



FCC PART 15.247
RSS-GEN ISSUE 5, FEBRUARY 2021 AMENDMENT2
RSS-247 ISSUE 4, JULY 24, 2025

TEST REPORT

For

Xiamen Renhe Sports Equipment Co., Ltd

FCC: 4F 1129 Jicheng Road Industrial Concentration Zone Tongan, Xiamen city Fujian Province, China

IC: 4/F, 1129, Jicheng Road, Industrial Concentration Zone, Tong'an, Xiamen, Fujian 361100 China

FCC ID: 2ASII-AP01
IC: 34495-AP01

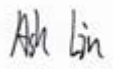
Report Type: Original Report	Product Name: TREADMILL
Report Number:	2507W27469E-RF-02
Report Date:	2025-10-31
Reviewed By:	Ash Lin 
Approved By:	Miles Chen
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen Tel: +86-592-3200111 www.baclcorp.com.cn

TABLE OF CONTENTS

REPORT REVISION HISTORY	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	5
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY.....	6
SYSTEM TEST CONFIGURATION.....	7
TEST MODE AND VOLTAGE.....	7
DESCRIPTION OF TEST CONFIGURATION	7
EQUIPMENT MODIFICATIONS	7
★EUT EXERCISE SOFTWARE	8
DUTY CYCLE	9
SUPPORT EQUIPMENT LIST AND DETAILS	10
EXTERNAL I/O CABLE	10
BLOCK DIAGRAM OF TEST SETUP	10
SUMMARY OF TEST RESULTS.....	12
TEST EQUIPMENT LIST	13
FCC §15.203 & RSS-Gen Clause 6.8 - ANTENNA REQUIREMENT	14
APPLICABLE STANDARD	14
ANTENNA CONNECTOR CONSTRUCTION	14
FCC §15.207 (a) & RSS-Gen Clause 8.8 – AC LINE CONDUCTED EMISSIONS.....	15
APPLICABLE STANDARD	15
EUT SETUP	15
EMI TEST RECEIVER SETUP.....	15
TEST PROCEDURE	15
RESULT & MARGIN CALCULATION.....	16
TEST DATA	16
FCC §15.209, §15.205 & §15.247(d) & RSS-247 ISSUE 4 Clause 6.6, RSS-GEN ISSUE5 CLAUSE 8.10 - SPURIOUS EMISSIONS.....	19
APPLICABLE STANDARD	19
EUT SETUP	19
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	21
TEST PROCEDURE	21
RESULT & MARGIN CALCULATION.....	22
TEST DATA	23
FCC §15.247(a) (2) & RSS-247 ISSUE 4 Clause 6.3.1 a - 6 dB EMISSION BANDWIDTH.....	95
APPLICABLE STANDARD	95
EUT SETUP	95
TEST PROCEDURE	95
TEST DATA	96
RSS-Gen ISSUE 5 Clause 6.7 – 99% OCCUPIED BANDWIDTH.....	99
APPLICABLE STANDARD	99
EUT SETUP	99
TEST PROCEDURE	100
TEST DATA	101

FCC §15.247(B) (3) & RSS-247 ISSUE 4 CLAUSE 6.3.2 – MAXIMUM CONDUCTED OUTPUT POWER.....	104
APPLICABLE STANDARD	104
EUT SETUP	104
TEST PROCEDURE	104
TEST DATA	105
FCC §15.247(d) & RSS-247 ISSUE 4 Clause 6.6 – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE	106
APPLICABLE STANDARD	106
EUT SETUP	106
TEST PROCEDURE	106
TEST DATA	107
FCC §15.247(e) & RSS-247 ISSUE 4 CLAUSE 6.3.1 b- POWER SPECTRAL DENSITY	109
APPLICABLE STANDARD	109
EUT SETUP	109
TEST PROCEDURE	109
TEST DATA	110
EUT PHOTOGRAPHS	113
TEST SETUP PHOTOGRAPHS	114

REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2507W27469E-RF-02	R1V1	2025-10-31	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Xiamen Renhe Sports Equipment Co., Ltd
Product Name:	TREADMILL
Tested Model:	AP01
HVIN:	AP01
Multiple Model(s):	R3, X20
Trade Mark:	N/A
Power Supply:	AC 120V/60Hz
Maximum Peak Conducted Output Power:	21.33 dBm
Frequency Range:	802.11b/g/n20: 2412-2462 MHz 802.11n40: 2422-2452 MHz
Modulation Technique:	802.11b: DSSS 802.11g/n: OFDM
Antenna Type:	PCB antenna
★Maximum Antenna Gain:	0 dBi
EUT Received Status:	Good
<i>Note:</i> 1. The Maximum Antenna Gain was declared by manufacturer. 2. The test model is identify with the series model except for the model name, please refer to declaration letter for more detail. 3. All measurement and test data in this report was gathered from production sample serial number: 382M-1 (RF conducted), 382M-2 (Conducted Emission and Radiated Emission) (Assigned by the BACL (Xiamen). The EUT supplied by the applicant was received on 2025-08-07)	

Objective

This test report is prepared for *Xiamen Renhe Sports Equipment Co., Ltd* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions's rules and RSS-247 Issue 4, July 24, 2025 and RSS-Gen, Issue 5, February 2021 Amendment 2 of the Innovation, Science and Economic Development Canada.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020 + Cor.1-2023[▲], American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and KDB 558074 D01 15.247 Meas Guidance v05r02.

All tests and measurements indicated in this document were performed in accordance with RSS-247 Issue 4, July 24, 2025 of the Innovation, Science and Economic Development Canada & RSS-Gen, Issue 5, February 2021 Amendment 2: General Requirements for Compliance of Radio Apparatus & ANSI C63.10-2020 + Cor.1-2023[▲]: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone Xiamen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the IC accredited lab under the KDB 974614 D01, the IC Designation No. : CN0176.

Measurement Uncertainty

Item		U_{lab}
Conducted Emission	150kHz-30MHz	2.45 dB
Radiated Emission	9kHz-150kHz	2.82dB
	150kHz-30MHz	2.74dB
	30MHz~200MHz	3.47dB
	200MHz~1GHz	4.86dB
	1GHz~6GHz	4.88dB
	6GHz~18GHz	4.95dB
	18GHz~26.5GHz	4.45dB
Occupied Channel Bandwidth		2%
Transmitter Conducted Power(Conducted RF power)		1.49 dB
Conducted Spurious Emission		2.92 dB
Power Spectral Density		0.61 dB
Duty Cycle		1 %
Temperature		1 °C
Humidity		5 %
Supply voltages		1 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

SYSTEM TEST CONFIGURATION

Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Test mode 1: Transmitting
Test voltage:	Test mode 1: AC 120V/60Hz
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.

Description of Test Configuration

For 802.11b, 802.11g, 802.11n-ht20, 802.11n-ht40 mode, 11 channels are provided to testing:

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

For 802.11b, 802.11g, 802.11n-ht20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-ht40 mode, EUT was tested with Channel 3, 6 and 9.

Equipment Modifications

No modification was made to the EUT tested.

★EUT Exercise Software

Wi-Fi test in the engineer mode.

RF Test Tool: Wifi_Test_Tool_V1.9.0

The device was tested with the worst case was performed as below:

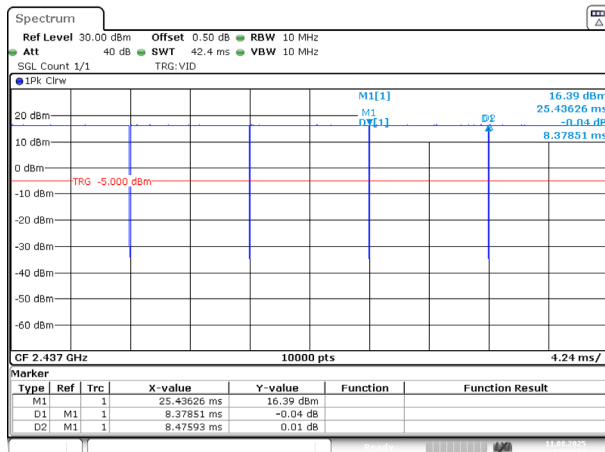
Test Modes	Test Channels	Test Frequency	Data rate	Power Level Setting
802.11b	Lowest	2412	1Mbps	8
	Middle	2437	1Mbps	8
	Highest	2462	1Mbps	8
802.11g	Lowest	2412	6Mbps	default
	Middle	2437	6Mbps	default
	Highest	2462	6Mbps	default
802.11n ht20	Lowest	2412	MCS0	default
	Middle	2437	MCS0	default
	Highest	2462	MCS0	default
802.11n ht40	Lowest	2422	MCS0	default
	Middle	2437	MCS0	default
	Highest	2452	MCS0	default

Pre-scan with all the data rates, the above data rate is the worst case for Wi-Fi test.

Duty Cycle

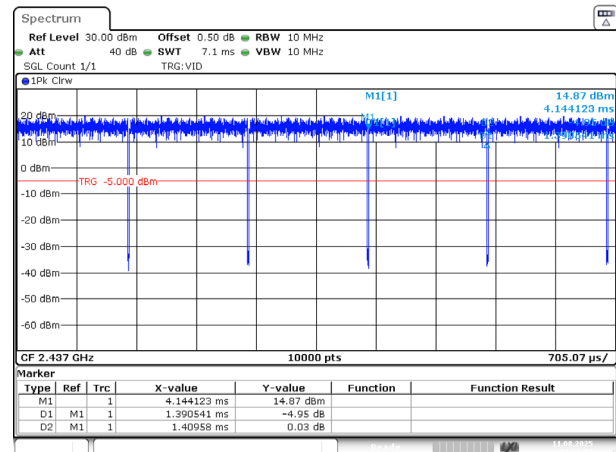
Test Mode:		Transmitting		Test Engineer:		Braylon Ma	
Test Date:		2025-08-11		Test Voltage:		AC 120V/60Hz	
Environment:		Temp.: 25.3°C; Humi.: 61%; Atm :100.3kPa					
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	VBW Setting (kHz)		
802.11b	8.379	8.476	98.86	/	0.01		
802.11g	1.391	1.41	98.65	/	0.01		
802.11n ht20	1.299	1.317	98.63	/	0.01		
802.11n ht40	0.648	0.658	98.48	/	0.01		

802.11b_2437MHz



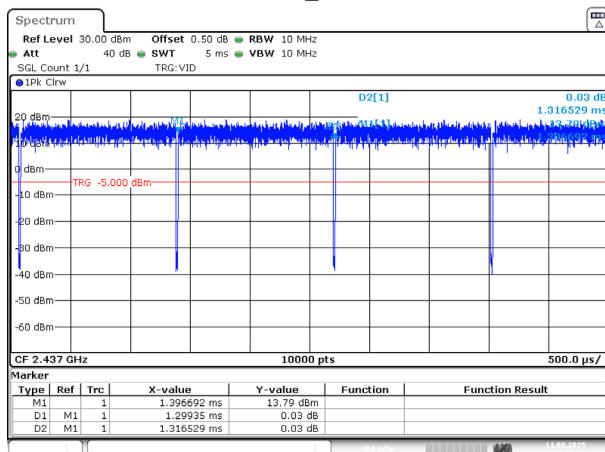
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 13:58:01

802.11g_2437MHz



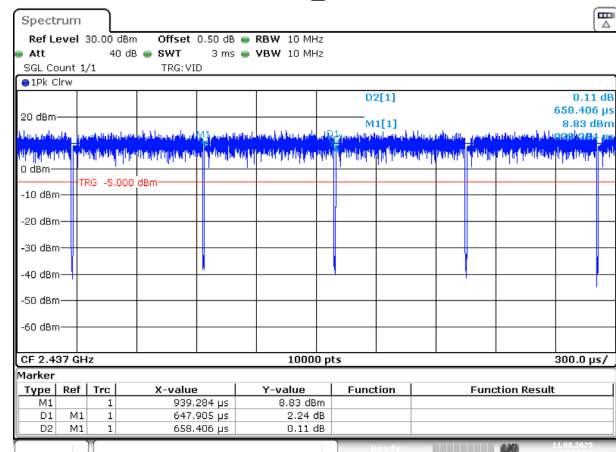
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 13:58:53

802.11n20_2437MHz



ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:00:18

802.11n40_2437MHz



ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:02:04

Support Equipment List and Details

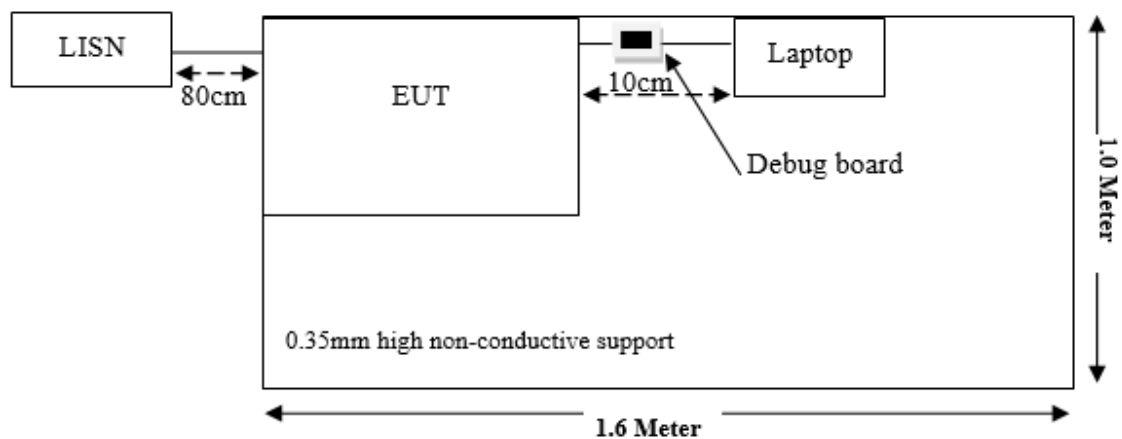
Manufacturer	Description	Model	Serial Number
Lenovo	Laptop	T480	PF1P5K4F
Unknown	Debug board	Unknown	Unknown

External I/O Cable

Cable Description	Length (m)	From Port	To
Dupont Cable	0.2	EUT	Debug board
USB cable	10	Laptop	Debug board
USB cable	1.5	Laptop	Debug board
RF Cable	0.1	EUT antenna port	Spectrum Analyzer

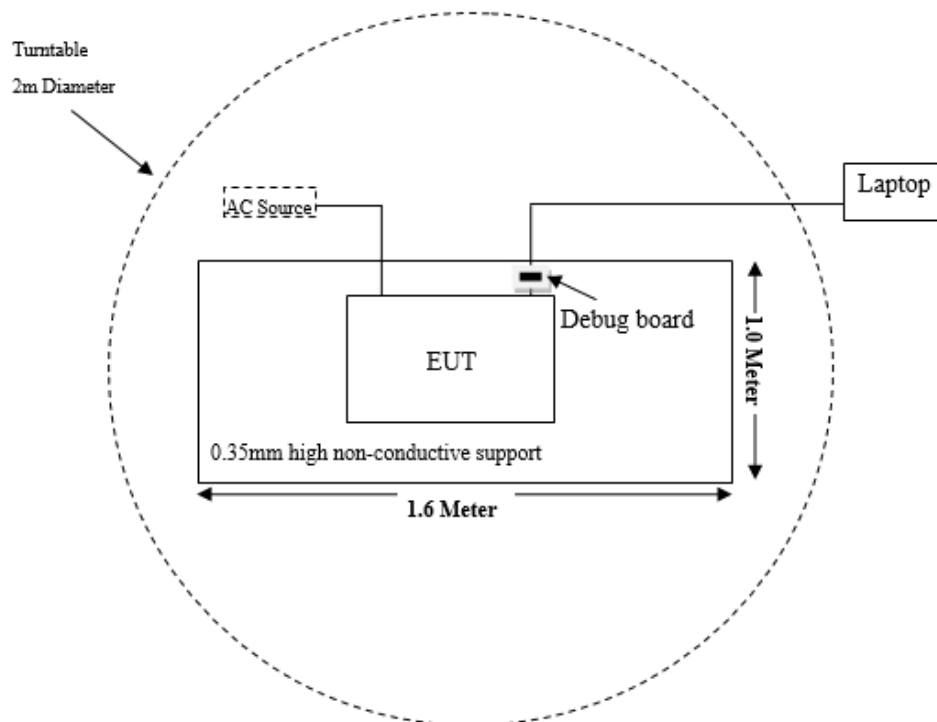
Block Diagram of Test Setup

Conducted Emission:



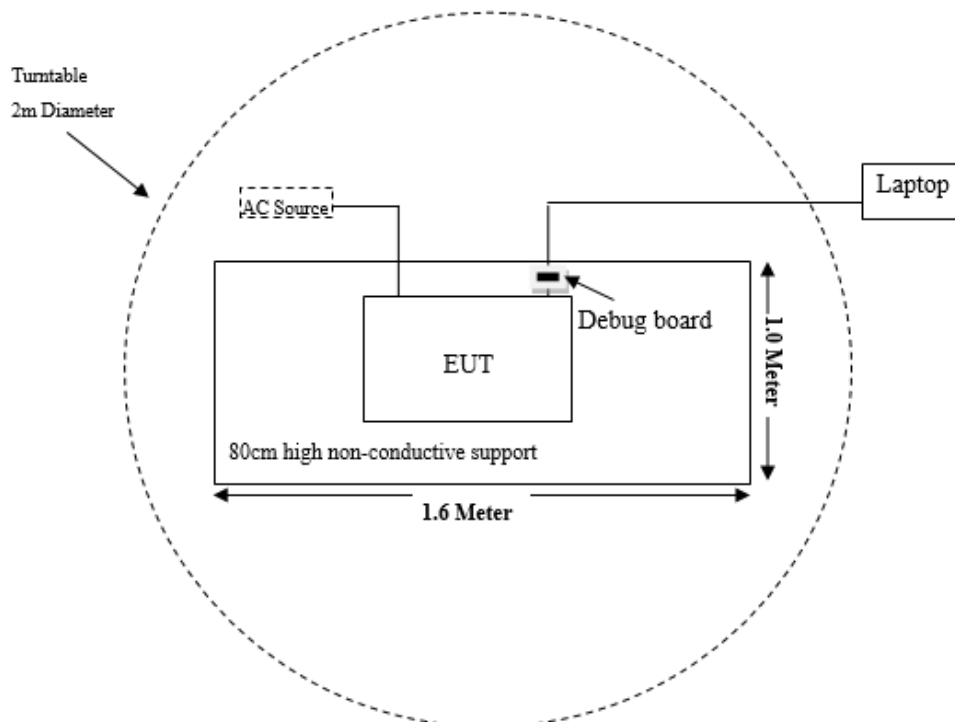
Radiated Emission:

Below 1GHz:



Note: Antenna is 0.8m above ground.

Above 1GHz:



Note: Antenna is 1.5m above ground.

SUMMARY OF TEST RESULTS

Standard(s)/Rule(s)	Description of Test	Result
FCC §15.203 RSS-Gen Issue 5 Clause 6.8	Antenna Requirement	Compliance
FCC §15.207 (a) RSS-Gen Issue 5 Clause 8.8	AC Line Conducted Emissions	Compliance
FCC §15.205, §15.209, §15.247(d) RSS-247 Issue 4 Clause 6.6 RSS-Gen Issue 5 Clause 8.10	Radiated Emissions & Restricted Bands Emissions & Antenna-port conducted emission	Compliance
FCC §15.247 (a)(2) RSS-247 Issue 4 Clause 6.3.1 a	6 dB Emission Bandwidth	Compliance
RSS-Gen Issue 5 Clause 6.7	99% Occupied Bandwidth	Compliance
FCC §15.247(b)(3) RSS-247 Issue 4 Clause 6.3.2	Maximum Conducted Output Power	Compliance
FCC §15.247(d) RSS-247 Issue 4 Clause 6.6	100 kHz Bandwidth of Frequency Band Edge	Compliance
FCC §15.247(e) RSS-247 Issue 4 Clause 6.3.1 b	Power Spectral Density	Compliance

TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions					
EMI Test Receiver	Rohde & Schwarz	ESR	103105	2025/2/20	2026/2/19
LISN	Rohde & Schwarz	ENV216	100129	2025/2/20	2026/2/19
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC001	2025/2/20	2026/2/19
EMI Test software	Audix	E3	18621a	N/A	N/A
Radiated Emissions Below 1GHz					
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2025/2/20	2026/2/19
Loop Antenna	Rohde & Schwarz	HFH2-Z2	830749/001	2023/7/27	2026/7/26
Antenna	Sunol Sciences	JB6	A122022-5	2023/7/27	2026/7/26
Amplifier	Sonoma	310B	120903	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	HFH2-CC	335.3609	2025/2/20	2026/2/19
Test Software	Audix	E3	18621a	N/A	N/A
Radiated Emissions Above 1 GHz					
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102051	2025/2/20	2026/2/19
Filter Switch Unit	Decentest	DT7220FSU	DS79904	2025/2/21	2026/2/20
Multiplex Switch Test Control Set	Decentest	DT7220SCU	DS79901	2025/2/21	2026/2/20
Horn Antenna	EMCO	3115	9002-3355	2024/11/19	2027/11/18
Preamplifier	GLOBAL	1313-A100M18G	4121301	2025/1/16	2026/1/15
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2025/2/20	2026/2/19
Horn Antenna	EMCO	3116	9407-2232	2023/7/31	2026/7/30
Preamplifier	A.H.Systems	PAM-1840	200	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH360A-2.92-3M	CC008	2025/2/20	2026/2/19
Coaxial Cable	XINHANGWEIBO	XH360A-2.92-1M	CC009	2025/2/20	2026/2/19
Test Software	Audix	E3	18621a	N/A	N/A
RF Conducted Test					
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102051	2025/2/20	2026/2/19
USB Wideband Power Sensor	Boonton	55318	8934	2025/2/20	2026/2/19
Test Software	JD	JDAutoTestSystem	1.0.0.3813	N/A	N/A

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

FCC §15.203 & RSS-Gen Clause 6.8 - ANTENNA REQUIREMENT

Applicable Standard

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

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

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

According to RSS-Gen Clause 6.8 The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connector Construction

The EUT has one PCB antenna arrangement for 2.4G WiFi, which was permanently attached and the antenna gain is 0 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

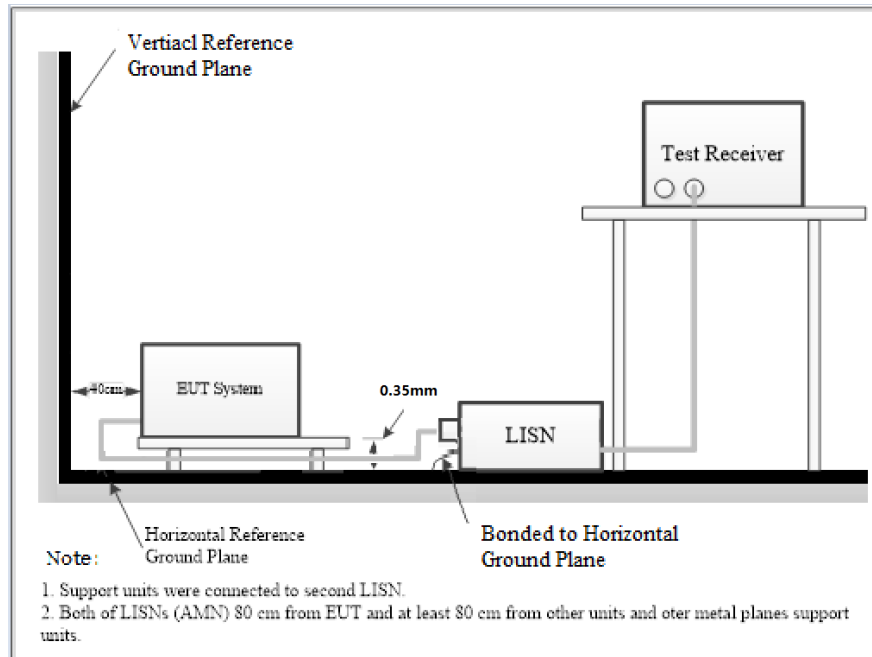
Result: Compliance

FCC §15.207 (a) & RSS-Gen Clause 8.8 – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207, RSS-Gen Clause 8.8

EUT Setup



The setup of EUT is according with per ANSI C63.10-2020 + Cor.1-2023[▲] measurement procedure. The specification used was with the FCC Part 15.207, RSS-Gen limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

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

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

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

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

All final data was recorded in the Quasi-peak and average detection mode.

