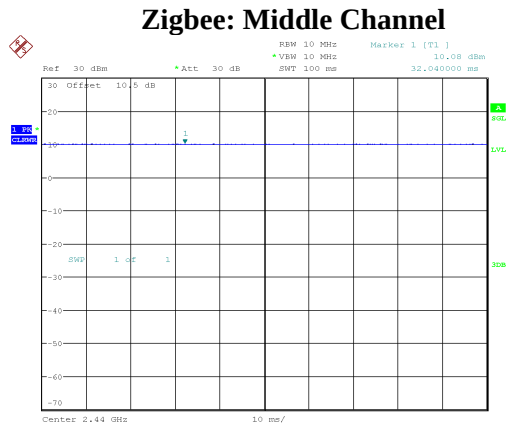


ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:32:31

BLE (2 Mbps): Middle Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:32:36



ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:40:06

Mode	Duty Cycle (%)	T _{on} (ms)	T _{on+off} (ms)	10log(1/x) (dB)
BLE (125 kbps)	100	100	100	/
BLE (500 kbps)	100	100	100	/
BLE (1 Mbps)	100	100	100	/
BLE (2 Mbps)	100	100	100	/
Zigbee	100	100	100	/

Note:

1. "x" means the Duty Cycle.
2. $\text{Offset}(10.5\text{dB}) = \text{Attenuator}(10\text{dB}) + \text{Cable loss}(0.5\text{dB})$

Support Equipment List and Details

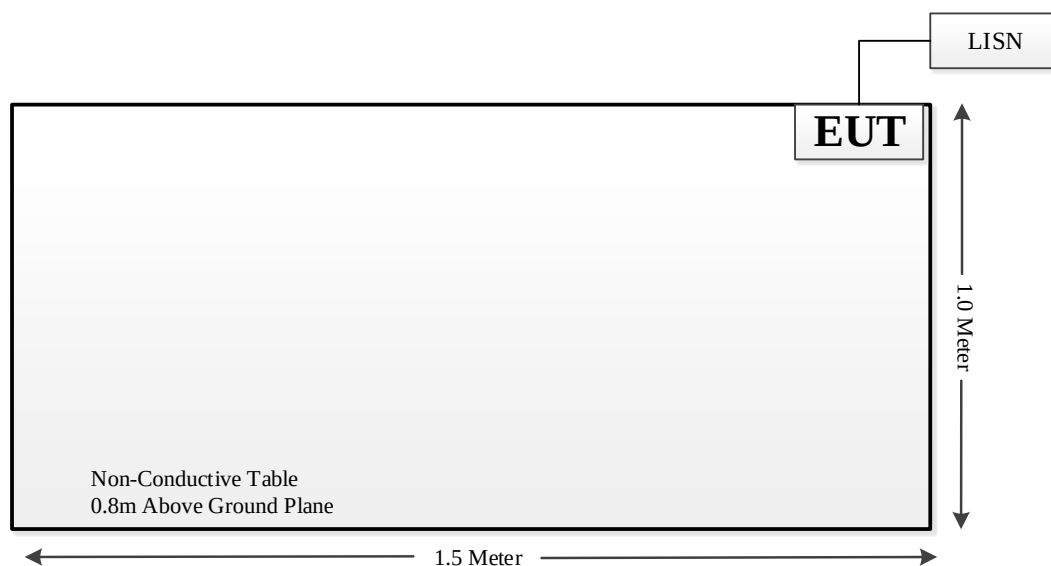
Manufacturer	Description	Model	Serial Number
Unknown	Socket	Unknown	Unknown

External I/O Cable

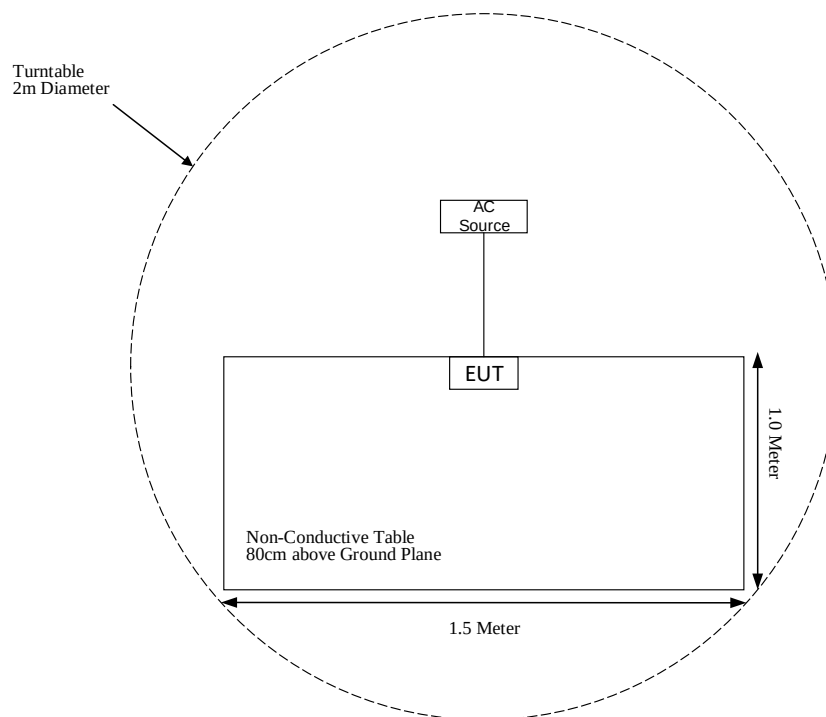
Cable Description	Length (m)	From Port	To
Power Cable 1	1.0	EUT	LISN/Socket/ AC Source
Power Cable 2	1.0	Socket	AC Source

Block Diagram of Test Setup

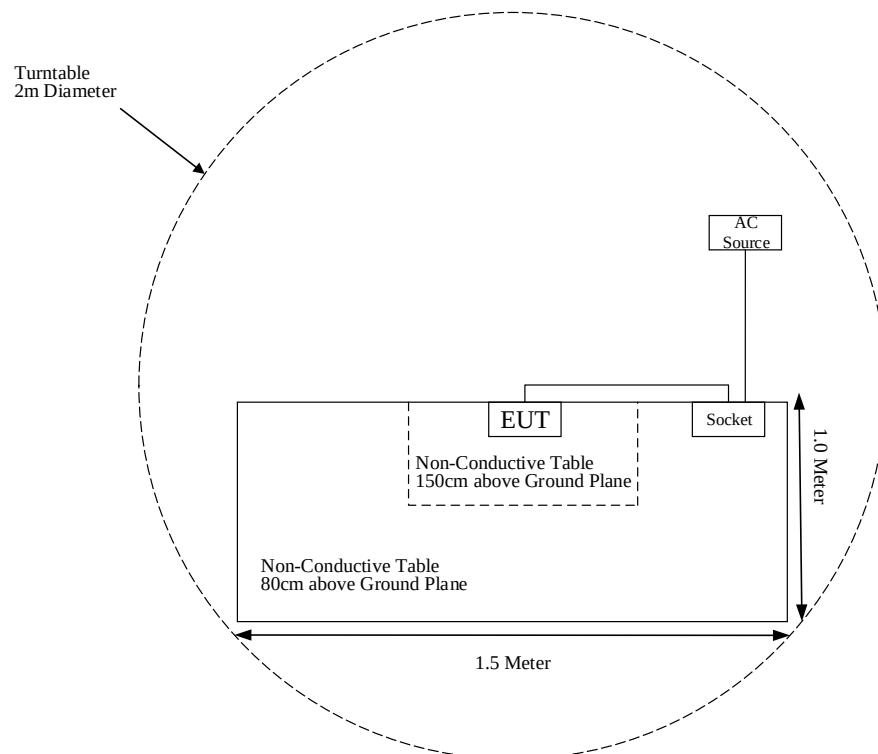
For Conducted Emissions:



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
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	BRM50702	G024	2025-08-01	2026-07-31
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
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2025-04-08	2026-04-07
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	100552	2025-04-08	2026-04-07
MICRO-COAX	Coaxial Cable	Cable-15	015	2025-04-08	2026-04-07

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	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	Compliant
§15.247(d)	Conducted Spurious Emission	Compliant
§15.247(e)	Power Spectral Density	Compliant

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/cm ²)	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 Formulary

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency Range (MHz)	Antenna Gain		★Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402~2480	-1.0	0.79	11.56	14.32	20	0.0023	1.0
Zigbee	2405~2480	-1.0	0.79	11.41	13.84	20	0.0022	1.0

Note:

1. For the above tune up power were declared by the manufacturer, which is Maximum Test Output Conducted Power+1dB.

2. Zigbee and BLE cannot transmit simultaneously.

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 for BLE&Zigbee, and the antenna gain is -1.0 dBi, which permanently attached to the EUT, fulfill the requirement of this section. Please refer to the EUT photos.

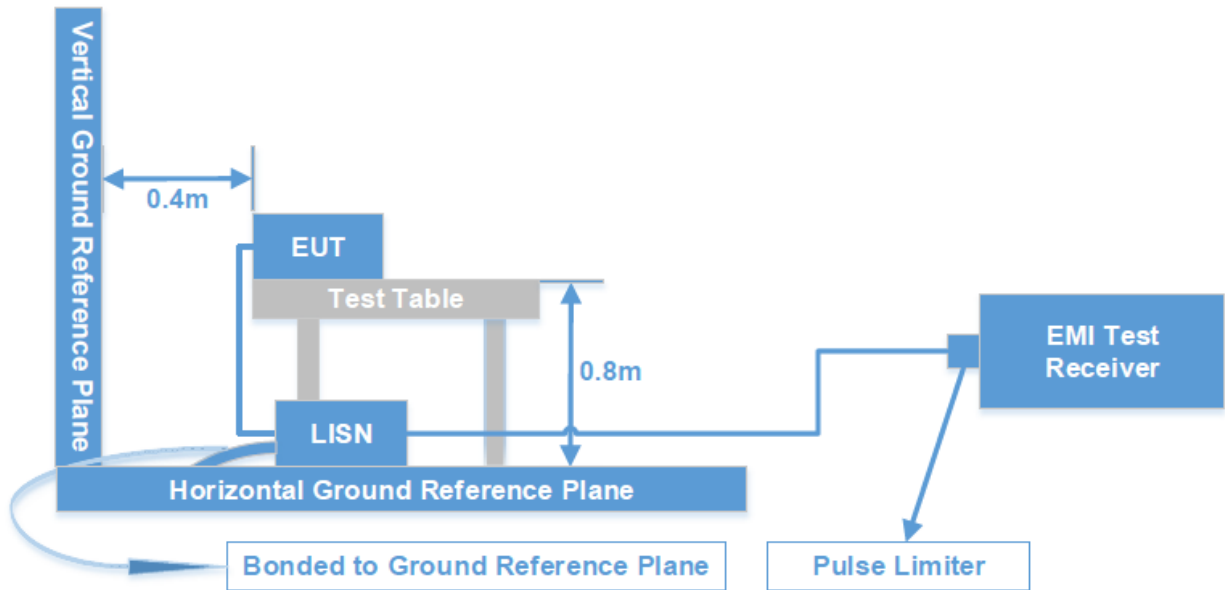
Result: Compliant.

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 + Cor.1-2023. 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	VBW
150 kHz – 30 MHz	9 kHz	30 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)

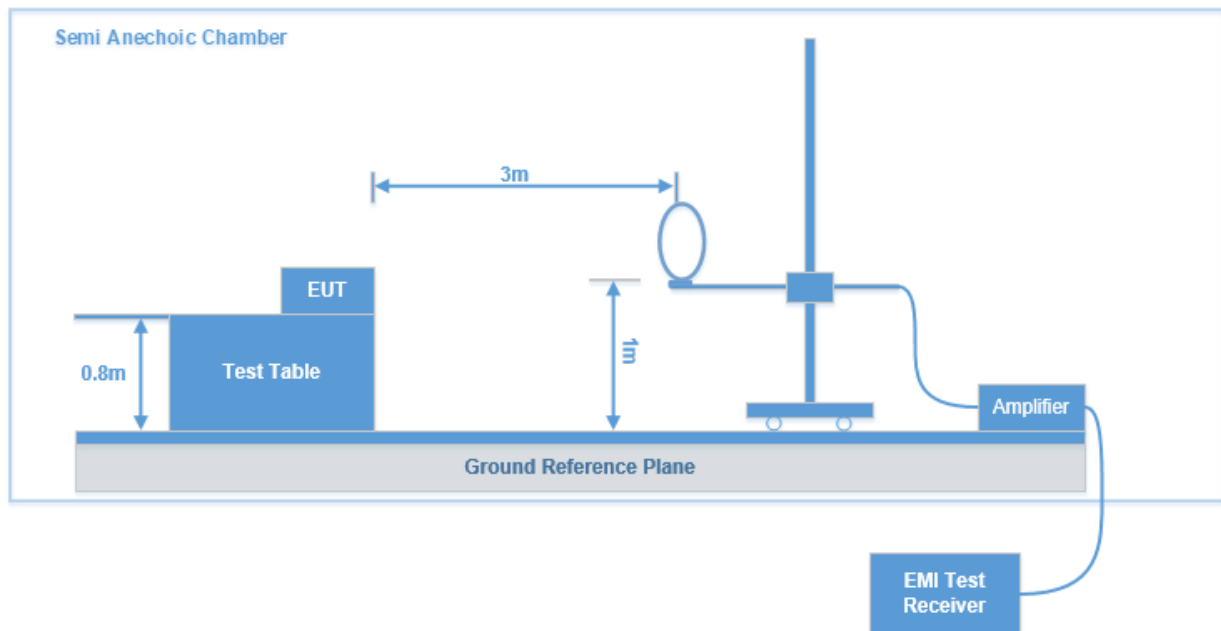
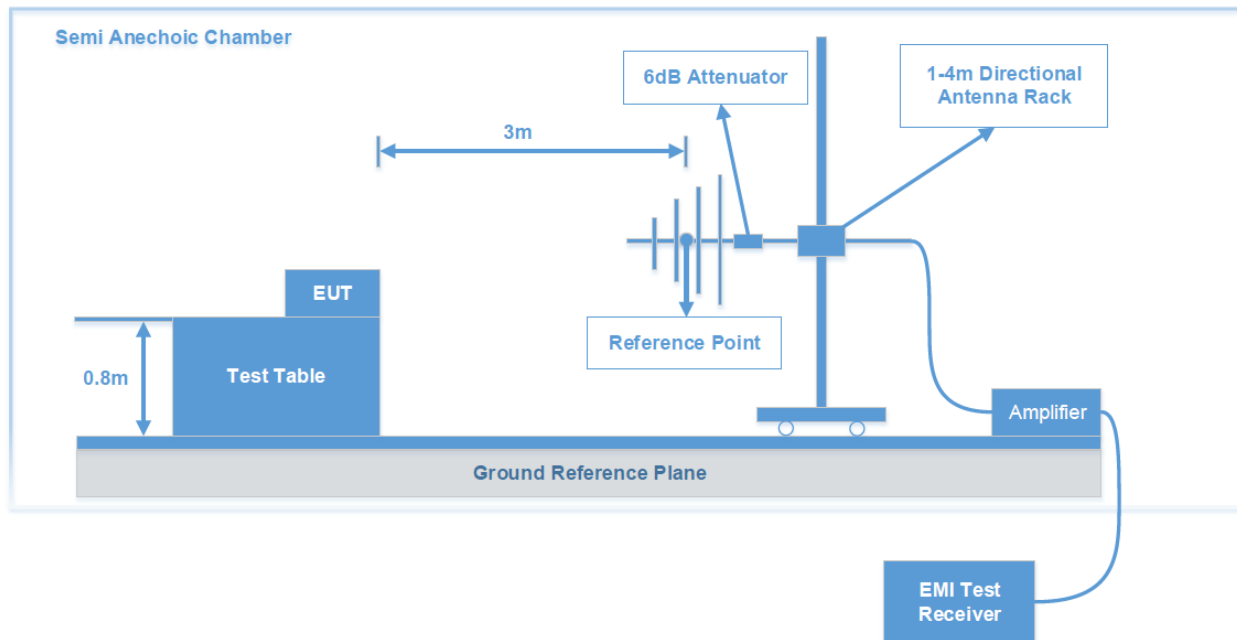
Test Results Summary

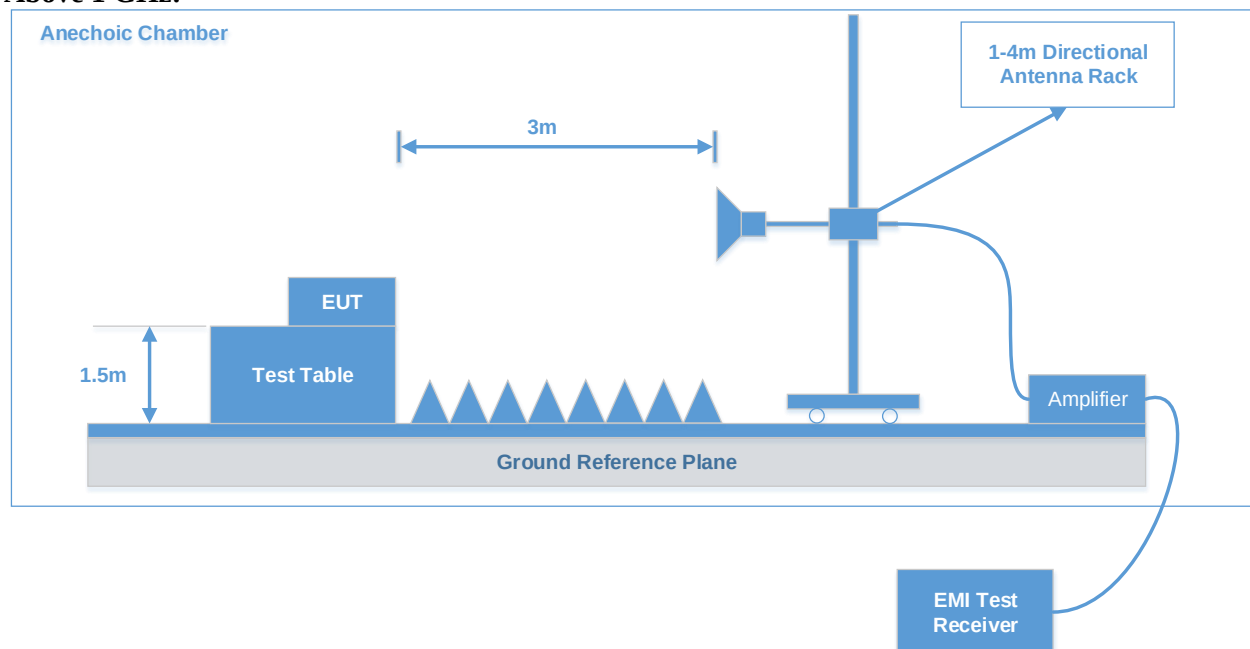
According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

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:

Note: The EUT Antenna 1.5m above Ground Plane

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2020 + Cor.1-2023. 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

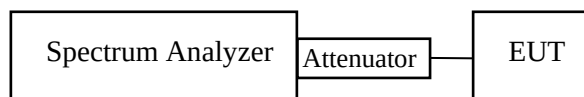
Applicable Standard

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

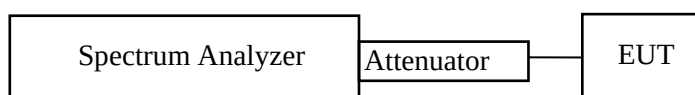
Applicable Standard

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

Band Edges

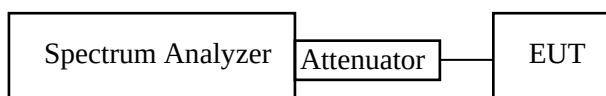
Applicable Standard

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 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

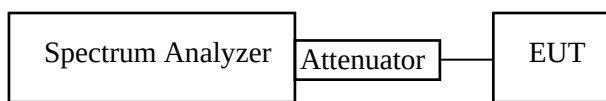
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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: the offset=Attenuator (10dB) + Cable loss (1.0dB) has been added in Spectrum Analyzer.

