

MEASUREMENT REPORT

FCC PART 15 Subpart E RLAN 802.11a/n/ac

Report No.: S2025081401640105

Issue Date: 11-04-2025

Applicant: Lumi United Technology Co., Ltd
Address: B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan
Residential District, Nanshan District, Shenzhen, China
FCC ID: 2AKIT-SRTA06
Product: Thermostat Hub W200
Model No.: SRT-A06E, SRT-A06D
FCC Classification: Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s): Part 15 Subpart E (Section 15.407)
Test Procedure(s): ANSI C63.10-2013, KDB 789033 D02v02r01,
KDB 662911 D01v02r01
Item Receipt date: Aug. 20, 2025
Test Date: Aug. 20 ~ Oct. 30, 2025

Compiled By

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Approved By

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The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 789033 D02v02r01. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of Fangguang Inspection & Testing Co., Ltd. Wuxi Branch

The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

Revision History

Report No.	Version	Description	Issue Date
S2025081401640105	Rev. 01	/	11-04-2025

CONTENTS

Description	Page
§2.1033 General Information	6
1. Introduction	7
1.1. Scope	7
1.2. Fangguang Test Location	7
2. Product Information	8
2.1. Equipment Description	8
2.2. Product Specification Subjective to this Report	8
2.3. Operation Frequencies and Channel List	9
2.4. Device Capabilities	9
2.5. Test Software	25
2.6. Test Mode	26
2.7. Test Configuration	26
2.8. EUT Photo	26
2.9. EMI Suppression Device(s)/Modifications	26
2.10. Labeling Requirements	26
3. Description of Test	27
3.1. Evaluation Procedure	27
3.2. AC Line Conducted Emissions	27
3.3. Radiated Emissions	28
4. Antenna Requirements	29
5. Test Equipment Calibration Date	30
6. Measurement Uncertainty	32
7. Test Result	33
7.1. Summary	33
7.2. 26dB Bandwidth Measurement and 99% Bandwidth	34
7.2.1. Test Limit	34
7.2.2. Test Procedure used	34
7.2.3. Test Setting	34
7.2.4. Test Setup	35
7.2.5. Test Result	35
7.3. 6dB Bandwidth Measurement	65
7.3.1. Test Limit	65
7.3.2. Test Procedure used	65
7.3.3. Test Setting	65
7.3.4. Test Setup	65

7.3.5.	Test Result	66
7.4.	Output Power Measurement	74
7.4.1.	Test Limit	74
7.4.2.	Test Procedure Used	74
7.4.3.	Test Setting	74
7.4.4.	Test Setup	75
7.4.5.	Test Rate Assessment	75
7.4.6.	Test Result	76
7.5.	Transmit Power Control	92
7.5.1.	Test Limit	92
7.5.2.	Test Procedure Used	92
7.5.3.	Test Setting	92
7.5.4.	Test Setup	92
7.5.5.	Test Result	92
7.6.	Power Spectral Density Measurement	93
7.6.1.	Test Limit	93
7.6.2.	Test Procedure Used	93
7.6.3.	Test Setting	93
7.6.4.	Test Setup	94
7.6.5.	Test Result	95
7.7.	Frequency Stability Measurement	111
7.7.1.	Test Limit	111
7.7.2.	Test Procedure Used	111
7.7.3.	Test Setup	111
7.7.4.	Test Result	112
7.8.	Radiated Spurious Emission Measurement	122
7.8.1.	Test Limit	122
7.8.2.	Test Procedure Used	122
7.8.3.	Test Setting	122
7.8.4.	Test Setup	124
7.8.5.	Test Result	126
7.9.	Radiated Restricted Band Edge Measurement	270
7.9.1.	Test Limit	270
7.9.2.	Test Result	272
7.10.	AC Conducted Emissions Measurement	321
7.10.1.	Test Limit	321
7.10.2.	Test Procedure	321
7.10.3.	Test Setup	322

