

Case No. : <u>GTS20240320024-1-13</u>
Ambient Condition: <u>22 °C, 57 %RH</u>
According Standard: <u>■Part15E</u>
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	Ant1	5180	19.960	5170.040	5190.000	---	---
		5200	19.840	5190.120	5209.960	---	---
		5240	19.840	5230.160	5250.000	---	---
11N20SISO	Ant1	5180	20.120	5170.000	5190.120	---	---
		5200	20.240	5189.800	5210.040	---	---
		5240	20.200	5229.880	5250.080	---	---
11N40SISO	Ant1	5190	40.400	5169.840	5210.240	---	---
		5230	40.320	5209.840	5250.160	---	---
11AC20SISO	Ant1	5180	20.280	5169.920	5190.200	---	---
		5200	20.200	5189.920	5210.120	---	---
		5240	20.120	5229.960	5250.080	---	---
11AC40SISO	Ant1	5190	40.160	5170.080	5210.240	---	---
		5230	41.120	5209.440	5250.560	---	---
11AC80SISO	Ant1	5210	80.960	5169.680	5250.640	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



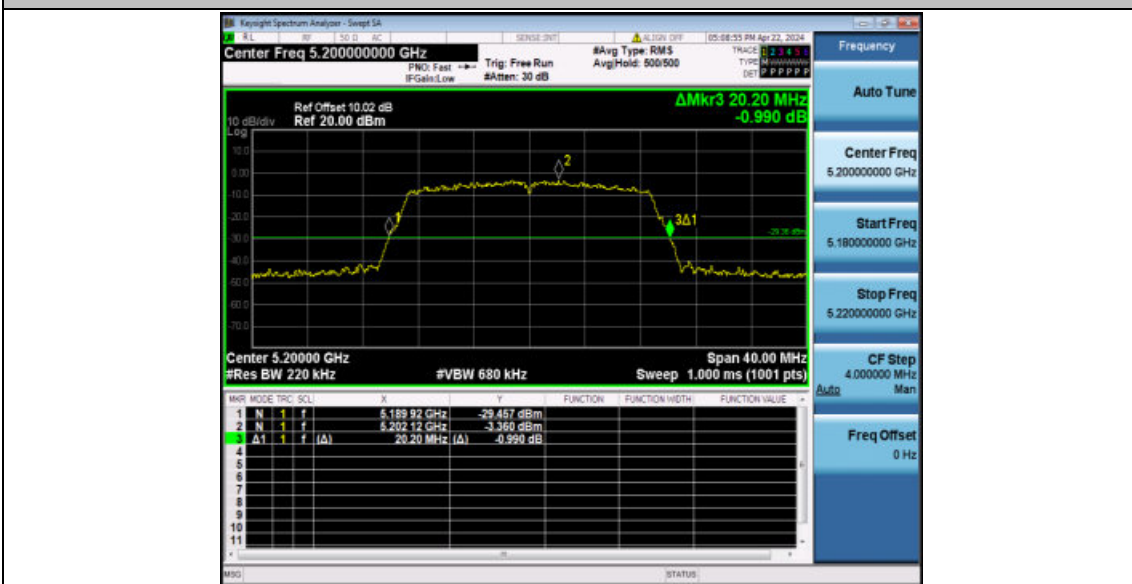
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

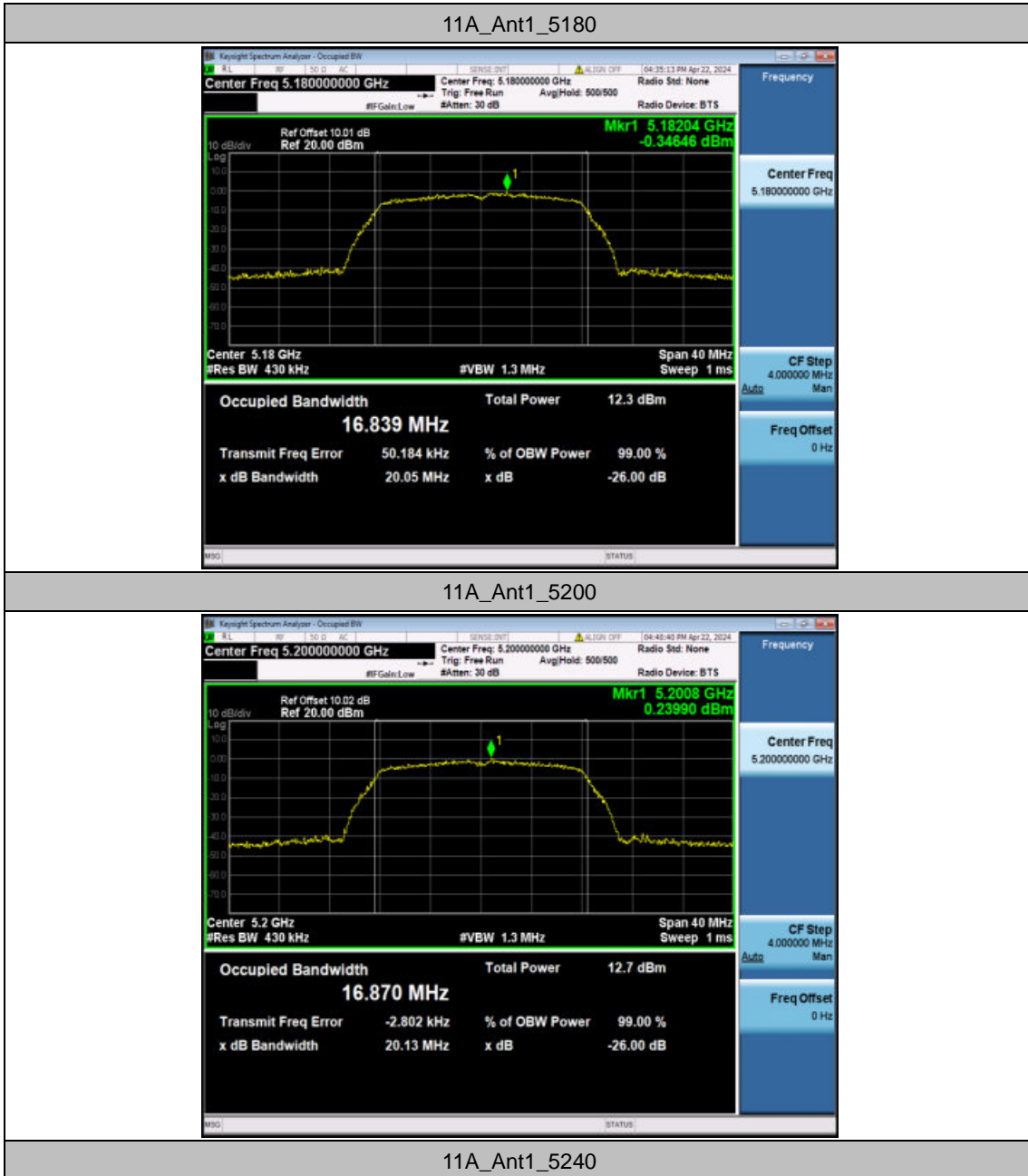


Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.839	5171.6307	5188.4697	---	---
		5200	16.870	5191.5622	5208.4322	---	---
		5240	16.853	5231.6012	5248.4542	---	---
11N20SISO	Ant1	5180	17.809	5171.1264	5188.9354	---	---
		5200	17.864	5191.0574	5208.9214	---	---
		5240	17.783	5231.1360	5248.9190	---	---
11N40SISO	Ant1	5190	36.231	5171.9634	5208.1944	---	---
		5230	36.342	5211.9400	5248.2820	---	---
11AC20SISO	Ant1	5180	17.877	5171.0576	5188.9346	---	---
		5200	17.835	5191.0952	5208.9302	---	---
		5240	17.818	5231.0987	5248.9167	---	---
11AC40SISO	Ant1	5190	36.250	5171.9133	5208.1633	---	---
		5230	36.336	5211.9399	5248.2759	---	---
11AC80SISO	Ant1	5210	75.213	5172.6284	5247.8414	---	---

