FCC PART 15.247

TEST REPORT

For

Hangzhou YuShu Technology Co., Ltd.

306 Room, Building 1, 88 Dongliu Rd, XiXing Street, Binjiang District, Hangzhou, ZheJiang, China

FCC ID: 2A5PE-YUSHU006

Report Type:	**Product Name:**
Original Report	Quadruped Robot

Report Number:	RKSA240325003-00B
Report Date:	2024-10-14
Reviewed By:	Bard Liu
Approved By:	Oscar Ye
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

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA240325003-00B	R1V1	2024-10-14	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant	Hangzhou YuShu Technology Co., Ltd.
Tested Model	B2
Product Name	Quadruped Robot
Power Supply	DC 50.4V from Battery
RF Function:	2.4G Wi-Fi; BLE
Operating Band/Frequency:	2.4G Wi-Fi: 2412~2462 MHz(802.11b/g/n20/ax20), 2422~2452 MHz(802.11n40/ax40) BLE(1Mbps/2Mbps): 2402-2480 MHz
Maximum Output Power:	2.4G Wi-Fi: 802.11b: 25.59 dBm 802.11g: 26.19 dBm 802.11n20: 29.28 dBm 802.11ax20: 29.67 dBm 802.11n40: 28.41 dBm 802.11ax40: 27.09 dBm BLE(1Mbps): 2.47 dBm BLE(2Mbps): 2.59 dBm
Channel Number:	2.4G Wi-Fi: 11(802.11b/g/n20/ax20), 7(802.11n40/ax40) BLE: 40
Channel Separation:	2.4G Wi-Fi: 5 MHz BLE: 2 MHz
Modulation Type:	2.4G Wi-Fi: DSSS, OFDM, OFDMA BLE: GFSK
Antenna Type:	2.4G Wi-Fi /BLE: Omni Antenna
★Maximum Antenna Gain:	2.4G Wi-Fi Chain 0/Chain 1: 2.49 dBi BLE: 2.49 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: RKSA240325003-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-03-25.)

Objective

This report is prepared for *Hangzhou YuShu Technology Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions' rules.

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

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, 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℃
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 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, 802.11n20, 802.11ax-HE20 mode, EUT was tested with Channel 1, 6 and 11.
802.11n40, 802.11ax-HE40 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 tool: QRCT

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

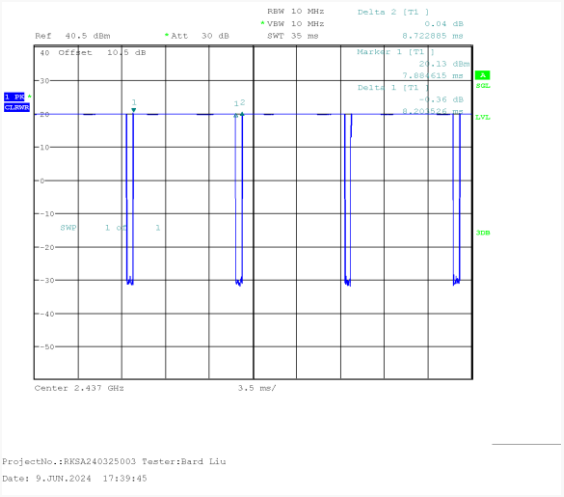
Mode	Data rate	★Power Level					
		Low Channel		Middle Channel		High Channel	
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
802.11b	1Mbps	19	19	20	20	20	20
802.11g	6Mbps	14	14	14	14	14	14
802.11n20	MCS0	14	14	13	14	14	13
802.11ax-HE20	MCS0	14	14	14	14	14	14
802.11n40	MCS0	10	10	11	11	11	11
802.11ax-HE40	MCS0	10	10	11	11	11	11

Mode	Data rate	★Power Level
BLE(1Mbps)	1Mbps	Default
BLE(2Mbps)	2Mbps	Default

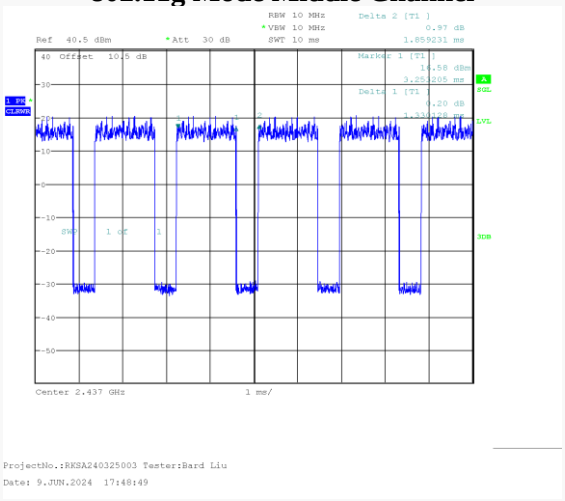
Note:
1. The power level was declared by the applicant.
2. 802.11b/g supports SISO, 802.11n20/n40/ax20/ax40 supports SISO and MIMO mode.
For Radiated Emission,according to pretest, the worst case for 802.11n20/n40/ax20/ax40 is MIMO mode.
So 802.11n20/n40/ax20/ax40 MIMO mode test data were recorded in the report.
3. For 802.11ax, the EUT only support full RU not support partial RU.
For Conducted Test:
802.11b & 802.11g &802.11n&802.11ax: each transmit chains were tested.
For Radiated Test:
802.11b & 802.11g, SISO for each transmit chain
802.11n&802.11 ax: MIMO for two transmit chains

Duty Cycle:
Chain 0:

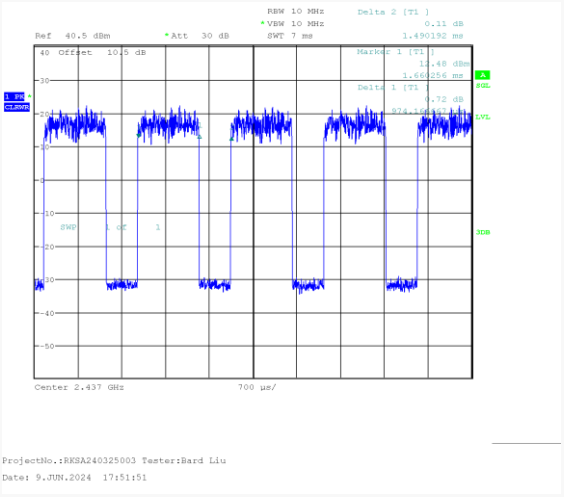
802.11b Mode Middle Channel



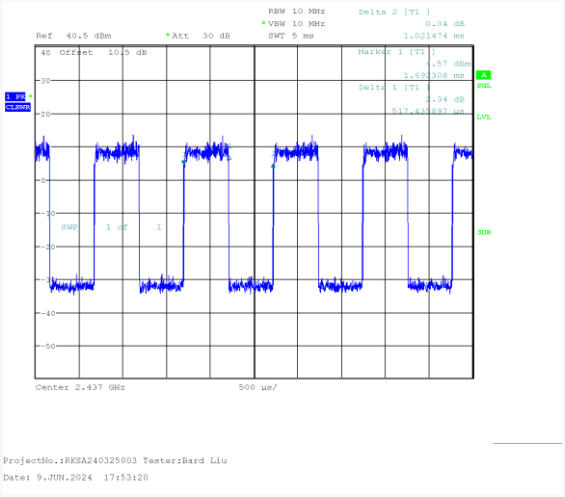
802.11g Mode Middle Channel



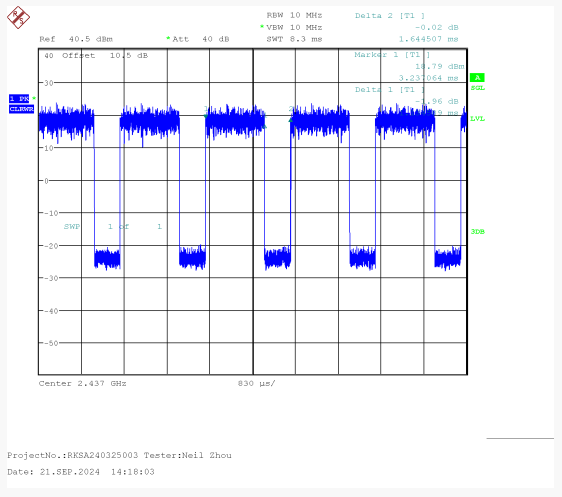
802.11ax20 Mode Middle Channel



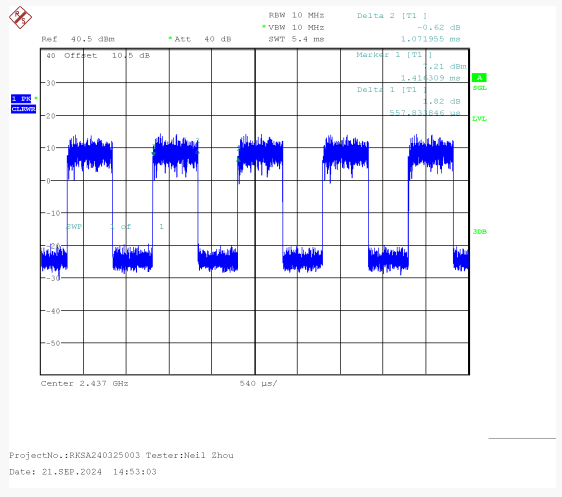
802.11ax40 Mode Middle Channel



802.11n20 Mode Middle Channel

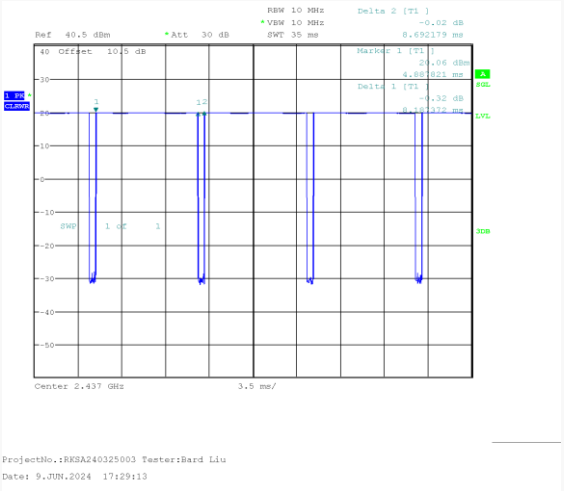


802.11n40 Mode Middle Channel

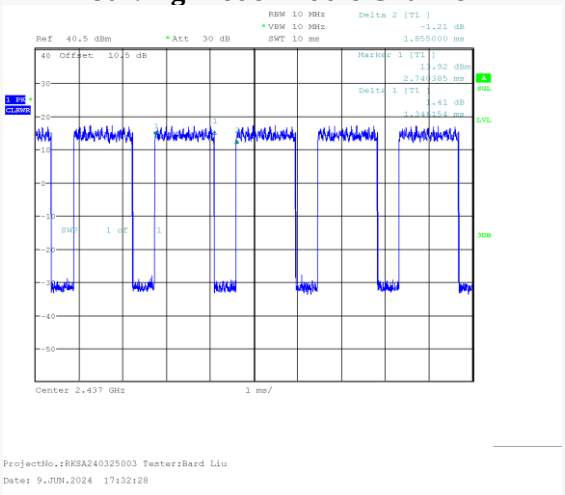


Chain 1:

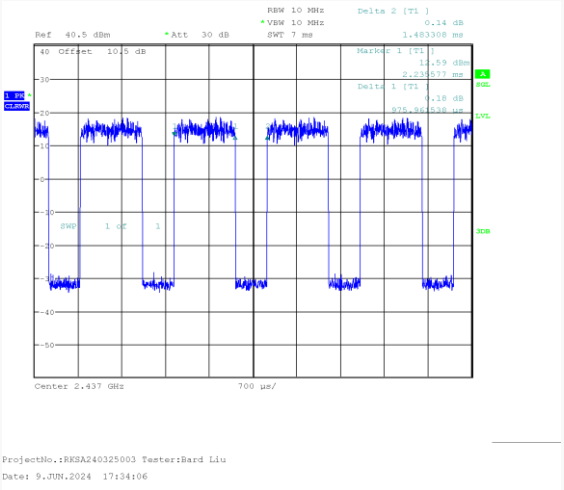
802.11b Mode Middle Channel



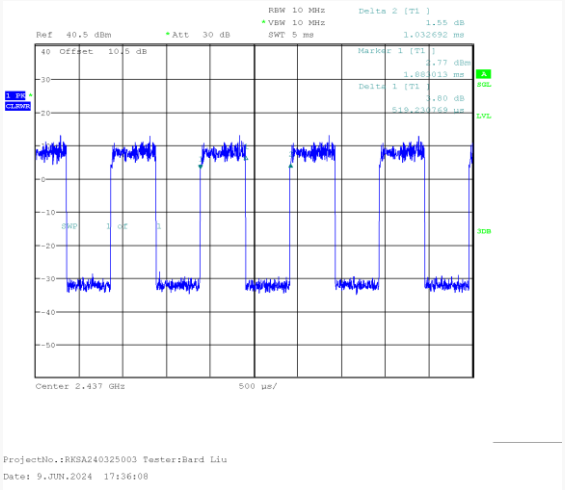
802.11g Mode Middle Channel



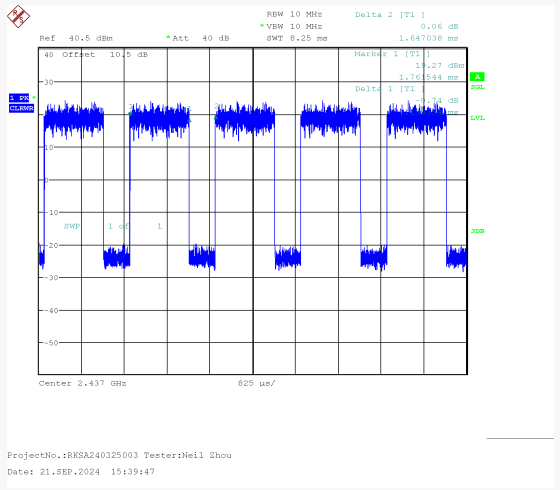
802.11ax20 Mode Middle Channel



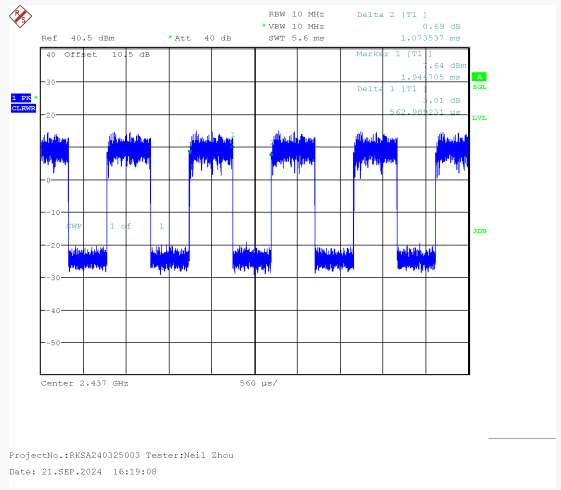
802.11ax40 Mode Middle Channel



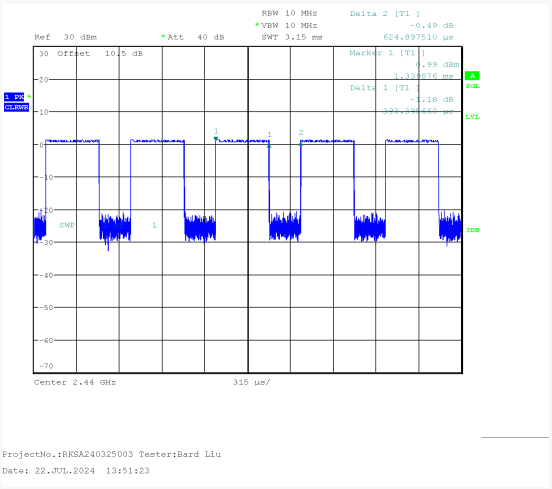
802.11n20 Mode Middle Channel



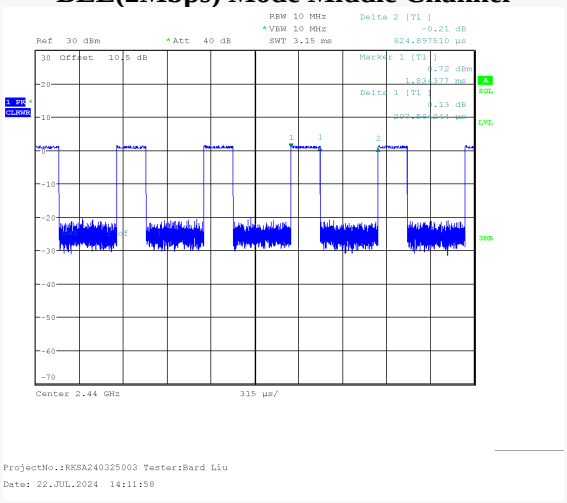
802.11n40 Mode Middle Channel



BLE(1Mbps) Mode Middle Channel



BLE(2Mbps) Mode Middle Channel



Test Mode	Channel (MHz)	Duty Cycle(%)	Ton(ms)	Ton+off(ms)	10log(1/x)（dB）
802.11b chain 0	2437	94.04	8.203	8.723	0.27
802.11g chain 0	2437	71.54	1.330	1.859	1.45
802.11ax20 chain 0	2437	65.37	0.974	1.49	1.85
802.11n20 chain 0	2437	69.00	1.135	1.645	1.61
802.11ax40 chain 0	2437	50.64	0.517	1.021	2.96
802.11n40 chain 0	2437	52.05	0.558	1.072	2.84
802.11b chain 1	2437	94.19	8.187	8.692	0.26
802.11g chain 1	2437	72.56	1.346	1.855	1.39
802.11ax20 chain 1	2437	65.81	0.976	1.483	1.82
802.11n20 chain 1	2437	68.85	1.134	1.647	1.62
802.11ax40 chain 1	2437	50.24	0.519	1.033	2.99
802.11n40 chain 1	2437	52.42	0.563	1.074	2.80
BLE(1Mbps)	2440	62.88	0.393	0.625	2.01
BLE(2Mbps)	2440	33.28	0.208	0.625	4.78