7.10.4. Test Result	323
8. Conclusion	325

§2.1033 General Information

Applicant:	Lumi United Technology Co., Ltd
Applicant Address:	B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District, Nanshan District, Shenzhen, China
Manufacturer:	Lumi United Technology Co., Ltd
Manufacturer Address:	B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District, Nanshan District, Shenzhen, China
Test Site:	Fangguang Inspection & Testing Co. Ltd
LAB ID:	CN5037
LAB registration number:	600222-0
Test Site Address:	No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China
FCC Rule Part(s):	Part 15 Subpart E (15.407)
FCC ID:	2AKIT-SRTA06
Test Device Serial No.:	S/N.: / ☐ Production ☒ Pre-Production ☐ Engineering
FCC Classification:	Unlicensed National Information Infrastructure (UNII)

1. Introduction

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

1.2. Fangguang Test Location

These measurement tests were performed at the Fangguang Inspection and testing Co.,LTD located at No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China. The detailed description of the measurement facility was found to be in compliance with the requirements of ANSI C63.10-2013.

2. Product Information

2.1. Equipment Description

Product Name:	Thermostat Hub W200
Test Model:	SRT-A06E
Additional Model:	SRT-A06D
Model difference descriptions:	They have the same technical construction including circuit diagram, PCB LAYOUT, hardware version and software version identical, except sales area and packaging are different.
Trade Mark:	Aqara
Input Voltage Range:	AC 24V
Software Version:	V3.0.3_0004
Hardware Version:	V1.2
EUT sample number:	S20250814016401-1-1 (Conducted) S20250814016401-1-2 (Radiated)

Note: This information is provided by the Customer and its authenticity is the responsibility of the Customer.

2.2. Product Specification Subjective to this Report

Frequency Range:	For 802.11a/n-HT20/ac-VHT20: 5180~5240MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5230MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5775MHz
Type of Modulation:	802.11a/n/ac: OFDM/BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM
Data Rate:	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: MCS0~MCS7 802.11ac: MCS0~MCS9
Antenna Type:	PIFA Antenna
Antenna Gain:	0.5dBi

Note:

1. The maximum Antenna Gain was declared by the manufacturer.
2. This report is made solely on the basis of such data and/or information. We accept no responsibility for the authenticity and completeness of the above data and information and the validity of the results and/or conclusions. The test model is SRT-A06E.

2.3. Operation Frequencies and Channel List

802.11a/n-HT20/ac-VHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	149	5745 MHz	153	5765 MHz
157	5785 MHz	161	5805 MHz	165	5825 MHz

EUT was tested with Channel 36, 40, 48, 149, 157 and 165.

802.11n-HT40/ac-VHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz
159	5795 MHz	--	--	--	--

EUT was tested with Channel 38, 46, 151 and 159.

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	155	5775 MHz	--	--

EUT was tested with Channel 42 and 155.

2.4. Device Capabilities

This device contains the following capabilities:

2.4GHz WLAN (DTS)&5GHz WLAN (UNII)

Note: 5GHz (NII) operation is possible in 20MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 8MHz, and detector = Peak per the guidance of Section B) 2) b) of KDB 789033 D02v02r01. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

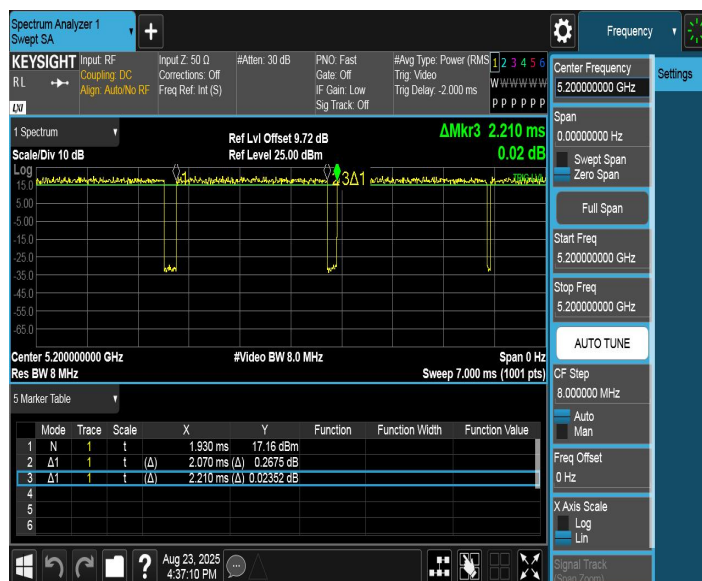
Test Mode	Antenna	Frequency (MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.06	2.22	92.79
		5200	2.07	2.21	93.67
		5240	2.06	2.20	93.64
		5745	2.06	2.24	91.96
		5785	2.07	2.21	93.67

