

Project No: TM-250300067P FCC ID: 2AWUU68B2701 Page: 1 / 109
Report No.: TMWK2503001052KR IC: 26271-68B2701 Rev.: 03

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

INDUSTRY CANADA RSS-247

(CLASS II PERMISSIVE CHANGE)

Test Standard	FCC Part 15.247 IC RSS-247 issue 3 and IC RSS-GEN issue 5
Product name	Outdoor Wi-Fi Gateway
Brand Name	Verkada
Model No.	GW31-E-HW
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: 2013 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:



Dally Hong
Sr. Engineer

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	April 11, 2025	Initial Issue	ALL	Peggy Tsai
01	April 18, 2025	See the following Note Rev. (01)	P.6, 15-18, 25-31	Peggy Tsai
02	April 22, 2025	See the following Note Rev. (02)	P.4, 6, 11, 26-33, 99-108	Peggy Tsai
03	April 24, 2025	See the following Note Rev. (03)	P.18, 19, 26-33, 102-104	Peggy Tsai

Note:

Rev. (01)

1. Added Direction gain in section 1.3.
2. Added EUT Duty Cycle in section 3.3.
3. Modify test limit in section 4.1.1.
4. Modify test result in section 4.1.4.

Rev. (02)

1. Modify Date of Test in section 1.1.
2. Modify Notes in section 1.3 and 4.1.4.
3. Modify Measurement Uncertainty and test summary in section 1.4 and 2.
4. Added Power Spectral Density in section 4.3.

Rev. (02)

1. Modify test limit in section 4.1.1.
2. Modify Limit and Notes in section 4.1.4 and 4.3.4.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	FCC: Verkada Inc 405 E. 4th Ave. San Mateo California United States 94401 IC: Verkada, Inc. 405 E. 4th Ave. San Mateo CA 94401 United States Of America (Excluding The States Of Alaska)
Manufacturer	FCC: Verkada Inc 405 E. 4th Ave. San Mateo California United States 94401 IC: Verkada, Inc. 405 E. 4th Ave. San Mateo CA 94401 United States Of America (Excluding The States Of Alaska)
Equipment	Outdoor Wi-Fi Gateway
Model No. / HVIN	GW31-E-HW
Model Discrepancy	N/A
Trade Name	Verkada
Received Date	March 10, 2025
Date of Test	March 14 ~ April 21, 2025
Power Operation	1. Powered from Adapter (APD / DA-80A54) I/P: 100-240Vac, 50-60Hz, 1.5A MAX O/P: 54.0Vdc, 1.48A, 79.92W 2. Powered from PoE (EnGenius / PNA90BGS-54-TG) I/P: 100-240Vac, 1.5A, 50-60Hz O/P: 56Vdc, 1.7A 3. Powered from DC 12V
PMN	GW31-E-HW
EUT Serial #	68B2701-DVT01-ANT-20
HW Version	0.1
FW Version	0.1
Class II Permissive Change	1. Added new antenna. (Verkada / ACC-ANT-20)

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/ac VHT20/ac HE20: 2412MHz ~ 2462MHz 802.11n HT 40/ac VHT40/ac HE40: 2422MHz ~ 2452MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 MHz mode : OFDM 4. IEEE 802.11n HT 40 MHz mode : OFDM 5. IEEE 802.11ac VHT 20 MHz mode : OFDM 6. IEEE 802.11ac VHT 40 MHz mode : OFDM 7. IEEE 802.11ax HE 20 MHz mode : OFDMA 8. IEEE 802.11ax HE 40 MHz mode : OFDMA
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 MHz mode : 11 Channels 4. IEEE 802.11n HT 40 MHz mode : 7 Channels 5. IEEE 802.11ac VHT 20 MHz mode : 11 Channels 6. IEEE 802.11ac VHT 40 MHz mode : 7 Channels 7. IEEE 802.11ax HE 20 MHz mode : 11 Channels 8. IEEE 802.11ax HE 40 MHz mode : 7 Channels

Remark:

Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 and RSS-GEN Table 1 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
<input type="checkbox"/> 1 MHz or less	1	Middle
<input type="checkbox"/> 1 MHz to 10 MHz	2	1 near top and 1 near bottom
<input checked="" type="checkbox"/> More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna-1	Antenna Type	<input type="checkbox"/> PIFA <input type="checkbox"/> PCB <input checked="" type="checkbox"/> Dipole <input type="checkbox"/> Coils
	Antenna Brand / Model	Senao / 7102A1338000
	Antenna Gain	Ant 1: Gain 2.79dBi Ant 2: Gain 2.38dBi Direction gain : 5.60 dBi
	Antenna Connectors	N-Type
Antenna-2	Antenna Type	<input type="checkbox"/> PIFA <input checked="" type="checkbox"/> Directional Antenna
	Antenna Brand / Model	Verkada / ACC-ANT-20
	Antenna Gain	Chain 0: Gain: 11.4 dBi Chain 1: Gain: 11.4 dBi Direction gain : 14.41 dBi
	Antenna Connectors	N-Type

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 and RSS-GEN 6.8.
2. Direction gain = $10 \times \log((10^{(Chain\ 0/20)} + 10^{(Chain\ 1/20)})^2)/2$

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
RF output power (Power Meter + Power sensor)	+/- 0.24 dB
Power Spectral density	+/- 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
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 public 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
Power Meter	Anritsu	ML2496A	2136002	2024-07-19	2025-07-18
DC Blocks	Marvelous Microwave	MVE6411	MVE-001	2024-08-08	2025-08-07
Attenuator	Marvelous Microwave Ine	MVE2213-10	08	2024-11-07	2025-11-06
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	SCHWARZBEC K	FMZB 1513-60	1513-60-028	2024-12-11	2025-12-10
Thermo-Hygro Meter	WISEWIND	1206	D07	2024-11-26	2025-11-25
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2024-07-12	2025-07-11
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+250204	2025-03-03	2026-03-02
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	T04H30001800 070S01	22011402-4	2024-06-12	2025-06-11
Pre-Amplifier	EMCI	EMC184045SE	980860	2024-12-02	2025-12-01
Horn Antenna	SCHWARZBEC K	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:

1. Each piece of equipment is scheduled for calibration once a year.
2. 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					

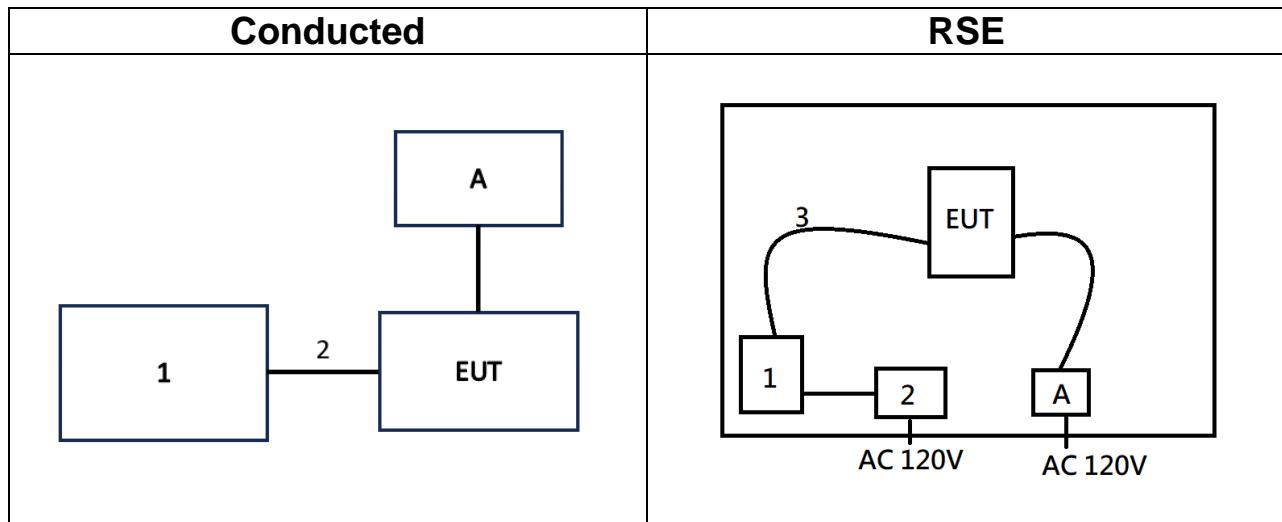
Support Equipment (Conducted)

No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(1822)	Lenovo	L480	N/A	N/A
2	Lan Cable	ATAKE	AC6-FL10	N/A	N/A
A	Adapter	APD	DA-80A54	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
3	RJ45	atake	AC6-FL10	202108270206	N/A
A	Adapter	APD	DA-80A54	S3B01999000025	N/A

1.8 TEST SET UP DIAGRAM



1.9 TEST PROGRAM

The EUT connection corresponds to the surrounding fixture control board. This EUT uses "Tera Term" setup command and Fleming.cxtt software 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 C63.10:2013, FCC Part 2, FCC Part 15.247, KDB 558074, RSS-247 Issue 3 and RSS-GEN Issue 5.

2. TEST SUMMARY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
15.203	RSS-GEN 6.8	1.3	Antenna Requirement	Pass
15.247(b)(3)	RSS-247(5.4)(d)	4.1	Output Power Measurement	Pass
15.247(d) 15.205, 15.209	RSS-GEN 8.9, 8.10	4.2	Radiation Band Edge	Pass
15.247(d) 15.205, 15.209	RSS-GEN 8.9, 8.10	4.2	Radiation Spurious Emission	Pass
15.247(e)	RSS-247(5.2)(b)	4.3	Power Spectral Density	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 802.11n HT40 mode :MCS0 IEEE 802.11ac VHT20 mode :MCS0 IEEE 802.11ac VHT40 mode :MCS0 IEEE 802.11ax HE20 mode :MCS0 IEEE 802.11ax HE40 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 802.11n HT40 mode : 1. Lowest Channel : 2422MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2452MHz IEEE 802.11ac VHT20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11ac VHT40 mode : 1. Lowest Channel : 2422MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2452MHz IEEE 802.11ax HE20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11ax HE40 mode : 1. Lowest Channel : 2422MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2452MHz

Operation Transmitter

IEEE 802.11b mode :1T1R
IEEE 802.11g mode :1T1R
IEEE 802.11n HT20 mode : 2T2R
IEEE 802.11n HT40 mode : 2T2R
IEEE 802.11ac VHT20 mode : 2T2R
IEEE 802.11ac VHT40 mode : 2T2R
IEEE 802.11ax HE20 mode : 2T2R
IEEE 802.11ax HE40 mode : 2T2R

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. Based on FCC Part 15.31(m) and RSS-Gen 6.9, the laboratory conducts a comprehensive evaluation of ch low, ch middle, and ch high. Other additional channels only evaluate the radiated restricted bands of operation and powers.

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 Adapter
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4
Worst Position	<input type="checkbox"/> Placed in fixed position. <input type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input checked="" type="checkbox"/> 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 Adapter
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

Remark:

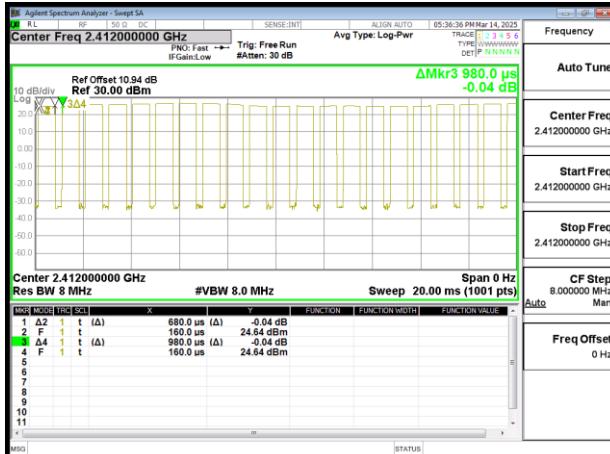
1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Z-Plane) were recorded in this report

3.3 EUT DUTY CYCLE

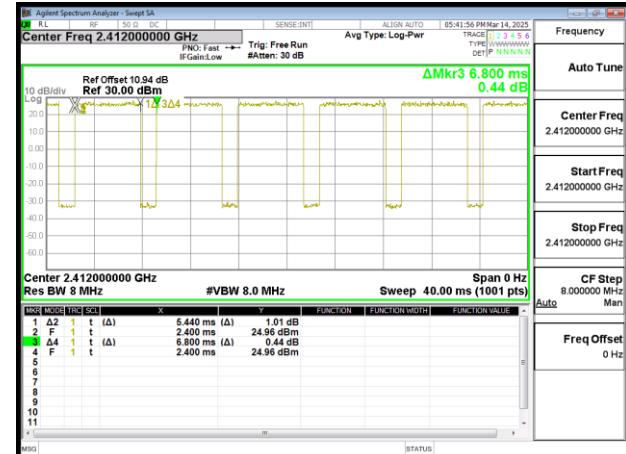
Temperature: 19.2 ~ 25.2°C **Test date:** March 14 ~ April 21, 2025
Humidity: 50 ~ 64% RH **Tested by:** David Li

Mode		Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b		69.39	1.59	1.47	2.00
802.11g		96.59	0.15	0.51	1.00
802.11n_20		80.00	0.97	0.18	1.00
802.11n_40		80.47	0.94	0.18	1.00
802.11ac_20		80.44	0.95	0.18	1.00
802.11ac_40		80.47	0.94	0.18	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	80.00	0.97	0.18	1.00
802.11ax_40	Full	80.47	0.94	0.18	1.00

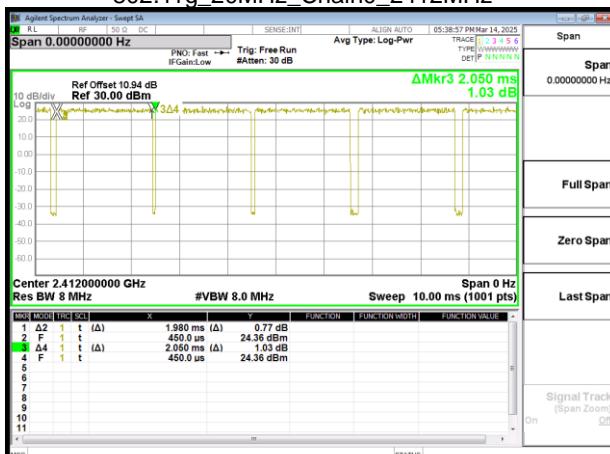
802.11b_20MHz_Chain0_2412MHz



802.11n_20MHz_Chain0_2412MHz



802.11g_20MHz_Chain0_2412MHz



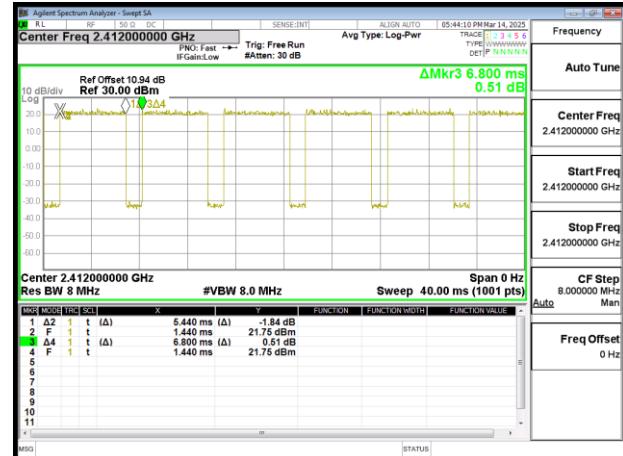
802.11n_40MHz_Chain0_2422MHz



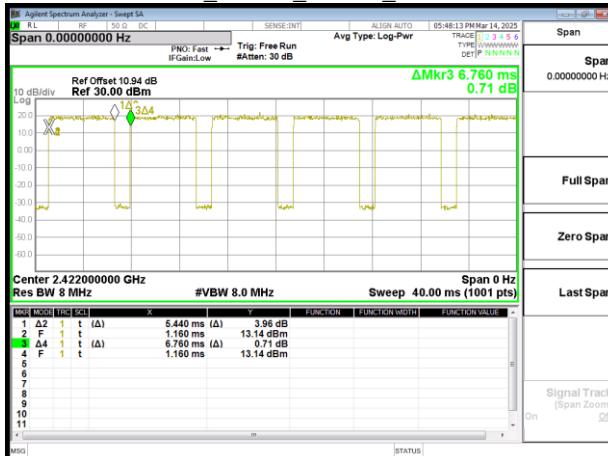
802.11ac_20MHz_Chain0_2412MHz



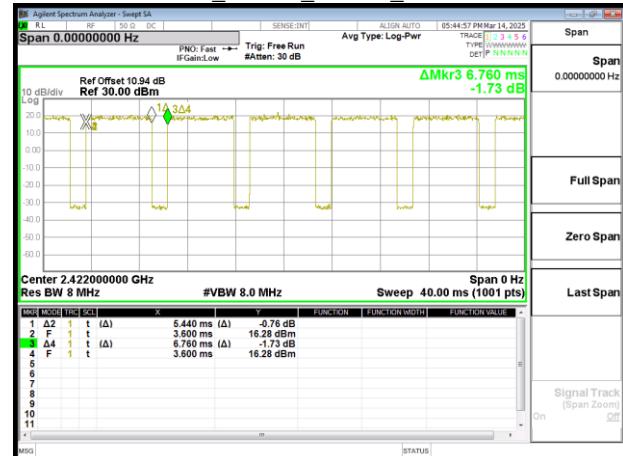
802.11ax_20MHz_Chain0_2412MHz



802.11ac_40MHz_Chain0_2422MHz



802.11ax_40MHz_Chain0_2422MHz



4. TEST RESULT

4.1 OUTPUT POWER MEASUREMENT

4.1.1 Test Limit

According to §15.247(b) and RSS-247 section 5.4(d),

Peak output power

FCC

For systems using digital modulation in the 2400-2483.5 MHz bands: 1 Watt(30 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 1 dB that the directional gain of the antenna exceeds 6 dBi.

IC

For systems using digital modulation in the 2400-2483.5 MHz bands: 1 Watt(30 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.

FCC Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :
IC Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :

IC EIRP

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :
-------	---

Average output power : For reporting purposes only.

4.1.2 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.

4.1.3 Test Setup

Refer to section 1.8.

4.1.4 Test Result

Temperature: 19.2 ~ 25.2°C **Test date:** March 14 ~ April 21, 2025
Humidity: 50 ~ 64% RH **Tested by:** David Li

FCC :

802.11b Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	159.96	22.04	24.60	PASS
6	2437	1	20	155.60	21.92	24.60	PASS
11	2462	1	20	157.40	21.97	24.60	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	20	91.98	19.64	24.60	PASS
6	2437	1	20	85.65	19.33	24.60	PASS
11	2462	1	20	86.24	19.36	24.60	PASS

802.11b Ch1							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	164.82	22.17	24.60	PASS
6	2437	1	20	159.51	22.03	24.60	PASS
11	2462	1	20	170.22	22.31	24.60	PASS

802.11b Ch1							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	94.12	19.74	24.60	PASS
6	2437	1	20	96.32	19.84	24.60	PASS
11	2462	1	20	96.54	19.85	24.60	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=24.6

802.11g Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	62.52	17.96	24.60	PASS
6	2437	6	13	65.01	18.13	24.60	PASS
11	2462	6	13	63.83	18.05	24.60	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	13	16.87	12.27	24.60	PASS
6	2437	6	13	17.46	12.42	24.60	PASS
11	2462	6	13	16.99	12.30	24.60	PASS

802.11g Ch1

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	64.12	18.07	24.60	PASS
6	2437	6	13	65.16	18.14	24.60	PASS
11	2462	6	13	65.31	18.15	24.60	PASS

802.11g Ch1

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	17.26	12.37	24.60	PASS
6	2437	6	13	17.62	12.46	24.60	PASS
11	2462	6	13	17.70	12.48	24.60	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=24.6

802.11n_HT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	16.08	16.27	82.92	19.19	24.60	PASS
6	2437	MCS0	12	16.05	16.19	81.86	19.13	24.60	PASS
11	2462	MCS0	12	16.15	16.26	83.48	19.22	24.60	PASS

802.11n_HT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	11.05	11.14	25.73	14.10	24.60	PASS
6	2437	MCS0	12	10.96	11.11	25.38	14.05	24.60	PASS
11	2462	MCS0	12	11.02	11.19	25.79	14.12	24.60	PASS

802.11n_HT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	14.56	14.70	58.09	17.64	24.60	PASS
6	2437	MCS0	10	14.51	14.75	58.10	17.64	24.60	PASS
9	2452	MCS0	10	14.53	14.84	58.86	17.70	24.60	PASS

802.11n_HT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	9.42	9.84	18.40	12.65	24.60	PASS
6	2437	MCS0	10	9.68	9.88	19.03	12.80	24.60	PASS
9	2452	MCS0	10	9.71	9.78	18.88	12.76	24.60	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=24.6

802.11ac_VHT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	16.05	16.14	81.39	19.11	24.60	PASS
6	2437	MCS0	12	16.02	16.18	81.49	19.11	24.60	PASS
11	2462	MCS0	12	16.05	16.22	82.15	19.15	24.60	PASS

802.11ac_VHT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	10.90	10.98	24.81	13.95	24.60	PASS
6	2437	MCS0	12	10.87	10.99	24.75	13.94	24.60	PASS
11	2462	MCS0	12	10.95	11.13	25.39	14.05	24.60	PASS

802.11ac_VHT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	14.37	14.67	56.66	17.53	24.60	PASS
6	2437	MCS0	10	14.50	14.74	57.97	17.63	24.60	PASS
9	2452	MCS0	10	14.47	14.71	57.57	17.60	24.60	PASS

802.11ac_VHT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	9.08	9.76	17.57	12.45	24.60	PASS
6	2437	MCS0	10	9.66	9.85	18.92	12.77	24.60	PASS
9	2452	MCS0	10	9.68	9.50	18.22	12.60	24.60	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=24.6

802.11ax_HE20M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
1	2412	MCS0	full	12	16.73	16.78	94.74	19.77	24.60	PASS
6	2437	MCS0	full	12	16.71	16.93	96.20	19.83	24.60	PASS
11	2462	MCS0	full	12	16.82	17.02	98.43	19.93	24.60	PASS

802.11ax_HE20M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
1	2412	MCS0	full	12	10.85	10.92	24.52	13.89	24.60	PASS
6	2437	MCS0	full	12	10.78	10.93	24.35	13.87	24.60	PASS
11	2462	MCS0	full	12	10.83	11.03	24.78	13.94	24.60	PASS

802.11ax_HE40M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
3	2422	MCS0	full	10	15.05	15.38	66.50	18.23	24.60	PASS
6	2437	MCS0	full	10	14.87	15.33	64.81	18.12	24.60	PASS
9	2452	MCS0	full	10	15.06	15.30	65.95	18.19	24.60	PASS

802.11ax_HE40M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
3	2422	MCS0	full	10	9.28	9.41	17.22	12.36	24.60	PASS
6	2437	MCS0	full	10	9.23	9.48	17.26	12.37	24.60	PASS
9	2452	MCS0	full	10	9.29	9.57	17.56	12.45	24.60	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=24.6

IC:

802.11b Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	159.96	22.04	29	PASS
6	2437	1	20	155.60	21.92	29	PASS
11	2462	1	20	157.40	21.97	29	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	20	91.98	19.64	29	PASS
6	2437	1	20	85.65	19.33	29	PASS
11	2462	1	20	86.24	19.36	29	PASS

802.11b Ch1							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	164.82	22.17	29	PASS
6	2437	1	20	159.51	22.03	29	PASS
11	2462	1	20	170.22	22.31	29	PASS

802.11b Ch1							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	20	94.12	19.74	29	PASS
6	2437	1	20	96.32	19.84	29	PASS
11	2462	1	20	96.54	19.85	29	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offset to the power meter for Avg. power and cable loss has been offset for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
4. The antenna gain is greater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6=29

802.11g Ch0

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	62.52	17.96	29	PASS
6	2437	6	13	65.01	18.13	29	PASS
11	2462	6	13	63.83	18.05	29	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	13	16.87	12.27	29	PASS
6	2437	6	13	17.46	12.42	29	PASS
11	2462	6	13	16.99	12.30	29	PASS

802.11g Ch1

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	64.12	18.07	29	PASS
6	2437	6	13	65.16	18.14	29	PASS
11	2462	6	13	65.31	18.15	29	PASS

802.11g Ch1

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	13	17.26	12.37	29	PASS
6	2437	6	13	17.62	12.46	29	PASS
11	2462	6	13	17.70	12.48	29	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offset to the power meter for Avg. power and cable loss has been offset for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
4. The antenna gain is greater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=29

802.11n_HT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	16.08	16.27	82.92	19.19	29	PASS
6	2437	MCS0	12	16.05	16.19	81.86	19.13	29	PASS
11	2462	MCS0	12	16.15	16.26	83.48	19.22	29	PASS

802.11n_HT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	11.05	11.14	25.73	14.10	29	PASS
6	2437	MCS0	12	10.96	11.11	25.38	14.05	29	PASS
11	2462	MCS0	12	11.02	11.19	25.79	14.12	29	PASS

802.11n_HT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	14.56	14.70	58.09	17.64	29	PASS
6	2437	MCS0	10	14.51	14.75	58.10	17.64	29	PASS
9	2452	MCS0	10	14.53	14.84	58.86	17.70	29	PASS

802.11n_HT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	9.42	9.84	18.40	12.65	29	PASS
6	2437	MCS0	10	9.68	9.88	19.03	12.80	29	PASS
9	2452	MCS0	10	9.71	9.78	18.88	12.76	29	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
4. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=29

802.11ac_VHT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	16.05	16.14	81.39	19.11	29	PASS
6	2437	MCS0	12	16.02	16.18	81.49	19.11	29	PASS
11	2462	MCS0	12	16.05	16.22	82.15	19.15	29	PASS

