TEST REPORT

Applicant:	**Renesas Design Korea Inc.**
Address:	**7th SiliconPark, 35 Pangyo-ro 255 beon-gil Bundang-gu, Seongnam-si, Gyeonggi-do, 13486 Republic of Korea**
Product Name:	**RRQ61051 Module**
Model Name:	**RRQ61051-009, RRQ61051-010**
Type of Equipment:	**Certification Ordinance Article 2, Paragraph 1, Item 19**
Test method(s):	**MIC Notice No.88 of 2004, Appendix No.43(Version: MIC Notice No.409 of 2023)**
Report Number:	**2502Q45198E-RF-07B**
Report Date:	**2025/8/28**

The above device has been tested and found compliant with the requirement of the relevant standards by Bay Area Compliance Laboratories Corp. (Dongguan).

Reviewed By: **Carlos Wu** Title: **Project Engineer**

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2502Q45198E-RF-07B	Original Report	2025/8/28

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

Product Name:	RRQ61051 Module
Test Model:	RRQ61051-009
Multiple Models:	RRQ61051-010
Model Difference:	Please refer to the DOS
Rated Input Voltage:	1.8~3.6Vdc (Typical:3.3Vdc)
Serial Number:	2YVE-1
EUT Received Date:	2025/2/25
EUT Received Status:	Good

Accessory Information

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

Technical Specification

Operation Frequency Range (MHz):	802.11b/g/n20/ax20: 2412-2472
Max. RF Output Power (Conducted):	802.11b: 7.4mW/MHz 802.11g: 5.0mW/MHz 802.11n20: 4.5mW/MHz 802.11ax20: 4.2mW/MHz
Number of TX Chain(s):	1
Number of RX Chain(s):	1
Antenna Gain (dBi)▲:	3.3
Modulation Type:	DSSS, OFDM, OFDMA
Emission Type	G1D, D1D
Note: For this product, the manufacturer declares that 802.11ax mode only supports full RU and doesn't support partial RU.	

SUMMARY OF TEST RESULTS

SN	Description of Test	Result
1	Frequency Error	Compliant
2	Occupied Bandwidth and Spread Bandwidth	Compliant
3	Transmitter Spurious Emission and Unwanted Emission Intensity	Compliant
4	Antenna Output Power and Output Power Tolerance	Compliant
5	Receiver Spurious Emission and Unwanted Emission Intensity	Compliant
6	Carrier sense capability (1)	Not Applicable*
7	Carrier sense capability (2)	Compliant
8	Carrier sense capability (3)	Not Applicable**
9	Transmission frequency channel switching function	Not Applicable*
10	Transmission Antenna Gain	Not Applicable***
11	Transmission Radiation Angle Width	Not Applicable***
12	Interference Prevention Function	Compliant
13	Frequency Hopping Dwell Time	Not Applicable****
14	Construction Protection Confirmation	Compliant

Note:

Not Applicable: Only required for device with "compensating for the reduction of EIRP with output power" function.*

*Not Applicable**: Only required for outdoor use radio control of model airplanes.*

*Not Applicable***: This item not applicable when the EIRP less than the limit.*

*Not Applicable****: Testing is only required for FHSS system devices.*

DESCRIPTION OF TEST CONFIGURATION

Operation Frequency Detail

The system was configured for testing in engineering mode, which was provided by manufacturer. 13 channels are provided as below table:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437	13	2472
7	2442	/	/

For lowest, middle and highest channel, 802.11b, 802.11g , 802.11n-HT20 and 802.11ax-hew20 modes were tested with Channel 1, 7 and 13.

The extreme voltage test conditions which were declared by the manufacturer and the normal conditions are as below:

NV: Normal Voltage 3.3VDC

LV: Low Voltage 1.8VDC

HV: High Voltage 3.6VDC

The EUT in built a power manage system, power deviation of the RF chipset input is less than 1% when the extreme voltage supplied by measuring the voltage of pin 48 (VDDRF), therefore the test only performed at normal condition. Details as following:

Voltage Condition	Input(V_{DC})	RF System Voltage(V_{DC})
NV	3.3	1.37
LV	1.8	1.37
HV	3.6	1.37

EUT Operation Condition

The EUT was configured for testing in Engineering Mode, which was provided by the manufacturer. The EUT configuration as below:

EUT Exercise Software:	Tera Term VT

The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲. The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the output power across all data rates bandwidths, and modulations.

Mode	Channel	Frequency (MHz)	Data rate (Mbps)	Power level
802.11 b	Low	2412	1	14
	Middle	2442	1	13
	High	2472	1	13
802.11 g	Low	2412	6	14
	Middle	2442	6	15
	High	2472	6	13
802.11 n20	Low	2412	MCS0	13
	Middle	2442	MCS0	14
	High	2472	MCS0	13
802.11ax20	Low	2412	MCS0	13
	Middle	2442	MCS0	14
	High	2472	MCS0	13

Equipment Modifications

No modifications are made to the EUT during all test items.

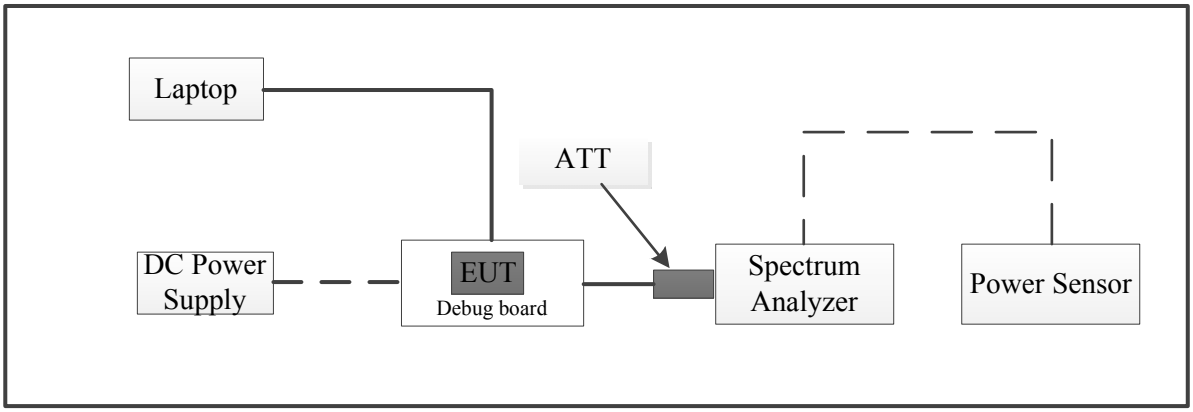
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
All-sun	Multimeter	EM305A	8348897
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1
Azeyoo	Laptop	AL141U	unknown
unknown	Debug Board	unknown	unknown

Support Cable List and Details

Manufacturer	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	NO	NO	1.1	Debug Board	Laptop
DC Cable	NO	NO	0.8	EUT	DC Power Supply

Configuration of Test Setup



Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

Measurement Uncertainty

Otherwise required by the applicant or product regulations, decision rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Frequency Error	±0,5 ppm
Occupied bandwidth and spreading bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions(TX&RX), conducted	±1.5 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

1 - FREQUENCY ERROR

Limit

Within ±50ppm.

Test Procedure

Set the EUT to the measurement frequency without modulation.
Setting of SA is following as: Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: MAX Hold.
Record the peak spot frequency.

If the EUT can`t set at un-modulation mode, measure the 10dBc center frequency.

Test Data

Test Result: Compliant. The details please refer to the Appendix.

2 - OCCUPIED BANDWIDTH

Limit

- Occupied bandwidth:≤26 MHz for 20M system
- Occupied bandwidth:≥26 MHz and ≤40 MHz for 20M system
- Spreading bandwidth: 500kHz or more
- Spreading Factor: 5 or more

Test Procedure

1. Setting of SA is following as: RB: 300 kHz/VB: 300 kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% ofbandwidth function to measure occupied bandwidth.
3. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 90% of bandwidth function to measure spread bandwidth.
4. Spread Factor=Spread Bandwidth/modulation rate. The modulation rate: MR= 1.375 for 802.11b(DSSS).

Test Data

Test Result: Compliant. The details please refer to the Appendix.

3 - TRANSMITTER SPURIOUS EMISSION STRENGTH AND UNWANTED EMISSION INTENSITY

Limit

- 30MHz≤f＜2387 MHz:≤2.5μW/MHz
- 2387 MHz≤f≤2400 MHz:≤25μW/MHz;
- 2483.5 MHz＜f≤2496.5 MHz:≤25μW/MHz
- 2496.5 MHz＜f≤12500MHz:≤2.5μW/MHz

Test Procedure

❖ Conditions of Application Equipment (EUT)

- The modulation state shall be in continuously transmitting mode.

❖ Spectrum Analyzer Conditions

- Setting of SA start 30MHz and stop frequency 1000MHz,RB:100kHz/VB:100kHz,Sweep time: Auto. Sweep mode: continuous sweep .Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 0.25μW/100kHz.
- Setting of SA start 1000MHz and stop frequency 2387MHz,RB:1MHz/VB:1MHz,Sweep time: Auto. Sweep mode: continuous sweep .Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 2.5μW/MHz.
- Setting of SA start 2387MHz and stop frequency 2400MHz,RB:1MHz/VB:1MHz,Sweep time: Auto. Sweep mode: continuous sweep .Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 25μW/MHz.
- Setting of SA start 2483.5MHz and stop frequency 2496.5MHz,RB:1MHz/VB:1MHz,Sweep time: Auto. Sweep mode: continuous sweep .Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 25μW/MHz.
- Setting of SA start 2496.5MHz and stop frequency 12500MHz,RB:1MHz/VB:1MHz,Sweep time: Auto. Sweep mode: continuous sweep .Detect mode: Positive peak/Trace mode: max hold. Then to mark peak. reading value + cable loss shall be less than 2.5μW/MHz.

If above test over the limit, the below test procedure should be used:

Step 1:

Center the frequency which was want to investigate, search the peak frequency.

Step 2:

- Center frequency: Searched Frequency
- Span: 0Hz
- RBW:1MHz(Above 1GHz), VBW: Same as RBW.
- Sweep time: Auto(Minimum time to ensure measurement accuracy. *In case of burst wave, one burst shall be included per data point) Data points: 400 points or more. Sweep mode: Single Sweep.
- Detection Mode: Sample

Test Data

Test Result: Compliant. The details please refer to the Appendix.

4 - ANTENNA OUTPUT POWER AND ANTENNA POWER TOLERANCE

Limit

- ≤ 10mW/MHz (OFDM/DSSS for bandwidth ≤ 26MHz)
- ≤ 5mW/MHz (OFDM for bandwidth >26MHz and bandwidth ≤40MHz)

The Output Power Tolerance must be within +20%, -80%.

E.i.r.p:
- ≤ 12.14dBm/MHz (OFDM/DSSS for bandwidth ≤ 26MHz)
- ≤9.13dBm/MHz (OFDM for bandwidth >26MHz and bandwidth ≤40MHz)

Note: E.I.R.P will not be applied to the transmission antenna which has a gain of 2.14dBi or less.

Test Procedure

Step 1:
Use the following settings on the spectrum analyser:
- Centre Frequency: The centre frequency of the channel under test.
- Resolution BW: 1 MHz.
- Video BW: 3MHz.
- Detector mode: Peak.
- Averaging: Off.
- Sweep: Continuous.
- Span: Twice the nominal OBW.

Step 2:
Connect the E.U.T. to the Spectrum Analyzer and switch on the U.U.T.

Step 3:
Adjust the Reference Level of the Spectrum Analyzer so that the peak of the power envelope is between the Reference Level and the Reference Level - 10 dB. This assumes a 10 dB/devision setting is used on the spectrum analyser.

Step 4:
Use the marker to find the peak value of the power envelope.
Adjust the centre frequency of the analyser to the marker frequency, resulting in the peak of the power envelope being in the centre of the screen.

Step 5:
Change the Spectrum Analyzer settings as follows:
- Resolution BW: 1 MHz.
- Video BW: 1 MHz.
- Detector mode: Peak.
- Averaging: Off.
- Sweep: Continuous.
- Span: 0 Hz.

Step 6:
Connect a Power Meter to the "Narrow I.F" output port of the Spectrum Analyzer. The power is set Auto Duty factor.

NOTE: The IF output of the spectrum analyser may be 20 dB or more below the input level of the spectrum analyser. Unless the power meter has adequate sensitivity, a wideband amplifier may be required.

Adjust the Centre Frequency of the spectrum analyser carefully (fine tune) for maximum indication on the power meter.
The level measured by the power meter shall be recorded as level "D".
The maximum e.i.r.p. is calculated from the above measured “D”, and the applicable antenna assembly gain "G" in dBi, according to the formula below. If more than one antenna assembly is intended for this power setting, the gain of the antenna assembly with the highest gain shall be used.

- PD = D + G

The above procedure shall be repeated for each of the frequency channels.

Where the spectrum analyser bandwidth is non-Gaussian, a suitable correction factor shall be determined and applied.

Test Data

Test Result: Compliant. The details please refer to the Appendix.

5 - RECEIVER SPURIOUS EMISSION AND UNWANTED EMISSION INTENSITY

Limit

- ≤ 4nW (30 MHz ≤ f ≤ 1000 MHz)
- ≤ 20 nW (1 GHz ≤ f ≤ 12.5 GHz)

Test Procedure

❖ Conditions of Application Equipment (EUT)
- The modulation state shall be “continuous receiving mode”.

❖ Spectrum Analyzer Conditions

- Start Frequency: Start Frequency of frequency range to measure (30MHz to 1GHz)
- Stop Frequency: Stop Frequency of frequency range to measure (1GHz to 12.5GHz)
- Span: AUTO (Measurement Range)
- RBW: 100 kHz, VBW: 100 kHz for Frequency < 1 GHz
- RBW: 1MHz, VBW: 1MHz for Frequency > 1 GHz
- Sweep time: AUTO or more
- Sweep mode: Auto Sweep
- Detection: Positive Peak
- Reference Level: Enough level for maximum dynamic range

Test Data

Test Result: Compliant. The details please refer to the Appendix.

12 - INTERFERENCE PREVENTION FUNCTION

Requirement

Article 6-2.3 of Regulations for Enforcement of the radio law

A wireless device used mainly in the same premises to automatically transmit or receive identification codes.

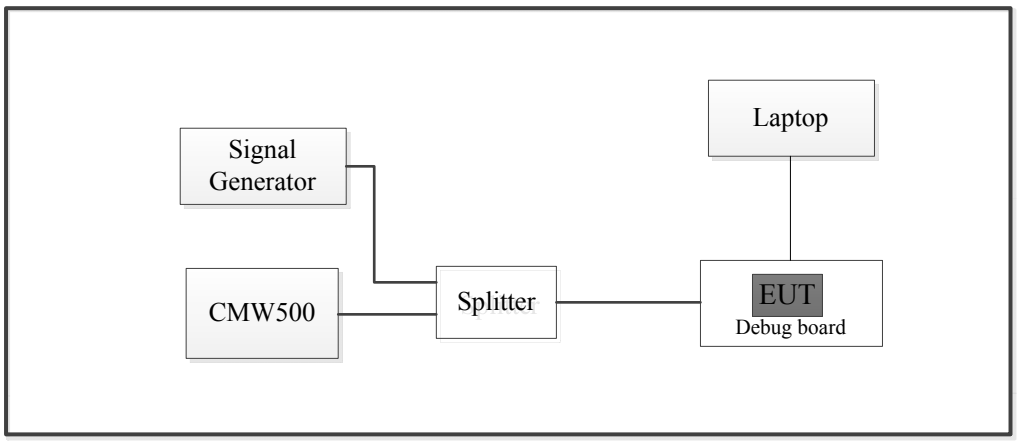
Article 1.8 of MPT Ministerial Notice No. 424 of 1994 (the last revision: Notice No. 374 of Nov. 10, 2023)

48 bits or more. However, for radio of the following frequencies, the requirement is 19 bits or more:

(1), 5150-5250MHz; 5470-5730MHz; 5925-6425MHz;
(2), 24.77-25.23GHz;
(3), 57-66GHz.

Test Procedure

- Measurement System Diagram



- 1.In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes form EUT. b. Check the transmitted identification codes with the demodulator.
- 2. In the case of receiving the identification code: a. Transmit the predetermined identification codes form the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes form the counterpart. d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

Test Data

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9	**Relative Humidity: (%)**	72	**ATM Pressure: (kPa)**	99.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/2/28	2026/2/27	BACL(DG)	D
Mini-Circuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2025/2/25	2026/2/24	BACL(DG)	D
R&S	Wideband Radio Communication Tester	CMW500	149216	2024/9/5	2025/9/4	BACL Metrology	C
All-sun	Multimeter	EM305A	8348897	2024/8/16	2025/8/15	BACL Metrology	C
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A
Agilent	MXG Vector Signal Generator	N5182B	MY51350142	2024/8/26	2025/8/25	GRGTEST	C

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

Note:

A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).

B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).

C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Item	Result	Requirement	Verdict
Methodology to transmit ID Code:	Automatically	Automatically	Compliant
Methodology to receive ID Code:	Automatically	Automatically	Compliant
Identification Codes (ID Codes) of EUT:	EC:9F:0D:9F:FF:FE	/	/
Bits of ID Codes:	48 bits	48 bits or more	Compliant

Test Result: Compliant

14 - CONSTRUCTION PROTECTION CONFIRMATION

Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

Confirmation Result

Compliant, the RF part (Except for antenna) was covered by metal shielding case, it can’t be opened easily. Please refer the EUT photo.

EXHIBIT A – EUT PHOTOGRAPHS

Please refer to the attachment 2502Q45198E-RF-EXP EUT External photos and 2502Q45198E-RF-INP EUT Internal photos.

EXHIBIT B – TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2502Q45198E-RF-TSP Test Setup Photos.

APPENDIX - TEST DATA

Frequency Error

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9	**Relative Humidity: (%)**	72	**ATM Pressure: (kPa)**	99.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15	BACL Metrology	C
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04	BACL Metrology	C
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/02/28	2026/02/27	BACL(DG)	D
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/06/13	2026/06/12	BACL(DG)	D
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A

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D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Test Condition: NV

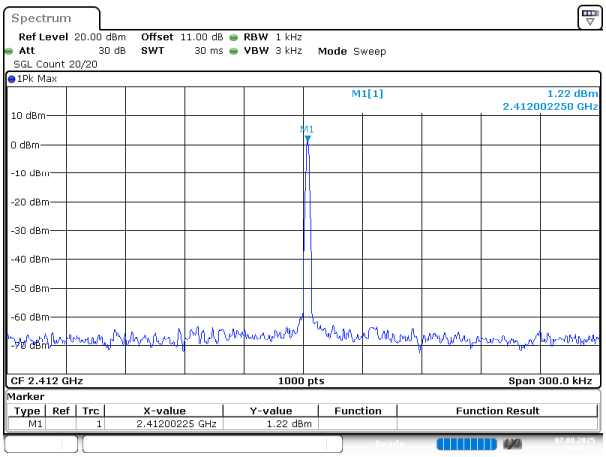
Mode	Frequency (MHz)	Measure Frequency(MHz)	Frequency Tolerance(ppm)	Limit (ppm)	Verdict
Single Carrier	2412	2412.00225	0.93	± 50	Pass
	2442	2442.00225	0.92	± 50	Pass
	2472	2472.00225	0.91	± 50	Pass

Note:

Frequency Tolerance = (Measure Frequency - Frequency)/Frequency*10^6

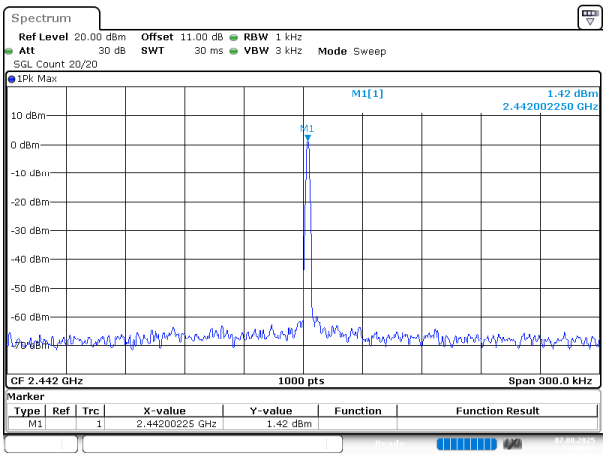
Test Condition: NV

2412MHz



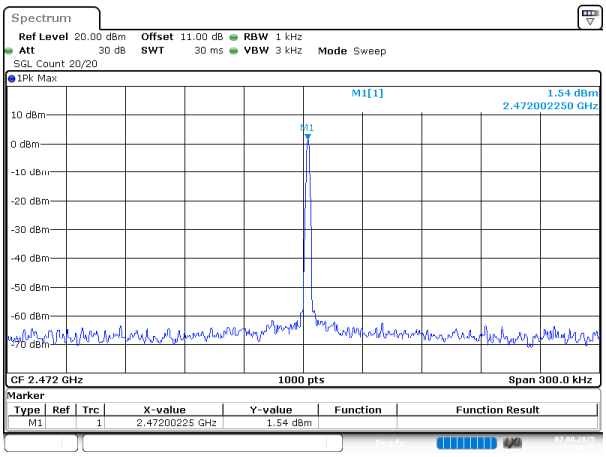
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:48:32

2442MHz



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:48:54

2472MHz



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:49:15

Note: Offset = Coaxial Attenuator (10dB) + Cable Loss (1dB)

Occupied Bandwidth and Spreading Bandwidth

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9	**Relative Humidity: (%)**	72	**ATM Pressure: (kPa)**	99.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15	BACL Metrology	C
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04	BACL Metrology	C
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/02/28	2026/02/27	BACL(DG)	D
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/06/13	2026/06/12	BACL(DG)	D
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A

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D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Test Condition: NV

Mode	Occupied bandwidth (MHz)			Limit(MHz)	Verdict
	Low Channel	Middle Channel	High Channel		
802.11b	17.24	12.56	12.72	≤ 26	Pass
802.11g	23.10	25.32	21.40	≤ 26	Pass
802.11n20	21.85	24.70	22.20	≤ 26	Pass
802.11ax20	21.40	24.95	22.20	≤ 26	Pass