Test Data: See Appendix

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

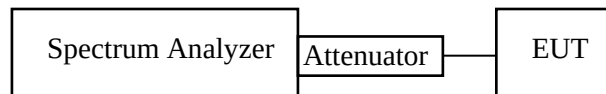
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of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

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

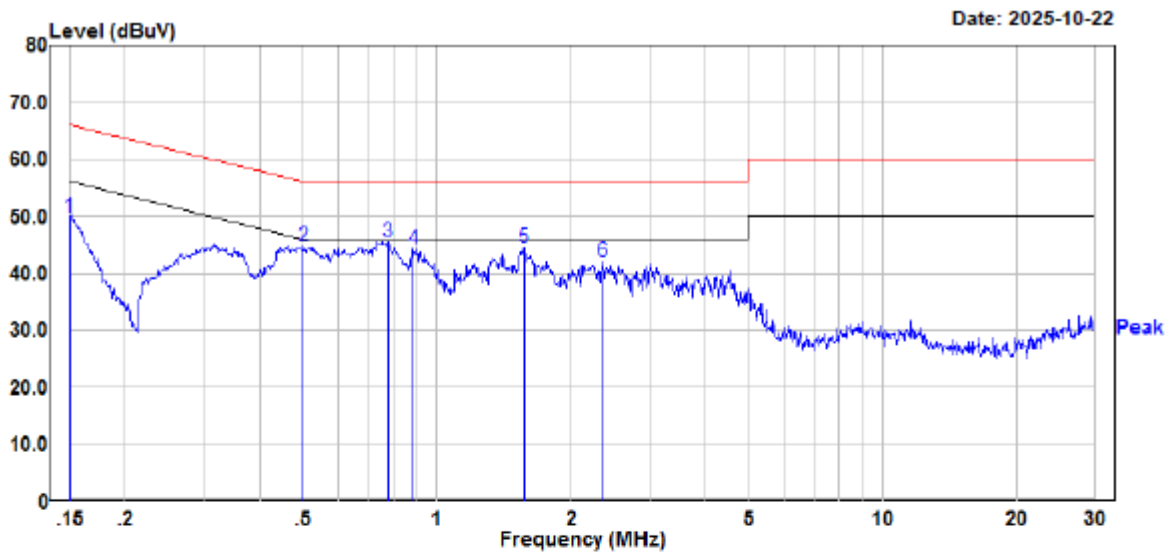
AC LINE CONDUCTED EMISSIONS

Environmental Conditions & Test Information

Test Date:	2025-10-22
Temperature:	20.8 °C
Relative Humidity:	51 %
ATM Pressure:	103.2 kPa
Test Result:	Pass
Test Engineer:	Jack He

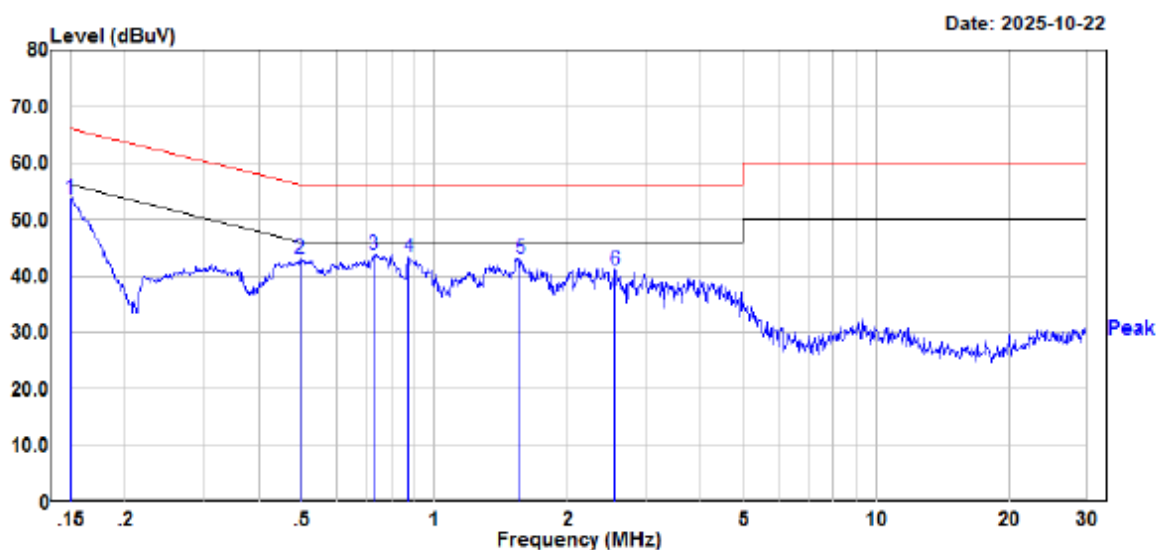
EUT operation mode: Transmitting in BLE (2 Mbps) low channel (maximum output power mode)

Line:



Site : CE
Condition : limit\FCC PART 15.207
Project No. : RKS250929008
Model : 9290042915
Phase : L
Voltage : 120V/60Hz
Mode : BLE 2M
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto
Temperature : 20.8℃
Humidity : 51%
Atmospheric pressure: 103.2kPa
Test Engineer : Jack He

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.150	29.47	20.41	49.88	66.00	-16.12 Peak
2	0.501	24.45	20.17	44.62	56.00	-11.38 Peak
3	0.777	25.18	20.23	45.41	56.00	-10.59 Peak
4	0.885	24.05	20.20	44.25	56.00	-11.75 Peak
5	1.569	24.18	20.25	44.43	56.00	-11.57 Peak
6	2.350	21.69	20.27	41.96	56.00	-14.04 Peak

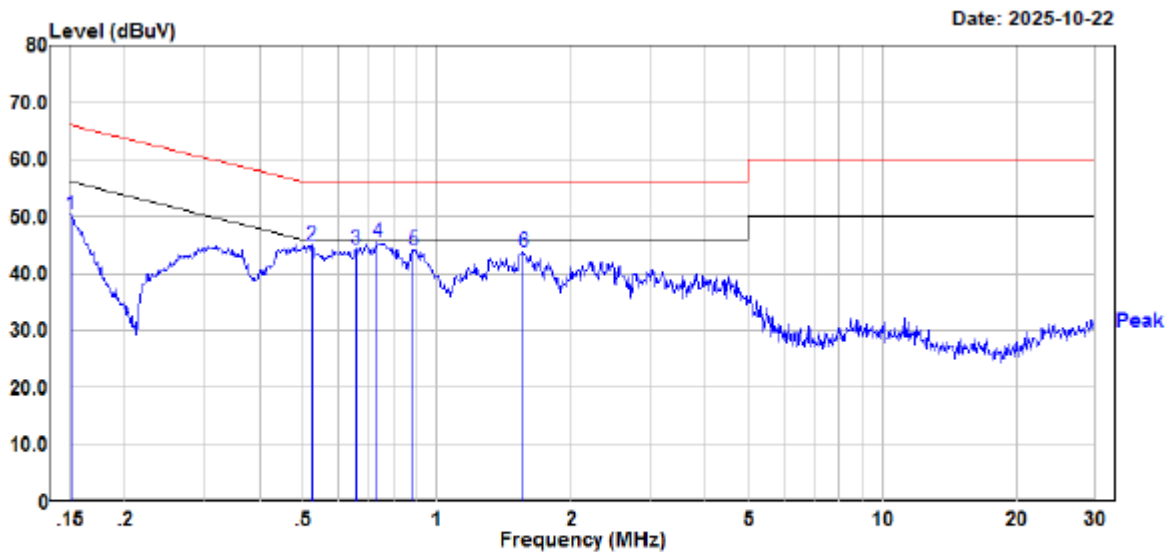
Neutral:

Site : CE
Condition : limit\FCC PART 15.207
: DET:Peak
Project No. : RKS250929008
Model : 9290042915
Phase : N
Voltage : 120V/60Hz
Mode : BLE 2M
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto
Temperature : 20.8℃
Humidity : 51%
Atmospheric pressure: 103.2kPa
Test Engineer : Jack He

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	33.38	20.39	53.77	66.00	-12.23	Peak
2	0.496	22.78	20.21	42.99	56.06	-13.07	Peak
3	0.728	23.61	20.23	43.84	56.00	-12.16	Peak
4	0.871	23.16	20.20	43.36	56.00	-12.64	Peak
5	1.561	22.87	20.23	43.10	56.00	-12.90	Peak
6	2.557	20.90	20.26	41.16	56.00	-14.84	Peak

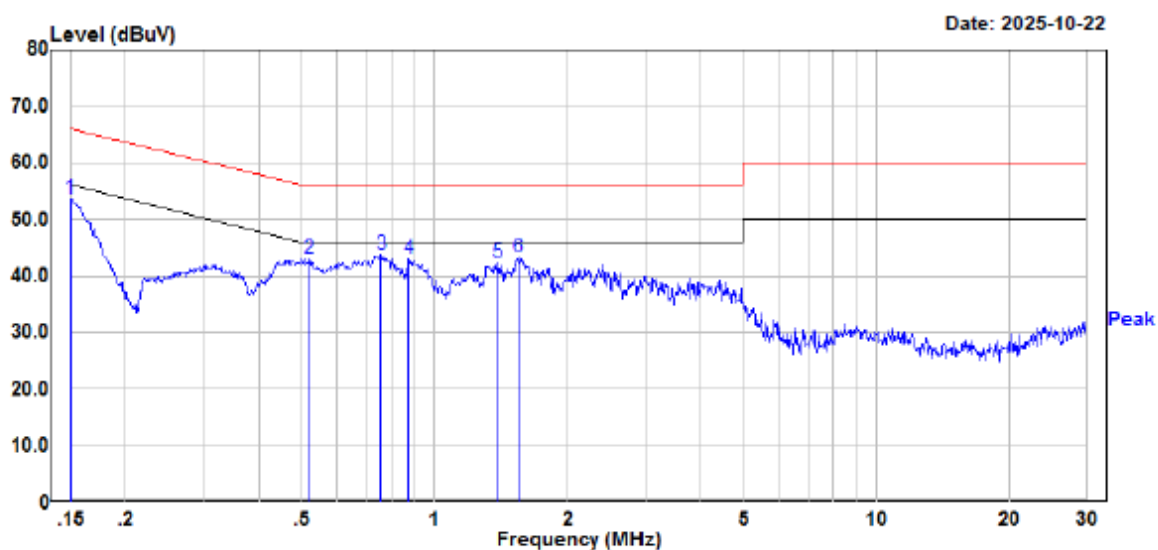
EUT operation mode: Transmitting in Zigbee low channel (maximum output power mode)

Line:



Site : CE
 Condition : limit\FCC PART 15.207
 : DET:Peak
 Project No. : RKS250929008
 Model : 9290042915
 Phase : L
 Voltage : 120V/60Hz
 Mode : ZigBee
 Test Equipment : ENV216,ESR3
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto
 Temperature : 20.8℃
 Humidity : 51%
 Atmospheric pressure: 103.2kPa
 Test Engineer : Jack He

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	29.99	20.41	50.40	65.96	-15.56	Peak
2	0.524	24.70	20.18	44.88	56.00	-11.12	Peak
3	0.659	23.90	20.24	44.14	56.00	-11.86	Peak
4	0.736	25.25	20.25	45.50	56.00	-10.50	Peak
5	0.885	23.89	20.20	44.09	56.00	-11.91	Peak
6	1.561	23.60	20.24	43.84	56.00	-12.16	Peak

Neutral:

Site : CE
 Condition : limit\FCC PART 15.207
 : DET:Peak
 Project No. : RKS250929008
 Model : 9290042915
 Phase : N
 Voltage : 120V/60Hz
 Mode : ZigBee
 Test Equipment : ENV216,ESR3
 Receiver Setting : RBW: 9 kHz, VBW: 30 kHz, Sweep Time: Auto
 Temperature : 20.8℃
 Humidity : 51%
 Atmospheric pressure: 103.2kPa
 Test Engineer : Jack He

	Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.150	33.34	20.39	53.73	66.00	-12.27 Peak
2	0.519	22.88	20.21	43.09	56.00	-12.91 Peak
3	0.758	23.44	20.23	43.67	56.00	-12.33 Peak
4	0.871	22.81	20.20	43.01	56.00	-12.99 Peak
5	1.385	22.11	20.22	42.33	56.00	-13.67 Peak
6	1.546	23.03	20.23	43.26	56.00	-12.74 Peak

SPURIOUS EMISSIONS**Environmental Conditions & Test Information**

Frequency Range:	9kHz - 1GHz	1GHz-18GHz	18 GHz - 25 GHz
Test Date:	2025-10-20 to 2025-10-21	2025-10-23 to 2025-10-24	2025-10-30
Temperature:	22.2-26 °C	21.1-21.7 °C	26 °C
Relative Humidity:	50-54 %	49-50 %	54 %
ATM Pressure:	100.5-103.1 kPa	103.0 kPa	100.5 kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Scarf Yang	Destine Hu	Hugh Wu

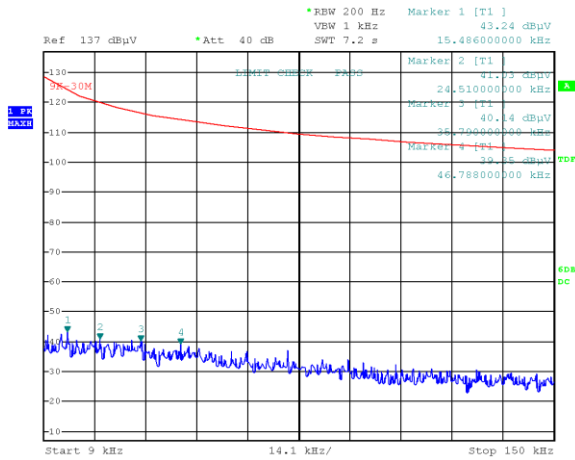
Test Result: Compliant.

EUT operation mode: Transmitting

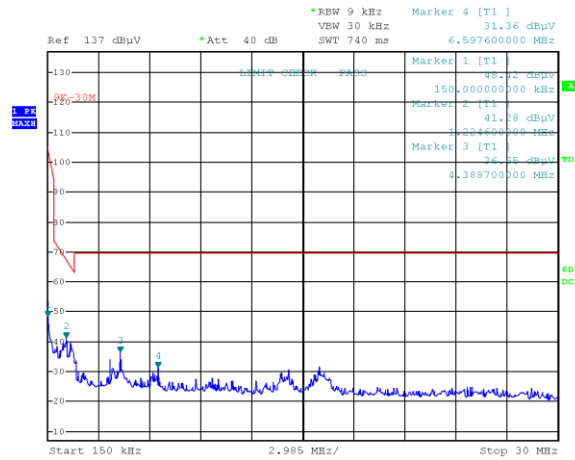
After pre-scan in the X, Y and Z axes of orientation, the worst case in the Y axes of orientation is below:

9 kHz-30MHz: Transmitting in maximum output power mode BLE (125 kbps) low channel
Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No.RKS250929008
 Date: 21.OCT.2025 11:49:19

Tester:Scarfe Yang

Project No.RKS250929008
 Date: 21.OCT.2025 11:57:34

Tester:Scarfe Yang

9 kHz-150 kHz

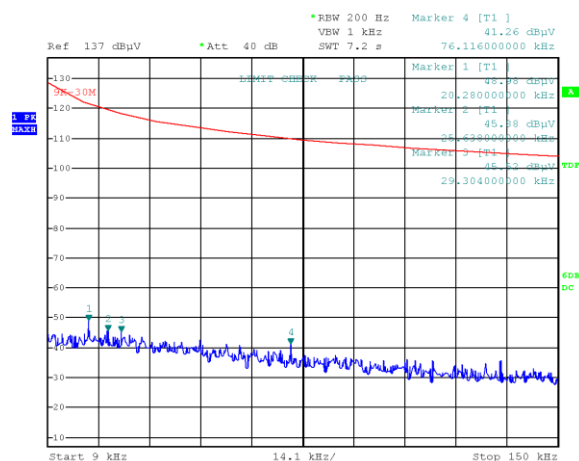
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.024510	41.03	PK	-0.58	119.82	78.79
0.015486	43.24	PK	-0.54	123.81	80.57
0.035790	40.14	PK	-1.54	116.53	76.39
0.046788	39.35	PK	-3.3	114.2	74.85

150 kHz-30 MHz

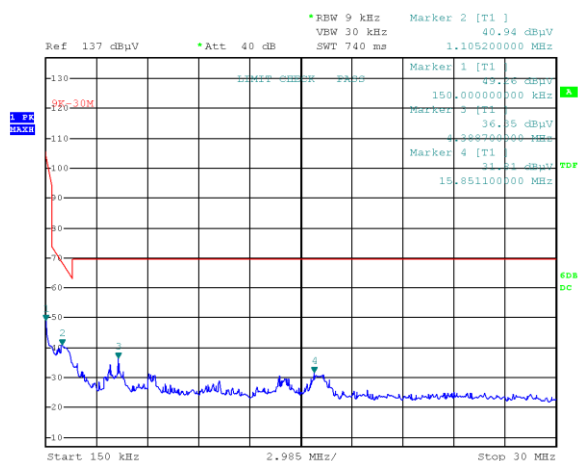
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	48.42	PK	-11.34	104.08	55.66
1.224600	41.28	PK	-28.35	65.84	24.56
4.388700	36.65	PK	-31.97	69.54	32.89
6.597600	31.36	PK	-32.30	69.54	38.18

9 kHz-30MHz: Transmitting in maximum output power mode BLE (500 kbps) low channel
Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No.RKS250929008

Tester:Scarfe Yang

Date: 21.OCT.2025 19:05:36

Project No.RKS250929008

Tester:Scarfe Yang

Date: 21.OCT.2025 19:15:11

9 kHz-150 kHz

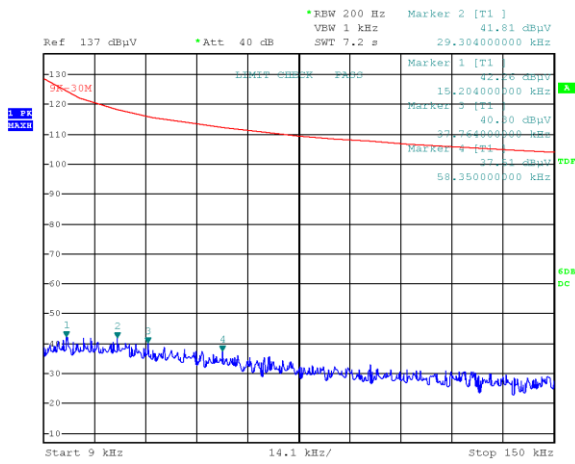
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.020280	48.98	PK	-0.56	121.46	72.48
0.025638	45.88	PK	-0.59	119.43	73.55
0.029304	45.52	PK	-0.61	118.27	72.75
0.076116	41.26	PK	-6.86	109.97	68.71

150 kHz-30 MHz

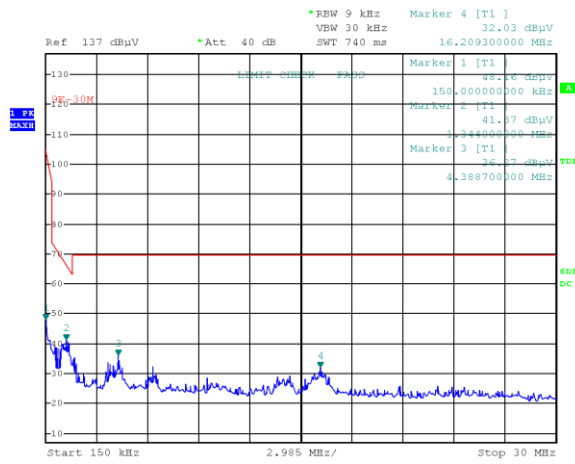
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	49.26	PK	-11.34	104.08	54.82
1.105200	40.94	PK	-27.96	66.74	25.80
4.388700	36.35	PK	-31.97	69.54	33.19
15.851100	31.81	PK	-33.20	69.54	37.73

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

9kHz-150kHz



150kHz-30MHz



Project No.RKS250929008
Date: 21.OCT.2025 11:29:27

Tester:Scarfe Yang

Project No.RKS250929008
Date: 21.OCT.2025 11:33:42

Tester:Scarfe Yang

9 kHz-150 kHz

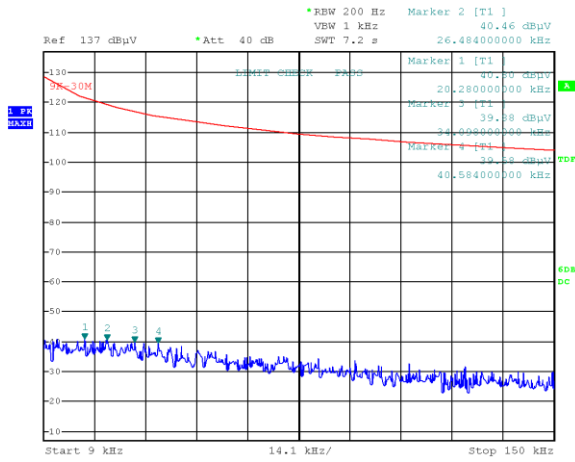
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.015204	42.26	PK	-0.54	123.97	81.71
0.029304	41.81	PK	-0.61	118.27	76.46
0.037764	40.30	PK	-1.85	116.06	75.76
0.058350	37.51	PK	-4.78	112.28	74.77

150 kHz-30 MHz

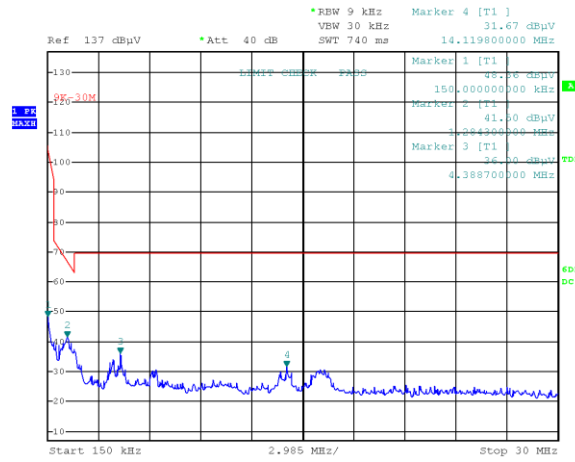
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	48.16	PK	-11.34	104.08	55.92
1.344000	41.37	PK	-28.75	65.04	23.67
4.388700	36.27	PK	-31.97	69.54	33.27
16.209300	32.03	PK	-33.20	69.54	37.51

9 kHz-30MHz: Transmitting in maximum output power mode BLE (2 Mbps) low channel
Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No.RKS250929008
 Date: 21.OCT.2025 11:40:18

