

Project No: TM-2506000137P
Report No.: TMWK2506002274KR

FCC ID: 2BOLD-YZL001

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Rev.: 01

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

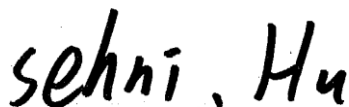
Test Standard	FCC Part 15.247
Product name	Yedi Zen Lock
Brand Name	YEDI
Model No.	YZL001
Test Result	Pass
Statements of Conformity	Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2020 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc.(Wugu Laboratory)

Approved by:



Sehni Hu
Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	August 11, 2025	Initial Issue	ALL	Allison Chen
01	August 28, 2025	See the following Note Rev.(01)	P.1, 5, 8, 15-16, 40	Allison Chen

Note:

Rev.(01)

1. Modify ANSI version and antenna brand name.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	Yedi Technologies Inc. 329 11th St NE, Washington, District of Columbia, 20002, USA
Manufacturer	Yedi Technologies Inc. 329 11th St NE, Washington, District of Columbia, 20002, USA
Equipment	Yedi Zen Lock
Model No.	YZL001
Model Discrepancy	N/A
Trade Name	YEDI
Received Date	June 11, 2025
Date of Test	June 19 ~ July 24, 2025
Power Operation	Power from Battery. (DC 3.7V, 18650*3)
HW Version	REV:3
SW Version	2.9.1

Remark:

1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT 20/ax HE20: 2412MHz ~ 2462MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT20 mode : OFDM 4. IEEE 802.11ax HE20 mode : OFDMA
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT20 mode : 11 Channels 4. IEEE 802.11ax HE20 mode : 11 Channels

Remark:

Refer as ANSI C63.10: 2020 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☐ PIFA ☒ PCB ☐ Dipole ☐ Coils
Antenna Gain	4.21 dBi
Model	Ant. 2
Antenna Connector	IPEX

Notes:

1. The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203.

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 2.21 dB
Channel Bandwidth	+/- 2.79 dB
RF output power (Power Meter + Power sensor)	+/- 0.24 dB
Power Spectral density	+/- 2.74 dB
Conducted Bandedge	+/- 2.74 dB
Conducted Spurious Emission	+/- 2.74 dB
Radiated Emission_9kHz-30MHz	+/- 3.492 dB
Radiated Emission_30MHz-200MHz	+/- 3.62 dB
Radiated Emission_200MHz-1GHz	+/- 3.899 dB
Radiated Emission_1GHz-6GHz	+/- 5.063 dB
Radiated Emission_6GHz-18GHz	+/- 5.122 dB
Radiated Emission_18GHz-26GHz	+/- 3.032 dB
Radiated Emission_26GHz-40GHz	+/- 3.271 dB

Remark:

- 1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	-	Not applicable, because EUT not connect to AC Main Source direct.
Radiation	Tony Chao, Ben Yang	-
RF Conducted	David Li	-

Remark: The lab has been recognized as the FCC accredited lab. under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.6 INSTRUMENT CALIBRATION

Conducted_FCC/IC/NCC (All)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
EXA Signal Analyzer	Keysight	N9010A	MY53400256	2024-11-19	2025-11-18
Power Sensor	Anritsu	MA2411B	1911387	2024-08-30	2025-08-29
Power Sensor	Anritsu	MA2411B	1911386	2024-07-19	2025-07-18
				2025-07-07	2026-07-06
Power Meter	Anritsu	ML2496A	2136002	2024-07-19	2025-07-18
				2025-07-07	2026-07-06
DC Blocks	Marvelous Microwave	MVE6411	MVE-001	2024-08-08	2025-08-07
Software	Radio Test Software Ver. 21				

966A_Radiated					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Signal Analyzer	KEYSIGHT	N9010A	MY52220817	2025-03-05	2026-03-04
Active Loop Antenna	COM-POWER	AL-130	121051	2025-02-18	2026-02-17
Thermo-Hygro Meter	HTC	HTC-1	HTC-D06	2025-05-26	2026-05-25
Bi-Log Antenna	Sunol Sciences	JB1	A052609&533	2025-01-03	2026-01-02
Preamplifier	EMEC	EM330	060609	2025-02-20	2026-02-19
Cable	Huber+Suhner	104PEA	20995+21000+182330	2024-08-07	2025-08-06
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2024-12-20	2025-12-19
Preamplifier	HP	8449B	3008A00965	2024-12-18	2025-12-17
Cable	EMCI	EMC101G	221012+230205+250412	2025-04-24	2026-04-23
Attenuator	Mini-Circuits	BW-S9W5	BWS9W5-09-966A-01	2025-02-06	2026-02-05
Site Validation	CCS	966A	N/A	2024-08-03	2025-08-02
High Pass Filters	Titan Microwave	T04H30001800070S01	22011402-4	2025-06-03	2026-06-02
Pre-Amplifier	EMCI	EMC184045SE	980860	2024-12-02	2025-12-01
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2024-12-06	2025-12-05
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Software	e3 V9-210616c				

Remark:

- Each piece of equipment is scheduled for calibration once a year.
- N.C.R. = No Calibration Required.

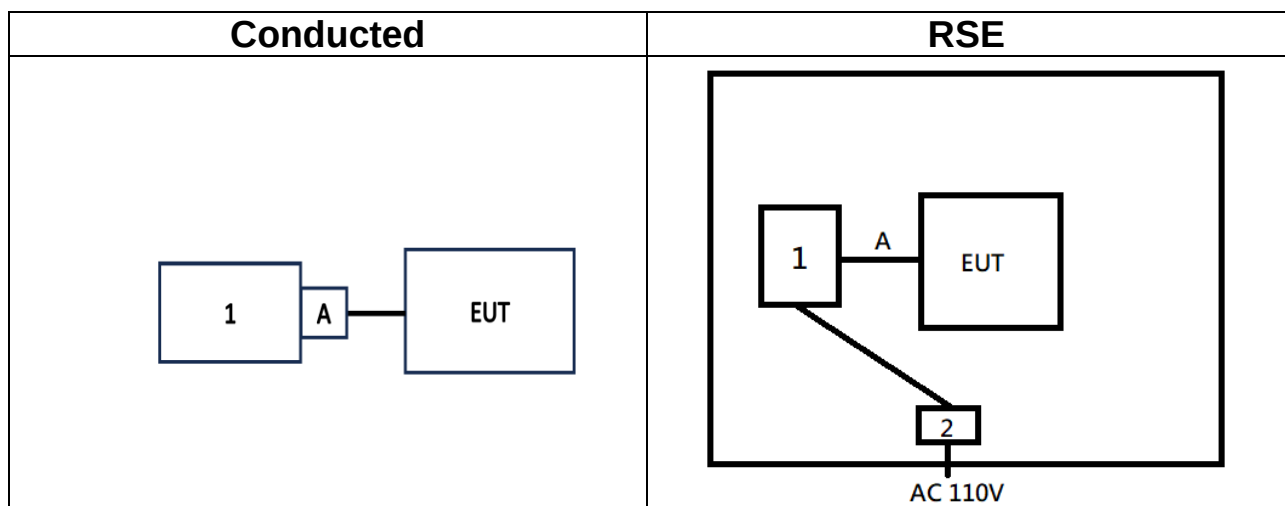
1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
	N/A					

Support Equipment (Conducted)					
No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(B)	Lenovo	T470	N/A	N/A
A	4 Pin to USB	N/A	N/A	N/A	N/A

Support Equipment (RSE)					
No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(D)	Lenovo	ThinkPad X260	N/A	N/A
2	Adapter	Lenovo	ADLX45DLC3A	N/A	N/A
A	USB Cable	N/A	N/A	N/A	N/A

1.8 TEST SET UP DIAGRAM



1.9 TEST PROGRAM

This EUT uses "sscom" software and set commands to set the frequency, modulation, and power to allow the sample to continuously transmit.

1.10 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10: 2020, FCC Part 2, FCC Part 15.247, KDB 558074.

