

FCC PART 15.247

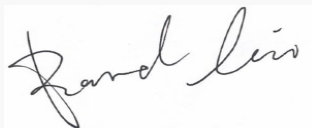
TEST REPORT

For

WISEASY TECHNOLOGY PTE. LTD.

70 Anson Road, #18-02, Hub Synergy Point, Singapore 079905

FCC ID: 2BFPO-R010

Report Type: Original Report	Product Name: Smart Reader
Report Number: <u>RKSA250928001-00B</u>	
Report Date: <u>2025-11-06</u>	
Reviewed By: <u>Bard Liu</u>	
Approved By: <u>Kyle Xu</u>	
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA250928001-00B	R1V1	2025-11-06	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	WISEASY TECHNOLOGY PTE. LTD.
Tested Model:	R010
Product Name:	Smart Reader
Power Supply:	DC 5V from adapter or DC 3.85V from battery
RF Function:	2.4G Wi-Fi; BLE
Operating Band/Frequency:	2.4G Wi-Fi: 2412~2462 MHz(802.11b/g/n20), 2422~2452 MHz(802.11n40) BLE(1 Mbps):2402-2480 MHz
Maximum Peak Output Power:	2.4G Wi-Fi: 802.11b: 21.652 dBm 802.11g: 18.826 dBm 802.11n20: 16.912 dBm 802.11n40: 17.045 dBm BLE(1 Mbps): 5.68 dBm
Channel Number:	2.4G Wi-Fi: 11(802.11b/g/n20), 7(802.11n40) BLE(1 Mbps): 40
Channel Separation:	2.4G Wi-Fi: 5 MHz BLE: 2 MHz
Modulation Type:	2.4G Wi-Fi: DSSS, OFDM BLE: GFSK
★Maximum Antenna Gain:	2.4G Wi-Fi & BLE:0.92 dBi

Adapter-1 Information:

Model: TPA-418G050100UU01

Input: 100-240V, 50/60Hz, 0.3A

Output: 5.0V, 1.0A, 5.0W

Adapter-2 Information:

Model: TPA-418G050200UU01

Input: 100-240V, 50/60Hz, 0.3A

Output: 5.0V, 2.0A, 10.0W

Note: The maximum antenna gain was declared by the manufacturer.

All measurement and test data in this report was gathered from production sample serial number: RKSA250928001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-09-28.)

Objective

This report is prepared for *WISEASY TECHNOLOGY PTE. LTD.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions' rules.

The tests were performed in order to determine Compliant with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Test Methodology

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

Measurement Uncertainty

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

Test Facility

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

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Channel List 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	/	/

For BLE (1 Mbps) mode, EUT was tested with channel 0, 19 and 39.

Channel List for Wi-Fi Mode:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437	/	/

For 802.11b, 802.11g and 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-HT40 mode, EUT was tested with Channel 3, 6 and 9.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test software: engineering mode

Pre-scan with all the data rates, and the worst case was performed as below:

Mode	Data Rate	Channel	★Power Level
802.11b	1 Mbps	Low	18
		Middle	18
		High	18
802.11g	6 Mbps	Low	15
		Middle	15
		High	13
802.11n-HT20	MCS0	Low	13
		Middle	13
		High	12
802.11n-HT40	MCS0	Low	12
		Middle	12
		High	10
BLE(1Mbps)	1Mbps	Low	Default
		Middle	Default
		High	Default

Note: The power level was declared by the applicant.

Environmental Conditions & Test Information

Test Date:	2025-10-15 to 2025-10-17
Temperature:	24-26 °C
Relative Humidity:	50-55 %
ATM Pressure:	100.2-101.2 kPa
Test Engineer:	Hugh Wu

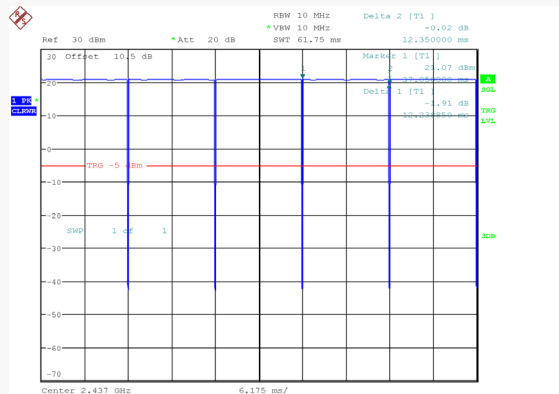
Mode	Duty Cycle (%)	Ton(ms)	Ton+off(ms)	10log(1/x) (dB)
802.11b	99.10	12.239	12.350	/
802.11g	98.10	2.034	2.073	/
802.11n-HT20	97.94	1.886	1.925	0.09
802.11n-HT40	93.93	0.918	0.977	0.27
BLE(1Mbps)	61.30	0.381	0.622	2.13

Note:

1. “x” means the Duty Cycle.
2. Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

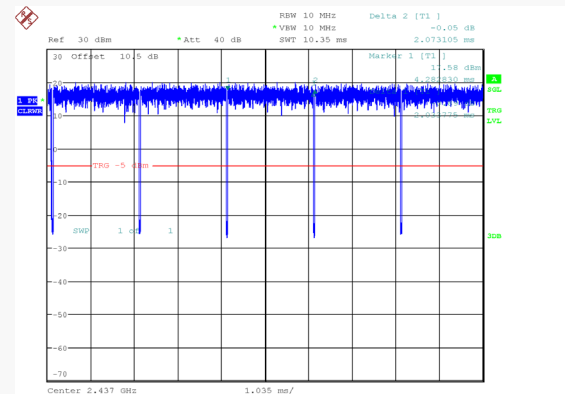
Duty Cycle:

802.11b Mode Middle Channel



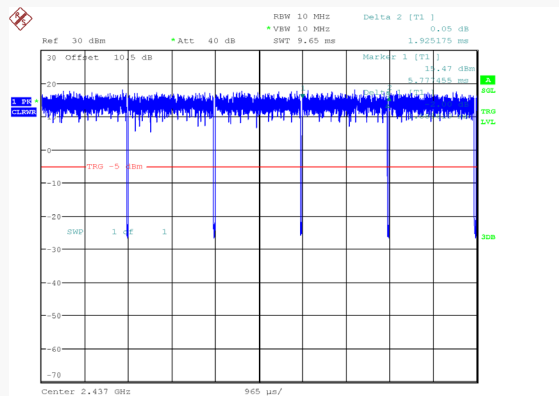
ProjectNo.:RKSA250928001 Tester:Hugh Wu
 Date: 16.OCT.2025 11:56:05

802.11g Mode Middle Channel



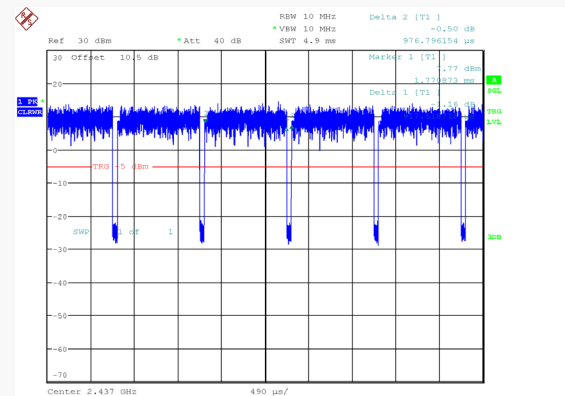
ProjectNo.:RKSA250928001 Tester:Hugh Wu
 Date: 17.OCT.2025 15:00:44

802.11n-HT20 Mode Middle Channel



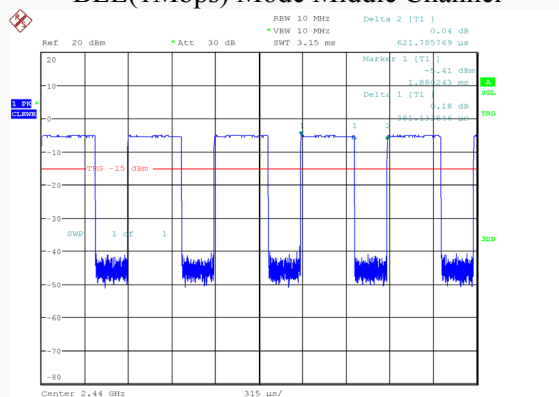
ProjectNo.:RKSA250928001 Tester:Hugh Wu
 Date: 17.OCT.2025 15:33:03

802.11n-HT40 Mode Middle Channel



ProjectNo.:RKSA250928001 Tester:Hugh Wu
 Date: 17.OCT.2025 16:15:15

BLE(1Mbps) Mode Middle Channel



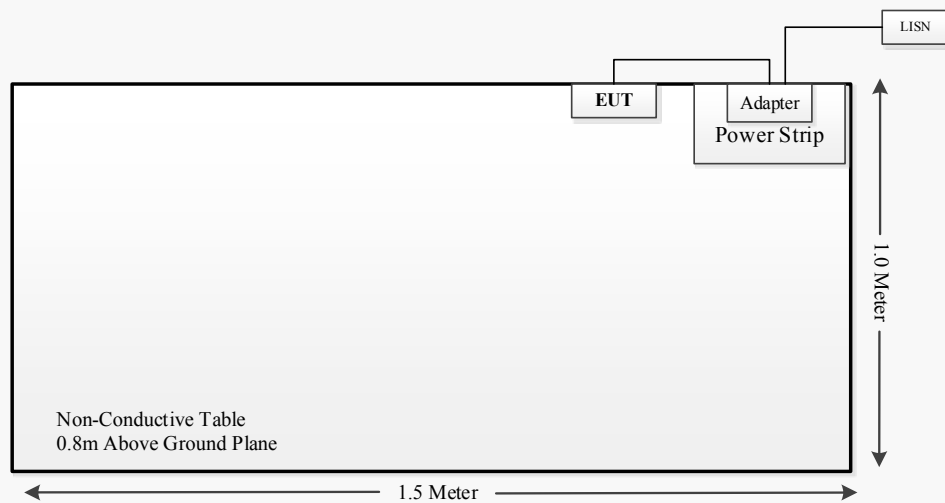
ProjectNo.:RKSA250928001 Tester:Hugh Wu
 Date: 15.OCT.2025 10:16:59

Support Equipment List and Details

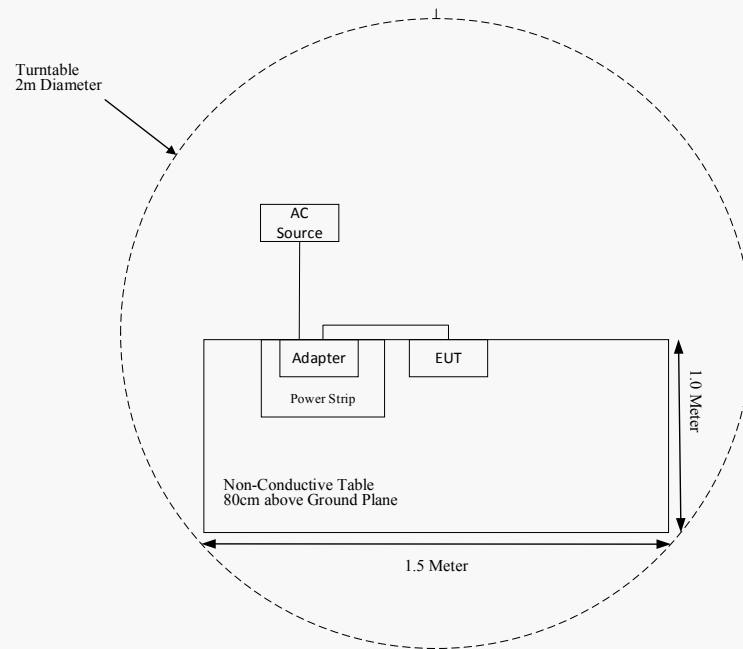
Manufacturer	Description	Model	Serial Number
/	Power Strip	/	/

External I/O Cable

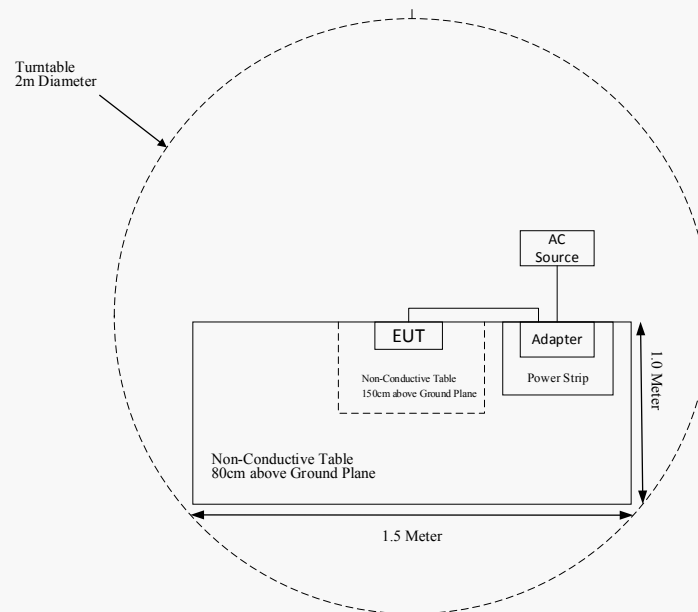
Cable Description	Length (m)	From Port	To Port
Power Cable	1.0	AC Source/LISN	Power Strip
USB Cable	1.5	Adapter	EUT

Block Diagram of Test Setup**For Conducted Emissions:**

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307(b)(1)& §2.1093	RF EXPOSURE	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(d)	Conducted Spurious Emission	Compliant
§15.247(e)	Power Spectral Density	Compliant

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	Broadband Antenna	JB3	A090314-1	2024-11-08	2027-11-07
Narda	6dB Attenuator	773-6	10690812-2-1	2024-11-08	2027-11-07
BACL	Active Loop Antenna	1313-1A	4041511	2024-11-22	2027-11-21
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	9311-4159	2024-12-02	2025-12-01
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
SELECTOR	Amplifier	EM18G40G	060726	2025-04-09	2026-04-08
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2025-04-08	2026-04-07
Narda	Attenuator	10dB	010	2025-04-08	2026-04-07
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
Anritsu	Power Sensor	MA24418A	12621	2025-04-09	2026-04-08

Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2025-04-09	2026-04-08
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).

FCC §1.1307(b) & §2.1093 - RF EXPOSURE

Applicable Standard

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

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

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Measurement Result

Mode	★Max Tune-up Conducted Power		Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
	(dBm)	(mW)				
BLE	6.0	3.98	5.0	1.3	3.0	Yes

Note:

1. For the above tune up power were declared by the manufacturer.
2. For 2.4G Wi-Fi, please reference report RKSA250928001-20B.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

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

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

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

Antenna Connector Construction

The EUT have an FPC antenna which permanently attached to the unit. fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

Test Procedure

ANSI C63.10-2020 clause 6.2

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

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

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

Level & Over Limit Calculation

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

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

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

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

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

Test Results Summary

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

Test Data: See Appendix

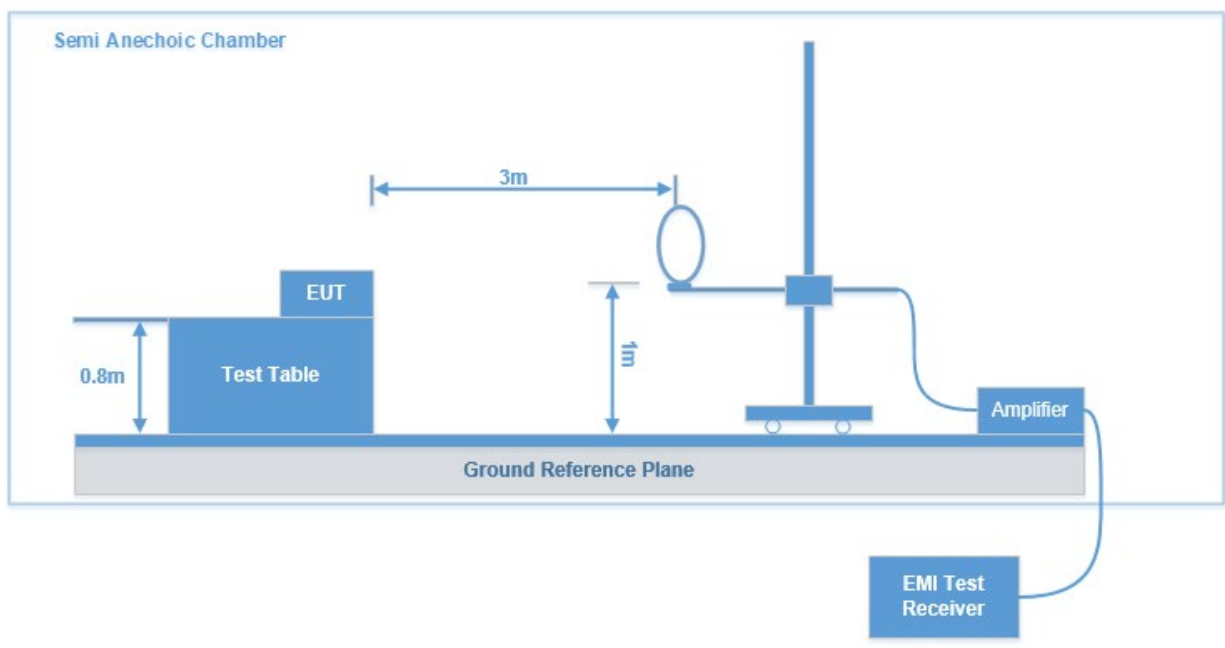
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

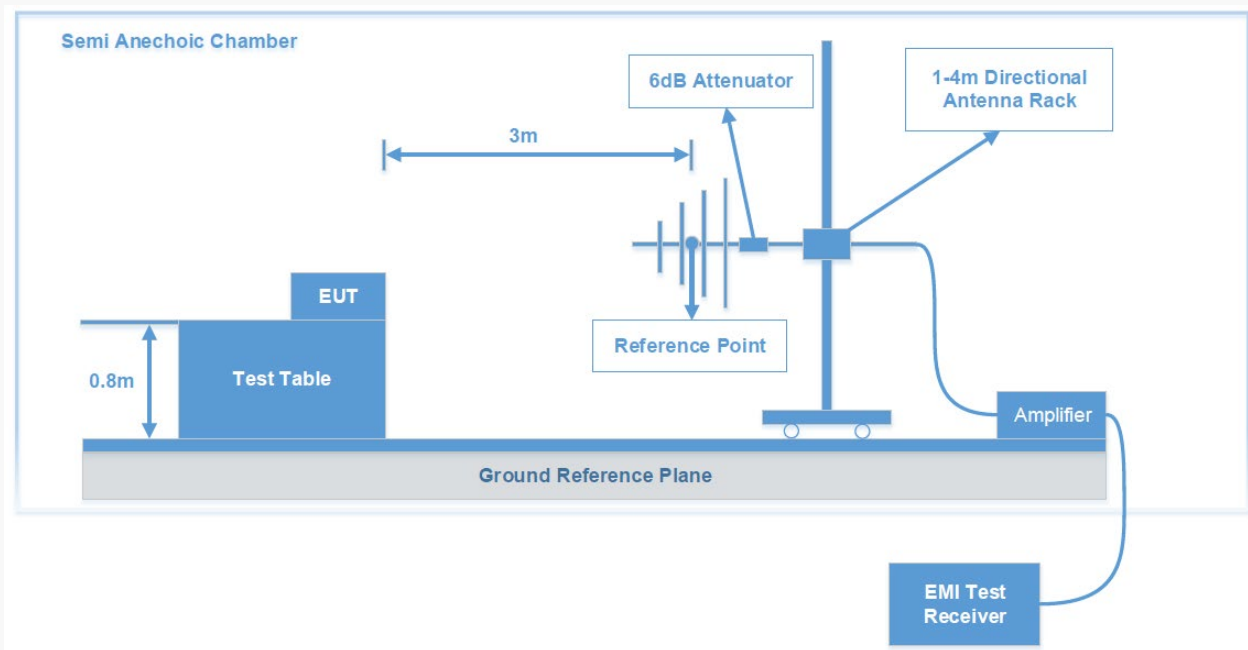
FCC §15.247 (d); §15.209; §15.205;

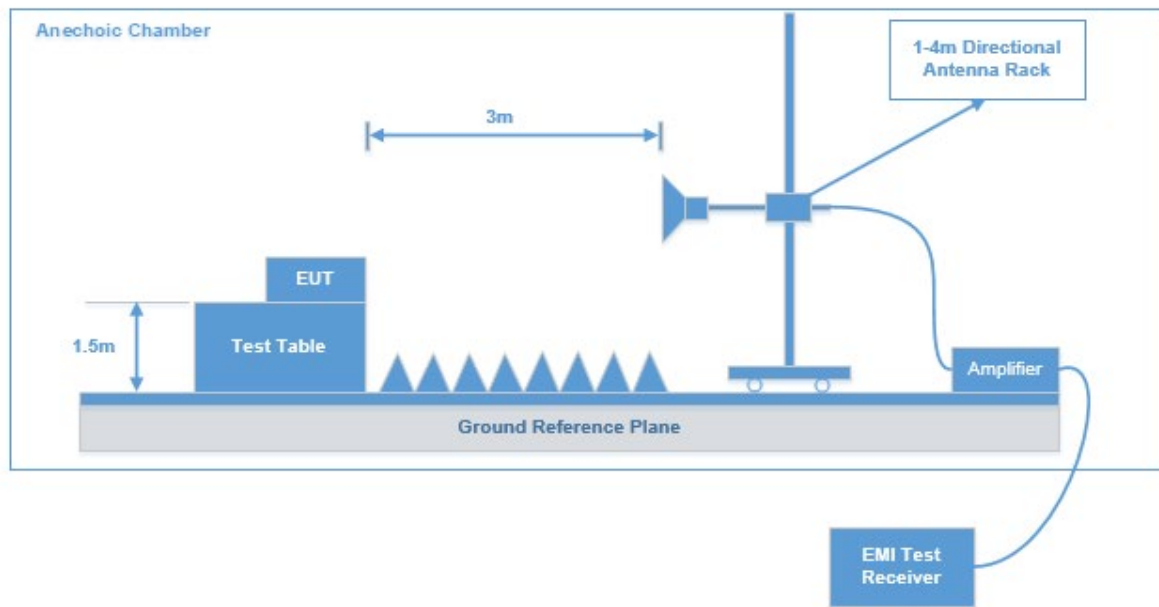
Test System Setup

9 kHz-30 MHz:



30 MHz-1 GHz:



Above 1 GHz:

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

EMI Test Receiver Setup

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

Test Procedure

According to ANSI C63.10-2020 clause 6.4, 6.5 and 6.6.

