FCC PART 15.247

TEST REPORT

For

Feit Electric Company

4901 Gregg Road, Pico Rivera, California 90660 United States

FCC ID: SYW-TAP20CONT

Report Type:	**Product Name:**
Original Report	Smart Color Chasing Strip Light

Report Number:	RKSB240612001-00A
Report Date:	2024-08-16
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	RKSB240612001-00A	R1V1	2024-08-16	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Feit Electric Company
Tested Model	FETAP20CAN/CONT
Product Name	Smart Color Chasing Strip Light
Power Supply	AC 100-240V
RF Function:	2.4G Wi-Fi
Operating Band/Frequency:	2412~2462 MHz(802.11b/g/n20)
Maximum Peak Output Power:	802.11b: 20.44 dBm 802.11g: 24.77 dBm 802.11n20: 24.60 dBm
Channel Number:	11(802.11b/g/n20)
Channel Separation:	5 MHz
Modulation Type:	DSSS, OFDM
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	0 dBi

Adapter Information:

Model: FETAP20/MP

Input: AC 100-240V, 50/60Hz, 0.6A Max

Output: DC 24V, 1.0A

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: RKSB240612001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-06-12.)

Objective

This report is prepared for *Feit Electric Company* 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 C63.10-2013, 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	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.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test software: SSCOM V5.13.1

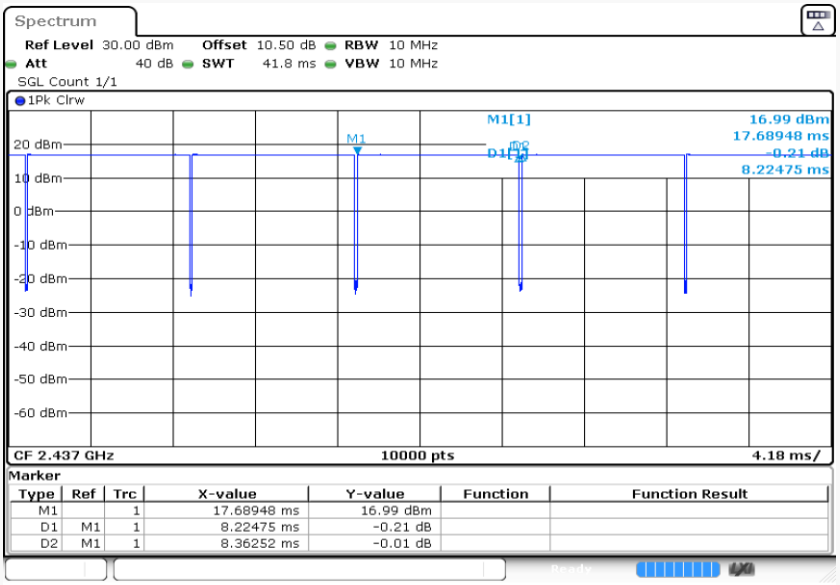
Pre-scan with all the data rates, and the worst case was performed as below:

Mode	Data Rate	Channel (MHz)	★Power Level
802.11b	1 Mbps	2412	Default
		2437	Default
		2462	Default
802.11g	6 Mbps	2412	Default
		2437	Default
		2462	Default
802.11n-HT20	MCS0	2412	Default
		2437	Default
		2462	Default

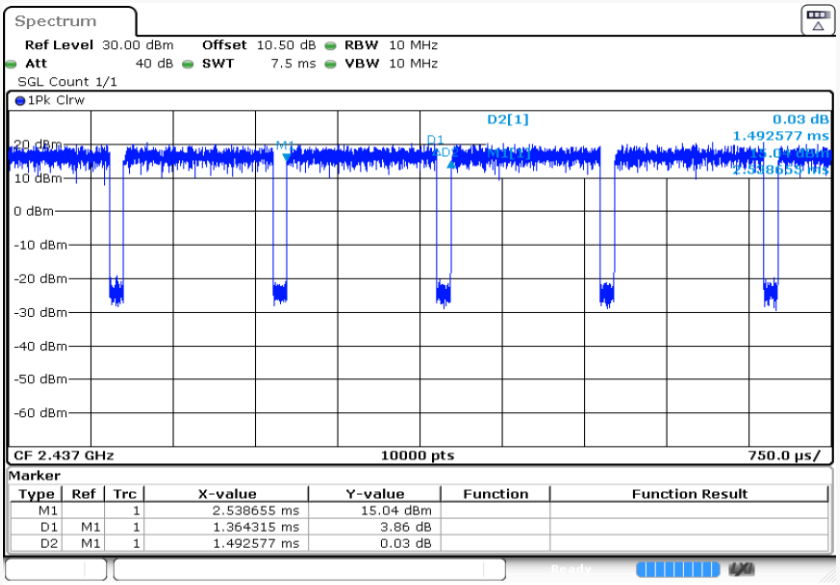
Note: The power level was declared by the applicant.

Duty Cycle:

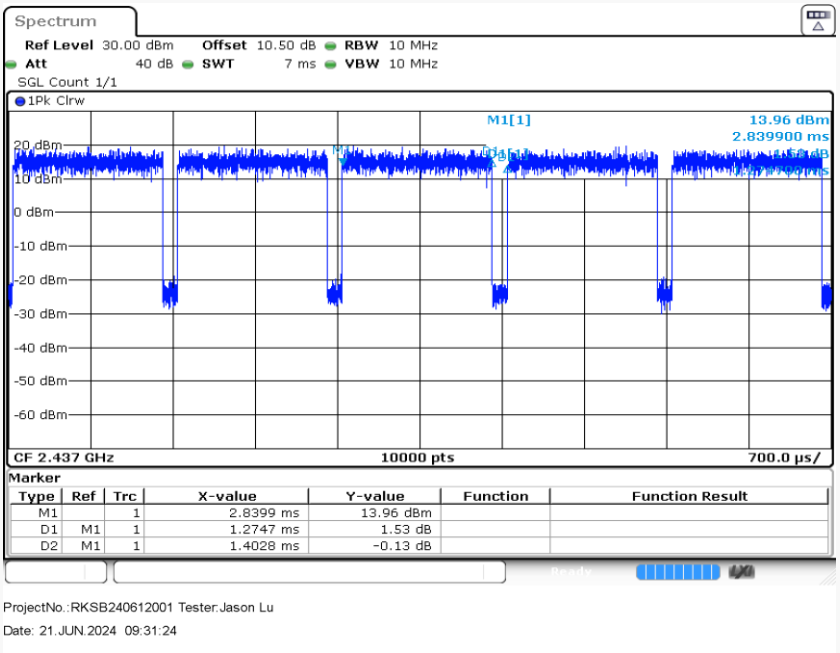
802.11b Mode Middle Channel



802.11g Mode Middle Channel



802.11n-HT20 Mode Middle Channel



Mode	Duty Cycle (%)	Ton(ms)	Ton+off(ms)	10log(1/x)
802.11b	98.35	8.225	8.363	/
802.11g	91.36	1.364	1.493	0.39
802.11n-HT20	90.88	1.275	1.403	0.42

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

Support Equipment List and Details

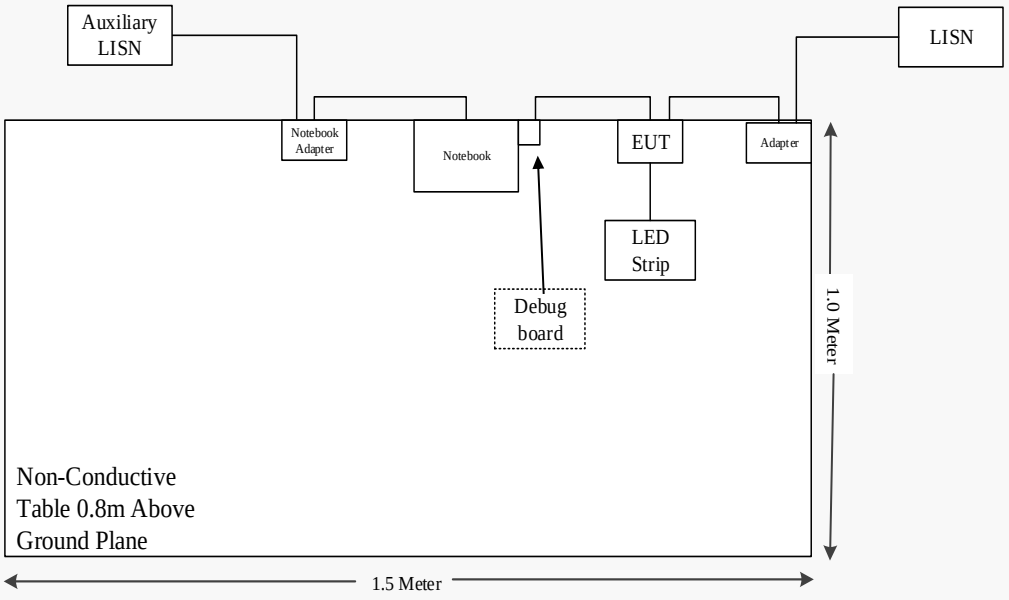
Manufacturer	Description	Model	Serial Number
DELL	Notebook	GX620	D65874152
DELL	Adapter	LA65NS0-00	DF263
Rohde & Schwarz	Auxiliary LISN	ENV216	3560.6550.16
/	Debug board	/	/

External I/O Cable

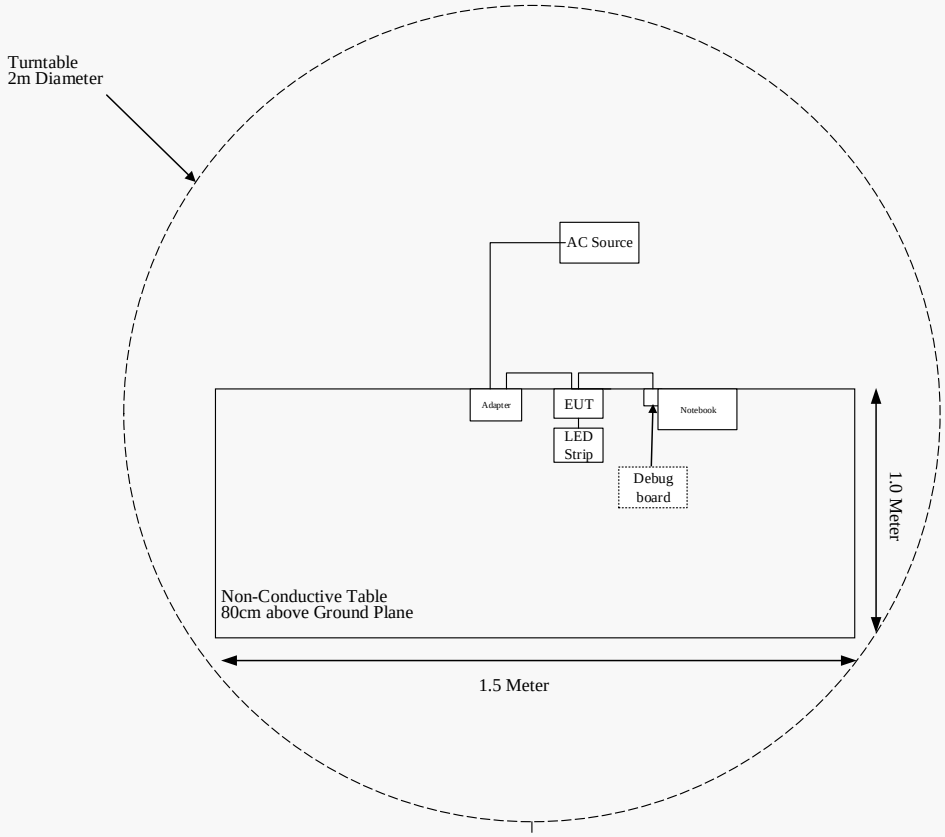
Cable Description	Length (m)	From Port	To Port
Data cable	0.1	EUT	Debug board
Power cable 1	1.0	Notebook	Notebook Adapter
Power cable 2	1.0	Adapter	LISN/AC Source
Power cable 3	1.0	EUT	Adapter

Block Diagram of Test Setup

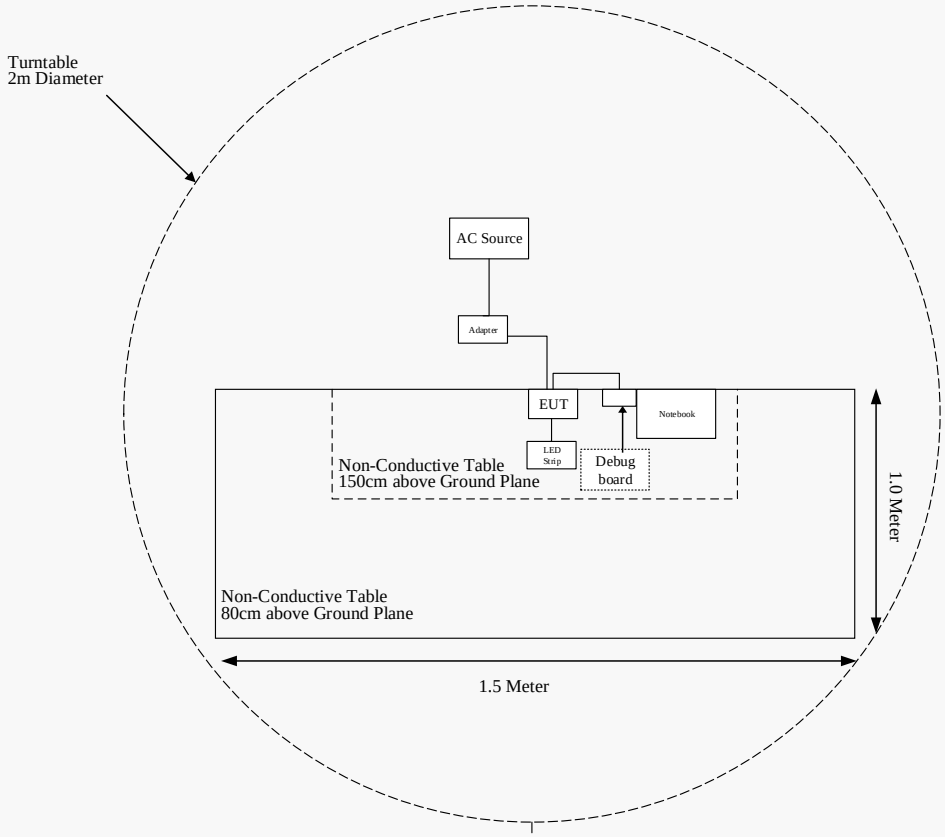
For Conducted Emissions:



For Radiated Emissions (Below 1 GHz):



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	Compliant
§15.247(d)	Spurious Emissions at Antenna Port	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(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	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
Sonoma Instrument	Pre-amplifier	310N	171205	2024-04-23	2025-04-22
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
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
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2023-12-02	2024-12-01
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
SELECTOR	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2024-04-25	2025-04-24
Narda	Attenuator	10dB	010	2024-04-25	2025-04-24
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-25	2025-04-24
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	Signal Analyzer	FSV40	101116	2024-04-24	2025-04-23
Narda	Attenuator	10dB	010	2024-04-25	2025-04-24
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
XHFDZ	RG178 Coaxial Cable	SMA-178	XHF-1102	Each time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	101746	2024-04-23	2025-04-22
Rohde & Schwarz	LISN	ENV216	101115	2024-04-23	2025-04-22
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse limiter	ESH3-Z2	100552	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-15	015	2024-04-25	2025-04-24

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);

Calculated Data:

Mode	**Frequency Range (MHz)**	**Antenna Gain**		**★Tune-up Output Power**		**Evaluation Distance (cm)**	**Power Density (mW/cm^2)**	**MPE Limit (mW/cm^2)**
		(dBi)	**(numeric)**	**(dBm)**	**(mW)**			
2.4G Wi-Fi	2412~2462	0	1.00	25.0	316.23	20	0.06	1.0

Note:

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

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

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 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 has a PCB antenna for 2.4G Wi-Fi, and the antenna gain is 0 dBi, which is permanently attached to the unit, fulfill the requirement of this section. Please refer to the EUT photos.

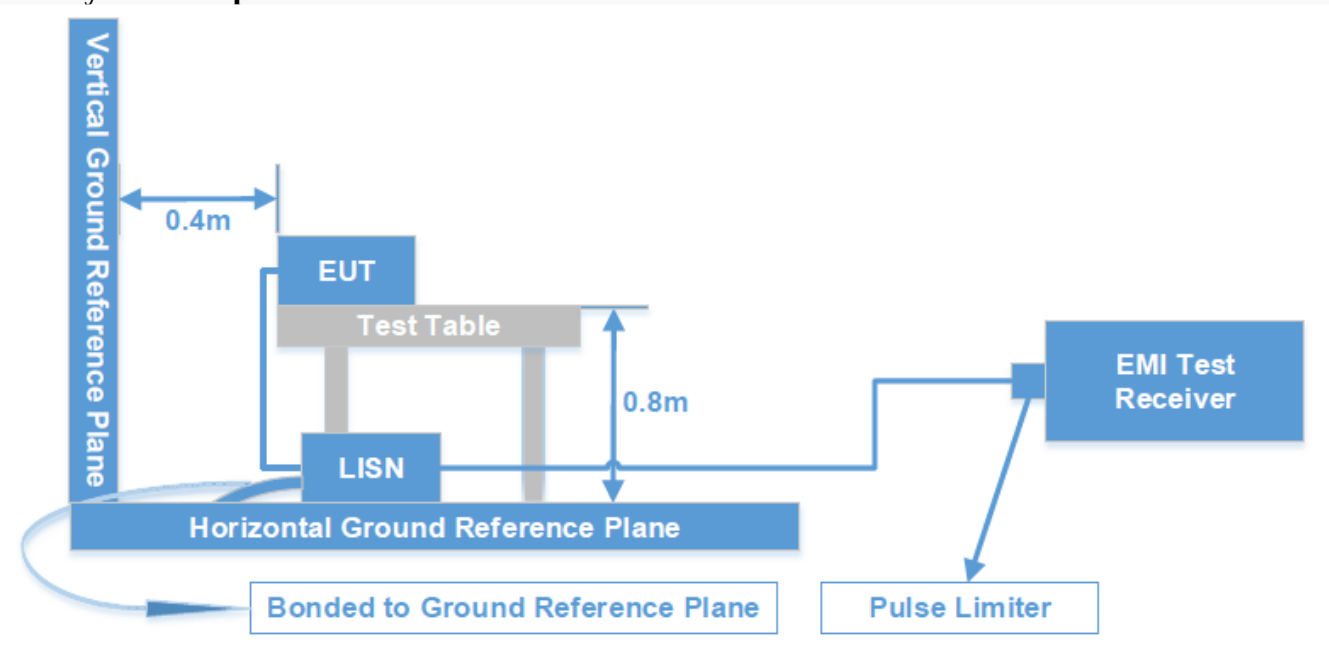
Result: Compliant.