2. TEST SUMMARY

FCC Standard Section	Report Section	Test Item	Result
15.203	1.3	Antenna Requirement	Pass
15.207(a)	4.1	AC Conducted Emission	N/A
15.247(a)(2)	4.2	6 dB Bandwidth	Pass
-	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)(3)	4.3	Output Power Measurement	Pass
15.247(e)	4.4	Power Spectral Density	Pass
15.247(d)	4.5	Conducted Band Edge	Pass
15.247(d)	4.5	Conducted Emission	Pass
15.247(d) 15.205, 15.209	4.6	Radiation Band Edge	Pass
15.247(d) 15.205, 15.209	4.6	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS0 IEEE 802.11ax HE20 mode :MCS0
Test Channel Frequencies	IEEE 802.11b mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11g mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11n HT20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11ax HE20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode : 1T1R IEEE 802.11ax HE20 mode : 1T1R

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

3.2 THE WORST MODE OF MEASUREMENT

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Battery
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☐ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☒ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Battery
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4

Remark:

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Z-Plane) were recorded in this report
3. This 802.11ax partial RU mode support 26/52/106-tone RU
4. 802.11ax support OFDMA full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) test output power, the full RU Power/PSD > partial RU, therefore the full RU perform full test to cover partial RU except for Radiated Band edge.

3.3 EUT DUTY CYCLE

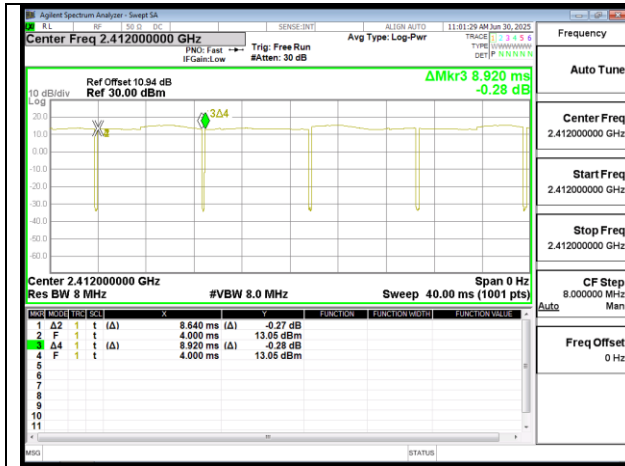
Temperature: 21.8~24.9°C

Test date: June 30~July 24, 2025

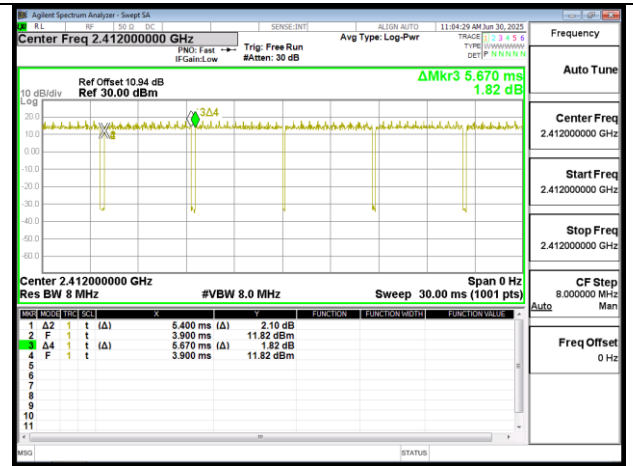
Humidity: 49~64% RH

Tested by: David Li

Mode		Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b		96.86	0.14	0.12	1.00
802.11g		95.24	0.21	0.19	1.00
802.11n_20		95.98	0.18	0.20	1.00
Mode	RU Config	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11ax_20	Full	96.22	0.17	0.19	1.00
	26 RU	96.24	0.17	0.19	1.00
	52 RU	96.24	0.17	0.19	1.00
	106 RU	95.72	0.19	0.19	1.00



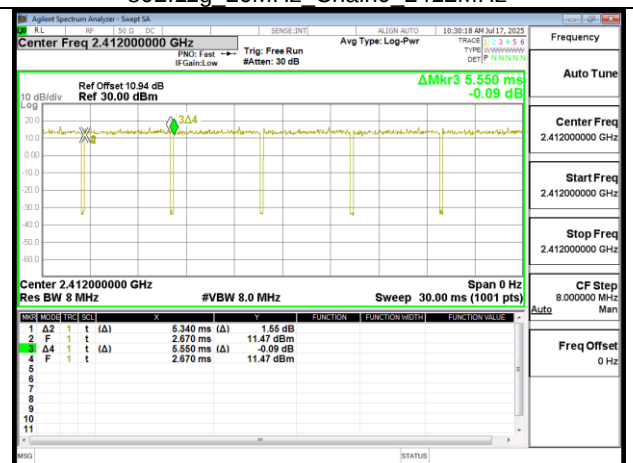
802.11b 20MHz Chain0 2412MHz



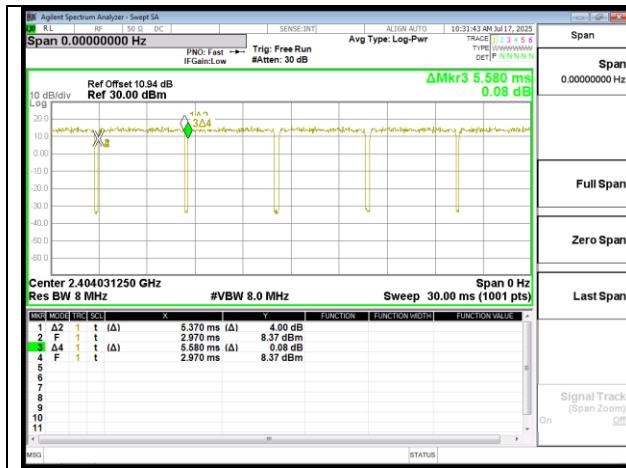
802.11g 20MHz Chain0 2412MHz



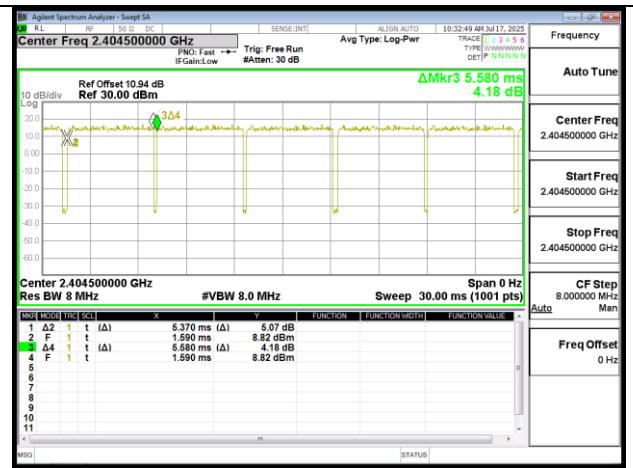
802.11n 20MHz Chain0 2412MHz



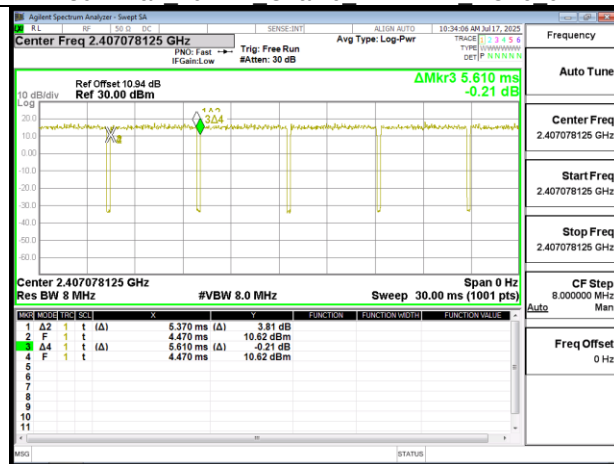
802.11ax 20MHz Chain0 2412MHz



802.11ax 20MHz Chain0 2412MHz RU26 0



802.11ax 20MHz Chain0 2412MHz RU52 37



802.11ax 20MHz Chain0 2412MHz RU106 53

4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a)(2),

Frequency Range (MHz)	Limits(dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

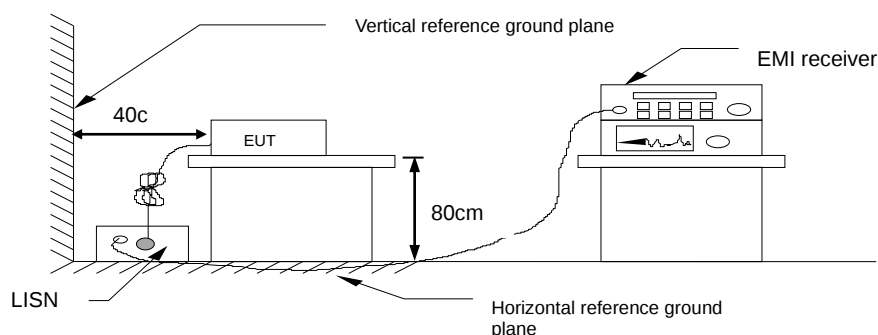
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2020,

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

4.1.3 Test Setup



4.1.4 Test Result

Not applicable, because EUT doesn't connect to AC Main Source direct.

