

Case No. : <u>GTS20240320024-1-13</u>	
Ambient Condition: <u>23</u> °C, <u>51</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.4.22</u>	Test Engineer: <u>Evan ouyang</u>

Appendix D.1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5180	19.840	5170.120	5189.960	---	---
		5200	20.080	5189.960	5210.040	---	---
		5240	19.760	5230.160	5249.920	---	---
11N20SISO	Ant2	5180	20.200	5170.000	5190.200	---	---
		5200	20.320	5189.880	5210.200	---	---
		5240	20.200	5229.880	5250.080	---	---
11N40SISO	Ant2	5190	40.400	5169.760	5210.160	---	---
		5230	40.240	5209.920	5250.160	---	---
11AC20SISO	Ant2	5180	20.280	5169.840	5190.120	---	---
		5200	20.320	5189.920	5210.240	---	---
		5240	20.360	5229.840	5250.200	---	---
11AC40SISO	Ant2	5190	40.240	5170.000	5210.240	---	---
		5230	40.560	5209.840	5250.400	---	---
11AC80SISO	Ant2	5210	80.960	5169.680	5250.640	---	---

Test Graphs



11A_Ant2_5200

Frequency

Auto Tune

Center Freq
5.20000000 GHzStart Freq
5.180000000 GHzStop Freq
5.220000000 GHzCF Step
4.000000 MHz
Auto ManFreq Offset
0 Hz

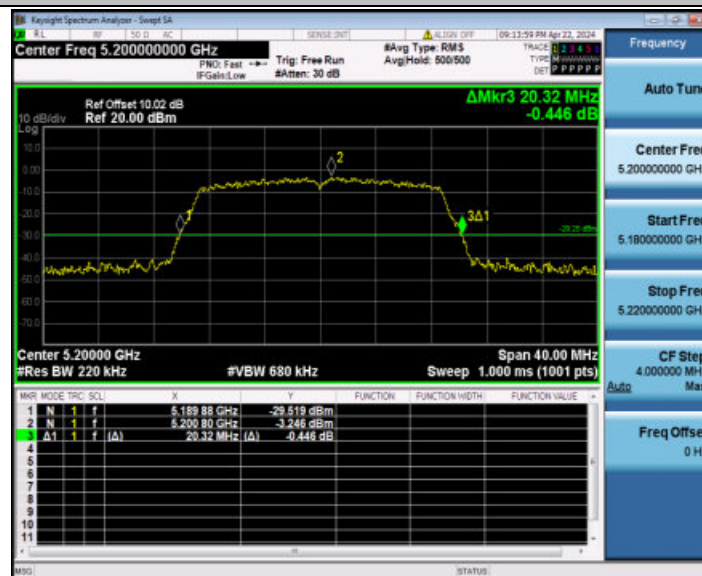
11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



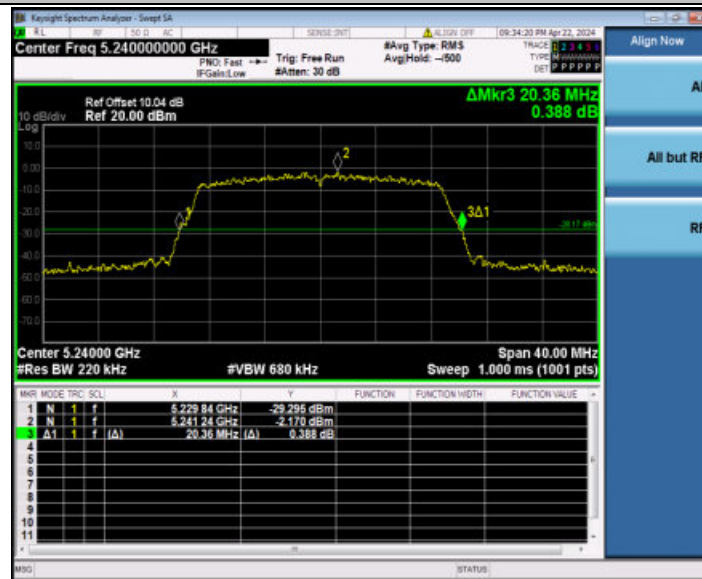
11AC20SISO_Ant2_5180



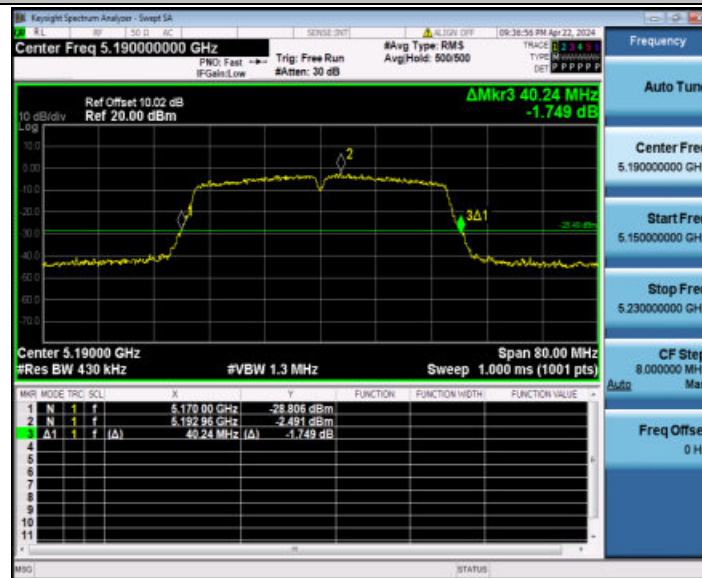
11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230

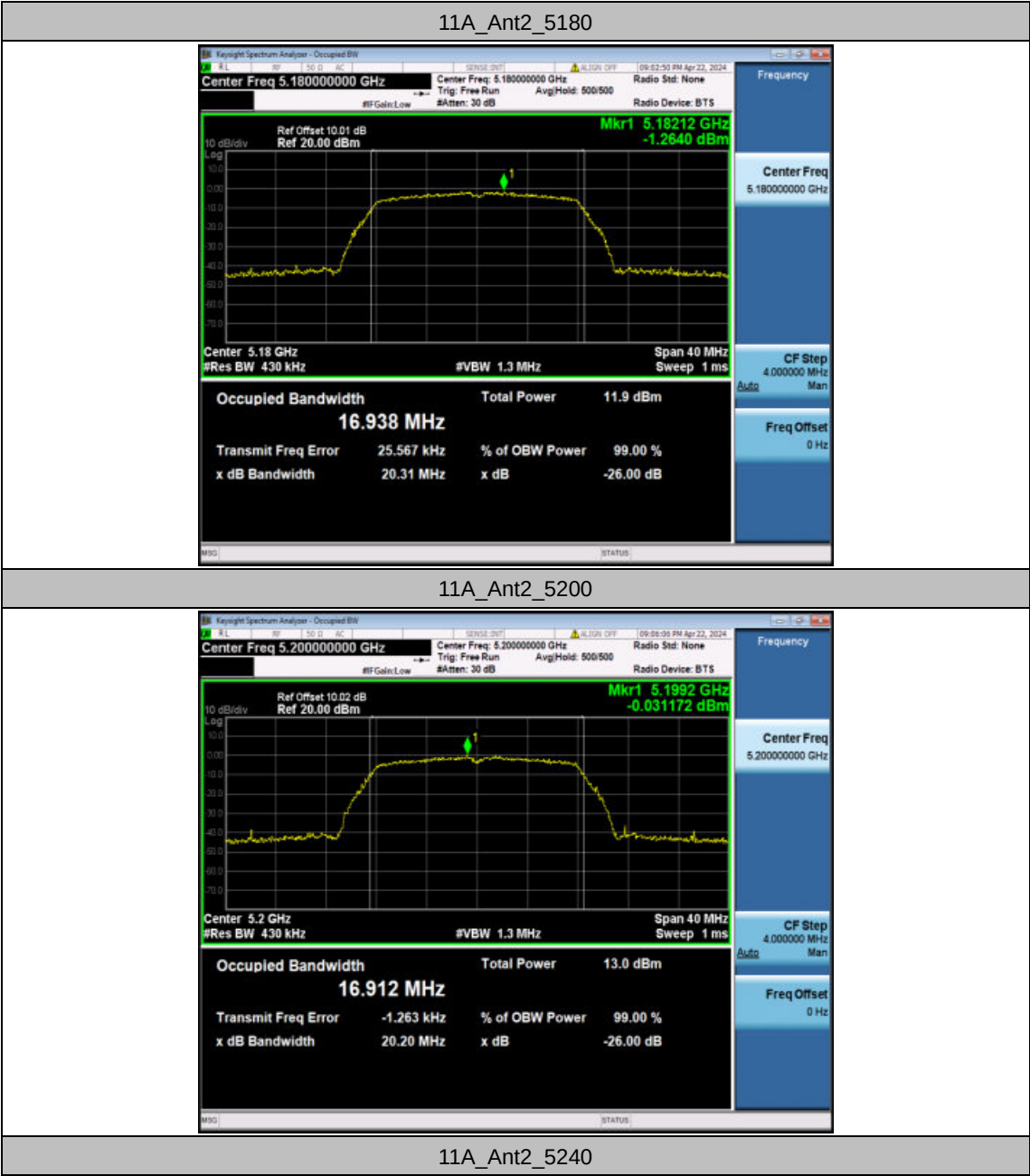


Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5180	16.938	5171.5566	5188.4946	---	---
		5200	16.912	5191.5427	5208.4547	---	---
		5240	16.907	5231.5729	5248.4799	---	---
11N20SISO	Ant2	5180	17.878	5171.0688	5188.9468	---	---
		5200	17.839	5191.0866	5208.9256	---	---
		5240	17.838	5231.1046	5248.9426	---	---
11N40SISO	Ant2	5190	36.218	5171.9392	5208.1572	---	---
		5230	36.231	5211.9505	5248.1815	---	---
11AC20SISO	Ant2	5180	17.871	5171.0724	5188.9434	---	---
		5200	17.836	5191.0733	5208.9093	---	---
		5240	17.801	5231.1089	5248.9099	---	---
11AC40SISO	Ant2	5190	36.265	5171.9336	5208.1986	---	---
		5230	36.213	5211.9546	5248.1676	---	---
11AC80SISO	Ant2	5210	75.170	5172.6166	5247.7866	---	---

Test Graphs



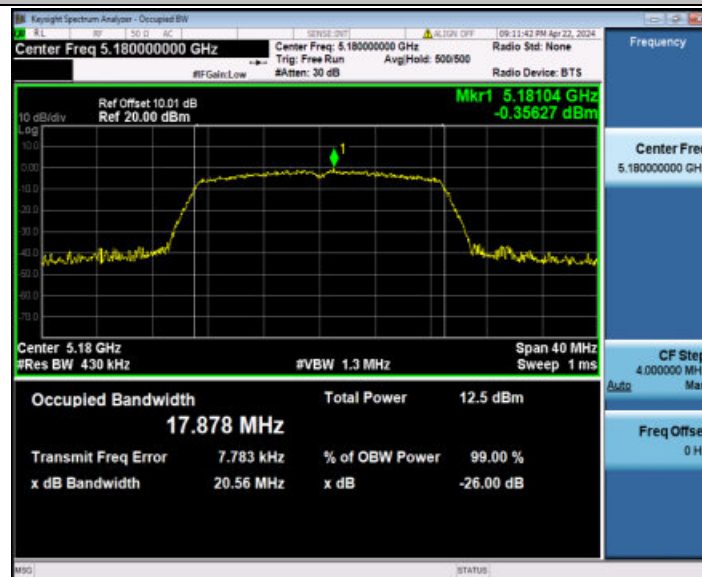
11A_Ant2_5200

Frequency
Center Freq
5.20000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