Tester:Scarfe Yang

Project No.RKS250929008
 Date: 21.OCT.2025 11:44:01

Tester:Scarfe Yang

9 kHz-150 kHz

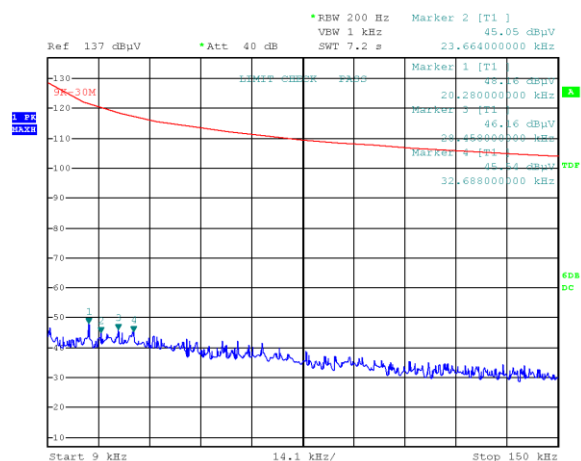
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.020280	40.80	PK	-0.56	121.46	80.66
0.026484	40.46	PK	-0.59	119.14	78.68
0.034098	39.88	PK	-1.27	116.95	77.07
0.040584	39.58	PK	-2.3	115.44	75.86

150 kHz-30 MHz

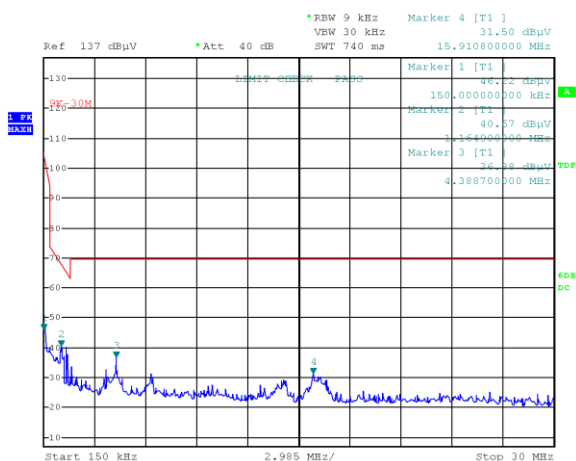
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	48.36	PK	-11.34	104.08	55.72
1.284300	41.50	PK	-28.55	65.43	23.93
4.388700	36.00	PK	-31.97	69.54	33.54
14.119800	31.67	PK	-33.12	69.54	37.87

9 kHz-30MHz: Transmitting in maximum output power mode Zigbee low channel
Parallel(worst case)

9kHz-150kHz



150kHz-30MHz



Project No.RKS250929008
 Date: 21.OCT.2025 19:21:09

Tester:Scarfe Yang

Project No.RKS250929008
 Date: 21.OCT.2025 19:26:45

Tester:Scarfe Yang

9 kHz-150 kHz

Frequency (MHz)	Corrected Amplitude (dBuV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBuV/m) @3m	Margin (dB)
0.02028	48.16	PK	-0.56	121.46	73.3
0.028458	46.16	PK	-0.6	118.52	72.36
0.023664	45.05	PK	-0.58	120.12	75.07
0.032688	45.54	PK	-1.04	117.32	71.78

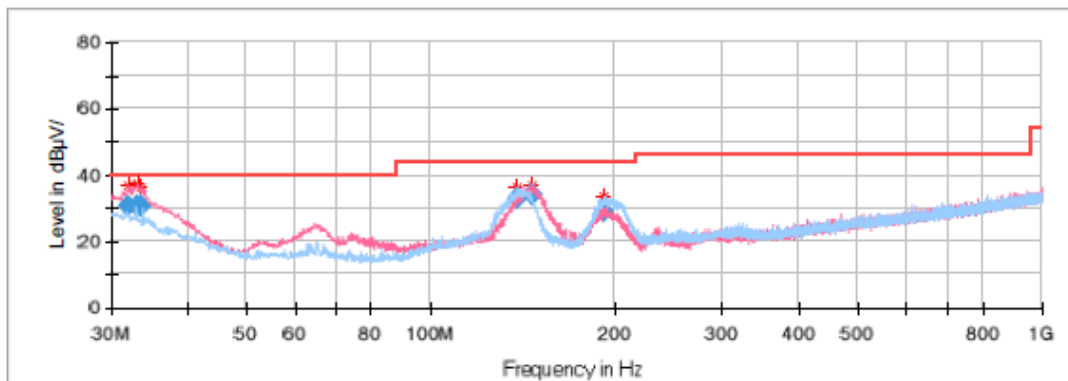
150 kHz-30 MHz

Frequency (MHz)	Corrected Amplitude (dBuV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBuV/m) @3m	Margin (dB)
0.150000	46.22	PK	-11.34	104.08	57.86
1.164900	40.67	PK	-28.15	66.28	25.61
4.388700	36.88	PK	-31.97	69.54	32.66
15.910800	31.50	PK	-33.21	69.54	38.04

30 MHz-1 GHz (Transmitting in BLE (2 Mbps) low channel (maximum output power mode)):
Low Channel: 2402 MHz

Common Information

Project No: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 2M 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: 22.2℃
Humidity: 54%
Barometric Pressure: 103.1kPa
Test Engineer: Scarf Yang
Test Date: 2025/10/20



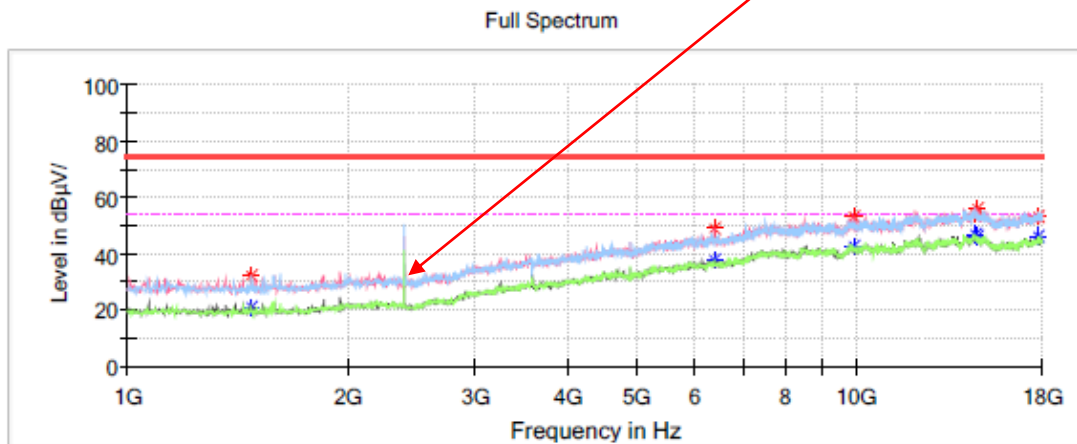
Final Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
32.061250	30.70	40.00	9.30	V	-6.7
33.152500	30.63	40.00	9.37	V	-6.7
33.637500	30.55	40.00	9.45	V	-6.9
138.276250	32.86	43.50	10.64	H	-11.2
146.521250	33.96	43.50	9.54	V	-11.5
192.353750	29.18	43.50	14.32	H	-12.4

1GHz-18GHz (BLE (125 kbps)):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE 125K 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:	21.7°C
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

Fundamental test with
Band Reject Filter

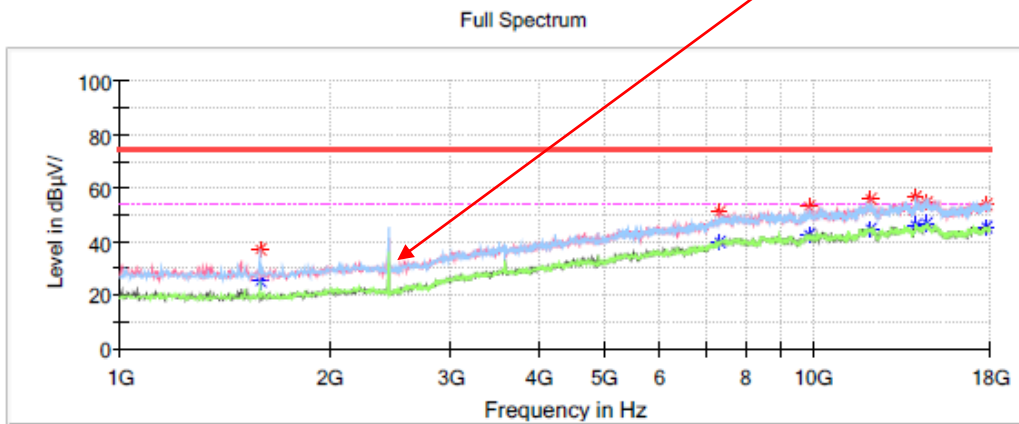
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1479.400000	---	20.64	54.00	33.36	V	-13.5
1479.400000	32.03	---	74.00	41.97	V	-13.5
6382.200000	49.08	---	74.00	24.92	V	-0.8
6382.200000	---	37.57	54.00	16.43	V	-0.8
9935.200000	---	42.44	54.00	11.56	H	6.2
9935.200000	53.30	---	74.00	20.70	H	6.2
14559.200000	---	47.00	54.00	7.00	V	11.8
14559.200000	53.71	---	74.00	20.29	V	11.8
14640.800000	---	45.87	54.00	8.13	V	11.5
14640.800000	56.06	---	74.00	17.94	V	11.5
17796.000000	---	45.89	54.00	8.11	H	11.2
17796.000000	53.07	---	74.00	20.93	H	11.2

Middle Channel: 2440 MHz**Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE 125K 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:	21.7℃
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

Fundamental test with
Band Reject Filter

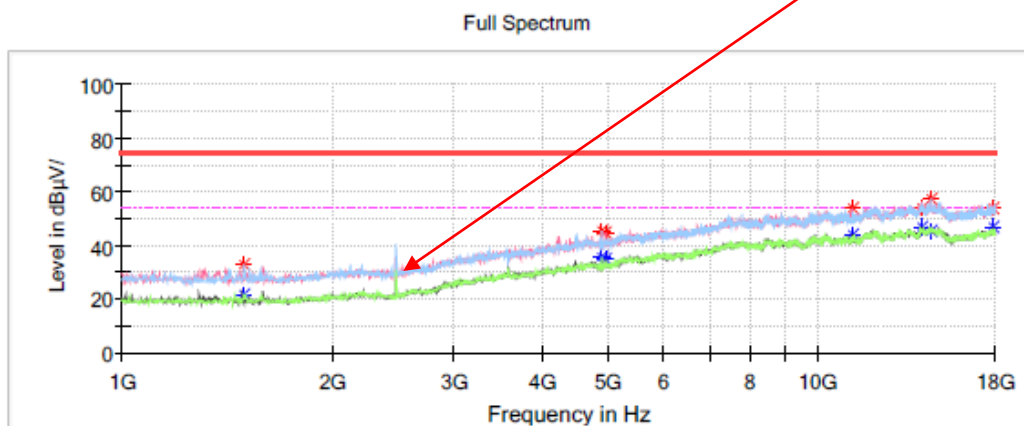
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1591.600000	36.78	---	74.00	37.22	H	-12.8
1591.600000	---	25.46	54.00	28.54	H	-12.8
7320.600000	---	40.14	54.00	13.86	V	2.4
7320.600000	50.92	---	74.00	23.08	V	2.4
9836.600000	53.41	---	74.00	20.59	V	5.9
9836.600000	---	42.82	54.00	11.18	V	5.9
12080.600000	---	44.65	54.00	9.35	V	9.0
12080.600000	56.19	---	74.00	17.81	V	9.0
14052.600000	56.57	---	74.00	17.43	H	11.2
14052.600000	---	46.15	54.00	7.85	H	11.2
14583.000000	54.77	---	74.00	19.23	V	11.7
14583.000000	---	46.70	54.00	7.30	V	11.7
17816.400000	53.53	---	74.00	20.47	H	11.3
17816.400000	---	45.51	54.00	8.49	H	11.3

High Channel: 2480 MHz**Common Information**

Project No.: RKSB250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 125K 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: 21.7°C
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

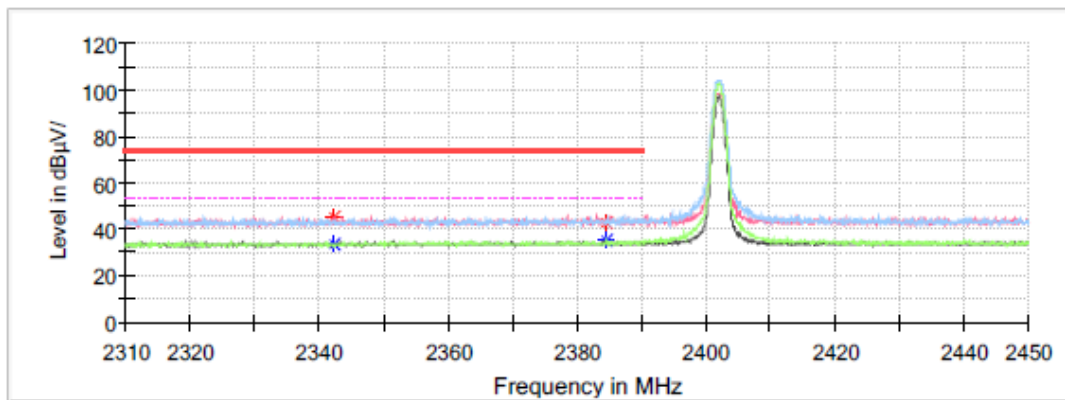
Fundamental test with
Band Reject Filter

**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)
1499.800000	---	21.85	54.00	32.15	H	-13.4
1499.800000	33.09	---	74.00	40.91	H	-13.4
4899.800000	---	35.97	54.00	18.03	H	-3.2
4899.800000	45.56	---	74.00	28.44	H	-3.2
4957.600000	---	34.72	54.00	19.28	V	-3.0
4957.600000	44.46	---	74.00	29.54	V	-3.0
11257.800000	---	43.98	54.00	10.02	V	7.4
11257.800000	53.52	---	74.00	20.48	V	7.4
14124.000000	53.85	---	74.00	20.15	V	11.3
14124.000000	---	47.05	54.00	6.95	V	11.3
14603.400000	57.67	---	74.00	16.33	H	11.6
14603.400000	---	45.59	54.00	8.41	H	11.6
17843.600000	53.66	---	74.00	20.34	V	11.3
17843.600000	---	46.59	54.00	7.41	V	11.3

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

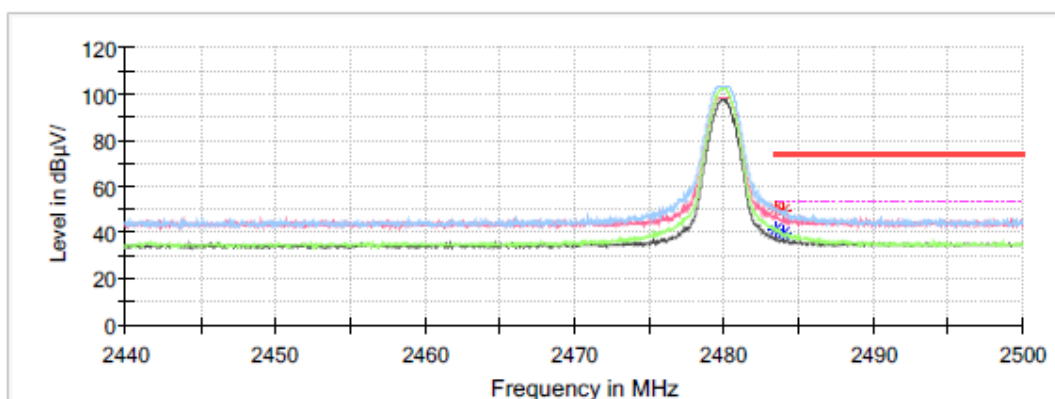
Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 125K Low Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 21.7℃
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

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)
2342.368000	---	33.44	54.00	20.56	V	0.2
2342.368000	45.64	---	74.00	28.36	V	0.2
2384.592000	---	35.19	54.00	18.81	H	0.2
2384.592000	43.08	---	74.00	30.92	H	0.2

Right Side**Common Information**

Project No.: RKSB250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 125K 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: 21.7℃
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

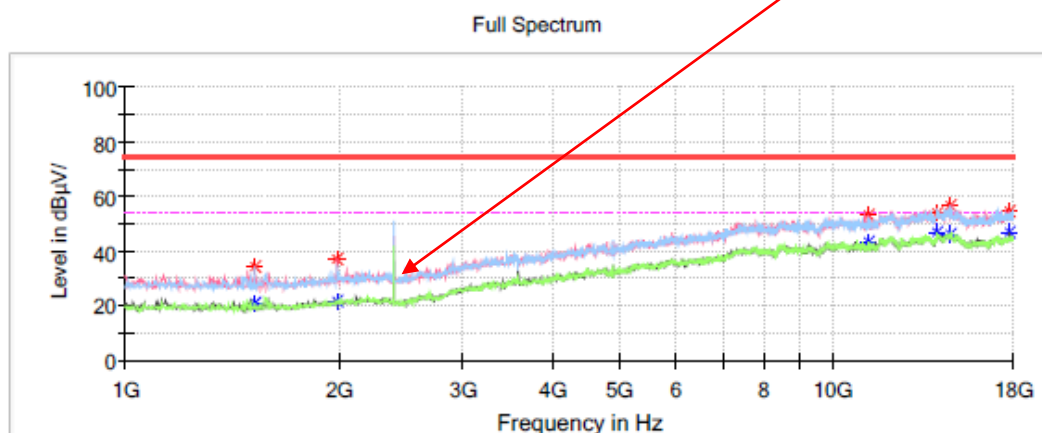
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.512000	---	41.17	54.00	12.83	H	0.4
2483.512000	50.27	---	74.00	23.73	H	0.4
2483.992000	---	39.51	54.00	14.49	H	0.4
2483.992000	49.57	---	74.00	24.43	H	0.4

1GHz-18GHz (BLE (500 kbps)):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE 500K 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:	21.7℃
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

Fundamental test with
Band Reject Filter

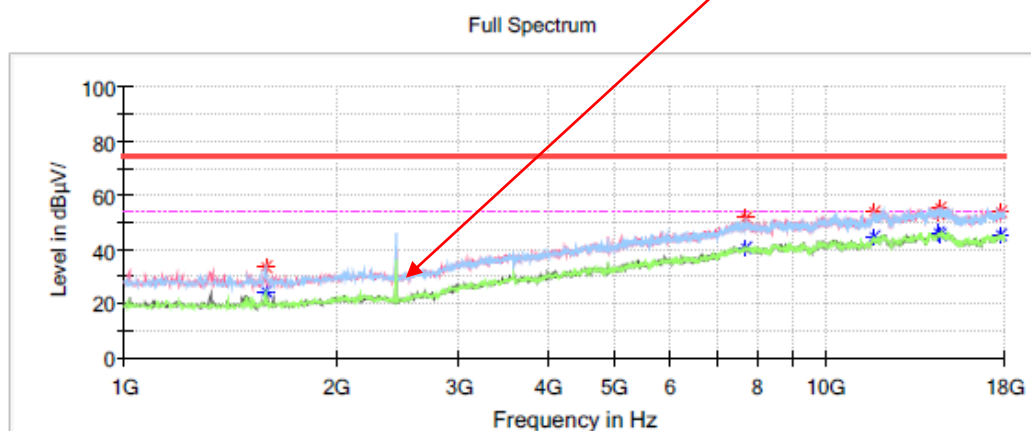
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1523.600000	---	21.08	54.00	32.92	H	-13.3
1523.600000	34.47	---	74.00	39.53	H	-13.3
1989.400000	36.73	---	74.00	37.27	V	-10.1
1989.400000	---	21.88	54.00	32.12	V	-10.1
11213.600000	---	43.28	54.00	10.72	V	7.3
11213.600000	53.18	---	74.00	20.82	V	7.3
14015.200000	54.15	---	74.00	19.85	H	11.1
14015.200000	---	46.85	54.00	7.15	H	11.1
14623.800000	56.68	---	74.00	17.32	H	11.6
14623.800000	---	45.95	54.00	8.05	H	11.6
17775.600000	54.40	---	74.00	19.60	V	11.2
17775.600000	---	46.51	54.00	7.49	V	11.2

Middle Channel: 2440 MHz**Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE 500K 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:	21.7℃
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

Fundamental test with
Band Reject Filter

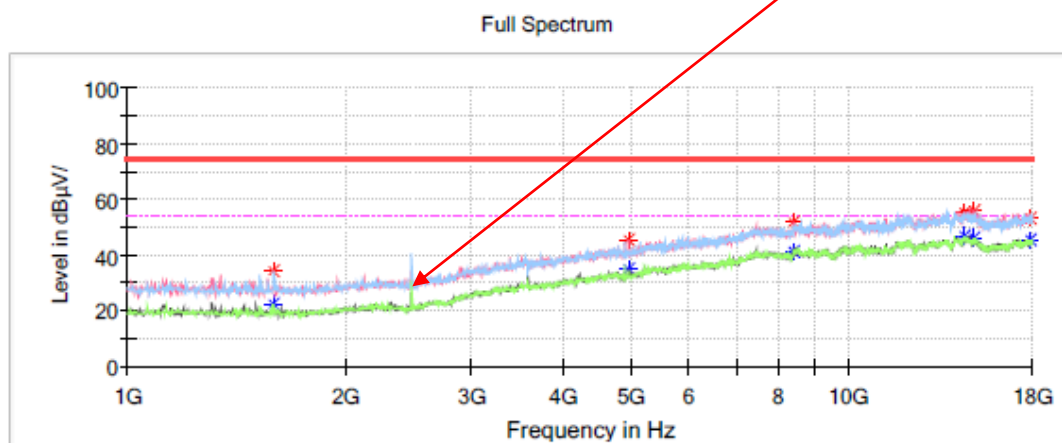
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1588.200000	---	24.64	54.00	29.36	H	-12.8
1588.200000	33.90	---	74.00	40.10	H	-12.8
7701.400000	---	40.49	54.00	13.51	H	3.1
7701.400000	51.75	---	74.00	22.25	H	3.1
11747.400000	53.84	---	74.00	20.16	V	8.6
11747.400000	---	44.51	54.00	9.49	V	8.6
14477.600000	53.45	---	74.00	20.55	V	11.9
14477.600000	---	46.47	54.00	7.53	V	11.9
14600.000000	55.45	---	74.00	18.55	H	11.6
14600.000000	---	45.72	54.00	8.28	H	11.6
17799.400000	53.79	---	74.00	20.21	H	11.2
17799.400000	---	45.68	54.00	8.32	H	11.2