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

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

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

Corrected Amplitude & Margin Calculation

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

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, and Subpart C, section 15.205, 15.209 and 15.247.

Test Data: See Appendix

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

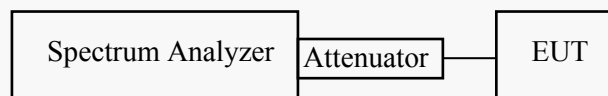
Applicable Standard

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

Test Procedure

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

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



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

Test Data: See Appendix

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

Applicable Standard

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

Test Procedure

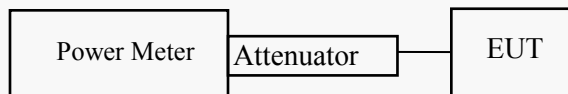
For 2.4G Wi-Fi:

According to ANSI C63.10-2020 sub-clause 11.9.1.2

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

11.9.2.3.2 Method AVGPM-G

Method AVGPM-G is a measurement using a gated RF average power meter. Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.



For BLE:

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

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



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

Test Data: See Appendix

FCC §15.247(D) – 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE & CONDUCTED SPURIOUS EMISSION

Band Edges

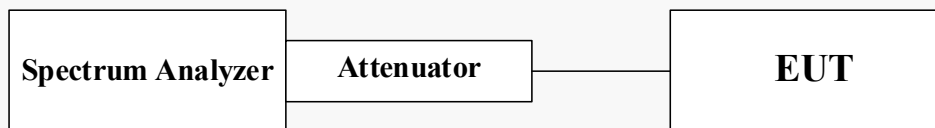
Applicable Standard

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 Compliant with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

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

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



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

Conducted Spurious Emission

Applicable Standard

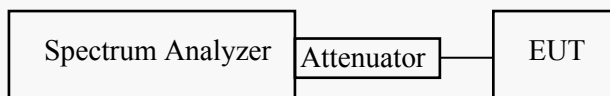
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the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

Test Procedure

According to ANSI C63.10-2020 Section 11.11

- a) Set the center frequency and span to encompass frequency range to be measured
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = No faster than coupled (auto) time.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.



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

Test Data: See Appendix

FCC §15.247(E) - POWER SPECTRAL DENSITY

Applicable Standard

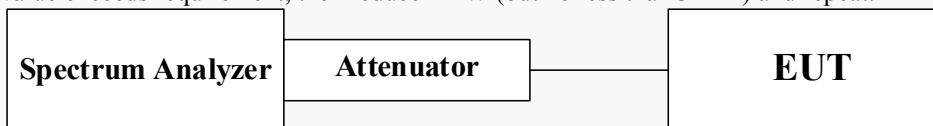
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of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

Test Procedure

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

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

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



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

Test Data: See Appendix

APPENDIX - TEST DATA

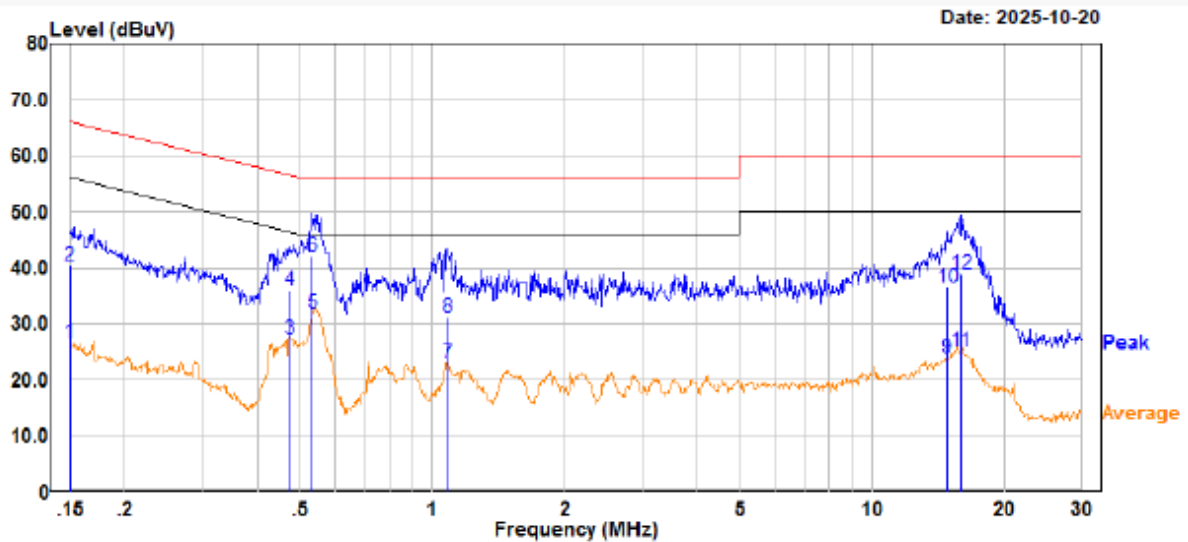
AC LINE CONDUCTED EMISSIONS

Environmental Conditions & Test Information

Test Date:	2025-10-20 to 2025-10-21
Temperature:	24.9 °C
Relative Humidity:	60 %
ATM Pressure:	101.7 kPa
Test Result:	Pass
Test Engineer:	Jack He

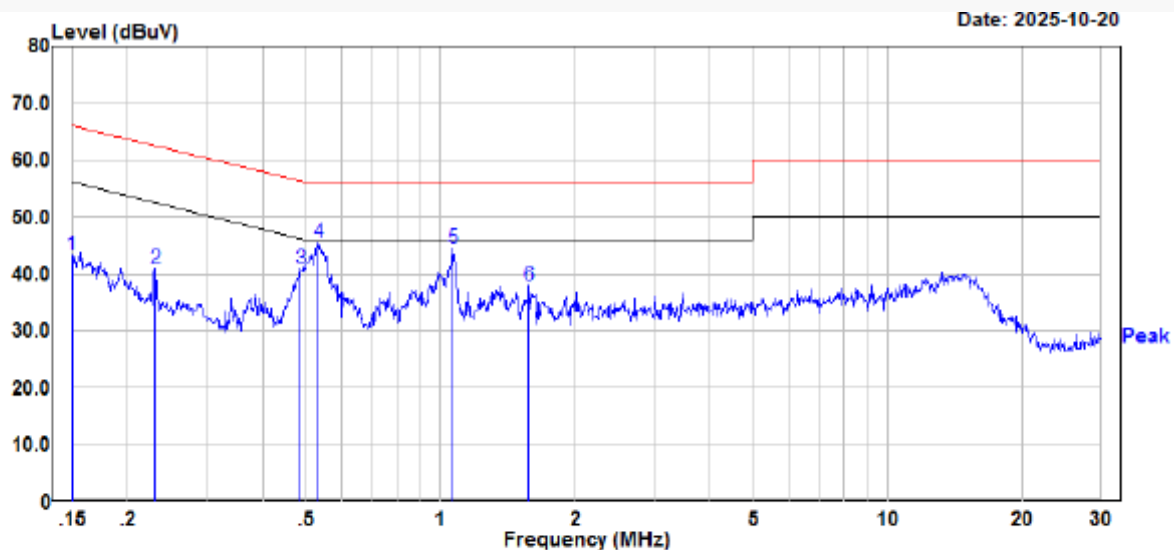
For Wi-Fi Mode:

EUT operation mode: Transmitting in maximum output power mode and 802.11b mode middle channel
Adapter-1



Site : CE
Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Line
: DET:Peak
Project No. : RKSA250928001
Model : R010
Phase : L
Voltage : 120V/60Hz
Mode : 2.4G WIFI
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
Temperature : 24.9℃
Humidity : 60%
Atmospheric pressure: 101.7kPa
Test Engineer : Jack He

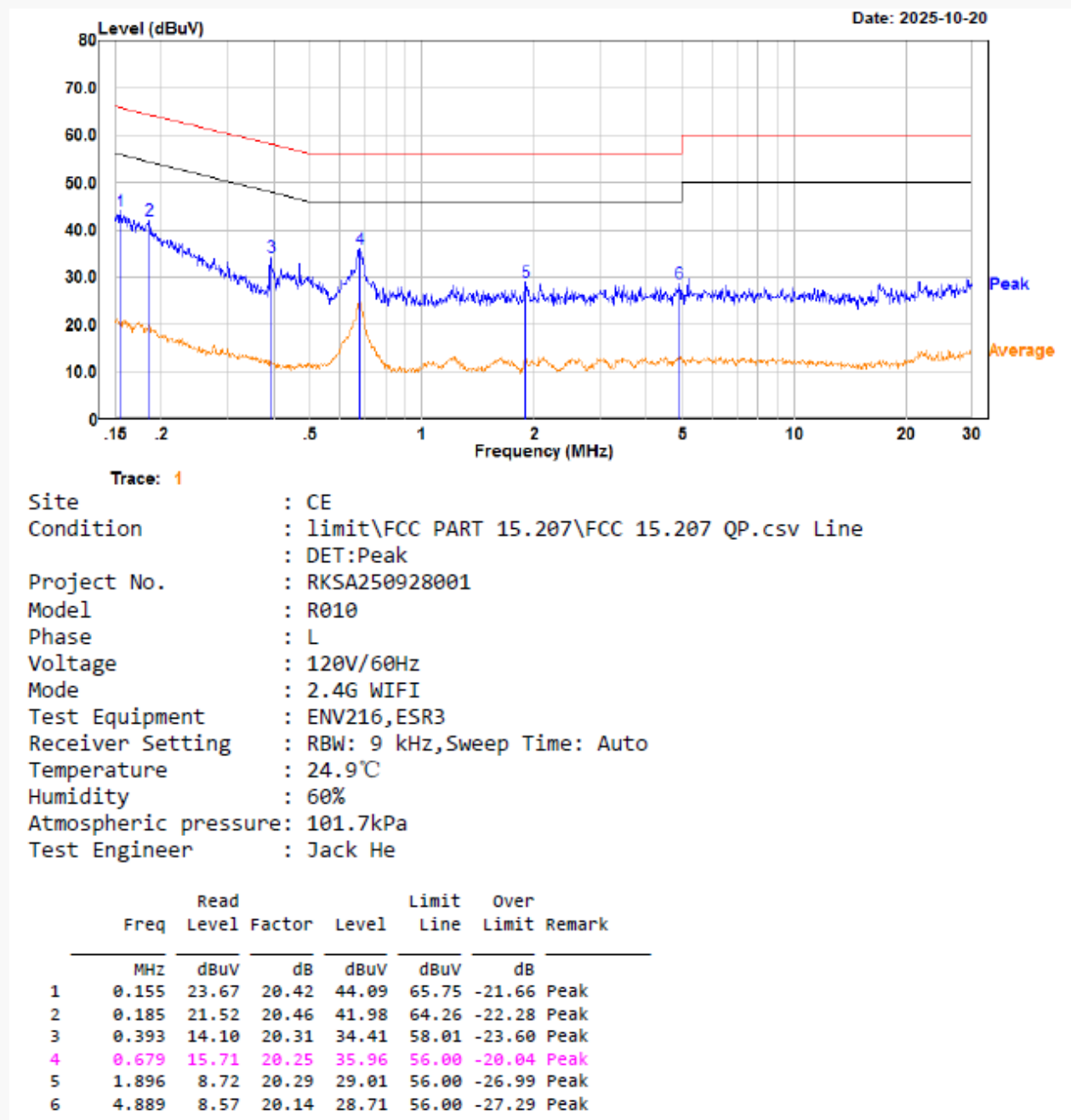
	Read		Limit	Over		
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB
1	0.150	6.10	20.41	26.51	56.00	-29.49 Average
2	0.150	19.90	20.41	40.31	66.00	-25.69 QP
3	0.474	7.20	20.23	27.43	46.44	-19.01 Average
4	0.474	15.90	20.23	36.13	56.44	-20.31 QP
5	0.535	11.80	20.19	31.99	46.00	-14.01 Average
6	0.535	21.90	20.19	42.09	56.00	-13.91 QP
7	1.080	2.79	20.19	22.98	46.00	-23.02 Average
8	1.080	11.09	20.19	31.28	56.00	-24.72 QP
9	14.782	3.70	20.27	23.97	50.00	-26.03 Average
10	14.782	16.20	20.27	36.47	60.00	-23.53 QP
11	15.851	4.80	20.31	25.11	50.00	-24.89 Average
12	15.851	18.60	20.31	38.91	60.00	-21.09 QP

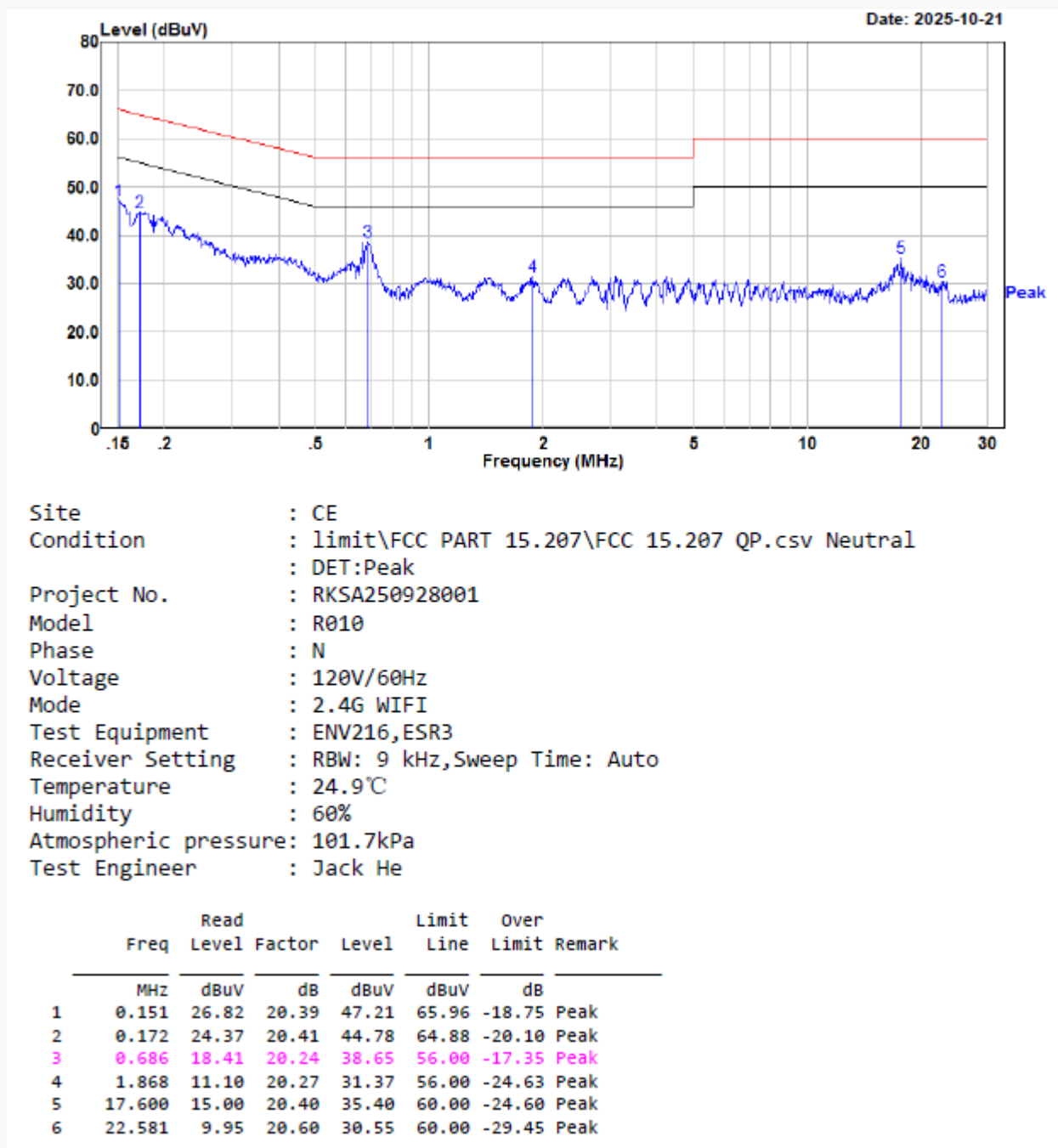


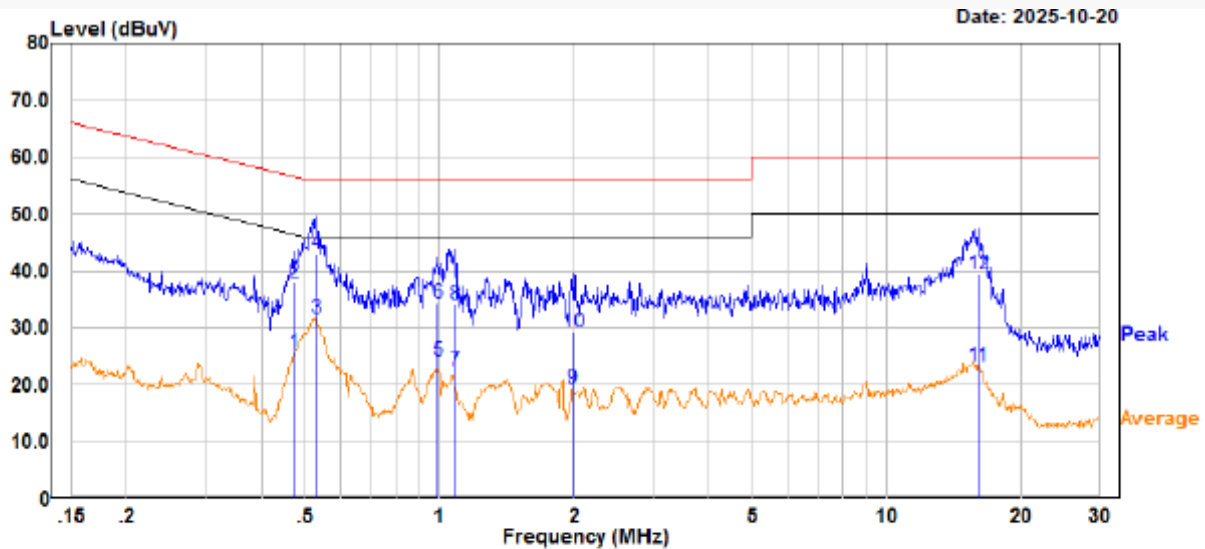
Site : CE
Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Neutral
: DET:Peak
Project No. : RKSA250928001
Model : R010
Phase : N
Voltage : 120V/60Hz
Mode : 2.4G WIFI
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
Temperature : 24.9°C
Humidity : 60%
Atmospheric pressure: 101.7kPa
Test Engineer : Jack He