FCC §15.207 (a) - AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

Test System Setup



The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

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

Frequency Range	RBW	VBW
150 kHz - 30 MHz	9 kHz	30 kHz

Test Procedure

ANSI C63.10-2013 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

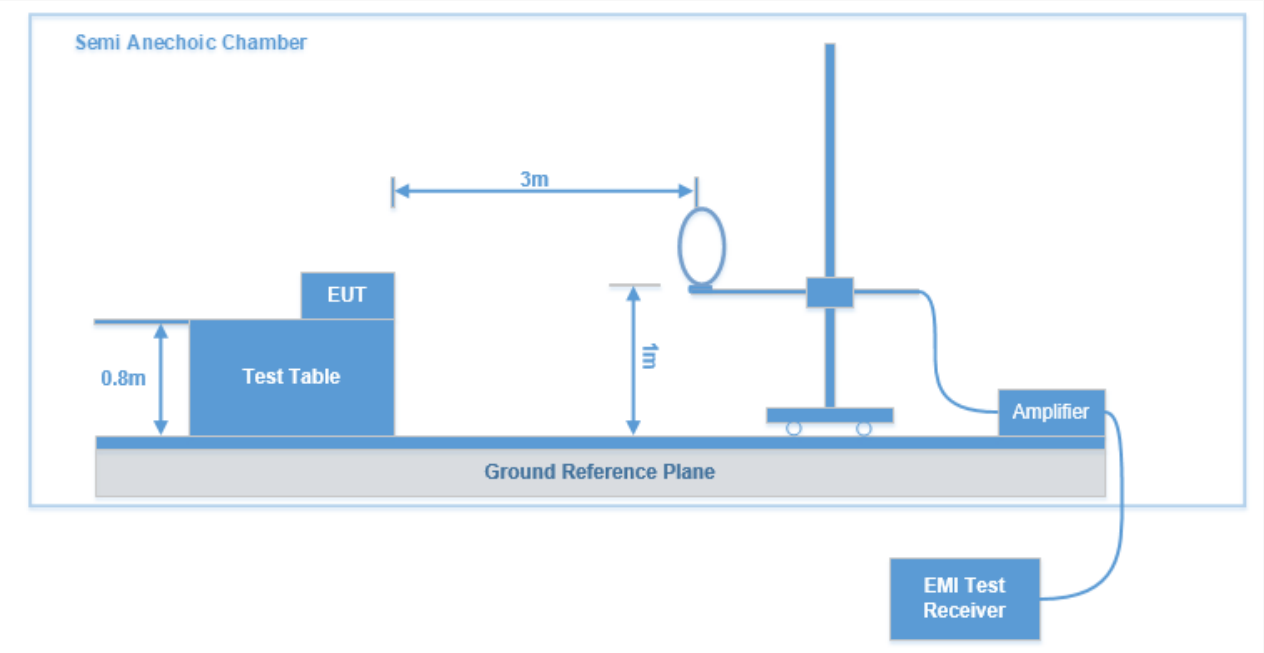
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

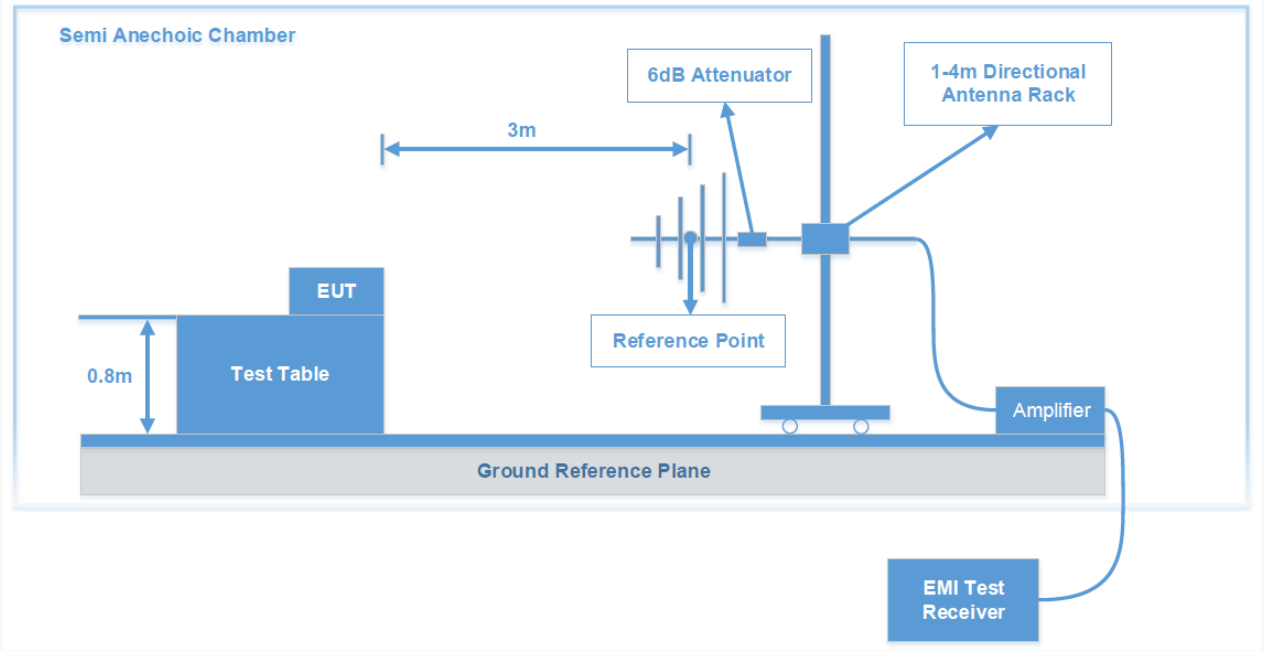
FCC §15.247 (d); §15.209; §15.205;

Test System Setup

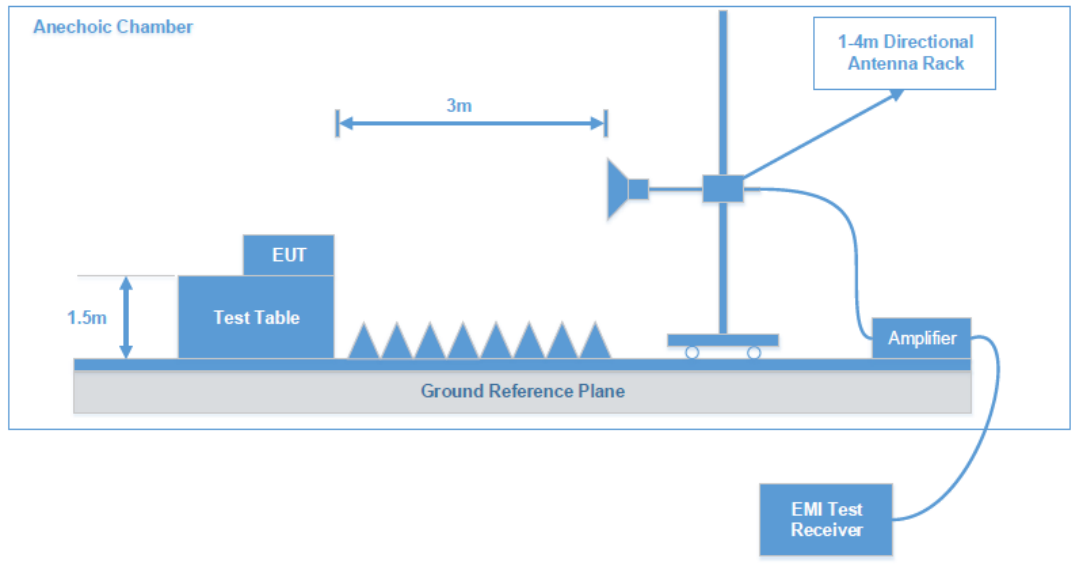
9k - 30MHz:



30 MHz - 1 GHz:



Above 1GHz:



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

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

Frequency Range	RBW	VBW	IF B/W	Detector
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

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.

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 (dBμV/m) = Meter Reading (dBμV) + 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

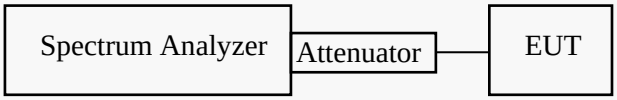
Applicable Standard

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.



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

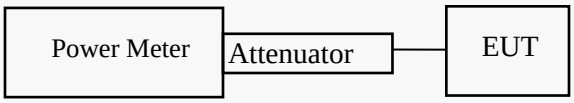
According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, Compliant with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted 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

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.



Test Data: See Appendix

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

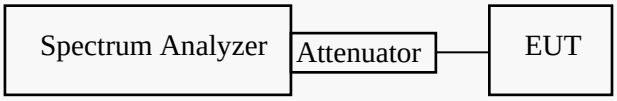
Applicable Standard

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.



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

Test Data: See Appendix

FCC §15.247(E) - POWER SPECTRAL DENSITY

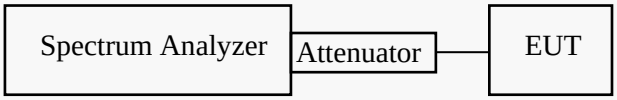
Applicable Standard

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 C63.10-2013 sub-clause 11.10.2

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.



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

Test Data: See Appendix

Appendix - TEST DATA

Environmental Conditions & Test Information

Test Item:	DUTY CYCLE	AC LINE CONDUCTED EMISSIONS	RADIATED EMISSIONS		
			9 kHz-1 GHz	1 GHz - 18 GHz	18 GHz -25 GHz
Test Date:	2024-06-21	2024-07-04	2024-06-21	2024-06-15	2024-06-25
Temperature:	25.9 ℃	26.3 ℃	25.9 ℃	23.1 ℃	23.3 ℃
Relative Humidity:	65 %	60 %	65 %	49 %	52 %
ATM Pressure:	100.2 kPa	100.9 kPa	100.2 kPa	100.7 kPa	100.1 kPa
Test Result:	/	Pass	Pass	Pass	Pass
Test Engineer:	Jason Lu	Joe Zhang	Leah Li	Hugh Wu	Hugh Wu

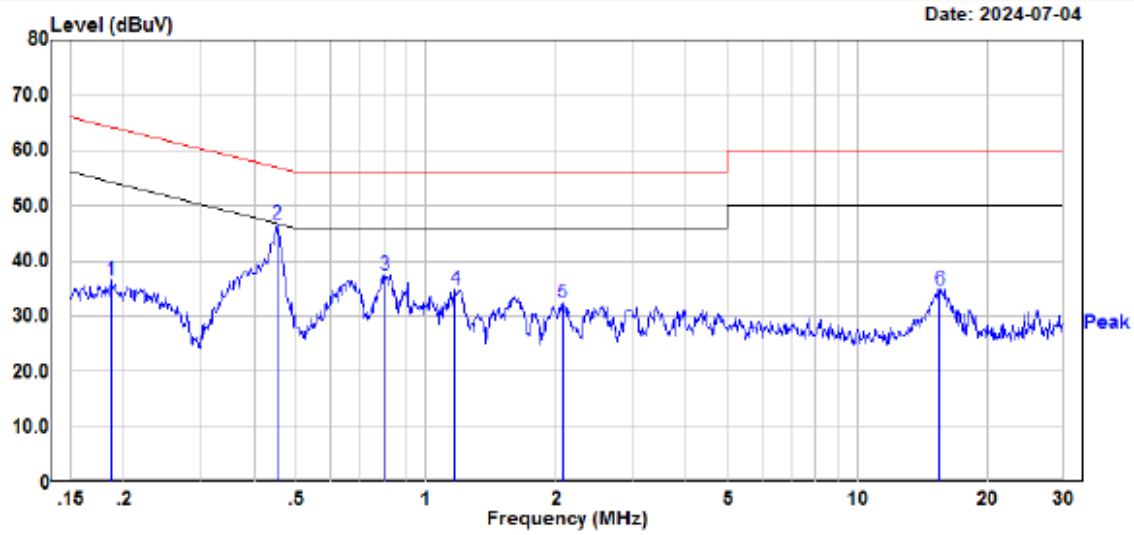
Test Item:	6 DB EMISSION BANDWIDTH	OCCUPIED BANDWIDTH	POWER SPECTRAL DENSITY	TRANSMITTER OUTPUT POWER MEASUREMENT	OUT OF BAND EMISSIONS
Test Date:	2024-06-17		2024-06-21		2024-06-17
Temperature:	24.1 ℃		25.9 ℃		24.1 ℃
Relative Humidity:	57%		65 %		57%
ATM Pressure:	100.7 kPa		100.2 kPa		100.7 kPa
Test Result:	Pass		Pass		Pass
Test Engineer:	Jason Lu		Jason Lu		Jason Lu

AC LINE CONDUCTED EMISSIONS

For Wi-Fi Mode:

EUT operation mode: Transmitting in maximum output power mode 802.11g mode Low channel

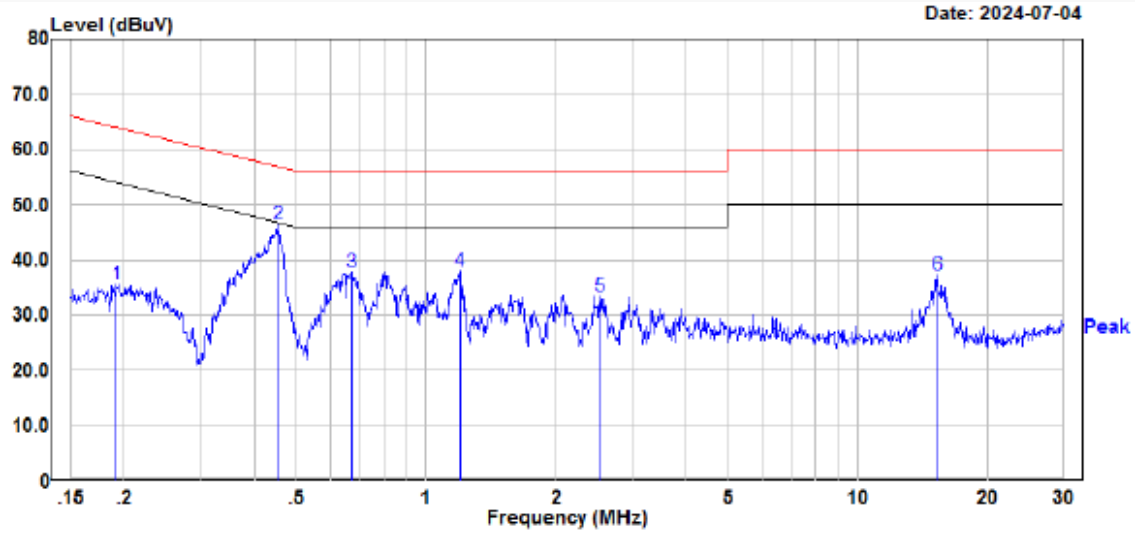
Line:




```
Site                : CE
Condition           : FCC Part 15.207
                    : DET:Peak
Project             : RKSB240612001
Model               : FETAP20CAN/CONT
Phase               : L
Voltage             : 120V/60Hz
Mode                : 2.4G WIFI
Test Equipment      : ENV216,ESR
Temperature         : 26.3℃
Humidity            : 60%
Atmospheric pressure: 100.9kPa
Test Engineer       : Joe Zhang
```

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.187	16.28	20.11	36.39	64.18	-27.79	Peak
2	0.451	26.36	20.23	46.59	56.85	-10.26	Peak
3	0.805	17.52	19.93	37.45	56.00	-18.55	Peak
4	1.169	15.07	19.82	34.89	56.00	-21.11	Peak
5	2.074	12.36	20.16	32.52	56.00	-23.48	Peak
6	15.460	15.21	19.70	34.91	60.00	-25.09	Peak

Neutral:



Site : CE
Condition : FCC Part 15.207
: DET:Peak
Project : RKSB240612001
Model : FETAP20CAN/CONT
Phase : N
Voltage : 120V/60Hz
Mode : 2.4G WIFI
Test Equipment : ENV216,ESR
Temperature : 26.3℃
Humidity : 60%
Atmospheric pressure: 100.9kPa
Test Engineer : Joe Zhang

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.191	15.43	20.11	35.54	63.97	-28.43	Peak
2	0.454	26.30	20.22	46.52	56.81	-10.29	Peak
3	0.672	17.63	20.07	37.70	56.00	-18.30	Peak
4	1.199	18.03	19.83	37.86	56.00	-18.14	Peak
5	2.532	13.19	20.20	33.39	56.00	-22.61	Peak
6	15.307	17.50	19.70	37.20	60.00	-22.80	Peak

SPURIOUS EMISSIONS

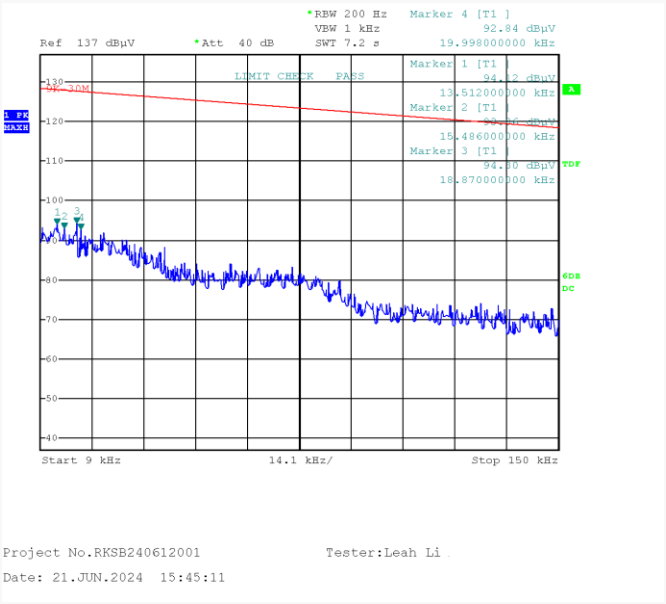
Test Result: Compliant

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

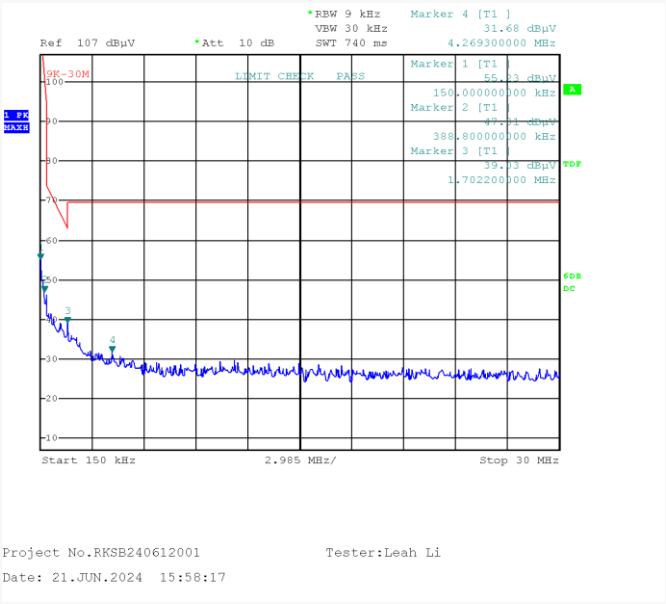
9 kHz-30MHz: (*Transmitting in maximum output power mode 802.11g mode Low channel*)