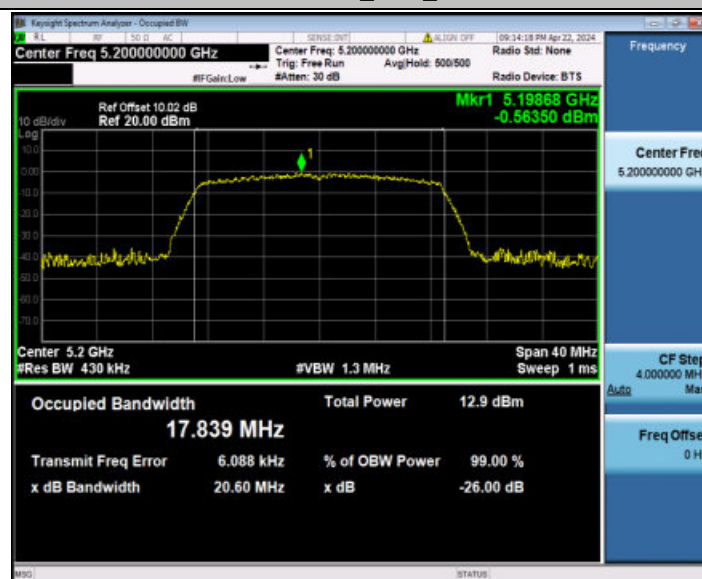
11A_Ant2_5240



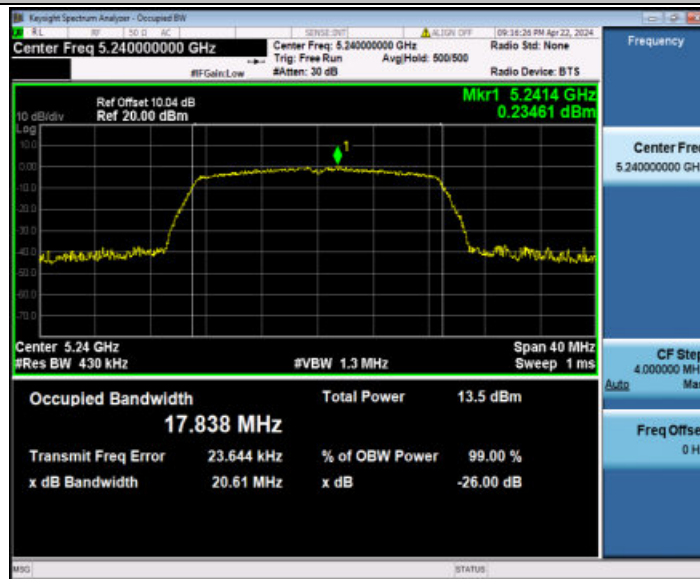
11N20SISO_Ant2_5180



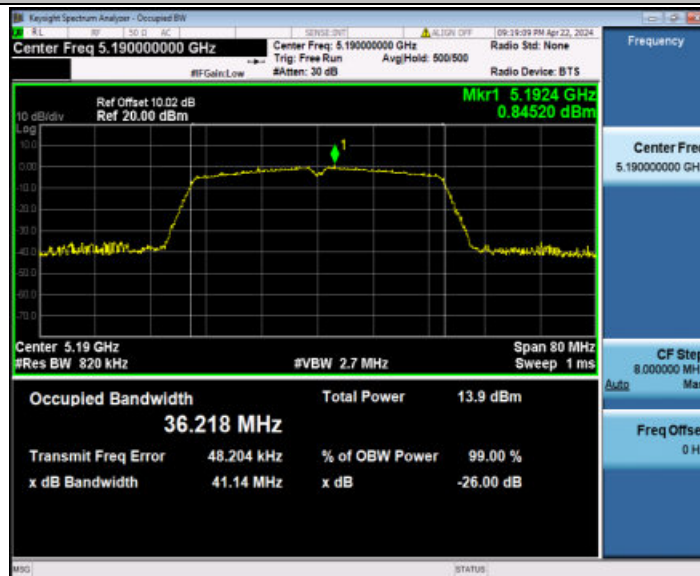
11N20SISO_Ant2_5200



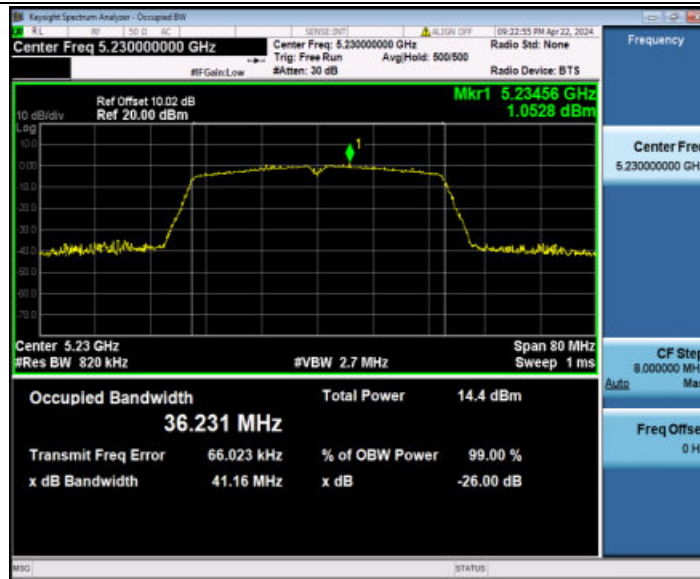
11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



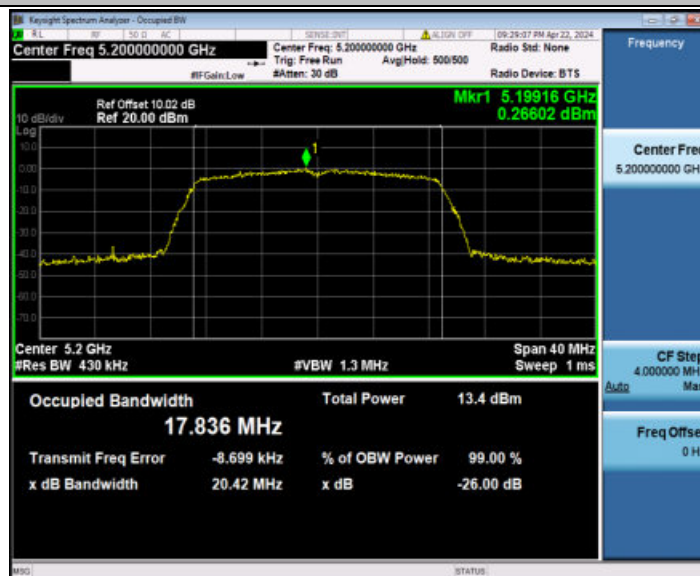
11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



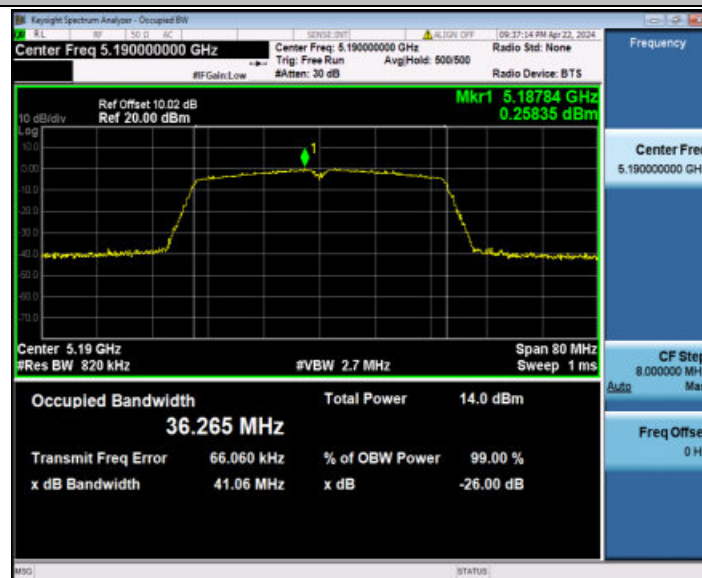
11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



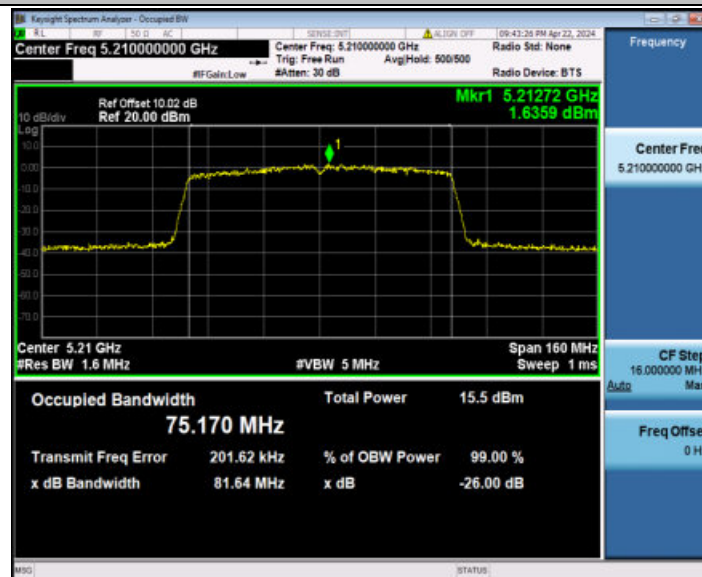
11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210

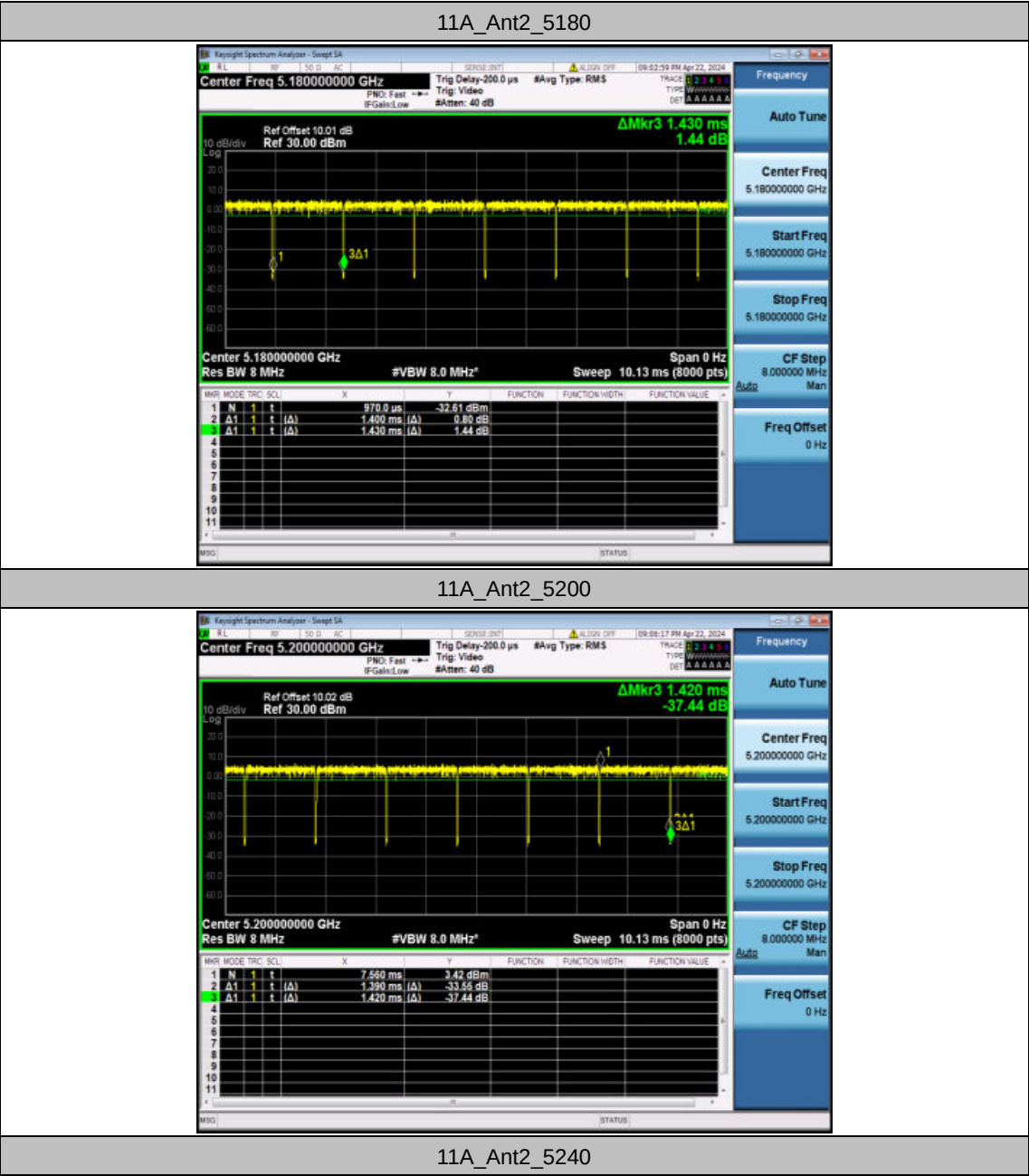


Appendix D.3: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant2	5180	1.40	1.43	97.90	0.09	0.71
		5200	1.39	1.42	97.89	0.09	0.72
		5240	1.40	1.43	97.90	0.09	0.71
11N20SISO	Ant2	5180	1.30	1.34	97.01	0.13	0.77
		5200	1.30	1.34	97.01	0.13	0.77
		5240	1.30	1.34	97.01	0.13	0.77
11N40SISO	Ant2	5190	0.65	0.68	95.59	0.20	1.54
		5230	0.65	0.68	95.59	0.20	1.54
11AC20SISO	Ant2	5180	1.31	1.35	97.04	0.13	0.76
		5200	1.31	1.35	97.04	0.13	0.76
		5240	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant2	5190	0.65	0.69	94.20	0.26	1.54
		5230	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant2	5210	0.32	0.36	88.89	0.51	3.13