4.2 6dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

4.2.1 Test Limit

According to §15.247(a)(2),

6 dB Bandwidth :

Limit	Shall be at least 500kHz
-------	--------------------------

Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

Test method Refer as KDB 558074 D01 and ANSI C63.10: 2020,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. in the test report.

4.2.3 Test Setup

Refer to section 1.8.

4.2.4 Test Result

Temperature: 21.8~24.9°C
Humidity: 49~64% RH

Test date: June 30~July 24, 2025
Tested by: David Li

6 dB Bandwidth

802.11b Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	9072	≥ 500	PASS
2437	9071	≥ 500	PASS
2462	9072	≥ 500	PASS

802.11g Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	15130	≥ 500	PASS
2437	15130	≥ 500	PASS
2462	15140	≥ 500	PASS

802.11n_HT_20M Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	15090	≥ 500	PASS
2437	15070	≥ 500	PASS
2462	15130	≥ 500	PASS

802.11ax_HE_20M Ch0

Freq. (MHz)	RU Config	6dB BW (kHz)	Limit (kHz)	Result
2412	full	18500	≥ 500	PASS
2437	full	18520	≥ 500	PASS
2462	full	18490	≥ 500	PASS

Occupied Bandwidth(99%)

802.11b Ch0

Freq. (MHz)	99% BW (MHz)
2412	13.445
2437	13.464
2462	13.462

802.11g Ch0

Freq. (MHz)	99% BW (MHz)
2412	16.778
2437	16.775
2462	16.758

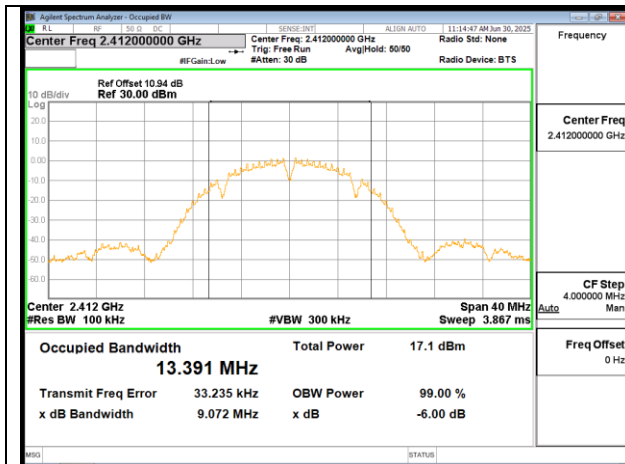
802.11n_HT20M Ch0

Freq. (MHz)	99% BW (MHz)
2412	17.598
2437	17.594
2462	17.562

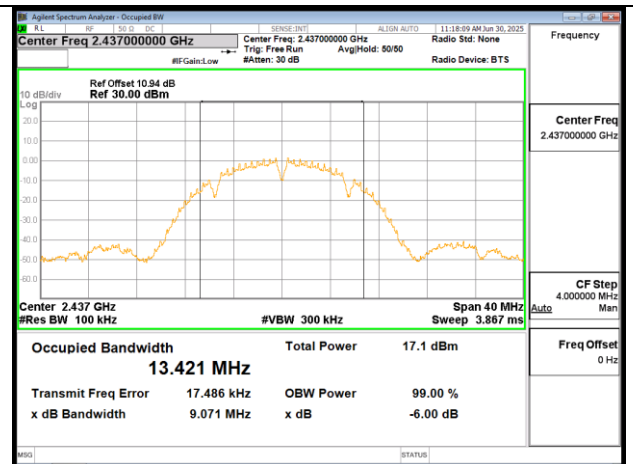
802.11ax_HE20M Ch0

Freq. (MHz)	RU Config	99% BW (MHz)
2412	full	18.788
2437	full	18.819
2462	full	18.8