High Channel: 2480 MHz**Common Information**

Project No.:	RKSB250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE 500K 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:	21.7°C
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

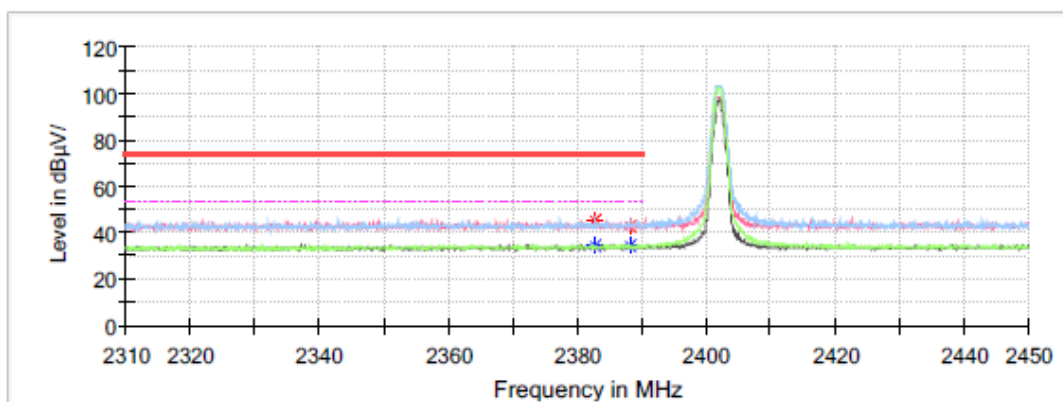
Fundamental test with
Band Reject Filter

**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)
1595.000000	---	22.55	54.00	31.45	H	-12.8
1595.000000	34.54	---	74.00	39.46	H	-12.8
4961.000000	---	34.71	54.00	19.29	V	-3.0
4961.000000	45.43	---	74.00	28.57	V	-3.0
8405.200000	---	41.55	54.00	12.45	H	4.4
8405.200000	51.47	---	74.00	22.53	H	4.4
14457.200000	---	46.81	54.00	7.19	H	11.9
14457.200000	54.90	---	74.00	19.10	H	11.9
14980.800000	56.01	---	74.00	17.99	V	10.3
14984.200000	---	46.25	54.00	7.75	V	10.3
17850.400000	---	45.65	54.00	8.35	V	11.4
17850.400000	53.01	---	74.00	20.99	V	11.4

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

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 500K 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: 21.7℃
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

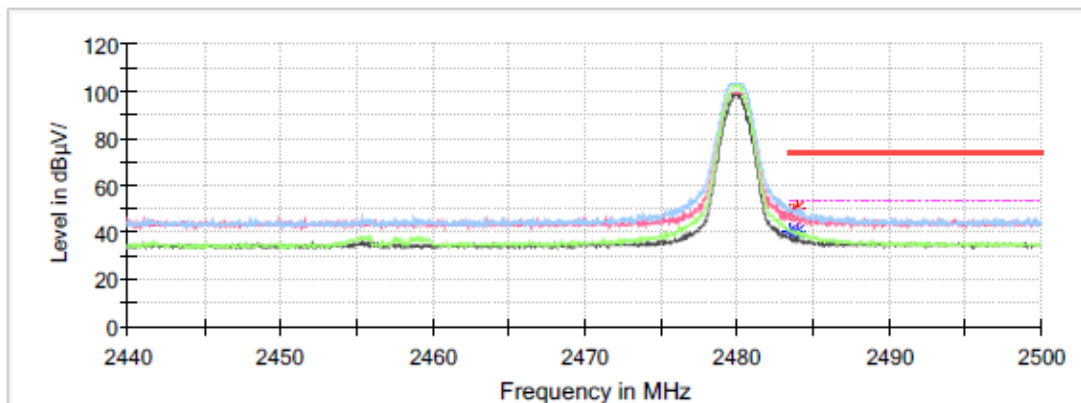
Full Spectrum**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2382.744000	45.44	---	74.00	28.56	V	0.2
2382.744000	---	34.26	54.00	19.74	V	0.2
2388.288000	43.08	---	74.00	30.92	H	0.2
2388.288000	---	34.80	54.00	19.20	H	0.2

Right Side**Common Information**

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE 500K 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: 21.7℃
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

Full Spectrum

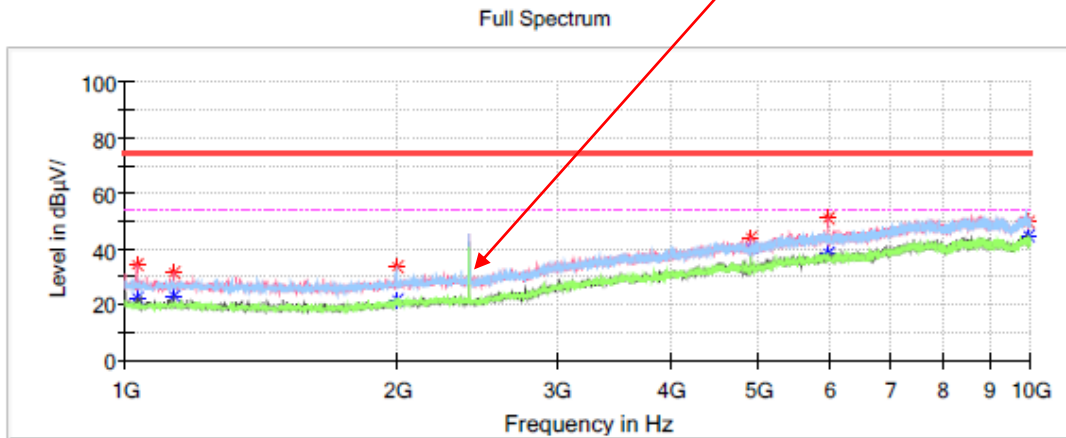
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.512000	48.85	---	74.00	25.15	H	0.4
2483.512000	---	40.64	54.00	13.36	H	0.4
2483.968000	50.30	---	74.00	23.70	H	0.4
2483.968000	---	40.64	54.00	13.36	H	0.4

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

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE-1M 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:	21.1°C
Humidity:	49%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/24

Fundamental test with
Band Reject Filter

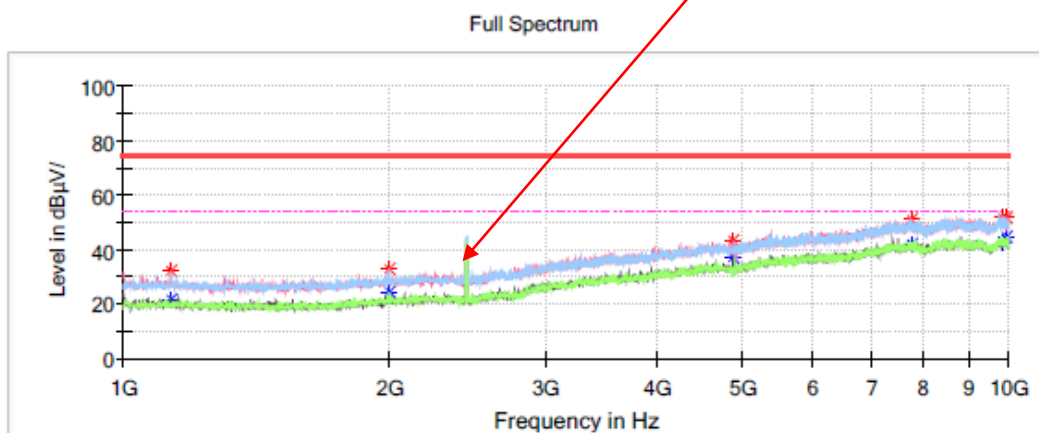
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1027.900000	---	22.52	54.00	31.48	V	-15.1
1027.900000	33.99	---	74.00	40.01	V	-15.1
1130.500000	---	23.05	54.00	30.95	V	-14.7
1130.500000	31.57	---	74.00	42.43	V	-14.7
1995.400000	---	21.56	54.00	32.44	H	-10.0
1995.400000	33.79	---	74.00	40.21	H	-10.0
4900.600000	---	40.47	54.00	13.53	V	-3.2
4900.600000	44.10	---	74.00	29.90	V	-3.2
5988.700000	---	38.33	54.00	15.67	V	-0.6
5988.700000	50.94	---	74.00	23.06	V	-0.6
9933.400000	49.82	---	74.00	24.18	V	6.2
9933.400000	---	44.91	54.00	9.09	V	6.2

Middle Channel: 2440 MHz**Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE-1M 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:	21.1°C
Humidity:	49%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/24

Fundamental test with
Band Reject Filter

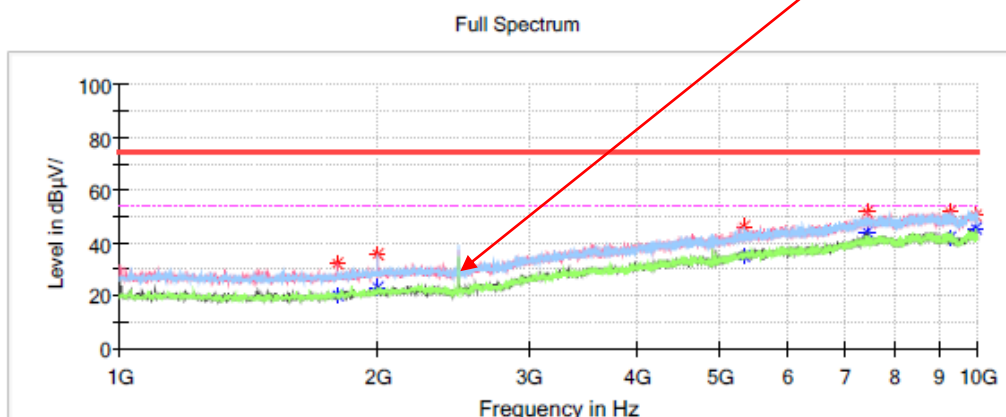
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1128.700000	---	21.52	54.00	32.48	V	-14.8
1128.700000	32.06	---	74.00	41.94	V	-14.8
1999.000000	---	24.30	54.00	29.70	H	-10.0
1999.000000	32.89	---	74.00	41.11	H	-10.0
4879.900000	---	37.07	54.00	16.93	V	-3.2
4879.900000	43.09	---	74.00	30.91	V	-3.2
7761.700000	---	42.24	54.00	11.76	H	3.1
7761.700000	50.82	---	74.00	23.18	H	3.1
9832.600000	52.09	---	74.00	21.91	V	5.8
9832.600000	---	42.84	54.00	11.16	V	5.8
9943.300000	51.71	---	74.00	22.29	H	6.2
9943.300000	---	44.95	54.00	9.05	H	6.2

High Channel: 2480 MHz**Common Information**

Project No.: RKSB250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-1M 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: 21.1℃
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

Fundamental test with
Band Reject Filter

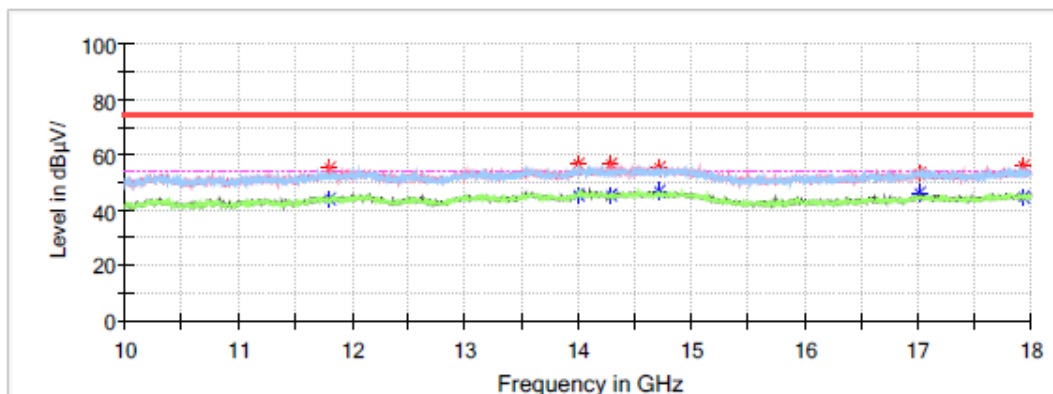
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1792.900000	---	20.56	54.00	33.44	V	-11.4
1792.900000	32.10	---	74.00	41.90	V	-11.4
1994.500000	---	23.24	54.00	30.76	H	-10.0
1994.500000	35.47	---	74.00	38.53	H	-10.0
5333.500000	---	35.04	54.00	18.96	V	-2.1
5333.500000	45.92	---	74.00	28.08	V	-2.1
7440.400000	---	43.96	54.00	10.04	V	2.8
7440.400000	51.46	---	74.00	22.54	V	2.8
9270.100000	---	41.74	54.00	12.26	H	4.7
9270.100000	51.94	---	74.00	22.06	H	4.7
9933.400000	50.29	---	74.00	23.71	V	6.2
9933.400000	---	45.11	54.00	8.89	V	6.2

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

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-1M 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: 21.1℃
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

Full Spectrum

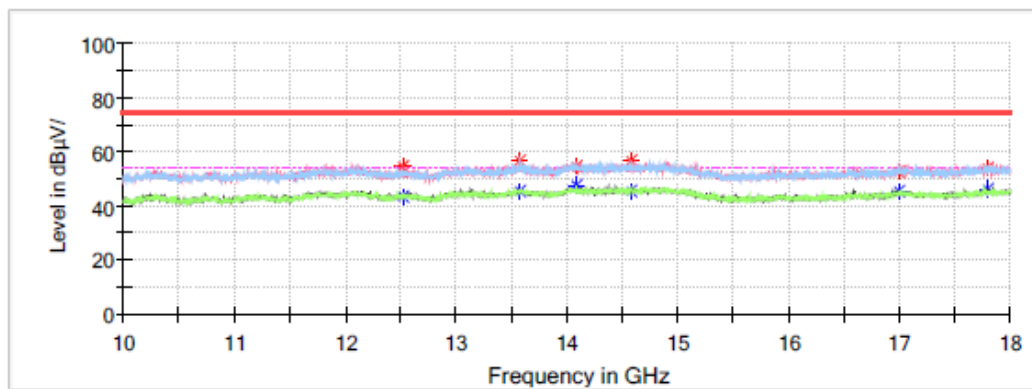
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
11811.200000	55.29	---	74.00	18.71	V	8.7
11811.200000	---	44.29	54.00	9.71	V	8.7
14004.800000	---	45.56	54.00	8.44	H	11.1
14004.800000	56.53	---	74.00	17.47	H	11.1
14288.000000	---	45.60	54.00	8.40	H	11.6
14288.000000	56.30	---	74.00	17.70	H	11.6
14721.600000	---	47.09	54.00	6.91	H	11.2
14721.600000	55.29	---	74.00	18.71	H	11.2
17016.000000	53.43	---	74.00	20.57	V	10.9
17016.000000	---	46.32	54.00	7.68	V	10.9
17936.000000	56.28	---	74.00	17.72	H	11.6
17936.000000	---	44.43	54.00	9.57	H	11.6

Middle Channel: 2440 MHz**Common Information**

Project No.: RKS250929008
 EUT Model: 9290042915
 Test Mode: Transmitting in BLE-1M 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: 21.1℃
 Humidity: 49%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/24

Full Spectrum

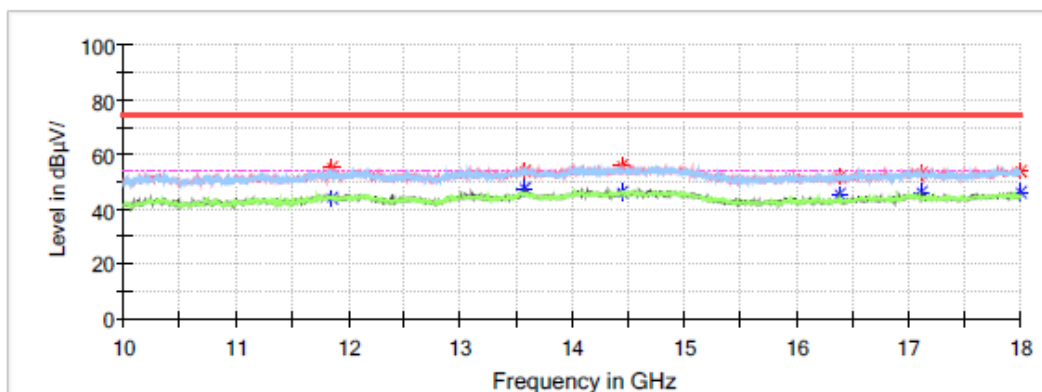
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
12521.600000	54.79	---	74.00	19.21	V	8.8
12521.600000	---	43.36	54.00	10.64	V	8.8
13582.400000	---	45.21	54.00	8.79	V	10.2
13582.400000	56.89	---	74.00	17.11	V	10.2
14089.600000	---	47.30	54.00	6.70	H	11.2
14089.600000	54.52	---	74.00	19.48	H	11.2
14572.800000	---	45.47	54.00	8.53	H	11.7
14572.800000	56.52	---	74.00	17.48	H	11.7
16992.000000	52.72	---	74.00	21.28	H	10.9
16992.000000	---	45.52	54.00	8.48	H	10.9
17800.000000	---	46.17	54.00	7.83	V	11.2
17800.000000	54.05	---	74.00	19.95	V	11.2

High Channel: 2480 MHz**Common Information**

Project No.: RKSB250929008
 EUT Model: 9290042915
 Test Mode: Transmitting in BLE-1M 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: 21.1℃
 Humidity: 49%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/24

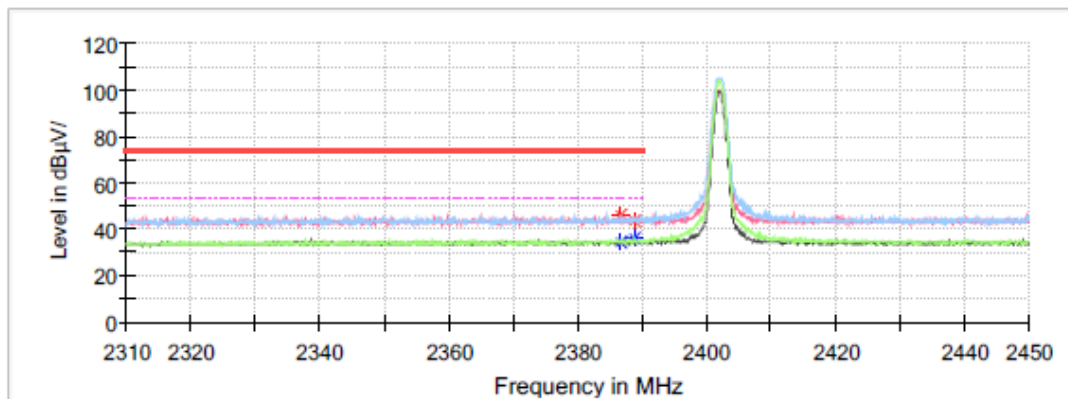
Full Spectrum

**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)
11849.600000	---	44.17	54.00	9.83	V	8.8
11849.600000	55.21	---	74.00	18.79	V	8.8
13568.000000	---	47.54	54.00	6.46	V	10.1
13568.000000	54.14	---	74.00	19.86	V	10.1
14440.000000	---	45.84	54.00	8.16	H	11.9
14440.000000	56.22	---	74.00	17.78	H	11.9
16376.000000	51.81	---	74.00	22.19	V	9.0
16376.000000	---	45.56	54.00	8.44	V	9.0
17118.400000	53.35	---	74.00	20.65	V	10.8
17118.400000	---	45.99	54.00	8.01	V	10.8
17996.800000	53.86	---	74.00	20.14	V	11.8
17996.800000	---	46.15	54.00	7.85	V	11.8

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

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-1M 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: 21.1°C
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

Full Spectrum**Critical Freqs**

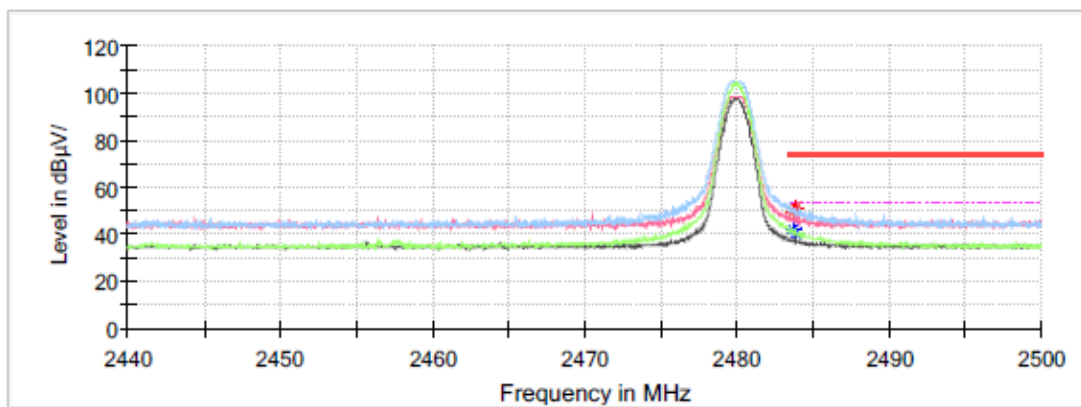
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2386.664000	---	34.77	54.00	19.23	H	0.2
2386.664000	45.89	---	74.00	28.11	H	0.2
2388.848000	---	35.79	54.00	18.21	H	0.2
2388.848000	43.87	---	74.00	30.13	H	0.2