Test Graphs





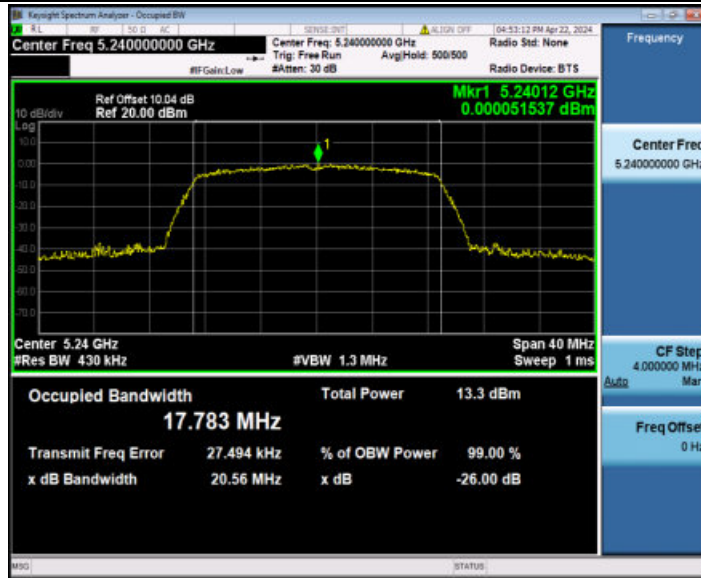
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



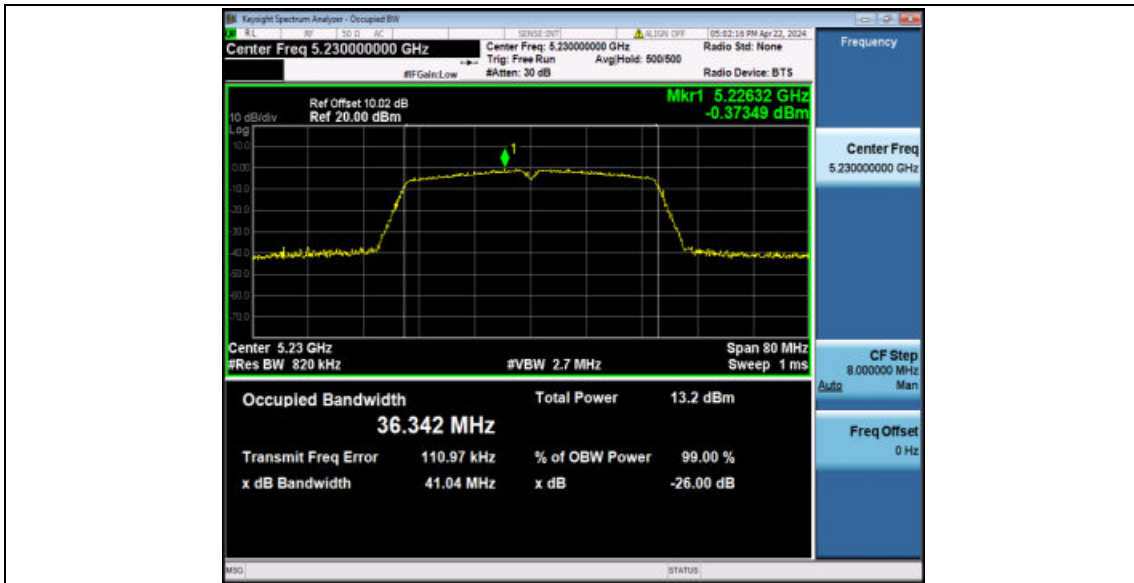
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11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



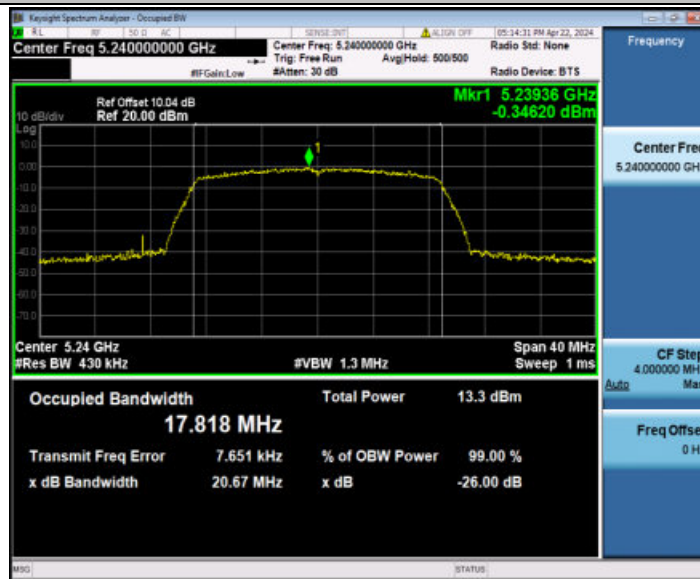
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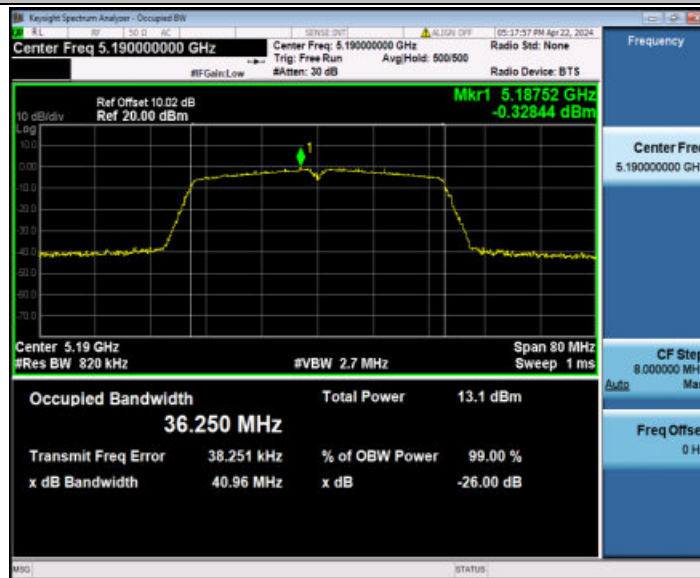
11AC20SISO_Ant1_5200



