



FCC PART 15.247

TEST REPORT

For

Fujian Newland Payment Technology Co.,Ltd.

No. B602, Building #1, Haixia Jingmao Plaza, Fuzhou Bonded Area 350015,
Fujian, China

FCC ID: 2AM6U-NLD51

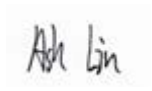
Report Type: Original Report	Product Name: D51
Report Number:	<u>2507S56058E-RF-01</u>
Report Date:	<u>2025-06-25</u>
Reviewed By:	<u>Ash Lin</u> 
Approved By:	<u>Miles Chen</u>
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science 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
TEST FACILITY	5
MEASUREMENT UNCERTAINTY.....	6
SYSTEM TEST CONFIGURATION.....	7
TEST MODE AND VOLTAGE.....	7
DESCRIPTION OF TEST CONFIGURATION	7
EQUIPMENT MODIFICATIONS	7
★EUT EXERCISE SOFTWARE	7
DUTY CYCLE	8
SUPPORT EQUIPMENT LIST AND DETAILS	10
EXTERNAL I/O CABLE.....	10
BLOCK DIAGRAM OF TEST SETUP	10
SUMMARY OF TEST RESULTS	13
TEST EQUIPMENT LIST	14
FCC §15.203 - ANTENNA REQUIREMENT.....	15
APPLICABLE STANDARD	15
ANTENNA CONNECTOR CONSTRUCTION	15
FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS	16
APPLICABLE STANDARD	16
EUT SETUP.....	16
EMI TEST RECEIVER SETUP.....	16
TEST PROCEDURE	16
RESULT & MARGIN CALCULATION.....	17
TEST DATA	17
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS.....	20
APPLICABLE STANDARD	20
EUT SETUP	20
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	21
TEST PROCEDURE	22
RESULT & MARGIN CALCULATION.....	23
TEST DATA	24
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH.....	78
APPLICABLE STANDARD	78
EUT SETUP	78
TEST PROCEDURE	78
TEST DATA	79
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER.....	84
APPLICABLE STANDARD	84
EUT SETUP	84
TEST PROCEDURE	84
TEST DATA	85
FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE.....	86
APPLICABLE STANDARD	86

EUT SETUP	86
TEST PROCEDURE	86
TEST DATA	86
FCC §15.247(e) - POWER SPECTRAL DENSITY	90
APPLICABLE STANDARD	90
EUT SETUP	90
TEST PROCEDURE	90
TEST DATA	91
EUT PHOTOGRAPHS.....	96
TEST SETUP PHOTOGRAPHS	97

REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2507S56058E-RF-01	R1V1	2025-06-25	Initial Release

GENERAL INFORMATION**Product Description for Equipment under Test (EUT)**

Product Name:	D51
Tested Model:	D51
Power Supply:	DC 5V from adapter
Maximum Conducted Peak Output Power:	16.81dBm
Frequency Range:	2412-2462MHz
Modulation Technique:	802.11b:DSSS 802.11g/n 20: OFDM
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	1.54dBi
EUT Received Status:	Good
<i>Note:</i> 1. The Maximum Antenna Gain was declared by manufacturer. 2. All measurement and test data in this report was gathered from production sample serial number: 325C-1 Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2025-04-29)	

Objective

This report is prepared on behalf of *Fujian Newland Payment Technology Co.,Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB 558074 D01 15.247 Meas Guidance v05r02.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Xiamen).

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.

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~40GHz	4.45dB
Occupied Channel Bandwidth		2%
Transmitter Conducted Power(Conducted RF power)		±1.49 dB
Power Spectral Density		±0.61dB
Duty Cycle		1%
Temperature		±1°C
Humidity		±5%
Supply voltages		±0.4%

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:	Transmitting
Test voltage:	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 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.

Equipment Modifications

No modification was made to the EUT tested.

★EUT Exercise Software

Wi-Fi test in the engineer mode.

RF Test Tool: Tera Term 5

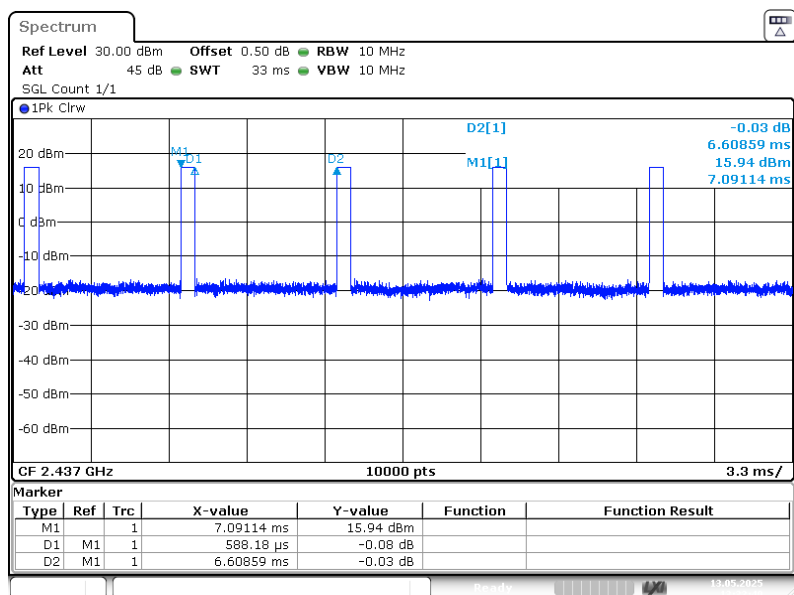
The device was tested with the worst case was performed as below:

Mode	Data rate	Power level		
		Low channel	Middle channel	High channel
802.11b	1 Mbps	-24	-24	-24
802.11g	6 Mbps	-48	-48	-48
802.11n-ht20	MCS0	-48	-48	-48

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

Duty cycle

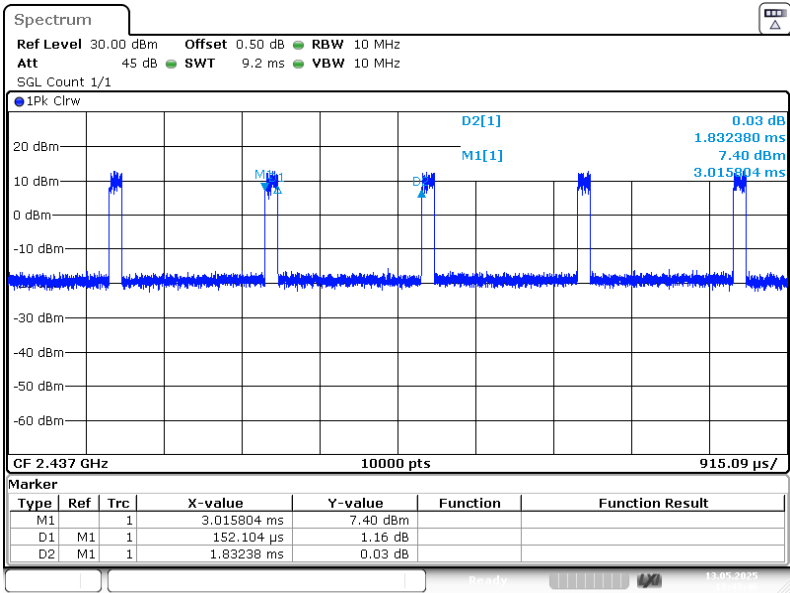
Test Mode:		Transmitting		Test Engineer:		Braylon Ma
Test Date:		2025-05-13		Test Voltage:		AC 120V/60Hz
Test Result:		Compliance		Environment:		Temp.: 23.7°C Humi.: 49% Atm.: 100.3kPa
Modes	Ton (ms)	Ton + off (ms)	Duty cycle (%)	1/T (Hz)	Duty Factor (dB)	VBW Setting (kHz)
802.11b	0.588	6.609	8.90	1701	10.51	2.00
802.11g	0.152	1.832	8.30	6579	10.81	10.00
802.11nHT20	0.155	1.834	8.45	6452	10.73	10.00

802.11b Middle Channel

ProjectNo.:2507S56058E-RF Tester:Braylon Ma

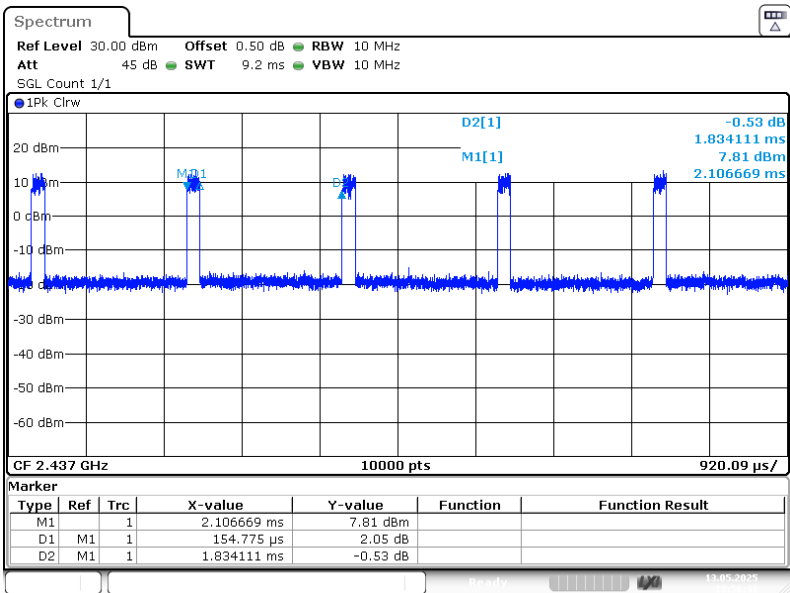
Date: 13.MAY.2025 13:32:49

802.11g Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:43:46

802.11nHT20 Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:56:41

Support Equipment List and Details

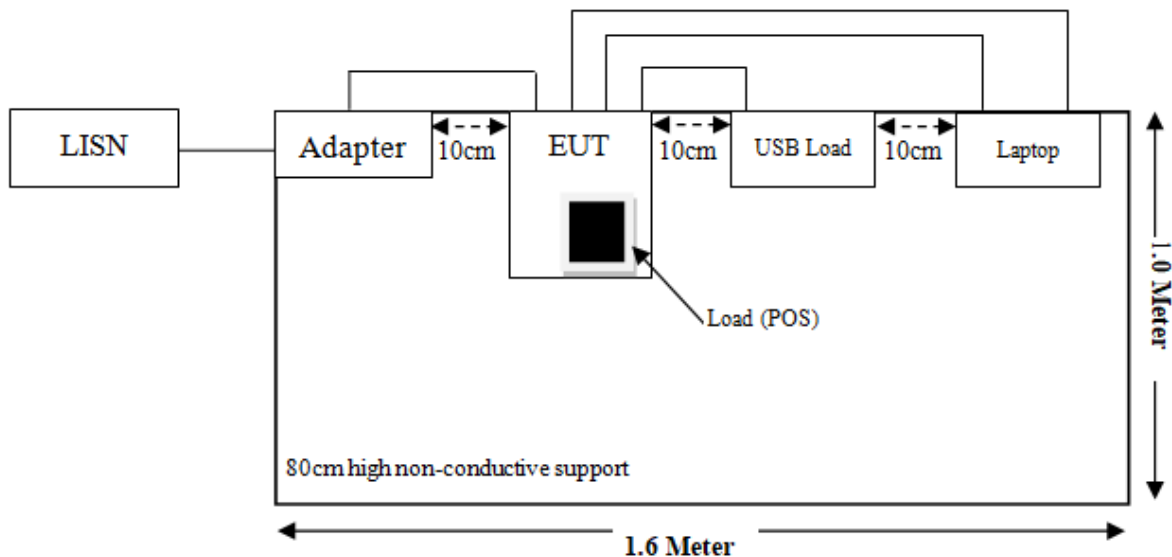
Manufacturer	Description	Model	Serial Number
Unknown	USB load	Unknown	Unknown
Newland	POS	N950	Unknown
Lenovo	Laptop	T480	PF1P5K4F
HONOTO	Adapter	ADS-12B-06	Unknown

External I/O Cable

Cable Description	Length (m)	From Port	To
USB Cable-RS232	2	EUT	Laptop
RJ-45 Cable	1	EUT	Laptop
USB Cable	1	EUT	USB load
USB Cable	1	EUT	Laptop

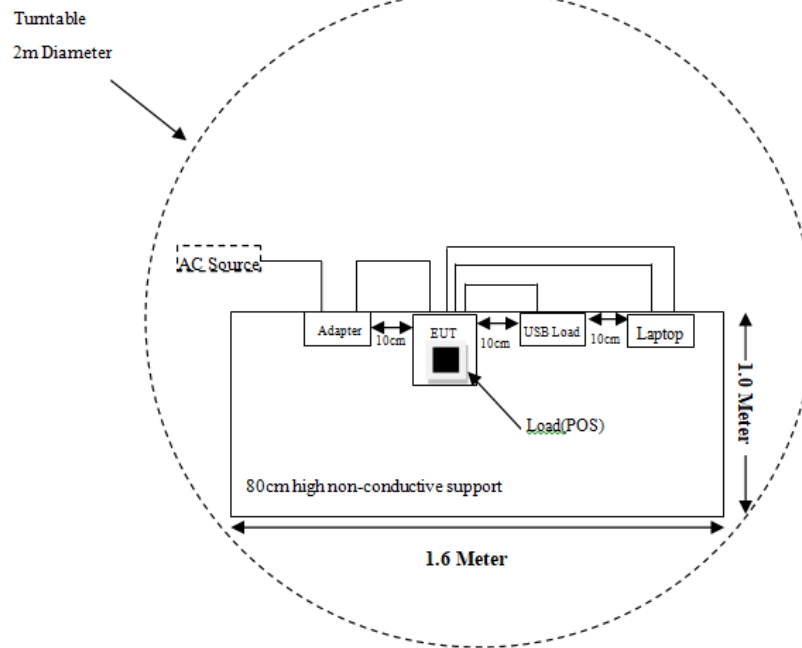
Block Diagram of Test Setup

Conducted Emission:

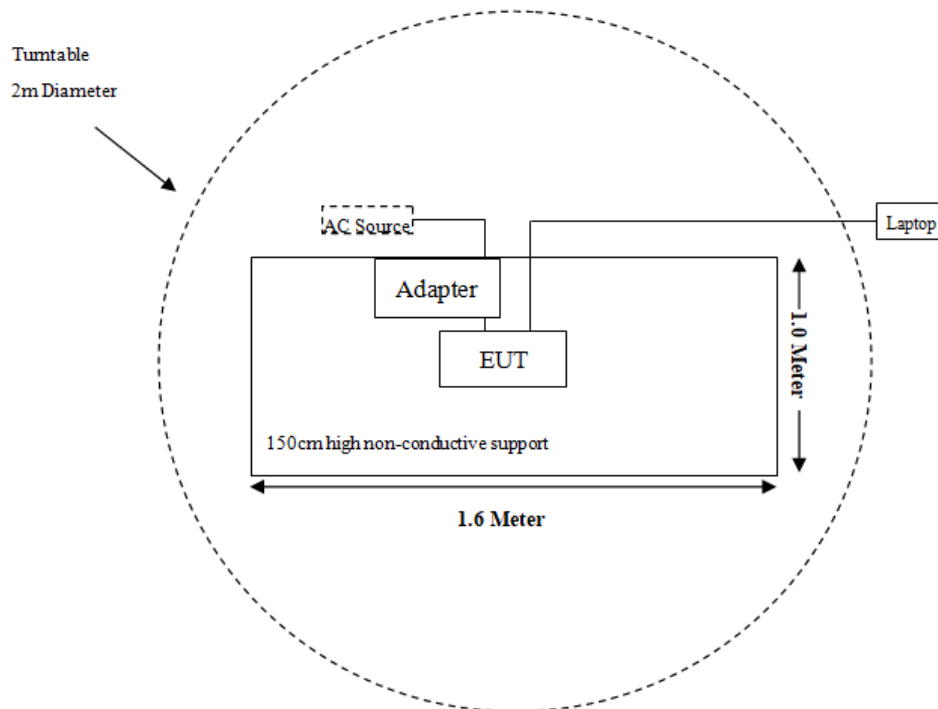


Radiated Emission:

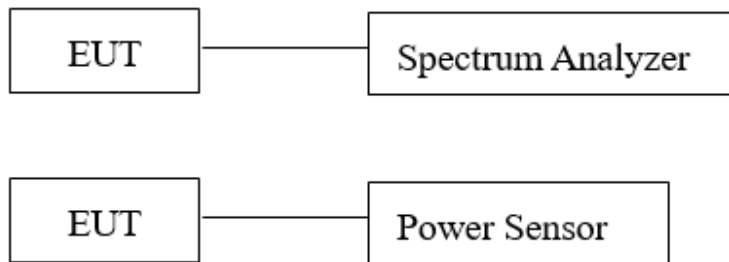
Below 1GHz



Above 1GHz



RF



Note: The cable assembly insertion loss of 0.5dB was entered as an offset in the power meter.(Actual cable loss was unavailable at the time of testing, therefore loss of 0.5dB was assumed as worst case.) This was later verified to be true by laboratory.

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance
§15.247(b)(3)	Maximum Conducted Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	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
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
Coaxial Cable	Lianxun	RF113	N/A	Each time	N/A
USB Wideband Power Sensor	Boonton	55318	8934	2024/9/19	2025/9/18

* **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 - ANTENNA REQUIREMENT

Applicable Standard

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

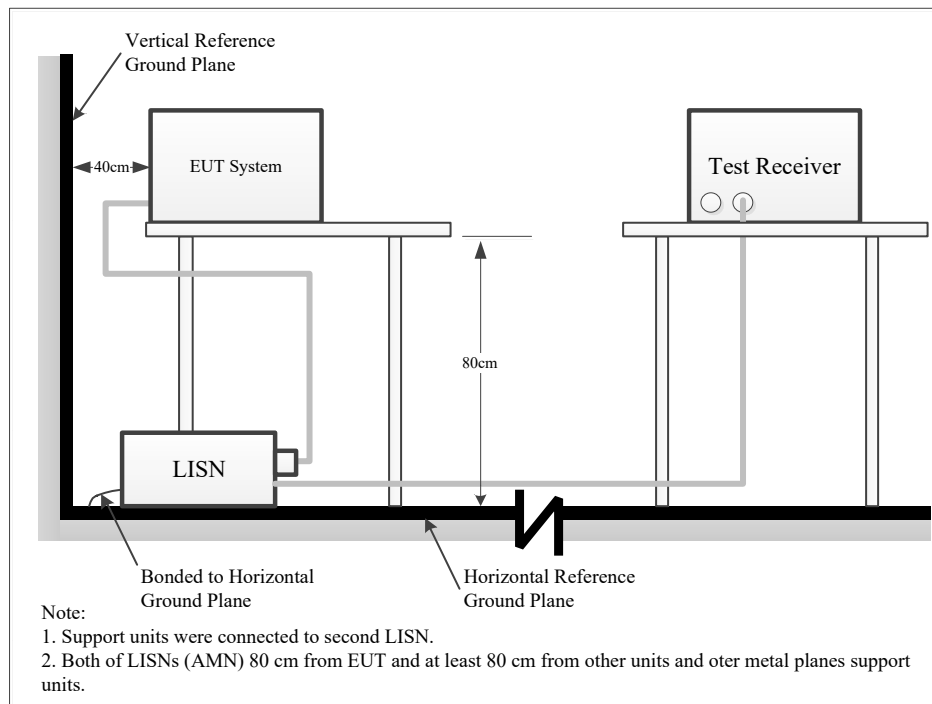
Antenna Connector Construction

The EUT has one PCB antenna arrangement for WIFI, which was permanently attached and the antenna gain is 1.54dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS**Applicable Standard**

FCC§15.207

EUT Setup

The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 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 Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

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

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

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:

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

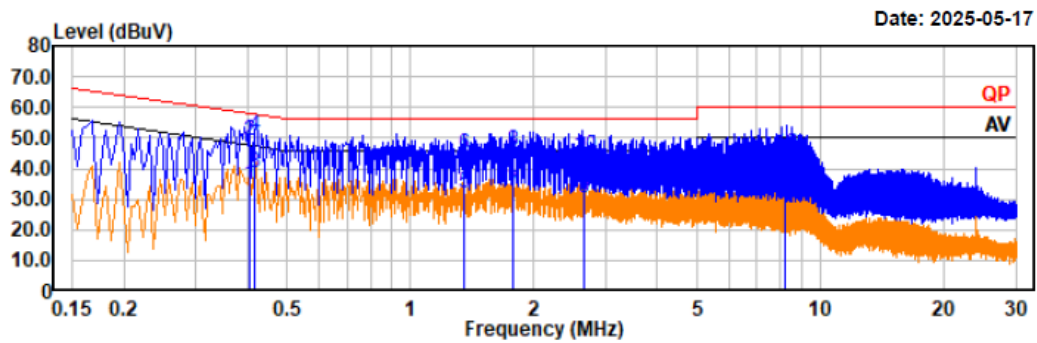
Test Data

Temperature:	24.8°C
Relative Humidity:	58%
ATM Pressure:	99.8kPa
Test Date:	2025-05-17
Test Engineer:	Wlif Wu

Note: The maximum output power mode: 802.11b middle channel was tested.

