RF TEST REPORT

FCC ID: 2AVBM-K1

Test Report No……..:	RF250812014-01-008
Product(s) Name……...:	Mini PC
Model(s)……..:	K1, M1, W1, K2, M2, W2, K3, M3, W3, V5, K5, M5, W5, V6, K6, M6, W6, V1 PRO, K1 PRO, M1 PRO, W1 PRO, P1, H1, G1, P2, H2, G2, P3, H3, G3, E5, P5, H5, G5, E1 PRO, P1 PRO, H1 PRO, G1 PRO, E2 PRO, P2 PRO, H2 PRO, G2 PRO, E3B, S3A, AM18, AM21, AM23, AM25, AM27, AM06PRO, CK10, AK1PRO, AK1PLUS, GK3PLUS, T8PLUS, S1, M1A, M1A PRO, M1A PRO+, M2A, M2A PRO, Retro X3, Retro X5, F1A, F2A, F3A, F5A, F7A, F9A, AD08, AD16, CK11, N3A, N3ES, C3A, C3B, G3A, G3B, G3C, R3A, A3A, A3ES, A3XY
Trade Mark……....:	N/A
Applicant……..…:	Shenzhen CYX Industrial Co., Ltd.
Address……..…...:	2F&5F, Bldg A, Xia Zao Digital Industry Park, No.8 Huali Rd, Gaofeng COMM, Dalang Str, Longhua Dist, Shenzhen, China
Receipt Date……..:	2025.08.15
Test Date……....:	2025.08.18~2025.09.02
Issued Date……..…:	2025.09.22
Standards……..:	47 CFR FCC Part 15, Subpart E(Section 15.407); ANSI C63.10:2013
Testing Laboratory……:	Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Loring Tan	Black Ding	Tim Zhang	Shenzhen Haiyun Standard Technical Co., Ltd. HAIYUN Report Seal
Loring Tan	Black Ding	Tim.zhang	

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History of this test report

Original Report Issue Date: 2025.09.22

● No additional attachment

○ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

Shenzhen CYX Industrial Co., Ltd.

2F&5F, Bldg A, Xia Zao Digital Industry Park, No.8 Huali Rd, Gaofeng COMM, Dalang Str, Longhua Dist, Shenzhen, China

1.2 Manufacturer

Shenzhen CYX Industrial Co., Ltd.

2F&5F, Bldg A, Xia Zao Digital Industry Park, No.8 Huali Rd, Gaofeng COMM, Dalang Str, Longhua Dist, Shenzhen, China

1.3 Basic Description of Equipment Under Test

Product No.	POC250812014-S001	
Product Name	Mini PC	
Model Name	K1, M1, W1, K2, M2, W2, K3, M3, W3, V5, K5, M5, W5, V6, K6, M6, W6, V1 PRO, K1 PRO, M1 PRO, W1 PRO, P1, H1, G1, P2, H2, G2, P3, H3, G3, E5, P5, H5, G5, E1 PRO, P1 PRO, H1 PRO, G1 PRO, E2 PRO, P2 PRO, H2 PRO, G2 PRO, E3B, S3A, AM18, AM21, AM23, AM25, AM27, AM06PRO, CK10, AK1PRO, AK1PLUS, GK3PLUS, T8PLUS, S1, M1A, M1A PRO, M1A PRO+, M2A, M2A PRO, Retro X3, Retro X5, F1A, F2A, F3A, F5A, F7A, F9A, AD08, AD16, CK11, N3A, N3ES, C3A, C3B, G3A, G3B, G3C, S3A, R3A, A3A, A3ES, A3XY	
Test Model	K1	
Model difference	Only the model name is different	
Trade Mark	N/A	
Power supply	DC 19V from adapter	
Adapter information	Model: AD0651-1903420F Input: 100-240V~, 50/60Hz 1.5A Max Output: 19.0V⎓3.42A, 64.98W	
Operating Temperature	0℃-45℃	
EUT Stage	○ Product Unit	●Final-Sample
Operating Band & Max Conducted Output Power	5150MHz ~5250MHz	802.11ac20: 14.46dBm(0.0279W)
	5725MHz ~5850MHz	802.11ac80: 8.26dBm(0.0067W)
Product Type	IEEE 802.11a/n/ac: WLAN (SISO)	
Nominal Bandwidth	20MHz / 40MHz / 80MHz	
Modulation	OFDM	
Antenna gain	4.16dBi	
Antenna type	FPC antenna	
Data Rate (Mbps)	IEEE 802.11a mode : 6/9/12/18/24/36/48/54 IEEE 802.11n mode : up to 150 IEEE 802.11ac mode : up to 433.3	

Channel Information			
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	802.11a /n /ac (20MHz)	5180-5240	36-48
5725-5850		5745-5825	149-165
5150-5250	802.11n /ac (40MHz)	5190-5230	38-46
5725-5850		5755-5795	151-159
5150-5250	802.11ac (80MHz)	5210	42
5725-5850		5775	155

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Test item	Standard	Results	Remarks
AC Power Conducted Emission	15.207 15.407(b)	Pass	Meet the requirement of the limit
Radiated Emission	15.205(a) 15.209(a) 15.407(b)	Pass	Meet the requirement of the limit
Antenna Requirements	15.203	Compliance	Note
Spectrum Bandwidth	15.407(a) 15.407(e)	Pass	Meet the requirement of the limit
Conducted Output Power	15.407(a)	Pass	Meet the requirement of the limit
Power Spectral Density	15.407(a)	Pass	Meet the requirement of the limit
Note: The EUT has one FPC antenna arrangement which was permanently attached.			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart E