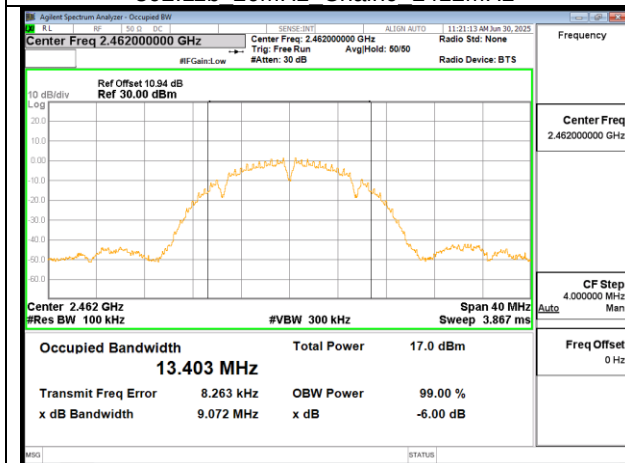
Test Data 6 dB Bandwidth



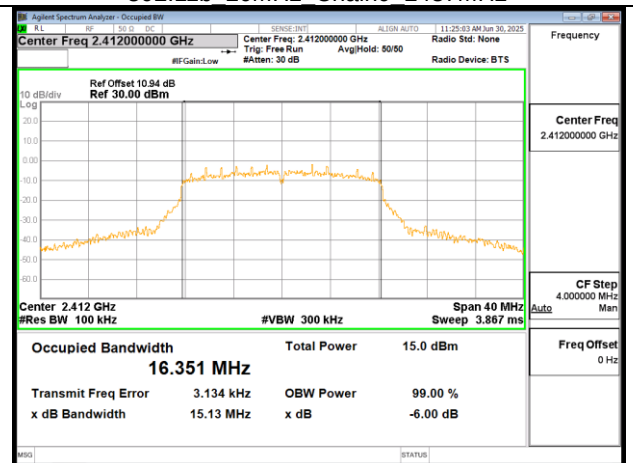
802.11b 20MHz Chain0 2412MHz



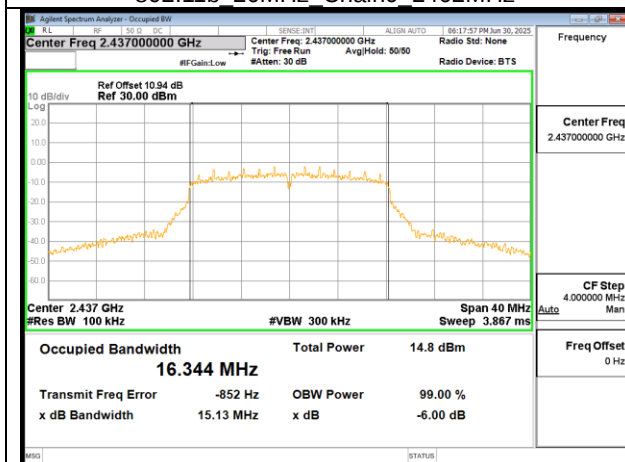
802.11b 20MHz Chain0 2437MHz



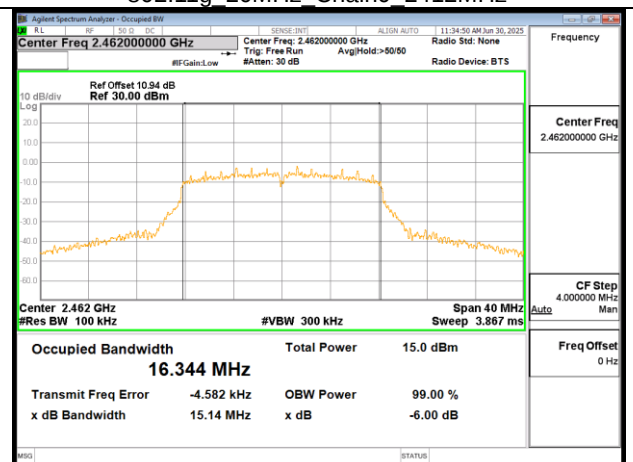
802.11b 20MHz Chain0 2462MHz



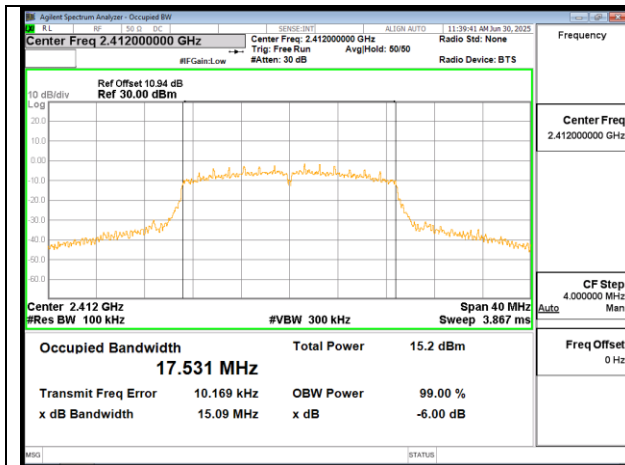
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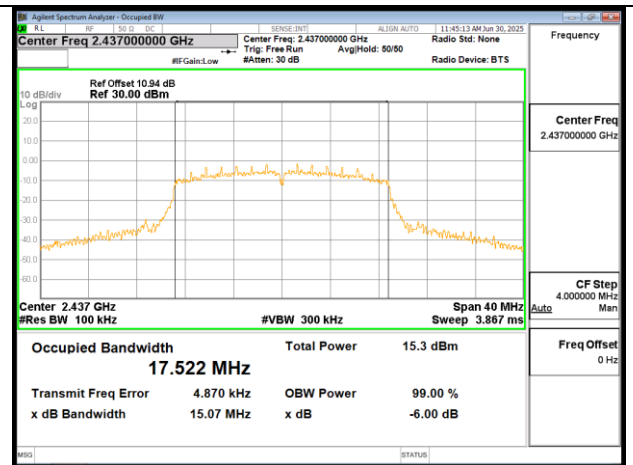
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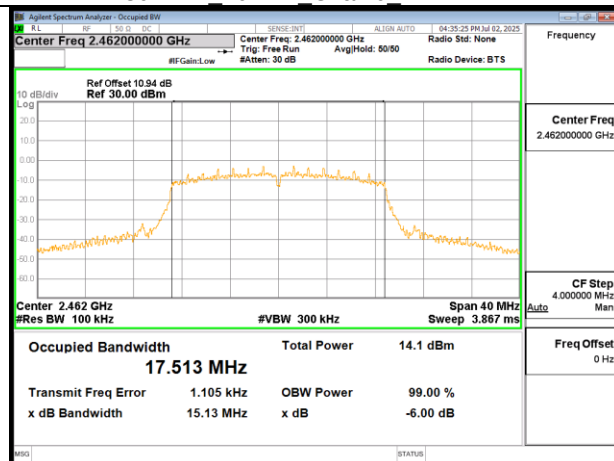
802.11g 20MHz Chain0 2462MHz



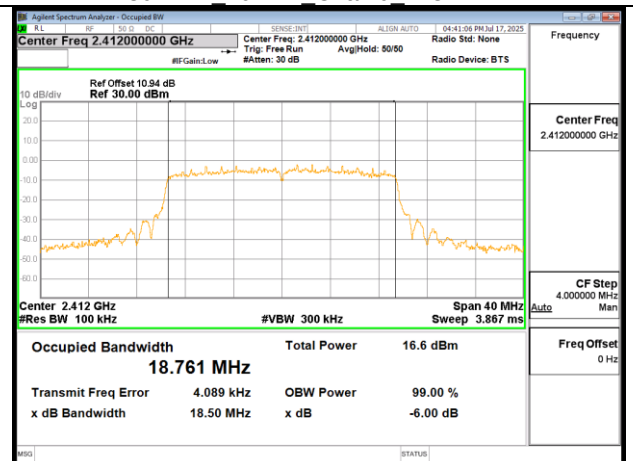
802.11n 20MHz Chain0 2412MHz



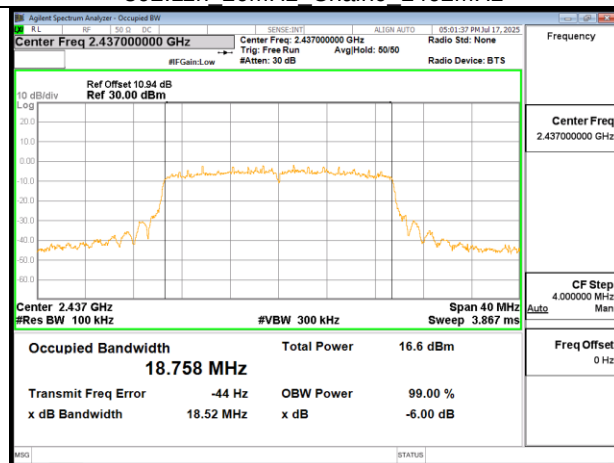
802.11n 20MHz Chain0 2437MHz



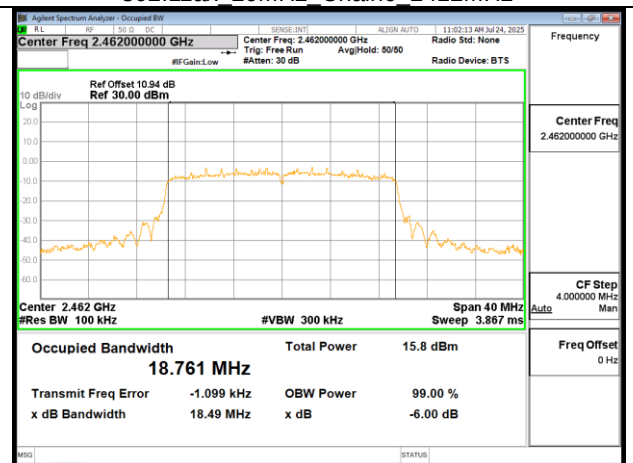
802.11n 20MHz Chain0 2462MHz



802.11ax 20MHz Chain0 2412MHz

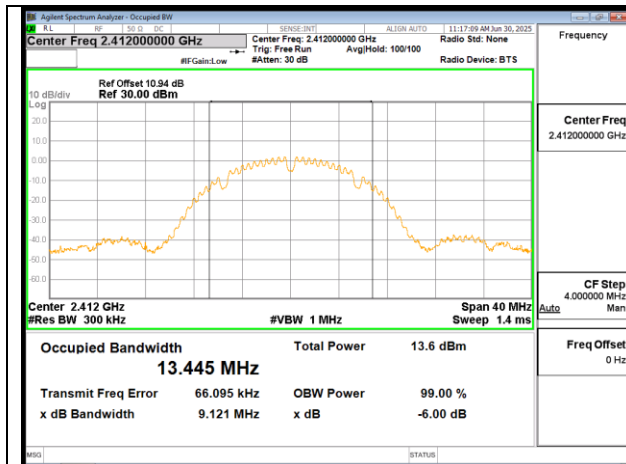


802.11ax 20MHz Chain0 2437MHz

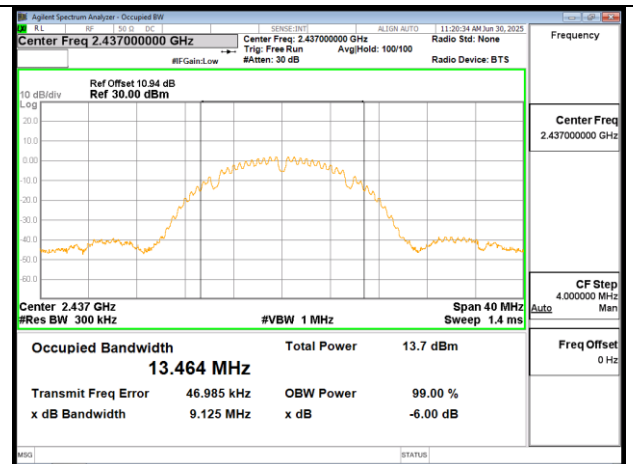


802.11ax 20MHz Chain0 2462MHz

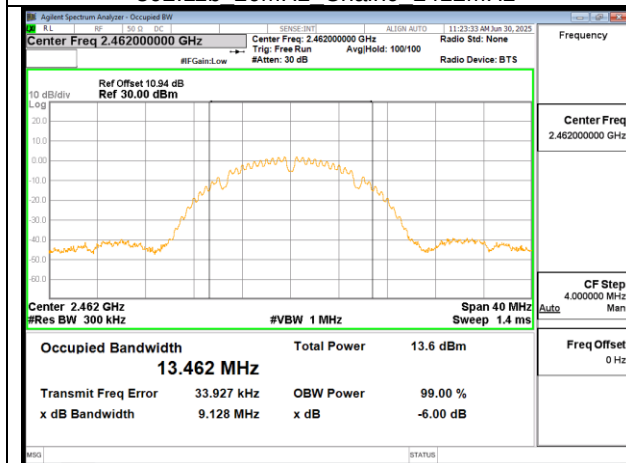
Test Data Occupied Bandwidth(99%)