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51

Temp/Humi/ATM: 24.8°C/58%/99.8kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



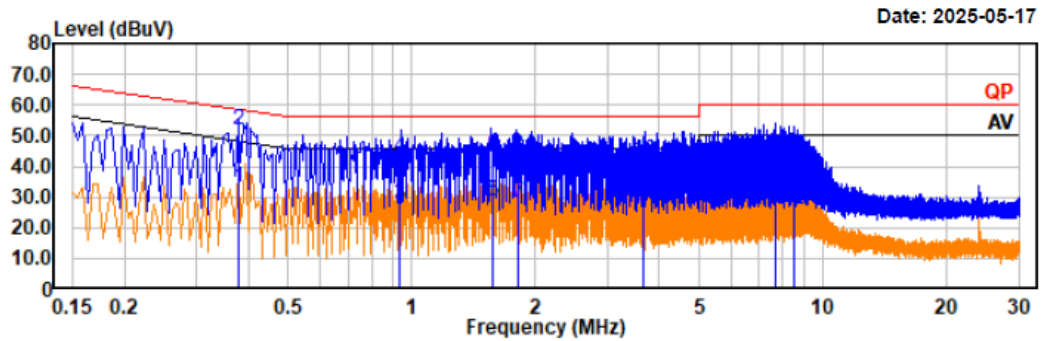
Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.40	4.17	30.82	34.99	47.77	12.78	Line	Average
0.40	18.37	30.82	49.19	57.77	8.58	Line	QP
0.42	7.55	30.80	38.35	47.53	9.18	Line	Average
0.42	19.69	30.80	50.49	57.53	7.04	Line	QP
1.35	-0.36	32.10	31.74	46.00	14.26	Line	Average
1.35	12.52	32.10	44.62	56.00	11.38	Line	QP
1.78	0.21	32.27	32.48	46.00	13.52	Line	Average
1.78	13.52	32.27	45.79	56.00	10.21	Line	QP
2.64	-1.53	31.94	30.41	46.00	15.59	Line	Average
2.64	12.23	31.94	44.17	56.00	11.83	Line	QP
8.22	-3.02	31.67	28.65	50.00	21.35	Line	Average
8.22	12.94	31.67	44.61	60.00	15.39	Line	QP

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51

Temp/Humi/ATM: 24.8°C/58%/99.8kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



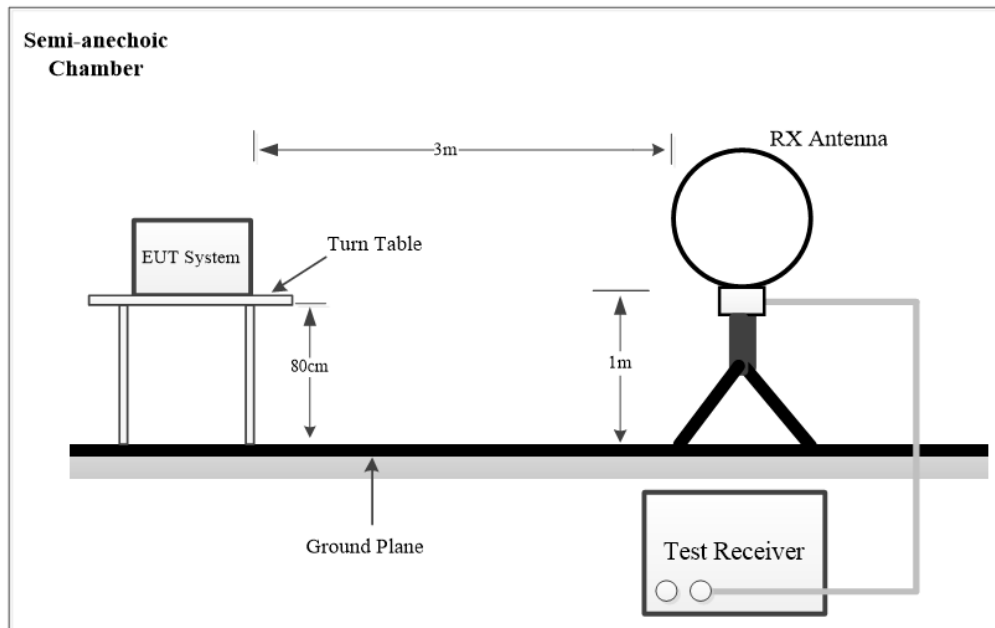
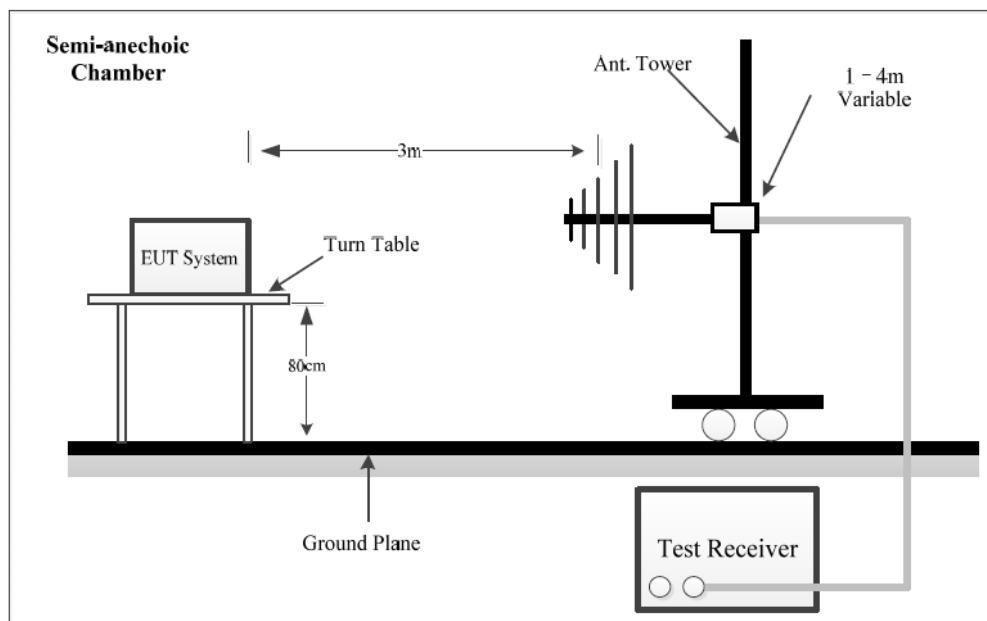
Trace: 1

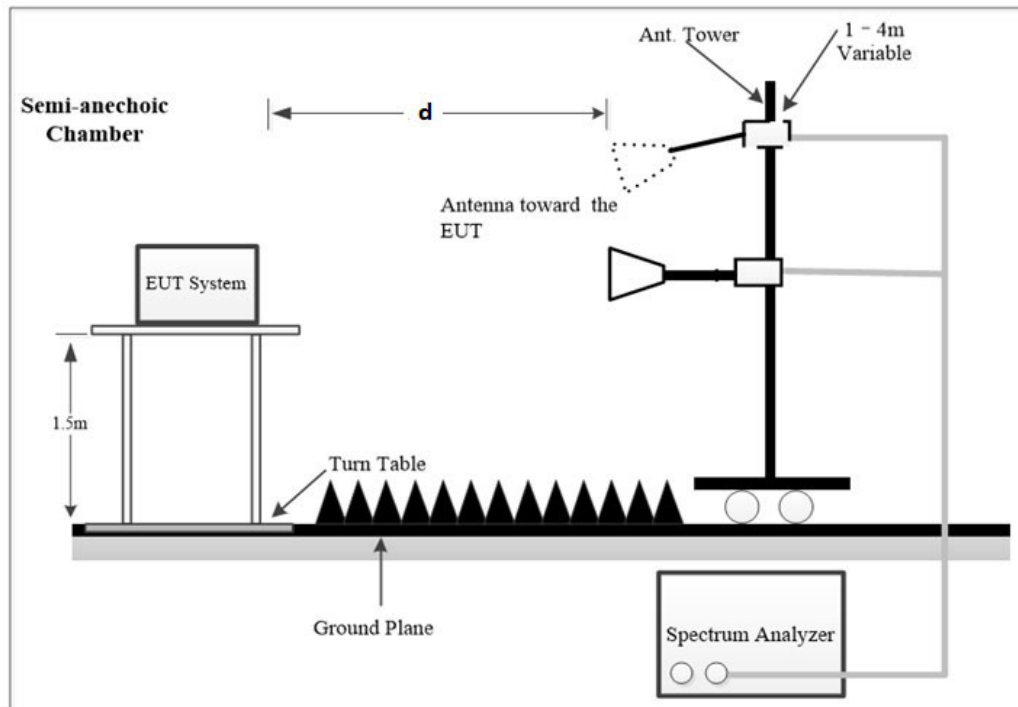
Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.38	2.07	30.96	33.03	48.31	15.28	Neutral	Average
0.38	20.81	30.96	51.77	58.31	6.54	Neutral	QP
0.94	-4.41	31.74	27.33	46.00	18.67	Neutral	Average
0.94	11.11	31.74	42.85	56.00	13.15	Neutral	QP
1.58	-3.54	32.13	28.59	46.00	17.41	Neutral	Average
1.58	11.59	32.13	43.72	56.00	12.28	Neutral	QP
1.81	-3.82	32.19	28.37	46.00	17.63	Neutral	Average
1.81	11.33	32.19	43.52	56.00	12.48	Neutral	QP
3.68	-5.26	31.56	26.30	46.00	19.70	Neutral	Average
3.68	10.62	31.56	42.18	56.00	13.82	Neutral	QP
7.64	-5.99	31.89	25.90	50.00	24.10	Neutral	Average
7.64	12.10	31.89	43.99	60.00	16.01	Neutral	QP
8.49	-5.59	31.63	26.04	50.00	23.96	Neutral	Average
8.49	12.19	31.63	43.82	60.00	16.18	Neutral	QP

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

FCC §15.247 (d); §15.209; §15.205;

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

Above 1GHz:

The radiated emission tests using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, and FCC 15.247 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, 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 = $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]})$ dB=6 dB

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	IF B/W	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

Test Procedure

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.

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

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

For 18GHz to 25GHz Radiated emission test and Bandedge emissions test

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) - Extrapolation factor (dB)

Extrapolation factor = 6 dB (distance = 1.5m)

Result (dB μ V/m) = Reading (dB μ V) + 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:

Margin (dB) = Limit (dB μ V/m) – Result (dB μ V/m)

Test Data

Please refer to the below table and plots.

Frequency Range:	Below 1 GHz	Above 1 GHz
Temperature:	22.5°C	22.3°C~22.5°C
Relative Humidity:	51 %	51%~54%
ATM Pressure:	100.1kPa	100.1kPa
Test Date:	2025-05-15	2025-05-15~2025-06-25
Test Engineer:	Wlif Wu	Wlif Wu

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: 802.11b middle channel was tested.

Project No.: 2507S56058E-RF

Test Mode: 802.11b 2437MHz

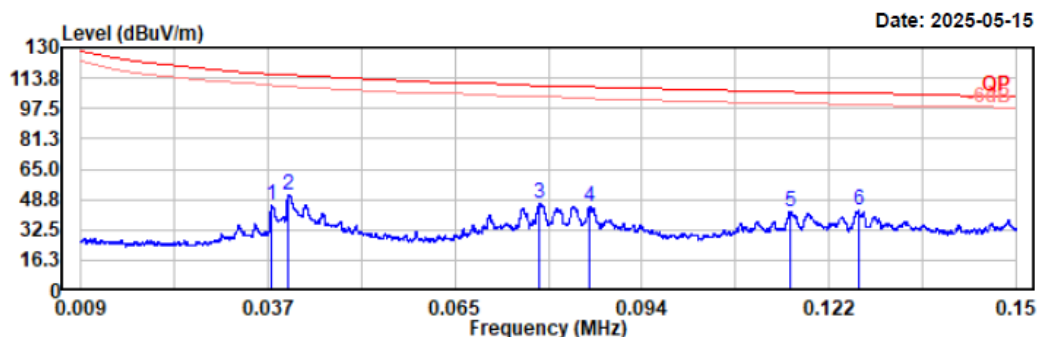
EUT Model: D51

Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

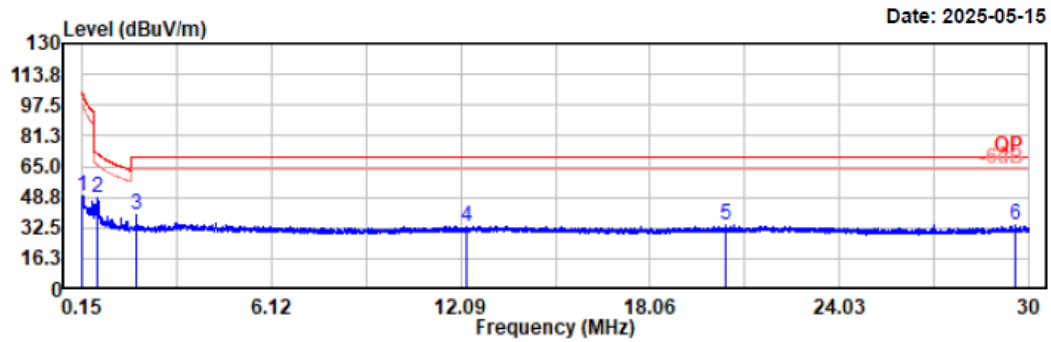


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.038	25.55	19.91	45.46	116.06	70.60	Peak
0.040	31.34	19.91	51.25	115.50	64.25	Peak
0.078	27.10	19.73	46.83	109.75	62.92	Peak
0.086	25.03	19.77	44.80	108.94	64.14	Peak
0.116	22.68	19.73	42.41	106.32	63.91	Peak
0.126	22.88	19.73	42.61	105.58	62.97	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



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

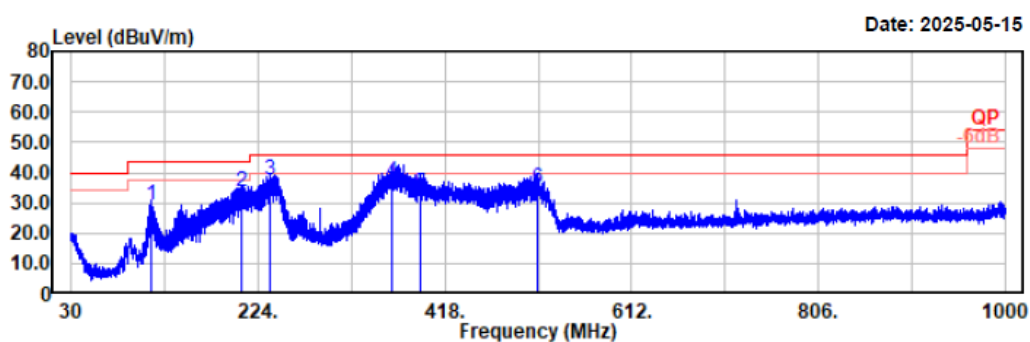
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.156	29.78	19.72	49.50	103.74	54.24	Peak
0.619	28.42	19.79	48.21	71.78	23.57	Peak
1.860	19.74	19.59	39.33	69.54	30.21	Peak
12.275	13.71	19.73	33.44	69.54	36.10	Peak
20.445	13.63	20.10	33.73	69.54	35.81	Peak
29.567	14.10	19.98	34.08	69.54	35.46	Peak

2) 30MHz~1GHz

Note: The maximum output power mode: 802.11b middle channel was tested.

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

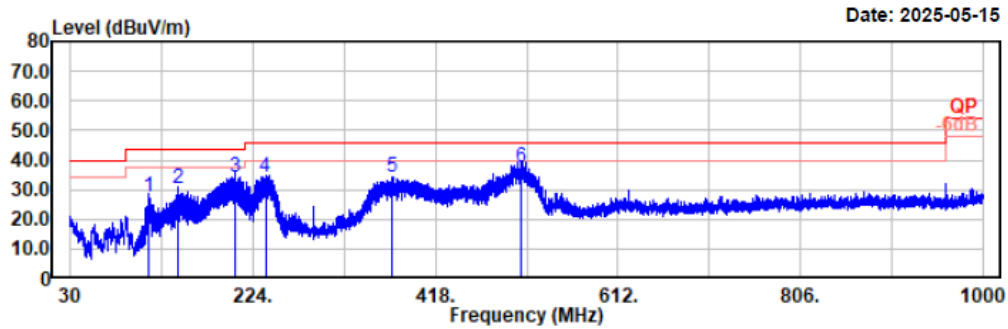


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
113.42	40.41	-11.29	29.12	43.50	14.38	Horizontal	Peak
206.44	45.76	-12.22	33.54	43.50	9.96	Horizontal	Peak
237.10	49.21	-11.88	37.33	46.00	8.67	Horizontal	Peak
363.63	44.80	-7.57	37.23	46.00	8.77	Horizontal	QP
392.30	39.79	-6.64	33.15	46.00	12.85	Horizontal	QP
514.93	38.41	-3.43	34.98	46.00	11.02	Horizontal	QP

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/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
113.42	38.79	-11.29	27.50	43.50	16.00	Vertical	Peak
143.98	41.06	-10.98	30.08	43.50	13.42	Vertical	Peak
205.09	46.08	-12.08	34.00	43.50	9.50	Vertical	Peak
237.19	45.84	-11.88	33.96	46.00	12.04	Vertical	Peak
372.60	41.47	-7.31	34.16	46.00	11.84	Vertical	Peak
509.67	40.68	-3.35	37.33	46.00	8.67	Vertical	QP

3) 1GHz~3GHz

Project No.: 2507S56058E-RF

Test Mode: 802.11b 2412MHz

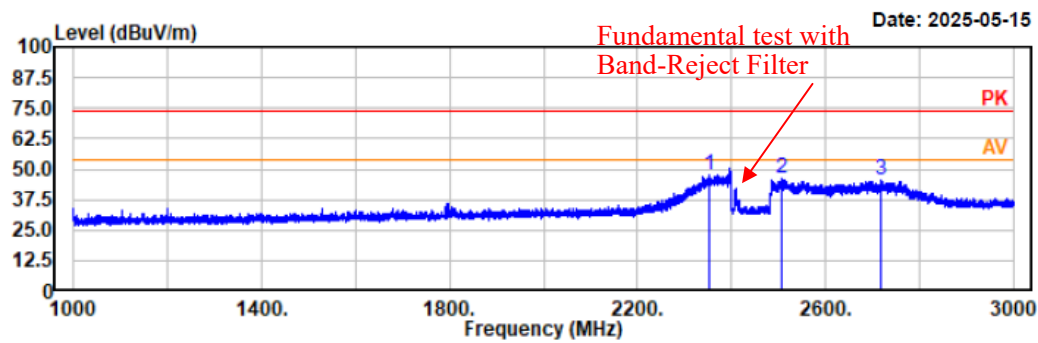
EUT Model: D51

Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

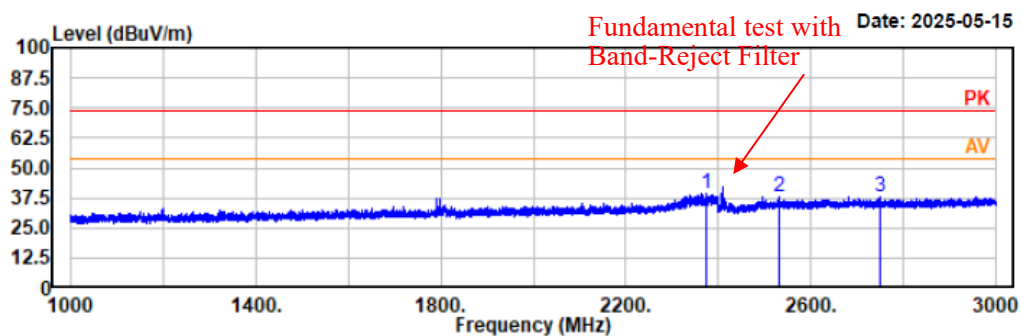


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2352.00	59.21	-11.31	47.90	74.00	26.10	horizontal	Peak
2507.40	57.03	-10.69	46.34	74.00	27.66	horizontal	Peak
2716.40	55.44	-9.99	45.45	74.00	28.55	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

