

RF TEST REPORT

FCC ID: O86-FLEX12C

Test Report No.....: RF251020010-01-002
Product(s) Name.....: Tablet
Model(s).....: Flex 12C
Trade Mark.....: /
Applicant.....: MobileDemand, LC
Address.....: 1501 Boyson Square Drive, Suite 101, Hiawatha, IA 52233,USA
Receipt Date.....: 2025.12.04
Test Date.....: 2025.12.04~2025.12.26
Issued Date.....: 2025.12.27
Standards.....: 47 CFR FCC Part 15, Subpart E(Section 15.407)
ANSI C63.10:2020
Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Lemon He	Black Ding	Tim Zhang	
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History of this test report

Original Report Issue Date: 2025.12.27

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

MobileDemand, LC

1501 Boyson Square Drive, Suite 101, Hiawatha, IA 52233,USA

1.2 Manufacturer

MobileDemand, LC

1501 Boyson Square Drive, Suite 101, Hiawatha, IA 52233,USA

1.3 Basic Description of Equipment Under Test

Product No.	POC251020010-S001			
Equipment Name	Tablet			
Model Name	Flex 12C			
Model difference	/			
Test model	Flex 12C			
Trade Mark	/			
Power Supply	DC 7.7V from battery or DC 12V/3A from adapter			
Adapter Information	Model: GQ36-120300-AU Input: 100-240V~50/60Hz 1.0A Max Output: 12.0V===3.0A			
Operating Temperature	0℃-45℃			
EUT Stage	○ Product Unit		●Final-Sample	
Operating Band & Max Conducted Output Power	5150MHz ~5250MHz		11AX80SISO 5775MHz Ant2: 14.02dBm(0.0252W)	
	5250MHz ~5350MHz			
	5470MHz ~5725MHz			
	5725MHz ~5850MHz			
Product Type	IEEE 802.11a/n/ac/ax: WLAN (SISO)			
Nominal Bandwidth	20MHz / 40MHz / 80MHz			
Modulation	OFDM/OFDMA			
Data Rate (Mbps)	IEEE 11a mode : 6/9/12/18/24/36/48/54 IEEE 11n mode : up to 300 IEEE 11ac mode : up to 866 IEEE 11ax mode : up to 2400			
TPC Function	○	With TPC	●	Without TPC
Beamforming Function	○	With Beamforming	●	Without Beamforming
Operating Mode(s)	☐ Master ☒ Client device without radar detection ☐ Client device with radar detection			
Antenna gain	Main ANT(Ant 2): 2.96dBi AUX ANT(Ant 1): 2.18dBi			
Antenna type	FPC_PIFA Antenna			

Note:

For more detailed features description, please refer to the manufacturer's or the User's manual of the EUT.

“●” indicates selection, “○” indicates non-selection.

Channel Information			
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	802.11a/n/ac/ax (20MHz)	5180-5240	36-48
5250-5350		5260-5320	52-64
5470-5725		5500-5700	100-140
5725-5850		5745-5825	149-165
5150-5250	802.11n/ac/ax (40MHz)	5190-5230	38-46
5250-5350		5270-5310	54-62
5470-5725		5510-5670	102-134
5725-5850		5755-5795	151-159
5150-5250	802.11ac/ax (80MHz)	5210	42
5250-5350		5290	58
5470-5725		5530-5610	106-122
5725-5850		5775	155

Note: For 802.11ax mode only support full RU mode.

1.4 Transmit Operating 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			
☒	802.11n(20MHz)	Operating mode	☒	1TX	☐	2TX	☐	3TX			
☒	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	
☒	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: This device have 2 antennas but support the SISO transmission mode only.

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
Dynamic Frequency Selection (DFS)	15.407(h)	Pass	See the report RF251020010-01-003 for details
Note: The EUT has two external antennas arrangement which was permanently attached.			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart E(Section 15.407)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

ANSI C63.10:2020

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	9718-284	JLE024	2025/3/1	2026/2/28
5	Horn Antenna	SCHWARZBEC K	BBHA 9120 D	02670	JLE028	2025/4/12	2026/4/11
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2025/4/15	2026/4/14
7	Horn Antenna	SCHWARZBEC K	BBHA 9170	9170#685	JLE029	2024/7/15	2027/7/14
8	Loop Antenna	SCHWARZBEC K	FMZB15 19B	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				
RF Conducted Emission							
1	MXA Signal Analyzer	Keysight	N9021B	MY60080 169	JLE050	2025/3/1	2026/2/28
2	RF Control Unit	dsusoft	JS0806-2	21G8060 449	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	N5182B	MY59100 855	JLE068	2025/4/15	2026/4/14
5	EXG Analog Signal Generator	Keysight	N5173B	MY59101 282	JLE052	2025/3/1	2026/2/28
6	Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	1201.000 2K50-116 064-Dt	JLE054	2025/3/1	2026/2/28
7	Test software	dsusoft	JS1120-3 Ver.3.2.22.0				
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	Test receiver	Rohde&Schwarz	ESCI	100718	JLE010	2025/3/1	2026/2/28
4	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	JLE047	2025/3/1	2026/2/28
5	Temp&Humidity Recorder	Meideshi	JR900	/	JLE020	2025/4/15	2026/4/14
6	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				

2.4 Operation Mode

The EUT was supplied by applicant and it was run in TX mode that was controlled by Master provided RF testing program.

Evaluated A/VHT20/VHT40/VHT80/HE20/HE40/HE80 mode only, due to similar modulation. The power setting of HT20/HT40 mode are the same or lower than /VHT20/VHT40.

The worst case test result was showed in the report.

2.5 Test Condition

Test Item	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	25°C, 53% RH	AC 120V/60Hz	Keith Huang
Radiated Emission	24°C, 51% RH	AC 120V/60Hz	Lemon He
Spectrum Bandwidth	24.4°C, 53% RH	AC 120V/60Hz	Freedom Zhuo
Conducted Power	24.4°C, 53% RH	AC 120V/60Hz	Freedom Zhuo
Power Spectral Density	24.4°C, 53% RH	AC 120V/60Hz	Freedom Zhuo

Note: Adapter supply voltage AC 120V/60Hz.

The applicant declare the operating environment of EUT as below:

Normal conditions: AC 120V/60Hz, 0~45°C

2.6 Duty Cycle of Test Signal

If duty cycle is $\geq 98\%$, 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	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
11A	Ant1	5180	0.19	0.24	79.17	1.01
	Ant2	5180	0.19	0.24	79.17	1.01
	Ant1	5200	0.19	0.24	79.17	1.01
	Ant2	5200	0.19	0.24	79.17	1.01
	Ant1	5240	0.20	0.24	83.33	0.79
	Ant2	5240	0.20	0.24	83.33	0.79
	Ant1	5260	0.20	0.24	83.33	0.79
	Ant2	5260	0.19	0.24	79.17	1.01
	Ant1	5280	0.19	0.24	79.17	1.01
	Ant2	5280	0.20	0.24	83.33	0.79

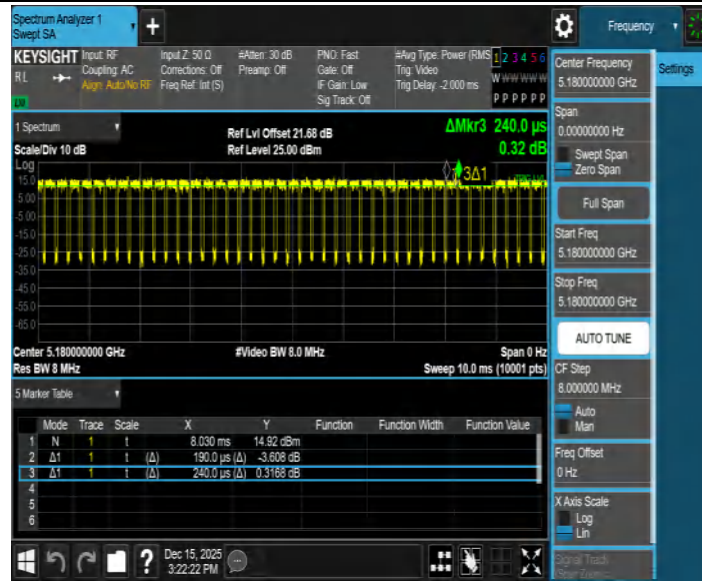
	Ant1	5320	0.20	0.24	83.33	0.79
	Ant2	5320	0.19	0.24	79.17	1.01
	Ant1	5500	0.19	0.24	79.17	1.01
	Ant2	5500	0.19	0.24	79.17	1.01
	Ant1	5580	0.19	0.24	79.17	1.01
	Ant2	5580	0.19	0.24	79.17	1.01
	Ant1	5700	0.19	0.24	79.17	1.01
	Ant2	5700	0.19	0.24	79.17	1.01
	Ant1	5745	0.19	0.24	79.17	1.01
	Ant2	5745	0.20	0.24	83.33	0.79
	Ant1	5785	0.19	0.24	79.17	1.01
	Ant2	5785	0.20	0.24	83.33	0.79
	Ant1	5825	0.19	0.24	79.17	1.01
	Ant2	5825	0.19	0.23	82.61	0.83
11AC20SISO	Ant1	5180	4.00	4.05	98.77	0.05
	Ant2	5180	4.00	4.05	98.77	0.05
	Ant1	5200	4.00	4.05	98.77	0.05
	Ant2	5200	4.00	4.05	98.77	0.05
	Ant1	5240	4.01	4.05	99.01	0.04
	Ant2	5240	4.00	4.05	98.77	0.05
	Ant1	5260	4.00	4.05	98.77	0.05
	Ant2	5260	4.01	4.05	99.01	0.04
	Ant1	5280	4.01	4.05	99.01	0.04
	Ant2	5280	4.00	4.05	98.77	0.05
	Ant1	5320	4.01	4.06	98.77	0.05
	Ant2	5320	4.00	4.05	98.77	0.05
	Ant1	5500	4.00	4.05	98.77	0.05
	Ant2	5500	4.01	4.05	99.01	0.04
	Ant1	5580	4.00	4.05	98.77	0.05
	Ant2	5580	4.00	4.05	98.77	0.05
	Ant1	5700	4.00	4.05	98.77	0.05
	Ant2	5700	4.01	4.05	99.01	0.04
	Ant1	5745	4.01	4.06	98.77	0.05
	Ant2	5745	4.00	4.05	98.77	0.05
	Ant1	5785	4.01	4.06	98.77	0.05
	Ant2	5785	4.00	4.05	98.77	0.05
	Ant1	5825	4.01	4.05	99.01	0.04
	Ant2	5825	4.01	4.05	99.01	0.04
11AC40SISO	Ant1	5190	3.98	4.02	99.00	0.04
	Ant2	5190	3.98	4.03	98.76	0.05
	Ant1	5230	3.98	4.03	98.76	0.05
	Ant2	5230	3.98	4.03	98.76	0.05
	Ant1	5270	3.98	4.03	98.76	0.05

	Ant2	5270	3.98	4.03	98.76	0.05
	Ant1	5310	3.98	4.03	98.76	0.05
	Ant2	5310	3.98	4.03	98.76	0.05
	Ant1	5510	3.98	4.03	98.76	0.05
	Ant2	5510	3.98	4.03	98.76	0.05
	Ant1	5550	3.98	4.03	98.76	0.05
	Ant2	5550	3.98	4.03	98.76	0.05
	Ant1	5670	3.98	4.02	99.00	0.04
	Ant2	5670	3.98	4.02	99.00	0.04
	Ant1	5755	3.98	4.02	99.00	0.04
	Ant2	5755	3.98	4.03	98.76	0.05
	Ant1	5795	3.98	4.03	98.76	0.05
	Ant2	5795	3.98	4.02	99.00	0.04
11AC80SISO	Ant1	5210	3.98	4.02	99.00	0.04
	Ant2	5210	3.97	4.02	98.76	0.05
	Ant1	5290	3.97	4.02	98.76	0.05
	Ant2	5290	3.97	4.02	98.76	0.05
	Ant1	5530	3.98	4.03	98.76	0.05
	Ant2	5530	3.98	4.02	99.00	0.04
	Ant1	5610	3.98	4.03	98.76	0.05
	Ant2	5610	3.98	4.02	99.00	0.04
	Ant1	5775	3.98	4.02	99.00	0.04
	Ant2	5775	3.97	4.02	98.76	0.05
11AX20SISO	Ant1	5180	0.27	0.31	87.10	0.60
	Ant2	5180	0.26	0.31	83.87	0.76
	Ant1	5200	0.26	0.31	83.87	0.76
	Ant2	5200	0.26	0.31	83.87	0.76
	Ant1	5240	0.26	0.31	83.87	0.76
	Ant2	5240	0.27	0.31	87.10	0.60
	Ant1	5260	0.26	0.31	83.87	0.76
	Ant2	5260	0.27	0.32	84.38	0.74
	Ant1	5280	0.27	0.31	87.10	0.60
	Ant2	5280	0.27	0.32	84.38	0.74
	Ant1	5320	0.26	0.31	83.87	0.76
	Ant2	5320	0.27	0.32	84.38	0.74
	Ant1	5500	0.26	0.31	83.87	0.76
	Ant2	5500	0.27	0.31	87.10	0.60
	Ant1	5580	0.26	0.31	83.87	0.76
	Ant2	5580	0.27	0.32	84.38	0.74
	Ant1	5700	0.26	0.31	83.87	0.76
	Ant2	5700	0.27	0.32	84.38	0.74
	Ant1	5745	0.26	0.31	83.87	0.76
	Ant2	5745	0.26	0.31	83.87	0.76

	Ant1	5785	0.26	0.31	83.87	0.76
	Ant2	5785	0.27	0.31	87.10	0.60
	Ant1	5825	0.27	0.32	84.38	0.74
	Ant2	5825	0.27	0.32	84.38	0.74
11AX40SISO	Ant1	5190	0.19	0.24	79.17	1.01
	Ant2	5190	0.19	0.24	79.17	1.01
	Ant1	5230	0.20	0.24	83.33	0.79
	Ant2	5230	0.20	0.25	80.00	0.97
	Ant1	5270	0.19	0.24	79.17	1.01
	Ant2	5270	0.19	0.24	79.17	1.01
	Ant1	5310	0.19	0.24	79.17	1.01
	Ant2	5310	0.19	0.24	79.17	1.01
	Ant1	5510	0.20	0.25	80.00	0.97
	Ant2	5510	0.19	0.24	79.17	1.01
	Ant1	5550	0.20	0.24	83.33	0.79
	Ant2	5550	0.19	0.24	79.17	1.01
	Ant1	5670	0.19	0.24	79.17	1.01
	Ant2	5670	0.20	0.24	83.33	0.79
	Ant1	5755	0.19	0.24	79.17	1.01
	Ant2	5755	0.19	0.24	79.17	1.01
	Ant1	5795	0.20	0.24	83.33	0.79
	Ant2	5795	0.20	0.25	80.00	0.97
11AX80SISO	Ant1	5210	0.18	0.23	78.26	1.06
	Ant2	5210	0.18	0.23	78.26	1.06
	Ant1	5290	0.19	0.24	79.17	1.01
	Ant2	5290	0.18	0.23	78.26	1.06
	Ant1	5530	0.17	0.22	77.27	1.12
	Ant2	5530	0.18	0.23	78.26	1.06
	Ant1	5610	0.18	0.23	78.26	1.06
	Ant2	5610	0.18	0.23	78.26	1.06
	Ant1	5775	0.18	0.23	78.26	1.06
	Ant2	5775	0.18	0.23	78.26	1.06

Test Graphs

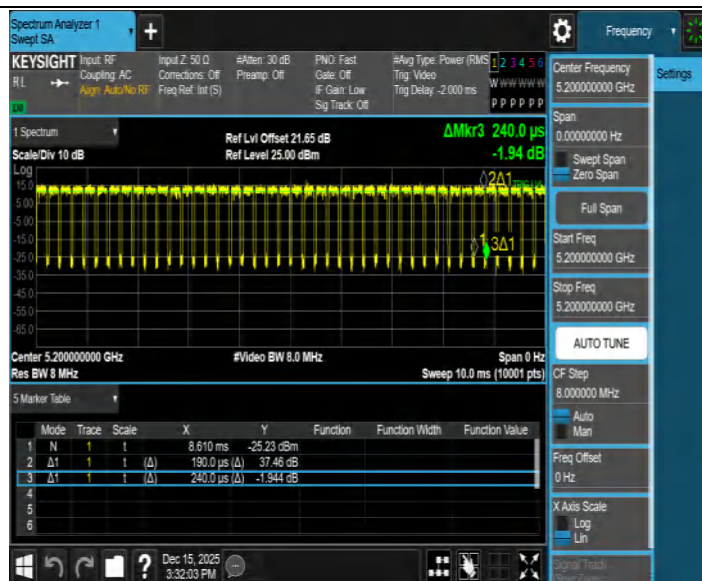
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11A_Ant2_5180



11A_Ant1_5200



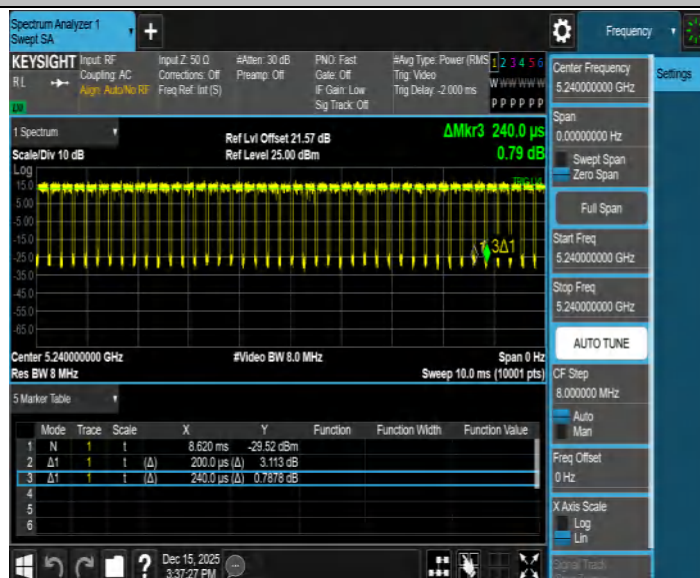
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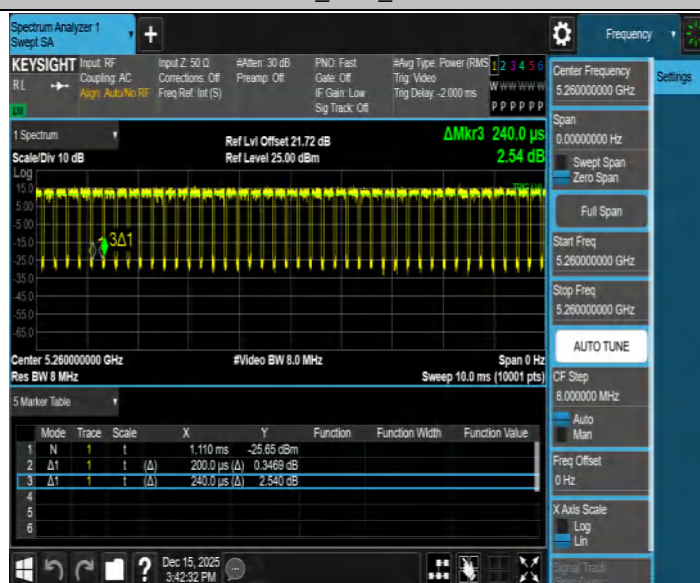
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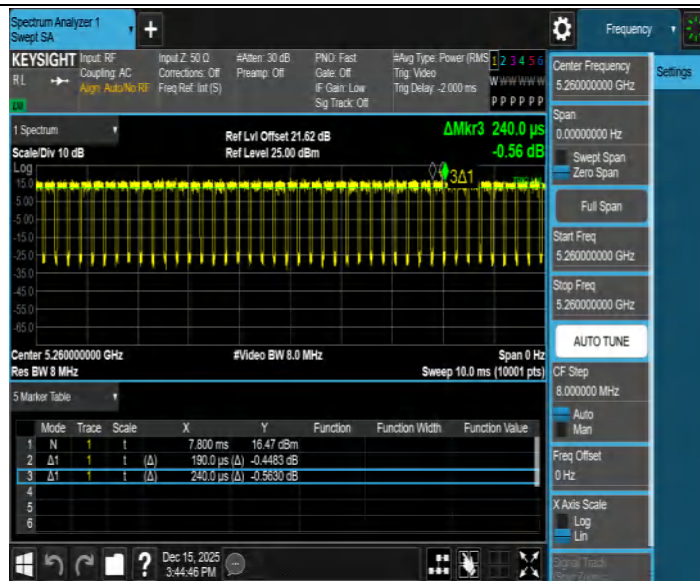
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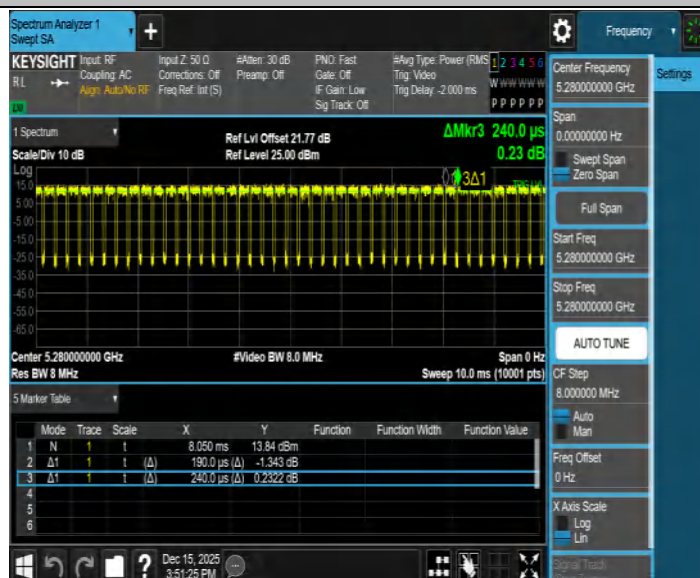
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11A Ant2 5260