		5825	2.06	2.19	94.06
11N20SISO	Ant1	5180	1.92	2.08	92.31
		5200	1.91	1.99	95.98
		5240	1.92	2.01	95.52
		5745	1.92	2.06	93.20
		5785	1.92	2.01	95.52
		5825	1.92	2.08	92.31
11N40SISO	Ant1	5190	0.94	0.99	94.95
		5230	0.94	1.01	93.07
		5755	0.94	1.00	94.00
		5795	0.94	1.02	92.16
11AC20SISO	Ant1	5180	1.93	2.07	93.24
		5200	1.93	2.09	92.34
		5240	1.93	2.07	93.24
		5745	1.94	2.05	94.63
		5785	1.94	2.15	90.23
		5825	1.93	2.04	94.61
11AC40SISO	Ant1	5190	0.96	1.05	91.43
		5230	0.95	1.11	85.59
		5755	0.95	1.12	84.82
		5795	0.95	1.07	88.79
11AC80SISO	Ant1	5210	0.46	0.58	79.31
		5775	0.46	0.64	71.88

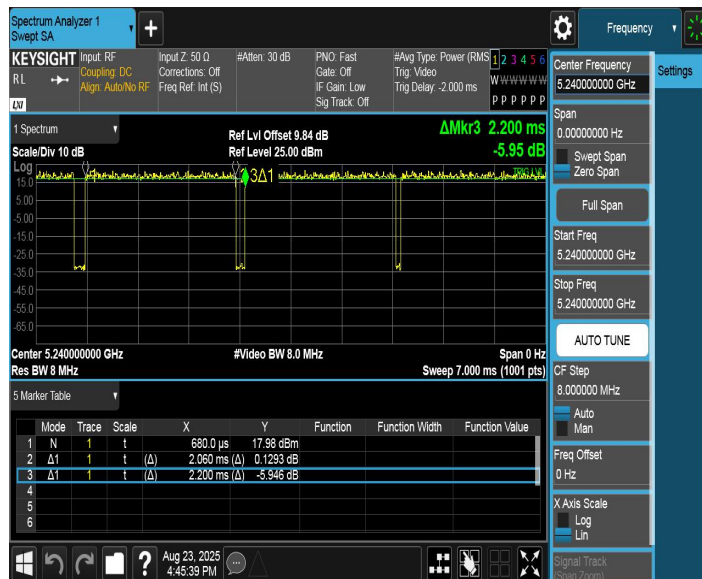
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11A_Ant1_5200



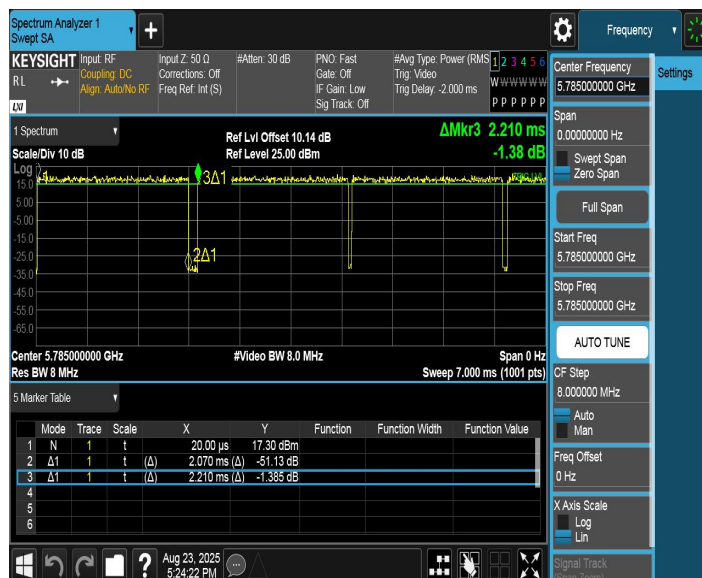
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11A_Ant1_5745