802.11ac_VHT20M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
1	2412	MCS0	12	10.90	10.98	24.81	13.95	29	PASS
6	2437	MCS0	12	10.87	10.99	24.75	13.94	29	PASS
11	2462	MCS0	12	10.95	11.13	25.39	14.05	29	PASS

802.11ac_VHT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	14.37	14.67	56.66	17.53	29	PASS
6	2437	MCS0	10	14.50	14.74	57.97	17.63	29	PASS
9	2452	MCS0	10	14.47	14.71	57.57	17.60	29	PASS

802.11ac_VHT40M_2TX

CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1				
3	2422	MCS0	10	9.08	9.76	17.57	12.45	29	PASS
6	2437	MCS0	10	9.66	9.85	18.92	12.77	29	PASS
9	2452	MCS0	10	9.68	9.50	18.22	12.60	29	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
4. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=29

802.11ax_HE20M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
1	2412	MCS0	full	12	16.73	16.78	94.74	19.77	29	PASS
6	2437	MCS0	full	12	16.71	16.93	96.20	19.83	29	PASS
11	2462	MCS0	full	12	16.82	17.02	98.43	19.93	29	PASS

802.11ax_HE20M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
1	2412	MCS0	full	12	10.85	10.92	24.52	13.89	29	PASS
6	2437	MCS0	full	12	10.78	10.93	24.35	13.87	29	PASS
11	2462	MCS0	full	12	10.83	11.03	24.78	13.94	29	PASS

802.11ax_HE40M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Peak Output Power (dBm)		Total Peak Output Power (mW)	Total Peak Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
3	2422	MCS0	full	10	15.05	15.38	66.50	18.23	29	PASS
6	2437	MCS0	full	10	14.87	15.33	64.81	18.12	29	PASS
9	2452	MCS0	full	10	15.06	15.30	65.95	18.19	29	PASS

802.11ax_HE40M_2TX

CH	Freq. (MHz)	Data Rate	RU Config	Power Setting	Avg. Output Power (dBm)		Total Avg. Output Power (mW)	Total Avg. Output Power (dBm)	Limit (dBm)	RESULT
					Ch0	Ch1				
3	2422	MCS0	full	10	9.28	9.41	17.22	12.36	29	PASS
6	2437	MCS0	full	10	9.23	9.48	17.26	12.37	29	PASS
9	2452	MCS0	full	10	9.29	9.57	17.56	12.45	29	PASS

Note:

1. Measured by power meter, cable loss + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.
2. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
3. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
4. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 30-(antenna gain-6)=29

EIRP:

802.11b Ch0							
CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
1	2412	1	19.64	11.40	31.04	35	PASS
6	2437	1	19.33	11.40	30.73	35	PASS
11	2462	1	19.36	11.40	30.76	35	PASS

802.11b Ch1							
CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
1	2412	1	19.74	11.40	31.14	35	PASS
6	2437	1	19.84	11.40	31.24	35	PASS
11	2462	1	19.85	11.40	31.25	35	PASS

802.11g Ch0							
CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
1	2412	6	12.27	11.40	23.67	35	PASS
6	2437	6	12.42	11.40	23.82	35	PASS
11	2462	6	12.30	11.40	23.70	35	PASS

802.11g Ch1							
CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
1	2412	6	12.37	11.40	23.77	35	PASS
6	2437	6	12.46	11.40	23.86	35	PASS
11	2462	6	12.48	11.40	23.88	35	PASS

Note:

1. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is greater than 6 dB, therefore the power limit attenuation has been applied in the test results. 36-(antenna gain-6)=35

802.11n_HT20M_2TX

CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
			Ch0	Ch1					
1	2412	MCS0	11.05	11.14	14.10	11.40	25.50	35	PASS
6	2437	MCS0	10.96	11.11	14.05	11.40	25.45	35	PASS
11	2462	MCS0	11.02	11.19	14.12	11.40	25.52	35	PASS

802.11n_HT40M_2TX

CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
			Ch0	Ch1					
3	2422	MCS0	9.42	9.84	12.65	11.40	24.05	35	PASS
6	2437	MCS0	9.68	9.88	12.80	11.40	24.20	35	PASS
9	2452	MCS0	9.71	9.78	12.76	11.40	24.16	35	PASS

802.11ac_VHT20M_2TX

CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
			Ch0	Ch1					
1	2412	MCS0	10.90	10.98	13.95	11.40	25.35	35	PASS
6	2437	MCS0	10.87	10.99	13.94	11.40	25.34	35	PASS
11	2462	MCS0	10.95	11.13	14.05	11.40	25.45	35	PASS

802.11ac_VHT40M_2TX

CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
			Ch0	Ch1					
3	2422	MCS0	9.08	9.76	12.45	11.40	23.85	35	PASS
6	2437	MCS0	9.66	9.85	12.77	11.40	24.17	35	PASS
9	2452	MCS0	9.68	9.50	12.60	11.40	24.00	35	PASS

Note:

1. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 36-(antenna gain-6)=35

802.11ax_HE20M_2TX										
CH	Freq. (MHz)	Data Rate	RU Config	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT
				Ch0	Ch1					
1	2412	MCS0	full	10.85	10.92	13.89	11.40	25.29	35	PASS
6	2437	MCS0	full	10.78	10.93	13.87	11.40	25.27	35	PASS
11	2462	MCS0	full	10.83	11.03	13.94	11.40	25.34	35	PASS

802.11ax_HE40M_2TX										
CH	Freq. (MHz)	Data Rate	RU Config	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT
				Ch0	Ch1					
3	2422	MCS0	full	9.28	9.41	12.36	11.40	23.76	35	PASS
6	2437	MCS0	full	9.23	9.48	12.37	11.40	23.77	35	PASS
9	2452	MCS0	full	9.29	9.57	12.45	11.40	23.85	35	PASS

Note:

1. In accordance with KDB 662911 and ANSI C63.10, for power measurements on IEEE 802.11 devices, an array gain of 0 dB (i.e., no array gain) shall be assumed when the number of antennas (NANT) is less than or equal to 4.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 36-(antenna gain-6)=35

4.2 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.2.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Above 30 MHz

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz (Note)

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Note: Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

Frequency	Magnetic field strength (H-Field) (μ A/m)	Measurement Distance (m)
9-490 kHz <small>Note</small>	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

4.2.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.
3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.
4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz).

Radiated emission below 30MHz is measured in a 9m*6m*6m semi-ane choic chamber, the measurements correspond to those obtained at an open-field test site. There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

5. The SA setting following :

(1) Below 30MHz :

- (1.1) 9KHz-490KHz : RBW=200Hz / VBW=1kHz / Sweep=AUTO
- (1.2) 490KHz-30MHz : RBW=10kHz / VBW=30kHz / Sweep=AUTO

(2) 30MHz to 1GHz : RBW = 100kHz, VBW \geq 3*RBW, Sweep = Auto,

Detector = Peak, Trace = Max hold.

(3) Above 1GHz :

- (3.1) For Peak measurement : RBW = 1MHz, VBW \geq 3 RBW, Sweep = Auto,
Detector = Peak, Trace = Max hold.
- (3.2) For Average measurement : RBW = 1MHz, VBW
· If Duty Cycle \geq 98%, VBW=10Hz.
· If Duty Cycle < 98%, VBW=1/T.

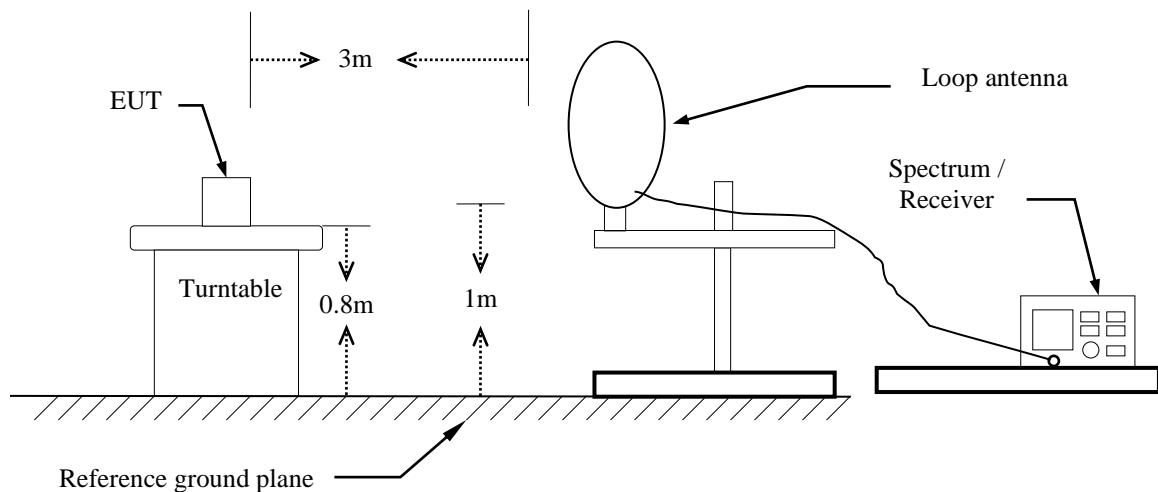
6. Data result :

Actual FS=Spectrum Reading Level + Factor

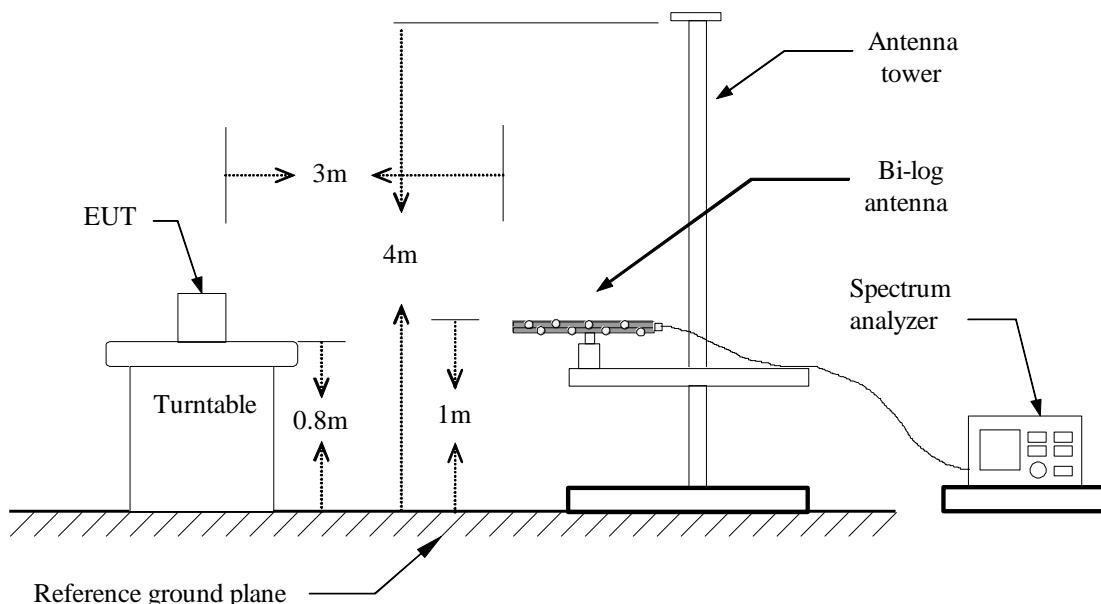
Margin=Actual FS- Limit

4.2.3 Test Setup

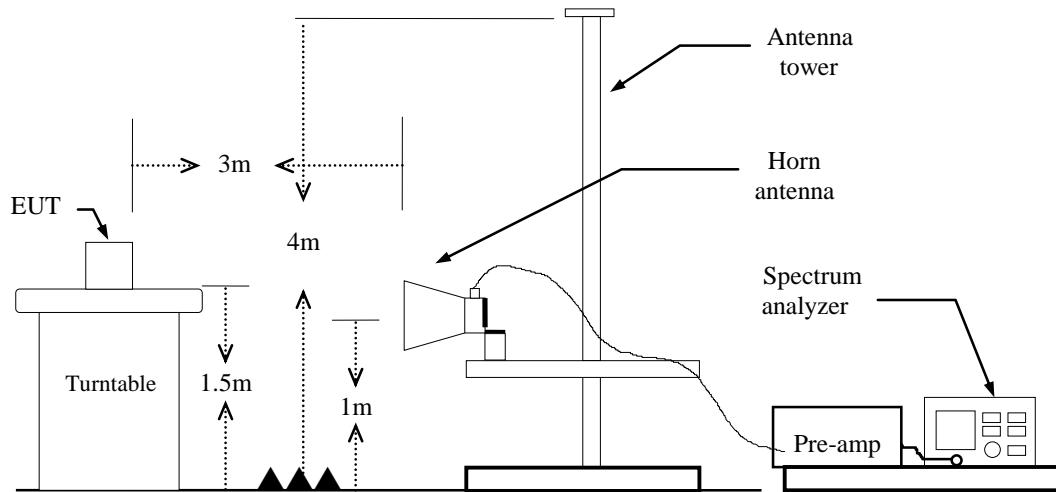
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

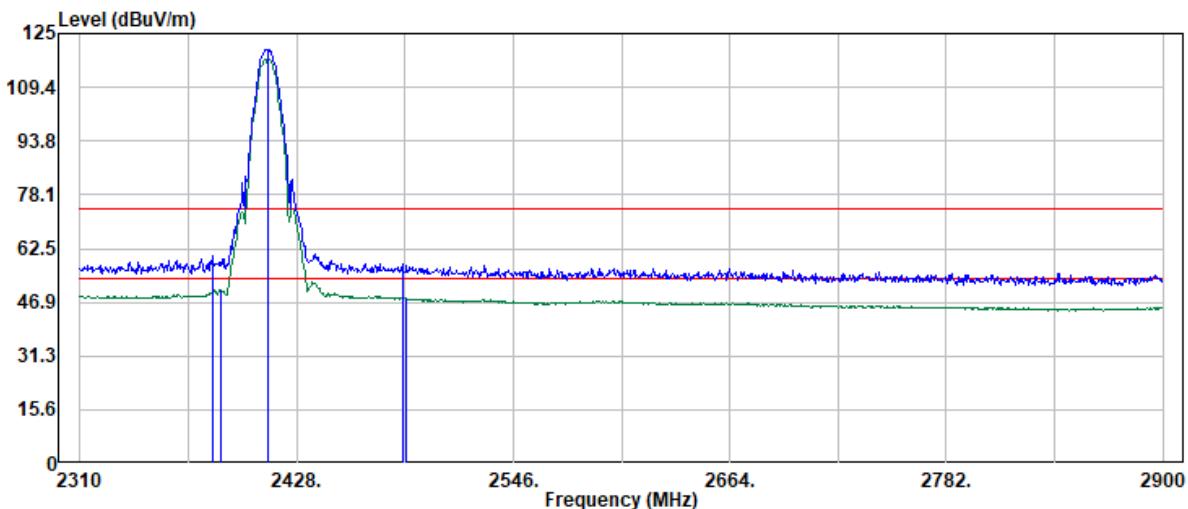


4.2.4 Test Result

Band Edge Test Data

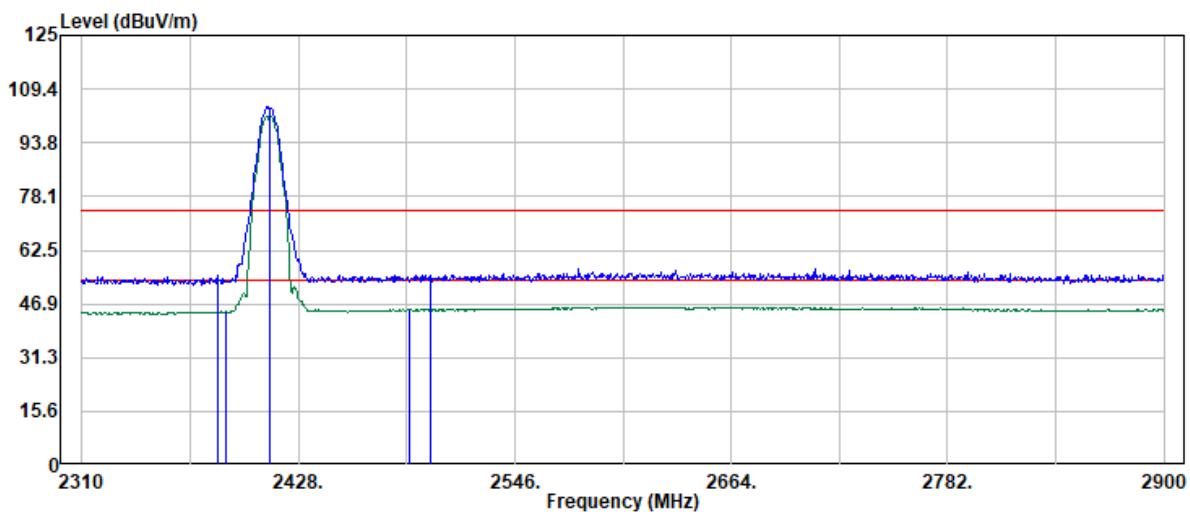
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Operation Band : 802.11b_CH1
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 20

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : Vertical
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 20

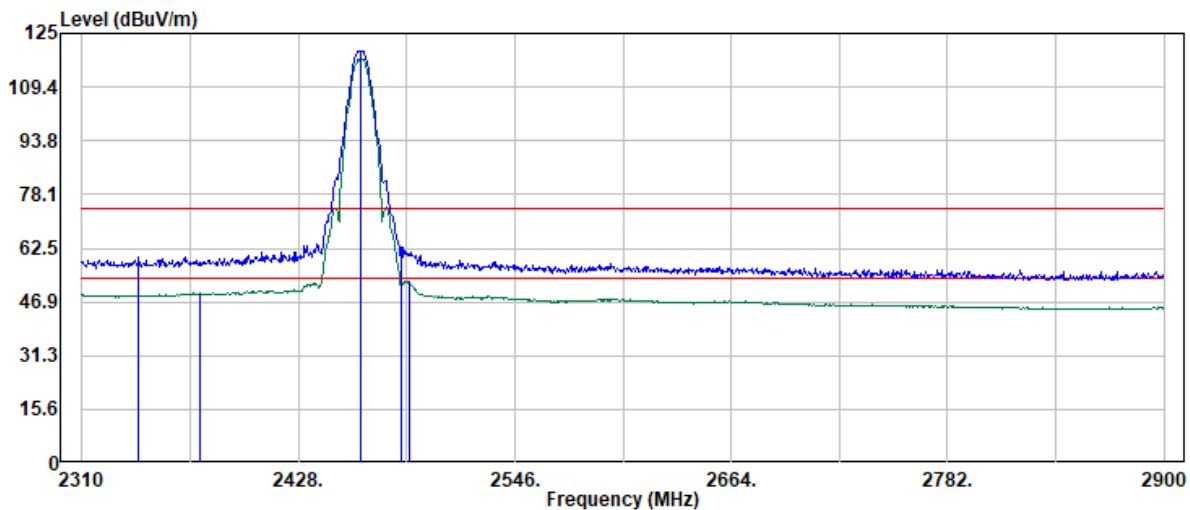
Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Trace: 1						
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2383.94	48.85	6.18	55.03	74.00	-18.97	Peak
2388.43	38.44	6.20	44.64	54.00	-9.36	Average
2412.00	97.78	6.30	104.08	--	--	Peak
2412.00	95.33	6.30	101.63	--	--	Average
2488.85	38.65	6.69	45.34	54.00	-8.66	Average
2499.84	48.64	6.69	55.33	74.00	-18.67	Peak

Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 20

Test Date : 2025-03-17
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A

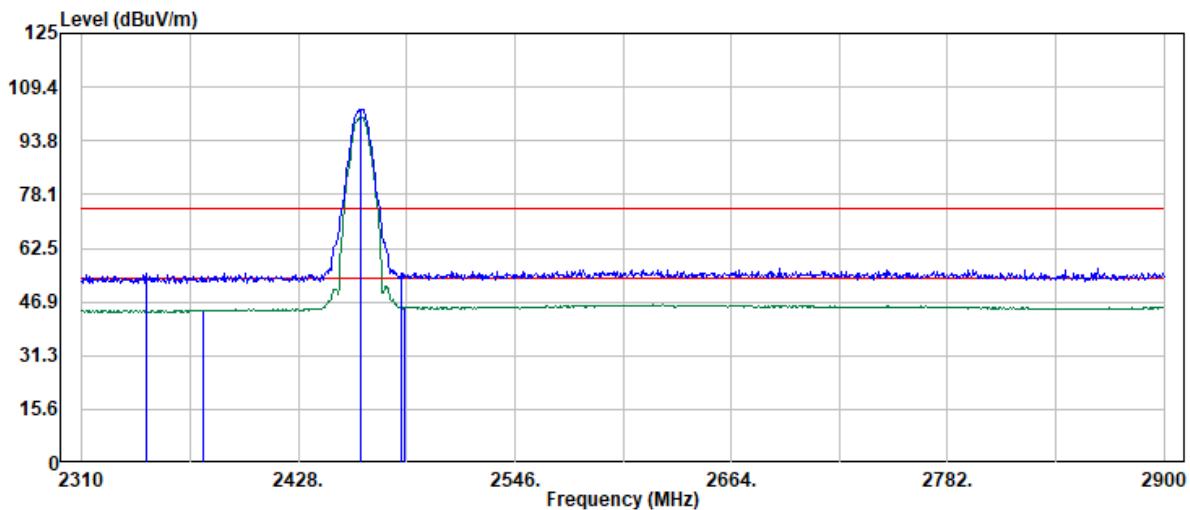


Trace: 1

Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
2340.97	53.75	6.08	59.83	74.00	-14.17	Peak
2374.45	43.29	6.12	49.41	54.00	-4.59	Average
2462.00	113.55	6.43	119.98	--	--	Peak
2462.00	110.99	6.43	117.42	--	--	Average
2484.35	56.27	6.65	62.92	74.00	-11.08	Peak
2488.35	46.27	6.69	52.96	54.00	-1.04	Average

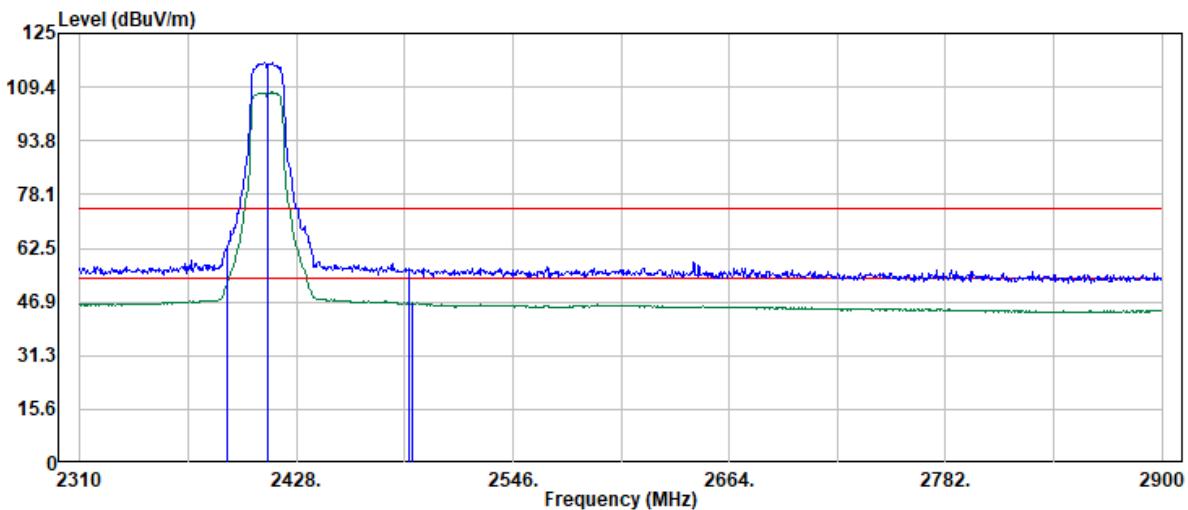
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Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 20

Test Date : 2025-03-17
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 13

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A

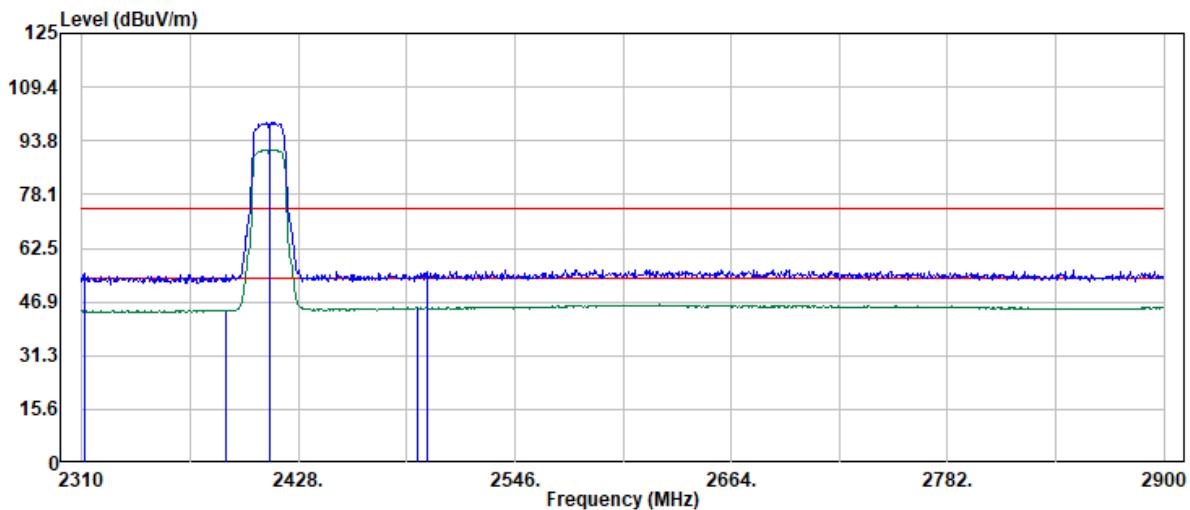


Trace: 1

Freq	Read Level	Actual Factor	Limit FS	Margin @3m	Detector Margin	Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2389.93	56.36	6.22	62.58	74.00	-11.42	Peak
2389.93	45.68	6.22	51.90	54.00	-2.10	Average
2412.00	110.18	6.30	116.48	--	--	Peak
2412.00	101.54	6.30	107.84	--	--	Average
2489.35	50.03	6.69	56.72	74.00	-17.28	Peak
2491.35	40.01	6.70	46.71	54.00	-7.29	Average

Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 13

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A

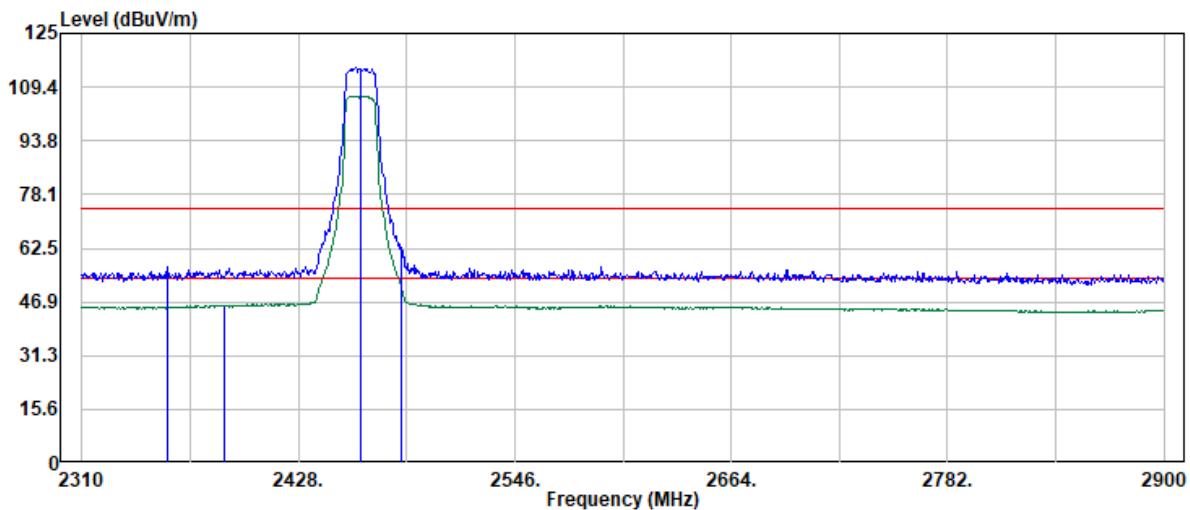


Trace: 1

Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
2311.50	48.79	6.27	55.06	74.00	-18.94	Peak
2388.93	38.15	6.22	44.37	54.00	-9.63	Average
2412.00	92.90	6.30	99.20	--	--	Peak
2412.00	84.91	6.30	91.21	--	--	Average
2492.85	38.43	6.70	45.13	54.00	-8.87	Average
2498.34	48.74	6.69	55.43	74.00	-18.57	Peak

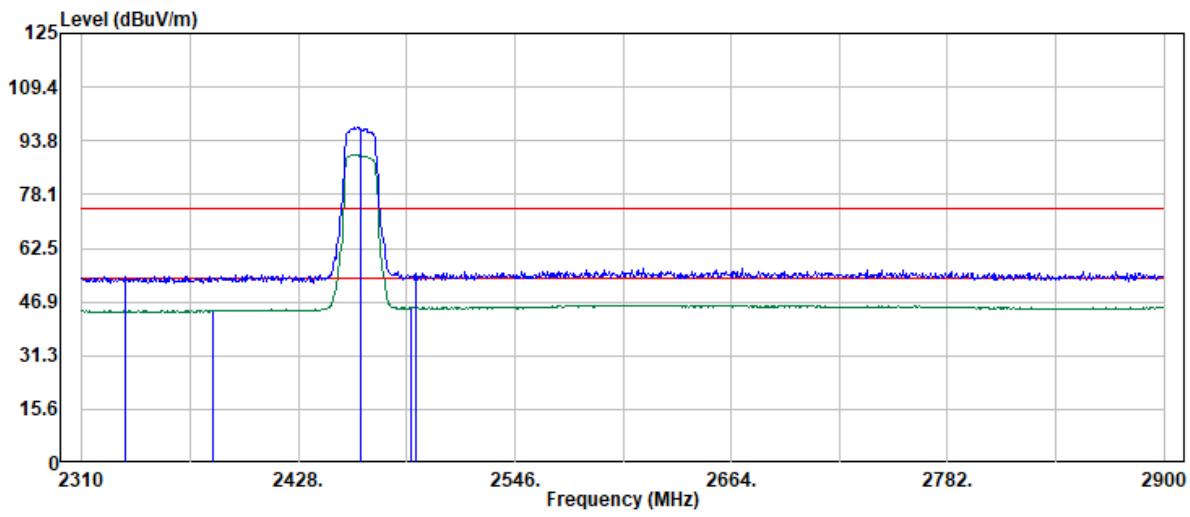
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Operation Band : 802.11g_CH1
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 13

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



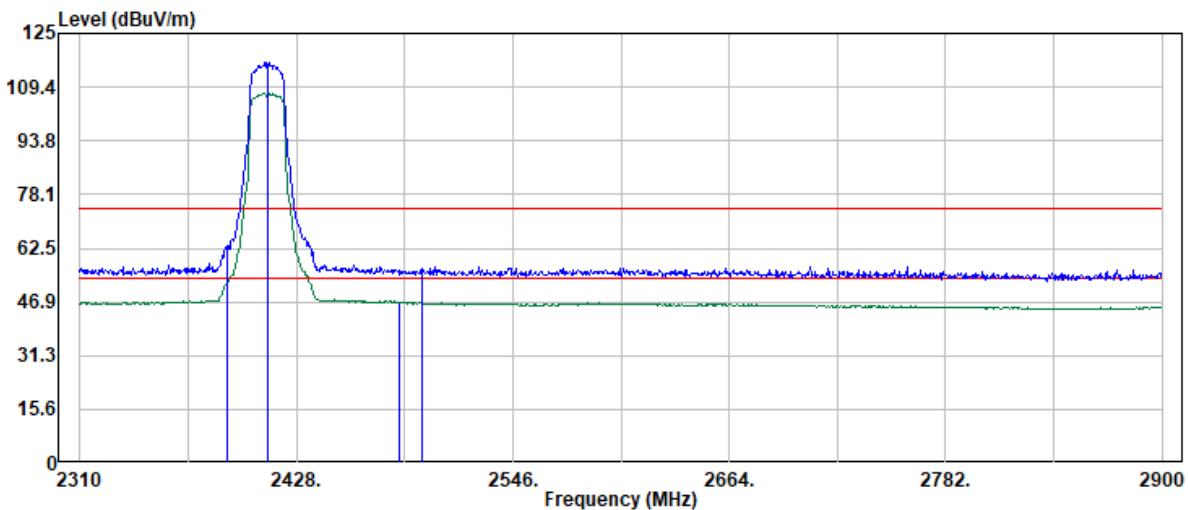
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Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 13

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.4/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A

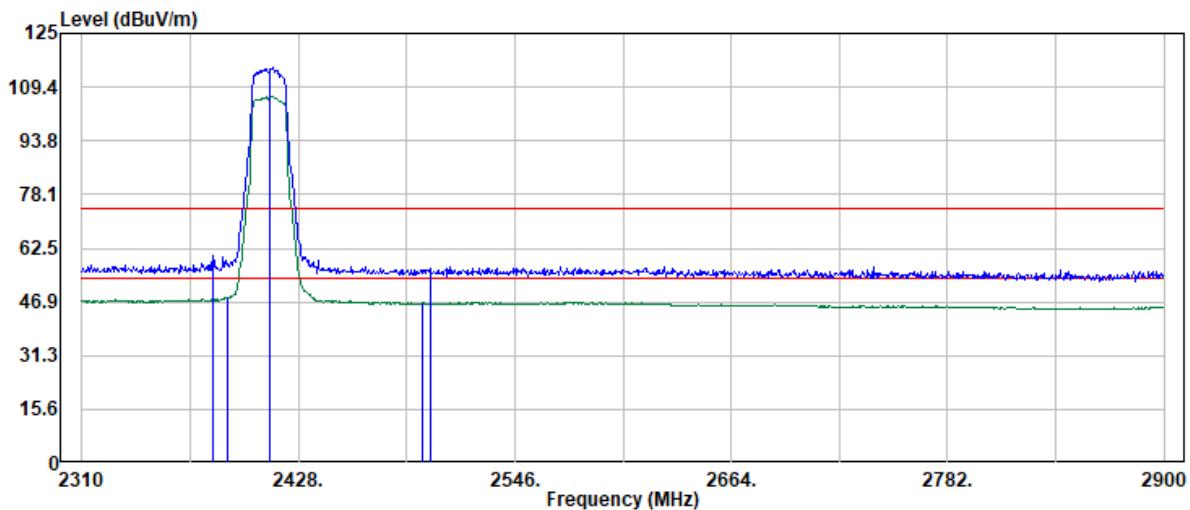


Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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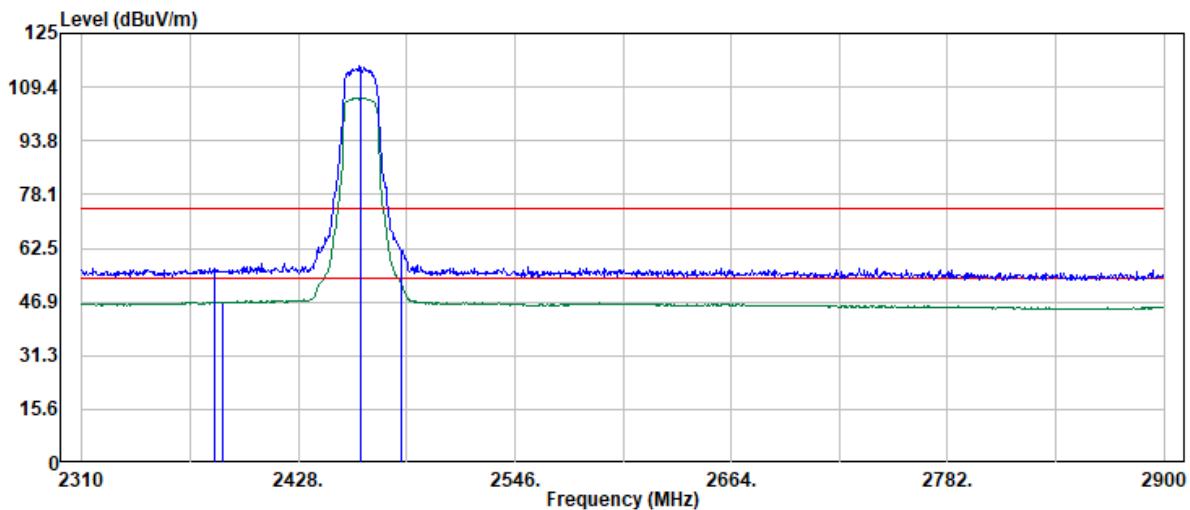
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Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.4/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A

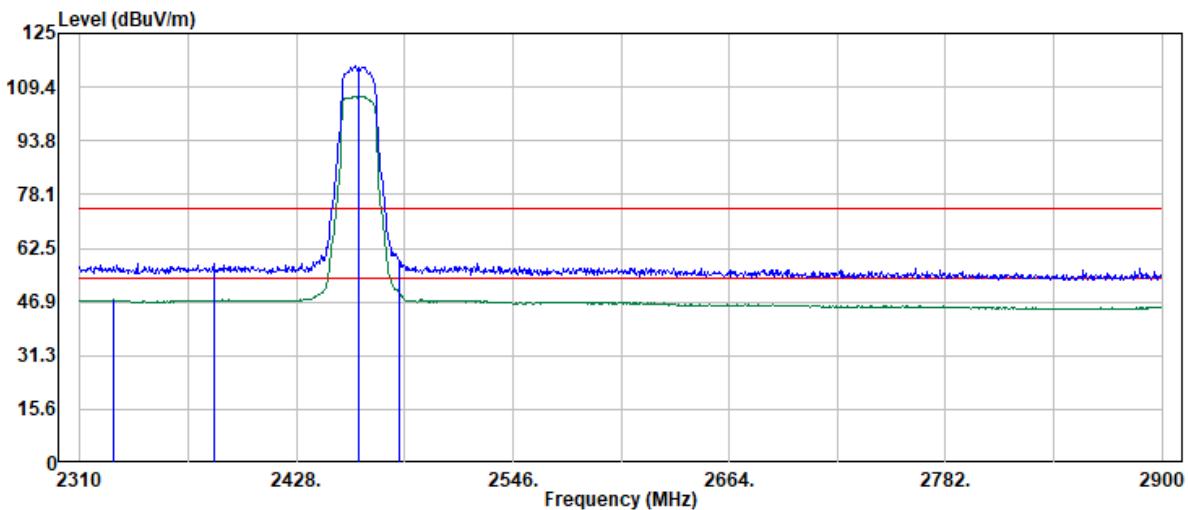


Trace: 1

Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2381.94	50.57	6.17	56.74	74.00	-17.26	Peak
2386.44	40.57	6.19	46.76	54.00	-7.24	Average
2462.00	108.94	6.43	115.37	--	--	Peak
2462.00	99.77	6.43	106.20	--	--	Average
2483.85	55.31	6.66	61.97	74.00	-12.03	Peak
2483.85	45.96	6.66	52.62	54.00	-1.38	Average

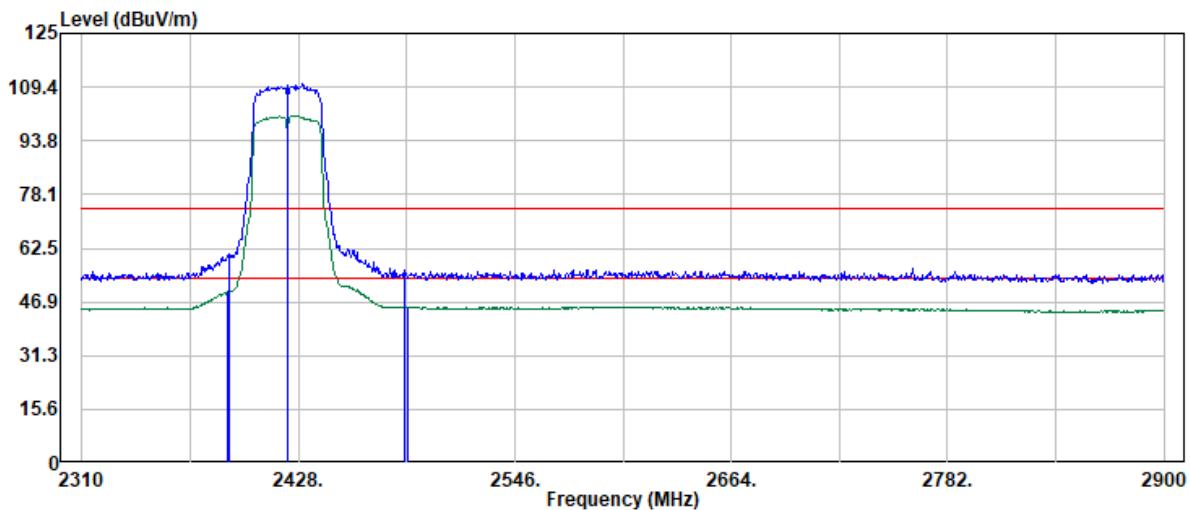
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Operation Band : 802.11n20
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



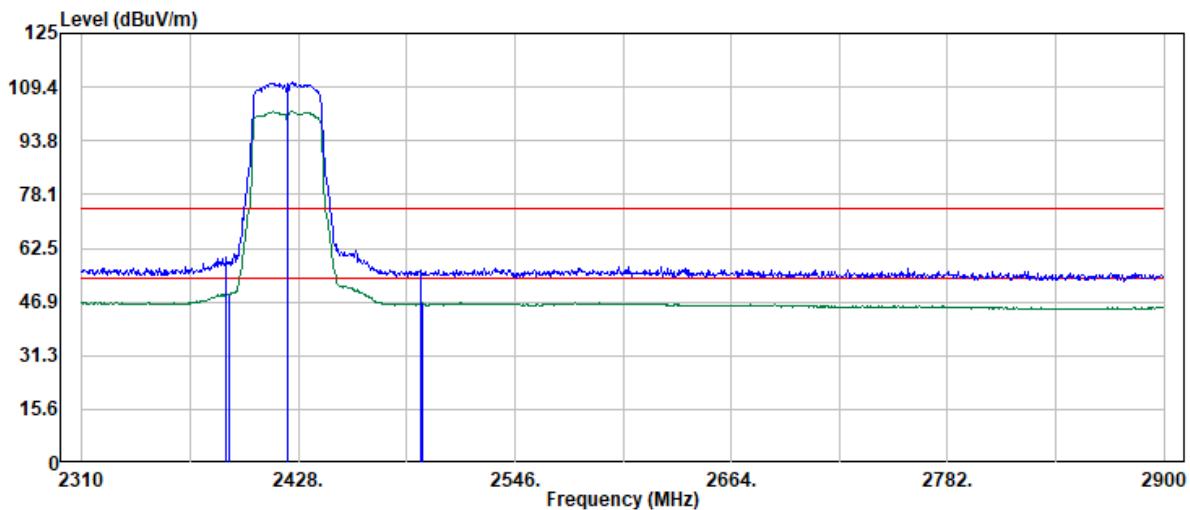
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Operation Band : 802.11n40
Frequency : 2422 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



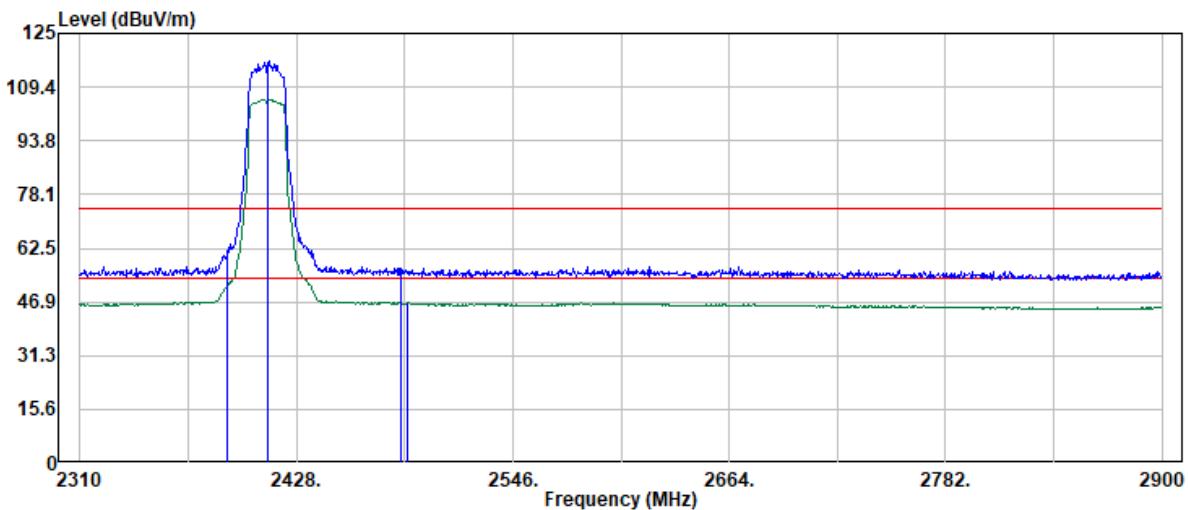
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Operation Band : 802.11n40
Frequency : 2422 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A

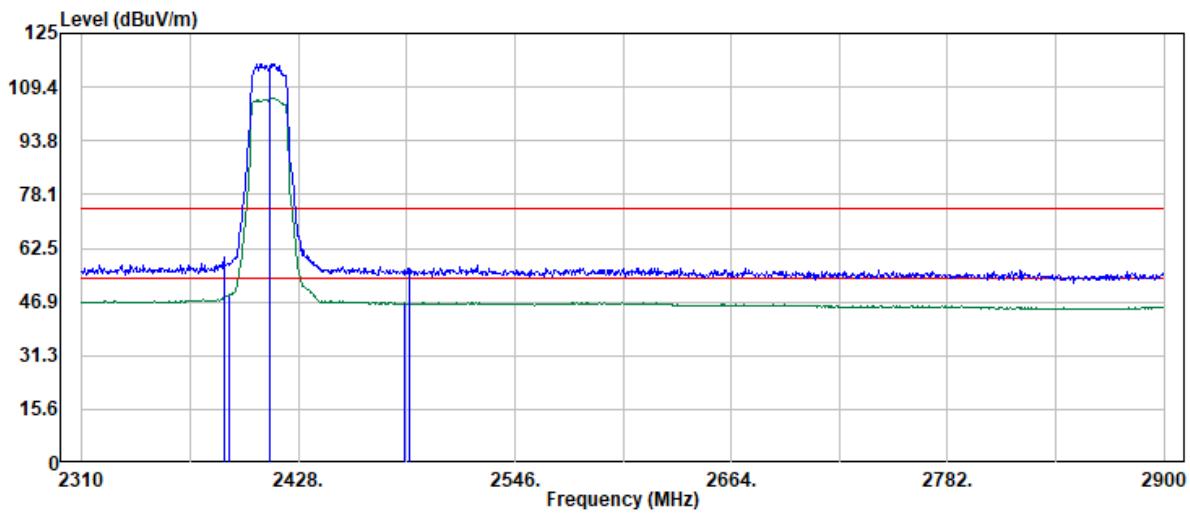


Trace: 1

Freq	Read Level	Read Factor	Actual FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2389.93	54.51	6.22	60.73	74.00	-13.27	Peak
2389.93	45.14	6.22	51.36	54.00	-2.64	Average
2412.00	110.71	6.30	117.01	--	--	Peak
2412.00	99.24	6.30	105.54	--	--	Average
2485.35	50.11	6.66	56.77	74.00	-17.23	Peak
2488.85	39.98	6.69	46.67	54.00	-7.33	Average

Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A

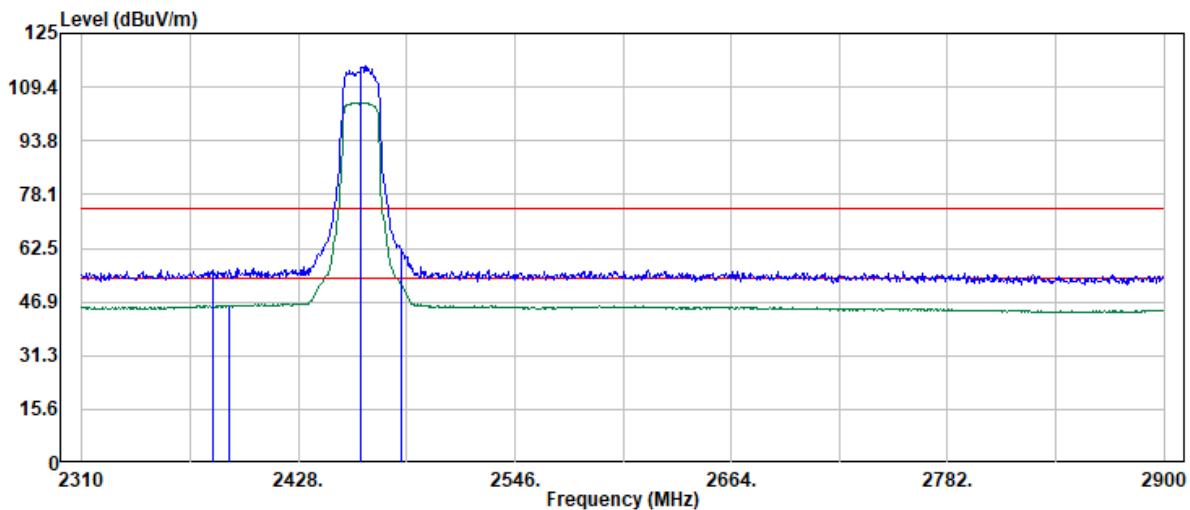


Trace: 1

Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
2387.43	53.66	6.20	59.86	74.00	-14.14	Peak
2389.93	42.50	6.22	48.72	54.00	-5.28	Average
2412.00	109.85	6.30	116.15	--	--	Peak
2412.00	99.89	6.30	106.19	--	--	Average
2485.85	39.96	6.67	46.63	54.00	-7.37	Average
2488.35	50.03	6.69	56.72	74.00	-17.28	Peak

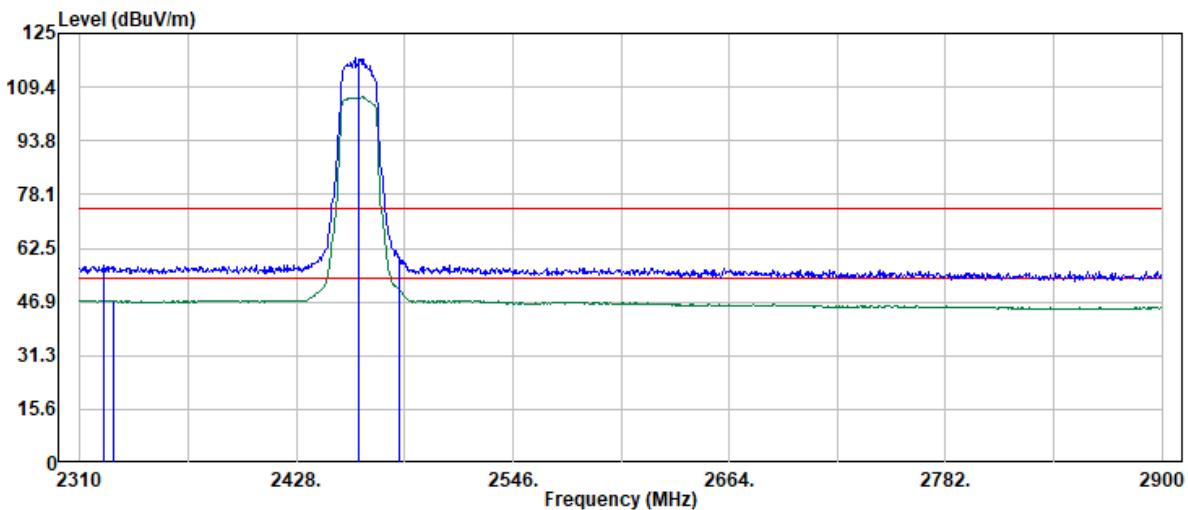
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Operation Band : 802.11ax20
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