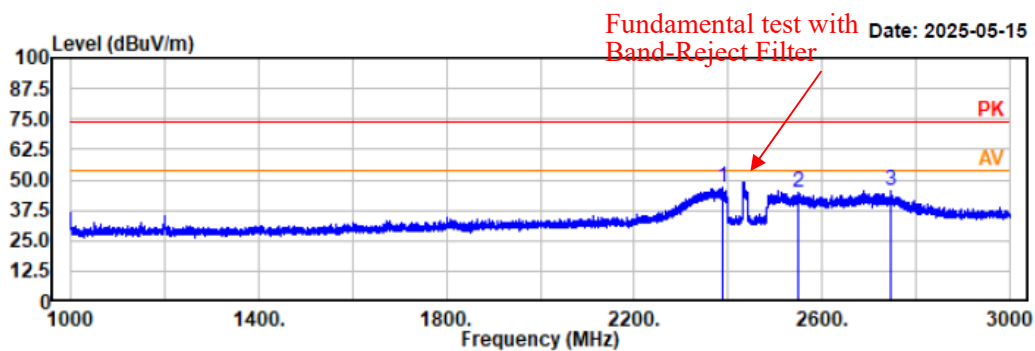


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2374.80	50.75	-11.22	39.53	74.00	34.47	vertical	Peak
2530.80	48.35	-10.64	37.71	74.00	36.29	vertical	Peak
2749.00	47.66	-9.95	37.71	74.00	36.29	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

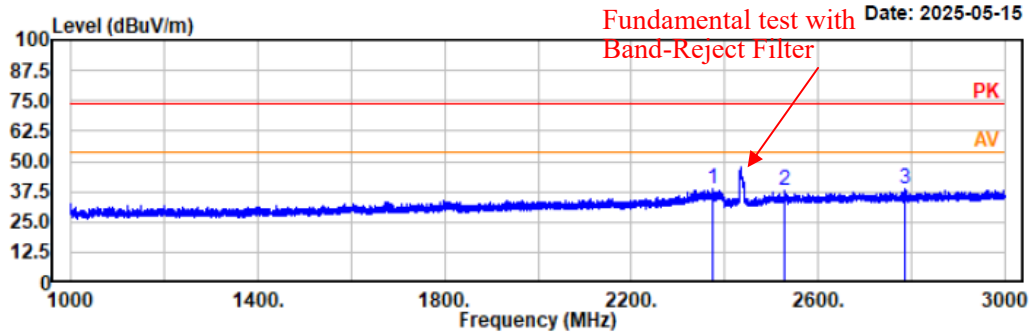


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2386.80	57.91	-11.16	46.75	74.00	27.25	horizontal	Peak
2549.20	55.39	-10.59	44.80	74.00	29.20	horizontal	Peak
2745.80	55.16	-9.96	45.20	74.00	28.80	horizontal	Peak

Project No.: 2507S56058E-RF
 Test Mode: 802.11b 2437MHz
 EUT Model: D51
 Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

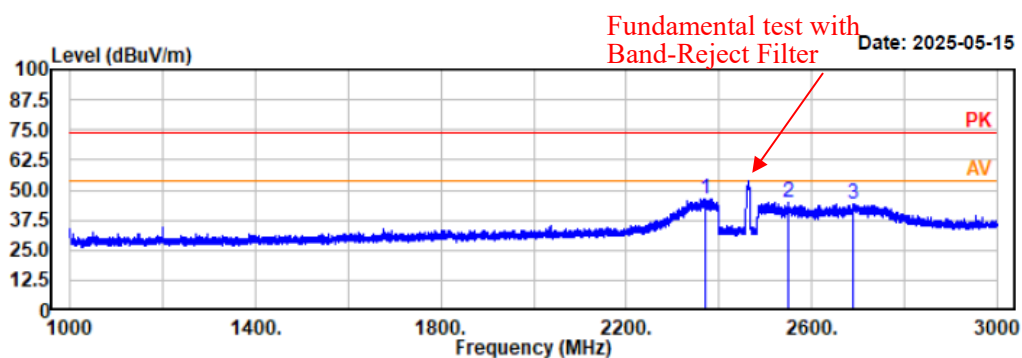


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2373.00	49.89	-11.23	38.66	74.00	35.34	vertical	Peak
2529.20	48.25	-10.64	37.61	74.00	36.39	vertical	Peak
2787.40	48.15	-9.83	38.32	74.00	35.68	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

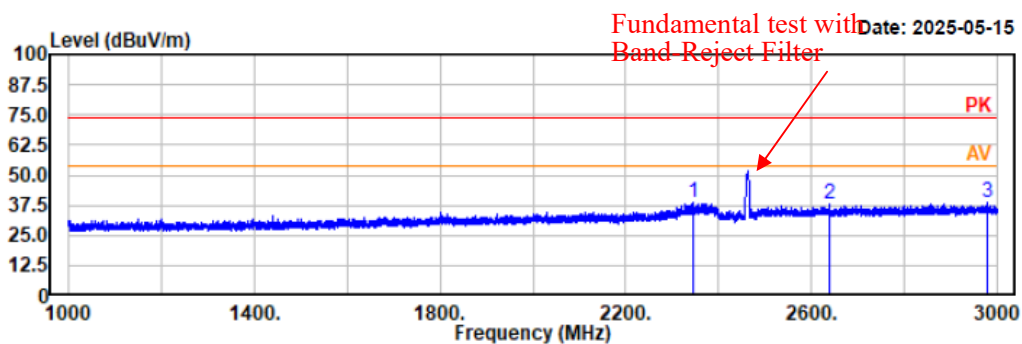


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2371.00	57.70	-11.24	46.46	74.00	27.54	horizontal	Peak
2550.00	55.30	-10.60	44.70	74.00	29.30	horizontal	Peak
2689.40	54.26	-10.04	44.22	74.00	29.78	horizontal	Peak

Project No.: 2507S56058E-RF
 Test Mode: 802.11b 2462MHz
 EUT Model: D51
 Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

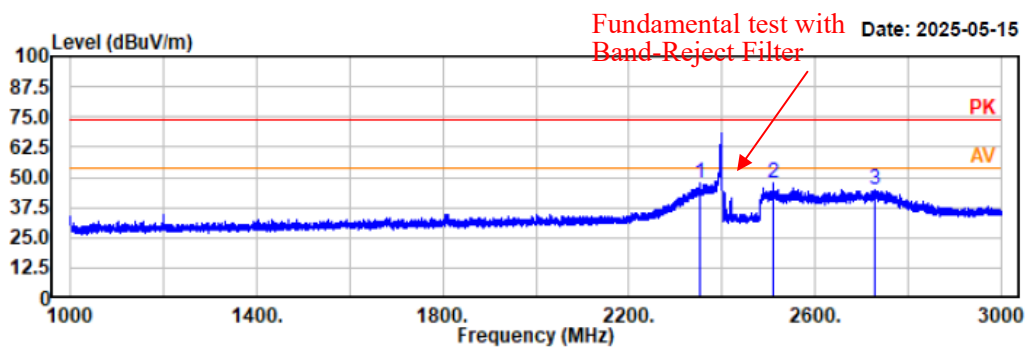


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2344.20	49.83	-11.33	38.50	74.00	35.50	vertical	Peak
2639.80	48.11	-10.24	37.87	74.00	36.13	vertical	Peak
2979.40	47.94	-9.05	38.89	74.00	35.11	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

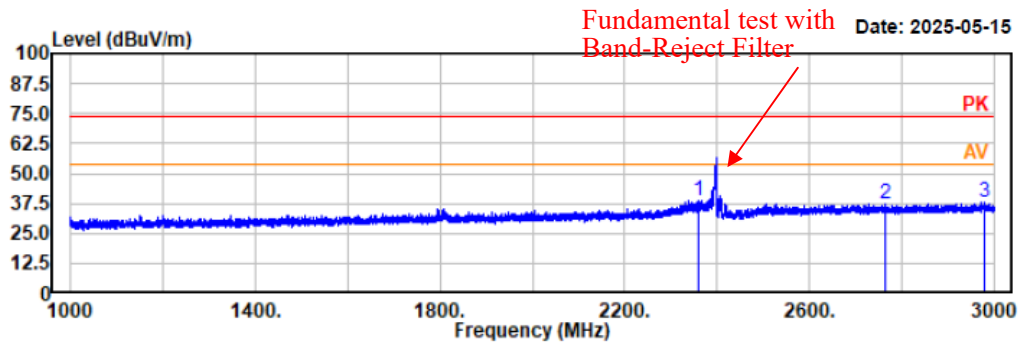


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2351.00	58.77	-11.32	47.45	74.00	26.55	horizontal	Peak
2509.60	57.98	-10.68	47.30	74.00	26.70	horizontal	Peak
2728.80	54.75	-9.97	44.78	74.00	29.22	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

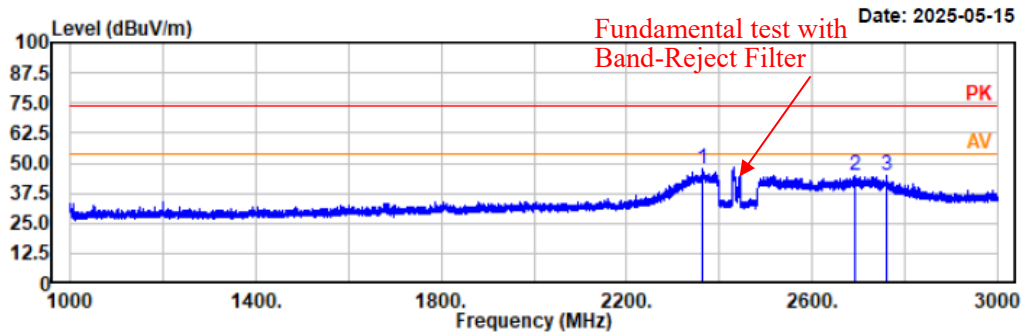


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2360.00	50.20	-11.28	38.92	74.00	35.08	vertical	Peak
2765.40	47.19	-9.90	37.29	74.00	36.71	vertical	Peak
2979.00	47.32	-9.05	38.27	74.00	35.73	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

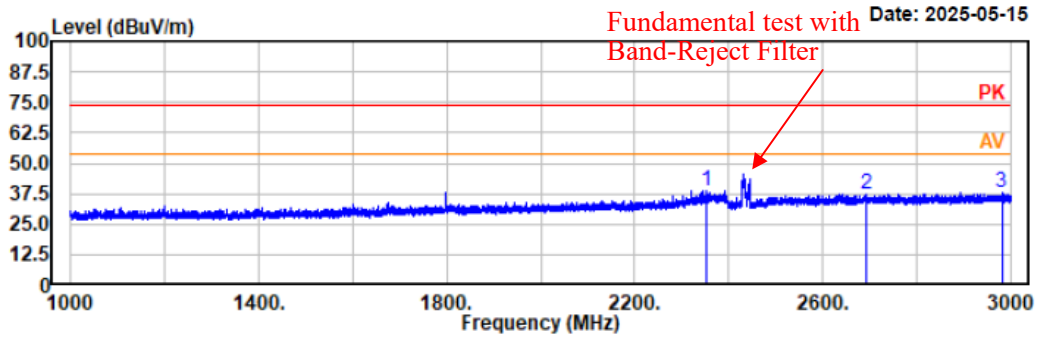


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2362.40	58.60	-11.27	47.33	74.00	26.67	horizontal	Peak
2693.60	54.97	-10.03	44.94	74.00	29.06	horizontal	Peak
2761.60	54.58	-9.90	44.68	74.00	29.32	horizontal	Peak

Project No.: 2507S56058E-RF
 Test Mode: 802.11g 2437MHz
 EUT Model: D51
 Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

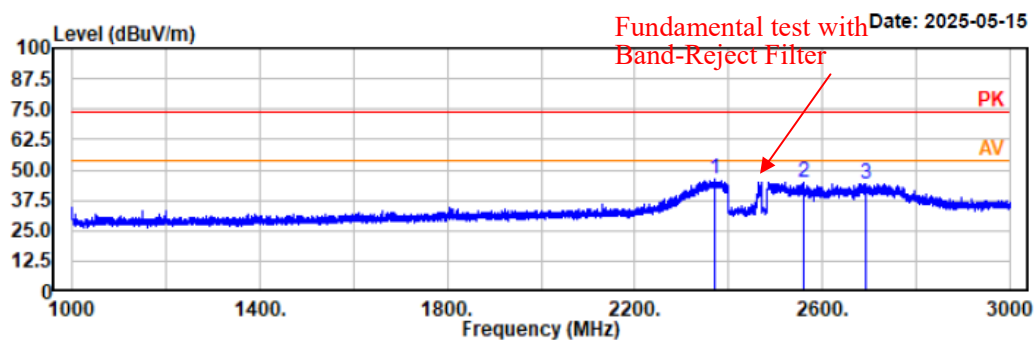


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2352.20	50.24	-11.31	38.93	74.00	35.07	vertical	Peak
2692.80	47.61	-10.03	37.58	74.00	36.42	vertical	Peak
2981.00	46.89	-9.05	37.84	74.00	36.16	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

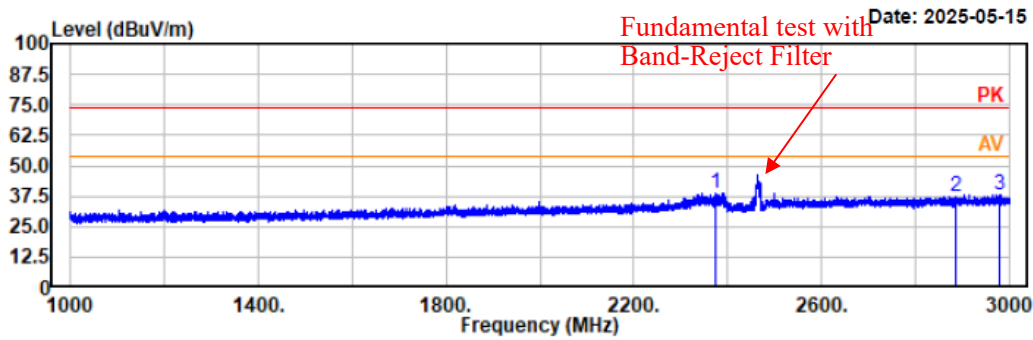


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2372.20	57.39	-11.23	46.16	74.00	27.84	horizontal	Peak
2560.20	55.56	-10.56	45.00	74.00	29.00	horizontal	Peak
2692.80	54.38	-10.03	44.35	74.00	29.65	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

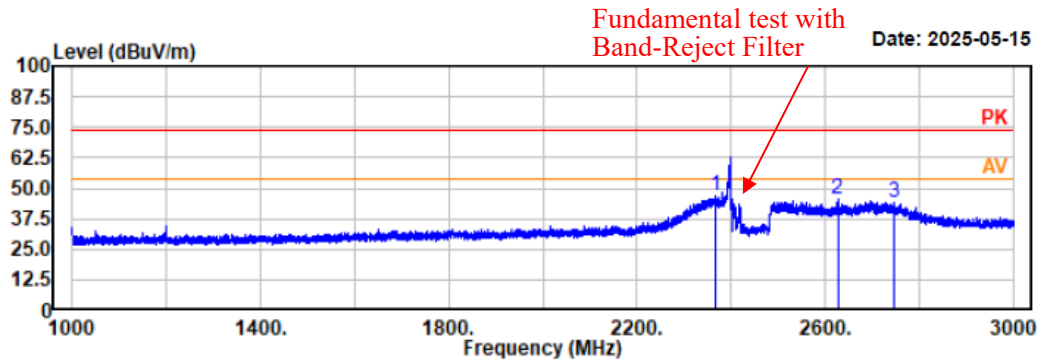


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2375.40	50.02	-11.22	38.80	74.00	35.20	vertical	Peak
2885.60	47.16	-9.58	37.58	74.00	36.42	vertical	Peak
2978.60	47.11	-9.06	38.05	74.00	35.95	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

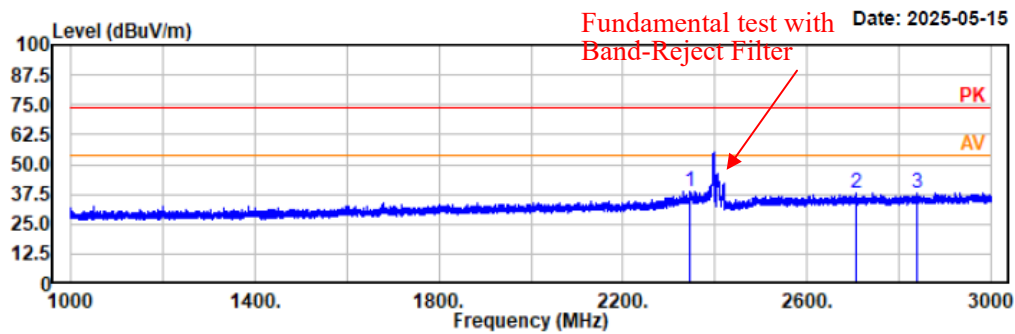


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2368.20	58.18	-11.24	46.94	74.00	27.06	horizontal	Peak
2626.60	55.52	-10.29	45.23	74.00	28.77	horizontal	Peak
2748.20	53.87	-9.95	43.92	74.00	30.08	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

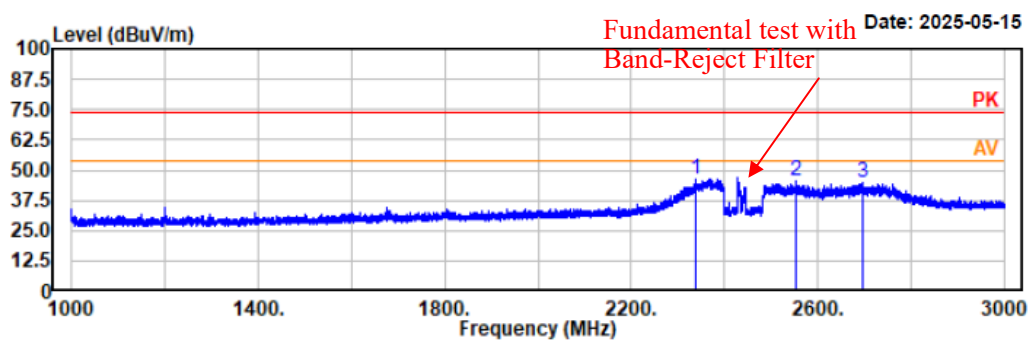


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2345.80	49.98	-11.33	38.65	74.00	35.35	vertical	Peak
2707.00	48.17	-10.00	38.17	74.00	35.83	vertical	Peak
2839.60	47.45	-9.65	37.80	74.00	36.20	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

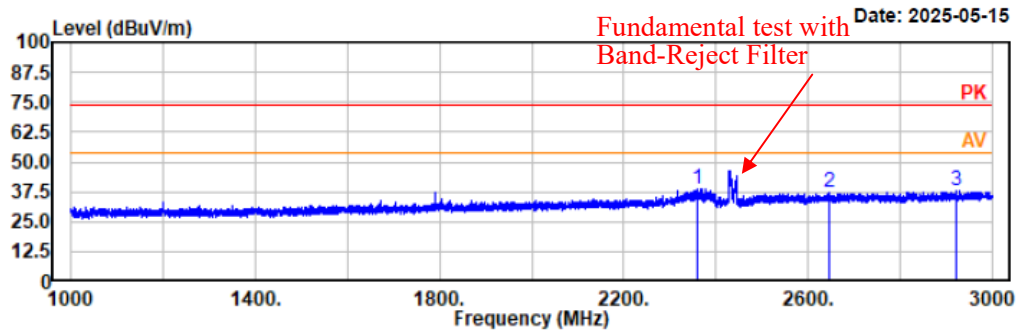


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2338.00	57.66	-11.34	46.32	74.00	27.68	horizontal	Peak
2552.80	55.77	-10.59	45.18	74.00	28.82	horizontal	Peak
2695.80	54.58	-10.02	44.56	74.00	29.44	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