Parallel (worst case):

9 kHz-150kHz



150 kHz -30 MHz



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)
0.013512	94.12	PK	54.13	124.99	30.87
0.015486	93.06	PK	52.87	123.80	30.74
0.018870	94.30	PK	51.04	122.09	27.79
0.019998	92.84	PK	50.00	121.58	28.74

150 kHz -30 MHz

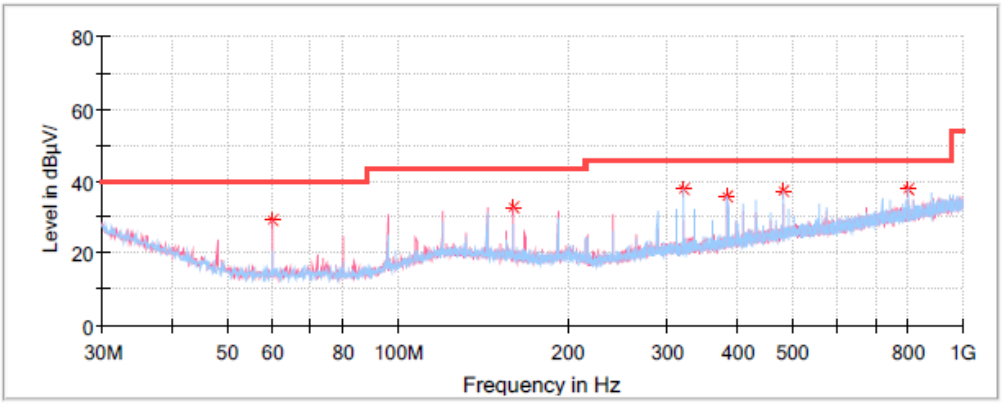
Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.150000	55.23	PK	50.90	104.08	48.85
0.388800	47.01	PK	26.13	95.78	48.71
1.702200	39.03	PK	10.50	63.00	23.97
4.269300	31.68	PK	16.11	69.54	37.86

30 MHz - 1GHz (*Transmitting in maximum output power mode 802.11g mode***):**

Low channel: 2412MHz

Common Information

Project No:	RKSB240612001
EUT Model:	FETAP20CAN/CONT
Test Mode:	802.11g mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	24.8℃
Humidity:	57%
Barometric Pressure:	100.2kPa
Test Engineer:	Leah Li
Test Date:	2024/6/21



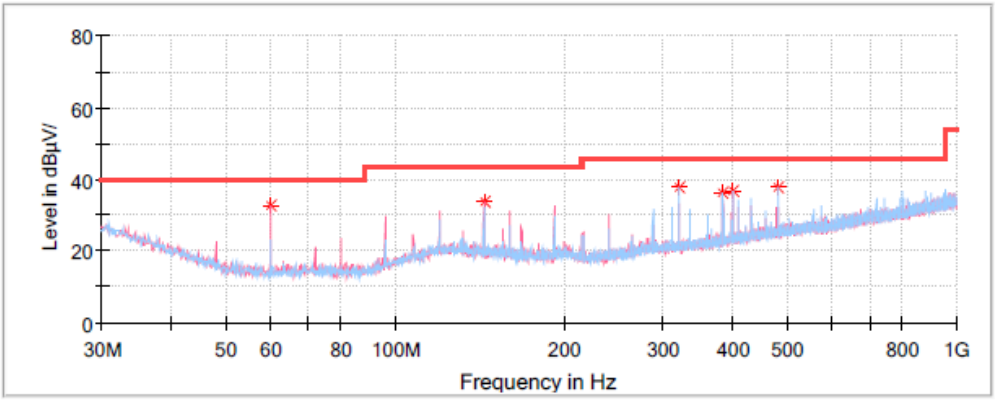
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
59.948750	29.19	40.00	10.81	V	-17.6
159.980000	32.89	43.50	10.61	V	-12.2
320.030000	37.94	46.00	8.06	H	-10.0
384.292500	35.67	46.00	10.33	H	-8.4
480.443750	37.00	46.00	9.00	H	-5.9
800.058750	37.74	46.00	8.26	H	-0.8

Middle channel: 2437MHz

Common Information

Project No:	RKSB240612001
EUT Model:	FETAP20CAN/CONT
Test Mode:	802.11g mode of middle channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	24.8℃
Humidity:	57%
Barometric Pressure:	100.2kPa
Test Engineer:	Leah Li
Test Date:	2024/6/21



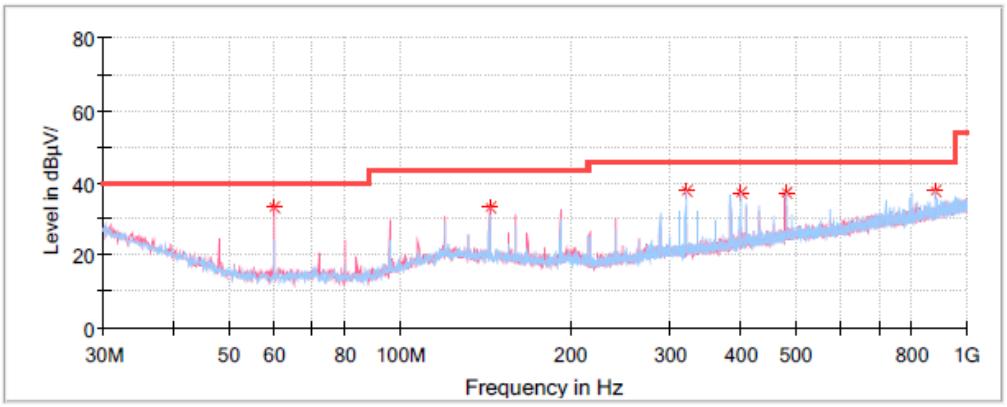
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
59.948750	32.68	40.00	7.32	V	-17.6
144.096250	33.56	43.50	9.94	V	-11.6
320.030000	37.72	46.00	8.28	H	-10.0
384.413750	36.30	46.00	9.70	H	-8.4
399.933750	36.68	46.00	9.32	V	-8.0
480.565000	37.84	46.00	8.16	H	-5.9

High Channel: 2462MHz

Common Information

Project No:	RKSB240612001
EUT Model:	FETAP20CAN/CONT
Test Mode:	802.11g mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Equipment:	ESCI, JB3, 310N
Temperature:	24.8℃
Humidity:	57%
Barometric Pressure:	100.2kPa
Test Engineer:	Leah Li
Test Date:	2024/6/21



Critical_Freqs

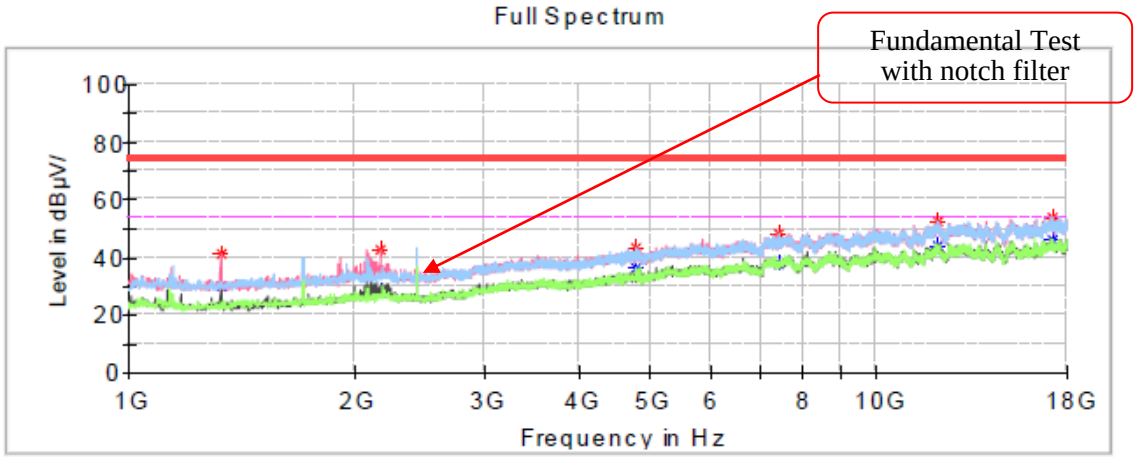
Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
59.948750	33.41	40.00	6.59	V	-17.6
144.096250	33.45	43.50	10.05	V	-11.6
320.030000	37.82	46.00	8.18	H	-10.0
399.812500	37.18	46.00	8.82	H	-8.0
480.565000	37.36	46.00	8.64	H	-5.9
880.083750	37.70	46.00	8.30	H	0.6

1GHz-18GHz:
802.11b Mode:

Low Channel: 2412MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



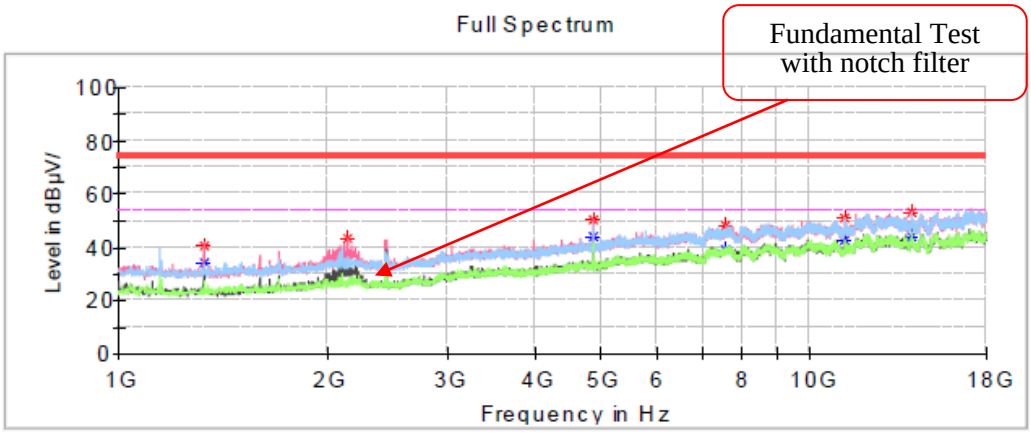
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB//m)
1326.400000	---	29.74	54.00	24.26	V	-15.0
1326.400000	41.23	---	74.00	32.77	V	-15.0
2174.700000	---	28.22	54.00	25.78	V	-11.2
2174.700000	42.98	---	74.00	31.02	V	-11.2
4775.700000	---	36.38	54.00	17.62	V	-3.3
4775.700000	43.20	---	74.00	30.80	V	-3.3
7420.900000	---	37.87	54.00	16.13	H	3.7
7420.900000	48.56	---	74.00	25.44	H	3.7
12065.300000	---	43.78	54.00	10.22	H	9.1
12065.300000	52.47	---	74.00	21.53	H	9.1
17211.200000	---	46.18	54.00	7.82	H	12.0
17211.200000	53.57	---	74.00	20.43	H	12.0

Middle Channel: 2437MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11b mode of middle channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



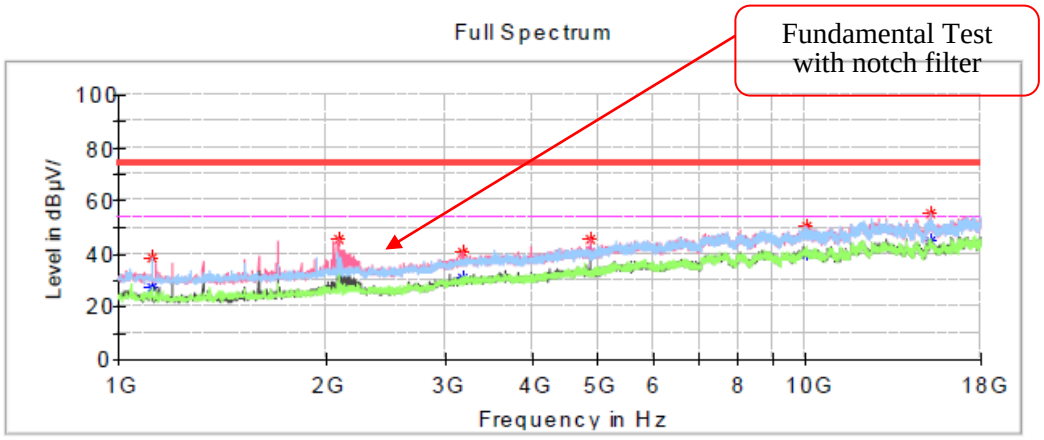
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1328.100000	---	33.98	54.00	20.02	V	-15.0
1328.100000	40.78	---	74.00	33.22	V	-15.0
2139.000000	---	34.91	54.00	19.09	V	-11.3
2139.000000	43.23	---	74.00	30.77	V	-11.3
4872.600000	50.48	---	74.00	23.52	V	-2.9
4872.600000	---	43.97	54.00	10.03	V	-2.9
7556.900000	---	39.49	54.00	14.51	V	3.9
7556.900000	48.27	---	74.00	25.73	V	3.9
11201.700000	---	43.00	54.00	11.00	H	7.9
11201.700000	51.17	---	74.00	22.83	H	7.9
14010.100000	---	44.23	54.00	9.77	H	9.8
14010.100000	53.35	---	74.00	20.65	H	9.8

High Channel: 2462MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

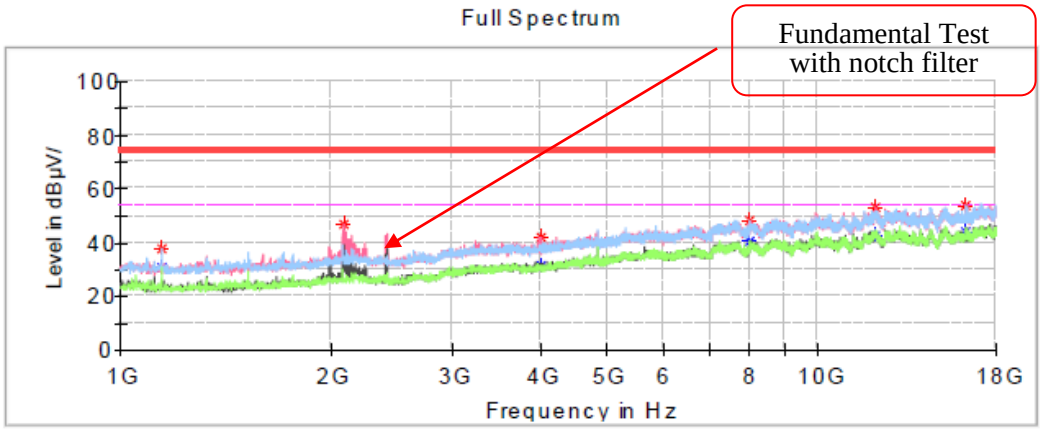
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1119.000000	38.77	---	74.00	35.23	H	-15.3
1119.000000	---	27.42	54.00	26.58	H	-15.3
2089.700000	45.61	---	74.00	28.39	V	-11.5
2089.700000	---	36.47	54.00	17.53	V	-11.5
3165.800000	---	30.52	54.00	23.48	V	-7.7
3165.800000	40.65	---	74.00	33.35	V	-7.7
4865.800000	45.80	---	74.00	28.20	V	-2.9
4865.800000	---	40.74	54.00	13.26	V	-2.9
10078.000000	---	39.58	54.00	14.42	V	7.1
10078.000000	50.22	---	74.00	23.78	V	7.1
15247.700000	---	44.71	54.00	9.29	V	9.6
15247.700000	54.97	---	74.00	19.03	V	9.6

802.11g Mode:

Low Channel: 2412MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11g mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



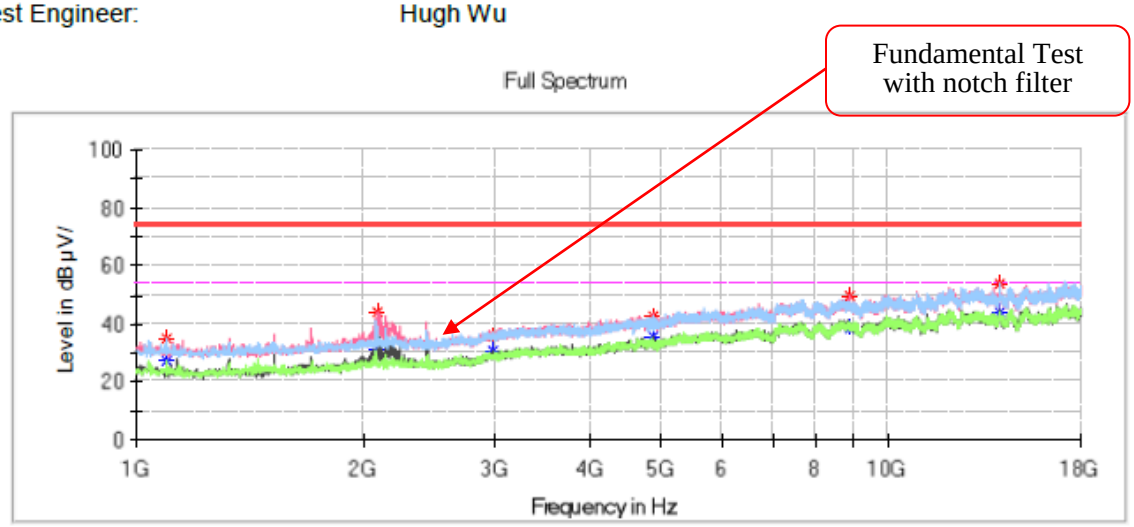
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1147.900000	---	30.93	54.00	23.07	H	-15.2
1147.900000	37.46	---	74.00	36.54	H	-15.2
2086.300000	---	35.30	54.00	18.70	V	-11.5
2086.300000	46.65	---	74.00	27.35	V	-11.5
4000.500000	---	31.80	54.00	22.20	V	-5.9
4000.500000	42.03	---	74.00	31.97	V	-5.9
8007.400000	---	40.28	54.00	13.72	V	3.9
8007.400000	48.49	---	74.00	25.51	V	3.9
12129.900000	---	42.93	54.00	11.07	V	9.1
12129.900000	52.89	---	74.00	21.11	V	9.1
16310.200000	---	43.72	54.00	10.28	H	10.3
16310.200000	53.82	---	74.00	20.18	H	10.3