	Freq	Read		Limit	Over	Remark
		Level	Factor	Line	Limit	
	MHz	dBuV	dB	dBuV	dB	
1	0.150	22.85	20.39	43.24	66.00	-22.76 Peak
2	0.230	20.40	20.40	40.80	62.44	-21.64 Peak
3	0.486	20.67	20.22	40.89	56.23	-15.34 Peak
4	0.535	25.14	20.21	45.35	56.00	-10.65 Peak
5	1.064	24.24	20.19	44.43	56.00	-11.57 Peak
6	1.577	17.71	20.24	37.95	56.00	-18.05 Peak

Adapter-2



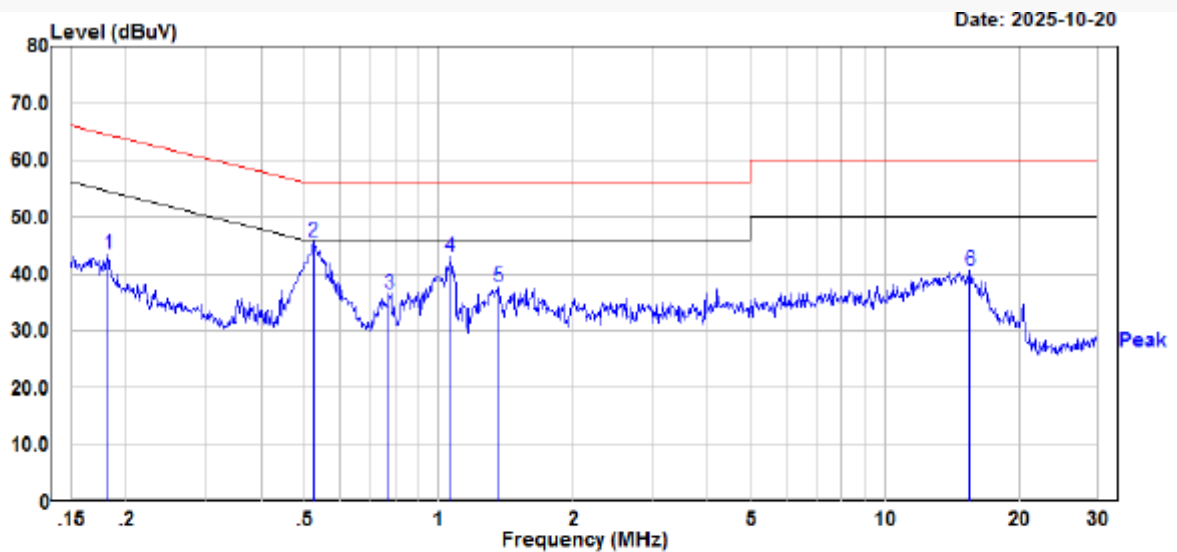


For BLE Mode:*EUT operation mode: Transmitting in BLE (1 Mbps) middle channel (maximum output power)**Adapter-1*

Trace: 1

Site : CE
 Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Line
 : DET:Peak
 Project No. : RKSA250928001
 Model : R010
 Phase : L
 Voltage : 120V/60Hz
 Mode : BLE 1M
 Test Equipment : ENV216,ESR3
 Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
 Temperature : 24.9℃
 Humidity : 60%
 Atmospheric pressure: 101.7kPa
 Test Engineer : Jack He

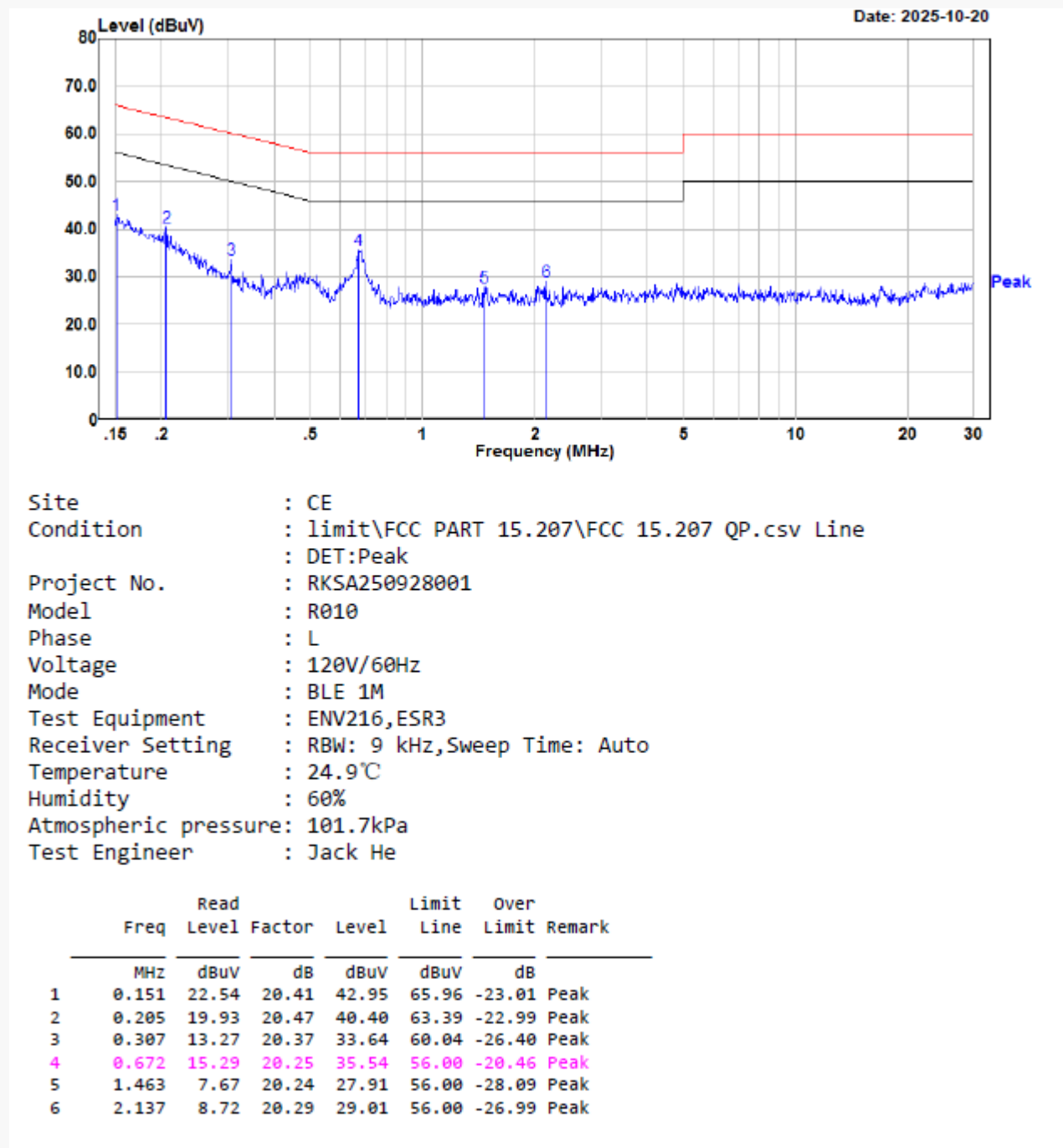
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.474	5.40	20.23	25.63	46.44	-20.81	Average
2	0.474	17.70	20.23	37.93	56.44	-18.51	QP
3	0.529	11.60	20.19	31.79	46.00	-14.21	Average
4	0.529	22.90	20.19	43.09	56.00	-12.91	QP
5	0.992	4.00	20.17	24.17	46.00	-21.83	Average
6	0.992	14.10	20.17	34.27	56.00	-21.73	QP
7	1.080	2.19	20.19	22.38	46.00	-23.62	Average
8	1.080	13.89	20.19	34.08	56.00	-21.92	QP
9	1.983	-1.00	20.30	19.30	46.00	-26.70	Average
10	1.983	9.00	20.30	29.30	56.00	-26.70	QP
11	16.009	2.90	20.32	23.22	50.00	-26.78	Average
12	16.009	19.20	20.32	39.52	60.00	-20.48	QP

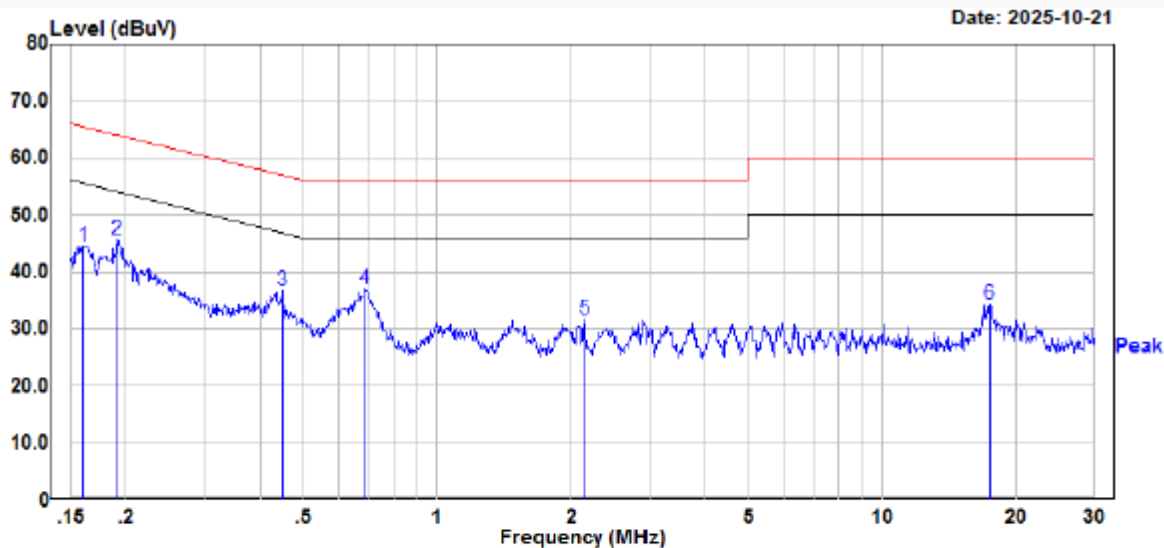


Site : CE
Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Neutral
Project No. : RKSA250928001
Model : R010
Phase : N
Voltage : 120V/60Hz
Mode : BLE 1M
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
Temperature : 24.9℃
Humidity : 60%
Atmospheric pressure: 101.7kPa
Test Engineer : Jack He

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.182	23.02	20.41	43.43	64.39	-20.96	Peak
2	0.524	25.41	20.21	45.62	56.00	-10.38	Peak
3	0.773	16.34	20.22	36.56	56.00	-19.44	Peak
4	1.058	22.83	20.18	43.01	56.00	-12.99	Peak
5	1.358	17.46	20.22	37.68	56.00	-18.32	Peak
6	15.460	20.21	20.29	40.50	60.00	-19.50	Peak

Adapter-2





Site : CE
Condition : limit\FCC PART 15.207\FCC 15.207 QP.csv Neutral
DET:Peak
Project No. : RKSA250928001
Model : R010
Phase : N
Voltage : 120V/60Hz
Mode : BLE 1M
Test Equipment : ENV216,ESR3
Receiver Setting : RBW: 9 kHz,Sweep Time: Auto
Temperature : 24.9℃
Humidity : 60%
Atmospheric pressure: 101.7kPa
Test Engineer : Jack He

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.160	24.15	20.40	44.55	65.46	-20.91	Peak
2	0.191	25.27	20.43	45.70	64.01	-18.31	Peak
3	0.449	16.36	20.31	36.67	56.89	-20.22	Peak
4	0.686	16.66	20.24	36.90	56.00	-19.10	Peak
5	2.137	11.49	20.27	31.76	56.00	-24.24	Peak
6	17.425	14.03	20.39	34.42	60.00	-25.58	Peak

SPURIOUS EMISSIONS**Environmental Conditions & Test Information**

Test Item:	SPURIOUS EMISSIONS			
	9kHz – 30MHz	30MHz - 1GHz	1 GHz - 18 GHz	18 GHz - 25 GHz
Test Date:	2025-10-23	2025-10-14 to 2025-10-21	2025-10-13 to 2025-10-18	2025-10-18
Temperature:	25 °C	22.2-23.7 °C	26.2-26.6 °C	26.2 °C
Relative Humidity:	40 %	50-56 %	50-54 %	50 %
ATM Pressure:	101.5 kPa	101.6-103.1 kPa	101.7 kPa	101.7 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Scarf Yang	Scarf Yang	Destine Hu	Hugh Wu

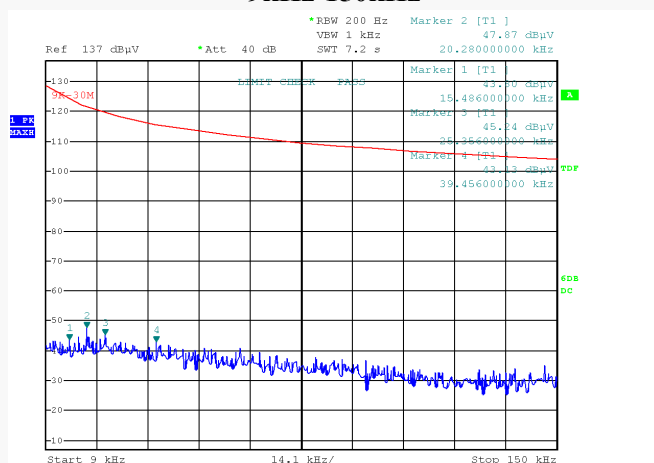
Test Result: Compliant

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

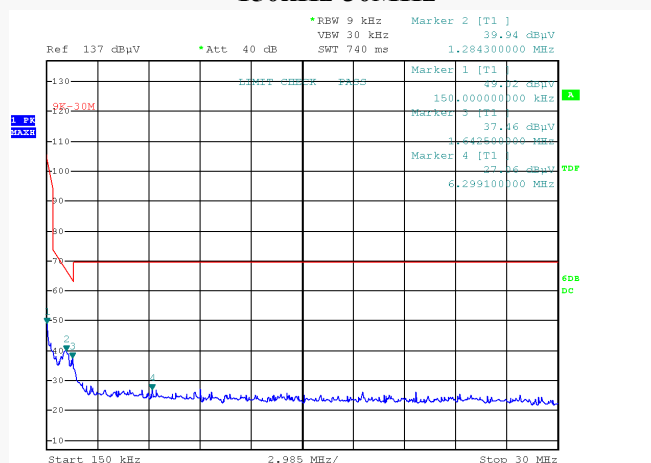
EUT operation mode: Transmitting

For Wi-Fi Mode:**9 kHz-30MHz:** (Transmitting in maximum output power mode and 802.11b mode middle channel)

Adapter-1

Parallel(worst case)**9kHz-150kHz**Project No. RKSA250928001
Date: 23.OCT.2025 18:20:12

Tester: Scarf Yang

150kHz-30MHzProject No. RKSA250928001
Date: 23.OCT.2025 18:25:37

Tester: Scarf Yang

9kHz-150kHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.015486	43.80	PK	-0.54	123.81	80.01
0.020280	47.87	PK	-0.56	121.46	73.59
0.025356	45.24	PK	-0.59	119.52	74.28
0.039456	43.13	PK	-2.12	115.68	72.55

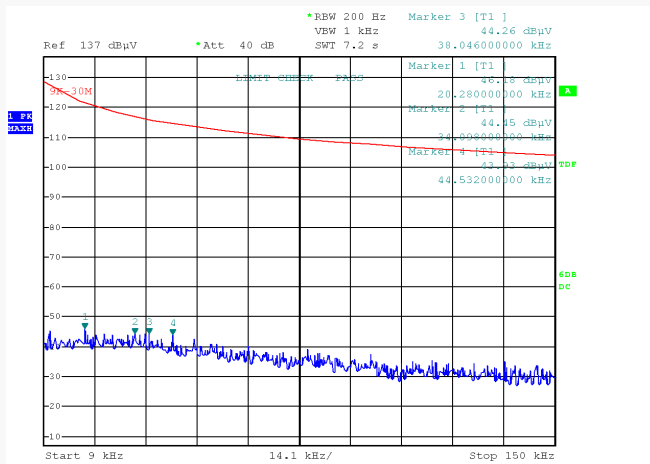
150kHz-30MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	49.02	PK	-11.34	104.08	55.06
1.284300	39.94	PK	-28.55	65.43	25.49
1.642500	37.46	PK	-29.73	63.29	25.83
6.299100	27.06	PK	-32.26	69.54	42.48

Adapter-2

Parallel(worst case)

9kHz-150kHz

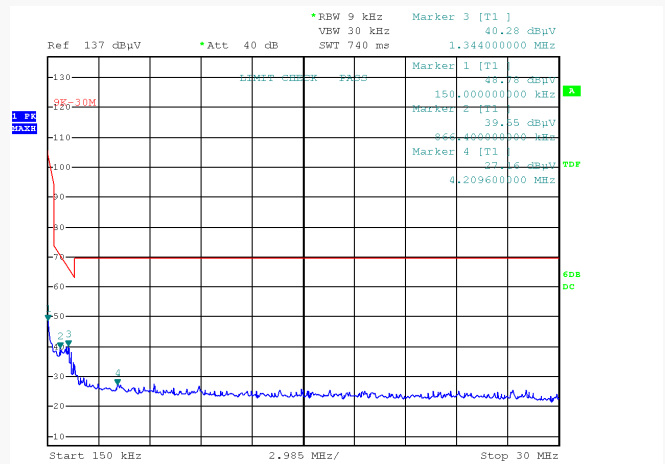


Project No. RKSA250928001

Tester: Scarf Yang

Date: 23.OCT.2025 17:35:34

150kHz-30MHz



Project No. RKSA250928001

Tester: Scarf Yang

Date: 23.OCT.2025 17:40:16

9kHz-150kHz

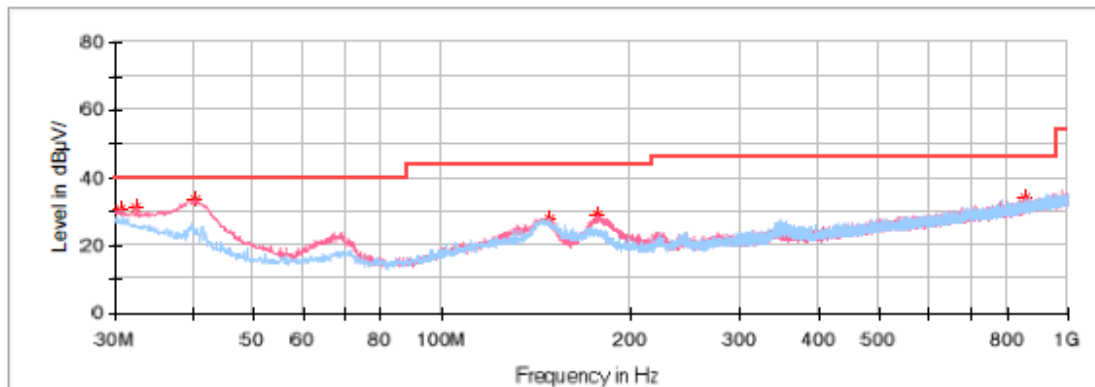
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.020280	46.18	PK	-0.56	121.46	75.28
0.034098	44.45	PK	-1.27	116.95	72.50
0.038046	44.26	PK	-1.9	116.00	71.74
0.044532	43.93	PK	-2.94	114.63	70.70