Spreading bandwidth and Spreading Factor for 802.11b(DSSS)

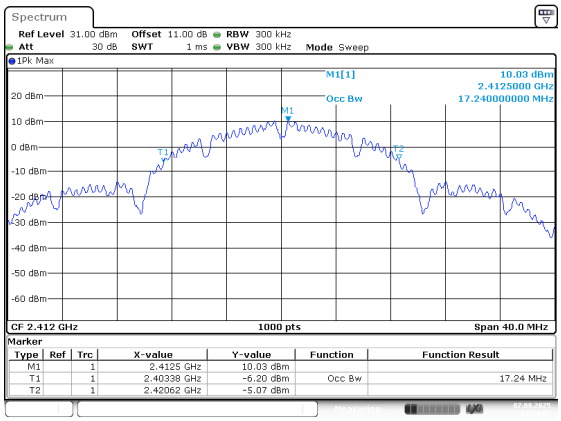
Test Items	Low Channel	Middle Channel	High Channel	Limit	Verdict
Spreading bandwidth (MHz)	11.840	7.000	7.040	≥ 0.5	Pass
Spreading Factor	8.61	5.09	5.12	≥ 5	Pass

Note1: Spread factor = spread bandwidth/modulation rate
Note2: Modulation rate: 802.11b = 1.375

Test Condition: NV

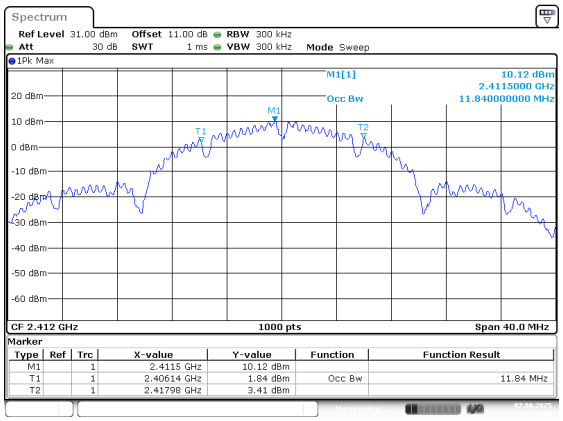
802.11b, Low Channel

Occupied Bandwidth



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 11:34:07

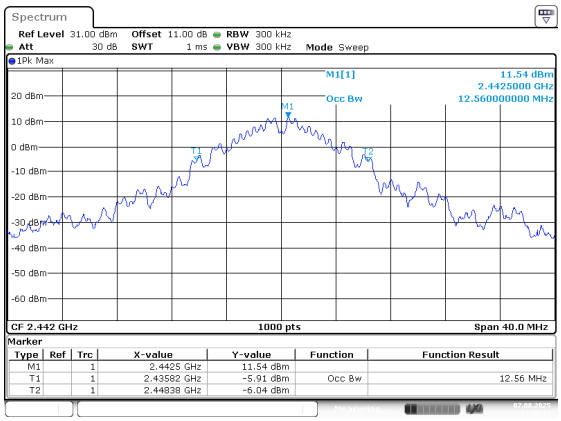
Spreading Bandwidth



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 11:34:21

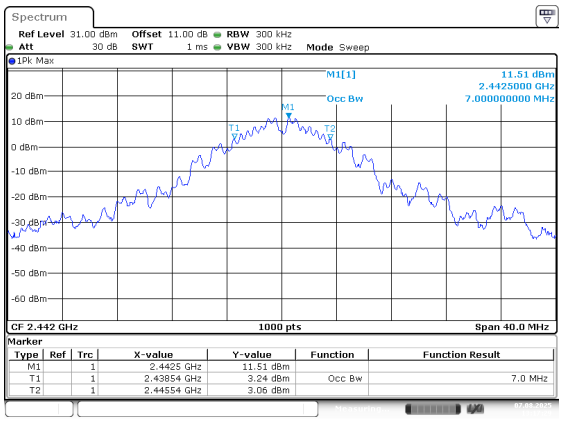
802.11b, Middle Channel

Occupied Bandwidth



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:17:15

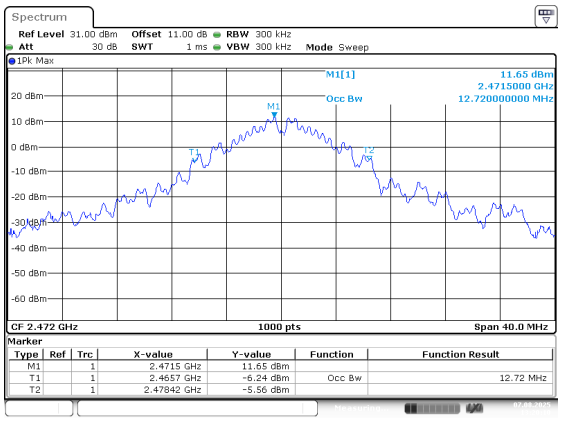
Spreading Bandwidth



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Date: 7.AUG.2025 13:17:30

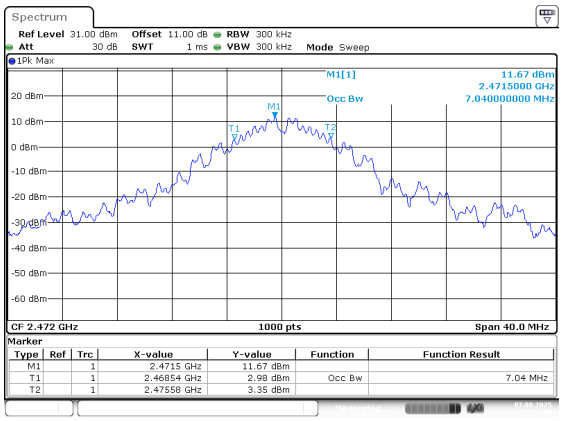
802.11b, High Channel

Occupied Bandwidth



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:20:10

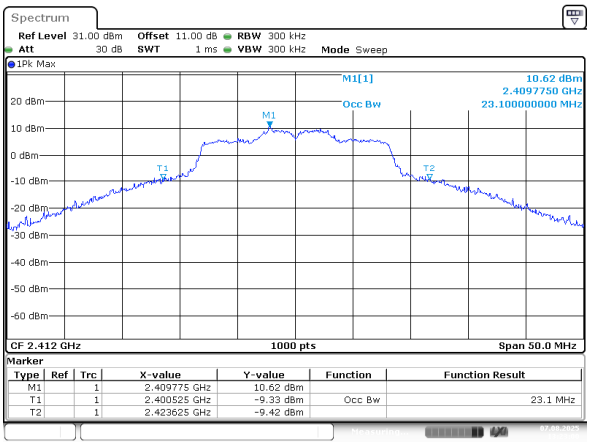
Spreading Bandwidth



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:20:29

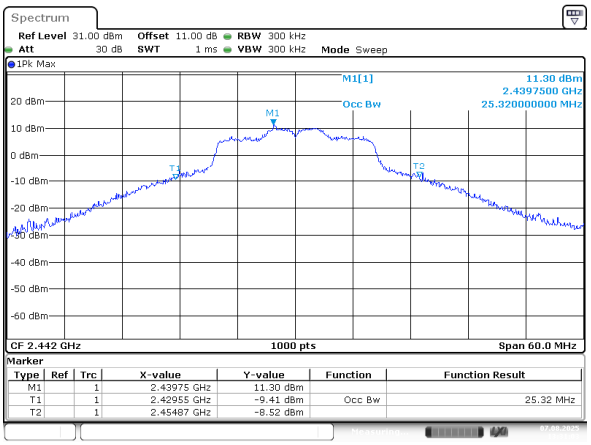
Occupied Bandwidth

802.11g, Low Channel



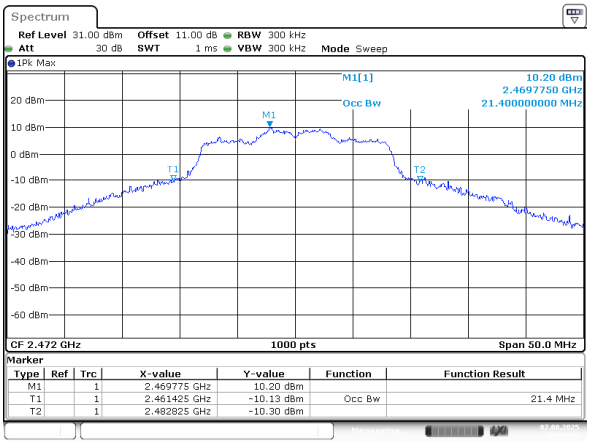
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:23:01

802.11g, Middle Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:31:04

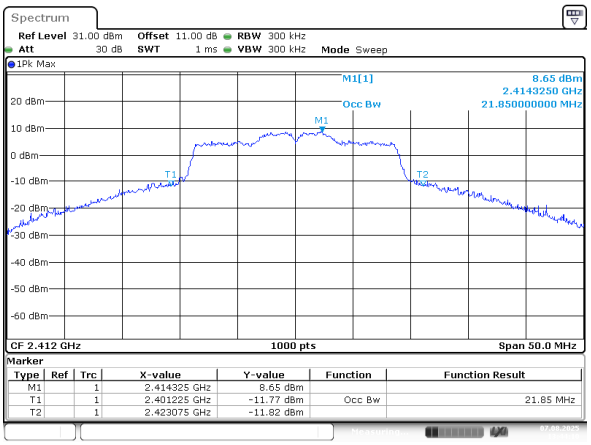
802.11g, High Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:36:33

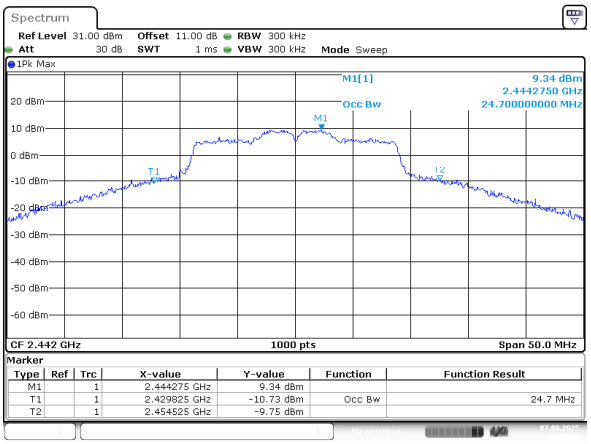
Occupied Bandwidth

802.11n20, Low Channel



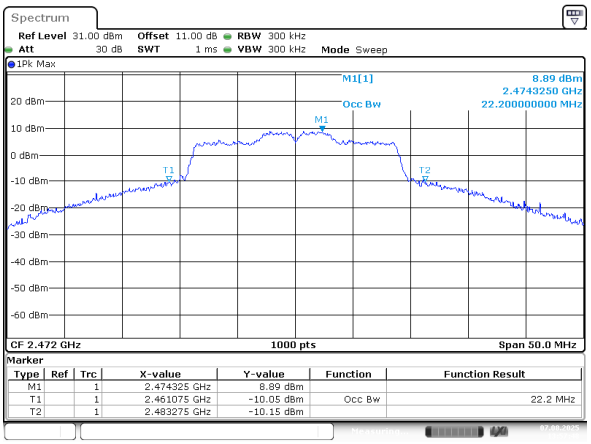
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:44:10

802.11n20, Middle Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:52:06

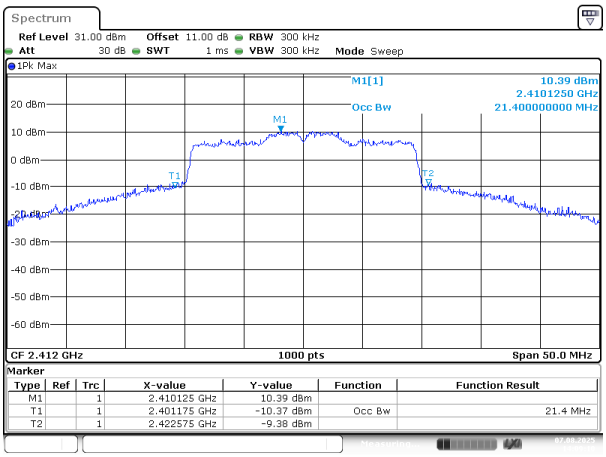
802.11n20, High Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:57:48

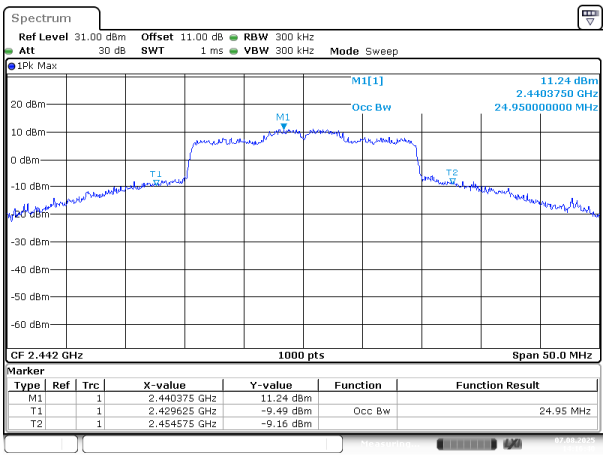
Occupied Bandwidth

802.11ax20, Low Channel



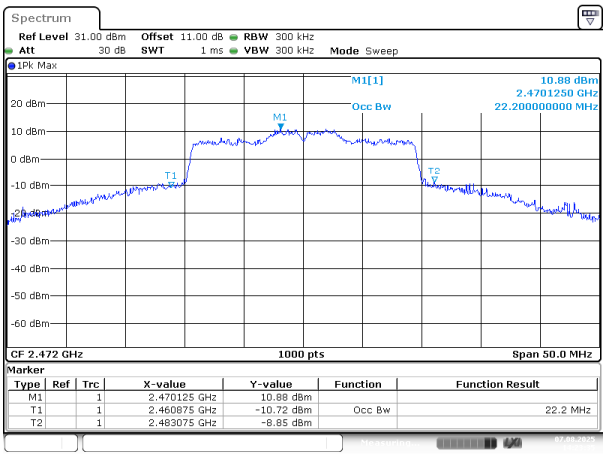
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:09:10

802.11ax20, Middle Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:16:40

802.11ax20, High Channel



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:23:35

Note: Offset = Coaxial Attenuator (10dB) + Cable Loss (1dB)

Transmitter Spurious Emission Strength

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07~2025/08/26
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9~27	**Relative Humidity: (%)**	63~72	**ATM Pressure: (kPa)**	99.7~100.9

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15	BACL Metrology	C
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04	BACL Metrology	C
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/02/28	2026/02/27	BACL(DG)	D
HUBER+SUHNER	Coaxial Attenuator	6610_SMA-50-1	0064	2025/06/13	2026/06/12	BACL(DG)	D
All-sun	Multimeter	EM305A	8348897	2025/08/15	2026/08/14	BACL Metrology	C
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A

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

Note:

A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).

B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).

C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Test Condition: NV

802.11b

Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start (MHz)	Stop (MHz)					
Low	Band I (100kHz)	30	1000	996.85	-47.12	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2110.64	-26.09	2.460	2.50	Pass
	Band III (1MHz)	2387	2400	2398.1508	-16.59	21.938	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2483.8868	-32.48	0.565	25	Pass
	Band V (1MHz)	2496.5	12500	2714.1	-29.99	1.002	2.50	Pass
Middle	Band I (100kHz)	30	1000	814.97	-46.05	0.025	0.25	Pass
	Band II (1MHz)	1000	2387	1627.96	-27.74	1.684	2.50	Pass
	Band III (1MHz)	2387	2400	2399.6133	-31.96	0.637	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2483.8933	-30.89	0.815	25	Pass
	Band V (1MHz)	2496.5	12500	2749.1	-32.61	0.549	2.50	Pass
High	Band I (100kHz)	30	1000	825.16	-41.40	0.072	0.25	Pass
	Band II (1MHz)	1000	2387	1648.08	-27.36	1.837	2.50	Pass
	Band III (1MHz)	2387	2400	2387.7183	-35.32	0.294	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.9463	-20.41	9.099	25	Pass
	Band V (1MHz)	2496.5	12500	2779.1	-30.90	0.813	2.50	Pass

802.11g

Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start (MHz)	Stop (MHz)					
Low	Band I (100kHz)	30	1000	989.57	-47.11	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2110.64	-31.33	0.736	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9838	-16.48	22.516	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2494.9368	-33.57	0.440	25	Pass
	Band V (1MHz)	2496.5	12500	2714.1	-31.00	0.795	2.50	Pass
Middle	Band I (100kHz)	30	1000	814.49	-47.17	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2136.99	-27.86	1.638	2.50	Pass
	Band III (1MHz)	2387	2400	2399.0868	-27.94	1.607	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.1208	-24.25	3.758	25	Pass
	Band V (1MHz)	2496.5	12500	2749.1	-28.97	1.269	2.50	Pass
High	Band I (100kHz)	30	1000	822.73	-46.61	0.022	0.25	Pass
	Band II (1MHz)	1000	2387	2163.35	-28.60	1.381	2.50	Pass
	Band III (1MHz)	2387	2400	2393.3603	-34.56	0.350	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.8813	-18.80	13.198	25	Pass
	Band V (1MHz)	2496.5	12500	2779.1	-32.25	0.595	2.50	Pass

802.11n20

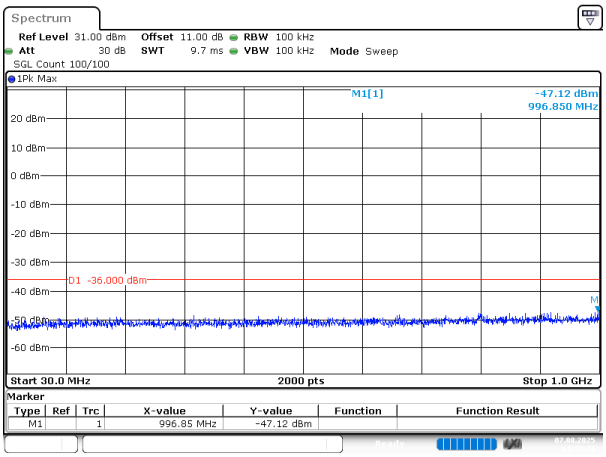
Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start (MHz)	Stop (MHz)					
Low	Band I (100kHz)	30	1000	977.45	-45.89	0.026	0.25	Pass
	Band II (1MHz)	1000	2387	2111.33	-26.48	2.249	2.50	Pass
	Band III (1MHz)	2387	2400	2399.7953	-18.91	12.847	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.4393	-33.70	0.427	25	Pass
	Band V (1MHz)	2496.5	12500	2714.1	-31.86	0.652	2.50	Pass
Middle	Band I (100kHz)	30	1000	630.67	-47.15	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2136.3	-29.44	1.139	2.50	Pass
	Band III (1MHz)	2387	2400	2399.9903	-29.52	1.117	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.4718	-25.90	2.570	25	Pass
	Band V (1MHz)	2496.5	12500	2744.1	-31.36	0.731	2.50	Pass
High	Band I (100kHz)	30	1000	824.67	-45.60	0.028	0.25	Pass
	Band II (1MHz)	1000	2387	2163.35	-28.63	1.372	2.50	Pass
	Band III (1MHz)	2387	2400	2399.6848	-34.13	0.386	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2483.7698	-17.33	18.505	25	Pass
	Band V (1MHz)	2496.5	12500	2779.1	-32.91	0.512	2.50	Pass

802.11ax20

Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm/RBW)	Result (μW/RBW)	Limit (μW/RBW)	Verdict
		Start (MHz)	Stop (MHz)					
Low	Band I (100kHz)	30	1000	936.22	-47.42	0.018	0.25	Pass
	Band II (1MHz)	1000	2387	2110.64	-33.62	0.435	2.50	Pass
	Band III (1MHz)	2387	2400	2399.0998	-19.41	11.460	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2485.8628	-32.57	0.553	25	Pass
	Band V (1MHz)	2496.5	12500	2714.1	-31.98	0.635	2.50	Pass
Middle	Band I (100kHz)	30	1000	813.52	-47.10	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2134.91	-31.13	0.771	2.50	Pass
	Band III (1MHz)	2387	2400	2399.7498	-28.68	1.355	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2484.7188	-25.08	3.105	25	Pass
	Band V (1MHz)	2496.5	12500	2749.1	-30.69	0.853	2.50	Pass
High	Band I (100kHz)	30	1000	927.01	-47.26	0.019	0.25	Pass
	Band II (1MHz)	1000	2387	2163.35	-28.76	1.332	2.50	Pass
	Band III (1MHz)	2387	2400	2399.4833	-33.93	0.405	25	Pass
	Band IV (1MHz)	2483.5	2496.5	2486.5453	-19.92	10.179	25	Pass
	Band V (1MHz)	2496.5	12500	2779.1	-32.80	0.525	2.50	Pass

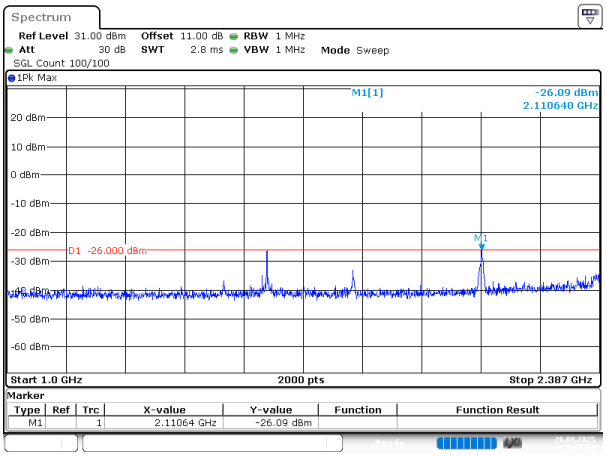
Test Condition: NV

802.11b, Low Channel(30MHz~1GHz)