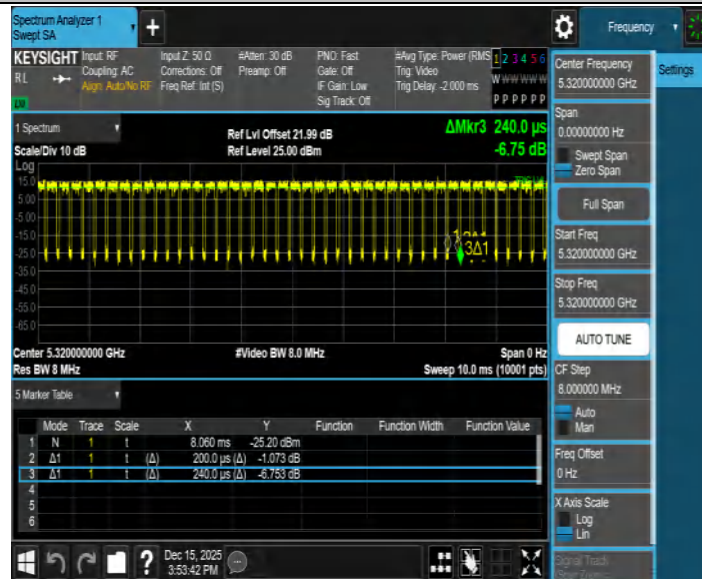
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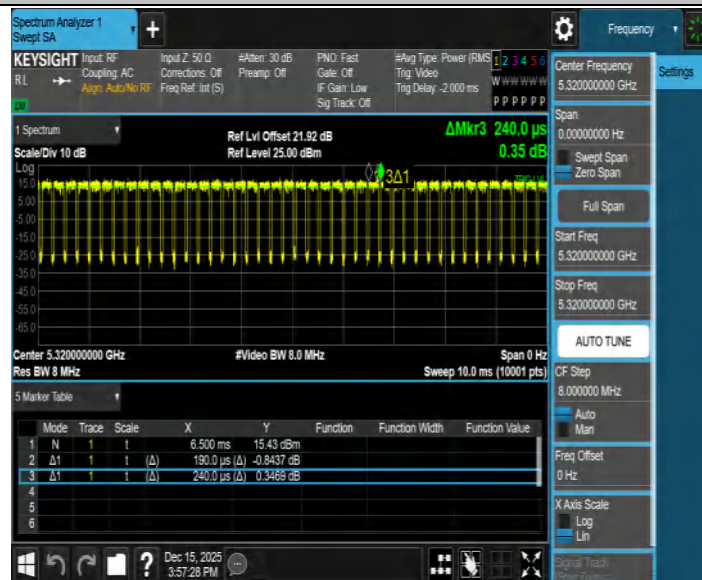
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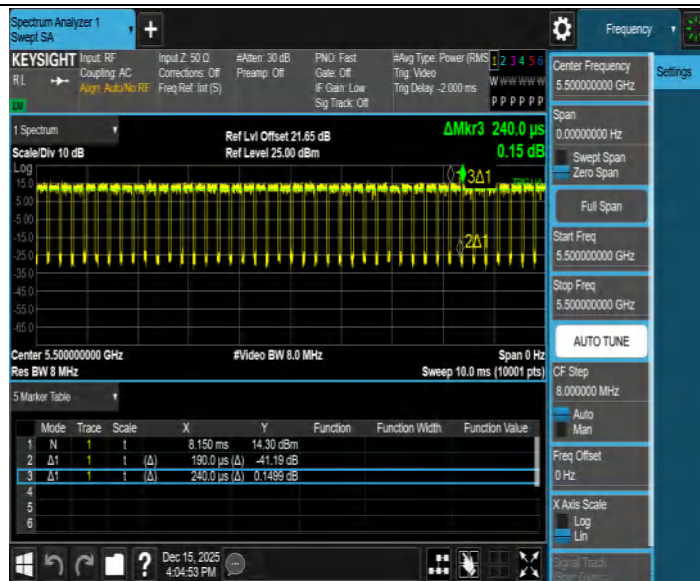
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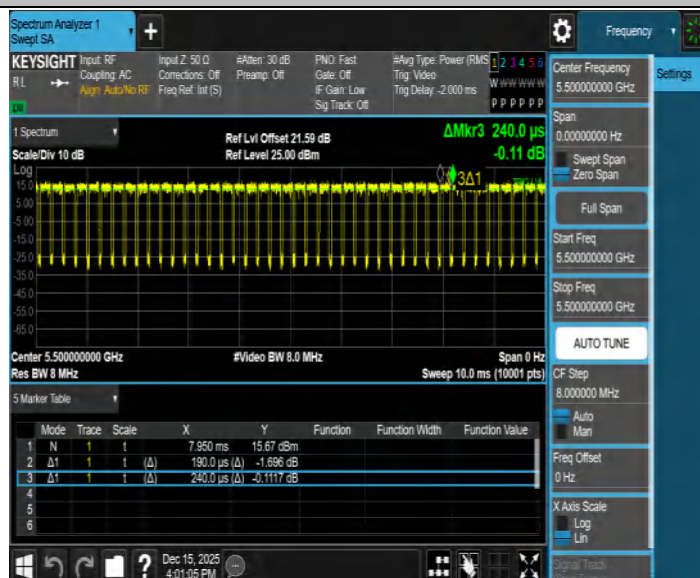
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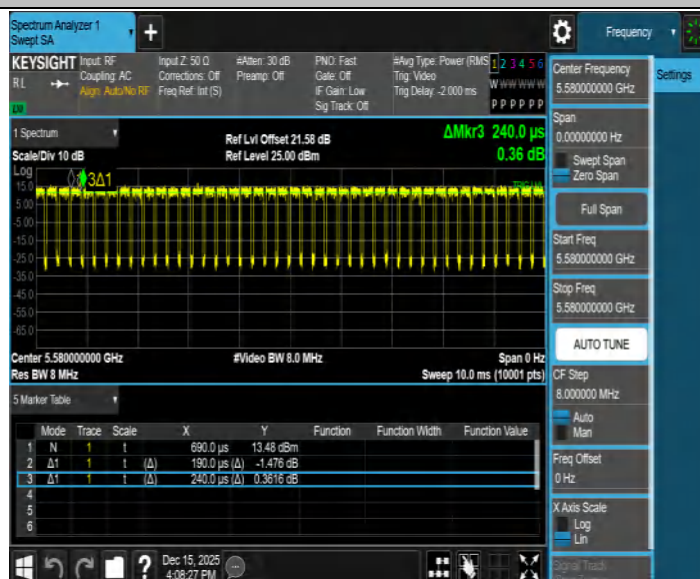
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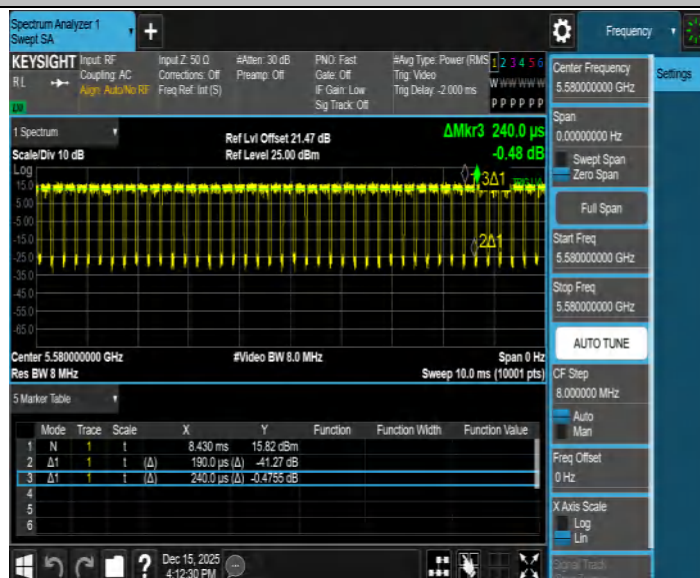
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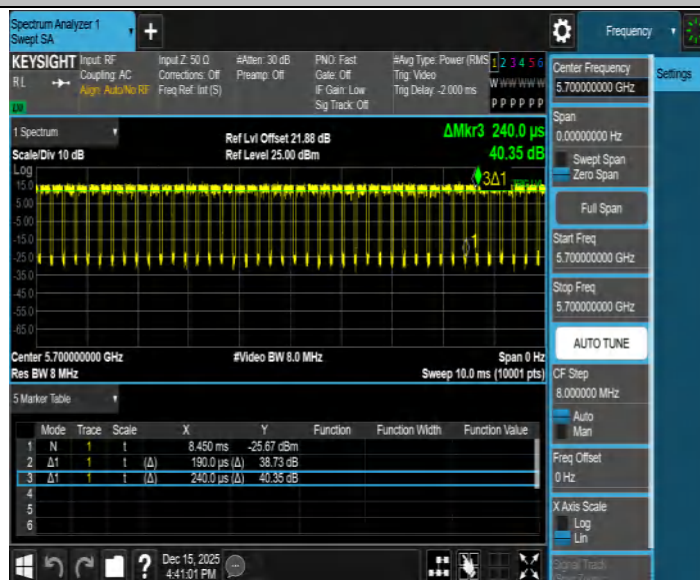
11A_Ant1_5580



11A_Ant2_5580



11A Ant1 5700



11A Ant2 5700



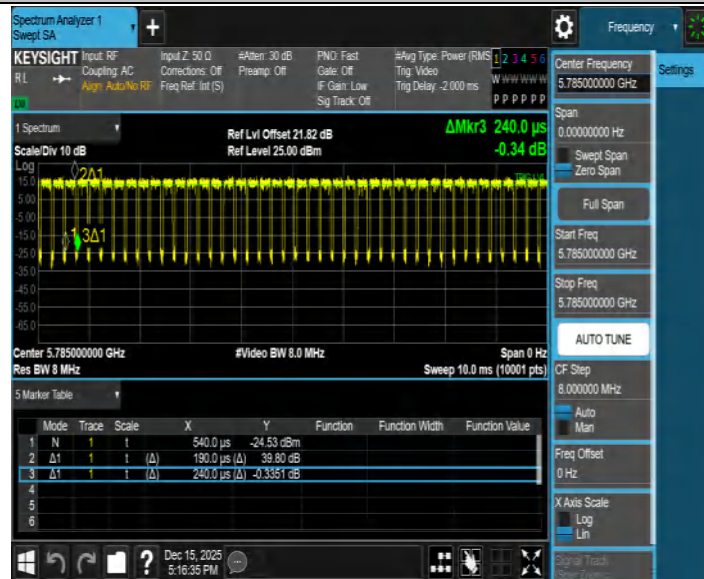
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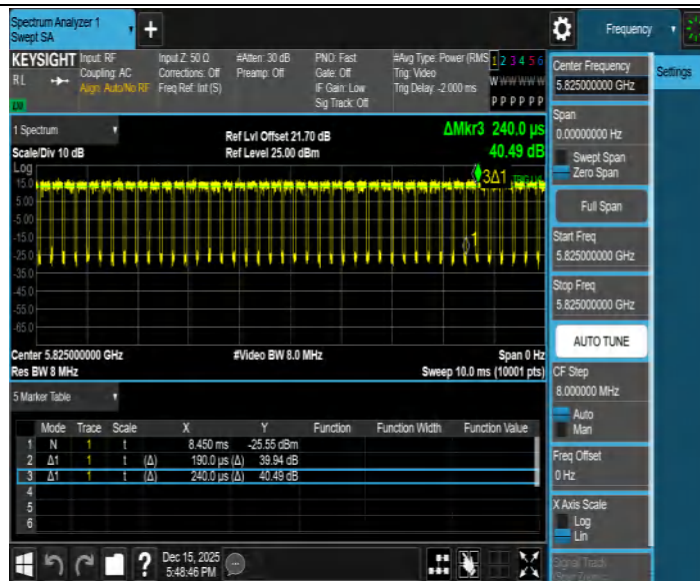
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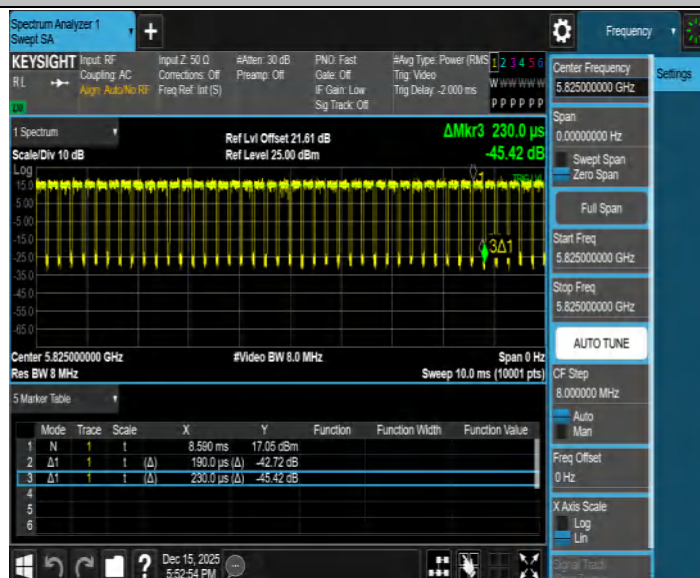
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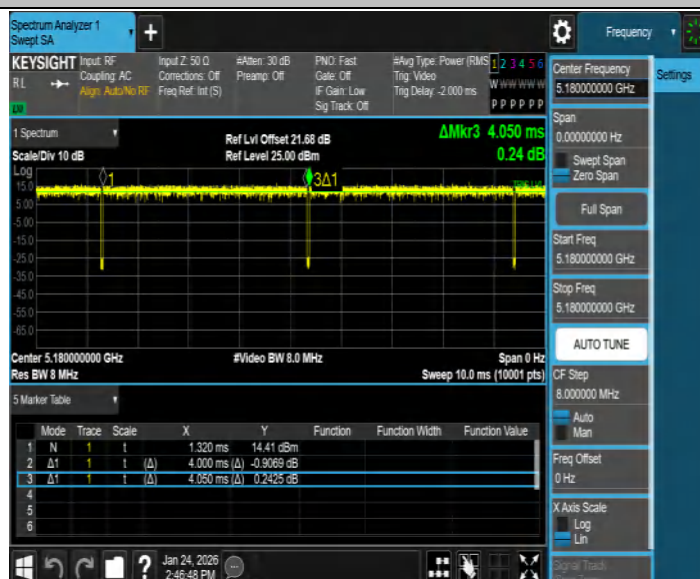
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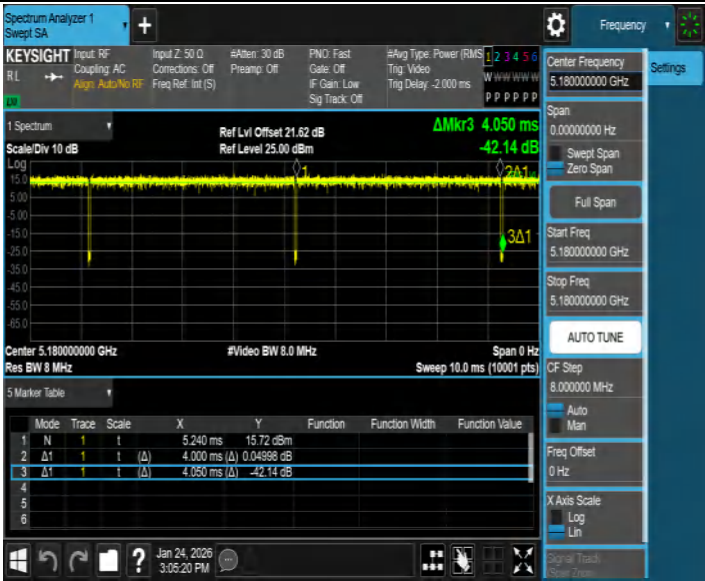
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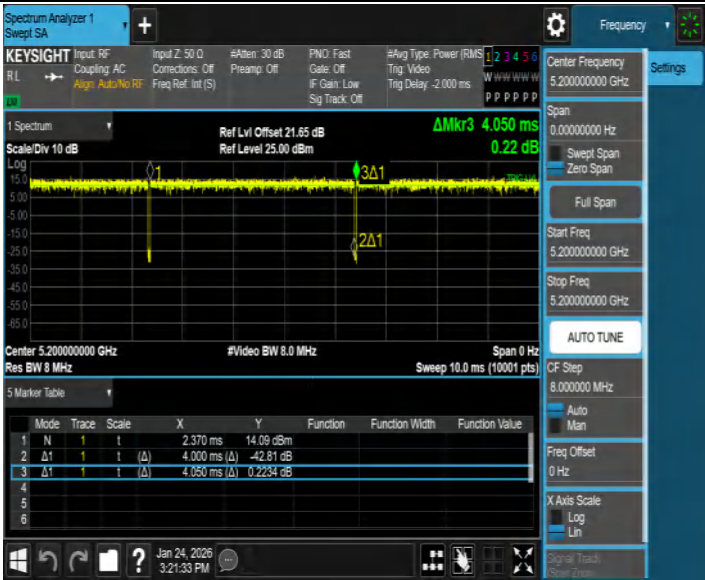
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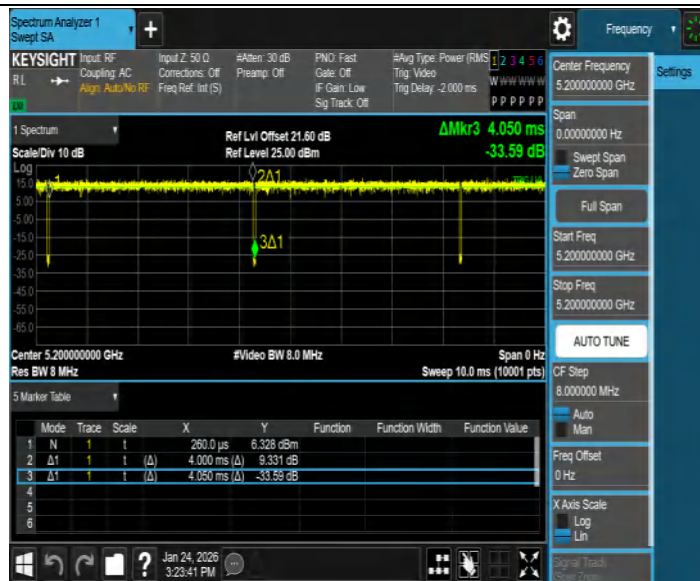
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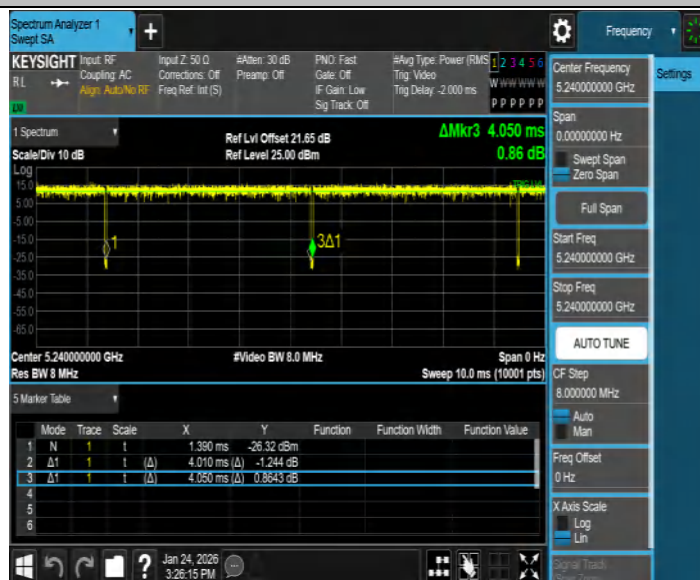
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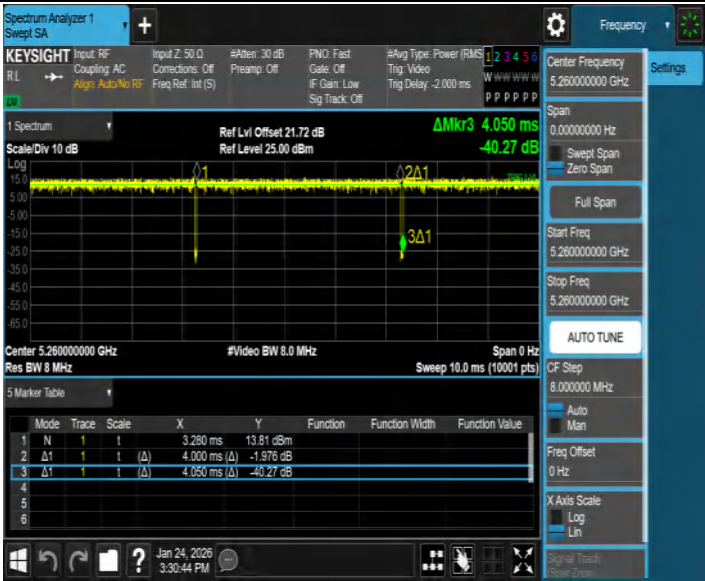
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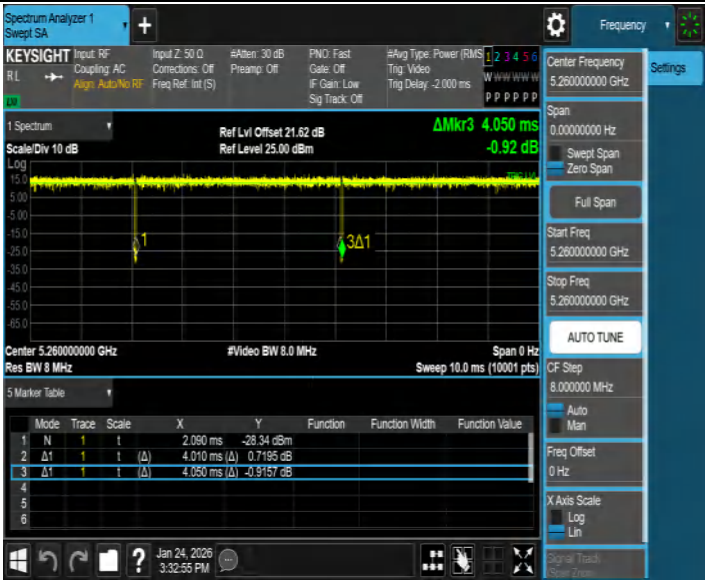
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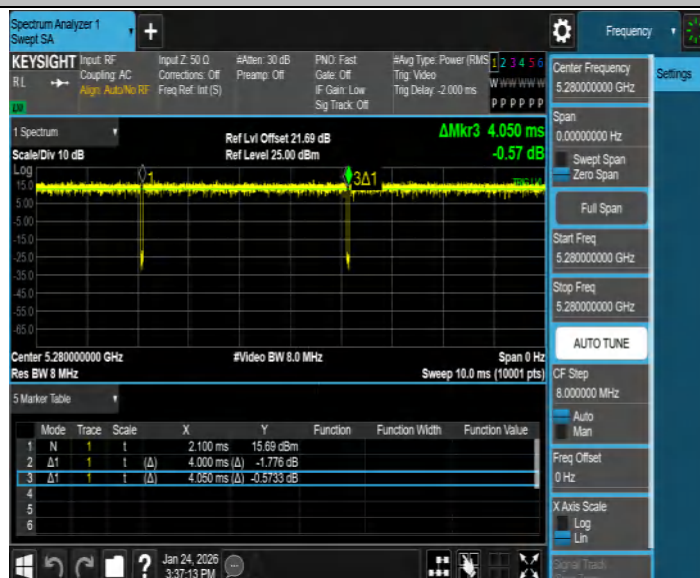
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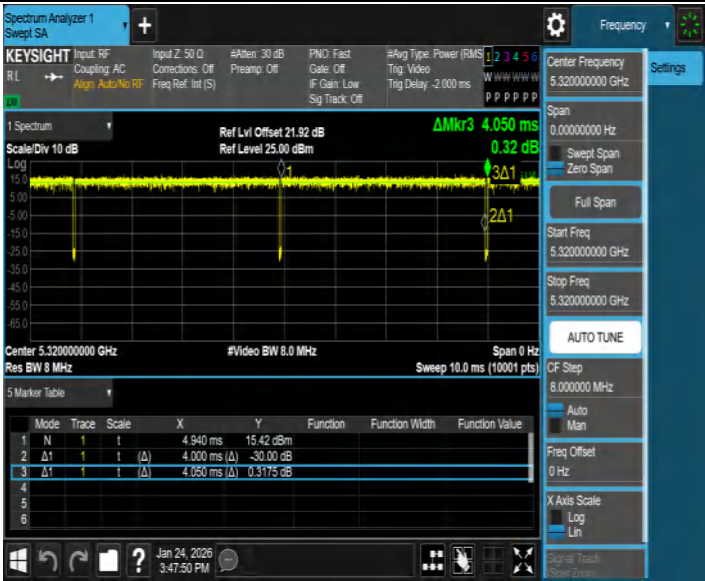
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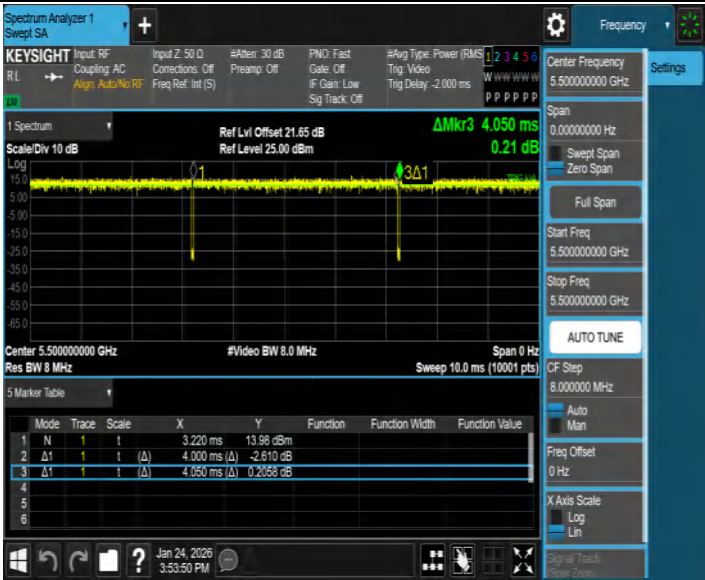
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11AC20SISO_Ant1_5500