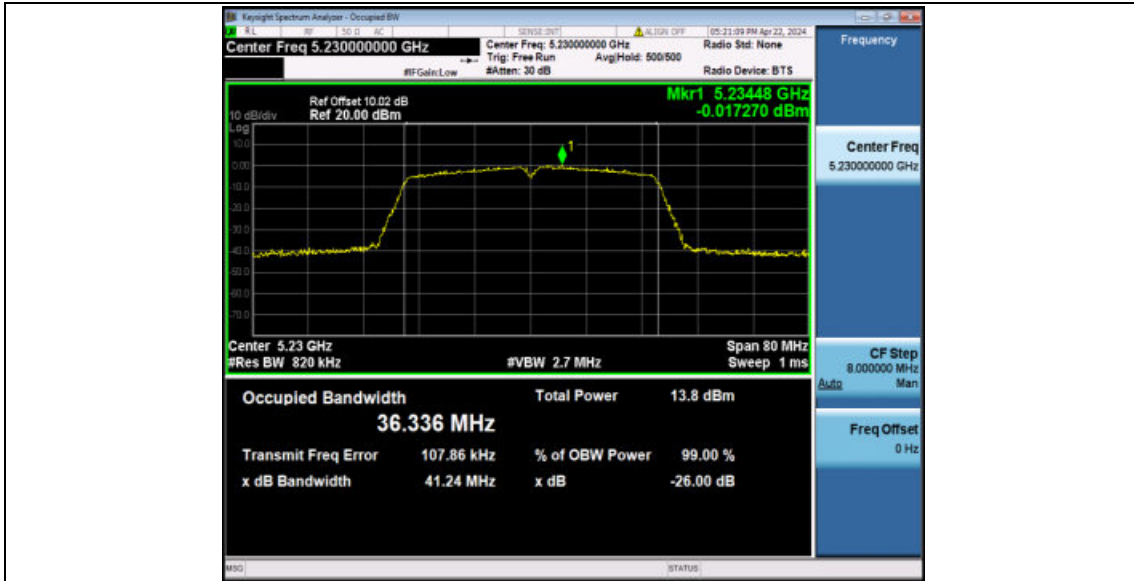
11AC20SISO_Ant1_5240



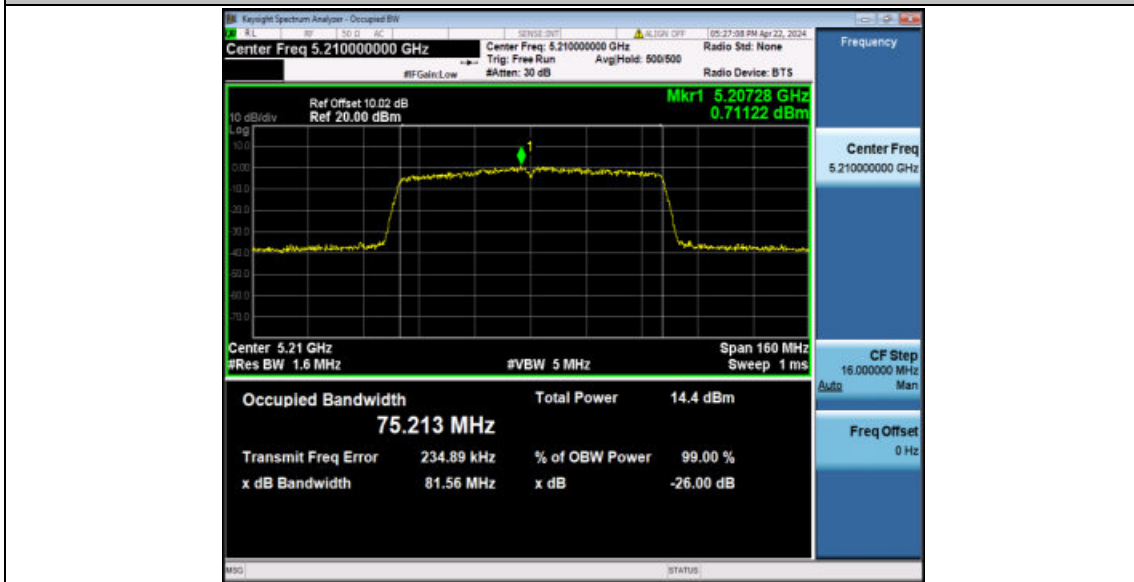
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210



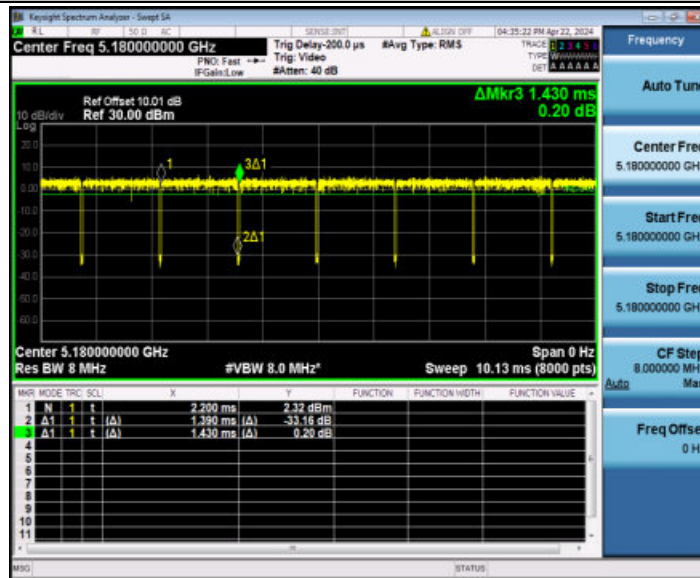
Appendix D.3: Duty Cycle

Test Result

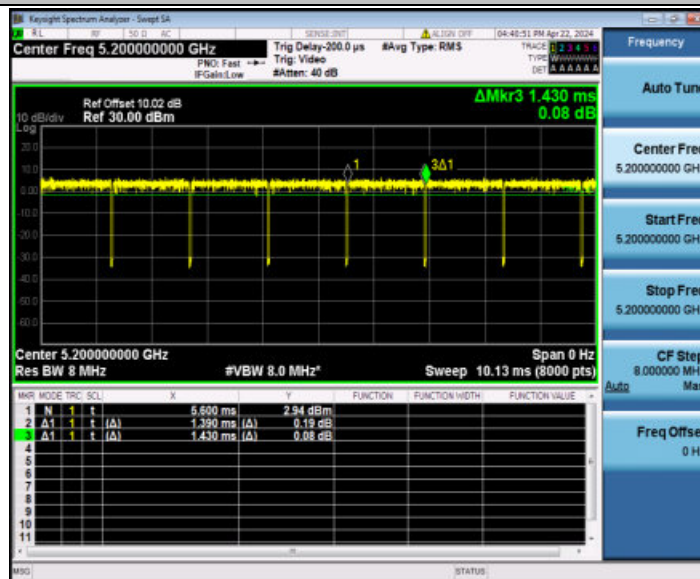
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	1.39	1.43	97.20	0.12	0.72
		5200	1.39	1.43	97.20	0.12	0.72
		5240	1.39	1.43	97.20	0.12	0.72
11N20SISO	Ant1	5180	1.29	1.33	96.99	0.13	0.78
		5200	1.30	1.34	97.01	0.13	0.77
		5240	1.30	1.33	97.74	0.10	0.77
11N40SISO	Ant1	5190	0.64	0.68	94.12	0.26	1.56
		5230	0.65	0.68	95.59	0.20	1.54
11AC20SISO	Ant1	5180	1.31	1.35	97.04	0.13	0.76
		5200	1.31	1.34	97.76	0.10	0.76
		5240	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant1	5190	0.65	0.69	94.20	0.26	1.54
		5230	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant1	5210	0.32	0.35	91.43	0.39	3.13