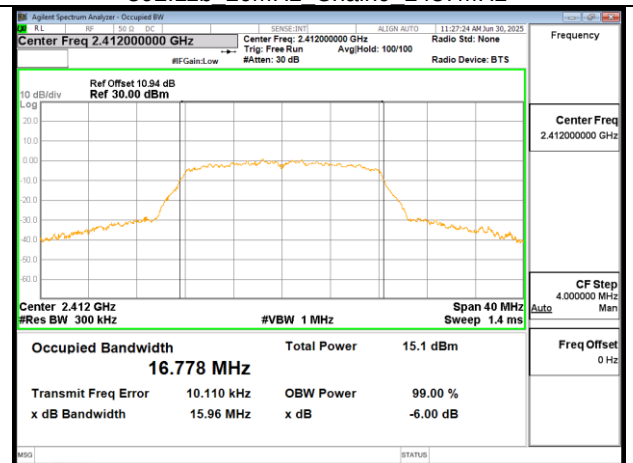
802.11b 20MHz Chain0 2412MHz



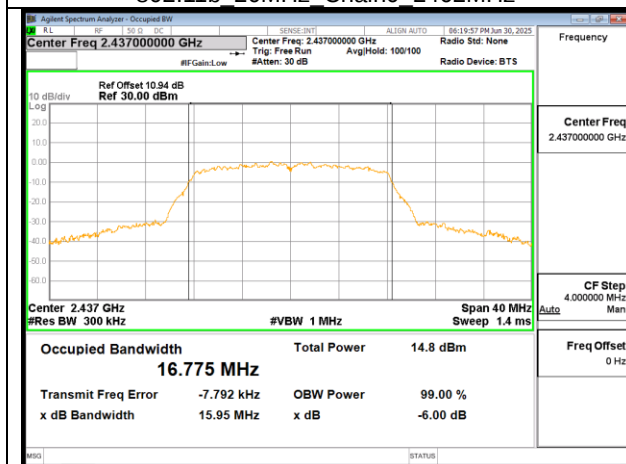
802.11b 20MHz Chain0 2437MHz



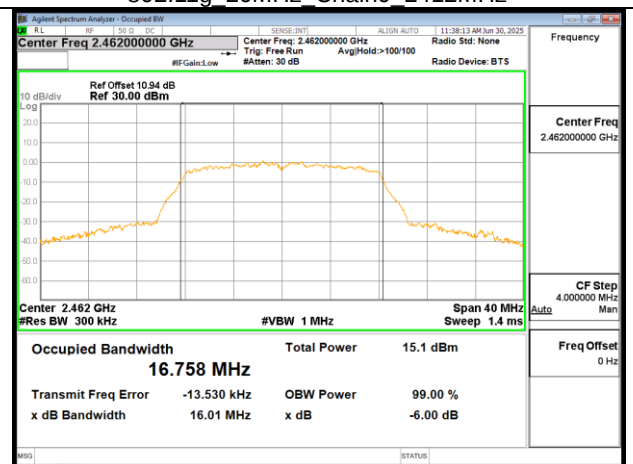
802.11b 20MHz Chain0 2462MHz



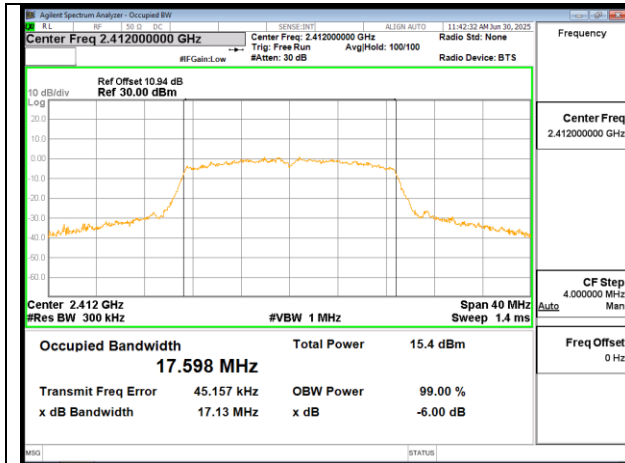
802.11g 20MHz Chain0 2412MHz



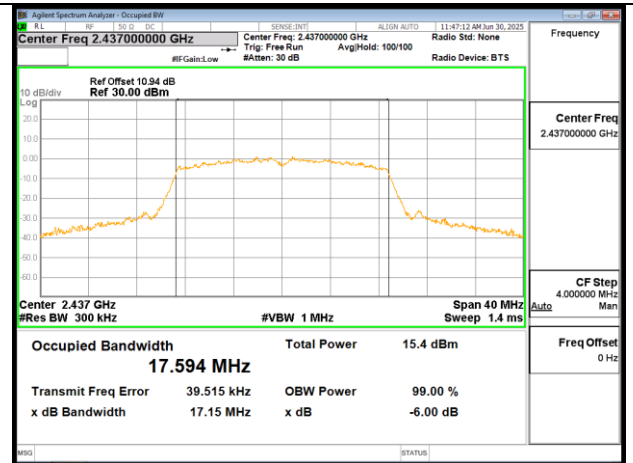
802.11g 20MHz Chain0 2437MHz



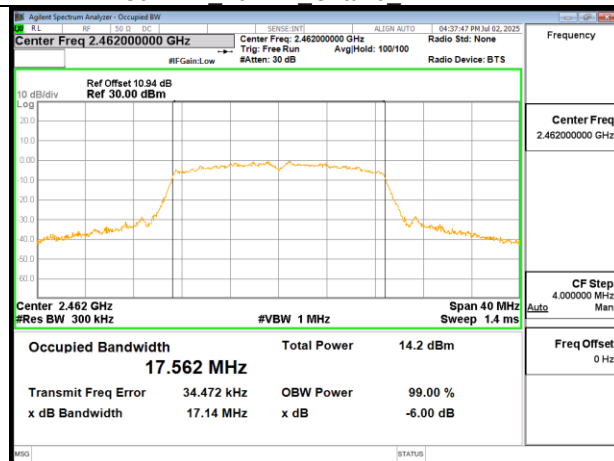
802.11g 20MHz Chain0 2462MHz



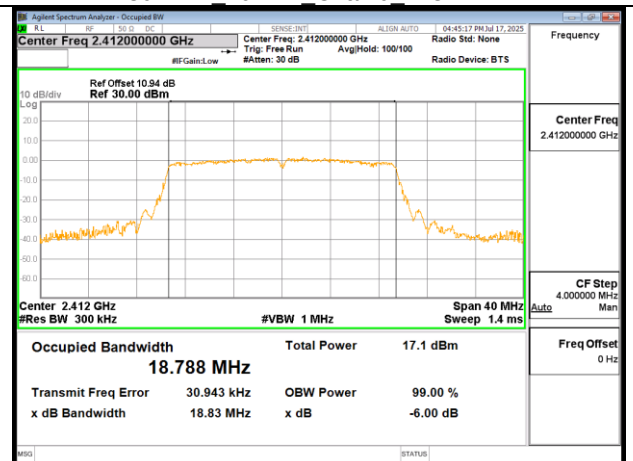
802.11n 20MHz Chain0 2412MHz



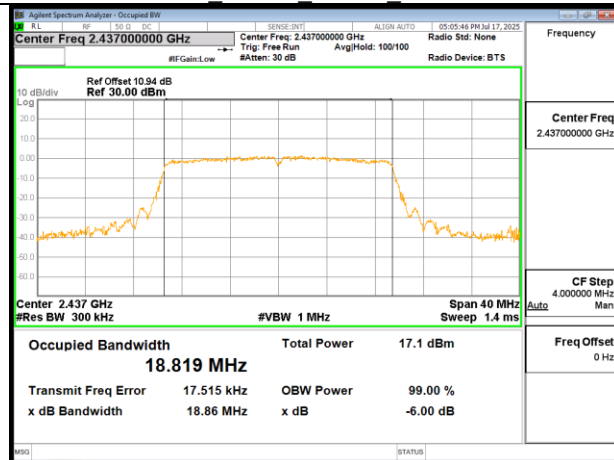
802.11n 20MHz Chain0 2437MHz



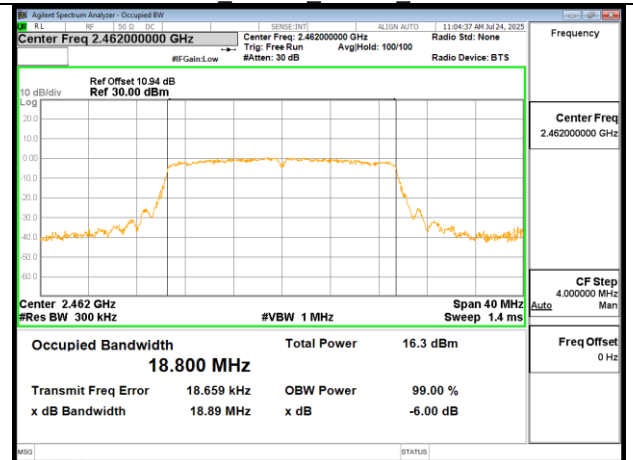
802.11n 20MHz Chain0 2462MHz



802.11ax 20MHz Chain0 2412MHz



802.11ax 20MHz Chain0 2437MHz



802.11ax 20MHz Chain0 2462MHz

4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.247(b),

FCC

Peak output power :

For systems using digital modulation in the 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30 dBm) and the e.i.r.p. shall not exceed 4Watt(36 dBm), base on the use of antennas with directional gain not exceed 6 dBi If transmitting antennas of directional gain greater than 6dBi are used the peak output power the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Limit	☒ Antenna not exceed 6 dBi : 30dBm ☐ Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] ☐ Point-to-point operation :
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Average output power : For reporting purposes only.

4.3.2 Test Procedure

Test method Refer as KDB 558074 D01.

1. The EUT RF output connected to the power meter by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Peak output power and Average output power. in the test report.

4.3.3 Test Setup

Refer to section 1.8.

4.3.4 Test Result

Temperature: 21.8~24.9°C

Test date: June 30~July 24, 2025

Humidity: 49~64% RH

Tested by: David Li

Peak & Average output power :

802.11b Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	10	17.46	12.42	30.00	PASS
6	2437	1	10	17.34	12.39	30.00	PASS
11	2462	1	10	16.98	12.30	30.00	PASS

802.11b Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	10	10.69	10.29	30.00	PASS
6	2437	1	10	10.52	10.22	30.00	PASS
11	2462	1	10	10.44	10.19	30.00	PASS

802.11g Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	10	57.68	17.61	30.00	PASS
6	2437	6	10	55.72	17.46	30.00	PASS
11	2462	6	10	53.58	17.29	30.00	PASS

802.11g Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	10	7.57	8.79	30.00	PASS
6	2437	6	10	7.52	8.76	30.00	PASS
11	2462	6	10	7.37	8.67	30.00	PASS

802.11n_HT_20M Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	10	55.98	17.48	30.00	PASS
6	2437	MCS0	10	54.70	17.38	30.00	PASS
11	2462	MCS0	9	45.92	16.62	30.00	PASS