Support Equipment List and Details

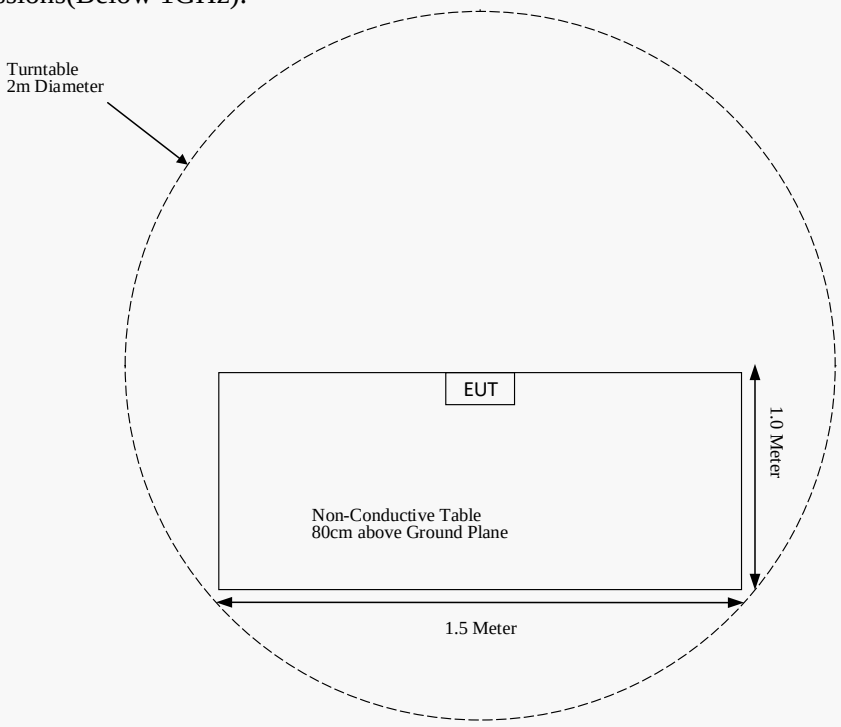
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

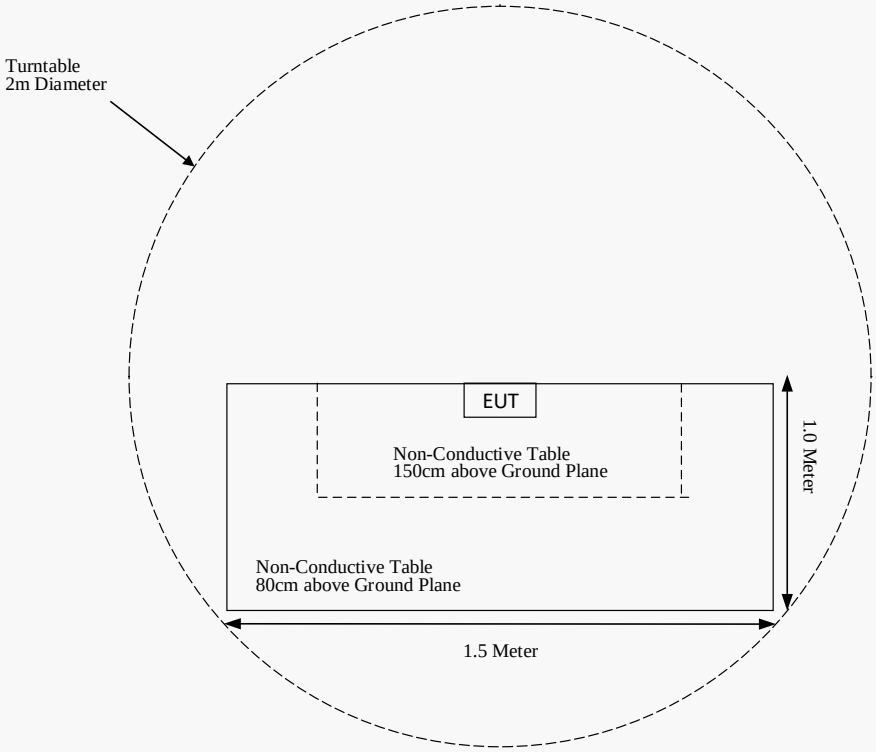
Cable Description	Length(m)	From Port	To
/	/	/	/

Block Diagram of Test Setup

For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (I), §1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Not Applicable (See Note)
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

Note: The EUT powered by battery.

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	2024-04-23	2025-04-22
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
Sonoma Instrument	Amplifier	310N	171205	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Rohde & Schwarz	Test Software	EMC32	100361	N/A	N/A
Radiated Emission Test (Chamber 2#)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2023-06-27	2024-06-26
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2024-06-27	2025-06-26
ETS-LINDGREN	Horn Antenna	3116	2516	2023-12-08	2024-12-07
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2024-04-23	2025-04-22
Narda	Attenuator	20dB	020	2024-04-23	2025-04-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2024-04-24	2025-04-23
Rohde & Schwarz	Signal Analyzer	FSV40-N	103298	2024-04-24	2025-04-23
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
Narda	Attenuator	10dB	N/A	2024-04-23	2025-04-22
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A

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

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/cm^2);
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);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

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)	MPE ratio
		(dBi)	(numeric)	(dBm)	(mW)				
SRD	2400.8-2480	2.49	1.77	8.5	7.08	20	0.0025	1.0	0.0025
2.4G Wi-Fi	2412-2462	2.49	1.77	30	1000.00	20	0.3521	1.0	0.3521
5G Wi-Fi	5150-5250	2.72	1.87	22.0	158.49	20	0.0590	1.0	0.0590
	5250-5350	2.93	1.96	21.0	125.89	20	0.0491	1.0	0.0491
	5470-5725	3.01	2.00	20.0	100.00	20	0.0398	1.0	0.0398
	5725-5850	3.11	2.05	21.5	141.25	20	0.0576	1.0	0.0576
BLE	2402-2480	2.49	1.77	3.0	2.00	20	0.0007	1.0	0.0007
Classic BT	2402-2480	2.49	1.77	5.5	3.55	20	0.0012	1.0	0.0012

Note:
1. For the above tune up power were declared by the manufacturer.
2. SRD and 2.4G Wi-Fi/5G WIFI/BT/BLE can transmit simultaneously.

$$\sum_i \frac{S_i}{S_{Limit,i}}$$

$= S_{SRD}/S_{limitSRD} + S_{2.4G\ Wi\text{-}Fi}/S_{limit2.4G\ Wi\text{-}Fi}$

$=0.0025+0.3521$

$=0.3546$

< 1.0

Result: The device meet FCC MPE at 20 cm distance.

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 Antenna permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

Function	Antenna Type	Chain	Antenna Gain (dBi)
2.4G Wi-Fi	Omni Antenna	Chain 0	2.49
		Chain 1	2.49

Function	Antenna Type	Antenna Gain (dBi)
BLE	Omni Antenna	2.49

Result: Compliant.

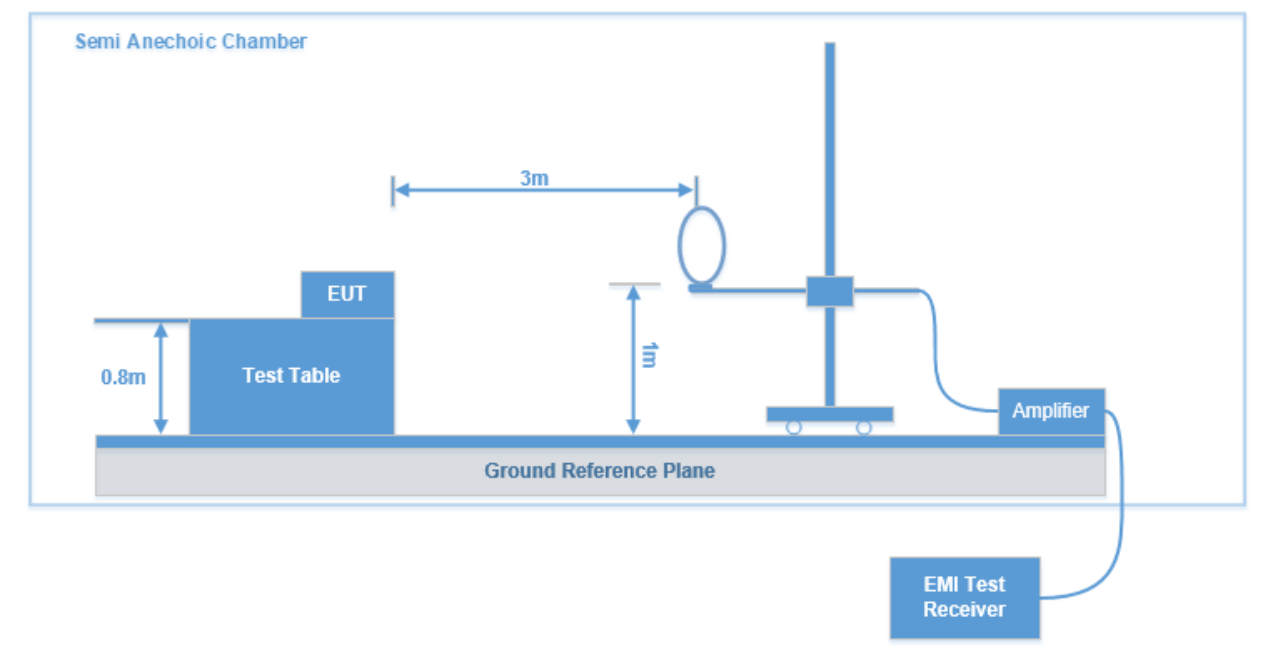
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

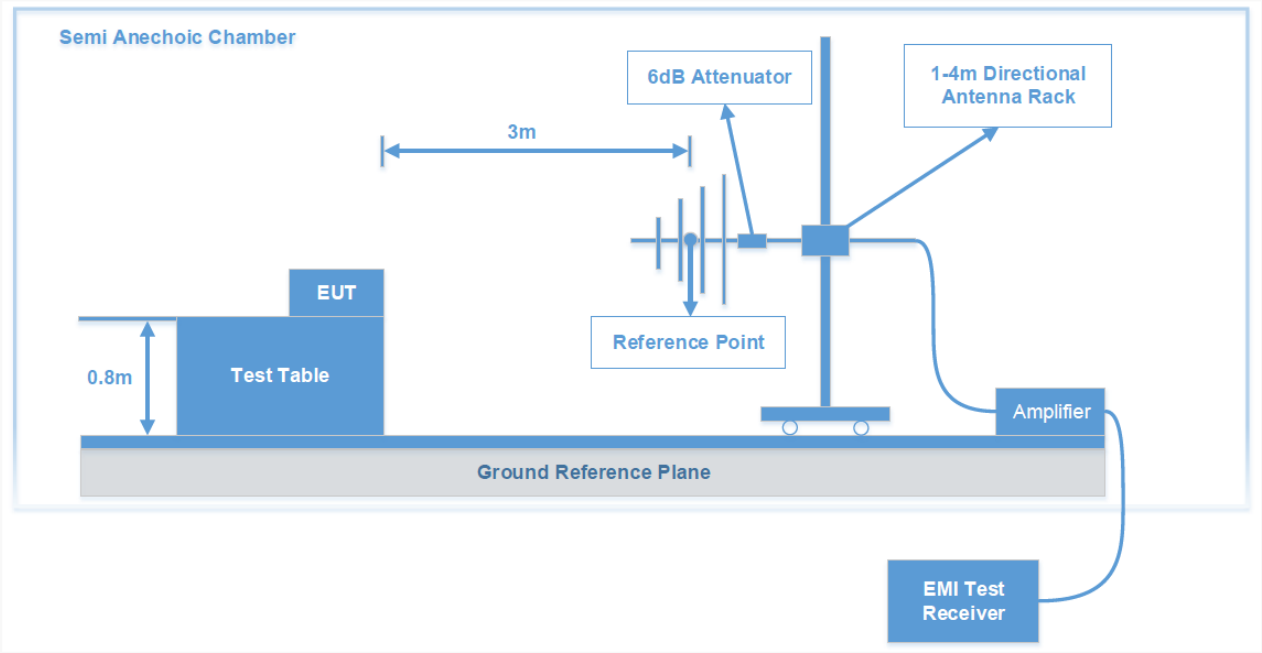
FCC §15.247 (d); §15.209; §15.205;

Test System Setup

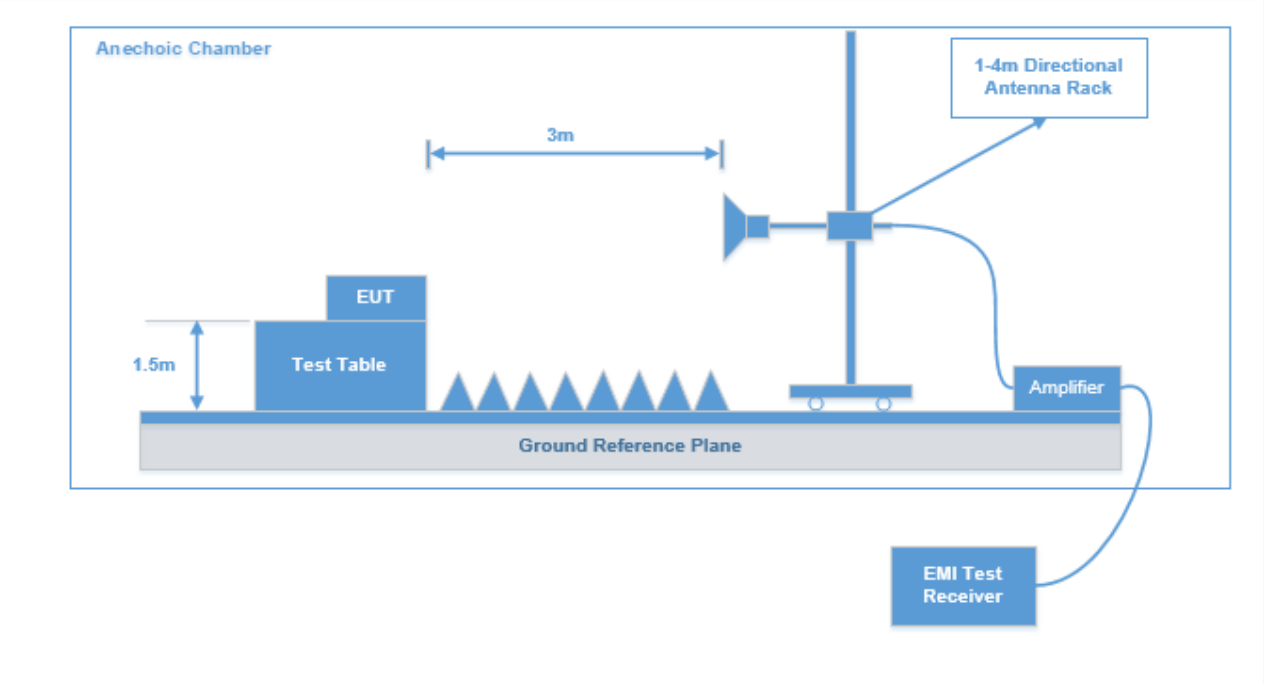
9 kHz-30 MHz:



30 MHz-1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. 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
9 kHz – 150 kHz	200 Hz	1 kHz	200 Hz	QP/Average
150 kHz – 30 MHz	9 kHz	30 kHz	9 kHz	QP/ Average
30 MHz – 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	/	Average

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.

Test Procedure

According to ANSI C63.10-2013 clause 6.5, 6.6 and 6.7.

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 (dBμV/m) = Meter Reading (dBμV) + Corrected factor（dB/m）
Corrected factor（dB/m）= 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 (dBμV/m) – Corrected Amplitude (dBμV/m)

Note: The QuasiPeak (dBμV/m), MaxPeak (dBμV/m), Average (dBμV/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

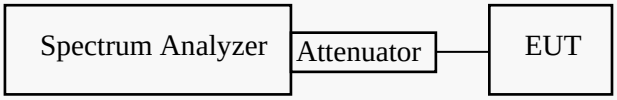
Applicable Standard

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 C63.10-2013 sub-clause 11.8.1

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 * RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data: See Appendix

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

Applicable Standard

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

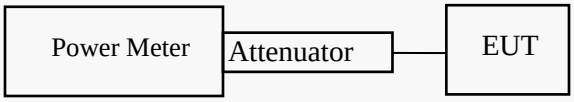
Test Procedure

According to ANSI C63.10-2013 sub-clause 11.9.1.3

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.

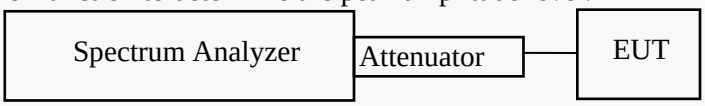
1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.

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.



According to ANSI C63.10-2013 sub-clause 11.9.1.1
For BLE:

1. Set the RBW ≥ DTS bandwidth.
2. Set VBW ≥ 3 * RBW.
3. Set span ≥ 3 * 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.



Test Data: See Appendix

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

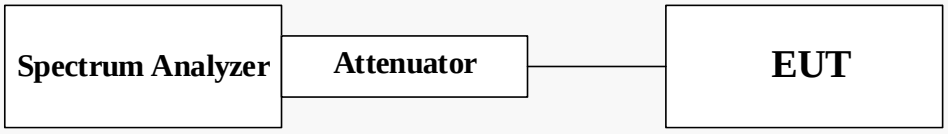
Applicable Standard

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

Test Procedure

According to ANSI C63.10-2013 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.