Test Graphs



11A_Ant2_5200

Frequency

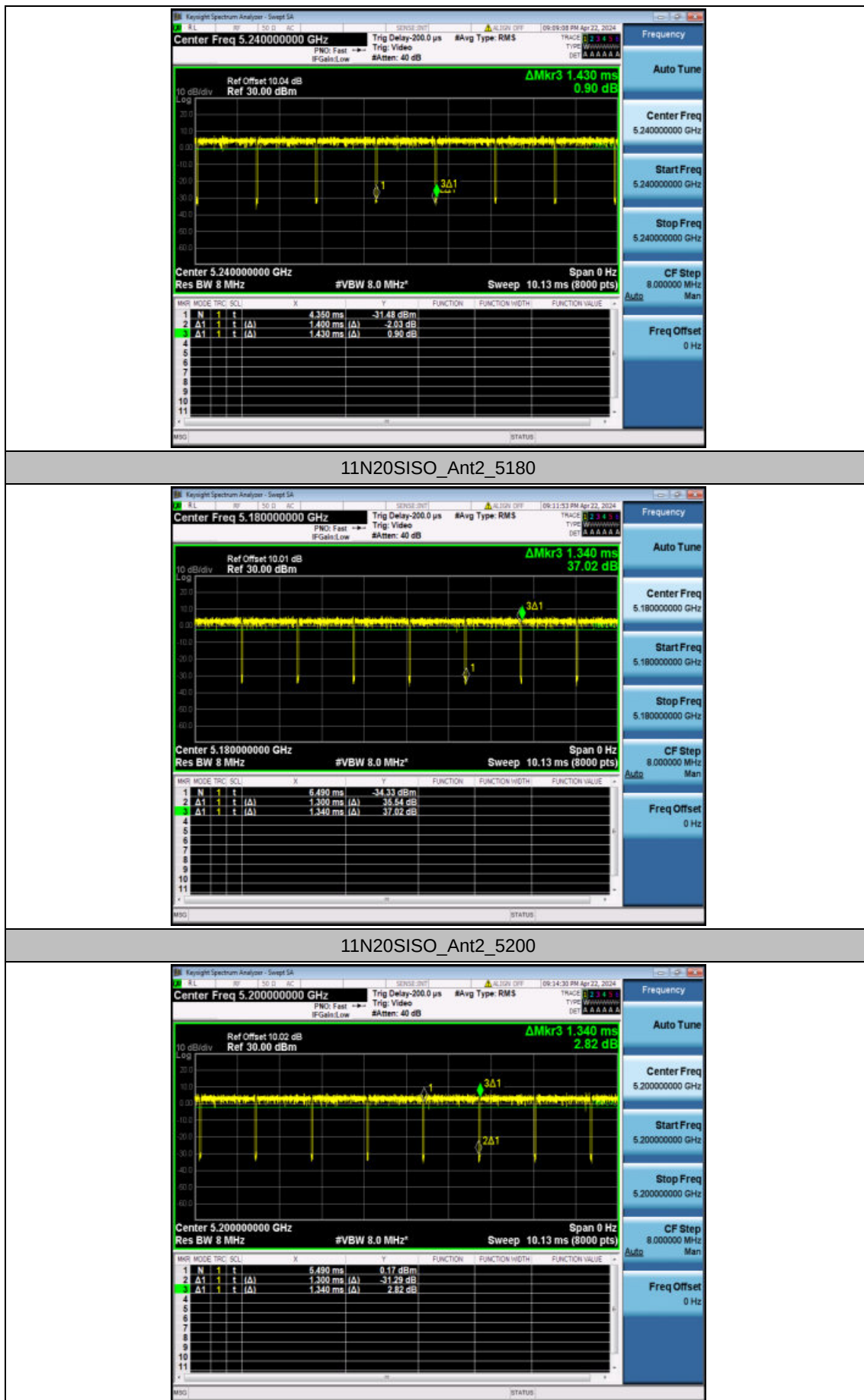
Auto Tune

Center Freq
5.200000000 GHzStart Freq
5.200000000 GHzStop Freq
5.200000000 GHzCF Step
8.0000000 MHz