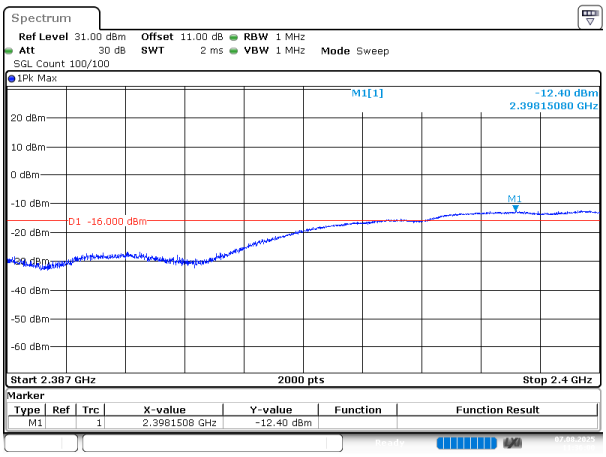
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 11:34:41

802.11b, Low Channel(1GHz~2.387GHz)



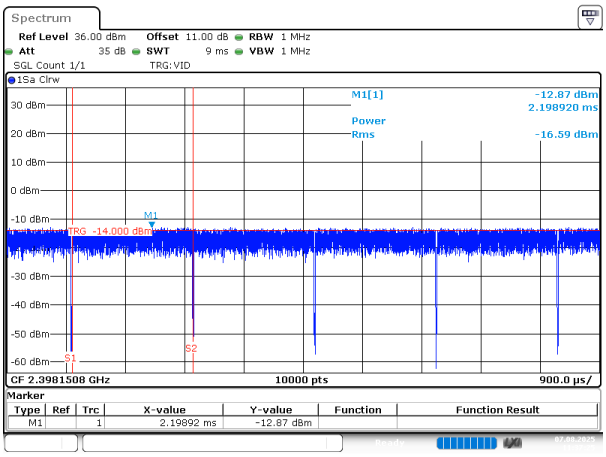
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:08:45

802.11b, Low Channel(2.387GHz~2.4GHz)



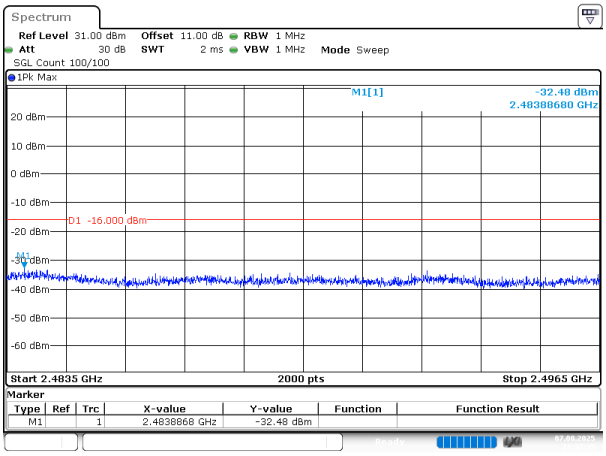
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802.11b, Low Channel(2.387GHz~2.4GHz)



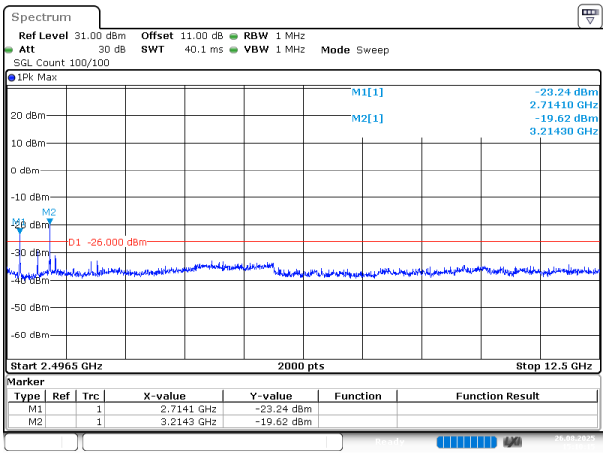
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Date: 7.AUG.2025 11:37:26

802.11b, Low Channel(2.4835GHz~2.4965GHz)



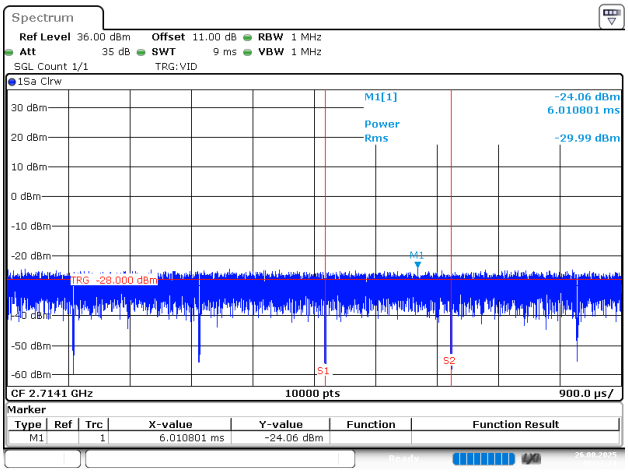
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 11:37:36

802.11b, Low Channel(2.4965GHz~12.5GHz)



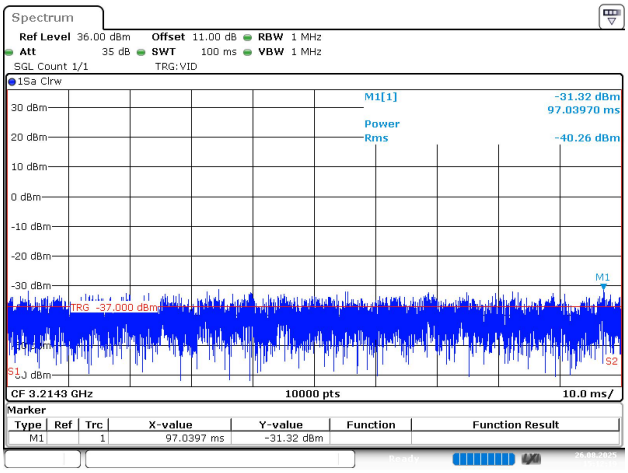
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:10:15

802.11b, Low Channel(2.4965GHz~12.5GHz)



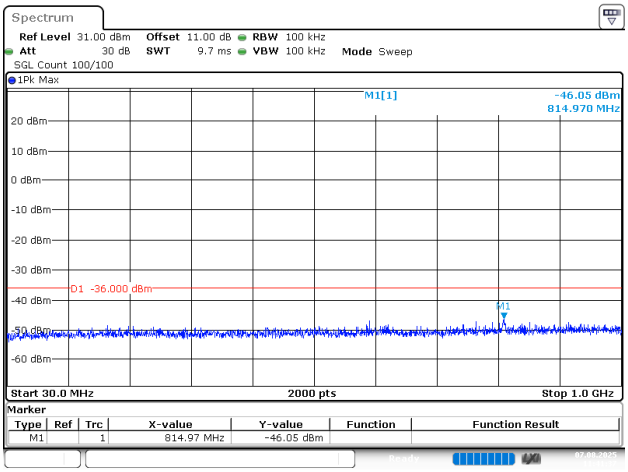
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:11:21

802.11b, Low Channel(2.4965GHz~12.5GHz)



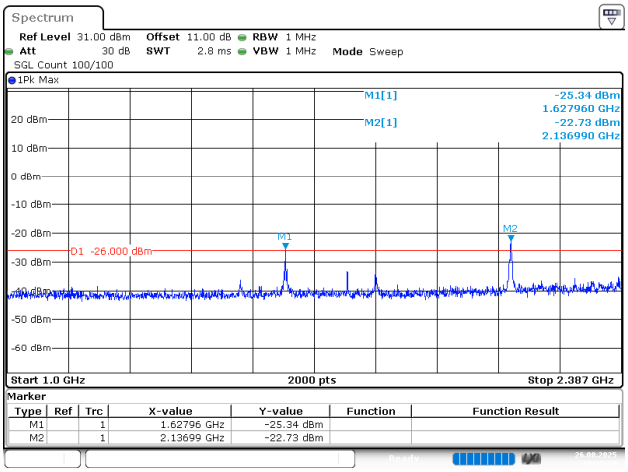
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:12:19

802.11b, Middle Channel(30MHz~1GHz)



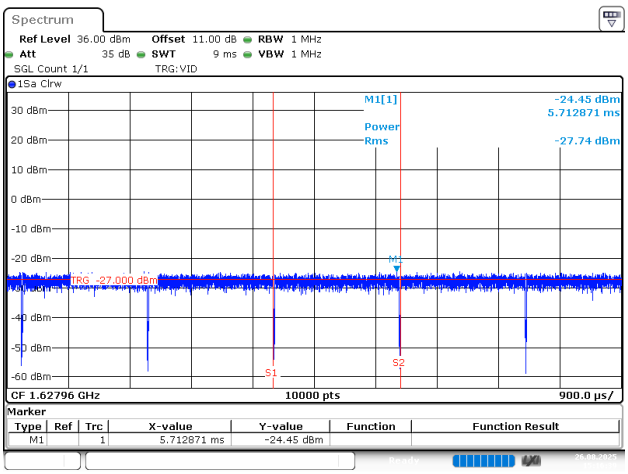
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 11:41:37

802.11b, Middle Channel(1GHz~2.387GHz)



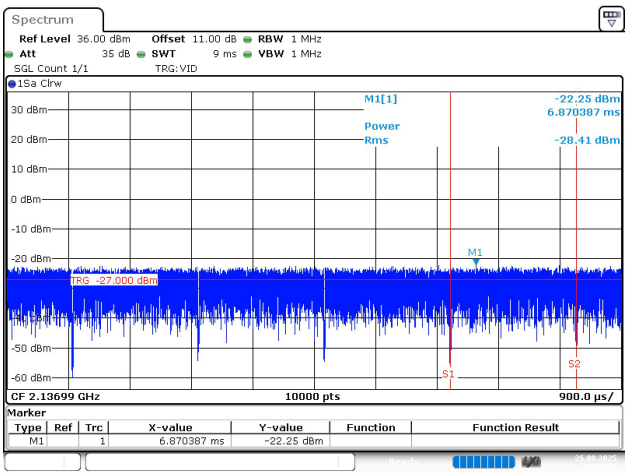
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:15:50

802.11b, Middle Channel(1GHz~2.387GHz)



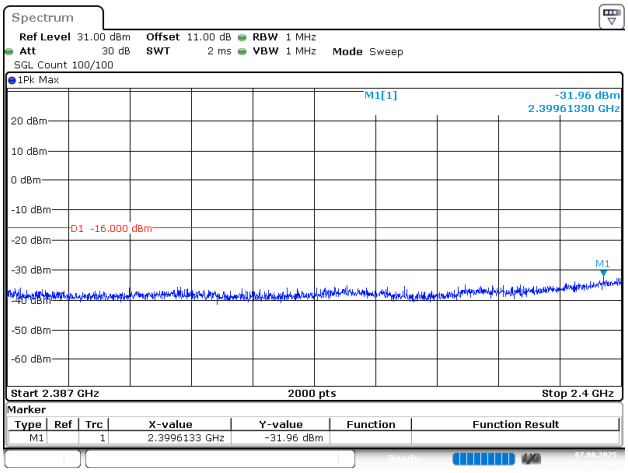
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 15:16:39

802.11b, Middle Channel(1GHz~2.387GHz)



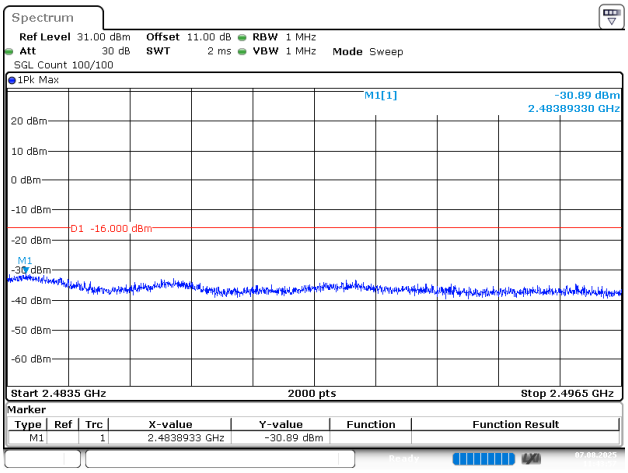
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Date: 26.AUG.2025 15:17:11

802.11b, Middle Channel(2.387GHz~2.4GHz)



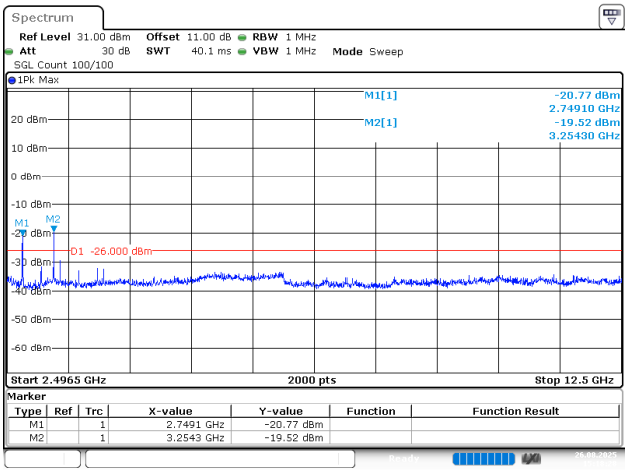
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Date: 7.AUG.2025 11:43:48

802.11b, Middle Channel(2.4835GHz~2.4965GHz)



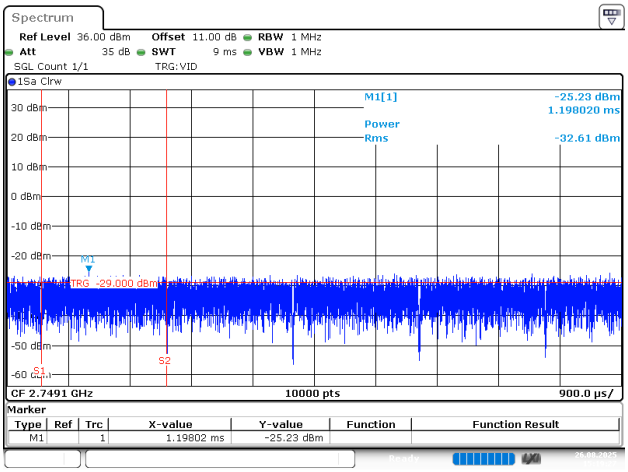
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Date: 7.AUG.2025 11:43:57

802.11b, Middle Channel(2.4965GHz~12.5GHz)



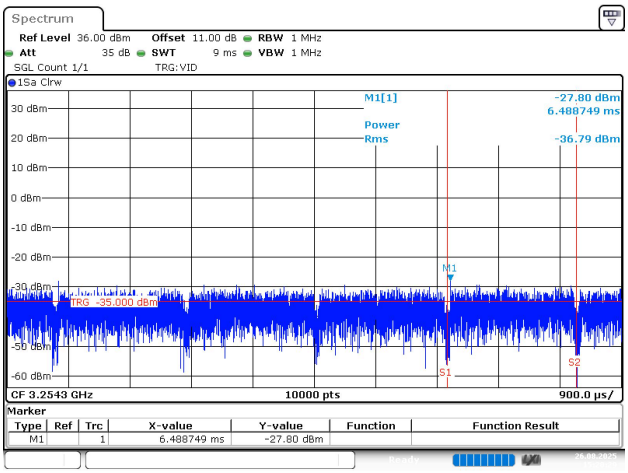
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Date: 26.AUG.2025 15:18:28

802.11b, Middle Channel(2.4965GHz~12.5GHz)



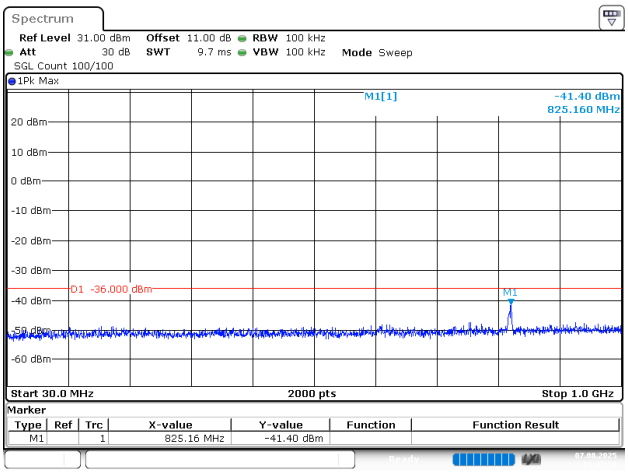
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Date: 26.AUG.2025 15:19:27

802.11b, Middle Channel(2.4965GHz~12.5GHz)



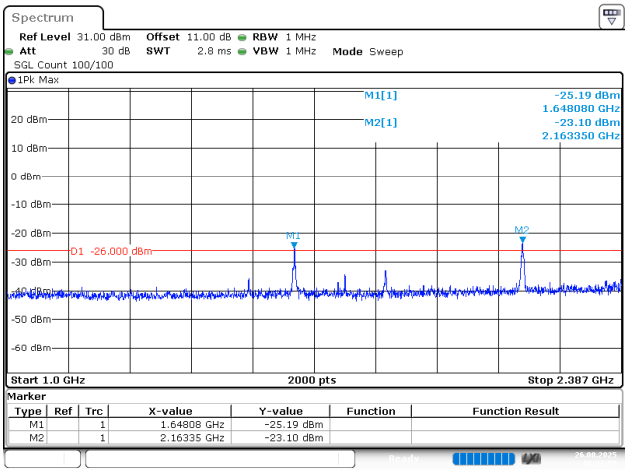
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Date: 26.AUG.2025 15:20:29

802.11b, High Channel(30MHz~1GHz)



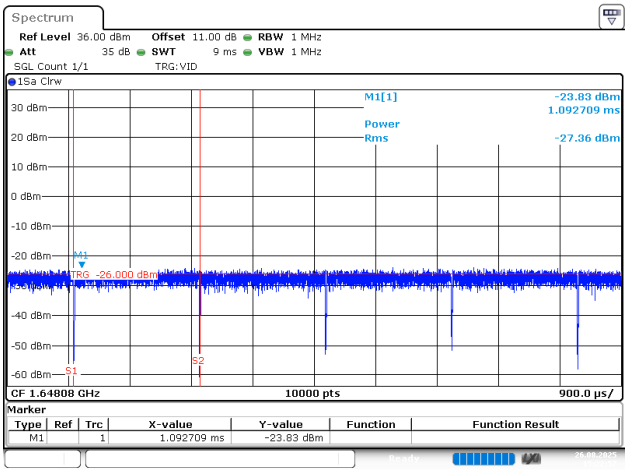
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802.11b, High Channel(1GHz~2.387GHz)



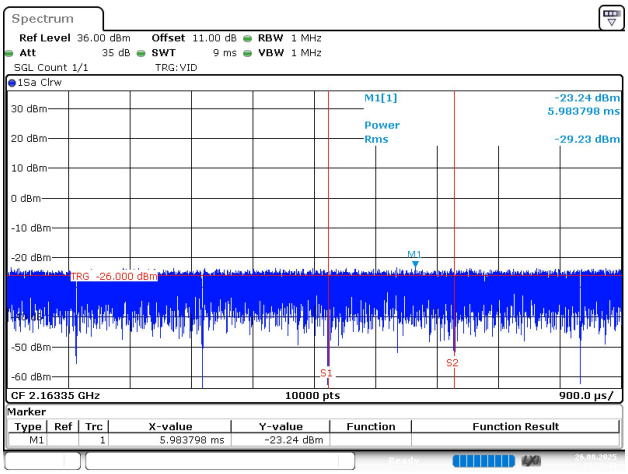
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802.11b, High Channel(1GHz~2.387GHz)



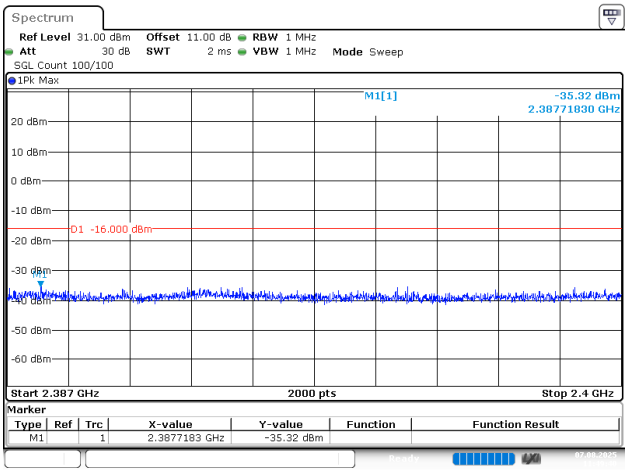
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802.11b, High Channel(1GHz~2.387GHz)



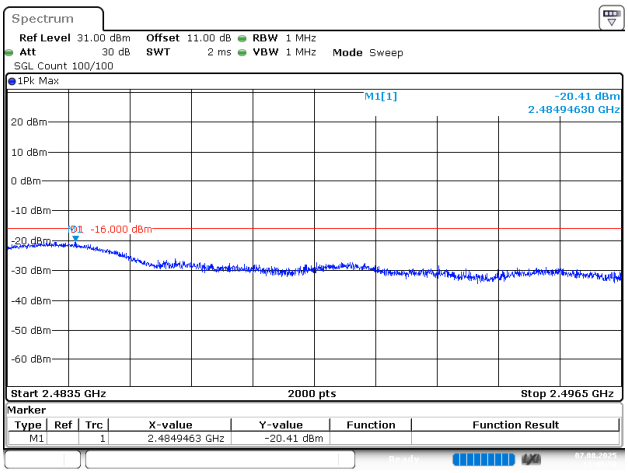
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Date: 26.AUG.2025 15:23:41

802.11b, High Channel(2.387GHz~2.4GHz)



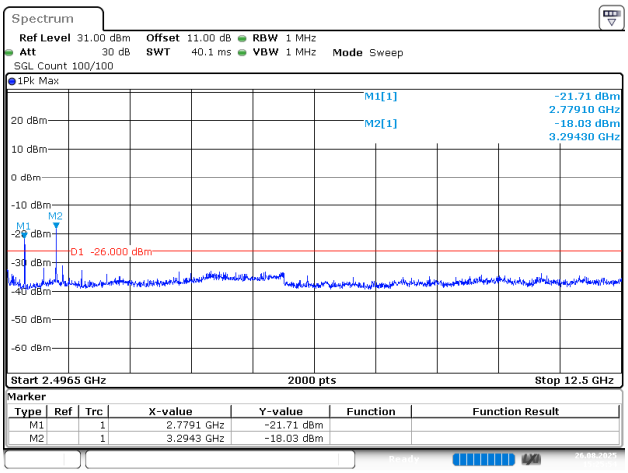
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802.11b, High Channel(2.4835GHz~2.4965GHz)