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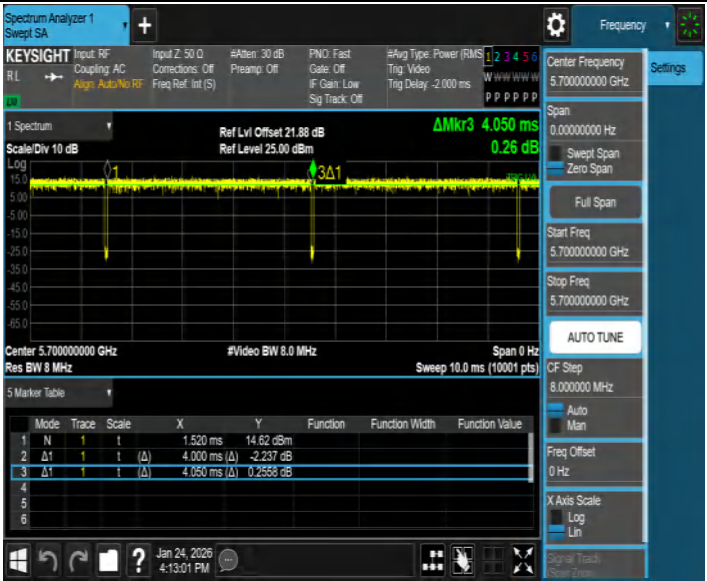
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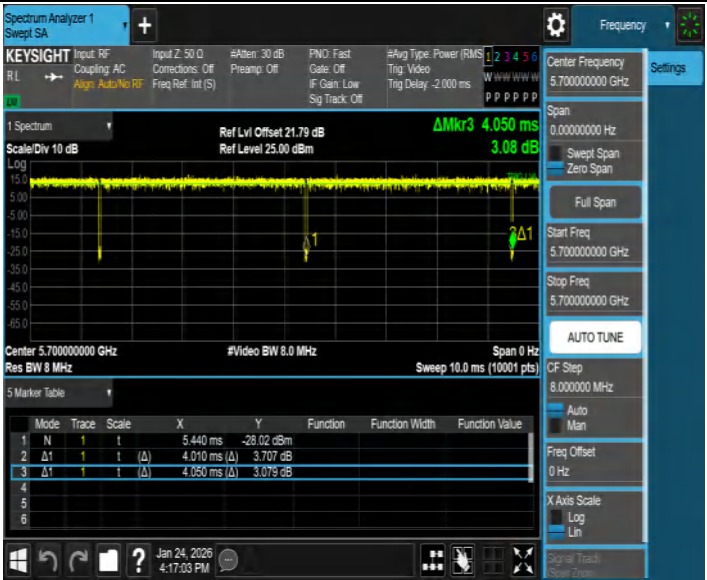
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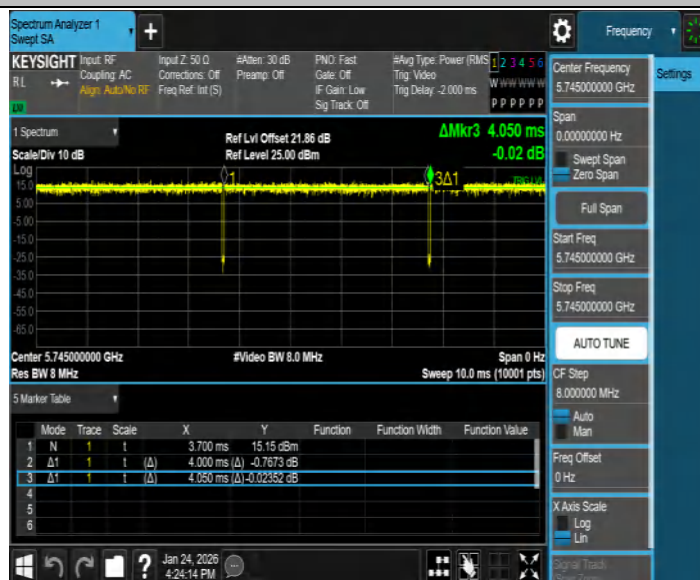
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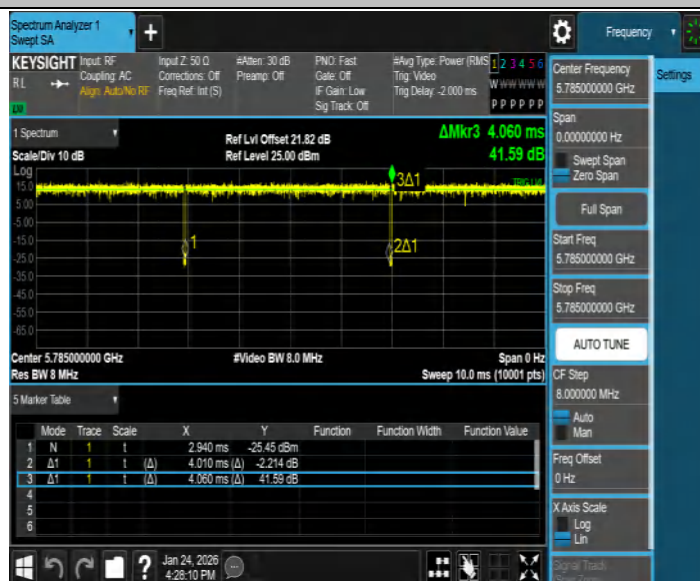
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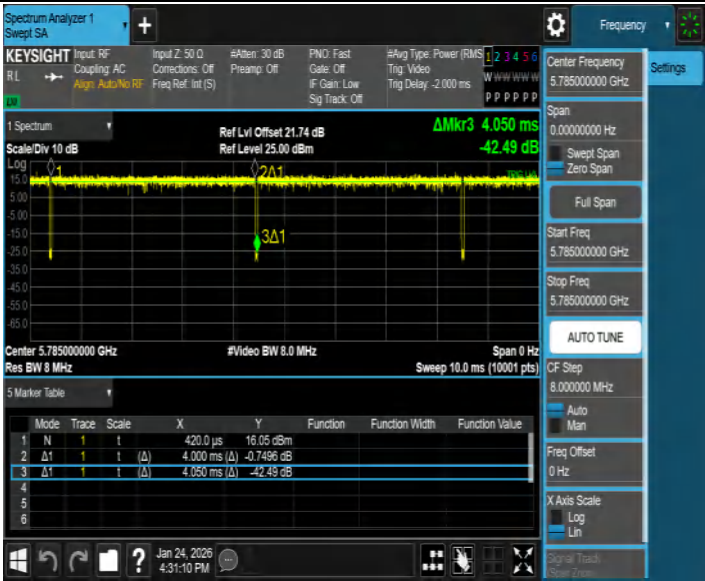
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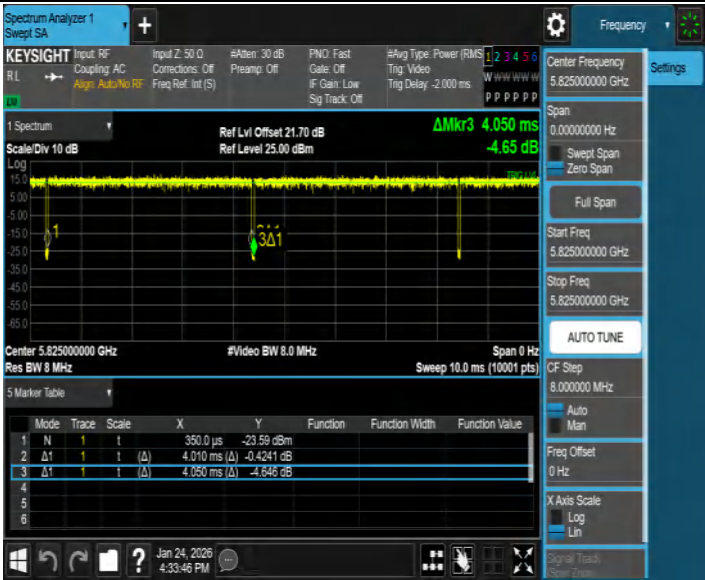
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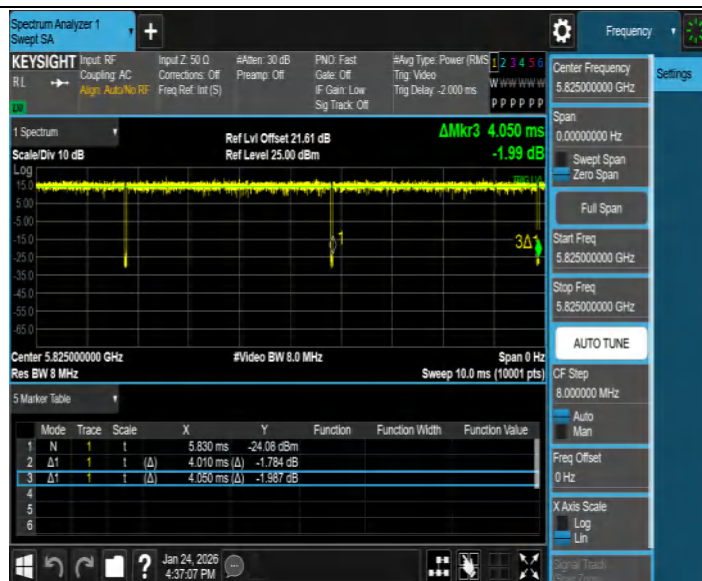
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11AC20SISO_Ant1_5825



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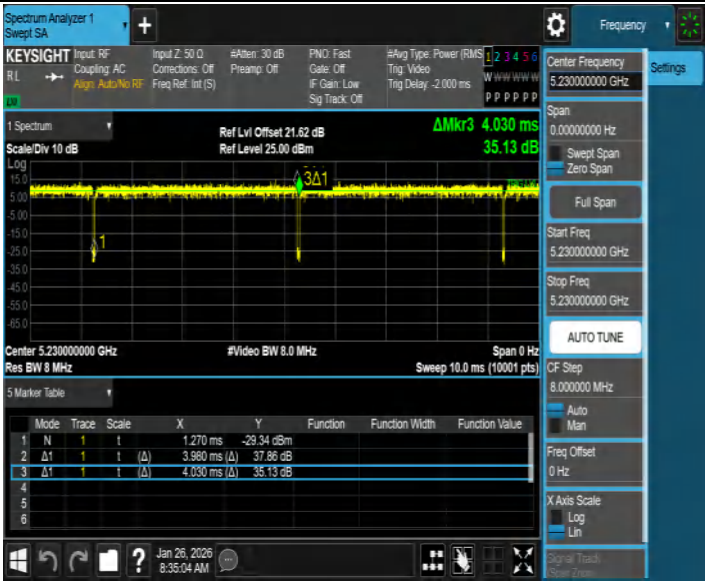
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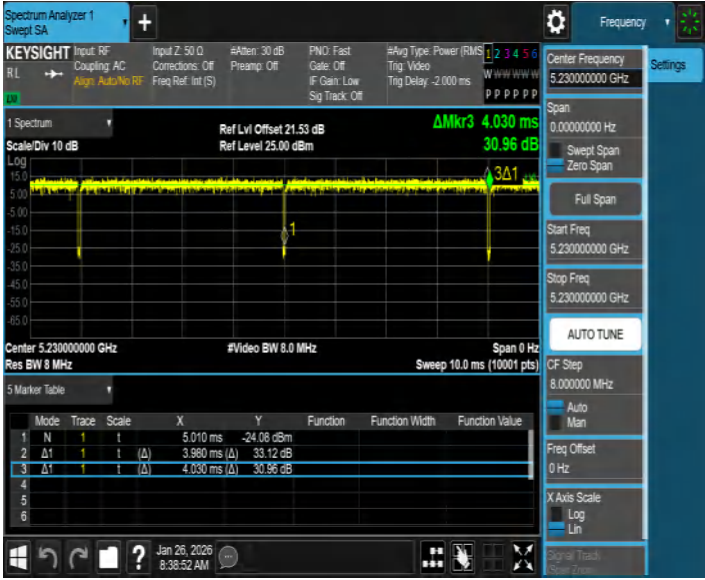
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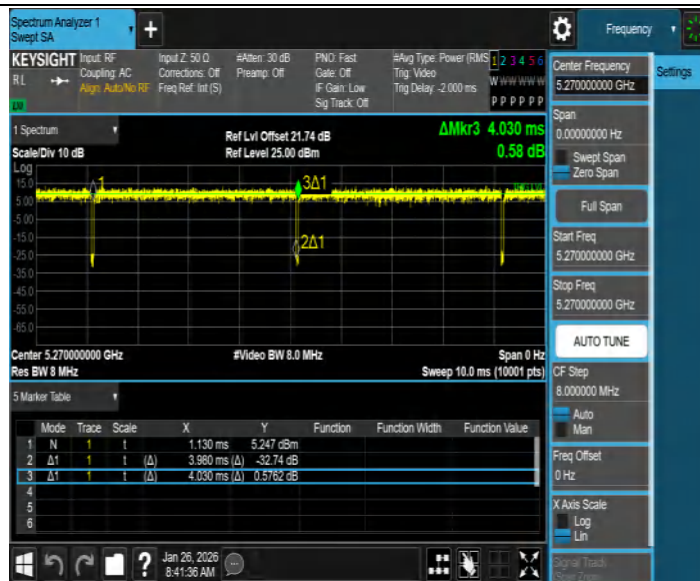
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11AC40SISO_Ant2_5230