Test Graphs

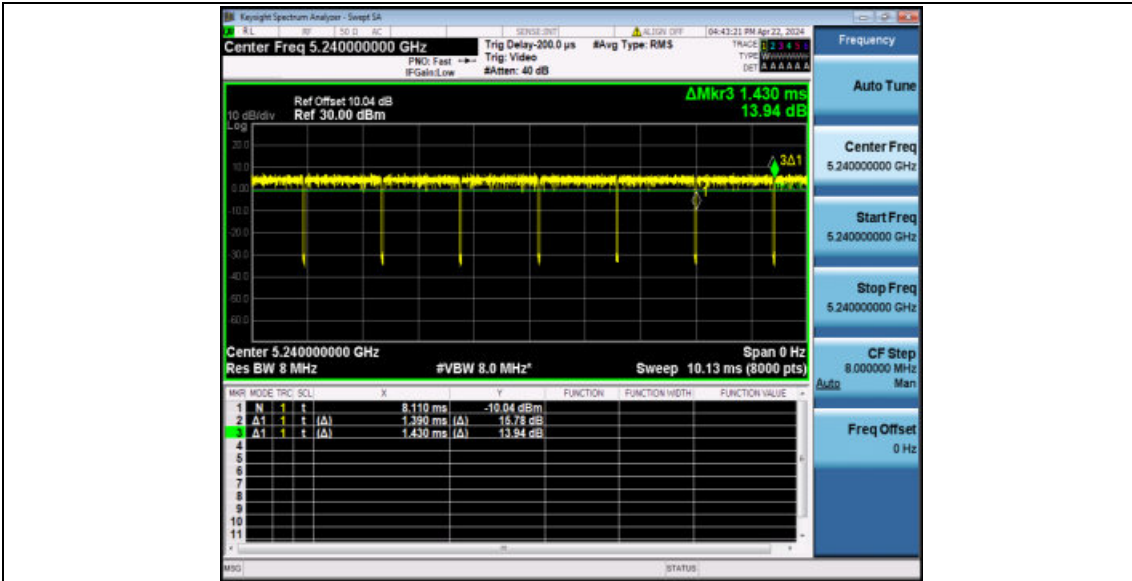
11A_Ant1_5180



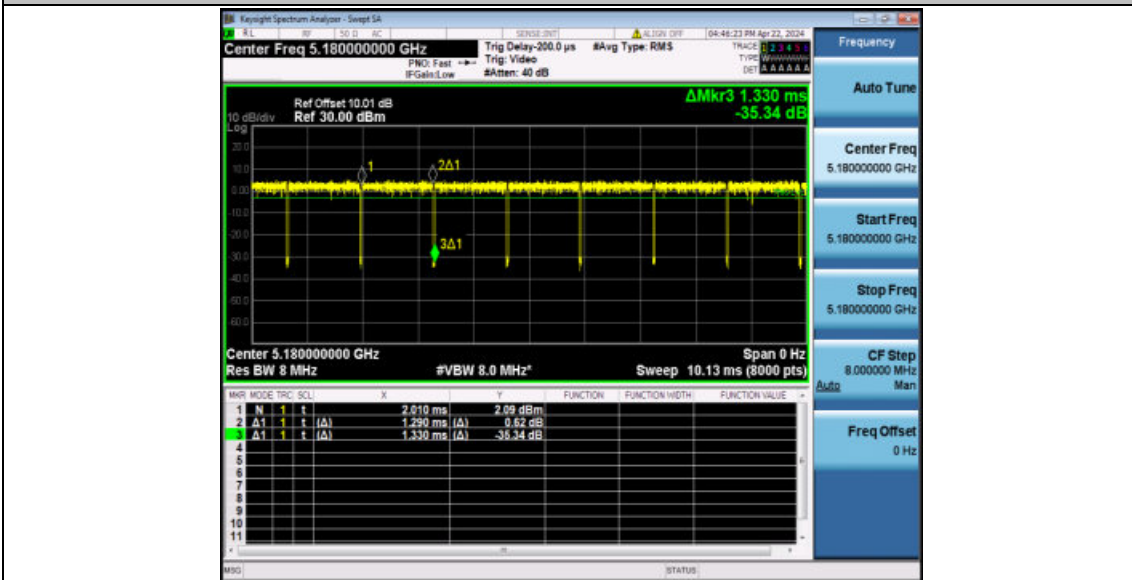
11A_Ant1_5200



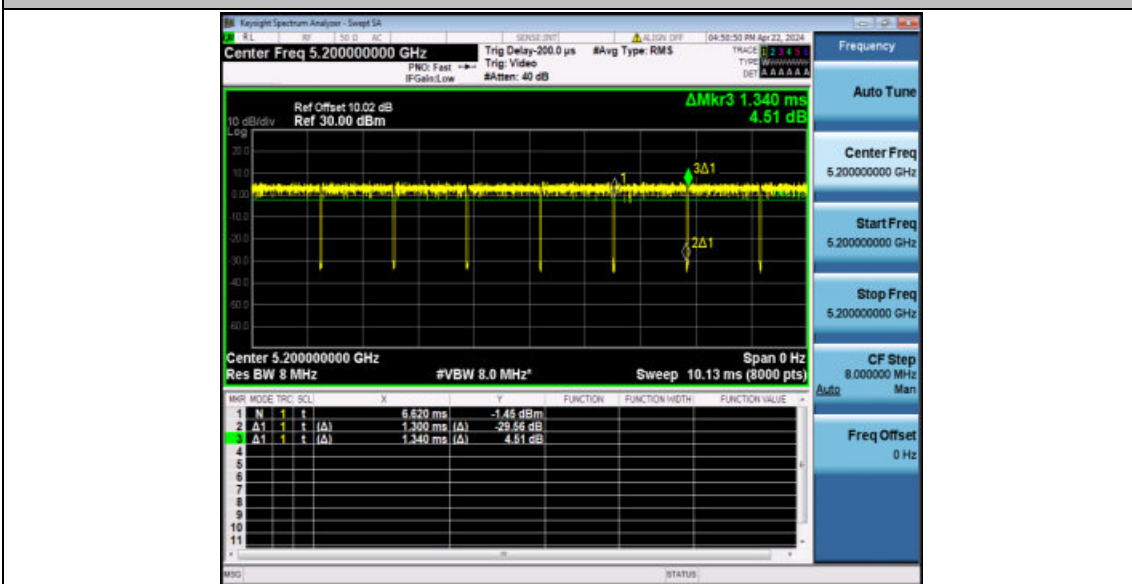
11A_Ant1_5240



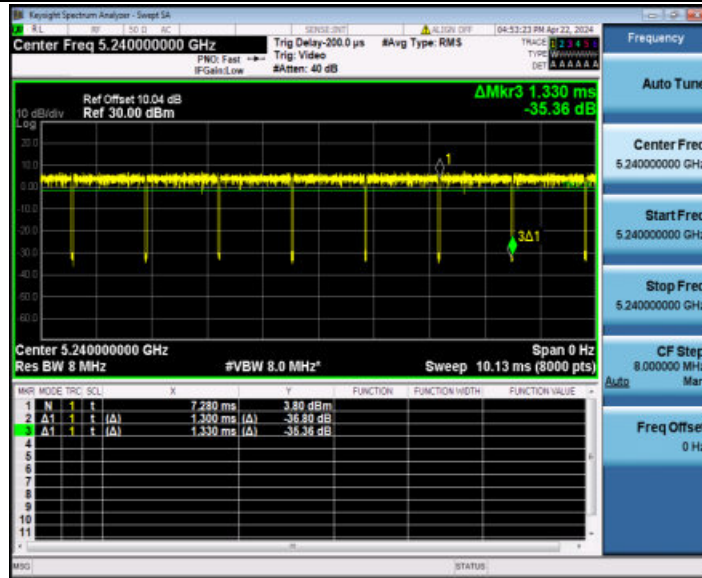
11N20SISO_Ant1_5180



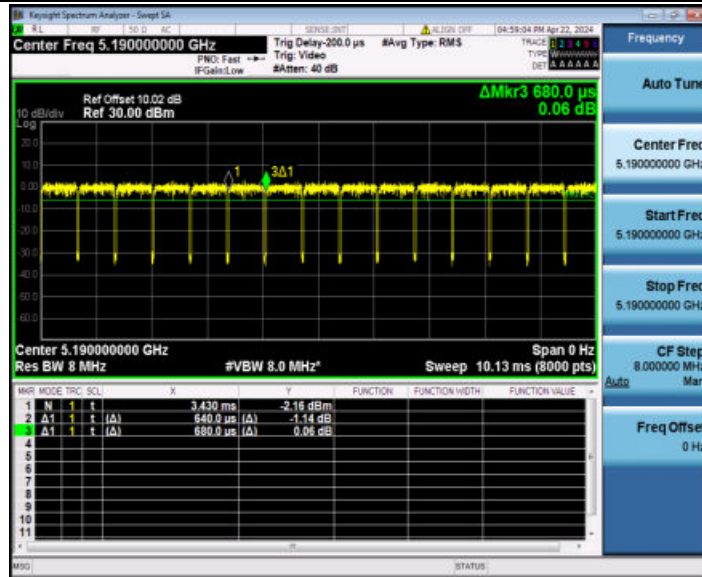
11N20SISO_Ant1_5200



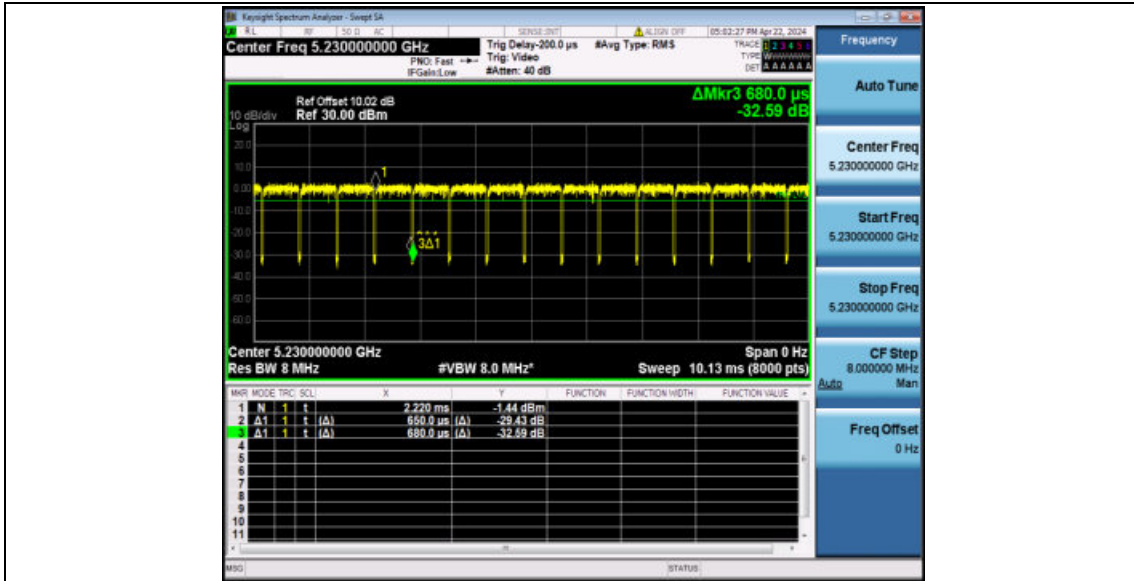
11N20SISO_Ant1_5240



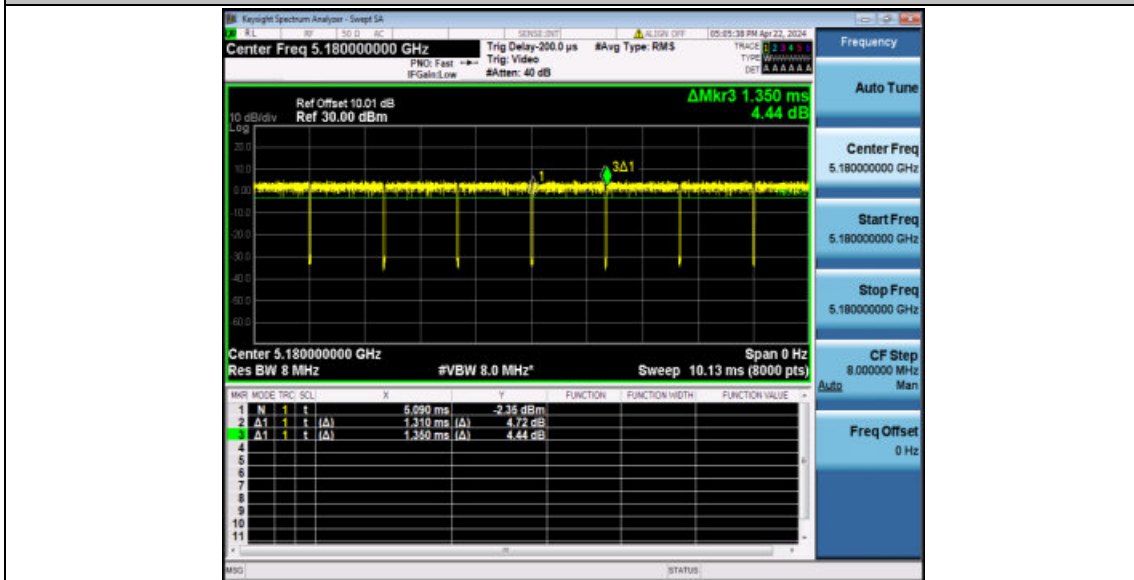
11N40SISO_Ant1_5190



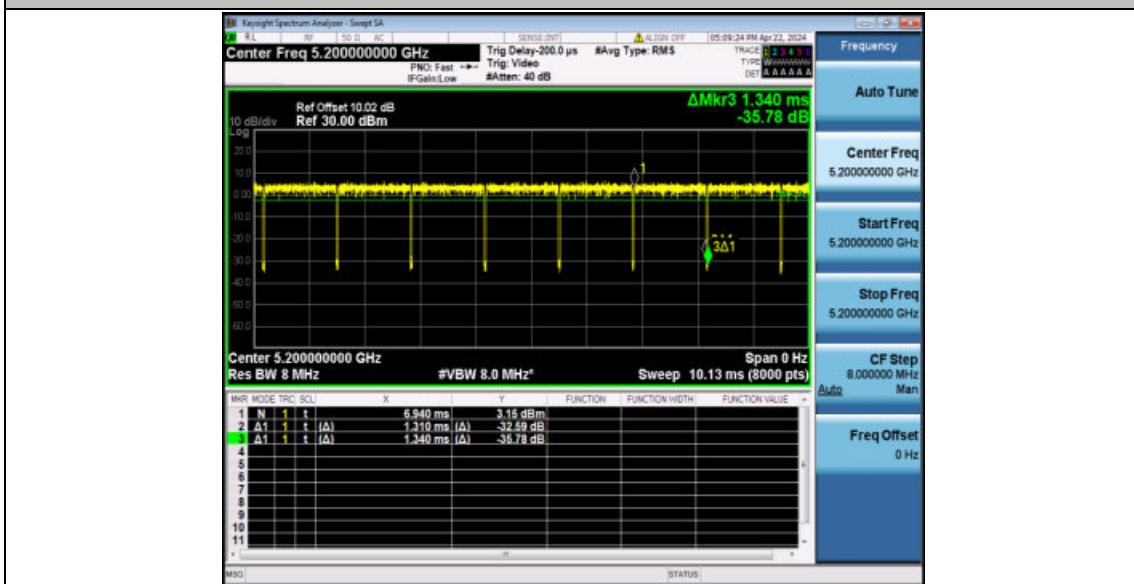
11N40SISO_Ant1_5230



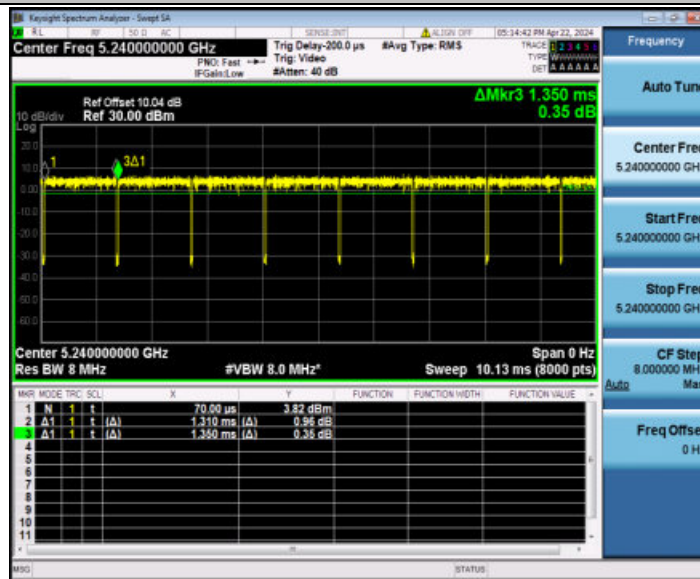
11AC20SISO_Ant1_5180



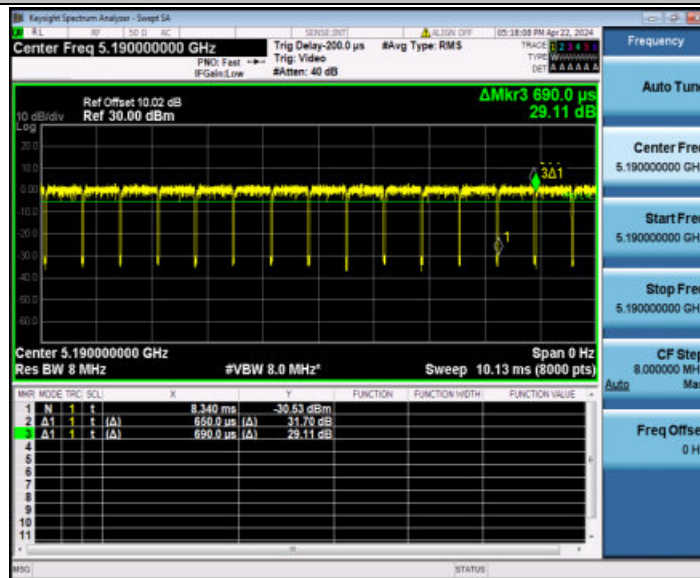
11AC20SISO_Ant1_5200



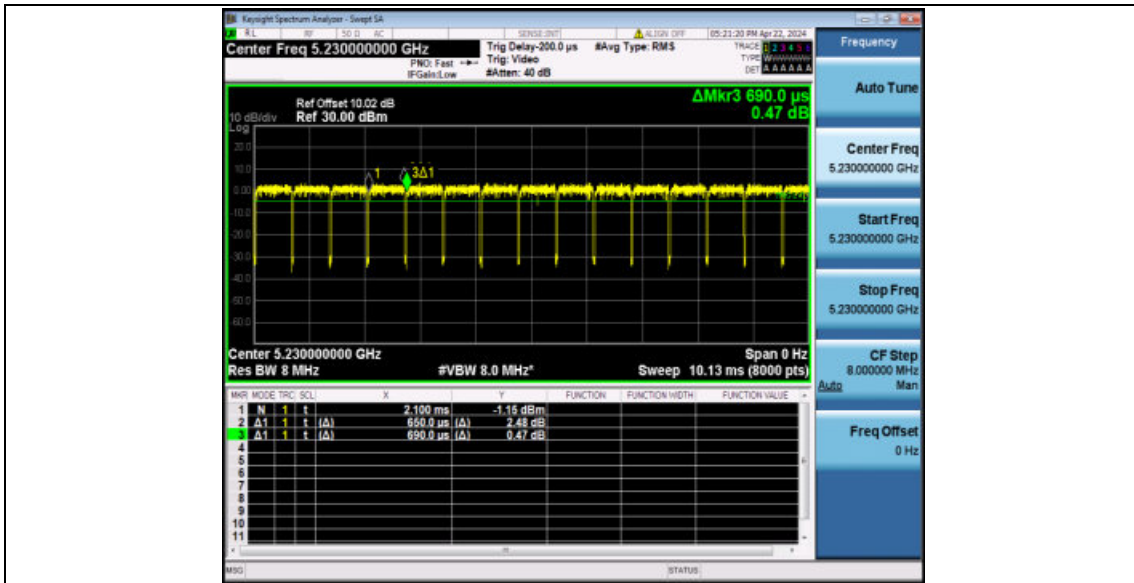
11AC20SISO_Ant1_5240



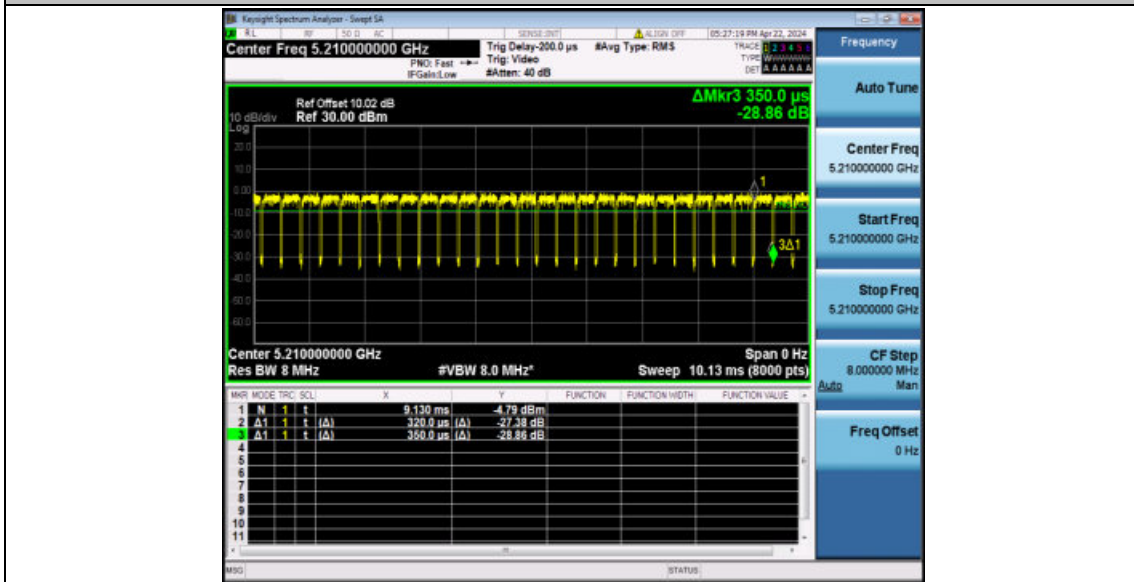