Right Side

Common Information

Project No.: RKSB250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-1M 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: 21.1℃
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

Full Spectrum



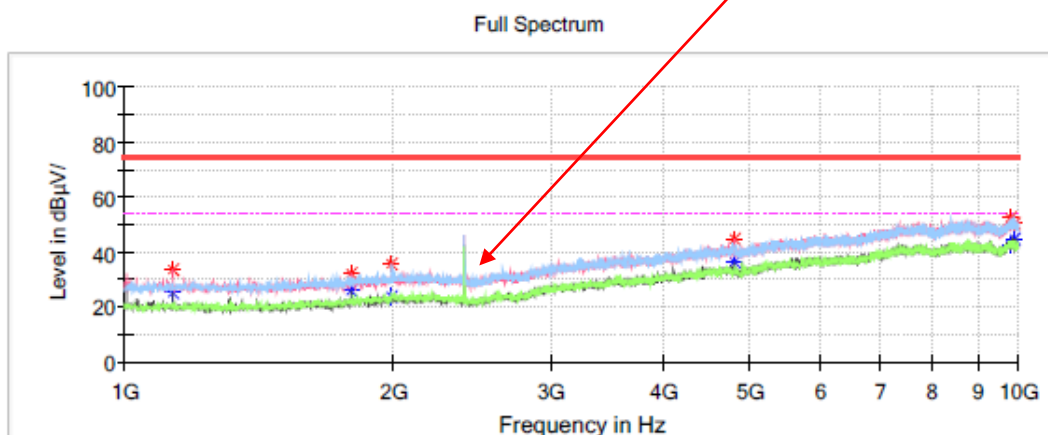
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.680000	49.73	---	74.00	24.27	H	0.4
2483.680000	---	42.16	54.00	11.84	H	0.4
2483.800000	51.52	---	74.00	22.48	H	0.4
2483.800000	---	40.68	54.00	13.32	H	0.4

1GHz-10GHz (BLE 2 Mbps):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE-2M 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:	21.1°C
Humidity:	49%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/24

Fundamental test with
Band Reject Filter

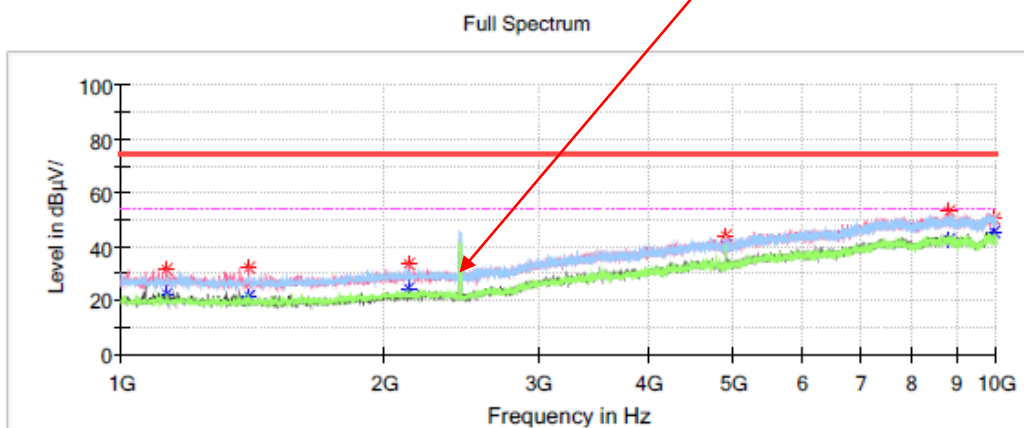
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.300000	---	25.45	54.00	28.55	V	-14.7
1132.300000	33.70	---	74.00	40.30	V	-14.7
1790.200000	---	25.87	54.00	28.13	V	-11.4
1790.200000	32.37	---	74.00	41.63	V	-11.4
1991.800000	---	23.69	54.00	30.31	H	-10.1
1991.800000	36.00	---	74.00	38.00	H	-10.1
4803.400000	---	36.48	54.00	17.52	V	-3.4
4803.400000	44.43	---	74.00	29.57	V	-3.4
9810.100000	52.24	---	74.00	21.76	H	5.8
9810.100000	---	42.80	54.00	11.20	H	5.8
9922.600000	50.20	---	74.00	23.80	V	6.1
9922.600000	---	44.80	54.00	9.20	V	6.1

Middle Channel: 2440 MHz**Common Information**

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-2M 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: 21.1°C
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

Fundamental test with
Band Reject Filter

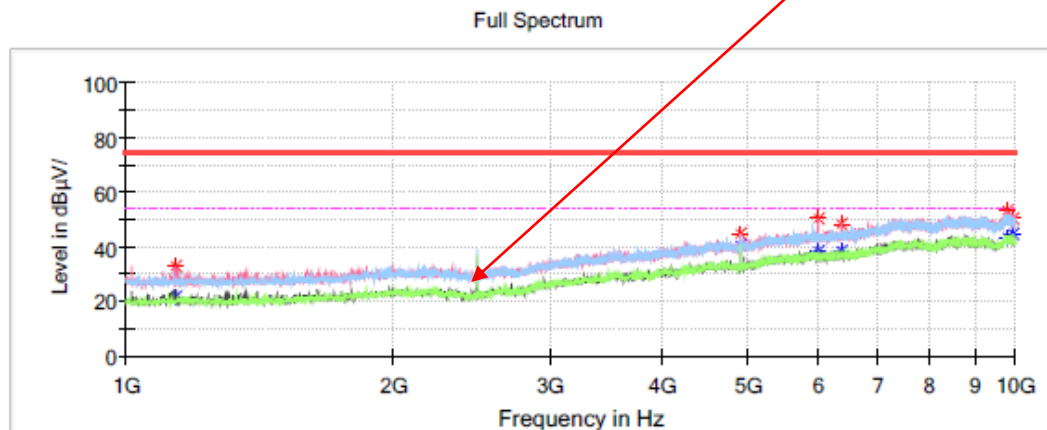
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1124.200000	---	22.21	54.00	31.79	V	-14.8
1124.200000	31.74	---	74.00	42.26	V	-14.8
1401.400000	---	21.75	54.00	32.25	V	-13.8
1401.400000	32.30	---	74.00	41.70	V	-13.8
2128.600000	---	24.31	54.00	29.69	V	-9.9
2128.600000	33.69	---	74.00	40.31	V	-9.9
4900.600000	---	40.38	54.00	13.62	H	-3.2
4900.600000	44.12	---	74.00	29.88	H	-3.2
8823.700000	53.06	---	74.00	20.94	V	4.7
8823.700000	---	43.00	54.00	11.00	V	4.7
9933.400000	50.08	---	74.00	23.92	H	6.2
9933.400000	---	45.16	54.00	8.84	H	6.2

High Channel: 2480 MHz**Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE-2M 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:	21.1°C
Humidity:	49%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/24

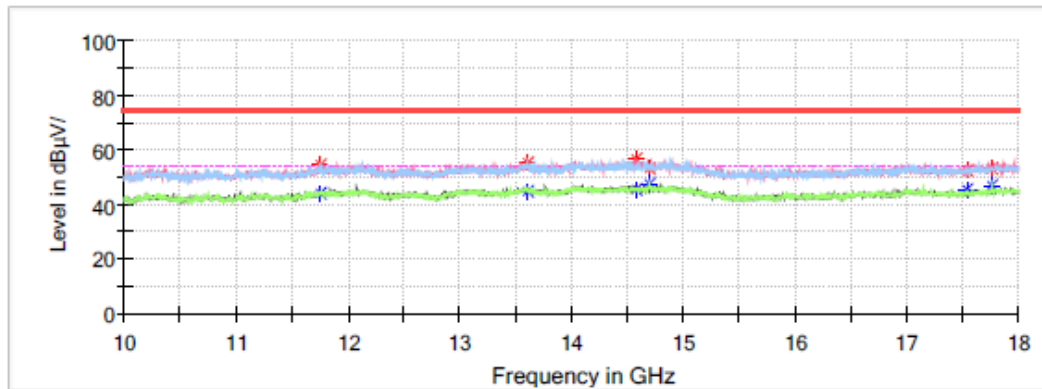
Fundamental test with
Band Reject Filter

**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)
1136.800000	---	21.52	54.00	32.48	V	-14.7
1136.800000	32.83	---	74.00	41.17	V	-14.7
4900.600000	---	40.55	54.00	13.45	H	-3.2
4900.600000	44.99	---	74.00	29.01	H	-3.2
5996.800000	---	38.34	54.00	15.66	V	-0.6
5996.800000	50.07	---	74.00	23.93	V	-0.6
6373.000000	---	38.55	54.00	15.45	V	-0.8
6373.000000	48.00	---	74.00	26.00	V	-0.8
9814.600000	52.83	---	74.00	21.17	V	5.8
9814.600000	---	43.63	54.00	10.37	V	5.8
9937.900000	50.30	---	74.00	23.70	H	6.2
9937.900000	---	44.55	54.00	9.45	H	6.2

10GHz-18GHz (BLE 2 Mbps):**Low Channel: 2402 MHz****Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in BLE-2M 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:	21.1℃
Humidity:	49%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/24

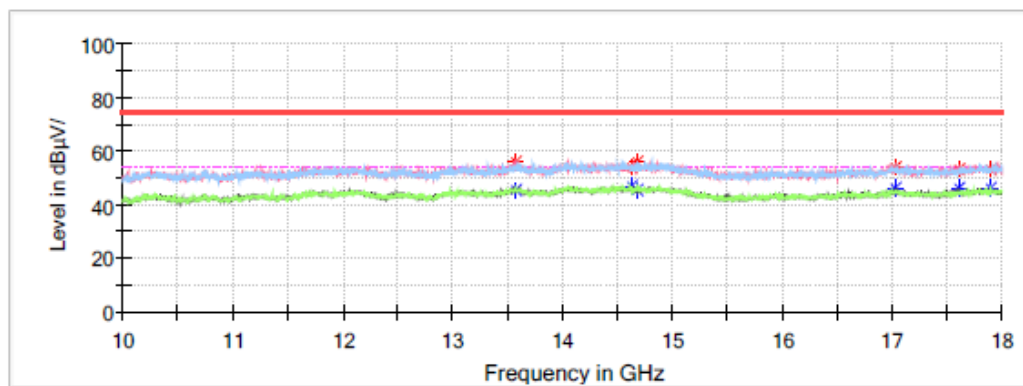
Full Spectrum**Critical Freqs**

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	---	43.84	54.00	10.16	V	8.6
11753.600000	54.38	---	74.00	19.62	V	8.6
13614.400000	---	45.07	54.00	8.93	H	10.2
13614.400000	55.31	---	74.00	18.69	H	10.2
14580.800000	56.83	---	74.00	17.17	V	11.7
14580.800000	---	45.60	54.00	8.40	V	11.7
14689.600000	53.41	---	74.00	20.59	H	11.3
14689.600000	---	47.29	54.00	6.71	H	11.3
17544.000000	---	45.76	54.00	8.24	V	10.5
17544.000000	52.29	---	74.00	21.71	V	10.5
17769.600000	53.04	---	74.00	20.96	H	11.1
17769.600000	---	46.54	54.00	7.46	H	11.1

Middle Channel: 2440 MHz**Common Information**

Project No.: RKS250929008
 EUT Model: 9290042915
 Test Mode: Transmitting in BLE-2M 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: 21.1℃
 Humidity: 49%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/24

Full Spectrum

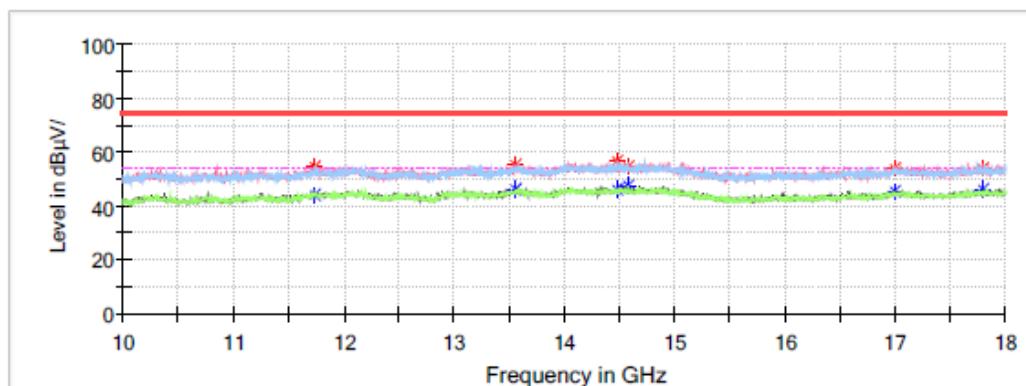
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
13582.400000	55.77	---	74.00	18.23	V	10.2
13582.400000	---	45.67	54.00	8.33	V	10.2
14628.800000	54.07	---	74.00	19.93	V	11.5
14628.800000	---	47.03	54.00	6.97	V	11.5
14683.200000	56.20	---	74.00	17.80	H	11.4
14683.200000	---	45.63	54.00	8.37	H	11.4
17025.600000	53.86	---	74.00	20.14	V	10.9
17025.600000	---	45.98	54.00	8.02	V	10.9
17604.800000	---	46.43	54.00	7.57	V	10.7
17604.800000	53.36	---	74.00	20.64	V	10.7
17905.600000	52.85	---	74.00	21.15	H	11.5
17905.600000	---	46.07	54.00	7.93	H	11.5

High Channel: 2480 MHz**Common Information**

Project No.: RKSB250929008
 EUT Model: 9290042915
 Test Mode: Transmitting in BLE-2M 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: 21.1℃
 Humidity: 49%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/24

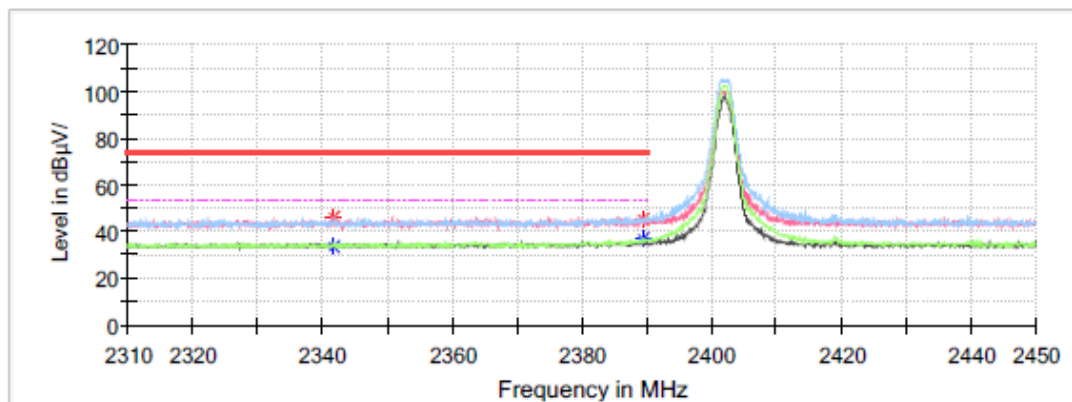
Full Spectrum

**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)
11734.400000	54.81	---	74.00	19.19	H	8.6
11734.400000	---	44.12	54.00	9.88	H	8.6
13560.000000	---	45.94	54.00	8.06	V	10.1
13560.000000	55.58	---	74.00	18.42	V	10.1
14480.000000	56.63	---	74.00	17.37	H	11.9
14480.000000	---	46.35	54.00	7.65	H	11.9
14582.400000	54.49	---	74.00	19.51	V	11.7
14582.400000	---	47.73	54.00	6.27	V	11.7
16993.600000	---	45.38	54.00	8.62	V	10.9
16993.600000	54.07	---	74.00	19.93	V	10.9
17800.000000	---	45.93	54.00	8.07	H	11.2
17800.000000	54.18	---	74.00	19.82	H	11.2

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

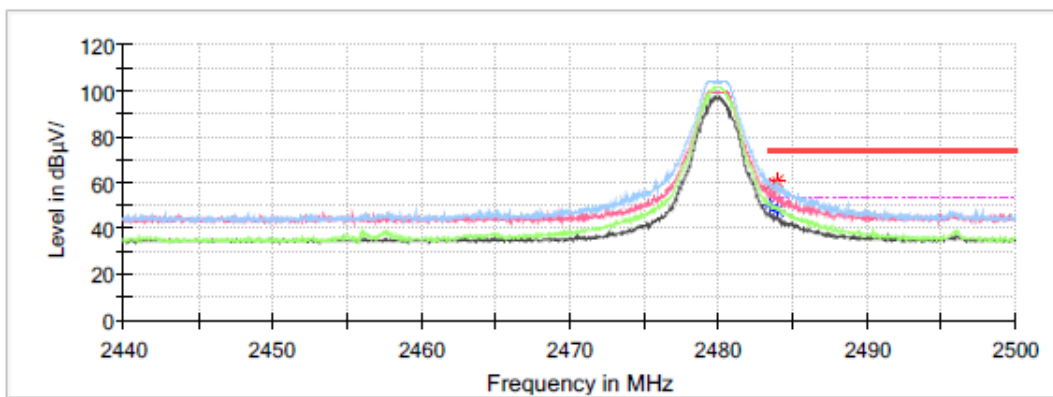
Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-2M Low Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 21.1℃
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

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)
2341.640000	---	33.98	54.00	20.02	V	0.2
2341.640000	46.16	---	74.00	27.84	V	0.2
2389.464000	---	36.81	54.00	17.19	H	0.2
2389.464000	45.59	---	74.00	28.41	H	0.2

Right Side**Common Information**

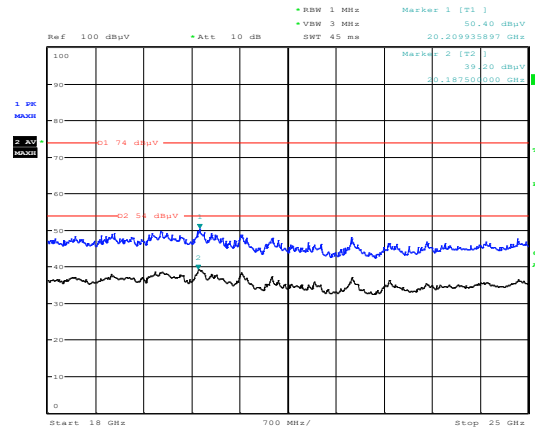
Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in BLE-2M High Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 21.1°C
Humidity: 49%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/24

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)
2483.512000	58.22	---	74.00	15.78	H	0.4
2483.512000	---	50.36	54.00	3.64	H	0.4
2484.016000	60.28	---	74.00	13.72	H	0.4
2484.016000	---	47.56	54.00	6.44	H	0.4

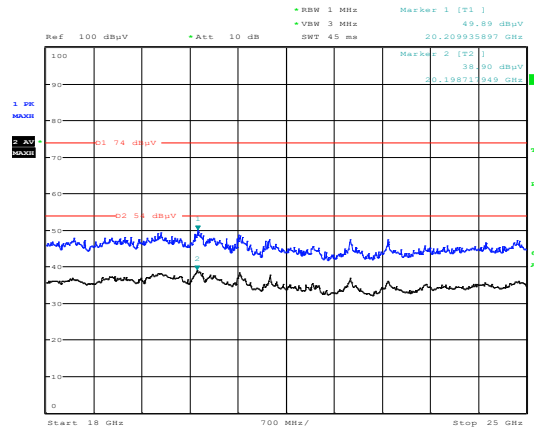
18 GHz - 25 GHz (Transmitting in maximum output power mode BLE (2 Mbps) low channel):

Horizontal



Project No :RKS250929008 Tester :Hugh Wu
Date: 30.OCT.2025 16:26:20

Vertical



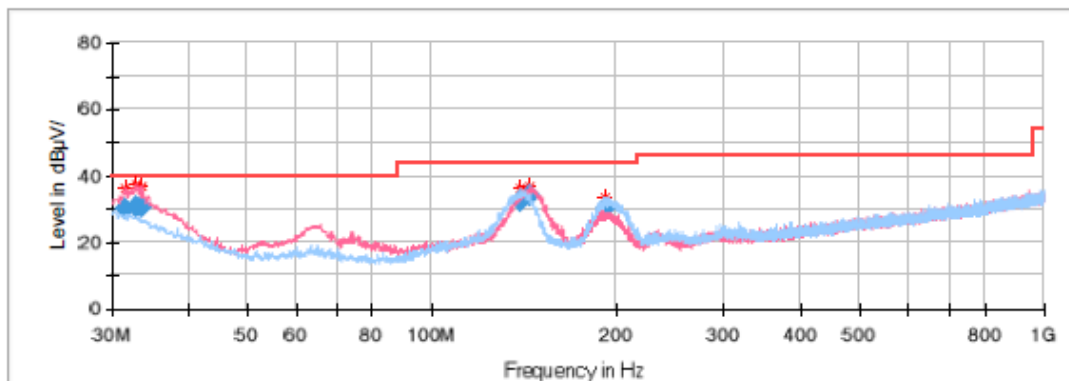
Project No :RKS250929008 Tester :Hugh Wu
Date: 30.OCT.2025 16:58:41