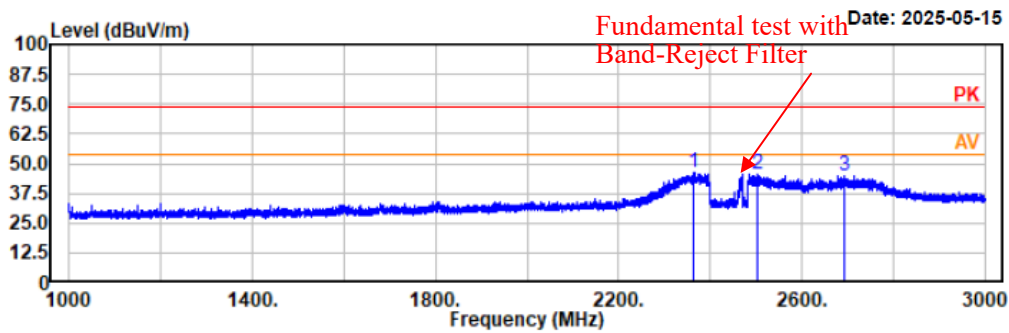


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2361.40	49.68	-11.27	38.41	74.00	35.59	vertical	Peak
2646.00	47.59	-10.22	37.37	74.00	36.63	vertical	Peak
2920.40	47.22	-9.41	37.81	74.00	36.19	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

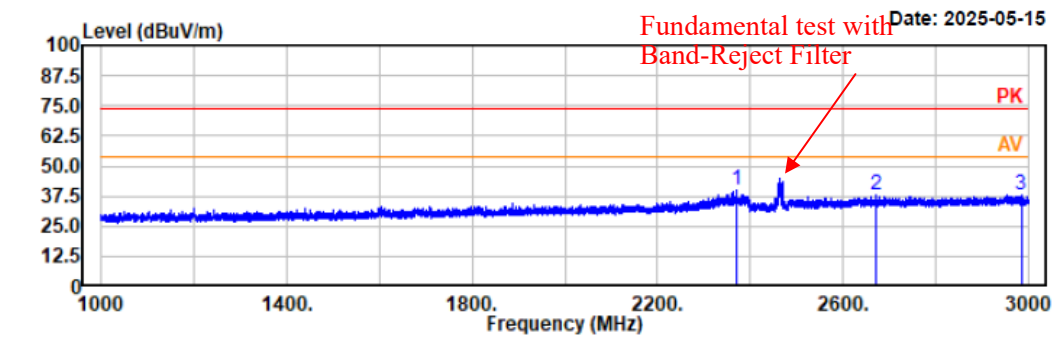


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2363.20	57.33	-11.27	46.06	74.00	27.94	horizontal	Peak
2502.40	56.24	-10.70	45.54	74.00	28.46	horizontal	Peak
2694.00	54.90	-10.02	44.88	74.00	29.12	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



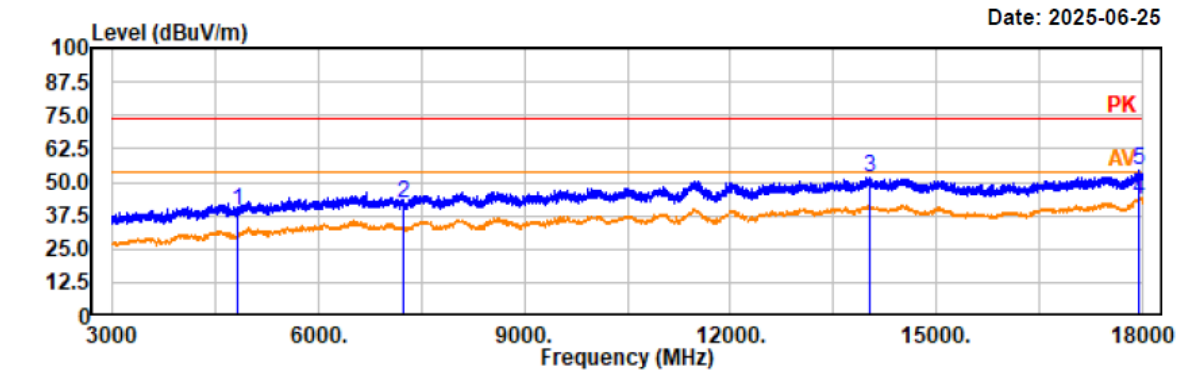
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2370.80	51.48	-11.24	40.24	74.00	33.76	vertical	Peak
2670.40	47.74	-10.12	37.62	74.00	36.38	vertical	Peak
2984.60	47.12	-9.02	38.10	74.00	35.90	vertical	Peak

4) 3GHz~18GHz

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



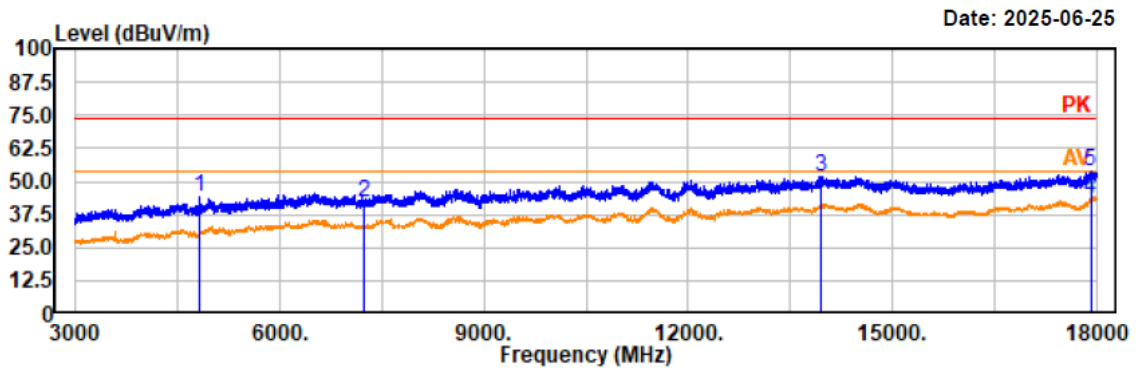
Trace: 1

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	44.38	-5.26	39.12	74.00	34.88	horizontal	Peak
7236.00	44.80	-2.47	42.33	74.00	31.67	horizontal	Peak
14022.00	46.31	5.22	51.53	74.00	22.47	horizontal	Peak
17961.00	36.84	6.86	43.70	54.00	10.30	horizontal	Average
17961.00	47.86	6.86	54.72	74.00	19.28	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

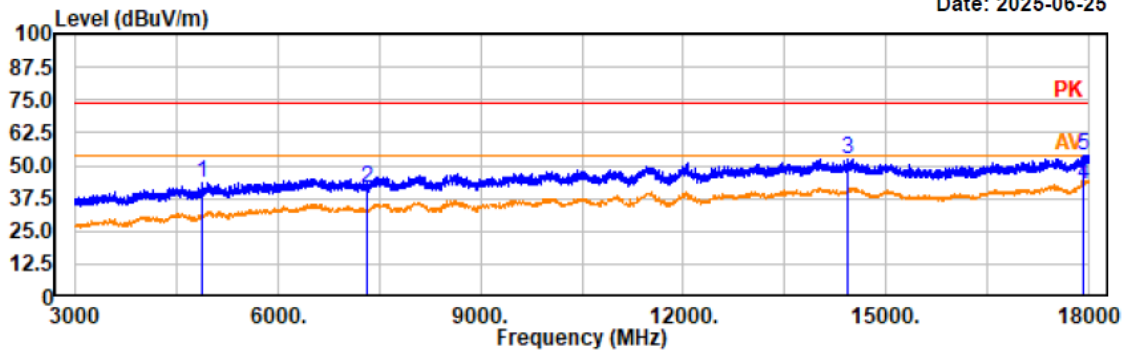
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	49.23	-5.26	43.97	74.00	30.03	vertical	Peak
7236.00	44.24	-2.47	41.77	74.00	32.23	vertical	Peak
13957.50	46.69	5.19	51.88	74.00	22.12	vertical	Peak
17911.50	36.40	6.81	43.21	54.00	10.79	vertical	Average
17911.50	46.97	6.81	53.78	74.00	20.22	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-06-25



Trace: 1

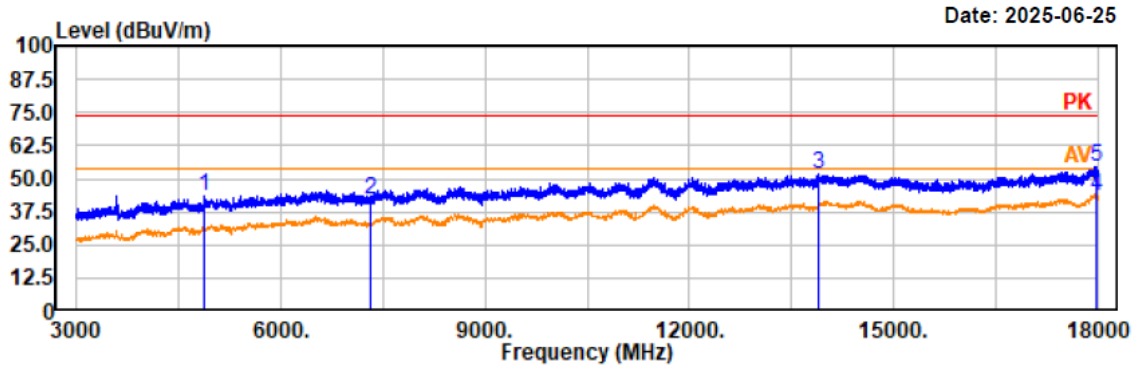
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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	48.92	-5.29	43.63	74.00	30.37	horizontal	Peak
7311.00	43.73	-2.28	41.45	74.00	32.55	horizontal	Peak
14434.50	47.22	5.19	52.41	74.00	21.59	horizontal	Peak
17937.00	36.04	6.84	42.88	54.00	11.12	horizontal	Average
17937.00	46.83	6.84	53.67	74.00	20.33	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

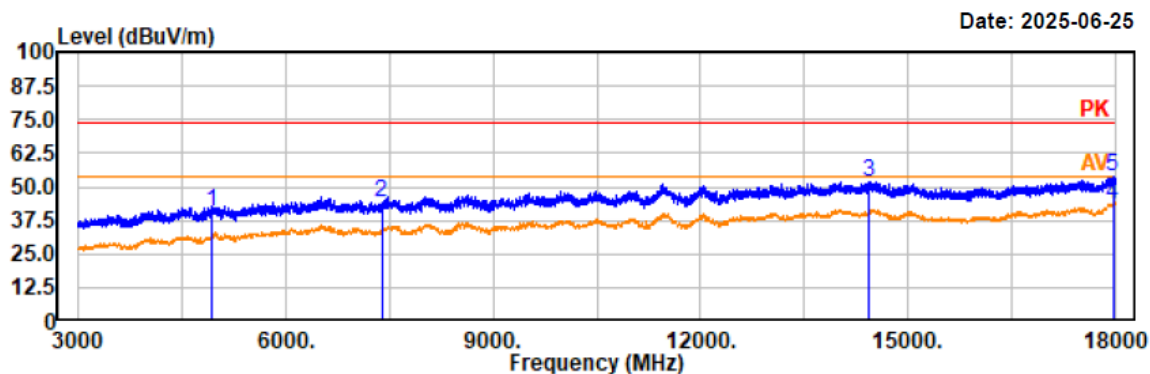
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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	48.76	-5.29	43.47	74.00	30.53	vertical	Peak
7311.00	44.18	-2.28	41.90	74.00	32.10	vertical	Peak
13896.00	46.22	5.17	51.39	74.00	22.61	vertical	Peak
17971.50	36.69	6.88	43.57	54.00	10.43	vertical	Average
17971.50	47.69	6.88	54.57	74.00	19.43	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

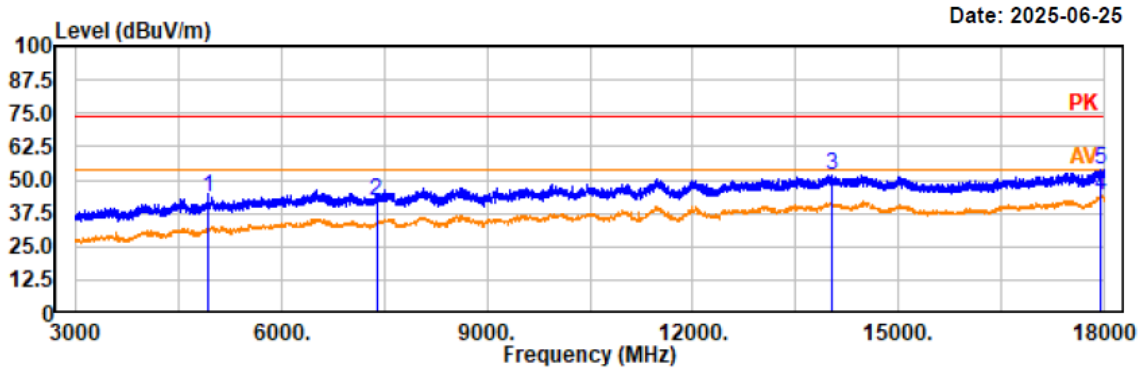
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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	45.72	-5.24	40.48	74.00	33.52	horizontal	Peak
7386.00	45.99	-2.15	43.84	74.00	30.16	horizontal	Peak
14430.00	46.85	5.19	52.04	74.00	21.96	horizontal	Peak
17965.50	36.88	6.87	43.75	54.00	10.25	horizontal	Average
17965.50	47.10	6.87	53.97	74.00	20.03	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

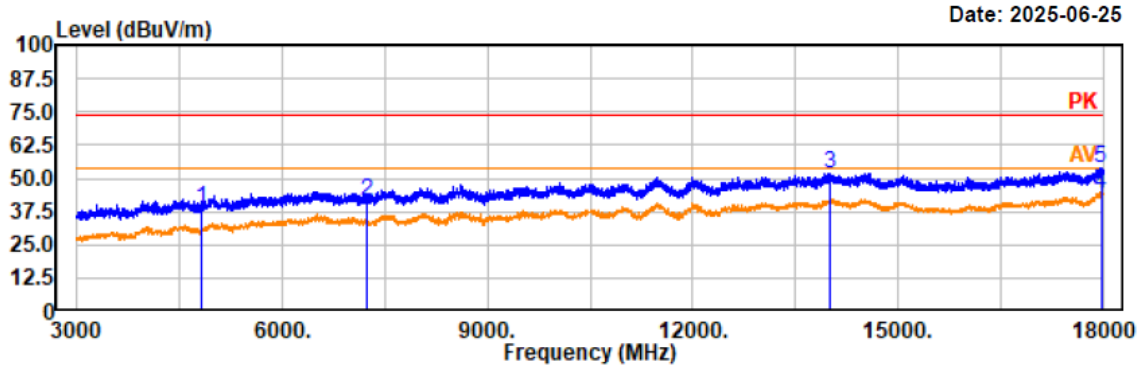
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.50	48.85	-5.24	43.61	74.00	30.39	vertical	Peak
7386.00	44.15	-2.15	42.00	74.00	32.00	vertical	Peak
14034.00	46.45	5.25	51.70	74.00	22.30	vertical	Peak
17955.00	37.16	6.87	44.03	54.00	9.97	vertical	Average
17955.00	46.62	6.87	53.49	74.00	20.51	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

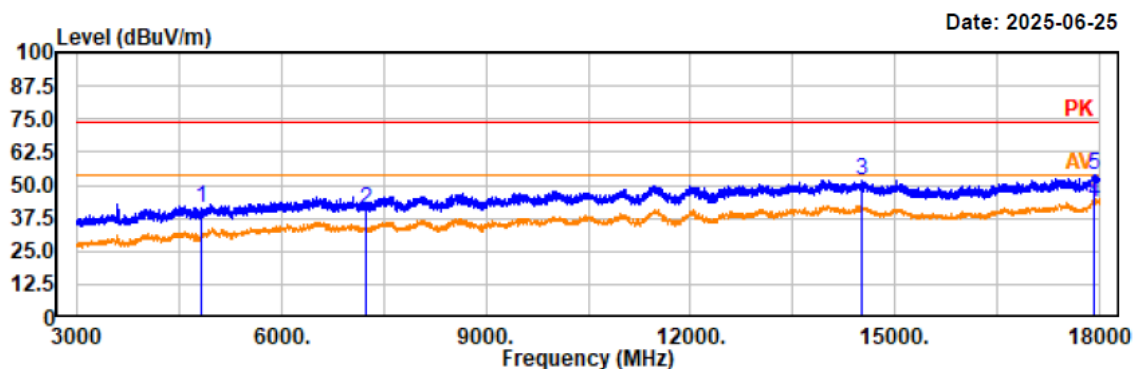
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	43.78	-5.26	38.52	74.00	35.48	horizontal	Peak
7236.00	43.72	-2.47	41.25	74.00	32.75	horizontal	Peak
13998.00	46.74	5.20	51.94	74.00	22.06	horizontal	Peak
17965.50	37.19	6.87	44.06	54.00	9.94	horizontal	Average
17965.50	47.09	6.87	53.96	74.00	20.04	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

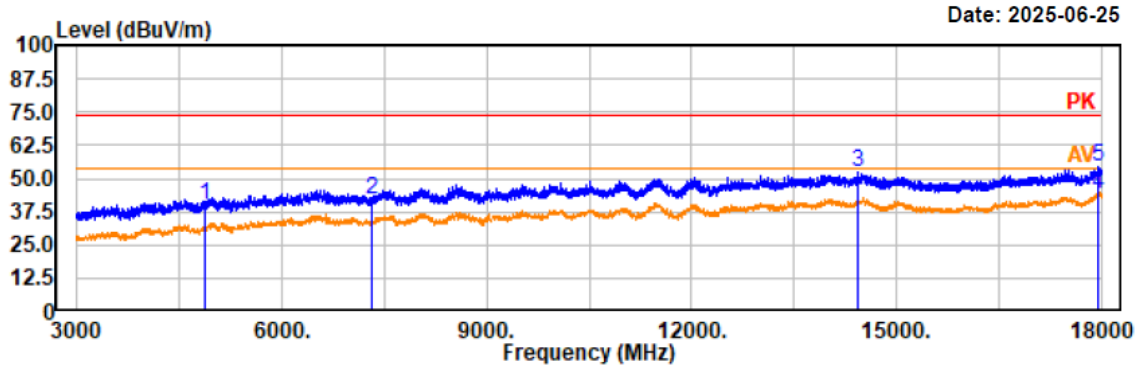
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	46.45	-5.26	41.19	74.00	32.81	vertical	Peak
7236.00	43.47	-2.47	41.00	74.00	33.00	vertical	Peak
14505.00	46.97	5.06	52.03	74.00	21.97	vertical	Peak
17913.00	36.51	6.81	43.32	54.00	10.68	vertical	Average
17913.00	47.14	6.81	53.95	74.00	20.05	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

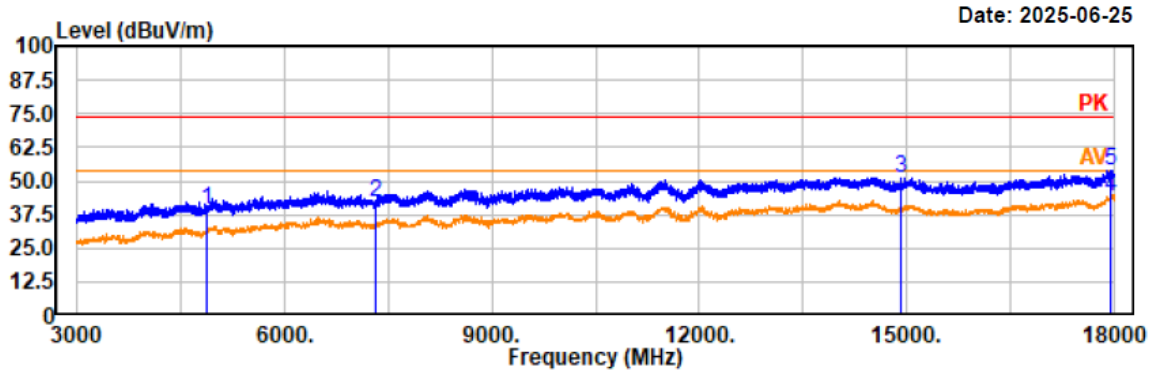
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	45.22	-5.29	39.93	74.00	34.07	horizontal	Peak
7311.00	44.45	-2.28	42.17	74.00	31.83	horizontal	Peak
14445.00	46.92	5.16	52.08	74.00	21.92	horizontal	Peak
17943.00	37.32	6.84	44.16	54.00	9.84	horizontal	Average
17943.00	47.65	6.84	54.49	74.00	19.51	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