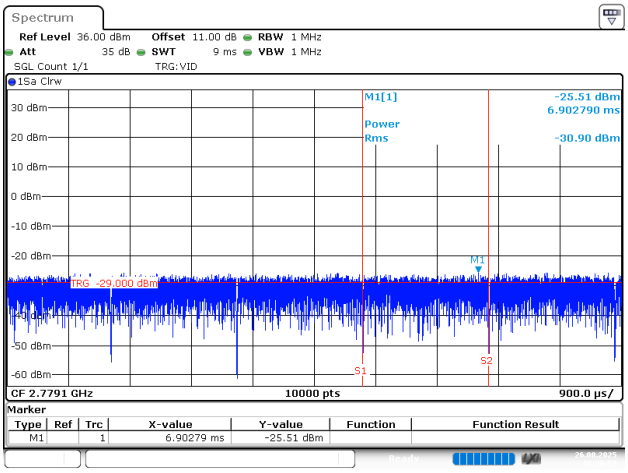
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802.11b, High Channel(2.4965GHz~12.5GHz)



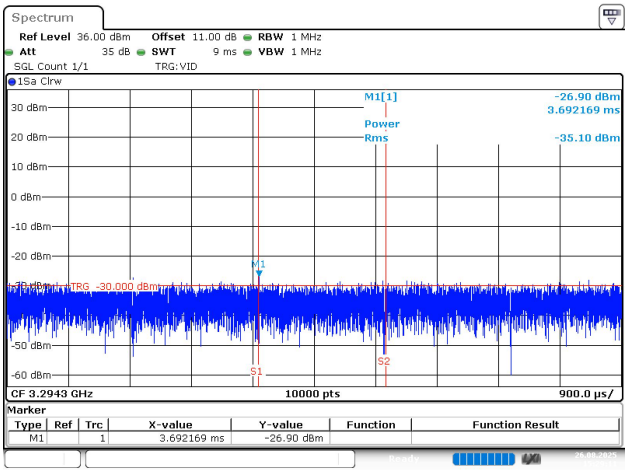
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802.11b, High Channel(2.4965GHz~12.5GHz)



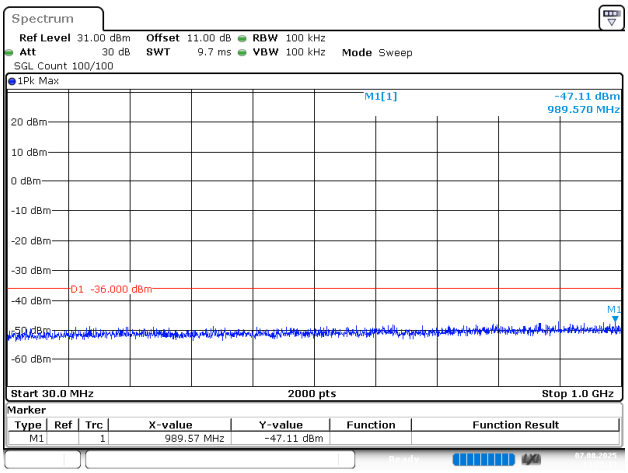
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802.11b, High Channel(2.4965GHz~12.5GHz)



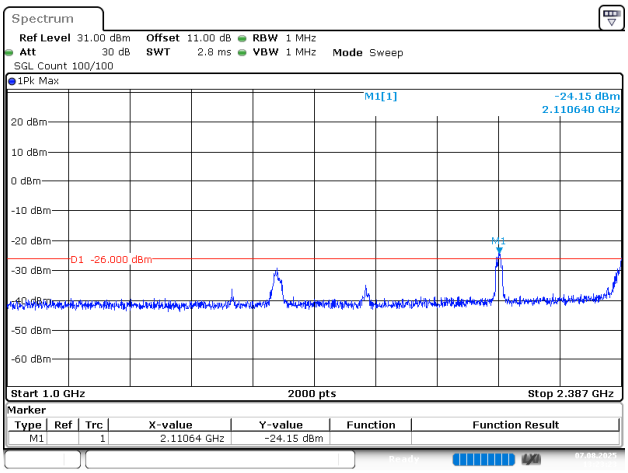
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802.11g, Low Channel(30MHz~1GHz)



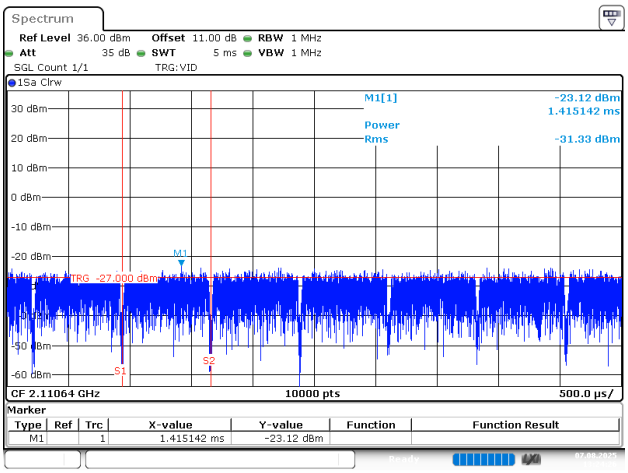
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802.11g, Low Channel(1GHz~2.387GHz)



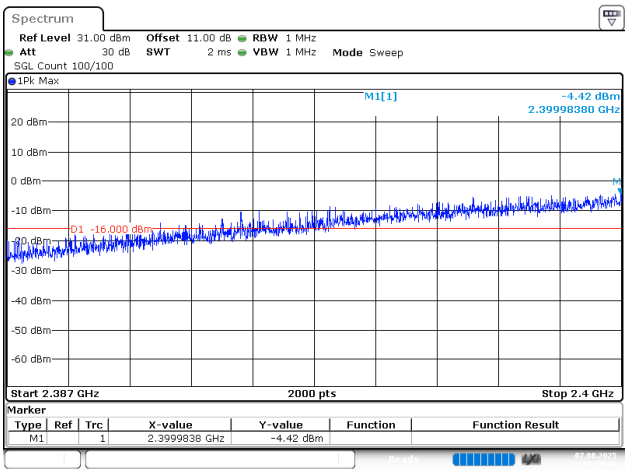
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802.11g, Low Channel(1GHz~2.387GHz)



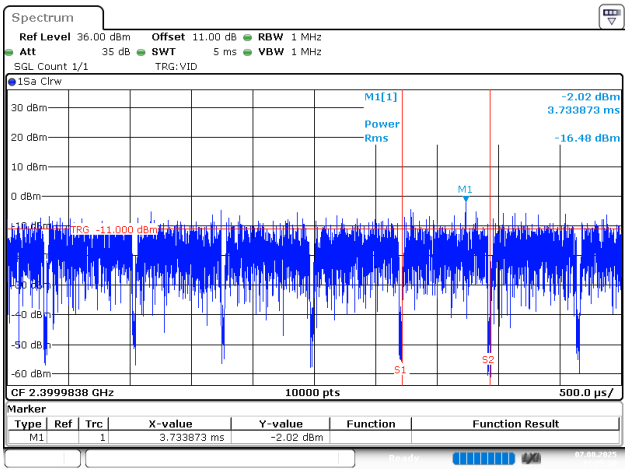
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802.11g, Low Channel(2.387GHz~2.4GHz)



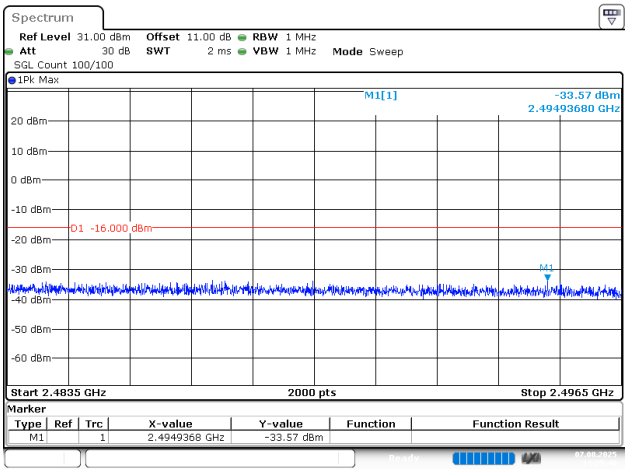
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802.11g, Low Channel(2.387GHz~2.4GHz)



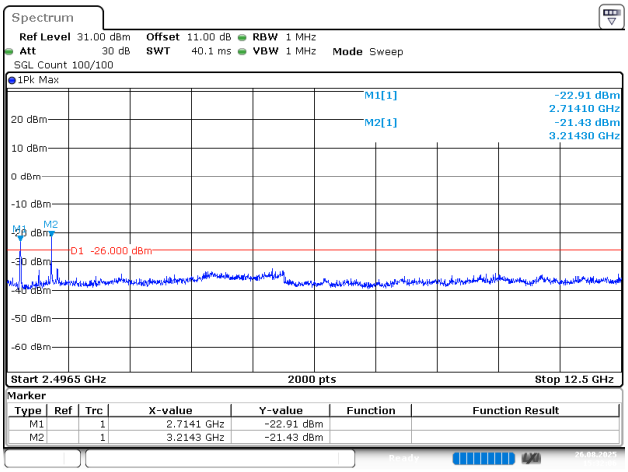
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802.11g, Low Channel(2.4835GHz~2.4965GHz)



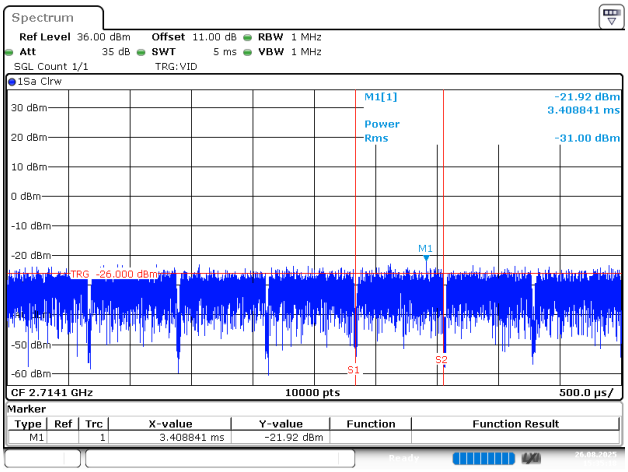
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802.11g, Low Channel(2.4965GHz~12.5GHz)



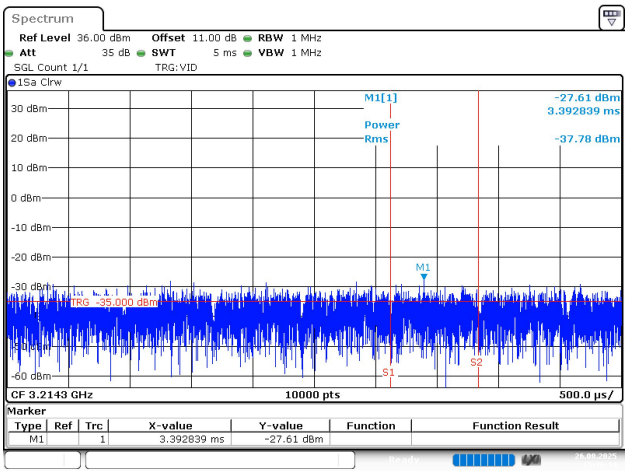
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802.11g, Low Channel(2.4965GHz~12.5GHz)



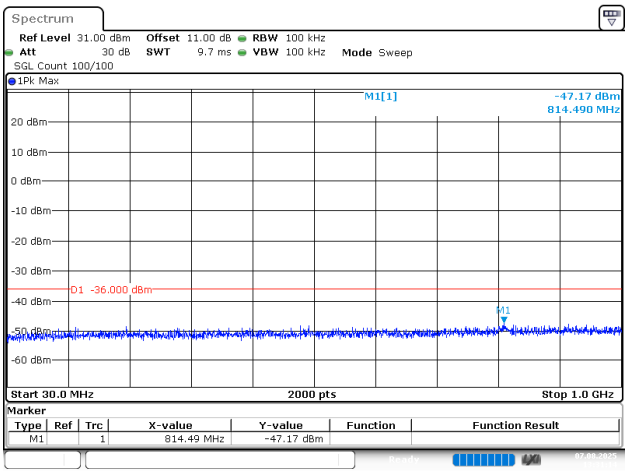
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802.11g, Low Channel(2.4965GHz~12.5GHz)



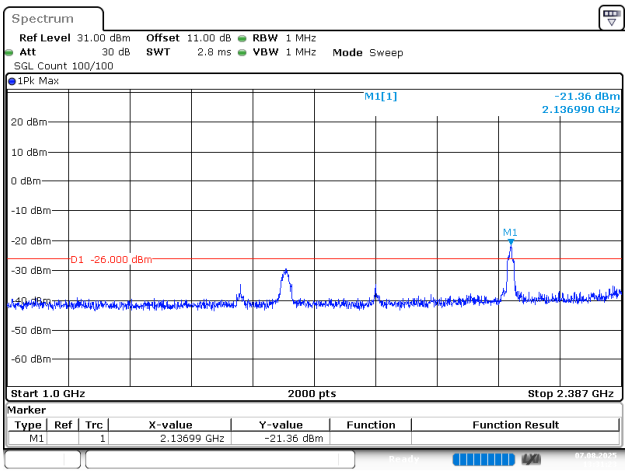
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Date: 26.AUG.2025 15:36:14

802.11g, Middle Channel(30MHz~1GHz)



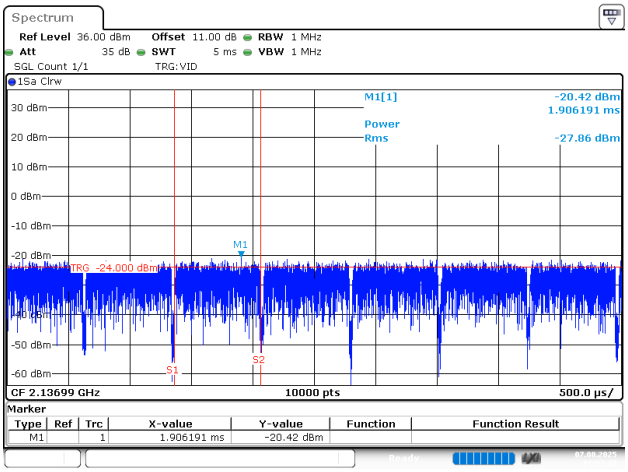
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Date: 7.AUG.2025 13:31:14

802.11g, Middle Channel(1GHz~2.387GHz)



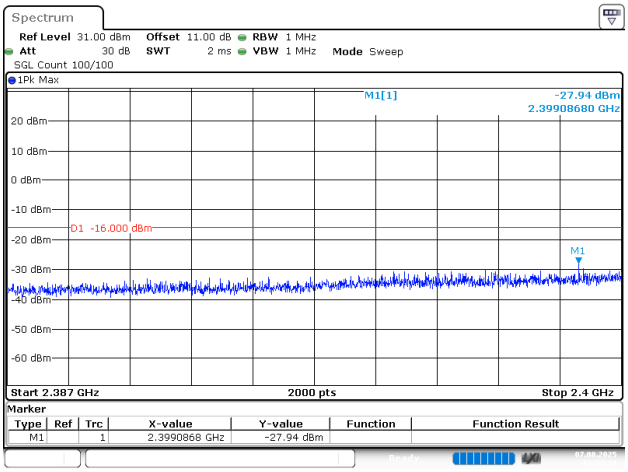
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802.11g, Middle Channel(1GHz~2.387GHz)



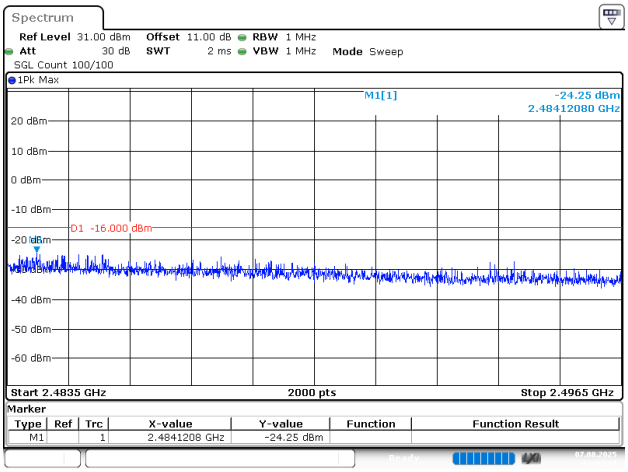
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Date: 7.AUG.2025 13:32:22

802.11g, Middle Channel(2.387GHz~2.4GHz)



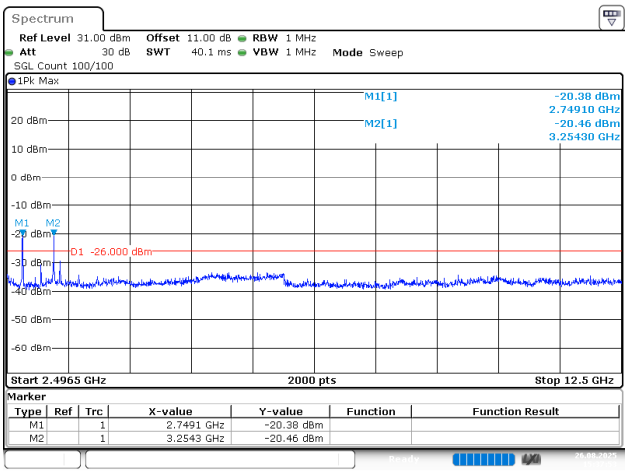
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802.11g, Middle Channel(2.4835GHz~2.4965GHz)



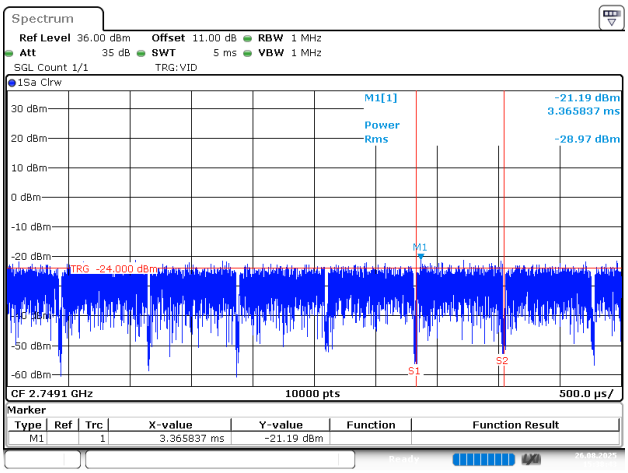
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802.11g, Middle Channel(2.4965GHz~12.5GHz)



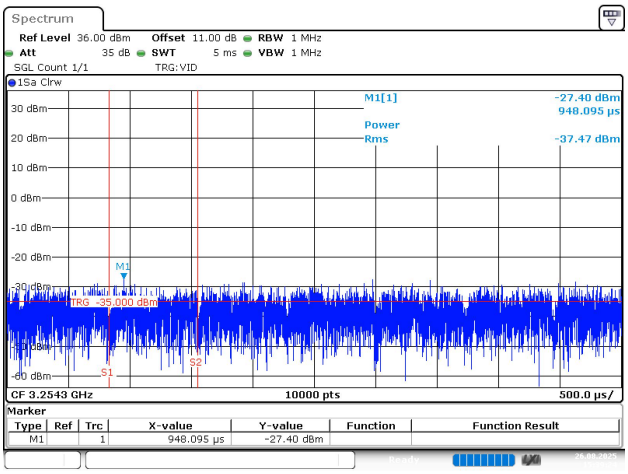
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802.11g, Middle Channel(2.4965GHz~12.5GHz)



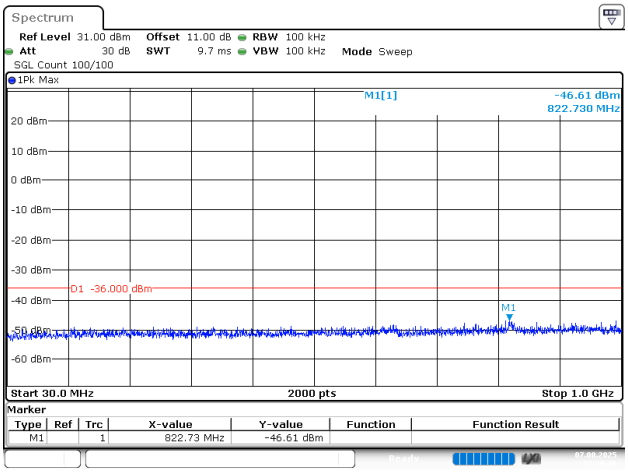
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Date: 26.AUG.2025 15:38:43

802.11g, Middle Channel(2.4965GHz~12.5GHz)



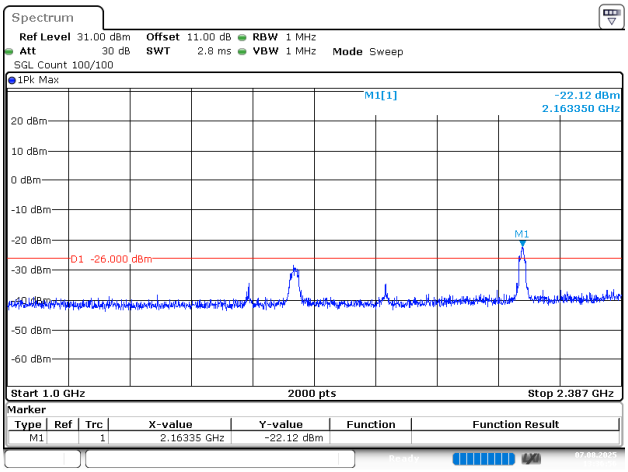
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802.11g, High Channel(30MHz~1GHz)