11AC40SISO_Ant1_5270



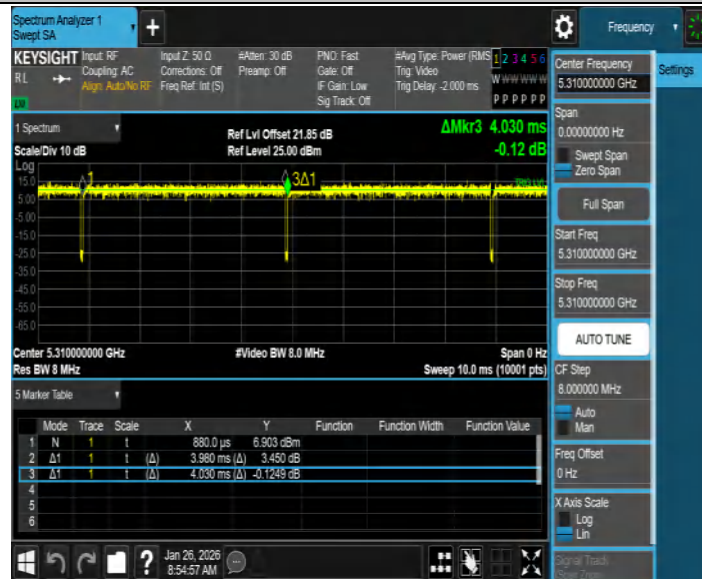
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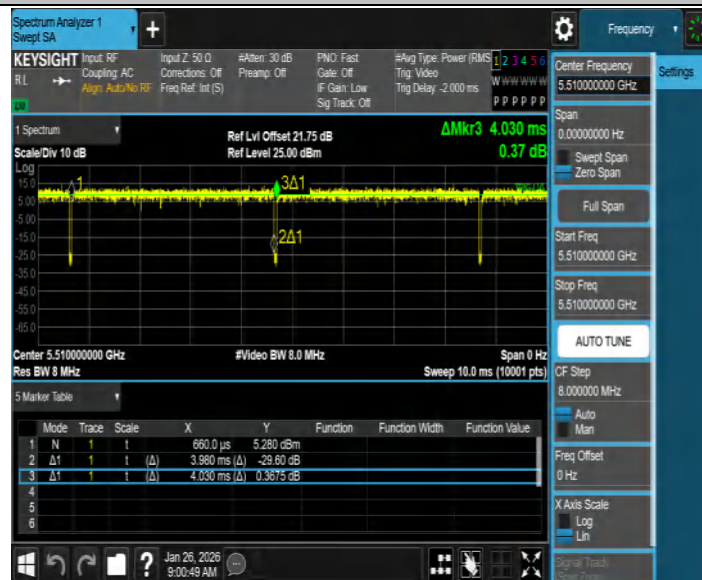
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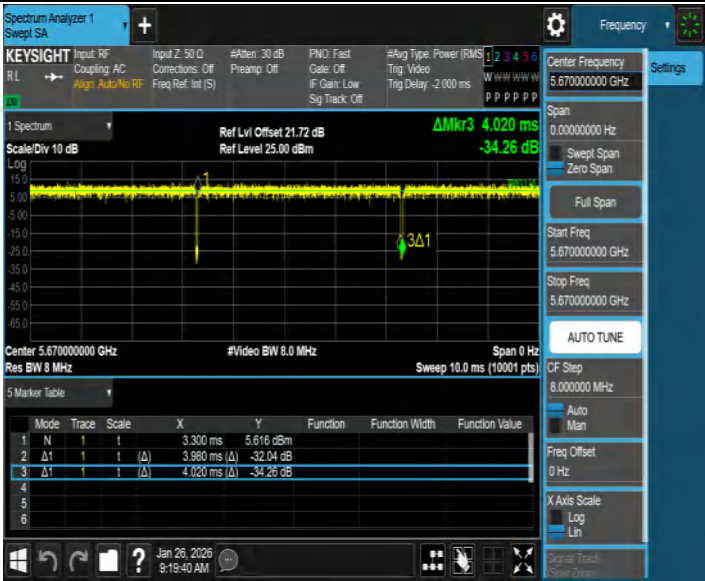
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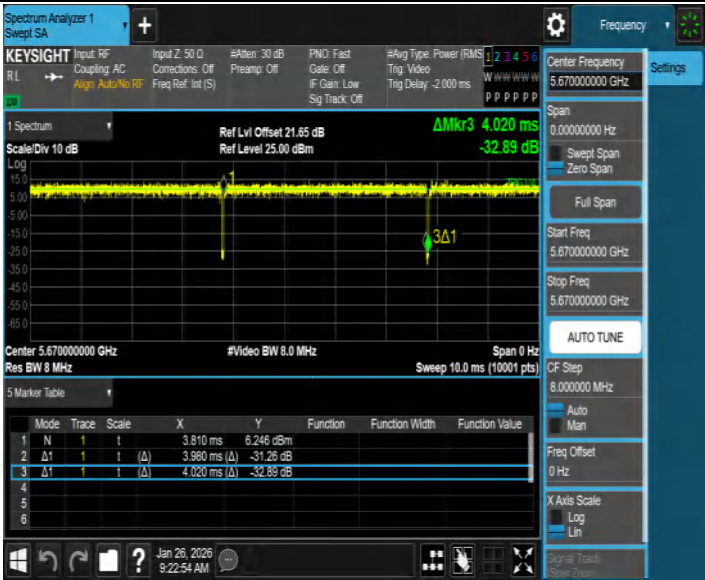
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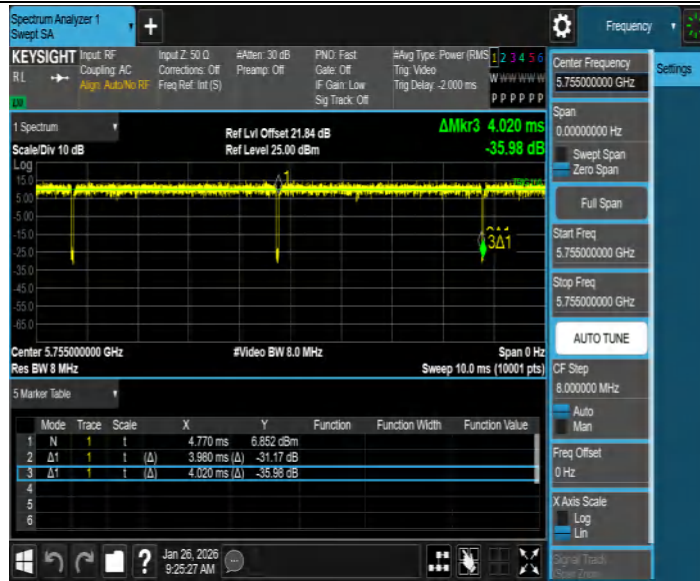
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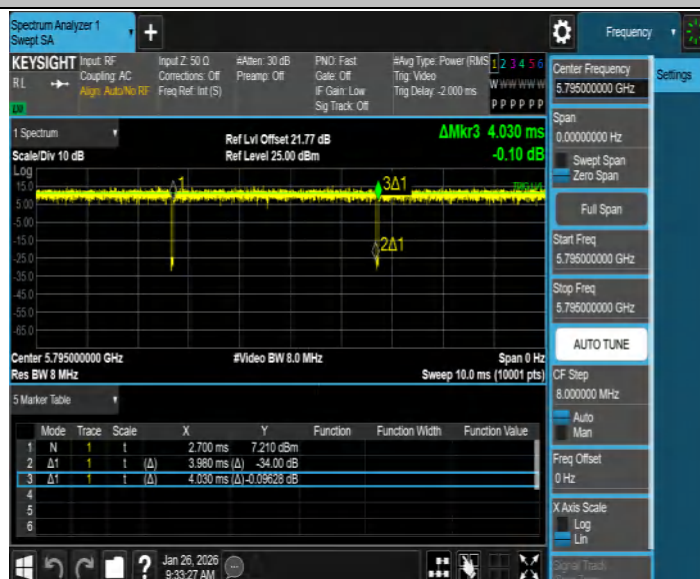
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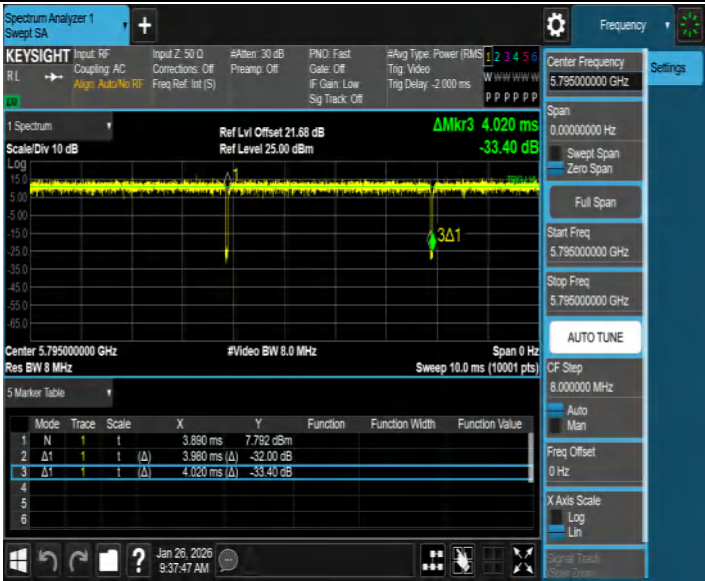
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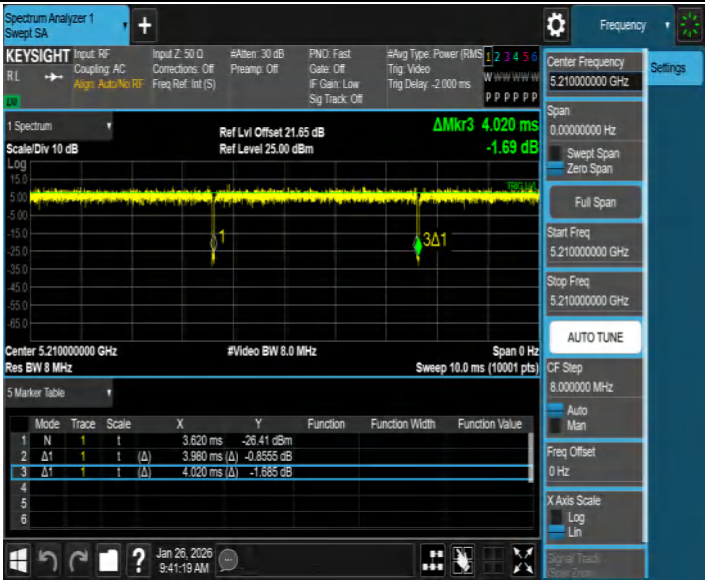
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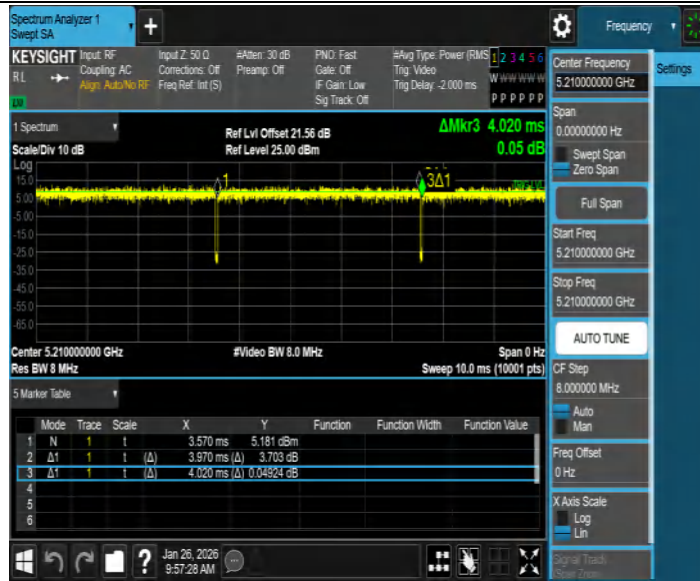
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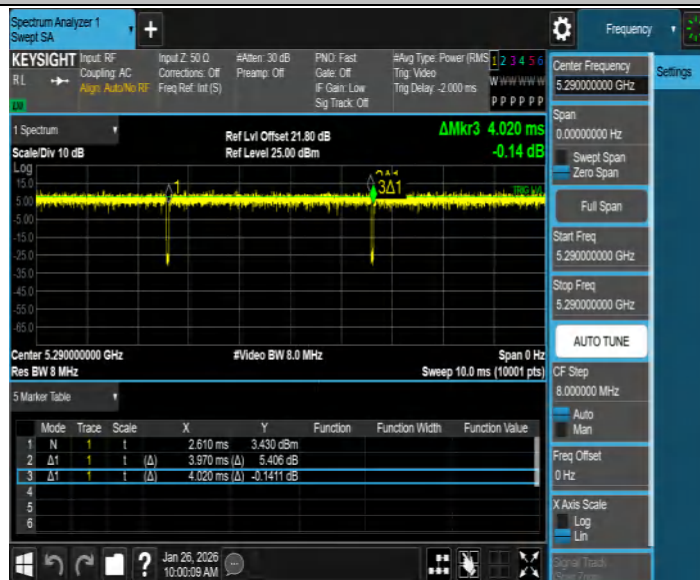
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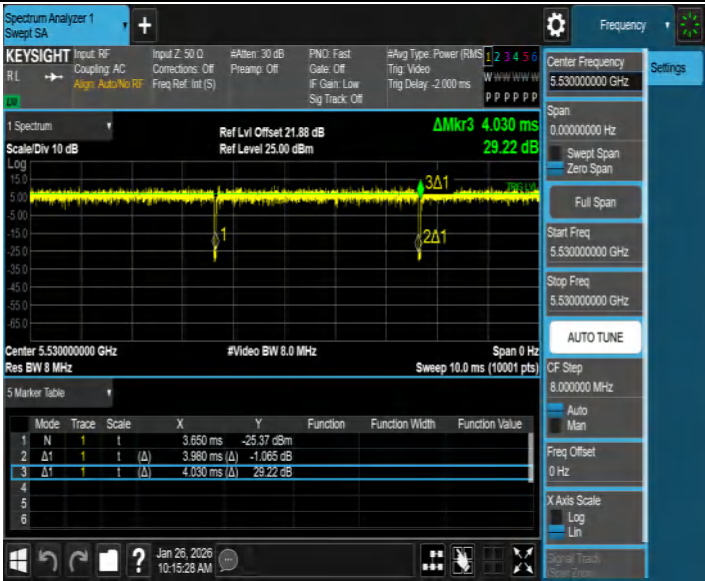
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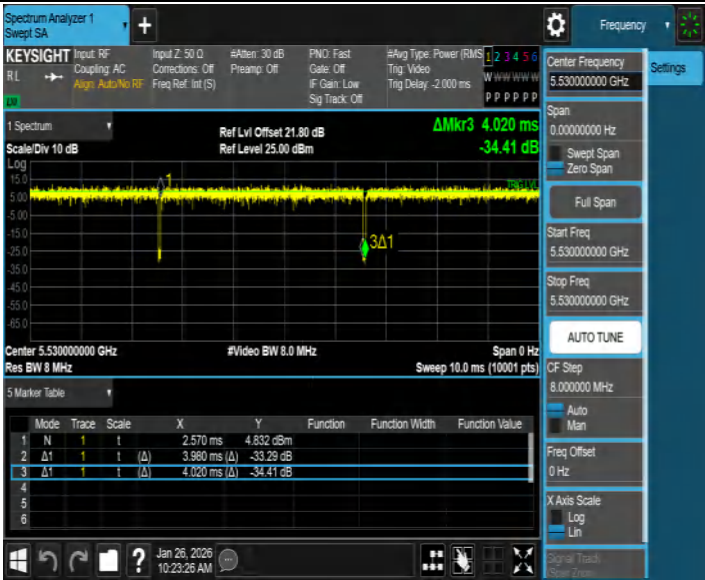
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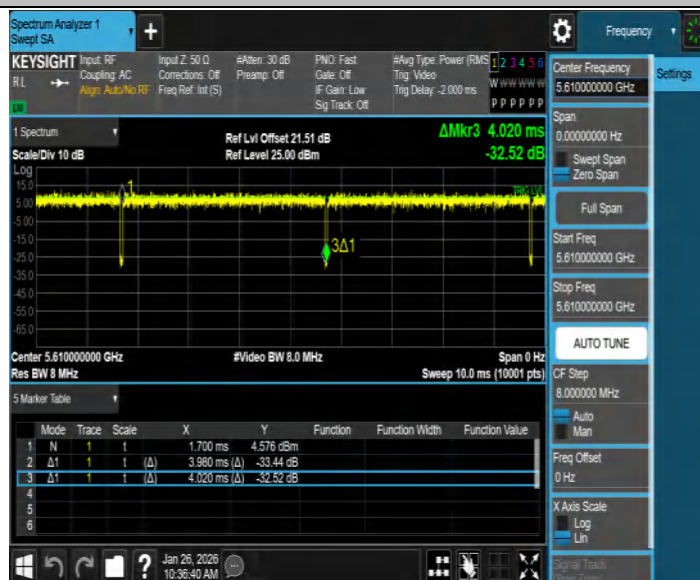
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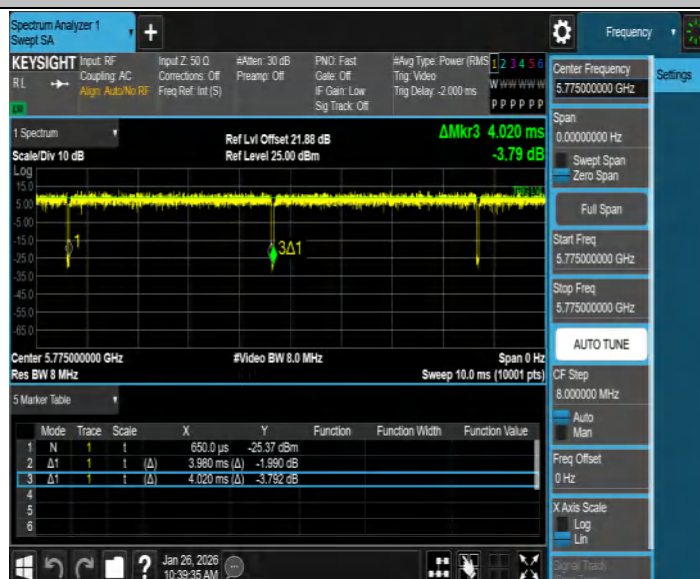
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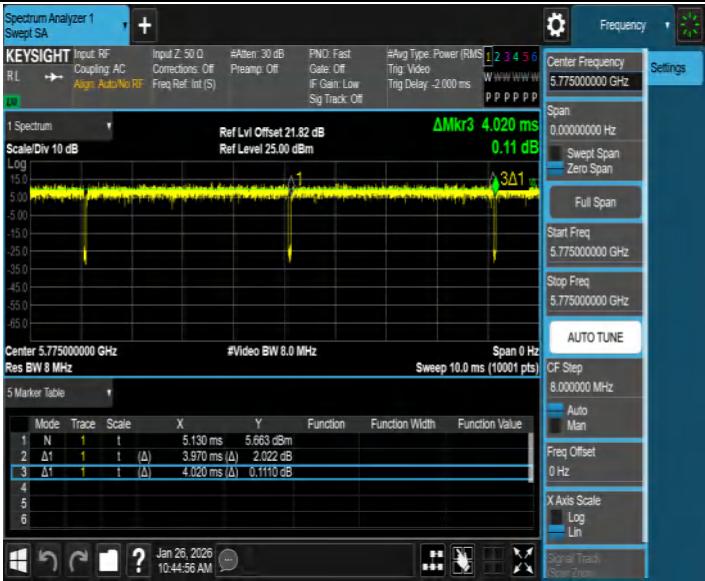
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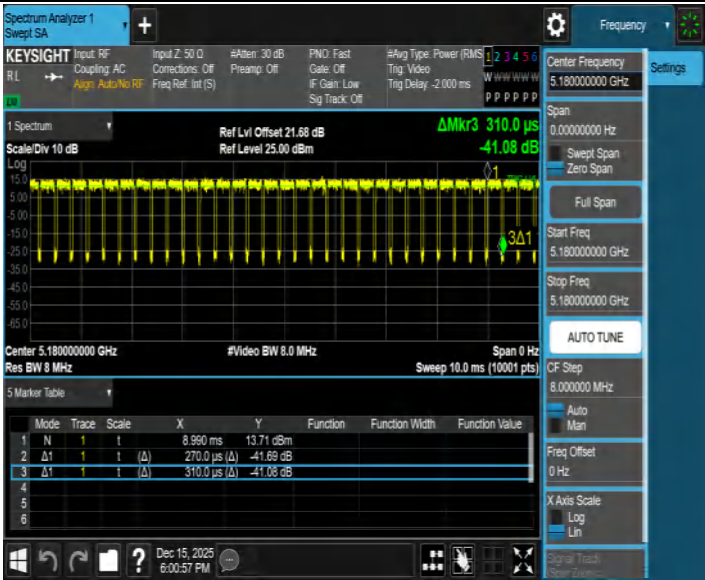
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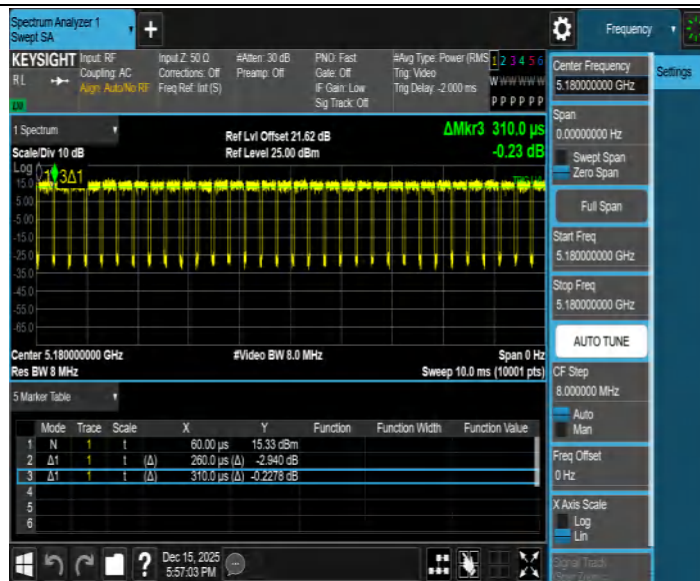
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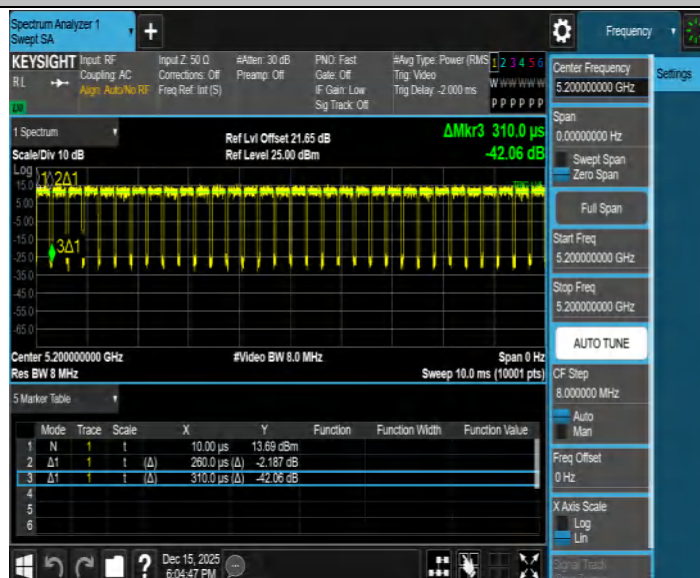
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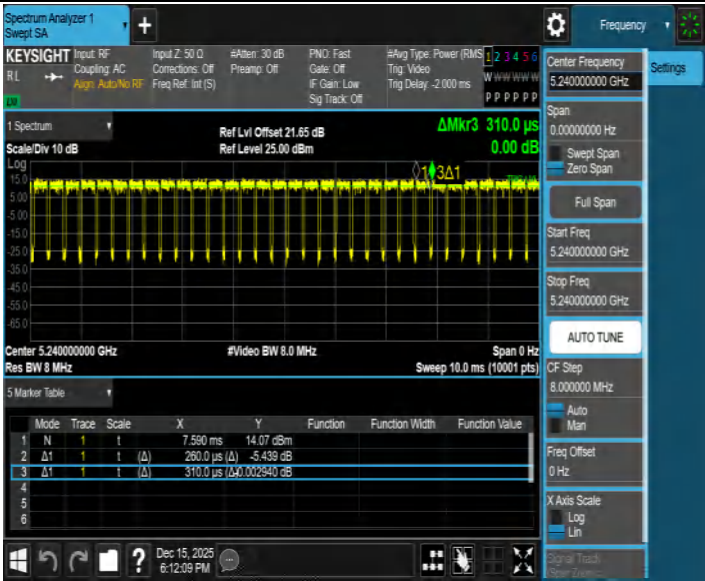
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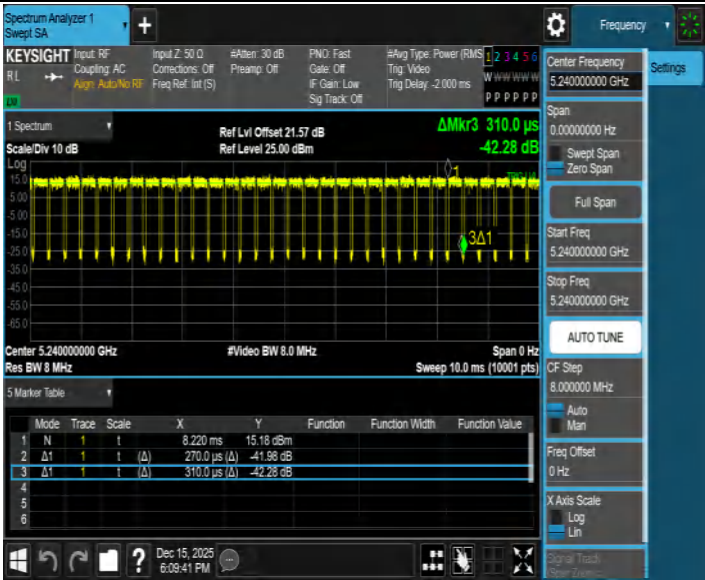
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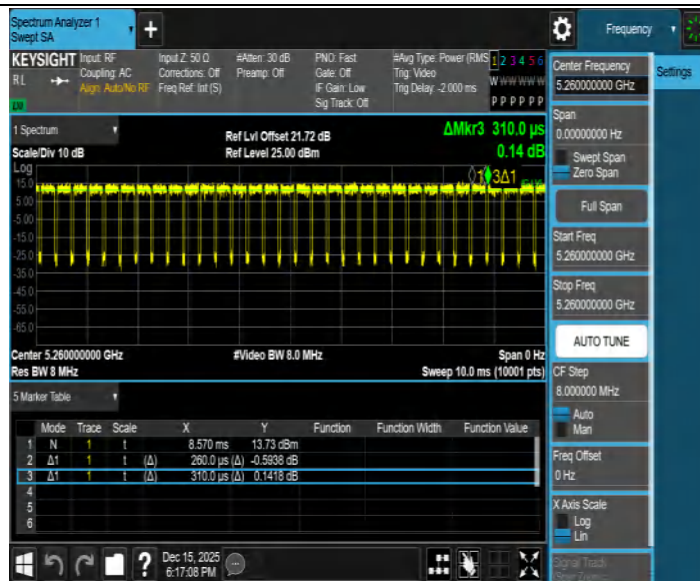