11A_Ant1_5785



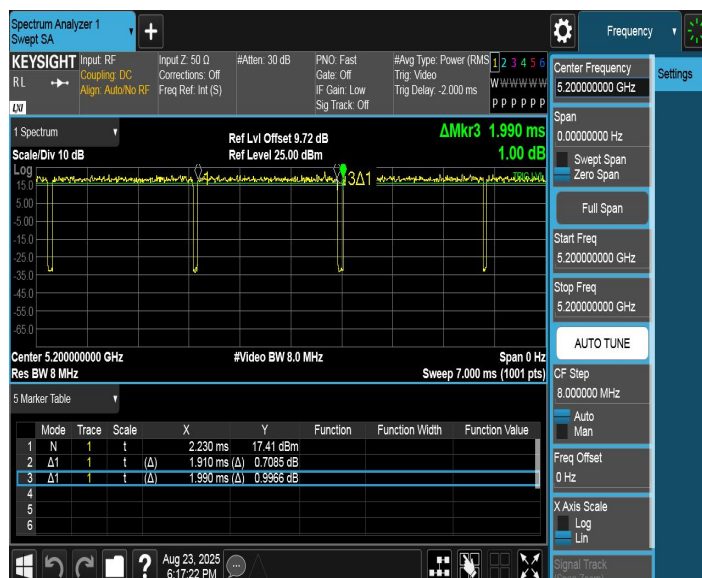
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11N20SISO_Ant1_5180