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

ANSI C63.10:2013

2.3 Test Instruments

Radiated Emissions							
No.	Equipment	Manufacturer	Type No.	Serial No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal. Due date (yyyy/mm/dd)
1	Test receiver	Rohde&Schwarz	ESU	100184	JLE011	2025/3/1	2026/2/28
2	Log periodic antenna	Schwarzbeck	VULB 9168	1151	JLE012	2025/4/12	2026/4/11
3	Low frequency amplifier	/	LNA 0920N	2014	JLE023	2025/3/1	2026/2/28
4	High frequency amplifier	Schwarzbeck	BBV 9718	284	JLE024	2025/3/1	2026/2/28
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1273	JLE028	2025/4/12	2026/4/11
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2025/4/15	2026/4/14
7	Horn Antenna	SCHWARZBECK	BBHA 9170	9170#685	JLE029	2024/7/15	2027/7/14
8	Loop Antenna	SCHWARZBECK	FMZB1519B	00029	JLE030	2024/7/15	2027/7/14
9	Broadband preamplifier	Schwarzbeck	BBV9721	9721-019	JLE025	2025/3/1	2026/2/28
10	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
Conducted Emission							
1	LISN	Rohde&Schwarz	ENV216	100075	JLE002	2025/3/1	2026/2/28
2	ISN	Schwarzbeck	CATE 5 8158	#171	JLE003	2025/2/21	2026/2/20
3	ISN	Schwarzbeck	CAT 3 8158	00187	JLE032	2025/2/21	2026/2/20
4	Test receiver	Rohde&Schwarz	ESCI	100718	JLE010	2025/3/1	2026/2/28
5	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	JLE047	2025/3/1	2026/2/28
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE020	2025/4/15	2026/4/14
7	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
RF Conducted Emission							
1	MXA Signal Analyzer	Keysight	N9021B	MY60080169	JLE050	2025/3/1	2026/2/28
2	RF Control Unit	dsusoft	JS0806-2	21G8060449	JLE053	2025/3/1	2026/2/28
3	power supply unit	dsusoft	JS0806-4 ADC	N/A	JLE055	2025/3/1	2026/2/28
4	VXG Signal Generator	Keysight	M9384B	MY61270787	JLE051	2025/6/10	2026/6/09
5	EXG Analog Signal Generator	Keysight	N5173B	MY59101282	JLE052	2025/3/1	2026/2/28
6	Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	1201.0002K50-116064-Dt	JLE054	2025/3/1	2026/2/28
7	Test software	dsusoft	JS1120-3 Ver.3.2.22.0				

2.4 Operation Mode

Transmit Operating Mode							Transmit Multiple Antennas					
●	Operating mode 1 (single antenna)						●	1TX				
○	Operating mode 2 (multiple antenna, no beam forming)						○	2TX	○	3TX	○	4TX
○	Operating mode 3 (multiple antenna, with beam forming)						○	2TX	○	3TX	○	4TX
●	802.11a	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		
●	802.11n(20MHz)	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		
●	802.11n(40MHz)	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		
●	802.11ac(20MHz)	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		
●	802.11ac(40MHz)	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		
●	802.11ac(80MHz)	Operating mode	●	1TX	○	2TX	○	3TX	○	4TX		

Note: The bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.

2.5 Test Condition

Test Item	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	23.9°C, 50% RH	AC 120V/60Hz	Lemon He
Radiated Emission	24.2°C, 47% RH	AC 120V/60Hz	Keith Huang
Spectrum Bandwidth	23.5°C, 51% RH	DC 19V	Freedom Zhuo
Conducted Power	23.5°C, 51% RH	DC 19V	Freedom Zhuo
Power Spectral Density	23.5°C, 51% RH	DC 19V	Freedom Zhuo

Note: Adapter supply voltage AC 120V/60Hz.
The applicant declare the operating environment of EUT as below:
Normal conditions: 19V DC, 0~45°C

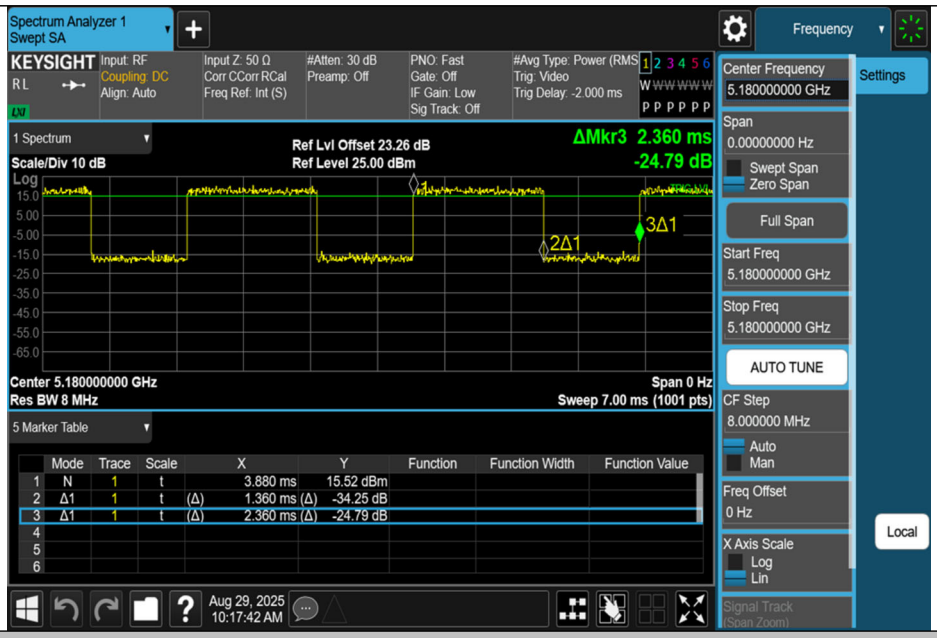
2.6 Duty Cycle of Test Signal

If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.
All the duty factor of other test mode have been considered.

TestMode	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	5180	1.36	2.36	57.63
11A	5200	1.35	2.36	57.20
11A	5240	1.36	2.37	57.38
11A	5745	1.36	2.37	57.38
11A	5785	1.36	2.37	57.38
11A	5825	1.36	2.37	57.38
11N20SISO	5180	1.27	2.28	55.70
11N20SISO	5200	1.27	2.27	55.95
11N20SISO	5240	1.28	2.28	56.14

11N20SISO	5745	1.28	2.28	56.14
11N20SISO	5785	1.27	2.28	55.70
11N20SISO	5825	1.27	2.28	55.70
11N40SISO	5190	0.63	1.64	38.41
11N40SISO	5230	0.63	1.64	38.41
11N40SISO	5755	0.63	1.64	38.41
11N40SISO	5795	0.63	1.64	38.41
11AC20SISO	5180	1.28	2.29	55.90
11AC20SISO	5200	1.28	2.28	56.14
11AC20SISO	5240	1.27	2.28	55.70
11AC20SISO	5745	1.28	2.28	56.14
11AC20SISO	5785	1.27	2.28	55.70
11AC20SISO	5825	1.27	2.28	55.70
11AC40SISO	5190	0.64	1.64	39.02
11AC40SISO	5230	0.63	1.64	38.41
11AC40SISO	5755	0.64	1.64	39.02
11AC40SISO	5795	0.64	1.64	39.02
11AC80SISO	5210	0.32	1.32	24.24
11AC80SISO	5775	0.31	1.32	23.48