Result & Margin Calculation

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

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$

$$\text{Result (dB}\mu\text{V)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

Test Data

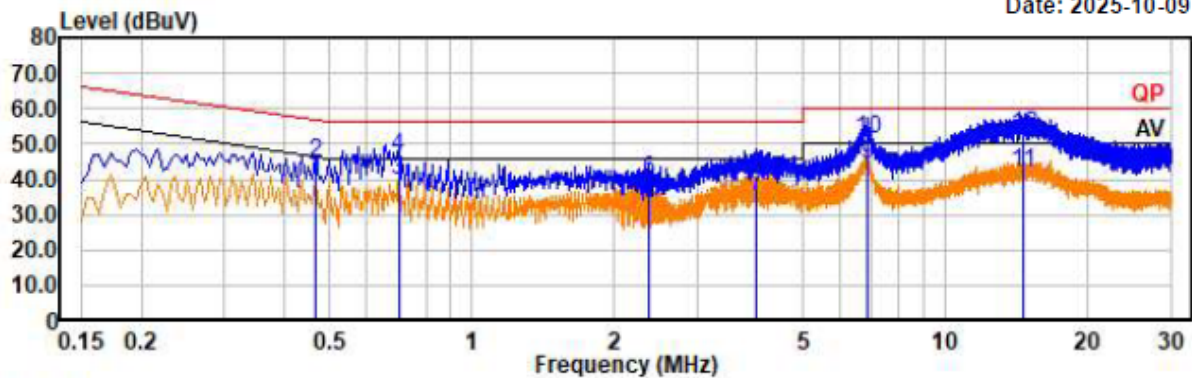
Temperature:	23.4 °C
Relative Humidity:	59 %
ATM Pressure:	100.1 kPa
Test Date:	2025-10-09
Test Engineer:	Wlif Wu

Note: The maximum output power mode: Transmitting in Wifi 802.11g low channel was tested.

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01

Temp/Humi/ATM: 23.4°C/59%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-09



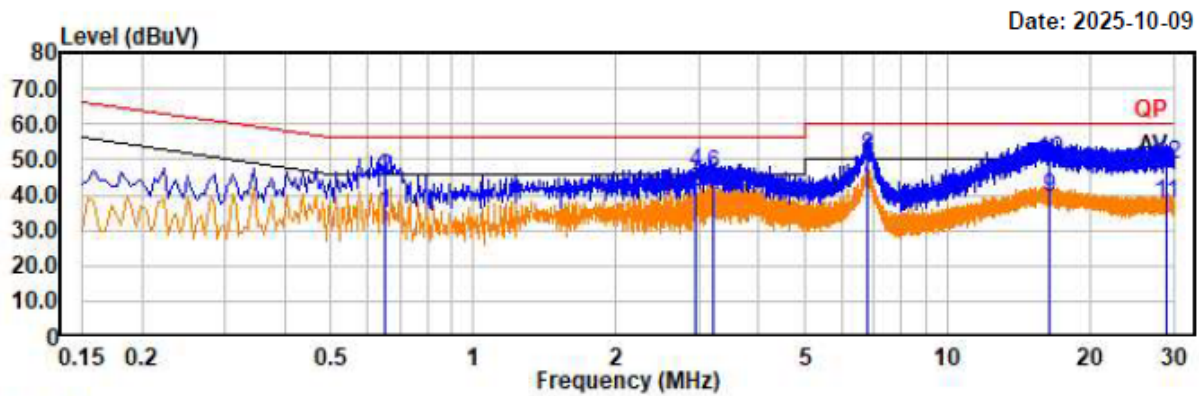
Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.468	20.22	20.24	40.46	46.55	6.09	Line	Average
0.468	24.26	20.24	44.50	56.55	12.05	Line	QP
0.699	19.14	20.37	39.51	46.00	6.49	Line	Average
0.699	25.84	20.37	46.21	56.00	9.79	Line	QP
2.370	14.33	20.97	35.30	46.00	10.70	Line	Average
2.370	18.96	20.97	39.93	56.00	16.07	Line	QP
3.972	14.11	20.94	35.05	46.00	10.95	Line	Average
3.972	19.84	20.94	40.78	56.00	15.22	Line	QP
6.832	23.75	20.35	44.10	50.00	5.90	Line	Average
6.832	31.09	20.35	51.44	60.00	8.56	Line	QP
14.619	21.19	20.92	42.11	50.00	7.89	Line	Average
14.619	31.71	20.92	52.63	60.00	7.37	Line	QP

Project No.: 2507W27469E-RF
 Test Mode: 802.11g 2412MHz
 EUT Model: AP01

Temp/Humi/ATM: 23.4°C/59%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz



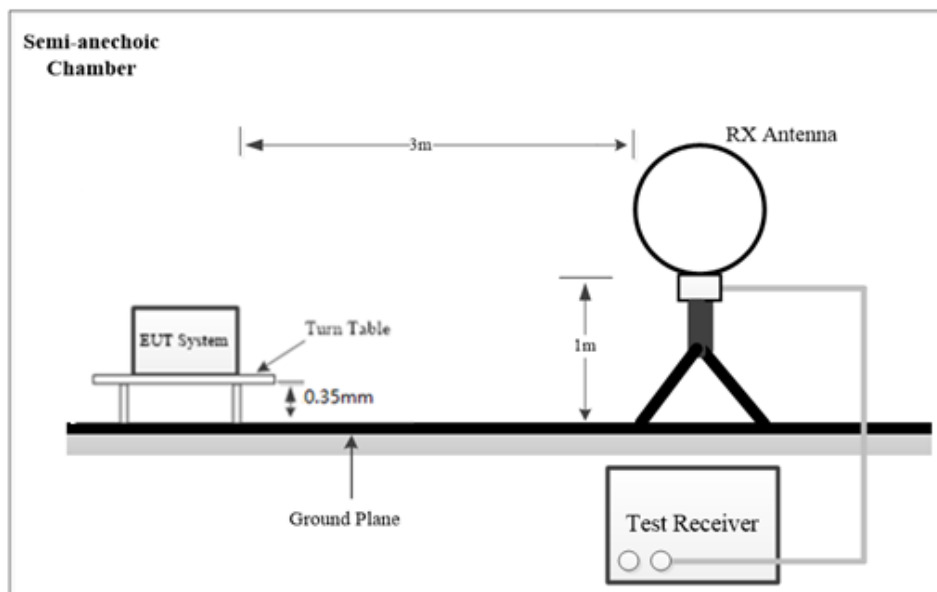
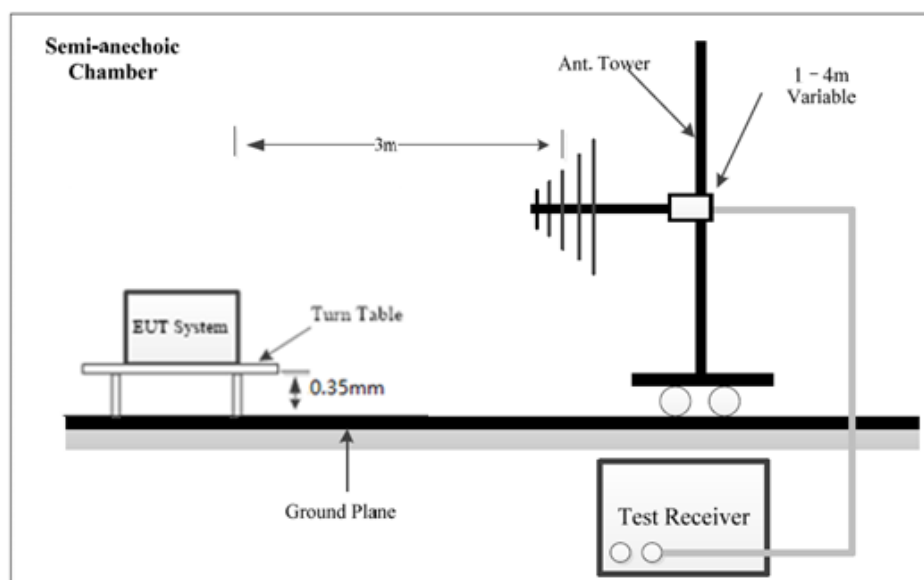
Trace: 1

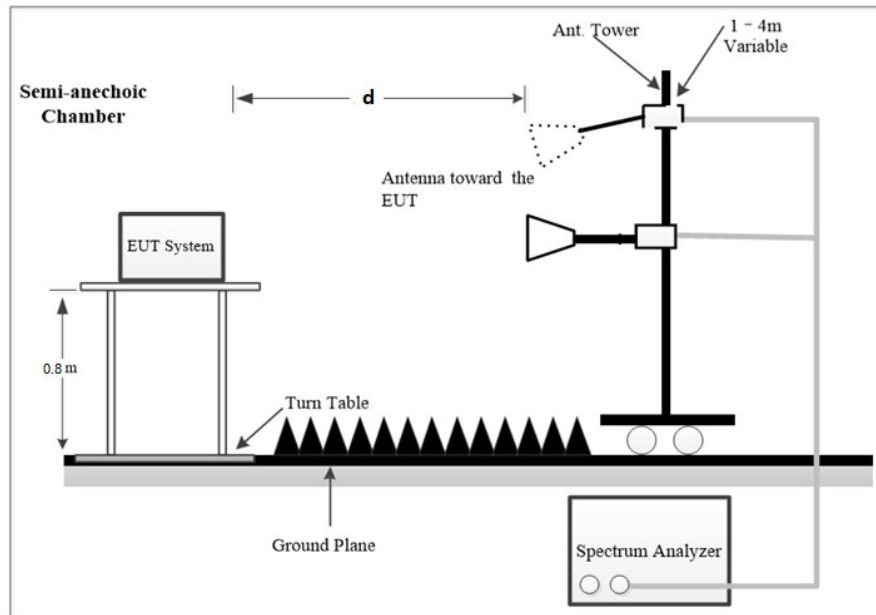
Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.653	14.27	20.53	34.80	46.00	11.20	Neutral	Average
0.653	23.91	20.53	44.44	56.00	11.56	Neutral	QP
2.931	19.77	20.92	40.69	46.00	5.31	Neutral	Average
2.931	25.36	20.92	46.28	56.00	9.72	Neutral	QP
3.195	19.97	20.92	40.89	46.00	5.11	Neutral	Average
3.195	24.95	20.92	45.87	56.00	10.13	Neutral	QP
6.800	24.47	20.35	44.82	50.00	5.18	Neutral	Average
6.800	30.65	20.35	51.00	60.00	9.00	Neutral	QP
16.437	18.51	20.83	39.34	50.00	10.66	Neutral	Average
16.437	28.69	20.83	49.52	60.00	10.48	Neutral	QP
28.874	16.91	20.61	37.52	50.00	12.48	Neutral	Average
28.874	28.05	20.61	48.66	60.00	11.34	Neutral	QP

FCC §15.209, §15.205 & §15.247(d) & RSS-247 ISSUE 4 Clause 6.6, RSS-GEN ISSUE5 CLAUSE 8.10 - SPURIOUS EMISSIONS**Applicable Standard**

FCC §15.247 (d); §15.209; §15.205; RSS-247 Issue 4 Clause 6.6; RSS-Gen Issue5 Clause 8.10

EUT Setup**9 kHz-30MHz:****30MHz -1 GHz:**

Above 1GHz:

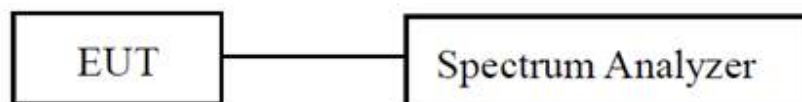
The radiated emission tests using the setup accordance with the ANSI C63.10-2020 + Cor.1-2023[▲]. The specification used was the FCC 15.209, FCC 15.247, RSS-247, RSS-Gen limits.

NOTE: d is testing distance;

For Radiated Emission test (1GHz-18GHz) and Bandedge Emission test, which was performed at 3 m distance.

For Radiated Emission test (18GHz-25GHz), which was performed at 1.5 m distance, according to ANSI C63.10-2020 + Cor.1-2023[▲] the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m.

Distance extrapolation Factor = $20 \log (\text{specific distance } [3\text{m}] / \text{test distance } [1.5\text{m}]) \text{ dB} = 6 \text{ dB}$

Antenna-port conducted emission:

Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was offset into the setting of test equipment:

TDF = Insert loss of RF cable

★ The Insert loss was declared by manufacturer.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Below 1GHz:

Frequency Range	RBW	VBW	Measurement
9 kHz – 150 kHz	300Hz	1 kHz	PK
	200Hz	/	QP
150 kHz – 30 MHz	10 kHz	30 kHz	PK
	9kHz	/	QP
30 MHz – 1000 MHz	100 kHz	300 kHz	PK
	120kHz	/	QP

Above 1GHz:

Pre-scan:

Duty Cycle	RBW	VBW	Measurement	Detector
Any	1MHz	3MHz	PK	PK
>98%	1MHz	5kHz	AV	PK
<98%	1MHz	1/T, not less than 5kHz	AV	PK

Final measurement for emission identified during the pre-scan:

Duty Cycle	RBW	VBW	Measurement	Detector
Any	1MHz	3MHz	PK	PK
>98%	1MHz	10Hz	AV	PK
<98%	1MHz	1/T	AV	PK

Note: T is minimum transmission duration

Test Procedure

Radiated Emissions:

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

For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. The report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground parallel) unless the margin is greater than 20 dB, then the following statement shall be made: “all emissions were greater than 20 dB below the limit.”

Below 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Above 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is below the AV emission limit, there's no need to record the measured AV level of the emissions in the report.

Antenna-port conducted emission:

Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The frequency range of testing shall span 30 MHz to 10 times the operating frequency and this may be done in a single sweep or, to aid resolution, across a number of sweeps. The resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector.

The limit is based on the highest in-band level across all channels measured using the same instrument settings (resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector). To help clearly demonstrate compliance a display line may be set at the required offset (typically 20 dB) below the highest in-band level. Where the highest in-band level is not clearly identified in the out-of-band measurements a separate spectral plot showing the in-band level shall be provided. When conducted measurements cannot be made (for example a device with integrated, non-removable antenna) radiated measurements shall be used. The reference level for determining the limit shall be established by maximizing

the field strength from the highest power channel and measuring using the resolution and video bandwidth settings and peak detector as described above. The field strength limit for spurious emissions outside of restricted-bands shall then be set at the required offset (typically 20 dB) below the highest in-band level. Radiated measurements will follow the standards measurement procedures described in Clause 6 with the exception that the resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector. Note that use of wider measurement bandwidths are acceptable for measuring the spurious emissions provided that the peak detector is used and that the measured value of spurious emissions are compared to the highest in-band level measured with the 100 kHz / 300 kHz bandwidth settings to determine compliance.

Result & Margin Calculation

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

For 9 kHz to 18GHz Radiated emission test and Bandedge emissions test

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

For 18GHz to 25GHz Radiated emission test

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)} - \text{Extrapolation factor (dB)}$$

$$\text{Extrapolation factor} = 6 \text{ dB (distance} = 1.5\text{m)}$$

$$\text{Result (dB}\mu\text{V/m)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB/m)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Result (dB}\mu\text{V/m)}$$

The spurious emission from 9 kHz-30MHz of IC RSS-Gen standard, the unit of final result on the test plots are dB μ V/m, so the limit should be added by 51.5dB from dB μ A/m to dB μ V/m.

Test Data

Please refer to the below table and plots.

Frequency Range:	Below 1 GHz	Above 1 GHz	Antenna-port conducted emission
Temperature:	24.5 °C	23.5°C~24.5°C	25.3 °C
Relative Humidity:	56 %	52%~56 %	61 %
ATM Pressure:	100.1 kPa	100.1kPa	100.3 kPa
Test Date:	2025-10-04	2025-10-04~2025-10-10	2025-08-11
Test Engineer:	Wlif Wu	Wlif Wu	Braylon Ma

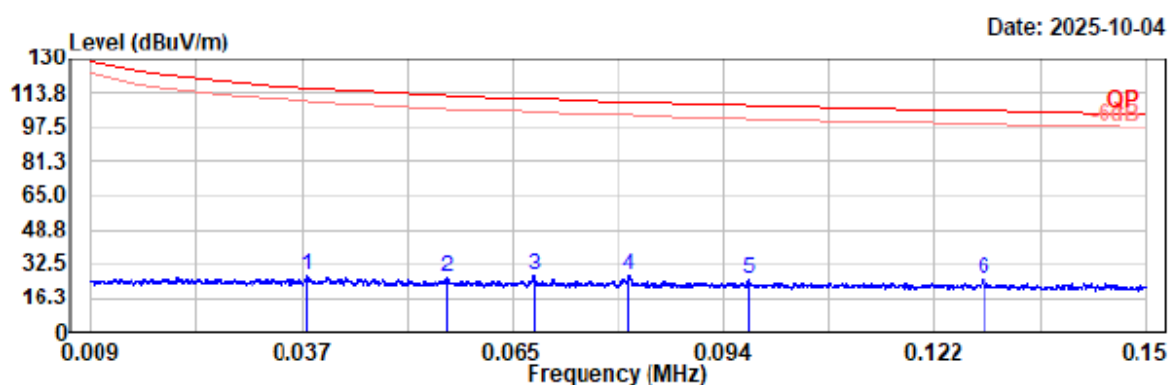
1) 9 kHz~30MHz

Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case.

Note: The maximum output power mode: Transmitting in Wifi 802.11g low channel was tested.

Project No.: 2507W27469E-RF
 Test Mode: 802.11g 2412MHz
 EUT Model: AP01
 Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

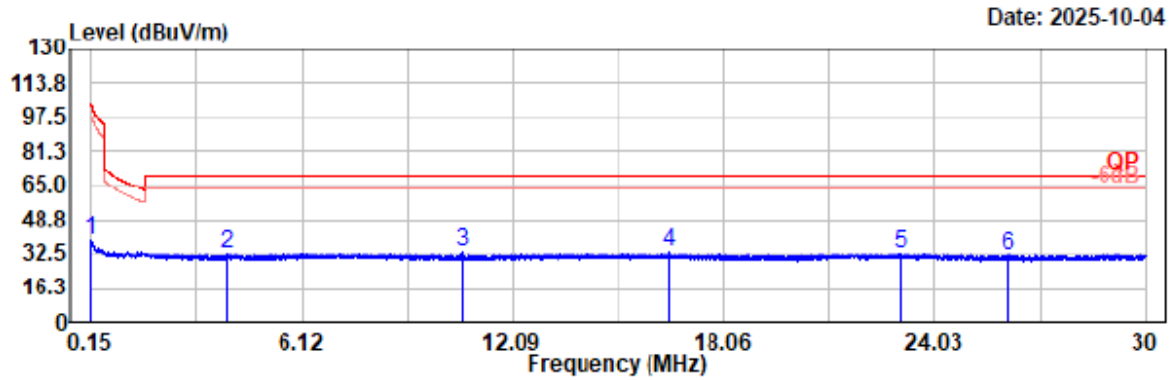


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.038	6.80	19.91	26.71	116.07	89.36	Peak
0.057	6.43	19.91	26.34	112.55	86.21	Peak
0.068	7.42	19.83	27.25	110.93	83.68	Peak
0.081	6.88	19.72	26.60	109.44	82.84	Peak
0.097	4.98	19.75	24.73	107.87	83.14	Peak
0.128	4.97	19.73	24.70	105.44	80.74	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Remark
0.156	20.12	19.72	39.84	103.74	63.90	Peak
4.013	13.15	19.76	32.91	69.54	36.63	Peak
10.687	14.20	19.71	33.91	69.54	35.63	Peak
16.472	14.20	19.86	34.06	69.54	35.48	Peak
23.084	13.42	20.17	33.59	69.54	35.95	Peak
26.099	12.52	20.16	32.68	69.54	36.86	Peak

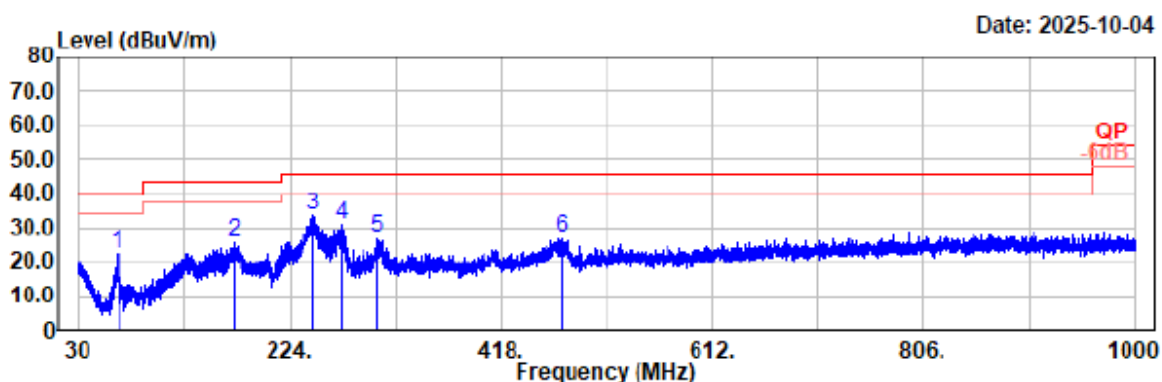
Note: $dBUV/m = dBuA/m + 51.5dB$

2) 30MHz -1GHz

Note: The maximum output power mode: Transmitting in Wifi 802.11g low channel was tested.