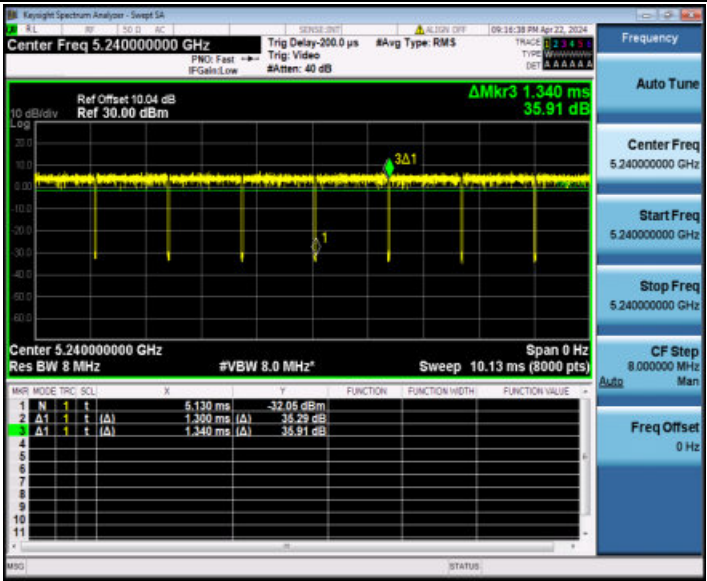
Man

Freq Offset
0 Hz

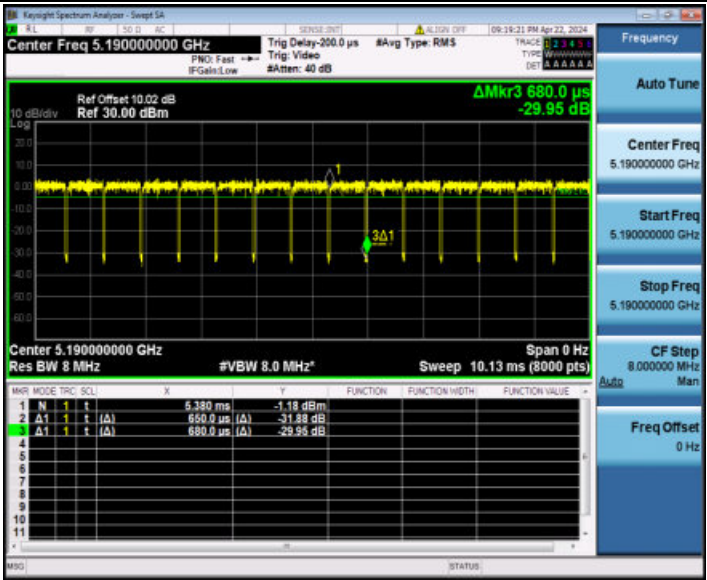
11A_Ant2_5240



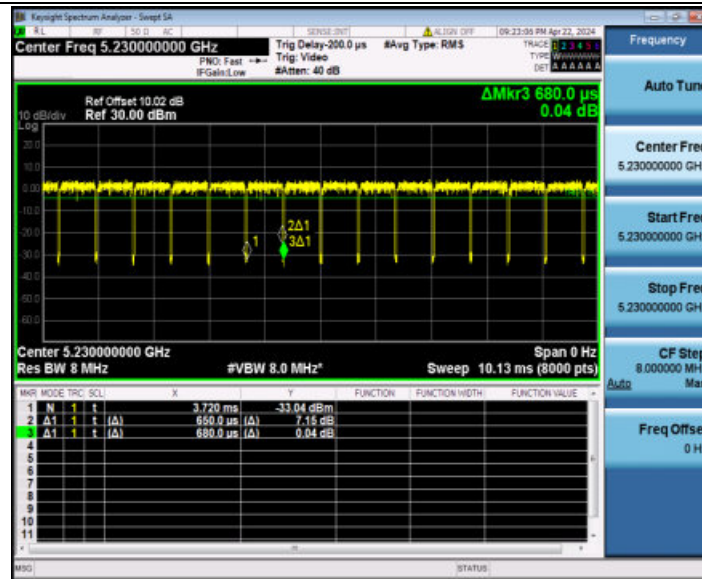
11N20SISO_Ant2_5240



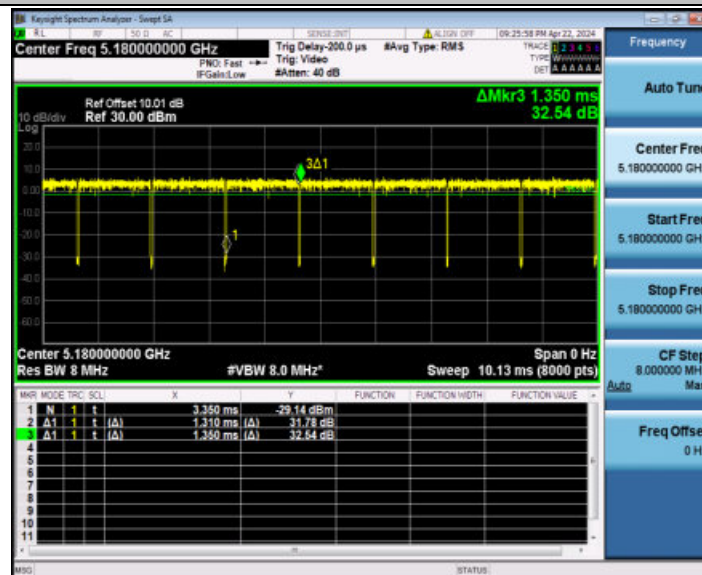
11N40SISO_Ant2_5190



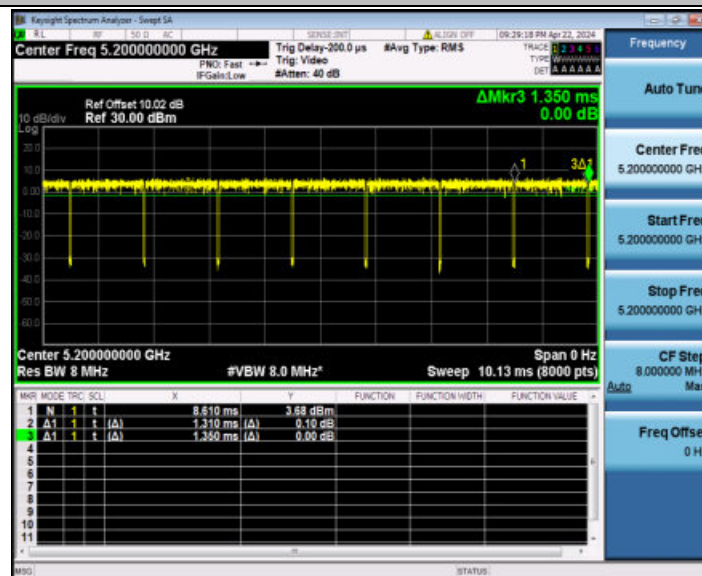
11N40SISO_Ant2_5230



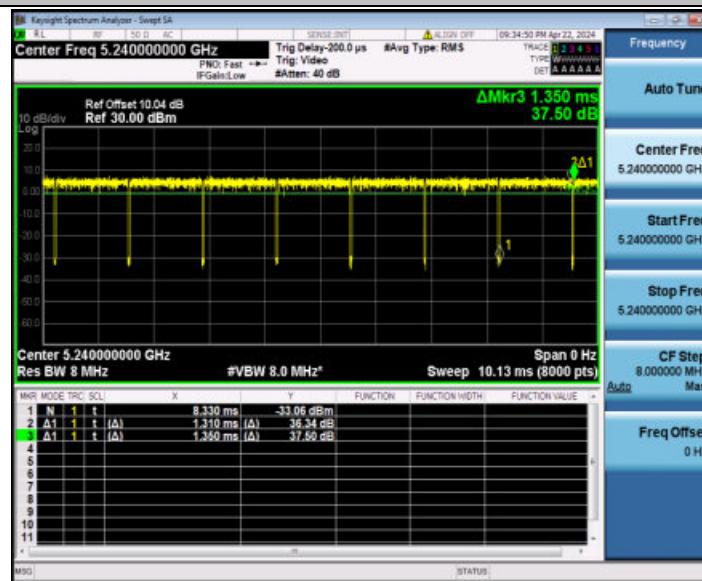
11AC20SISO_Ant2_5180



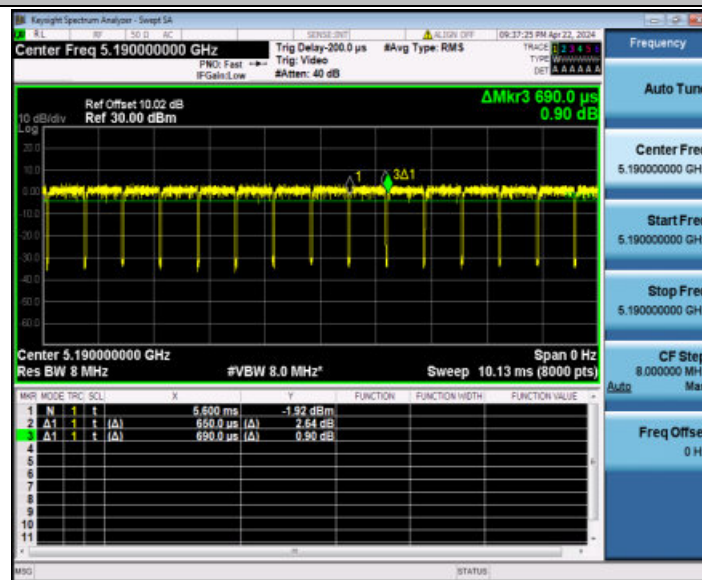
11AC20SISO_Ant2_5200



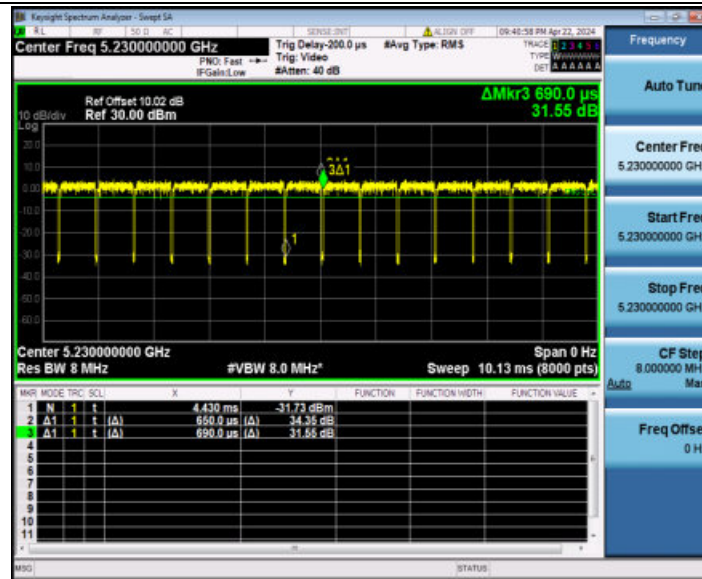
11AC20SISO_Ant2_5240



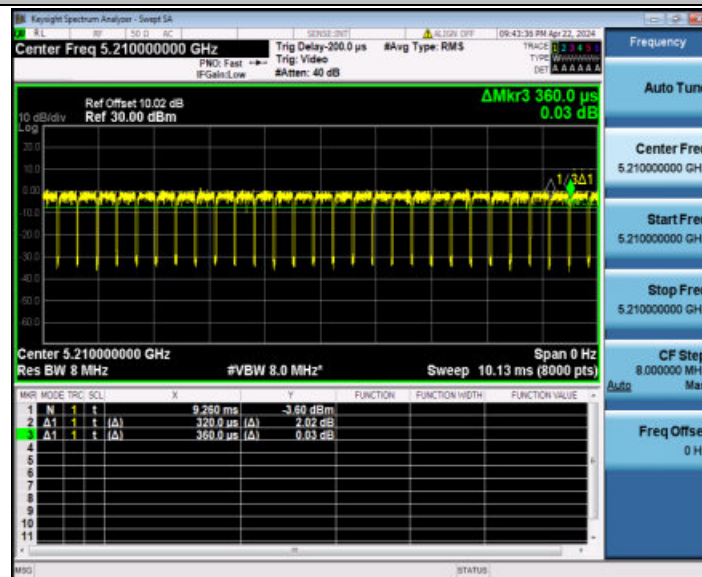
11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210



Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	6.91	97.90	0.09	7.00	≤23.98	PASS
		5200	7.18	97.89	0.09	7.27	≤23.98	PASS
		5240	7.09	97.90	0.09	7.18	≤23.98	PASS
11N20SISO	Ant2	5180	6.97	97.01	0.13	7.10	≤23.98	PASS
		5200	7.04	97.01	0.13	7.17	≤23.98	PASS
		5240	7.04	97.01	0.13	7.17	≤23.98	PASS
11N40SISO	Ant2	5190	6.83	95.59	0.20	7.03	≤23.98	PASS
		5230	6.98	95.59	0.20	7.18	≤23.98	PASS
11AC20SISO	Ant2	5180	7.12	97.04	0.13	7.25	≤23.98	PASS
		5200	7.34	97.04	0.13	7.47	≤23.98	PASS
		5240	7.14	97.04	0.13	7.27	≤23.98	PASS
11AC40SISO	Ant2	5190	6.87	94.20	0.26	7.13	≤23.98	PASS
		5230	6.91	94.20	0.26	7.17	≤23.98	PASS
11AC80SISO	Ant2	5210	6.60	88.89	0.51	7.11	≤23.98	PASS

Note:

1. The Duty Cycle Factor is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the data.

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant2	5180	-5.36	≤11.00	PASS
		5200	-4.38	≤11.00	PASS
		5240	-3.67	≤11.00	PASS
11N20SISO	Ant2	5180	-4.99	≤11.00	PASS
		5200	-4.65	≤11.00	PASS
		5240	-4.01	≤11.00	PASS
11N40SISO	Ant2	5190	-7.03	≤11.00	PASS
		5230	-6.41	≤11.00	PASS
11AC20SISO	Ant2	5180	-4.52	≤11.00	PASS
		5200	-4.15	≤11.00	PASS
		5240	-3.39	≤11.00	PASS
11AC40SISO	Ant2	5190	-6.78	≤11.00	PASS
		5230	-6.32	≤11.00	PASS
11AC80SISO	Ant2	5210	-10.42	≤11.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
 2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant2_5180



11A_Ant2_5200



11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210



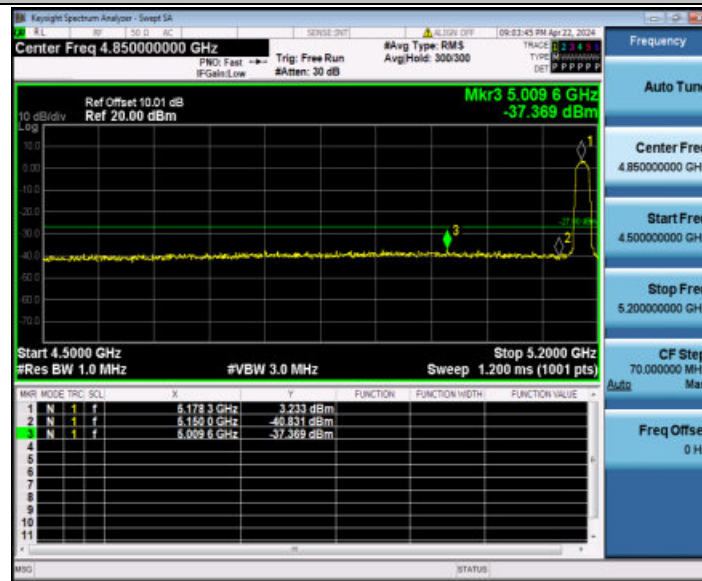
Appendix D.6: Band edge measurements

Test Result B1

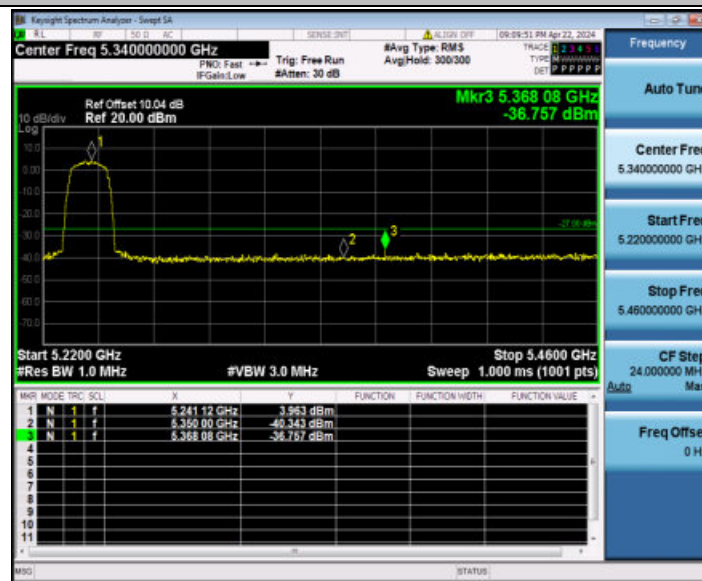
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant2	Low	5180	-37.37	≤ -27	PASS
		High	5240	-36.76	≤ -27	PASS
11N20SISO	Ant2	Low	5180	-37.42	≤ -27	PASS
		High	5240	-37.5	≤ -27	PASS
11N40SISO	Ant2	Low	5190	-36.76	≤ -27	PASS
		High	5230	-37.63	≤ -27	PASS
11AC20SISO	Ant2	Low	5180	-37.22	≤ -27	PASS
		High	5240	-37.01	≤ -27	PASS
11AC40SISO	Ant2	Low	5190	-36.37	≤ -27	PASS
		High	5230	-36.78	≤ -27	PASS
11AC80SISO	Ant2	Low	5210	-37.43	≤ -27	PASS
		High	5210	-36.73	≤ -27	PASS