Frequency (GHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
20.19	---	39.2	54	14.8	H	12.45
20.21	50.4	---	74	23.6	H	12.47
20.20	---	38.9	54	15.1	V	12.46
20.21	49.89	---	74	24.11	V	12.47

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

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

Project No: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in Zigbee 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: 22.2℃
Humidity: 54%
Barometric Pressure: 103.1kPa
Test Engineer: Scarf Yang
Test Date: 2025/10/20

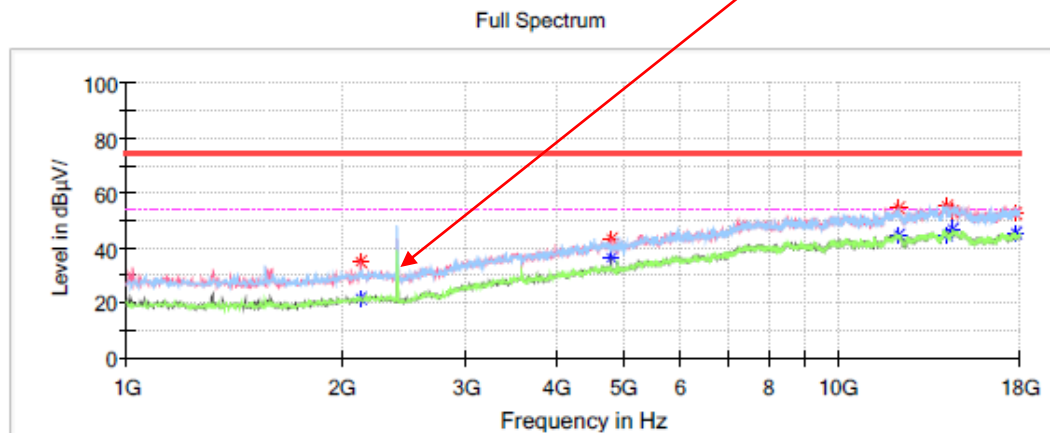
**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
31.576250	30.06	40.00	9.94	V	-6.0
32.788750	30.75	40.00	9.25	V	-6.7
33.637500	30.50	40.00	9.50	V	-7.0
139.731250	32.43	43.50	11.07	H	-11.2
144.823750	34.23	43.50	9.27	V	-11.4
191.868750	30.26	43.50	13.24	H	-12.5

1GHz-18GHz:**Low Channel: 2405 MHz****Common Information**

Project No.: RKSB250929008
 EUT Model: 9290042915
 Test Mode: Transmitting in ZigBee mode 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: 21.7°C
 Humidity: 50%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/23

Fundamental test with
Band Reject Filter

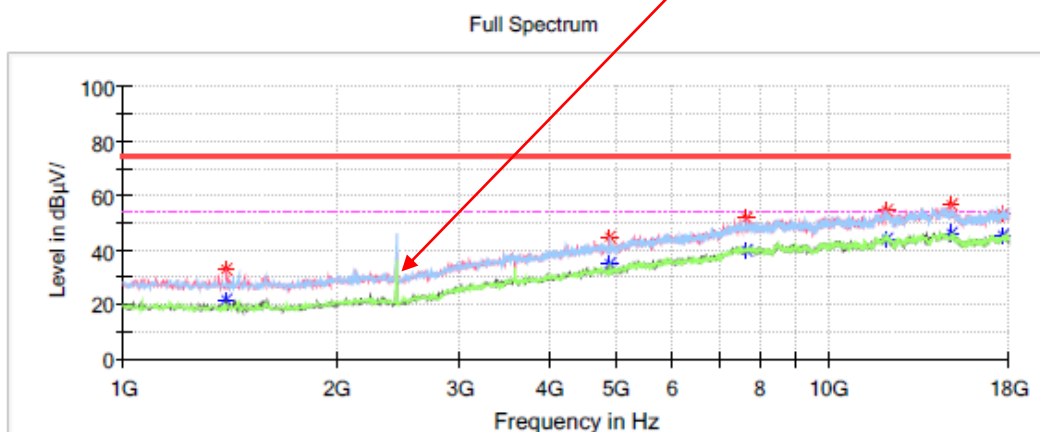
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2128.800000	34.78	---	74.00	39.22	V	-9.9
2128.800000	---	21.95	54.00	32.05	V	-9.9
4808.000000	43.04	---	74.00	30.96	V	-3.4
4808.000000	---	36.53	54.00	17.47	V	-3.4
12169.000000	54.82	---	74.00	19.18	H	9.0
12169.000000	---	44.57	54.00	9.43	H	9.0
14195.400000	55.31	---	74.00	18.69	H	11.4
14195.400000	---	44.51	54.00	9.49	H	11.4
14457.200000	53.36	---	74.00	20.64	V	11.9
14457.200000	---	46.66	54.00	7.34	V	11.9
17826.600000	---	45.50	54.00	8.50	H	11.3
17826.600000	52.42	---	74.00	21.58	H	11.3

Middle Channel: 2440 MHz**Common Information**

Project No.:	RKS250929008
EUT Model:	9290042915
Test Mode:	Transmitting in ZigBee mode 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:	21.7°C
Humidity:	50%
Atmospheric Pressure:	103.0kPa
Test Engineer:	Destine Hu
Test Date:	2025/10/23

Fundamental test with
Band Reject Filter

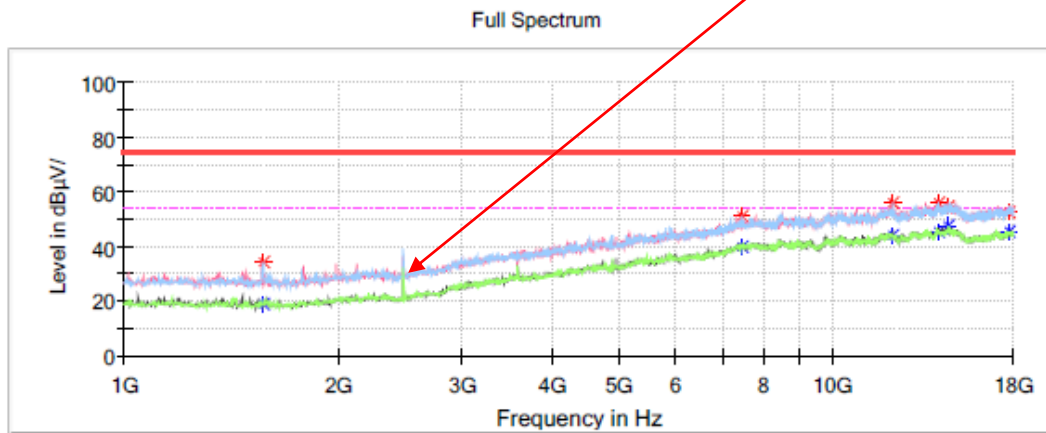
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1397.800000	---	21.55	54.00	32.45	V	-13.8
1397.800000	33.08	---	74.00	40.92	V	-13.8
4899.800000	---	35.27	54.00	18.73	H	-3.2
4899.800000	44.61	---	74.00	29.39	H	-3.2
7653.800000	---	39.71	54.00	14.29	V	3.1
7653.800000	51.46	---	74.00	22.54	V	3.1
12118.000000	---	44.40	54.00	9.60	V	9.0
12118.000000	54.44	---	74.00	19.56	V	9.0
14919.600000	---	46.43	54.00	7.57	V	10.6
14919.600000	56.34	---	74.00	17.66	V	10.6
17653.200000	52.85	---	74.00	21.15	H	10.8
17653.200000	---	45.38	54.00	8.62	H	10.8

High Channel: 2480 MHz**Common Information**

Project No.: RKSB250929008
EUT Model: 9290042915
Test Mode: Transmitting in ZigBee mode 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: 21.7°C
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

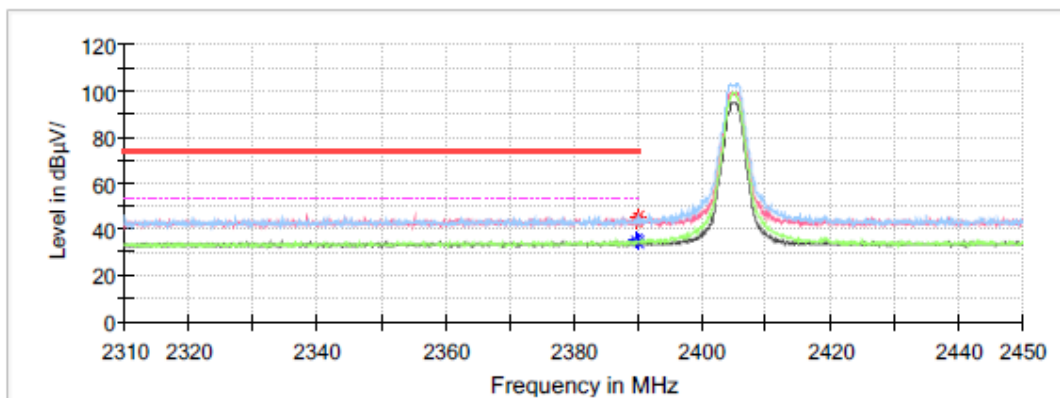
Fundamental test with
Band Reject Filter

**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)
1571.200000	---	19.07	54.00	34.93	V	-12.9
1571.200000	34.10	---	74.00	39.90	V	-12.9
7456.600000	---	39.74	54.00	14.26	V	2.8
7456.600000	50.76	---	74.00	23.24	V	2.8
12192.800000	---	43.96	54.00	10.04	V	9.0
12192.800000	56.08	---	74.00	17.92	V	9.0
14096.800000	---	45.22	54.00	8.78	H	11.3
14096.800000	56.23	---	74.00	17.77	H	11.3
14606.800000	54.22	---	74.00	19.78	H	11.6
14606.800000	---	47.31	54.00	6.69	H	11.6
17809.600000	---	45.58	54.00	8.42	V	11.3
17809.600000	52.77	---	74.00	21.23	V	11.3

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

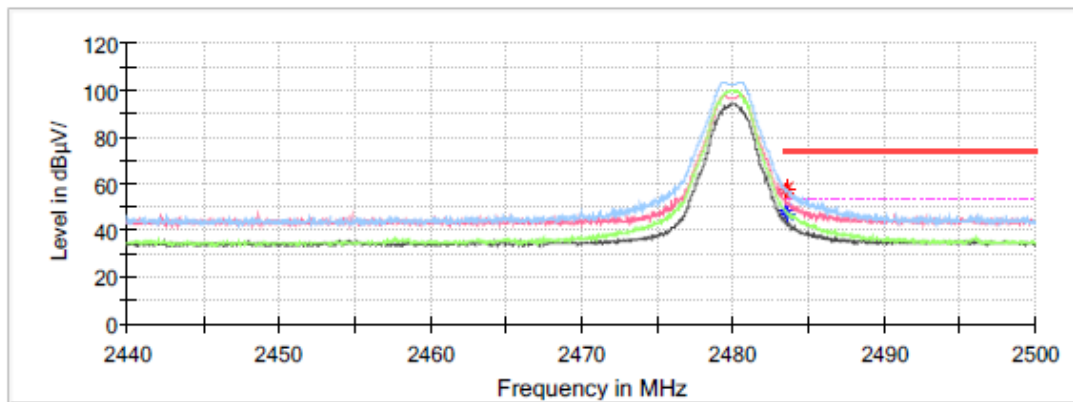
Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in ZigBee mode low channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 21.7°C
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

Full Spectrum**Critical Freqs**

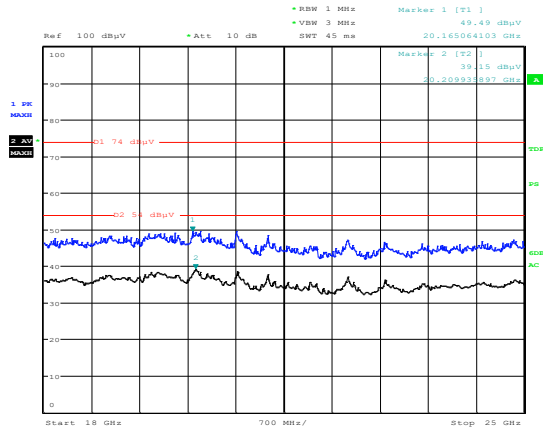
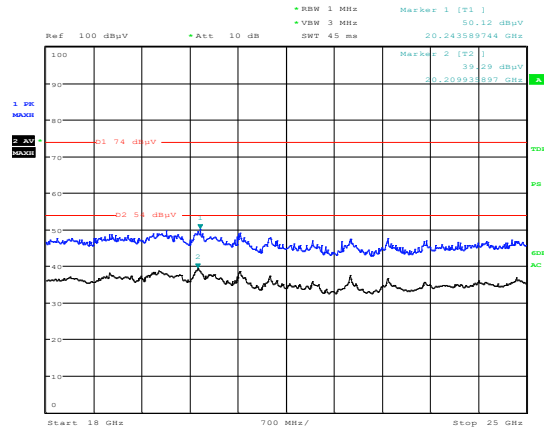
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.688000	43.94	---	74.00	30.06	H	0.2
2389.688000	---	34.92	54.00	19.08	H	0.2
2389.968000	45.16	---	74.00	28.84	H	0.2
2389.968000	---	34.82	54.00	19.18	H	0.2

Right Side**Common Information**

Project No.: RKS250929008
EUT Model: 9290042915
Test Mode: Transmitting in ZigBee mode 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: 21.7℃
Humidity: 50%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/10/23

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)
2483.512000	55.91	---	74.00	18.09	H	0.4
2483.512000	---	48.41	54.00	5.59	H	0.4
2483.608000	57.67	---	74.00	16.33	H	0.4
2483.608000	---	47.36	54.00	6.64	H	0.4

18 GHz - 25 GHz (Transmitting in maximum output power mode Zigbee low channel):**Horizontal****Vertical**

Project No :RKS250929008 Tester :Hugh Wu
Date: 30.OCT.2025 19:50:44

Project No :RKS250929008 Tester :Hugh Wu
Date: 30.OCT.2025 20:26:07

Frequency (GHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
20.21	---	39.15	54	14.85	H	12.47
20.17	49.49	---	74	24.51	H	12.43
20.21	---	39.29	54	14.71	V	12.47
20.24	50.12	---	74	23.88	V	12.5

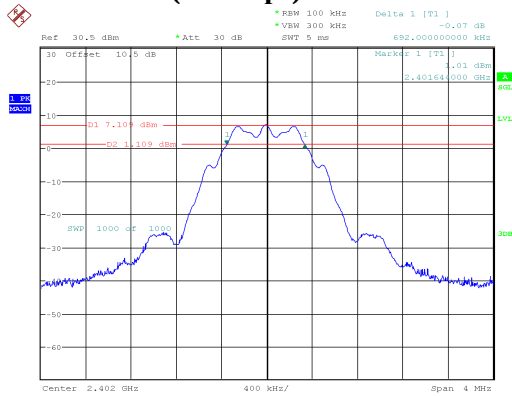
Note: The test distance is 3m. The limit is 74dBμV/m(Peak) and 54dBμV/m(Average).

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

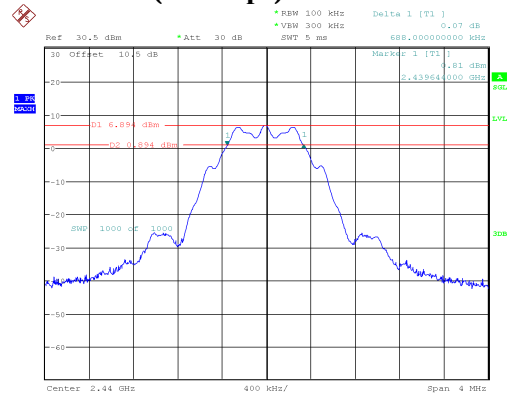
Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
BLE (125 kbps)	Low	2402	0.692	≥0.5
	Middle	2440	0.688	≥0.5
	High	2480	0.688	≥0.5
BLE (500 kbps)	Low	2402	0.708	≥0.5
	Middle	2440	0.708	≥0.5
	High	2480	0.708	≥0.5
BLE (1 Mbps)	Low	2402	0.708	≥0.5
	Middle	2440	0.708	≥0.5
	High	2480	0.704	≥0.5
BLE (2 Mbps)	Low	2402	1.398	≥0.5
	Middle	2440	1.392	≥0.5
	High	2480	1.392	≥0.5
Zigbee	Low	2405	1.644	≥0.5
	Middle	2440	1.644	≥0.5
	High	2480	1.644	≥0.5

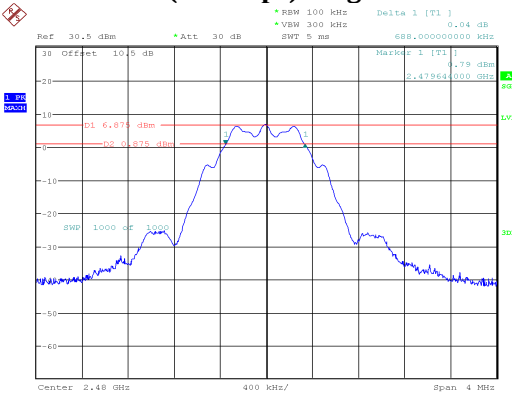
*EUT operation mode: Transmitting***Test Result:** Compliant.

BLE (125 kbps): Low Channel

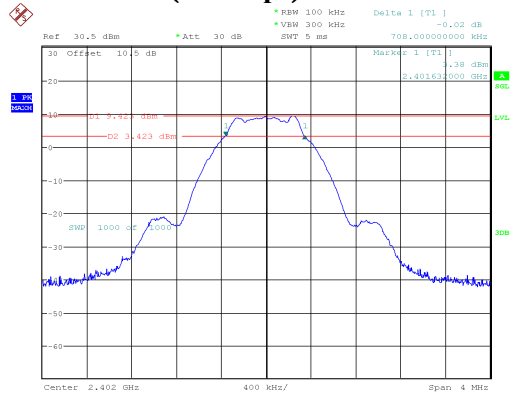
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:40:11

BLE (125 kbps): Middle Channel

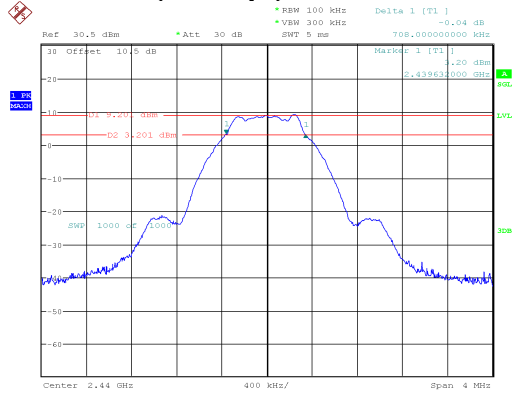
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:52:13

BLE (125 kbps): High Channel

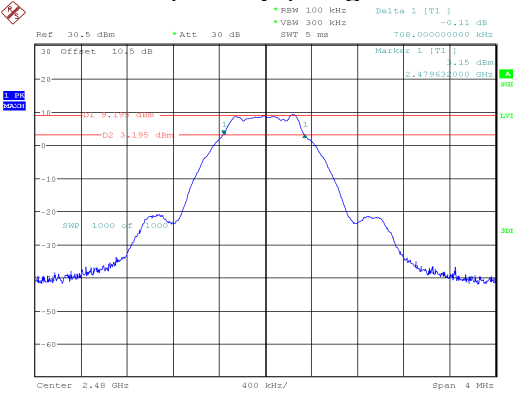
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:05:25

BLE (500 kbps): Low Channel

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:05:30

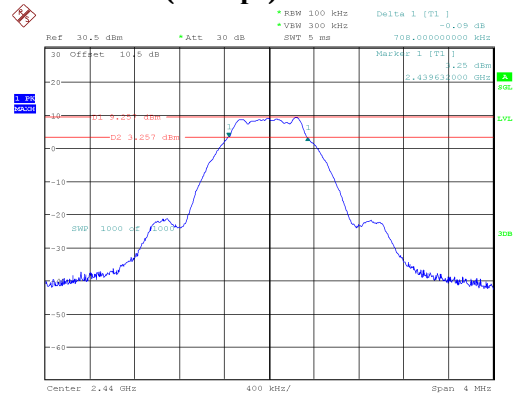
BLE (500 kbps): Middle Channel

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:14:42

BLE (500 kbps): High Channel

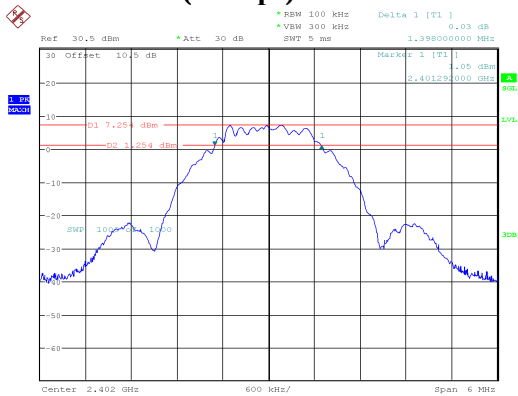
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:24:20