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_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	Ant1	5180	7.55	97.20	0.12	7.67	≤23.98	PASS
		5200	7.28	97.20	0.12	7.40	≤23.98	PASS
		5240	7.72	97.20	0.12	7.84	≤23.98	PASS
11N20SISO	Ant1	5180	7.53	96.99	0.13	7.66	≤23.98	PASS
		5200	7.56	97.01	0.13	7.69	≤23.98	PASS
		5240	7.85	97.74	0.10	7.95	≤23.98	PASS
11N40SISO	Ant1	5190	7.09	94.12	0.26	7.35	≤23.98	PASS
		5230	7.63	95.59	0.20	7.83	≤23.98	PASS
11AC20SISO	Ant1	5180	7.52	97.04	0.13	7.65	≤23.98	PASS
		5200	7.12	97.76	0.10	7.22	≤23.98	PASS
		5240	7.76	97.04	0.13	7.89	≤23.98	PASS
11AC40SISO	Ant1	5190	7.22	94.20	0.26	7.48	≤23.98	PASS
		5230	7.64	94.20	0.26	7.90	≤23.98	PASS
11AC80SISO	Ant1	5210	7.12	91.43	0.39	7.51	≤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 datD.

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-4.83	≤11.00	PASS
		5200	-4.47	≤11.00	PASS
		5240	-3.56	≤11.00	PASS
11N20SISO	Ant1	5180	-5.42	≤11.00	PASS
		5200	-4.60	≤11.00	PASS
		5240	-3.99	≤11.00	PASS
11N40SISO	Ant1	5190	-8.14	≤11.00	PASS
		5230	-7.53	≤11.00	PASS
11AC20SISO	Ant1	5180	-5.62	≤11.00	PASS
		5200	-4.71	≤11.00	PASS
		5240	-3.92	≤11.00	PASS
11AC40SISO	Ant1	5190	-7.62	≤11.00	PASS
		5230	-6.94	≤11.00	PASS
11AC80SISO	Ant1	5210	-11.14	≤11.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

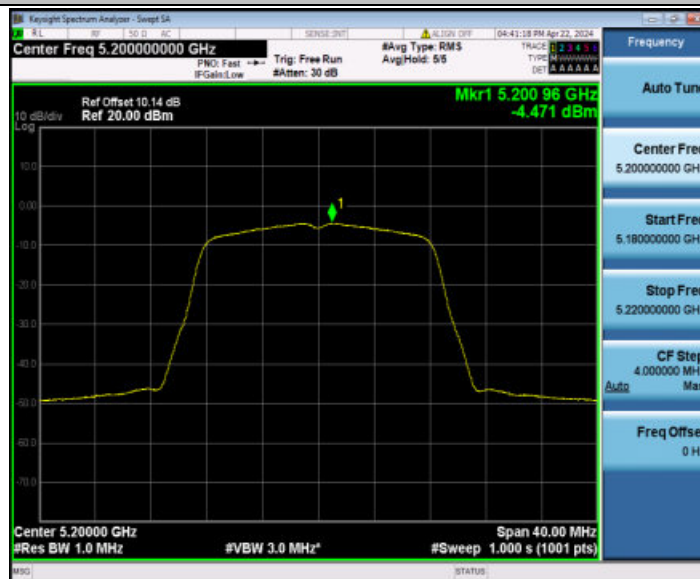
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



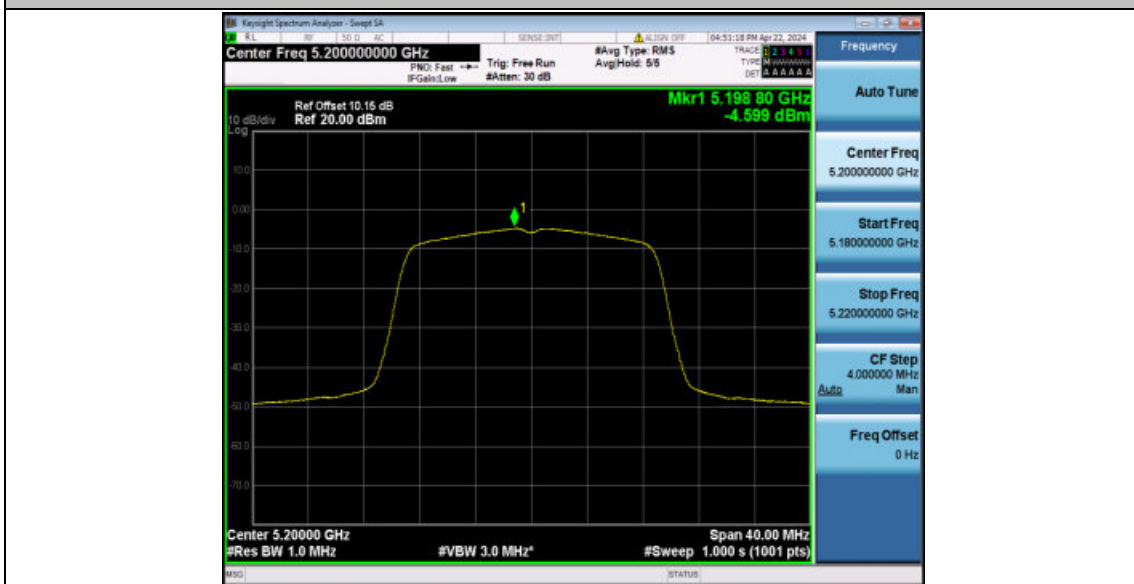
11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