Middle Channel: 2437MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11g mode of Middle channel
Standard:	FCC Part 15.209 & FCC Part 15.205 & FCC Part 15.247
Test Engineer:	Hugh Wu



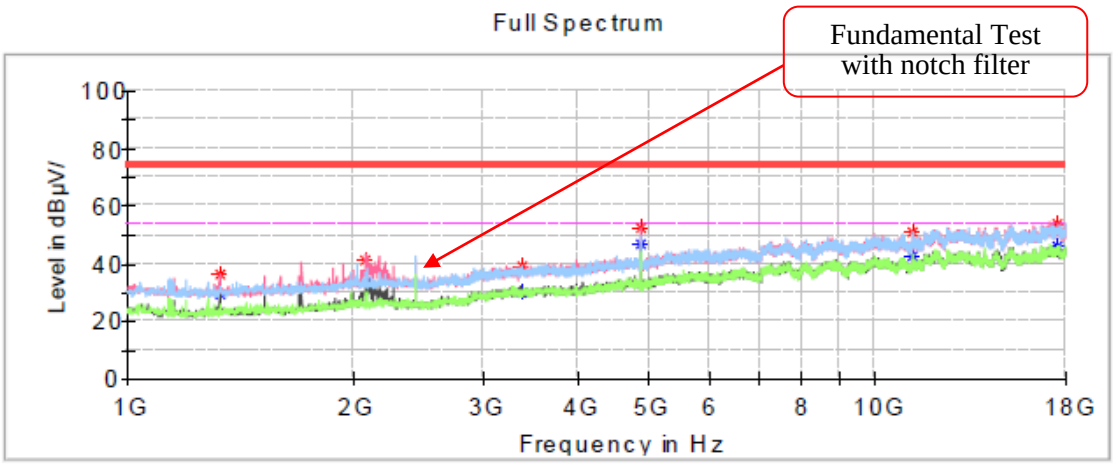
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1096.900000	---	27.04	54.00	26.96	H	-15.3
1096.900000	35.09	---	74.00	38.91	H	-15.3
2088.000000	---	31.15	54.00	22.85	V	-11.5
2088.000000	44.06	---	74.00	29.94	V	-11.5
2982.200000	35.86	---	74.00	38.14	V	-8.5
2982.200000	---	30.61	54.00	23.39	V	-8.5
4872.600000	42.35	---	74.00	31.65	H	-2.9
4872.600000	---	35.81	54.00	18.19	V	-2.9
8877.800000	---	38.77	54.00	15.23	V	5.4
8877.800000	49.48	---	74.00	24.52	V	5.4
14010.100000	---	43.95	54.00	10.05	V	9.8
14010.100000	53.74	---	74.00	20.26	H	9.8

High Channel: 2462MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11g mode of High channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



Critical_Freqs

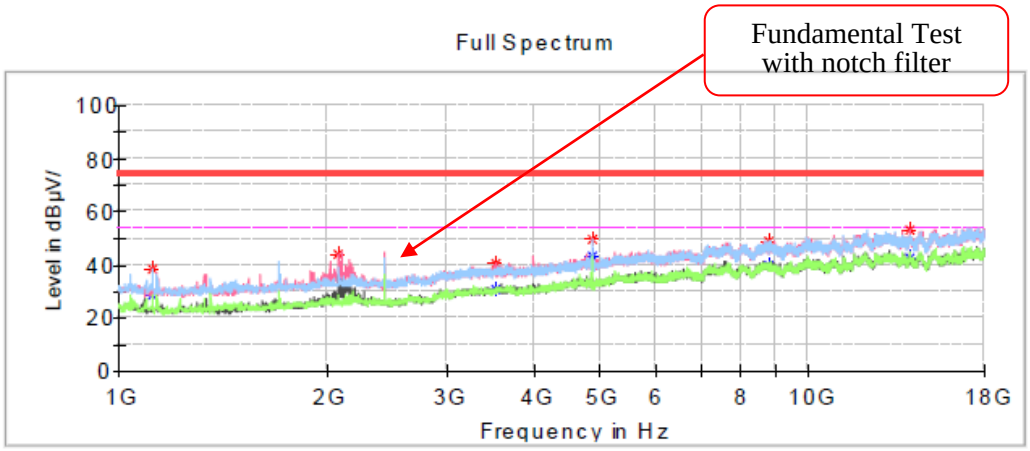
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1326.400000	---	29.28	54.00	24.72	V	-15.0
1326.400000	36.41	---	74.00	37.59	V	-15.0
2079.500000	---	33.85	54.00	20.15	V	-11.5
2079.500000	41.33	---	74.00	32.67	V	-11.5
3369.800000	---	30.40	54.00	23.60	H	-6.9
3369.800000	38.96	---	74.00	35.04	H	-6.9
4865.800000	---	46.61	54.00	7.39	V	-2.9
4865.800000	52.47	---	74.00	21.53	V	-2.9
11208.500000	---	42.93	54.00	11.07	H	8.0
11208.500000	51.38	---	74.00	22.62	H	8.0
17607.300000	---	46.25	54.00	7.75	H	11.6
17607.300000	54.14	---	74.00	19.86	V	11.6

802.11n-HT20 Mode :

Low Channel: 2412MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11n20 mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



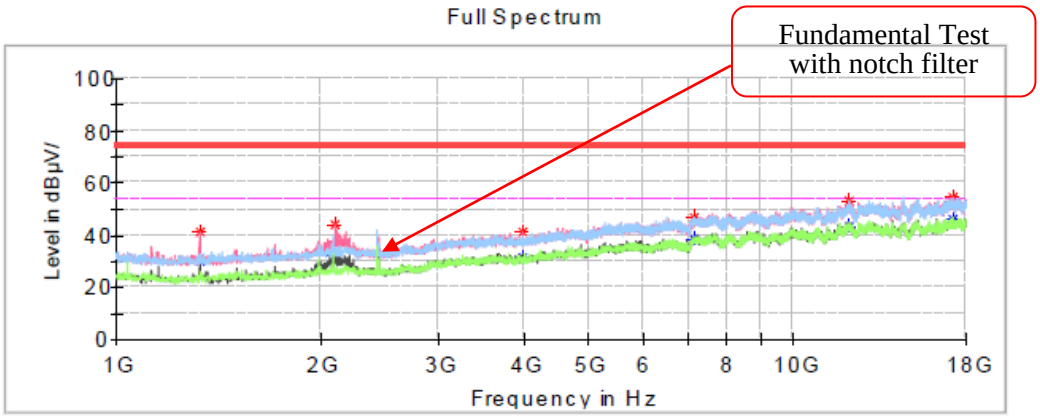
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1119.000000	---	28.55	54.00	25.45	H	-15.3
1119.000000	38.49	---	74.00	35.51	H	-15.3
2082.900000	44.28	---	74.00	29.72	V	-11.5
2082.900000	---	35.44	54.00	18.56	V	-11.5
3526.200000	---	30.73	54.00	23.27	V	-6.3
3526.200000	40.53	---	74.00	33.47	V	-6.3
4865.800000	49.73	---	74.00	24.27	H	-2.9
4865.800000	---	43.67	54.00	10.33	H	-2.9
8758.800000	---	39.81	54.00	14.19	H	5.4
8758.800000	49.21	---	74.00	24.79	H	5.4
14033.900000	---	42.95	54.00	11.05	V	9.8
14033.900000	52.94	---	74.00	21.06	V	9.8

Middle Channel: 2437MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11n20 mode of middle channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



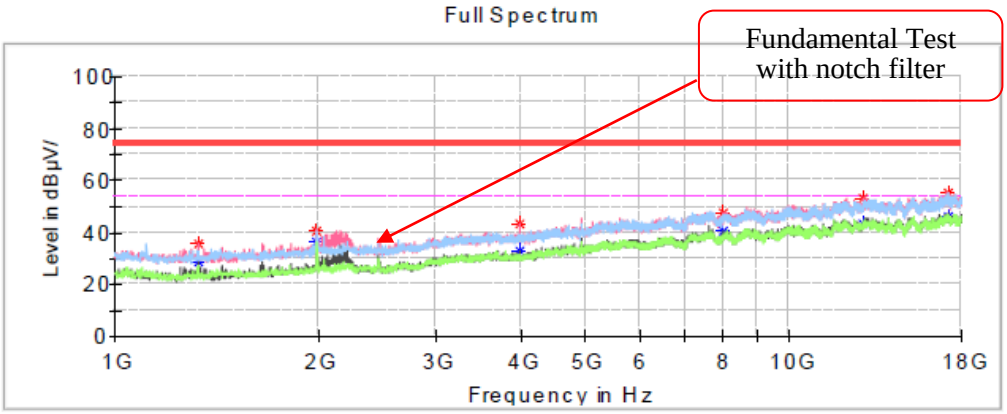
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1326.400000	---	30.26	54.00	23.74	V	-15.0
1326.400000	41.15	---	74.00	32.85	V	-15.0
2108.400000	---	32.46	54.00	21.54	V	-11.4
2108.400000	44.08	---	74.00	29.92	V	-11.4
3997.100000	---	31.48	54.00	22.52	V	-5.9
3997.100000	41.18	---	74.00	32.82	V	-5.9
7137.000000	---	38.63	54.00	15.37	H	3.0
7137.000000	46.76	---	74.00	27.24	H	3.0
12099.300000	---	43.58	54.00	10.42	H	9.1
12099.300000	53.37	---	74.00	20.63	H	9.1
17206.100000	---	46.28	54.00	7.72	V	12.0
17206.100000	54.36	---	74.00	19.64	V	12.0

High Channel: 2462MHz

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11n20 mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu



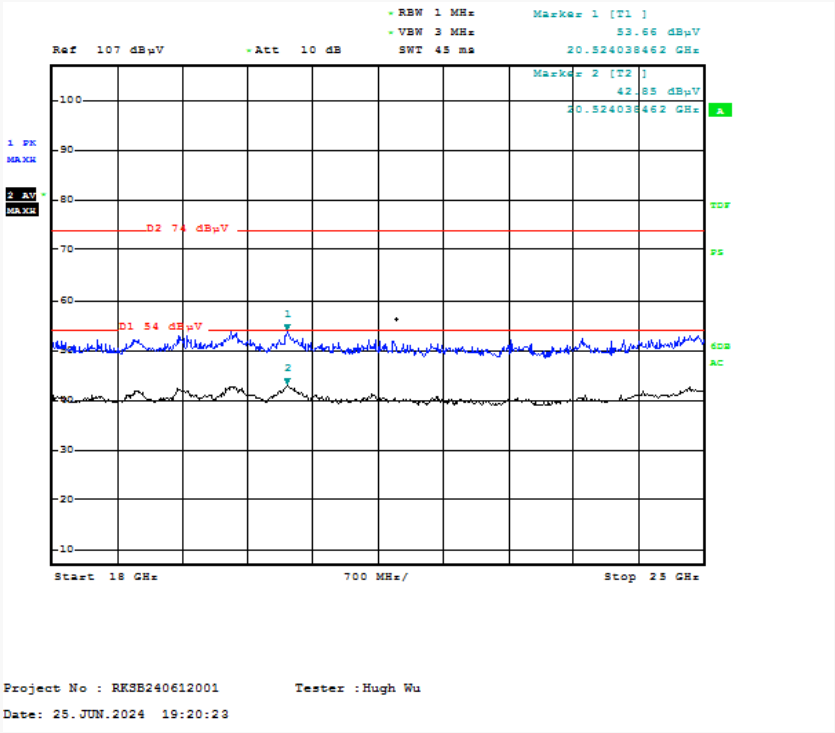
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1329.800000	---	28.88	54.00	25.12	V	-15.0
1329.800000	35.89	---	74.00	38.11	V	-15.0
1996.200000	40.72	---	74.00	33.28	H	-11.8
1996.200000	---	36.15	54.00	17.85	H	-11.8
3985.200000	---	32.74	54.00	21.26	V	-5.9
3985.200000	43.10	---	74.00	30.90	V	-5.9
7997.200000	---	40.63	54.00	13.37	V	3.9
7997.200000	47.73	---	74.00	26.27	V	3.9
12888.100000	---	43.19	54.00	10.81	V	9.7
12888.100000	53.24	---	74.00	20.76	V	9.7
17214.600000	---	46.21	54.00	7.79	H	12.0
17214.600000	55.48	---	74.00	18.52	H	12.0

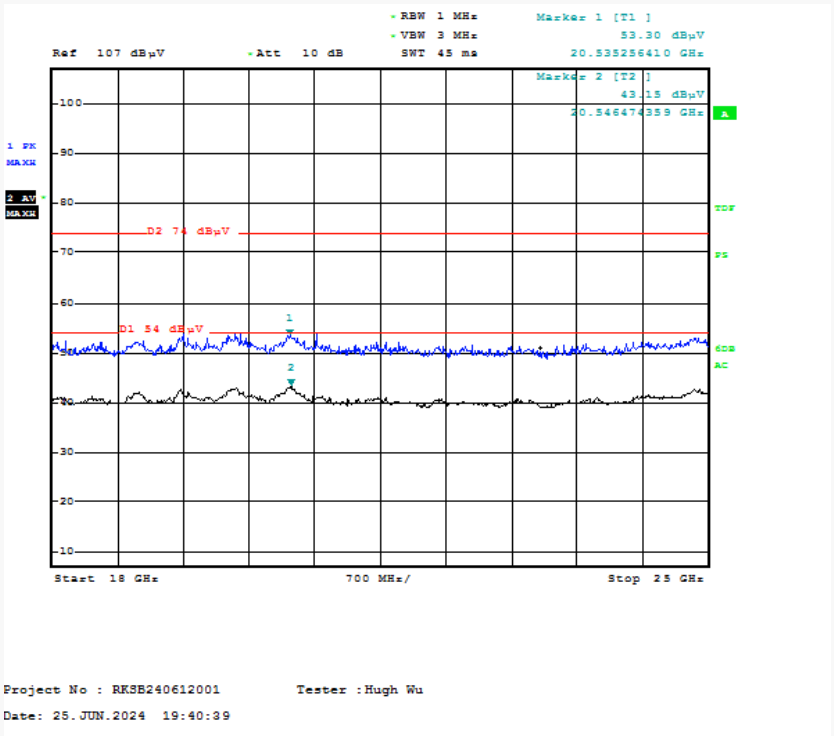
18GHz-25GHz:

Transmitting in 802.11g mode low channel is worst case

Horizontal



Vertical



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

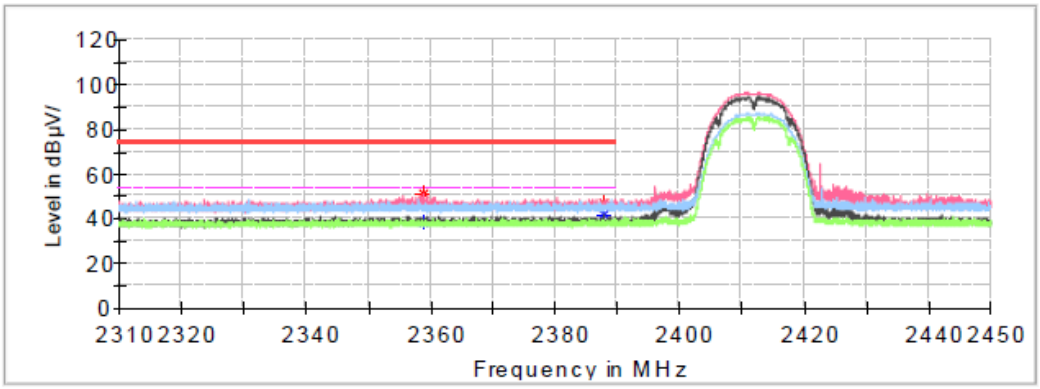
Band Edge:
802.11b Mode:

Low Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11b mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



Critical_Freqs

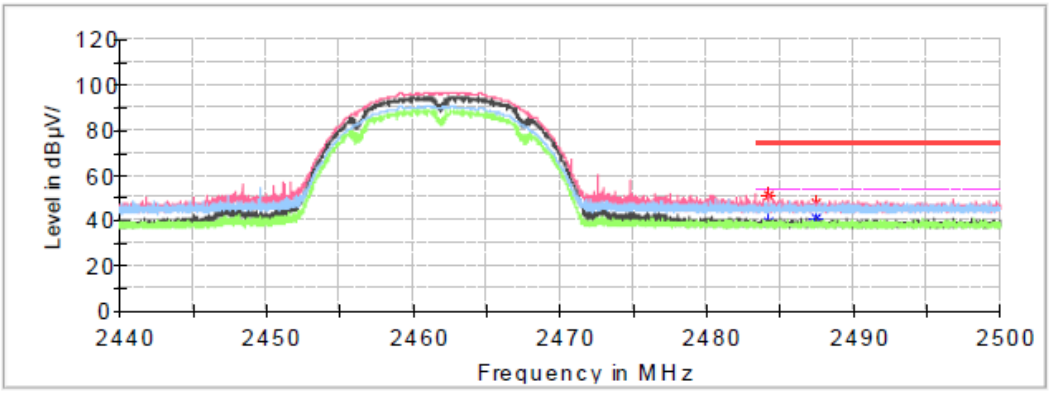
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2358.930000	50.84	---	74.00	23.16	V	-0.7
2358.930000	---	38.55	54.00	15.45	V	-0.7
2387.980000	47.12	---	74.00	26.88	V	-0.6
2387.980000	---	42.13	54.00	11.87	V	-0.6

High Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11b mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& 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)
2484.220000	51.11	---	74.00	22.89	V	-0.3
2484.220000	---	39.45	54.00	14.55	V	-0.3
2487.490000	47.90	---	74.00	26.10	V	-0.2
2487.490000	---	41.51	54.00	12.49	V	-0.2

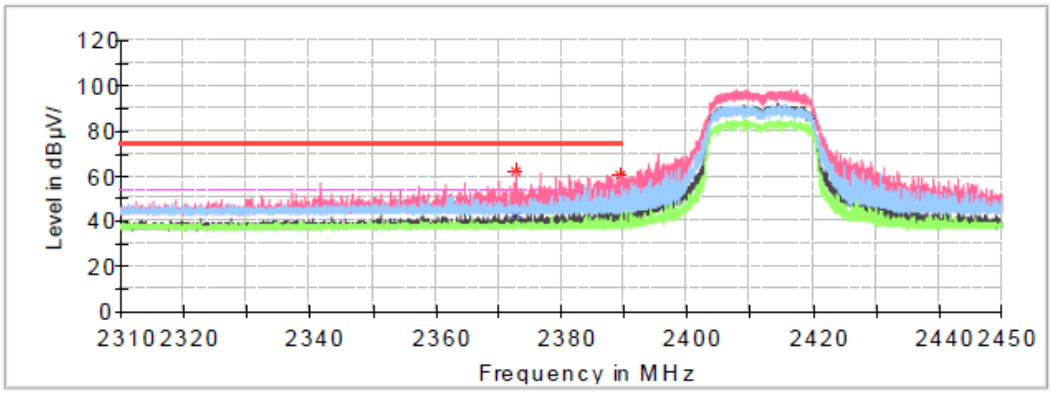
802.11g Mode :

Low Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11g mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



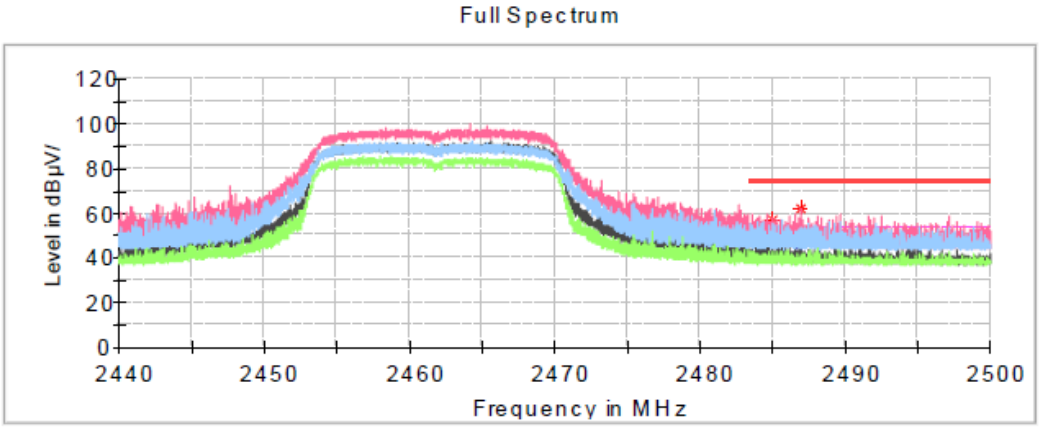
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2372.636000	62.03	---	74.00	11.97	V	-0.6
2372.636000	---	43.87	54.00	10.13	V	-0.6
2389.282000	60.30	---	74.00	13.70	V	-0.6
2389.282000	---	50.27	54.00	3.73	V	-0.6

High Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11g mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& 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)
2484.940000	57.32	---	74.00	16.68	V	-0.3
2484.940000	---	46.27	54.00	7.73	V	-0.3
2486.962000	61.83	---	74.00	12.17	V	-0.2
2486.962000	---	45.84	54.00	8.16	V	-0.2

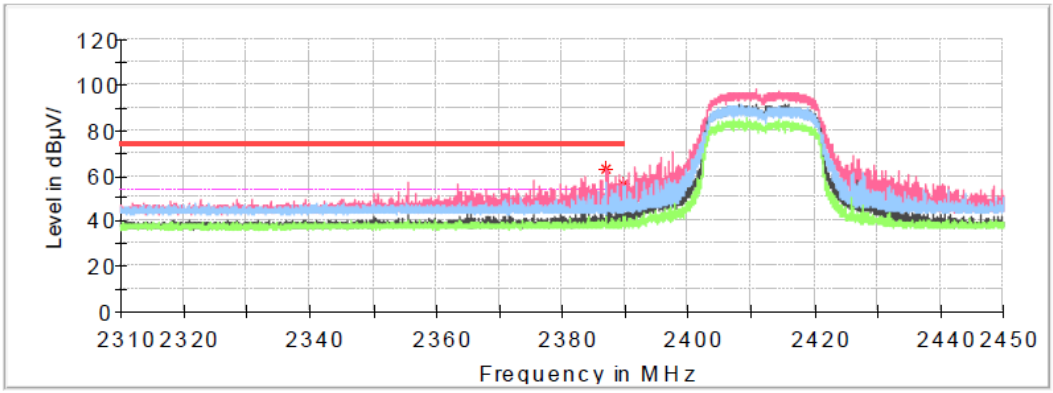
802.11n-HT20 Mode:

Low Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11n20 mode of low channel
Standard:	FCC Part 15.209& FCC Part 15.205& FCC Part 15.247
Test Engineer:	Hugh Wu

Full Spectrum



Critical_Freqs

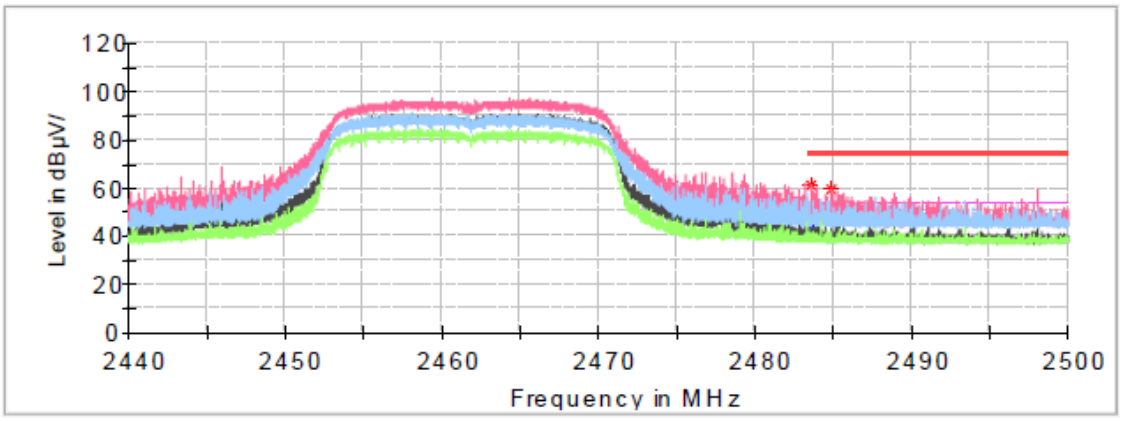
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2386.986000	62.57	---	74.00	11.43	V	-0.6
2386.986000	---	45.29	54.00	8.71	V	-0.6
2389.604000	56.33	---	74.00	17.67	V	-0.6
2389.604000	---	48.00	54.00	6.00	V	-0.6

High Channel

Common Information

Project No.:	RKSB240612001
Test Mode:	802.11n20 mode of high channel
Standard:	FCC Part 15.209& FCC Part 15.205& 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)
2483.584000	61.08	---	74.00	12.92	V	-0.3
2483.584000	---	44.41	54.00	9.59	V	-0.3
2484.814000	59.69	---	74.00	14.31	V	-0.3
2484.814000	---	48.83	54.00	5.17	V	-0.3

6 dB EMISSION BANDWIDTH

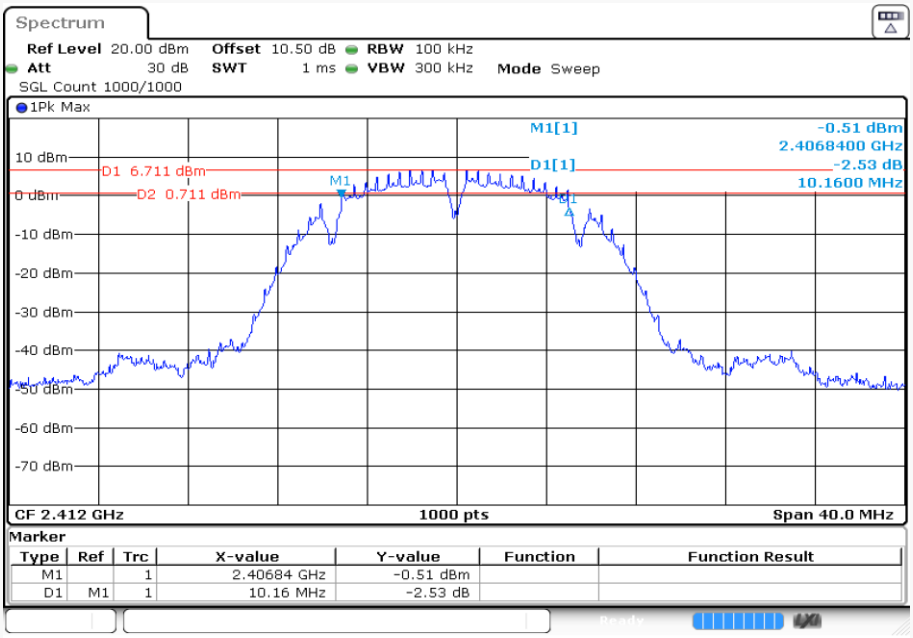
Test Result: Compliant.

EUT operation mode: Transmitting

For Wi-Fi Mode:

Test Mode	Channel (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	2412	10.160	0.5	PASS
	2437	10.160	0.5	PASS
	2462	10.160	0.5	PASS
802.11g	2412	15.560	0.5	PASS
	2437	15.560	0.5	PASS
	2462	15.440	0.5	PASS
802.11n-HT20	2412	15.240	0.5	PASS
	2437	15.240	0.5	PASS
	2462	15.480	0.5	PASS

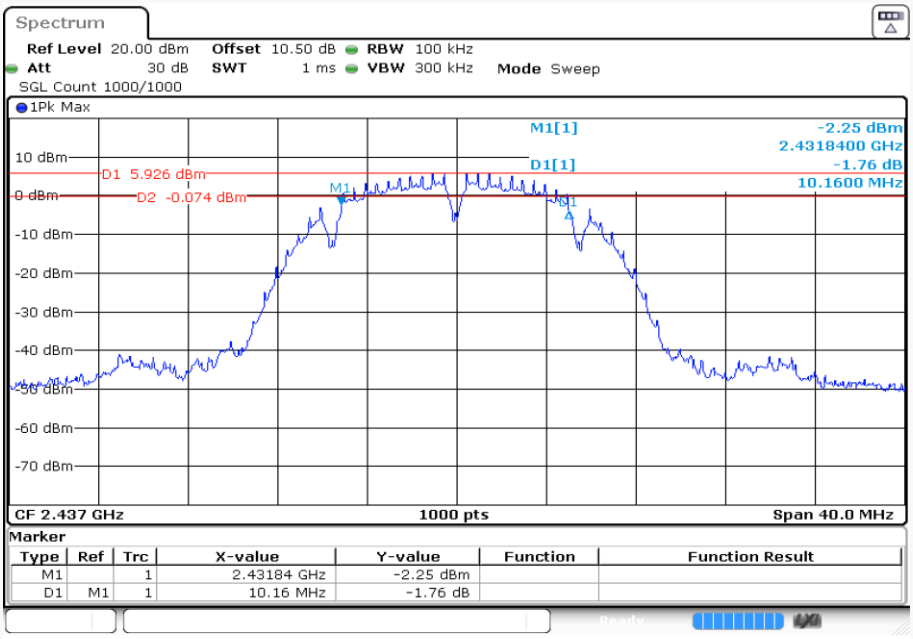
802.11b Mode Low Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:42:31

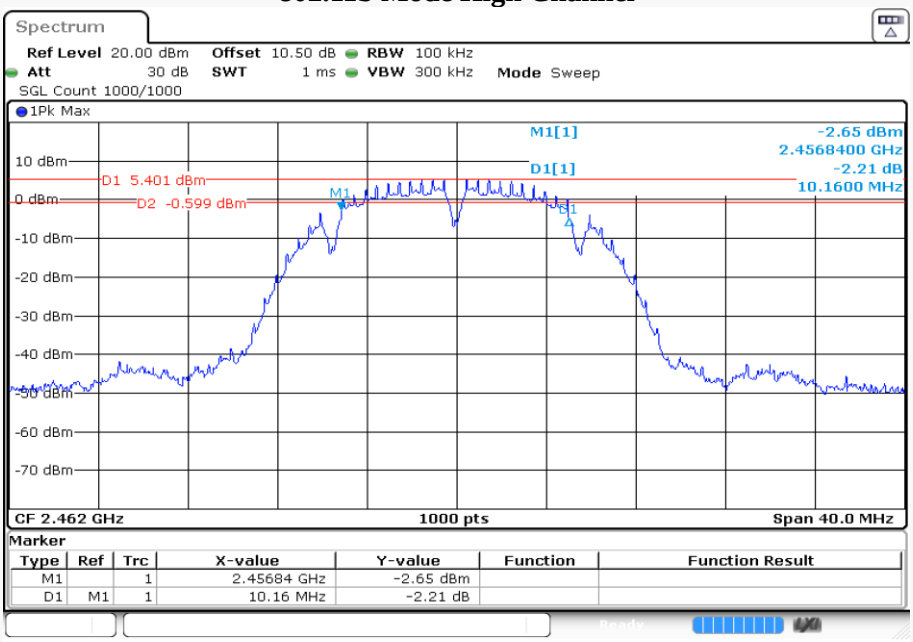
802.11b Mode Middle Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:44:18

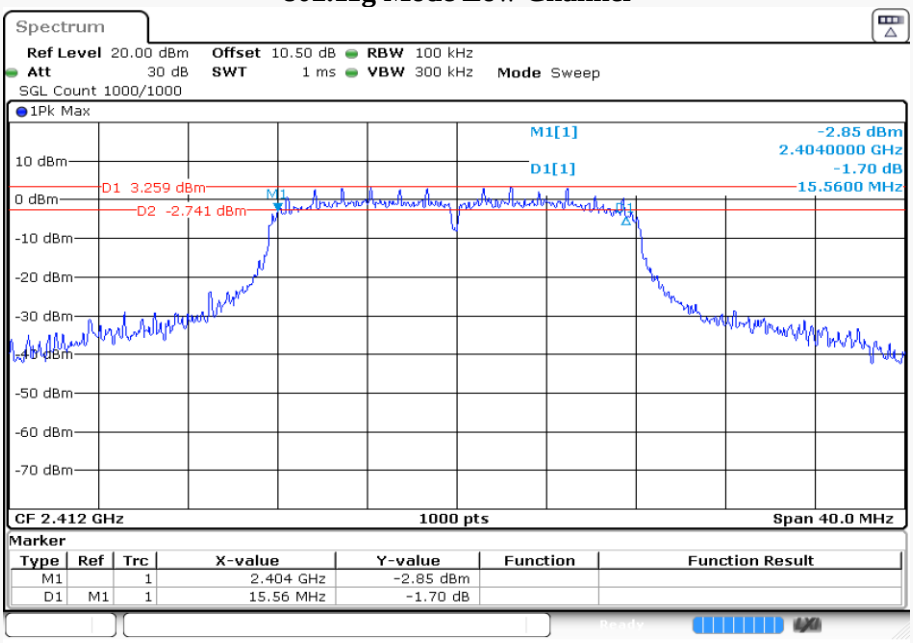
802.11b Mode High Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:46:20

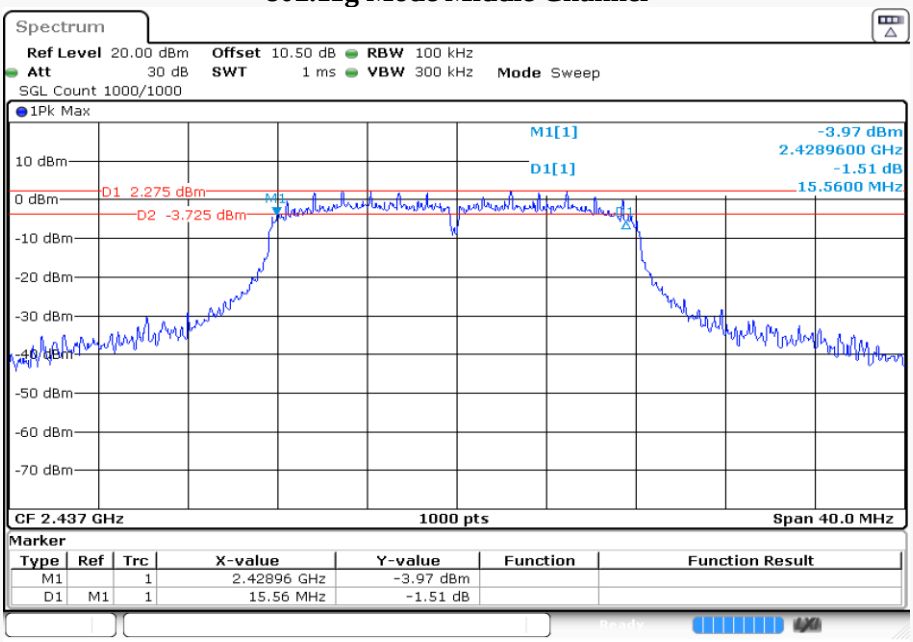
802.11g Mode Low Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:48:30