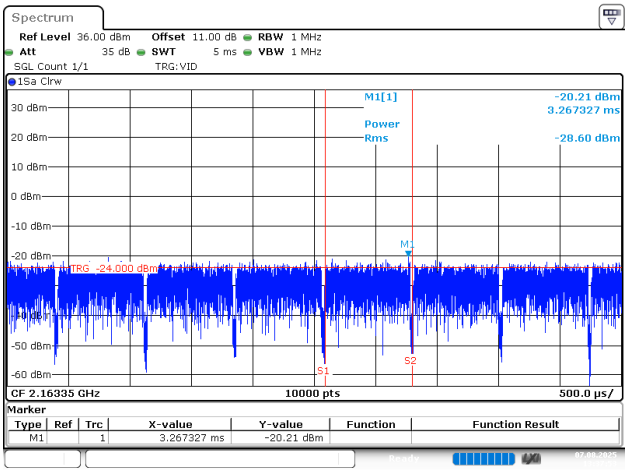
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802.11g, High Channel(1GHz~2.387GHz)



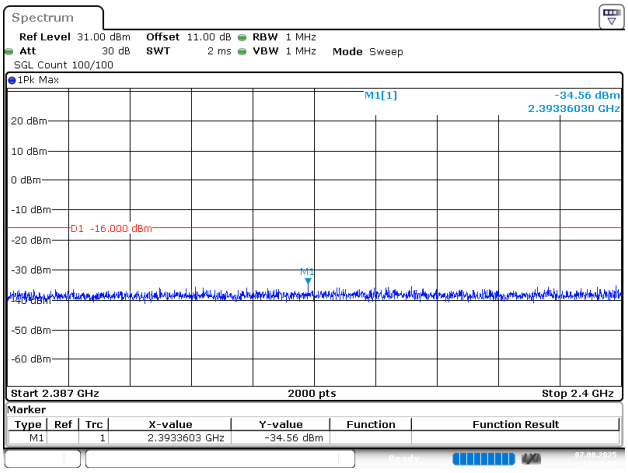
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802.11g, High Channel(1GHz~2.387GHz)



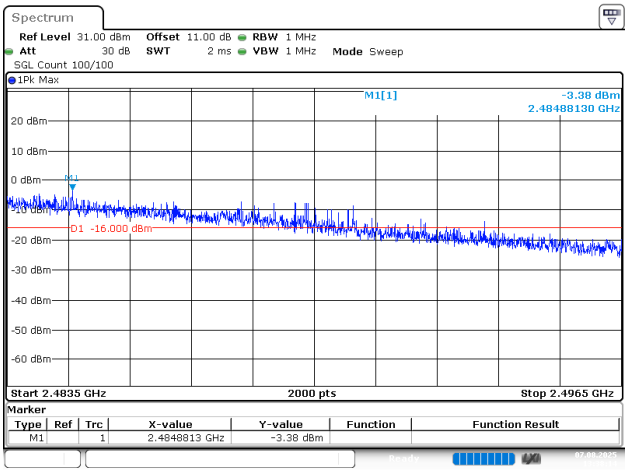
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802.11g, High Channel(2.387GHz~2.4GHz)



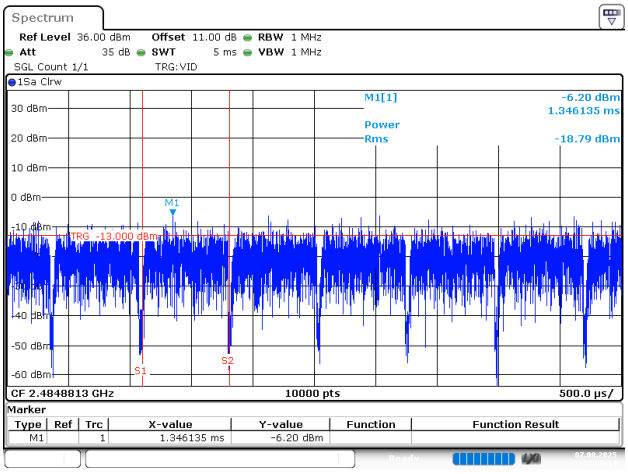
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802.11g, High Channel(2.4835GHz~2.4965GHz)



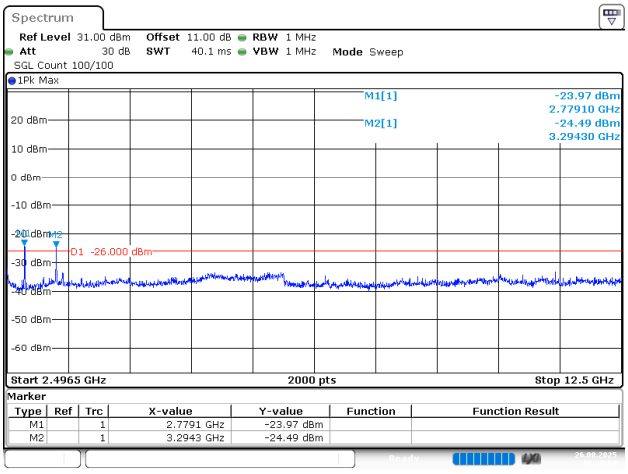
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802.11g, High Channel(2.4835GHz~2.4965GHz)



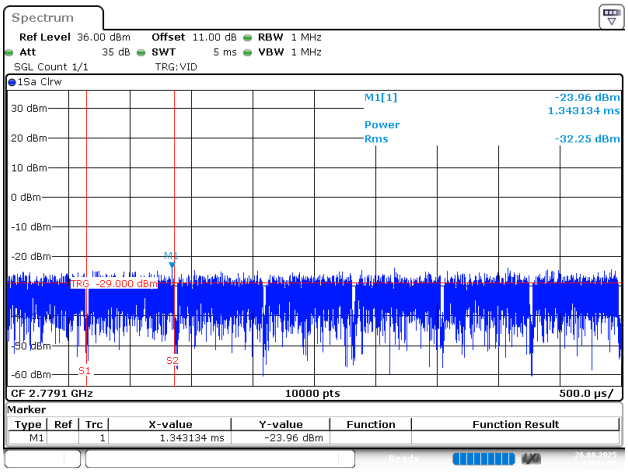
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802.11g, High Channel(2.4965GHz~12.5GHz)



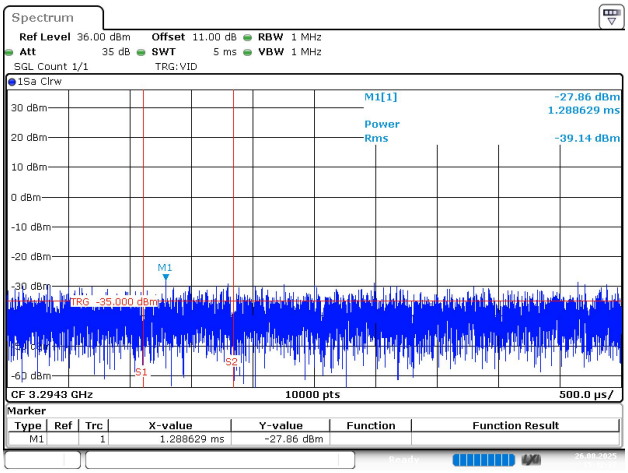
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802.11g, High Channel(2.4965GHz~12.5GHz)



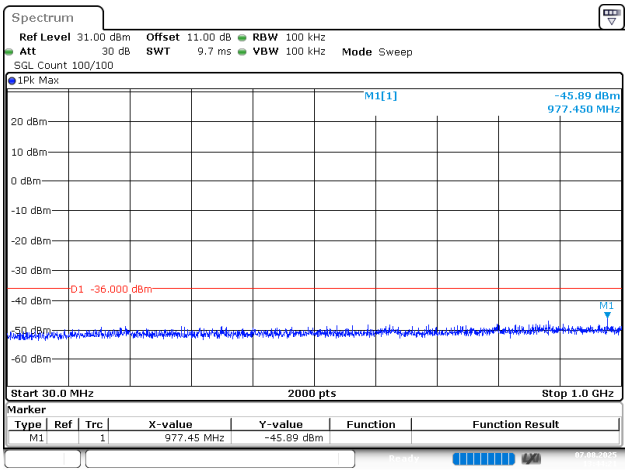
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802.11g, High Channel(2.4965GHz~12.5GHz)



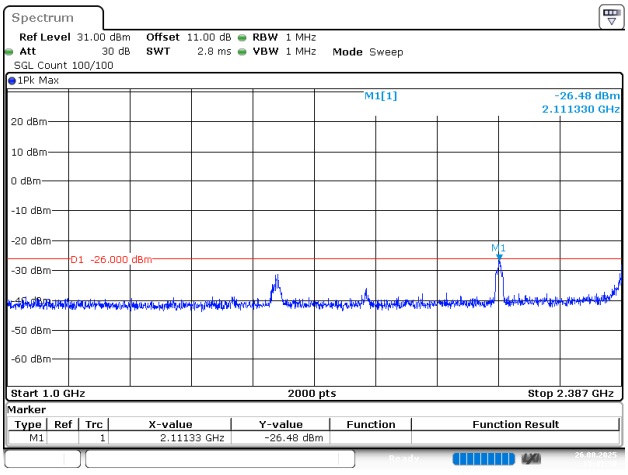
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802.11n20, Low Channel(30MHz~1GHz)



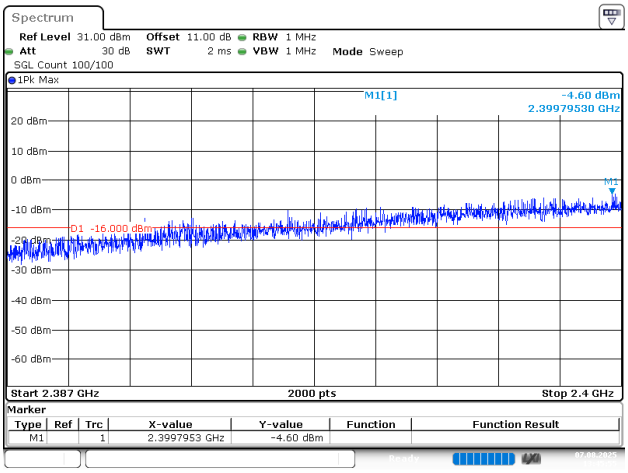
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802.11n20, Low Channel(1GHz~2.387GHz)



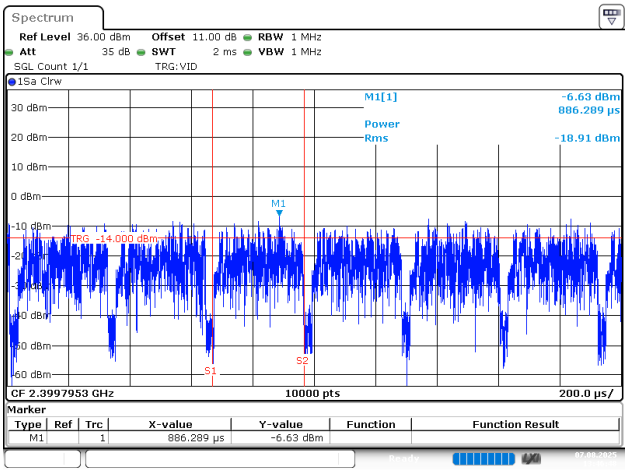
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Date: 26.AUG.2025 15:43:39

802.11n20, Low Channel(2.387GHz~2.4GHz)



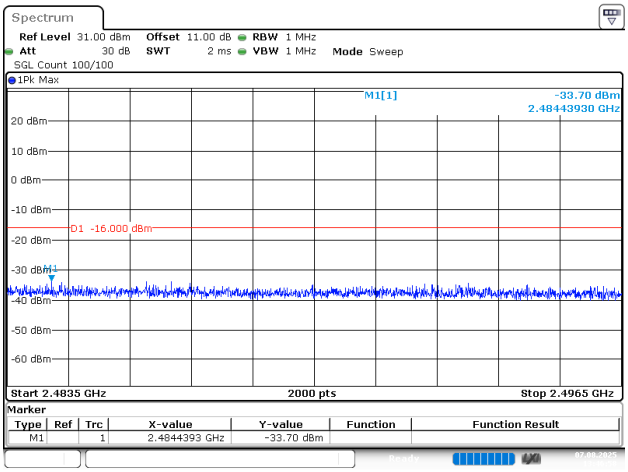
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802.11n20, Low Channel(2.387GHz~2.4GHz)



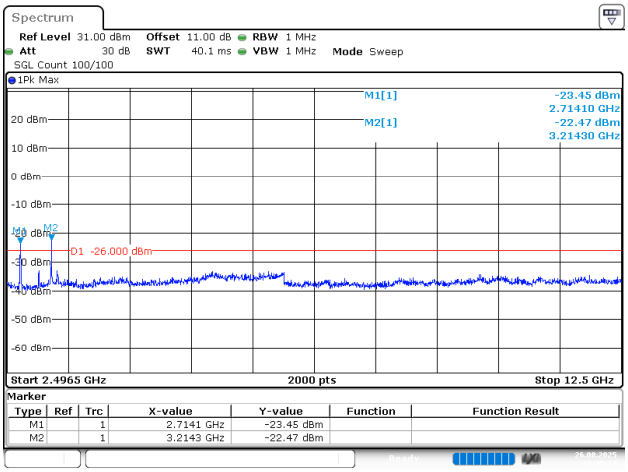
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 13:46:49

802.11n20, Low Channel(2.4835GHz~2.4965GHz)



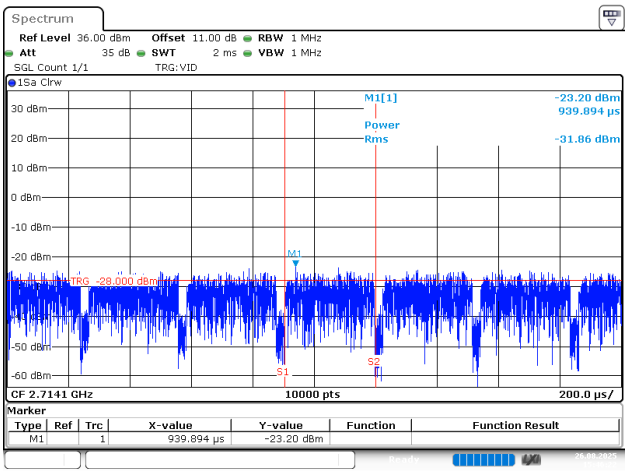
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Date: 7.AUG.2025 13:46:58

802.11n20, Low Channel(2.4965GHz~12.5GHz)



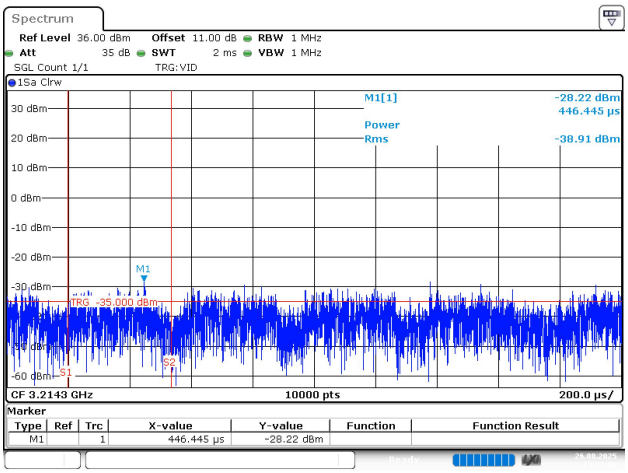
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802.11n20, Low Channel(2.4965GHz~12.5GHz)



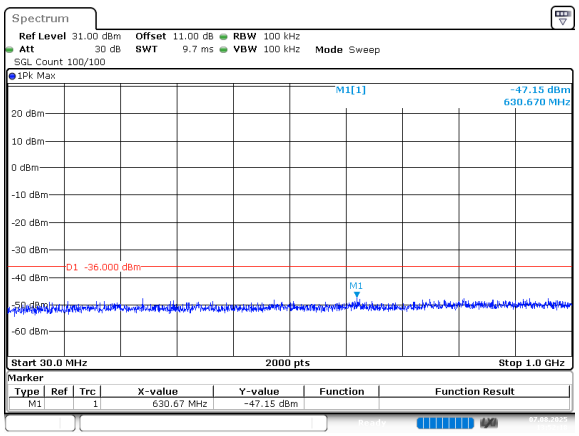
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802.11n20, Low Channel(2.4965GHz~12.5GHz)



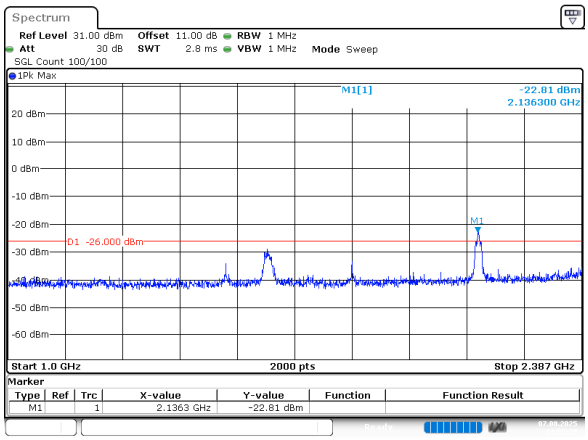
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802.11n20, Middle Channel(30MHz~1GHz)



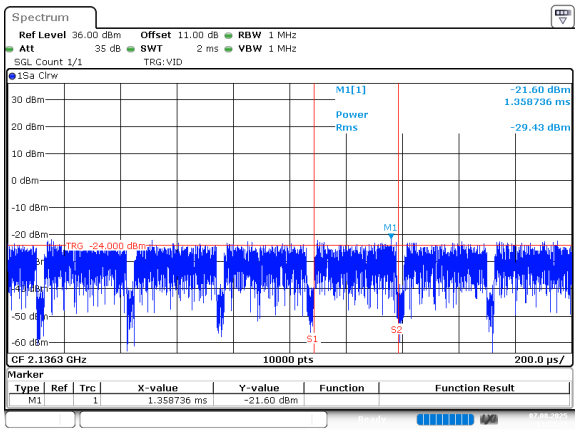
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Date: 7.AUG.2025 13:52:18

802.11n20, Middle Channel(1GHz~2.387GHz)



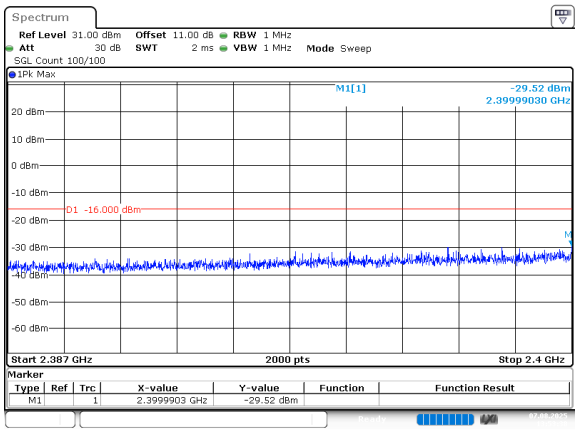
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802.11n20, Middle Channel(1GHz~2.387GHz)



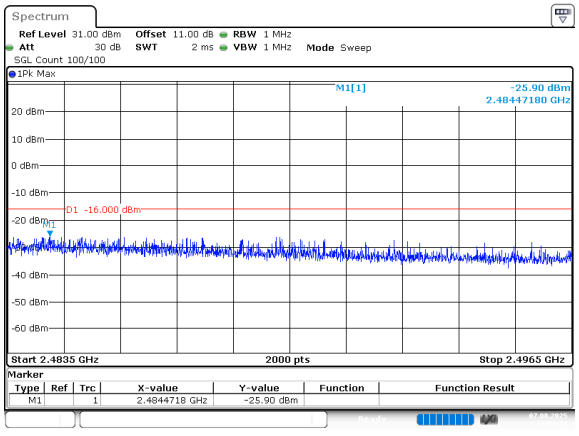
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802.11n20, Middle Channel(2.387GHz~2.4GHz)



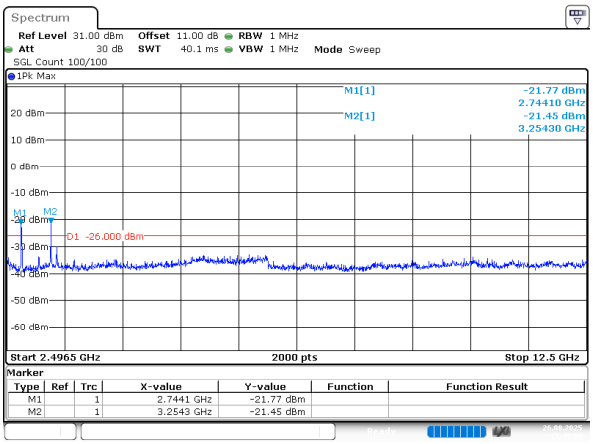
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802.11n20, Middle Channel(2.4835GHz~2.4965GHz)



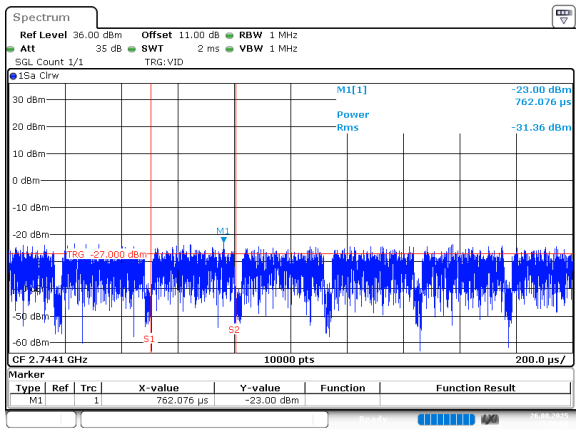
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802.11n20, Middle Channel(2.4965GHz~12.5GHz)