Test Graphs



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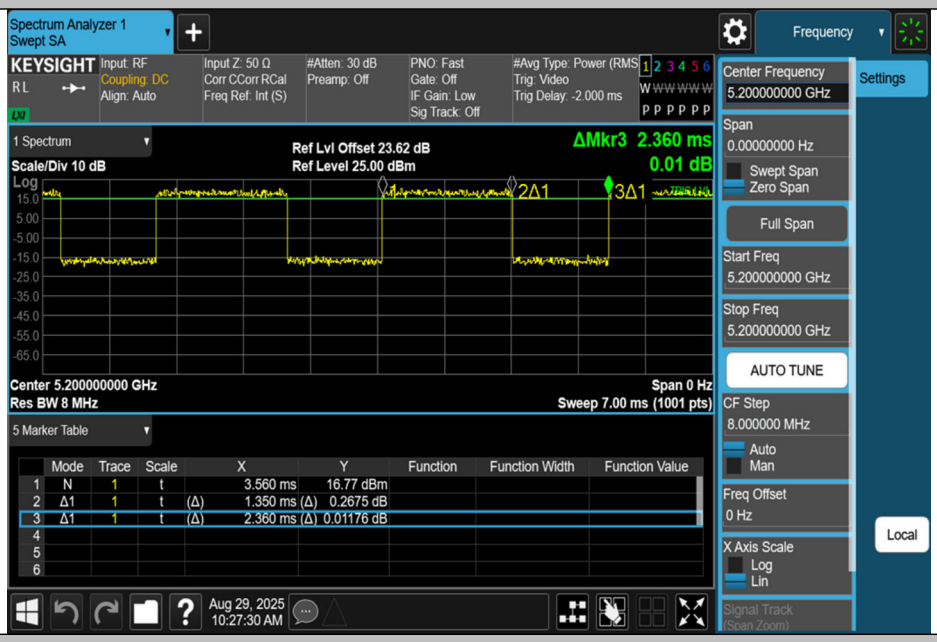

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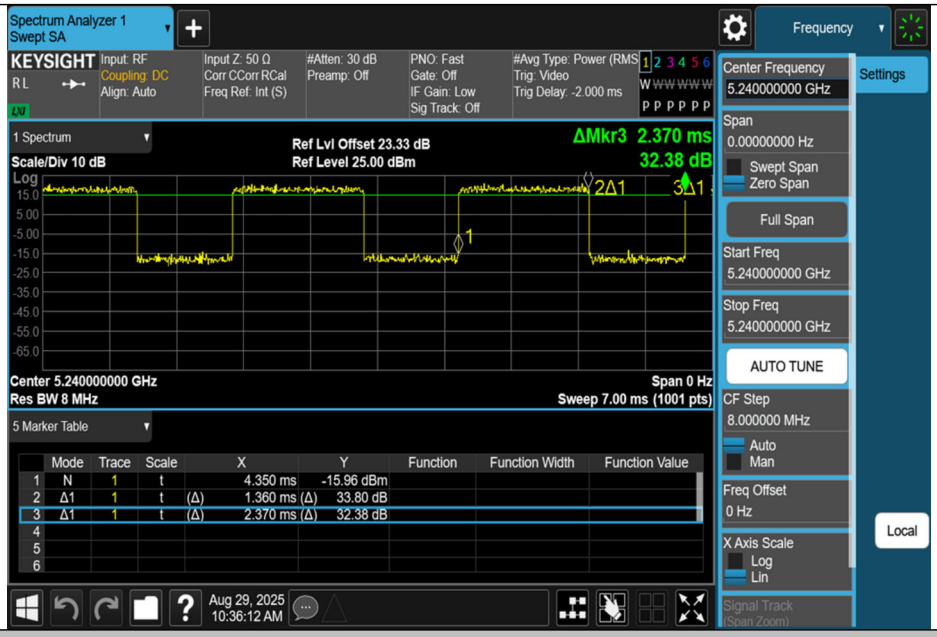

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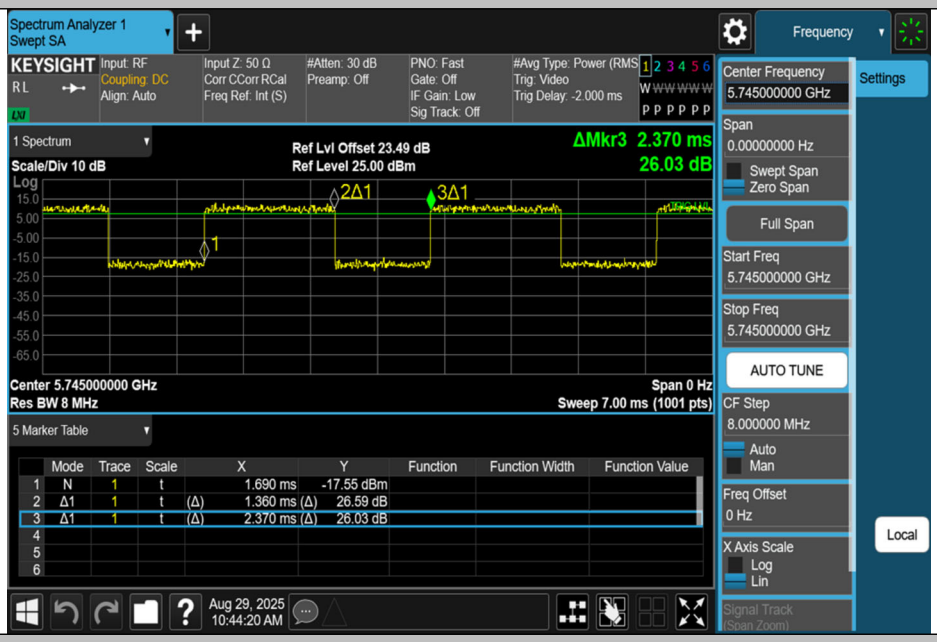