FCC §15.247(E) - POWER SPECTRAL DENSITY

Applicable Standard

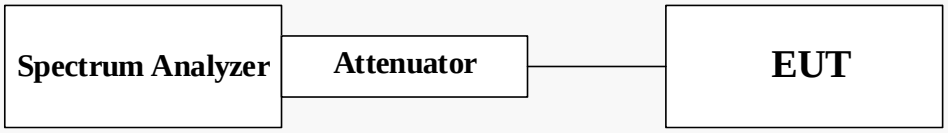
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of 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 C63.10-2013 sub-clause 11.10.2

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

1. Set the RBW to: 3kHz≤ RBW≤100 kHz.
2. Set the VBW ≥ 3*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.



APPENDIX - TEST DATA

Environmental Conditions & Test Information

Test Item:	RADIATED EMISSIONS			Duty Cycle
	9 kHz - 1GHz	1 GHz – 18 GHz	18 GHz - 25 GHz	
Test Date:	2024-07-17	2024-07-20	2024-05-24 to 2024-07-24	2024-06-09 to 2024-09-21
Temperature:	23.4 ℃	22.8 ℃	23.9-25.5 ℃	23.5-23.9 ℃
Relative Humidity:	52 %	53 %	52-55 %	50-53 %
ATM Pressure:	100.9 kPa	100.5kPa	100.1-100.5kPa	100.3-101.6kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Grace Luo	Hugh Wu & Klein Zhu	Hugh Wu	Bard Liu&Neil Zhou

Test Item:	6 DB EMISSION BANDWIDTH	POWER SPECTRAL DENSITY	TRANSMITTER OUTPUT POWER MEASUREMENT	OUT OF BAND EMISSIONS
Test Date:	2024-05-28 to 2024-09-21	2024-05-28 to 2024-09-21	2024-05-28 to 2024-09-21	2024-05-28 to 2024-09-21
Temperature:	23.3-23.9 ℃	23.3-23.9 ℃	23.3-23.9 ℃	23.3-23.9 ℃
Relative Humidity:	50-55 %	50-55 %	50-55 %	50-55 %
ATM Pressure:	100.3-101.6kPa	100.3-101.6kPa	100.3-101.6Pa	100.3-101.6kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Bard Liu&Neil Zhou	Bard Liu&Neil Zhou	Bard Liu&Neil Zhou	Bard Liu&Neil Zhou

SPURIOUS EMISSIONS

EUT operation mode: Transmitting

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

9kHz-30MHz:

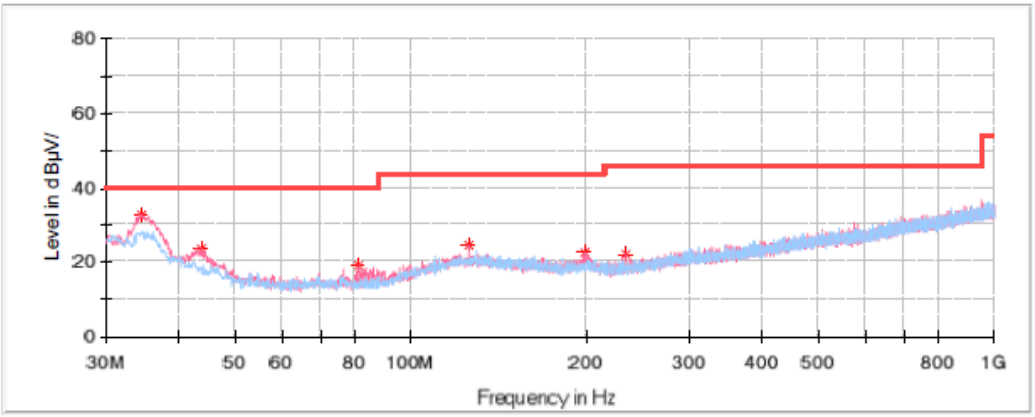
For 2.4G Wi-Fi: Transmitting in maximum output power chain 0+ Chain1 ax20 mode and low channel
For BLE: Transmitting in maximum output power BLE (2Mbps)mode and low channel

The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

For Wi-Fi Mode:
30MHz-1GHz: (Transmitting in maximum output power ax20 mode and low channel)
Chain 0+chain 1:
Low Channel: 2412 MHz

Common Information

Project No:	RKSA240325003
EUT Model:	B2
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 &FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	23.4℃
Humidity:	52%
Barometric Pressure:	100.9kPa
Test Engineer:	Grace Luo
Test Date:	2024/7/17



Critical_Freqs

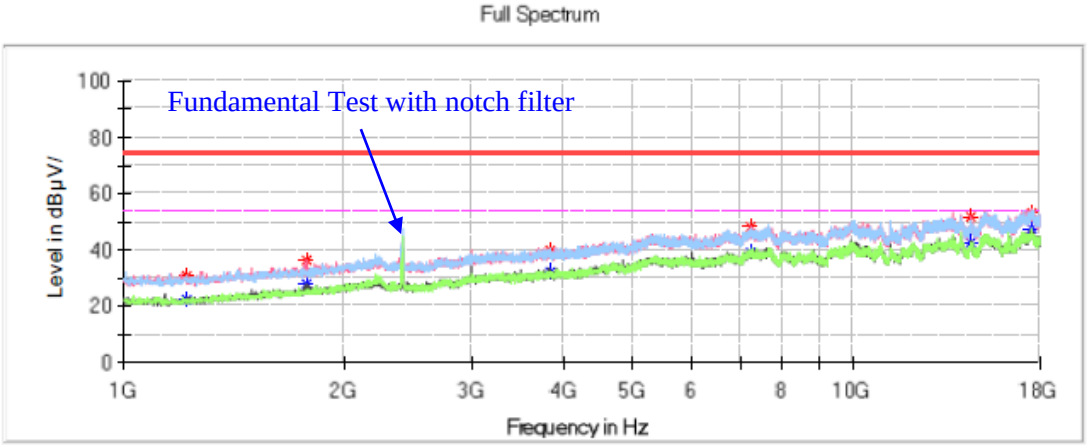
Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
34.486250	32.89	40.00	7.11	V	-7.7
43.580000	23.75	40.00	16.25	V	-13.4
81.531250	19.09	40.00	20.91	V	-17.3
125.908750	24.85	43.50	18.65	V	-11.0
199.265000	22.69	43.50	20.81	V	-12.2
233.821250	22.10	46.00	23.90	V	-12.9

1GHz-18GHz:
Chain 0:
802.11b Mode:

Low Channel: 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



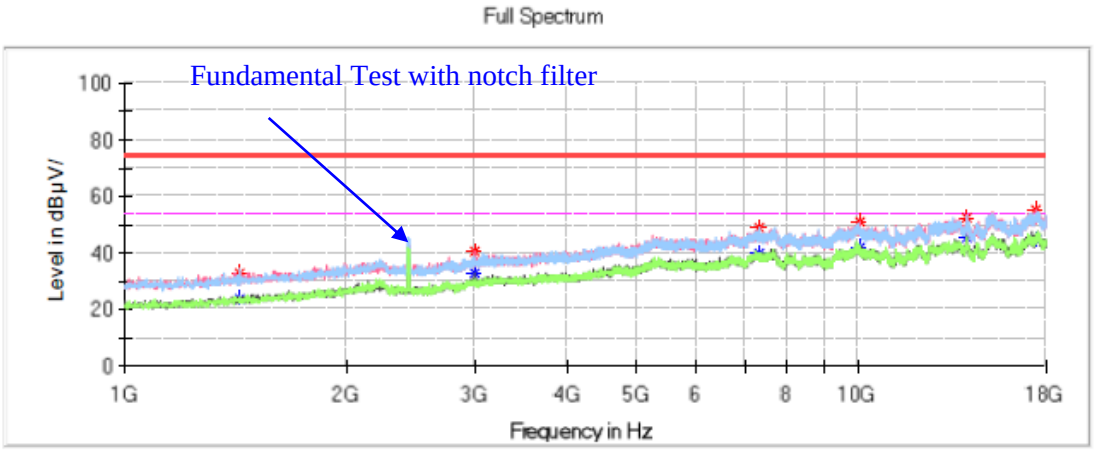
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1221.000000	30.80	---	74.00	43.20	H	-14.8
1221.000000	---	22.62	54.00	31.38	H	-14.8
1782.000000	36.71	---	74.00	37.29	V	-12.0
1782.000000	---	28.26	54.00	25.74	V	-12.0
3840.700000	39.77	---	74.00	34.23	H	-5.4
3840.700000	---	31.91	54.00	22.09	H	-5.4
7250.900000	48.57	---	74.00	25.43	V	4.0
7250.900000	---	38.92	54.00	15.08	V	4.0
14487.800000	51.51	---	74.00	22.49	V	8.2
14487.800000	---	42.94	54.00	11.06	V	8.2
17569.900000	52.93	---	74.00	21.07	H	13.3
17569.900000	---	47.53	54.00	6.47	H	13.3

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



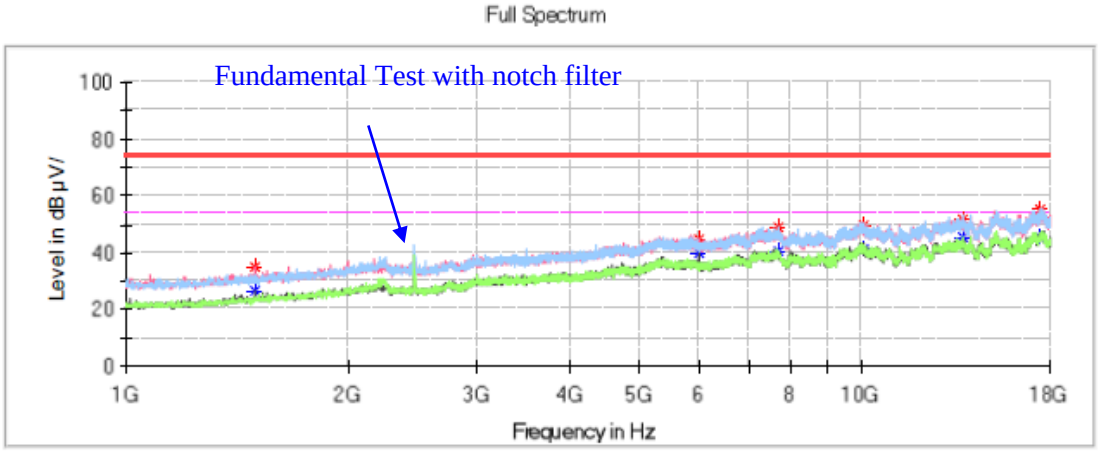
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1431.800000	---	24.01	54.00	29.99	V	-14.1
1431.800000	33.21	---	74.00	40.79	V	-14.1
2990.700000	---	32.62	54.00	21.38	V	-8.1
2990.700000	40.28	---	74.00	33.72	V	-8.1
7308.700000	---	39.88	54.00	14.12	H	4.0
7308.700000	49.13	---	74.00	24.87	H	4.0
10021.900000	---	42.19	54.00	11.81	V	7.8
10021.900000	50.84	---	74.00	23.16	V	7.8
14001.600000	---	45.11	54.00	8.89	V	10.5
14001.600000	52.38	---	74.00	21.62	V	10.5
17462.800000	---	44.73	54.00	9.27	V	13.5
17462.800000	54.91	---	74.00	19.09	V	13.5

High Channel: 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

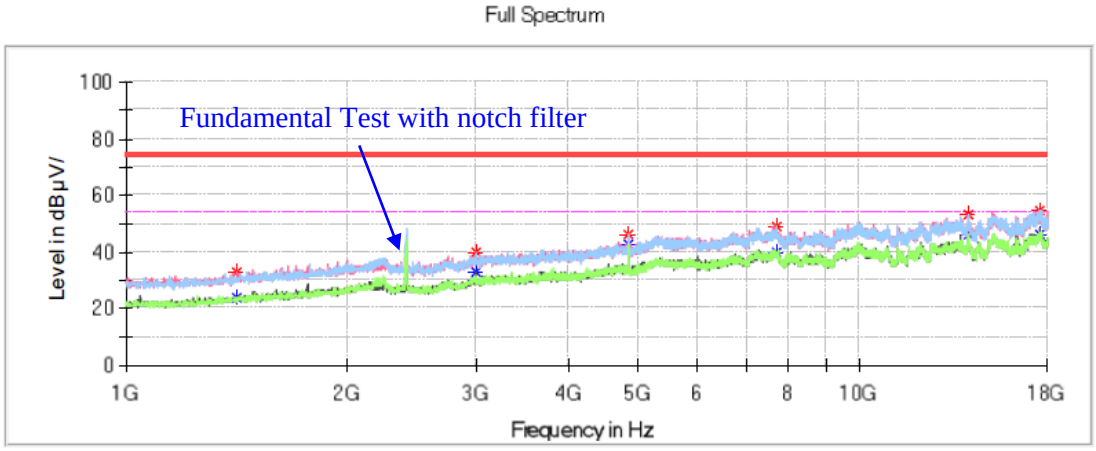
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1494.700000	34.67	---	74.00	39.33	V	-13.9
1494.700000	---	26.79	54.00	27.21	V	-13.9
5999.700000	44.91	---	74.00	29.09	V	0.2
5999.700000	---	39.87	54.00	14.13	V	0.2
7701.400000	---	40.42	54.00	13.58	H	4.0
7701.400000	48.61	---	74.00	25.39	H	4.0
10042.300000	49.63	---	74.00	24.37	H	7.8
10042.300000	---	40.94	54.00	13.06	H	7.8
13724.500000	52.07	---	74.00	21.93	V	10.8
13724.500000	---	45.18	54.00	8.82	V	10.8
17462.800000	---	45.57	54.00	8.43	V	13.5
17462.800000	55.51	---	74.00	18.49	V	13.5

Chain 1:
802.11b Mode:

Low Channel: 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



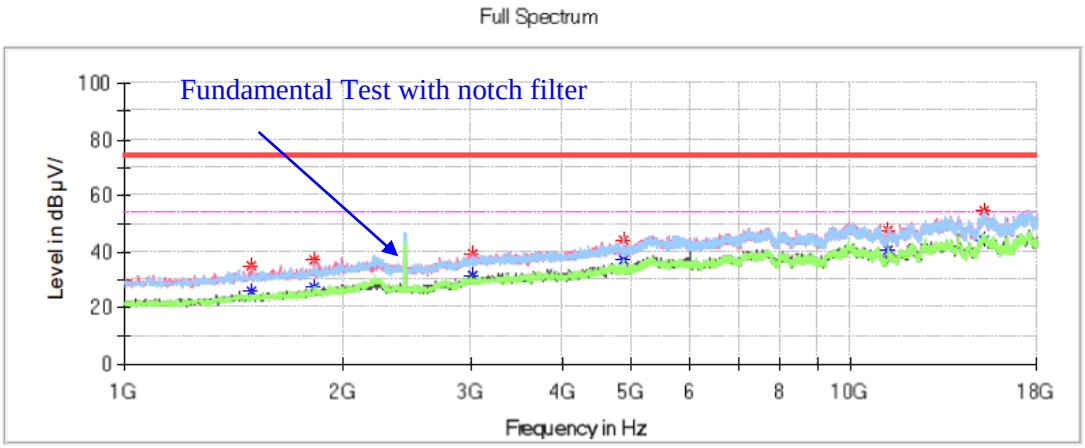
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1414.800000	32.99	---	74.00	41.01	V	-14.2
1414.800000	---	23.51	54.00	30.49	V	-14.2
2992.400000	40.20	---	74.00	33.80	V	-8.0
2992.400000	---	32.54	54.00	21.46	V	-8.0
4823.300000	46.42	---	74.00	27.58	H	-2.1
4823.300000	---	42.57	54.00	11.43	H	-2.1
7687.800000	48.79	---	74.00	25.21	V	4.1
7687.800000	---	39.60	54.00	14.40	V	4.1
14005.000000	53.30	---	74.00	20.70	H	10.5
14005.000000	---	46.47	54.00	7.53	H	10.5
17535.900000	---	46.38	54.00	7.62	V	13.5
17535.900000	54.67	---	74.00	19.33	V	13.5

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



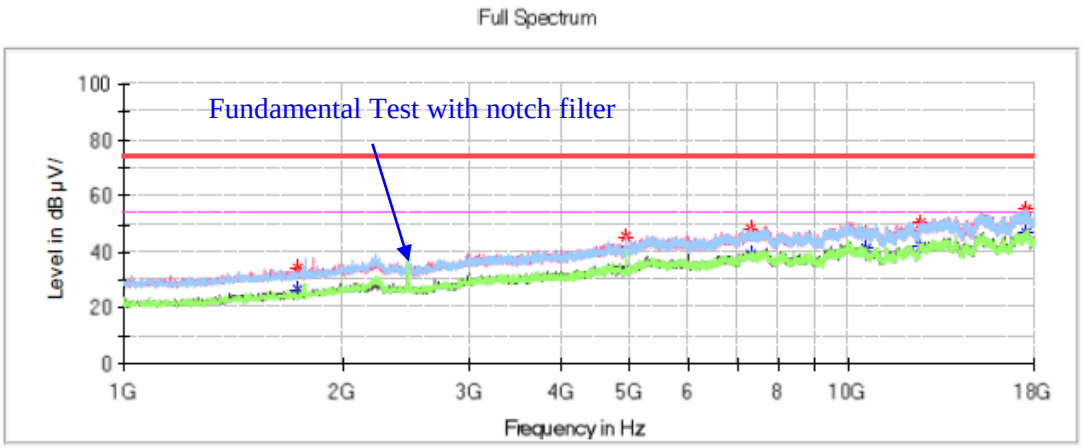
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1494.700000	35.08	---	74.00	38.92	V	-13.9
1494.700000	---	25.74	54.00	28.26	V	-13.9
1827.900000	37.15	---	74.00	36.85	V	-11.7
1827.900000	---	27.25	54.00	26.75	V	-11.7
3007.700000	---	31.17	54.00	22.83	V	-8.0
3007.700000	39.48	---	74.00	34.52	V	-8.0
4872.600000	44.09	---	74.00	29.91	H	-1.9
4872.600000	---	36.92	54.00	17.08	H	-1.9
11201.700000	---	40.54	54.00	13.46	V	6.7
11201.700000	47.45	---	74.00	26.55	V	6.7
15178.000000	54.64	---	74.00	19.36	V	10.7
15178.000000	---	43.75	54.00	10.25	V	10.7

High Channel: 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

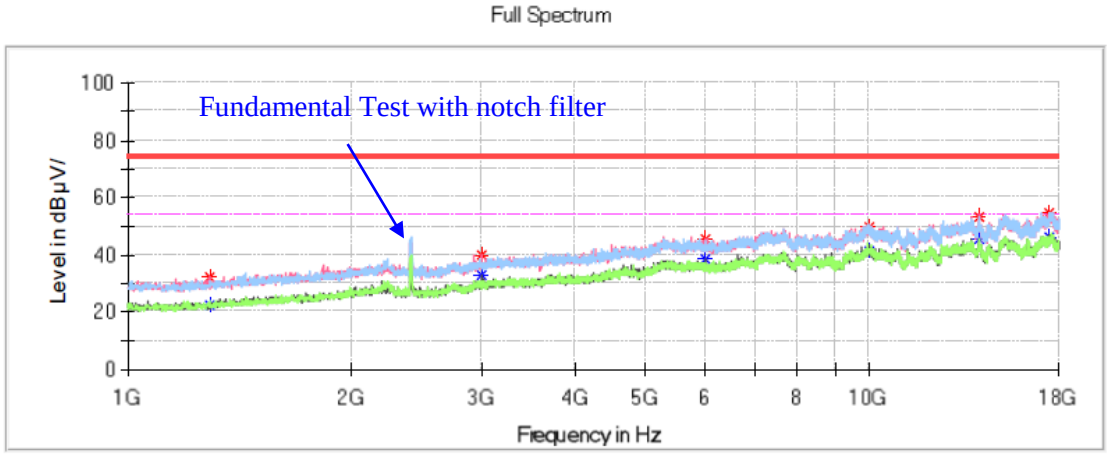
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1734.400000	34.25	---	74.00	39.75	V	-12.4
1734.400000	---	26.38	54.00	27.62	V	-12.4
4923.600000	---	40.46	54.00	13.54	H	-1.6
4923.600000	45.42	---	74.00	28.58	H	-1.6
7307.000000	---	39.33	54.00	14.67	V	4.0
7307.000000	48.24	---	74.00	25.76	V	4.0
10530.200000	46.50	---	74.00	27.50	V	7.2
10530.200000	---	41.19	54.00	12.81	V	7.2
12578.700000	---	42.30	54.00	11.70	V	8.5
12578.700000	50.47	---	74.00	23.53	V	8.5
17602.200000	55.29	---	74.00	18.71	V	13.2
17602.200000	---	46.69	54.00	7.31	V	13.2