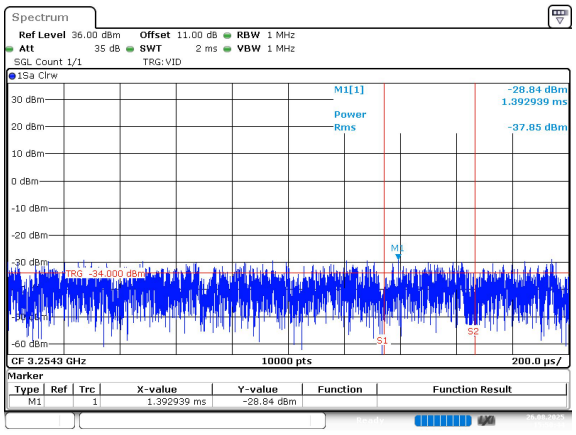
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802.11n20, Middle Channel(2.4965GHz~12.5GHz)



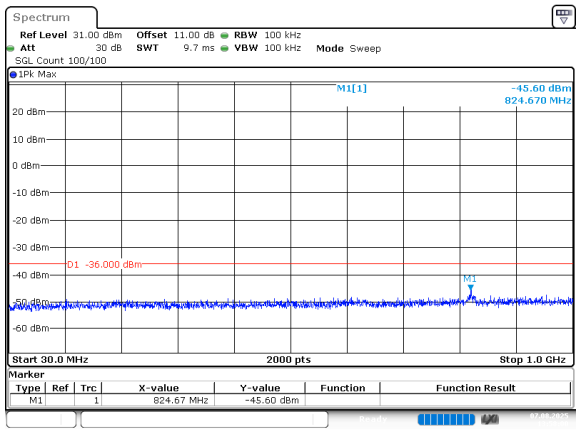
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802.11n20, Middle Channel(2.4965GHz~12.5GHz)



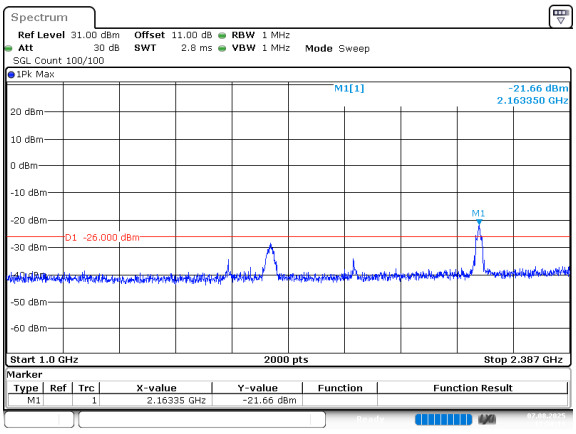
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802.11n20, High Channel(30MHz~1GHz)



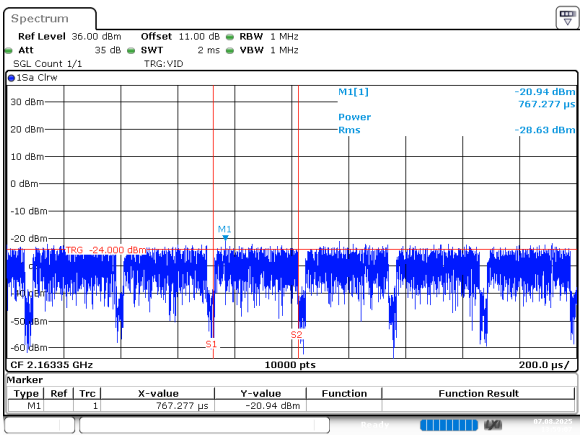
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Date: 7.AUG.2025 13:58:00

802.11n20, High Channel(1GHz~2.387GHz)



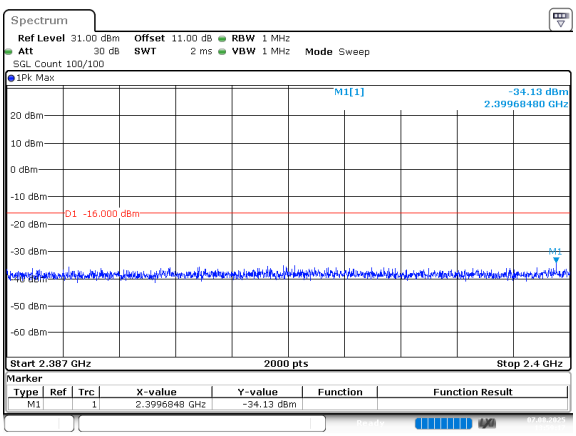
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802.11n20, High Channel(1GHz~2.387GHz)



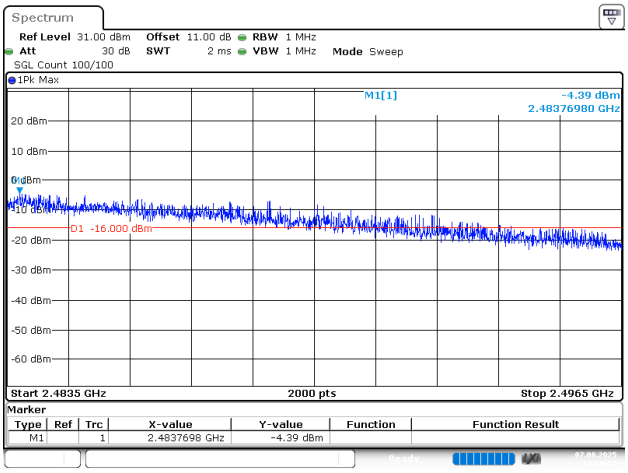
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802.11n20, High Channel(2.387GHz~2.4GHz)



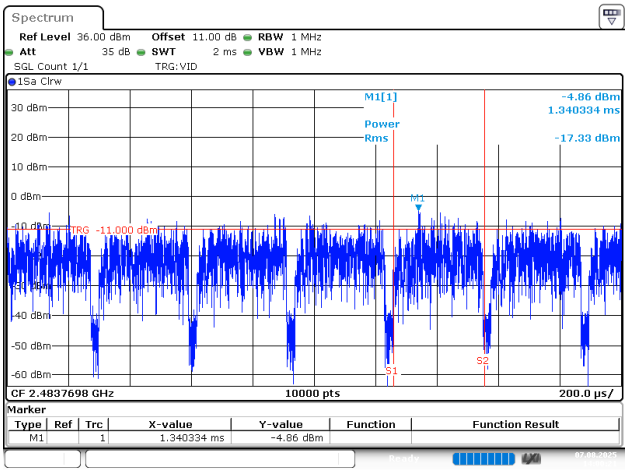
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802.11n20, High Channel(2.4835GHz~2.4965GHz)



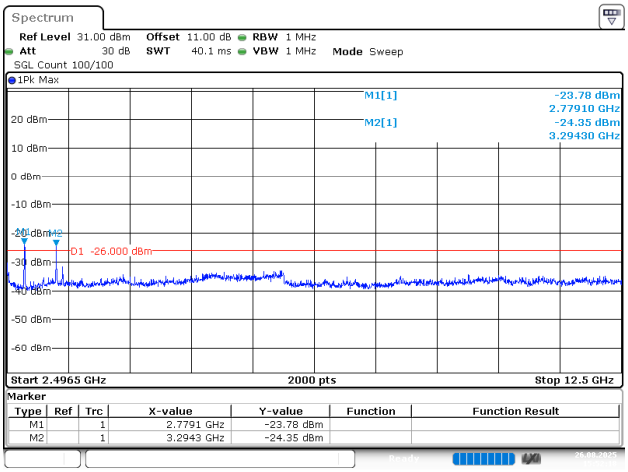
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802.11n20, High Channel(2.4835GHz~2.4965GHz)



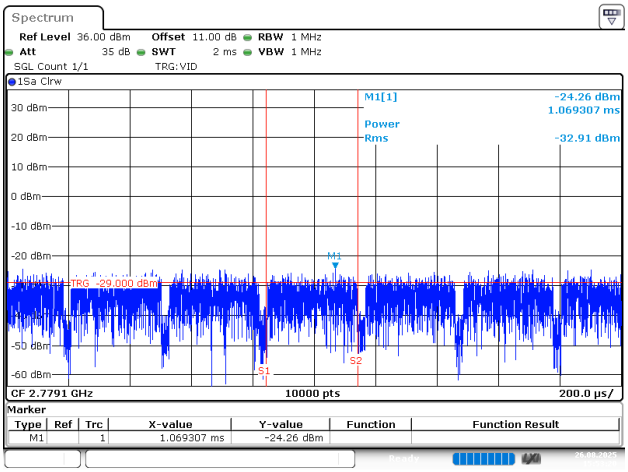
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802.11n20, High Channel(2.4965GHz~12.5GHz)



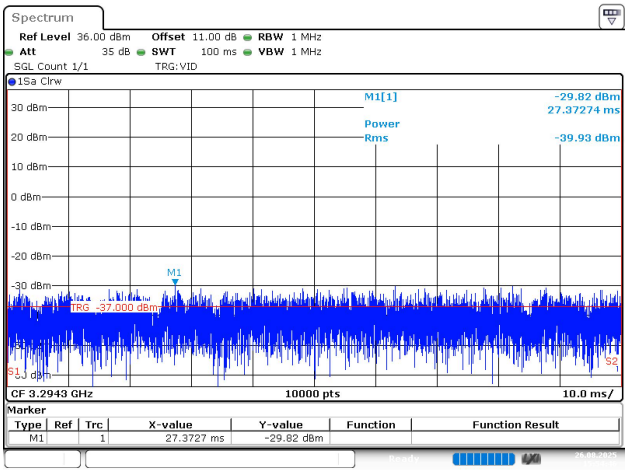
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802.11n20, High Channel(2.4965GHz~12.5GHz)



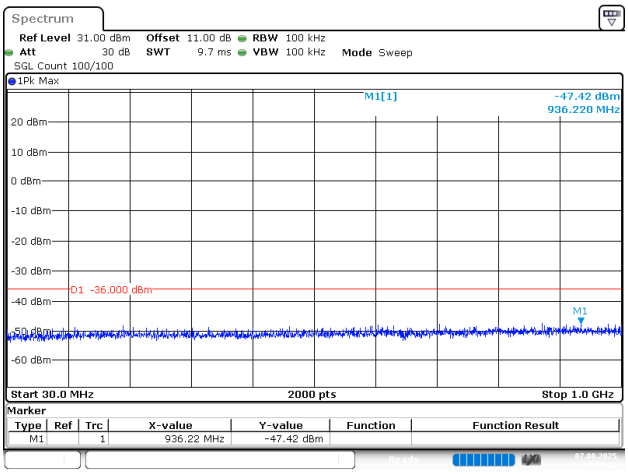
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802.11n20, High Channel(2.4965GHz~12.5GHz)



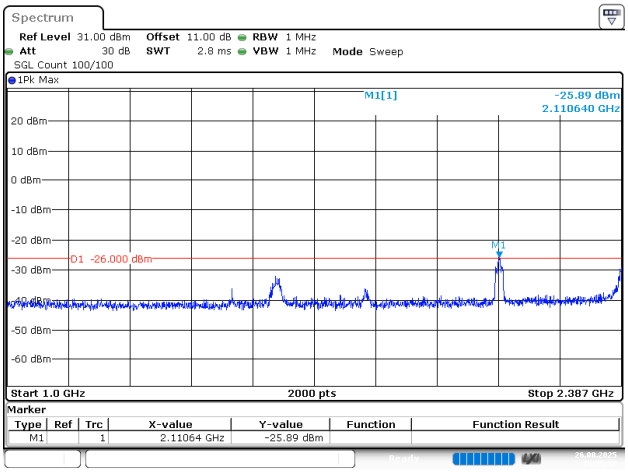
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802.11ax20, Low Channel(30MHz~1GHz)



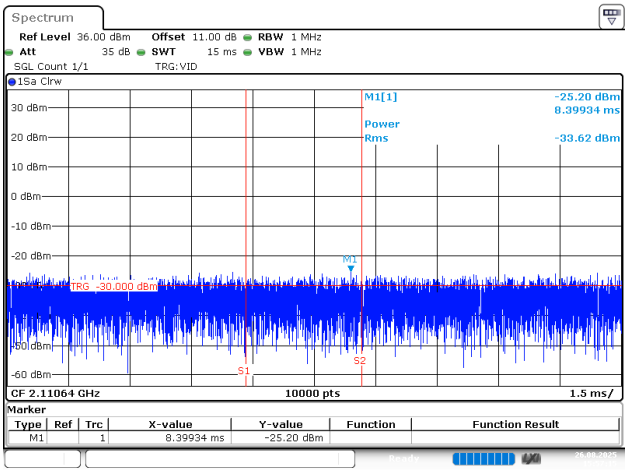
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802.11ax20, Low Channel(1GHz~2.387GHz)



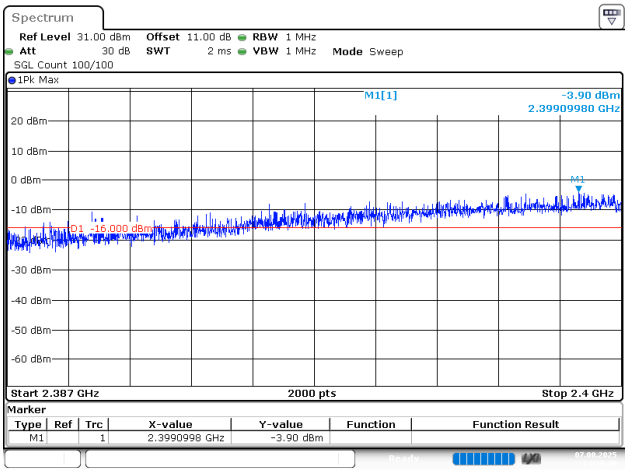
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802.11ax20, Low Channel(1GHz~2.387GHz)



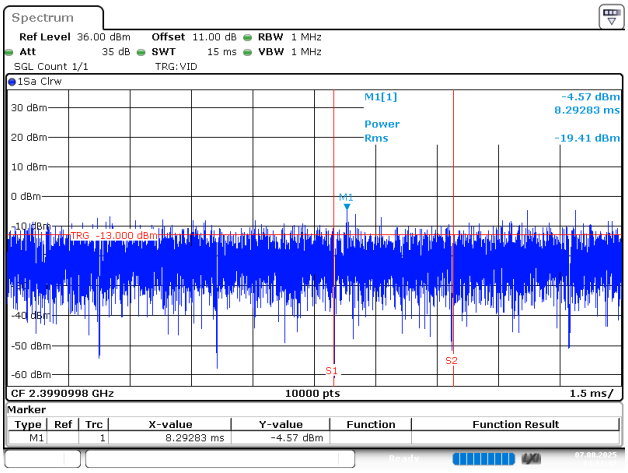
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802.11ax20, Low Channel(2.387GHz~2.4GHz)



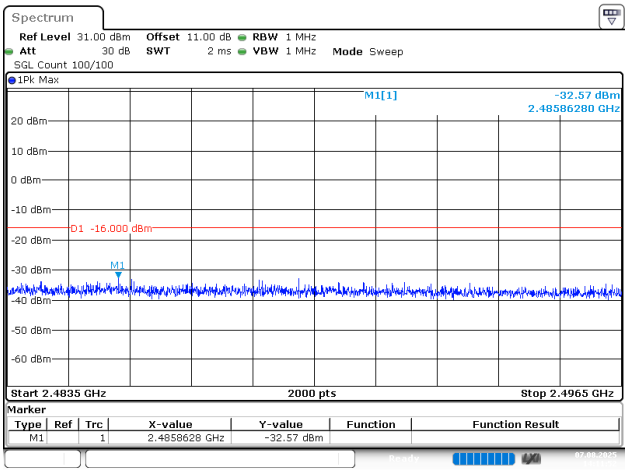
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Date: 7.AUG.2025 14:10:48

802.11ax20, Low Channel(2.387GHz~2.4GHz)



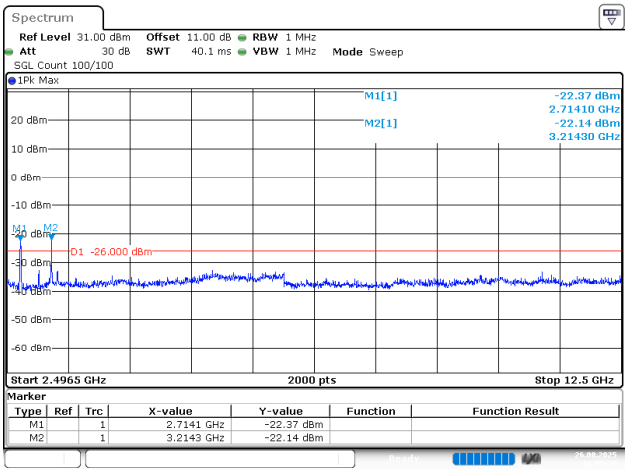
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802.11ax20, Low Channel(2.4835GHz~2.4965GHz)



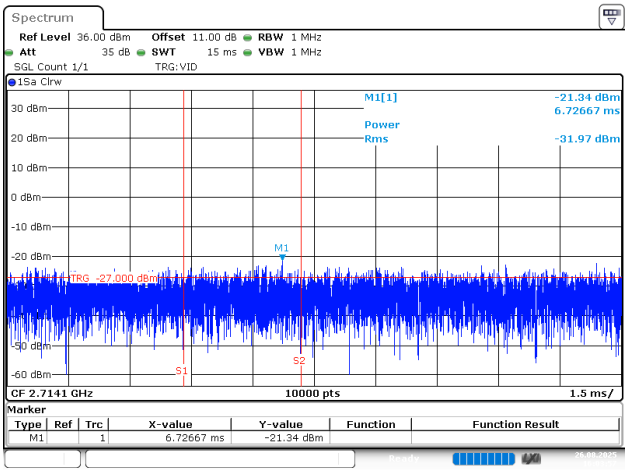
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802.11ax20, Low Channel(2.4965GHz~12.5GHz)



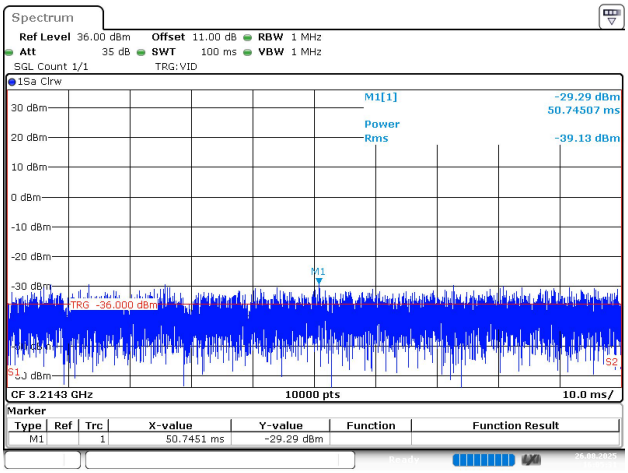
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802.11ax20, Low Channel(2.4965GHz~12.5GHz)



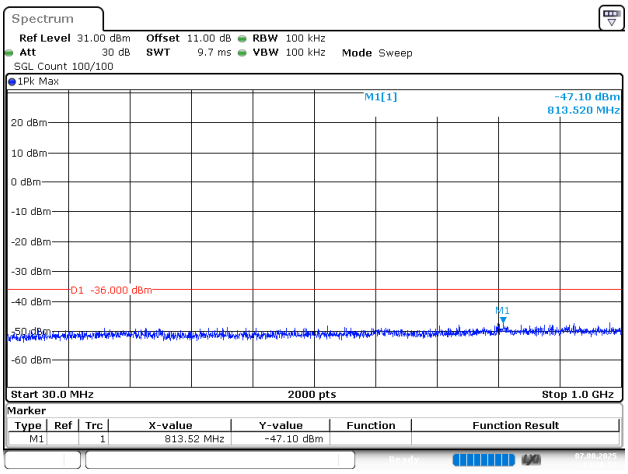
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802.11ax20, Low Channel(2.4965GHz~12.5GHz)



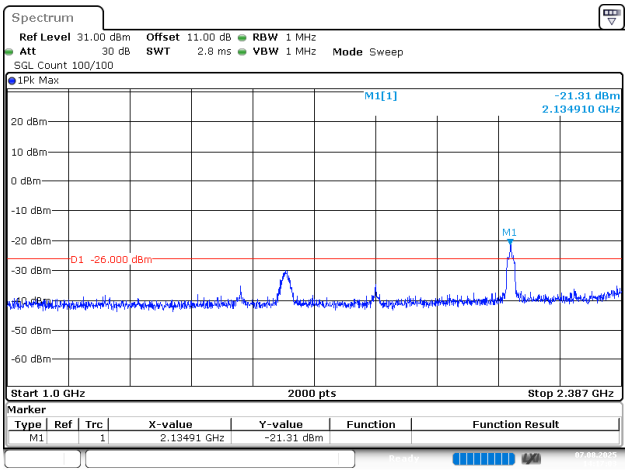
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802.11ax20, Middle Channel(30MHz~1GHz)



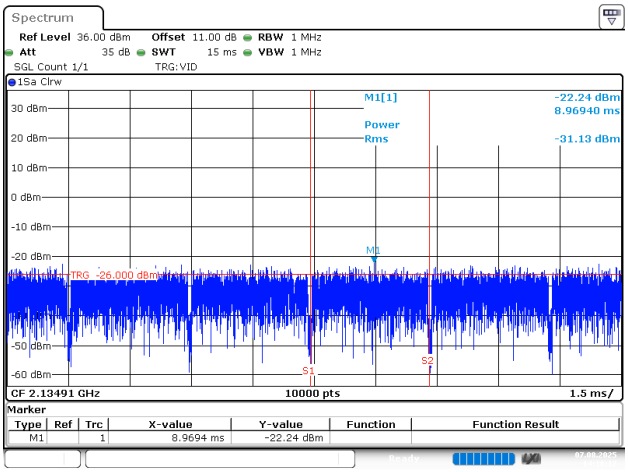
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802.11ax20, Middle Channel(1GHz~2.387GHz)