802.11n_HT_20M Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	10	7.27	8.62	30.00	PASS
6	2437	MCS0	10	7.22	8.59	30.00	PASS
11	2462	MCS0	9	5.98	7.77	30.00	PASS

802.11ax_HE_20M Ch0								
CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	10	106.66	20.28	30.00	PASS
			26/0	4	27.54	14.40	30.00	PASS
			52/37	4	28.25	14.51	30.00	PASS
			106/53	6	42.76	16.31	30.00	PASS
6	2437	MCS0	full	10	108.89	20.37	30.00	PASS
11	2462	MCS0	full	9	86.50	19.37	30.00	PASS
			26/8	2	18.97	12.78	30.00	PASS
			52/40	4	29.04	14.63	30.00	PASS
			106/54	6	43.15	16.35	30.00	PASS
802.11ax_HE_20M Ch0								
CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	full	10	8.12	9.10	30.00	PASS
			26/0	4	1.53	1.84	30.00	PASS
			52/37	4	1.69	2.28	30.00	PASS
			106/53	6	3.24	5.10	30.00	PASS
6	2437	MCS0	full	10	8.20	9.14	30.00	PASS
11	2462	MCS0	full	9	6.62	8.21	30.00	PASS
			26/8	2	1.02	0.11	30.00	PASS
			52/40	4	1.72	2.37	30.00	PASS
			106/54	6	3.26	5.13	30.00	PASS

4.4 POWER SPECTRAL DENSITY

4.4.1 Test Limit

According to §15.247(e),

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.

Limit	☒ Antenna not exceed 6 dBi : 8dBm ☐ Antenna with DG greater than 6 dBi : [Limit = 8 – (DG – 6)] ☐ Point-to-point operation :
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4.4.2 Test Procedure

Test method Refer as KDB 558074 D01

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
4. The path loss were compensated to the results for each measurement by SA.
5. Mark the maximum level.
6. Measure and record the result of power spectral density. in the test report.

4.4.3 Test Setup

Refer to section 1.8.

4.4.4 Test Result

Temperature: 21.8~24.9°C

Test date:

June 30~July 24, 2025

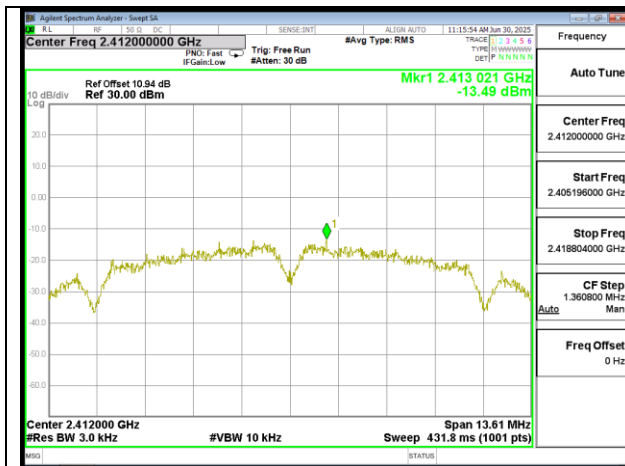
Humidity: 49~64% RH

Tested by:

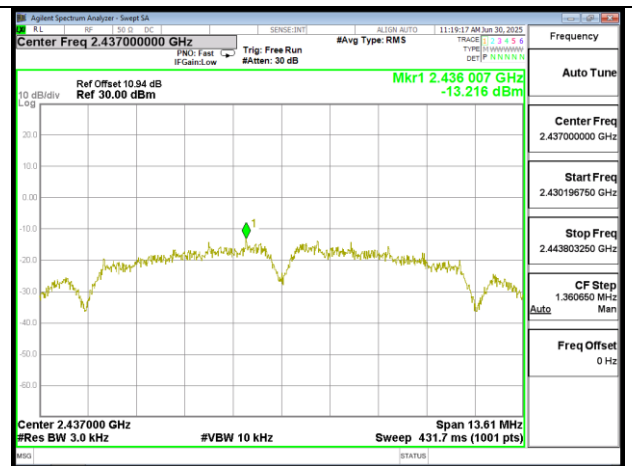
David Li

POWER DENSITY 802.11b					
Freq. (MHz)		Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412		-13.49	-13.49	8.00	PASS
2437		-13.22	-13.22	8.00	PASS
2462		-14.15	-14.15	8.00	PASS
POWER DENSITY 802.11g					
Freq. (MHz)		Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412		-19.62	-19.62	8.00	PASS
2437		-18.33	-18.33	8.00	PASS
2462		-18.72	-18.72	8.00	PASS
POWER DENSITY 802.11n HT20					
Freq. (MHz)		Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412		-17.86	-17.86	8.00	PASS
2437		-17.89	-17.89	8.00	PASS
2462		-18.62	-18.62	8.00	PASS
POWER DENSITY 802.11ax HE20					
Freq. (MHz)	RU Config	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	full	-17.31	-17.31	8.00	PASS
	26/0	-17.44	-17.44	8.00	PASS
	52/37	-19.18	-19.18	8.00	PASS
	106/53	-17.6	-17.60	8.00	PASS
2437	full	-17.29	-17.29	8.00	PASS
2462	full	-17.31	-17.31	8.00	PASS
	26/8	-18.19	-18.19	8.00	PASS
	52/40	-18.37	-18.37	8.00	PASS
	106/54	-17.92	-17.92	8.00	PASS