Chain 0:
802.11g Mode:

Low Channel: 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11g mode of low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



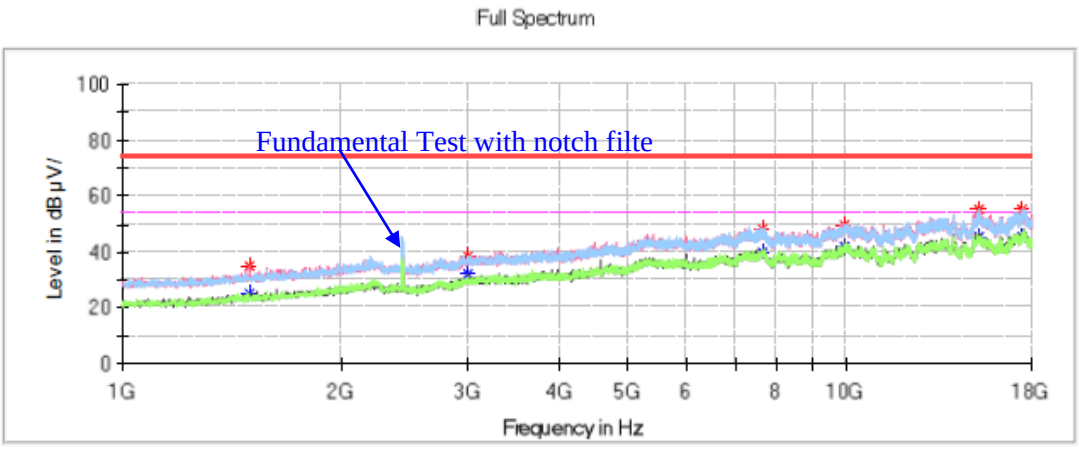
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1285.600000	31.94	---	74.00	42.06	V	-14.6
1285.600000	---	22.65	54.00	31.35	V	-14.6
2992.400000	39.73	---	74.00	34.27	V	-8.0
2992.400000	---	33.05	54.00	20.95	V	-8.0
5999.700000	45.31	---	74.00	28.69	V	0.2
5999.700000	---	38.79	54.00	15.21	V	0.2
9976.000000	49.90	---	74.00	24.10	V	7.7
9976.000000	---	41.21	54.00	12.79	V	7.7
14001.600000	52.91	---	74.00	21.09	V	10.5
14001.600000	---	45.19	54.00	8.81	V	10.5
17454.300000	---	46.44	54.00	7.56	H	13.5
17454.300000	54.89	---	74.00	19.11	H	13.5

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11g mode of middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



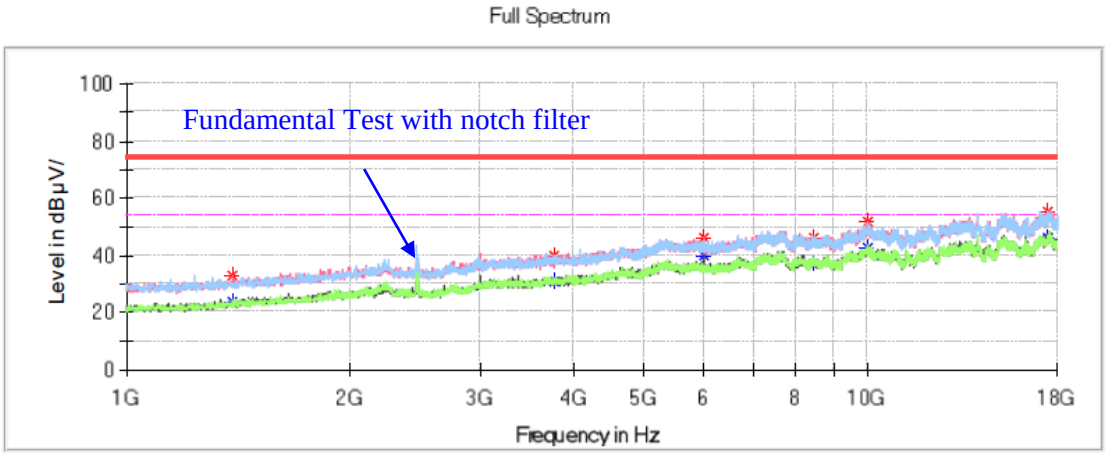
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1494.700000	34.70	---	74.00	39.30	V	-13.9
1494.700000	---	25.22	54.00	28.78	V	-13.9
2992.400000	---	31.97	54.00	22.03	V	-8.0
2992.400000	38.67	---	74.00	35.33	V	-8.0
7655.500000	---	39.67	54.00	14.33	V	4.1
7655.500000	48.59	---	74.00	25.41	V	4.1
9952.200000	---	41.89	54.00	12.11	V	7.7
9952.200000	49.87	---	74.00	24.13	V	7.7
15252.800000	55.14	---	74.00	18.86	H	11.0
15252.800000	---	45.52	54.00	8.48	H	11.0
17503.600000	---	45.72	54.00	8.28	V	13.6
17503.600000	55.43	---	74.00	18.57	V	13.6

High Channel: 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11g mode of high channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



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)
1387.600000	---	23.85	54.00	30.15	V	-14.3
1387.600000	32.84	---	74.00	41.16	V	-14.3
3777.800000	---	31.07	54.00	22.93	V	-5.5
3777.800000	40.20	---	74.00	33.80	V	-5.5
5999.700000	---	40.03	54.00	13.97	V	0.2
5999.700000	45.98	---	74.00	28.02	V	0.2
8440.900000	46.47	---	74.00	27.53	V	3.9
8440.900000	---	37.23	54.00	16.77	V	3.9
10004.900000	---	42.90	54.00	11.10	V	7.8
10004.900000	51.74	---	74.00	22.26	V	7.8
17418.600000	---	45.94	54.00	8.06	H	13.4
17418.600000	55.56	---	74.00	18.44	H	13.4

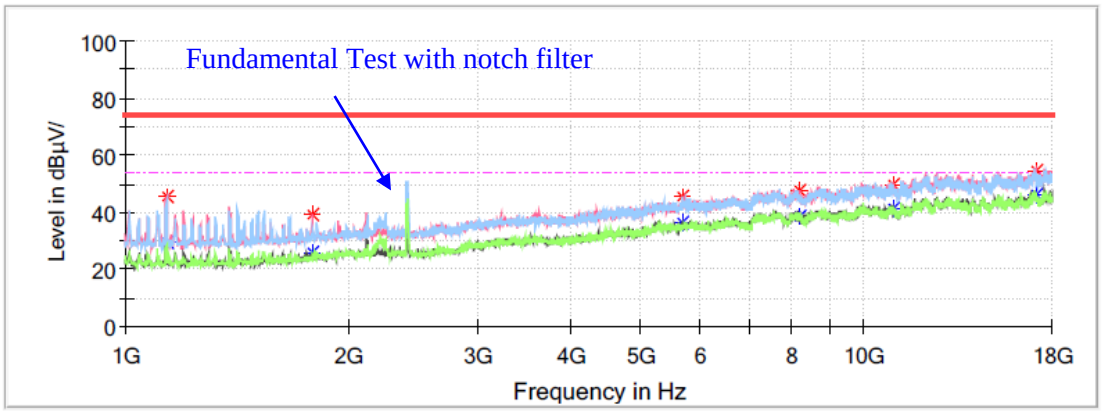
Chain 1:
802.11g Mode:

Low Channel: 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Full Spectrum



Critical_Freqs

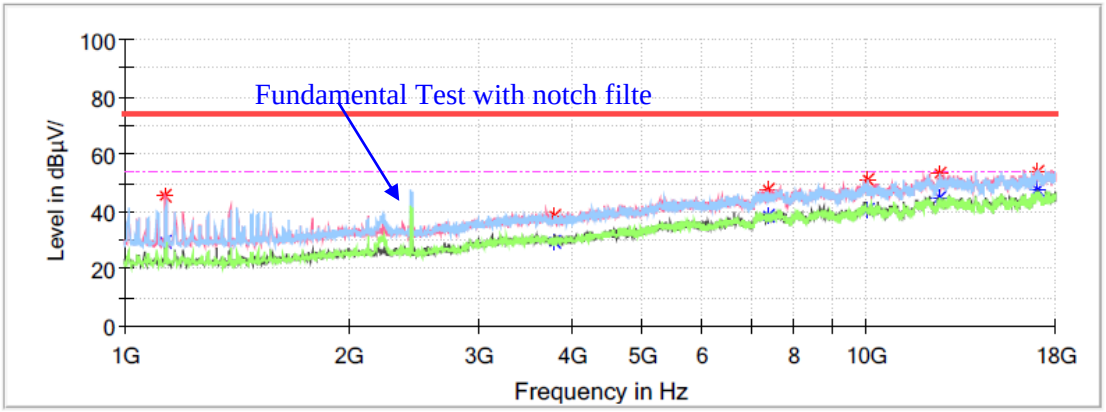
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1136.000000	45.55	---	74.00	28.45	V	-15.3
1136.000000	---	29.41	54.00	24.59	V	-15.3
1788.800000	---	25.55	54.00	28.45	V	-13.0
1788.800000	39.15	---	74.00	34.85	V	-13.0
5668.200000	45.12	---	74.00	28.88	H	-0.2
5668.200000	---	36.07	54.00	17.93	H	-0.2
8165.500000	47.59	---	74.00	26.41	V	4.4
8165.500000	---	38.75	54.00	15.25	V	4.4
10939.900000	49.70	---	74.00	24.30	H	7.3
10939.900000	---	41.04	54.00	12.96	H	7.3
17076.900000	---	45.99	54.00	8.01	V	12.2
17076.900000	54.37	---	74.00	19.63	V	12.2

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Full Spectrum



Critical_Freqs

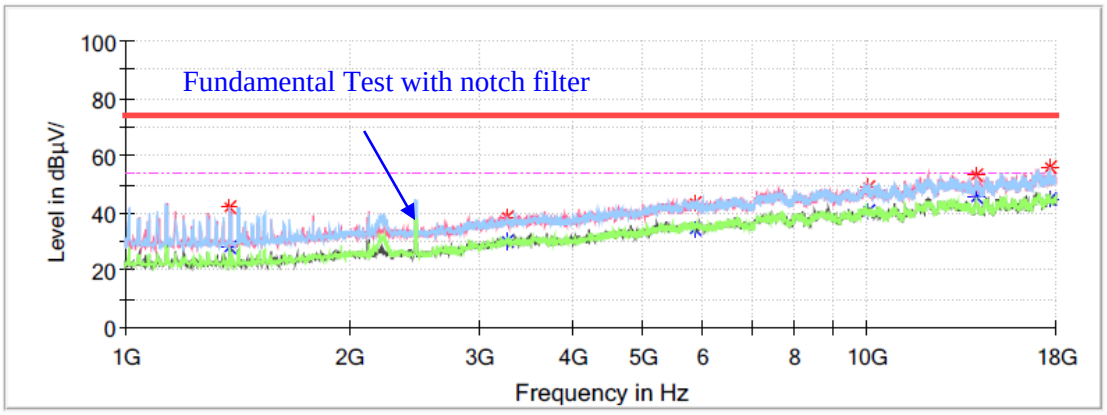
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1134.300000	---	29.08	54.00	24.92	V	-15.3
1134.300000	45.49	---	74.00	28.51	V	-15.3
3791.400000	---	29.53	54.00	24.47	V	-6.1
3791.400000	38.57	---	74.00	35.43	V	-6.1
7376.700000	---	38.49	54.00	15.51	V	3.6
7376.700000	47.54	---	74.00	26.46	V	3.6
10020.200000	---	40.83	54.00	13.17	H	7.2
10020.200000	50.81	---	74.00	23.19	H	7.2
12592.300000	---	44.79	54.00	9.21	H	9.7
12592.300000	53.04	---	74.00	20.96	H	9.7
17031.000000	53.58	---	74.00	20.42	V	12.2
17031.000000	---	47.47	54.00	6.53	V	12.2

High Channel: 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

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)
1382.500000	41.92	---	74.00	32.08	H	-14.9
1382.500000	---	27.92	54.00	26.08	H	-14.9
3272.900000	38.20	---	74.00	35.80	V	-7.3
3272.900000	---	29.73	54.00	24.27	V	-7.3
5865.400000	---	34.51	54.00	19.49	V	-0.1
5865.400000	43.37	---	74.00	30.63	V	-0.1
10078.000000	---	40.58	54.00	13.42	V	7.2
10078.000000	49.02	---	74.00	24.98	V	7.2
14005.000000	53.30	---	74.00	20.70	V	9.8
14005.000000	---	45.43	54.00	8.57	V	9.8
17643.000000	---	44.87	54.00	9.13	H	11.7
17643.000000	55.68	---	74.00	18.32	H	11.7

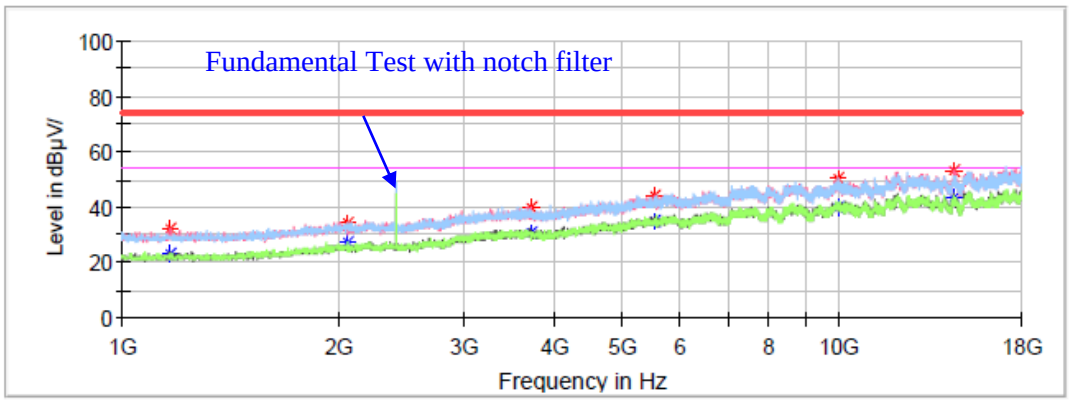
Chain 0+Chain 1:
802.11n20 Mode:

Low Channel : 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n20 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



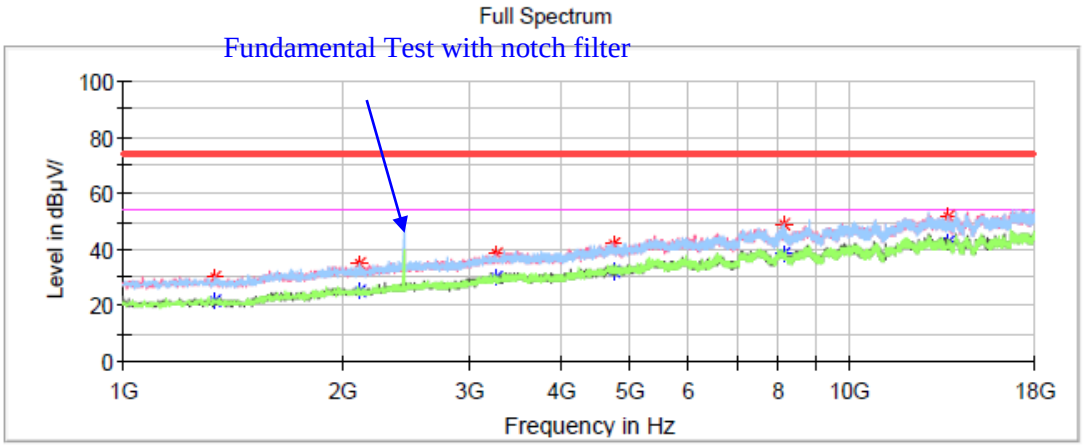
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1170.000000	---	22.88	54.00	31.12	V	-15.2
1170.000000	31.94	---	74.00	42.06	V	-15.2
2064.200000	---	27.09	54.00	26.91	H	-11.5
2064.200000	34.21	---	74.00	39.79	H	-11.5
3723.400000	---	30.84	54.00	23.16	V	-6.1
3723.400000	39.93	---	74.00	34.07	V	-6.1
5540.700000	---	34.96	54.00	19.04	V	-0.3
5540.700000	44.13	---	74.00	29.87	V	-0.3
10001.500000	---	40.03	54.00	13.97	H	7.2
10001.500000	50.07	---	74.00	23.93	H	7.2
14491.200000	---	43.47	54.00	10.53	H	9.4
14491.200000	53.18	---	74.00	20.82	H	9.4

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n20 mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

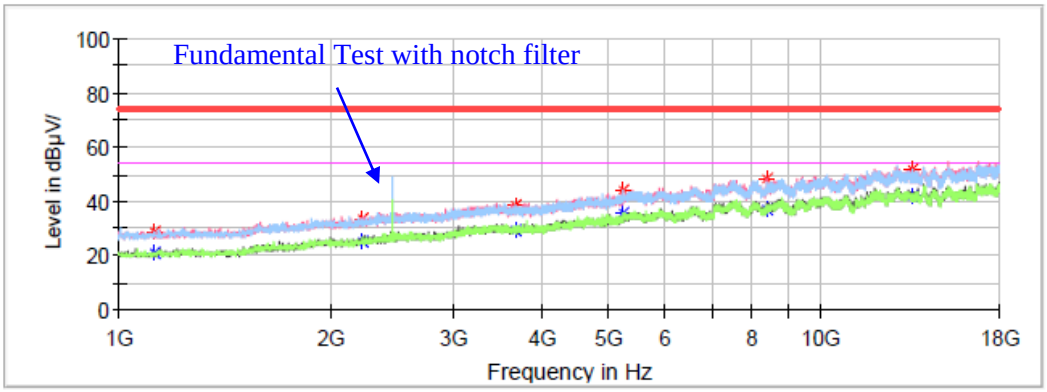
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1338.300000	---	21.60	54.00	32.40	H	-15.0
1338.300000	29.95	---	74.00	44.05	H	-15.0
2111.800000	---	25.02	54.00	28.98	H	-11.4
2111.800000	34.91	---	74.00	39.09	H	-11.4
3276.300000	---	30.18	54.00	23.82	V	-7.3
3276.300000	38.37	---	74.00	35.63	V	-7.3
4748.500000	---	32.22	54.00	21.78	V	-3.4
4748.500000	41.98	---	74.00	32.02	V	-3.4
8126.400000	---	38.46	54.00	15.54	H	4.3
8126.400000	48.87	---	74.00	25.13	H	4.3
13695.600000	---	42.87	54.00	11.13	H	9.7
13695.600000	51.47	---	74.00	22.53	H	9.7

High Channel : 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n20 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