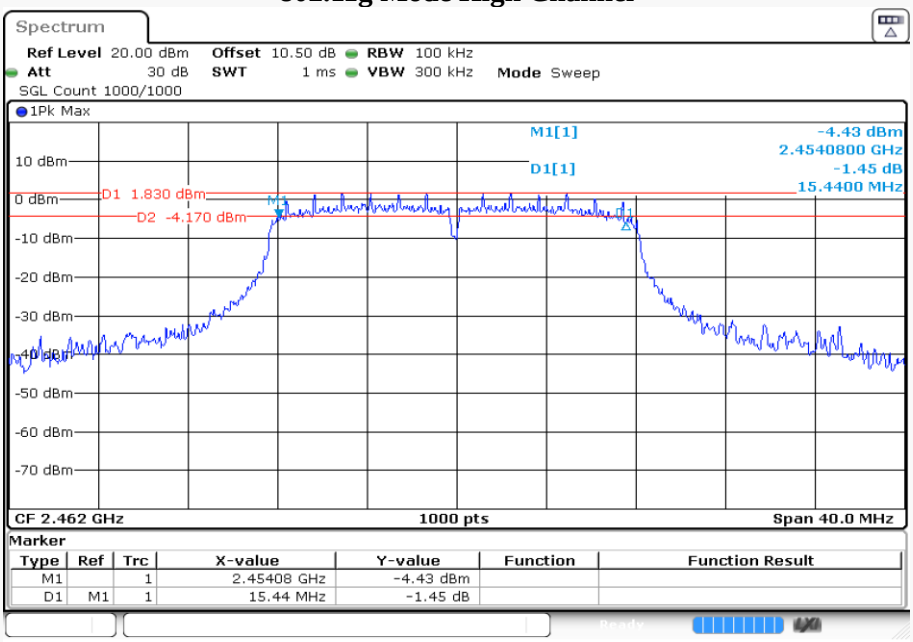
802.11g Mode Middle Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:51:25

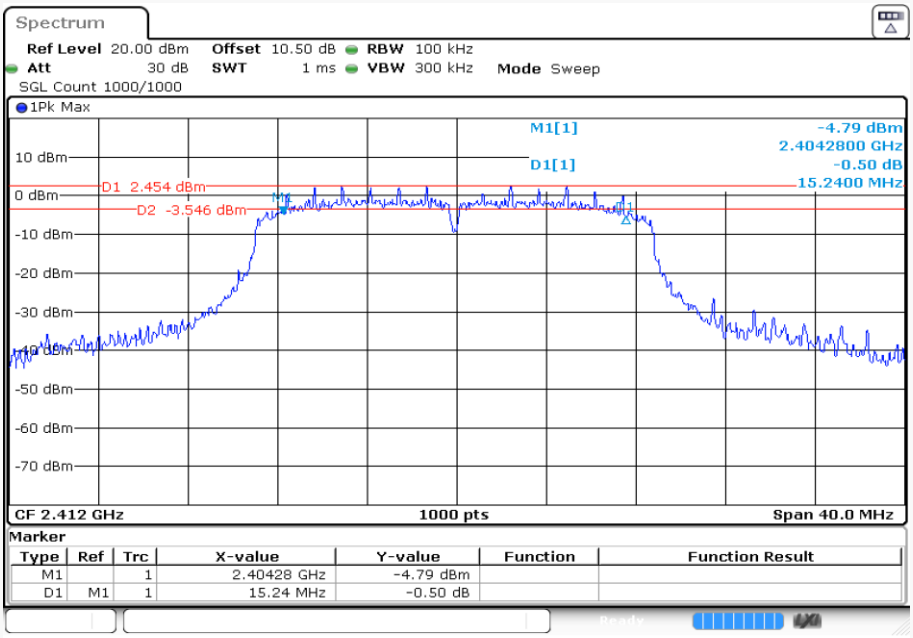
802.11g Mode High Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:53:24

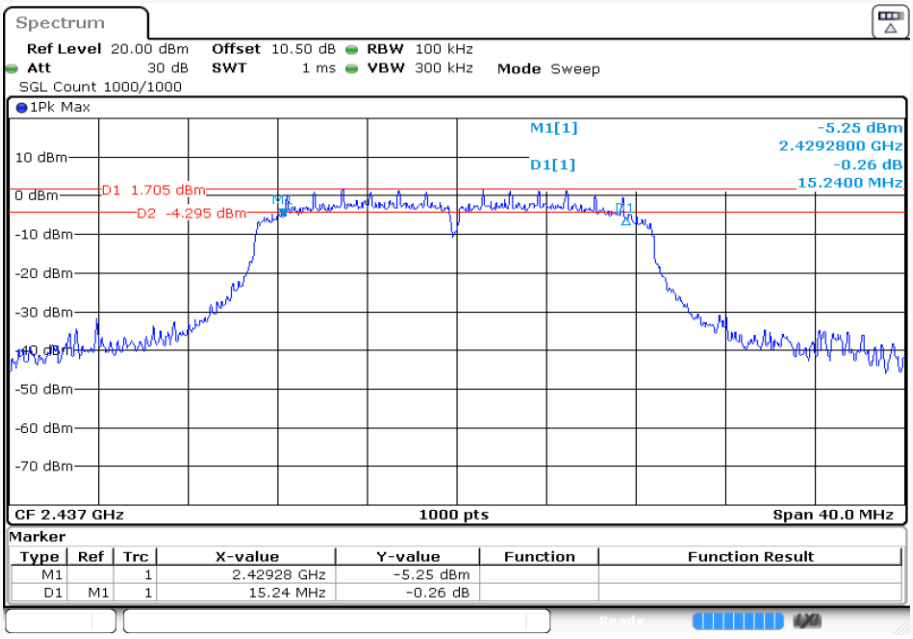
802.11n-HT20 Mode Low Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:55:39

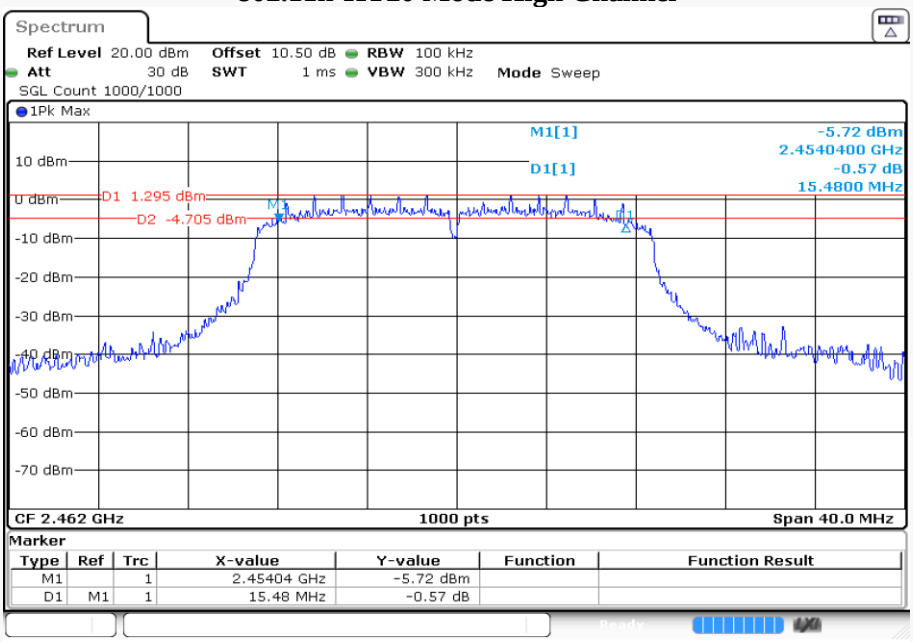
802.11n-HT20 Mode Middle Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:57:26

802.11n-HT20 Mode High Channel



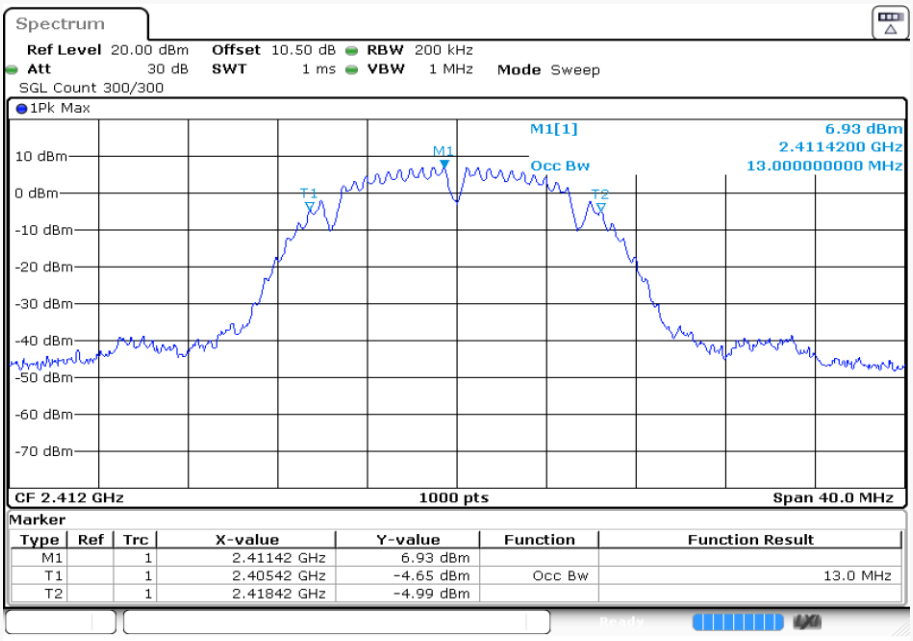
OCCUPIED BANDWIDTH

EUT operation mode: Transmitting

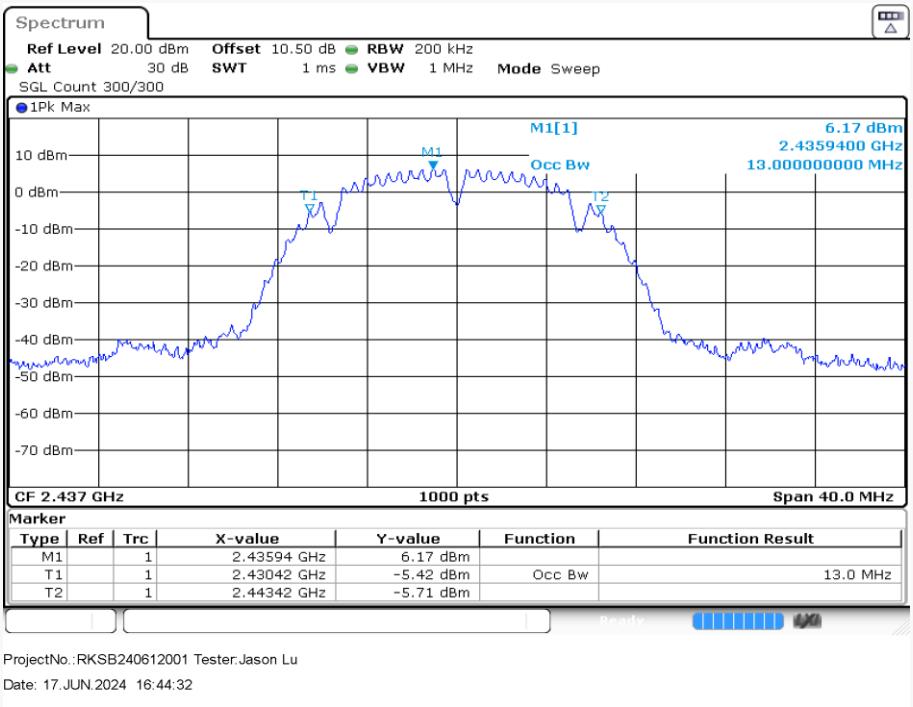
For Wi-Fi Mode:

Test Mode	Channel (MHz)	99% Occupied Bandwidth (MHz)
802.11b	2412	13.000
	2437	13.000
	2462	13.000
802.11g	2412	16.280
	2437	16.280
	2462	16.320
802.11n-HT20	2412	17.360
	2437	17.400
	2462	17.360