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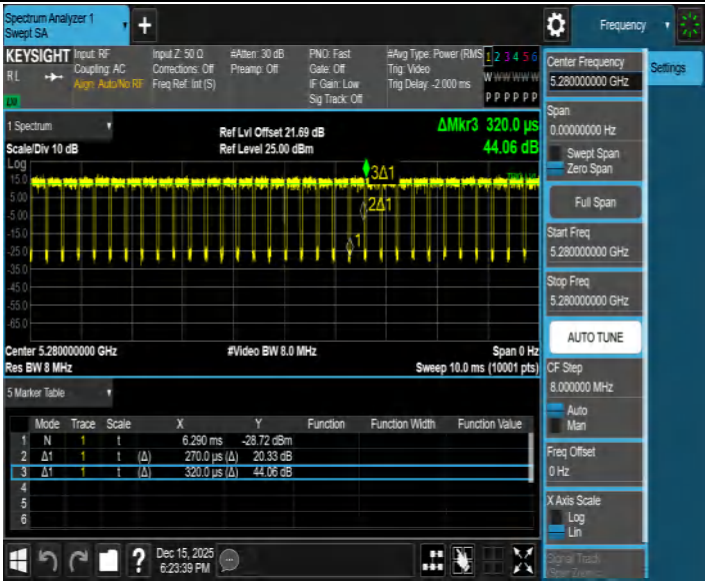
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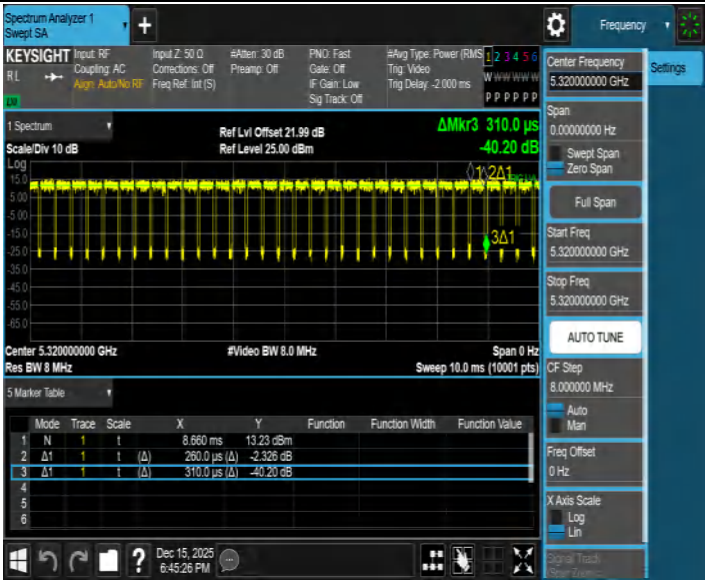
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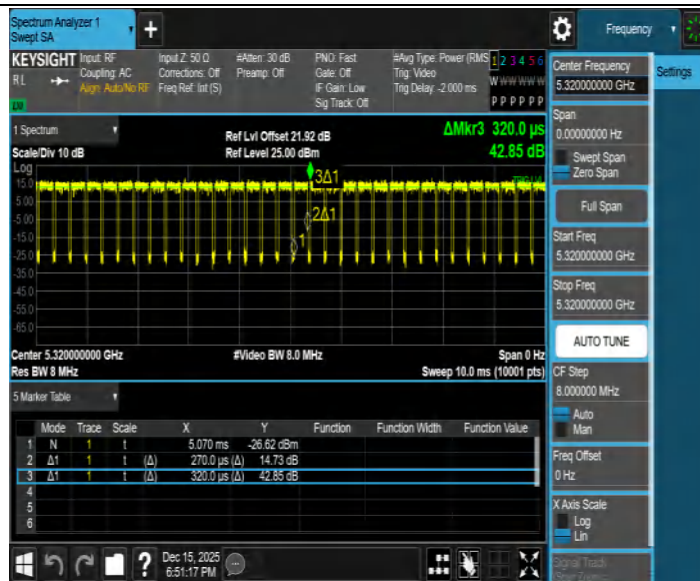
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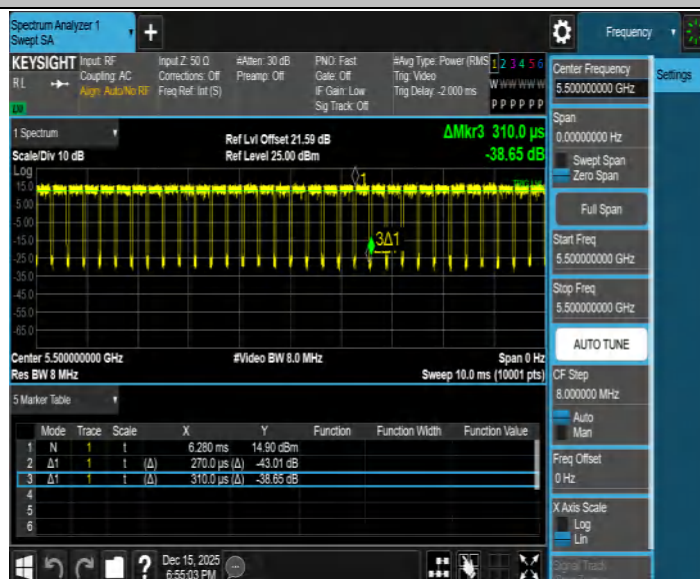
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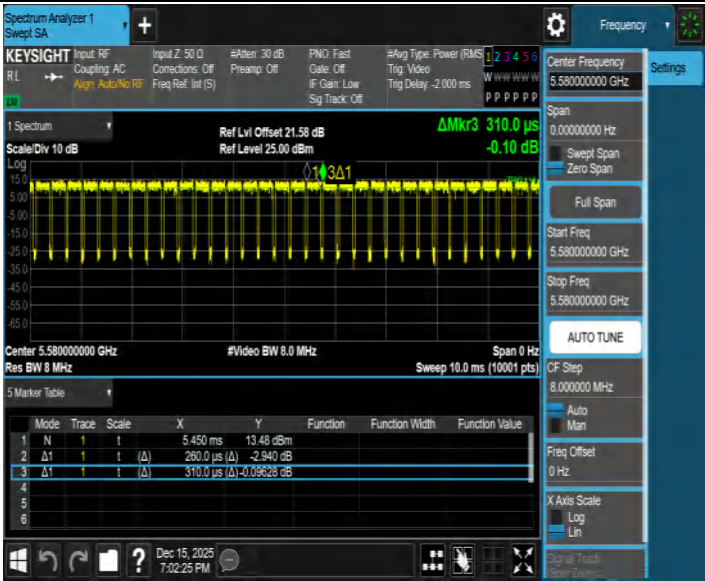
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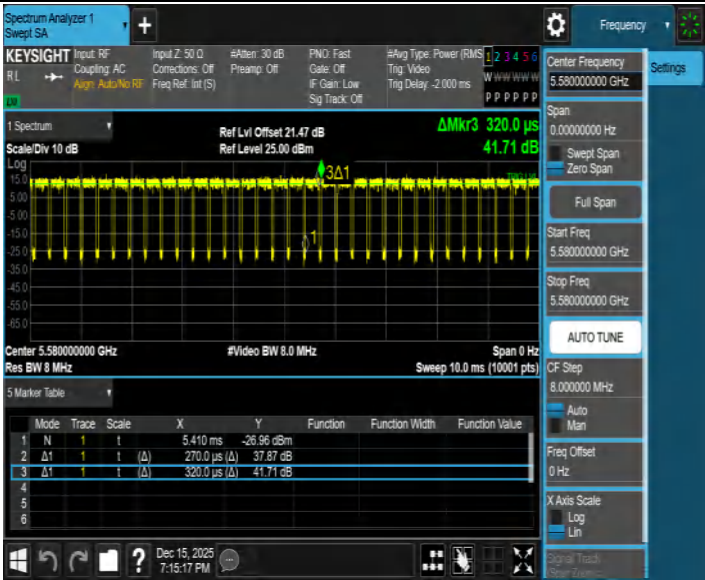
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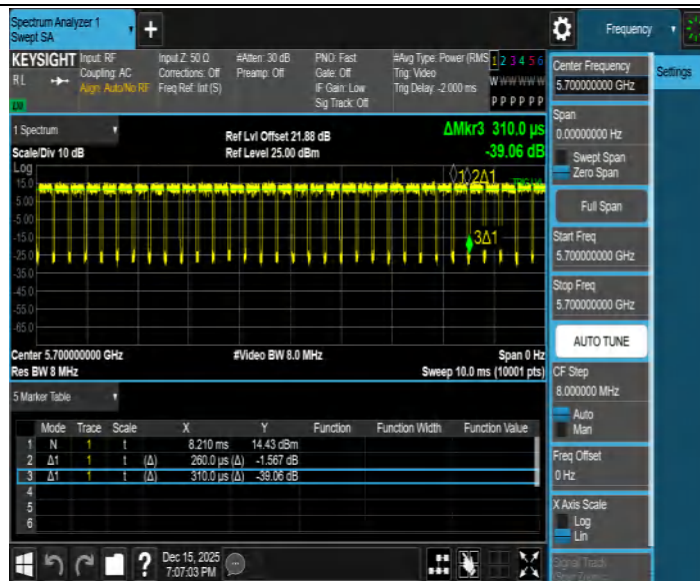
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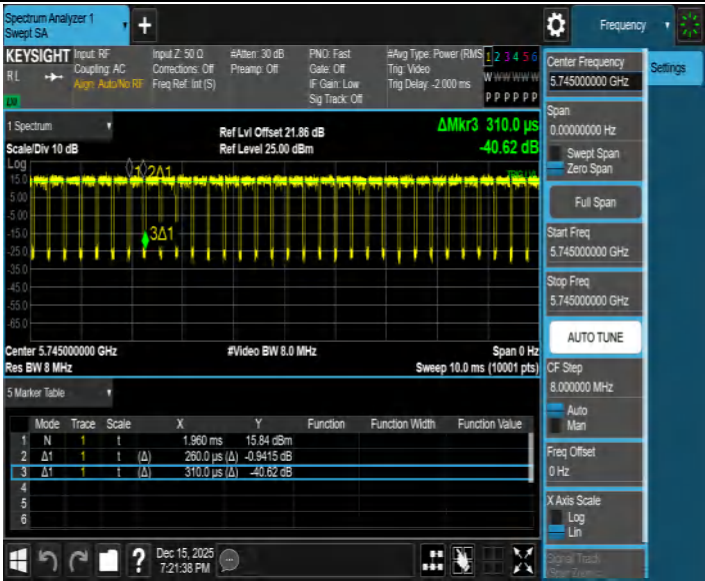
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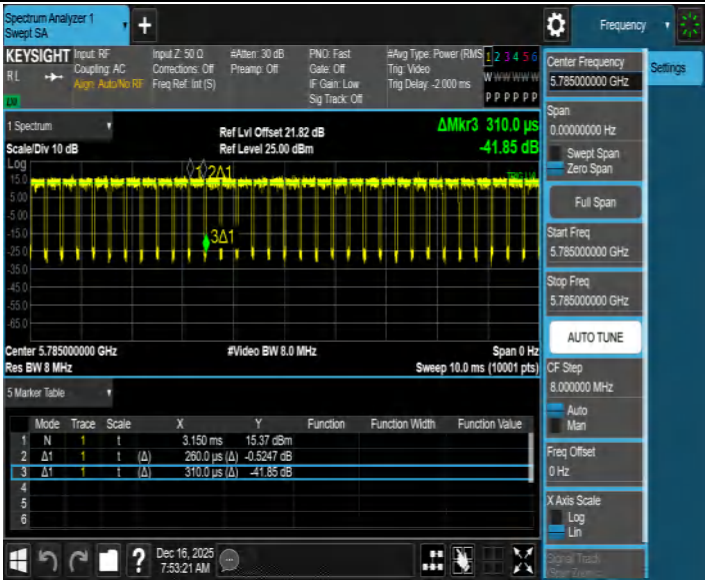
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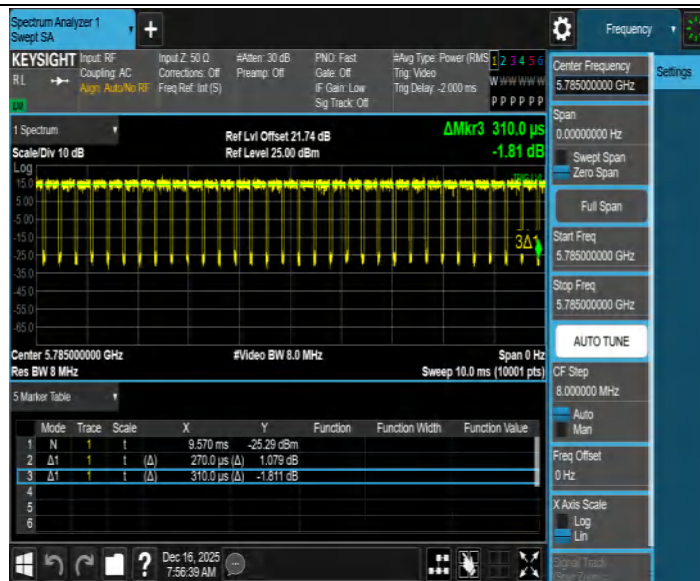
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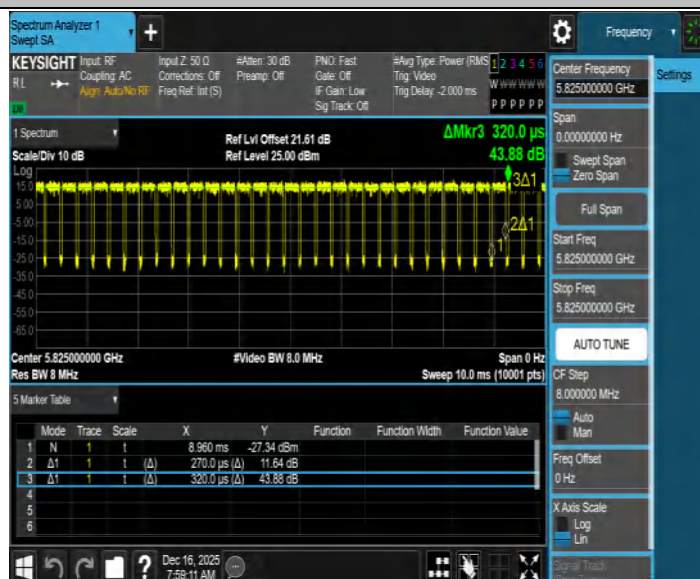
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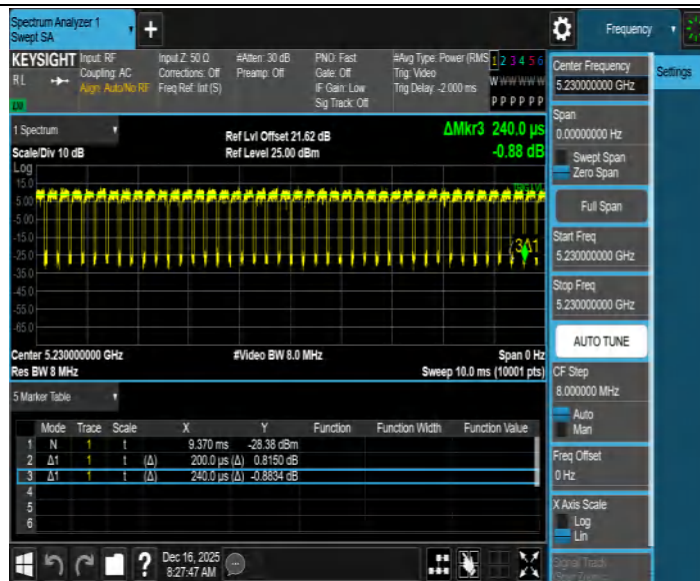
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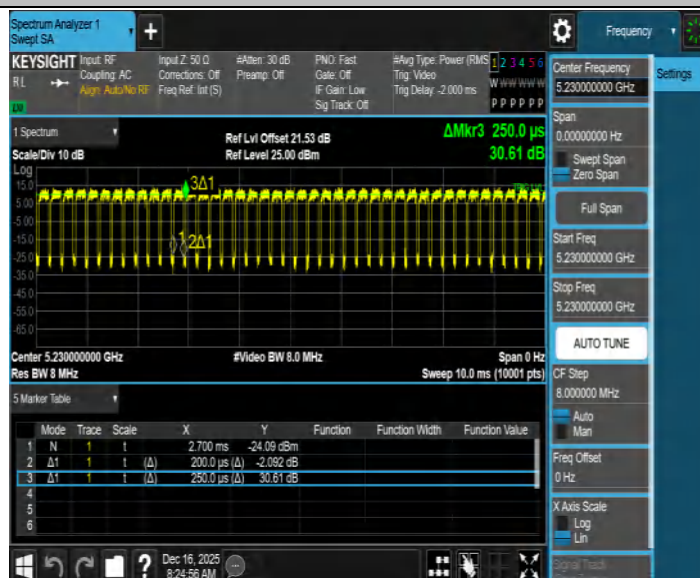
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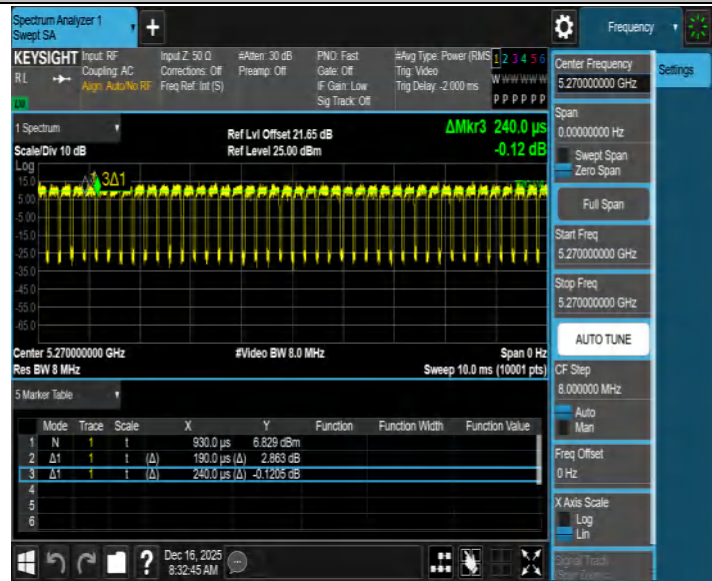
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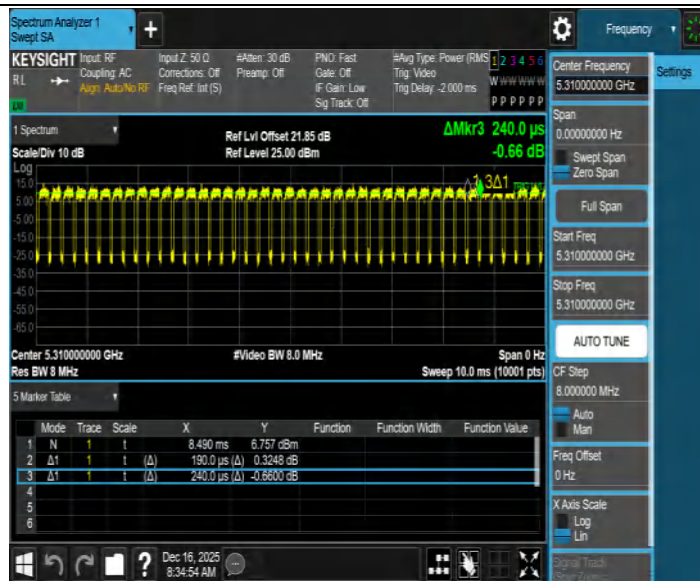
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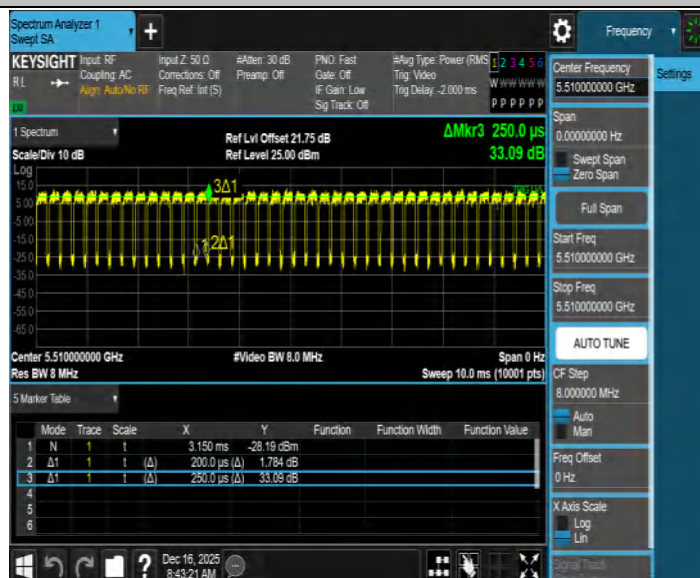
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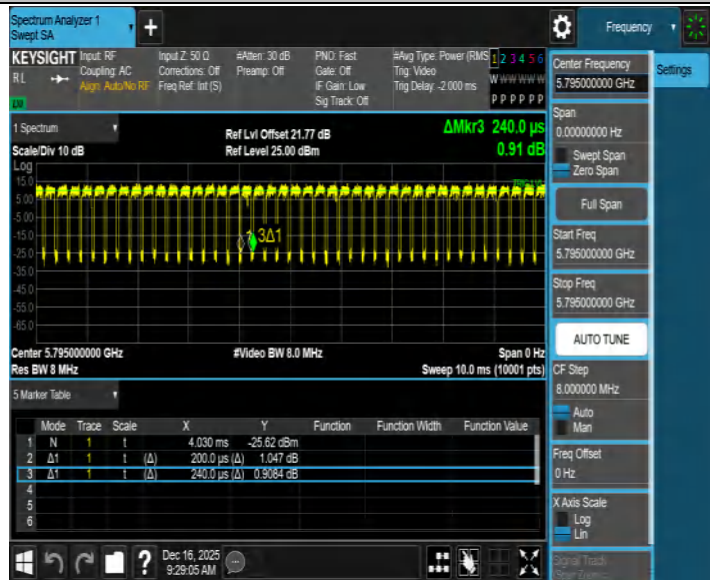
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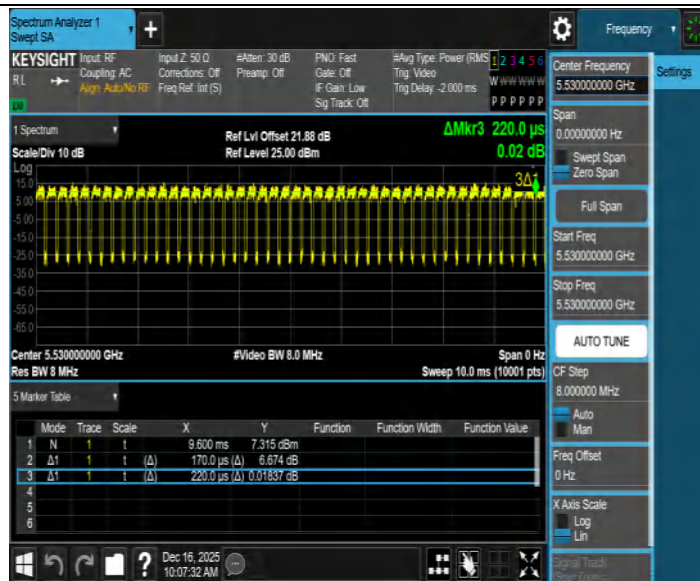
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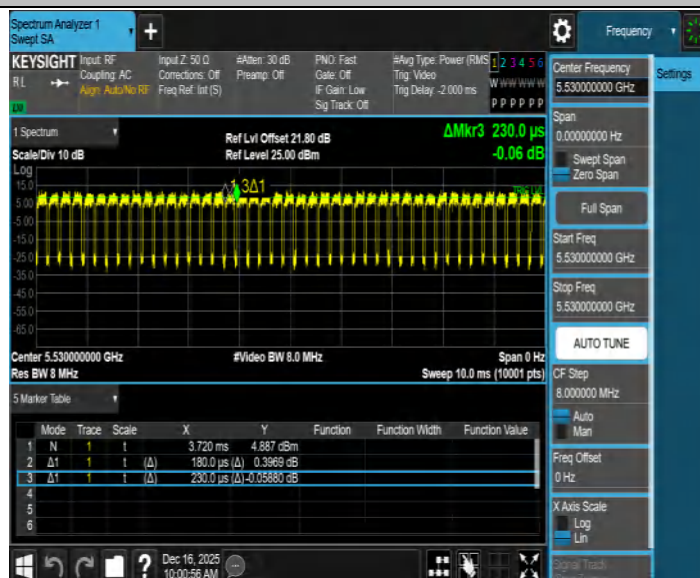
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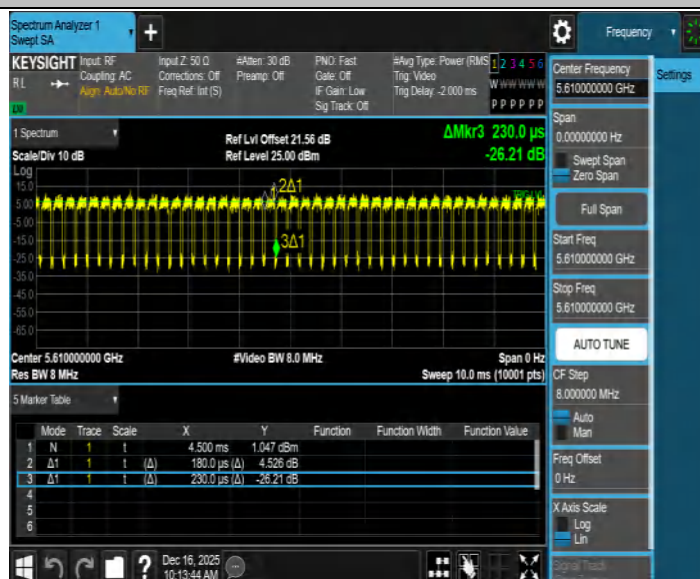
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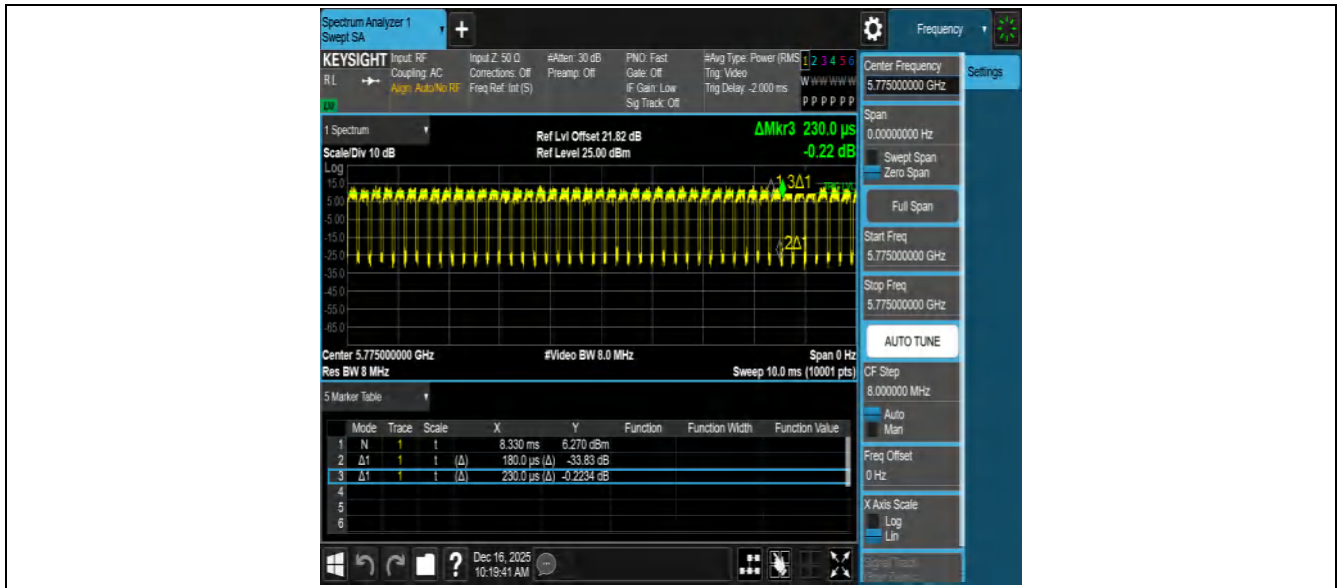
11AX80SISO_Ant2_5610