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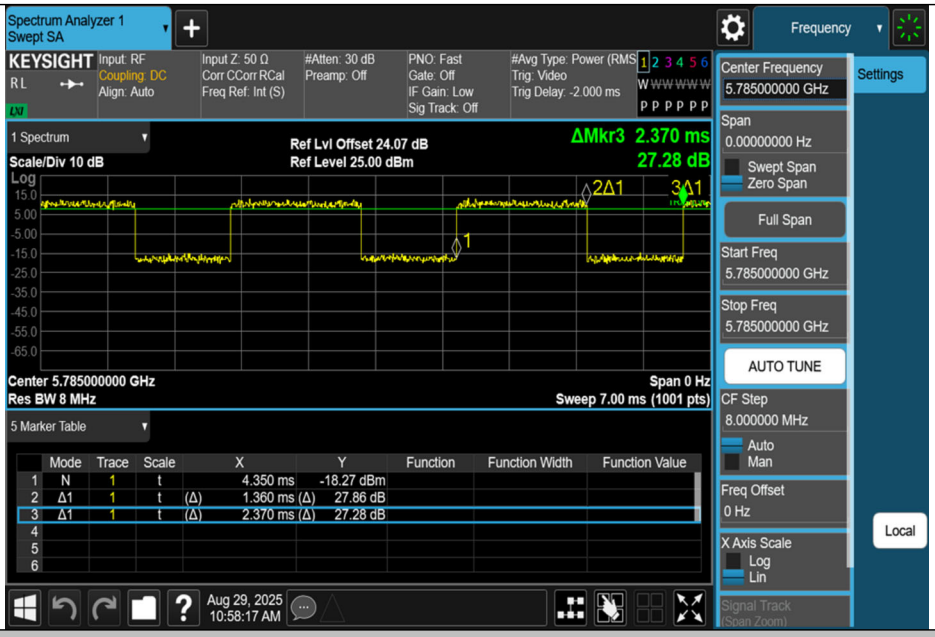

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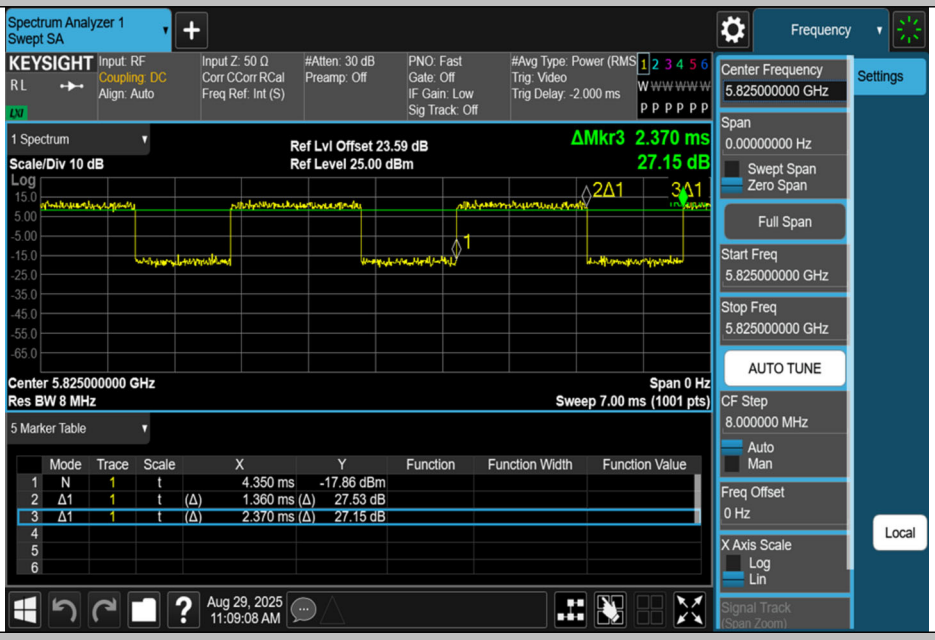

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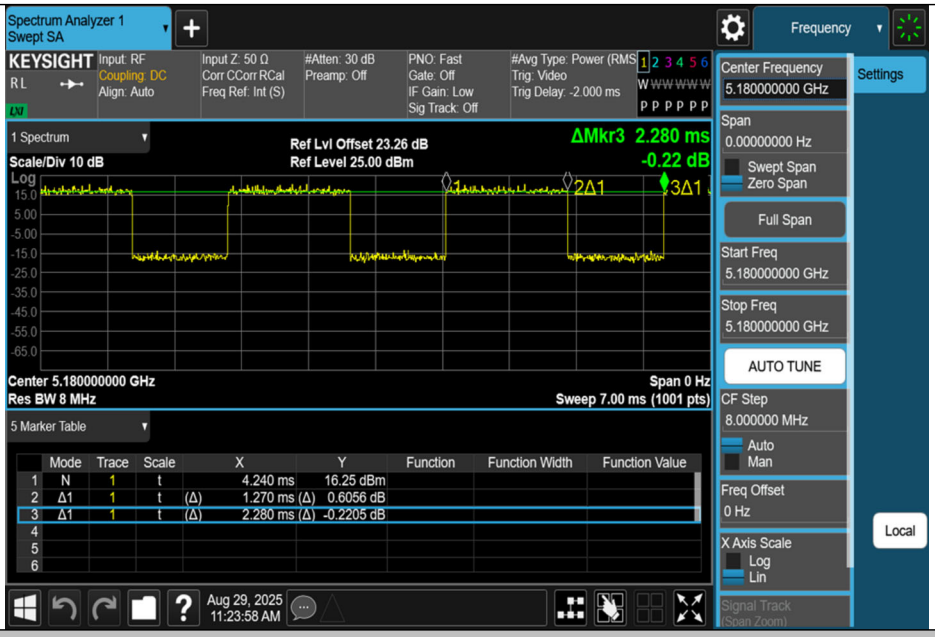