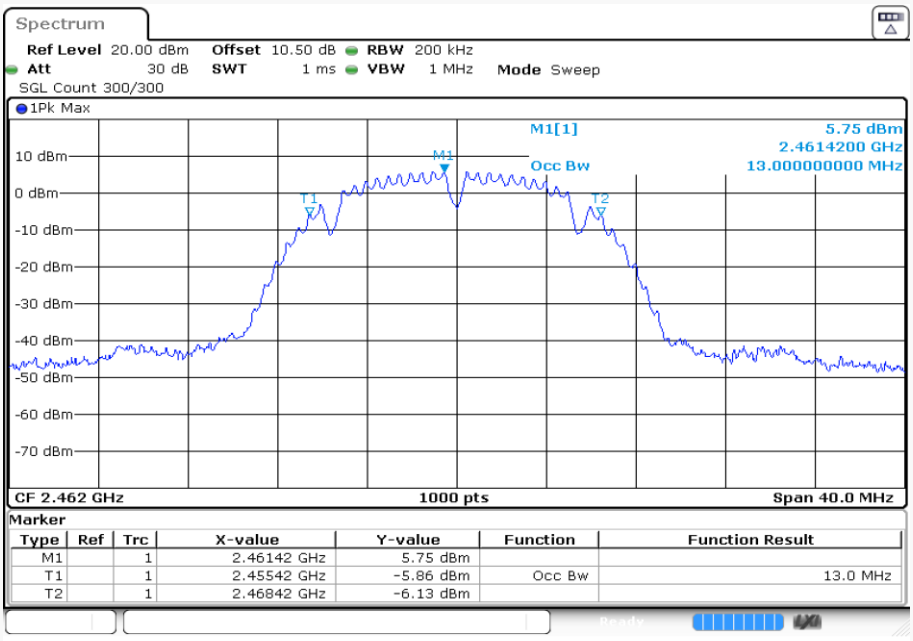
802.11b Mode Low Channel



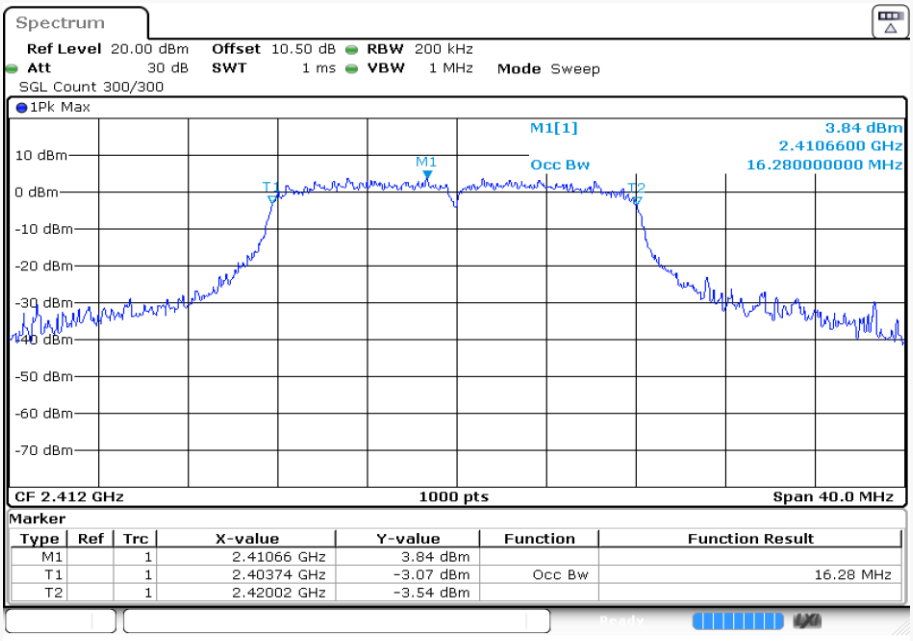
802.11b Mode Middle Channel



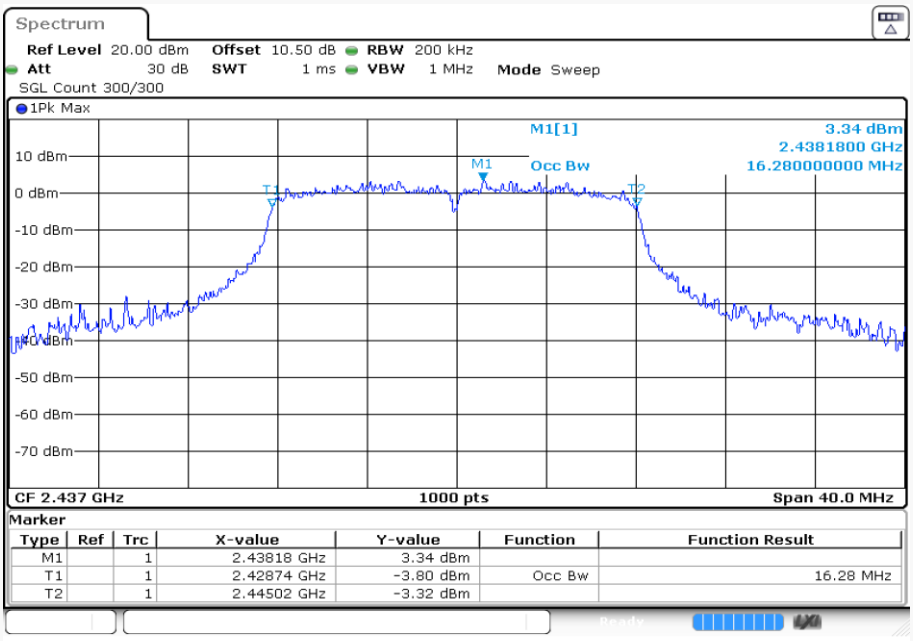
802.11b Mode High Channel



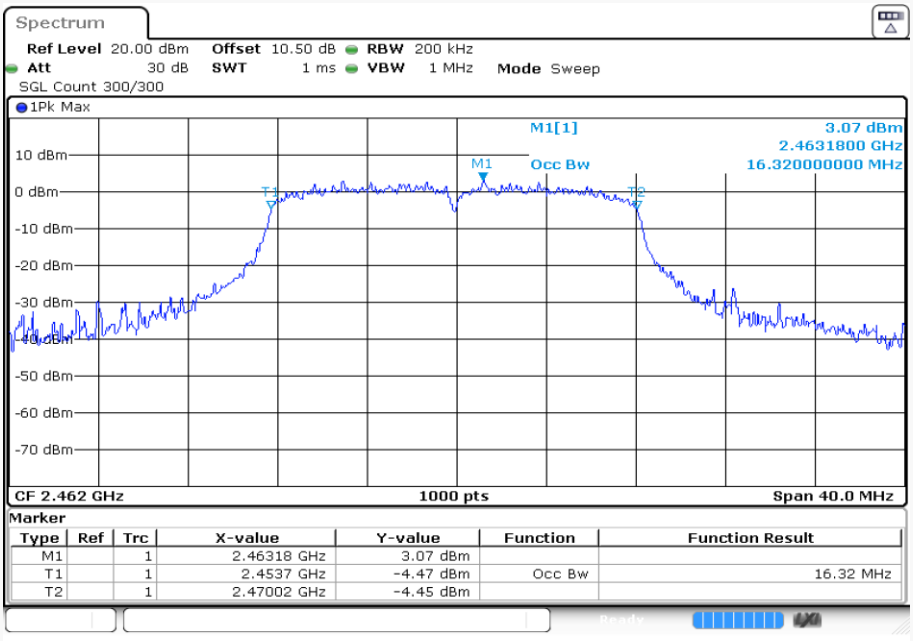
802.11g Mode Low Channel



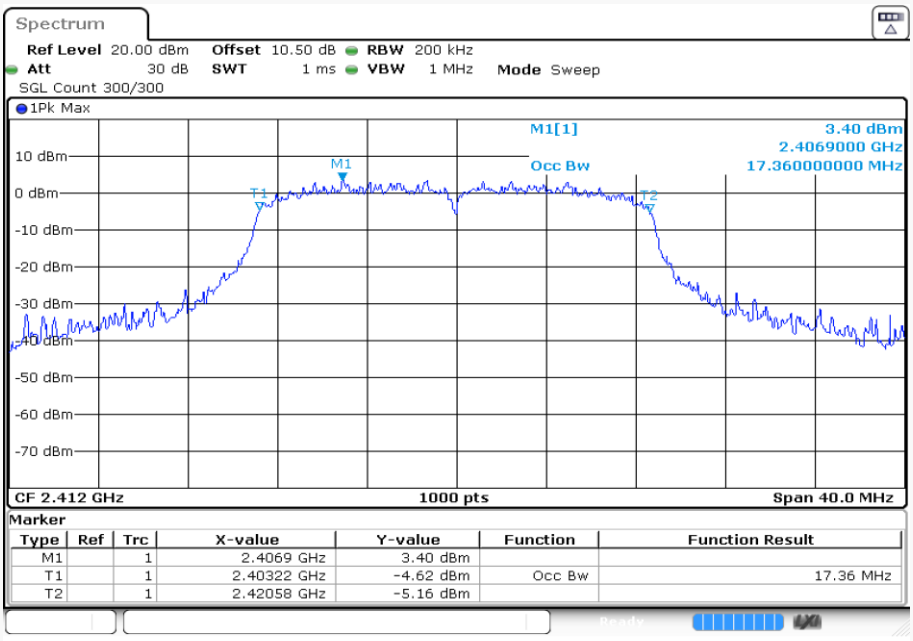
802.11g Mode Middle Channel



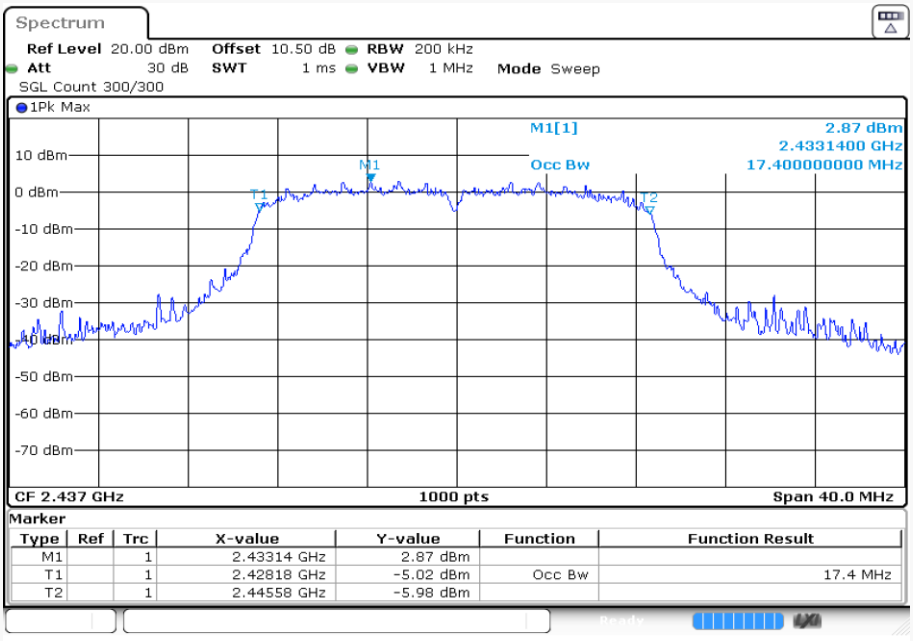
802.11g Mode High Channel



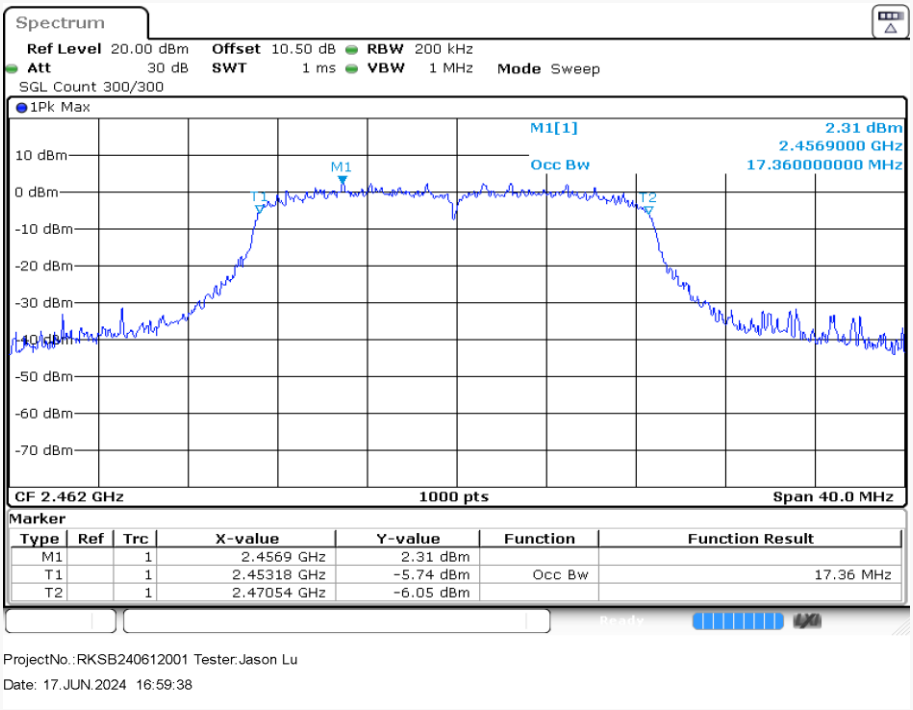
802.11n-HT20 Mode Low Channel



802.11n-HT20 Mode Middle Channel



802.11n-HT20 Mode High Channel



POWER SPECTRAL DENSITY

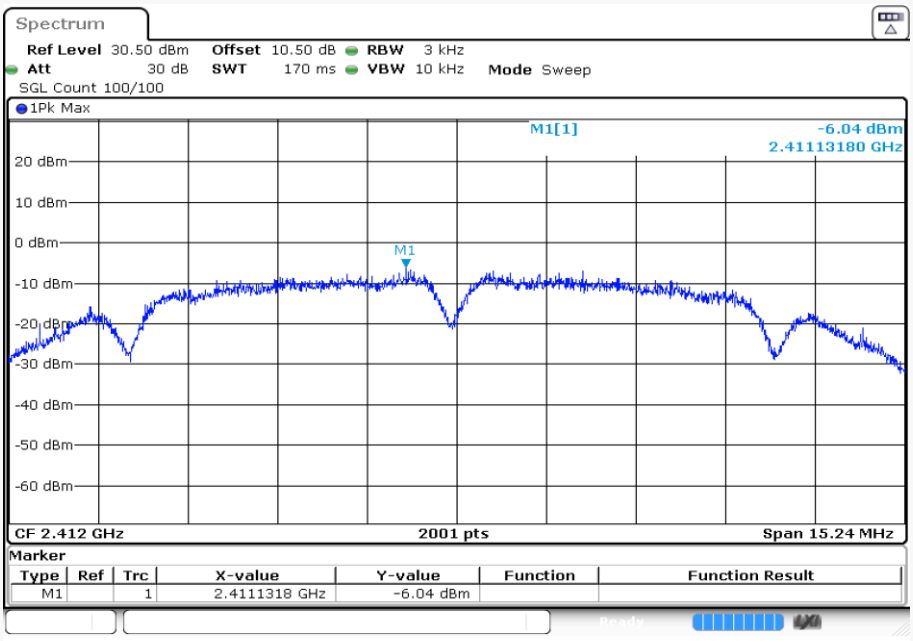
Test Result: Compliant.

EUT operation mode: Transmitting

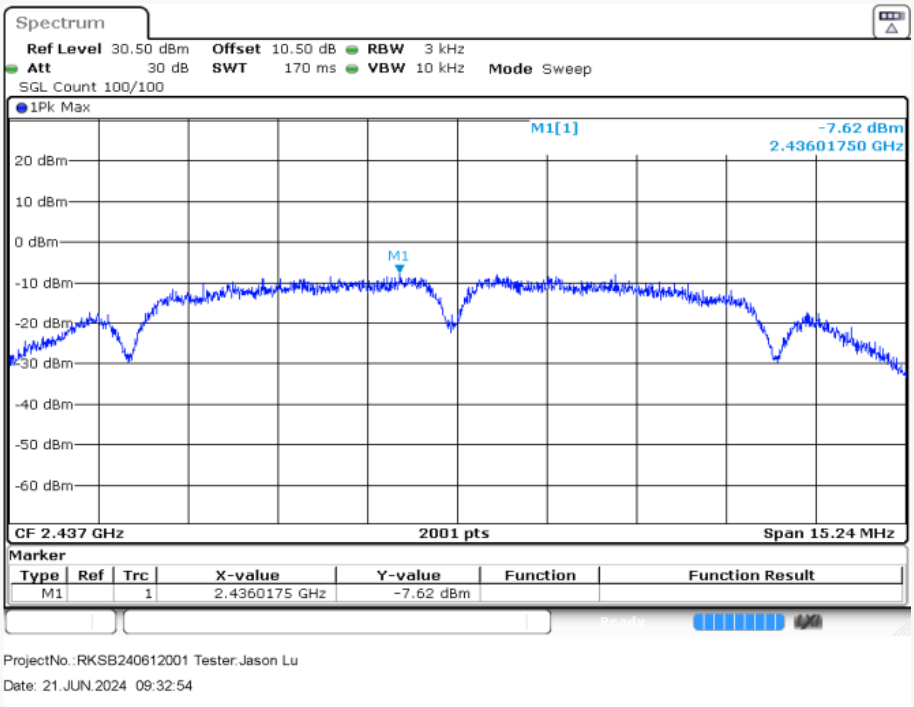
For Wi-Fi Mode:

Test Mode	Channel (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11b	2412	-6.04	≤8.00	PASS
	2437	-7.62	≤8.00	PASS
	2462	-7.30	≤8.00	PASS
802.11g	2412	-9.83	≤8.00	PASS
	2437	-11.28	≤8.00	PASS
	2462	-11.66	≤8.00	PASS
802.11n-HT20	2412	-11.16	≤8.00	PASS
	2437	-11.82	≤8.00	PASS
	2462	-12.32	≤8.00	PASS

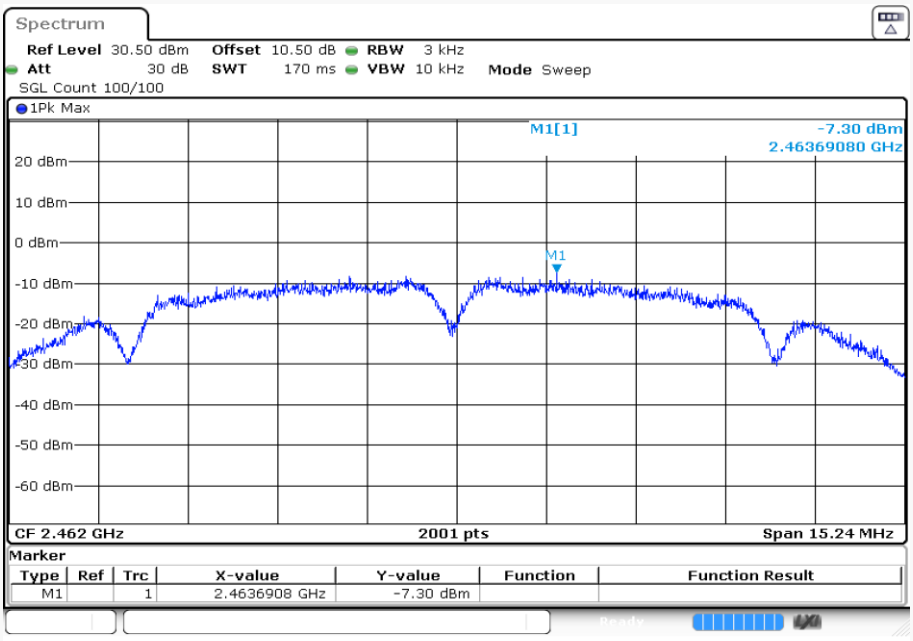
802.11b Low Channel



802.11b Middle Channel



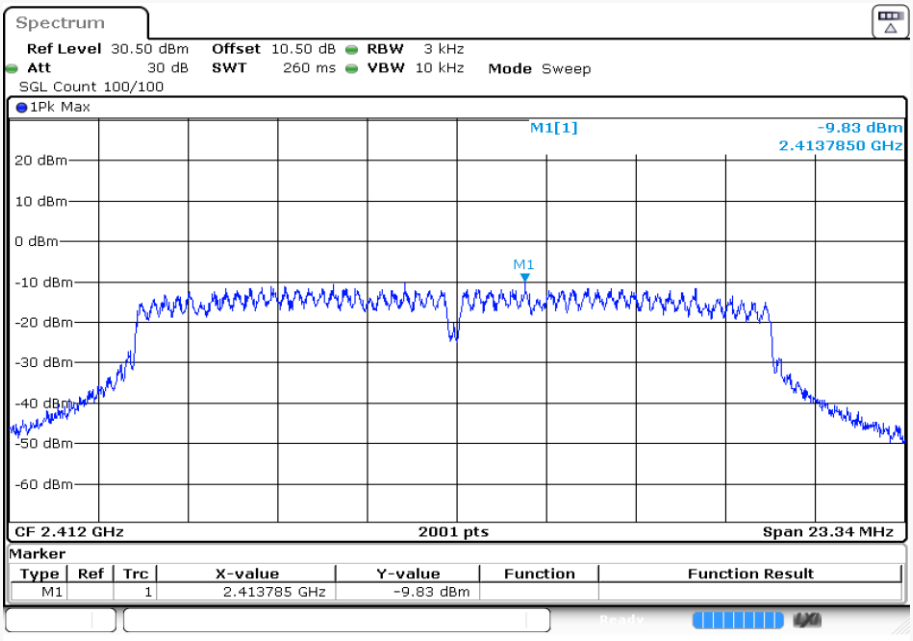
802.11b High Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 21.JUN.2024 09:33:31

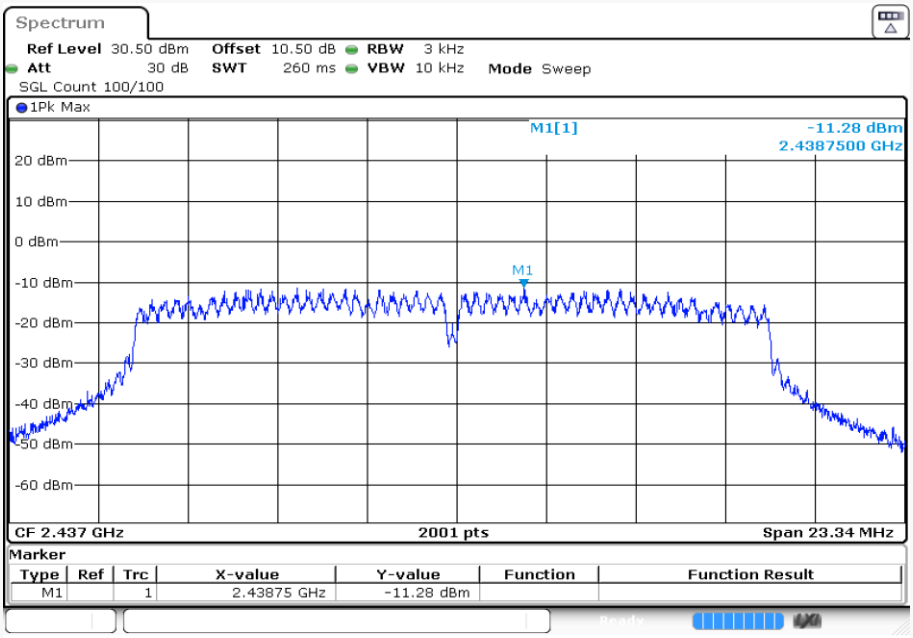
802.11g Low Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