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

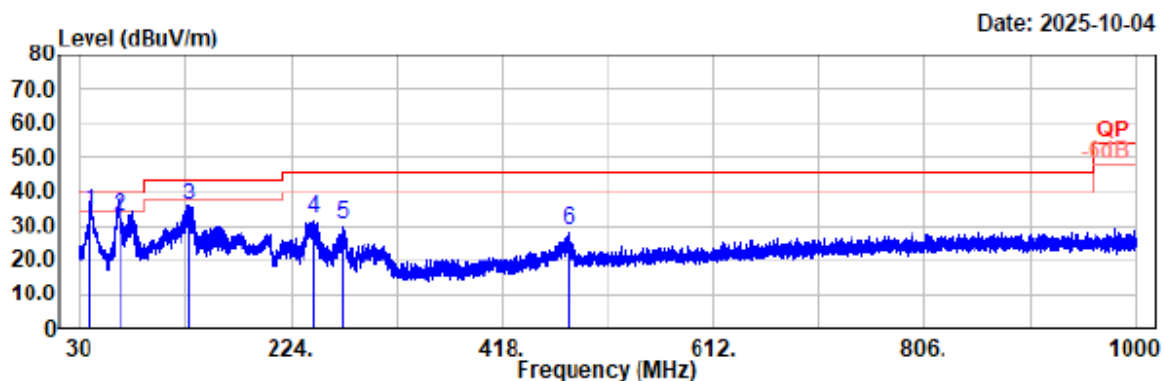


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
65.31	40.08	-17.28	22.80	40.00	17.20	Horizontal	Peak
171.72	38.04	-11.94	26.10	43.50	17.40	Horizontal	Peak
244.27	44.94	-11.48	33.46	46.00	12.54	Horizontal	Peak
270.46	40.48	-9.76	30.72	46.00	15.28	Horizontal	Peak
304.51	36.44	-9.15	27.29	46.00	18.71	Horizontal	Peak
473.87	31.25	-4.10	27.15	46.00	18.85	Horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



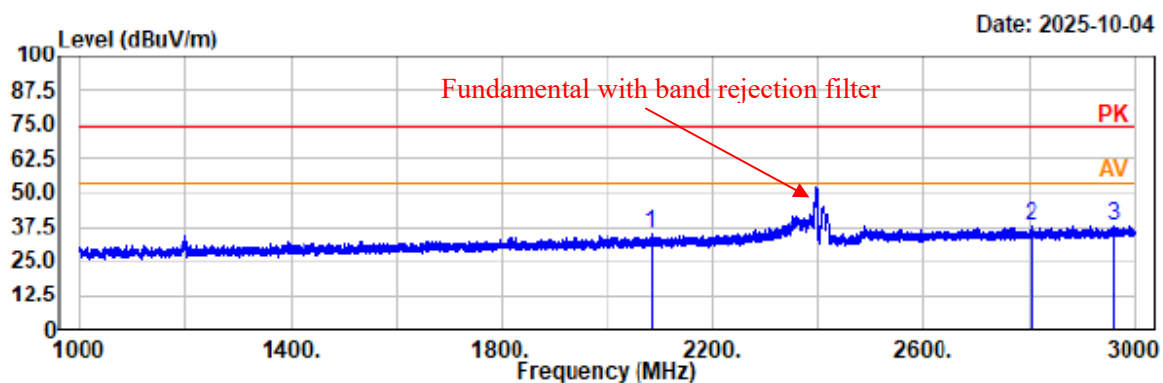
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
38.54	44.81	-10.59	34.22	40.00	5.78	Vertical	QP
65.43	49.70	-17.28	32.42	40.00	7.58	Vertical	QP
130.10	46.12	-10.12	36.00	43.50	7.50	Vertical	Peak
244.27	43.60	-11.48	32.12	46.00	13.88	Vertical	Peak
271.72	39.93	-9.73	30.20	46.00	15.80	Vertical	Peak
478.63	32.51	-3.89	28.62	46.00	17.38	Vertical	Peak

3) 1GHz~3GHz

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

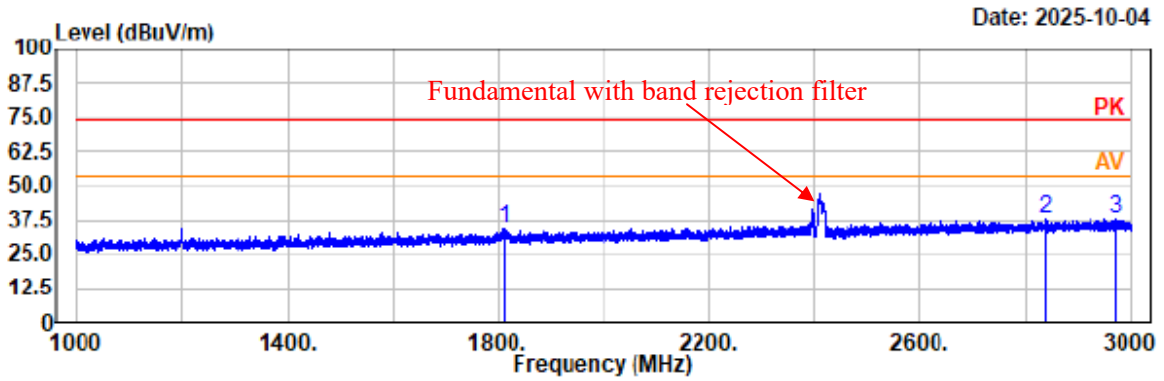


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2082.40	47.47	-12.29	35.18	74.00	38.82	horizontal	Peak
2804.80	47.91	-9.77	38.14	74.00	35.86	horizontal	Peak
2962.80	47.29	-9.14	38.15	74.00	35.85	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

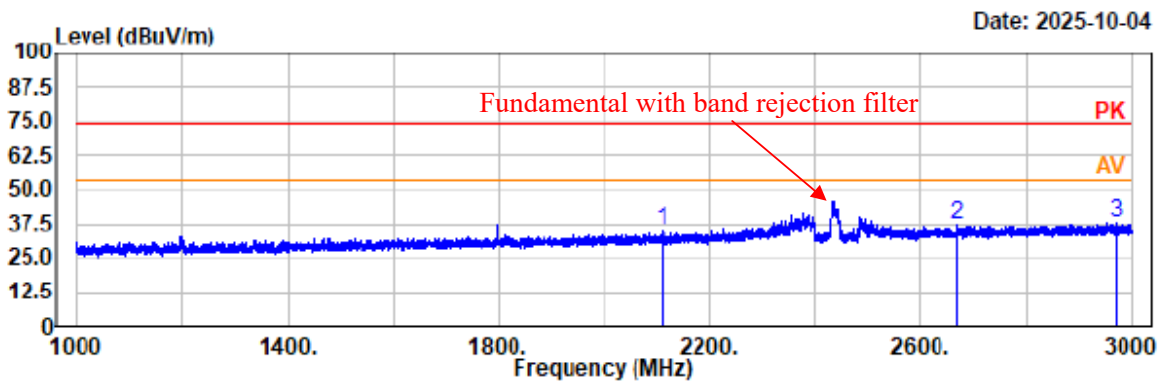


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
1811.20	47.89	-13.19	34.70	74.00	39.30	vertical	Peak
2838.20	47.66	-9.66	38.00	74.00	36.00	vertical	Peak
2972.00	47.04	-9.09	37.95	74.00	36.05	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

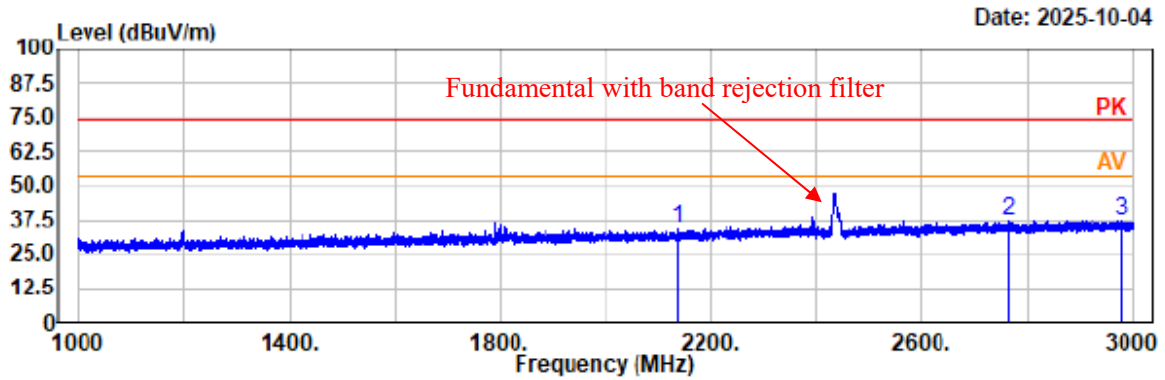


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2108.20	47.11	-12.21	34.90	74.00	39.10	horizontal	Peak
2667.40	47.15	-10.13	37.02	74.00	36.98	horizontal	Peak
2972.80	46.87	-9.08	37.79	74.00	36.21	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

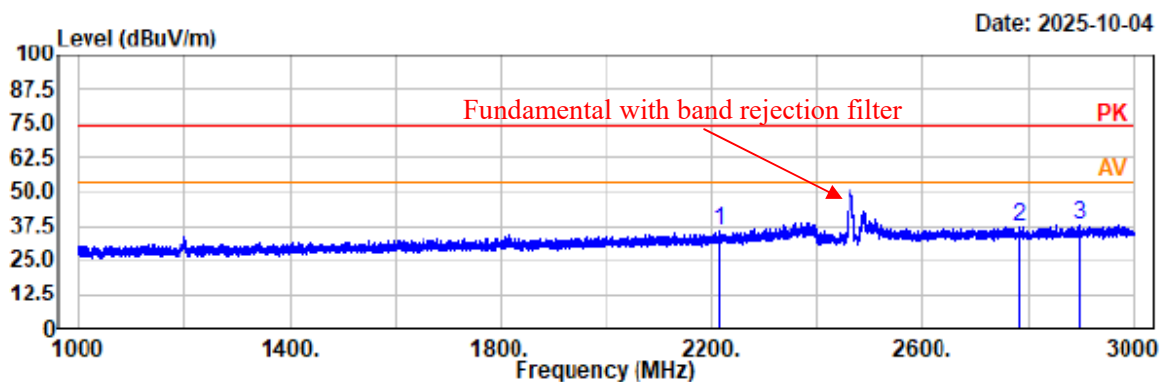


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2137.40	46.85	-12.16	34.69	74.00	39.31	vertical	Peak
2763.40	46.84	-9.90	36.94	74.00	37.06	vertical	Peak
2980.60	46.53	-9.05	37.48	74.00	36.52	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

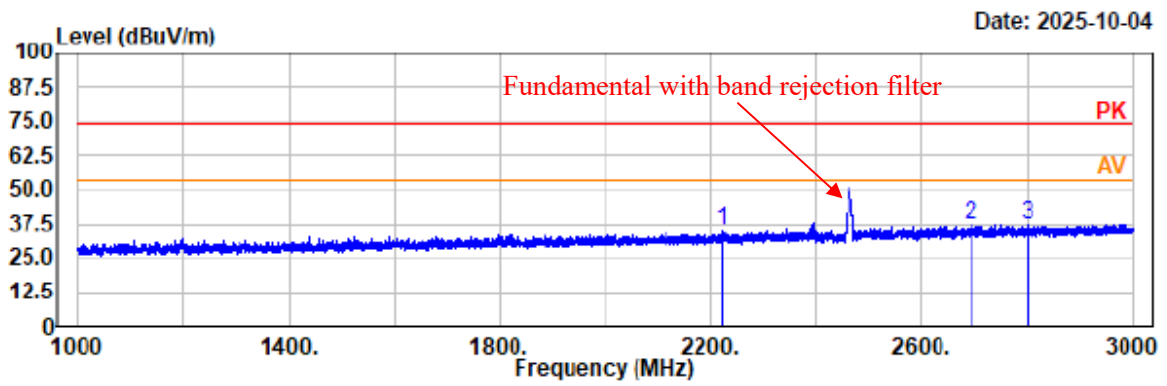


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2214.60	47.68	-11.90	35.78	74.00	38.22	horizontal	Peak
2781.80	47.06	-9.84	37.22	74.00	36.78	horizontal	Peak
2898.20	47.69	-9.55	38.14	74.00	35.86	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

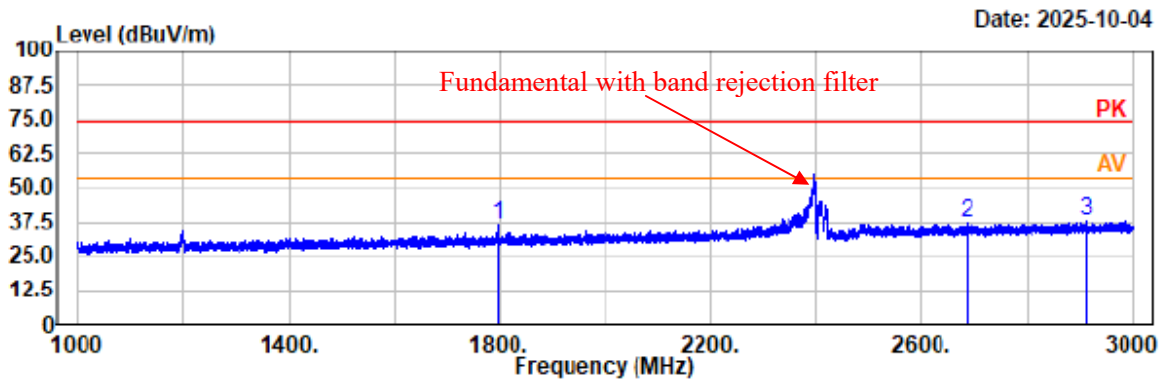


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2221.80	46.92	-11.88	35.04	74.00	38.96	vertical	Peak
2693.20	47.44	-10.03	37.41	74.00	36.59	vertical	Peak
2799.20	47.05	-9.79	37.26	74.00	36.74	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

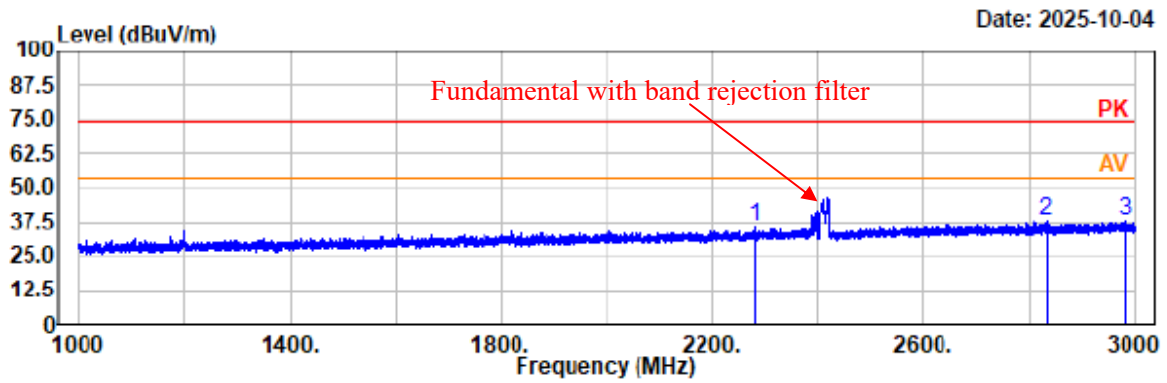


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
1796.20	50.01	-13.24	36.77	74.00	37.23	horizontal	Peak
2686.80	47.55	-10.05	37.50	74.00	36.50	horizontal	Peak
2910.00	47.54	-9.48	38.06	74.00	35.94	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

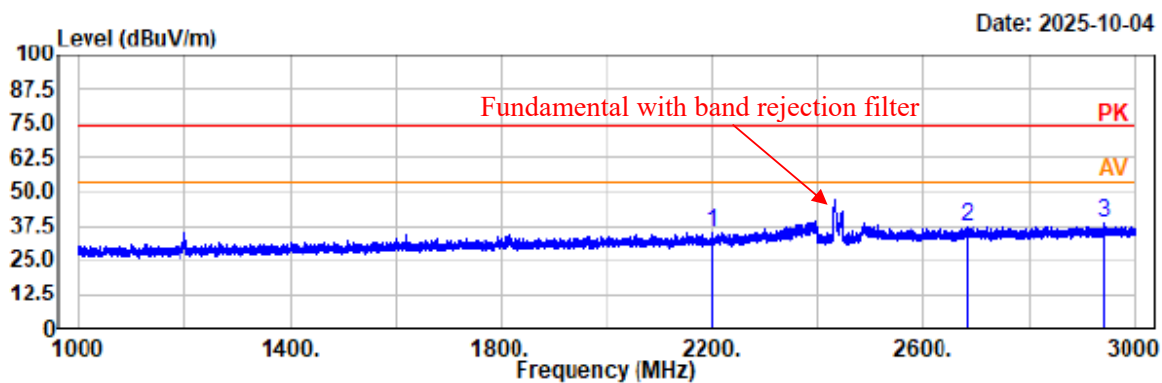


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2281.20	47.21	-11.55	35.66	74.00	38.34	vertical	Peak
2834.20	47.49	-9.67	37.82	74.00	36.18	vertical	Peak
2983.00	46.79	-9.04	37.75	74.00	36.25	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

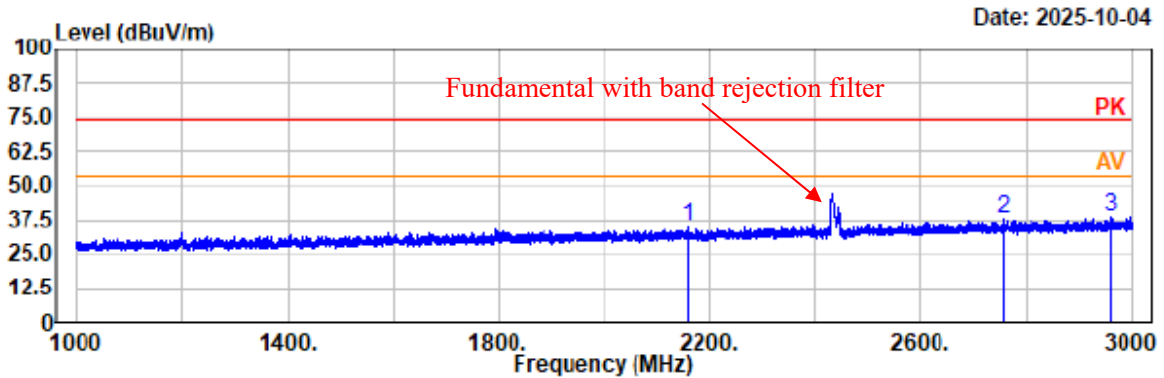


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2199.80	46.91	-11.95	34.96	74.00	39.04	horizontal	Peak
2681.40	47.56	-10.07	37.49	74.00	36.51	horizontal	Peak
2941.80	48.07	-9.26	38.81	74.00	35.19	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

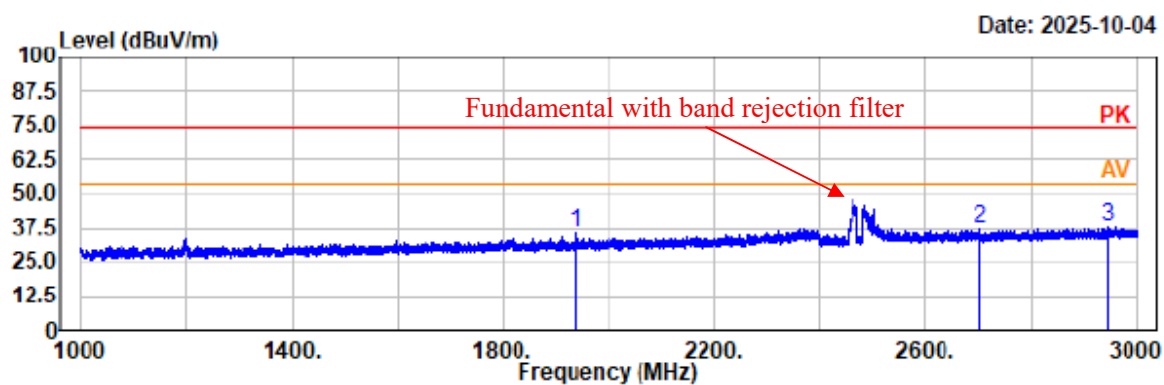


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2157.80	46.97	-12.11	34.86	74.00	39.14	vertical	Peak
2758.40	47.58	-9.92	37.66	74.00	36.34	vertical	Peak
2960.20	47.71	-9.16	38.55	74.00	35.45	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

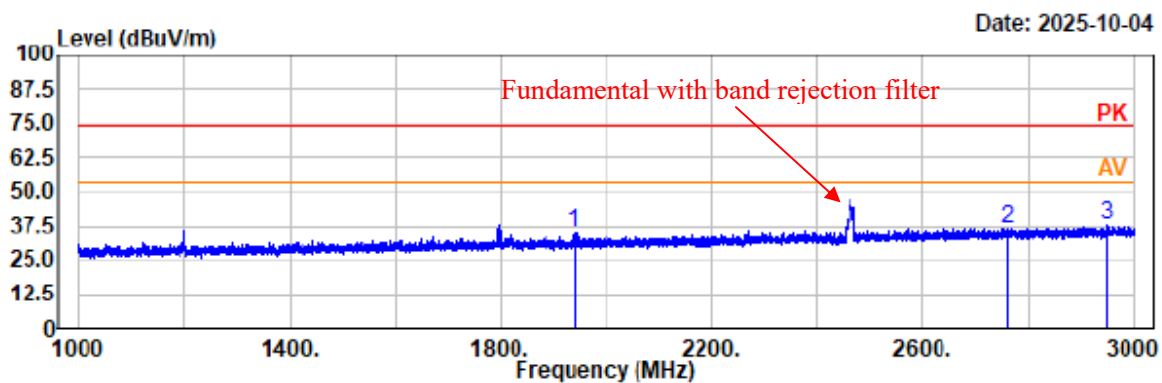


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
1939.00	48.49	-12.80	35.69	74.00	38.31	horizontal	Peak
2704.00	46.93	-9.99	36.94	74.00	37.06	horizontal	Peak
2947.60	46.88	-9.22	37.66	74.00	36.34	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

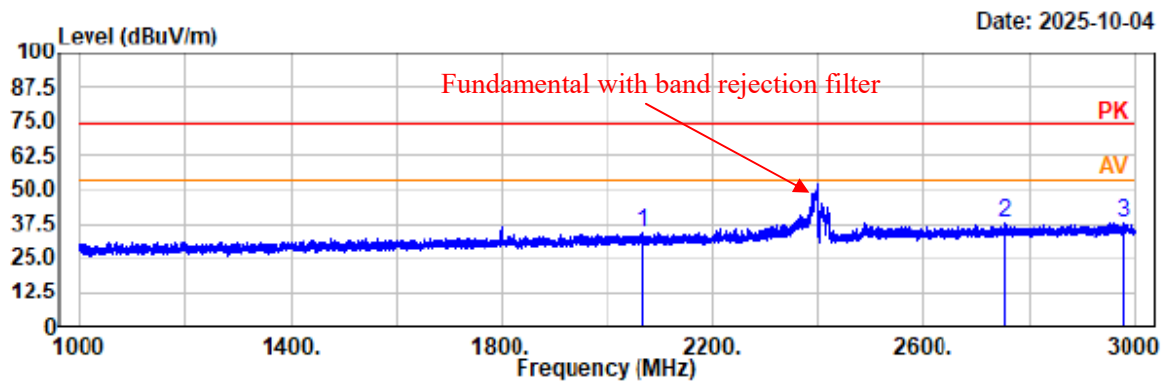


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
1939.20	48.03	-12.80	35.23	74.00	38.77	vertical	Peak
2762.20	46.58	-9.90	36.68	74.00	37.32	vertical	Peak
2951.80	46.81	-9.19	37.62	74.00	36.38	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

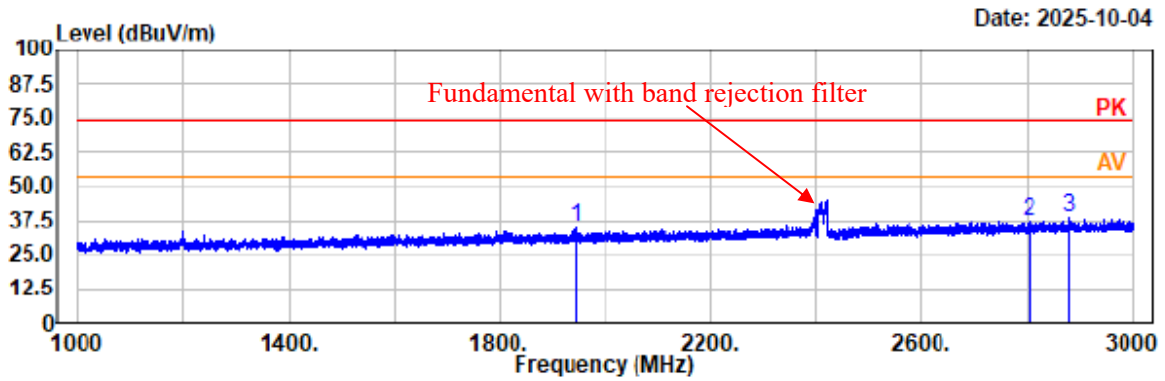


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2067.40	46.86	-12.36	34.50	74.00	39.50	horizontal	Peak
2753.00	47.56	-9.93	37.63	74.00	36.37	horizontal	Peak
2979.40	46.94	-9.05	37.89	74.00	36.11	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

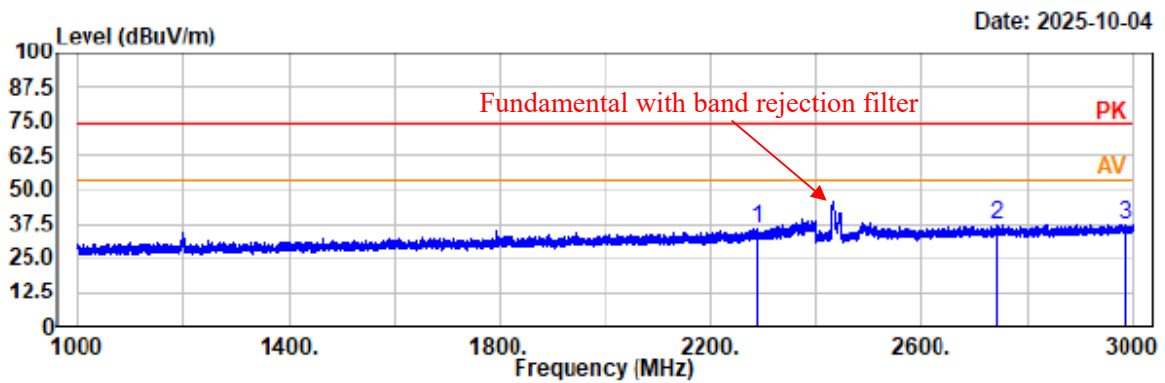


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1943.20	47.78	-12.78	35.00	74.00	39.00	vertical	Peak
2803.80	47.08	-9.77	37.31	74.00	36.69	vertical	Peak
2878.80	47.94	-9.58	38.36	74.00	35.64	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