BLE (1 Mbps): Middle Channel



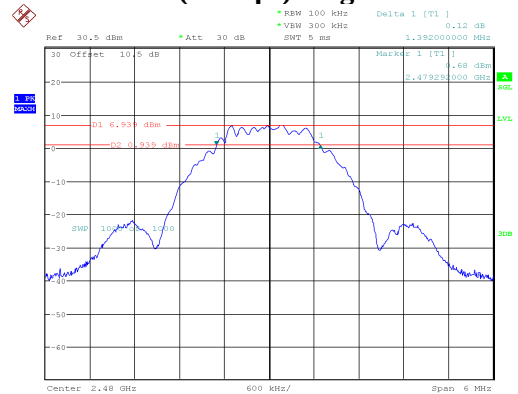
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:33:07

BLE (2 Mbps): Low Channel



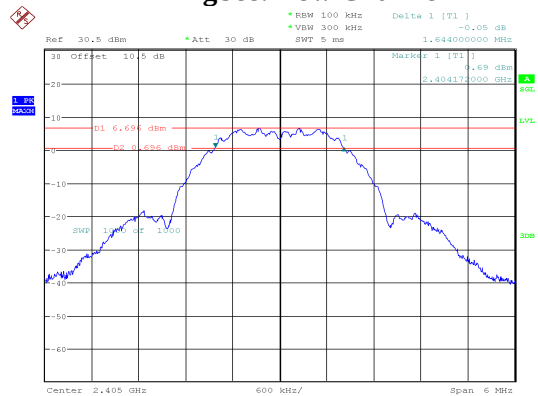
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:21:47

BLE (2 Mbps): High Channel



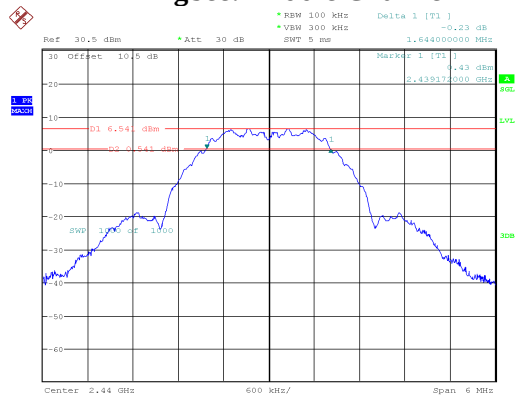
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:45:18

Zigbee: Low Channel



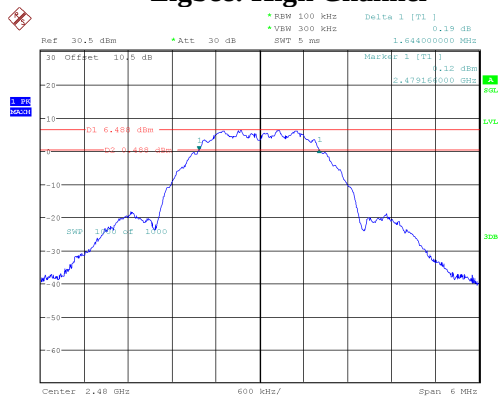
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:29:25

Zigbee: Middle Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:40:42

Zigbee: High Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:51:25

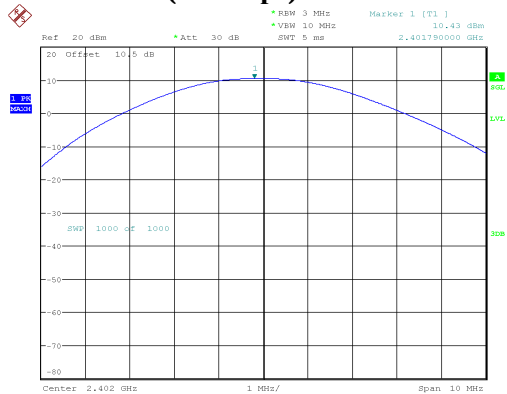
MAXIMUM CONDUCTED OUTPUT POWER**Environmental Conditions & Test Information**

Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.*EUT operation mode: Transmitting*

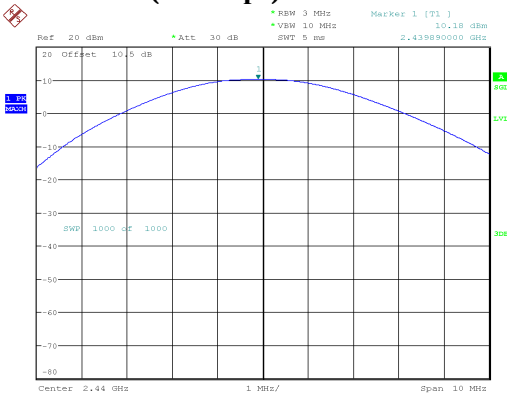
Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (125 kbps)	Low	2402	10.43	30	Pass
	Middle	2440	10.18	30	Pass
	High	2480	10.17	30	Pass
BLE (500 kbps)	Low	2402	10.42	30	Pass
	Middle	2440	10.20	30	Pass
	High	2480	10.21	30	Pass
BLE (1 Mbps)	Low	2402	10.41	30	Pass
	Middle	2440	10.21	30	Pass
	High	2480	10.22	30	Pass
BLE (2 Mbps)	Low	2402	10.56	30	Pass
	Middle	2440	10.28	30	Pass
	High	2480	10.24	30	Pass
Zigbee	Low	2405	10.41	30	Pass
	Middle	2440	10.24	30	Pass
	High	2480	10.22	30	Pass

BLE (125 kbps): Low Channel



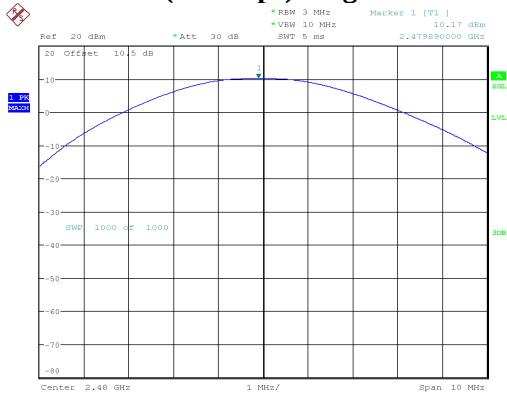
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:41:24

BLE (125 kbps): Middle Channel



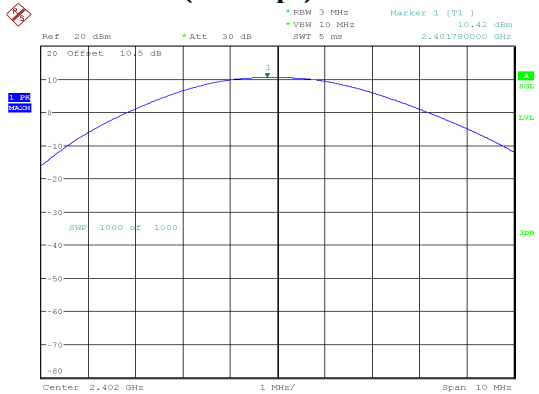
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:56:53

BLE (125 kbps): High Channel



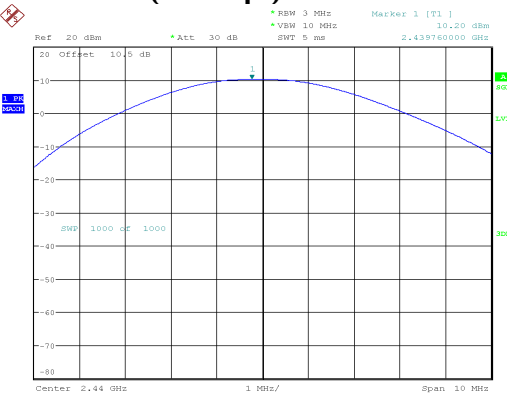
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:08:38

BLE (500 kbps): Low Channel



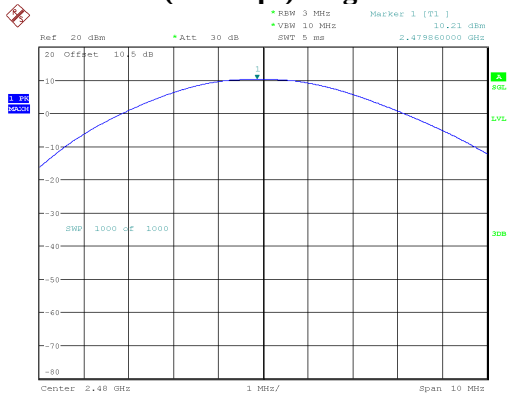
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:06:16

BLE (500 kbps): Middle Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:15:31

BLE (500 kbps): High Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:25:12

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:23:45

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:34:13

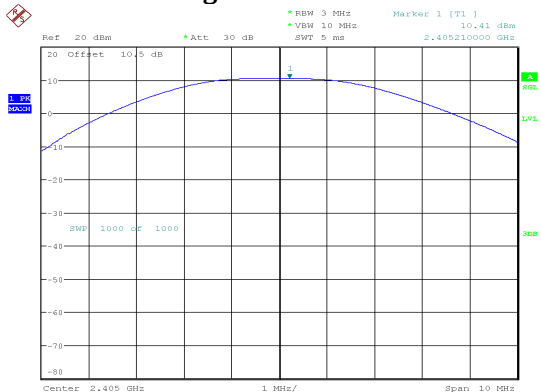
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:50:41

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:23:59

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:34:00

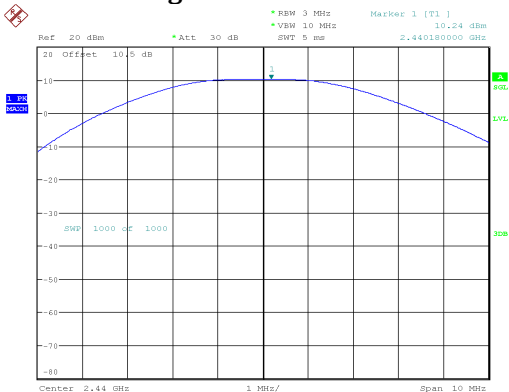
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:46:08

Zigbee: Low Channel



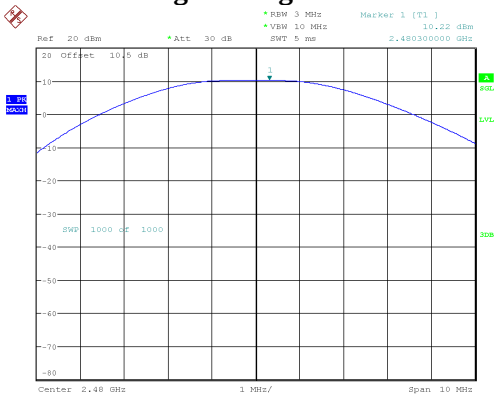
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:30:26

Zigbee: Middle Channel



ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:41:48

Zigbee: High Channel



ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:52:03

BAND EDGE**Environmental Conditions & Test Information**

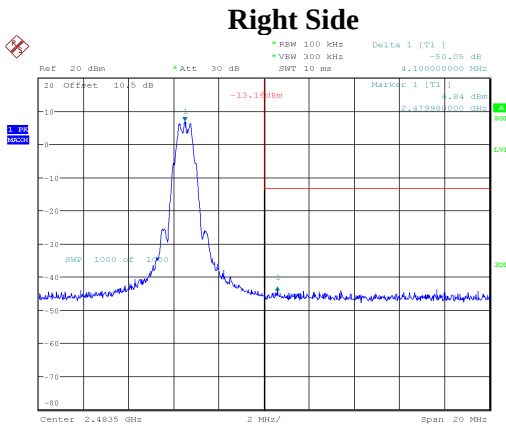
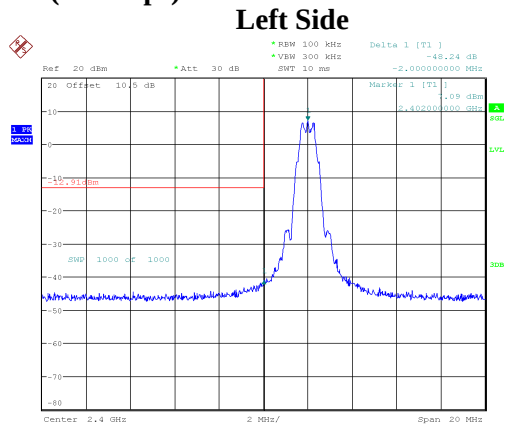
Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.

EUT operation mode: Transmitting

Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (125 kbps)	Low	2402	48.24	20
	High	2480	50.05	
BLE (500 kbps)	Low	2402	50.68	
	High	2480	53.41	
BLE (1 Mbps)	Low	2402	50.00	
	High	2480	52.75	
BLE (2 Mbps)	Low	2402	31.31	
	High	2480	47.15	
Zigbee	Low	2405	50.01	
	High	2480	47.94	

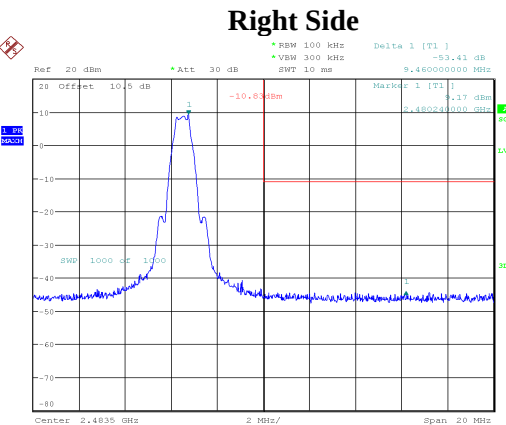
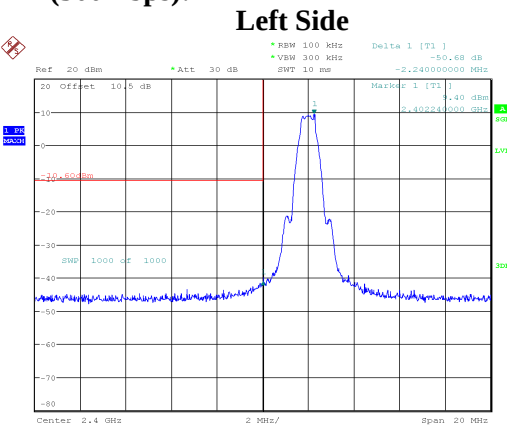
BLE (125 kbps):



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:42:25

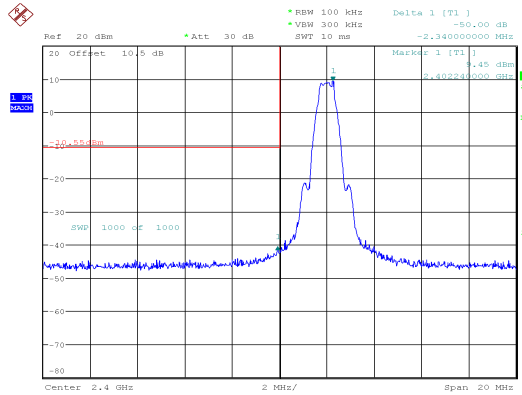
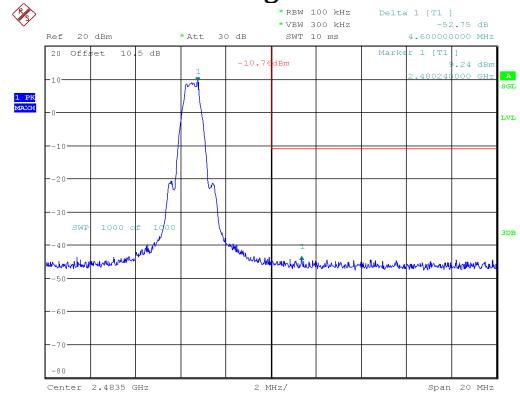
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:09:38

BLE (500 kbps):



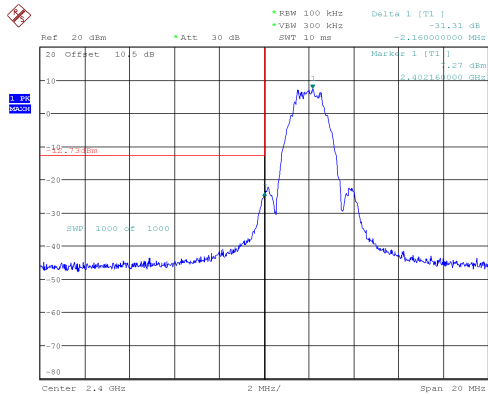
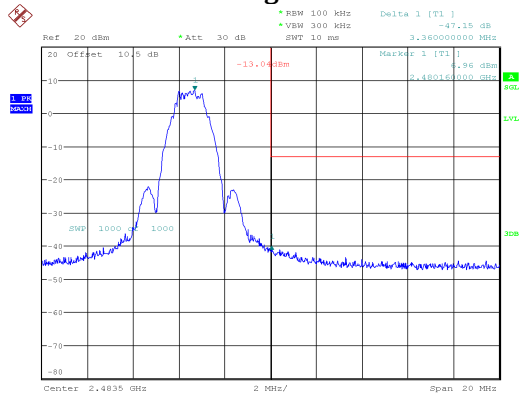
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:07:16

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:26:12

BLE (1 Mbps):**Left Side****Right Side**

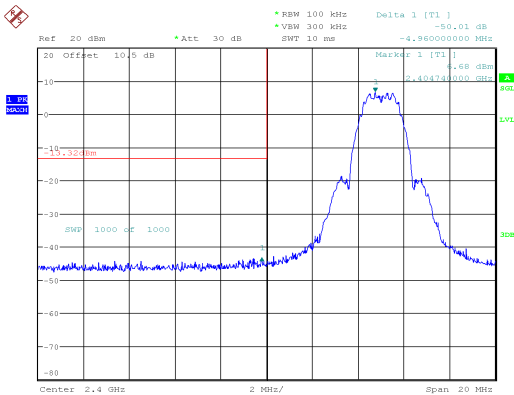
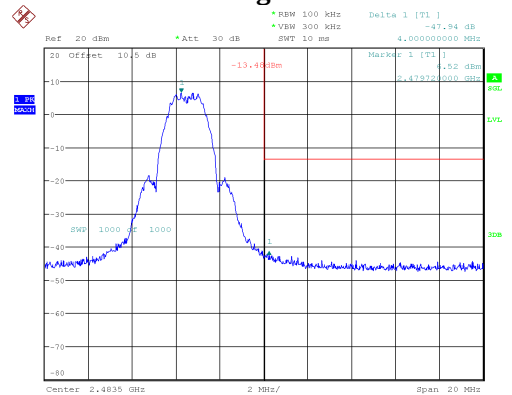
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:24:45

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:51:41

BLE (2 Mbps):**Left Side****Right Side**

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:24:58

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:47:07

Zigbee:**Left Side****Right Side**

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:31:25

ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:53:01

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

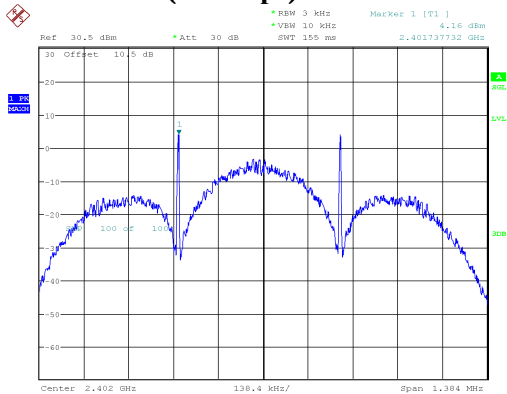
Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

Test Result: Compliant.