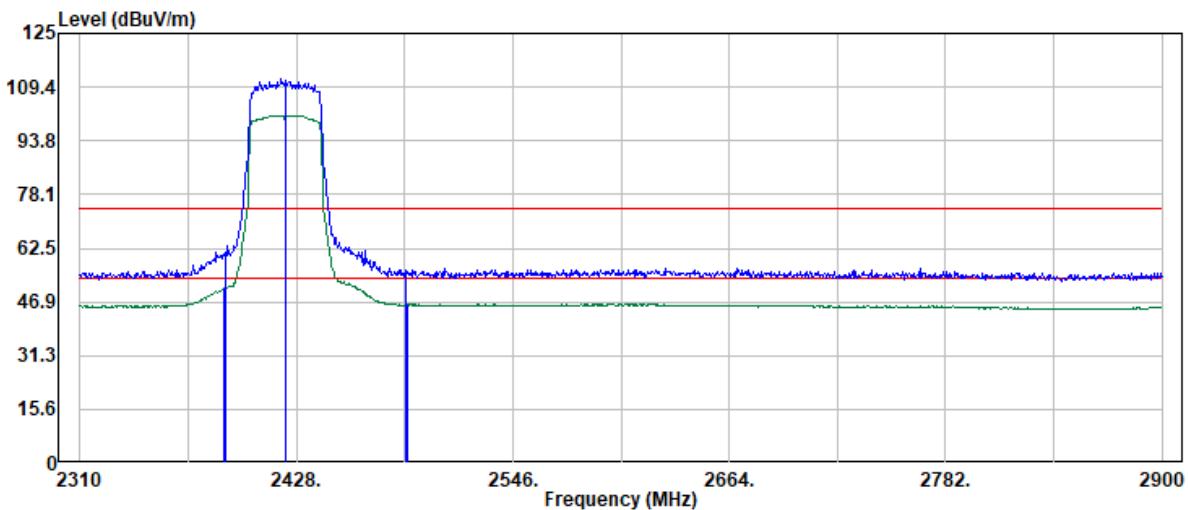
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Operation Band : 802.11ax20
Frequency : 2462 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 12

Test Date : 2025-03-18
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



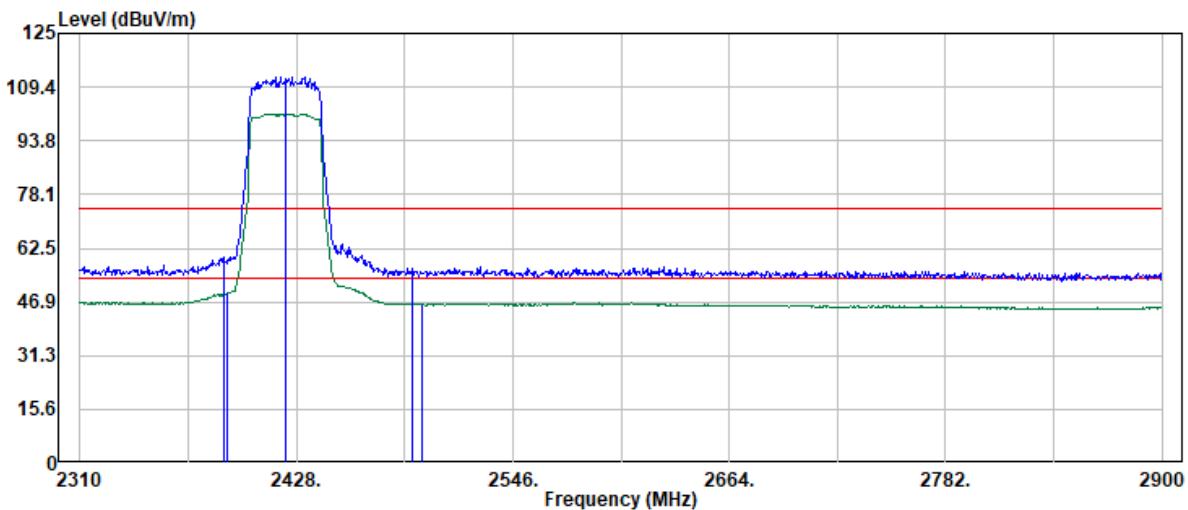
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Operation Band : 802.11ax40
Frequency : 2422 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2422 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A

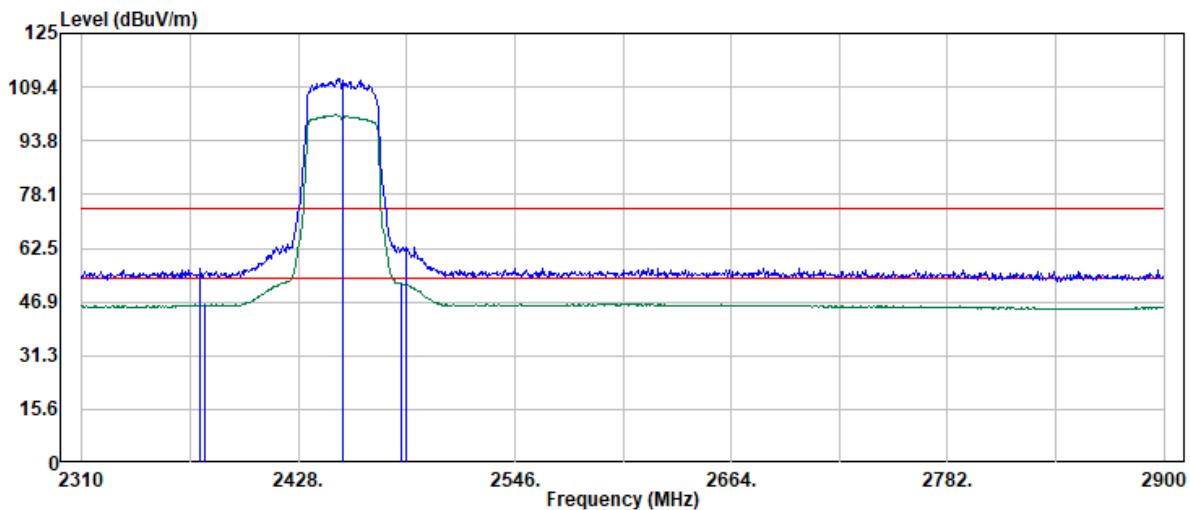


Trace: 1

Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
2388.43	53.74	6.20	59.94	74.00	-14.06	Peak
2389.93	43.30	6.22	49.52	54.00	-4.48	Average
2422.00	105.88	6.37	112.25	--	--	Peak
2422.00	95.26	6.37	101.63	--	--	Average
2491.35	49.86	6.70	56.56	74.00	-17.44	Peak
2496.34	39.69	6.70	46.39	54.00	-7.61	Average

Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2452 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/57
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



Trace: 1

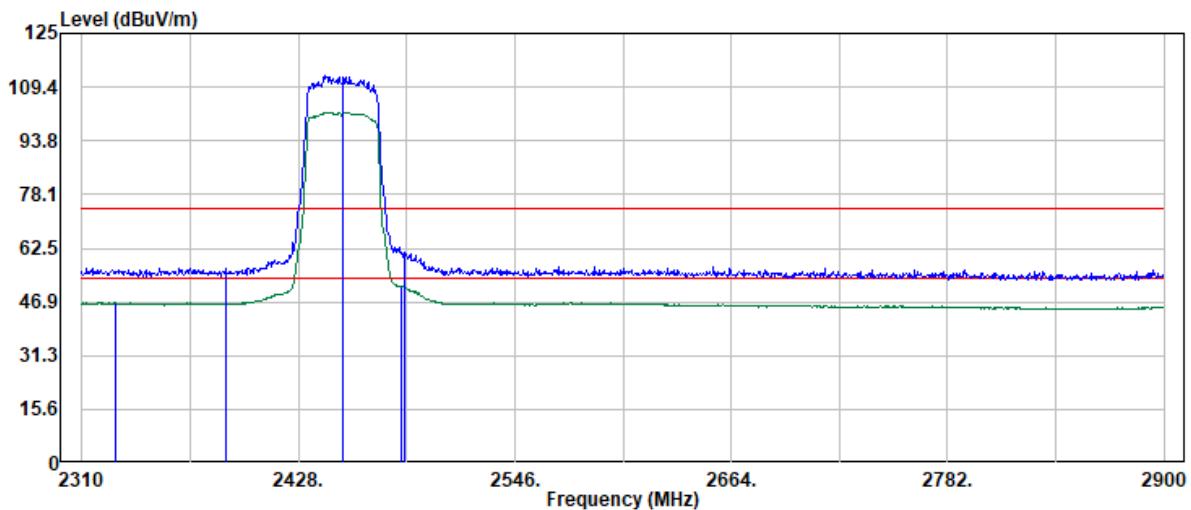
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2374.45	50.28	6.12	56.40	74.00	-17.60	Peak
2377.44	39.99	6.14	46.13	54.00	-7.87	Average
2452.00	105.52	6.45	111.97	--	--	Peak
2452.00	94.77	6.45	101.22	--	--	Average
2483.85	45.52	6.66	52.18	54.00	-1.82	Average
2486.85	56.25	6.68	62.93	74.00	-11.07	Peak

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2452 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/57
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A

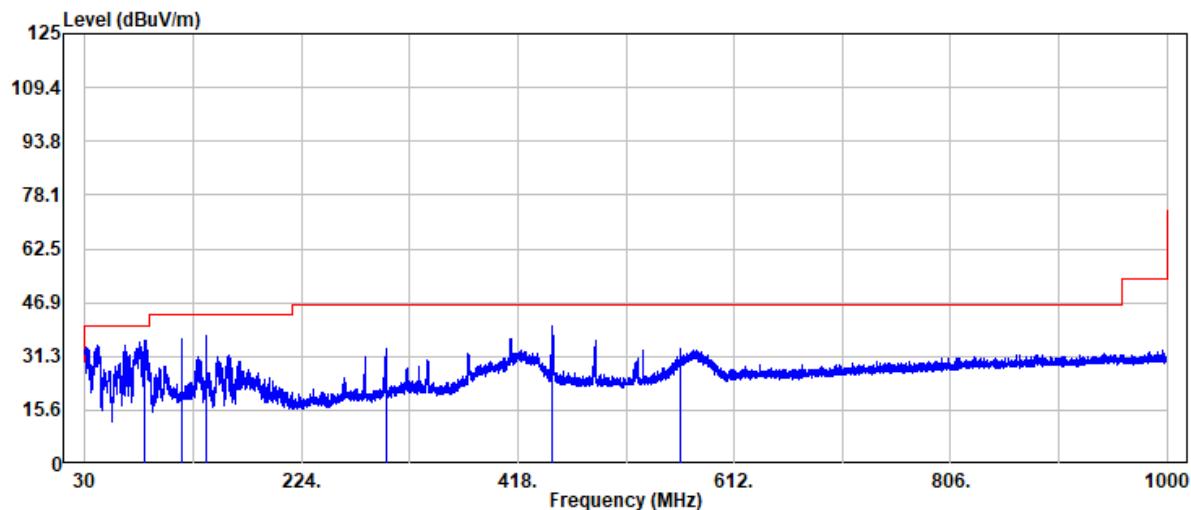


Trace: 1	Read Level	Actual FS	Limit @3m	Detector Margin	Detector Mode
Freq	dBuV	dB	dBuV/m	dB	PK/QP/AV
2328.48	40.49	6.13	46.62	54.00	-7.38
2388.43	50.54	6.20	56.74	74.00	-17.26
2452.00	106.34	6.45	112.79	--	--
2452.00	95.62	6.45	102.07	--	--
2483.85	44.71	6.66	51.37	54.00	-2.63
2486.35	54.71	6.67	61.38	74.00	-12.62

TX Test Data

Project No : TM-2503000067P
Operation Band : 802.11b_Ch1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

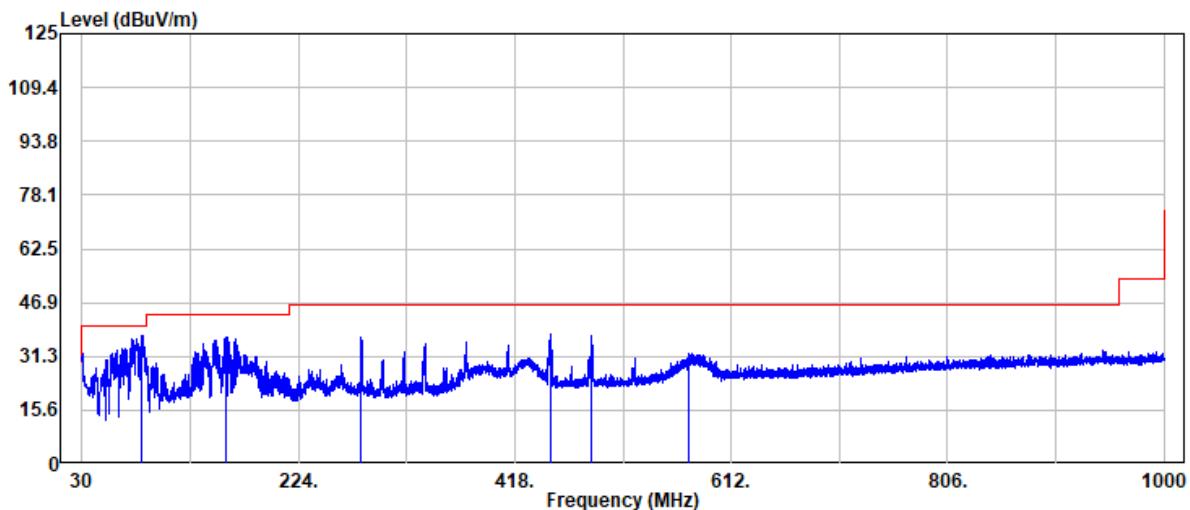
Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
83.70	52.37	-16.55	35.82	40.00	-4.18	Peak
116.70	46.46	-10.11	36.35	43.50	-7.15	Peak
139.30	47.84	-10.56	37.28	43.50	-6.22	Peak
300.00	42.85	-9.39	33.46	46.00	-12.54	Peak
448.80	45.58	-5.38	40.20	46.00	-5.80	Peak
563.60	36.78	-3.51	33.27	46.00	-12.73	Peak

Project No : TM-2503000067P
Operation Band : 802.11b_Ch1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



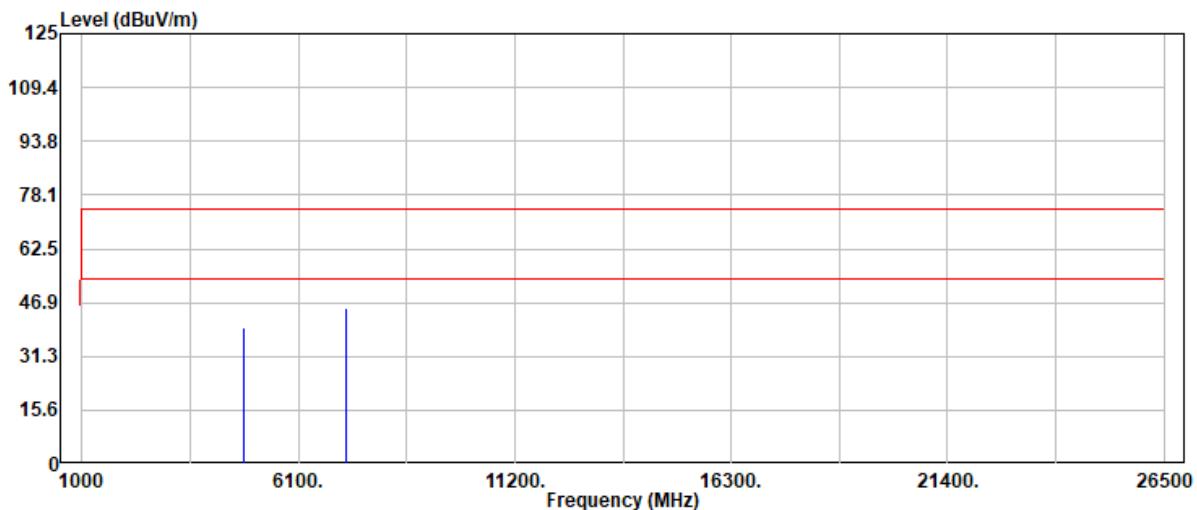
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
83.60	54.03	-16.55	37.48	40.00	-2.52	Peak
158.70	47.80	-11.13	36.67	43.50	-6.83	Peak
280.40	46.22	-9.63	36.59	46.00	-9.41	Peak
450.20	43.04	-5.37	37.67	46.00	-8.33	Peak
487.30	42.01	-4.53	37.48	46.00	-8.52	Peak
573.40	35.33	-3.25	32.08	46.00	-13.92	Peak

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



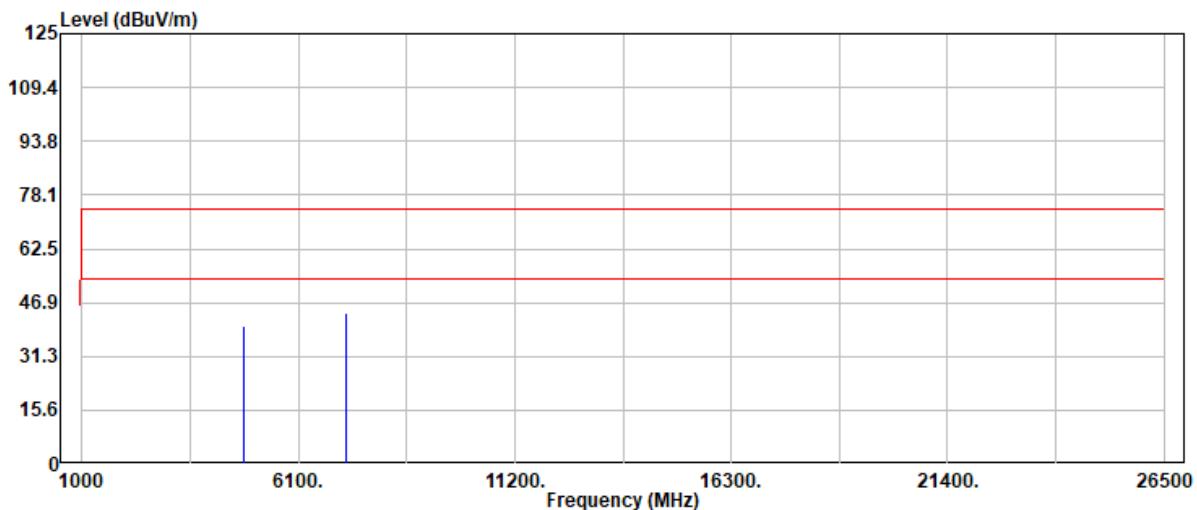
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	37.53	2.25	39.78	74.00	-34.22	Peak
4824.00	27.74	2.25	29.99	54.00	-24.01	Average
7236.00	36.39	8.95	45.34	74.00	-28.66	Peak
7236.00	26.30	8.95	35.25	54.00	-18.75	Average

Project No: TM-2503000067P
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Rev.: 03

Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



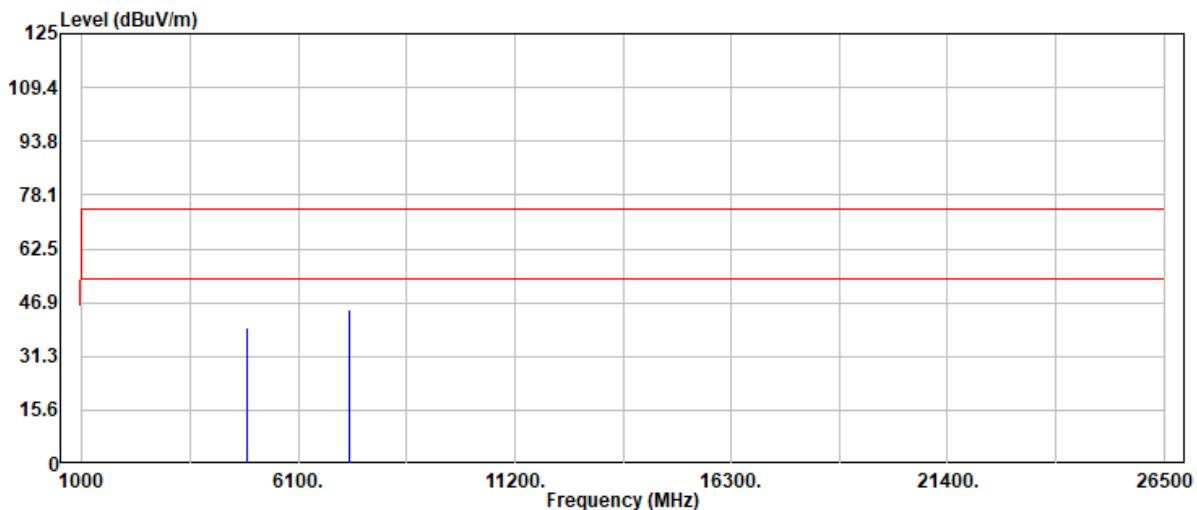
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	37.86	2.25	40.11	74.00	-33.89	Peak
4824.00	27.74	2.25	29.99	54.00	-24.01	Average
7236.00	35.06	8.95	44.01	74.00	-29.99	Peak
7236.00	26.23	8.95	35.18	54.00	-18.82	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



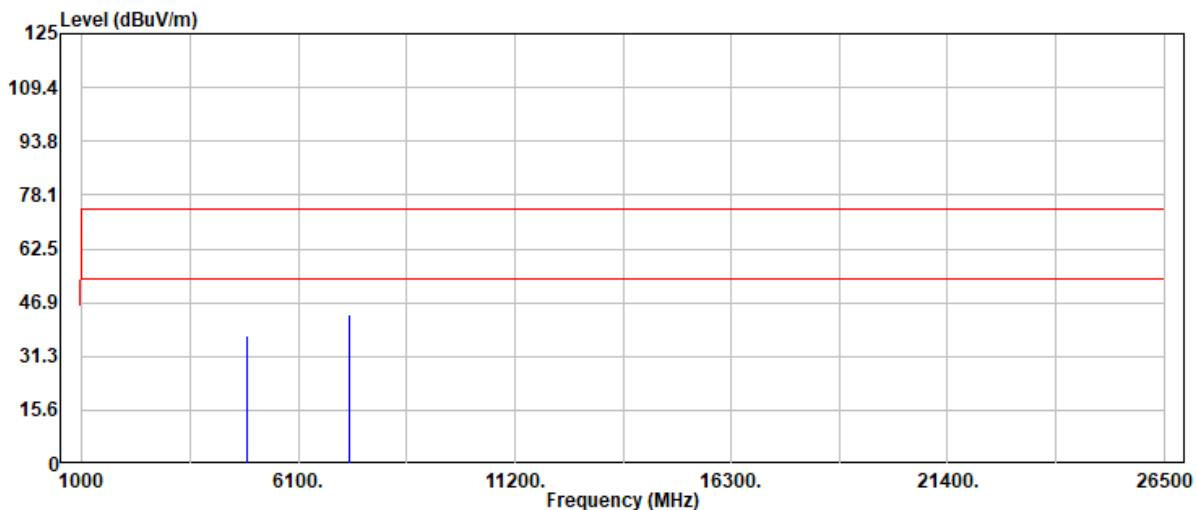
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	37.30	2.46	39.76	74.00	-34.24	Peak
4874.00	27.32	2.46	29.78	54.00	-24.22	Average
7311.00	35.64	9.14	44.78	74.00	-29.22	Peak
7311.00	26.14	9.14	35.28	54.00	-18.72	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



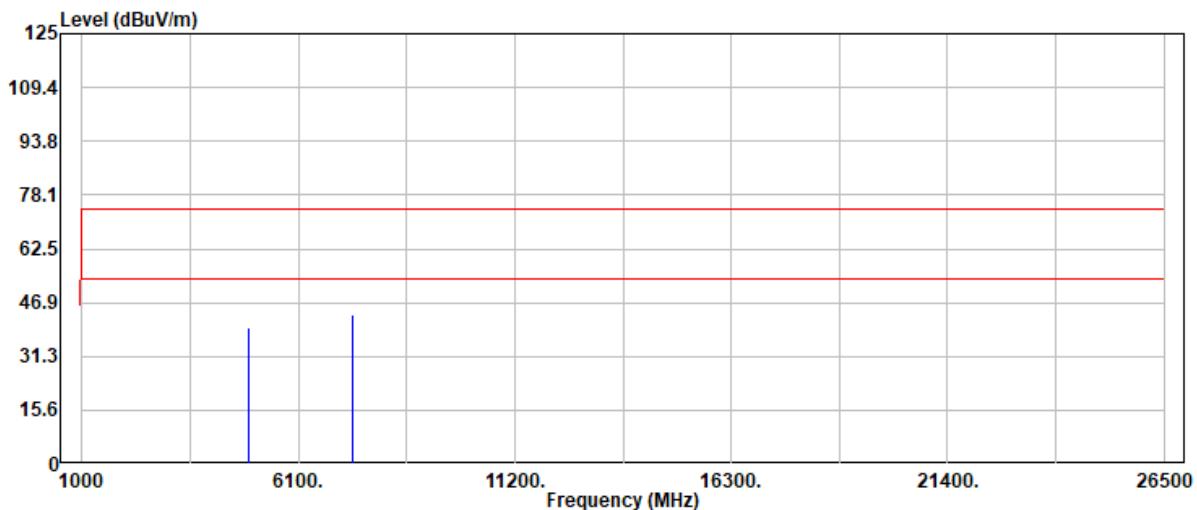
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.90	2.46	37.36	74.00	-36.64	Peak
4874.00	27.53	2.46	29.99	54.00	-24.01	Average
7311.00	34.05	9.14	43.19	74.00	-30.81	Peak
7311.00	26.14	9.14	35.28	54.00	-18.72	Average