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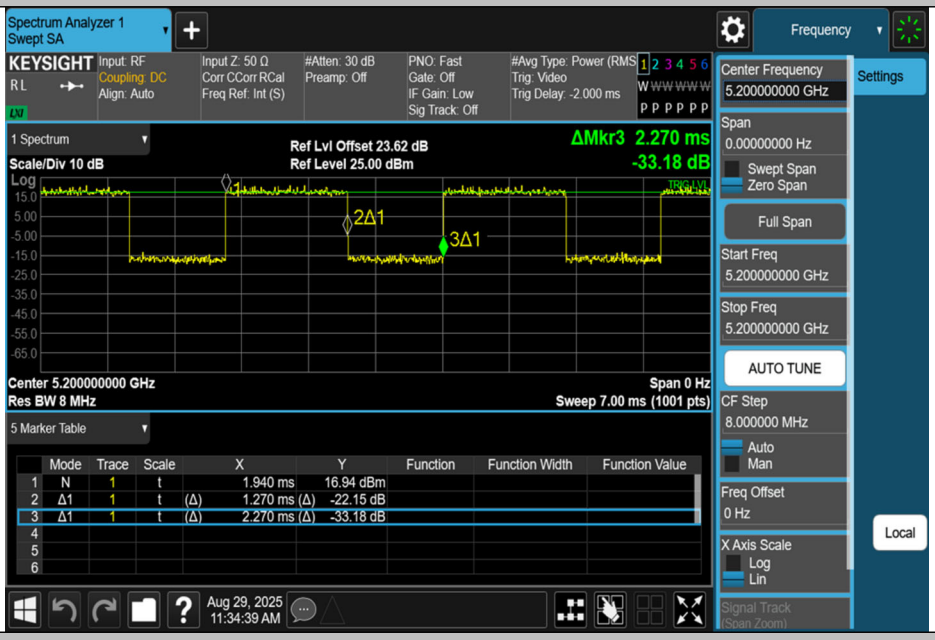

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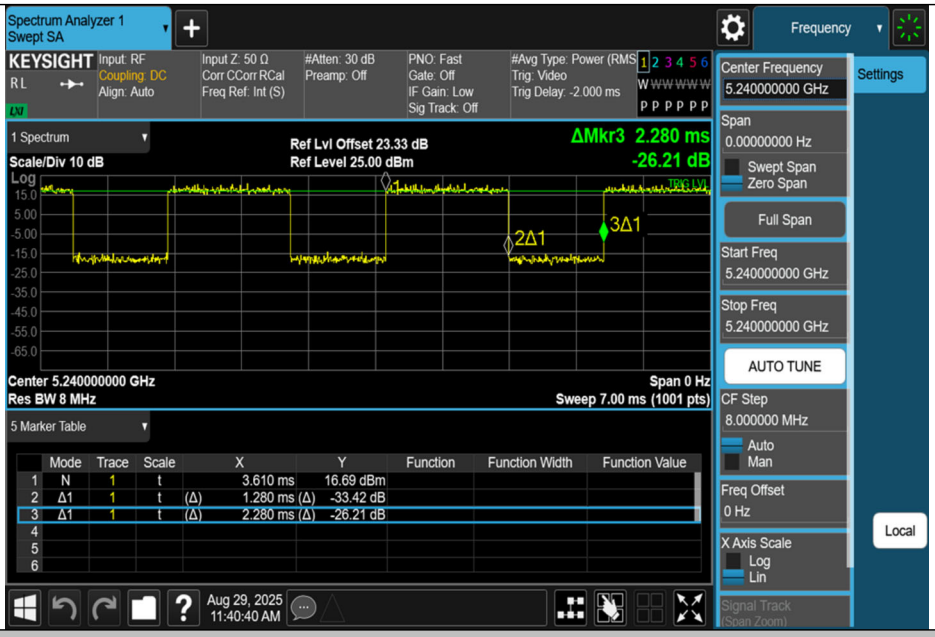

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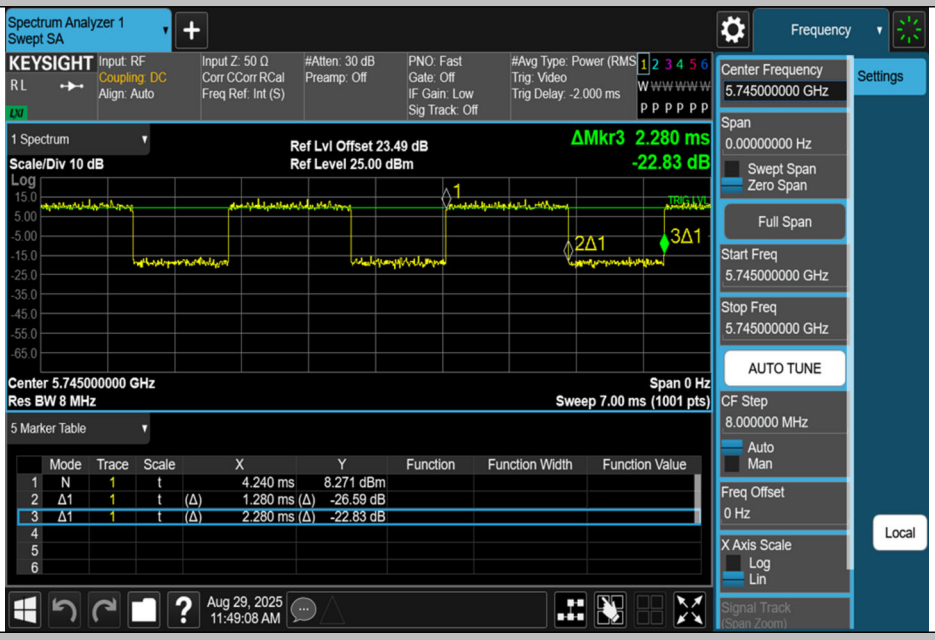