11AX80SISO_Ant1_5775



11AX80SISO_Ant2_5775



2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	$\pm 143.88\text{kHz}$
Power Spectral Density	$\pm 0.743\text{dB}$
Conducted Spurious Emission	$\pm 1.328\text{dB}$
RF power conducted	$\pm 0.384\text{dB}$
Conducted emission(9kHz~30MHz) AC main	$\pm 2.72\text{dB}$
Radiated emission(9kHz~30MHz)	$\pm 2.66\text{dB}$
Radiated emission (30MHz~1GHz)	$\pm 4.62\text{dB}$
Radiated emission (1GHz~18GHz)	$\pm 4.86\text{dB}$
Radiated emission (18GHz~40GHz)	$\pm 3.80\text{dB}$

2.8 Test Location

Company:	Shenzhen Haiyun Standard Technical CO., Ltd.
Address:	No. 110-113, 115, 116, Block B, Jinyuan Business Building, Bao'an District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier:	CN0145
A2LA Certificate Number:	6823.01
Telephone:	0755-26024411

2.9 SUPPORT UNITS

No.	Equipment	Model	Manufacturer	Series No
1	Earphone	/	/	/
2	Hard drive	/	Kingston	/
3	U-Disk	KN524721	Kingston	/
4	Router	E1630	ZTE	548216345
5	Monitor	CH6100	CHANGHONG	C62310547

3. Test Procedure And Results

3.1 AC Power Line Conducted Emission

3.1.1 Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

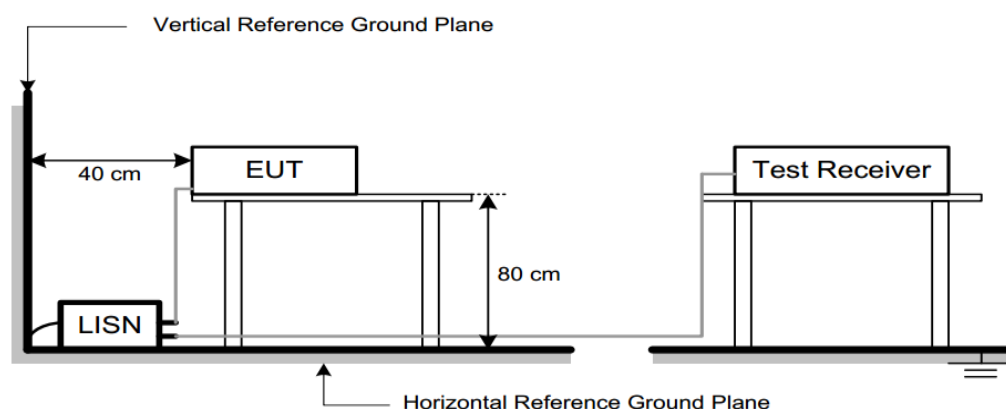
2. The lower limit shall apply at the transition frequencies.

3.1.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
○ Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

3.1.3 Test Setup



3.1.4 Test Result

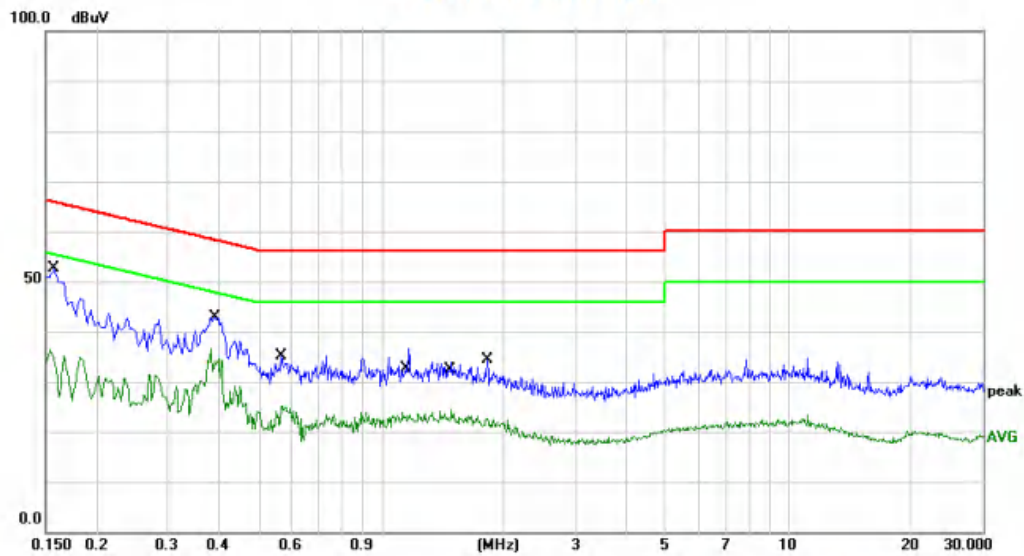
Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit
4. The TX AX20 Mode Channel 165 is found to be the worst case and recorded.