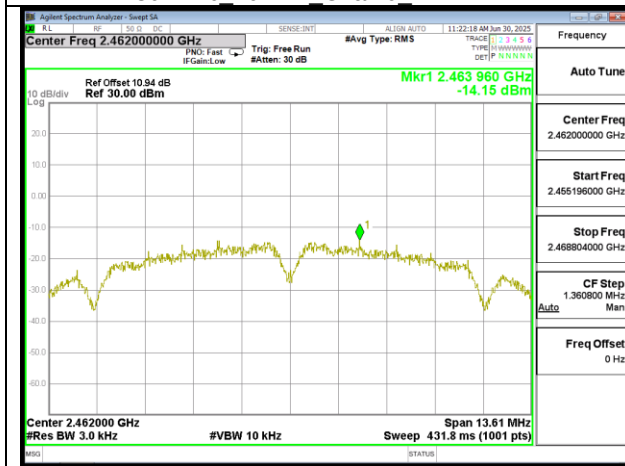
Test Data



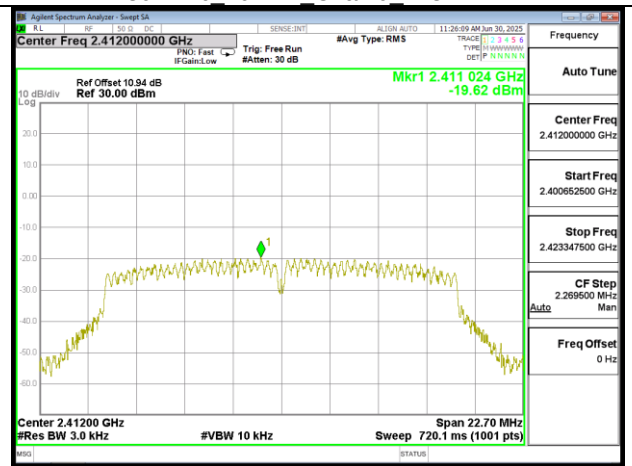
802.11b 20MHz Chain0 2412MHz



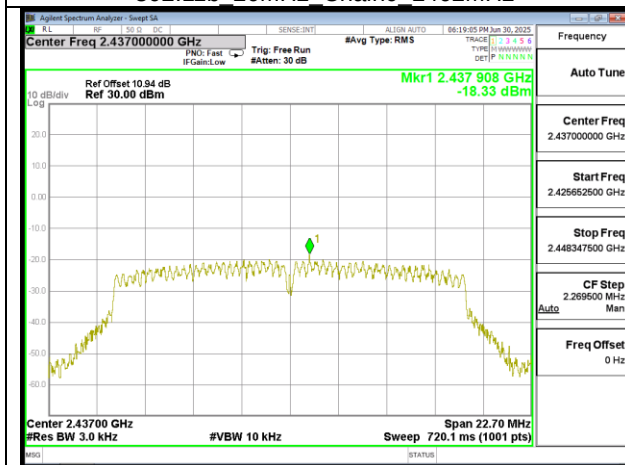
802.11b 20MHz Chain0 2437MHz



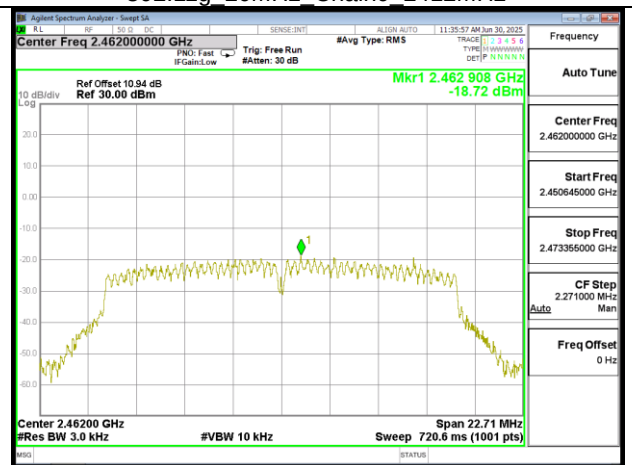
802.11b 20MHz Chain0 2462MHz



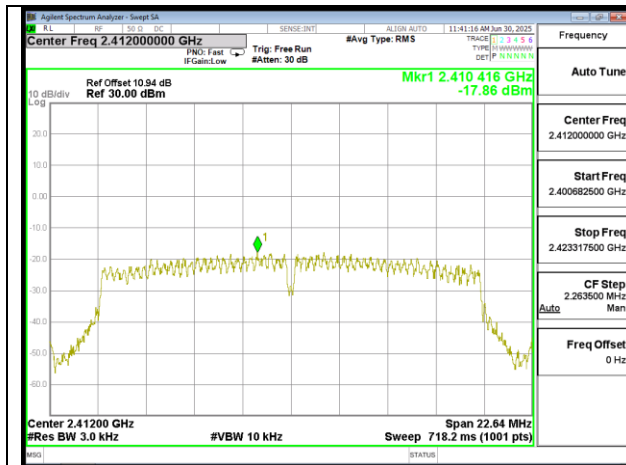
802.11g 20MHz Chain0 2412MHz



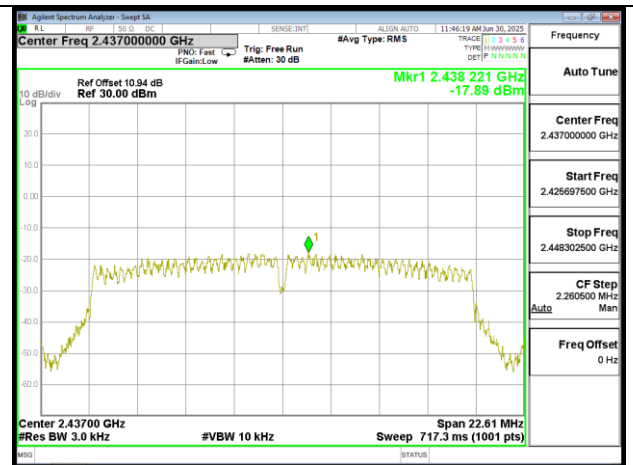
802.11g 20MHz Chain0 2437MHz



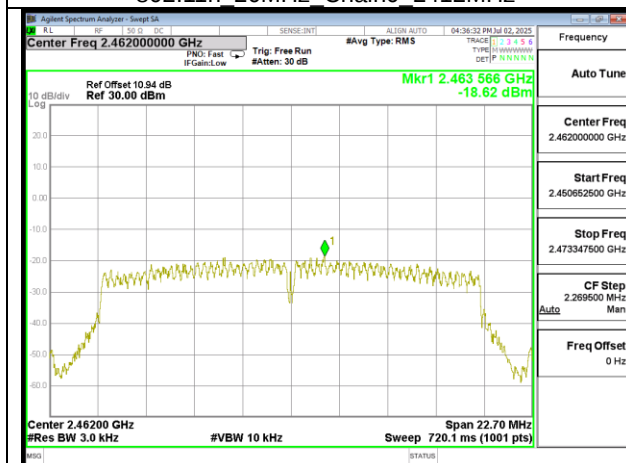
802.11g 20MHz Chain0 2462MHz



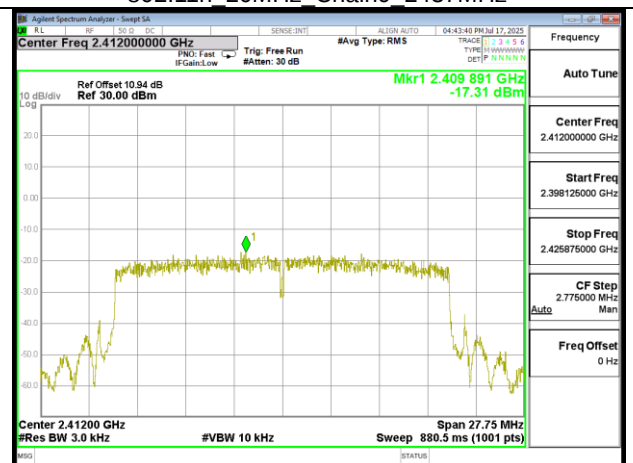
802.11n 20MHz Chain0 2412MHz



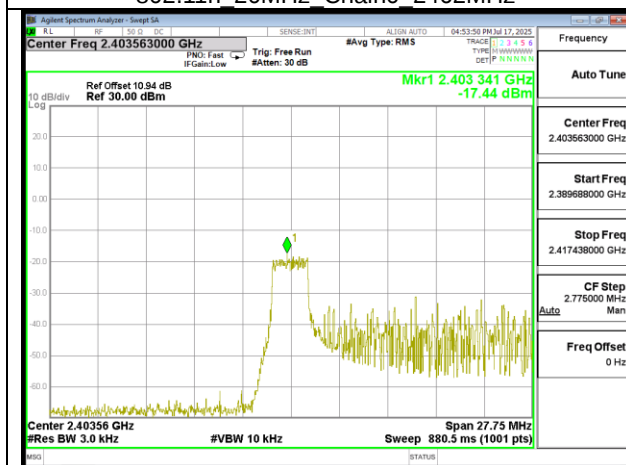
802.11n 20MHz Chain0 2437MHz