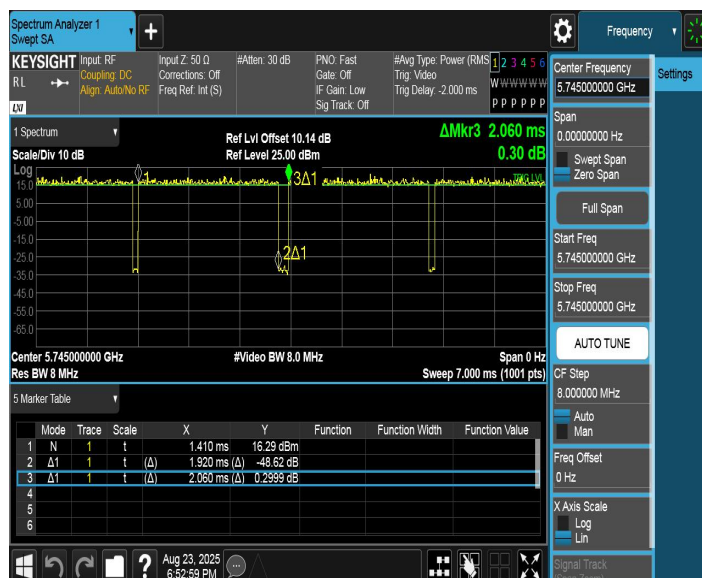
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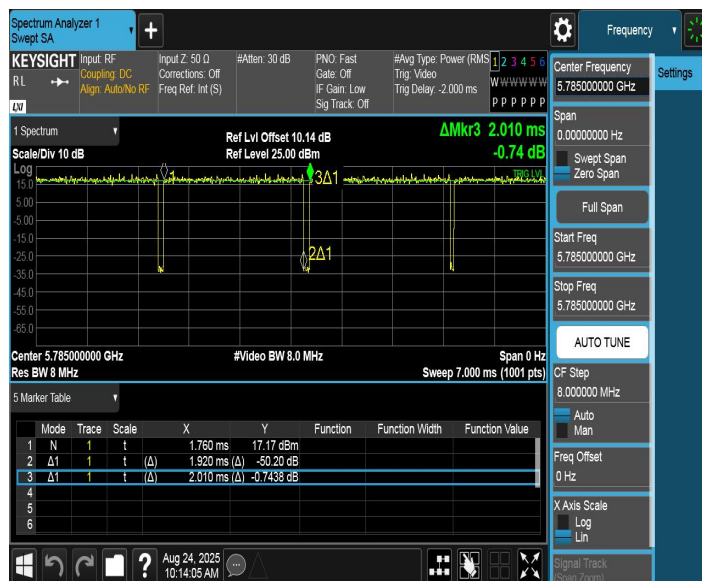
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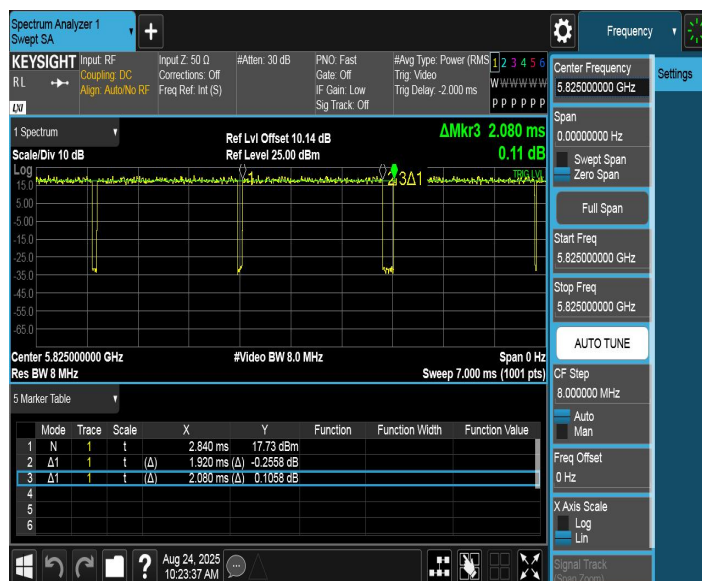
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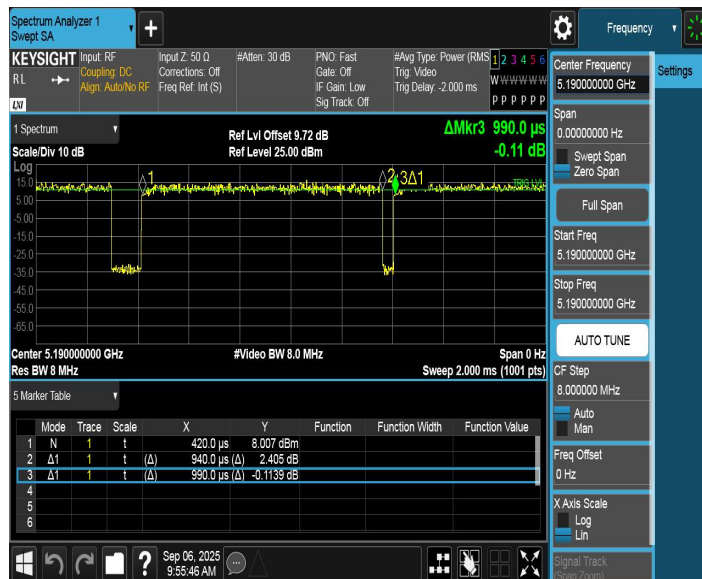
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11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