150kHz-30MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	48.78	PK	-11.34	104.08	55.30
0.866400	39.55	PK	-26.68	68.85	29.30
1.344000	40.28	PK	-28.75	65.04	24.76
4.209600	27.16	PK	-31.94	69.54	42.38

30MHz-1GHz (Transmitting in maximum output power 802.11b mode and middle channel):*Adapter-1***Middle Channel: 2437MHz****Common Information**

Project No: RKSA250928001
EUT Model: R010
Test Mode: Transmitting in 802.11b mode middle channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 22.2°C
Humidity: 50%
Barometric Pressure: 103.1Pa
Test Engineer: Scarf Yang
Test Date: 2025/10/21

**Critical_Freqs**

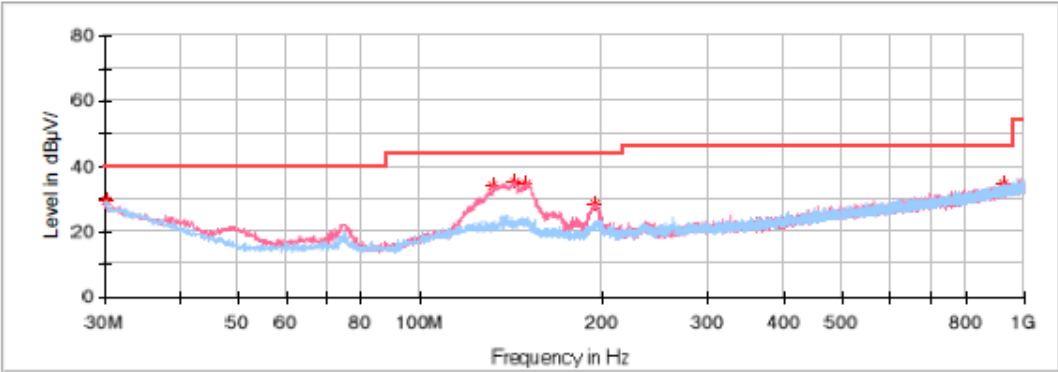
Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.727500	30.76	40.00	9.24	V	-5.2
32.546250	31.02	40.00	8.98	V	-6.4
40.306250	33.51	40.00	6.49	V	-11.5
149.067500	28.00	43.50	15.50	H	-11.6
177.803750	28.76	43.50	14.74	V	-12.9
854.136250	34.09	46.00	11.91	V	0.2

Adapter-2

Middle Channel: 2437MHz

Common Information

Project No: RKSA250928001
EUT Model: R010
Test Mode: Transmitting in 802.11b mode middle channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 23.7°C
Humidity: 56%
Barometric Pressure: 101.6Pa
Test Engineer: Scarf Yang
Test Date: 2025/10/14



Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.121250	29.50	40.00	10.50	H	-4.8
132.213750	33.87	43.50	9.63	V	-11.1
143.853750	35.01	43.50	8.49	V	-11.4
149.431250	34.76	43.50	8.74	V	-11.7
195.021250	28.58	43.50	14.92	V	-12.3
925.310000	34.88	46.00	11.12	H	1.4

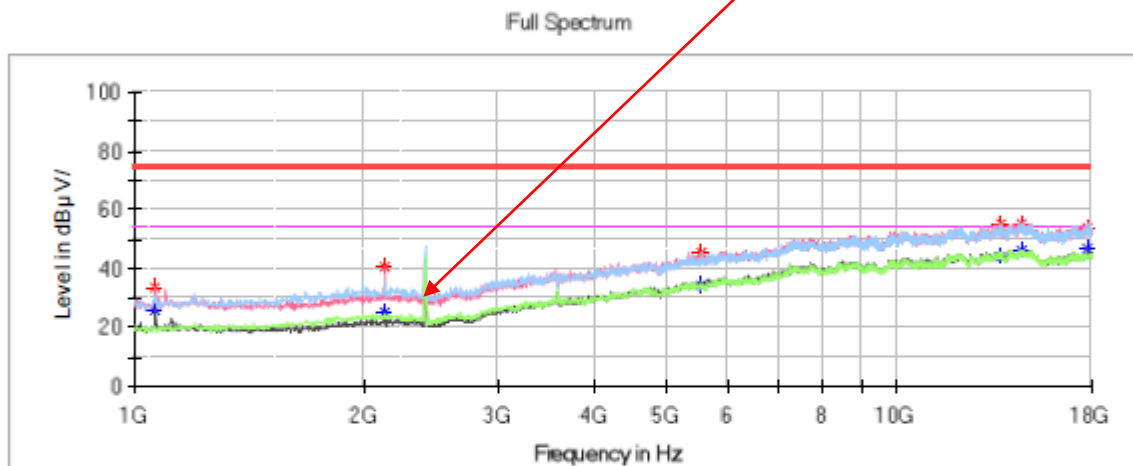
1GHz-18GHz:
802.11b Mode:

Low Channel: 2412MHz

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11b 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter



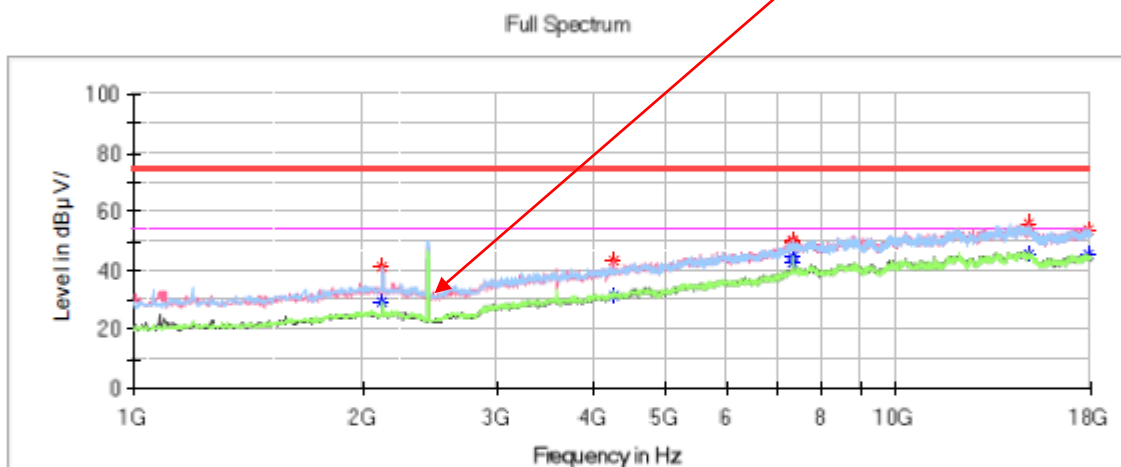
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1064.600000	---	25.55	54.00	28.45	V	-15.
1064.600000	33.87	---	74.00	40.13	V	-15.
2128.800000	---	25.26	54.00	28.74	V	-9.
2128.800000	40.22	---	74.00	33.78	V	-9.
5552.600000	---	34.47	54.00	19.53	H	-1.
5552.600000	45.74	---	74.00	28.26	H	-1.
13675.200000	---	44.27	54.00	9.73	V	10.
13675.200000	55.24	---	74.00	18.76	V	10.
14610.200000	55.56	---	74.00	18.44	H	11.
14610.200000	---	45.87	54.00	8.13	H	11.
17813.000000	53.66	---	74.00	20.34	V	11.
17813.000000	---	46.81	54.00	7.19	V	11.

Middle Channel: 2437MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11b 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

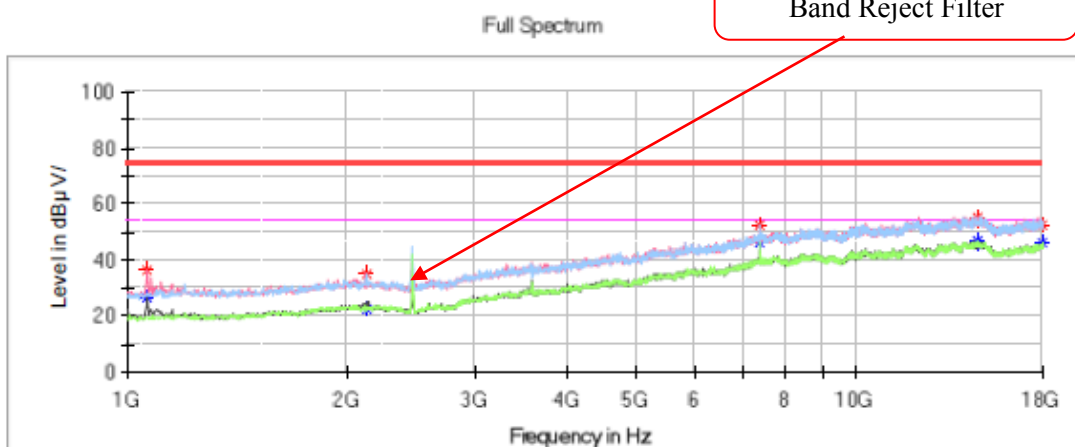
Fundamental Test with
Band Reject Filter

**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)
2122.000000	41.14	---	74.00	32.86	H	-9.9
2122.000000	---	29.59	54.00	24.41	H	-9.9
4257.200000	43.49	---	74.00	30.51	V	-4.6
4257.200000	---	31.46	54.00	22.54	V	-4.6
7310.400000	---	44.42	54.00	9.58	H	2.4
7310.400000	49.84	---	74.00	24.16	H	2.4
7313.800000	---	42.75	54.00	11.25	H	2.4
7313.800000	50.51	---	74.00	23.49	H	2.4
14906.000000	---	45.29	54.00	8.71	V	10.6
14906.000000	55.80	---	74.00	18.20	V	10.6
17925.200000	---	45.45	54.00	8.55	H	11.6
17925.200000	53.54	---	74.00	20.46	H	11.6

High Channel: 2462MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11b 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

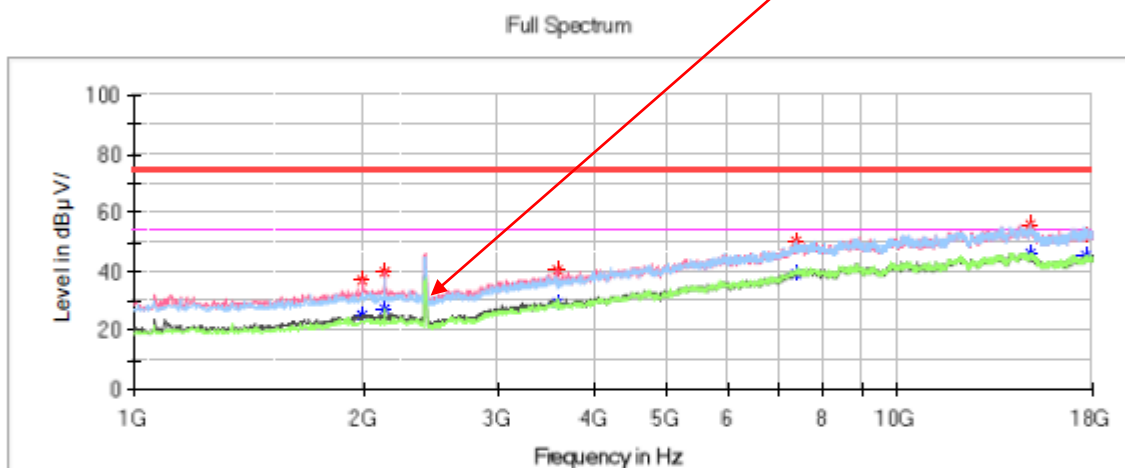
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1064.600000	36.40	---	74.00	37.60	V	-15.0
1064.600000	---	26.90	54.00	27.10	V	-15.0
2125.400000	35.09	---	74.00	38.91	H	-9.9
2125.400000	---	22.65	54.00	31.35	H	-9.9
7385.200000	52.27	---	74.00	21.73	H	2.6
7385.200000	---	45.82	54.00	8.18	H	2.6
14651.000000	55.49	---	74.00	18.51	V	11.5
14651.000000	---	45.57	54.00	8.43	V	11.5
14685.000000	53.97	---	74.00	20.03	V	11.3
14685.000000	---	46.76	54.00	7.24	V	11.3
17989.800000	52.47	---	74.00	21.53	H	11.7
17989.800000	---	46.04	54.00	7.96	H	11.7

802.11g Mode:**Low Channel: 2412MHz****Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11g 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter

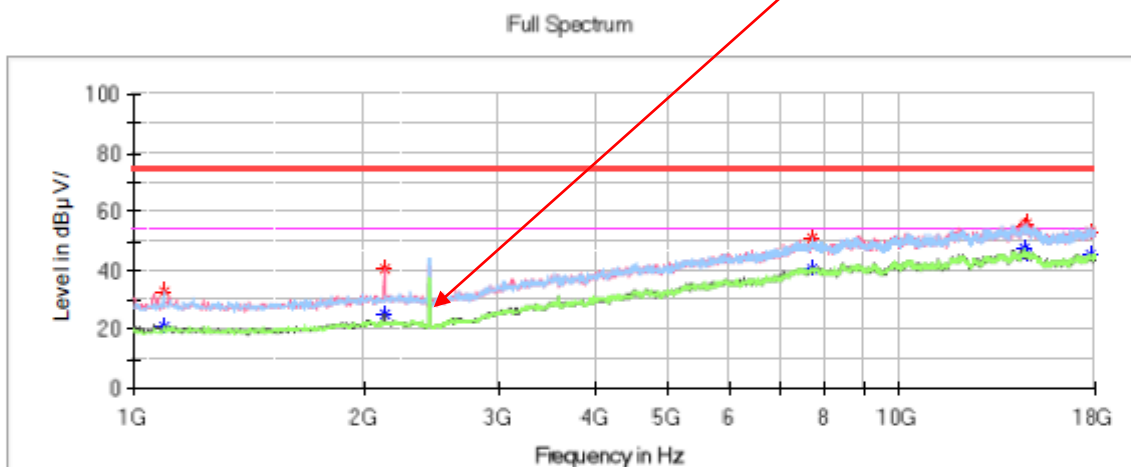
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1996.200000	---	24.86	54.00	29.14	V	-10.0
1996.200000	37.40	---	74.00	36.60	V	-10.0
2128.800000	---	27.44	54.00	26.56	V	-9.9
2128.800000	40.03	---	74.00	33.97	V	-9.9
3580.600000	---	29.25	54.00	24.75	V	-6.1
3580.600000	40.45	---	74.00	33.55	V	-6.1
7364.800000	---	39.38	54.00	14.62	H	2.6
7364.800000	50.22	---	74.00	23.78	H	2.6
14919.600000	55.97	---	74.00	18.03	H	10.6
14919.600000	---	46.45	54.00	7.55	H	10.5
17714.400000	52.56	---	74.00	21.44	H	11.0
17714.400000	---	45.80	54.00	8.20	H	11.0

Middle Channel: 2437MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11g 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter

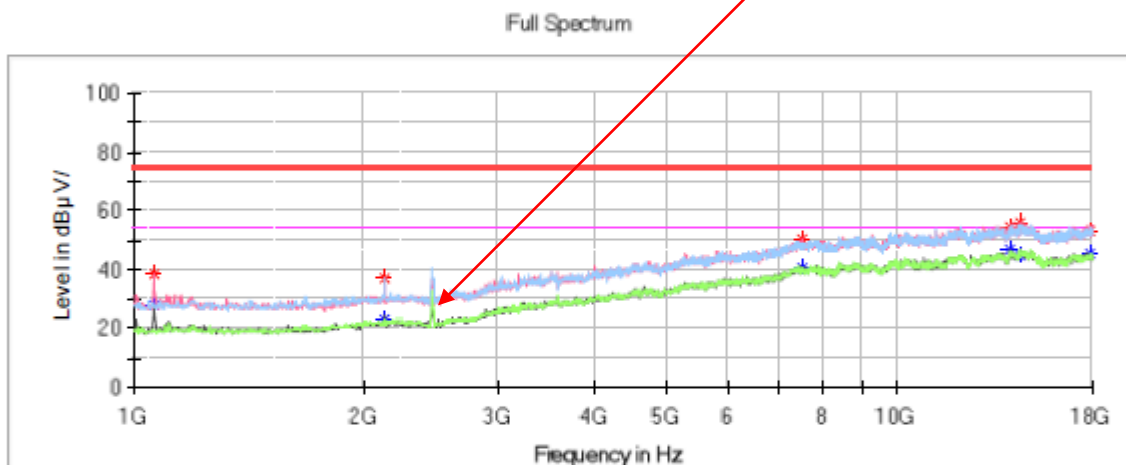
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1095.200000	---	20.92	54.00	33.08	H	-14
1095.200000	33.06	---	74.00	40.94	H	-14
2125.400000	---	25.01	54.00	28.99	V	-9
2125.400000	40.37	---	74.00	33.63	V	-9
7704.800000	---	40.49	54.00	13.51	V	3
7704.800000	51.05	---	74.00	22.95	V	3
14535.400000	---	47.22	54.00	6.78	H	11
14535.400000	55.06	---	74.00	18.94	H	11
14623.800000	---	45.36	54.00	8.64	V	11
14623.800000	55.81	---	74.00	18.19	V	11
17779.000000	53.39	---	74.00	20.61	H	11
17779.000000	---	45.70	54.00	8.30	H	11

High Channel: 2462MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11g 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	---	27.63	54.00	26.37	V	-15.
1061.200000	38.38	---	74.00	35.62	V	-15.
2132.200000	---	22.82	54.00	31.18	H	-9.
2132.200000	37.15	---	74.00	36.85	H	-9.
7528.000000	---	40.63	54.00	13.37	H	3.
7528.000000	50.22	---	74.00	23.78	H	3.
14022.000000	---	46.65	54.00	7.35	V	11.
14022.000000	54.28	---	74.00	19.72	V	11.
14470.800000	---	44.70	54.00	9.30	V	11.
14470.800000	55.61	---	74.00	18.39	V	11.
17921.800000	52.80	---	74.00	21.20	H	11.
17921.800000	---	45.56	54.00	8.44	H	11.