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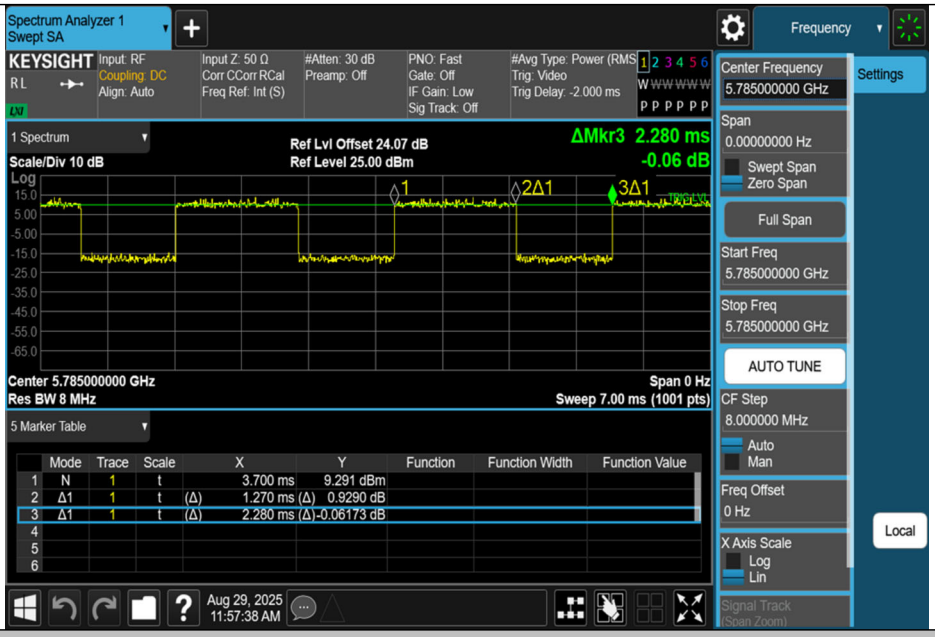

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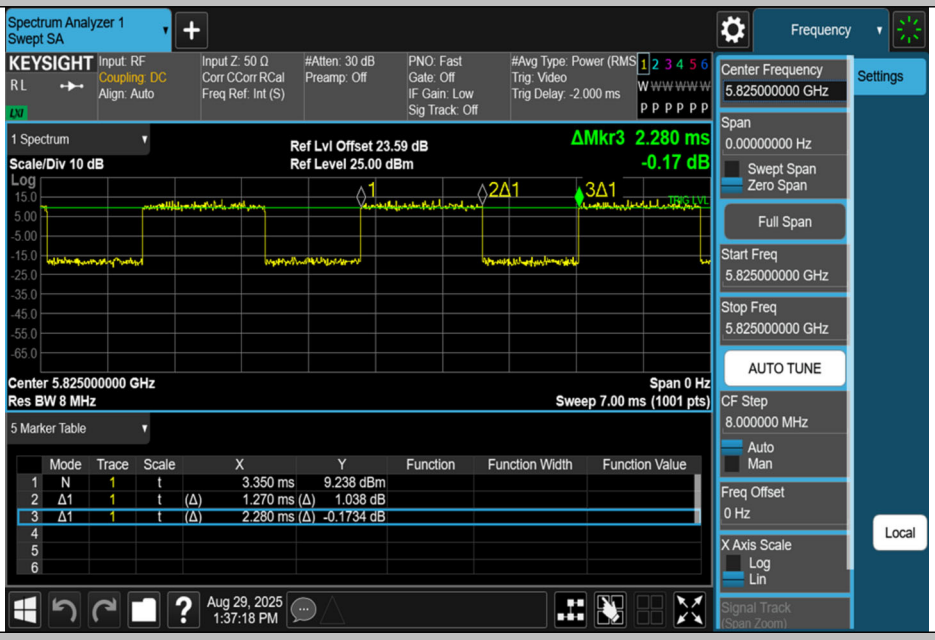

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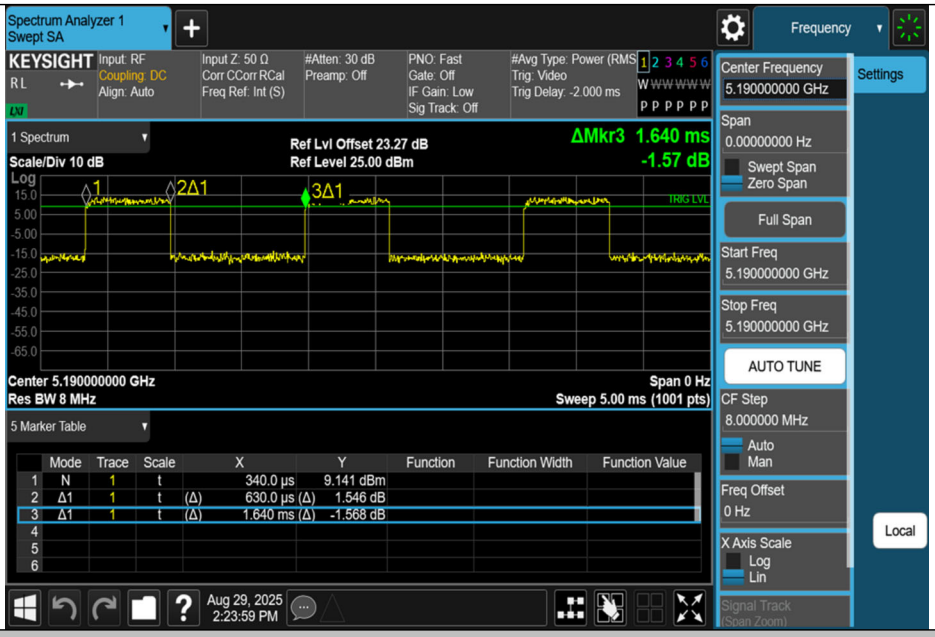

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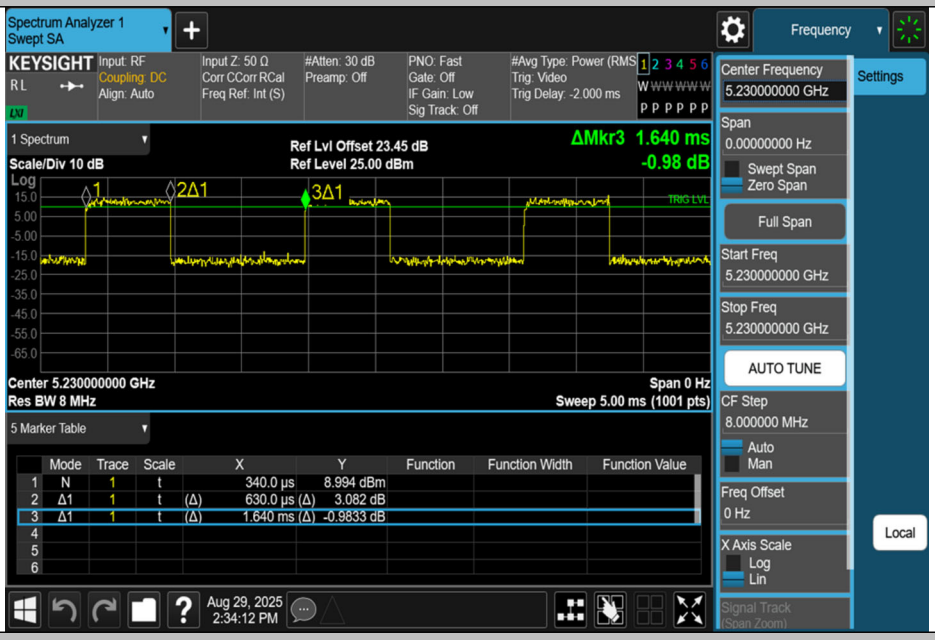