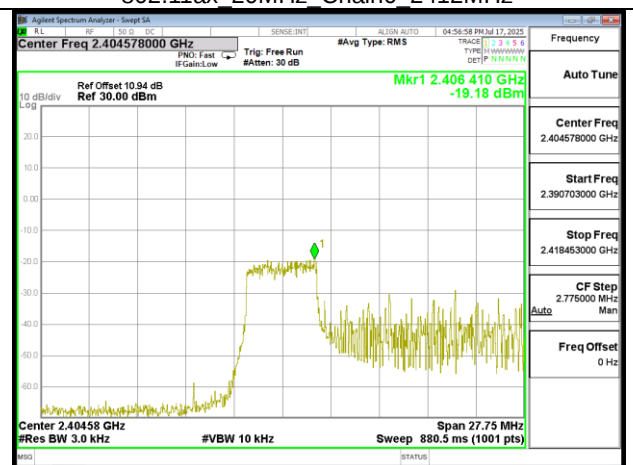
802.11n 20MHz Chain0 2462MHz



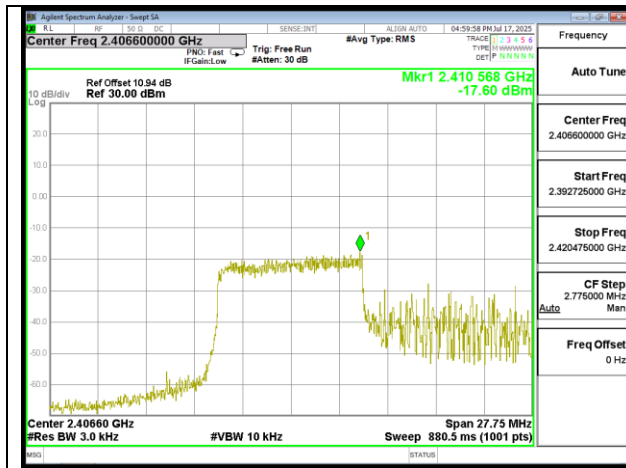
802.11ax 20MHz Chain0 2412MHz



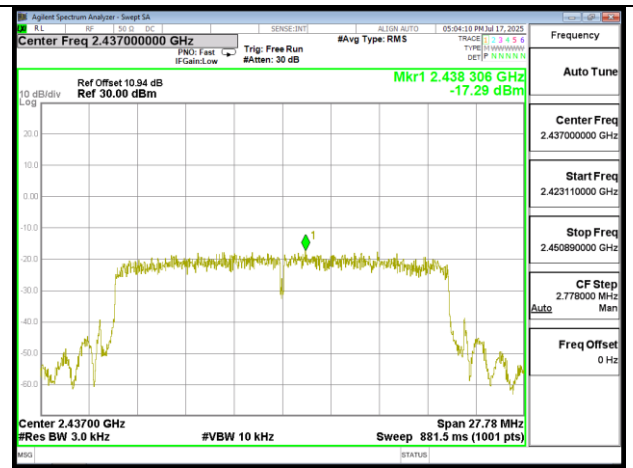
802.11ax 20MHz Chain0 2412MHz RU26 0



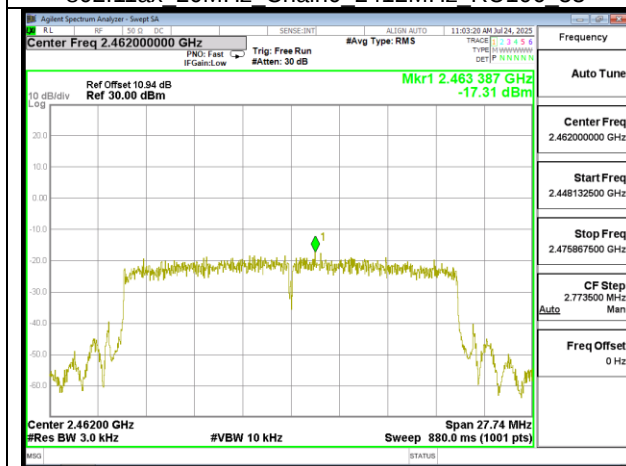
802.11ax 20MHz Chain0 2412MHz RU52 37



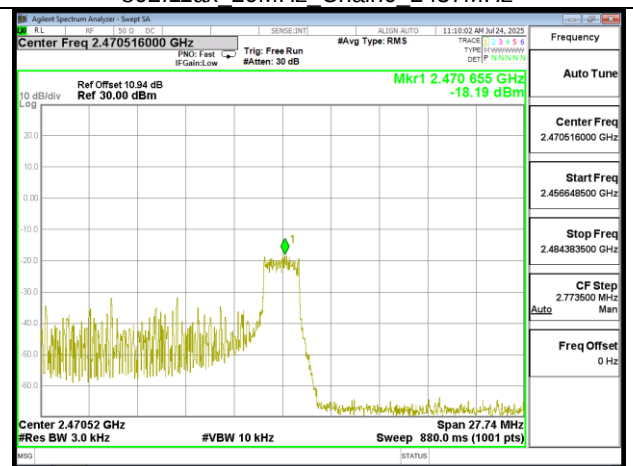
802.11ax 20MHz Chain0 2412MHz RU106 53



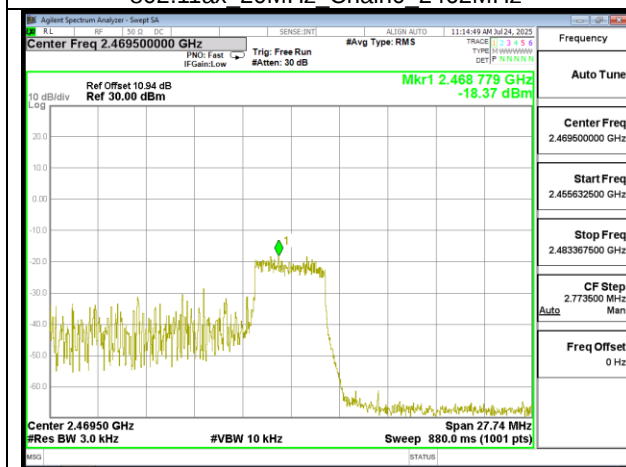
802.11ax 20MHz Chain0 2437MHz



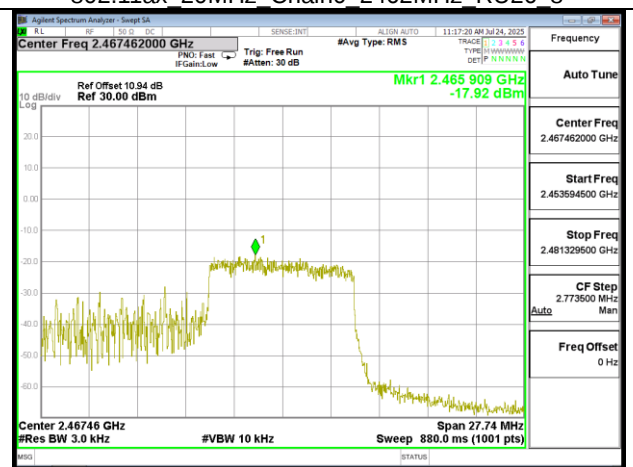
802.11ax 20MHz Chain0 2462MHz



802.11ax 20MHz Chain0 2462MHz RU26 8



802.11ax 20MHz Chain0 2462MHz RU52 40



802.11ax 20MHz Chain0 2462MHz RU106 54