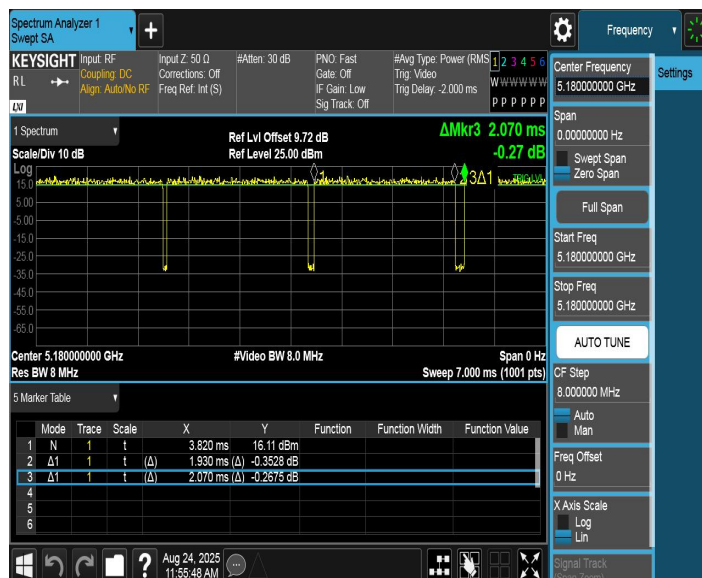
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11N40SISO_Ant1_5795



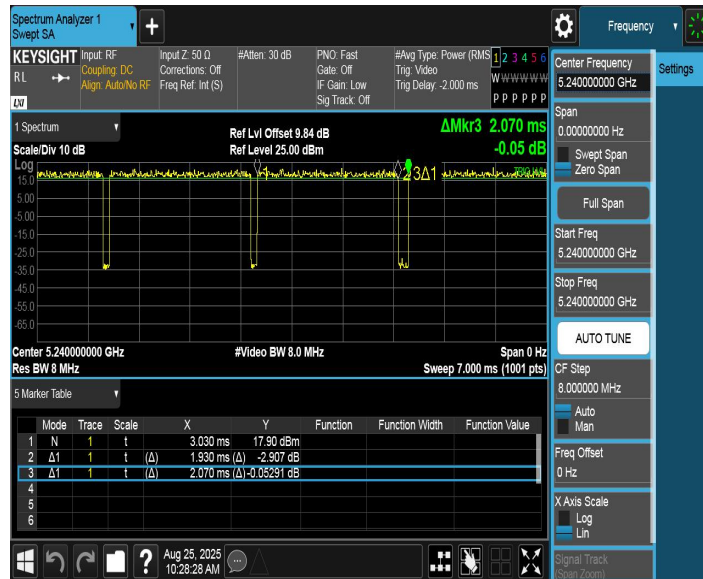
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11AC20SISO_Ant1_5200