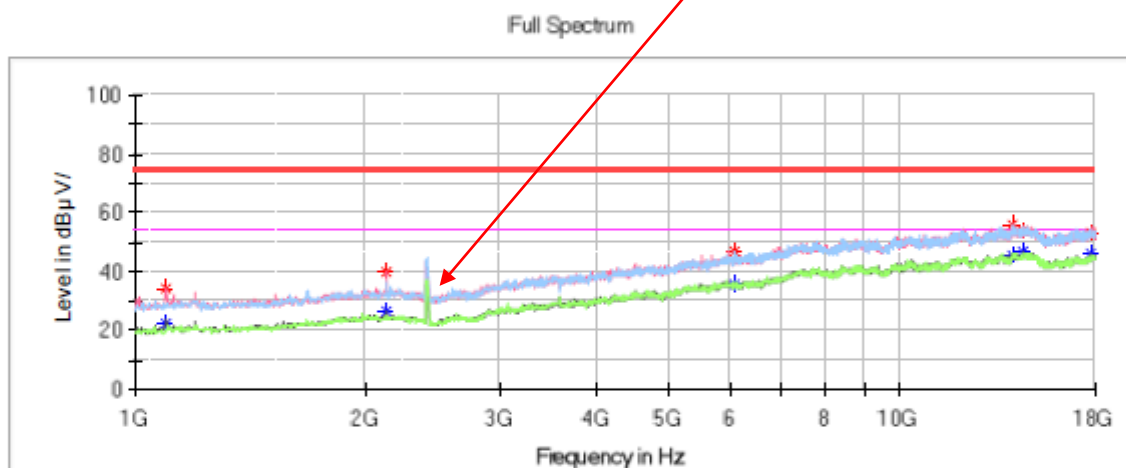
802.11n-HT20 Mode :

Low Channel: 2412MHz

Common Information

Project No.: RKSA250928001
 EUT Model: R010
 Test Mode: 2.4G WIFI 802.11n20 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: 26.6℃
 Humidity: 54%
 Atmospheric Pressure: 101.7kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter



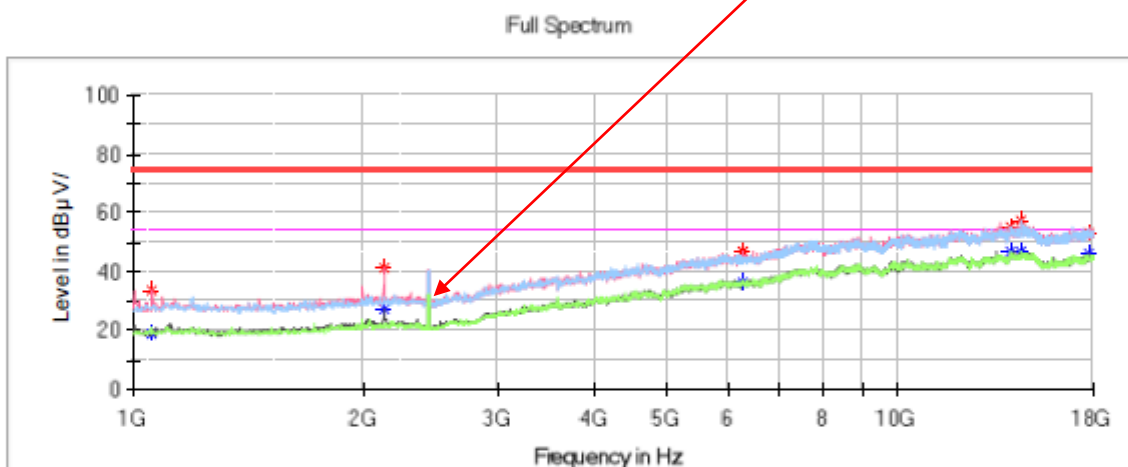
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1095.200000	34.47	---	74.00	39.53	V	-14.9
1095.200000	---	22.35	54.00	31.65	V	-14.9
2128.800000	39.57	---	74.00	34.43	V	-9.9
2128.800000	---	26.62	54.00	27.38	V	-9.9
6096.600000	46.52	---	74.00	27.48	H	-0.7
6096.600000	---	35.86	54.00	18.14	H	-0.7
14049.200000	---	45.59	54.00	8.41	H	11.2
14049.200000	56.02	---	74.00	17.98	H	11.2
14481.000000	---	46.67	54.00	7.33	V	11.9
14481.000000	53.96	---	74.00	20.04	V	11.9
17724.600000	---	45.82	54.00	8.18	H	11.0
17724.600000	53.38	---	74.00	20.62	H	11.0

Middle Channel: 2437MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n20 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter

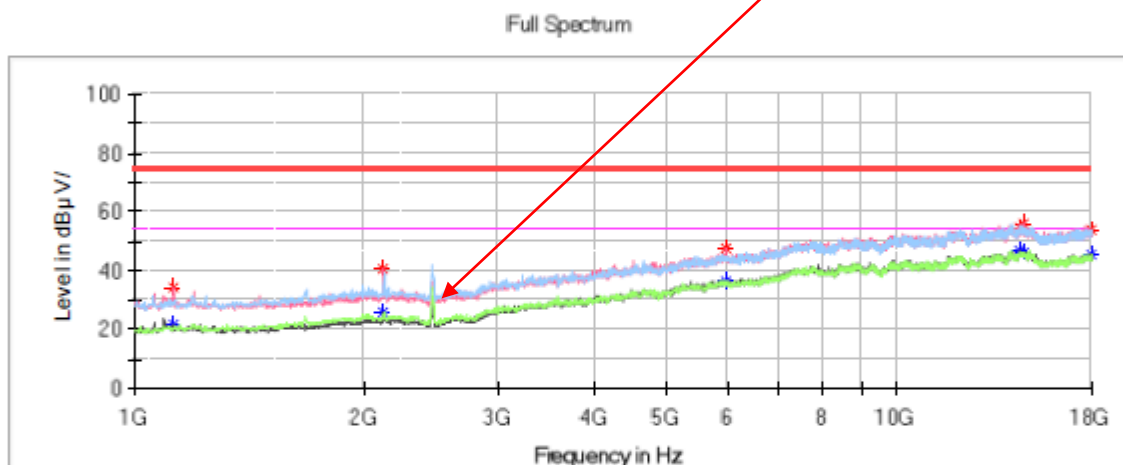
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1057.800000	---	19.10	54.00	34.90	V	-15.4
1057.800000	33.48	---	74.00	40.52	V	-15.4
2128.800000	---	27.16	54.00	26.84	V	-9.2
2128.800000	41.35	---	74.00	32.65	V	-9.2
6259.800000	---	36.43	54.00	17.57	V	-0.2
6259.800000	47.09	---	74.00	26.91	V	-0.2
14018.600000	---	46.93	54.00	7.07	H	11.2
14018.600000	55.18	---	74.00	18.82	H	11.2
14528.600000	---	46.53	54.00	7.47	H	11.2
14528.600000	57.07	---	74.00	16.93	H	11.2
17819.800000	53.17	---	74.00	20.83	V	11.2
17819.800000	---	45.89	54.00	8.11	V	11.2

High Channel: 2462MHz**Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n20 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

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)
1125.800000	---	21.64	54.00	32.36	V	-14.8
1125.800000	34.52	---	74.00	39.48	V	-14.8
2122.000000	---	25.95	54.00	28.05	V	-9.9
2122.000000	40.57	---	74.00	33.43	V	-9.9
5981.000000	---	36.46	54.00	17.54	V	-0.7
5981.000000	47.70	---	74.00	26.30	V	-0.7
14457.200000	54.81	---	74.00	19.19	H	11.9
14457.200000	---	47.09	54.00	6.91	H	11.9
14681.600000	55.90	---	74.00	18.10	V	11.4
14681.600000	---	46.03	54.00	7.97	V	11.4
17993.200000	53.64	---	74.00	20.36	V	11.8
17993.200000	---	45.69	54.00	8.31	V	11.8

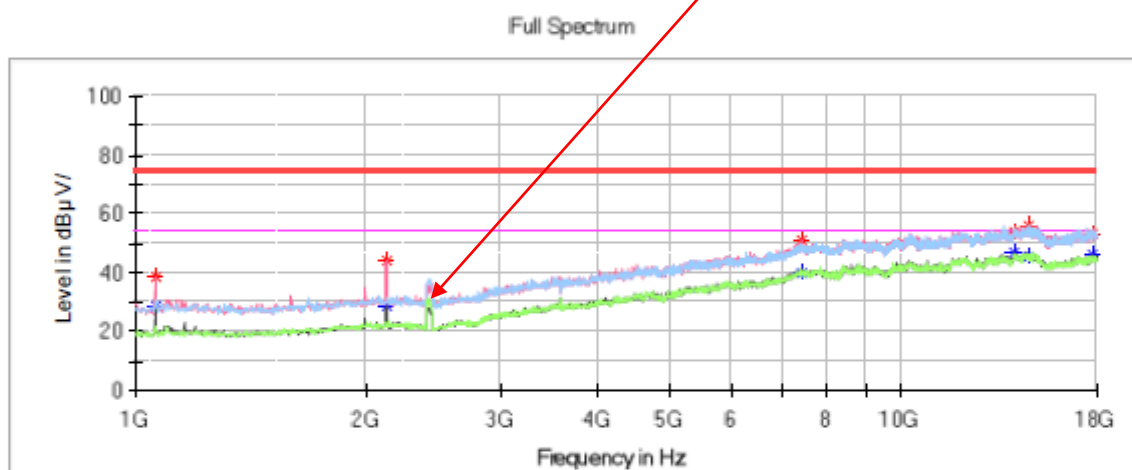
802.11n-HT40 Mode :

Low Channel: 2422MHz

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n40 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter



Critical Freqs

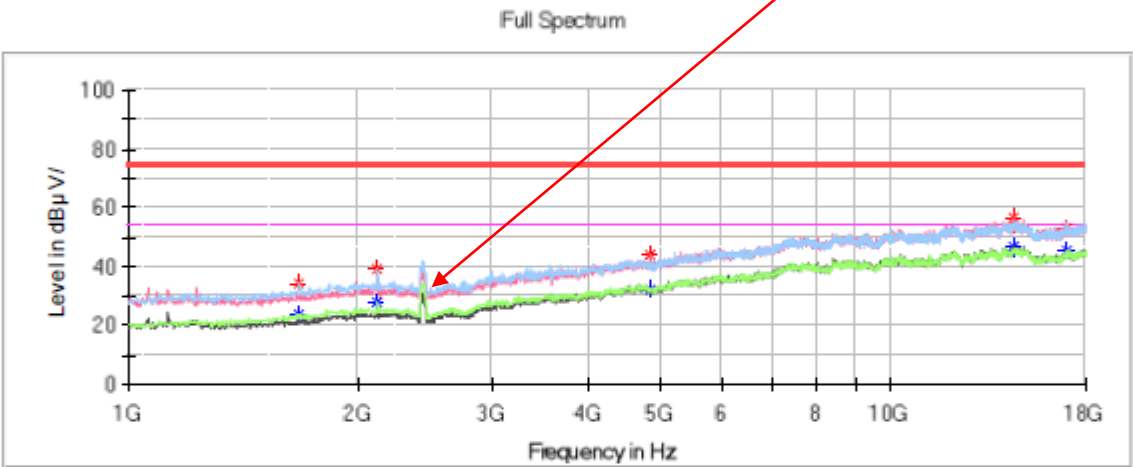
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	---	28.35	54.00	25.65	V	-15.0
1061.200000	38.70	---	74.00	35.30	V	-15.0
2125.400000	---	28.53	54.00	25.47	V	-9.0
2125.400000	44.01	---	74.00	29.99	V	-9.0
7392.000000	---	40.06	54.00	13.94	V	2.0
7392.000000	50.75	---	74.00	23.25	V	2.0
14073.000000	53.53	---	74.00	20.47	H	11.0
14073.000000	---	46.76	54.00	7.24	H	11.0
14702.000000	55.89	---	74.00	18.11	H	11.0
14702.000000	---	45.51	54.00	8.49	H	11.0
17792.600000	53.27	---	74.00	20.73	V	11.0
17792.600000	---	45.93	54.00	8.07	V	11.0

Middle Channel: 2437MHz

Common Information

Project No.: RKSA250928001
 EUT Model: R010
 Test Mode: 2.4G WIFI 802.11n40 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: 26.6℃
 Humidity: 54%
 Atmospheric Pressure: 101.7kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/13

Fundamental Test with
Band Reject Filter



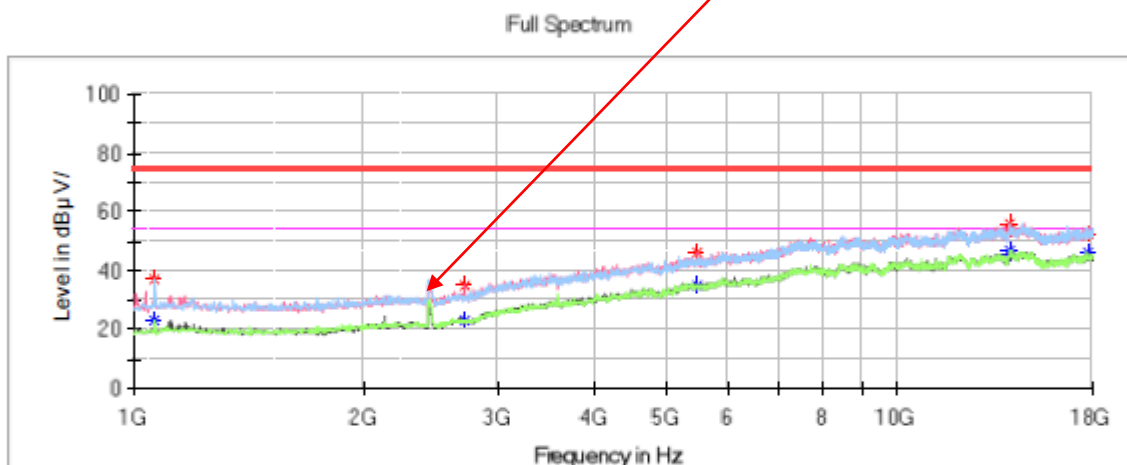
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1673.200000	---	23.49	54.00	30.51	H	-12.5
1673.200000	33.96	---	74.00	40.04	H	-12.5
2122.000000	39.25	---	74.00	34.75	H	-9.5
2122.000000	---	27.73	54.00	26.27	H	-9.5
4831.800000	43.72	---	74.00	30.28	V	-3.5
4831.800000	---	32.49	54.00	21.51	V	-3.5
14457.200000	---	46.73	54.00	7.27	V	11.5
14457.200000	53.53	---	74.00	20.47	V	11.5
14477.600000	---	45.23	54.00	8.77	V	11.5
14477.600000	56.51	---	74.00	17.49	V	11.5
17034.400000	53.47	---	74.00	20.53	H	10.5
17034.400000	---	45.68	54.00	8.32	H	10.5

High Channel: 2452MHz**Common Information**

Project No.: RKSA250928001
 EUT Model: R010
 Test Mode: 2.4G WIFI 802.11n40 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: 26.6°C
 Humidity: 54%
 Atmospheric Pressure: 101.7kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/13

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)
1064.600000	---	23.15	54.00	30.85	H	-15.1
1064.600000	37.33	---	74.00	36.67	H	-15.1
2710.200000	---	22.79	54.00	31.21	V	-8.1
2710.200000	34.88	---	74.00	39.12	V	-8.1
5477.800000	---	35.22	54.00	18.78	V	-1.1
5477.800000	46.05	---	74.00	27.95	V	-1.1
14015.200000	53.66	---	74.00	20.34	V	11.1
14015.200000	---	46.74	54.00	7.26	V	11.1
14025.400000	---	45.47	54.00	8.53	H	11.1
14025.400000	56.12	---	74.00	17.88	H	11.1
17734.800000	52.43	---	74.00	21.57	V	11.1
17734.800000	---	45.92	54.00	8.08	V	11.1

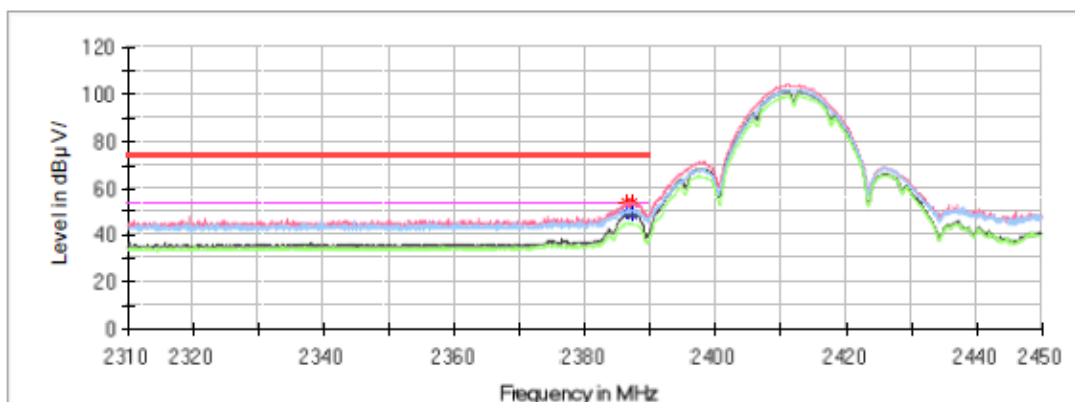
Band Edge:
802.11b Mode:

Low Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11b 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Full Spectrum



Critical Freqs

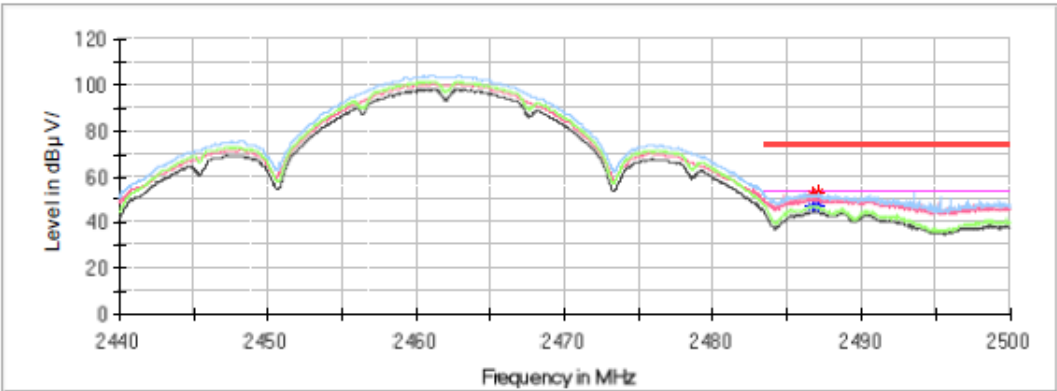
Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
2386.440000	---	49.23	54.00	4.77	V	0.2
2386.440000	53.60	---	74.00	20.40	V	0.2
2387.336000	---	48.66	54.00	5.34	V	0.2
2387.336000	54.01	---	74.00	19.99	V	0.2

High Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11b 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

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)
2486.728000	---	47.27	54.00	6.73	H	0.4
2486.728000	52.21	---	74.00	21.79	H	0.4
2487.112000	---	46.61	54.00	7.39	H	0.4
2487.112000	52.95	---	74.00	21.05	H	0.4

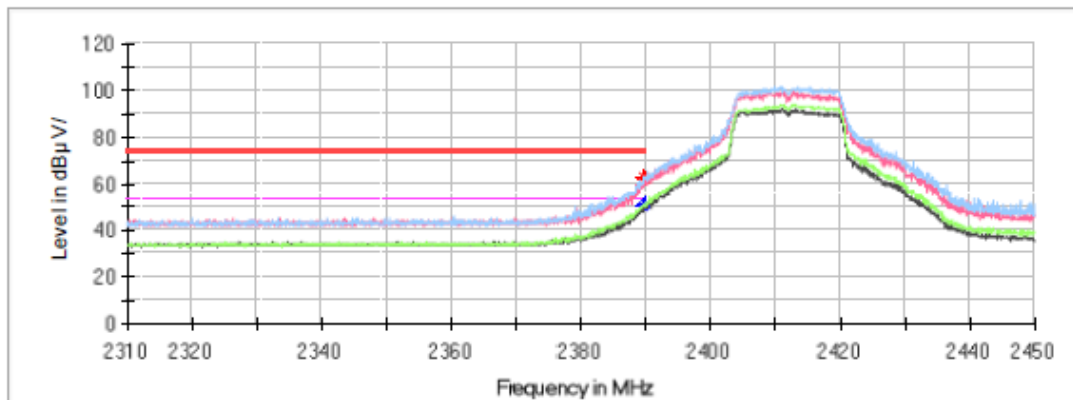
802.11g Mode :

Low Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11g 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Full Spectrum