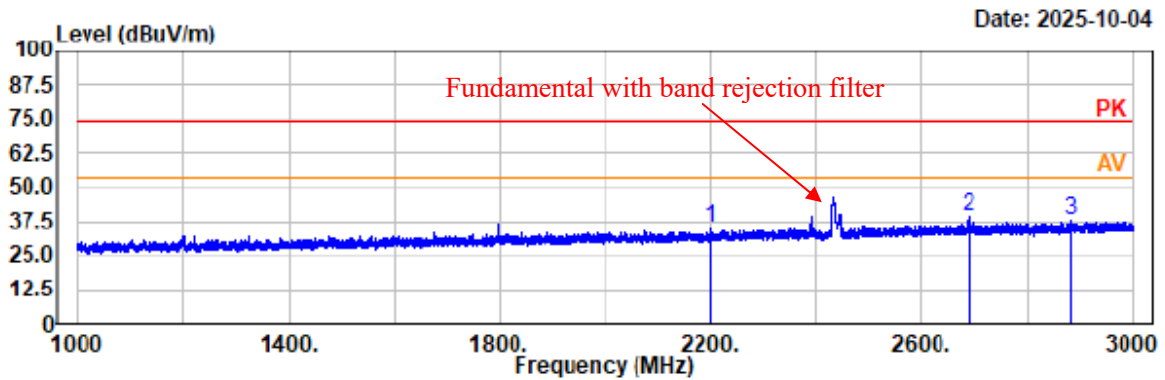


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2287.40	47.53	-11.52	36.01	74.00	37.99	horizontal	Peak
2744.20	47.32	-9.95	37.37	74.00	36.63	horizontal	Peak
2985.20	46.47	-9.02	37.45	74.00	36.55	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

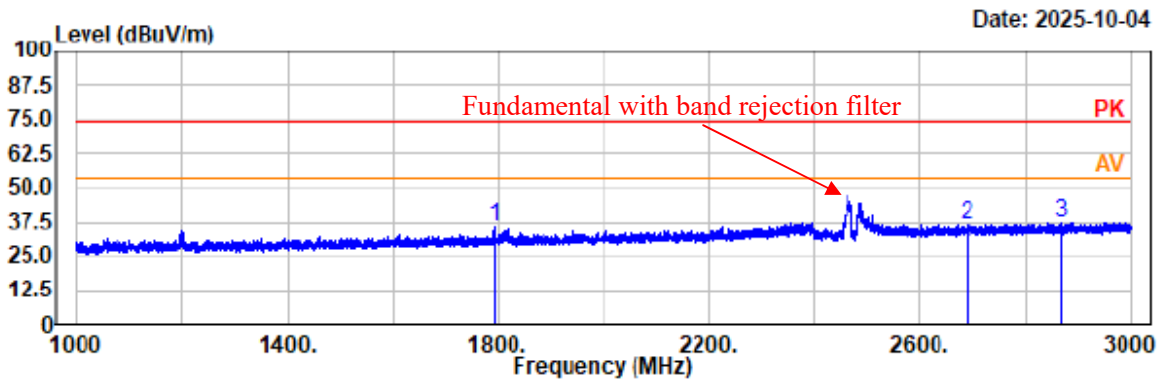


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2197.60	47.04	-11.96	35.08	74.00	38.92	vertical	Peak
2689.20	49.16	-10.04	39.12	74.00	34.88	vertical	Peak
2883.80	47.33	-9.58	37.75	74.00	36.25	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

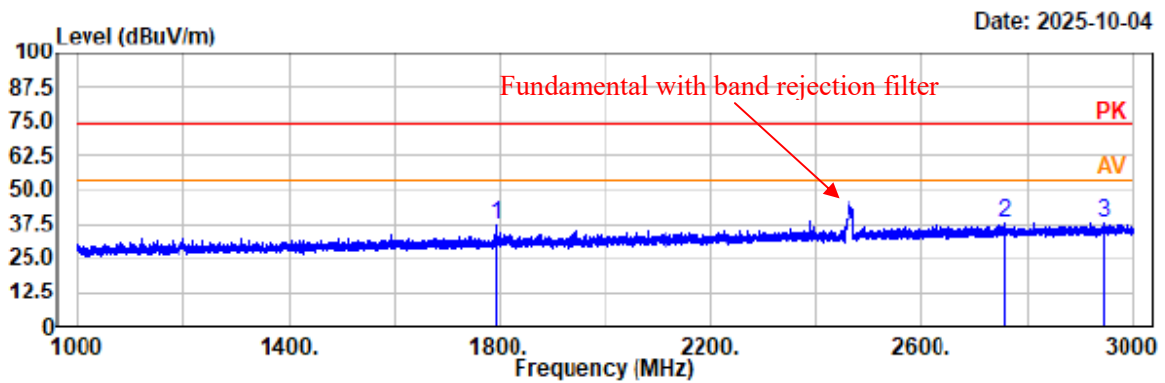


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1793.60	49.21	-13.25	35.96	74.00	38.04	horizontal	Peak
2688.40	46.46	-10.05	36.41	74.00	37.59	horizontal	Peak
2867.00	47.19	-9.60	37.59	74.00	36.41	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

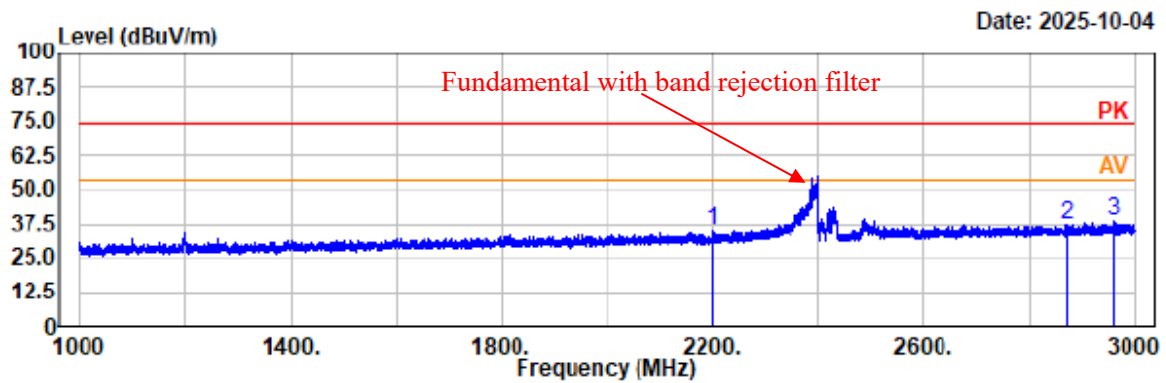


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
1795.60	50.21	-13.25	36.96	74.00	37.04	vertical	Peak
2758.40	48.18	-9.92	38.26	74.00	35.74	vertical	Peak
2947.20	46.82	-9.23	37.59	74.00	36.41	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2422MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

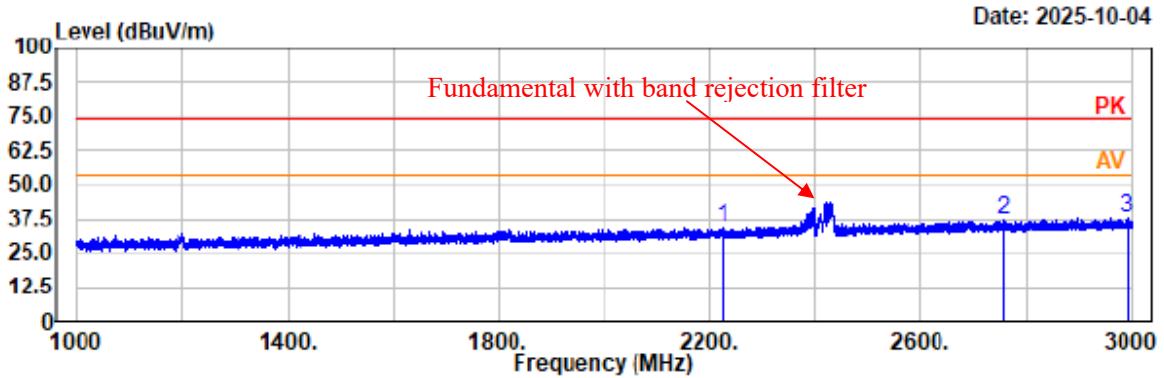


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2198.00	47.13	-11.96	35.17	74.00	38.83	horizontal	Peak
2872.60	47.16	-9.59	37.57	74.00	36.43	horizontal	Peak
2962.20	47.79	-9.14	38.65	74.00	35.35	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2422MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

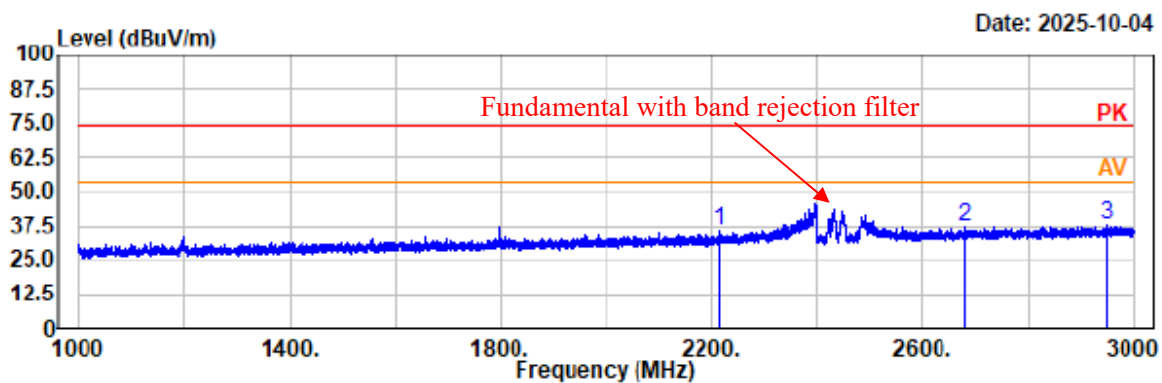


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2223.00	46.09	-11.87	34.22	74.00	39.78	vertical	Peak
2758.60	46.97	-9.92	37.05	74.00	36.95	vertical	Peak
2991.80	47.08	-8.99	38.09	74.00	35.91	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

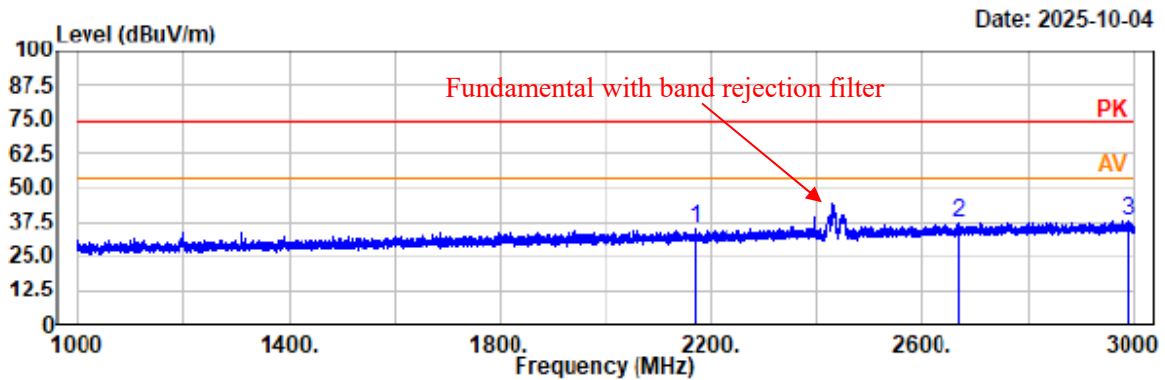


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2214.00	47.91	-11.90	36.01	74.00	37.99	horizontal	Peak
2678.20	47.48	-10.10	37.38	74.00	36.62	horizontal	Peak
2949.60	47.42	-9.21	38.21	74.00	35.79	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

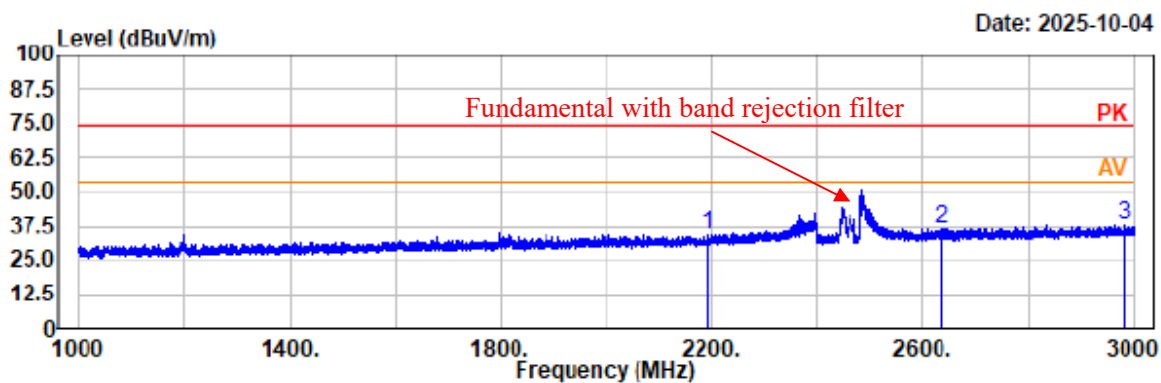


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2169.00	46.92	-12.07	34.85	74.00	39.15	vertical	Peak
2666.60	47.66	-10.13	37.53	74.00	36.47	vertical	Peak
2990.60	46.96	-9.00	37.96	74.00	36.04	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

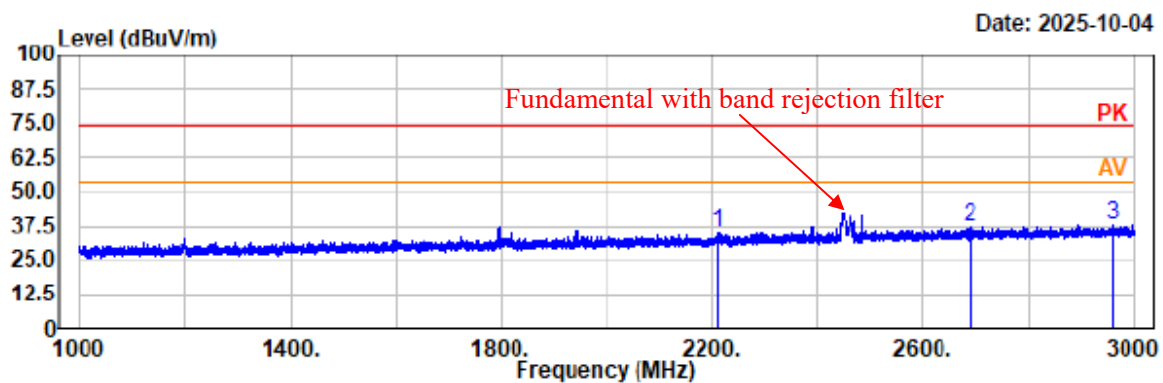


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2192.60	46.47	-11.97	34.50	74.00	39.50	horizontal	Peak
2634.20	47.03	-10.26	36.77	74.00	37.23	horizontal	Peak
2982.80	46.76	-9.04	37.72	74.00	36.28	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



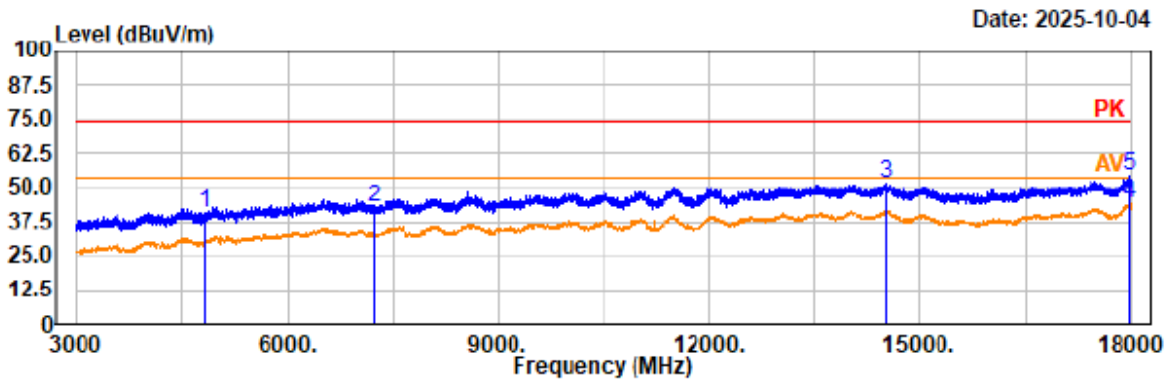
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2211.20	47.05	-11.91	35.14	74.00	38.86	vertical	Peak
2689.80	47.17	-10.04	37.13	74.00	36.87	vertical	Peak
2960.60	47.05	-9.16	37.89	74.00	36.11	vertical	Peak

4) 3GHz~18GHz

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

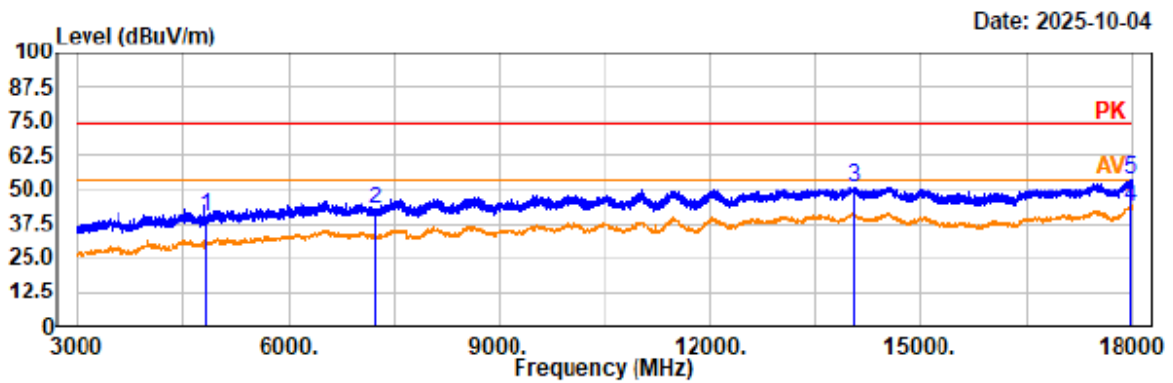
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4824.00	45.82	-5.26	40.56	74.00	33.44	horizontal	Peak
7236.00	45.41	-2.47	42.94	74.00	31.06	horizontal	Peak
14511.00	46.43	5.06	51.49	74.00	22.51	horizontal	Peak
17986.50	37.09	6.89	43.98	54.00	10.02	horizontal	Average
17986.50	47.29	6.89	54.18	74.00	19.82	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



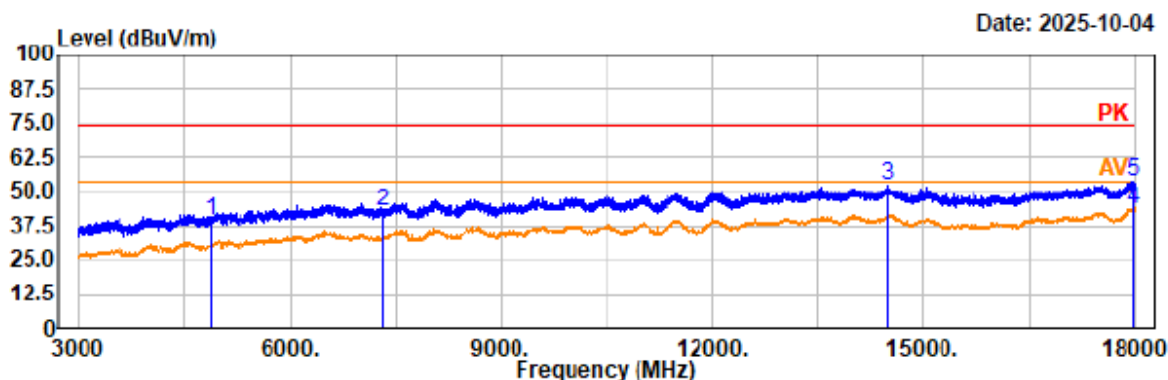
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	45.36	-5.26	40.10	74.00	33.90	vertical	Peak
7236.00	45.50	-2.47	43.03	74.00	30.97	vertical	Peak
14056.50	46.10	5.28	51.38	74.00	22.62	vertical	Peak
17982.00	36.44	6.89	43.33	54.00	10.67	vertical	Average
17982.00	46.87	6.89	53.76	74.00	20.24	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

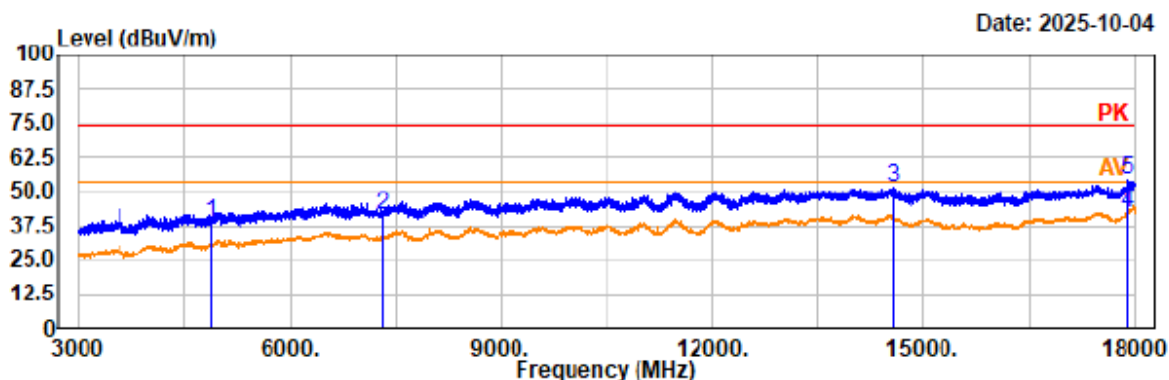
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.27	-5.29	38.98	74.00	35.02	horizontal	Peak
7311.00	45.28	-2.28	43.00	74.00	31.00	horizontal	Peak
14499.00	47.22	5.07	52.29	74.00	21.71	horizontal	Peak
17976.00	36.52	6.89	43.41	54.00	10.59	horizontal	Average
17976.00	46.67	6.89	53.56	74.00	20.44	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

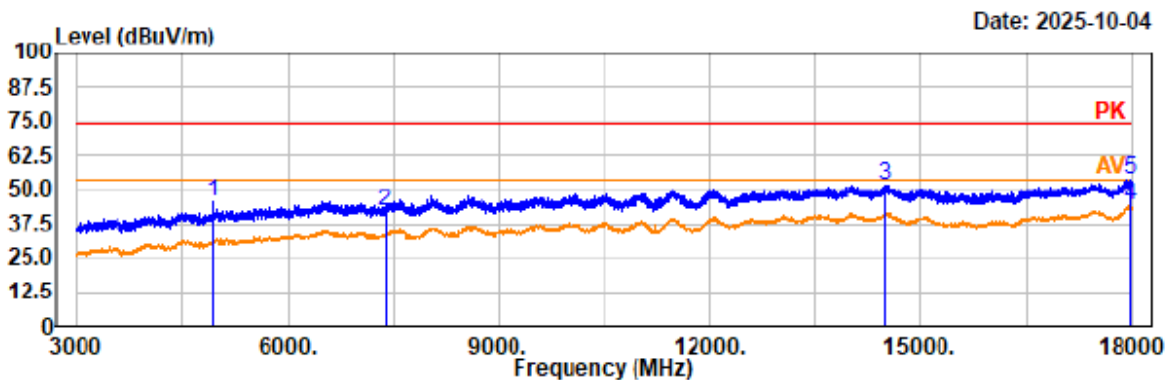
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	43.78	-5.29	38.49	74.00	35.51	vertical	Peak
7311.00	43.45	-2.28	41.17	74.00	32.83	vertical	Peak
14568.00	47.01	5.03	52.04	74.00	21.96	vertical	Peak
17901.00	35.35	6.81	42.16	54.00	11.84	vertical	Average
17901.00	47.42	6.81	54.23	74.00	19.77	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

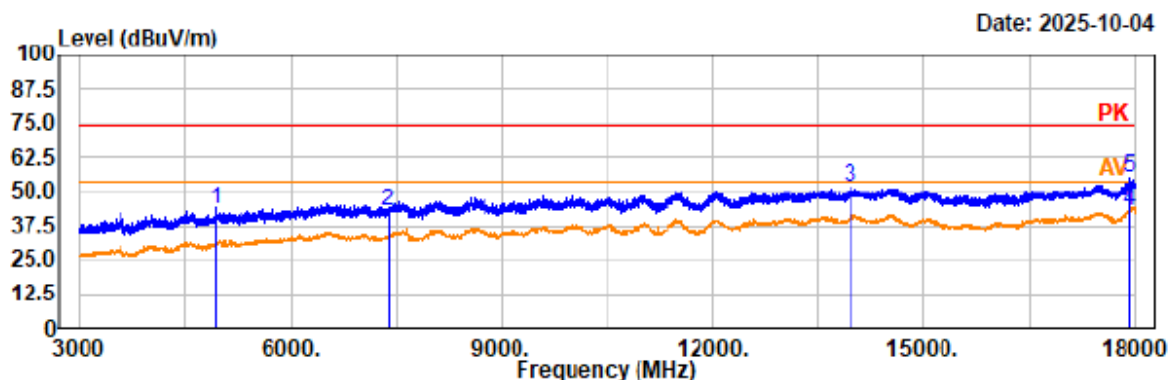
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4924.00	50.48	-5.24	45.24	74.00	28.76	horizontal	Peak
7386.00	43.88	-2.15	41.73	74.00	32.27	horizontal	Peak
14490.00	46.71	5.08	51.79	74.00	22.21	horizontal	Peak
17991.00	36.99	6.90	43.89	54.00	10.11	horizontal	Average
17991.00	47.23	6.90	54.13	74.00	19.87	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