Critical_Freqs

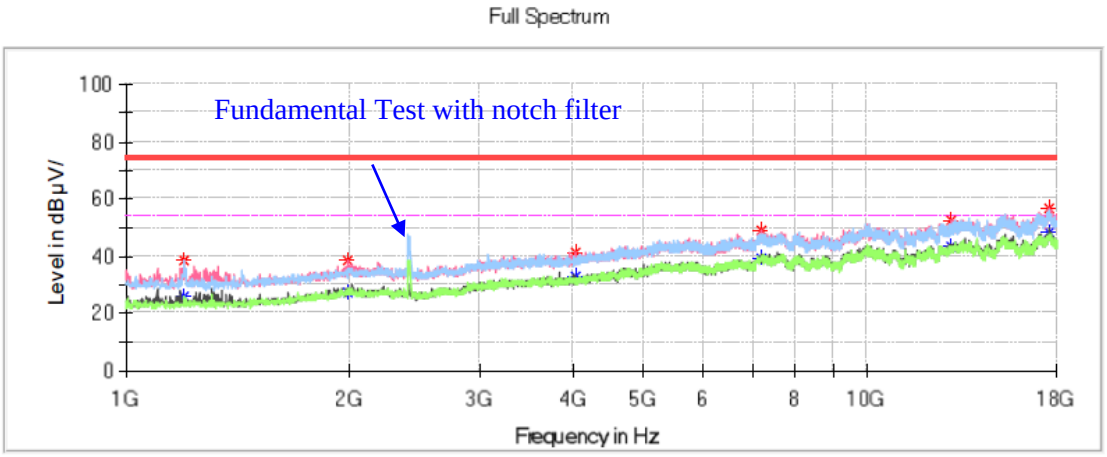
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1127.500000	---	20.67	54.00	33.33	V	-15.3
1127.500000	28.97	---	74.00	45.03	V	-15.3
2227.400000	---	25.03	54.00	28.97	V	-11.0
2227.400000	33.61	---	74.00	40.39	V	-11.0
3686.000000	---	29.33	54.00	24.67	H	-6.2
3686.000000	38.63	---	74.00	35.37	H	-6.2
5239.800000	---	35.33	54.00	18.67	H	-1.4
5239.800000	44.31	---	74.00	29.69	H	-1.4
8398.400000	---	37.33	54.00	16.67	V	5.1
8398.400000	48.03	---	74.00	25.97	V	5.1
13495.000000	---	41.88	54.00	12.12	H	9.6
13495.000000	51.48	---	74.00	22.52	H	9.6

802.11ax20 Mode:

Low Channel : 2412 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax20 mode of low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.247
Test Engineer:	Hugh Wu



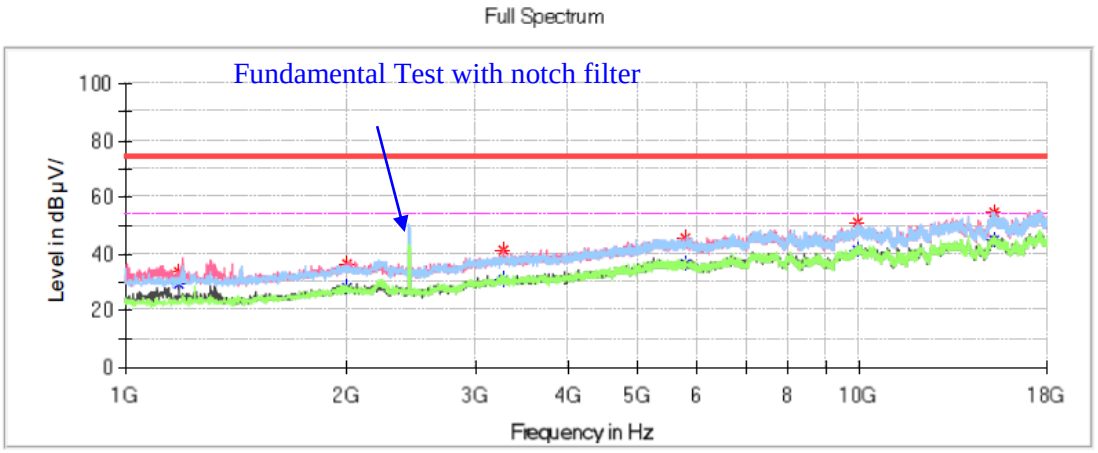
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1195.500000	---	25.92	54.00	28.08	H	-14.9
1195.500000	38.59	---	74.00	35.41	H	-14.9
1989.400000	---	27.60	54.00	26.40	V	-10.6
1989.400000	38.17	---	74.00	35.83	V	-10.6
4031.100000	---	32.75	54.00	21.25	V	-5.0
4031.100000	41.31	---	74.00	32.69	V	-5.0
7184.600000	---	39.44	54.00	14.56	V	3.9
7184.600000	48.90	---	74.00	25.10	V	3.9
12968.000000	---	43.56	54.00	10.44	V	9.0
12968.000000	52.60	---	74.00	21.40	V	9.0
17552.900000	---	48.38	54.00	5.62	V	13.4
17552.900000	56.52	---	74.00	17.48	V	13.4

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax20 mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



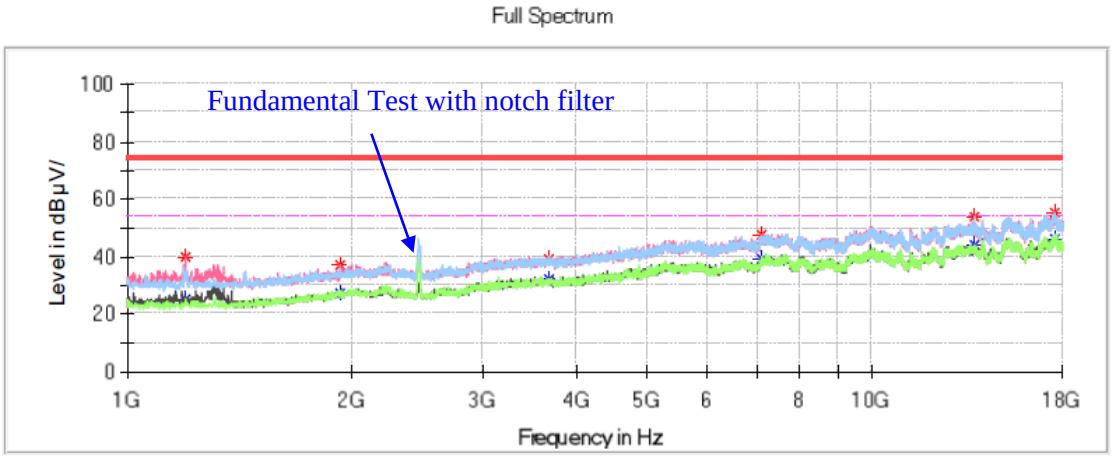
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1181.900000	---	29.70	54.00	24.30	V	-14.9
1181.900000	33.31	---	74.00	40.69	V	-14.9
2003.000000	---	28.13	54.00	25.87	V	-10.6
2003.000000	36.10	---	74.00	37.90	V	-10.6
3272.900000	---	30.48	54.00	23.52	H	-7.0
3272.900000	41.14	---	74.00	32.86	H	-7.0
5771.900000	---	36.11	54.00	17.89	H	0.5
5771.900000	45.45	---	74.00	28.55	H	0.5
9911.400000	---	41.60	54.00	12.40	V	7.5
9911.400000	50.91	---	74.00	23.09	V	7.5
15213.700000	---	44.94	54.00	9.06	H	10.8
15213.700000	54.29	---	74.00	19.71	H	10.8

High Channel : 2462 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax20 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

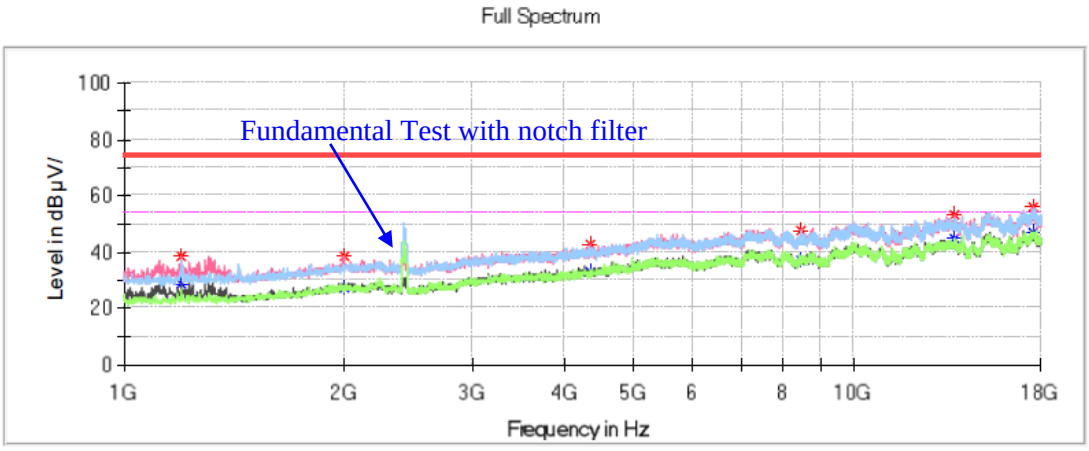
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	---	25.44	54.00	28.56	V	-14.9
1197.200000	39.62	---	74.00	34.38	V	-14.9
1928.200000	---	27.27	54.00	26.73	V	-11.1
1928.200000	36.94	---	74.00	37.06	V	-11.1
3680.900000	---	32.44	54.00	21.56	V	-5.7
3680.900000	39.16	---	74.00	34.84	V	-5.7
7106.400000	---	39.27	54.00	14.73	V	3.9
7106.400000	47.55	---	74.00	26.45	V	3.9
13680.300000	---	44.35	54.00	9.65	H	10.8
13680.300000	53.92	---	74.00	20.08	H	10.8
17595.400000	---	46.27	54.00	7.73	H	13.2
17595.400000	55.20	---	74.00	18.80	H	13.2

802.11ax40 Mode:

Low Channel : 2422 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax40 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



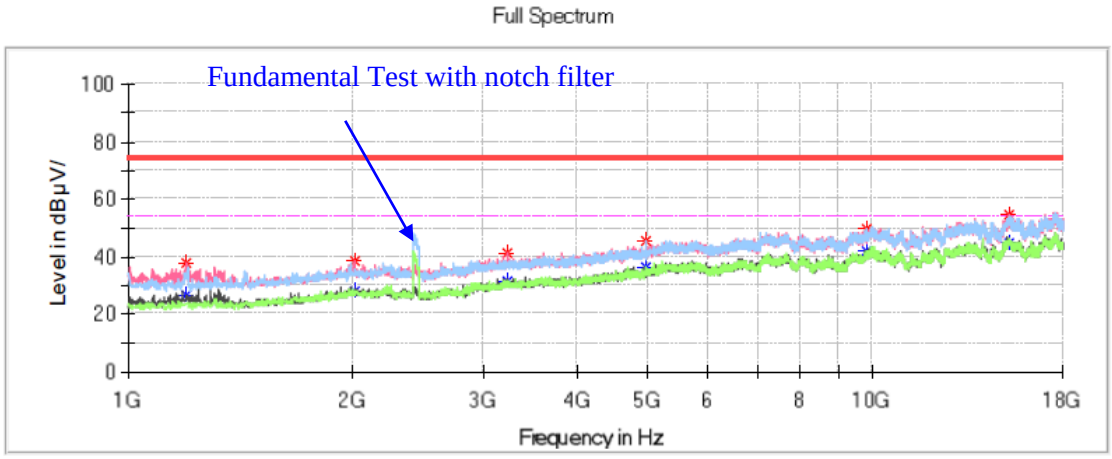
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	---	28.45	54.00	25.55	V	-14.9
1197.200000	38.31	---	74.00	35.69	V	-14.9
1997.900000	---	27.24	54.00	26.76	V	-10.6
1997.900000	38.76	---	74.00	35.24	V	-10.6
4354.100000	---	32.67	54.00	21.33	V	-4.2
4354.100000	42.60	---	74.00	31.40	V	-4.2
8435.800000	---	37.26	54.00	16.74	H	3.9
8435.800000	47.80	---	74.00	26.20	H	3.9
13685.400000	---	44.68	54.00	9.32	V	10.8
13685.400000	53.25	---	74.00	20.75	V	10.8
17583.500000	---	46.64	54.00	7.36	H	13.3
17583.500000	56.25	---	74.00	17.75	H	13.3

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax40 mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



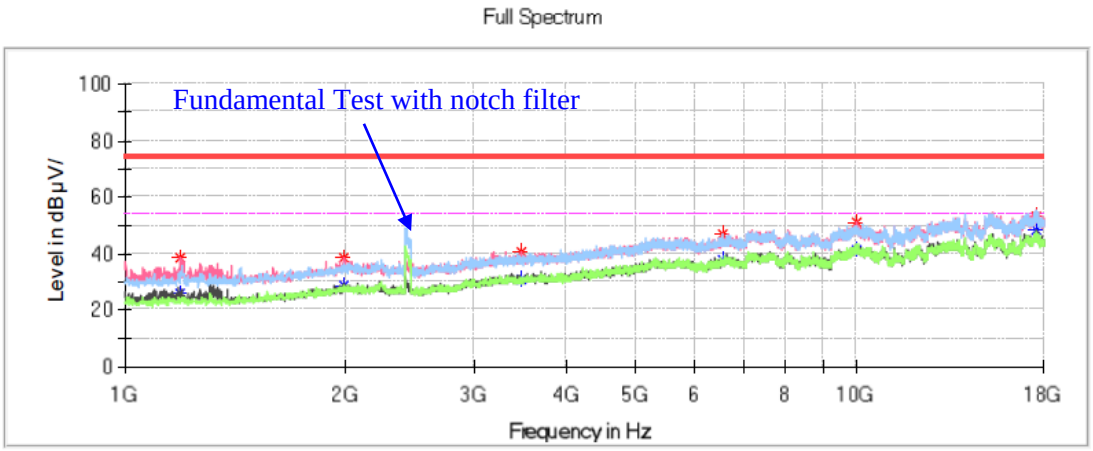
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1200.600000	---	26.33	54.00	27.67	V	-14.9
1200.600000	37.96	---	74.00	36.04	V	-14.9
2014.900000	---	27.79	54.00	26.21	V	-10.5
2014.900000	38.74	---	74.00	35.26	V	-10.5
3233.800000	---	31.47	54.00	22.53	V	-7.1
3233.800000	40.95	---	74.00	33.05	V	-7.1
4955.900000	---	36.71	54.00	17.29	H	-1.4
4955.900000	45.17	---	74.00	28.83	H	-1.4
9819.600000	---	41.82	54.00	12.18	H	7.2
9819.600000	49.68	---	74.00	24.32	H	7.2
15210.300000	---	44.69	54.00	9.31	V	10.8
15210.300000	54.88	---	74.00	19.12	V	10.8

High Channel : 2452 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax40 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

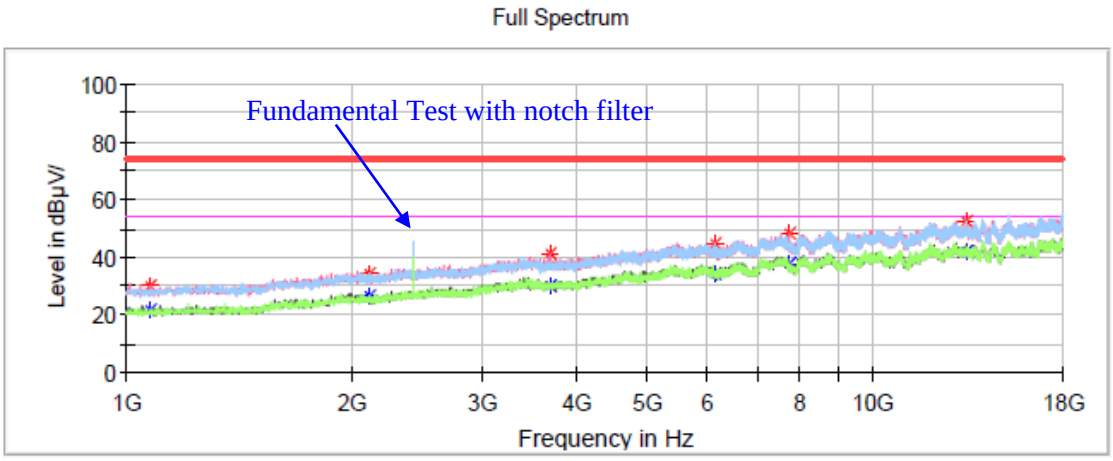
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1192.100000	---	25.95	54.00	28.05	V	-14.9
1192.100000	38.80	---	74.00	35.20	V	-14.9
1996.200000	---	29.00	54.00	25.00	V	-10.6
1996.200000	38.25	---	74.00	35.75	V	-10.6
3476.900000	---	30.42	54.00	23.58	V	-6.2
3476.900000	40.87	---	74.00	33.13	V	-6.2
6535.200000	---	37.66	54.00	16.34	H	1.0
6535.200000	46.74	---	74.00	27.26	H	1.0
9989.600000	---	41.25	54.00	12.75	V	7.8
9989.600000	50.95	---	74.00	23.05	V	7.8
17537.600000	---	48.17	54.00	5.83	H	13.5
17537.600000	52.82	---	74.00	21.18	H	13.5

802.11n40 Mode:

Low Channel : 2422 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n40 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

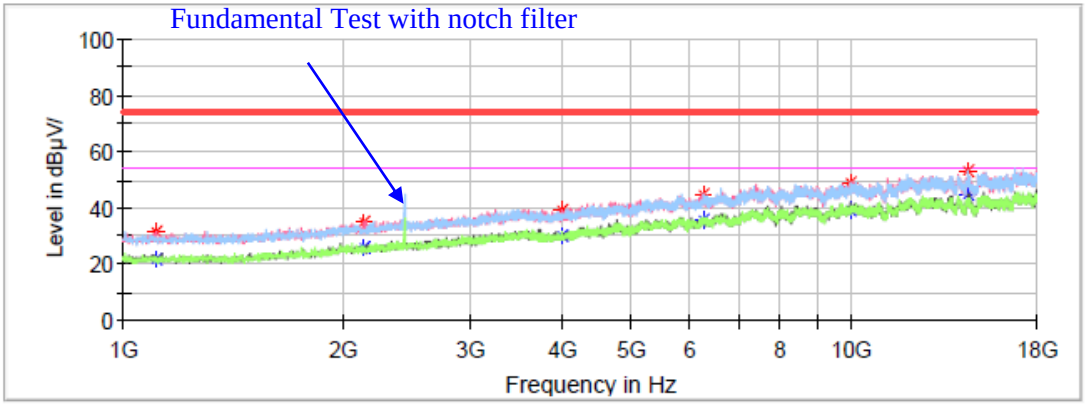
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1079.900000	---	21.34	54.00	32.66	V	-15.3
1079.900000	29.85	---	74.00	44.15	V	-15.3
2113.500000	---	26.23	54.00	27.77	V	-11.4
2113.500000	34.22	---	74.00	39.78	V	-11.4
3691.100000	---	30.06	54.00	23.94	H	-6.2
3691.100000	41.03	---	74.00	32.97	H	-6.2
6140.800000	---	34.59	54.00	19.41	H	0.2
6140.800000	45.02	---	74.00	28.98	H	0.2
7728.600000	---	37.78	54.00	16.22	V	3.9
7728.600000	48.29	---	74.00	25.71	V	3.9
13367.500000	---	41.86	54.00	12.14	V	9.6
13367.500000	52.32	---	74.00	21.68	V	9.6