Test Graphs B1

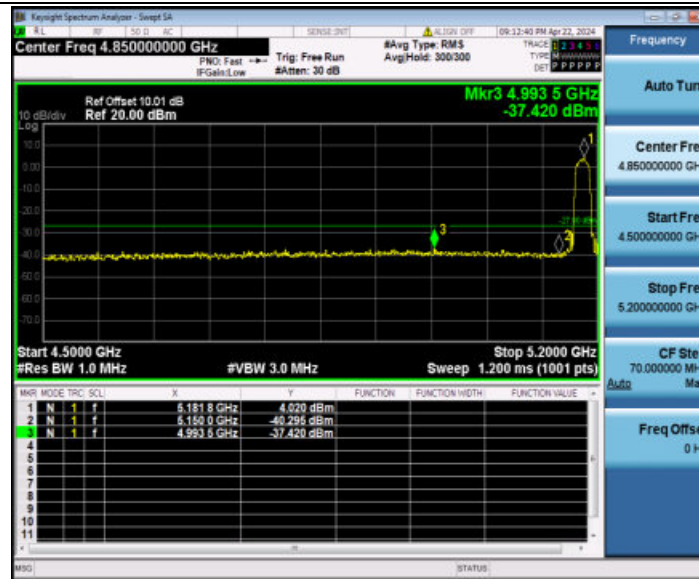
11A_Ant2_Low_5180



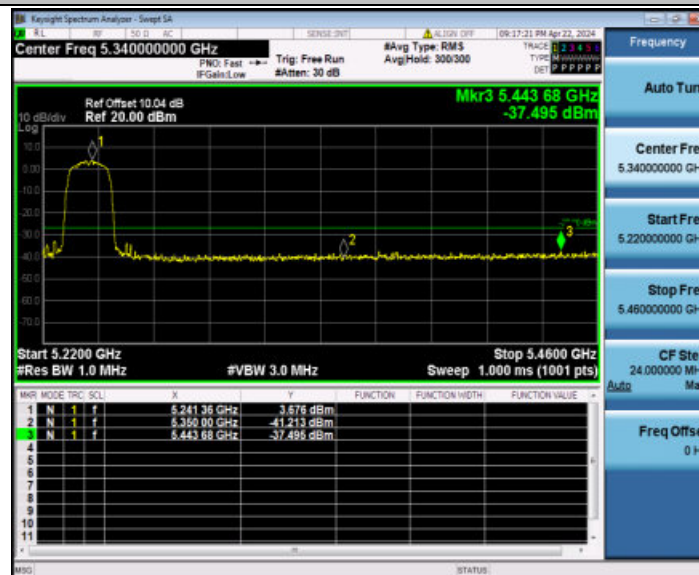
11A_Ant2_High_5240



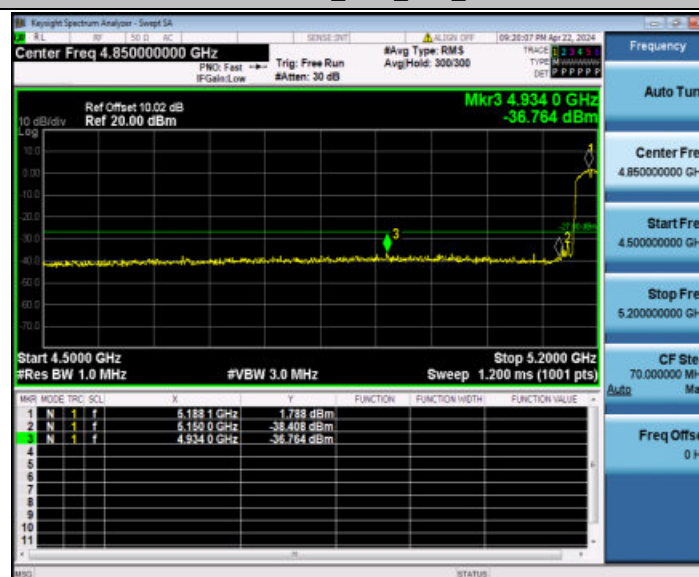
11N20SISO_Ant2_Low_5180



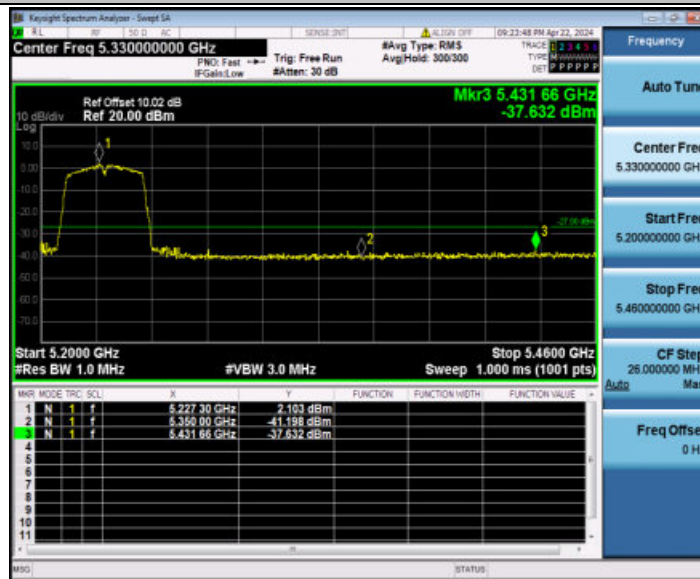
11N20SISO_Ant2_High_5240



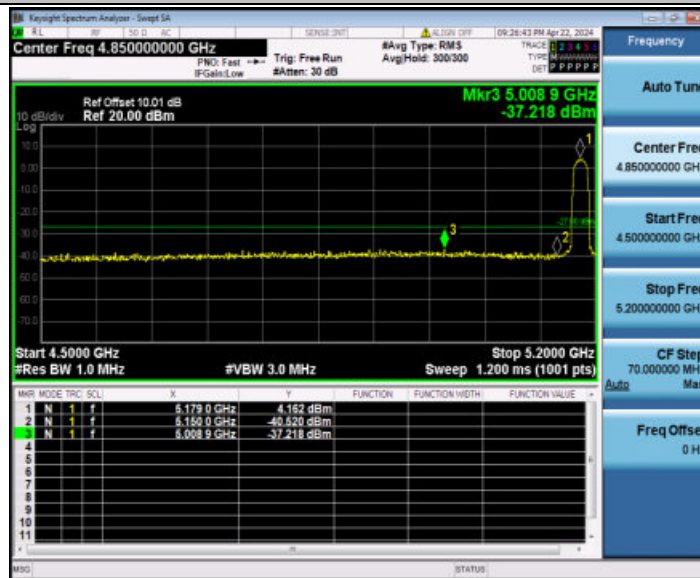
11N40SISO_Ant2_Low_5190



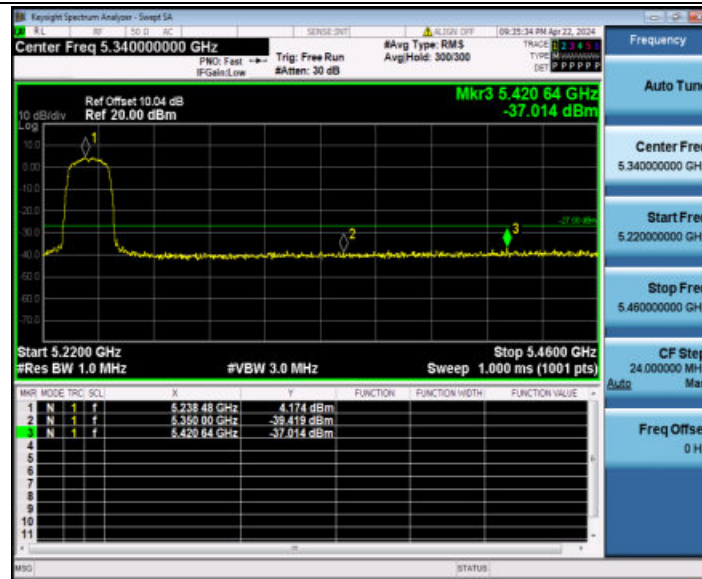
11N40SISO_Ant2_High_5230



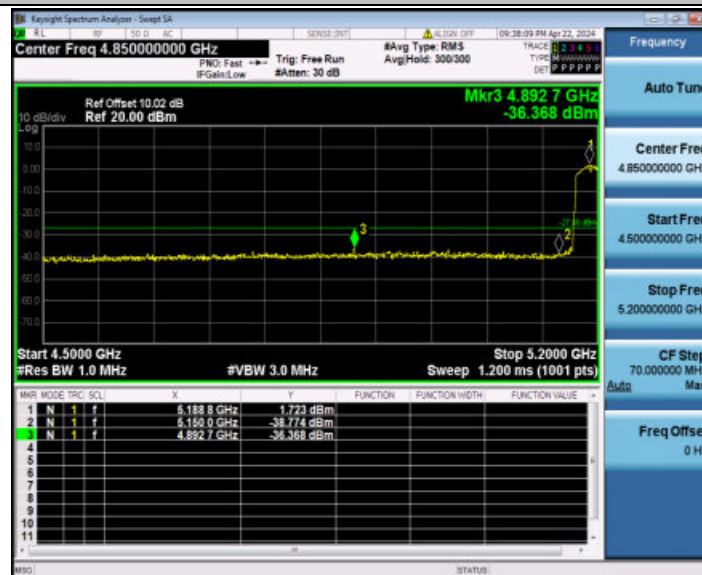
11AC20SISO_Ant2_Low_5180



11AC20SISO_Ant2_High_5240



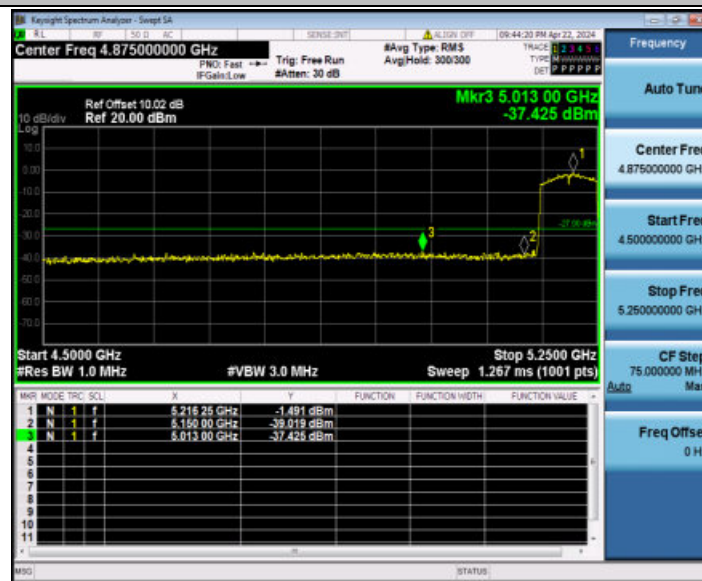
11AC40SISO_Ant2_Low_5190



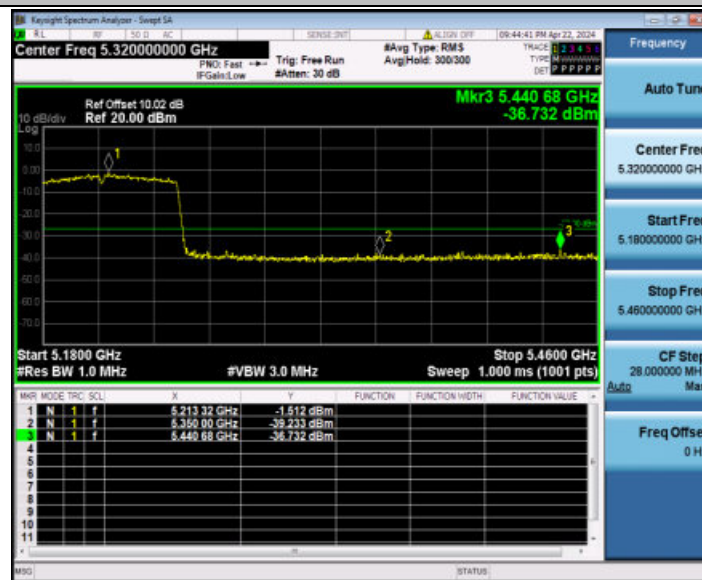
11AC40SISO_Ant2_High_5230



11AC80SISO_Ant2_Low_5210



11AC80SISO_Ant2_High_5210



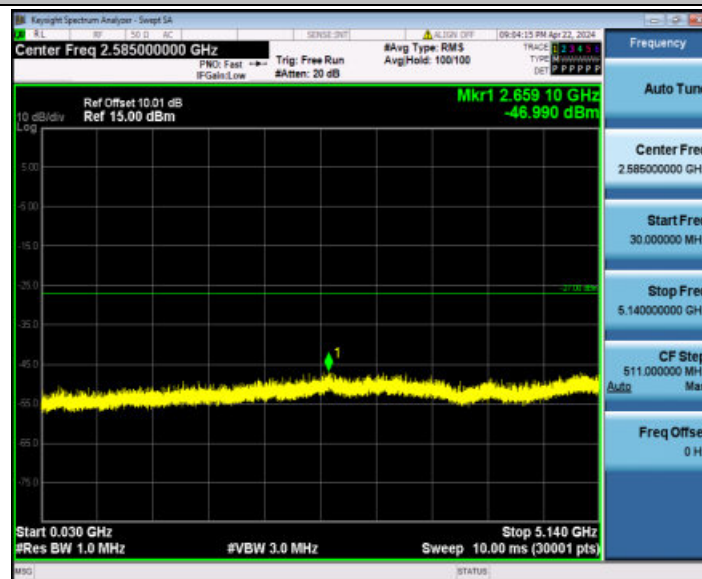
Appendix D.7: Conducted Spurious Emission