Critical Freqs

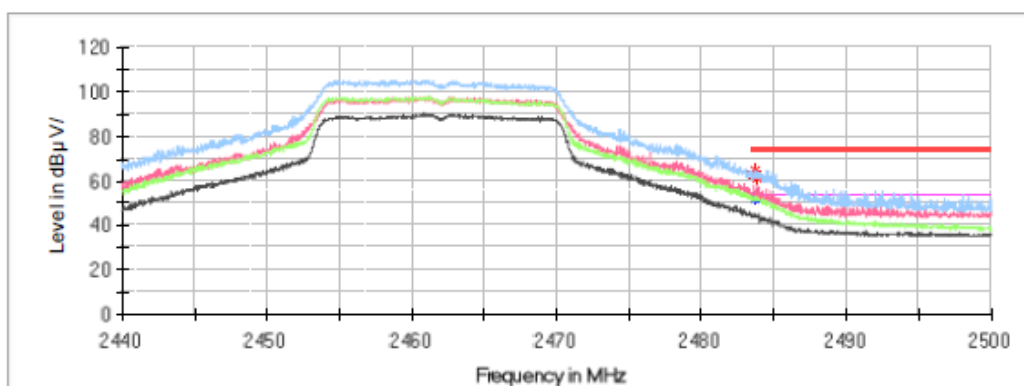
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.800000	63.26	---	74.00	10.74	H	0.2
2389.800000	---	50.54	54.00	3.46	H	0.2
2389.968000	61.99	---	74.00	12.01	H	0.2
2389.968000	---	51.51	54.00	2.49	H	0.2

High Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11g 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

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)
2483.728000	64.82	---	74.00	9.18	H	0.4
2483.728000	---	51.77	54.00	2.23	H	0.4
2483.776000	61.35	---	74.00	12.65	H	0.4
2483.776000	---	52.73	54.00	1.27	H	0.4

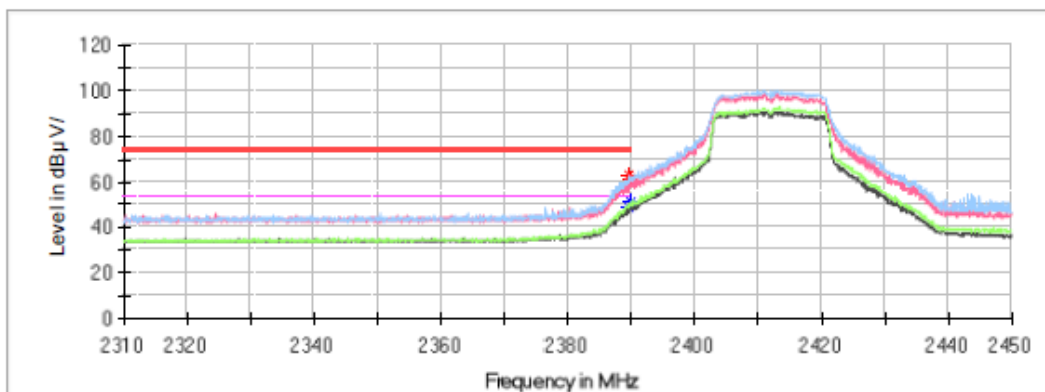
802.11n-HT20 Mode:

Low Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Full Spectrum



Critical Freqs

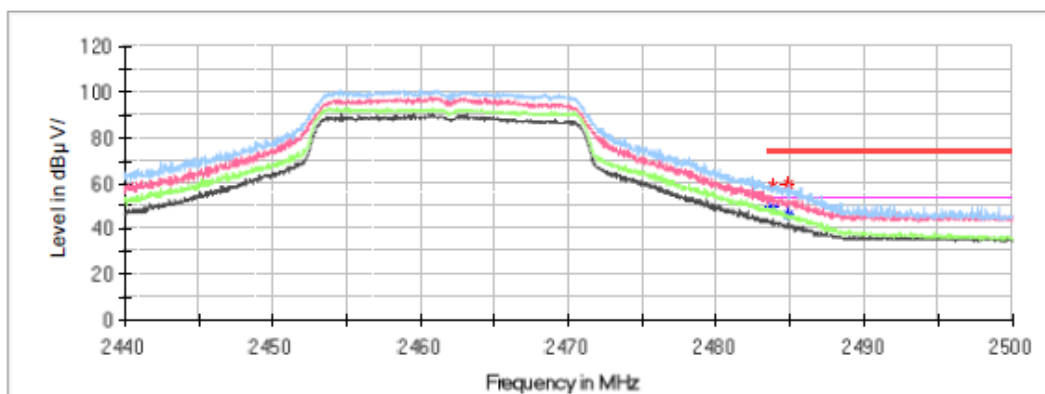
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.632000	62.77	---	74.00	11.23	V	0.2
2389.632000	---	48.77	54.00	5.23	V	0.2
2389.912000	61.62	---	74.00	12.38	H	0.2
2389.912000	---	51.17	54.00	2.83	H	0.2

High Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n20 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: 26.6°C
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Full Spectrum



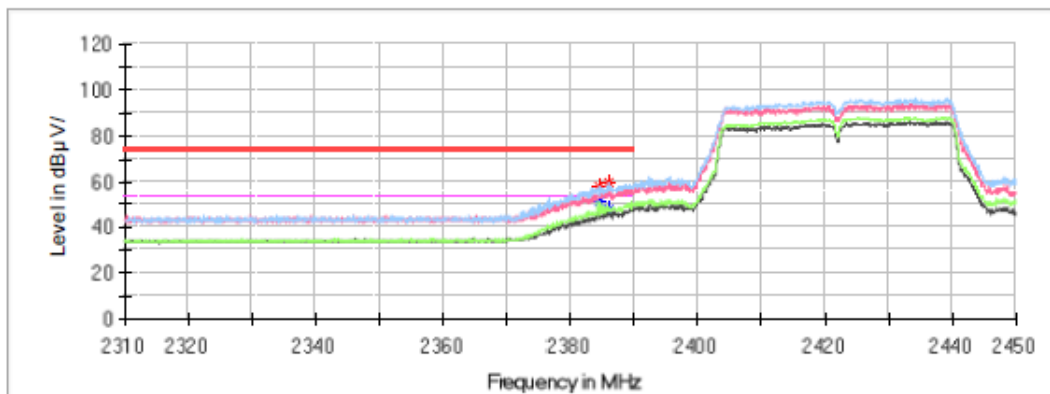
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.800000	58.37	---	74.00	15.63	H	0.4
2483.800000	---	49.14	54.00	4.86	H	0.4
2484.856000	---	46.54	54.00	7.46	H	0.4
2484.856000	59.51	---	74.00	14.49	H	0.4

802.11n-HT40 Mode:**Low Channel****Common Information**

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n40 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

Full Spectrum

**Critical Freqs**

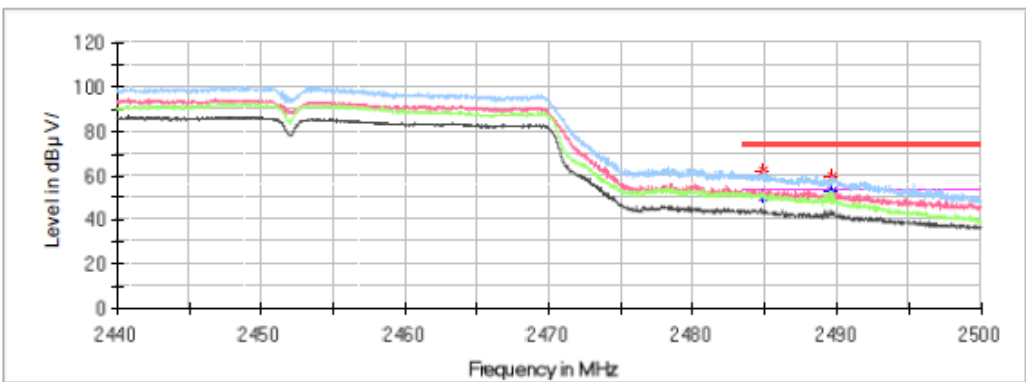
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2384.648000	---	51.39	54.00	2.61	H	0.2
2384.648000	57.58	---	74.00	16.42	H	0.2
2386.048000	---	48.17	54.00	5.83	H	0.2
2386.048000	59.36	---	74.00	14.64	H	0.2

High Channel

Common Information

Project No.: RKSA250928001
EUT Model: R010
Test Mode: 2.4G WIFI 802.11n40 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: 26.6℃
Humidity: 54%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/13

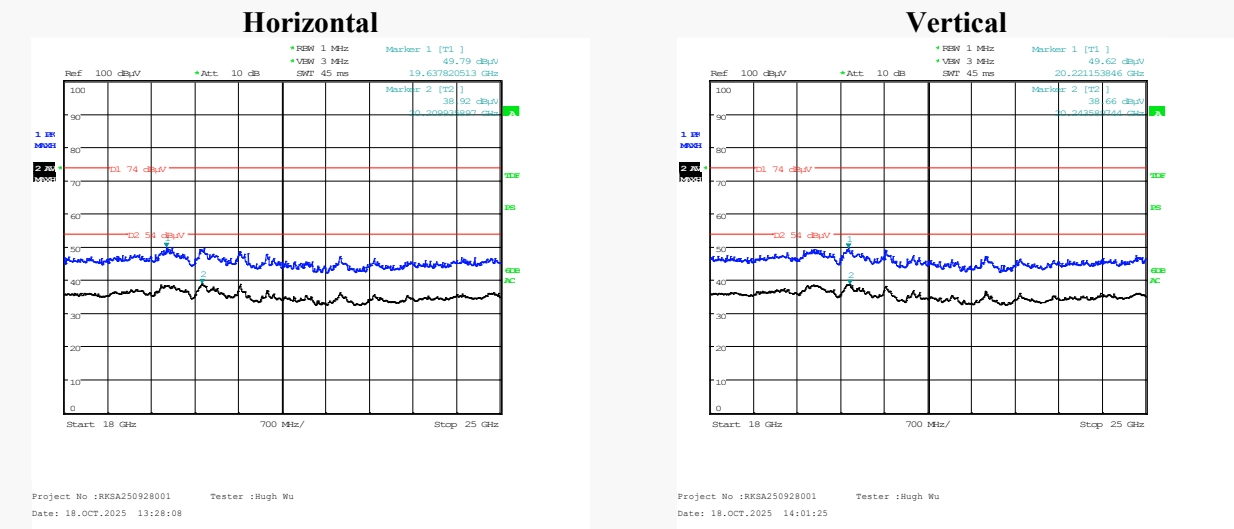
Full Spectrum



Critical Freqs

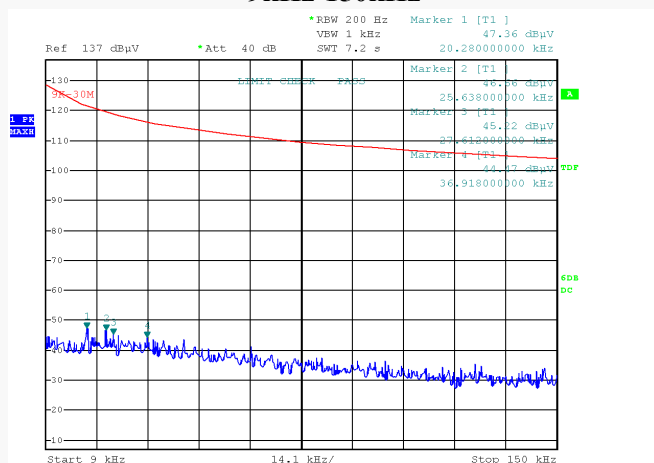
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.928000	62.18	---	74.00	11.82	H	0.4
2484.928000	---	50.60	54.00	3.40	H	0.4
2489.680000	59.91	---	74.00	14.09	H	0.4
2489.680000	---	53.09	54.00	0.91	H	0.4

18GHz-25GHz: Transmitting in maximum output power mode and 802.11b mode middle channel



Frequency (GHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
20.24	---	38.66	54	15.34	V	12.5
20.22	49.62	---	74	24.38	V	12.48
20.21	---	38.92	54	15.08	H	12.47
19.64	49.79	---	74	24.21	H	11.24

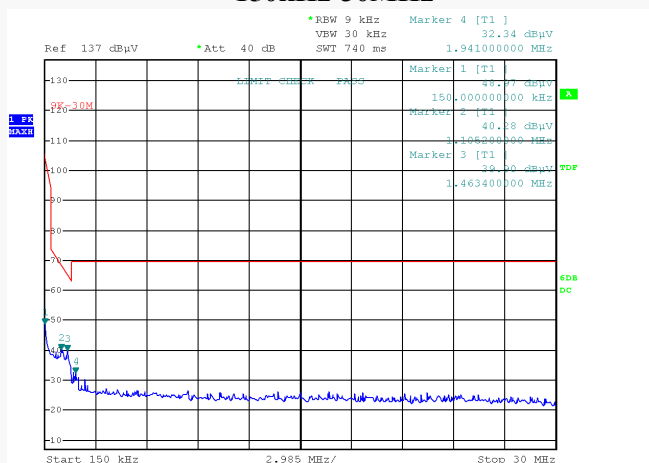
Note: The test distance is 3m. The limit is 74dBμV/m (Peak) and 54dBμV/m (Average).

For BLE Mode:**9 kHz-30MHz:** Transmitting in maximum output power mode BLE middle channel*Adapter-1***Parallel(worst case)****9kHz-150kHz**

Project No. RKSA250928001

Tester: Scarf Yang

Date: 23.OCT.2025 18:39:31

150kHz-30MHz

Project No. RKSA250928001

Tester: Scarf Yang

Date: 23.OCT.2025 18:36:05

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	47.36	PK	-0.56	121.46	74.10
0.025638	46.66	PK	-0.59	119.43	72.77
0.027612	45.22	PK	-0.60	118.78	73.56
0.036918	44.47	PK	-1.72	116.26	71.79

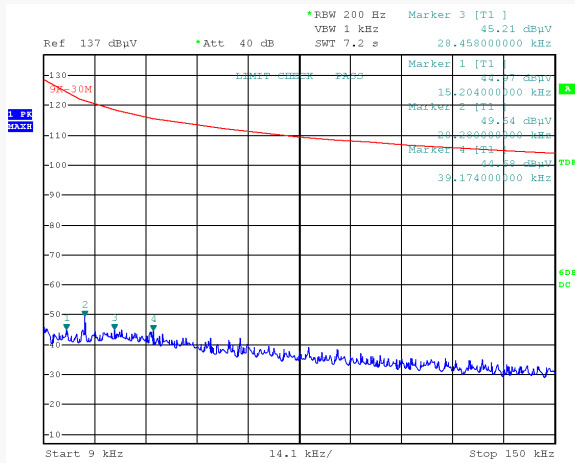
150 kHz-30 MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	48.97	PK	-11.34	104.08	55.11
1.105200	40.28	PK	-27.96	66.74	26.46
1.463400	39.90	PK	-29.14	64.30	24.40
1.941000	32.34	PK	-30.72	69.54	37.20

Adapter-2

Parallel(worst case)

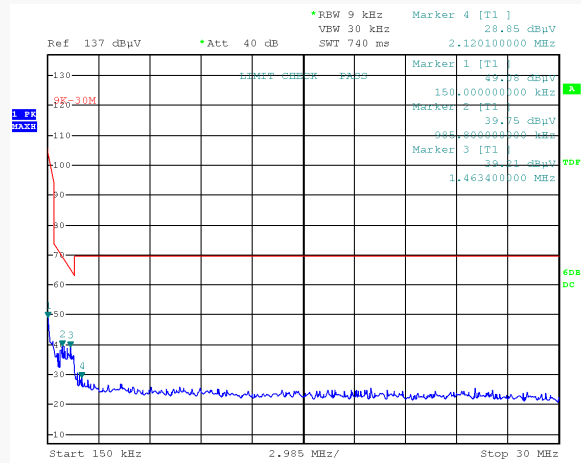
9kHz-150kHz



Project No.RKSA250928001
 Date: 23.OCT.2025 17:56:04

Tester:Scarv Yang

150kHz-30MHz



Project No.RKSA250928001
 Date: 23.OCT.2025 18:03:57

Tester:Scarv 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	44.97	PK	-0.54	123.97	79.00
0.020280	49.64	PK	-0.56	121.46	71.82
0.028458	45.21	PK	-0.6	118.52	73.31
0.039174	44.68	PK	-2.08	115.74	71.06

150 kHz-30 MHz

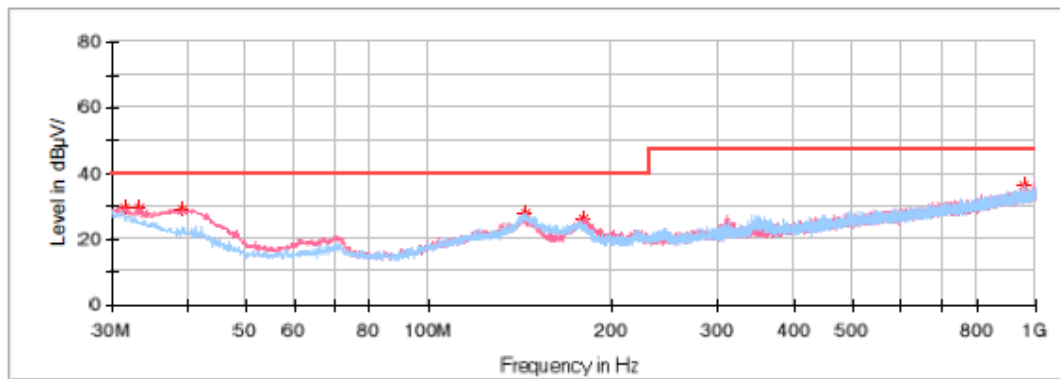
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.150000	49.08	PK	-11.34	104.08	55.00
0.985800	39.75	PK	-27.51	67.73	27.98
1.463400	39.21	PK	-29.14	64.30	25.09
2.120100	28.85	PK	-30.97	69.54	40.69

BLE (1 Mbps) (Transmitting in maximum output power BLE (1 Mbps) middle channel)
 Adapter-1
 30MHz-1GHz

Middle Channel: 2440MHz

Common Information

Project No:	RKSA250928001
EUT Model:	R010
Test Mode:	Transmitting in BLE 1M mode middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Receiver Setting:	RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature:	22.2°C
Humidity:	50%
Barometric Pressure:	103.1Pa
Test Engineer:	Scarf Yang
Test Date:	2025/10/21



Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
31.576250	29.44	40.00	10.56	V	-5.8
33.273750	29.31	40.00	10.69	V	-6.9
39.336250	28.93	40.00	11.07	V	-10.9
144.338750	27.94	40.00	12.06	H	-11.4
180.471250	26.04	40.00	13.96	V	-13.0
960.230000	36.40	47.00	10.60	H	2.0

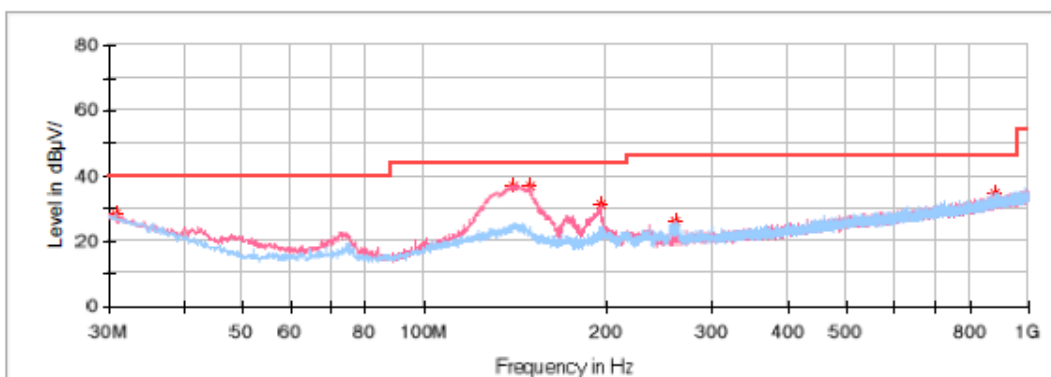
Adapter-2

30MHz-1GHz

Middle Channel: 2440MHz

Common Information

Project No:	RKSA250928001
EUT Model:	R010
Test Mode:	Transmitting in BLE 1M mode middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Receiver Setting:	RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature:	23.7°C
Humidity:	56%
Barometric Pressure:	101.6Pa
Test Engineer:	Scarf Yang
Test Date:	2025/10/14