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Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



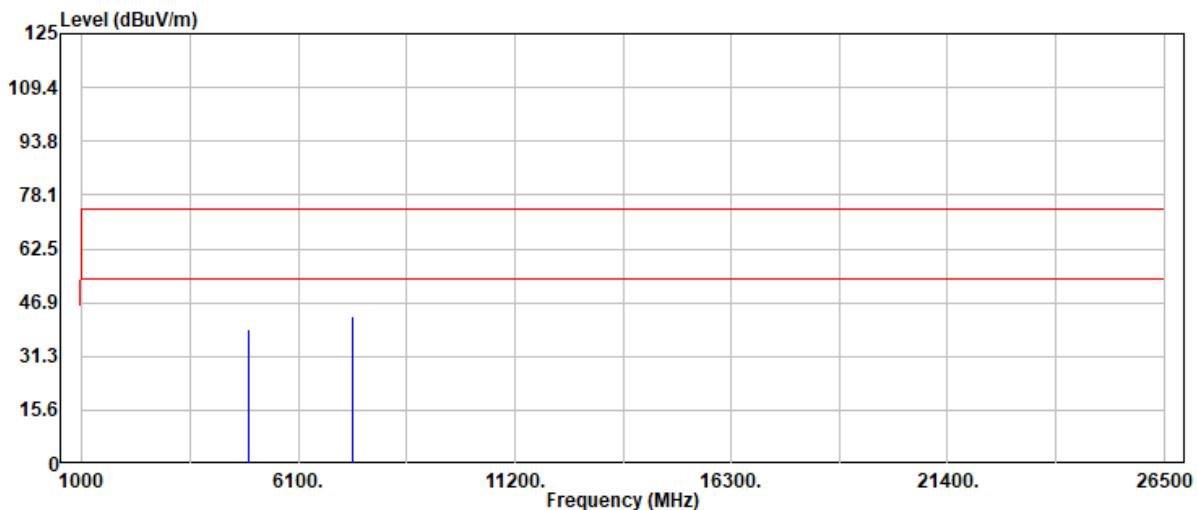
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	36.46	3.00	39.46	74.00	-34.54	Peak
4924.00	27.49	3.00	30.49	54.00	-23.51	Average
7386.00	34.24	9.37	43.61	74.00	-30.39	Peak
7386.00	26.32	9.37	35.69	54.00	-18.31	Average

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Project No : TM-2503000067P
Operation Band : 802.11b_CH1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 20

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



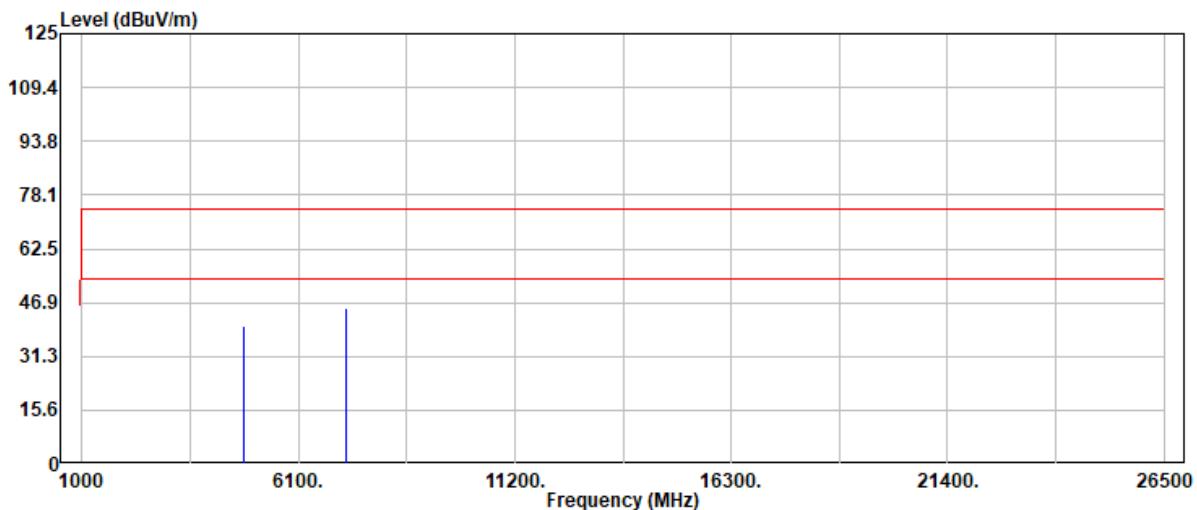
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	36.04	3.00	39.04	74.00	-34.96	Peak
4924.00	27.50	3.00	30.50	54.00	-23.50	Average
7386.00	33.61	9.37	42.98	74.00	-31.02	Peak
7386.00	26.13	9.37	35.50	54.00	-18.50	Average

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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



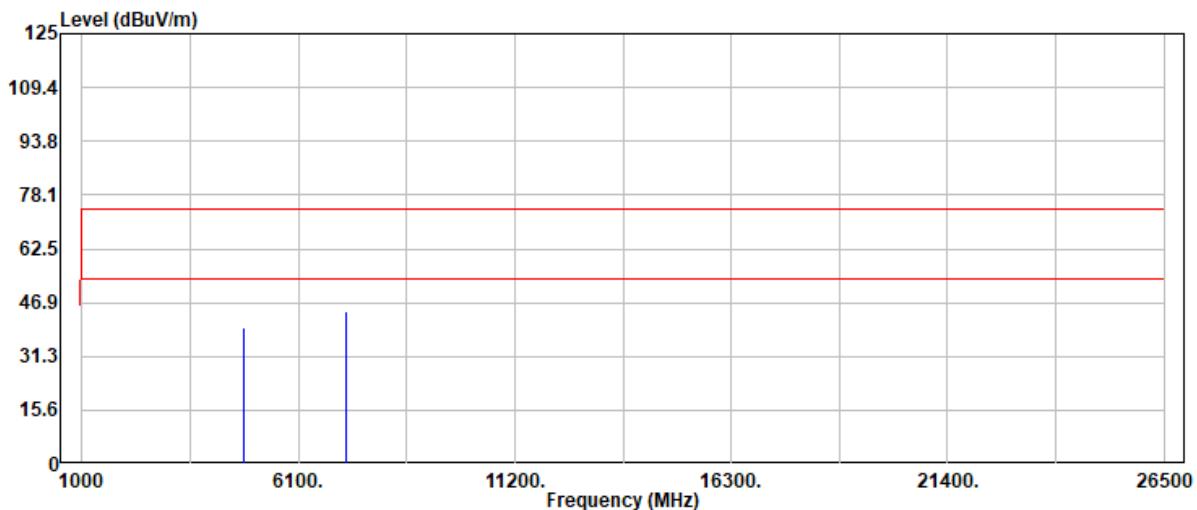
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	37.99	2.25	40.24	74.00	-33.76	Peak
4824.00	25.84	2.25	28.09	54.00	-25.91	Average
7236.00	36.40	8.95	45.35	74.00	-28.65	Peak
7236.00	27.61	8.95	36.56	54.00	-17.44	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



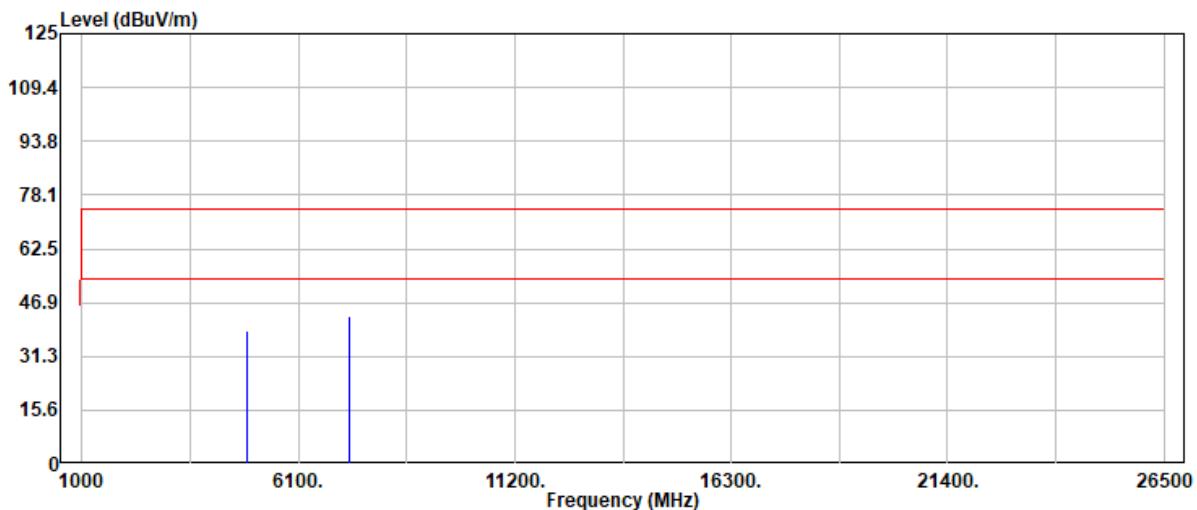
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	37.27	2.25	39.52	74.00	-34.48	Peak
4824.00	27.20	2.25	29.45	54.00	-24.55	Average
7236.00	35.56	8.95	44.51	74.00	-29.49	Peak
7236.00	25.91	8.95	34.86	54.00	-19.14	Average

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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



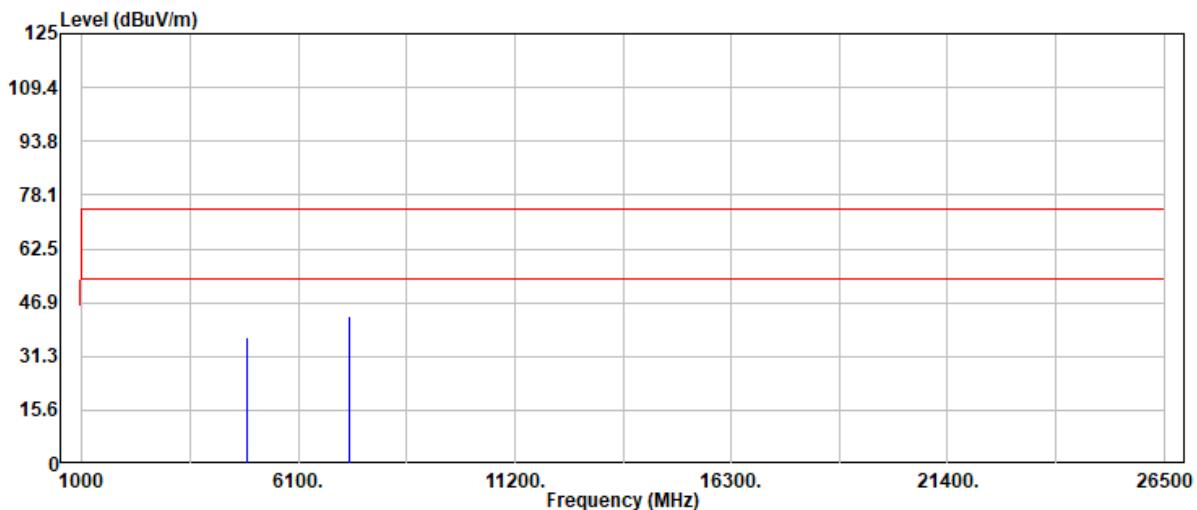
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	36.08	2.46	38.54	74.00	-35.46	Peak
4874.00	27.61	2.46	30.07	54.00	-23.93	Average
7311.00	33.86	9.14	43.00	74.00	-31.00	Peak
7311.00	25.11	9.14	34.25	54.00	-19.75	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



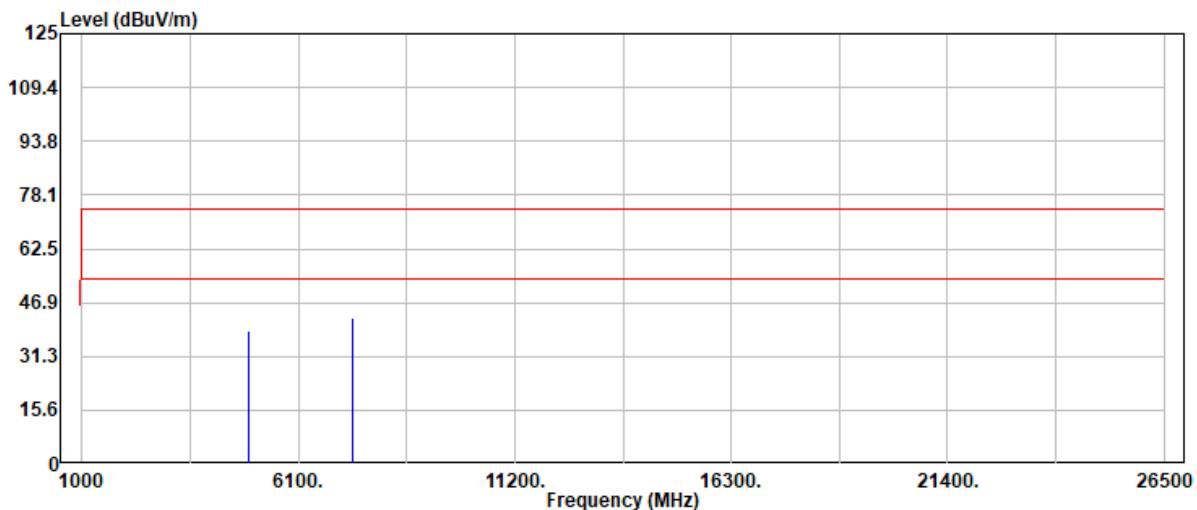
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.17	2.46	36.63	74.00	-37.37	Peak
4874.00	27.39	2.46	29.85	54.00	-24.15	Average
7311.00	33.64	9.14	42.78	74.00	-31.22	Peak
7311.00	25.48	9.14	34.62	54.00	-19.38	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A

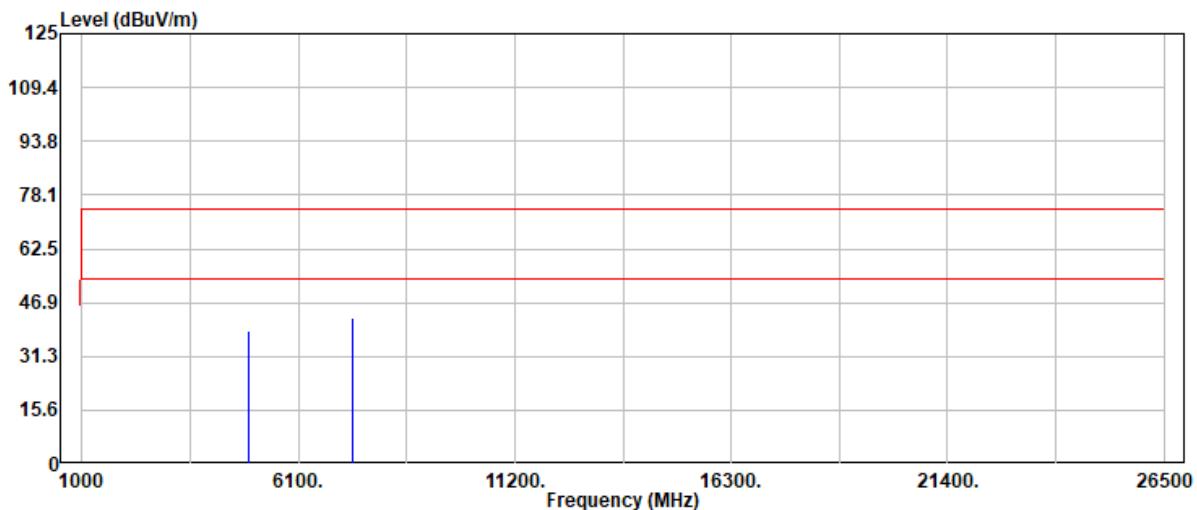


Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11g_CH1
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 13

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



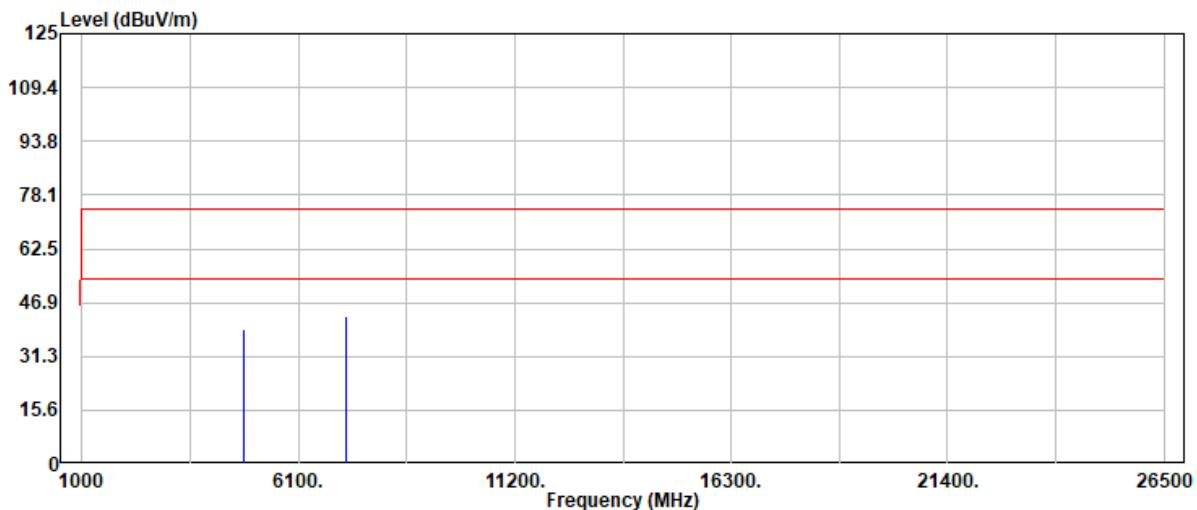
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	35.80	3.00	38.80	74.00	-35.20	Peak
4924.00	27.05	3.00	30.05	54.00	-23.95	Average
7386.00	33.13	9.37	42.50	74.00	-31.50	Peak
7386.00	26.29	9.37	35.66	54.00	-18.34	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : Vertical
Engineer : Ben.Yang
Test Chamber : 966A



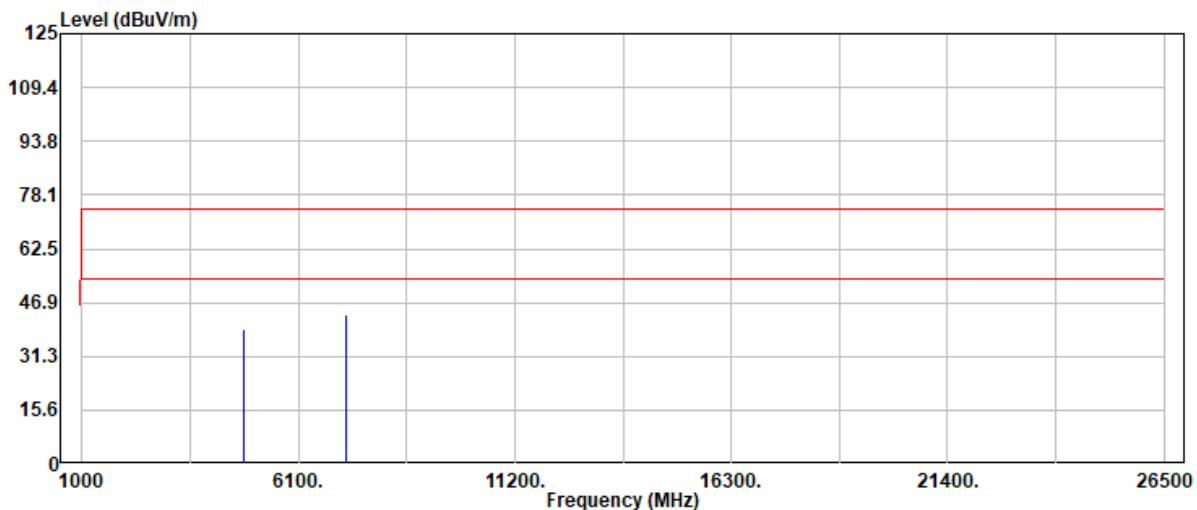
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	36.73	2.25	38.98	74.00	-35.02	Peak
4824.00	27.60	2.25	29.85	54.00	-24.15	Average
7236.00	34.07	8.95	43.02	74.00	-30.98	Peak
7236.00	25.35	8.95	34.30	54.00	-19.70	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Rev.: 03

Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



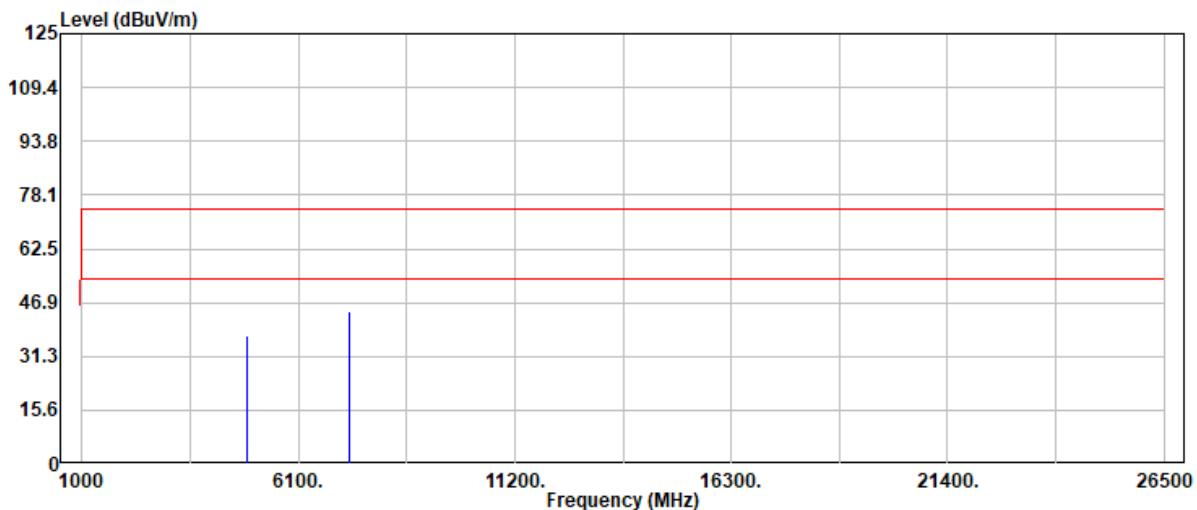
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	36.92	2.25	39.17	74.00	-34.83	Peak
4824.00	27.81	2.25	30.06	54.00	-23.94	Average
7236.00	34.62	8.95	43.57	74.00	-30.43	Peak
7236.00	25.80	8.95	34.75	54.00	-19.25	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



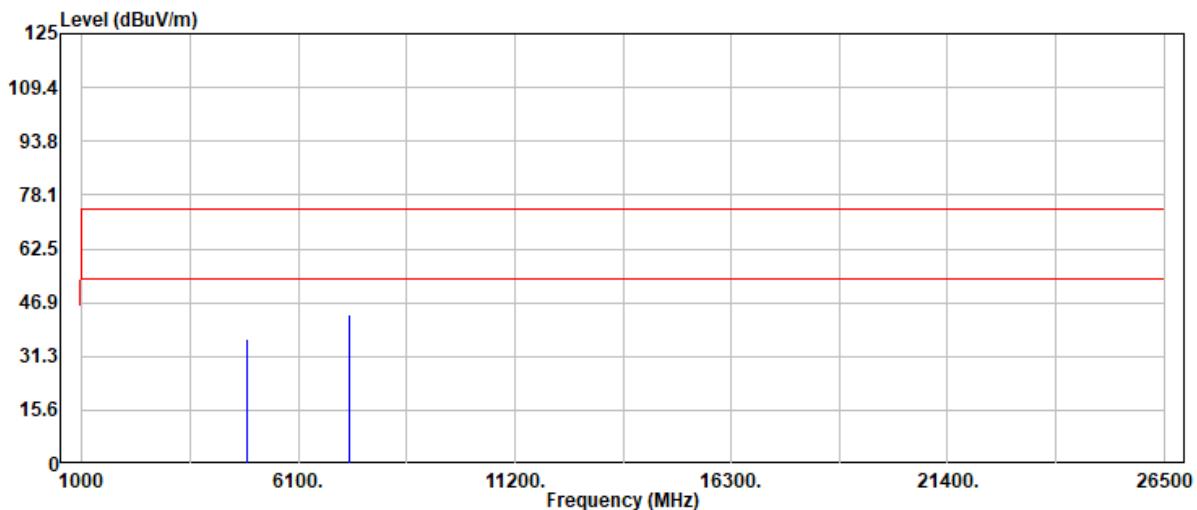
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.64	2.46	37.10	74.00	-36.90	Peak
4874.00	27.54	2.46	30.00	54.00	-24.00	Average
7311.00	35.38	9.14	44.52	74.00	-29.48	Peak
7311.00	26.49	9.14	35.63	54.00	-18.37	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