Test Result

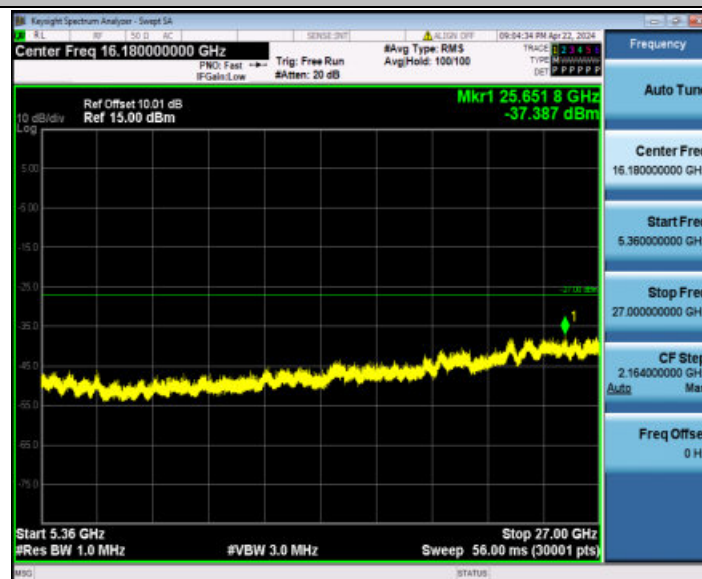
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	30~5140	2659.1	-46.99	≤-27	PASS
			5360~27000	25651.83	-37.39	≤-27	PASS
		5200	30~5140	5022.47	-46.56	≤-27	PASS
			5360~27000	24855.48	-36.97	≤-27	PASS
		5240	30~5140	2681.07	-45.21	≤-27	PASS
			5360~27000	24174.54	-36.84	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	4855.37	-46.39	≤-27	PASS
			5360~27000	24258.21	-37.48	≤-27	PASS
		5200	30~5140	2683.45	-46.53	≤-27	PASS
			5360~27000	24275.52	-36.66	≤-27	PASS
		5240	30~5140	5016.17	-45.99	≤-27	PASS
			5360~27000	25711.7	-36.29	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	5138.47	-45.99	≤-27	PASS
			5360~27000	26745.37	-37.33	≤-27	PASS
		5230	30~5140	4938.5	-45.63	≤-27	PASS
			5360~27000	26811.01	-36.1	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	2617.02	-46.29	≤-27	PASS
			5360~27000	25048.79	-37.51	≤-27	PASS
		5200	30~5140	4961.66	-46.31	≤-27	PASS
			5360~27000	26024.04	-36.58	≤-27	PASS
		5240	30~5140	2616	-46.33	≤-27	PASS
			5360~27000	23512.35	-37.01	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	5068.97	-46.58	≤-27	PASS
			5360~27000	26026.92	-37.13	≤-27	PASS
		5230	30~5140	3052.91	-46.45	≤-27	PASS
			5360~27000	24271.92	-36.74	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	5136.76	-43.1	≤-27	PASS
			5360~27000	26048.56	-36.59	≤-27	PASS