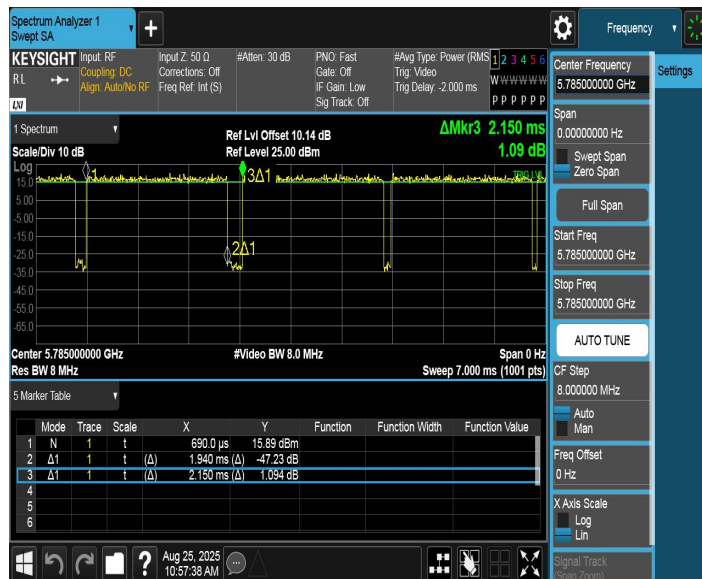
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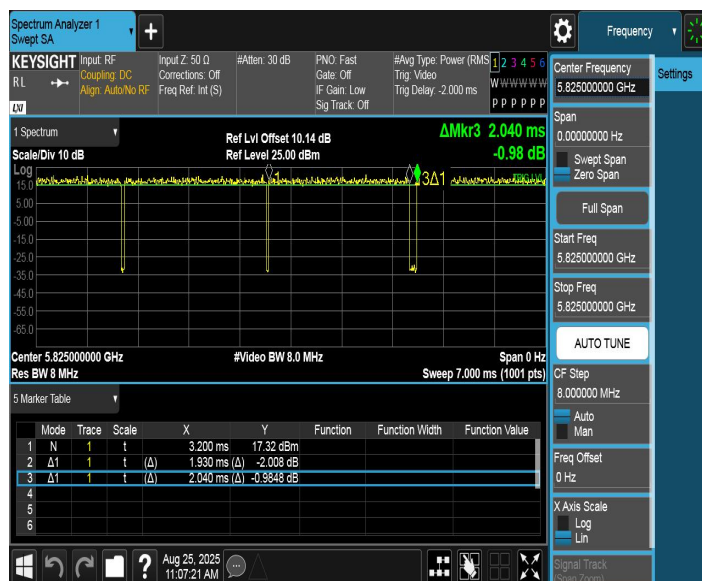
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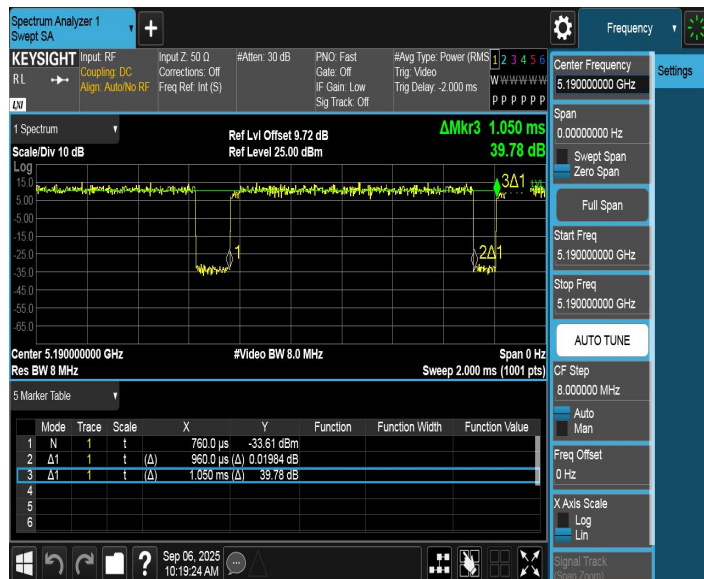
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11AC20SISO_Ant1_5825



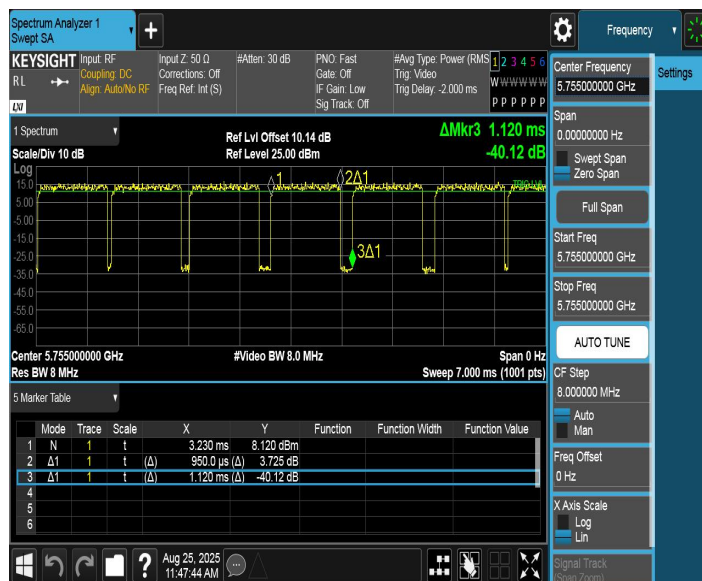
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11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