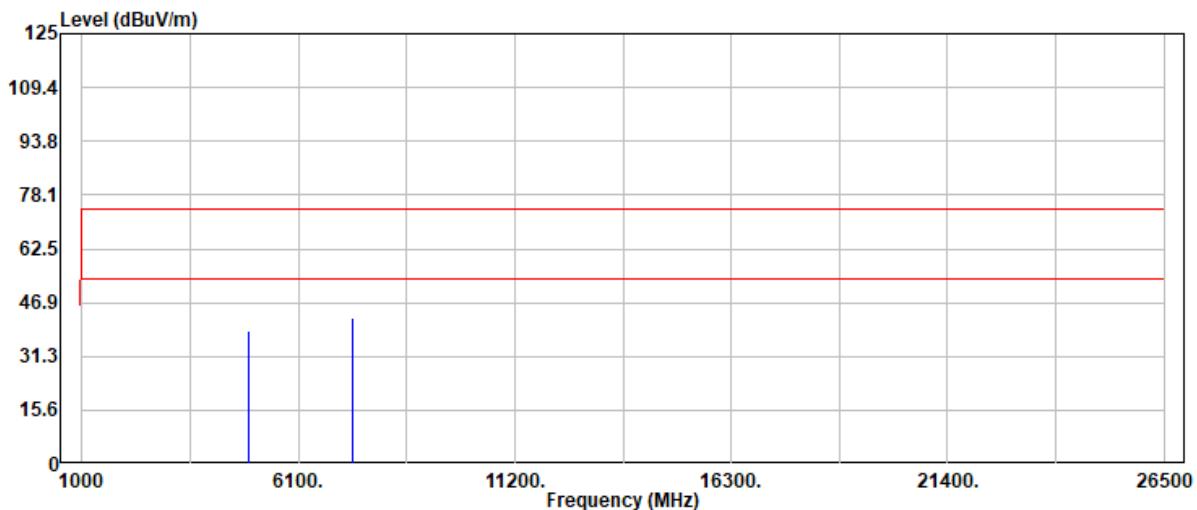
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	33.88	2.46	36.34	74.00	-37.66	Peak
4874.00	26.58	2.46	29.04	54.00	-24.96	Average
7311.00	34.02	9.14	43.16	74.00	-30.84	Peak
7311.00	25.82	9.14	34.96	54.00	-19.04	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



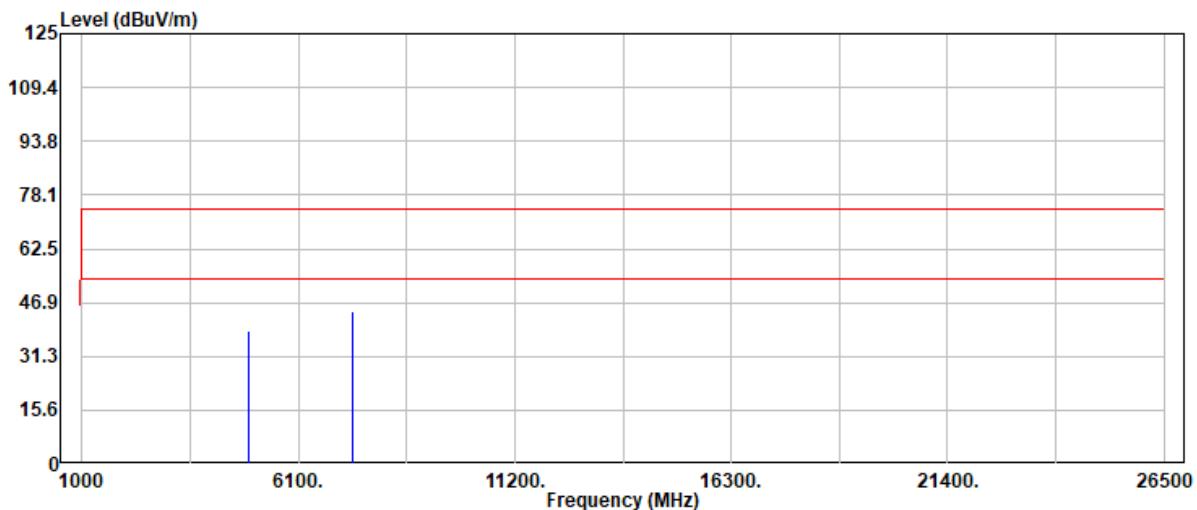
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	35.56	3.00	38.56	74.00	-35.44	Peak
4924.00	27.93	3.00	30.93	54.00	-23.07	Average
7386.00	33.19	9.37	42.56	74.00	-31.44	Peak
7386.00	26.51	9.37	35.88	54.00	-18.12	Average

Project No: TM-2503000067P
Report No.: TMWK2503001052KR

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Rev.: 03

Project No : TM-2503000067P
Operation Band : 802.11n20
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



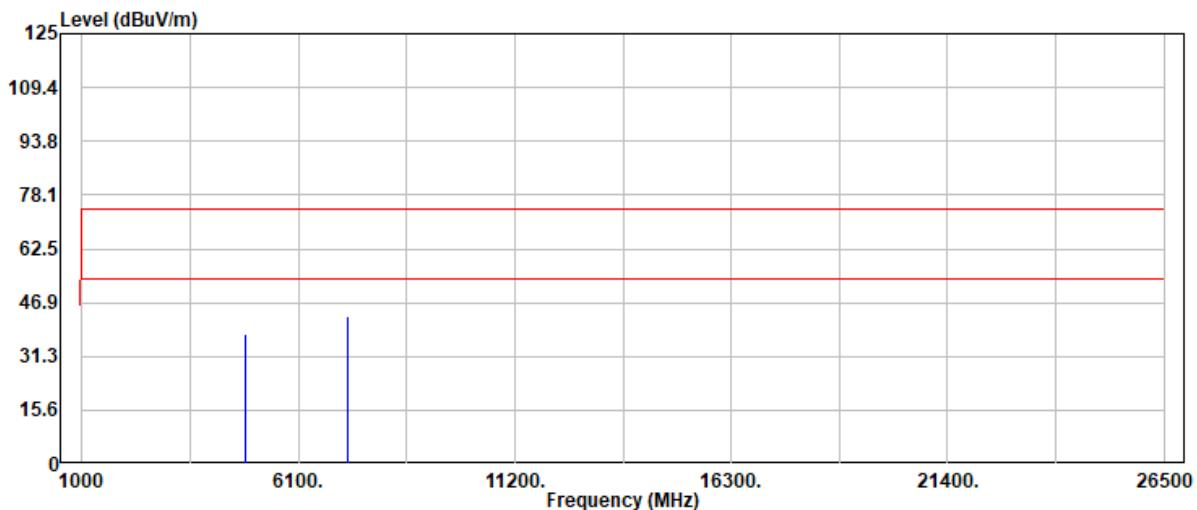
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	35.76	3.00	38.76	74.00	-35.24	Peak
4924.00	27.66	3.00	30.66	54.00	-23.34	Average
7386.00	34.84	9.37	44.21	74.00	-29.79	Peak
7386.00	26.51	9.37	35.88	54.00	-18.12	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2422 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



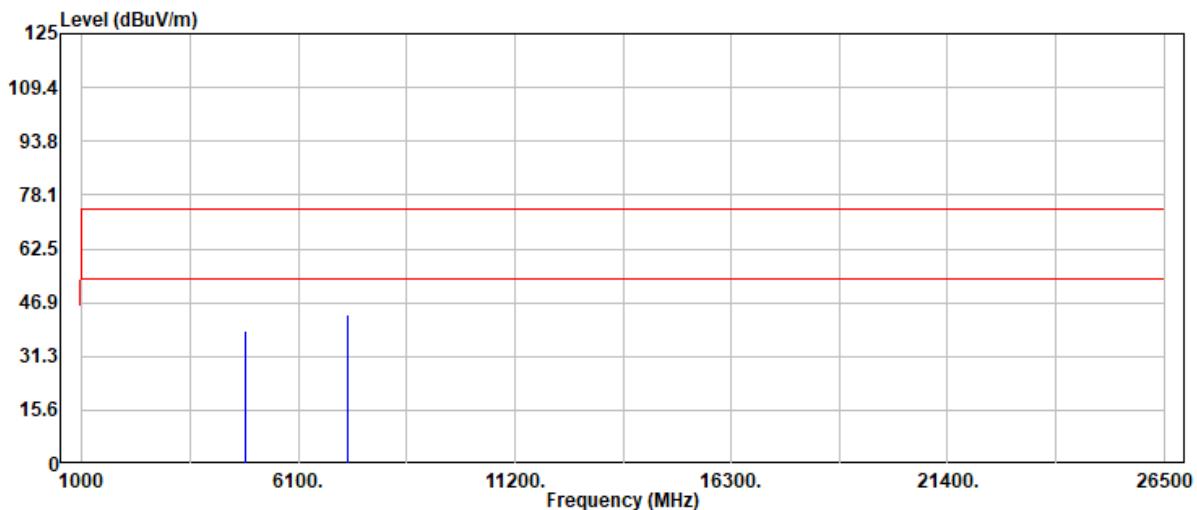
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4844.00	35.60	2.23	37.83	74.00	-36.17	Peak
4844.00	27.88	2.23	30.11	54.00	-23.89	Average
7266.00	33.71	9.05	42.76	74.00	-31.24	Peak
7266.00	26.54	9.05	35.59	54.00	-18.41	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2422 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



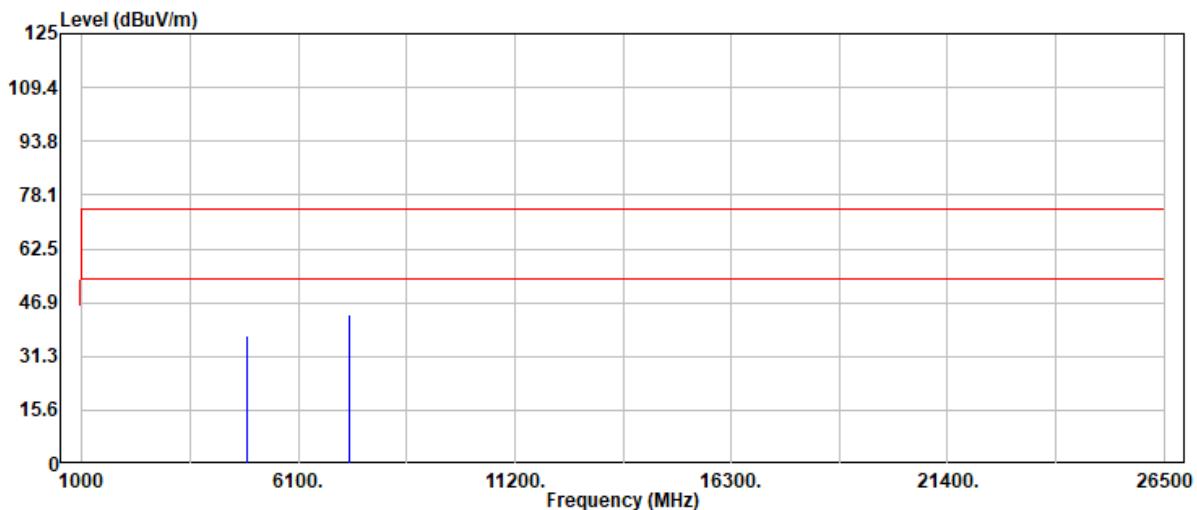
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4844.00	36.53	2.23	38.76	74.00	-35.24	Peak
4844.00	26.91	2.23	29.14	54.00	-24.86	Average
7266.00	34.52	9.05	43.57	74.00	-30.43	Peak
7266.00	25.87	9.05	34.92	54.00	-19.08	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



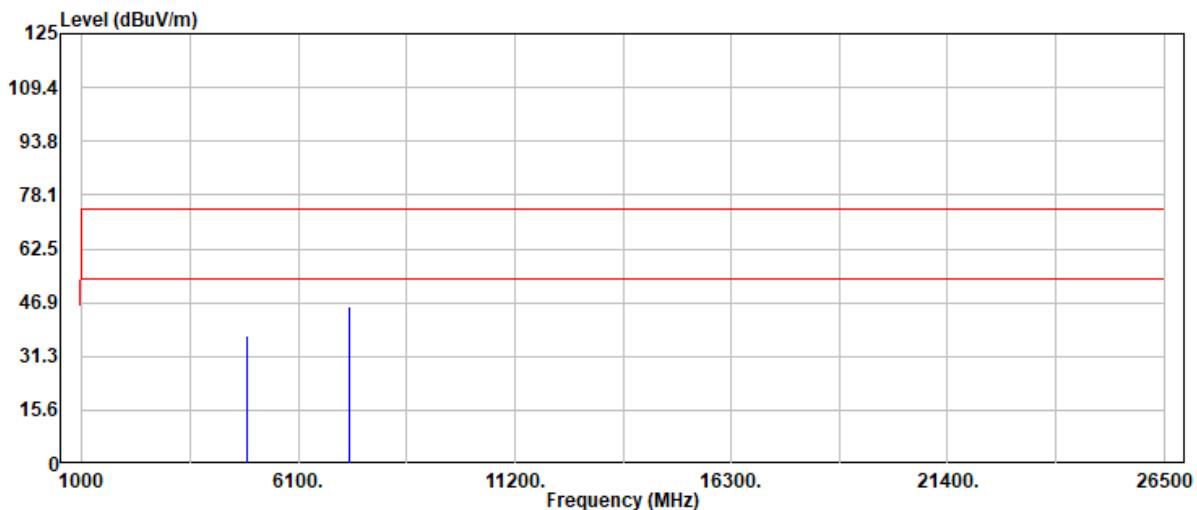
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.63	2.46	37.09	74.00	-36.91	Peak
4874.00	27.15	2.46	29.61	54.00	-24.39	Average
7311.00	34.45	9.14	43.59	74.00	-30.41	Peak
7311.00	26.55	9.14	35.69	54.00	-18.31	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



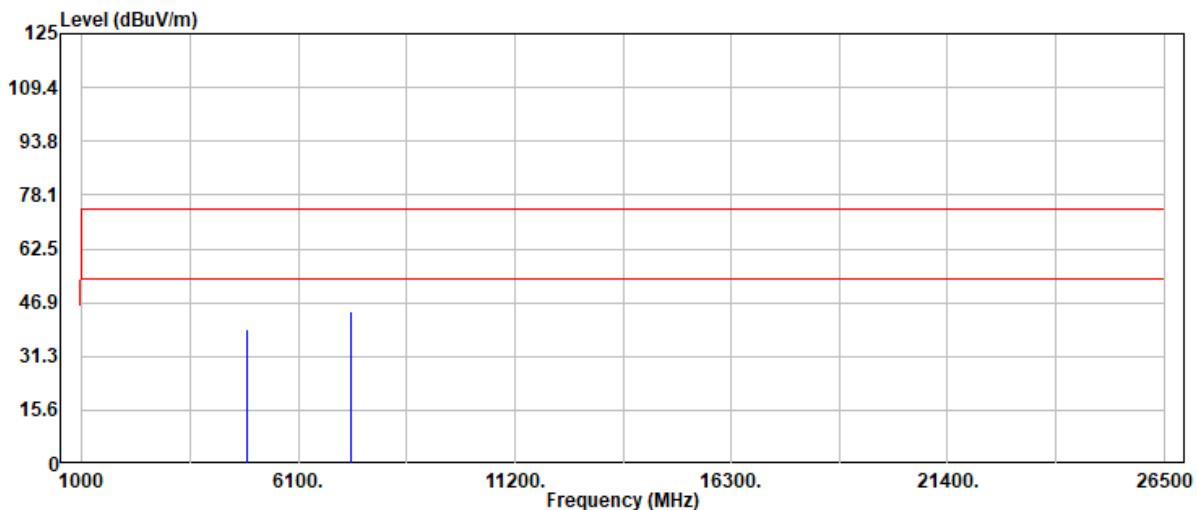
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.68	2.46	37.14	74.00	-36.86	Peak
4874.00	27.41	2.46	29.87	54.00	-24.13	Average
7311.00	36.39	9.14	45.53	74.00	-28.47	Peak
7311.00	26.32	9.14	35.46	54.00	-18.54	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2452 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



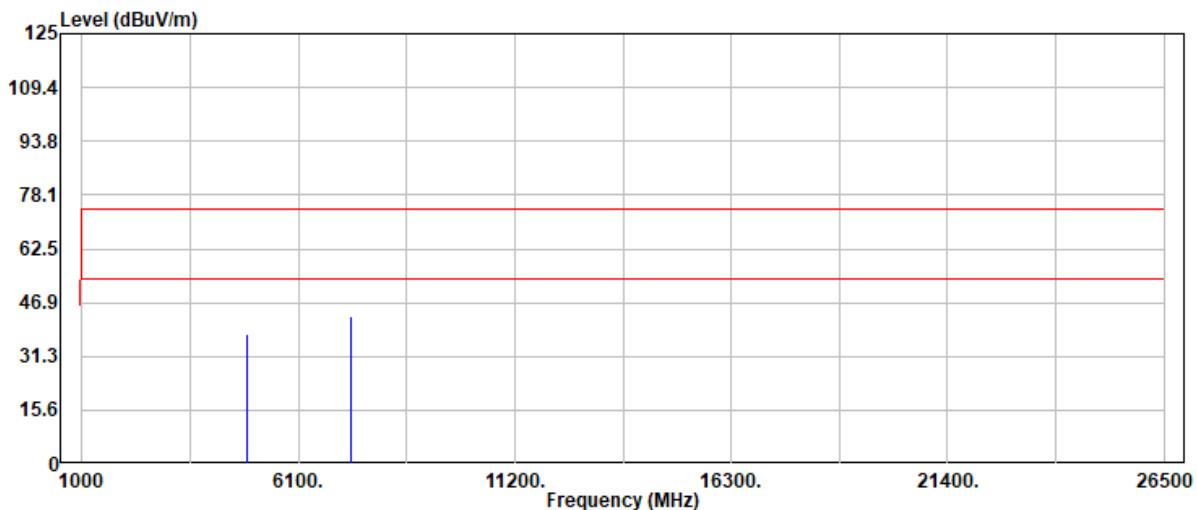
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4904.00	36.18	2.76	38.94	74.00	-35.06	Peak
4904.00	27.80	2.76	30.56	54.00	-23.44	Average
7356.00	35.11	9.35	44.46	74.00	-29.54	Peak
7356.00	26.22	9.35	35.57	54.00	-18.43	Average

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Project No : TM-2503000067P
Operation Band : 802.11n40
Frequency : 2452 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



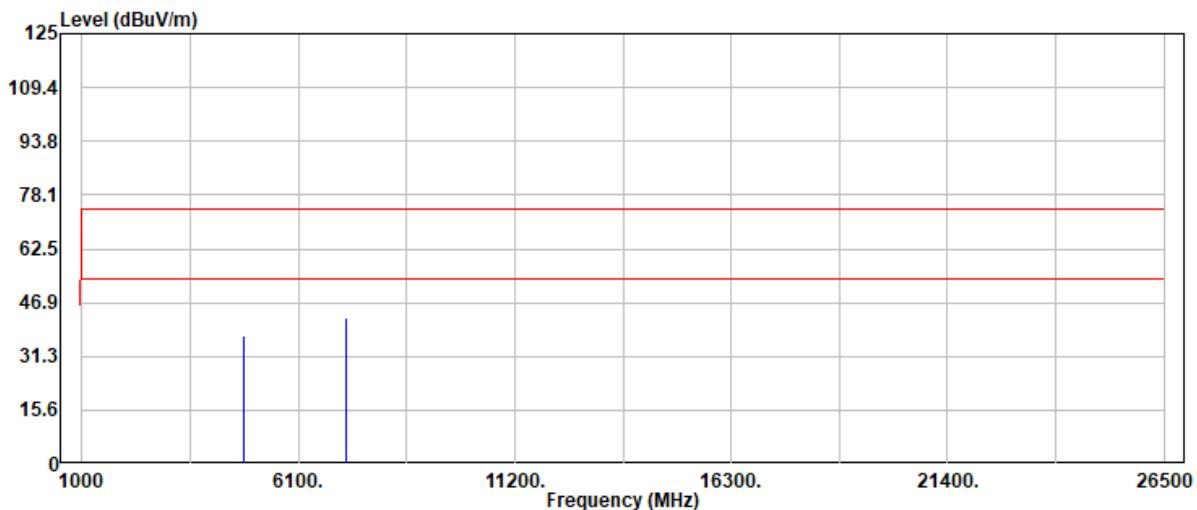
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4904.00	35.09	2.76	37.85	74.00	-36.15	Peak
4904.00	27.60	2.76	30.36	54.00	-23.64	Average
7356.00	33.78	9.35	43.13	74.00	-30.87	Peak
7356.00	26.21	9.35	35.56	54.00	-18.44	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



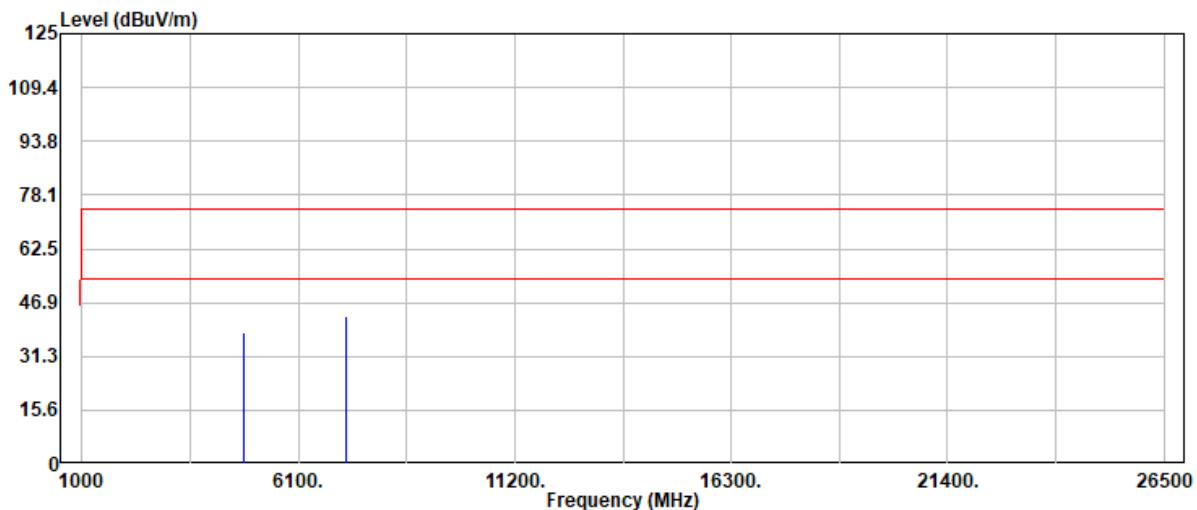
Freq	Read Level	Actual Factor	Limit FS	Margin @3m	Detector Margin	Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
4824.00	35.18	2.25	37.43	74.00	-36.57	Peak
4824.00	27.38	2.25	29.63	54.00	-24.37	Average
7236.00	33.44	8.95	42.39	74.00	-31.61	Peak
7236.00	26.48	8.95	35.43	54.00	-18.57	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2412 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



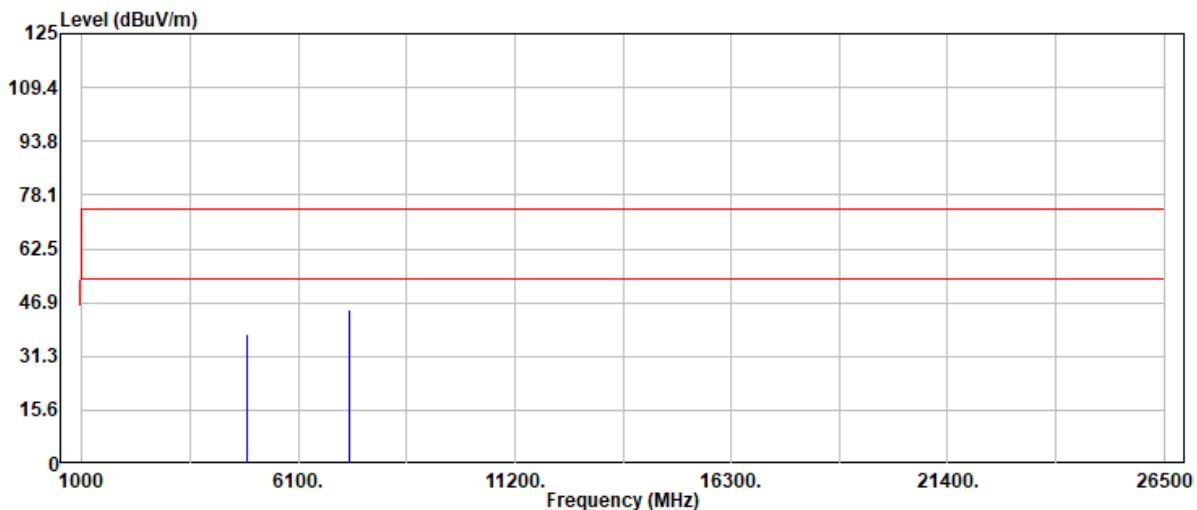
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4824.00	35.80	2.25	38.05	74.00	-35.95	Peak
4824.00	27.49	2.25	29.74	54.00	-24.26	Average
7236.00	33.87	8.95	42.82	74.00	-31.18	Peak
7236.00	26.23	8.95	35.18	54.00	-18.82	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