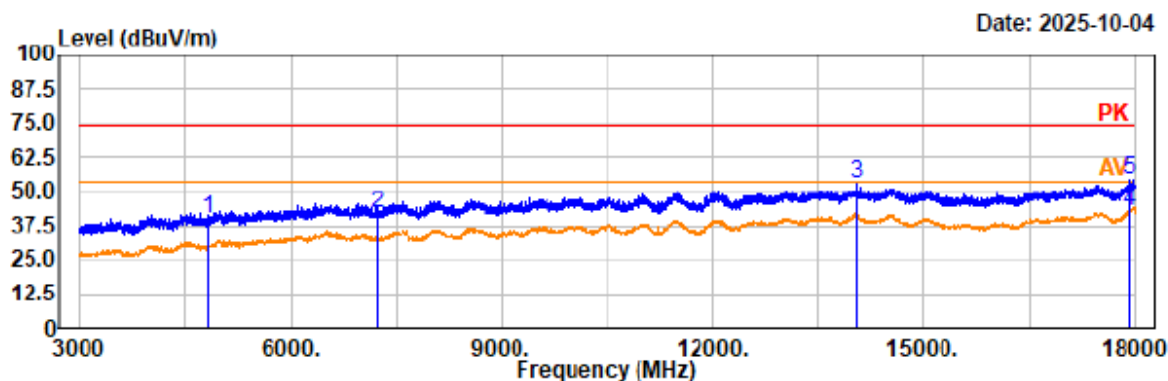
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4924.00	48.80	-5.24	43.56	74.00	30.44	vertical	Peak
7386.00	44.76	-2.15	42.61	74.00	31.39	vertical	Peak
13944.00	46.47	5.19	51.66	74.00	22.34	vertical	Peak
17923.50	36.24	6.83	43.07	54.00	10.93	vertical	Average
17923.50	48.01	6.83	54.84	74.00	19.16	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

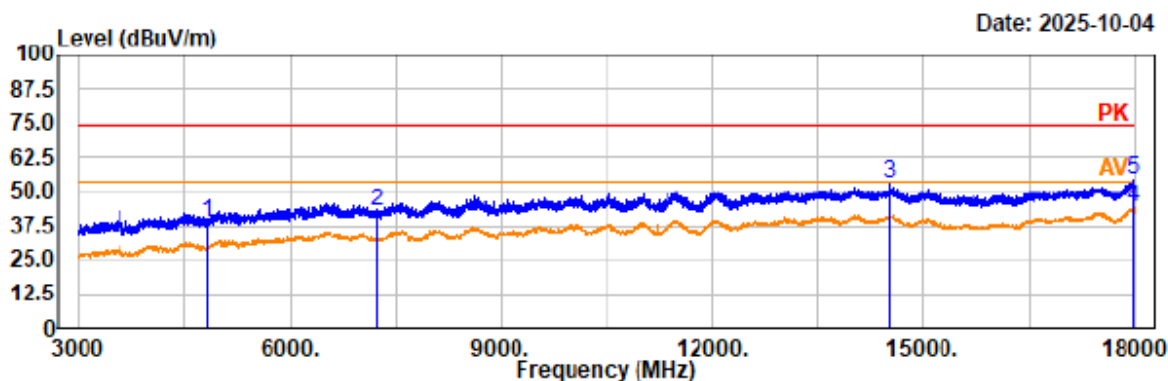
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	45.45	-5.26	40.19	74.00	33.81	horizontal	Peak
7236.00	44.43	-2.47	41.96	74.00	32.04	horizontal	Peak
14061.00	47.87	5.28	53.15	74.00	20.85	horizontal	Peak
17925.00	36.04	6.84	42.88	54.00	11.12	horizontal	Average
17925.00	47.40	6.84	54.24	74.00	19.76	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

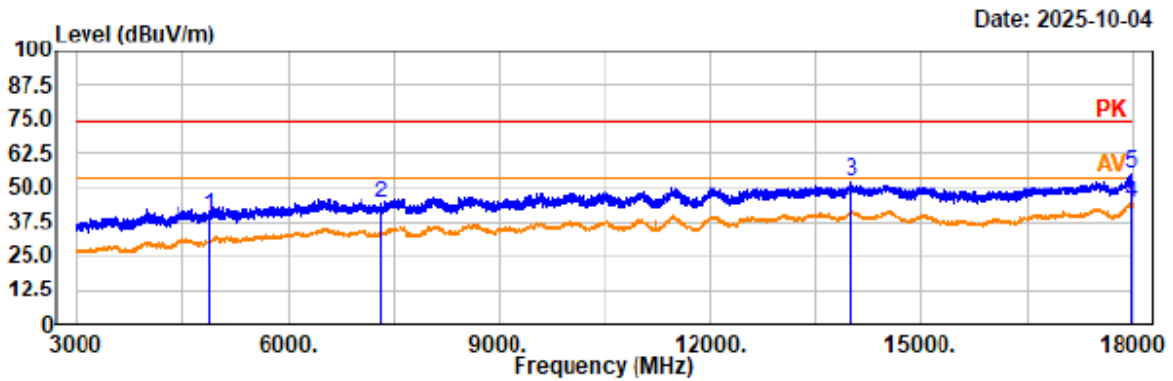
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4824.00	43.75	-5.26	38.49	74.00	35.51	vertical	Peak
7236.00	45.06	-2.47	42.59	74.00	31.41	vertical	Peak
14515.50	47.72	5.06	52.78	74.00	21.22	vertical	Peak
17989.50	37.06	6.90	43.96	54.00	10.04	vertical	Average
17989.50	47.59	6.90	54.49	74.00	19.51	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

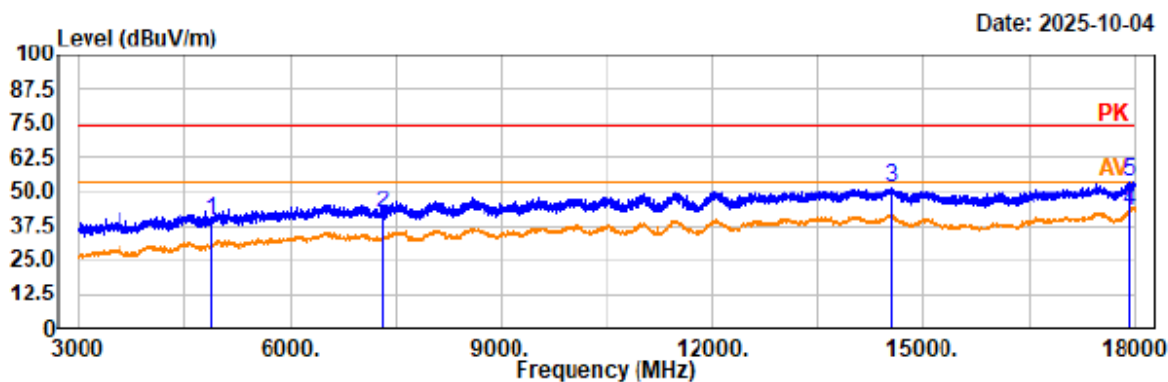
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.87	-5.29	39.58	74.00	34.42	horizontal	Peak
7311.00	46.71	-2.28	44.43	74.00	29.57	horizontal	Peak
13996.50	47.05	5.20	52.25	74.00	21.75	horizontal	Peak
17988.00	37.43	6.89	44.32	54.00	9.68	horizontal	Average
17988.00	47.99	6.89	54.88	74.00	19.12	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

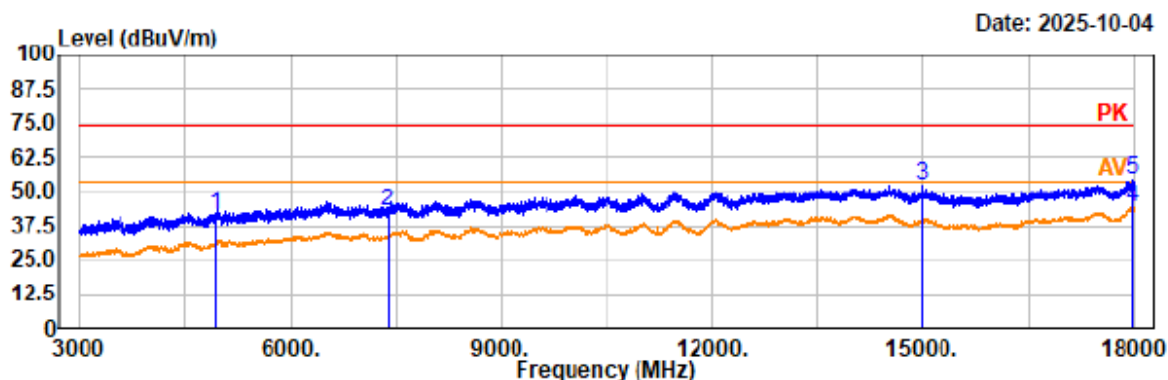
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.55	-5.29	39.26	74.00	34.74	vertical	Peak
7311.00	44.22	-2.28	41.94	74.00	32.06	vertical	Peak
14548.50	46.82	5.04	51.86	74.00	22.14	vertical	Peak
17926.50	36.05	6.84	42.89	54.00	11.11	vertical	Average
17926.50	46.93	6.84	53.77	74.00	20.23	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

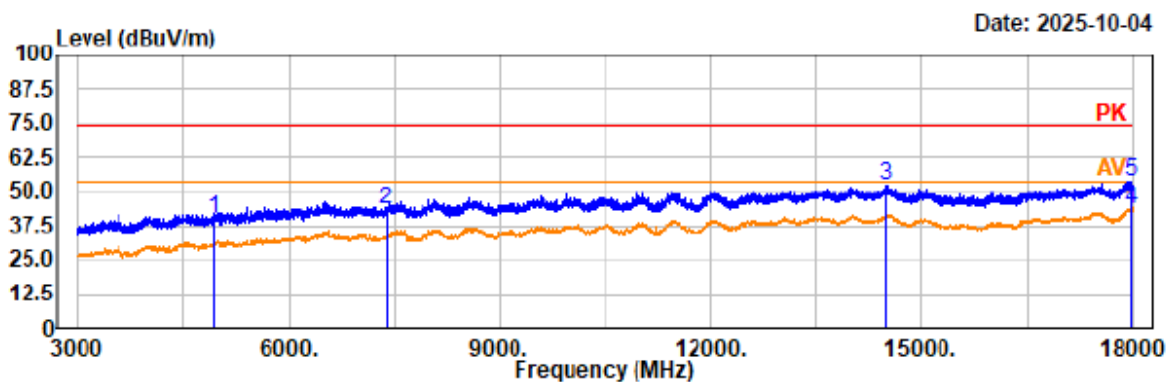
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4924.00	46.54	-5.24	41.30	74.00	32.70	horizontal	Peak
7386.00	45.22	-2.15	43.07	74.00	30.93	horizontal	Peak
14988.00	47.84	4.47	52.31	74.00	21.69	horizontal	Peak
17989.50	37.05	6.90	43.95	54.00	10.05	horizontal	Average
17989.50	47.86	6.90	54.76	74.00	19.24	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

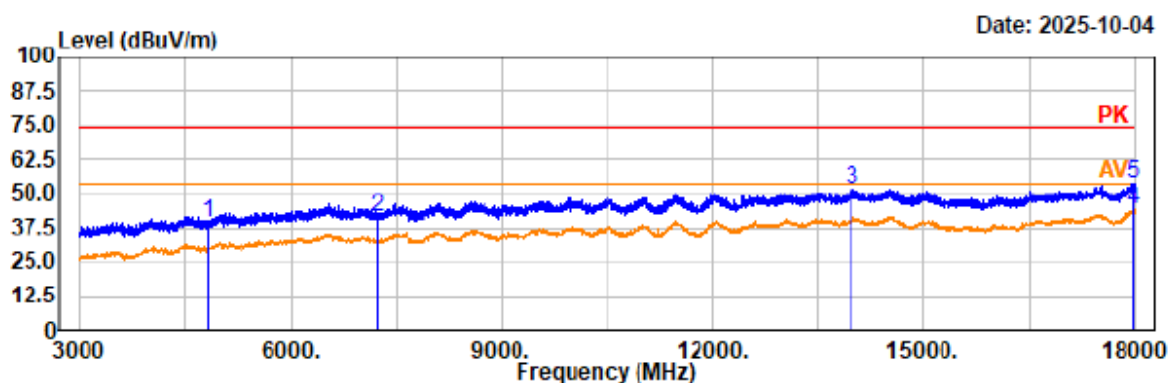
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.00	45.07	-5.24	39.83	74.00	34.17	vertical	Peak
7386.00	45.53	-2.15	43.38	74.00	30.62	vertical	Peak
14494.50	47.34	5.08	52.42	74.00	21.58	vertical	Peak
17982.00	36.83	6.89	43.72	54.00	10.28	vertical	Average
17982.00	46.97	6.89	53.86	74.00	20.14	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

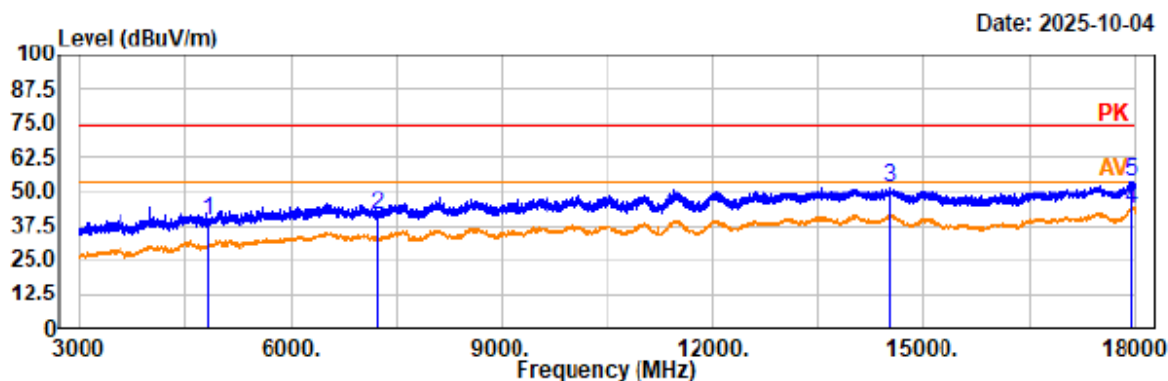
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	44.27	-5.26	39.01	74.00	34.99	horizontal	Peak
7236.00	43.98	-2.47	41.51	74.00	32.49	horizontal	Peak
13989.00	46.48	5.20	51.68	74.00	22.32	horizontal	Peak
17989.50	37.18	6.90	44.08	54.00	9.92	horizontal	Average
17989.50	47.10	6.90	54.00	74.00	20.00	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

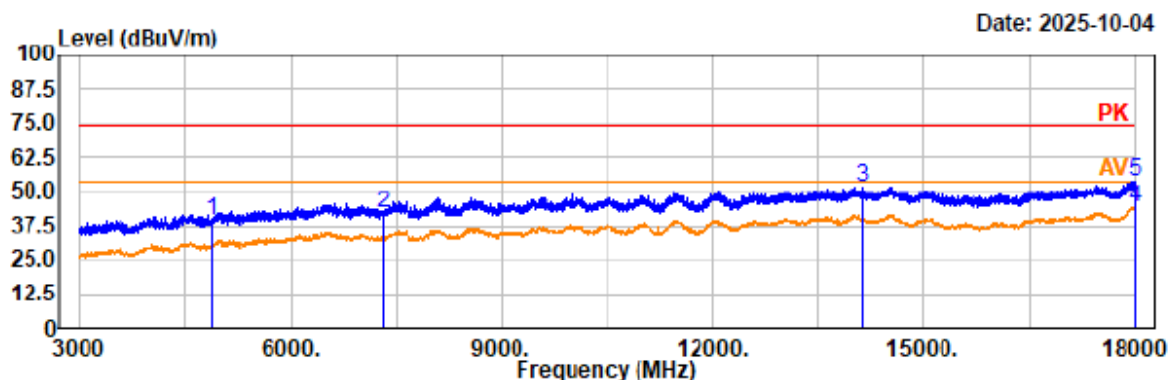
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4824.00	44.58	-5.26	39.32	74.00	34.68	vertical	Peak
7236.00	43.61	-2.47	41.14	74.00	32.86	vertical	Peak
14520.00	46.87	5.06	51.93	74.00	22.07	vertical	Peak
17959.50	36.72	6.86	43.58	54.00	10.42	vertical	Average
17959.50	46.88	6.86	53.74	74.00	20.26	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

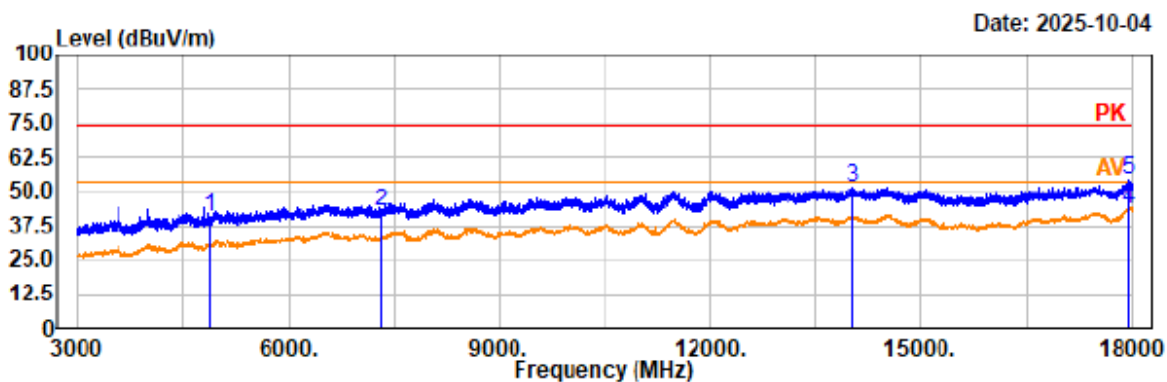
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4874.00	44.44	-5.29	39.15	74.00	34.85	horizontal	Peak
7311.00	44.67	-2.28	42.39	74.00	31.61	horizontal	Peak
14128.50	46.32	5.35	51.67	74.00	22.33	horizontal	Peak
17992.50	37.02	6.90	43.92	54.00	10.08	horizontal	Average
17992.50	46.75	6.90	53.65	74.00	20.35	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

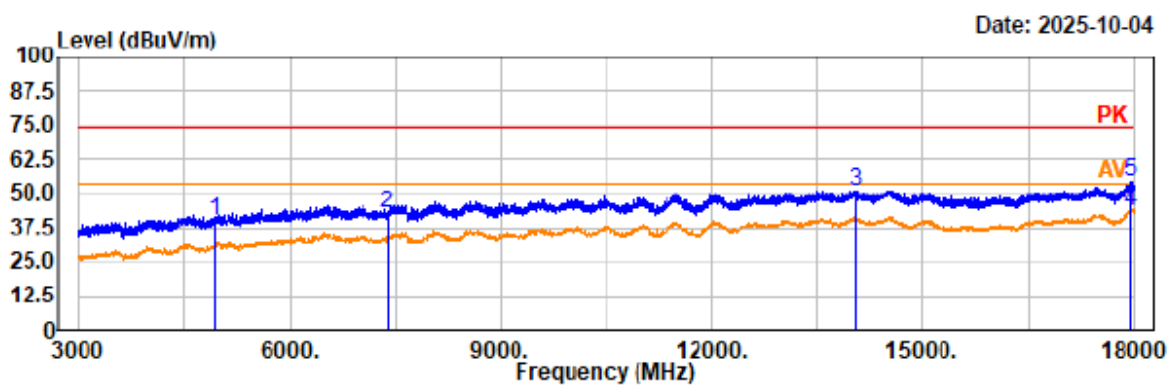
Condition: PK RBW:1MHz VBW:3MHz SwT:auto

AV RBW:1MHz VBW:5kHz SwT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	45.71	-5.29	40.42	74.00	33.58	vertical	Peak
7311.00	44.72	-2.28	42.44	74.00	31.56	vertical	Peak
14019.00	46.58	5.23	51.81	74.00	22.19	vertical	Peak
17956.50	36.40	6.87	43.27	54.00	10.73	vertical	Average
17956.50	47.38	6.87	54.25	74.00	19.75	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

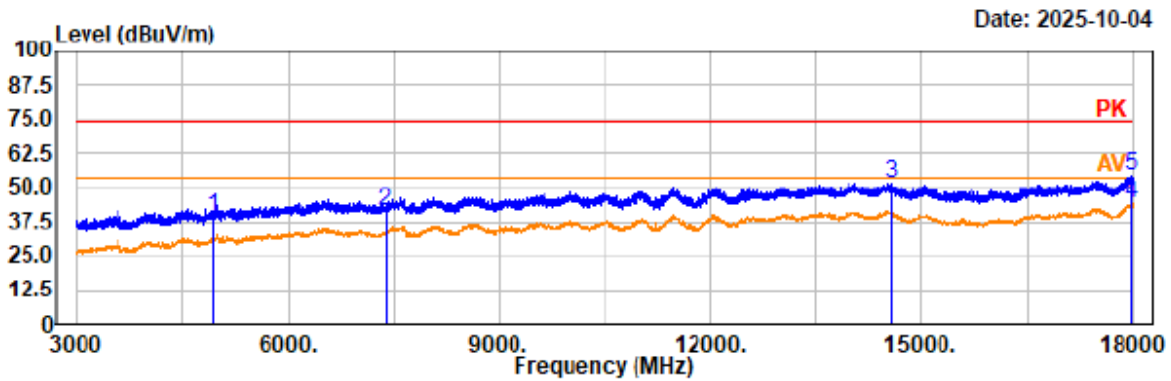
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4924.00	45.39	-5.24	40.15	74.00	33.85	horizontal	Peak
7386.00	44.61	-2.15	42.46	74.00	31.54	horizontal	Peak
14049.00	46.03	5.27	51.30	74.00	22.70	horizontal	Peak
17962.50	36.69	6.86	43.55	54.00	10.45	horizontal	Average
17962.50	47.53	6.86	54.39	74.00	19.61	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

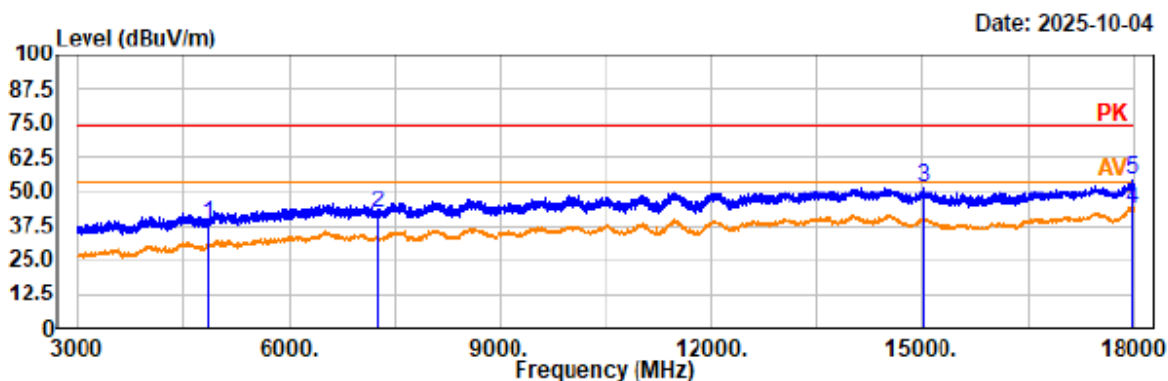
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4924.00	44.74	-5.24	39.50	74.00	34.50	vertical	Peak
7386.00	43.86	-2.15	41.71	74.00	32.29	vertical	Peak
14569.50	47.03	5.03	52.06	74.00	21.94	vertical	Peak
17980.50	37.06	6.89	43.95	54.00	10.05	vertical	Average
17980.50	47.48	6.89	54.37	74.00	19.63	vertical	Peak

Project No.: 2507W27469E-RF
 Test Mode: 802.11n40 2422MHz
 EUT Model: AP01
 Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz



Trace: 1

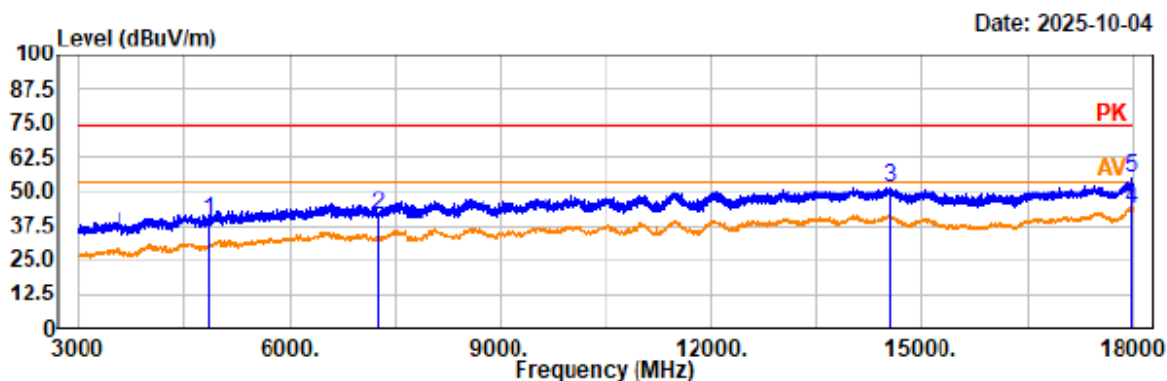
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4844.00	43.18	-5.27	37.91	74.00	36.09	horizontal	Peak
7266.00	44.29	-2.39	41.90	74.00	32.10	horizontal	Peak
15022.50	47.69	4.35	52.04	74.00	21.96	horizontal	Peak
17970.00	36.76	6.88	43.64	54.00	10.36	horizontal	Average
17970.00	47.52	6.88	54.40	74.00	19.60	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2422MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

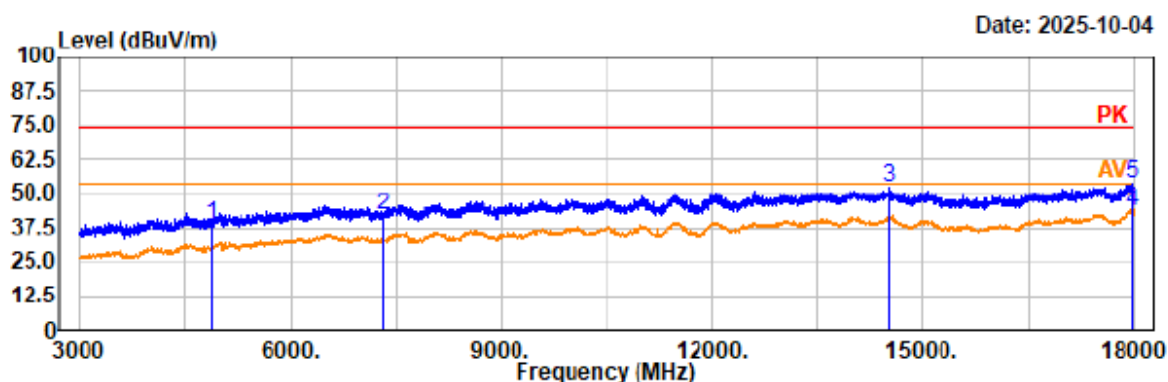
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4844.00	44.36	-5.27	39.09	74.00	34.91	vertical	Peak
7266.00	43.98	-2.39	41.59	74.00	32.41	vertical	Peak
14529.00	46.98	5.05	52.03	74.00	21.97	vertical	Peak
17970.00	36.61	6.88	43.49	54.00	10.51	vertical	Average
17970.00	48.17	6.88	55.05	74.00	18.95	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

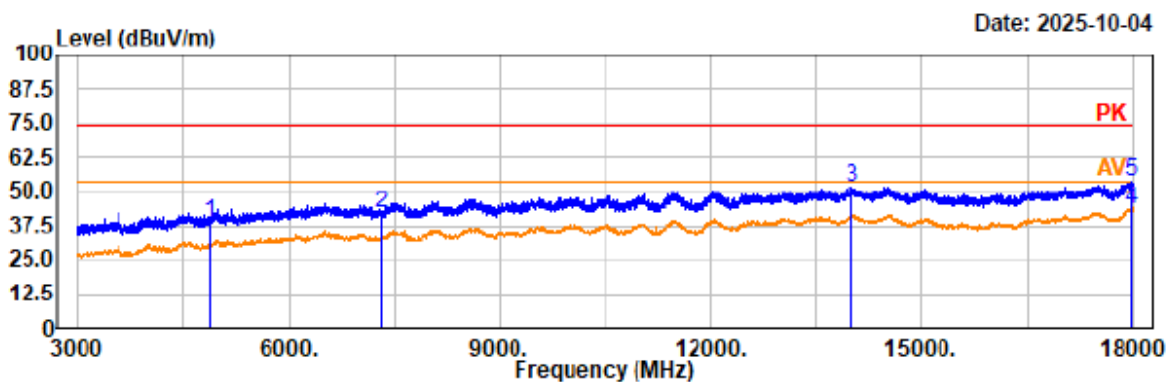
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	43.72	-5.29	38.43	74.00	35.57	horizontal	Peak
7311.00	44.13	-2.28	41.85	74.00	32.15	horizontal	Peak
14508.00	47.43	5.06	52.49	74.00	21.51	horizontal	Peak
17979.00	36.82	6.89	43.71	54.00	10.29	horizontal	Average
17979.00	46.89	6.89	53.78	74.00	20.22	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2437MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

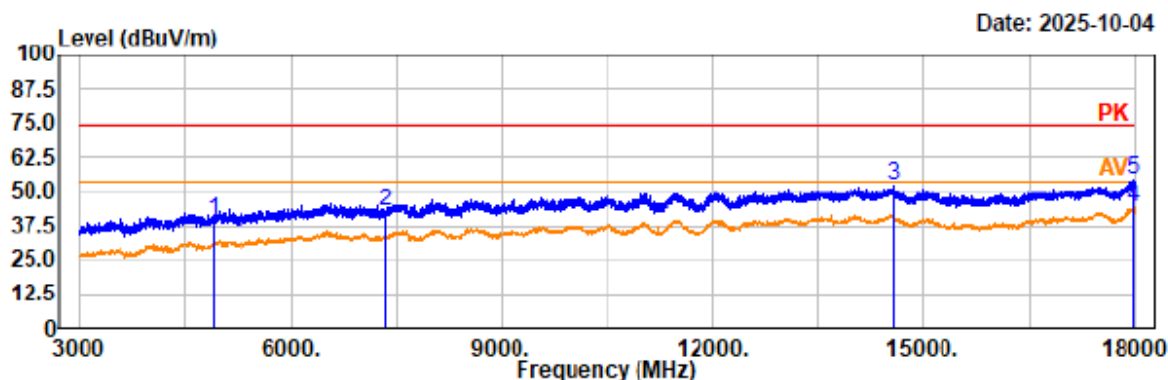
Condition: PK RBW:1MHz VBW:3MHz SwT:auto

AV RBW:1MHz VBW:5kHz SwT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	43.90	-5.29	38.61	74.00	35.39	vertical	Peak
7311.00	44.56	-2.28	42.28	74.00	31.72	vertical	Peak
14016.00	46.54	5.22	51.76	74.00	22.24	vertical	Peak
17974.50	36.25	6.88	43.13	54.00	10.87	vertical	Average
17974.50	46.83	6.88	53.71	74.00	20.29	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

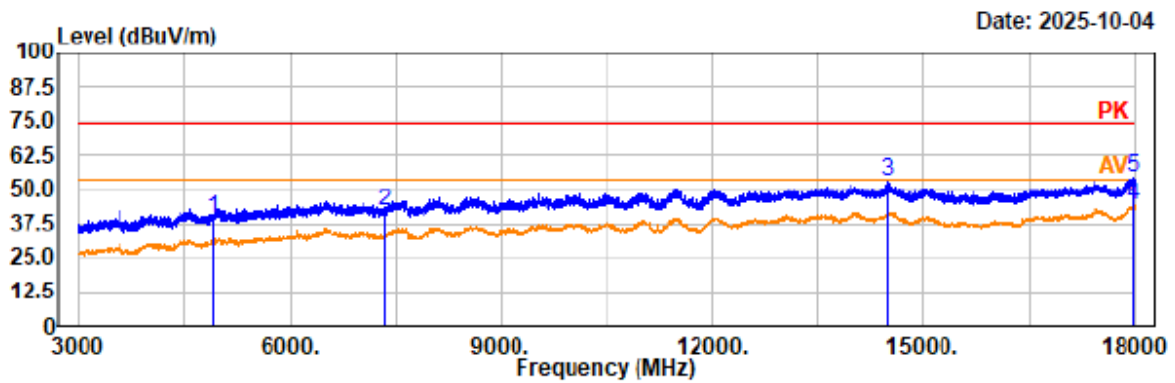
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4904.00	44.87	-5.30	39.57	74.00	34.43	horizontal	Peak
7356.00	44.71	-2.17	42.54	74.00	31.46	horizontal	Peak
14580.00	47.11	5.03	52.14	74.00	21.86	horizontal	Peak
17988.00	37.32	6.89	44.21	54.00	9.79	horizontal	Average
17988.00	47.26	6.89	54.15	74.00	19.85	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

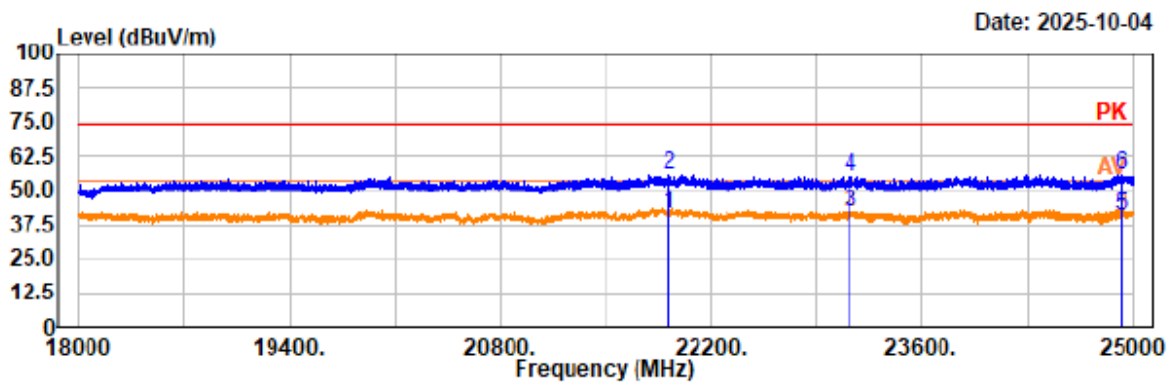
Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4904.00	44.61	-5.30	39.31	74.00	34.69	vertical	Peak
7356.00	43.99	-2.17	41.82	74.00	32.18	vertical	Peak
14487.00	47.71	5.09	52.80	74.00	21.20	vertical	Peak
17968.50	37.00	6.88	43.88	54.00	10.12	vertical	Average
17968.50	47.45	6.88	54.33	74.00	19.67	vertical	Peak

5) Above 18GHz

Note: The maximum output power mode: Transmitting in Wifi 802.11g low channel was tested.

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 1.5m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

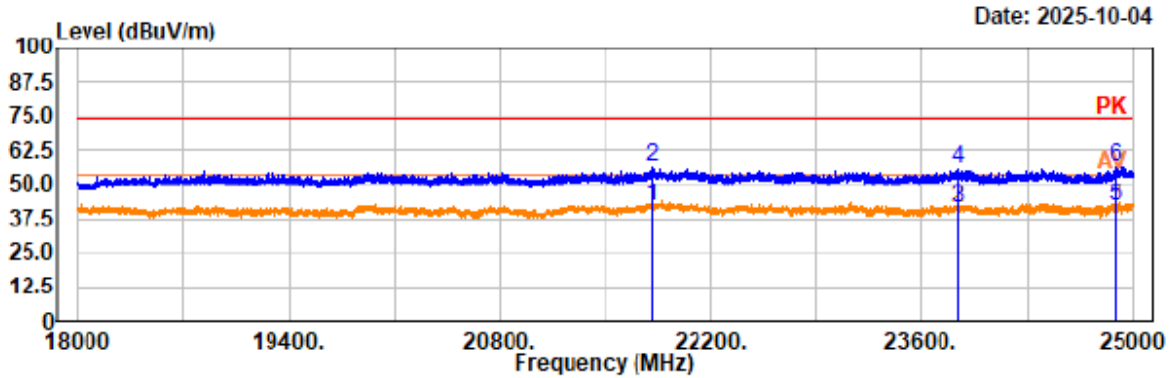
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
21924.20	35.99	5.19	41.18	54.00	12.82	horizontal	Average
21924.20	50.81	5.19	56.00	74.00	18.00	horizontal	Peak
23122.60	36.95	4.93	41.88	54.00	12.12	horizontal	Average
23122.60	50.43	4.93	55.36	74.00	18.64	horizontal	Peak
24927.20	34.46	6.32	40.78	54.00	13.22	horizontal	Average
24927.20	49.51	6.32	55.83	74.00	18.17	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 1.5m

Temp/Humi/ATM: 24.5°C/56%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

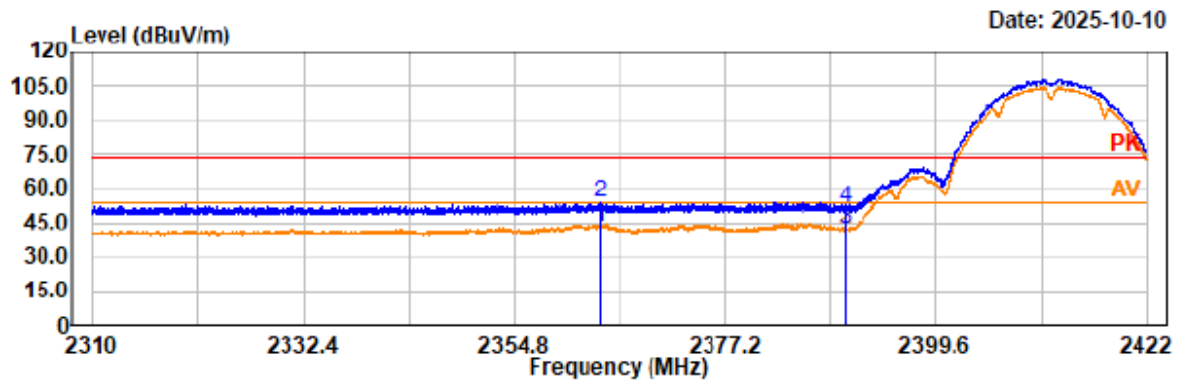
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
21809.40	37.01	5.01	42.02	54.00	11.98	vertical	Average
21809.40	51.46	5.01	56.47	74.00	17.53	vertical	Peak
23832.40	35.88	5.28	41.16	54.00	12.84	vertical	Average
23832.40	50.85	5.28	56.13	74.00	17.87	vertical	Peak
24886.60	35.89	6.30	42.19	54.00	11.81	vertical	Average
24886.60	50.19	6.30	56.49	74.00	17.51	vertical	Peak

Restricted Bands Emissions:

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

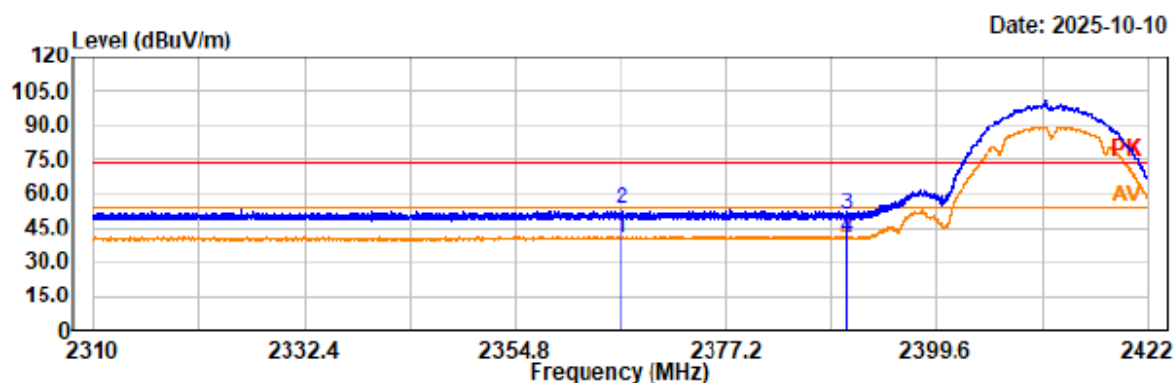
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2363.81	38.32	4.74	43.06	54.00	10.94	horizontal	Average
2363.81	49.21	4.74	53.95	74.00	20.05	horizontal	Peak
2390.00	37.23	4.85	42.08	54.00	11.92	horizontal	Average
2390.00	46.30	4.85	51.15	74.00	22.85	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



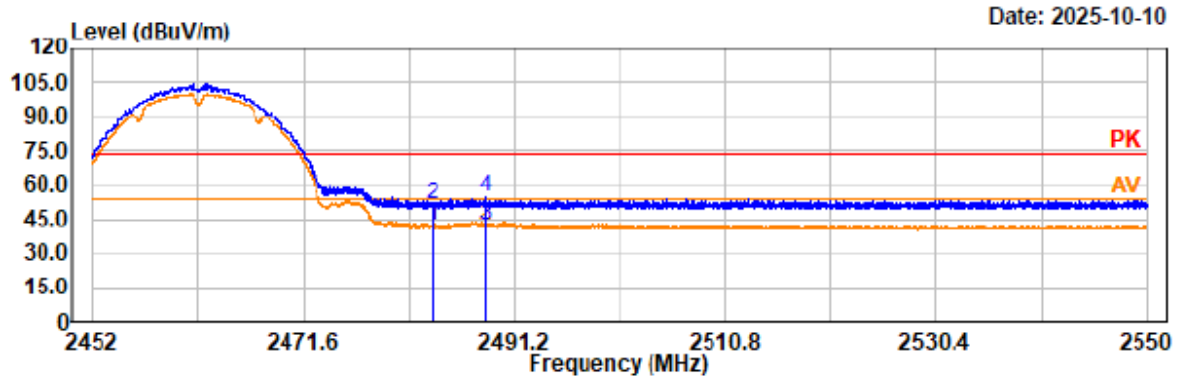
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2366.14	36.19	4.75	40.94	54.00	13.06	vertical	Average
2366.14	48.03	4.75	52.78	74.00	21.22	vertical	Peak
2390.00	45.55	4.85	50.40	74.00	23.60	vertical	Peak
2390.00	35.91	4.85	40.76	54.00	13.24	vertical	Average

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

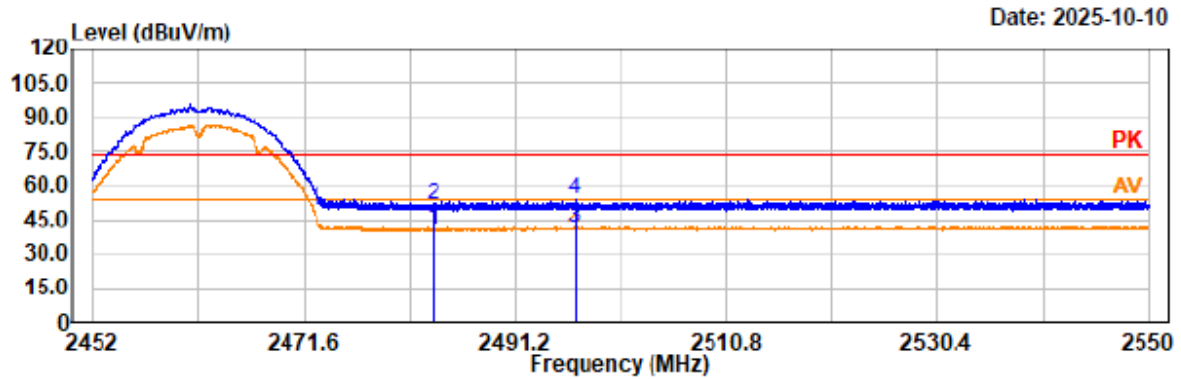
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2483.50	36.84	5.23	42.07	54.00	11.93	horizontal	Average
2483.50	46.02	5.23	51.25	74.00	22.75	horizontal	Peak
2488.38	37.29	5.24	42.53	54.00	11.47	horizontal	Average
2488.38	48.98	5.24	54.22	74.00	19.78	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11b 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

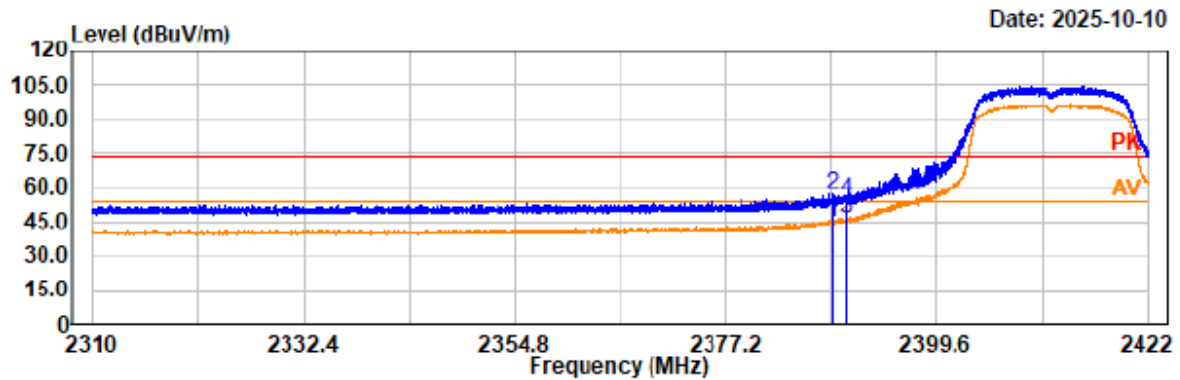
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2483.50	35.66	5.23	40.89	54.00	13.11	vertical	Average
2483.50	45.81	5.23	51.04	74.00	22.96	vertical	Peak
2496.80	36.07	5.29	41.36	54.00	12.64	vertical	Average
2496.80	48.11	5.29	53.40	74.00	20.60	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

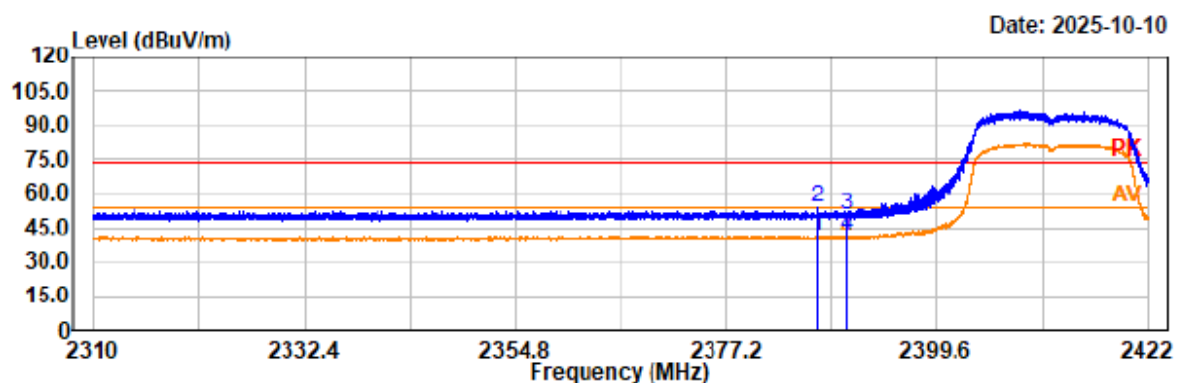
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2388.53	40.10	4.84	44.94	54.00	9.06	horizontal	Average
2388.53	52.17	4.84	57.01	74.00	16.99	horizontal	Peak
2390.00	41.19	4.85	46.04	54.00	7.96	horizontal	Average
2390.00	50.04	4.85	54.89	74.00	19.11	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