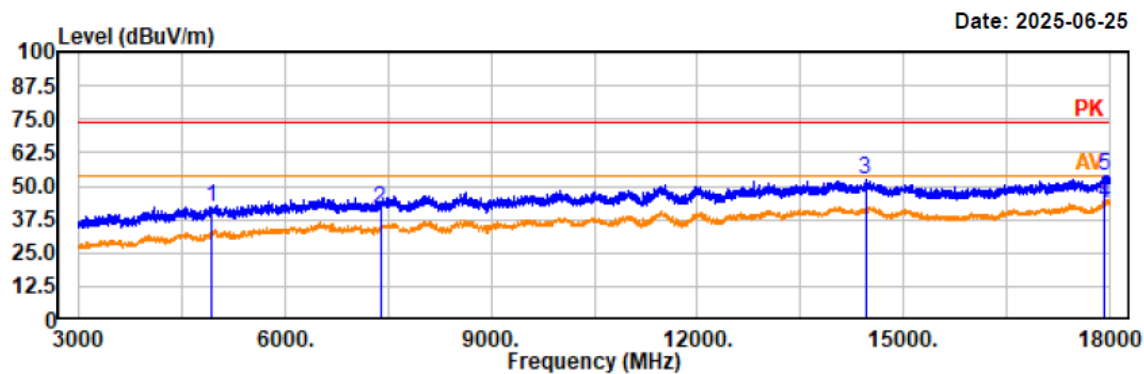
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.77	-5.29	39.48	74.00	34.52	vertical	Peak
7311.00	44.11	-2.28	41.83	74.00	32.17	vertical	Peak
14916.00	46.66	4.60	51.26	74.00	22.74	vertical	Peak
17955.00	37.34	6.87	44.21	54.00	9.79	vertical	Average
17955.00	47.19	6.87	54.06	74.00	19.94	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

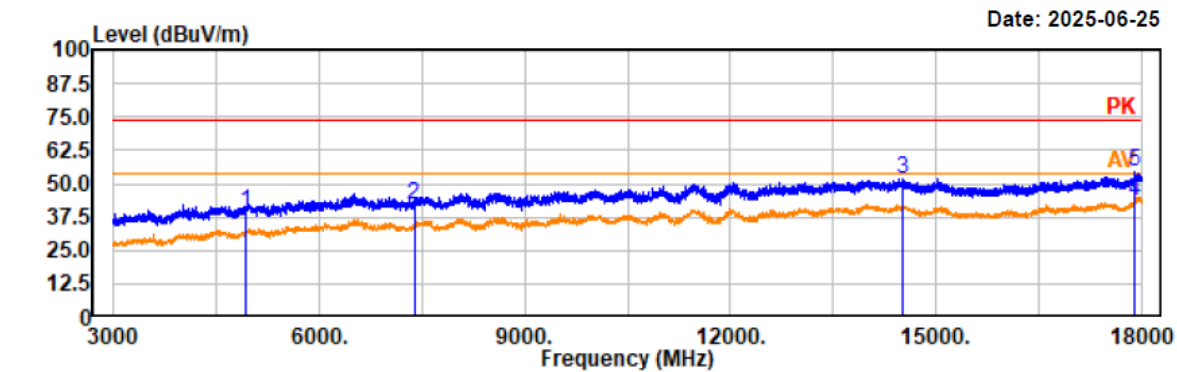
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.00	47.48	-5.24	42.24	74.00	31.76	horizontal	Peak
7386.00	43.84	-2.15	41.69	74.00	32.31	horizontal	Peak
14448.00	47.12	5.15	52.27	74.00	21.73	horizontal	Peak
17916.00	36.71	6.82	43.53	54.00	10.47	horizontal	Average
17916.00	47.12	6.82	53.94	74.00	20.06	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



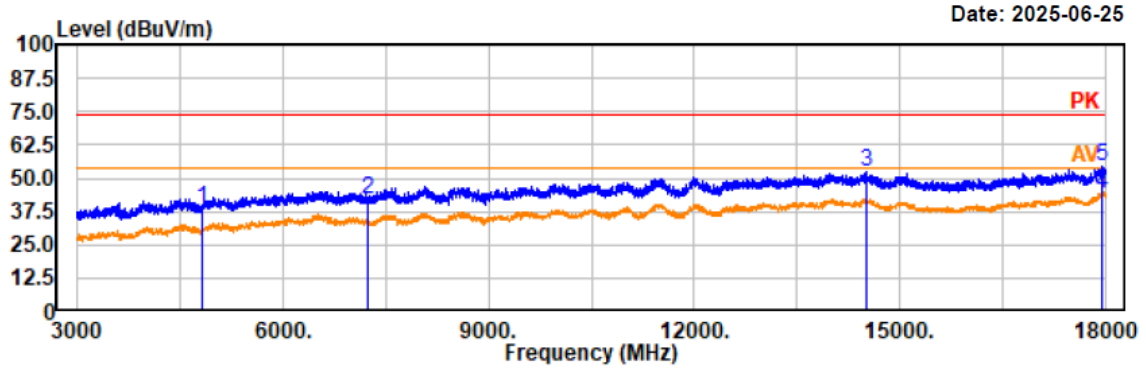
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.00	44.83	-5.24	39.59	74.00	34.41	vertical	Peak
7386.00	44.54	-2.15	42.39	74.00	31.61	vertical	Peak
14514.00	46.87	5.07	51.94	74.00	22.06	vertical	Peak
17910.00	36.82	6.81	43.63	54.00	10.37	vertical	Average
17910.00	47.81	6.81	54.62	74.00	19.38	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

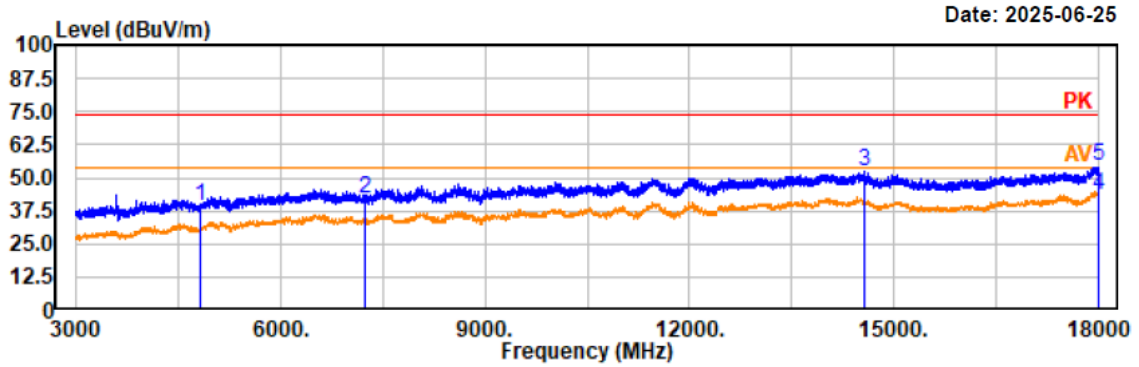
Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4824.00	44.05	-5.26	38.79	74.00	35.21	horizontal	Peak
7236.00	44.27	-2.47	41.80	74.00	32.20	horizontal	Peak
14520.00	47.36	5.06	52.42	74.00	21.58	horizontal	Peak
17953.50	37.36	6.86	44.22	54.00	9.78	horizontal	Average
17953.50	47.31	6.86	54.17	74.00	19.83	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

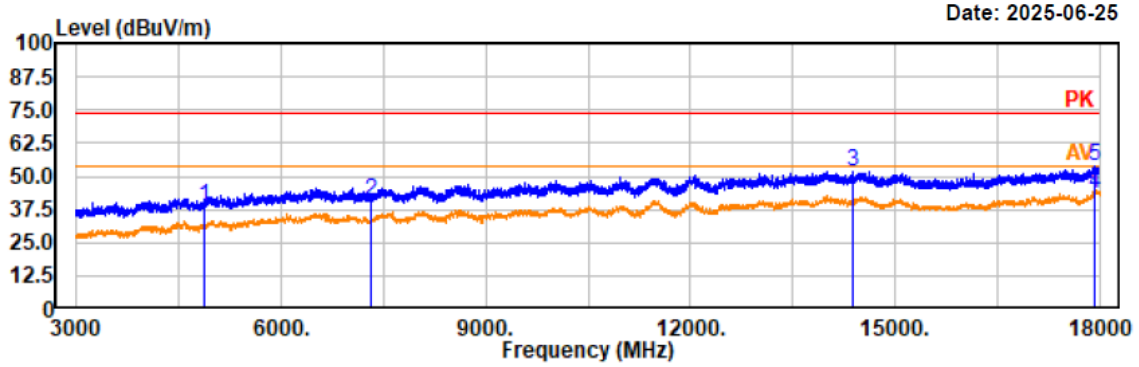
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
4824.00	44.71	-5.26	39.45	74.00	34.55	vertical	Peak
7236.00	44.72	-2.47	42.25	74.00	31.75	vertical	Peak
14566.50	47.51	5.03	52.54	74.00	21.46	vertical	Peak
17999.99	36.39	6.91	43.30	54.00	10.70	vertical	Average
17999.99	47.75	6.91	54.66	74.00	19.34	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

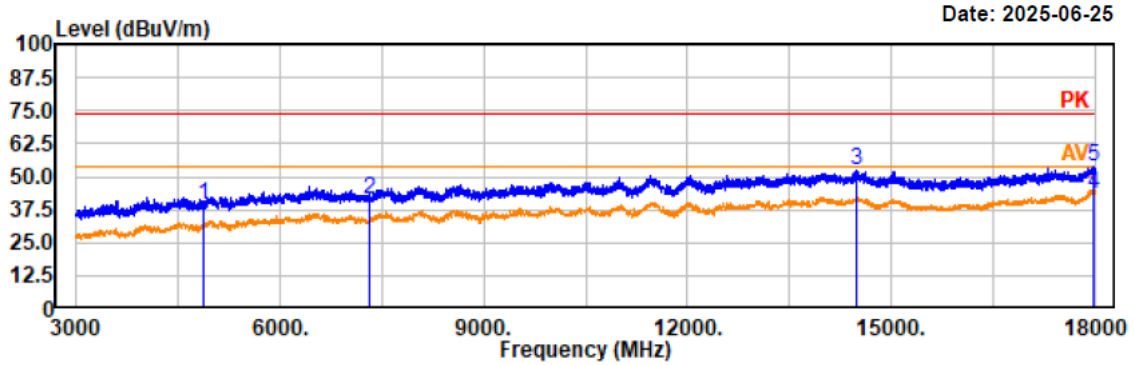
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.06	-5.29	38.77	74.00	35.23	horizontal	Peak
7311.00	43.22	-2.28	40.94	74.00	33.06	horizontal	Peak
14380.50	46.64	5.25	51.89	74.00	22.11	horizontal	Peak
17922.00	36.39	6.83	43.22	54.00	10.78	horizontal	Average
17922.00	47.05	6.83	53.88	74.00	20.12	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2437MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

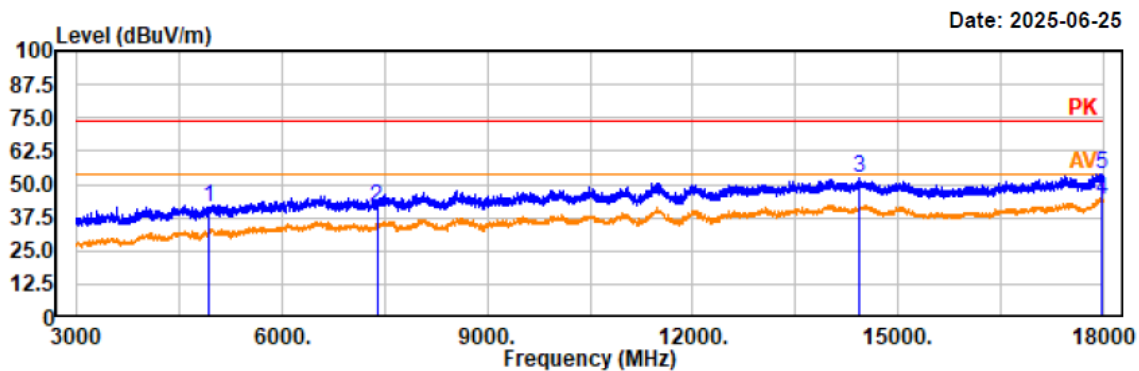
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4874.00	44.79	-5.29	39.50	74.00	34.50	vertical	Peak
7311.00	43.61	-2.28	41.33	74.00	32.67	vertical	Peak
14497.50	47.03	5.07	52.10	74.00	21.90	vertical	Peak
17974.50	36.63	6.88	43.51	54.00	10.49	vertical	Average
17974.50	46.72	6.88	53.60	74.00	20.40	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

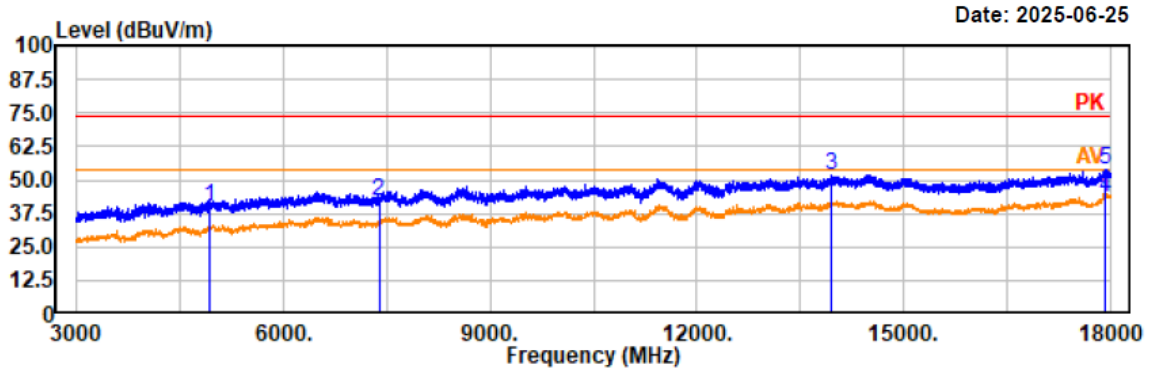
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.00	46.95	-5.24	41.71	74.00	32.29	horizontal	Peak
7386.00	43.55	-2.15	41.40	74.00	32.60	horizontal	Peak
14436.00	47.18	5.18	52.36	74.00	21.64	horizontal	Peak
17974.50	36.95	6.88	43.83	54.00	10.17	horizontal	Average
17974.50	47.13	6.88	54.01	74.00	19.99	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.3°C/54%/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:10kHz SWT:auto

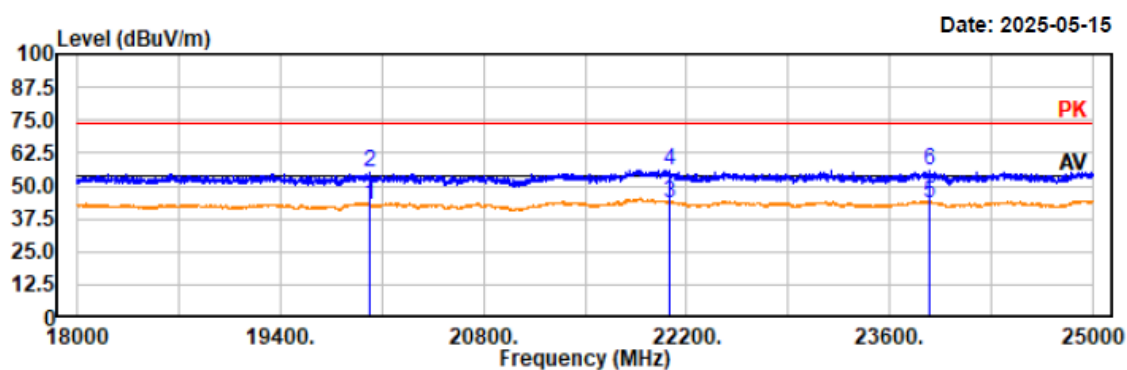
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4924.00	45.12	-5.24	39.88	74.00	34.12	vertical	Peak
7386.00	44.16	-2.15	42.01	74.00	31.99	vertical	Peak
13957.50	46.79	5.19	51.98	74.00	22.02	vertical	Peak
17917.50	36.70	6.82	43.52	54.00	10.48	vertical	Average
17917.50	47.20	6.82	54.02	74.00	19.98	vertical	Peak

5) 18GHz~25GHz

Note: The maximum output power mode: 802.11b middle channel was tested.

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 1.5m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



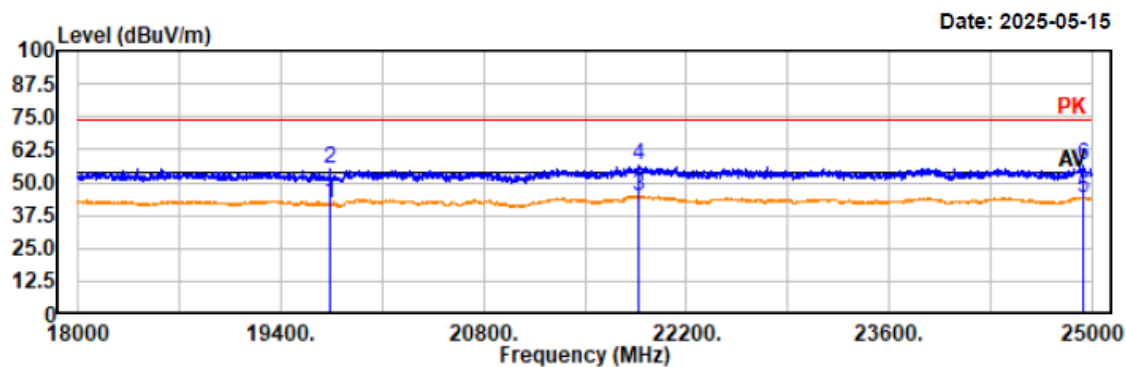
Trace: 1

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
20013.00	39.17	3.55	42.72	54.00	11.28	horizontal	Average
20013.00	51.70	3.55	55.25	74.00	18.75	horizontal	Peak
22085.40	38.63	5.04	43.67	54.00	10.33	horizontal	Average
22085.40	51.00	5.04	56.04	74.00	17.96	horizontal	Peak
23880.60	38.08	5.34	43.42	54.00	10.58	horizontal	Average
23880.60	50.25	5.34	55.59	74.00	18.41	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2437MHz
EUT Model: D51
Test distance: 1.5m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

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

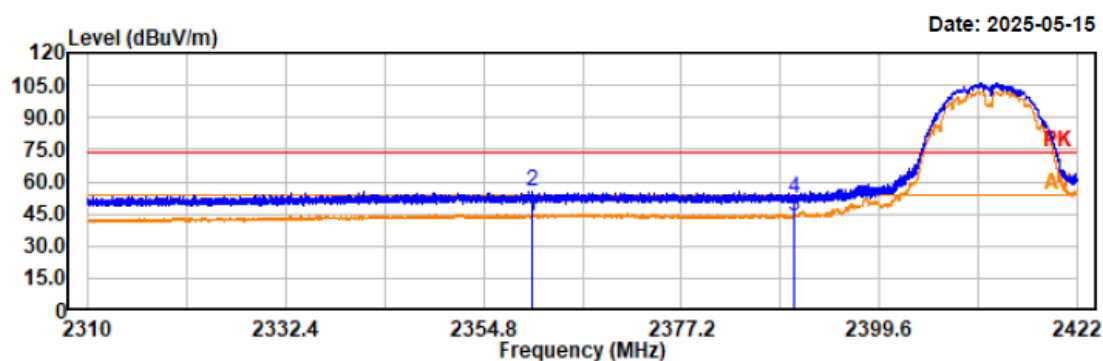
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
19740.20	38.47	3.37	41.84	54.00	12.16	vertical	Average
19740.20	51.65	3.37	55.02	74.00	18.98	vertical	Peak
21865.40	39.62	5.16	44.78	54.00	9.22	vertical	Average
21865.40	51.48	5.16	56.64	74.00	17.36	vertical	Peak
24941.00	37.88	6.31	44.19	54.00	9.81	vertical	Average
24941.00	50.24	6.31	56.55	74.00	17.45	vertical	Peak

Bandedges Emissions:

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



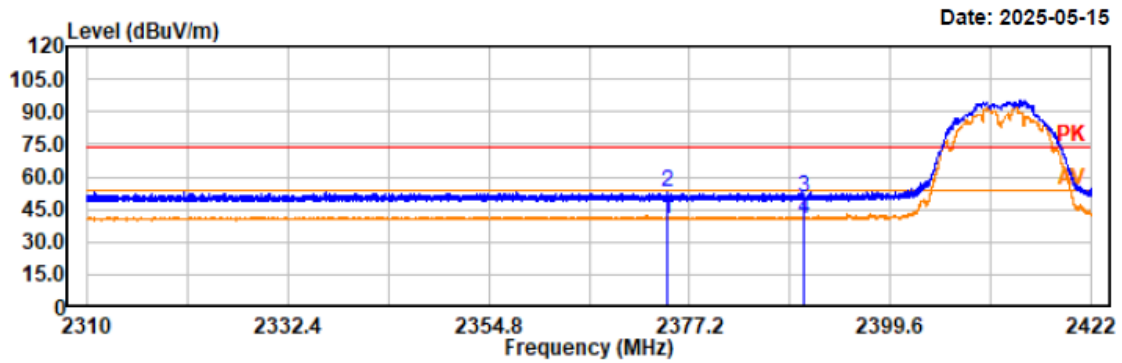
Trace: 1

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
2360.36	38.89	4.72	43.61	54.00	10.39	horizontal	Average
2360.36	50.87	4.72	55.59	74.00	18.41	horizontal	Peak
2390.00	38.81	4.84	43.65	54.00	10.35	horizontal	Average
2390.00	47.69	4.84	52.53	74.00	21.47	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

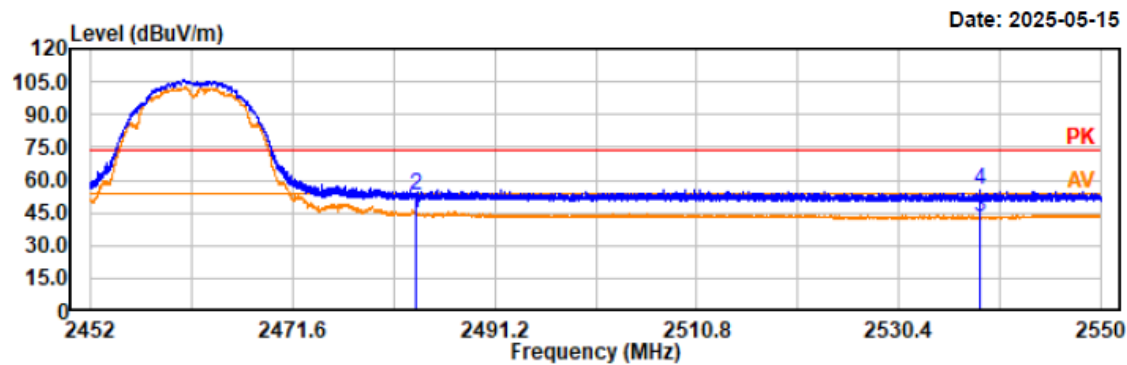
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2374.74	35.95	4.78	40.73	54.00	13.27	vertical	Average
2374.74	48.26	4.78	53.04	74.00	20.96	vertical	Peak
2390.00	45.33	4.84	50.17	74.00	23.83	vertical	Peak
2390.00	35.81	4.84	40.65	54.00	13.35	vertical	Average

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



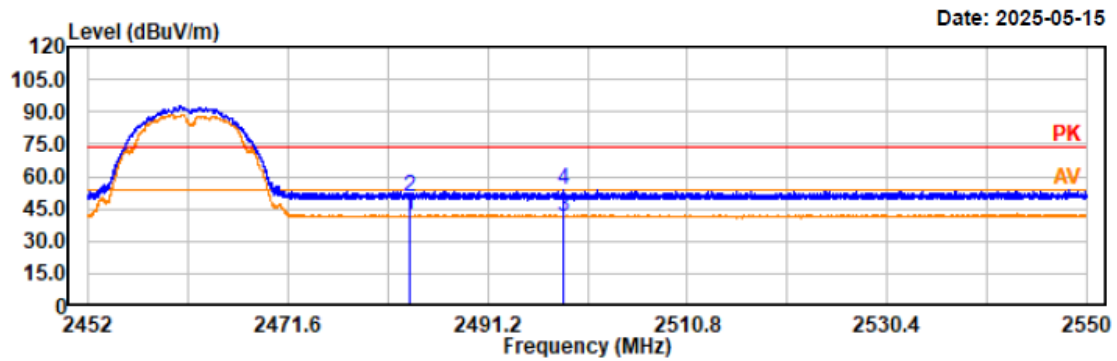
Trace: 1

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	39.26	5.23	44.49	54.00	9.51	horizontal	Average
2483.50	47.80	5.23	53.03	74.00	20.97	horizontal	Peak
2538.32	37.65	5.39	43.04	54.00	10.96	horizontal	Average
2538.32	50.05	5.39	55.44	74.00	18.56	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11b 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

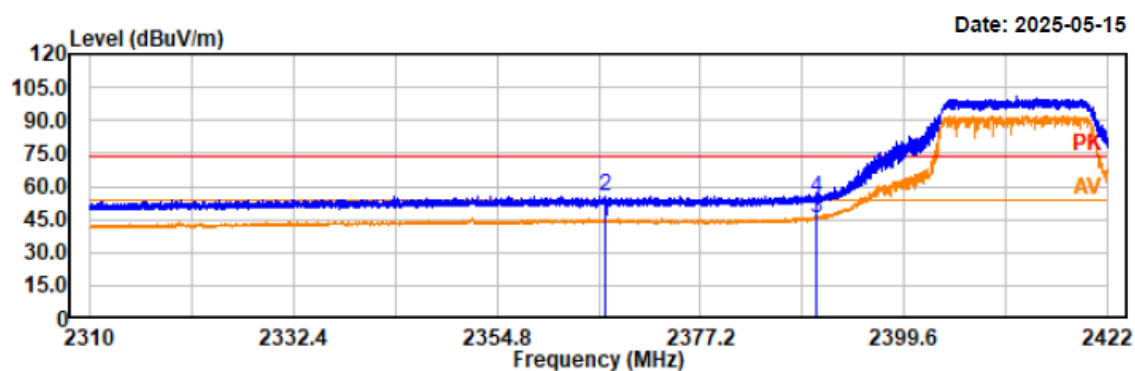
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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	36.60	5.23	41.83	54.00	12.17	vertical	Average
2483.50	45.48	5.23	50.71	74.00	23.29	vertical	Peak
2498.72	36.20	5.29	41.49	54.00	12.51	vertical	Average
2498.72	48.48	5.29	53.77	74.00	20.23	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

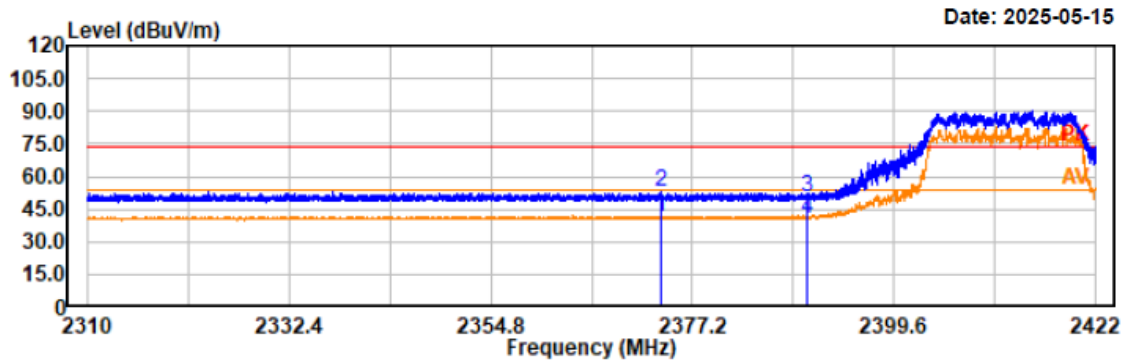
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2366.62	39.33	4.76	44.09	54.00	9.91	horizontal	Average
2366.62	50.82	4.76	55.58	74.00	18.42	horizontal	Peak
2390.00	40.69	4.84	45.53	54.00	8.47	horizontal	Average
2390.00	49.41	4.84	54.25	74.00	19.75	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

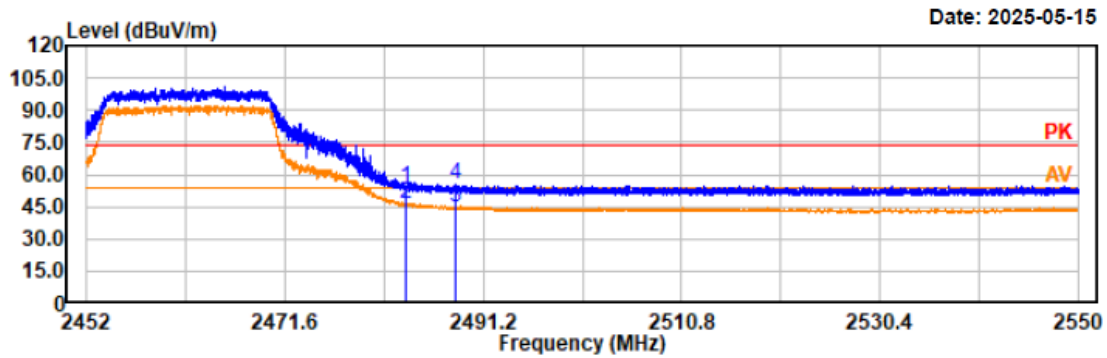
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2373.76	36.21	4.78	40.99	54.00	13.01	vertical	Average
2373.76	48.24	4.78	53.02	74.00	20.98	vertical	Peak
2390.00	45.97	4.84	50.81	74.00	23.19	vertical	Peak
2390.00	36.13	4.84	40.97	54.00	13.03	vertical	Average

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

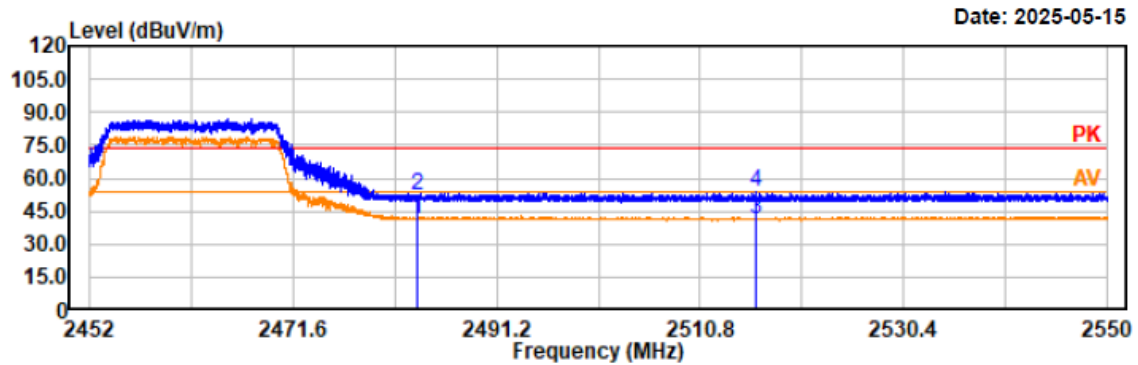
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	48.64	5.23	53.87	74.00	20.13	horizontal	Peak
2483.50	40.84	5.23	46.07	54.00	7.93	horizontal	Average
2488.46	39.07	5.24	44.31	54.00	9.69	horizontal	Average
2488.46	50.07	5.24	55.31	74.00	18.69	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11g 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

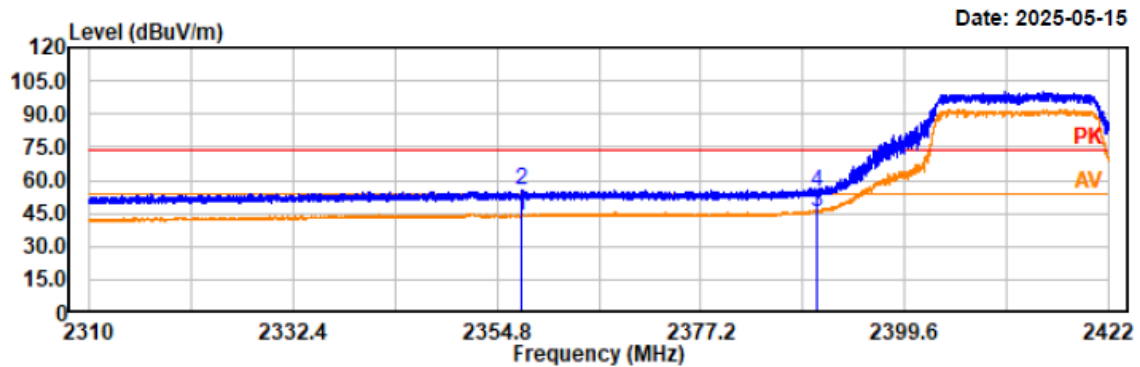
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	36.27	5.23	41.50	54.00	12.50	vertical	Average
2483.50	46.79	5.23	52.02	74.00	21.98	vertical	Peak
2516.10	35.74	5.33	41.07	54.00	12.93	vertical	Average
2516.10	48.19	5.33	53.52	74.00	20.48	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

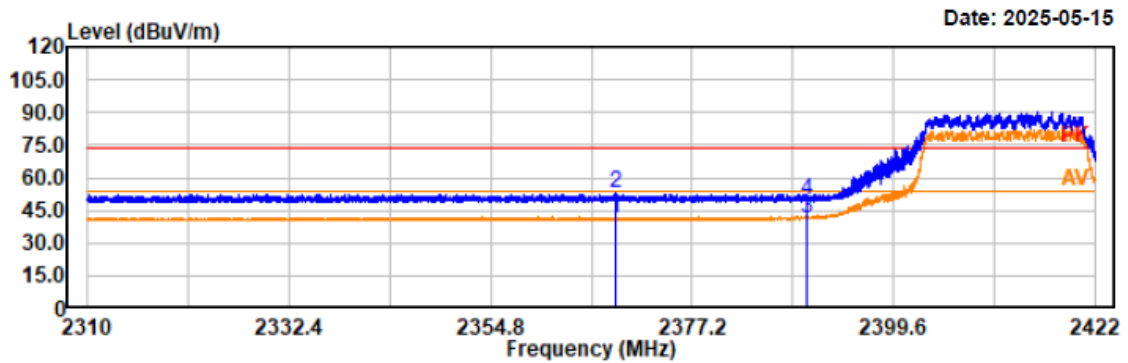
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2357.45	39.10	4.71	43.81	54.00	10.19	horizontal	Average
2357.45	50.56	4.71	55.27	74.00	18.73	horizontal	Peak
2390.00	40.98	4.84	45.82	54.00	8.18	horizontal	Average
2390.00	50.08	4.84	54.94	74.00	19.06	horizontal	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2412MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

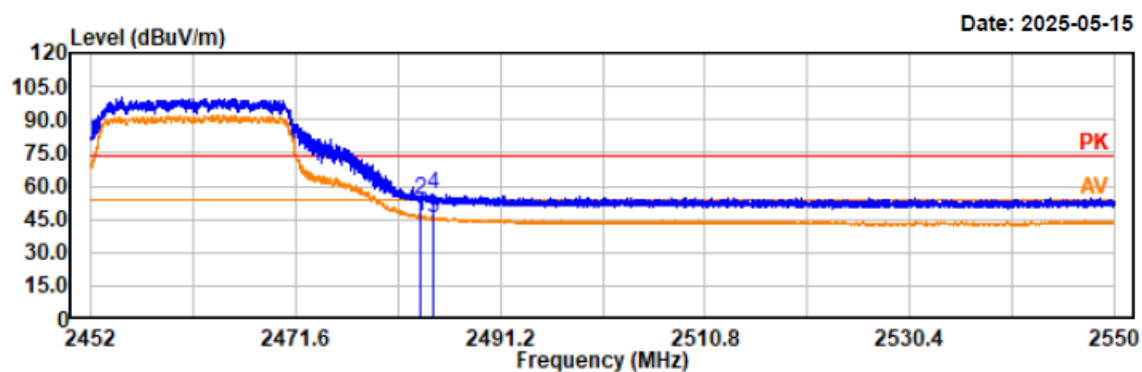
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2368.80	36.25	4.77	41.02	54.00	12.98	vertical	Average
2368.80	48.01	4.77	52.78	74.00	21.22	vertical	Peak
2390.00	36.39	4.84	41.23	54.00	12.77	vertical	Average
2390.00	45.12	4.84	49.96	74.00	24.04	vertical	Peak

Project No.: 2507S56058E-RF
Test Mode: 802.11n20 2462MHz
EUT Model: D51
Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/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:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	41.20	5.23	46.43	54.00	7.57	horizontal	Average
2483.50	48.77	5.23	54.00	74.00	20.00	horizontal	Peak
2484.77	39.90	5.24	45.14	54.00	8.86	horizontal	Average
2484.77	51.23	5.24	56.47	74.00	17.53	horizontal	Peak

Project No.: 2507S56058E-RF

Test Mode: 802.11n20 2462MHz

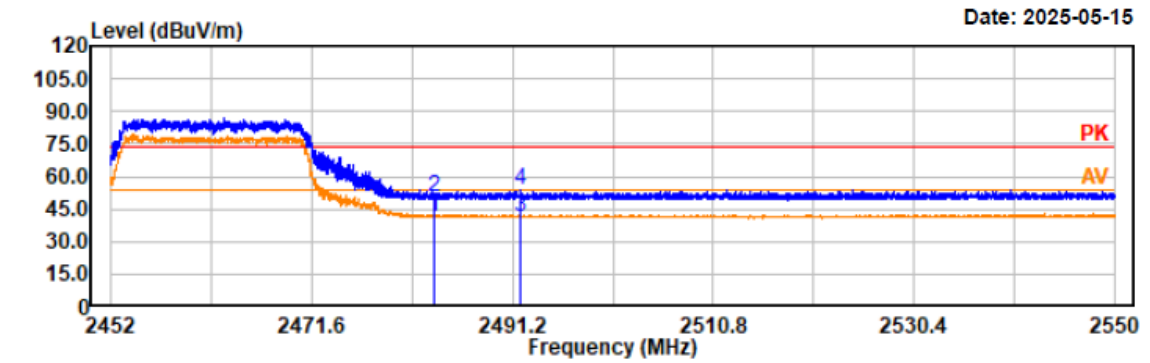
EUT Model: D51

Test distance: 3m

Temp/Humi/ATM: 22.5°C/51%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz



Trace: 1

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

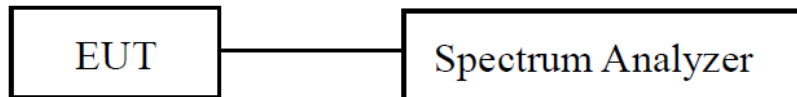
AV RBW:1MHz VBW:10kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2483.50	36.13	5.23	41.36	54.00	12.64	vertical	Average
2483.50	45.54	5.23	50.77	74.00	23.23	vertical	Peak
2491.90	36.26	5.27	41.53	54.00	12.47	vertical	Average
2491.90	48.28	5.27	53.55	74.00	20.45	vertical	Peak

FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

Applicable Standard

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

EUT Setup**Test Procedure**

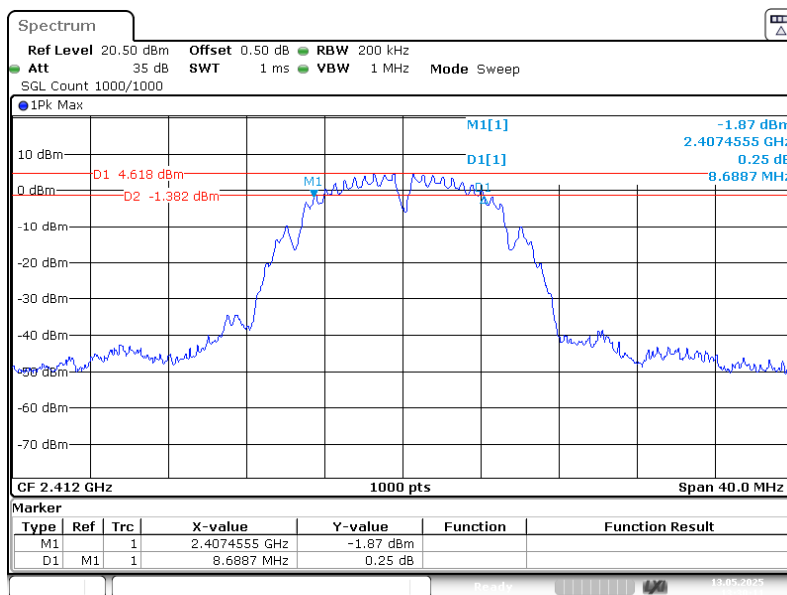
According to ANSI C63.10-2020 Section 11.8