Test Graphs

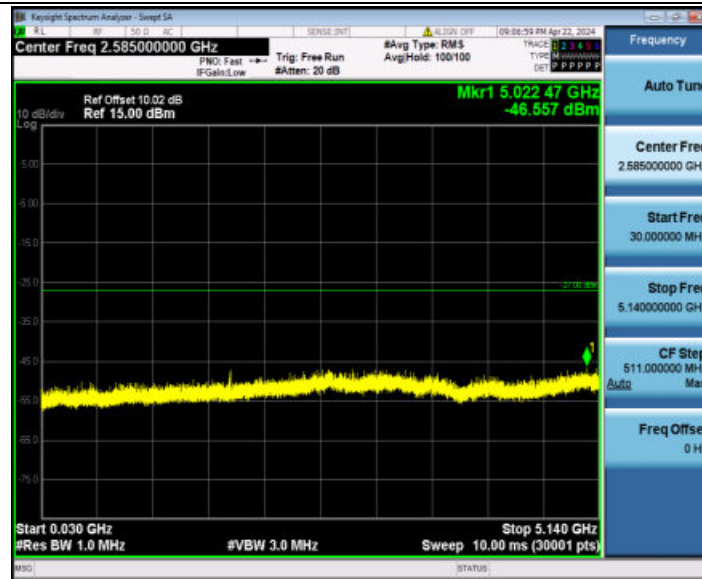
11A_Ant2_5180_30~5140



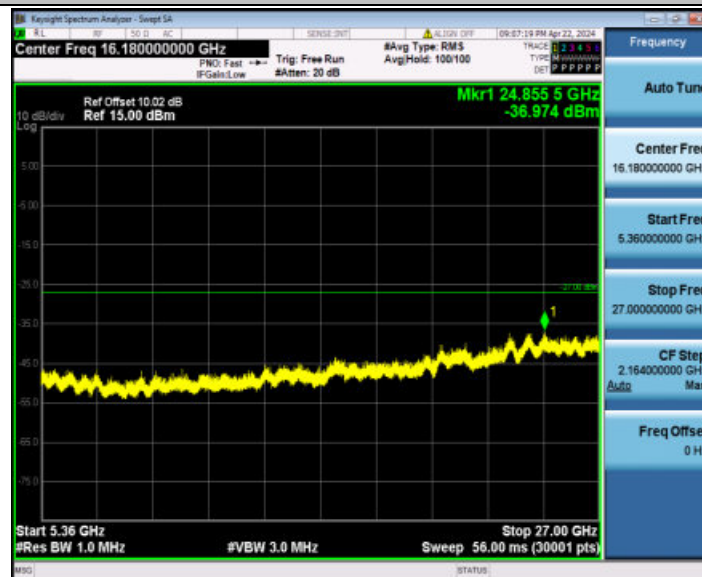
11A_Ant2_5180_5360~27000



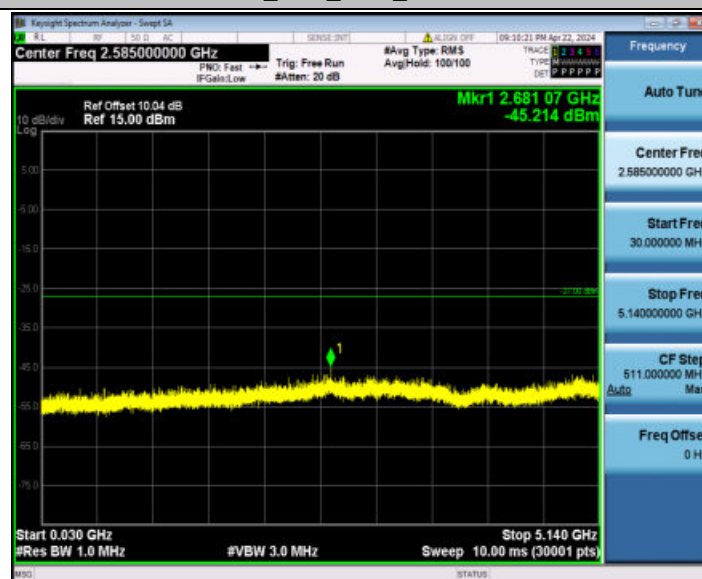
11A_Ant2_5200_30~5140



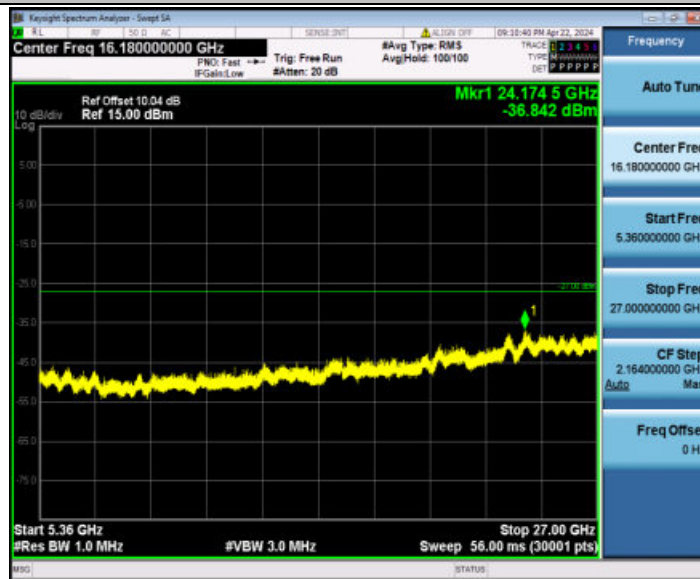
11A_Ant2_5200_5360~27000



11A_Ant2_5240_30~5140



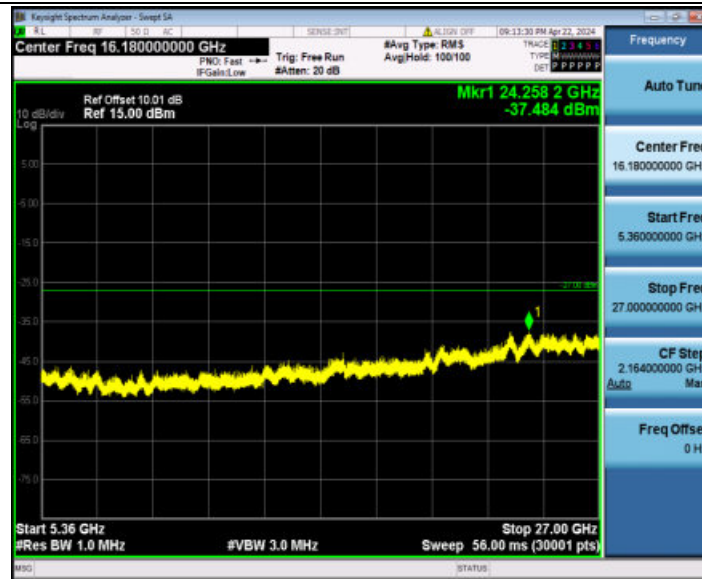
11A_Ant2_5240_5360~27000



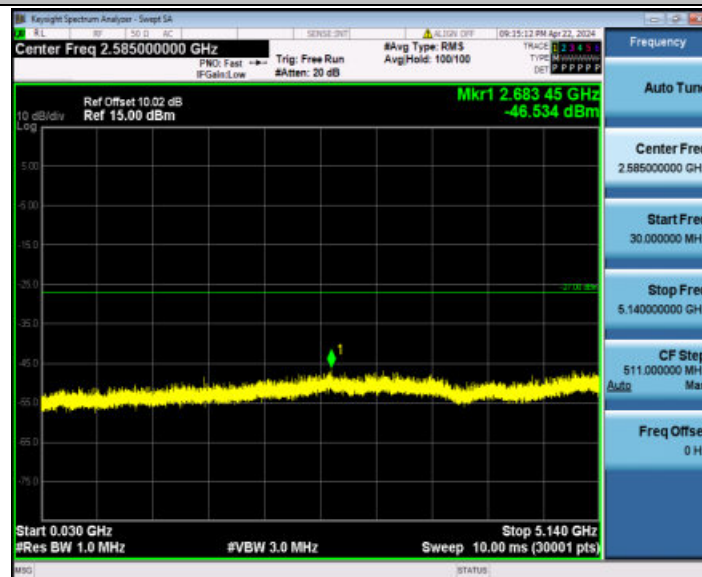
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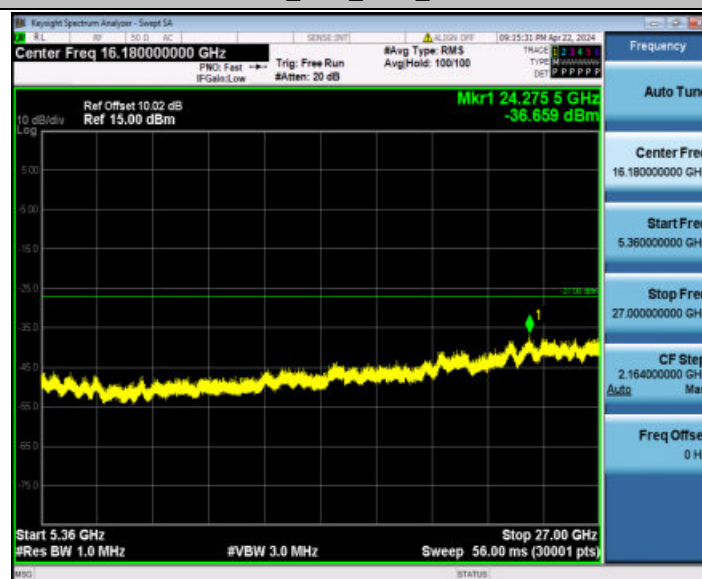
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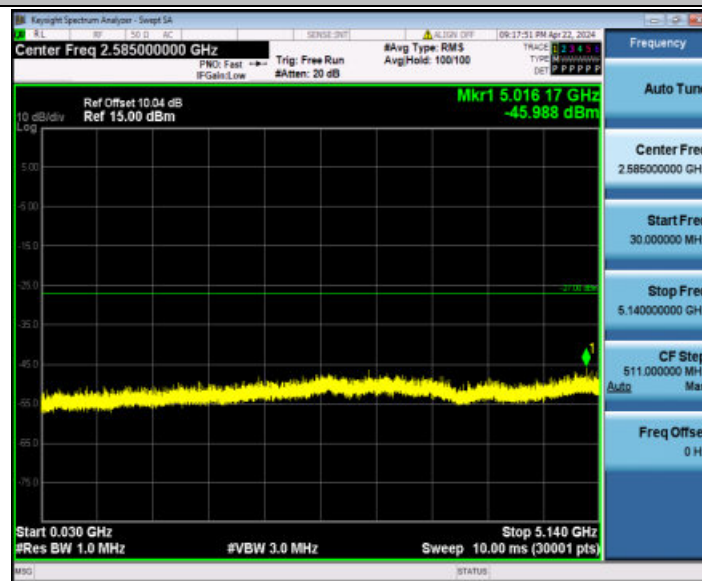
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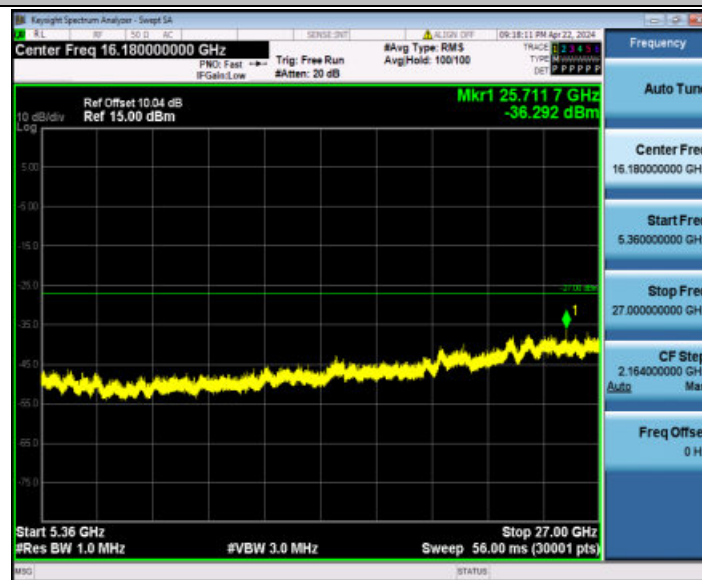
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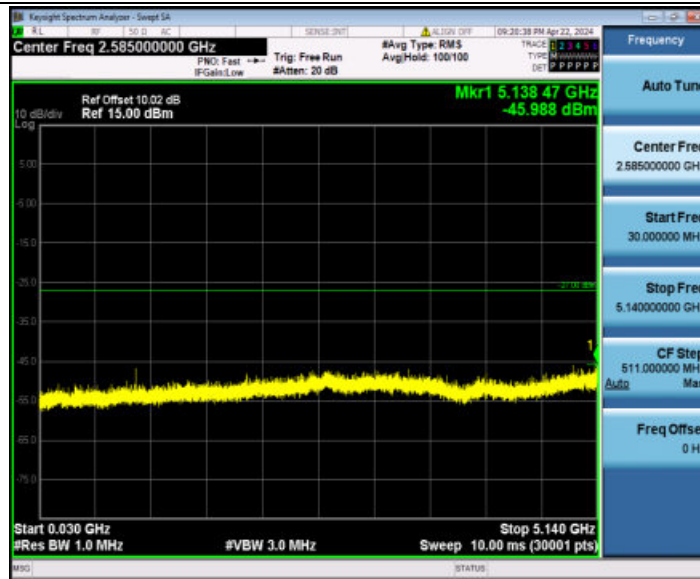
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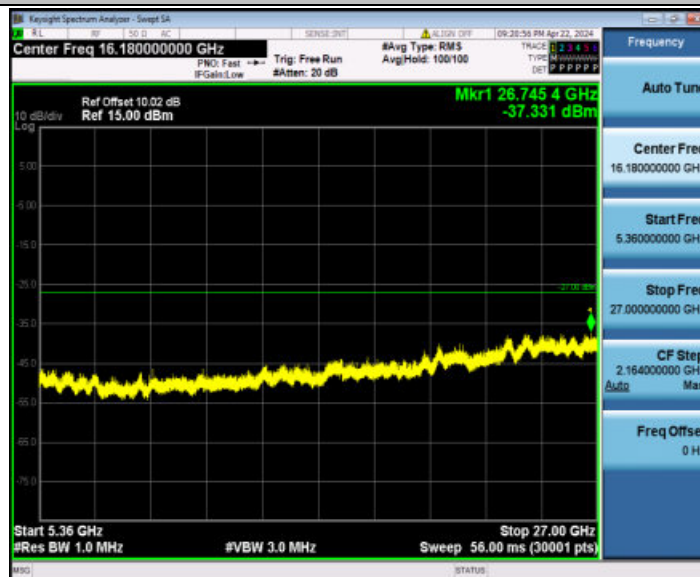
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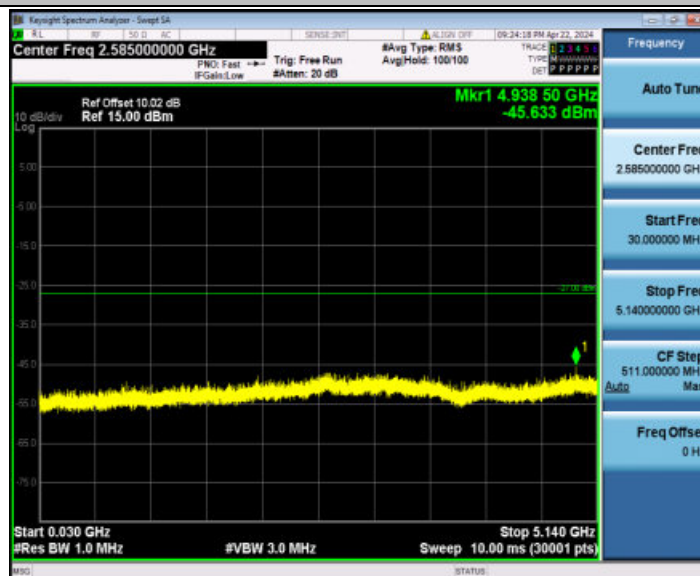
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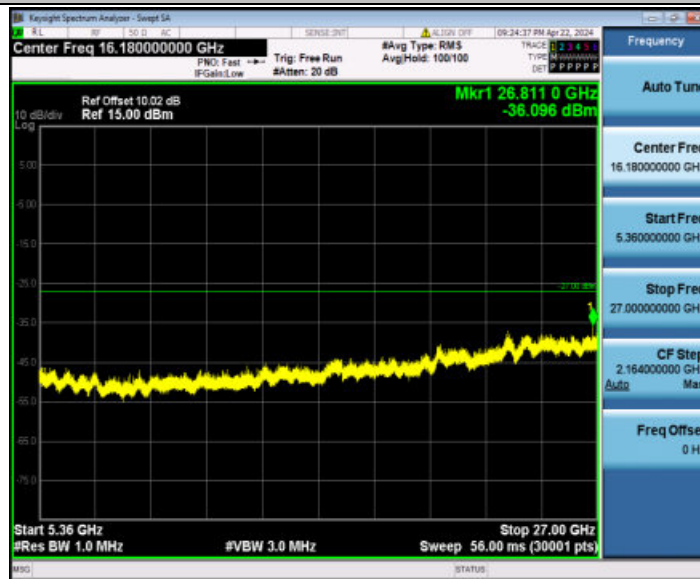
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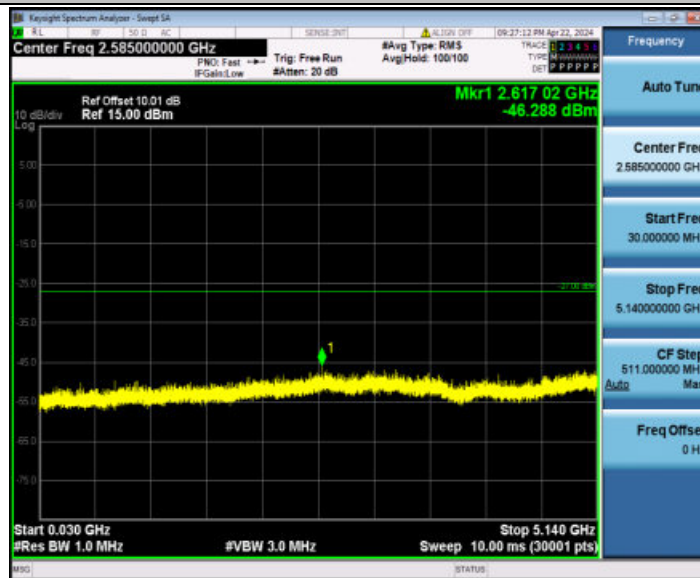