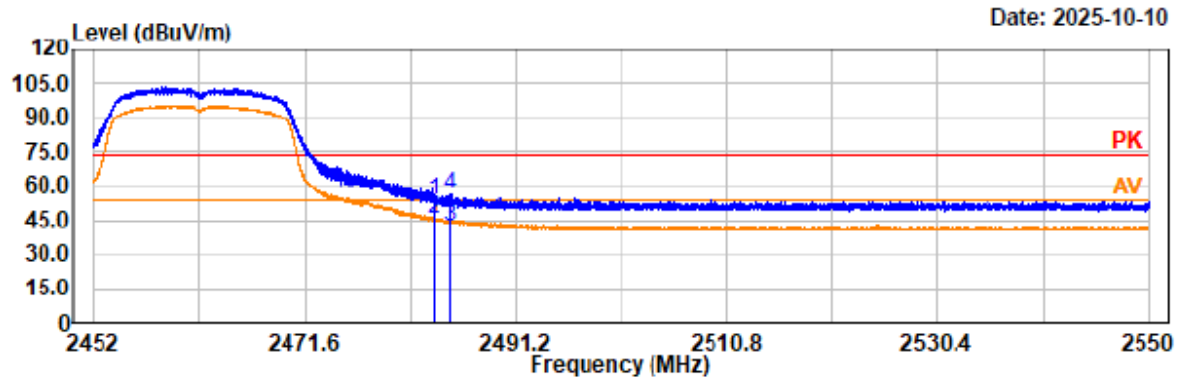
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2387.00	36.23	4.84	41.07	54.00	12.93	vertical	Average
2387.00	48.74	4.84	53.58	74.00	20.42	vertical	Peak
2390.00	45.47	4.85	50.32	74.00	23.68	vertical	Peak
2390.00	36.26	4.85	41.11	54.00	12.89	vertical	Average

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

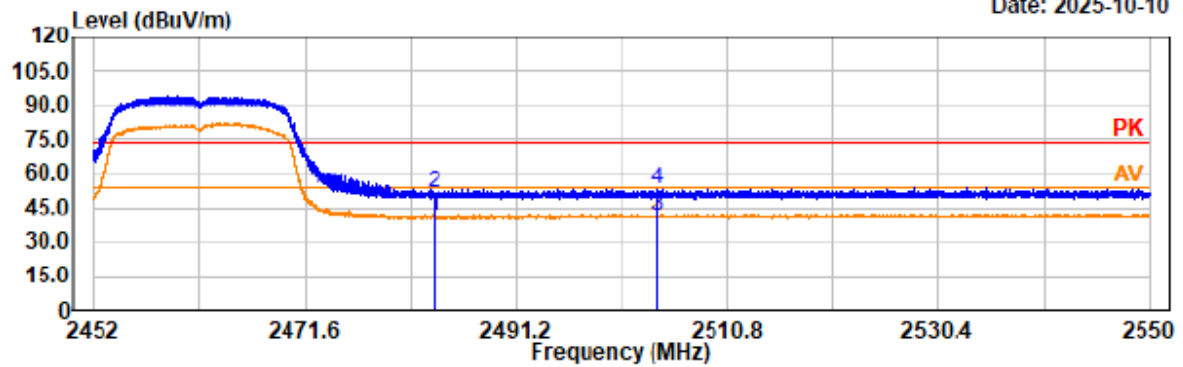
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	48.48	5.23	53.71	74.00	20.29	horizontal	Peak
2483.50	39.96	5.23	45.19	54.00	8.81	horizontal	Average
2485.20	36.56	5.24	41.80	54.00	12.20	horizontal	Average
2485.20	51.08	5.24	56.32	74.00	17.68	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11g 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-10



Trace: 1

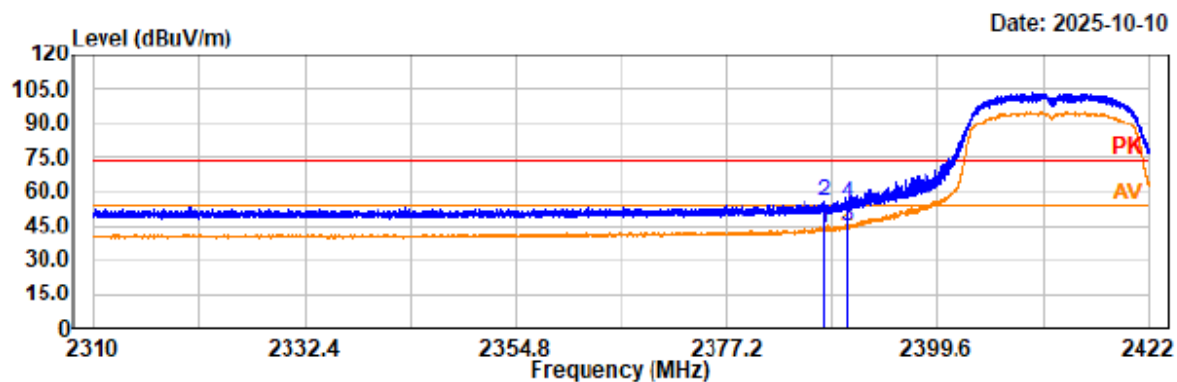
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	35.82	5.23	41.05	54.00	12.95	vertical	Average
2483.50	45.86	5.23	51.09	74.00	22.91	vertical	Peak
2504.25	35.94	5.31	41.25	54.00	12.75	vertical	Average
2504.25	47.92	5.31	53.23	74.00	20.77	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

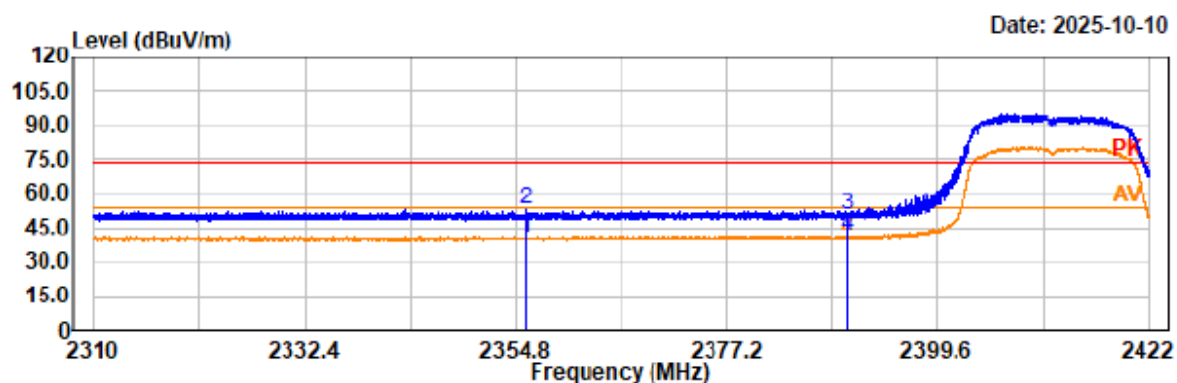
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2387.47	38.82	4.84	43.66	54.00	10.34	horizontal	Average
2387.47	50.78	4.84	55.62	74.00	18.38	horizontal	Peak
2390.00	39.90	4.85	44.75	54.00	9.25	horizontal	Average
2390.00	49.72	4.85	54.57	74.00	19.43	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



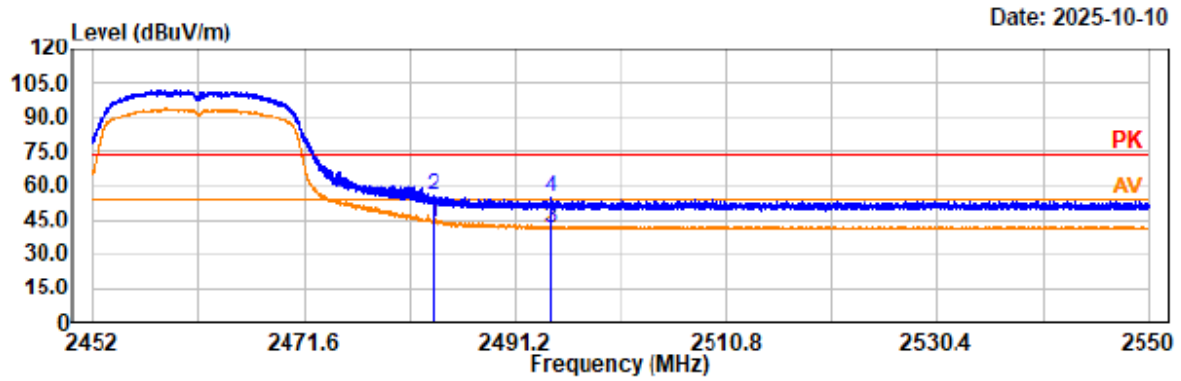
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2355.80	35.78	4.70	40.48	54.00	13.52	vertical	Average
2355.80	48.07	4.70	52.77	74.00	21.23	vertical	Peak
2390.00	45.48	4.85	50.33	74.00	23.67	vertical	Peak
2390.00	36.19	4.85	41.04	54.00	12.96	vertical	Average

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

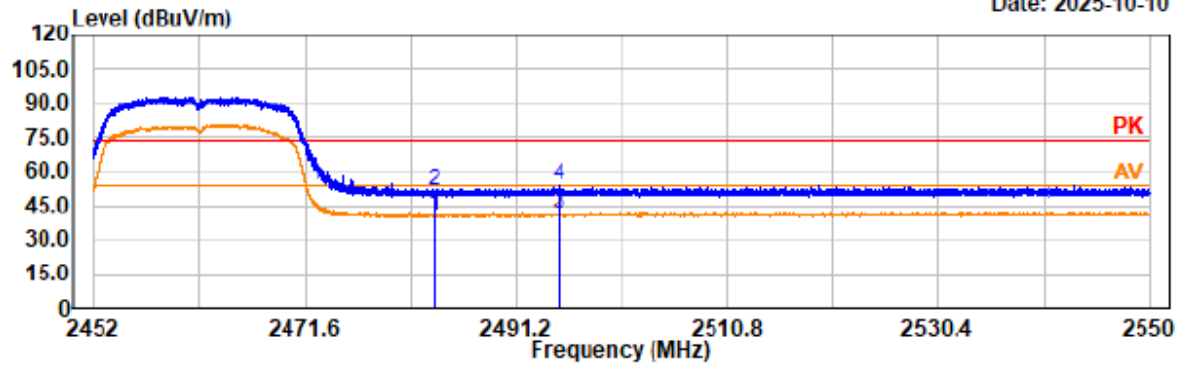
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	38.92	5.23	44.15	54.00	9.85	horizontal	Average
2483.50	49.81	5.23	55.04	74.00	18.96	horizontal	Peak
2494.36	36.45	5.28	41.73	54.00	12.27	horizontal	Average
2494.36	49.20	5.28	54.48	74.00	19.52	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-10



Trace: 1

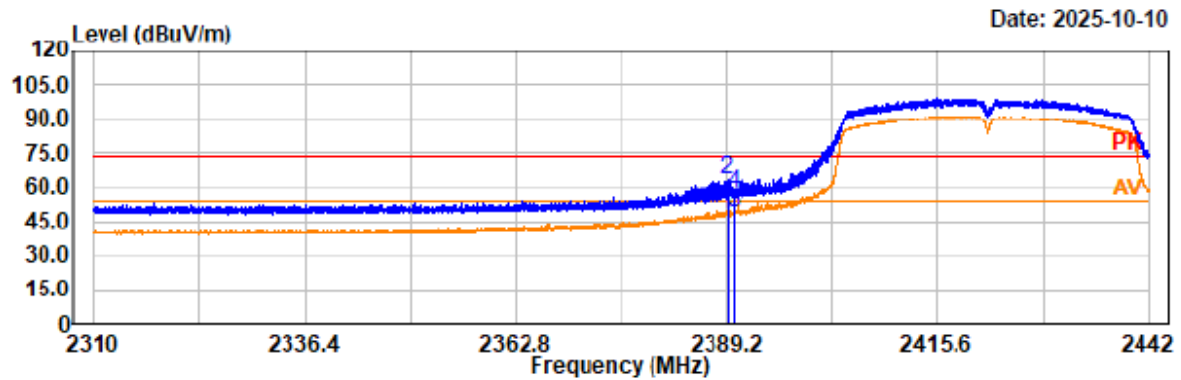
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	35.73	5.23	40.96	54.00	13.04	vertical	Average
2483.50	46.34	5.23	51.57	74.00	22.43	vertical	Peak
2495.15	35.77	5.28	41.05	54.00	12.95	vertical	Average
2495.15	48.19	5.28	53.47	74.00	20.53	vertical	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2422MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

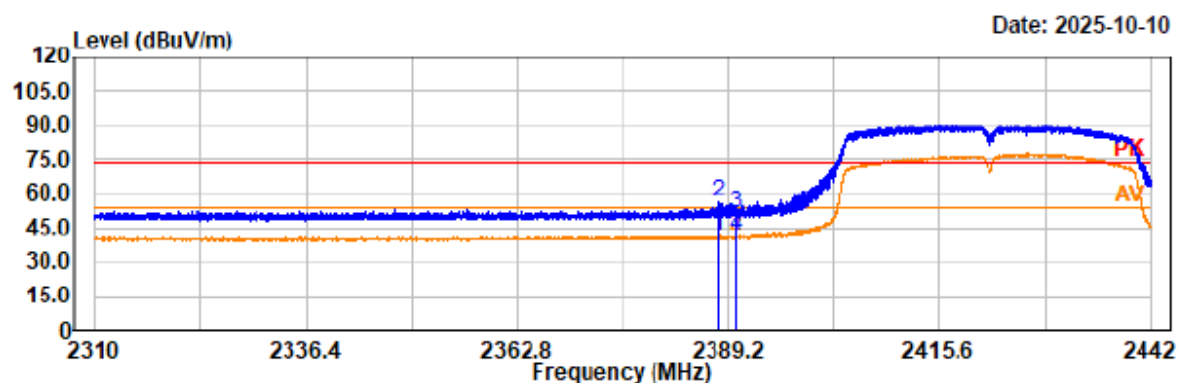
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2389.24	43.05	4.85	47.90	54.00	6.10	horizontal	Average
2389.24	59.07	4.85	63.92	74.00	10.08	horizontal	Peak
2390.01	44.30	4.85	49.15	54.00	4.85	horizontal	Average
2390.01	52.68	4.85	57.53	74.00	16.47	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2422MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



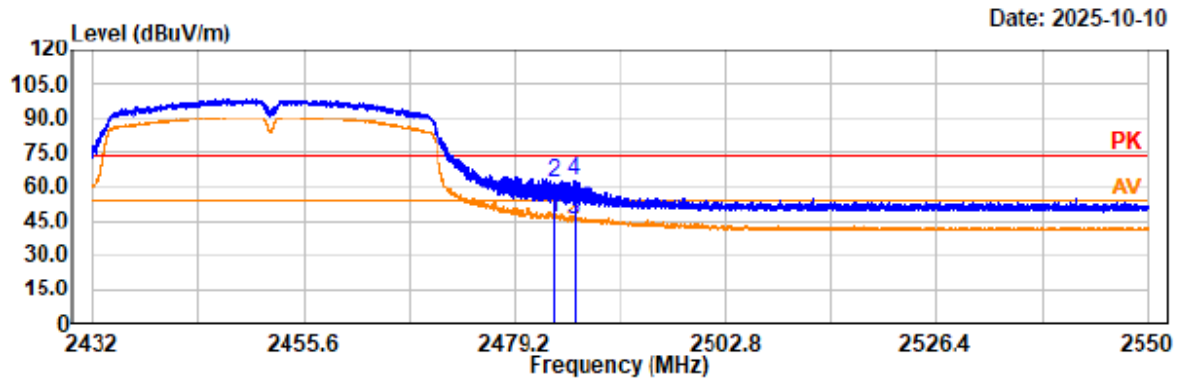
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2387.83	36.37	4.84	41.21	54.00	12.79	vertical	Average
2387.83	51.17	4.84	56.01	74.00	17.99	vertical	Peak
2390.00	46.10	4.85	50.95	74.00	23.05	vertical	Peak
2390.00	36.43	4.85	41.28	54.00	12.72	vertical	Average

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

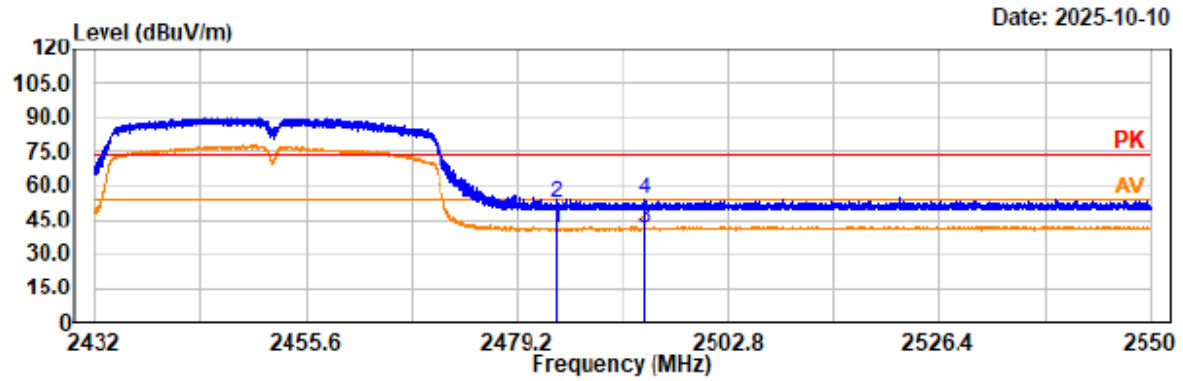
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
2483.50	41.30	5.23	46.53	54.00	7.47	horizontal	Average
2483.50	56.79	5.23	62.02	74.00	11.98	horizontal	Peak
2485.94	40.34	5.24	45.58	54.00	8.42	horizontal	Average
2485.94	57.82	5.24	63.06	74.00	10.94	horizontal	Peak

Project No.: 2507W27469E-RF
Test Mode: 802.11n40 2452MHz
EUT Model: AP01
Test distance: 3m

Temp/Humi/ATM: 23.5°C/52%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



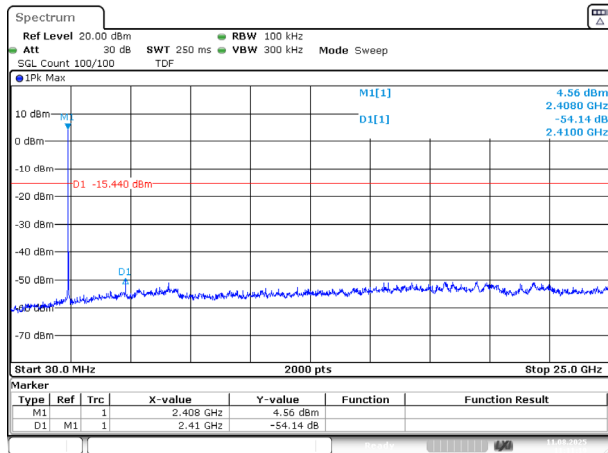
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

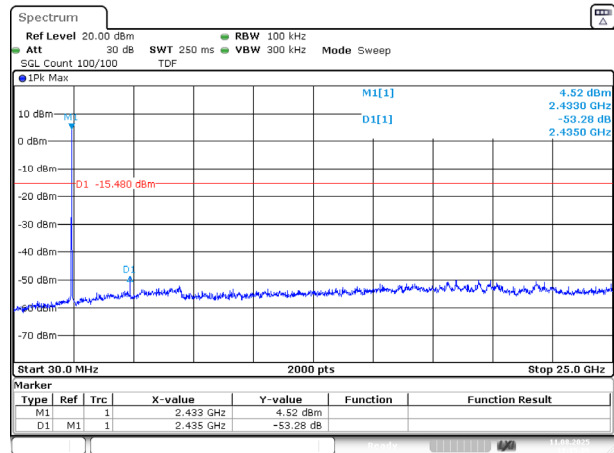
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	36.03	5.23	41.26	54.00	12.74	vertical	Average
2483.50	47.16	5.23	52.39	74.00	21.61	vertical	Peak
2493.38	36.26	5.27	41.53	54.00	12.47	vertical	Average
2493.38	48.53	5.27	53.80	74.00	20.20	vertical	Peak