- 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

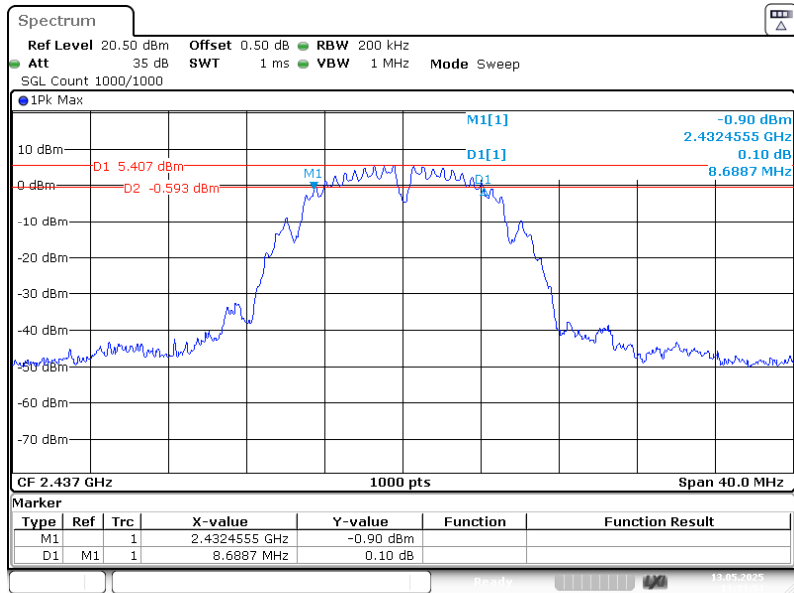
Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-05-13	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 23.7°C Humi.: 49% Atm : 100.3 kPa
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
802.11b	2412	8.689	0.5
	2437	8.689	0.5
	2462	8.689	0.5
802.11g	2412	16.497	0.5
	2437	16.497	0.5
	2462	16.497	0.5
802.11n HT20	2412	17.738	0.5
	2437	17.698	0.5
	2462	17.738	0.5

Please refer to below plots:

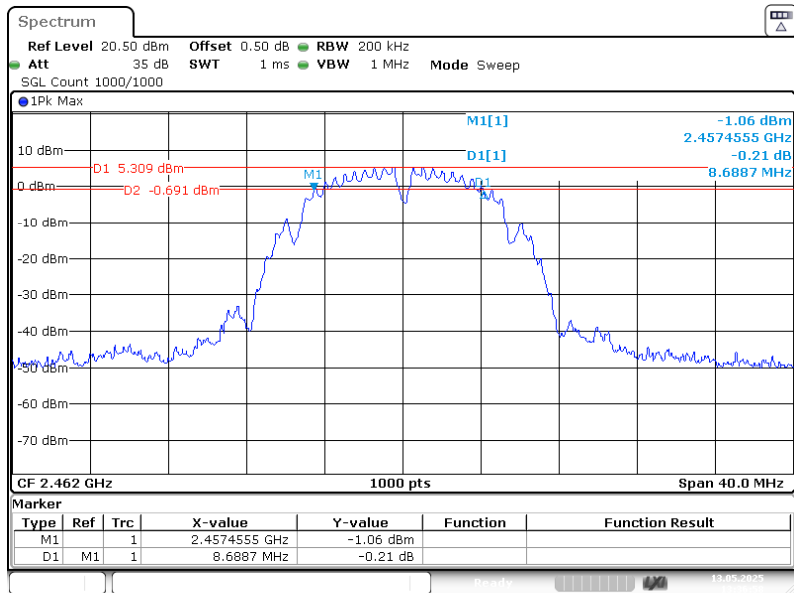
802.11b Mode Low Channel

ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:30:11

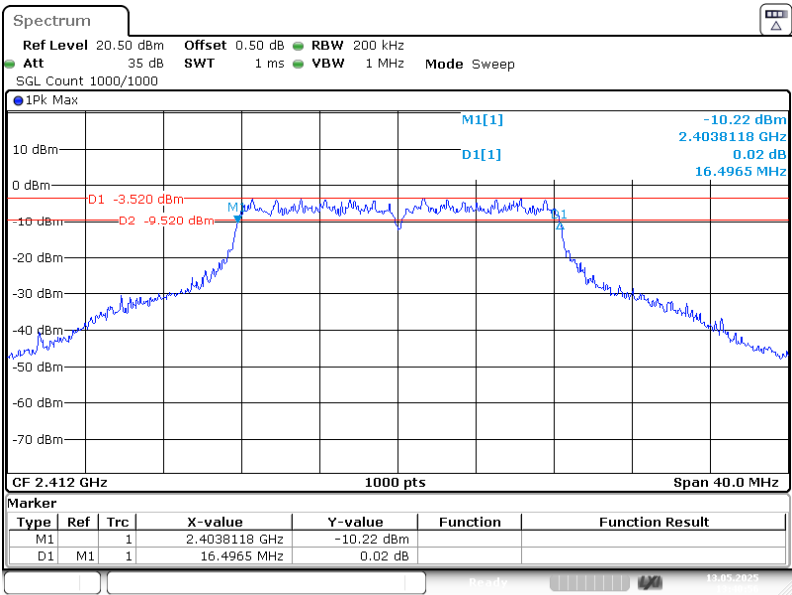
802.11b Mode Middle Channel



802.11b Mode High Channel

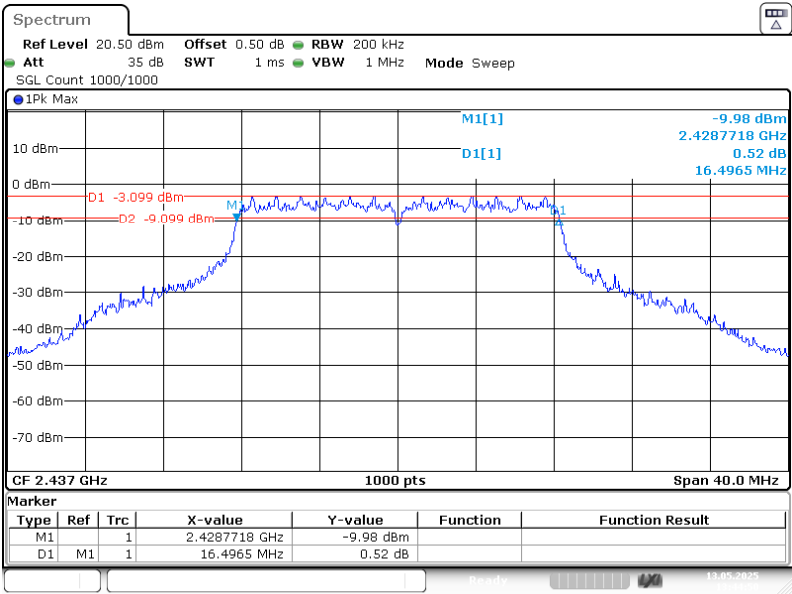


802.11g Mode Low Channel



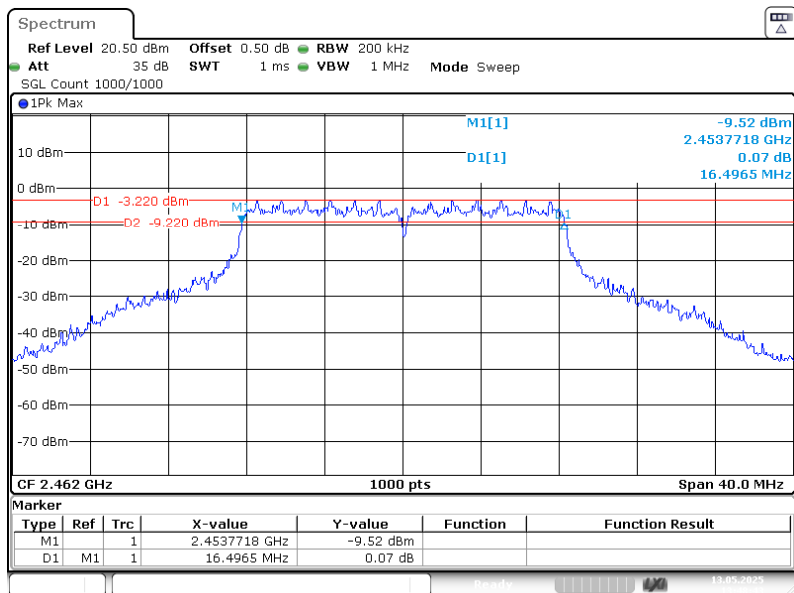
ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:40:56

802.11g Mode Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:44:50

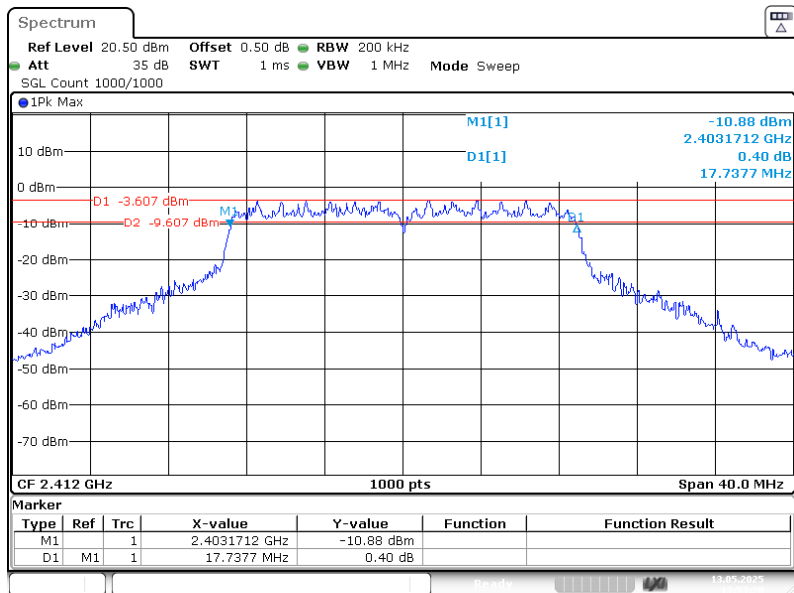
802.11g Mode High Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:48:43

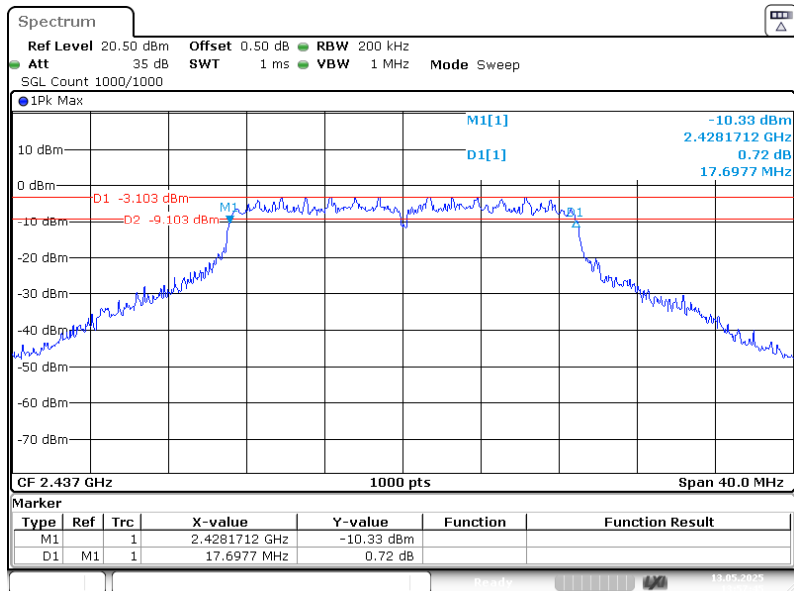
802.11n-ht20 Mode Low Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:53:20

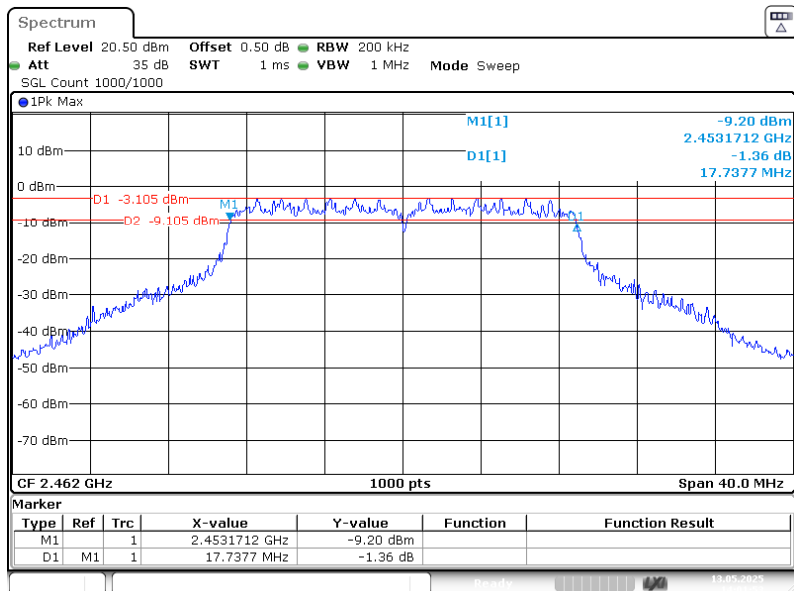
802.11n-ht20 Mode Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:57:44

802.11n-ht20 Mode High Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 14:01:53

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

Applicable Standard

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

EUT Setup



Test Procedure

According to ANSI C63.10-2020 Section 11.9.1.2

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast responding diode detector.

- a) Set the EUT in transmitting mode.
- b) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to test equipment.
- c) Add a correction factor to the display.
- d) Set the power meter to test peak output power, record the result.

According to ANSI C63.10-2020 Section 11.9.2.3.2

Method AVGPM-G is a measurement using a gated RF average power meter.

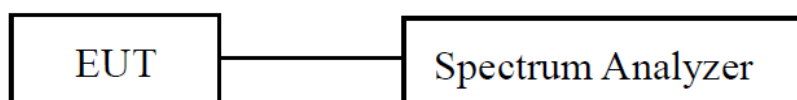
Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Test Data

Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-05-13	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 23.7°C Humi.: 49% Atm.:100.3kPa
Test Modes	Test Frequency (MHz)	Maximum Conducted Peak Output Power (dBm)	Limit (dBm)
802.11b	2412	16.07	30
	2437	16.81	30
	2462	16.78	30
802.11g	2412	15.56	30
	2437	16.25	30
	2462	15.89	30
802.11n HT20	2412	15.45	30
	2437	15.89	30
	2462	15.79	30

FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE**Applicable Standard**

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

EUT Setup**Test Procedure**

According to ANSI C63.10-2020 Section 11.11

- Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution. NOTE—the number of points can also be increased for large spans to retain frequency resolution
- Set the RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max-hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level.

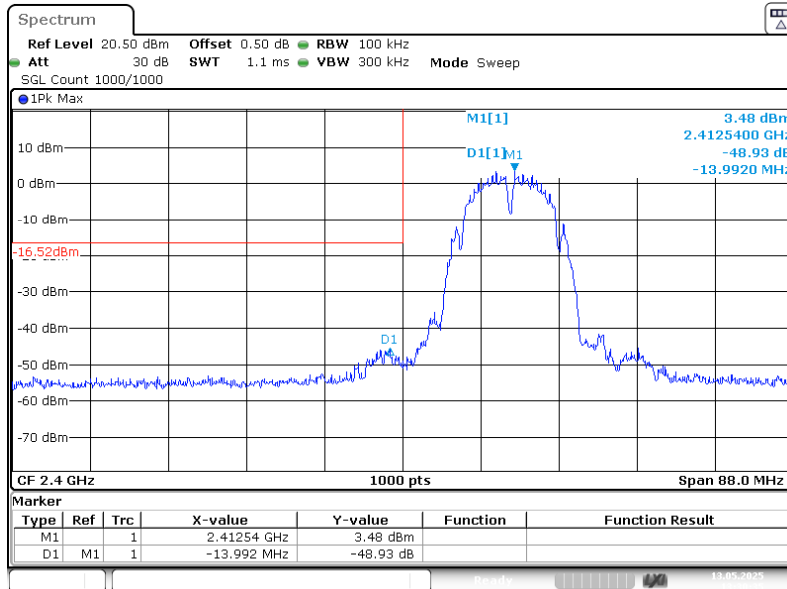
Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

Test Data

Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-05-13	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 23.7°C Humi.: 49% Atm.: 100.3kPa

Please refer to below plots:

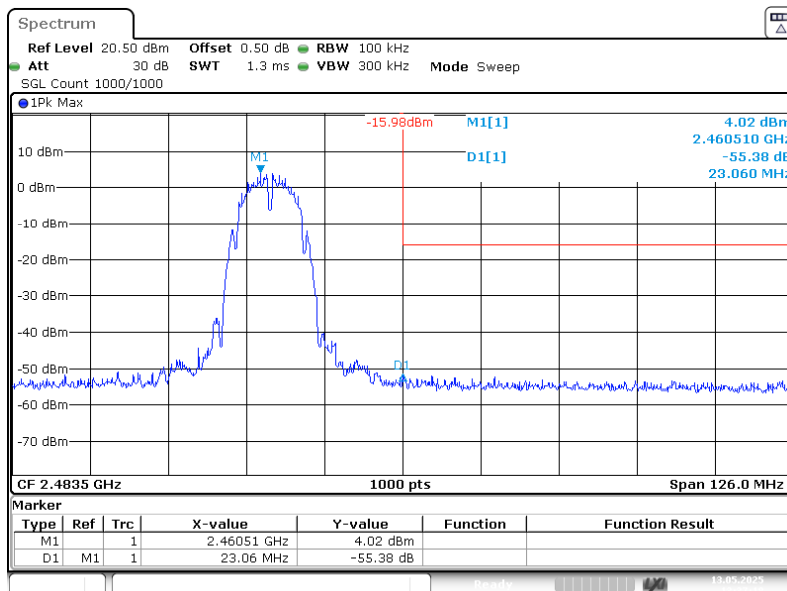
802.11b Mode Left Side



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:30:35

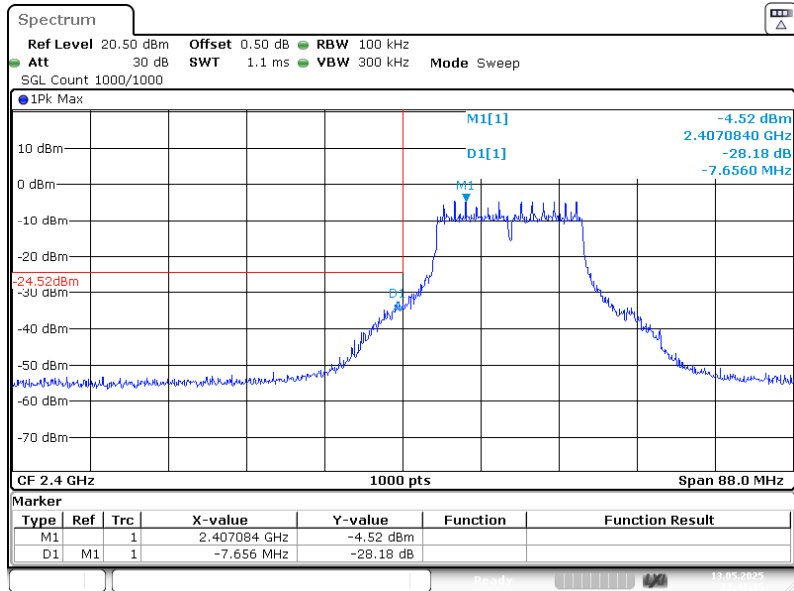
802.11b Mode Right Side



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:37:18

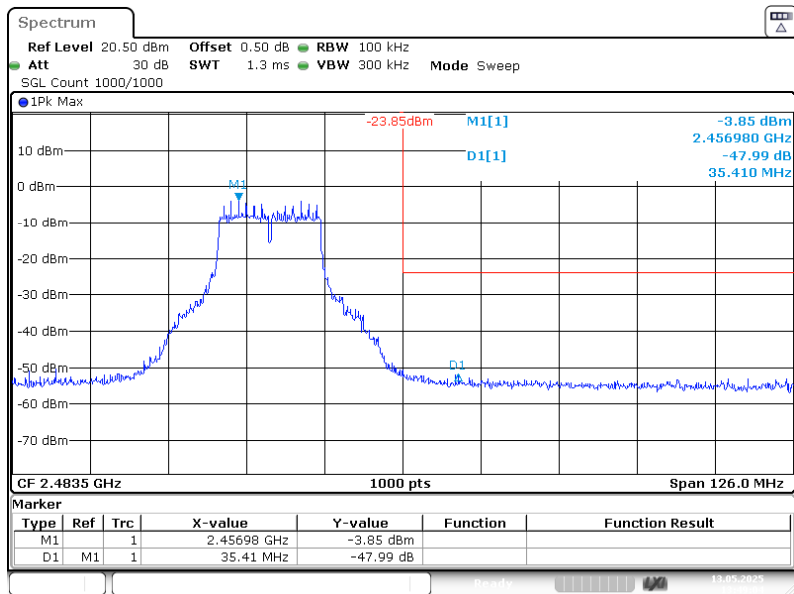
802.11g Mode Left Side



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:41:16

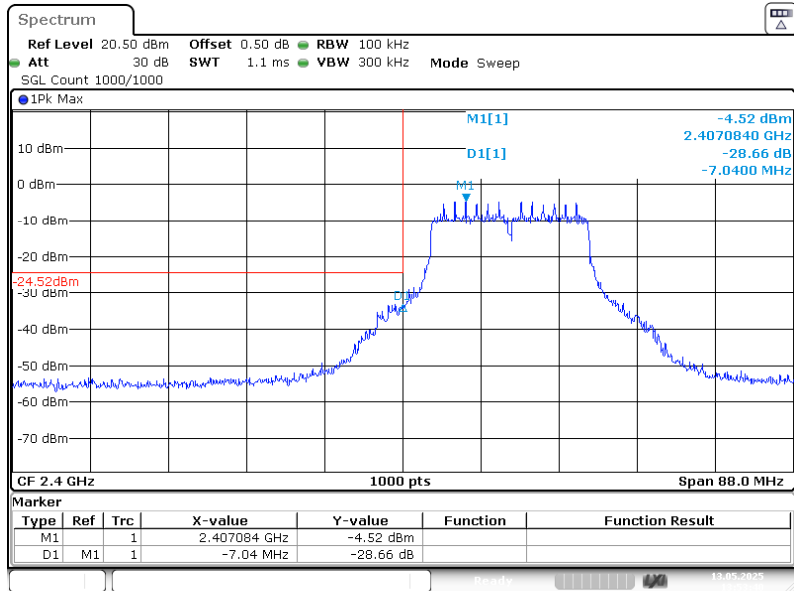
802.11g Mode Right Side



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:49:03

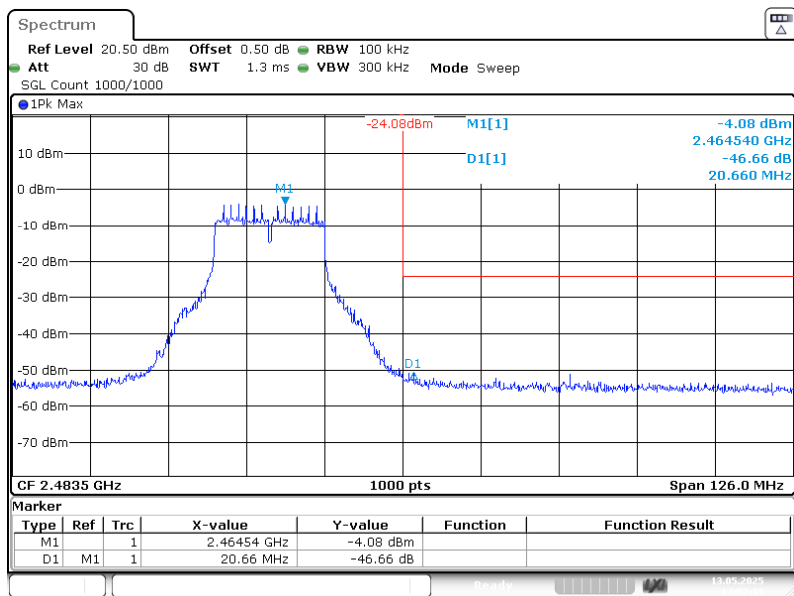
802.11n-ht20 Mode Left Side



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 13:53:40

802.11n-ht20 Mode Right Side



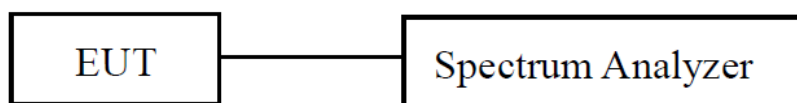
ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 14:02:13

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

EUT Setup**Test Procedure**

According to ANSI C63.10-2020 Section 11.10.2

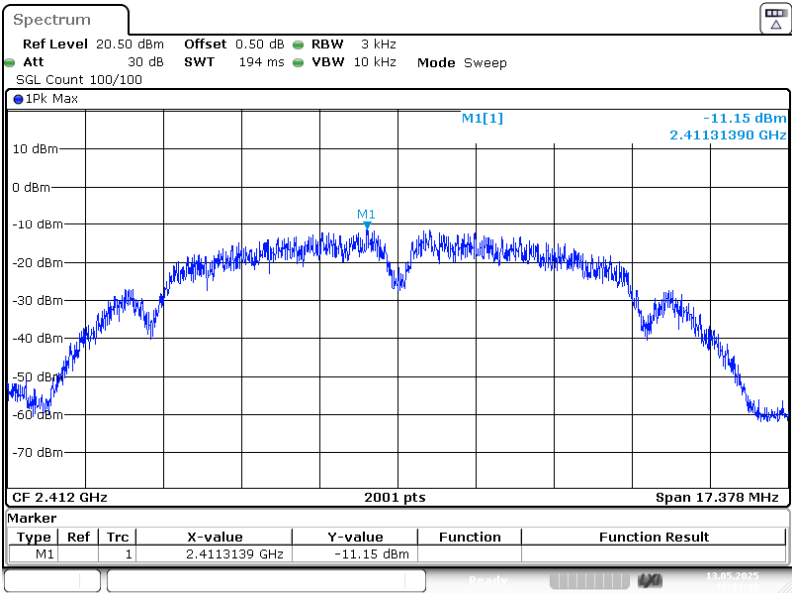
- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span >1.5 times the DTS bandwidth.
- c) Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = No faster than coupled (auto) time.
- g) Trace mode = max-hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

Test Data

Test Mode:	Transmitting	Test Engineer:	Braylon Ma
Test Date:	2025-05-13	Test Voltage:	AC 120V/60Hz
Test Result:	Compliance	Environment:	Temp.: 23.7°C Humi.: 49% Atm : 100.3kPa
Test Modes	Test Frequency (MHz)	Reading (dBm/3kHz)	Limit (dBm/3kHz)
802.11b	2412	-11.15	8.00
	2437	-10.66	8.00
	2462	-10.54	8.00
802.11g	2412	-20.76	8.00
	2437	-20.05	8.00
	2462	-20.58	8.00
802.11nHT20	2412	-19.55	8.00
	2437	-19.14	8.00
	2462	-19.28	8.00

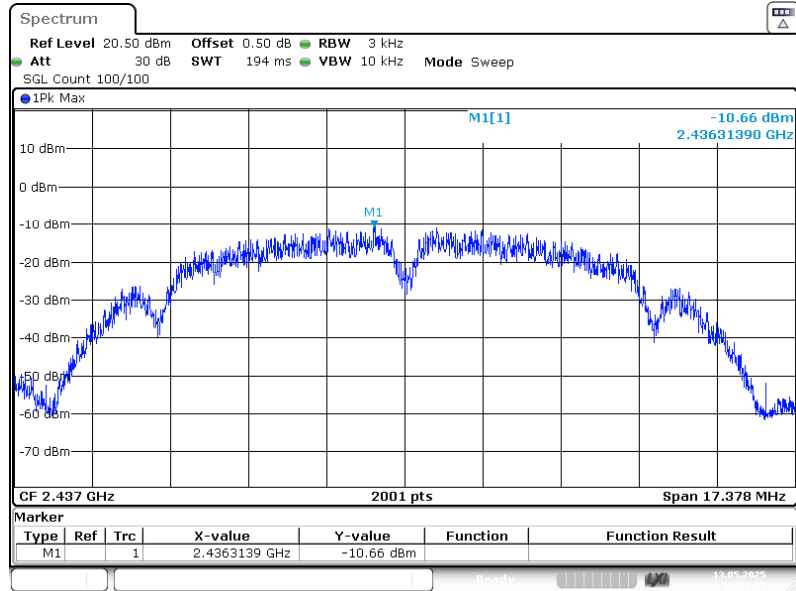
Please refer to below plots:

802.11b Mode Low Channel



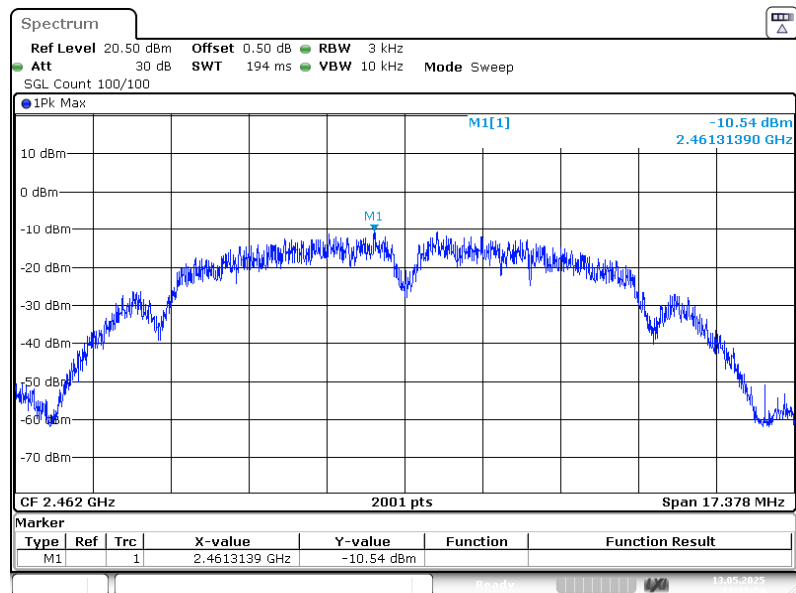
ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:31:11

802.11b Mode Middle Channel



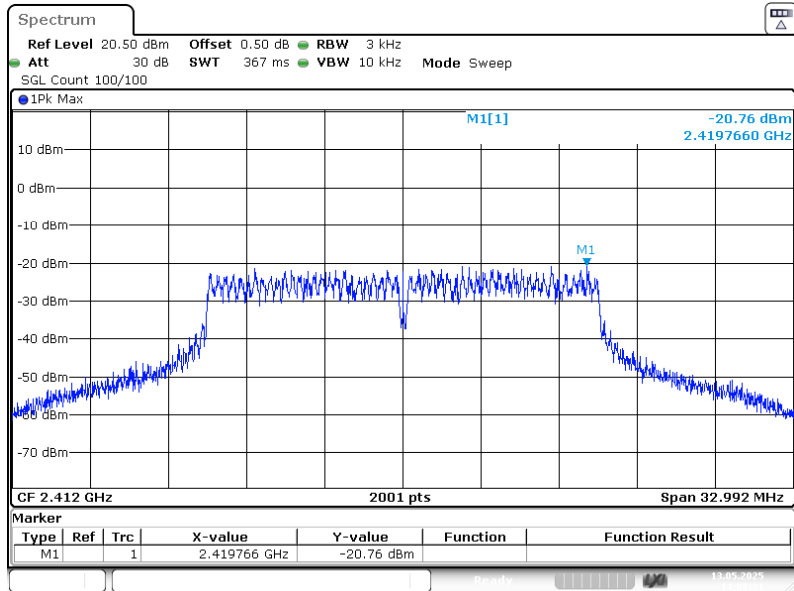
ProjectNo.:2507S56058E-RF Tester:Braylon Ma
 Date: 13.MAY.2025 13:34:29

802.11b Mode High Channel



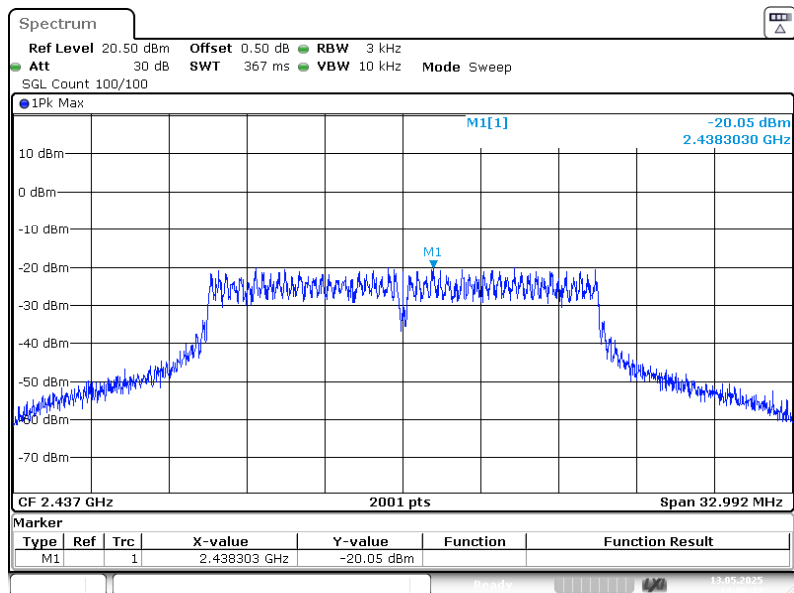
ProjectNo.:2507S56058E-RF Tester:Braylon Ma
 Date: 13.MAY.2025 13:37:54

802.11g Mode Low Channel



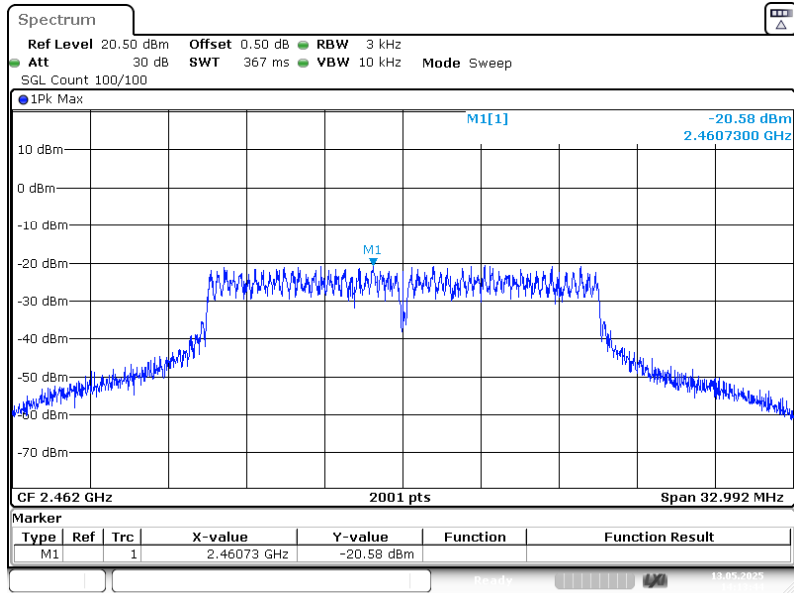
ProjectNo.:2507S56058E-RF Tester:Braylon Ma
 Date: 13.MAY.2025 14:08:20

802.11g Mode Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
 Date: 13.MAY.2025 14:09:41

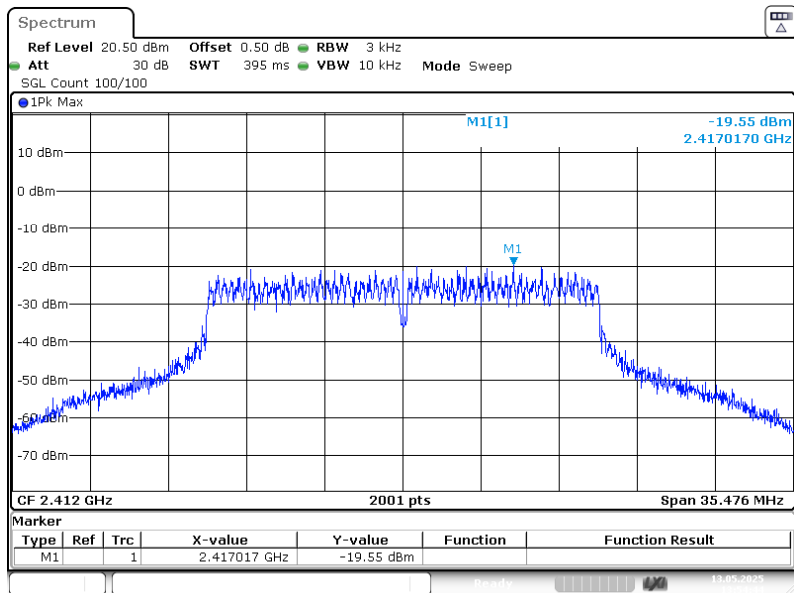
802.11g Mode High Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

Date: 13.MAY.2025 14:13:45

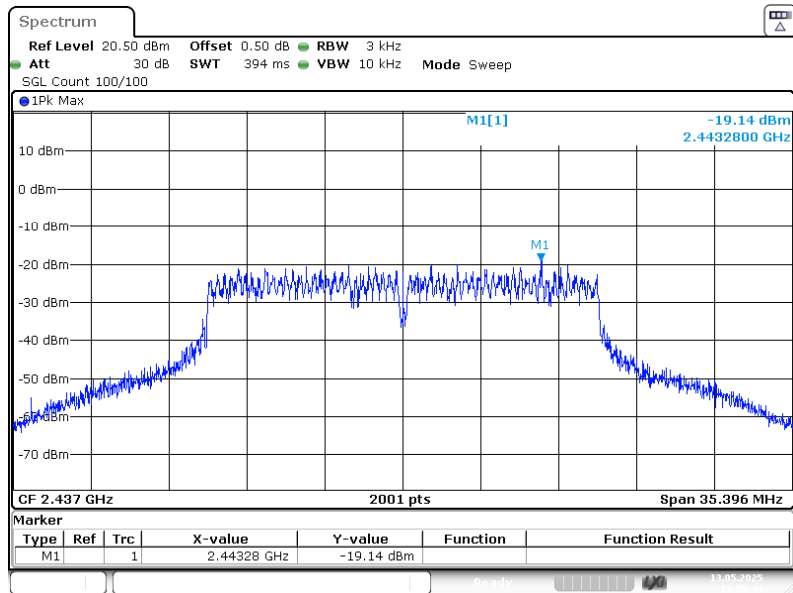
802.11n-ht20 Mode Low Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma

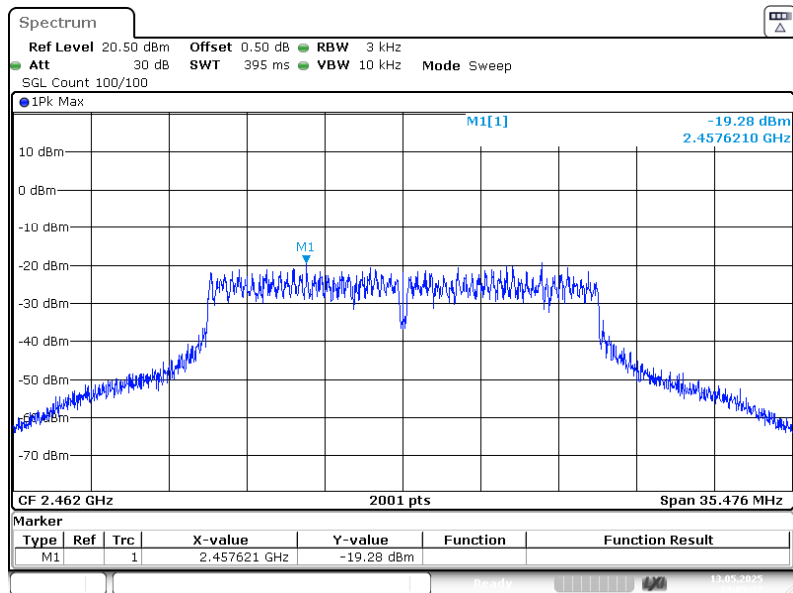
Date: 13.MAY.2025 13:54:44

802.11n-ht20 Mode Middle Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 13:58:48

802.11n-ht20 Mode High Channel



ProjectNo.:2507S56058E-RF Tester:Braylon Ma
Date: 13.MAY.2025 14:03:17

EUT PHOTOGRAPHS

Please refer to the attachment 2507S56058E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2507S56058E-RF-INP EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2507S56058E-RF-TSP SETUP PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk “★”.
2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.
3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95.45% confidence interval.
5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).
6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

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