Middle Channel: 2437 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n40 mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



Critical_Freqs

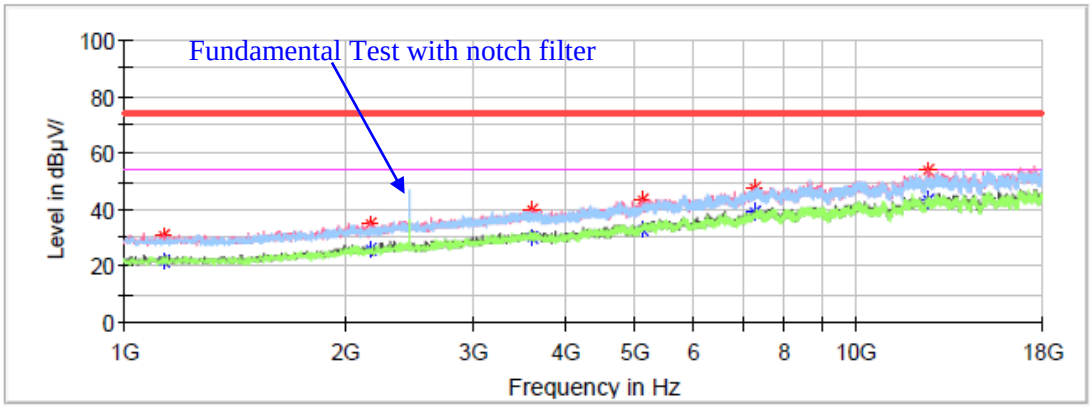
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1110.500000	31.41	---	74.00	42.59	V	-15.3
1110.500000	---	21.80	54.00	32.20	V	-15.3
2147.500000	34.66	---	74.00	39.34	V	-11.3
2147.500000	---	25.98	54.00	28.02	V	-11.3
4002.200000	39.27	---	74.00	34.73	V	-5.9
4002.200000	---	30.22	54.00	23.78	V	-5.9
6253.000000	44.56	---	74.00	29.44	V	0.3
6253.000000	---	35.46	54.00	18.54	V	0.3
9984.500000	48.85	---	74.00	25.15	H	7.1
9984.500000	---	39.05	54.00	14.95	H	7.1
14491.200000	---	44.81	54.00	9.19	H	9.4
14491.200000	53.07	---	74.00	20.93	H	9.4

High Channel : 2452 MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n40 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



Critical_Freqs

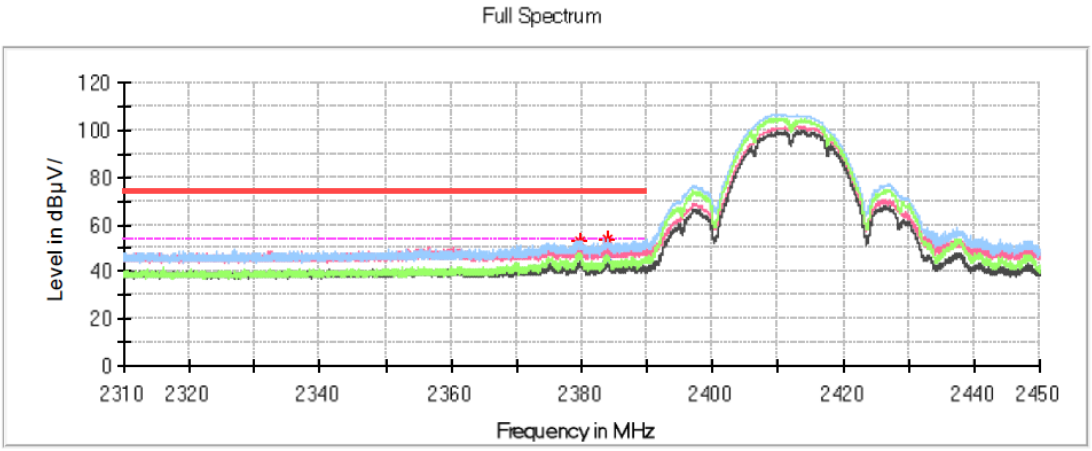
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1134.300000	---	21.85	54.00	32.15	V	-15.3
1134.300000	30.62	---	74.00	43.38	V	-15.3
2171.300000	---	26.10	54.00	27.90	V	-11.2
2171.300000	35.17	---	74.00	38.83	V	-11.2
3619.700000	---	30.32	54.00	23.68	H	-6.2
3619.700000	39.54	---	74.00	34.46	H	-6.2
5100.400000	---	32.68	54.00	21.32	V	-2.0
5100.400000	43.38	---	74.00	30.62	V	-2.0
7296.800000	---	39.33	54.00	14.67	V	3.4
7296.800000	47.81	---	74.00	26.19	V	3.4
12570.200000	---	43.67	54.00	10.33	V	9.7
12570.200000	54.17	---	74.00	19.83	V	9.7

Band Edge emissions:

Chain 0:
802.11b Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

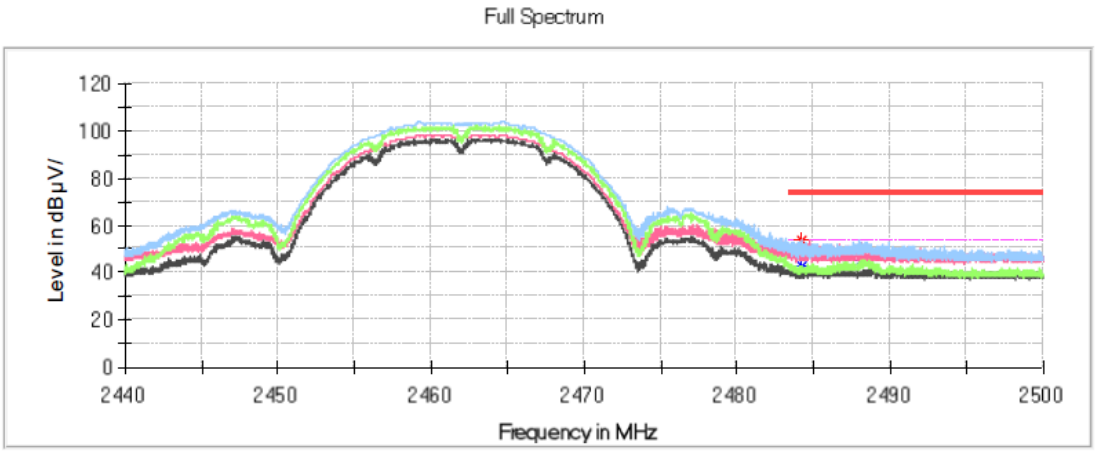


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2379.580000	52.47	---	74.00	21.53	H	0.0
2379.580000	---	47.58	54.00	6.42	H	0.0
2383.836000	53.84	---	74.00	20.16	H	0.1
2383.836000	---	46.19	54.00	7.81	H	0.1

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



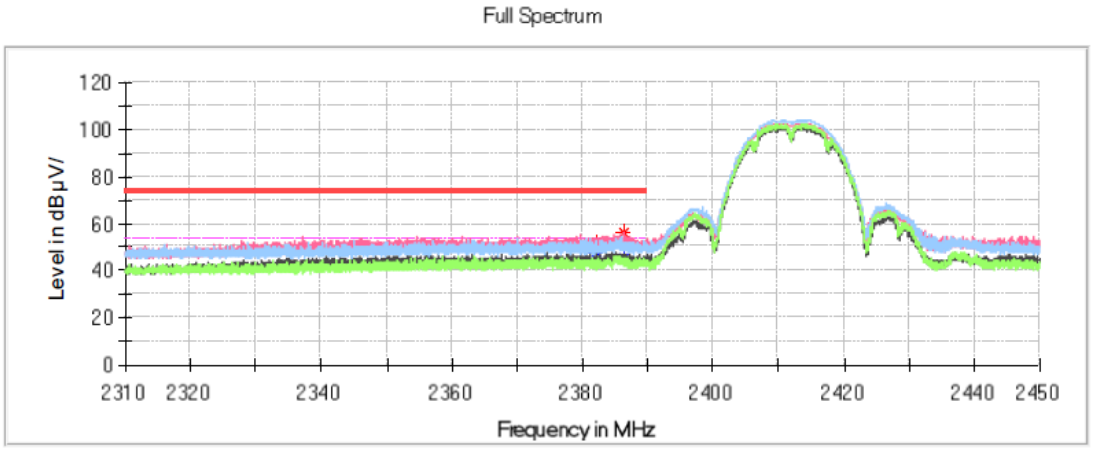
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.184000	53.91	---	74.00	20.09	H	0.2
2484.184000	---	42.41	54.00	11.59	H	0.2
2488.126000	49.61	---	74.00	24.39	H	0.2
2488.126000	---	45.30	54.00	8.70	H	0.2

Chain 1:
802.11b Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

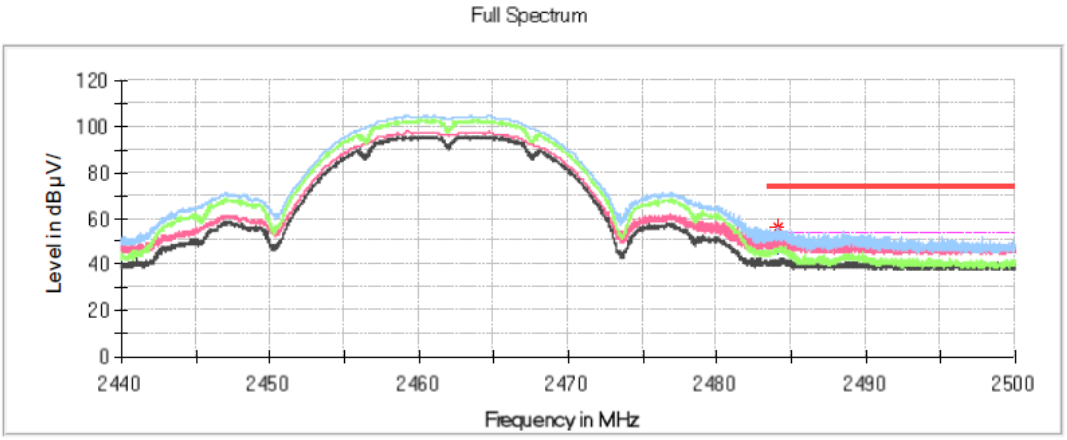


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2382.156000	51.87	---	74.00	22.13	V	0.0
2382.156000	---	48.03	54.00	5.97	V	0.0
2386.370000	55.86	---	74.00	18.14	V	0.1
2386.370000	---	45.42	54.00	8.58	V	0.1

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

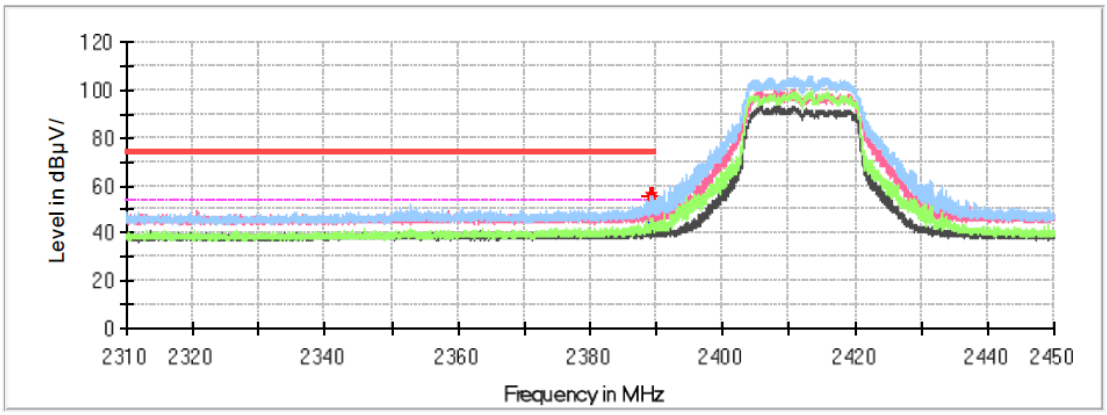
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.034000	56.04	---	74.00	17.96	H	0.2
2484.034000	---	46.70	54.00	7.30	H	0.2
2484.214000	52.22	---	74.00	21.78	H	0.2
2484.214000	---	47.88	54.00	6.12	H	0.2

Chain 0:
802.11g Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11g mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum

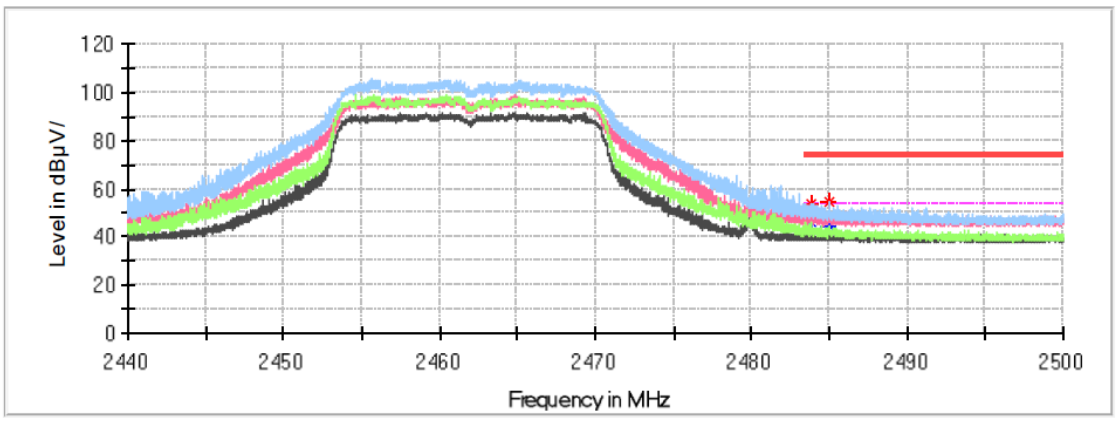


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.128000	55.08	---	74.00	18.92	H	0.1
2389.128000	---	45.79	54.00	8.21	H	0.1
2389.240000	54.99	---	74.00	19.01	H	0.1
2389.240000	---	46.09	54.00	7.91	H	0.1

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11g mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

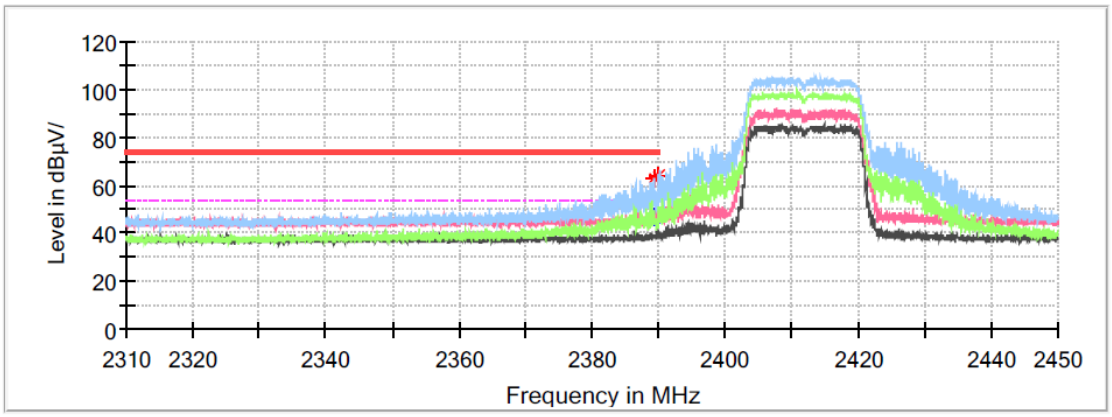
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.806000	---	46.28	54.00	7.72	H	0.2
2483.806000	54.00	---	74.00	20.00	H	0.2
2485.012000	---	44.20	54.00	9.80	H	0.2
2485.012000	54.17	---	74.00	19.83	H	0.2

Chain 1:
802.11g Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Full Spectrum



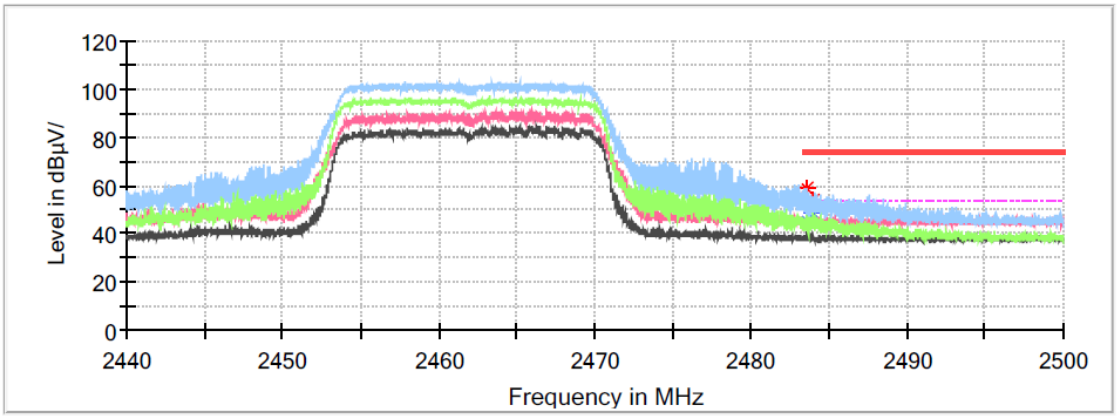
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.352000	---	47.01	54.00	6.99	H	-0.6
2389.352000	62.58	---	74.00	11.42	H	-0.6
2389.982000	---	47.81	54.00	6.19	H	-0.6
2389.982000	63.95	---	74.00	10.05	H	-0.6

Common Information

Project No.:	RKSA240325003
Test Mode:	2.4G WIFI
Standard:	FCC Part 15.247& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Full Spectrum