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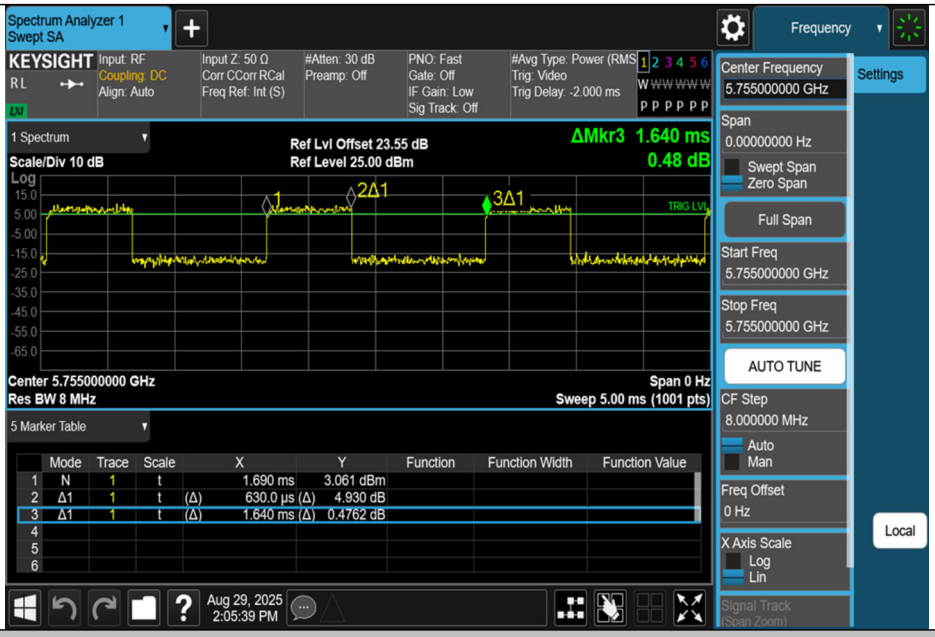

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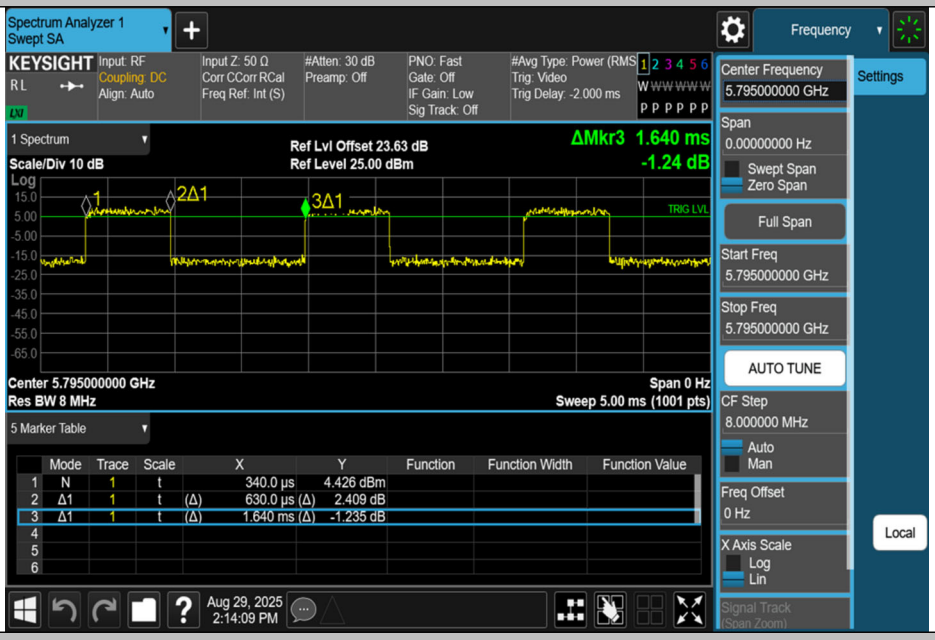

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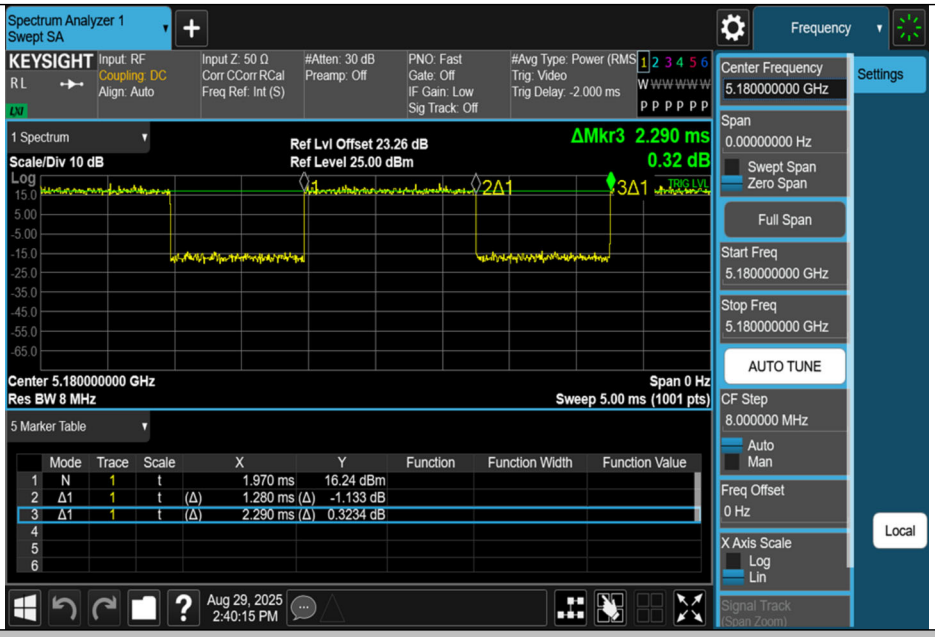