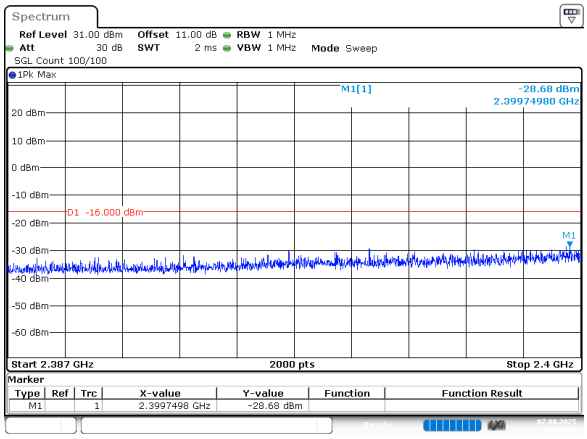
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802.11ax20, Middle Channel(1GHz~2.387GHz)



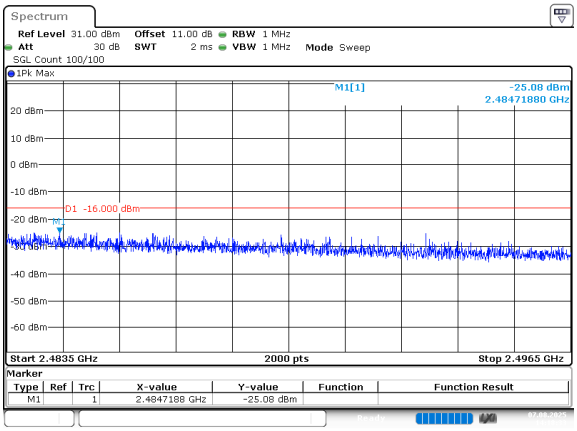
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802.11ax20, Middle Channel(2.387GHz~2.4GHz)



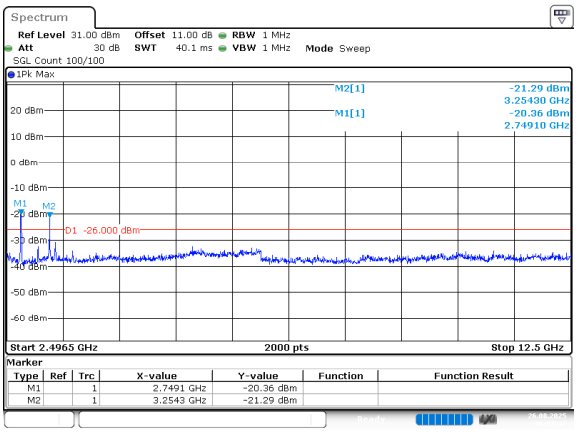
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802.11ax20, Middle Channel(2.4835GHz~2.4965GHz)



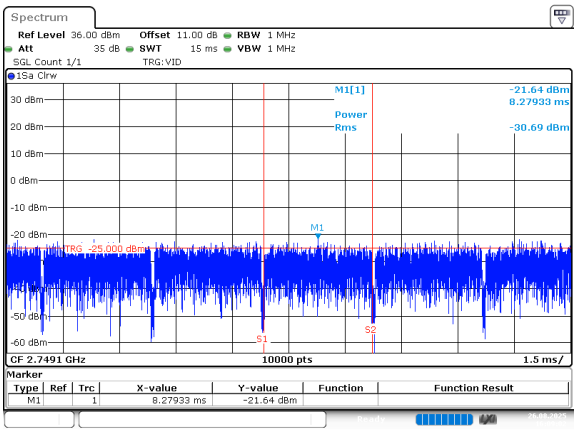
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802.11ax20, Middle Channel(2.4965GHz~12.5GHz)



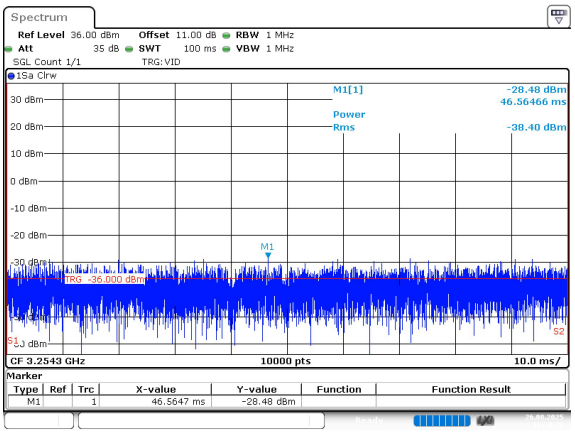
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802.11ax20, Middle Channel(2.4965GHz~12.5GHz)



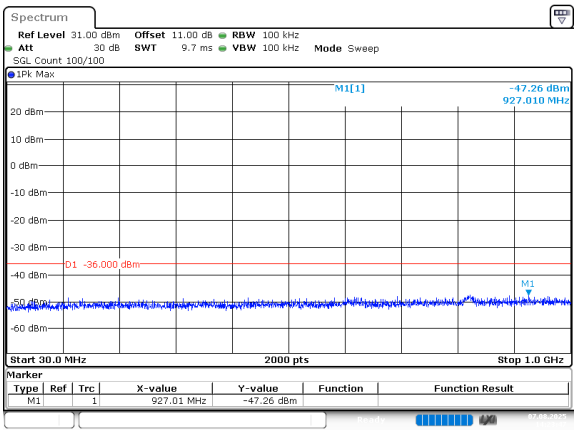
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802.11ax20, Middle Channel(2.4965GHz~12.5GHz)



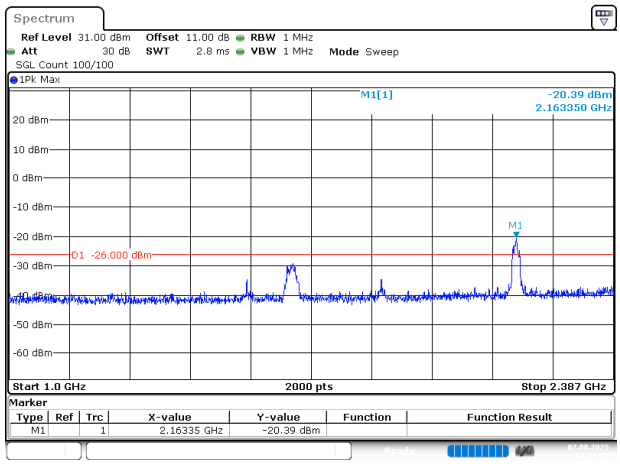
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802.11ax20, High Channel(30MHz~1GHz)



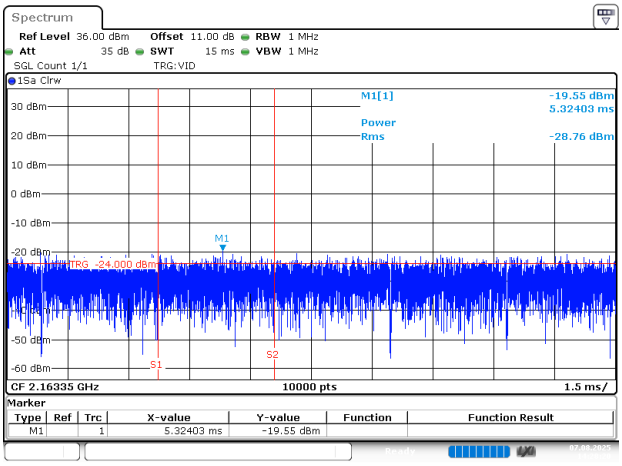
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802.11ax20, High Channel(1GHz~2.387GHz)



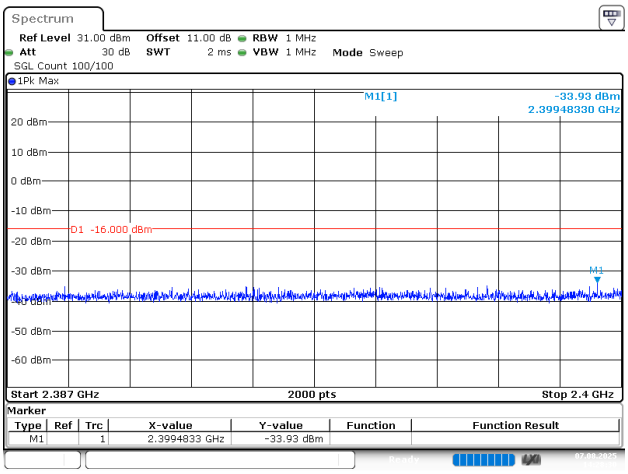
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802.11ax20, High Channel(1GHz~2.387GHz)



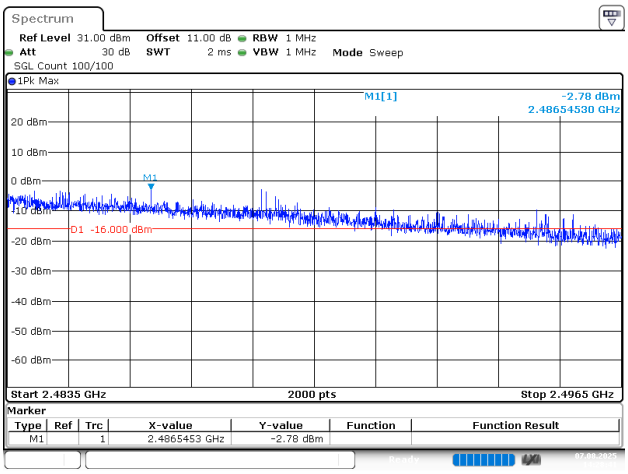
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802.11ax20, High Channel(2.387GHz~2.4GHz)



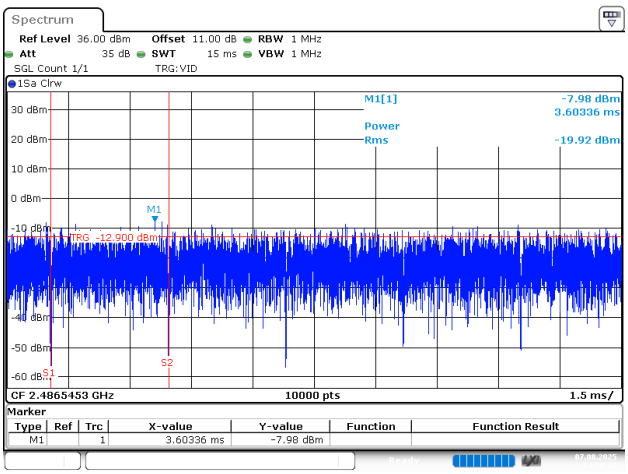
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802.11ax20, High Channel(2.4835GHz~2.4965GHz)



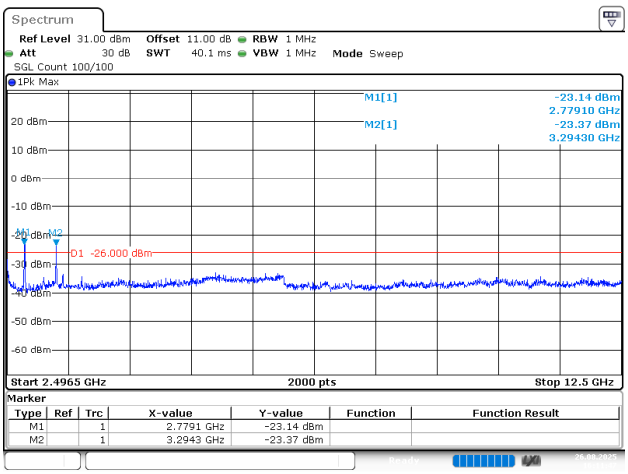
ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 14:28:41

802.11ax20, High Channel(2.4835GHz~2.4965GHz)



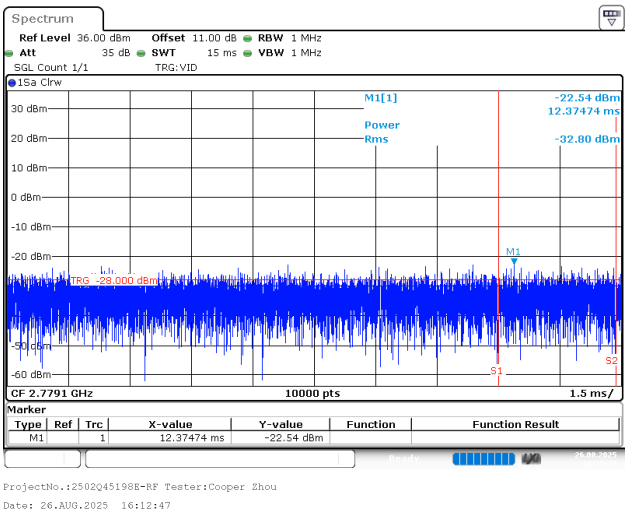
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Date: 7.AUG.2025 14:29:38

802.11ax20, High Channel(2.4965GHz~12.5GHz)

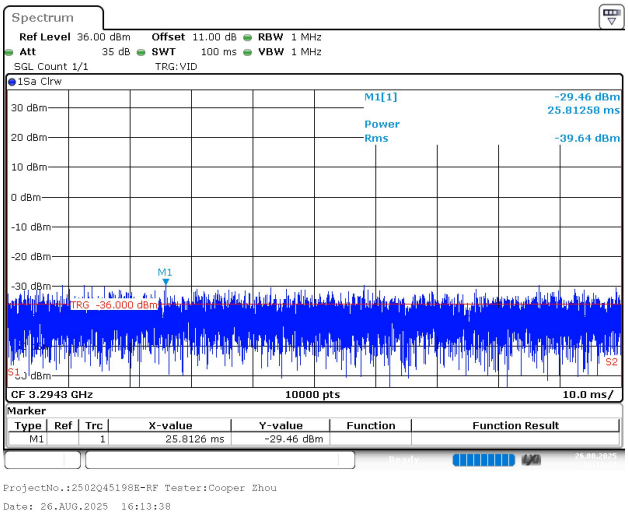


ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 26.AUG.2025 16:11:48

802.11ax20, High Channel(2.4965GHz~12.5GHz)



802.11ax20, High Channel(2.4965GHz~12.5GHz)



Note:

1. For those unwanted emissions which exceeded the limits in the pre-scan measurements, all of them have already been accurately measured and which all were passed, but only the worst case was showed in report.

2. Note: Offset = Coaxial Attenuator (10dB) + Cable Loss (1dB)

Antenna Output Power and Output Power Tolerance

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9	**Relative Humidity: (%)**	72	**ATM Pressure: (kPa)**	99.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15	BACL Metrology	C
R&S	Spectrum Analyzer	FSP 38	100478	2024/09/05	2025/09/04	BACL Metrology	C
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/02/28	2026/02/27	BACL(DG)	D
Anritsu	Microwave Peak Power Sensor	MA24418A	12618	2025/06/11	2026/06/10	BACL Metrology	C
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/06/13	2026/06/12	BACL(DG)	D
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A

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

Note:

A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).

B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).

C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Test Condition: NV

Mode	Antenna gain (dBi)	Declared power (mW/MHz)
802.11b	3.3	7.4
802.11g	3.3	5.0
802.11n20	3.3	4.5
802.11ax20	3.3	4.2

Mode	Channel	Antenna output power (dBm/MHz)	Antenna output power(mW/MHz)		Antenna output tolerance(%)		EIRP (dBm/MHz)		Verdict
			Result	Limit	Result	Limit	Result	Limit	
802.11b	Low	7.56	5.702	≤ 10	-22.95	-80~+20	10.86	≤ 12.14	Pass
	Middle	8.69	7.396	≤ 10	-0.05	-80~+20	11.99	≤ 12.14	Pass
	High	8.66	7.345	≤ 10	-0.74	-80~+20	11.96	≤ 12.14	Pass
802.11g	Low	6.37	4.335	≤ 10	-13.30	-80~+20	9.67	≤ 12.14	Pass
	Middle	6.93	4.932	≤ 10	-1.36	-80~+20	10.23	≤ 12.14	Pass
	High	6.38	4.345	≤ 10	-13.10	-80~+20	9.68	≤ 12.14	Pass
802.11n20	Low	5.64	3.664	≤ 10	-18.58	-80~+20	8.94	≤ 12.14	Pass
	Middle	6.52	4.487	≤ 10	-0.29	-80~+20	9.82	≤ 12.14	Pass
	High	5.98	3.963	≤ 10	-11.93	-80~+20	9.28	≤ 12.14	Pass
802.11ax20	Low	5.33	3.412	≤ 10	-18.76	-80~+20	8.63	≤ 12.14	Pass
	Middle	6.17	4.140	≤ 10	-1.43	-80~+20	9.47	≤ 12.14	Pass
	High	5.52	3.565	≤ 10	-15.12	-80~+20	8.82	≤ 12.14	Pass

Note:
Antenna output power(mW/MHz)= 10^[Antenna output power(dBm/MHz) / 10]
Antenna output power tolerance(%) = (Antenna output power - Declared power) / Declared power * 100
EIRP(dBm/MHz) = Antenna output power(dBm/MHz) + Antenna gain.

Receiver Spurious Emission and Unwanted Emission Intensity

Test Information:

Serial No.:	2YVE-1	**Test Date:**	2025/08/07
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Cooper Zhou	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25.9	**Relative Humidity: (%)**	72	**ATM Pressure: (kPa)**	99.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	Calibration Agency	Calibration Method
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15	BACL Metrology	C
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04	BACL Metrology	C
Mini-Circuits	Coaxial DC Block	BLK-18-S+	15542	2025/02/28	2026/02/27	BACL(DG)	D
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/06/13	2026/06/12	BACL(DG)	D
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A	N/A	N/A

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

Note:

A. Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).

B. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).

C. Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

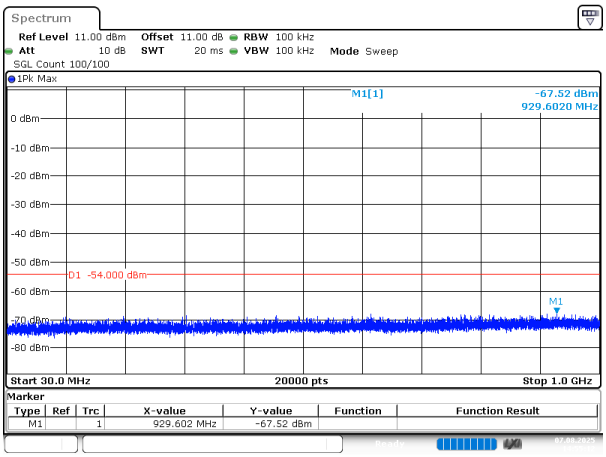
D. Calibration conducted by using measuring instruments and other equipment which shall have been given any of calibration, etc. listed above from a) to c).

Test Condition: NV

Mode	Channel	Test Band (RBW)	Frequency Range		Max.Emission Located(MHz)	Result (dBm)	Result (nW)	Limit (nW)	Verdict
			Start (MHz)	Stop (MHz)					
802.11b	Low	Band I (100kHz)	30	1000	929.602	-67.52	0.177	4	Pass
		Band II (1MHz)	1000	12500	6973.39	-52.60	5.495	20	Pass
	Middle	Band I (100kHz)	30	1000	905.595	-65.99	0.252	4	Pass
		Band II (1MHz)	1000	12500	6957.29	-52.52	5.598	20	Pass
	High	Band I (100kHz)	30	1000	676.772	-67.50	0.178	4	Pass
		Band II (1MHz)	1000	12500	6809.51	-52.63	5.458	20	Pass
802.11g	Low	Band I (100kHz)	30	1000	862.284	-67.45	0.180	4	Pass
		Band II (1MHz)	1000	12500	5830.29	-53.07	4.932	20	Pass
	Middle	Band I (100kHz)	30	1000	998.278	-67.13	0.194	4	Pass
		Band II (1MHz)	1000	12500	5896.99	-51.84	6.546	20	Pass
	High	Band I (100kHz)	30	1000	724.302	-67.40	0.182	4	Pass
		Band II (1MHz)	1000	12500	6083.29	-53.48	4.487	20	Pass
802.11n20	Low	Band I (100kHz)	30	1000	883.236	-67.56	0.175	4	Pass
		Band II (1MHz)	1000	12500	6887.71	-52.98	5.035	20	Pass
	Middle	Band I (100kHz)	30	1000	938.187	-67.59	0.174	4	Pass
		Band II (1MHz)	1000	12500	6799.16	-53.43	4.539	20	Pass
	High	Band I (100kHz)	30	1000	947.353	-67.19	0.191	4	Pass
		Band II (1MHz)	1000	12500	6082.71	-53.43	4.539	20	Pass
802.11ax20	Low	Band I (100kHz)	30	1000	579.19	-68.05	0.157	4	Pass
		Band II (1MHz)	1000	12500	5778.54	-53.29	4.688	20	Pass
	Middle	Band I (100kHz)	30	1000	855.543	-66.84	0.207	4	Pass
		Band II (1MHz)	1000	12500	5802.69	-53.01	5.000	20	Pass
	High	Band I (100kHz)	30	1000	963.989	-66.89	0.205	4	Pass
		Band II (1MHz)	1000	12500	6829.06	-53.51	4.457	20	Pass

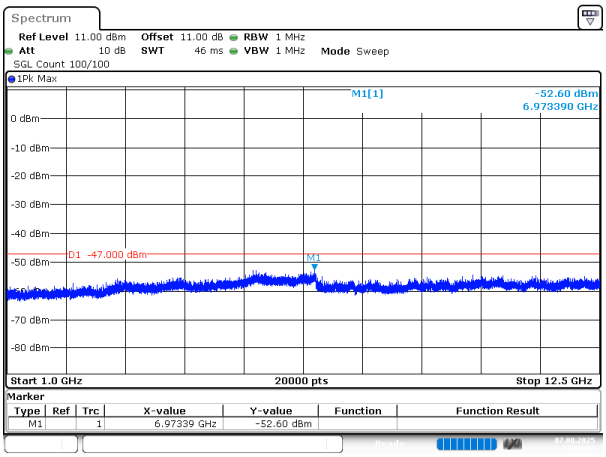
Test Condition: NV

802.11b, Low Channel(30MHz~1GHz)