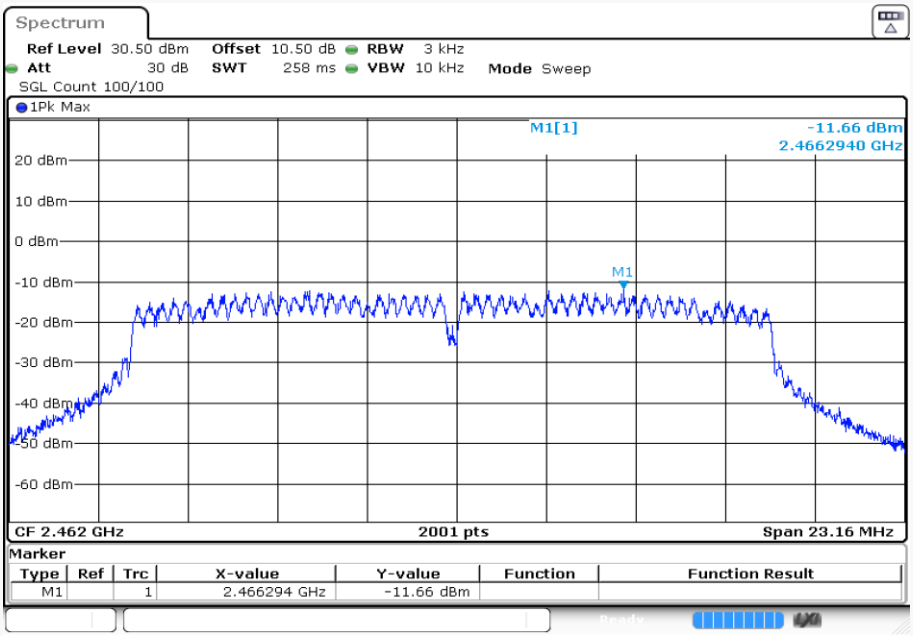
Date: 21.JUN.2024 09:34:24

802.11g Middle Channel



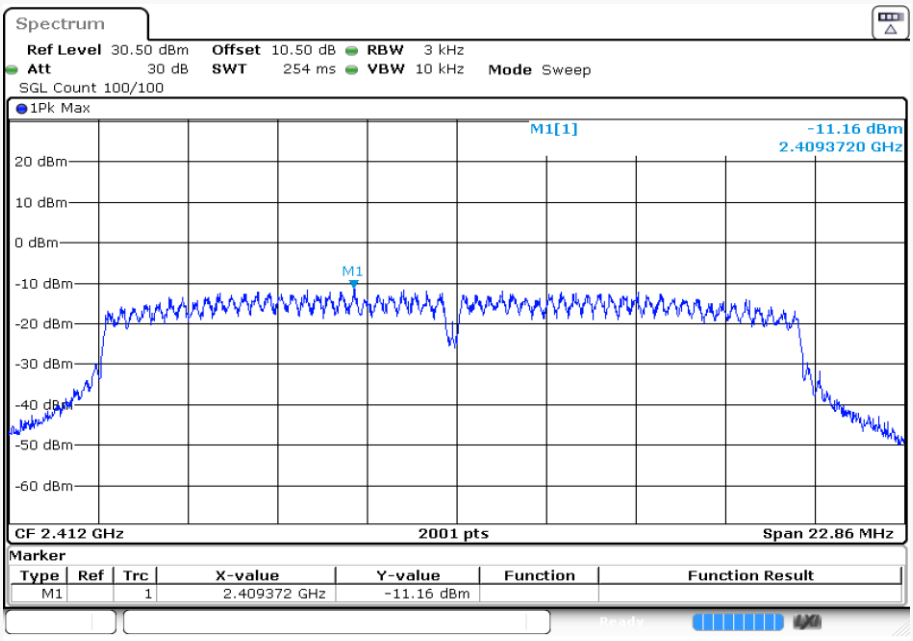
ProjectNo.:RKSB240612001 Tester:Jason Lu
Date: 21.JUN.2024 09:35:09

802.11g High Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu
Date: 21.JUN.2024 09:35:54

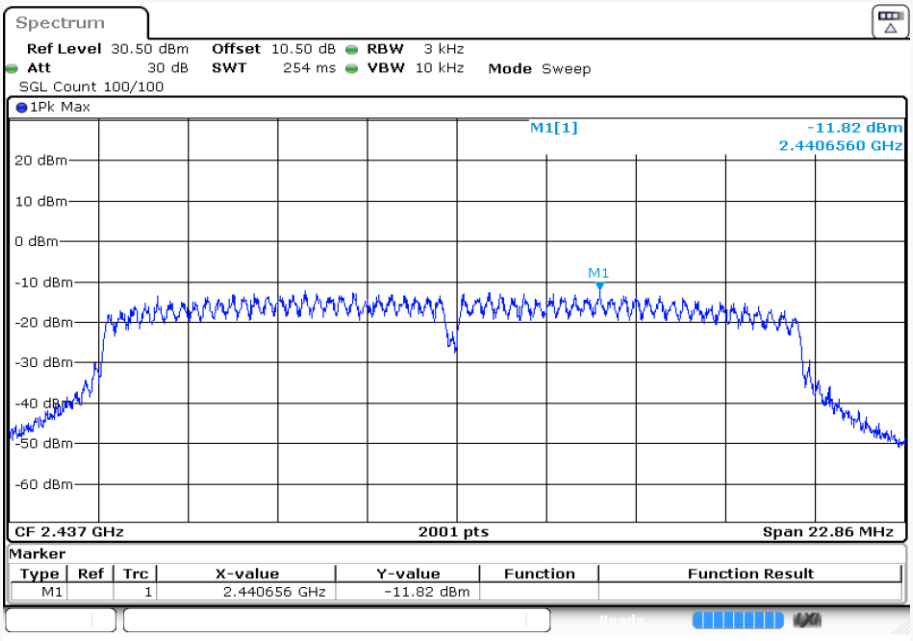
802.11n-HT20 Low Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 21.JUN.2024 09:36:50

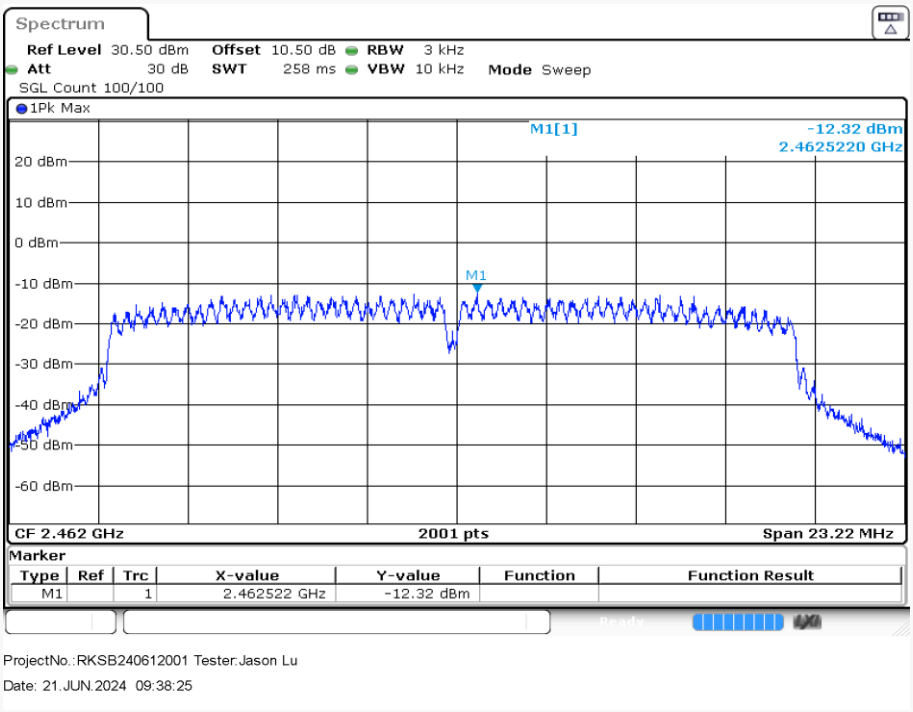
802.11n-HT20 Middle Channel



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 21.JUN.2024 09:37:37

802.11n-HT20 High Channel



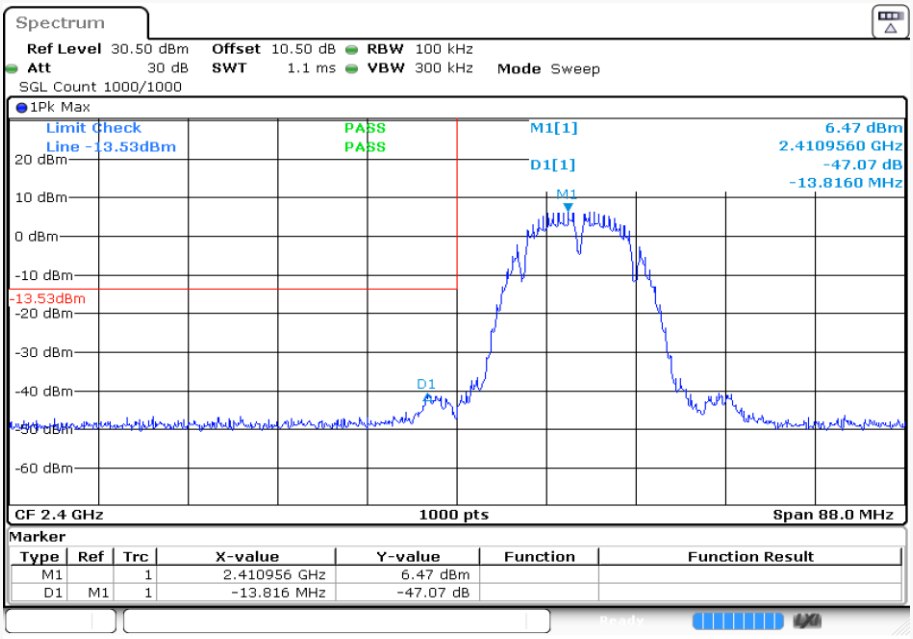
TRANSMITTER OUTPUT POWER MEASUREMENT

Test Mode	Channel (MHz)	Peak Output Power (dBm)	Limit (dBm)	Result
802.11b	2412	20.44	≤30.00	PASS
	2437	20.26	≤30.00	PASS
	2462	20.38	≤30.00	PASS
802.11g	2412	24.77	≤30.00	PASS
	2437	24.54	≤30.00	PASS
	2462	24.57	≤30.00	PASS
802.11n-HT20	2412	24.60	≤30.00	PASS
	2437	24.47	≤30.00	PASS
	2462	24.56	≤30.00	PASS

OUT OF BAND EMISSIONS

EUT operation mode: Transmitting

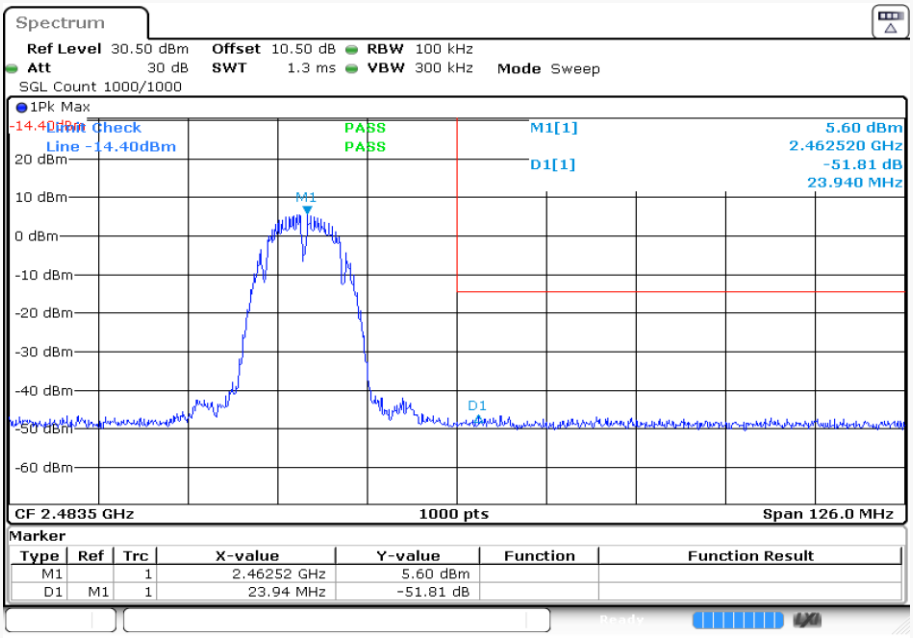
802.11b Mode Left Side



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:41:49

802.11b Mode Right Side



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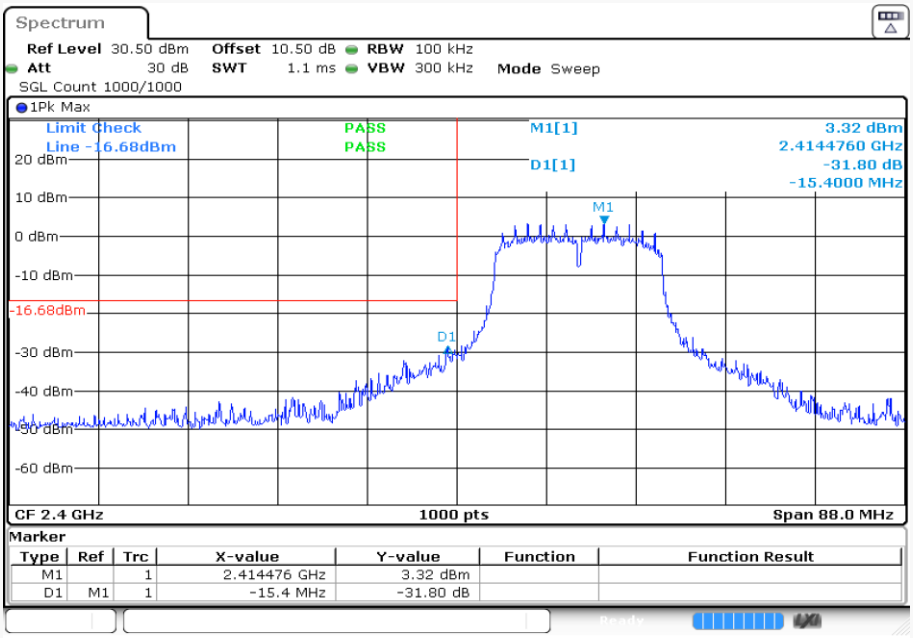
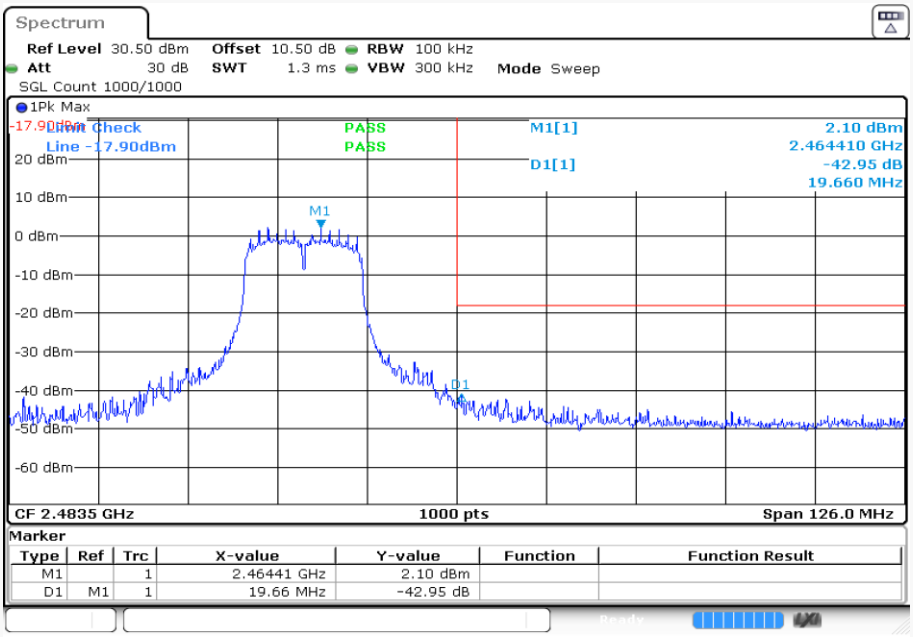
Date: 17.JUN.2024 16:45:57

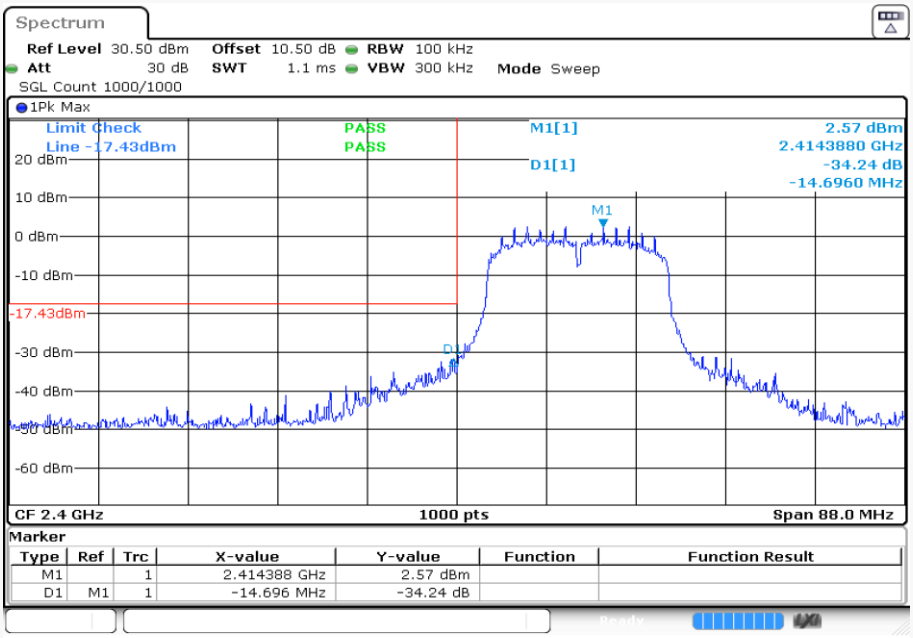
802.11g Mode Left Side



802.11g Mode Right Side



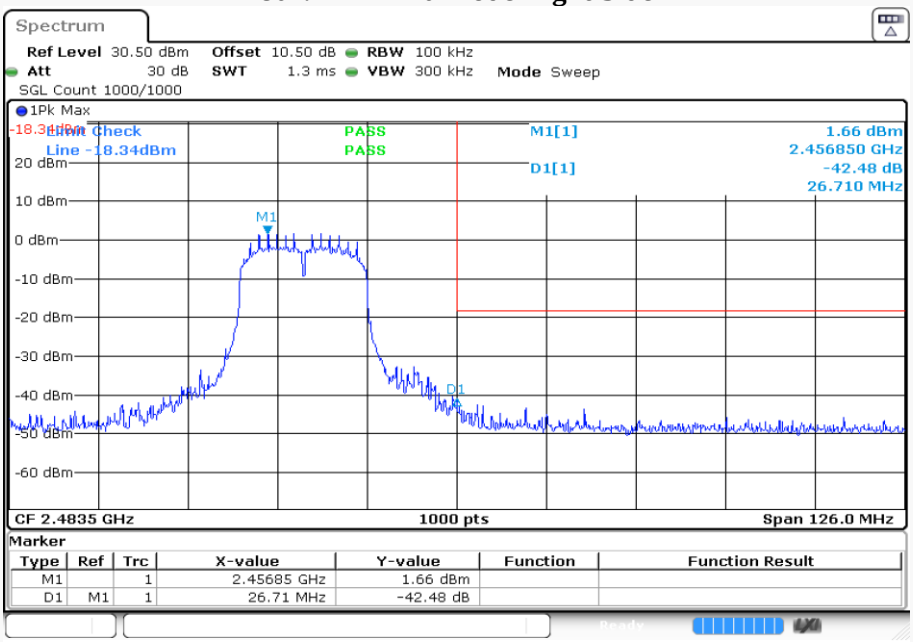
802.11n-HT20 Mode Left Side



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:55:13

802.11n-HT20 Mode Right Side



ProjectNo.:RKSB240612001 Tester:Jason Lu

Date: 17.JUN.2024 16:59:00

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A - EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B - EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT C - TEST SETUP PHOTOGRAPHS.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

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