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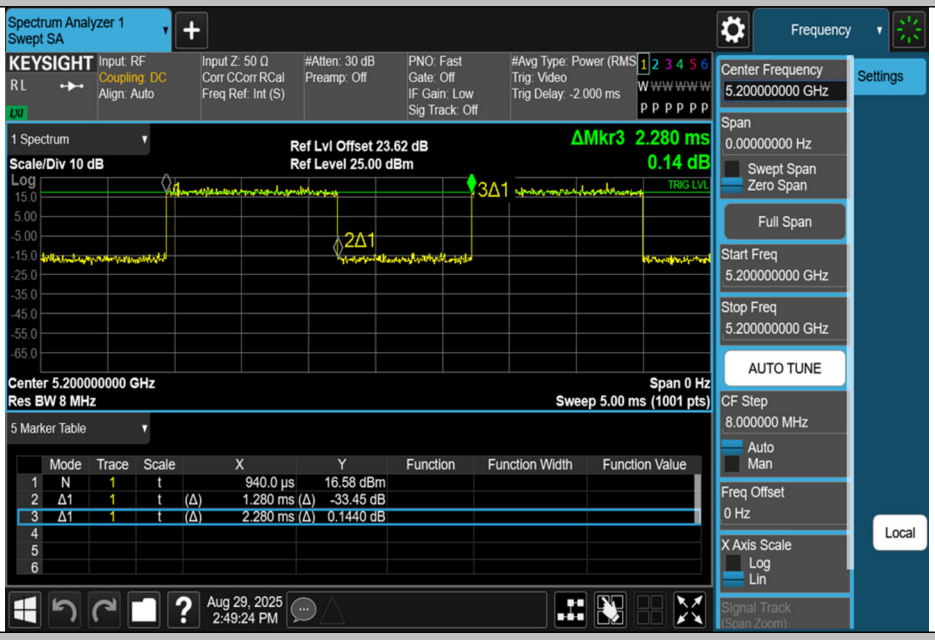

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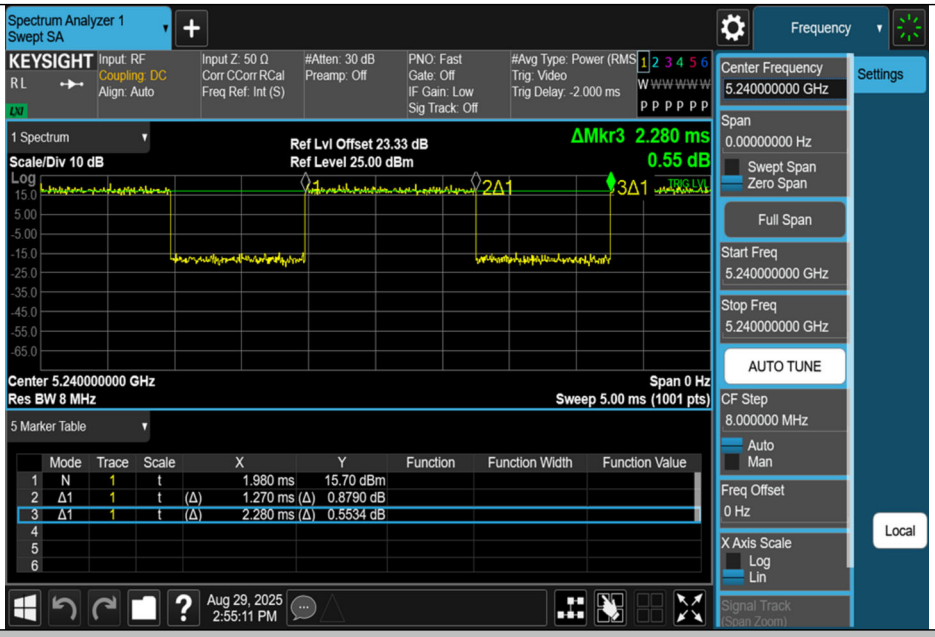

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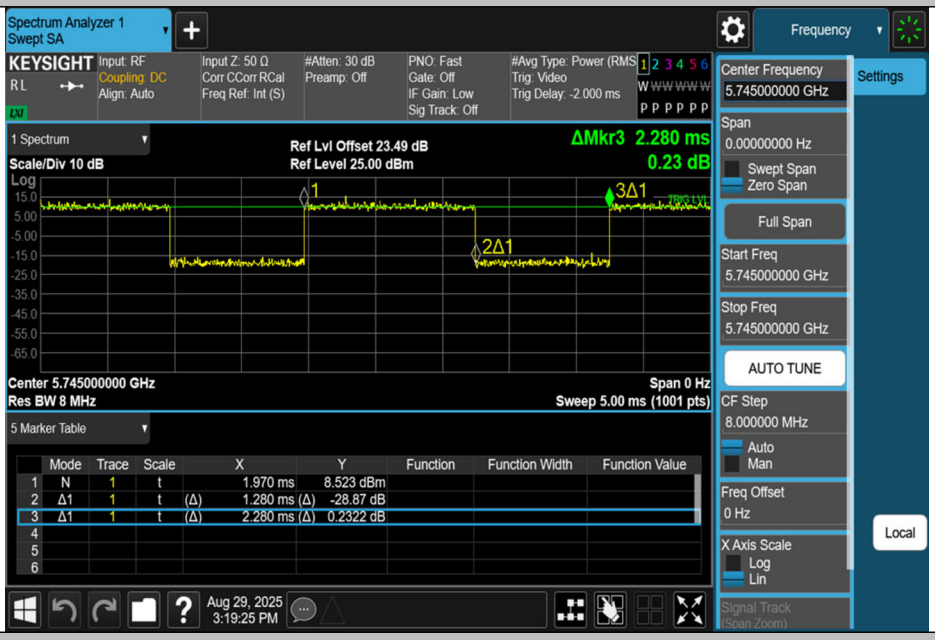

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