150kHz~30MHz	TX AX20 Channel 165
--------------	---------------------

Line

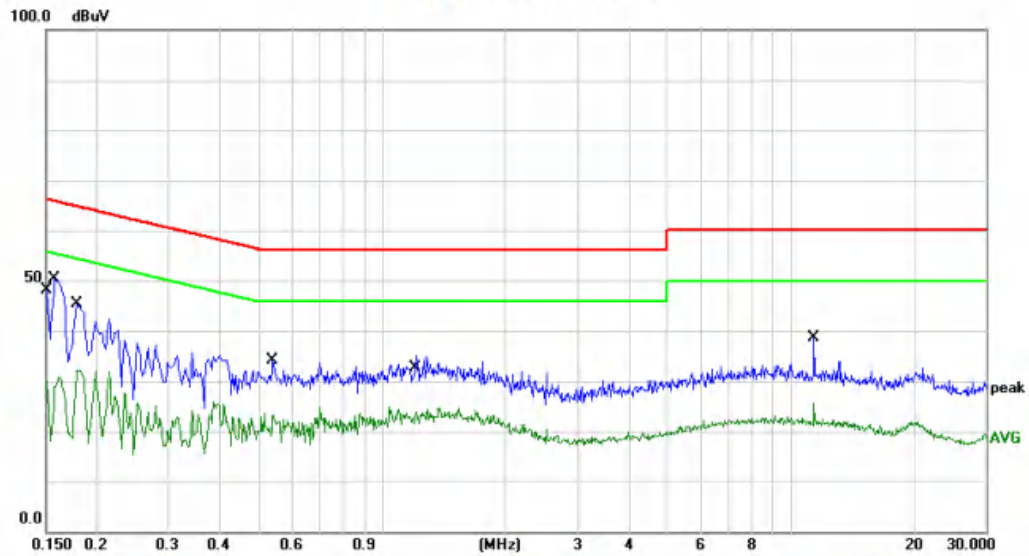
Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1		0.1584	27.75	19.51	47.26	65.55	-18.29	QP		
2		0.1584	9.17	19.51	28.68	55.55	-26.87	AVG		
3		0.3878	21.31	19.52	40.83	58.11	-17.28	QP		
4 *		0.3878	13.73	19.52	33.25	48.11	-14.86	AVG		
5		0.5652	9.54	19.53	29.07	56.00	-26.93	QP		
6		0.5652	2.21	19.53	21.74	46.00	-24.26	AVG		
7		1.1403	7.64	19.70	27.34	56.00	-28.66	QP		
8		1.1403	2.28	19.70	21.98	46.00	-24.02	AVG		
9		1.4571	7.30	19.79	27.09	56.00	-28.91	QP		
10		1.4571	2.42	19.79	22.21	46.00	-23.79	AVG		
11		1.8182	5.46	19.97	25.43	56.00	-30.57	QP		
12		1.8182	0.99	19.97	20.96	46.00	-25.04	AVG		

Neutral

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1	*	0.1526	29.52	19.70	49.22	65.86	-16.64	QP		
2		0.1526	12.73	19.70	32.43	55.86	-23.43	AVG		
3		0.1560	28.59	19.70	48.29	65.67	-17.38	QP		
4		0.1560	10.89	19.70	30.59	55.67	-25.08	AVG		
5		0.1793	22.75	19.70	42.45	64.52	-22.07	QP		
6		0.1793	9.52	19.70	29.22	54.52	-25.30	AVG		
7		0.5434	8.12	19.75	27.87	56.00	-28.13	QP		
8		0.5434	1.40	19.75	21.15	46.00	-24.85	AVG		
9		1.1904	7.96	19.95	27.91	56.00	-28.09	QP		
10		1.1904	2.61	19.95	22.56	46.00	-23.44	AVG		
11		11.4082	4.07	20.51	24.58	60.00	-35.42	QP		
12		11.4082	0.27	20.51	20.78	50.00	-29.22	AVG		

3.2 Radiated Emission

3.2.1 Limit

1) Limit of radiated emission measurement:

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Distance Meters(m)	Field Strength Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 – 0.49	300	$2400/F(\text{kHz})$	-
0.490 – 1.705	30	$24000/F(\text{kHz})$	-
1.705 – 30	30	30	-
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) Emission level $\text{dB}\mu\text{V} = 20 \log$ Emission level $\mu\text{V/m}$

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

2) Limit of unwanted emission out of the restricted bands:

Frequency(MHz)	EIRP Limit(dBm/MHz)	Equivalent Field Strength at 3m($\text{dB}\mu\text{V}/\text{m}$)
5150-5250	-27	68.2
5250-5350	-27	68.2
5470-5725	-27	68.2
5725-5850	-27 NOTE (2)	68.2
	10 NOTE (2)	105.2
	15.6 NOTE (2)	110.8
	27 NOTE (2)	122.2

Note: (1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d=3\text{m}$

(2) According to 15.407(b)(4)(i), all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

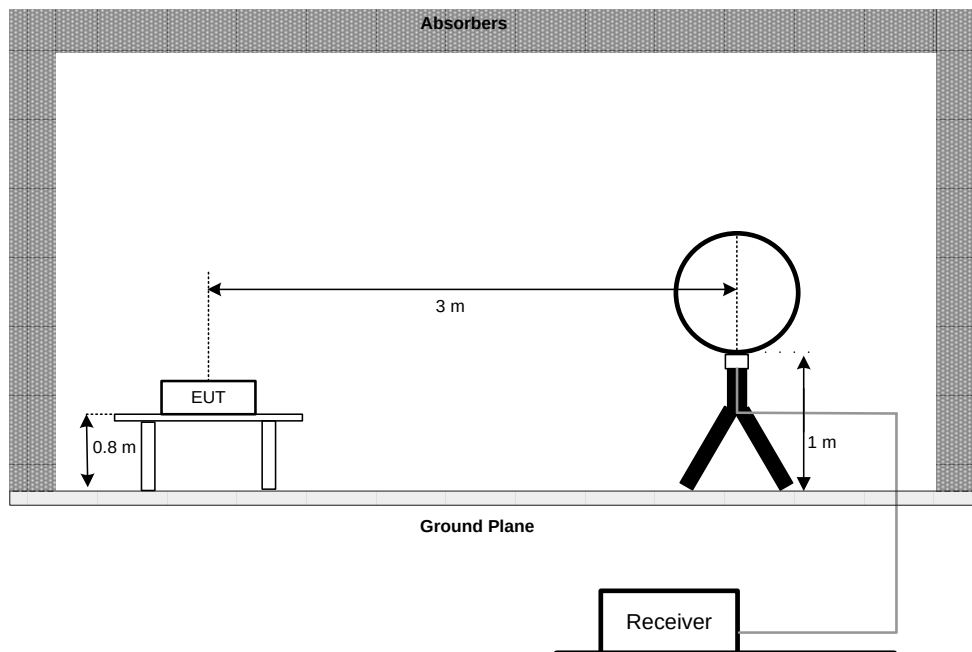
3.2.2 Test Procedure

Test Method	
○Conducted Measurement	●Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

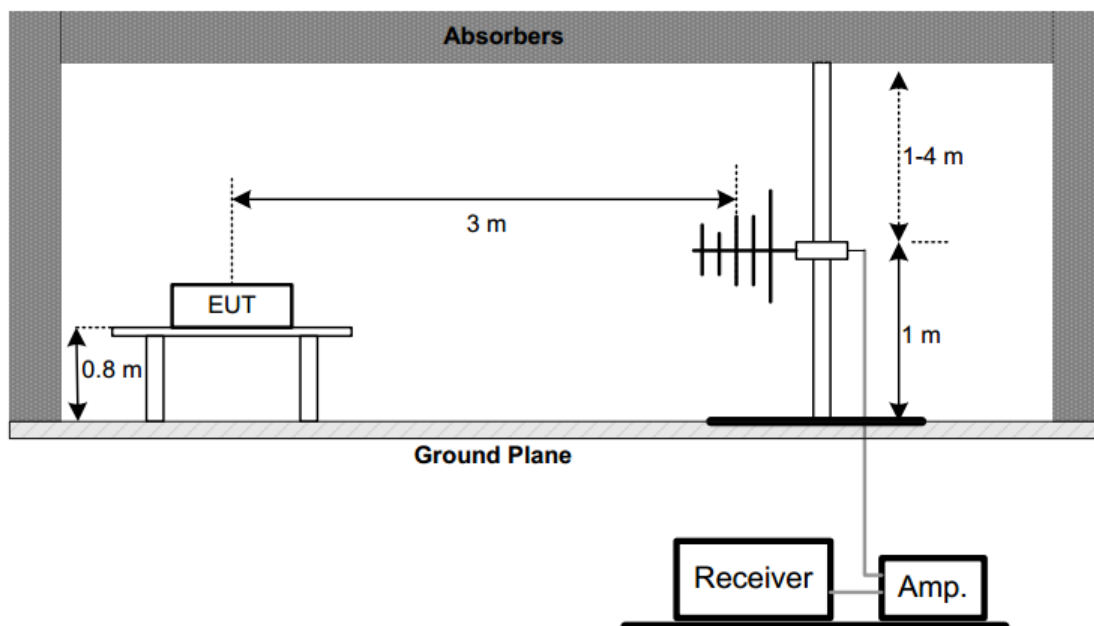
- a) The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b) The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c) The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e) The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f) The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g) All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h) All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i) For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.2.3 Test Setup

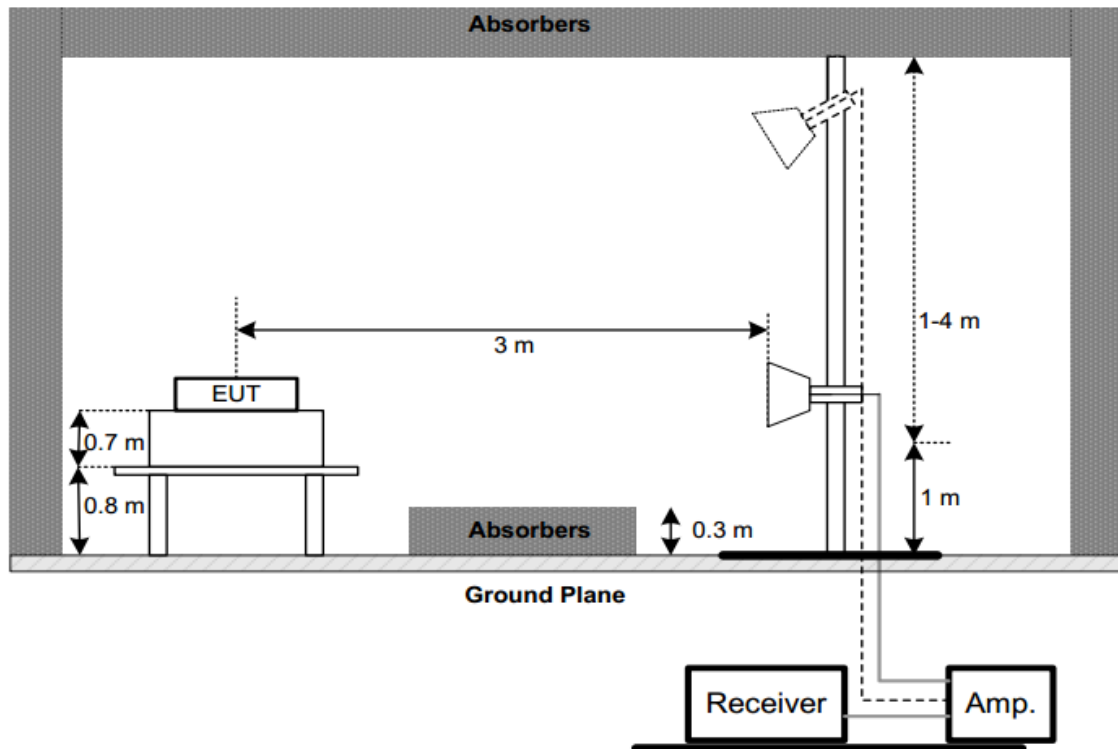
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



(C) Radiated Emission Test Set-Up Frequency Above 1 GHz



3.2.4 Test Result

1) Radiated emission: 9kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

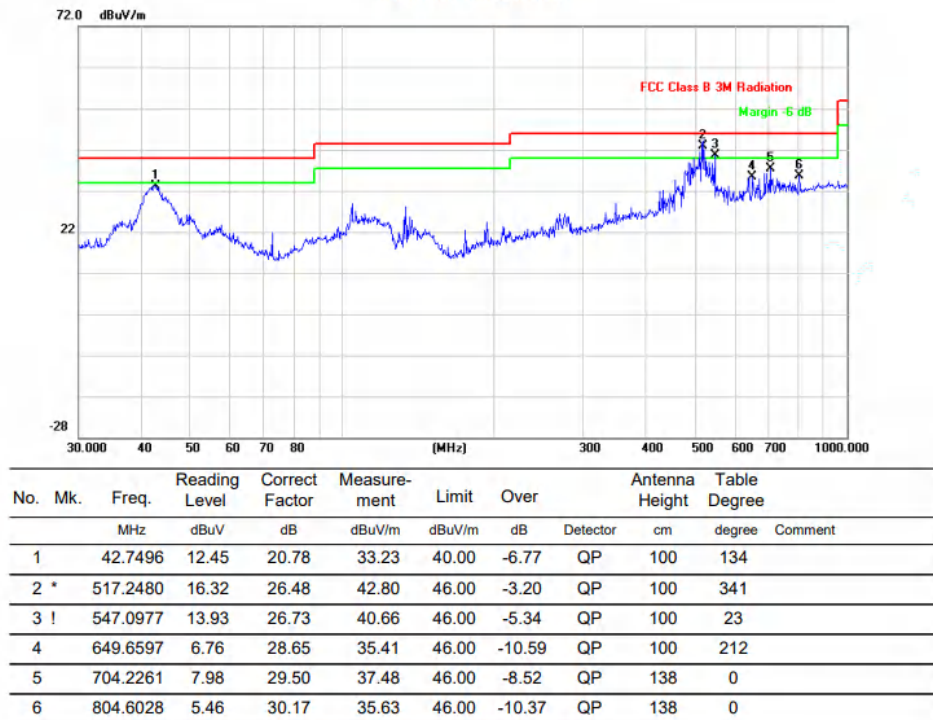
2) Radiated emission: 30MHz-1G

Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit
3. The TX AX20 Mode Channel 165 is found to be the worst case and recorded.

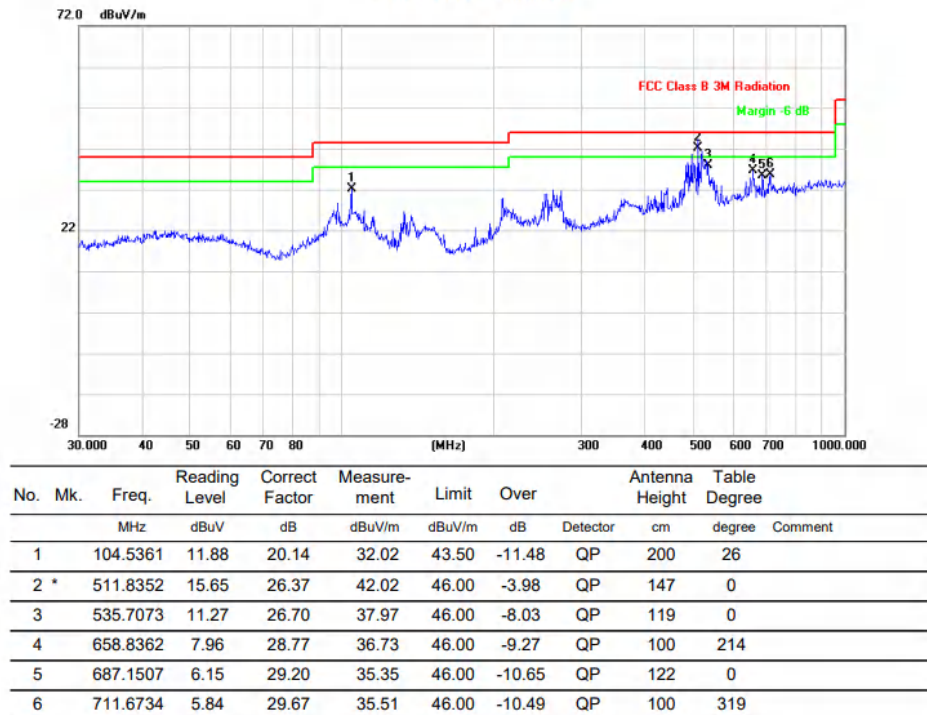
VERTICAL

Radiated Emission



HORIZONTAL

Radiated Emission



3) Radiated emission: Above 1G

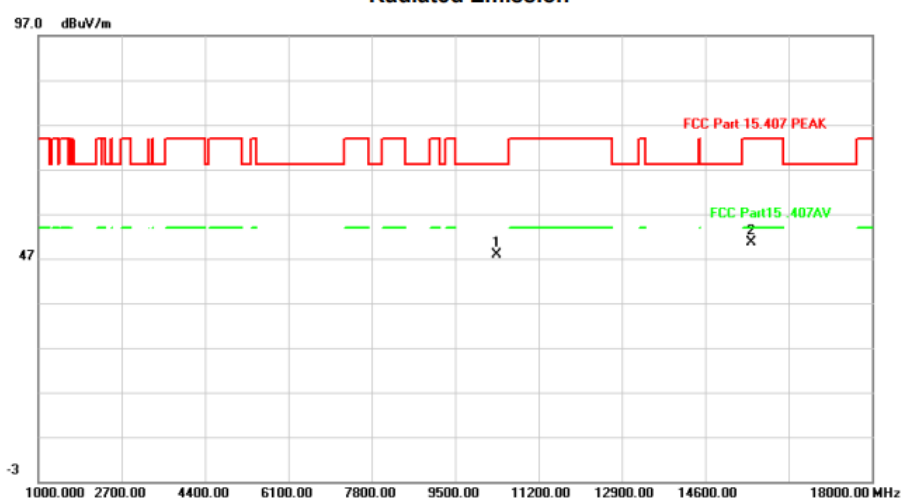
Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

Above 1G (1GHz~18GHz)	Test mode:11A	Test Channel:36
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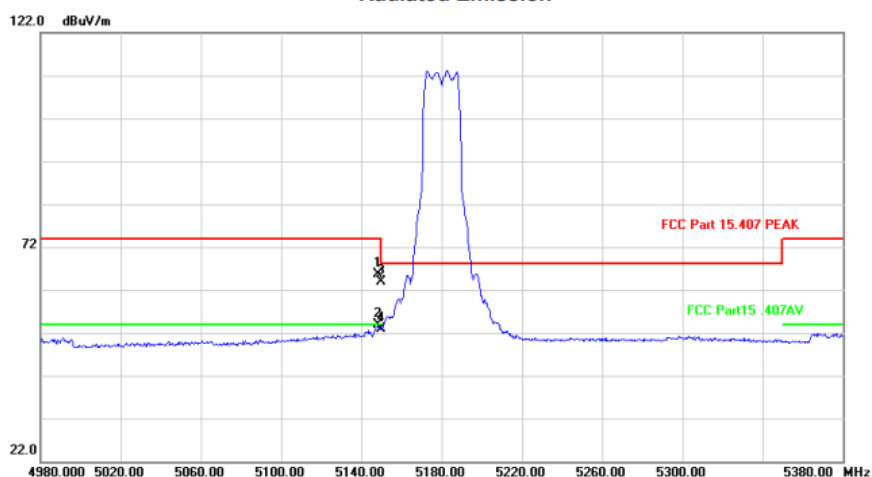
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10357.933	48.31	-0.34	47.97	68.20	-20.23	peak		
2		15544.633	47.36	3.16	50.52	74.00	-23.48	peak		

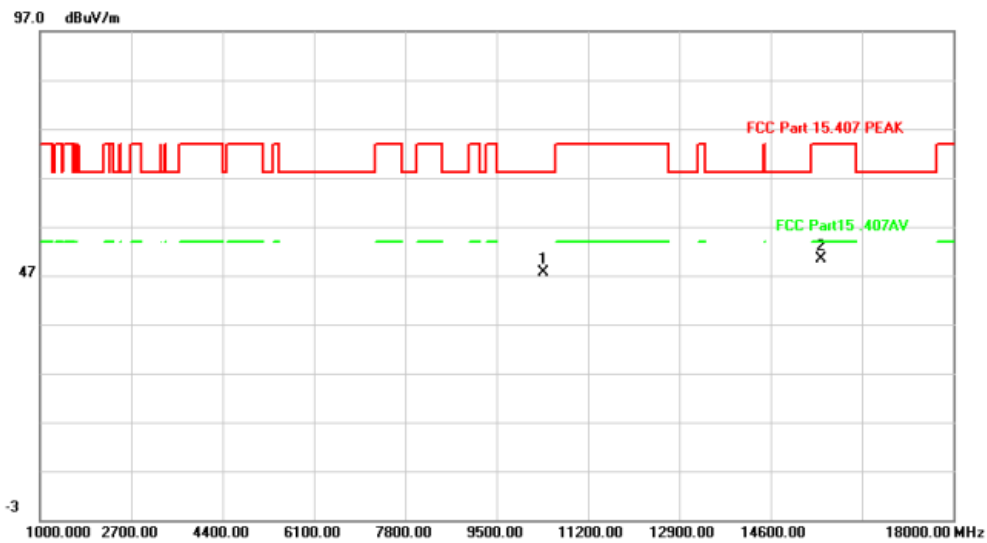
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5148.400	18.21	47.50	65.71	74.00	-8.29	peak		
2	*	5148.400	6.28	47.50	53.78	54.00	-0.22	AVG		
3		5150.000	16.35	47.50	63.85	74.00	-10.15	peak		
4		5150.000	5.41	47.50	52.91	54.00	-1.09	AVG		

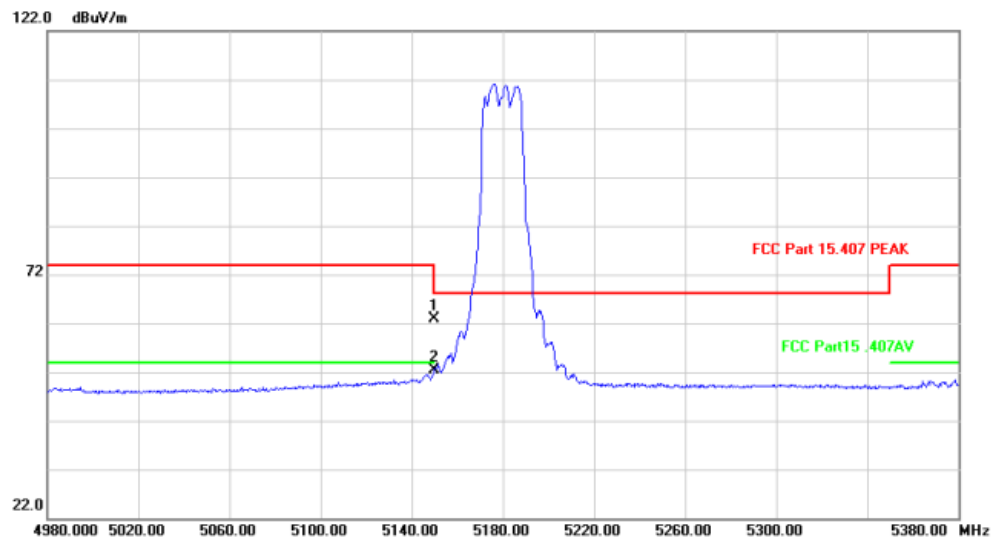
HORIZONTALA

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10361.900	47.85	-0.34	47.51	68.20	-20.69	peak		
2		15540.700	47.16	3.16	50.32	74.00	-23.68	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5150.000	15.35	47.50	62.85	74.00	-11.15	peak		
2	*	5150.000	4.97	47.50	52.47	54.00	-1.53	AVG		