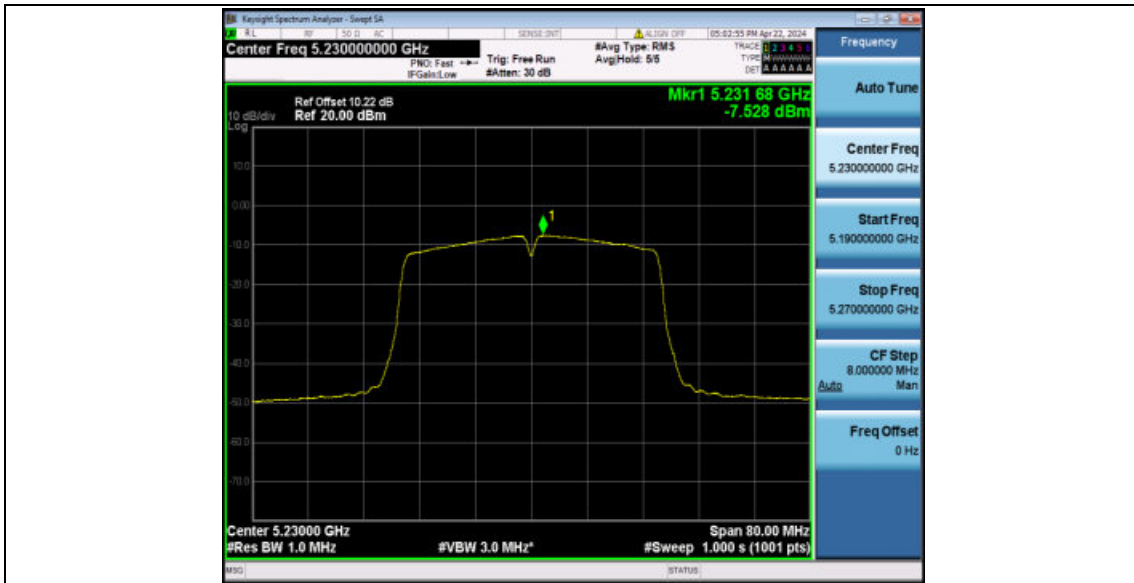
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



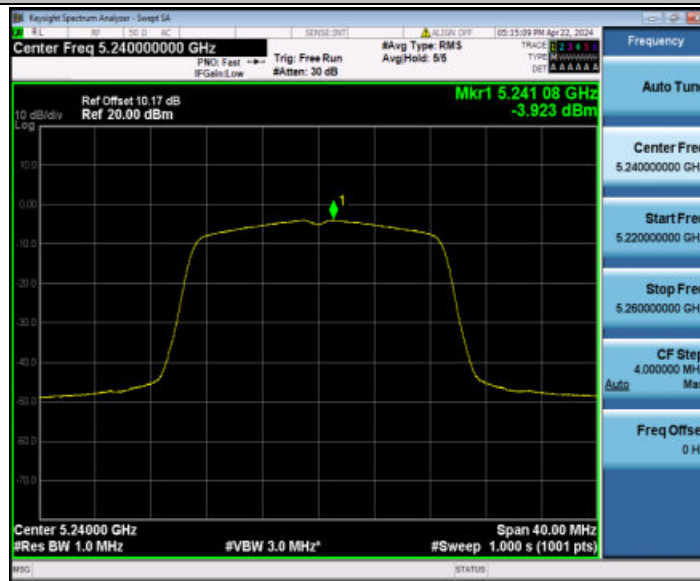
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

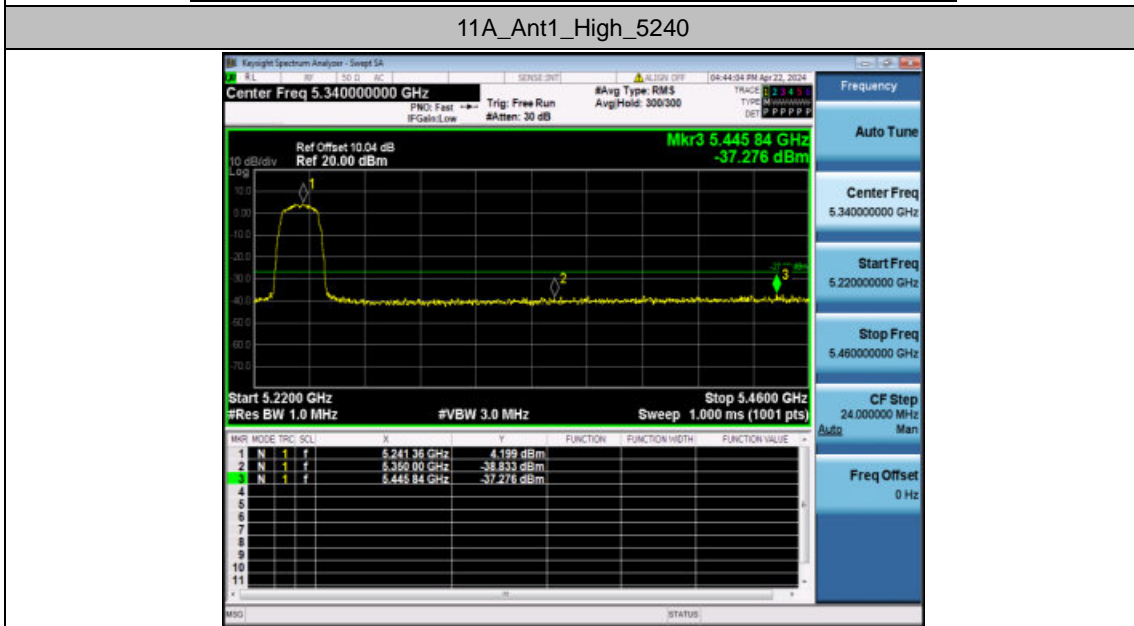
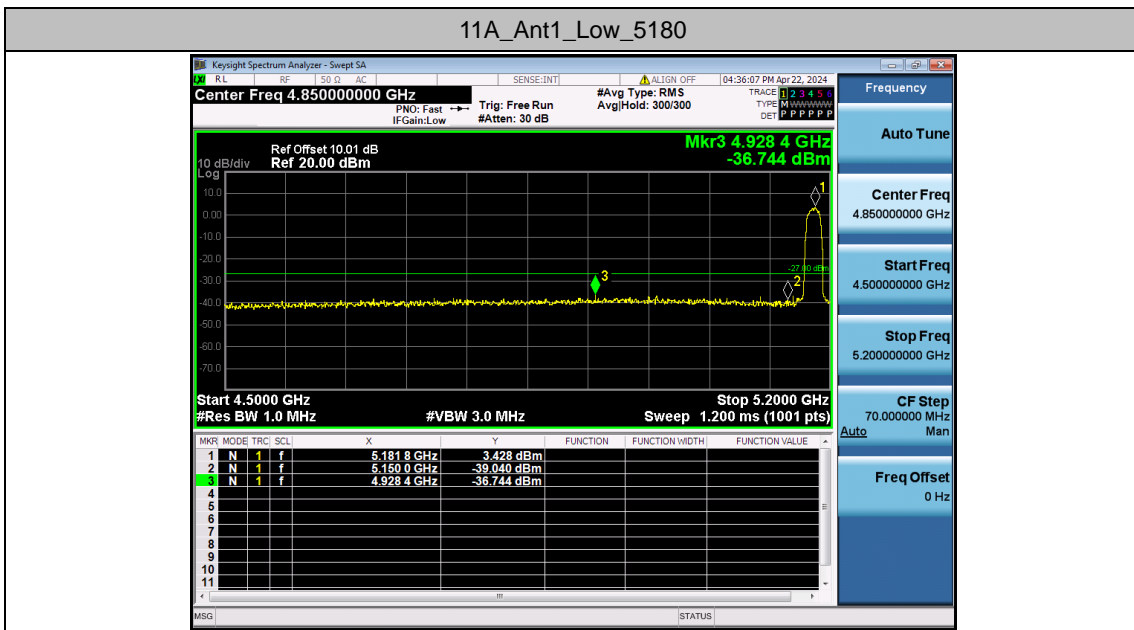