Critical_Freqs

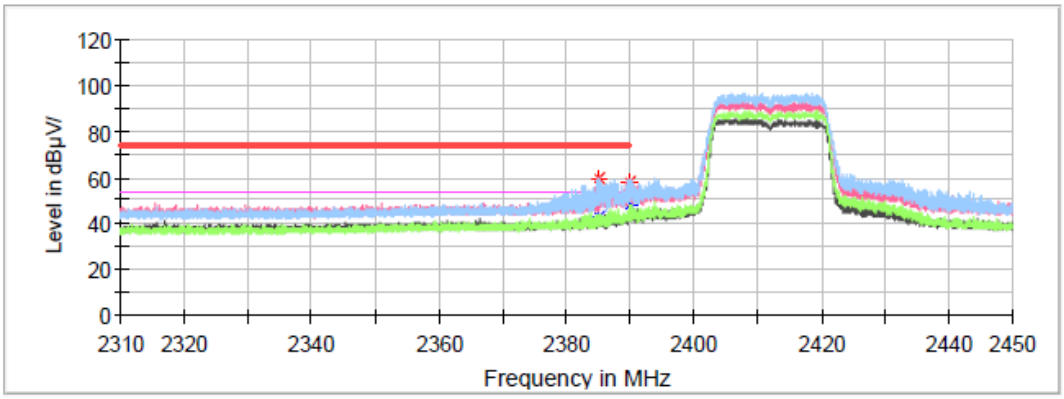
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.572000	58.45	---	74.00	15.55	H	-0.3
2483.572000	---	44.91	54.00	9.09	H	-0.3
2483.968000	53.52	---	74.00	20.48	H	-0.3
2483.968000	---	48.30	54.00	5.70	H	-0.3

Chain 0+Chain 1:
802.11n20 Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n20 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



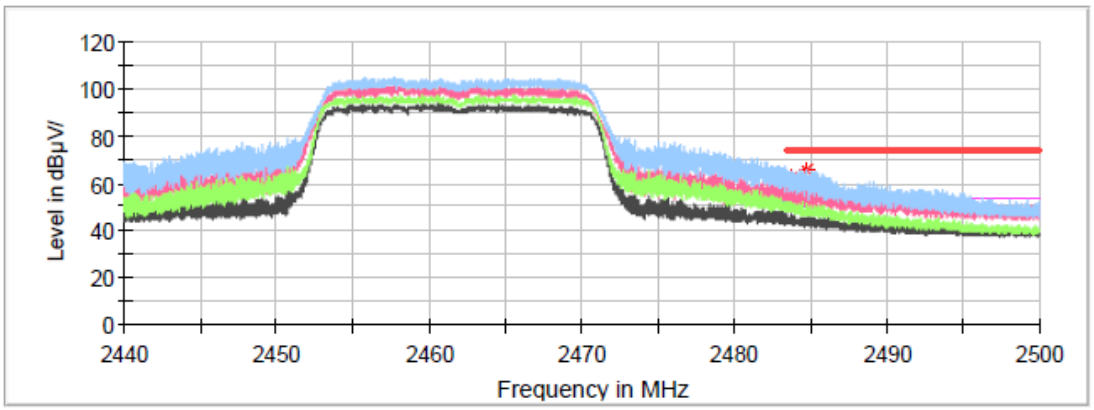
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2385.180000	59.18	---	74.00	14.82	H	-0.6
2385.180000	---	42.65	54.00	11.35	H	-0.6
2389.912000	57.71	---	74.00	16.29	V	-0.6
2389.912000	---	47.82	54.00	6.18	V	-0.6

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n20 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



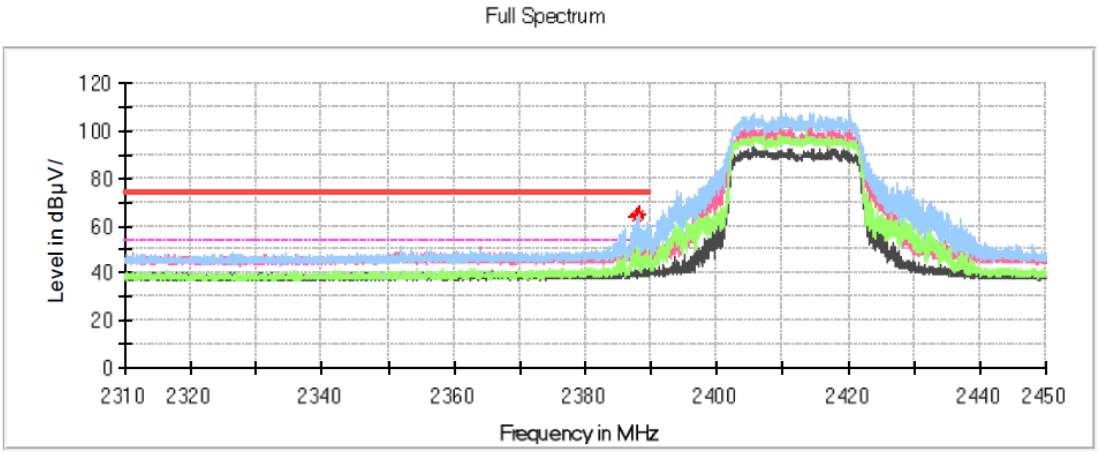
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.698000	61.85	---	74.00	12.15	H	-0.3
2483.698000	---	52.44	54.00	1.56	H	-0.3
2484.742000	65.61	---	74.00	8.39	V	-0.3
2484.742000	---	51.55	54.00	2.45	V	-0.3

Chain 0+Chain 1:
802.11ax20 Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax20 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

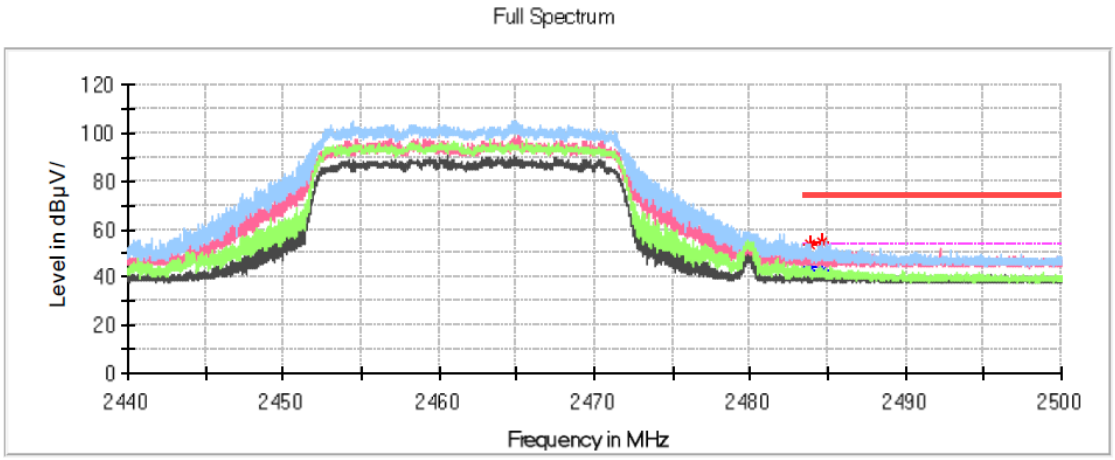


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2387.910000	---	51.43	54.00	2.57	H	0.1
2387.910000	63.70	---	74.00	10.30	H	0.1
2388.162000	---	50.53	54.00	3.47	H	0.1
2388.162000	64.72	---	74.00	9.28	H	0.1

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax20 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



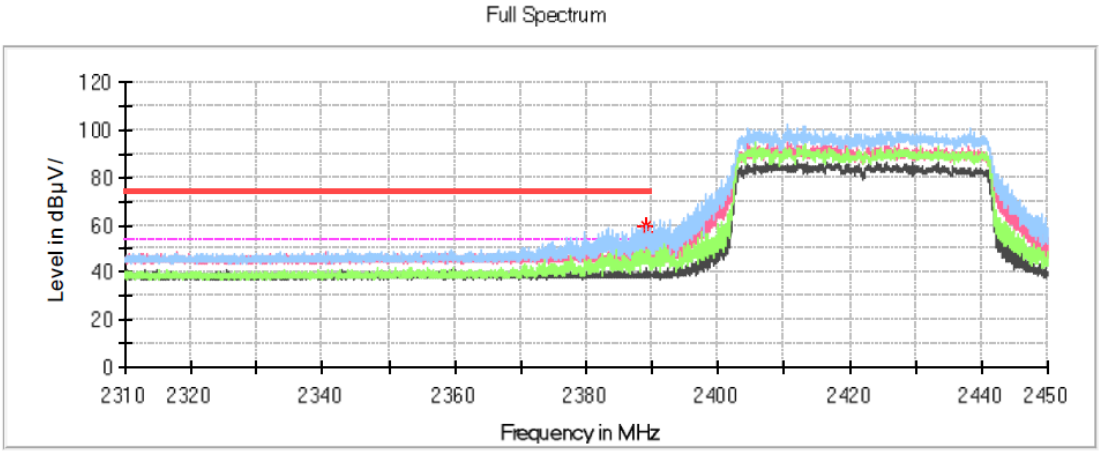
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2483.830000	53.88	---	74.00	20.12	H	0.2
2483.830000	---	44.63	54.00	9.37	H	0.2
2484.652000	---	42.87	54.00	11.13	H	0.2
2484.652000	54.57	---	74.00	19.43	H	0.2

Chain 0+Chain 1:
802.11ax40 Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax40 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

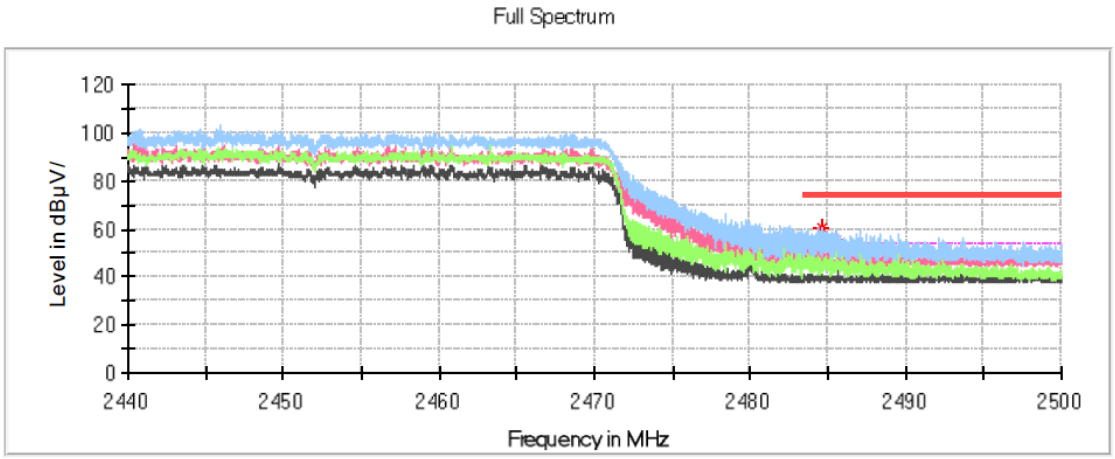


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2389.100000	---	47.29	54.00	6.71	H	0.1
2389.100000	59.62	---	74.00	14.38	H	0.1
2389.184000	56.85	---	74.00	17.15	H	0.1
2389.184000	---	49.41	54.00	4.59	H	0.1

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11ax40 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

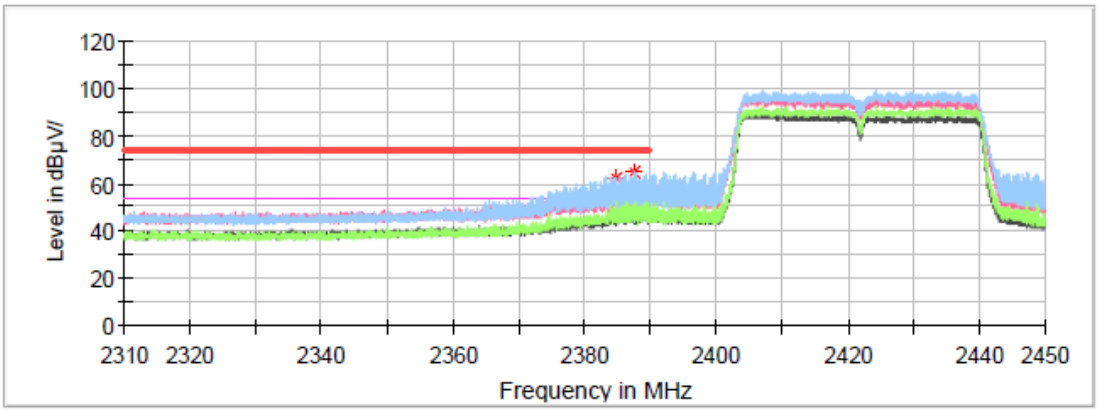
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.604000	60.63	---	74.00	13.37	H	0.2
2484.604000	---	44.94	54.00	9.06	H	0.2
2485.534000	55.42	---	74.00	18.58	H	0.2
2485.534000	---	49.93	54.00	4.07	H	0.2

Chain 0+Chain 1:
802.11n40 Mode:

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n40 mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



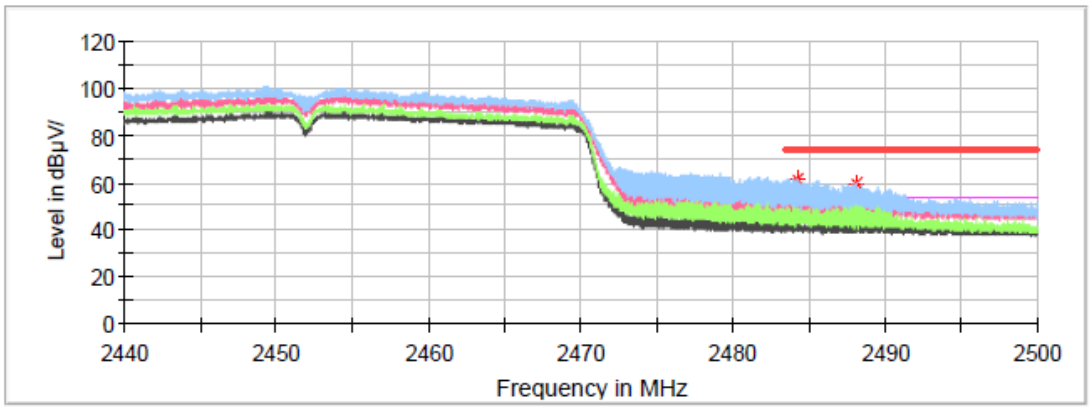
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2384.830000	62.45	---	74.00	11.55	H	-0.6
2384.830000	---	51.99	54.00	2.01	H	-0.6
2387.434000	64.39	---	74.00	9.61	V	-0.6
2387.434000	---	50.98	54.00	3.02	V	-0.6

Common Information

Project No.:	RKSA240325003
Test Mode:	802.11n40 mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum

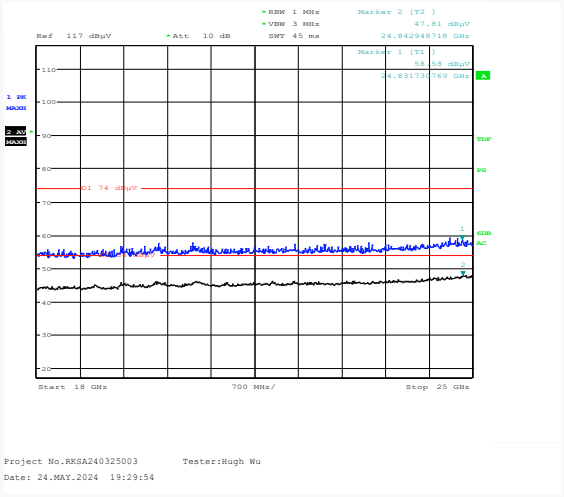


Critical_Freqs

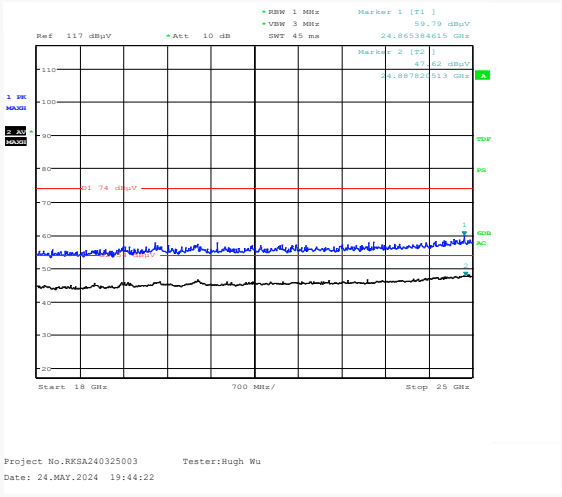
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2484.178000	61.22	---	74.00	12.78	H	-0.3
2484.178000	---	48.41	54.00	5.59	H	-0.3
2488.072000	59.24	---	74.00	14.76	V	-0.2
2488.072000	---	50.21	54.00	3.79	V	-0.2

18GHz-25GHz: *Transmitting in maximum output power ax20 mode and low channel*
Chain 0+Chain 1:

Horizontal



Vertical



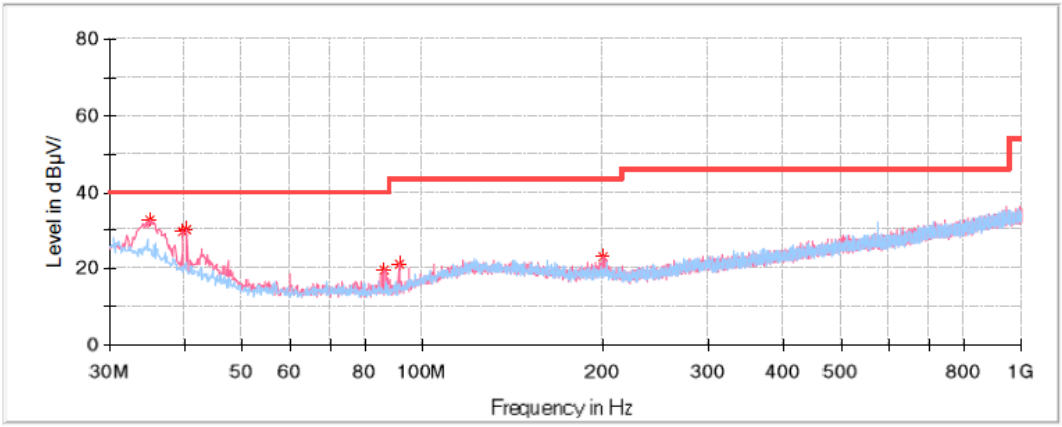
Note: The test distance is 3m. The limit is 74dBµV/m(Peak) and 54dBµV/m(Average).