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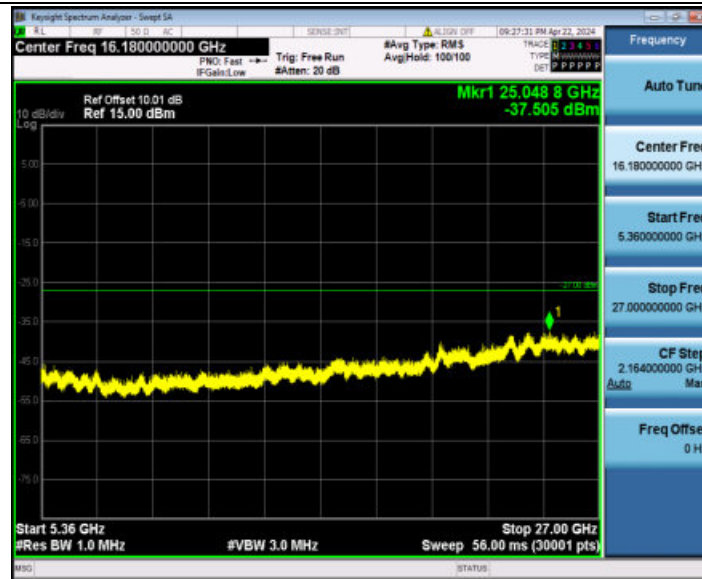
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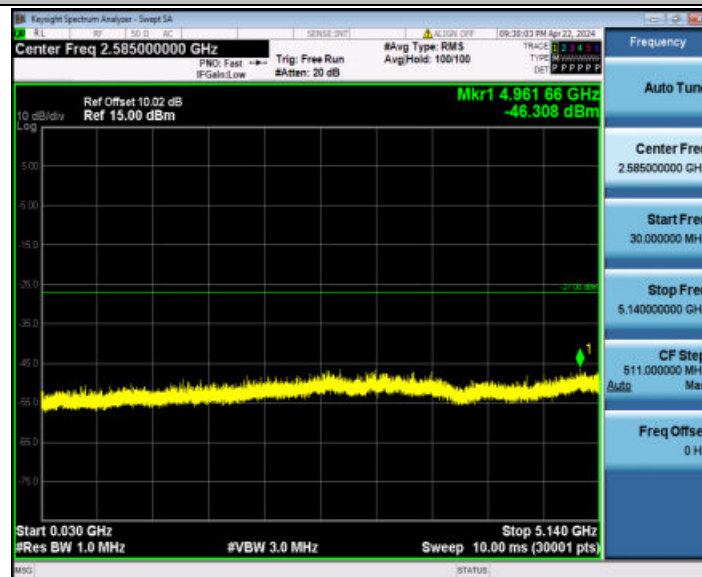
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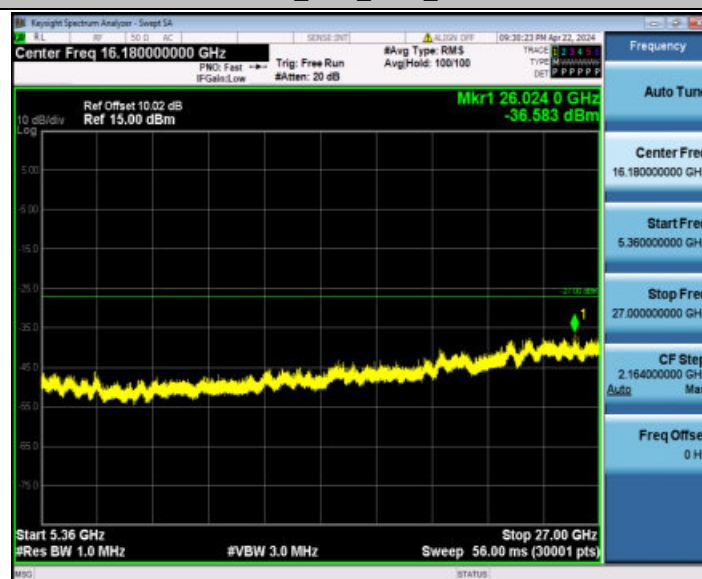
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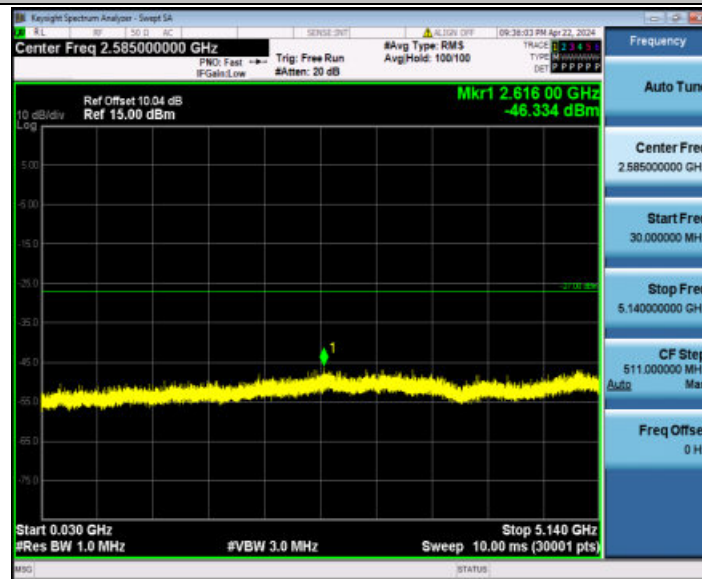
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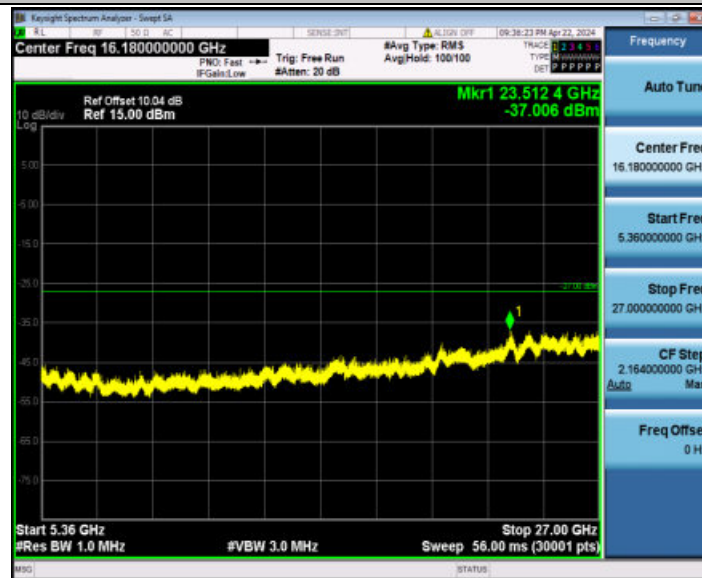
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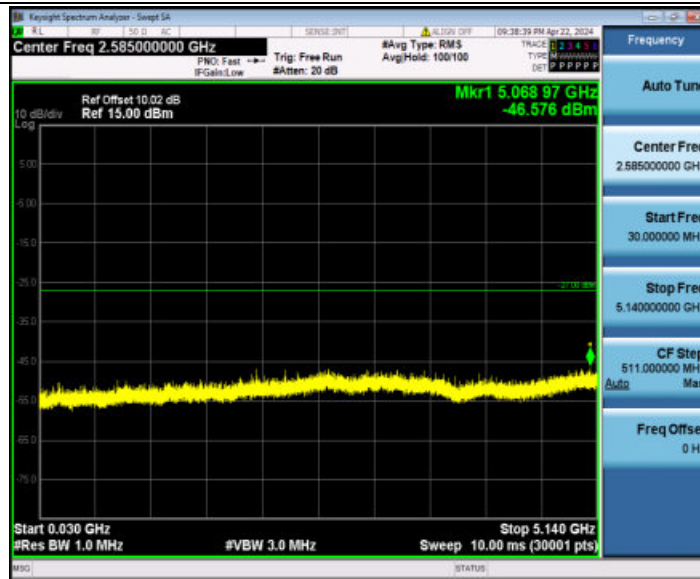
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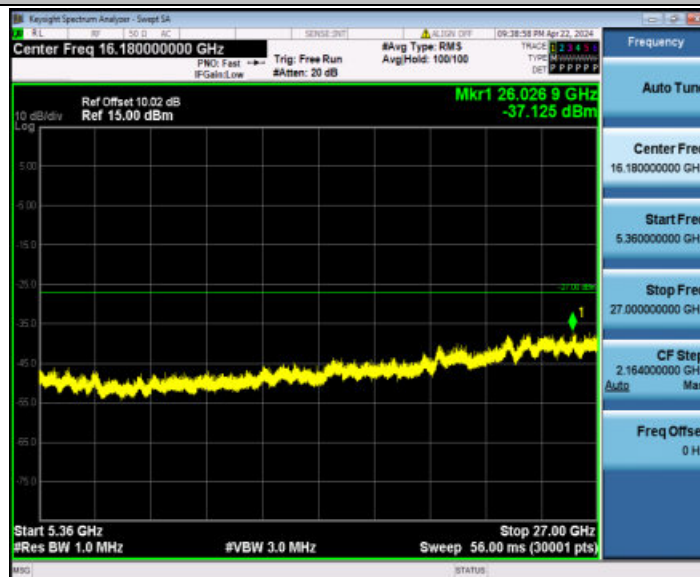
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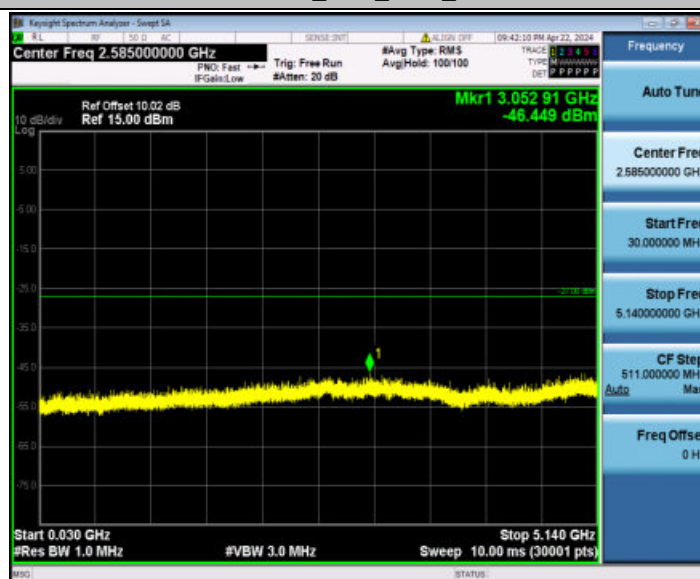
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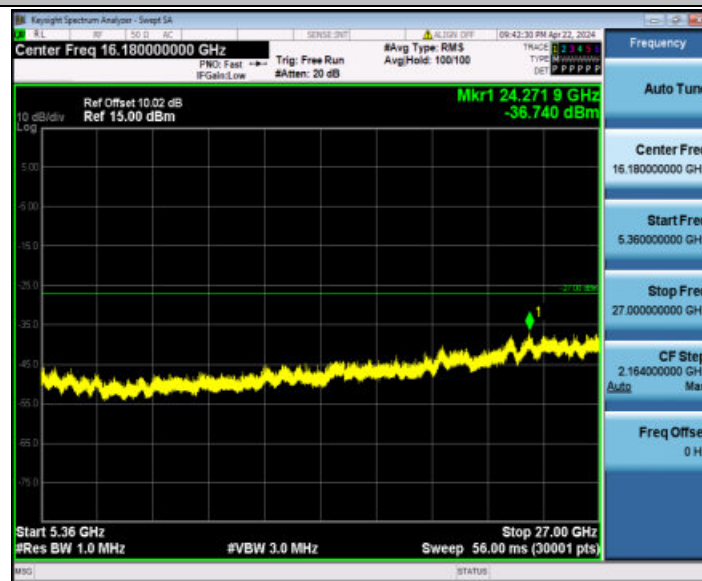
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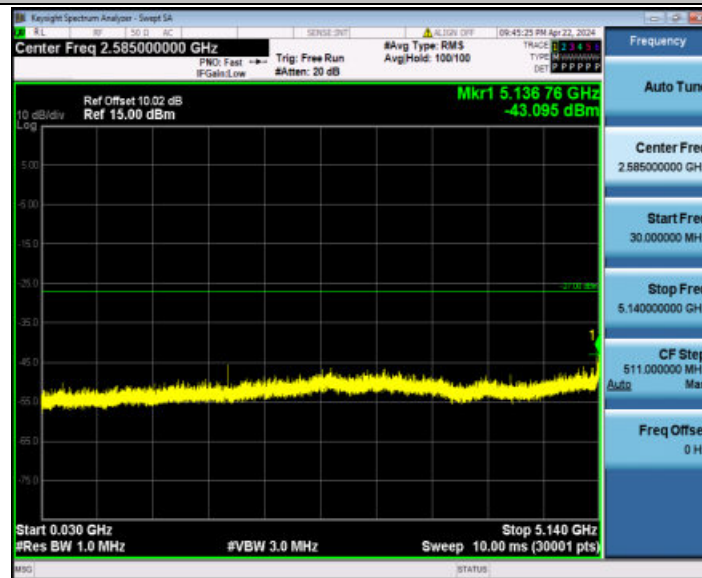
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11AC40SISO_Ant2_5230_5360~27000



11AC80SISO_Ant2_5210_30~5140



11AC80SISO_Ant2_5210_5360~27000