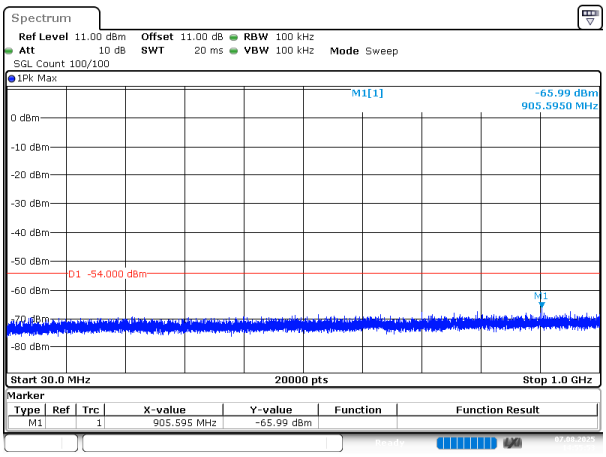
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802.11b, Low Channel(1GHz~12.5GHz)



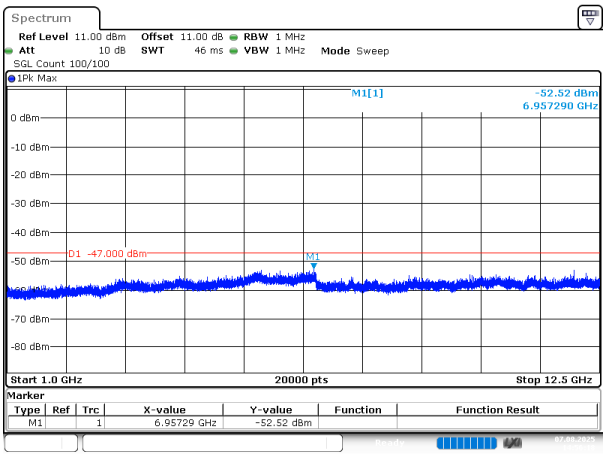
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802.11b, Middle Channel(30MHz~1GHz)



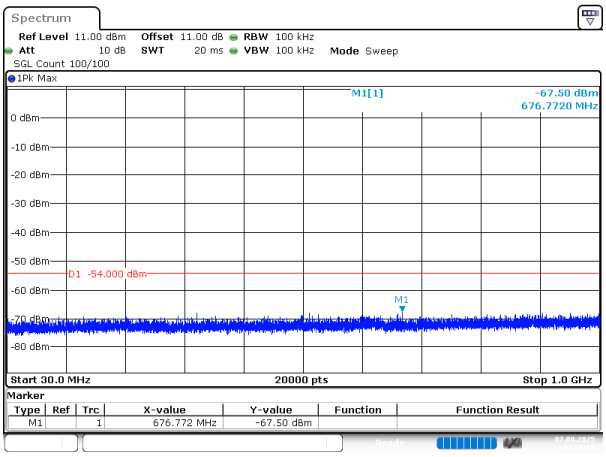
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802.11b, Middle Channel(1GHz~12.5GHz)



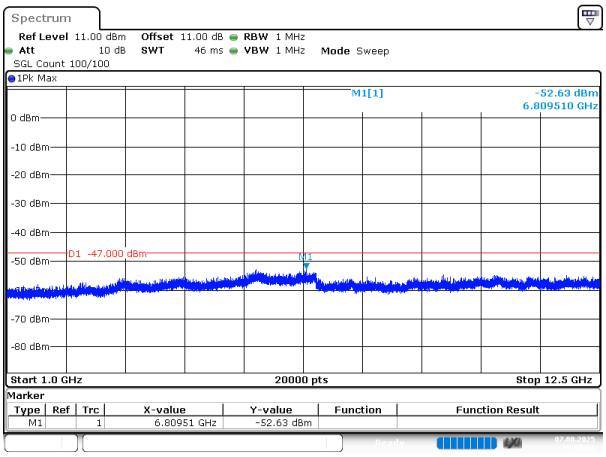
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802.11b, High Channel(30MHz~1GHz)



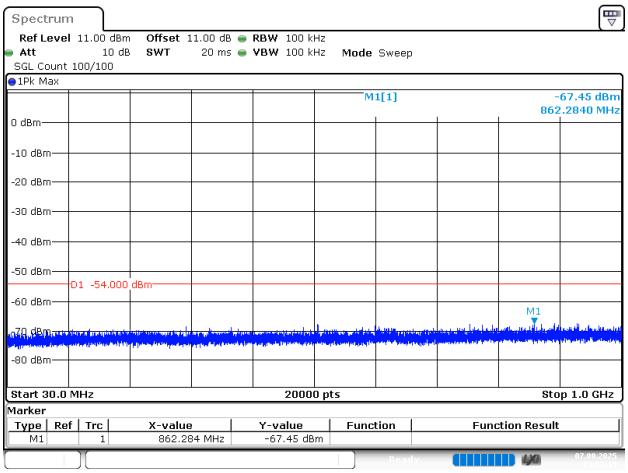
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802.11b, High Channel(1GHz~12.5GHz)



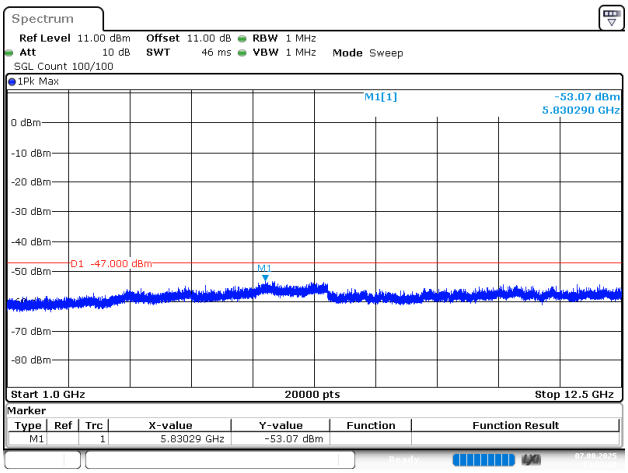
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802.11g, Low Channel(30MHz~1GHz)



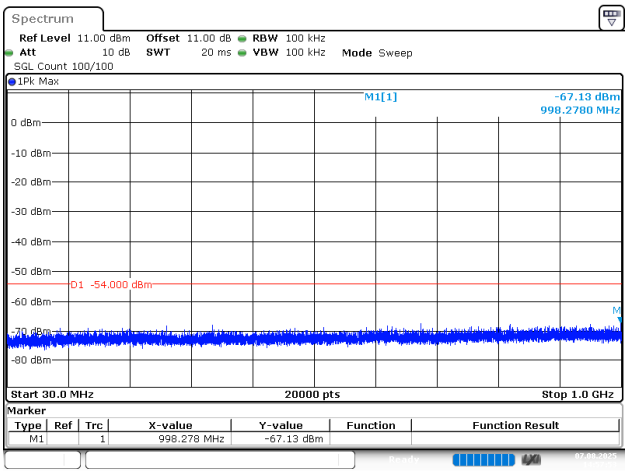
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802.11g, Low Channel(1GHz~12.5GHz)



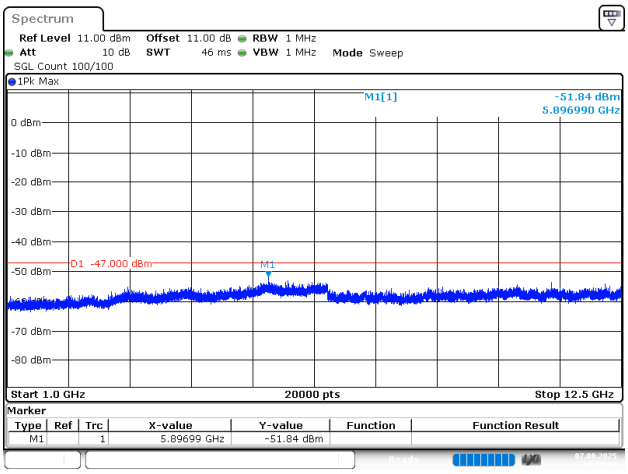
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802.11g, Middle Channel(30MHz~1GHz)



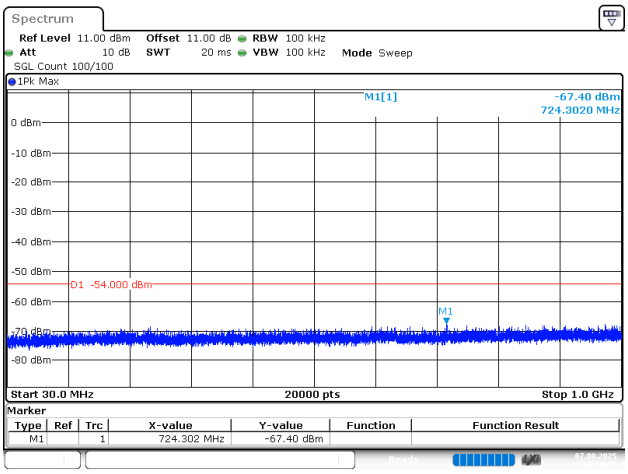
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802.11g, Middle Channel(1GHz~12.5GHz)



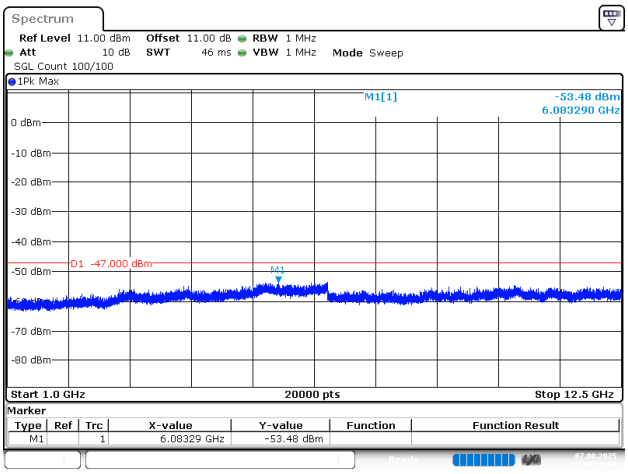
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802.11g, High Channel(30MHz~1GHz)



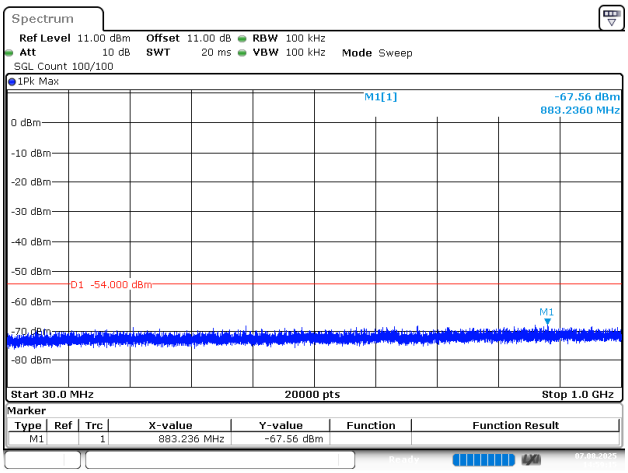
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802.11g, High Channel(1GHz~12.5GHz)



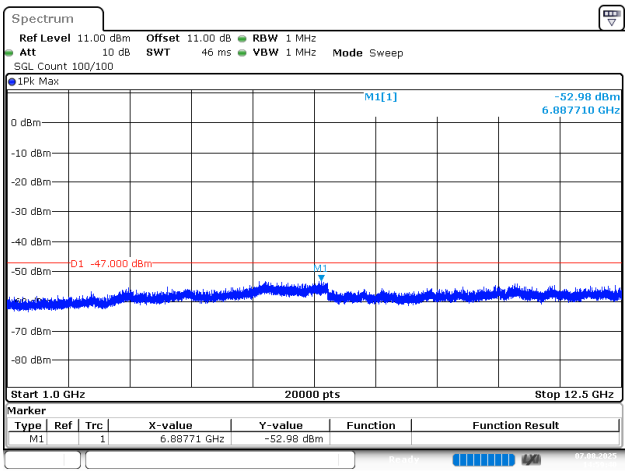
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802.11n20, Low Channel(30MHz~1GHz)



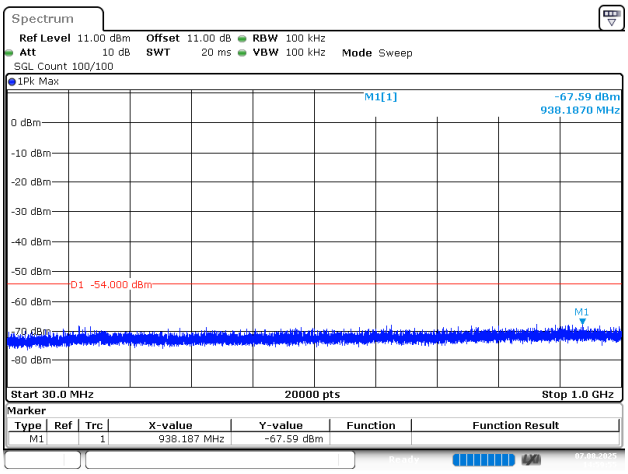
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802.11n20, Low Channel(1GHz~12.5GHz)



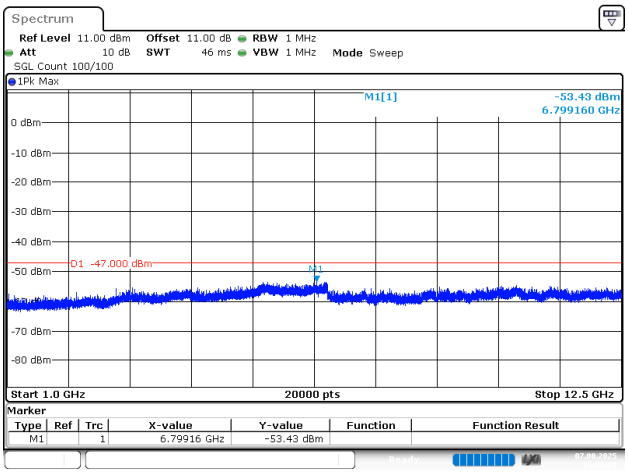
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802.11n20, Middle Channel(30MHz~1GHz)



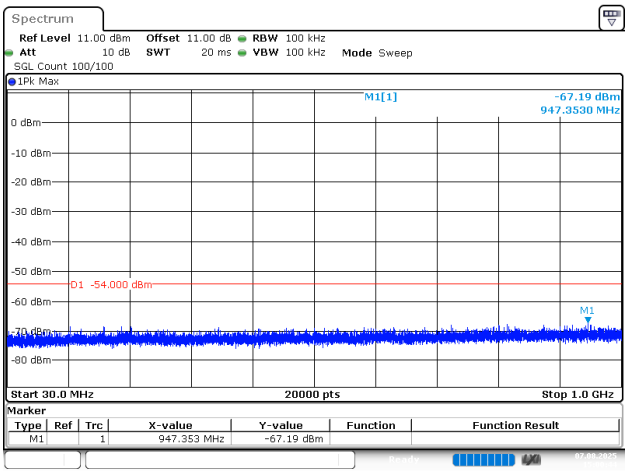
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802.11n20, Middle Channel(1GHz~12.5GHz)



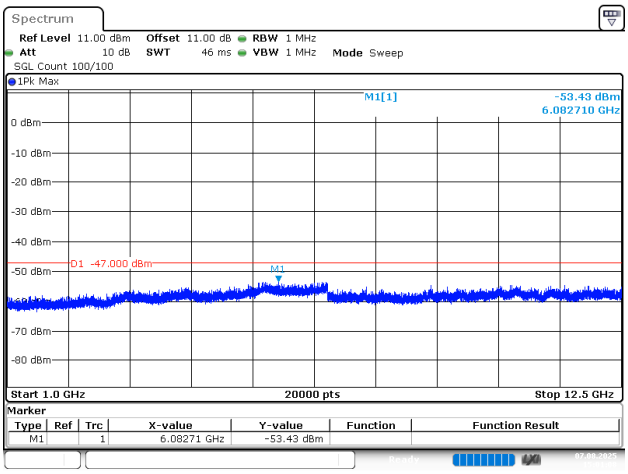
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802.11n20, High Channel(30MHz~1GHz)



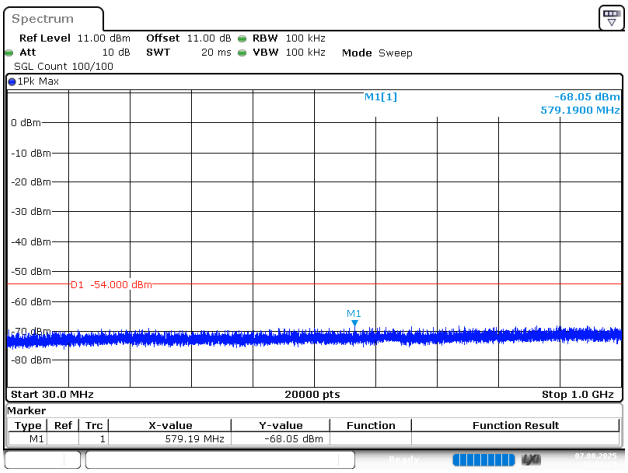
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802.11n20, High Channel(1GHz~12.5GHz)



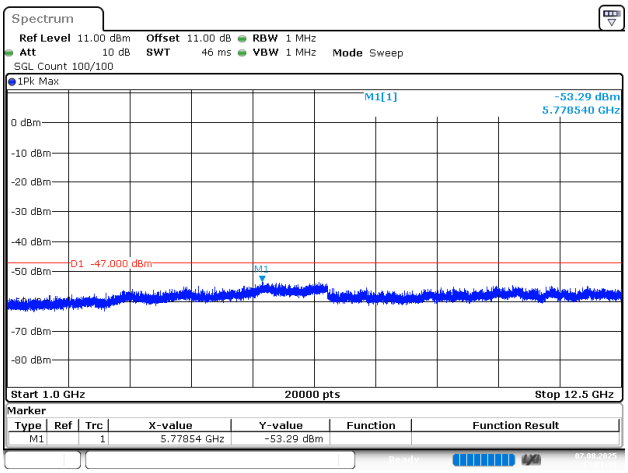
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802.11ax20, Low Channel(30MHz~1GHz)



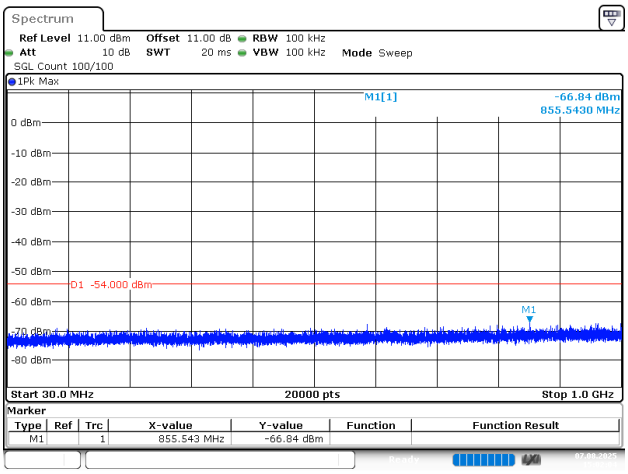
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802.11ax20, Low Channel(1GHz~12.5GHz)



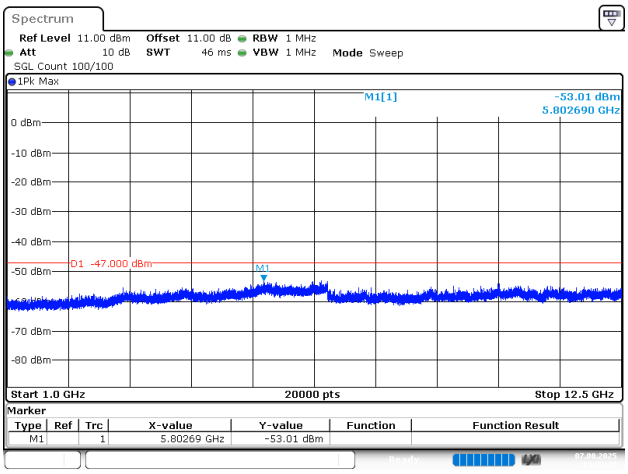
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802.11ax20, Middle Channel(30MHz~1GHz)



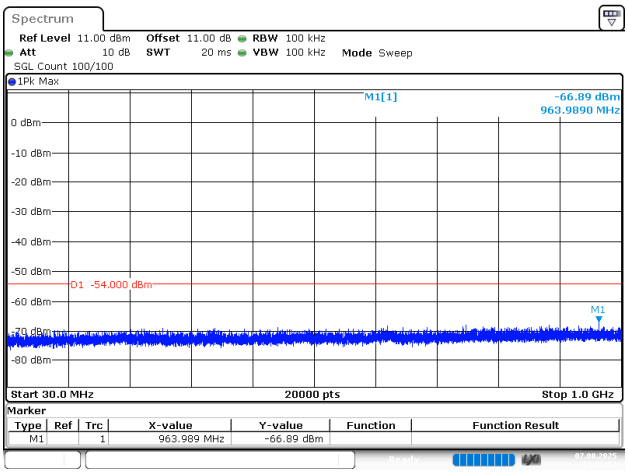
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Date: 7.AUG.2025 15:02:04

802.11ax20, Middle Channel(1GHz~12.5GHz)



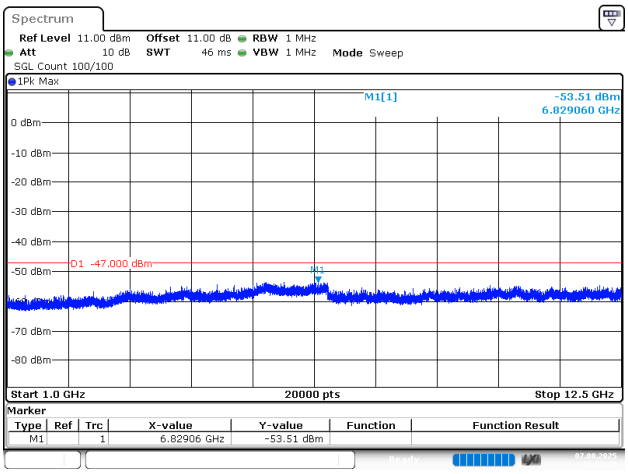
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802.11ax20, High Channel(30MHz~1GHz)



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 15:02:51

802.11ax20, High Channel(1GHz~12.5GHz)



ProjectNo.:2502Q45198E-RF Tester:Cooper Zhou
Date: 7.AUG.2025 15:03:18

Note: Offset = Coaxial Attenuator (10dB) + Cable Loss (1dB)

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