For BLE (1 Mbps) Mode:
30MHz-1GHz

Low Channel: 2402MHz

Common Information

Project No:	RKSA240325003
EUT Model:	B2
Test Mode:	BLE 1M
Standard:	FCC Part 15.205 & FCC Part 15.209 &FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	23.4℃
Humidity:	52%
Barometric Pressure:	100.9kPa
Test Engineer:	Grace Luo
Test Date:	2024/7/17



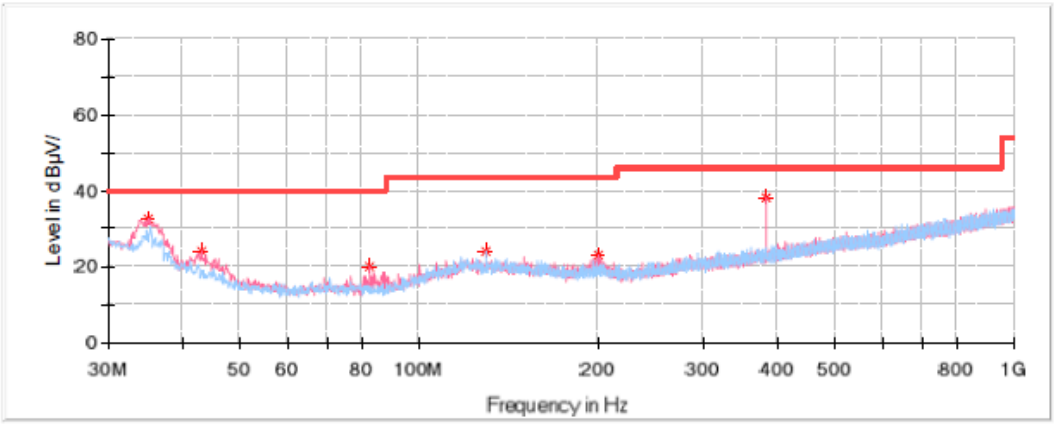
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
35.092500	32.55	40.00	7.45	V	-8.2
39.700000	29.48	40.00	10.52	V	-11.2
40.427500	30.14	40.00	9.86	V	-11.7
86.502500	19.59	40.00	20.41	V	-17.1
91.352500	21.24	43.50	22.26	V	-16.6
199.871250	23.02	43.50	20.48	V	-12.2

Middle Channel: 2440MHz

Common Information

Project No:	RKSA240325003
EUT Model:	B2
Test Mode:	BLE 1M
Standard:	FCC Part 15.205 & FCC Part 15.209 &FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	23.4℃
Humidity:	52%
Barometric Pressure:	100.9kPa
Test Engineer:	Grace Luo
Test Date:	2024/7/17



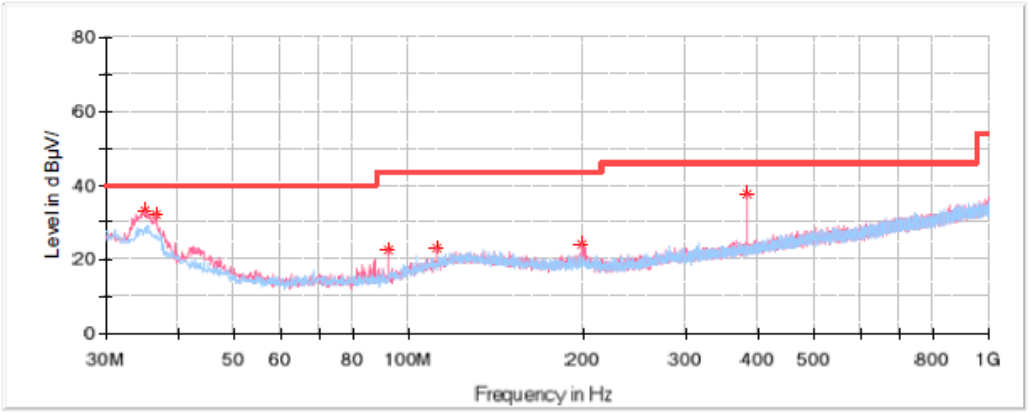
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
35.092500	32.48	40.00	7.52	V	-8.2
43.095000	24.40	40.00	15.60	V	-13.1
82.501250	19.97	40.00	20.03	V	-17.2
129.182500	24.03	43.50	19.47	H	-11.1
199.750000	23.14	43.50	20.36	V	-12.2
384.050000	37.99	46.00	8.01	V	-8.4

High Channel: 2480MHz

Common Information

Project No:	RKSA240325003
EUT Model:	B2
Test Mode:	BLE 1M
Standard:	FCC Part 15.205 & FCC Part 15.209 &FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	23.4℃
Humidity:	52%
Barometric Pressure:	100.9kPa
Test Engineer:	Grace Luo
Test Date:	2024/7/17



Critical_Freqs

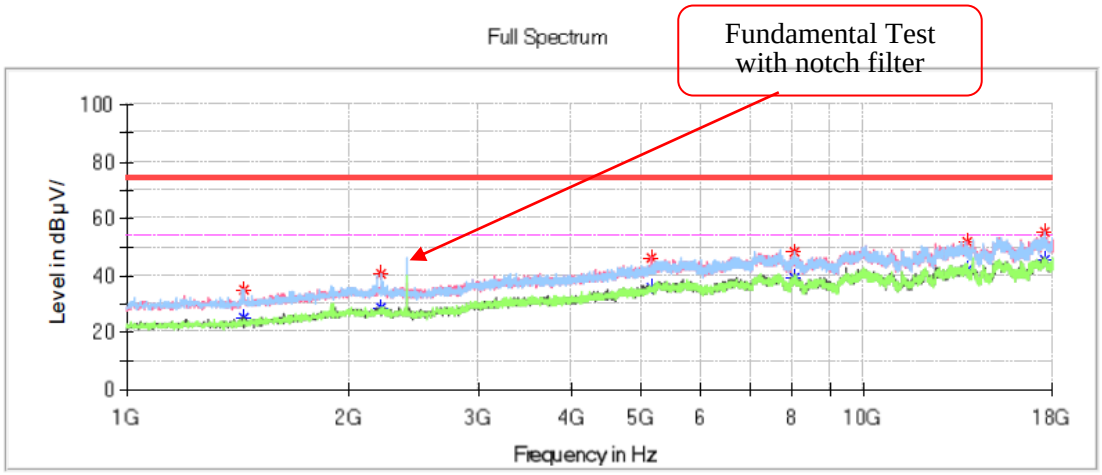
Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
35.092500	33.13	40.00	6.87	V	-8.2
36.547500	32.24	40.00	7.76	V	-9.1
92.080000	22.74	43.50	20.76	V	-16.4
111.601250	23.05	43.50	20.45	V	-12.4
199.022500	24.08	43.50	19.42	V	-12.2
384.050000	37.58	46.00	8.42	V	-8.4

1GHz-18GHz:

Low Channel: 2402MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	BLE 1M mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



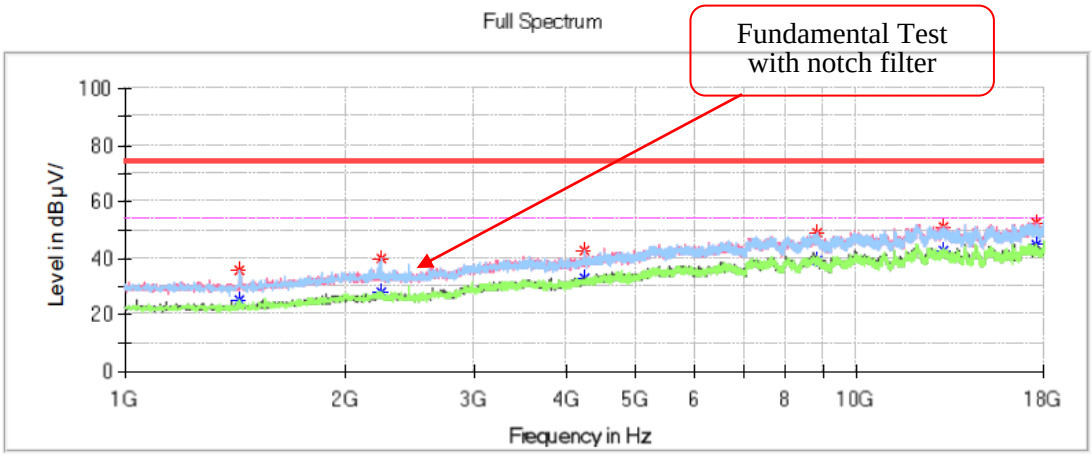
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1438.600000	---	25.17	54.00	28.83	H	-14.1
1438.600000	35.11	---	74.00	38.89	H	-14.1
2207.000000	---	28.45	54.00	25.55	H	-10.2
2207.000000	40.87	---	74.00	33.13	H	-10.2
5139.500000	---	35.95	54.00	18.05	V	-0.6
5139.500000	46.16	---	74.00	27.84	V	-0.6
8015.900000	---	38.82	54.00	15.18	H	3.8
8015.900000	48.27	---	74.00	25.73	H	3.8
13755.100000	---	42.11	54.00	11.89	V	10.8
13755.100000	51.90	---	74.00	22.10	V	10.8
17605.600000	---	45.52	54.00	8.48	H	13.2
17605.600000	55.07	---	74.00	18.93	H	13.2

Middle Channel: 2440MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	BLE 1M mode of middle channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



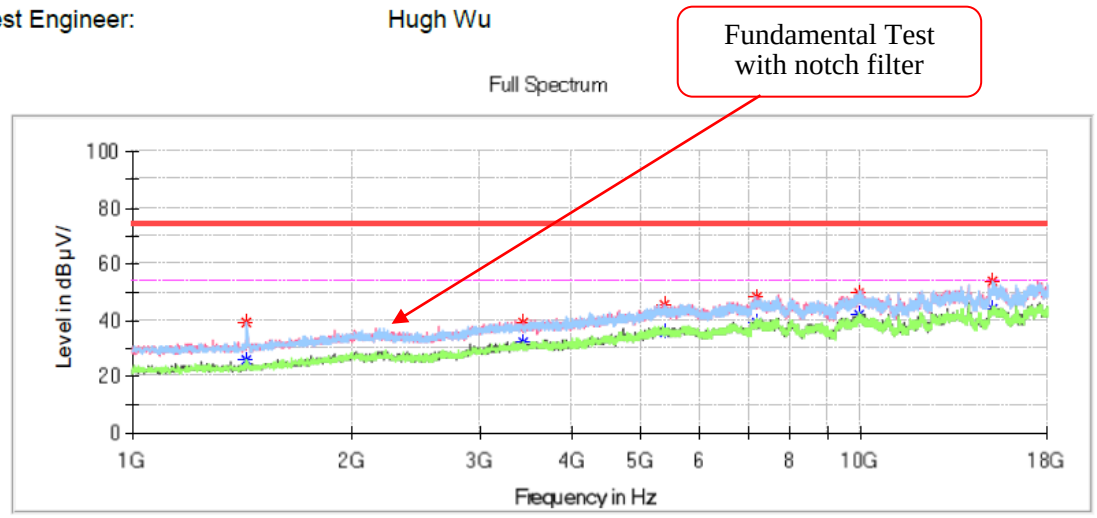
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1436.900000	---	24.95	54.00	29.05	H	-14.8
1436.900000	35.76	---	74.00	38.24	H	-14.8
2239.300000	---	28.21	54.00	25.79	H	-11.0
2239.300000	39.94	---	74.00	34.06	H	-11.0
4240.200000	---	32.71	54.00	21.29	V	-5.1
4240.200000	42.39	---	74.00	31.61	V	-5.1
8811.500000	---	39.29	54.00	14.71	V	5.4
8811.500000	49.24	---	74.00	24.76	V	5.4
13092.100000	---	42.45	54.00	11.55	V	9.7
13092.100000	51.29	---	74.00	22.71	V	9.7
17600.500000	---	44.77	54.00	9.23	V	11.6
17600.500000	52.58	---	74.00	21.42	V	11.6

High Channel: 2480MHz

Common Information

Project No.:	RKSA240325003
Test Mode:	BLE 1M mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

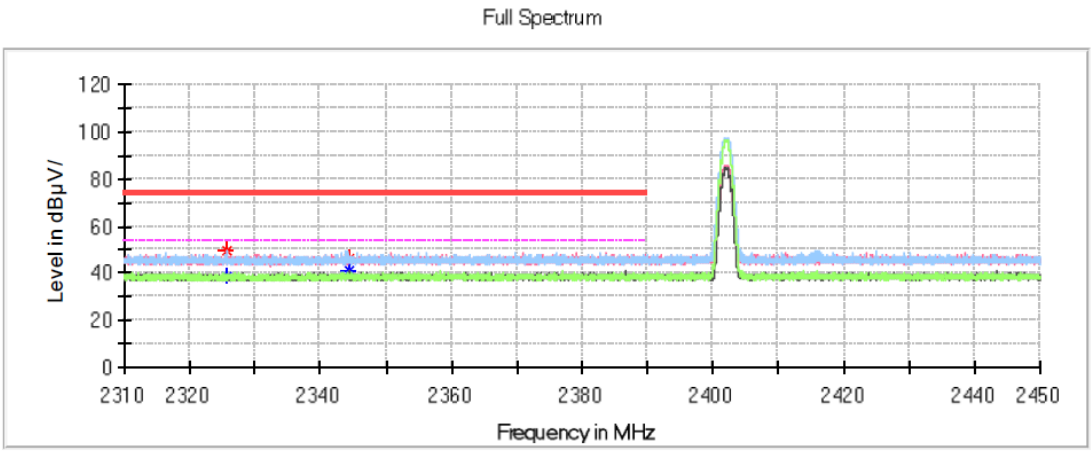
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1436.900000	---	25.61	54.00	28.39	H	-14.1
1436.900000	38.91	---	74.00	35.09	H	-14.1
3432.700000	---	32.05	54.00	21.95	H	-6.4
3432.700000	39.03	---	74.00	34.97	H	-6.4
5380.900000	---	35.89	54.00	18.11	H	0.4
5380.900000	45.46	---	74.00	28.54	H	0.4
7169.300000	---	39.35	54.00	14.65	V	3.9
7169.300000	48.20	---	74.00	25.80	V	3.9
9943.700000	---	41.74	54.00	12.26	V	7.6
9943.700000	49.74	---	74.00	24.26	V	7.6
15176.300000	---	44.19	54.00	9.81	H	10.7
15176.300000	53.77	---	74.00	20.23	H	10.7

Band Edge:

Low Channel

Common Information

Project No.:	RKSA240325003
Test Mode:	BLE 1M mode of low channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



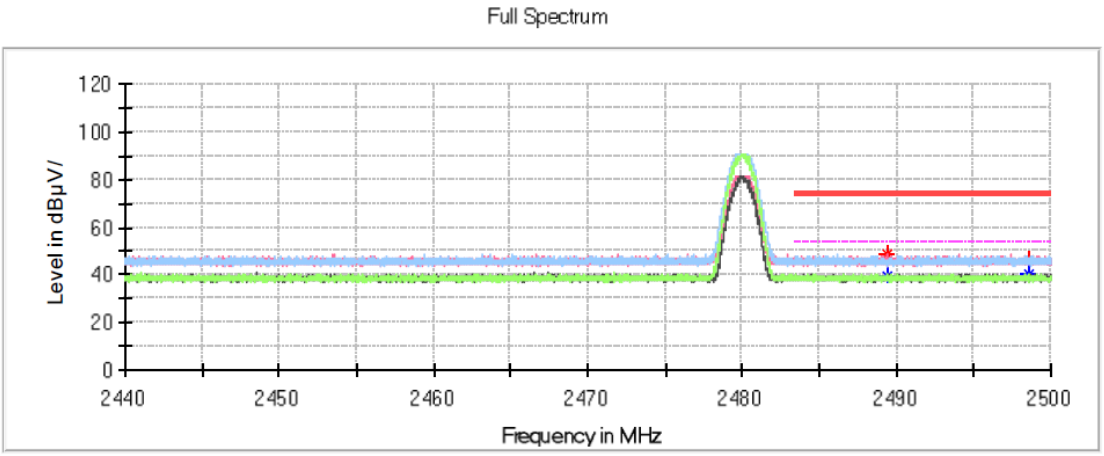
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2325.666000	49.43	---	74.00	24.57	H	0.0
2325.666000	---	38.57	54.00	15.43	H	0.0
2344.426000	45.97	---	74.00	28.03	V	0.0
2344.426000	---	40.80	54.00	13.20	V	0.0

High Channel

Common Information

Project No.:	RKSA240325003
Test Mode:	BLE 1M mode of high channel
Standard:	FCC Part 15.205& FCC Part 15.209& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

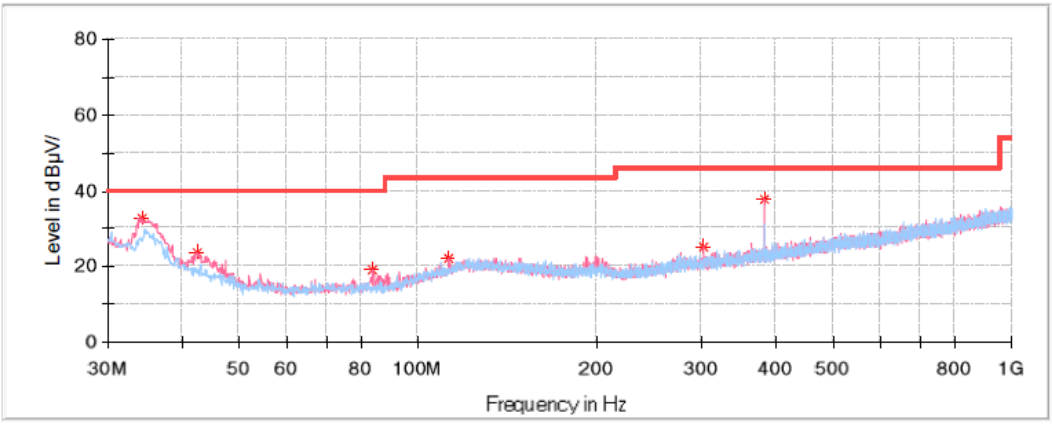
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2489.374000	48.45	---	74.00	25.55	H	0.2
2489.374000	---	39.03	54.00	14.97	H	0.2
2498.518000	45.76	---	74.00	28.24	H	0.2
2498.518000	---	40.62	54.00	13.38	H	0.2

For BLE (2 Mbps) Mode:
30MHz-1GHz

Low Channel: 2402MHz

Common Information

Project No:	RKSA240325003
EUT Model:	B2
Test Mode:	BLE 2M
Standard:	FCC Part 15.205 & FCC Part 15.209 &FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	23.4℃
Humidity:	52%
Barometric Pressure:	100.9kPa
Test Engineer:	Grace Luo
Test Date:	2024/7/17



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
34.243750	32.68	40.00	7.32	V	-7.6
42.367500	23.80	40.00	16.20	V	-12.7
83.956250	19.31	40.00	20.69	V	-17.2
112.813750	22.05	43.50	21.45	V	-12.2
303.176250	25.15	46.00	20.85	V	-10.4
383.928750	37.55	46.00	8.45	V	-8.4