**Critical_Freqs**

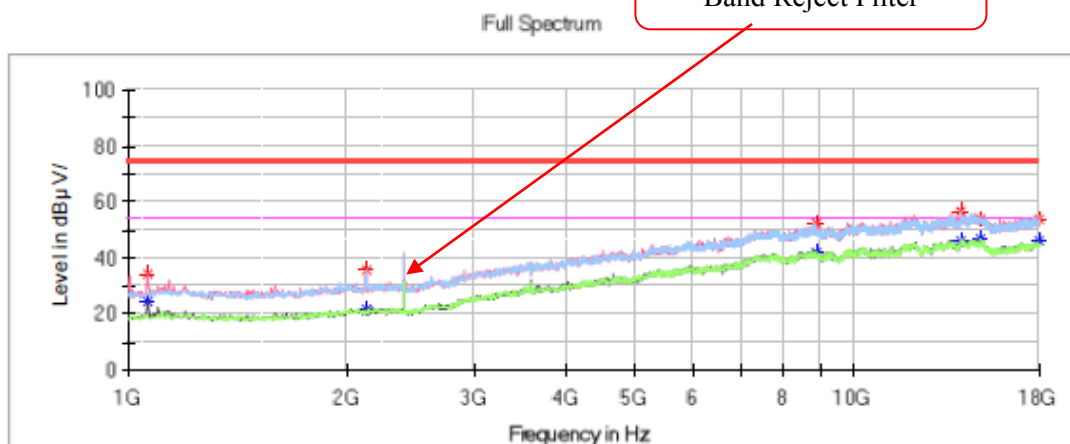
Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.848750	28.42	40.00	11.58	H	-5.3
140.580000	37.14	43.50	6.36	V	-11.3
149.673750	36.75	43.50	6.75	V	-11.7
195.506250	31.05	43.50	12.45	V	-12.3
260.981250	25.86	46.00	20.14	H	-11.9
882.872500	34.57	46.00	11.43	H	0.7

BLE (1 Mbps)
1GHz-18GHz:

Low Channel: 2402MHz

Common Information

Project No.: RKSA250928001
EUT Model: R010
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: 26.2°C
Humidity: 50%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/18

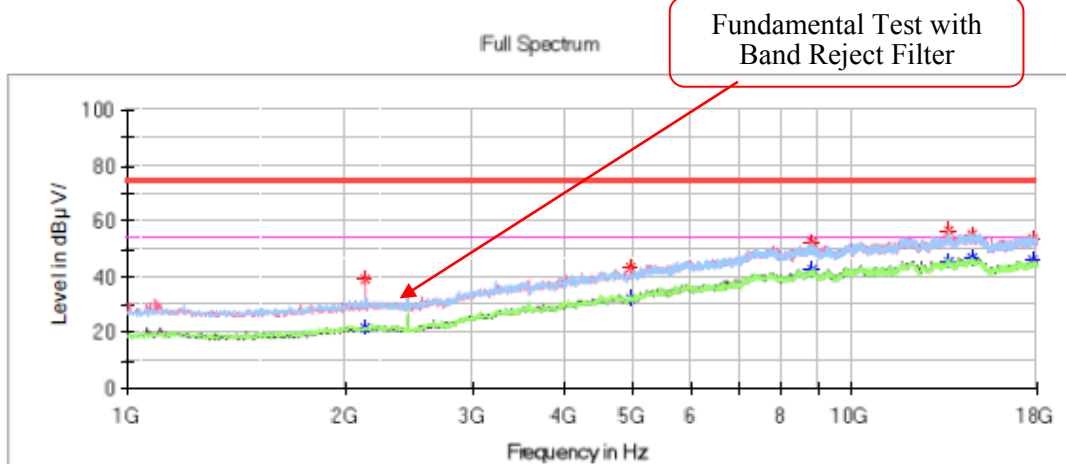


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	34.09	---	74.00	39.91	V	-15.0
1061.200000	---	24.66	54.00	29.34	V	-15.0
2125.400000	35.65	---	74.00	38.35	H	-9.9
2125.400000	---	21.65	54.00	32.35	H	-9.9
8854.000000	---	42.09	54.00	11.91	H	4.7
8854.000000	52.76	---	74.00	21.24	H	4.7
14049.200000	56.49	---	74.00	17.51	V	11.2
14049.200000	---	46.03	54.00	7.97	V	11.2
14912.800000	53.92	---	74.00	20.08	H	10.6
14912.800000	---	47.06	54.00	6.94	H	10.6
17966.000000	53.61	---	74.00	20.39	V	11.7
17966.000000	---	46.31	54.00	7.69	V	11.7

Middle Channel: 2440MHz**Common Information**

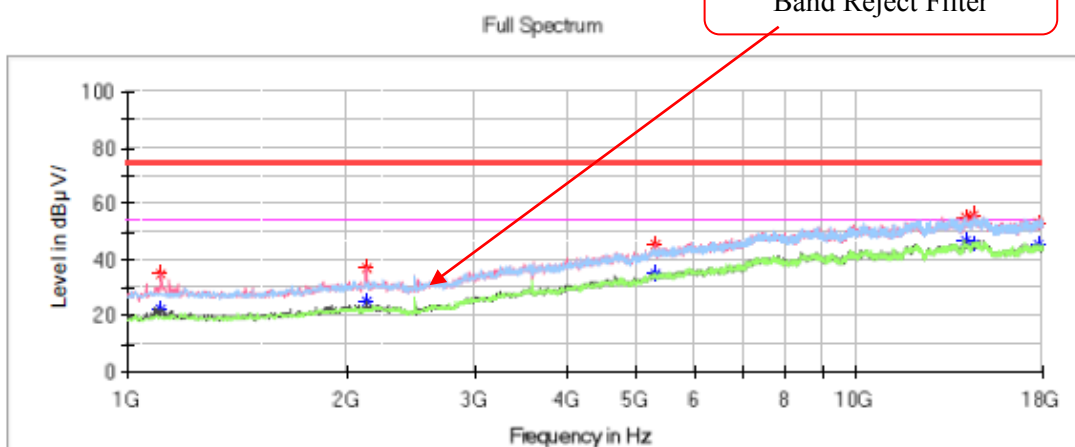
Project No.: RKSA250928001
EUT Model: R010
Test Mode: Transmitting in BLE-1M Middle Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 26.2°C
Humidity: 50%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/18

**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	---	21.62	54.00	32.38	H	-9.9
2128.800000	38.85	---	74.00	35.15	H	-9.9
4957.600000	---	32.48	54.00	21.52	V	-3.0
4957.600000	43.56	---	74.00	30.44	V	-3.0
8847.200000	---	42.43	54.00	11.57	H	4.7
8847.200000	52.62	---	74.00	21.38	H	4.7
13590.200000	---	45.34	54.00	8.66	H	10.2
13590.200000	56.86	---	74.00	17.14	H	10.2
14654.400000	---	47.01	54.00	6.99	V	11.4
14654.400000	55.10	---	74.00	18.90	V	11.4
17809.600000	53.56	---	74.00	20.44	H	11.3
17809.600000	---	45.85	54.00	8.15	H	11.3

High Channel: 2480MHz**Common Information**

Project No.: RKSA250928001
 EUT Model: R010
 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: 26.2°C
 Humidity: 50%
 Atmospheric Pressure: 101.7kPa
 Test Engineer: Destine Hu
 Test Date: 2025/10/18

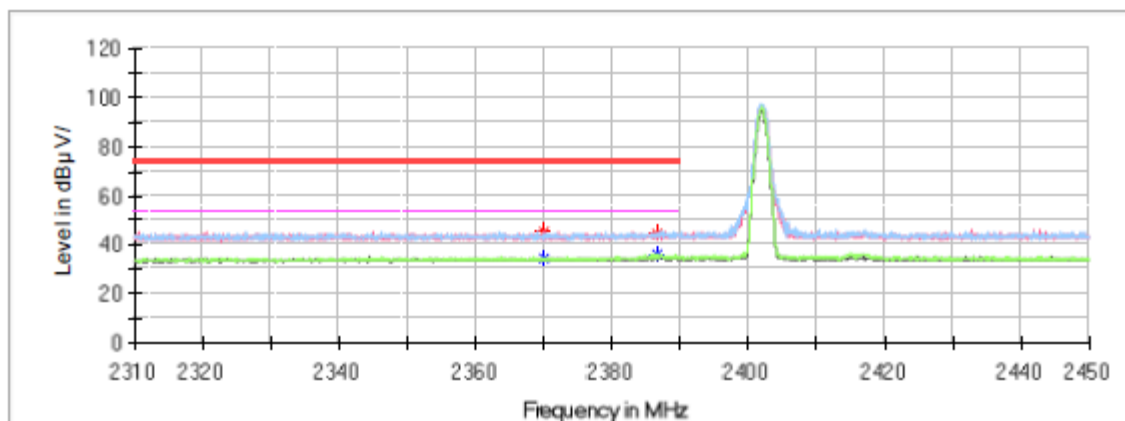
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1112.200000	---	22.26	54.00	31.74	V	-14.8
1112.200000	35.14	---	74.00	38.86	V	-14.8
2125.400000	---	24.93	54.00	29.07	V	-9.9
2125.400000	36.81	---	74.00	37.19	V	-9.9
5294.200000	---	34.89	54.00	19.11	H	-2.2
5294.200000	45.40	---	74.00	28.60	H	-2.2
14096.800000	---	46.80	54.00	7.20	V	11.3
14096.800000	54.91	---	74.00	19.09	V	11.3
14481.000000	---	45.43	54.00	8.57	H	11.9
14481.000000	56.17	---	74.00	17.83	H	11.9
17772.200000	53.42	---	74.00	20.58	V	11.2
17772.200000	---	45.69	54.00	8.31	V	11.2

Band Edge:**Low Channel****Common Information**

Project No.: RKSA250928001
EUT Model: R010
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: 26.2℃
Humidity: 50%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/18

Full Spectrum

**Critical Freqs**

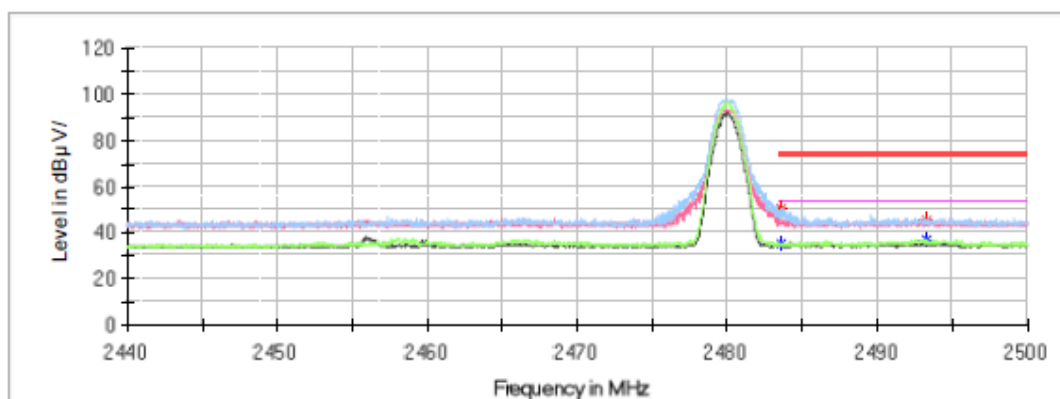
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2370.144000	45.49	---	74.00	28.51	V	0.2
2370.144000	---	34.13	54.00	19.87	V	0.2
2386.664000	44.45	---	74.00	29.55	H	0.2
2386.664000	---	36.27	54.00	17.73	H	0.2

High Channel

Common Information

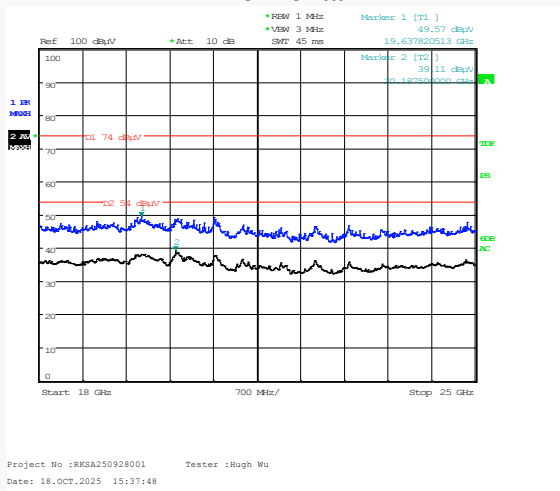
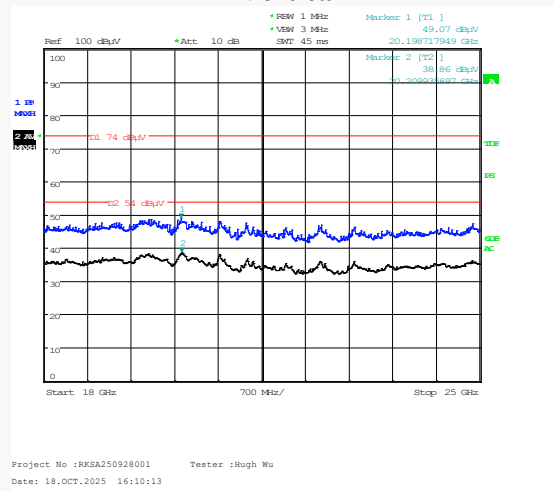
Project No.: RKSA250928001
EUT Model: R010
Test Mode: Transmitting in BLE-1M High Channel
Standard: FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 26.2°C
Humidity: 50%
Atmospheric Pressure: 101.7kPa
Test Engineer: Destine Hu
Test Date: 2025/10/18

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)
2483.584000	---	34.97	54.00	19.03	H	0.4
2483.584000	50.35	---	74.00	23.65	H	0.4
2493.280000	---	37.16	54.00	16.84	V	0.4
2493.280000	45.34	---	74.00	28.66	V	0.4

18GHz-25GHz: Transmitting in maximum output power mode and BLE 1M middle channel**Horizontal****Vertical**

Frequency (GHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
20.21	---	38.86	54	15.14	V	12.47
20.20	49.07	---	74	24.93	V	12.46
20.19	---	39.11	54	14.89	H	12.45
19.64	49.57	---	74	24.43	H	11.24

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:	2025-10-15 to 2025-10-17
Temperature:	24-26 °C
Relative Humidity:	50-55 %
ATM Pressure:	100.2-101.2 kPa
Test Engineer:	Hugh Wu

Test Result: Compliant.

EUT operation mode: Transmitting

For Wi-Fi Mode:

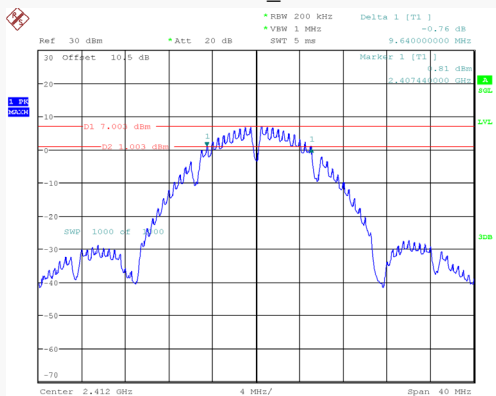
Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)	Result
802.11b Mode				
Low	2412	9.640	≥ 0.5	Pass
Middle	2437	9.160	≥ 0.5	Pass
High	2462	9.200	≥ 0.5	Pass
802.11g Mode				
Low	2412	16.360	≥ 0.5	Pass
Middle	2437	16.040	≥ 0.5	Pass
High	2462	16.400	≥ 0.5	Pass
802.11n-HT20 Mode				
Low	2412	17.480	≥ 0.5	Pass
Middle	2437	17.240	≥ 0.5	Pass
High	2462	17.600	≥ 0.5	Pass
802.11n-HT40 Mode				
Low	2422	35.040	≥ 0.5	Pass
Middle	2437	34.880	≥ 0.5	Pass
High	2452	36.560	≥ 0.5	Pass

For BLE Mode:

Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)	Result
BLE (1 Mbps)	Low	2402	0.676	≥ 0.5	Pass
	Middle	2440	0.684	≥ 0.5	Pass
	High	2480	0.676	≥ 0.5	Pass

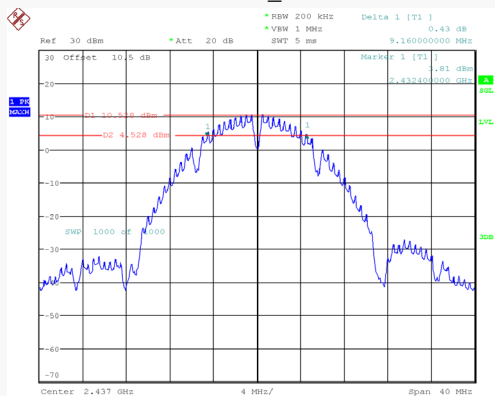
For Wi-Fi Mode:

802.11b_2412MHz



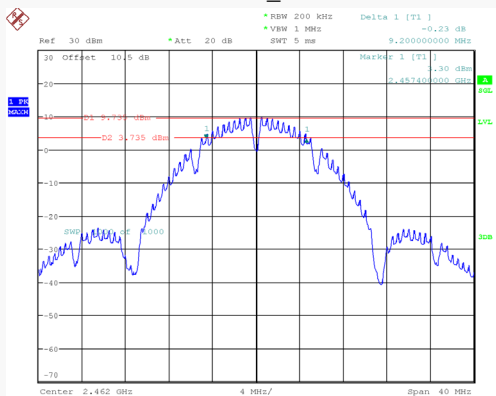
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 16.OCT.2025 11:50:05

802.11b_2437MHz



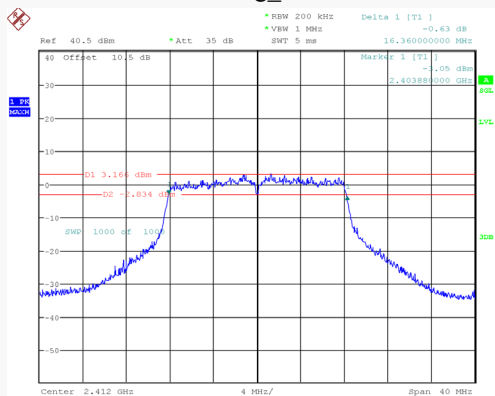
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 16.OCT.2025 11:57:28