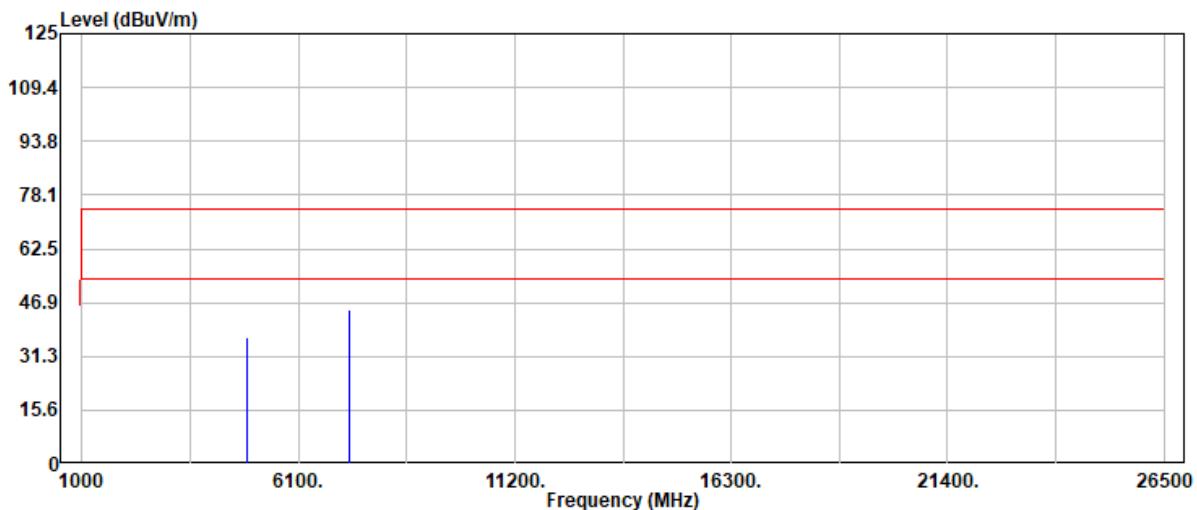
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	35.10	2.46	37.56	74.00	-36.44	Peak
4874.00	27.19	2.46	29.65	54.00	-24.35	Average
7311.00	35.57	9.14	44.71	74.00	-29.29	Peak
7311.00	26.34	9.14	35.48	54.00	-18.52	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



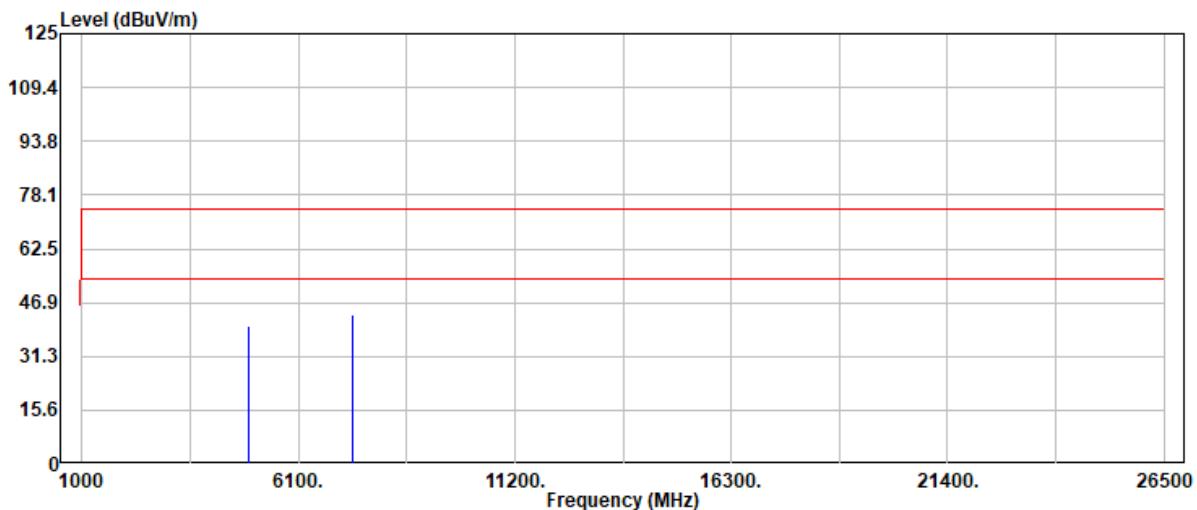
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.56	2.46	37.02	74.00	-36.98	Peak
4874.00	27.58	2.46	30.04	54.00	-23.96	Average
7311.00	35.59	9.14	44.73	74.00	-29.27	Peak
7311.00	26.89	9.14	36.03	54.00	-17.97	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



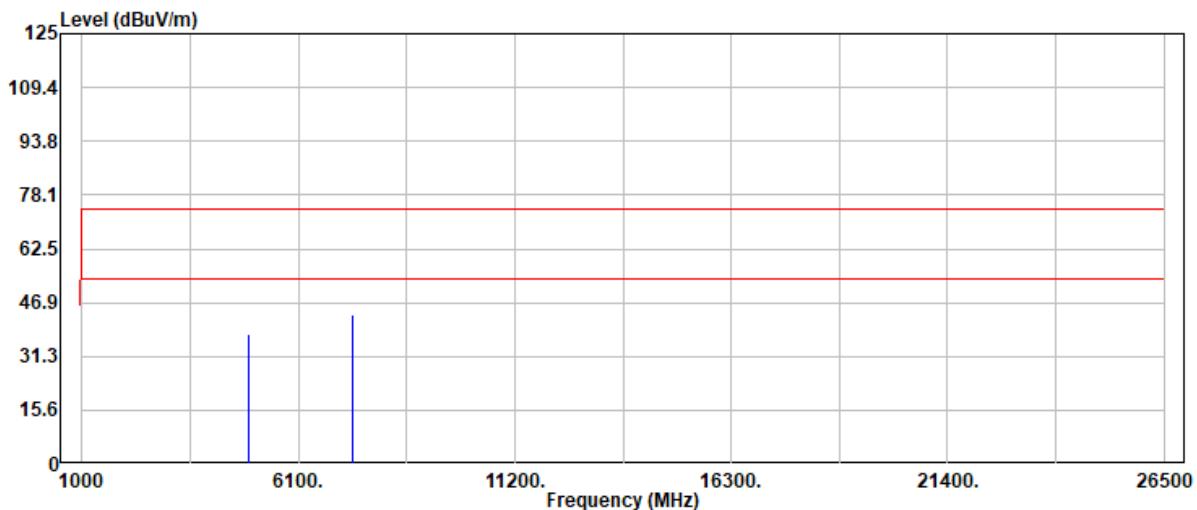
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	37.07	3.00	40.07	74.00	-33.93	Peak
4924.00	26.50	3.00	29.50	54.00	-24.50	Average
4924.00	27.63	3.00	30.63	54.00	-23.37	Average
7386.00	34.02	9.37	43.39	74.00	-30.61	Peak

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax20
Frequency : 2462 MHz
Operation Mode : TX
EUT Pol : H
Setting : 12

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



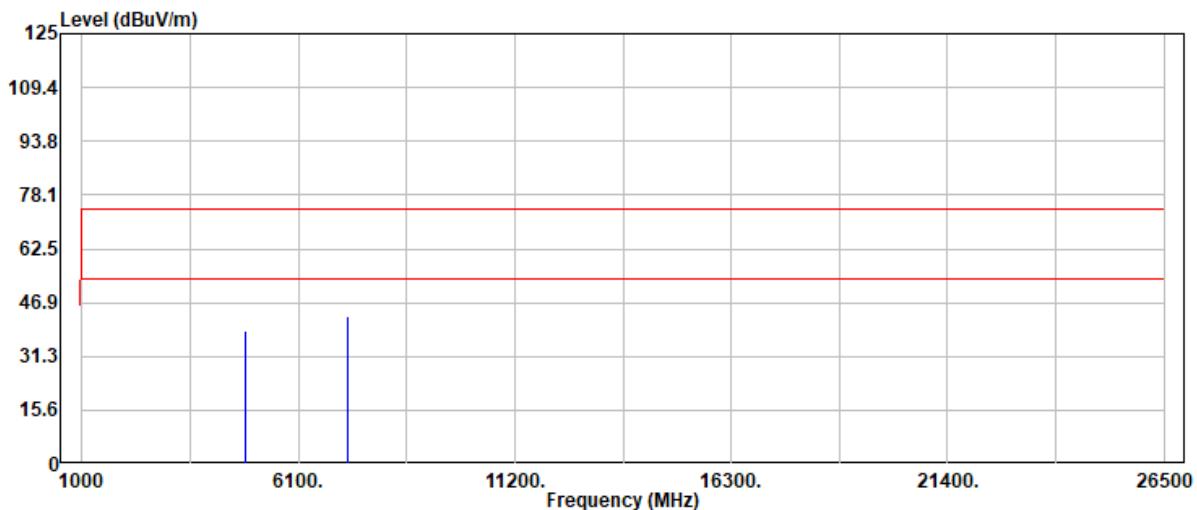
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4924.00	34.90	3.00	37.90	74.00	-36.10	Peak
4924.00	27.39	3.00	30.39	54.00	-23.61	Average
7386.00	33.81	9.37	43.18	74.00	-30.82	Peak
7386.00	26.10	9.37	35.47	54.00	-18.53	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2422 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



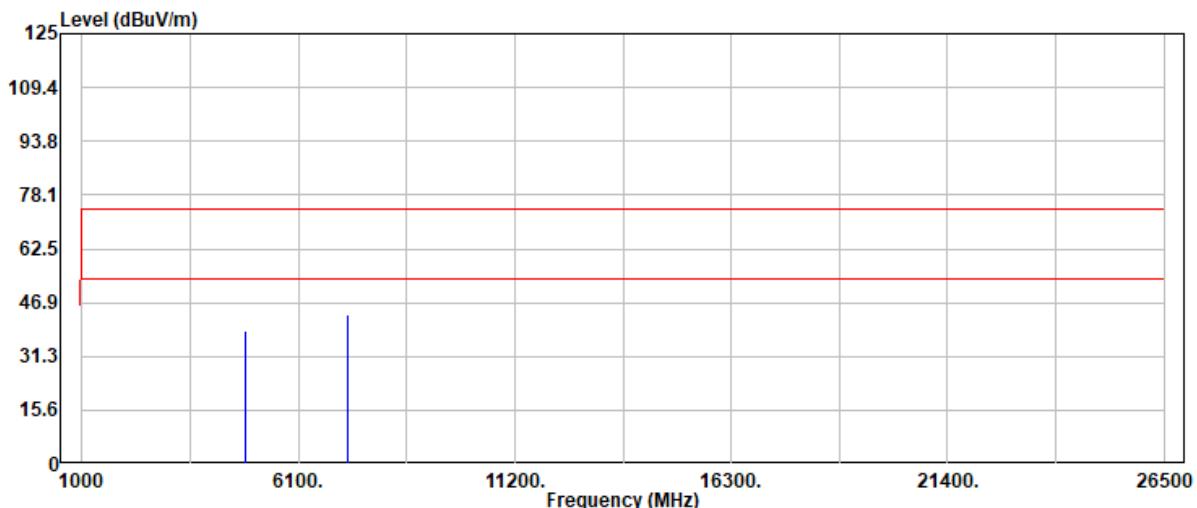
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4844.00	36.22	2.23	38.45	74.00	-35.55	Peak
4844.00	27.84	2.23	30.07	54.00	-23.93	Average
7266.00	33.84	9.05	42.89	74.00	-31.11	Peak
7266.00	26.42	9.05	35.47	54.00	-18.53	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2422 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



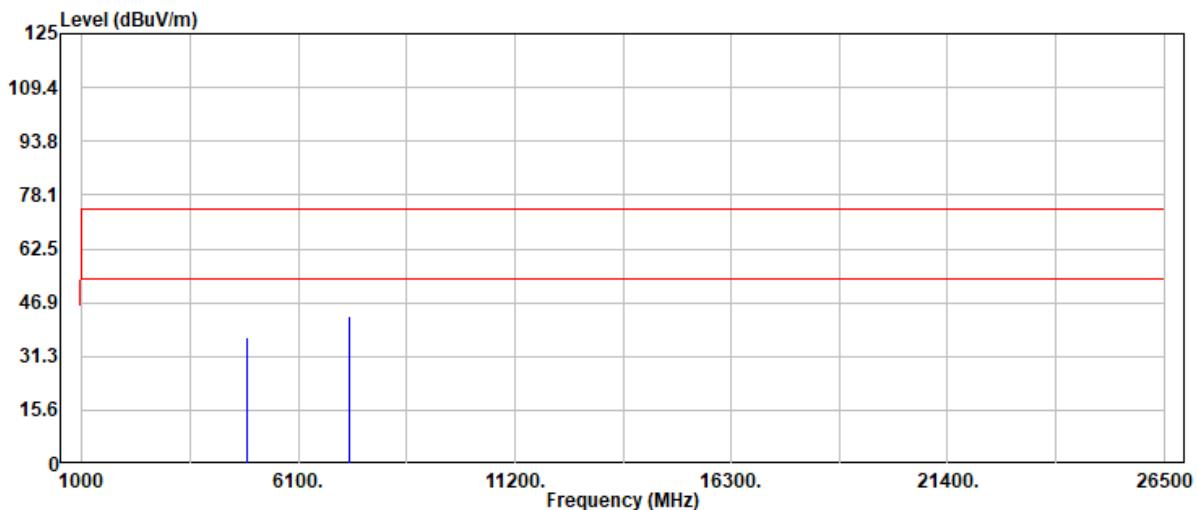
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4844.00	36.41	2.23	38.64	74.00	-35.36	Peak
4844.00	27.27	2.23	29.50	54.00	-24.50	Average
7266.00	34.26	9.05	43.31	74.00	-30.69	Peak
7266.00	26.71	9.05	35.76	54.00	-18.24	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



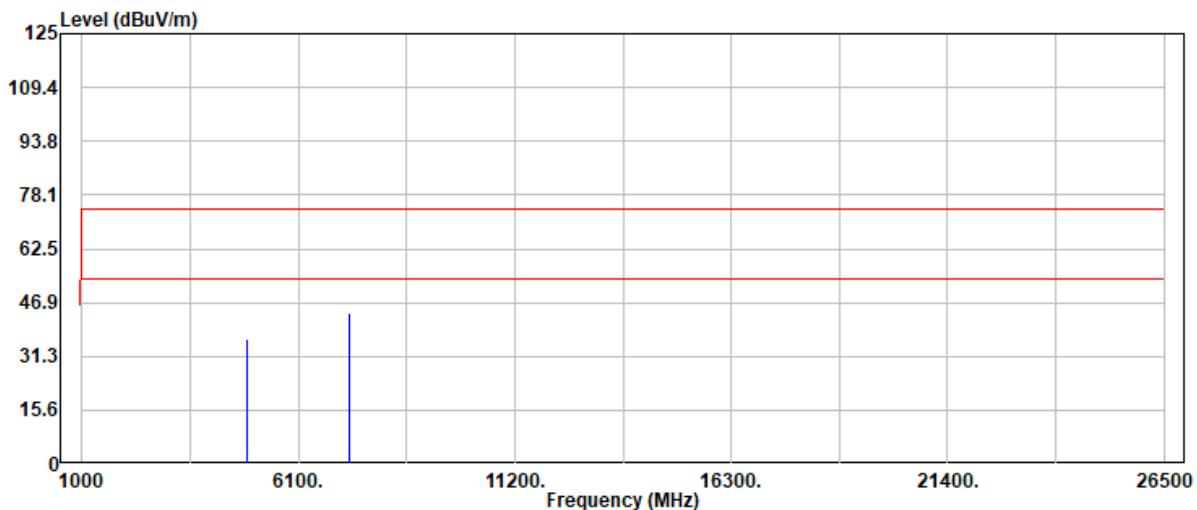
Freq MHz	Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.45	2.46	36.91	74.00	-37.09	Peak
4874.00	27.65	2.46	30.11	54.00	-23.89	Average
7311.00	33.97	9.14	43.11	74.00	-30.89	Peak
7311.00	26.05	9.14	35.19	54.00	-18.81	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2437 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



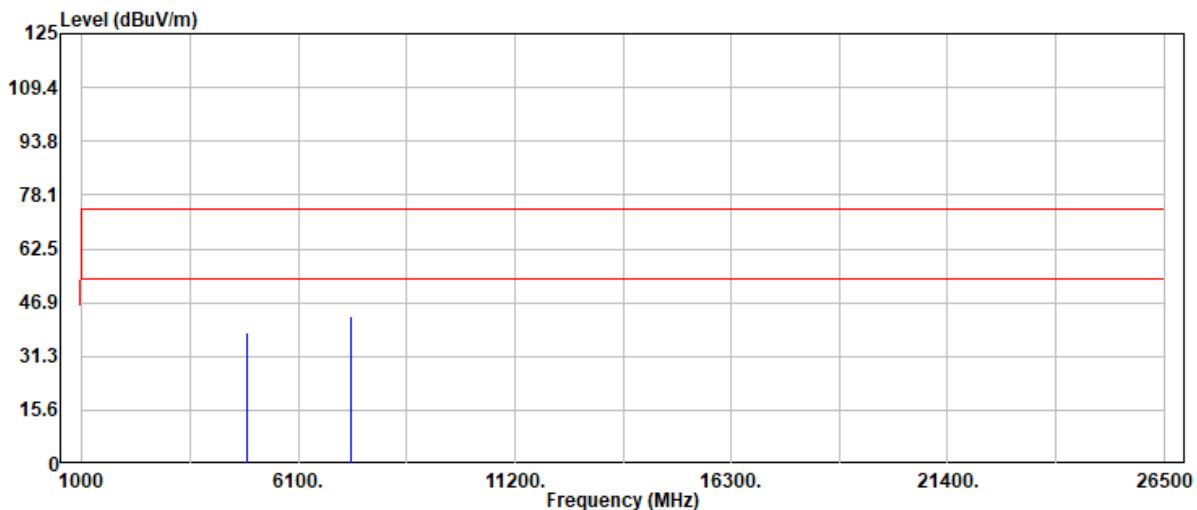
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4874.00	34.03	2.46	36.49	74.00	-37.51	Peak
4874.00	27.39	2.46	29.85	54.00	-24.15	Average
7311.00	34.82	9.14	43.96	74.00	-30.04	Peak
7311.00	26.75	9.14	35.89	54.00	-18.11	Average

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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2452 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : VERTICAL
Engineer : Ben.Yang
Test Chamber : 966A



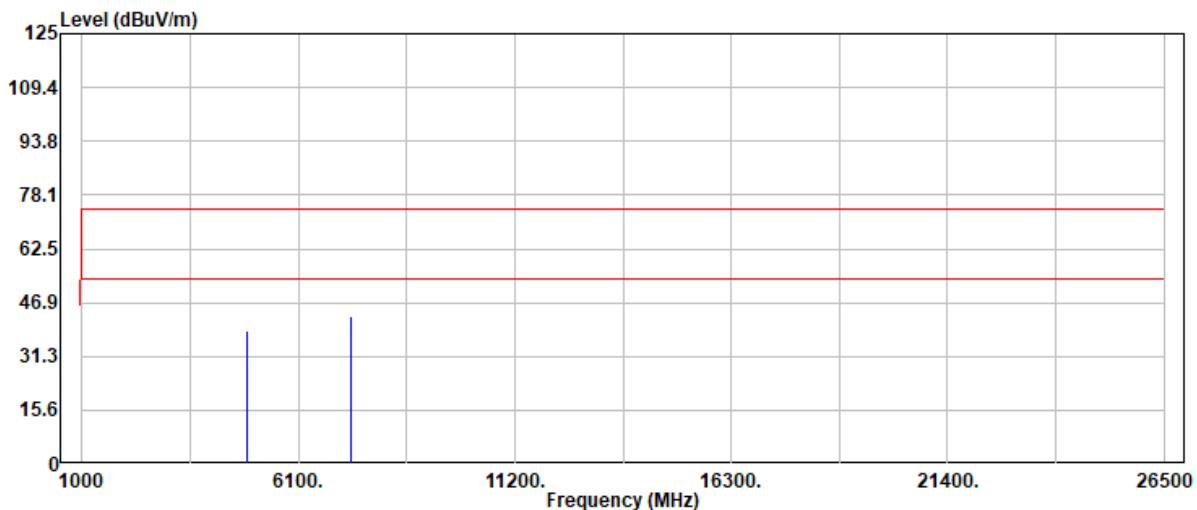
Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4904.00	35.47	2.76	38.23	74.00	-35.77	Peak
4904.00	27.82	2.76	30.58	54.00	-23.42	Average
7356.00	33.71	9.35	43.06	74.00	-30.94	Peak
7356.00	26.58	9.35	35.93	54.00	-18.07	Average

Project No: TM-2503000067P
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Project No : TM-2503000067P
Operation Band : 802.11ax40
Frequency : 2452 MHz
Operation Mode : TX
EUT Pol : H
Setting : 10

Test Date : 2025-03-19
Temp./Humi. : 24.3/58
Antenna Pol. : HORIZONTAL
Engineer : Ben.Yang
Test Chamber : 966A



Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4904.00	35.85	2.76	38.61	74.00	-35.39	Peak
4904.00	27.78	2.76	30.54	54.00	-23.46	Average
7356.00	33.70	9.35	43.05	74.00	-30.95	Peak
7356.00	26.89	9.35	36.24	54.00	-17.76	Average

4.3 POWER SPECTRAL DENSITY

4.3.1 Test Limit

According to §15.247(e) and RSS-247 section 5.2(b),

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.

FCC Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 8dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 8 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :
IC Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 8dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 8 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :

4.3.2 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.

4.3.4 Test Result

Temperature: 19.2 ~ 25.2°C **Test date:** March 14 ~ April 21, 2025
Humidity: 50 ~ 64% RH **Tested by:** David Li

FCC :

POWER DENSITY 802.11b				
Freq. (MHz)	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-3.79	-3.79	2.60	PASS
2437	-2.83	-2.83	2.60	PASS
2462	-2.58	-2.58	2.60	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(antenna gain-6)=2.6

POWER DENSITY 802.11g				
Freq. (MHz)	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-14.14	-14.14	2.60	PASS
2437	-13.16	-13.16	2.60	PASS
2462	-12.6	-12.60	2.60	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(antenna gain-6)=2.6

POWER DENSITY 802.11n HT20					
Freq. (MHz)	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-19.73	-20.12	-16.91	-0.41	PASS
2437	-18.75	-19.63	-16.16	-0.41	PASS
2462	-18.84	-19.1	-15.96	-0.41	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain -6)=-0.41

POWER DENSITY 802.11n HT40					
Freq. (MHz)	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	-25.04	-24.01	-21.48	-0.41	PASS
2437	-23.7	-24.29	-20.97	-0.41	PASS
2452	-23.43	-23.45	-20.43	-0.41	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain -6)=-0.41

POWER DENSITY 802.11ax HE20						
Freq. (MHz)	RU Config	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	full	-20.33	-19.78	-17.04	-0.41	PASS
2437	full	-18.79	-19.17	-15.97	-0.41	PASS
2462	full	-19.11	-19.16	-16.12	-0.41	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain -6)=-0.41

POWER DENSITY 802.11ax HE40						
Freq. (MHz)	RU Config	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	full	-24.42	-24.41	-21.40	-0.41	PASS
2437	full	-23.56	-24.05	-20.79	-0.41	PASS
2452	full	-22.96	-23.71	-20.31	-0.41	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain -6)=-0.41

IC :

POWER DENSITY 802.11b				
Freq. (MHz)	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-3.79	-3.79	7.00	PASS
2437	-2.83	-2.83	7.00	PASS
2462	-2.58	-2.58	7.00	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(antenna gain-6)=7

POWER DENSITY 802.11g				
Freq. (MHz)	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-14.14	-14.14	7.00	PASS
2437	-13.16	-13.16	7.00	PASS
2462	-12.6	-12.60	7.00	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(antenna gain-6)=7

POWER DENSITY 802.11n HT20					
Freq. (MHz)	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-19.73	-20.12	-16.91	6.00	PASS
2437	-18.75	-19.63	-16.16	6.00	PASS
2462	-18.84	-19.1	-15.96	6.00	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain-6)=6

POWER DENSITY 802.11n HT40					
Freq. (MHz)	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	-25.04	-24.01	-21.48	6.00	PASS
2437	-23.7	-24.29	-20.97	6.00	PASS
2452	-23.43	-23.45	-20.43	6.00	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain-6)=6

POWER DENSITY 802.11ax HE20						
Freq. (MHz)	RU Config	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	full	-20.33	-19.78	-17.04	6.00	PASS
2437	full	-18.79	-19.17	-15.97	6.00	PASS
2462	full	-19.11	-19.16	-16.12	6.00	PASS

Note:

1. cable loss as dB that offsets in the spectrum.
2. The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain-6)=6

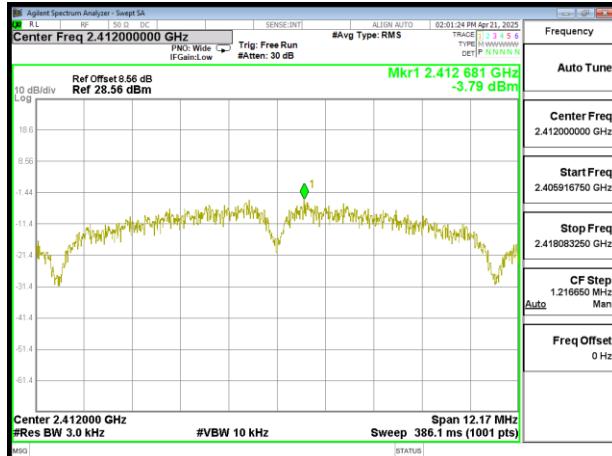
POWER DENSITY 802.11ax HE40						
Freq. (MHz)	RU Config	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	full	-24.42	-24.41	-21.40	6.00	PASS
2437	full	-23.56	-24.05	-20.79	6.00	PASS
2452	full	-22.96	-23.71	-20.31	6.00	PASS

Note:

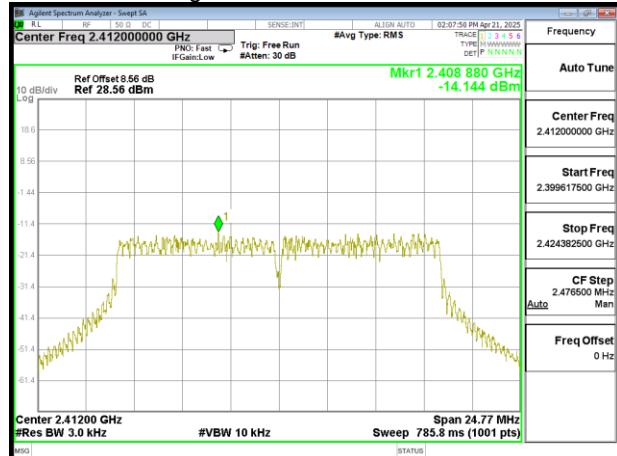
1. cable loss as dB that offsets in the spectrum.
- 2.The total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.
3. The antenna gain is grater than 6 dB, therefore the power limit attenuation has been applied in the test results. 8-(Direction gain-6)=6

Test Data

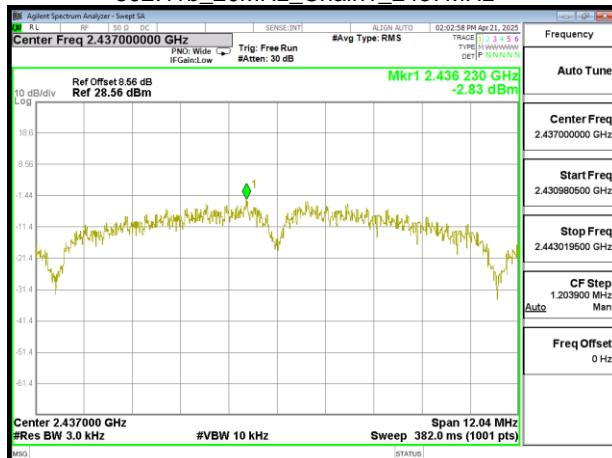
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802.11g_20MHz_Chain1_2412MHz



802.11b_20MHz_Chain1_2437MHz



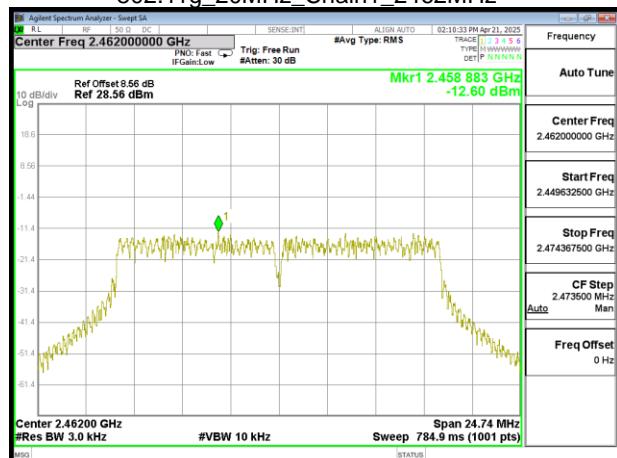
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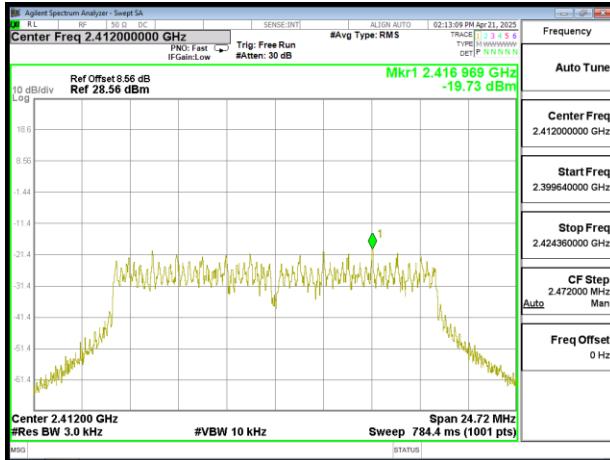
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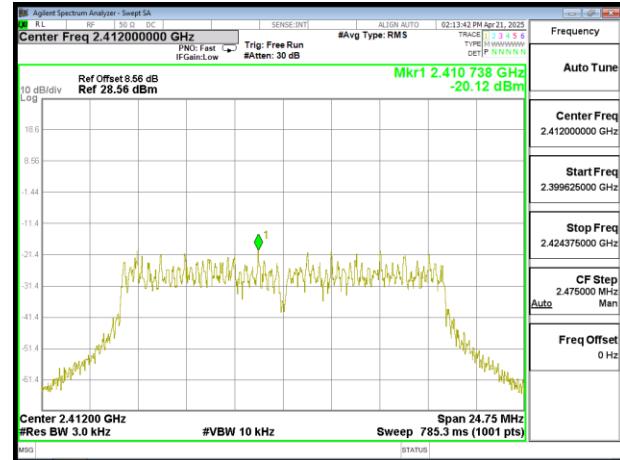
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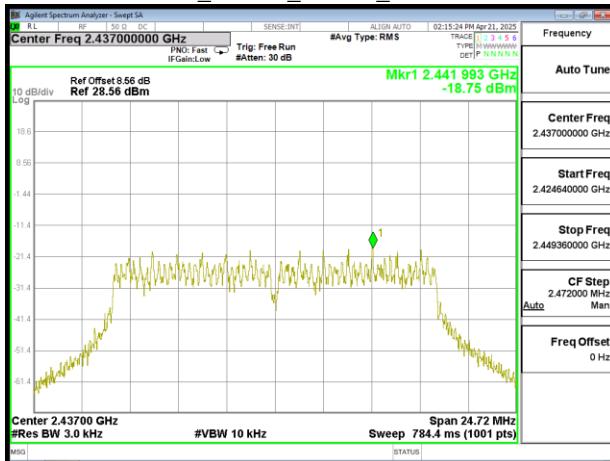
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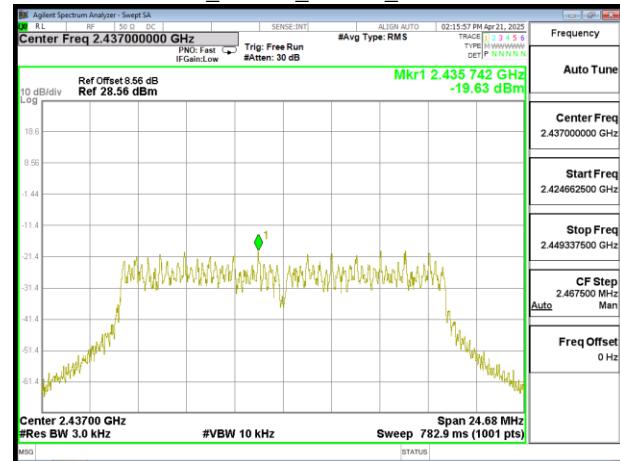
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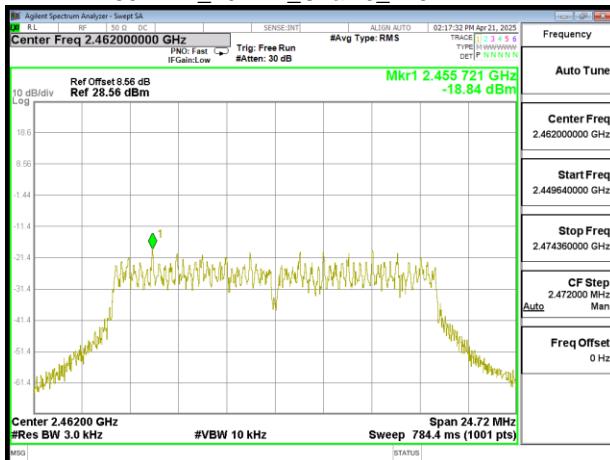
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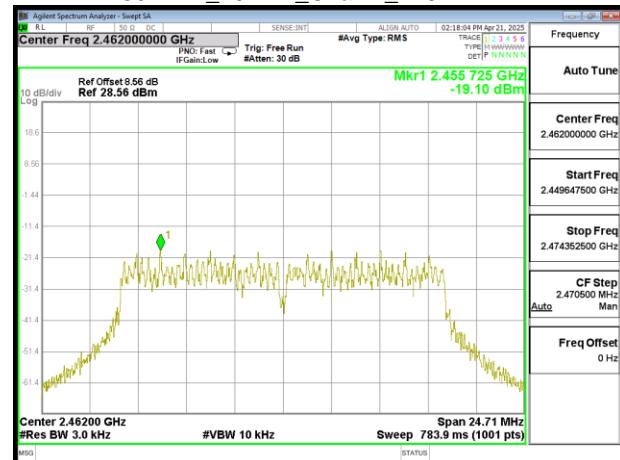
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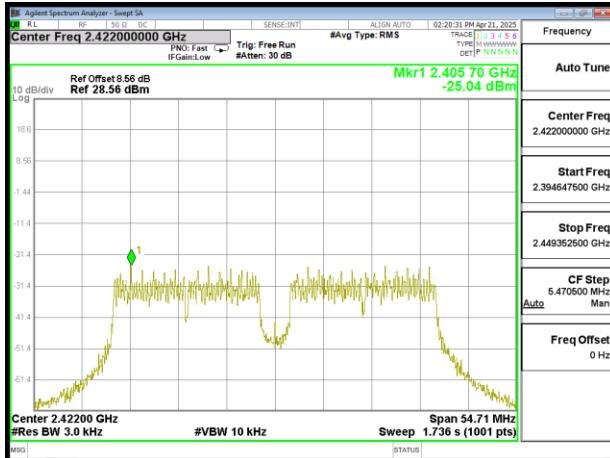
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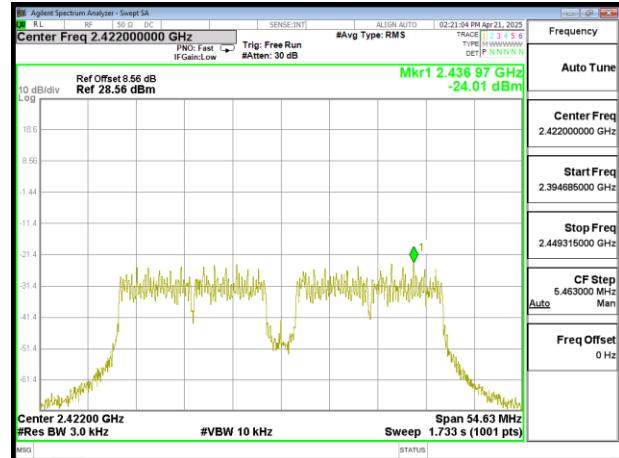
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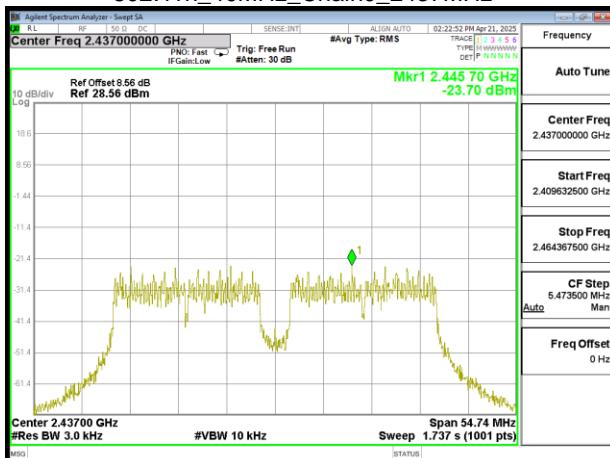
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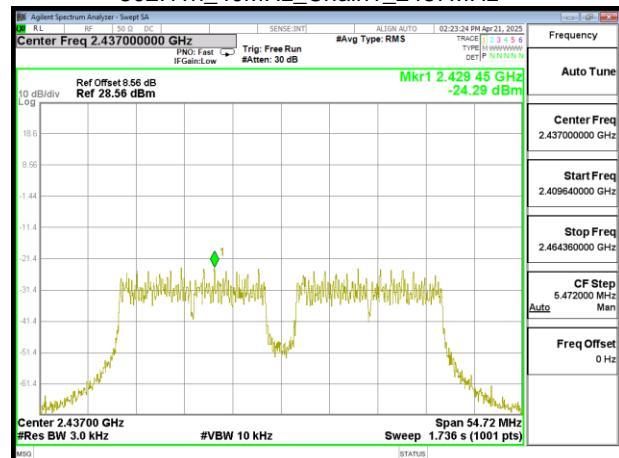
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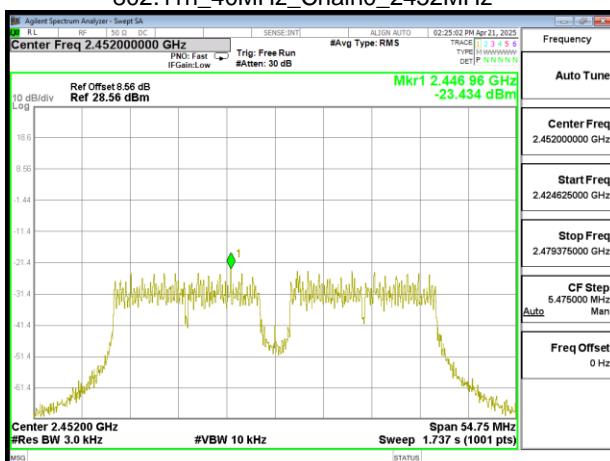
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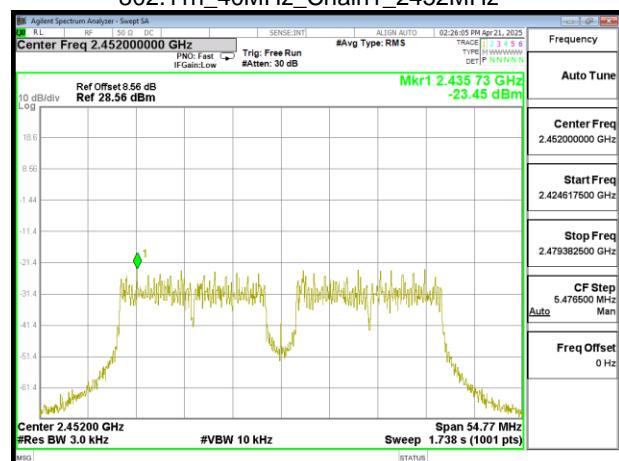
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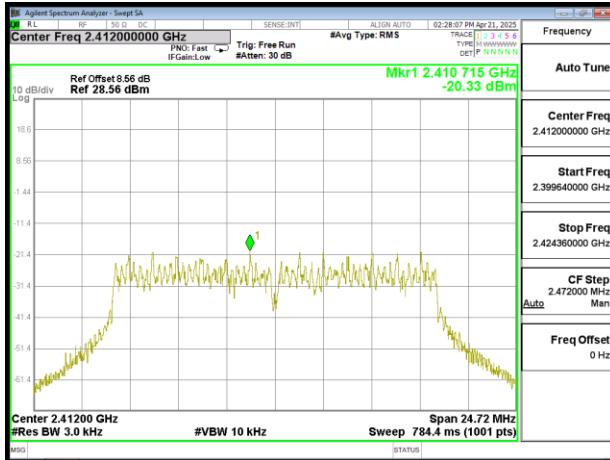
802.11n_40MHz_Chain0_2452MHz



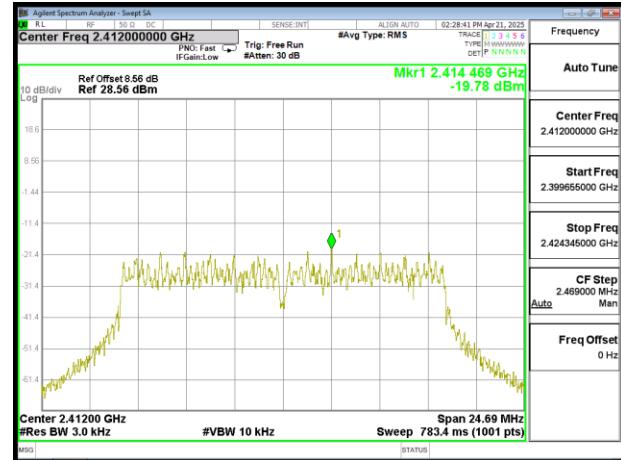
802.11n_40MHz_Chain1_2452MHz



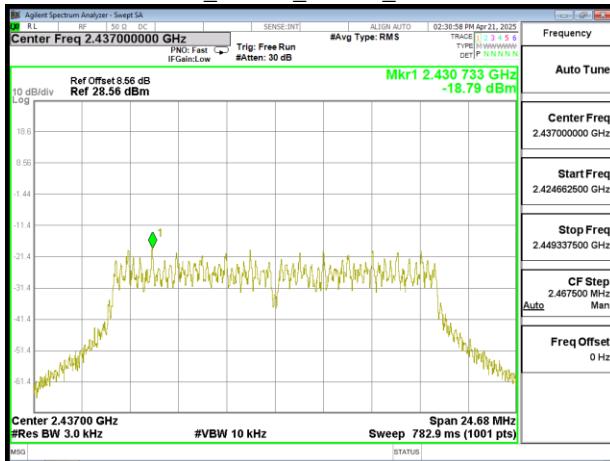
802.11ax_20MHz_Chain0_2412MHz



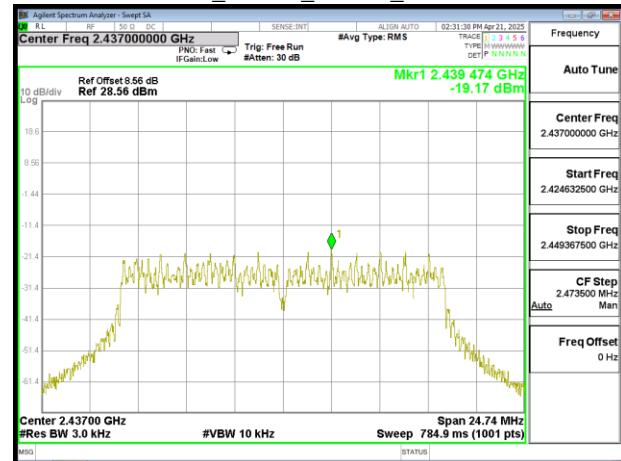
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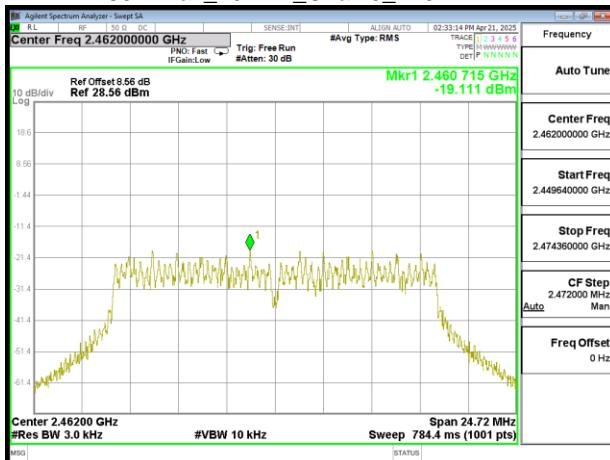
802.11ax_20MHz_Chain0_2437MHz



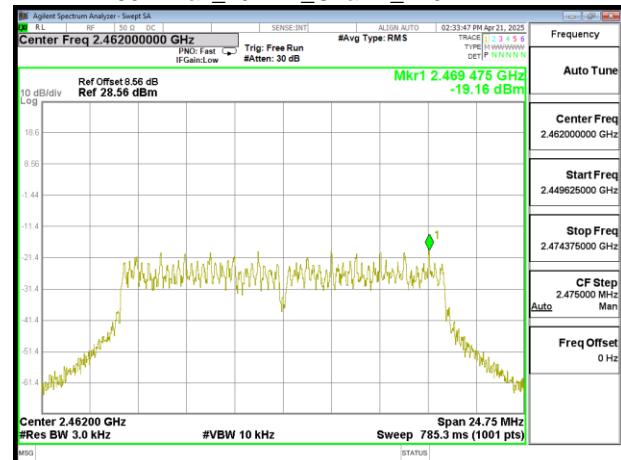
802.11ax_20MHz_Chain1_2437MHz



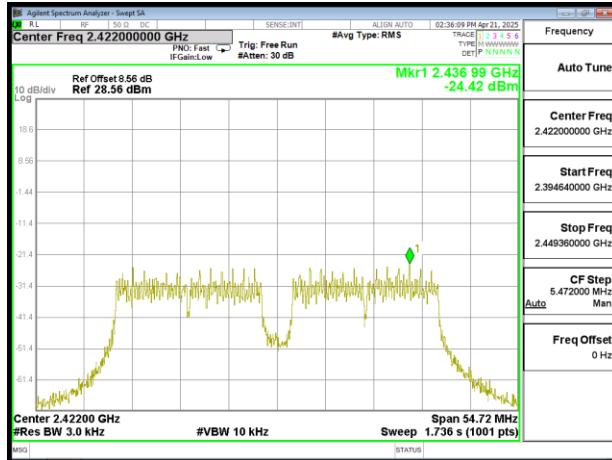
802.11ax_20MHz_Chain0_2462MHz



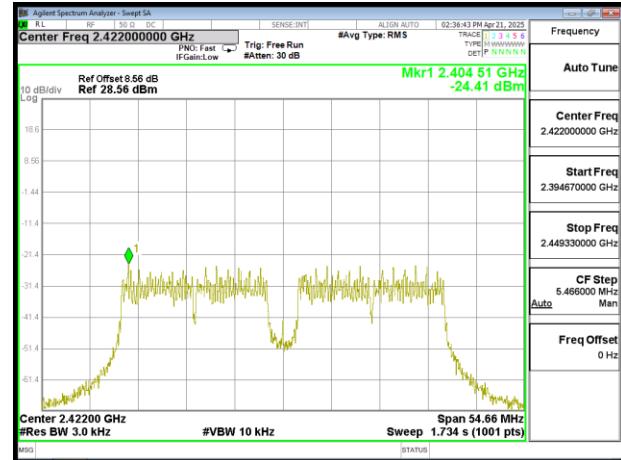
802.11ax_20MHz_Chain1_2462MHz



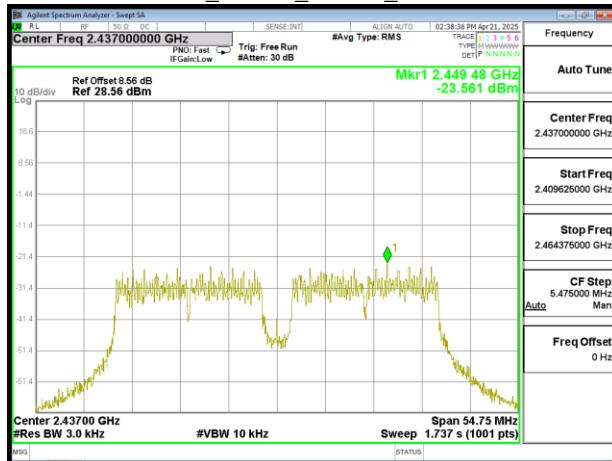
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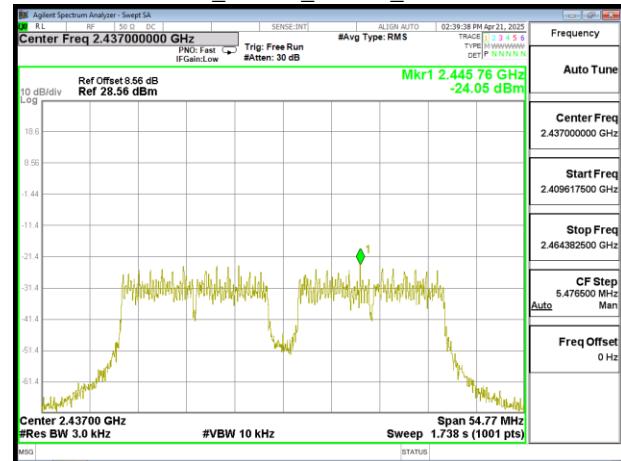
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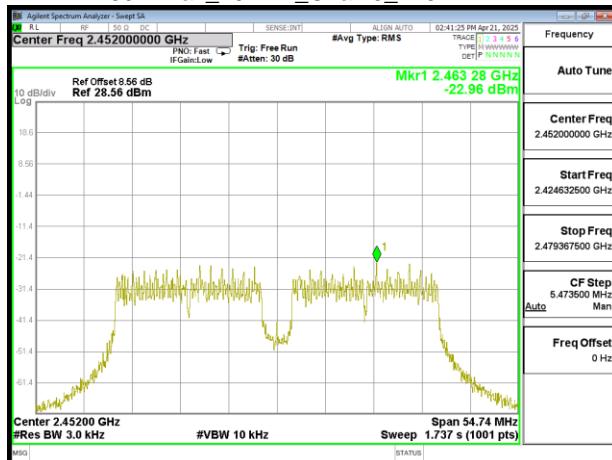
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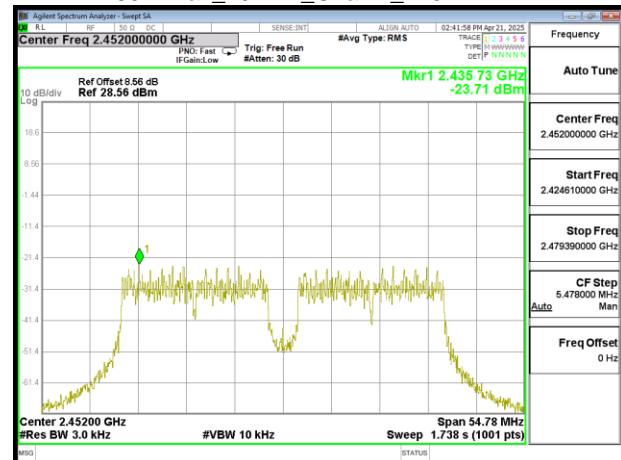
802.11ax_40MHz_Chain1_2437MHz



802.11ax_40MHz_Chain0_2452MHz



802.11ax_40MHz_Chain1_2452MHz



- End of Test Report -