Antenna-port conducted emission

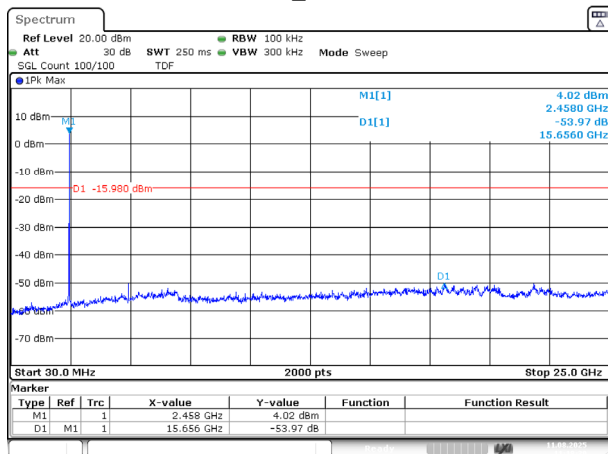
802.11b_2412MHz



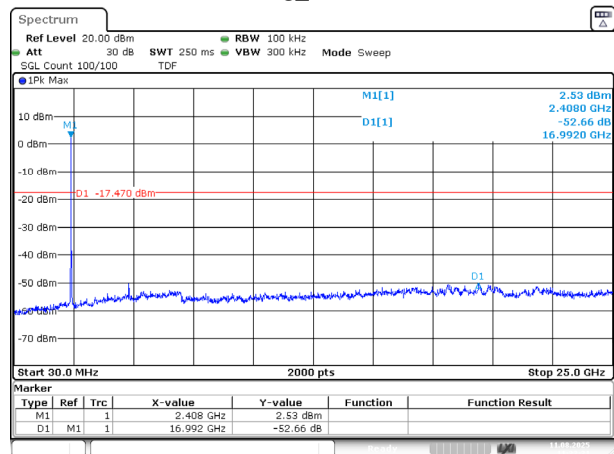
802.11b_2437MHz



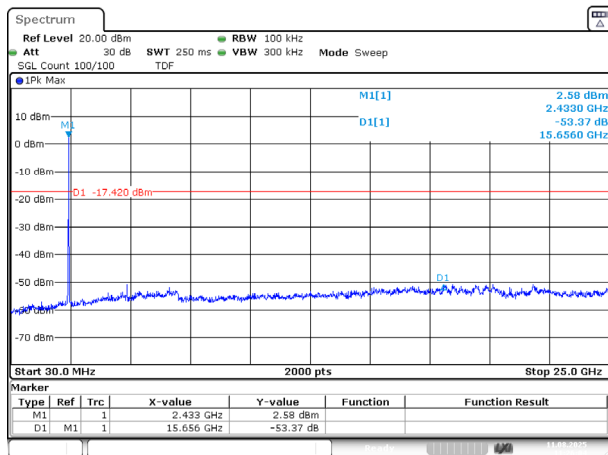
802.11b_2462MHz



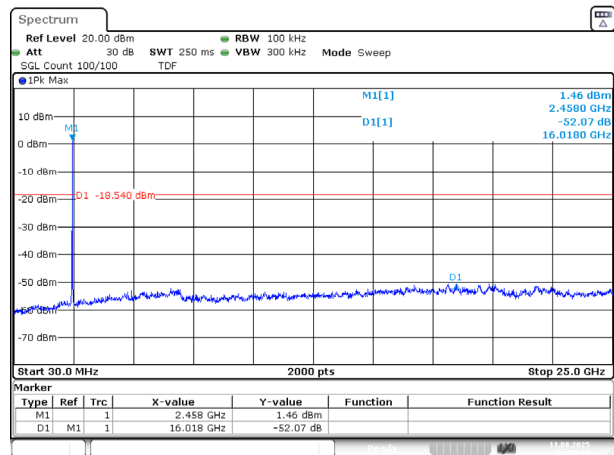
802.11g_2412MHz



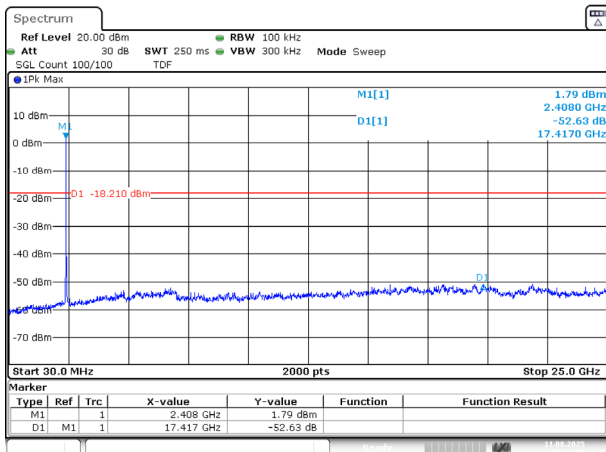
802.11g_2437MHz



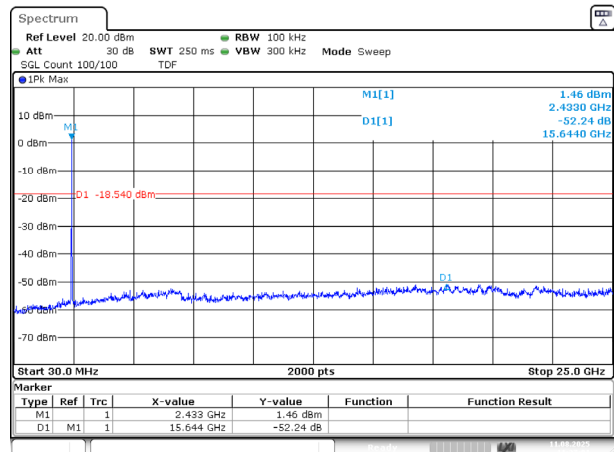
802.11g_2462MHz



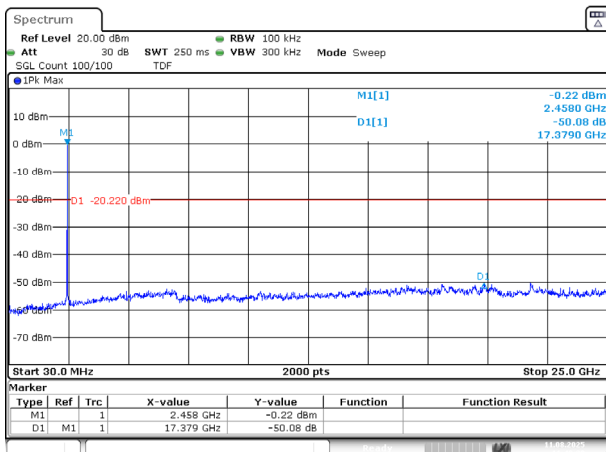
802.11n20_2412MHz



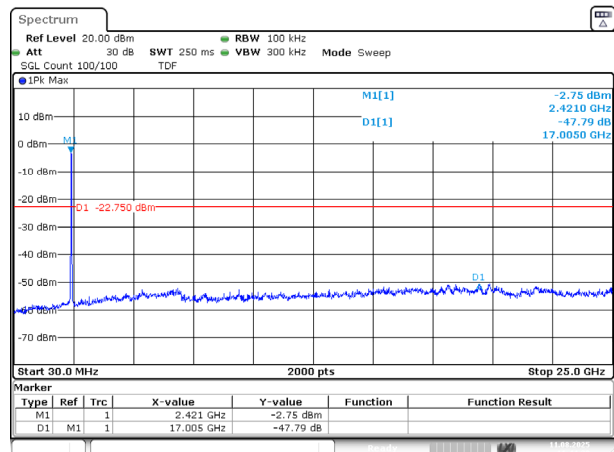
802.11n20_2437MHz



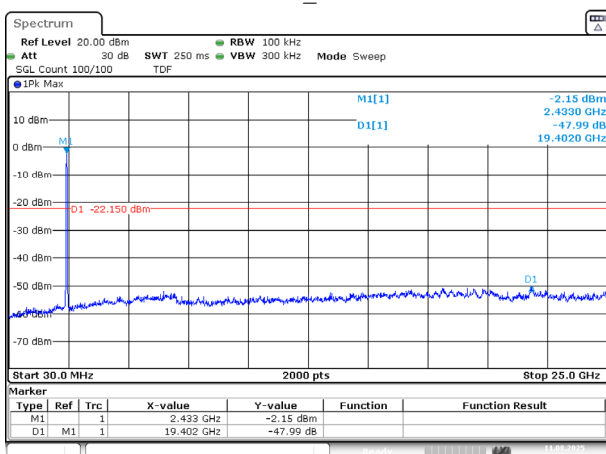
802.11n20_2462MHz



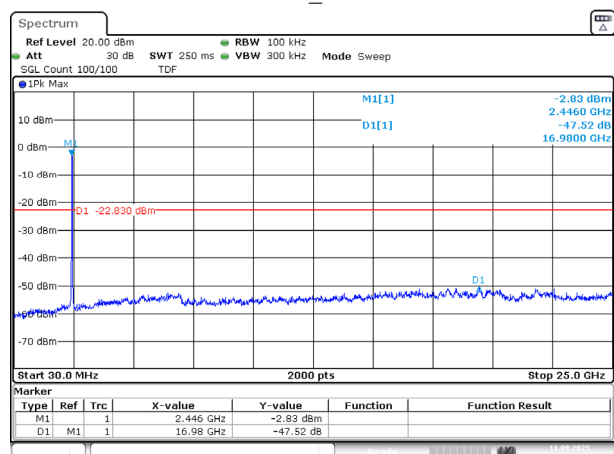
802.11n40_2422MHz



802.11n40_2437MHz



802.11n40_2452MHz



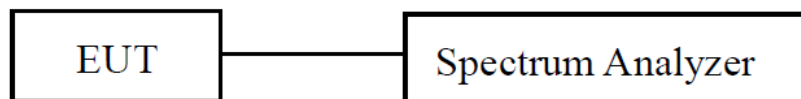
FCC §15.247(a) (2) & RSS-247 ISSUE 4 Clause 6.3.1 a - 6 dB EMISSION BANDWIDTH**Applicable Standard**

FCC§15.247 (a)(2)

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

RSS-247 ISSUE 4 Clause 6.3.1 a

The minimum 6 dB bandwidth shall be 500 kHz.

EUT Setup

Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was offset into the setting of test equipment:

Offset = Insert loss of RF cable

★ The Insert loss was declared by manufacturer.

Test Procedure

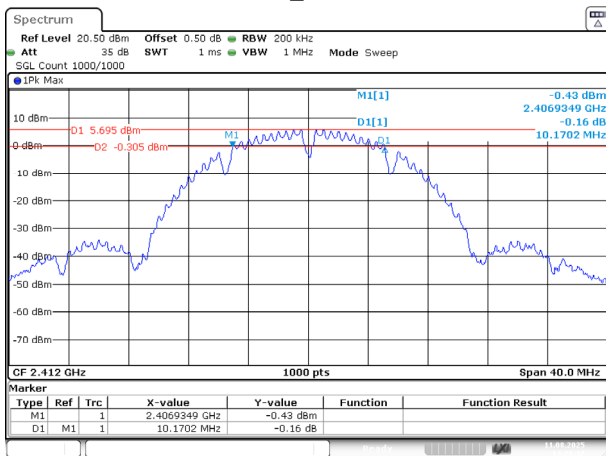
According to ANSI C63.10-2020 + Cor.1-2023[▲] Section 11.8

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

Test Data

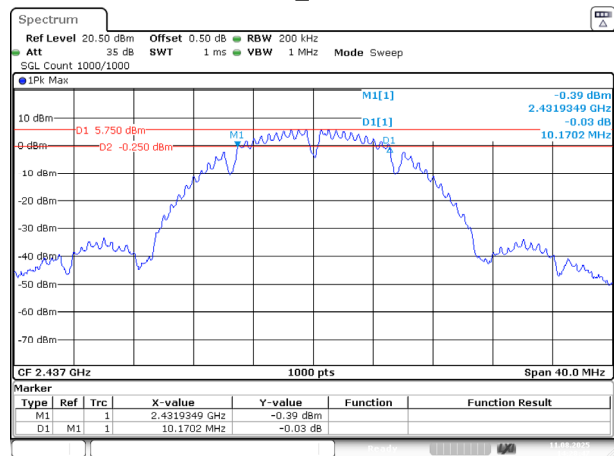
Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-08-11	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 25.3°C Humi.: 61% Atm :100.3kPa
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
802.11b	2412	10.17	0.5
	2437	10.17	0.5
	2462	10.17	0.5
802.11g	2412	15.856	0.5
	2437	15.816	0.5
	2462	15.816	0.5
802.11n ht20	2412	15.656	0.5
	2437	15.656	0.5
	2462	15.656	0.5
802.11n ht40	2422	35.395	0.5
	2437	35.476	0.5
	2452	35.155	0.5

802.11b_2412MHz



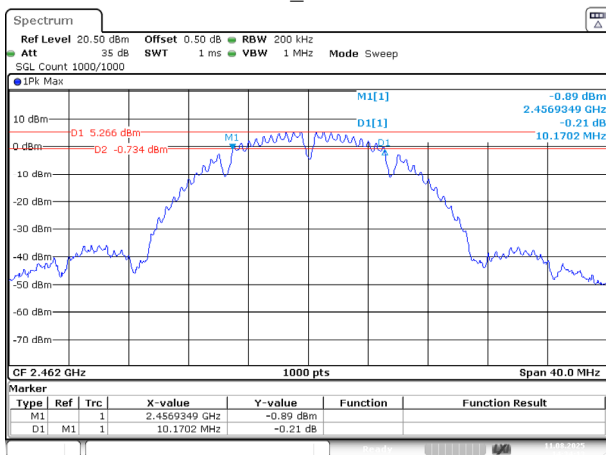
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:21:17

802.11b_2437MHz



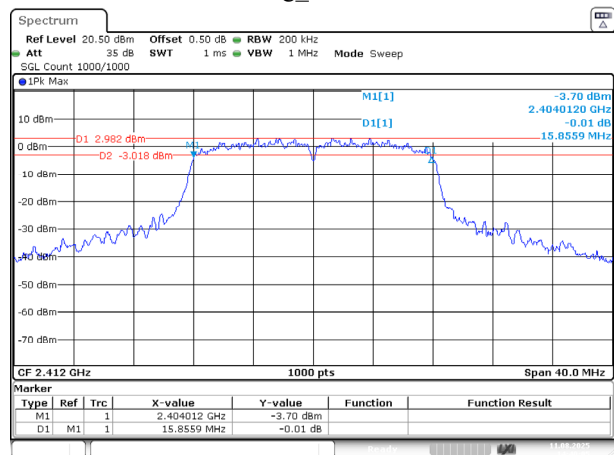
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:28:47

802.11b_2462MHz



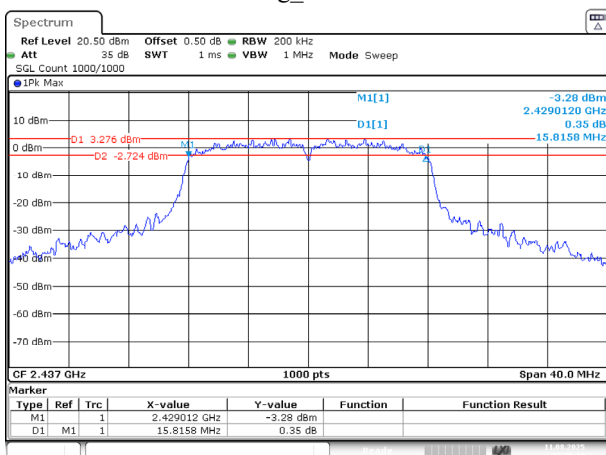
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:34:14

802.11g_2412MHz



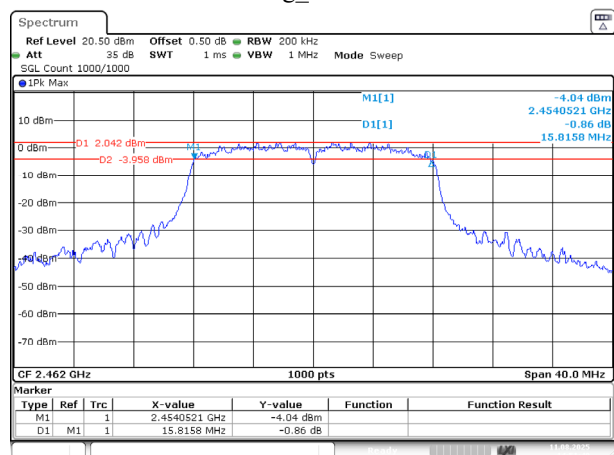
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:40:06

802.11g_2437MHz



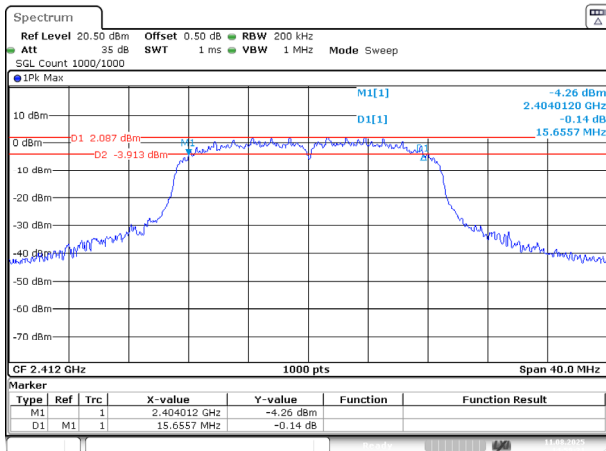
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:46:10

802.11g_2462MHz

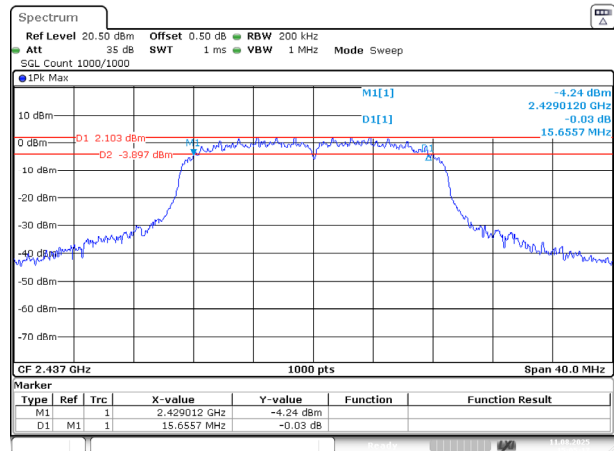


ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:51:49

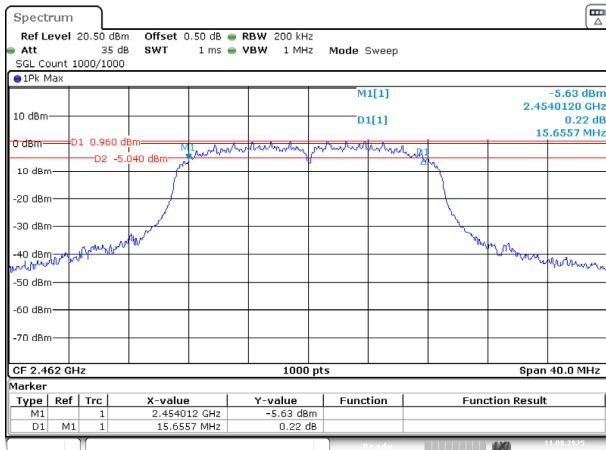
802.11n20_2412MHz



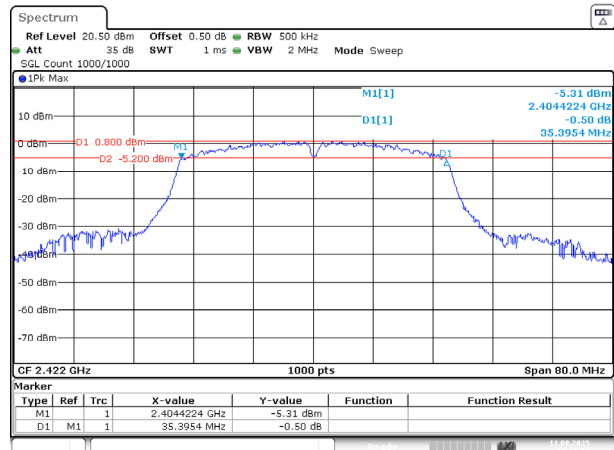
802.11n20_2437MHz



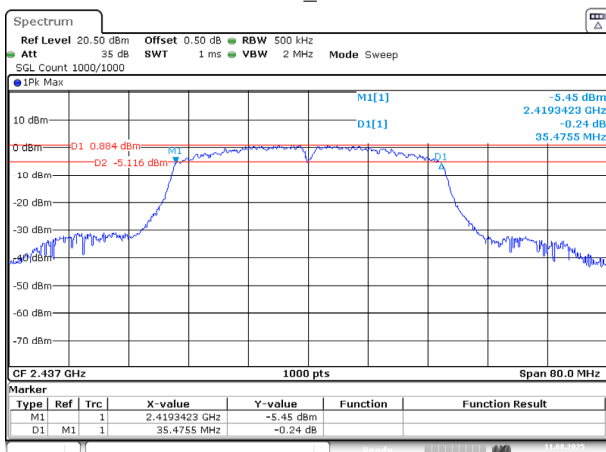
802.11n20_2462MHz



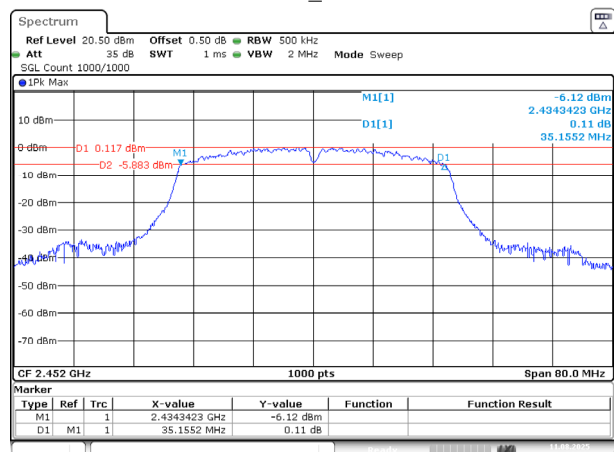
802.11n40_2422MHz



802.11n40_2437MHz



802.11n40_2452MHz



RSS-Gen ISSUE 5 Clause 6.7 – 99% OCCUPIED BANDWIDTH

Applicable Standard

According to RSS-Gen Issue 5 Clause 6.7

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the “x dB bandwidth” is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

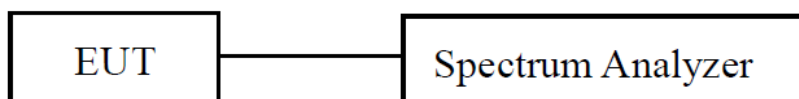
The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.

The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).

EUT Setup

Note: A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable was offset into the setting of test equipment:

Offset = Insert loss of RF cable

★ The Insert loss was declared by manufacturer.

Test Procedure

According to ANSI C63.10-2020 + Cor.1-2023[▲] Section 6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

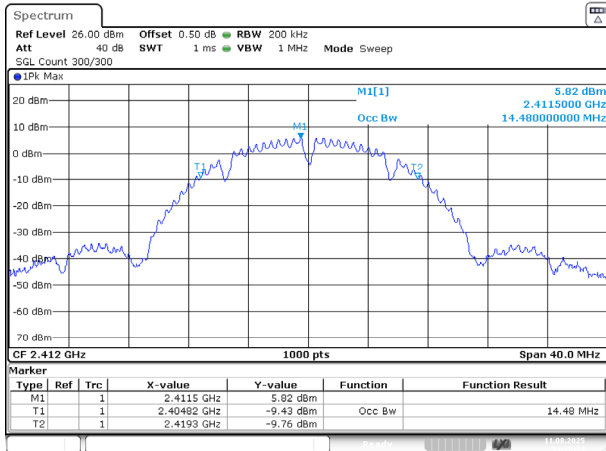
The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW/RBW})]$ below the reference level. Specific guidance is given in 4.1.6.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Test Data

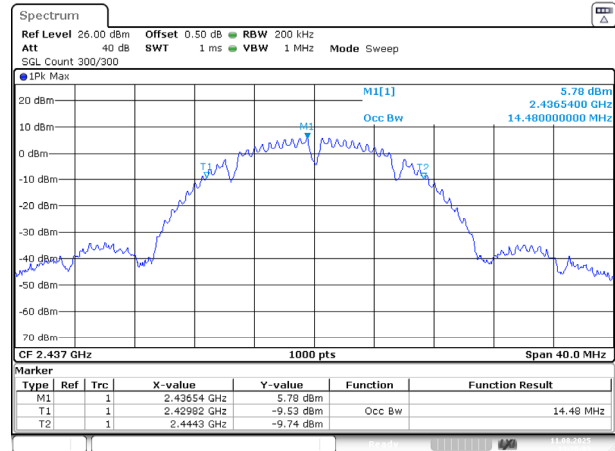
Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-08-11	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 25.3°C Humi.: 61% Atm :100.3kPa
Test Modes	Test Channel	Test Frequency (MHz)	99% Occupied Bandwidth (MHz)
802.11b	Lowest	2412	14.48
	Middle	2437	14.48
	Highest	2462	14.44
802.11g	Lowest	2412	16.12
	Middle	2437	16.12
	Highest	2462	16.12
802.11n ht20	Lowest	2412	17.12
	Middle	2437	17.16
	Highest	2462	17.16
802.11n ht40	Lowest	2422	35.68
	Middle	2437	35.68
	Highest	2452	35.76

802.11b_2412MHz



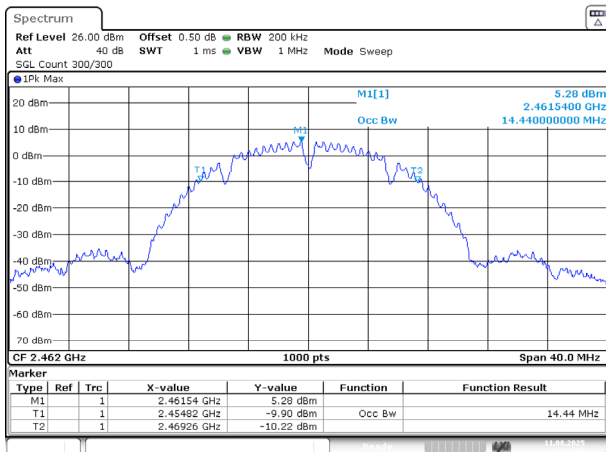
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:20:24

802.11b_2437MHz



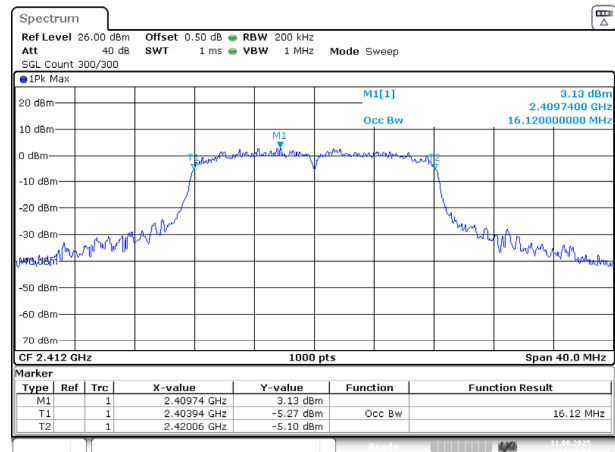
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:28:02

802.11b_2462MHz



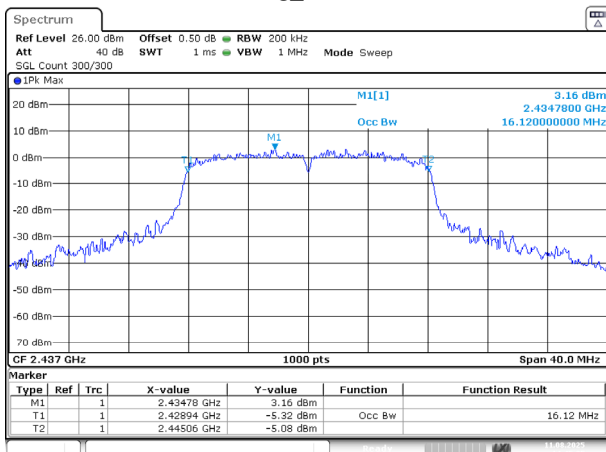
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:33:26

802.11g_2412MHz



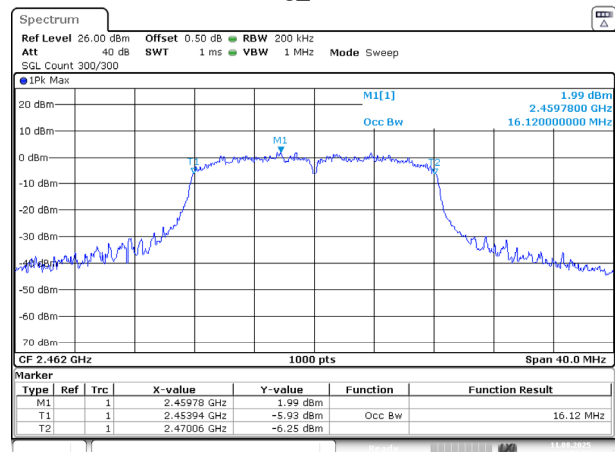
ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:39:12

802.11g_2437MHz



ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:45:25

802.11g_2462MHz



ProjectNo.:2507W27469E-RF Tester:Braylon Ma
Date: 11.AUG.2025 14:51:01