802.11b_2462MHz

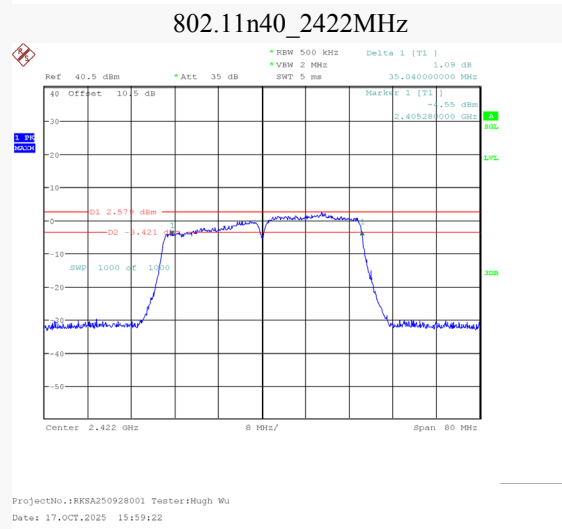
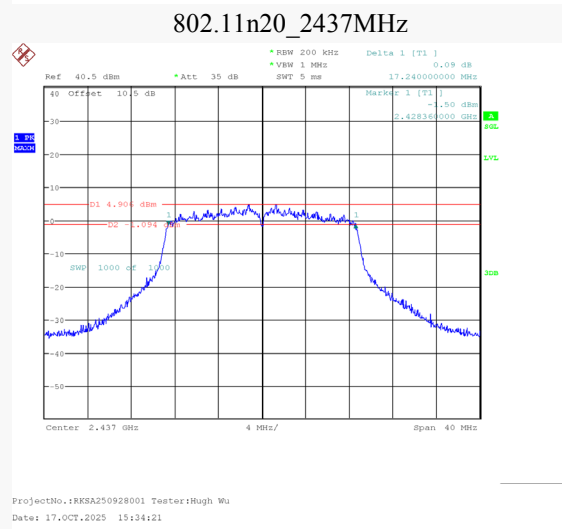
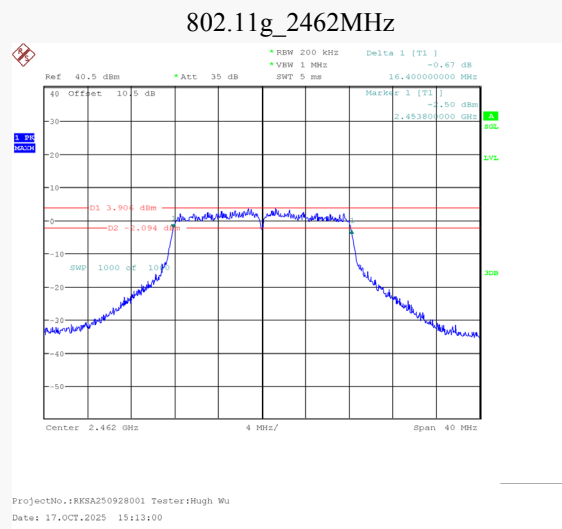


ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 16.OCT.2025 13:10:44

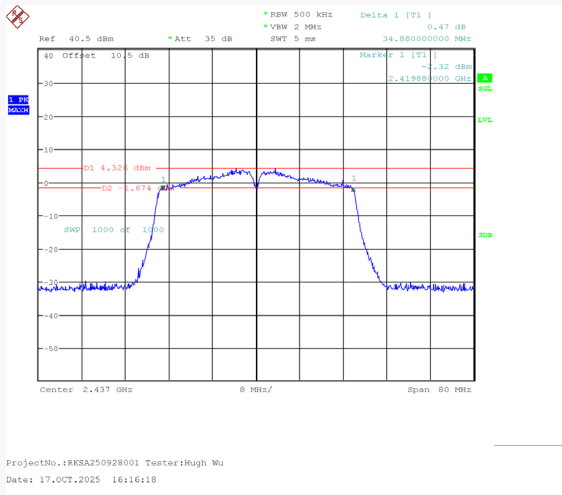
802.11g_2412MHz



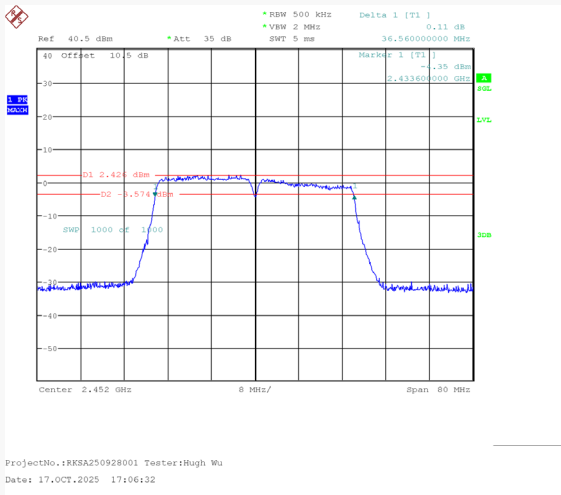
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 17.OCT.2025 14:51:16



802.11n40_2437MHz

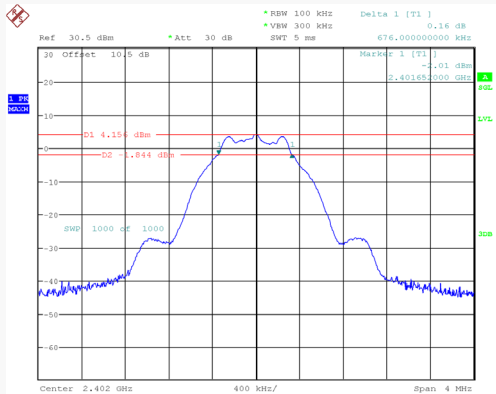


802.11n40_2452MHz



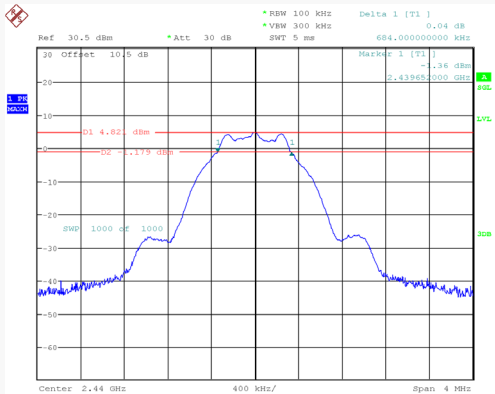
For BLE Mode:
BLE (1 Mbps)

Low Channel



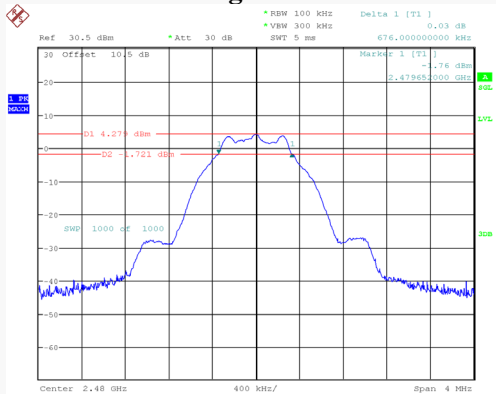
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 15.OCT.2025 10:09:10

Middle Channel



ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 15.OCT.2025 10:17:14

High Channel



ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 15.OCT.2025 10:20:14

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

Test Date:	2025-10-15
Temperature:	24 °C
Relative Humidity:	51 %
ATM Pressure:	100.2 kPa
Test Result:	Pass
Test Engineer:	Hugh Wu

Test Result: Compliant.

EUT operation mode: Transmitting

For Wi-Fi Mode:

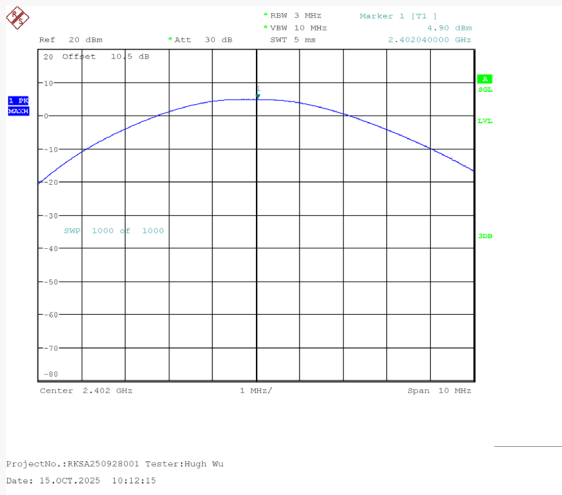
Channel	Frequency (MHz)	Average Output Power(dBm)	Peak Output Power(dBm)	Peak Output Power Limit (dBm)
802.11b Mode				
Low	2412	15.62	18.314	≤30
Middle	2437	18.934	21.652	≤30
High	2462	18.576	21.084	≤30
802.11g Mode				
Low	2412	10.973	15.615	≤30
Middle	2437	13.962	18.826	≤30
High	2462	11.764	16.49	≤30
802.11n-HT20 Mode				
Low	2412	8.792	13.543	≤30
Middle	2437	11.787	16.912	≤30
High	2462	10.746	15.61	≤30
802.11n-HT40 Mode				
Low	2422	8.601	15.81	≤30
Middle	2437	10.271	17.045	≤30
High	2452	9.548	16.625	≤30

BLE Mode:

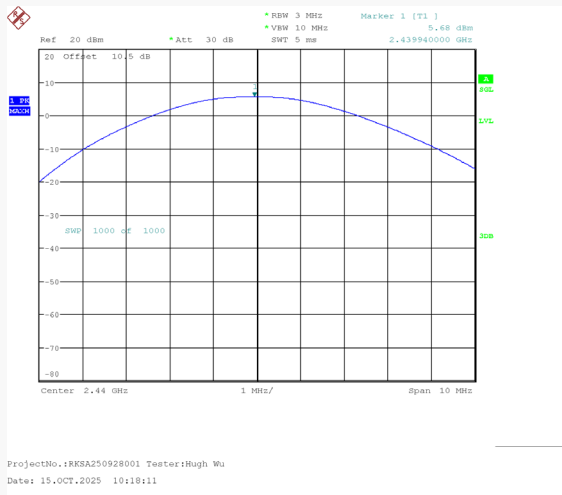
Mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
BLE (1 Mbps)	Low	2402	4.90	≤30	Pass
	Middle	2440	5.68	≤30	Pass
	High	2480	5.06	≤30	Pass

BLE (1 Mbps)

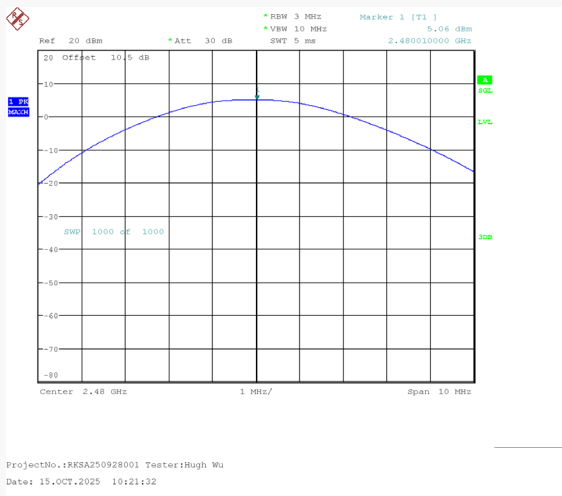
Low Channel



Middle Channel



High Channel



100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE**Environmental Conditions & Test Information**

Test Date:	2025-10-15 to 2025-10-17
Temperature:	24-26 °C
Relative Humidity:	50-55 %
ATM Pressure:	100.2-101.2 kPa
Test Engineer:	Hugh Wu

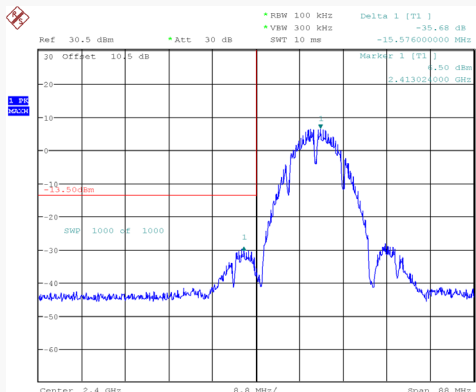
*EUT operation mode: Transmitting***Test Result:** Compliant

Mode	Channel	Test Frequency (MHz)	Result (dB)	Limit (dB)
802.11b	Low	2412	35.68	20
	High	2462	48.73	20
802.11g	Low	2412	31.14	20
	High	2462	44.47	20
802.11n20	Low	2412	27.78	20
	High	2462	43.27	20
802.11n40	Low	2422	37.11	20
	High	2452	38.23	20

Mode	Channel	Frequency (MHz)	Result (dB)	Limit (dB)
BLE (1 Mbps)	Low	2402	46.91	20
	High	2480	48.22	

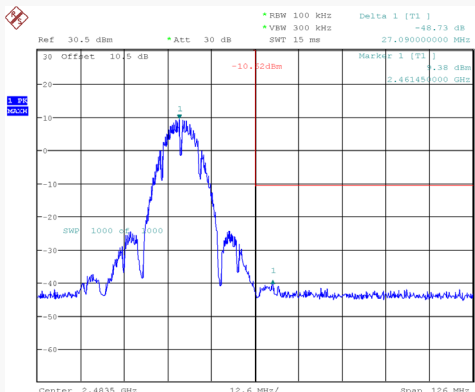
For Wi-Fi Mode:

802.11b Mode Left Side



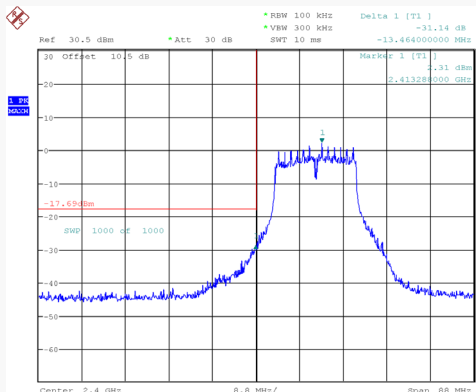
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 16.OCT.2025 11:51:20

802.11b Mode Right Side



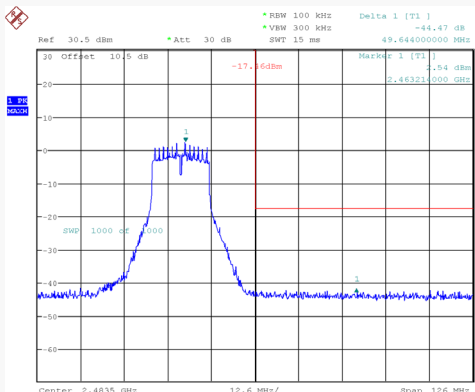
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 16.OCT.2025 13:11:45

802.11g Mode Left Side



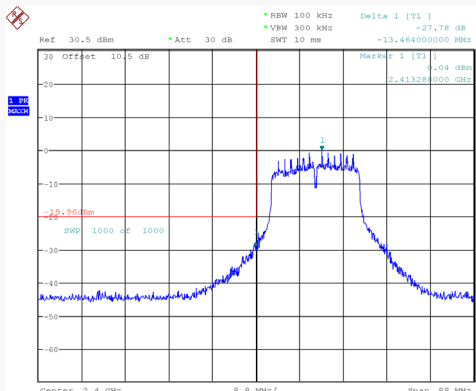
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 17.OCT.2025 14:53:03

802.11g Mode Right Side



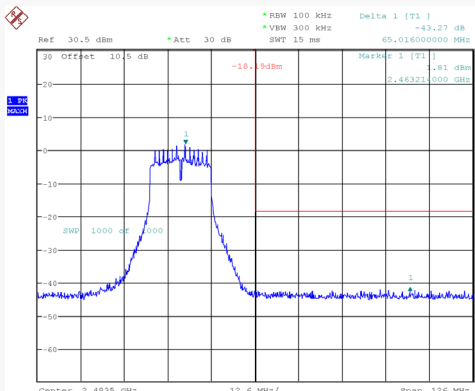
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 17.OCT.2025 15:14:02

802.11n-HT20 Mode Left Side



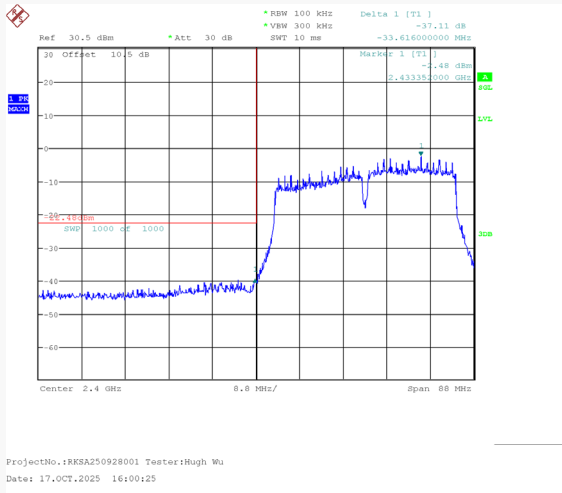
ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 17.OCT.2025 15:24:45

802.11n-HT20 Mode Right Side

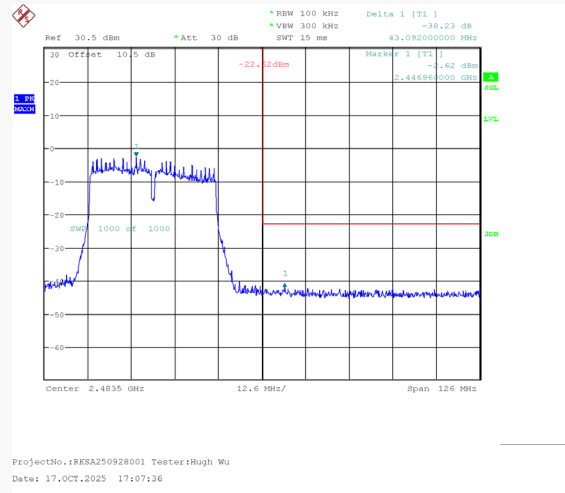


ProjectNo.:RKSA250928001 Tester:Hugh Wu
Date: 17.OCT.2025 15:48:38

802.11n-HT40 Mode Left Side

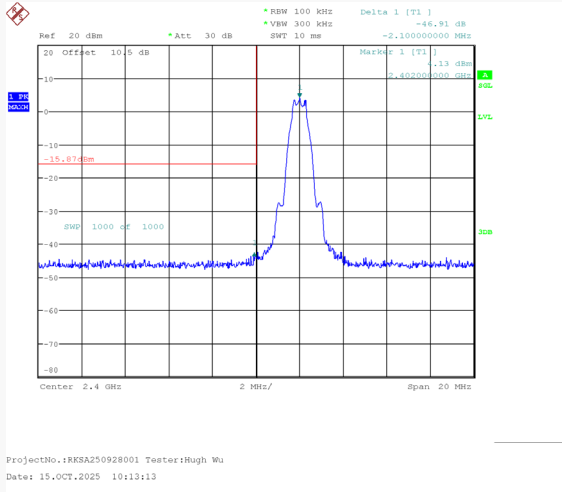


802.11n-HT40 Mode Right Side

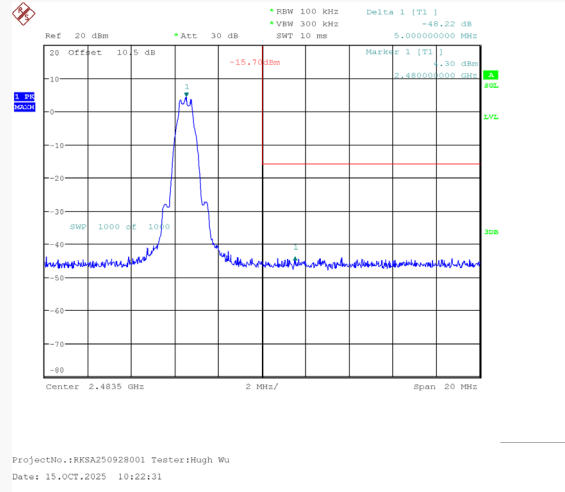


For BLE Mode:
BLE (1 Mbps)

Left Side



Right Side



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

Test Date:	2025-10-15 to 2025-10-18
Temperature:	24-26.5 °C
Relative Humidity:	51-55 %
ATM Pressure:	100.2-101.5 kPa
Test Engineer:	Hugh Wu

Mode	Channel	Frequency (MHz)	Result (dB)	Limit (dB)
802.11b	Low	2412	46.77	20
	Middle	2437	50.23	20
	High	2462	49.15	20
802.11g	Low	2412	42.25	20
	Middle	2437	43.24	20
	High	2462	42.49	20
802.11n20	Low	2412	38.22	20
	Middle	2437	41.74	20
	High	2462	41.26	20
802.11n40	Low	2422	38.02	20
	Middle	2437	38.40	20
	High	2452	37.75	20

Mode	Channel	Frequency (MHz)	Result (dB)	Limit (dB)
BLE (1 Mbps)	Low	2402	44.98	20
	Middle	2440	44.54	20
	High	2480	44.99	20