EUT operation mode: Transmitting

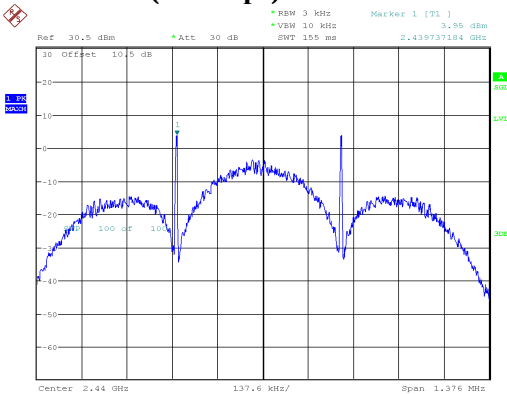
Mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
BLE (125 kbps)	Low	2402	4.16	≤8
	Middle	2440	3.95	≤8
	High	2480	3.89	≤8
BLE (500 kbps)	Low	2402	-6.48	≤8
	Middle	2440	-6.69	≤8
	High	2480	-6.72	≤8
BLE (1 Mbps)	Low	2402	-6.50	≤8
	Middle	2440	-6.70	≤8
	High	2480	-6.64	≤8
BLE (2 Mbps)	Low	2402	-11.97	≤8
	Middle	2440	-12.25	≤8
	High	2480	-12.22	≤8
Zigbee	Low	2405	-5.12	≤8
	Middle	2440	-5.00	≤8
	High	2480	-5.15	≤8

BLE (125 kbps): Low Channel



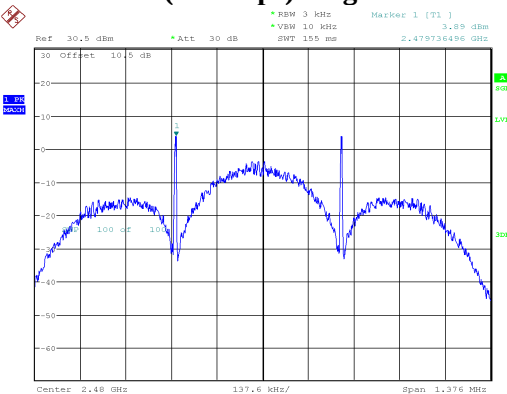
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:42:50

BLE (125 kbps): Middle Channel



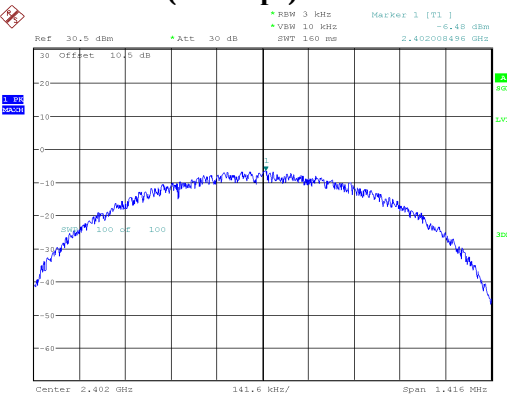
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:57:19

BLE (125 kbps): High Channel



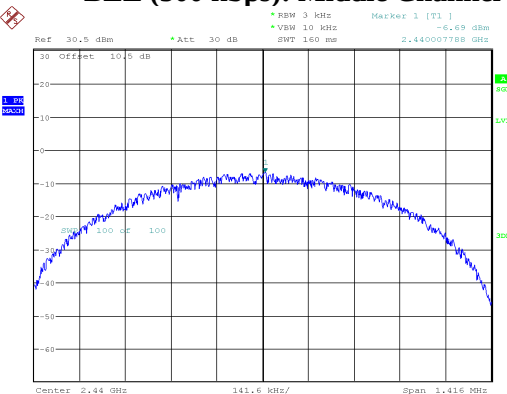
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:10:03

BLE (500 kbps): Low Channel



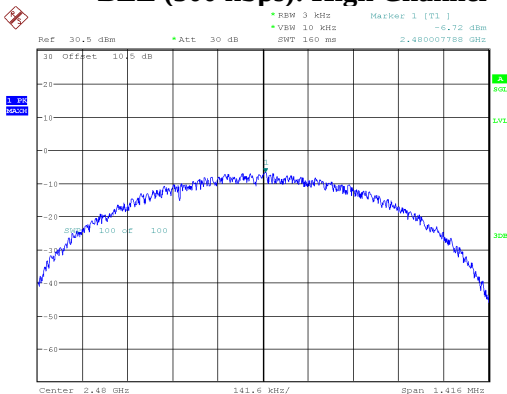
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:07:41

BLE (500 kbps): Middle Channel



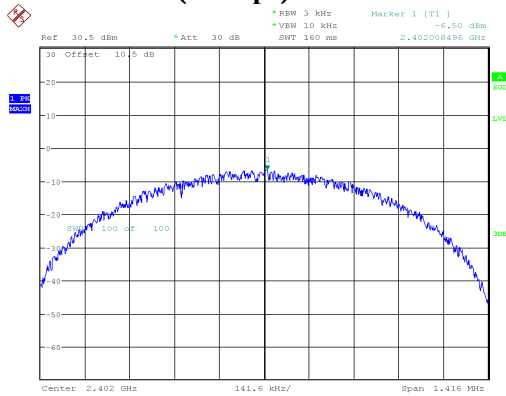
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:15:57

BLE (500 kbps): High Channel



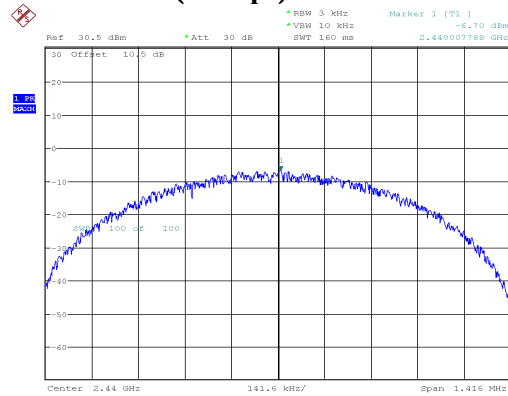
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:26:38

BLE (1 Mbps): Low Channel



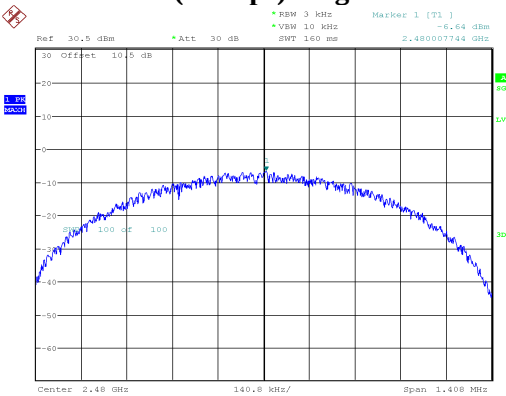
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:25:11

BLE (1 Mbps): Middle Channel



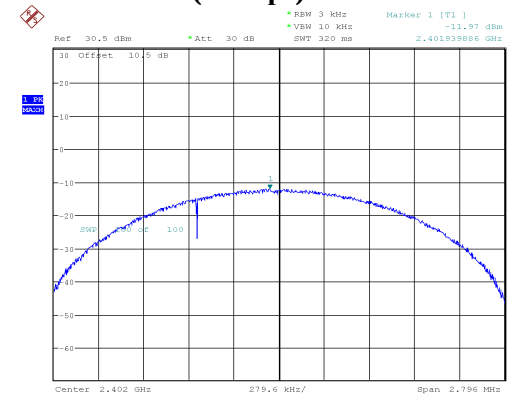
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:34:39

BLE (1 Mbps): High Channel



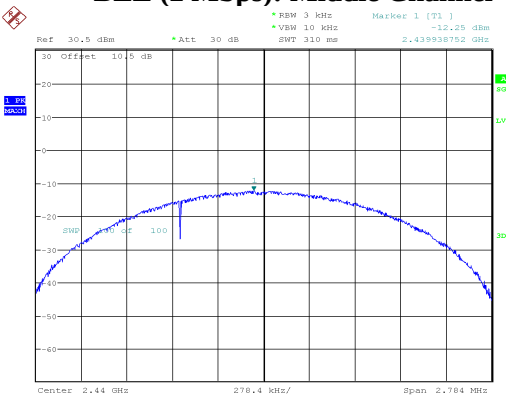
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:52:07

BLE (2 Mbps): Low Channel



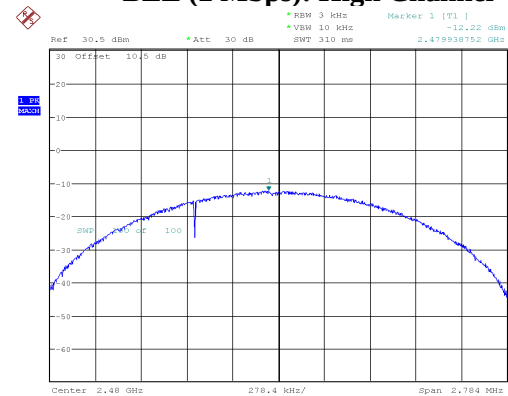
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:25:39

BLE (2 Mbps): Middle Channel



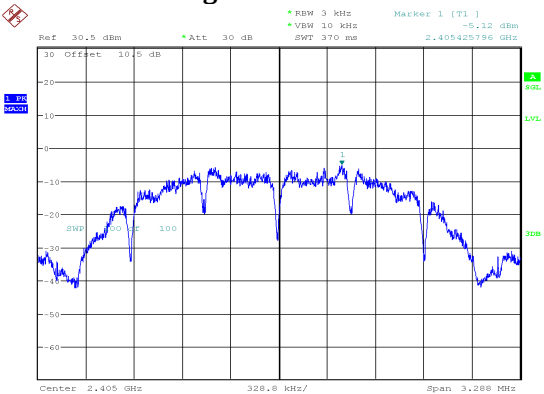
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:34:40

BLE (2 Mbps): High Channel



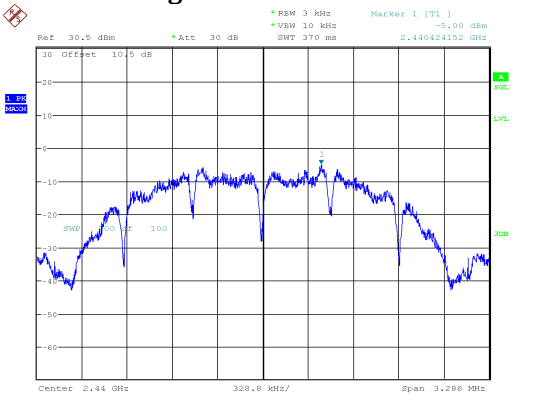
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:47:48

Zigbee: Low Channel



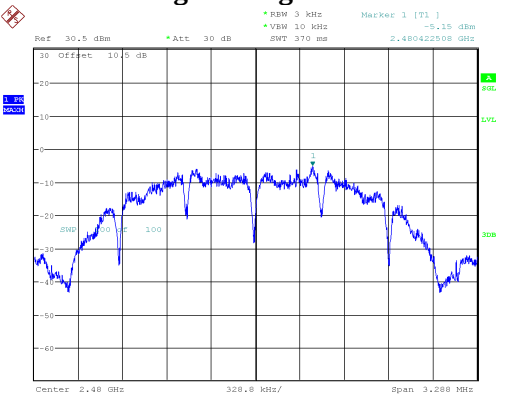
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:32:39

Zigbee: Middle Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:42:34

Zigbee: High Channel

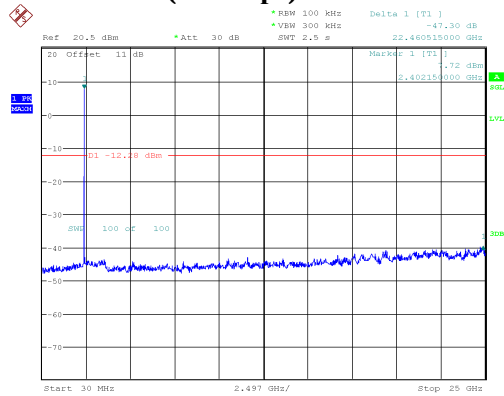


ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:53:47

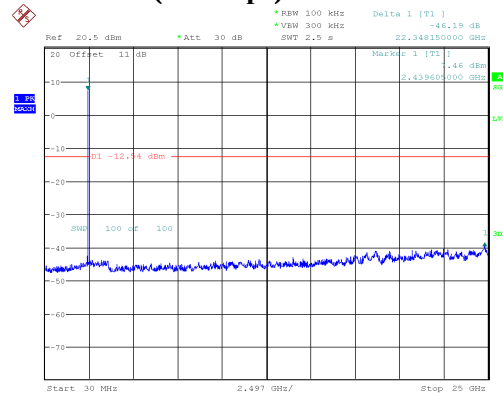
CONDUCTED SPURIOUS EMISSION**Environmental Conditions & Test Information**

Test Date:	2025-10-27 to 2025-10-28
Temperature:	22-25.8 °C
Relative Humidity:	50-53 %
ATM Pressure:	100.5-101.1 kPa
Test Result:	Pass
Test Engineer:	Neil Zhou

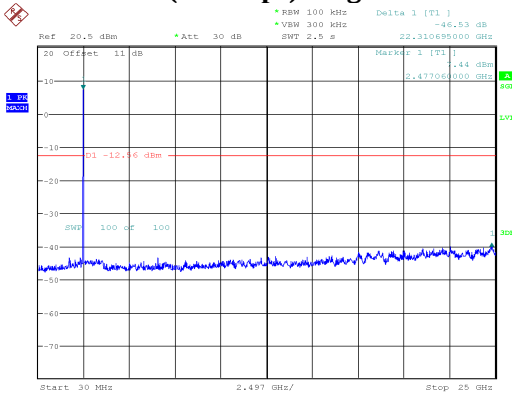
Mode	Channel	Frequency (MHz)	Result (dBc)	Limit (dBc)
BLE (125 kbps)	Low	2402	47.30	20
	Middle	2440	46.19	
	High	2480	46.53	
BLE (500 kbps)	Low	2402	49.25	
	Middle	2440	49.31	
	High	2480	49.40	
BLE (1 Mbps)	Low	2402	49.50	
	Middle	2440	49.82	
	High	2480	48.78	
BLE (2 Mbps)	Low	2402	47.43	
	Middle	2440	48.11	
	High	2480	47.70	
Zigbee	Low	2405	45.84	
	Middle	2440	45.70	
	High	2480	46.19	

BLE (125 kbps): Low Channel

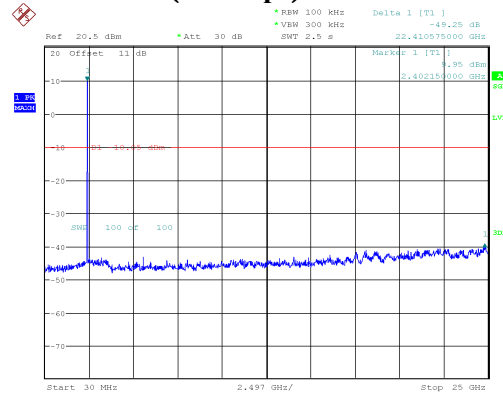
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:48:54

BLE (125 kbps): Middle Channel

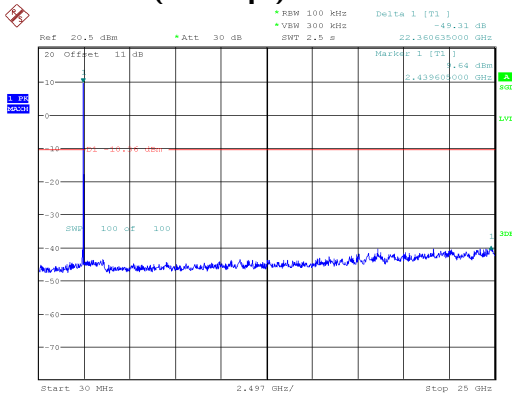
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:02:36

BLE (125 kbps): High Channel

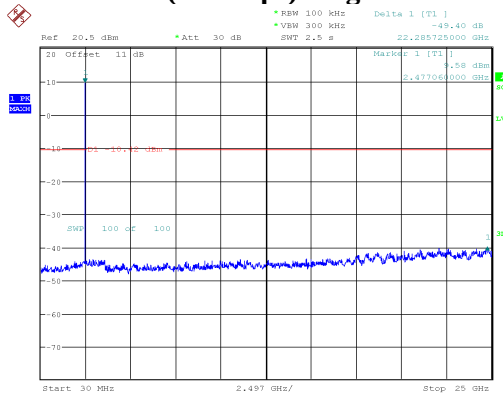
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 11:15:14

BLE (500 kbps): Low Channel

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:12:41

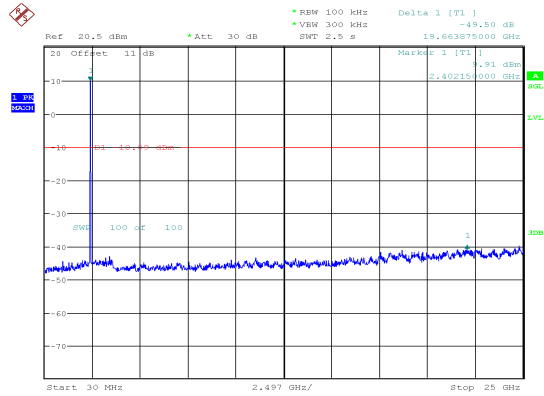
BLE (500 kbps): Middle Channel

ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:21:39

BLE (500 kbps): High Channel

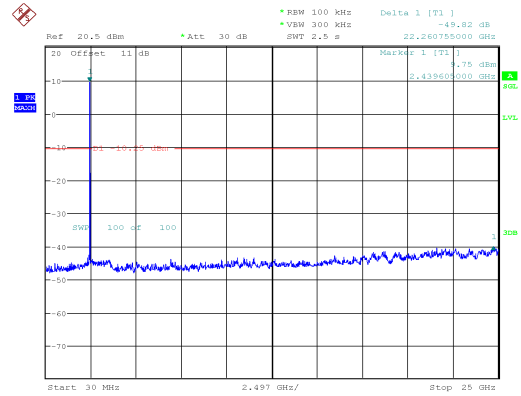
ProjectNo.:RKSB250929008 Tester:Neil Zhou
Date: 28.OCT.2025 10:31:53

BLE (1 Mbps): Low Channel



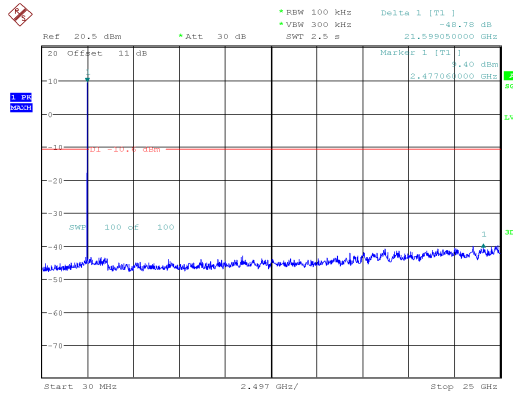
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:31:15

BLE (1 Mbps): Middle Channel



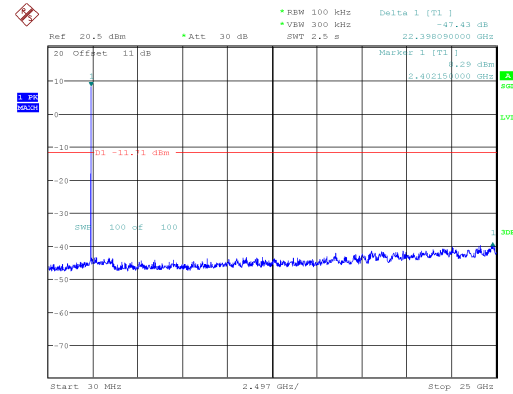
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:47:08

BLE (1 Mbps): High Channel



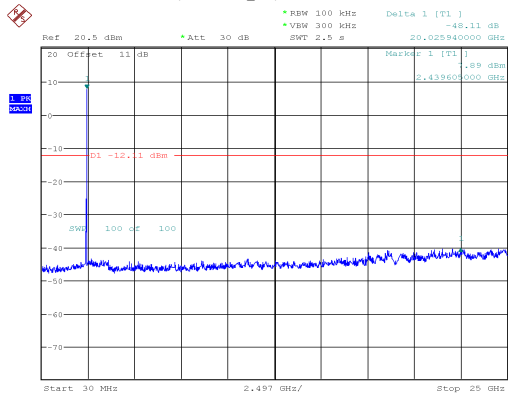
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 19:58:46

BLE (2 Mbps): Low Channel



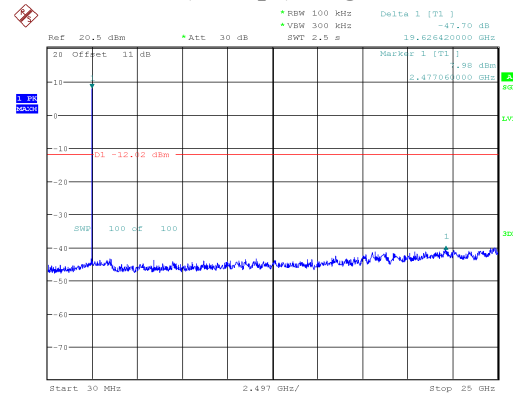
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:30:35

BLE (2 Mbps): Middle Channel



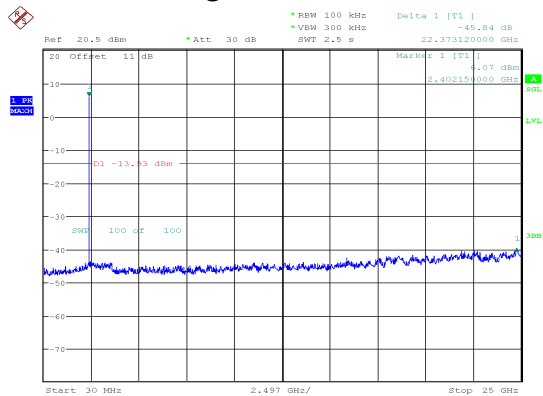
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:41:52

BLE (2 Mbps): High Channel



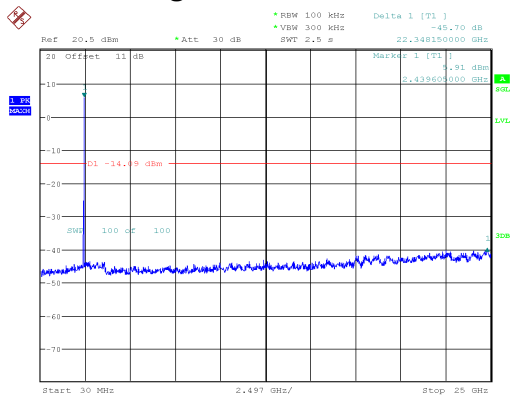
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 28.OCT.2025 09:52:54

Zigbee: Low Channel



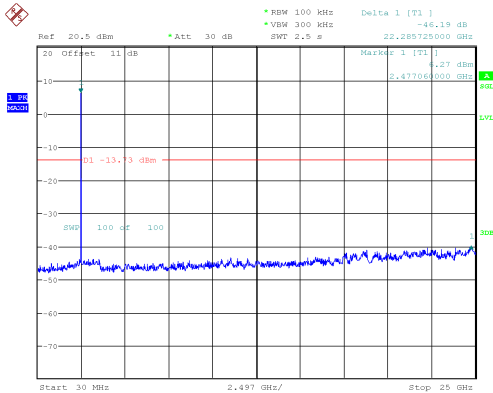
ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:37:55

Zigbee: Middle Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:47:46

Zigbee: High Channel



ProjectNo.:RKS250929008 Tester:Neil Zhou
Date: 27.OCT.2025 17:58:43

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.
6. This report may contain standards and test items that are not covered by the accreditation scope and shall be marked with an asterisk “▲”.

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