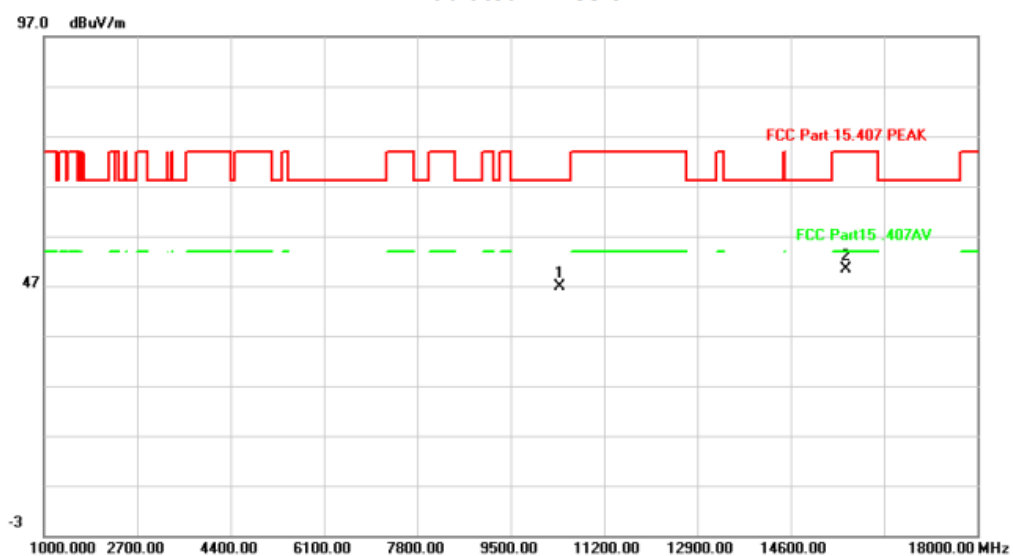
Above 1G (1GHz~18GHz)

Test mode: 11A

Test Channel:40

VERTICAL

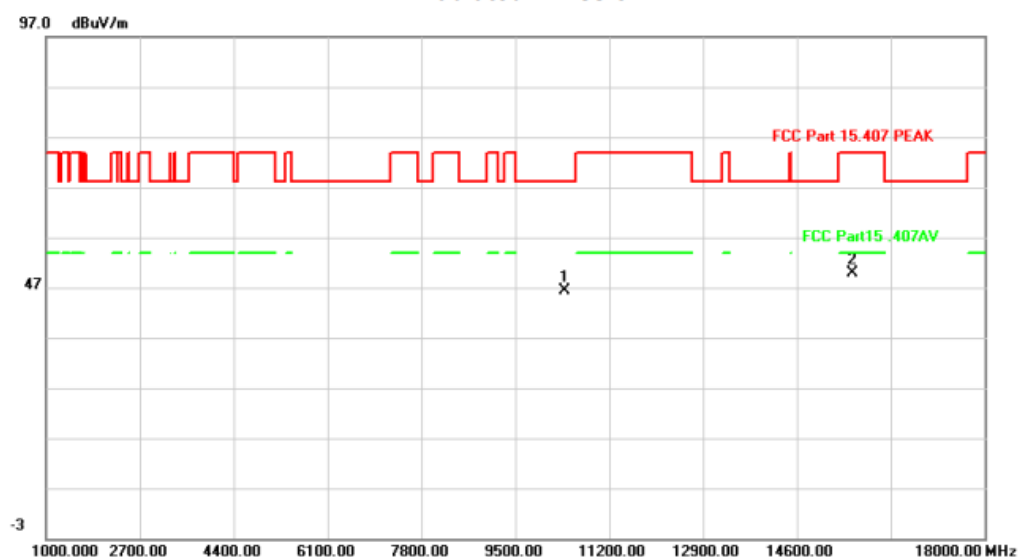
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10403.267	47.17	-0.35	46.82	68.20	-21.38	peak		
2		15601.300	47.12	3.15	50.27	74.00	-23.73	peak		

HORIZONTAL

Radiated Emission

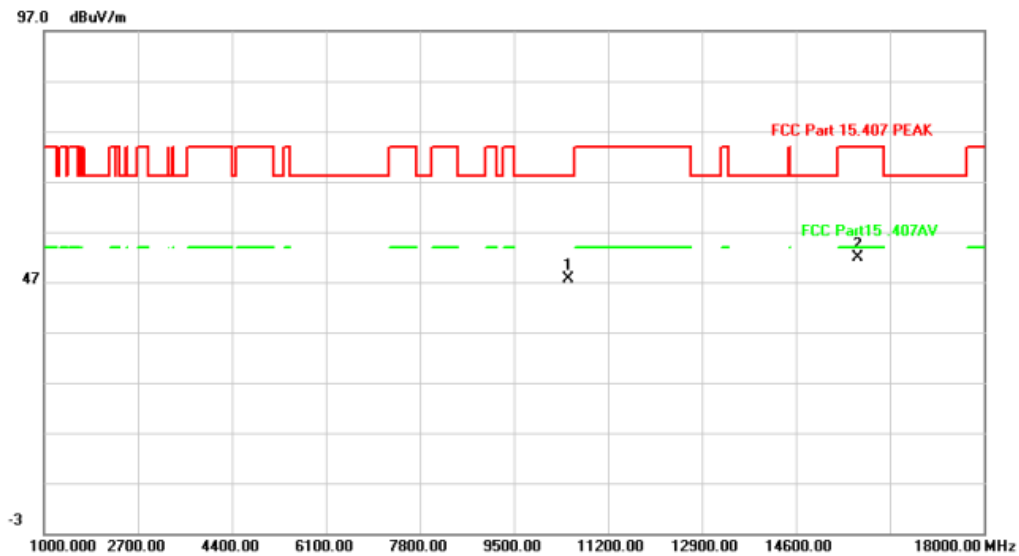


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10400.600	46.73	-0.35	46.38	68.20	-21.82	peak		
2		15604.133	46.82	3.15	49.97	74.00	-24.03	peak		

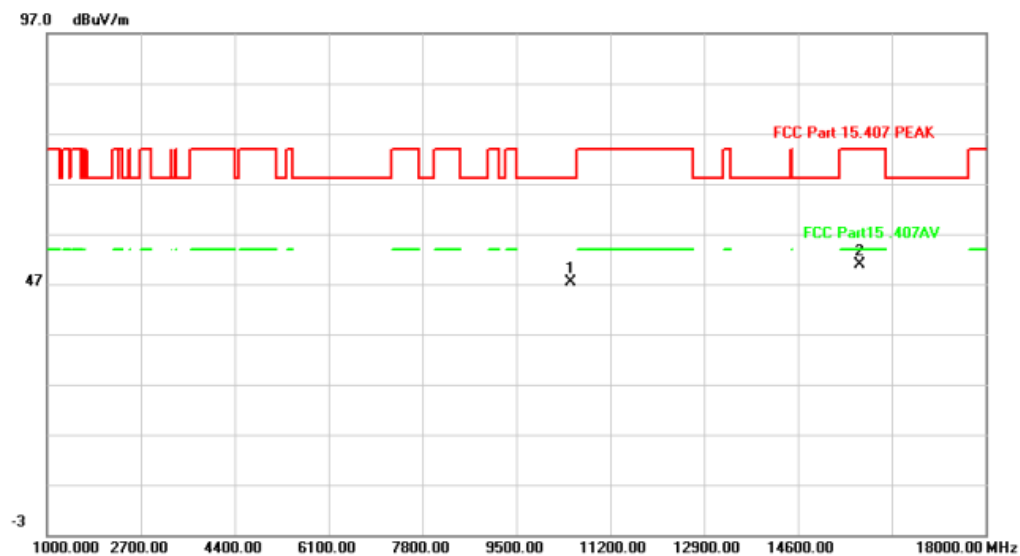
Above 1G (1GHz~18GHz)

Test mode: 11A

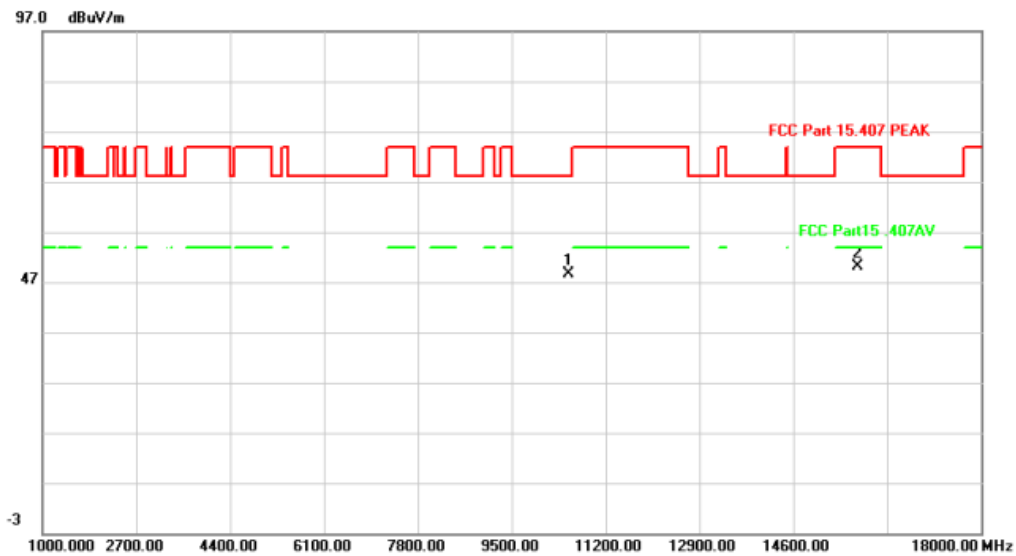
Test Channel:48

VERTICAL
Radiated Emission

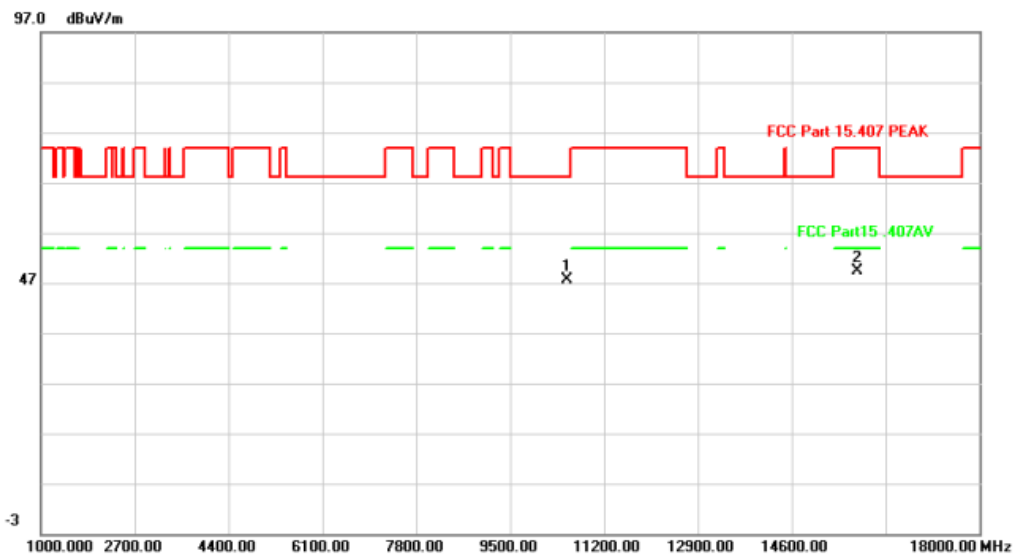
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10476.367	47.97	-0.37	47.60	68.20	-20.60	peak		
2		15715.767	48.67	3.14	51.81	74.00	-22.19	peak		

HORIZONTAL
Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10475.800	47.64	-0.37	47.27	68.20	-20.93	peak		
2		15720.300	47.80	3.14	50.94	74.00	-23.06	peak		

VERTICAL
Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10522.500	48.97	-0.28	48.69	68.20	-19.51	peak		
2		15775.833	47.07	3.13	50.20	74.00	-23.80	peak		

HORIZONTAL
Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10520.500	47.86	-0.29	47.57	68.20	-20.63	peak		
2		15779.233	46.25	3.13	49.38	74.00	-24.62	peak		

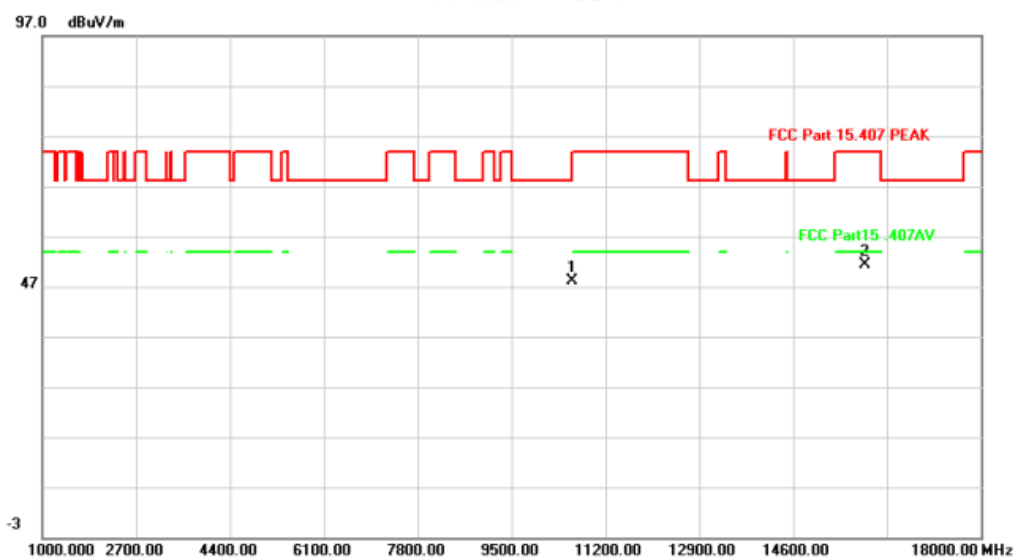
Above 1G (1GHz~18GHz)

Test mode: 11A

Test Channel:56

VERTICAL

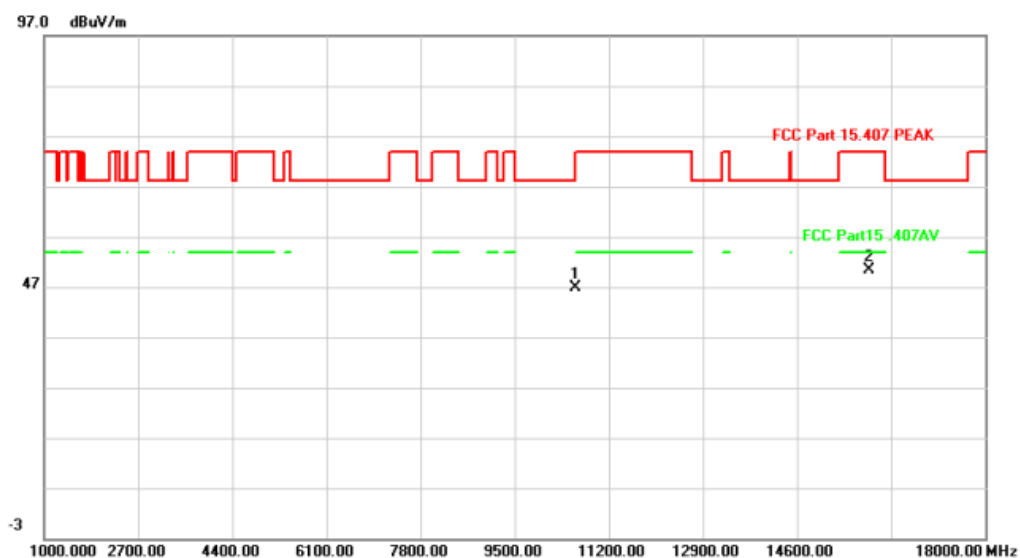
Radiated Emission



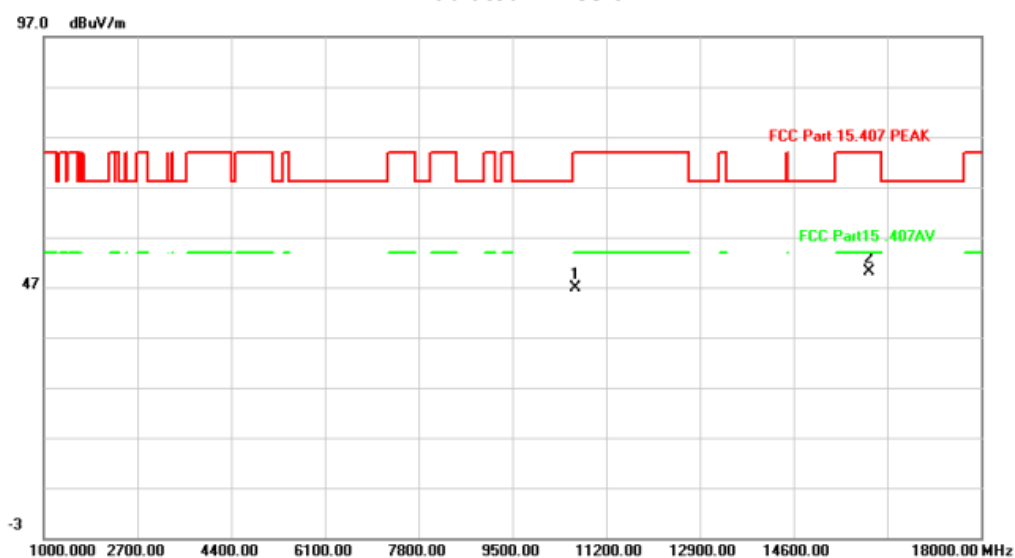
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10606.700	48.07	0.09	48.16	74.00	-25.84	peak		
2 *		15901.233	48.37	3.12	51.49	74.00	-22.51	peak		

HORIZONTAL

Radiated Emission

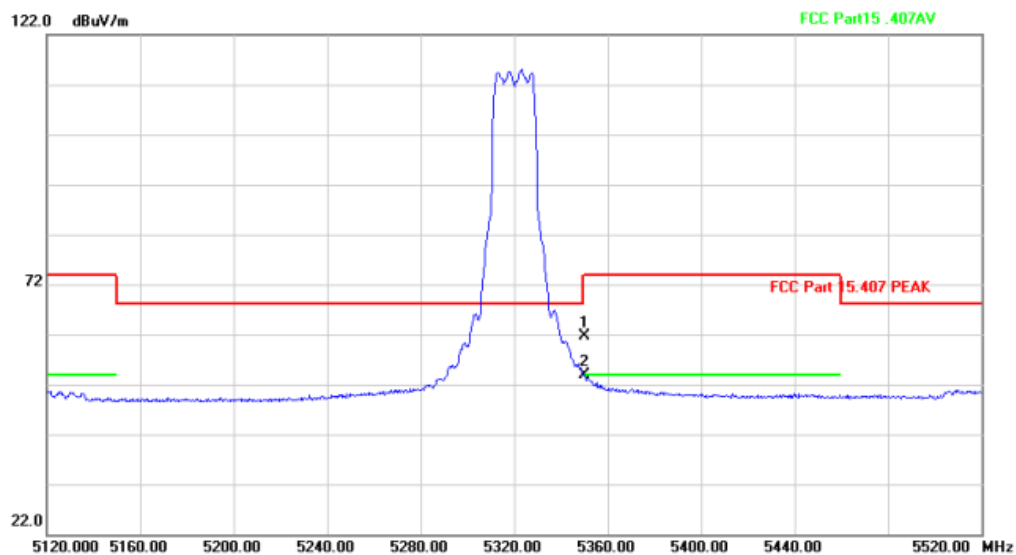


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10601.433	46.77	0.07	46.84	74.00	-27.16	peak		
2 *		15901.230	47.22	3.12	50.34	74.00	-23.66	peak		

VERTICAL
Radiated Emission

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		10641.633	46.65	0.25	46.90	74.00	-27.10	peak		
2 *		15961.633	47.02	3.11	50.13	74.00	-23.87	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		5350.000	13.65	47.97	61.62	74.00	-12.38	peak		
2 *		5350.000	5.86	47.97	53.83	54.00	-0.17	AVG		