Appendix D.6: Band edge measurements

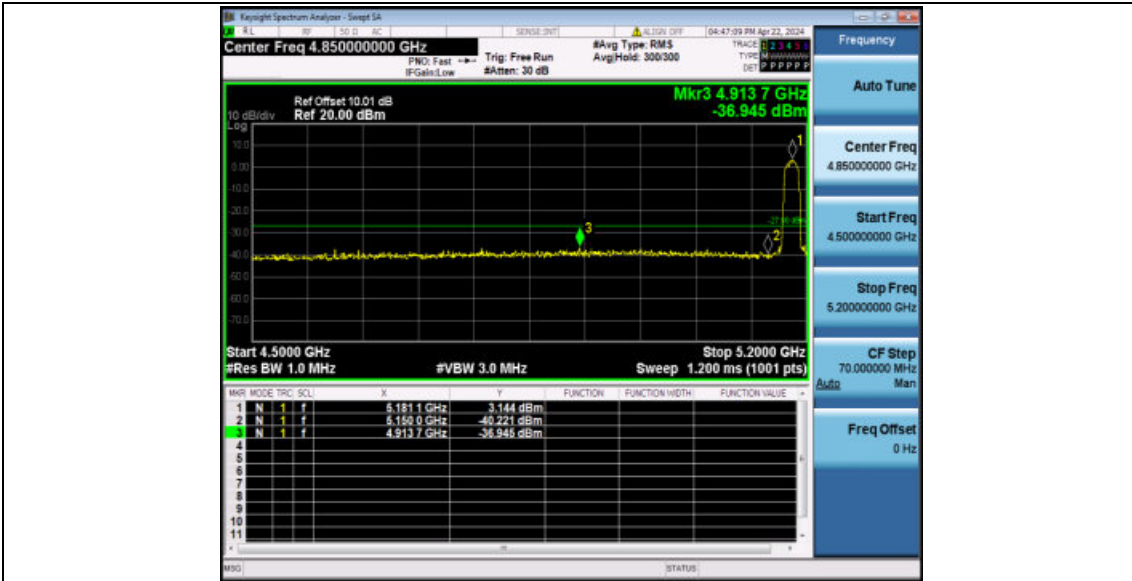
Test Result B1

TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-36.74	≤ -27	PASS
		High	5240	-37.28	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-36.95	≤ -27	PASS
		High	5240	-37.79	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-36.64	≤ -27	PASS
		High	5230	-37.56	≤ -27	PASS
11AC20SISO	Ant1	Low	5180	-37.5	≤ -27	PASS
		High	5240	-37.21	≤ -27	PASS
11AC40SISO	Ant1	Low	5190	-37.11	≤ -27	PASS
		High	5230	-37.8	≤ -27	PASS
11AC80SISO	Ant1	Low	5210	-37.36	≤ -27	PASS
		High	5210	-37.44	≤ -27	PASS

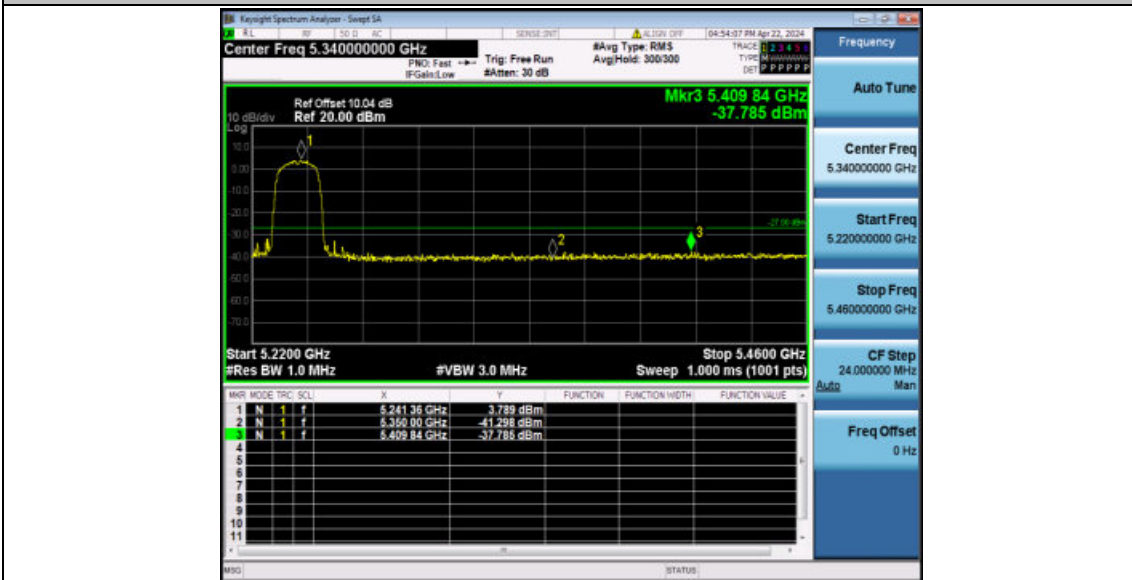
Test Graphs B1



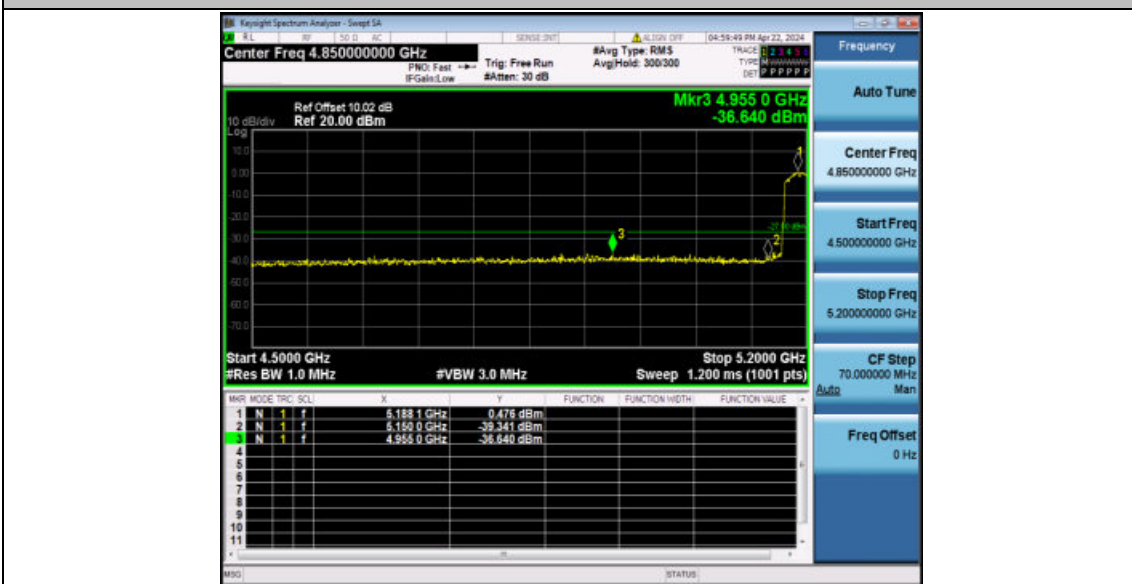
11N20SISO_Ant1_Low_5180



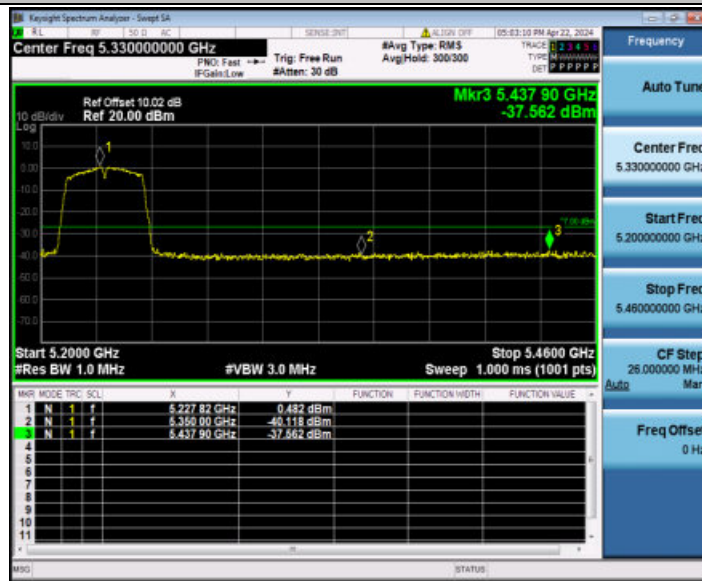
11N20SISO_Ant1_High_5240



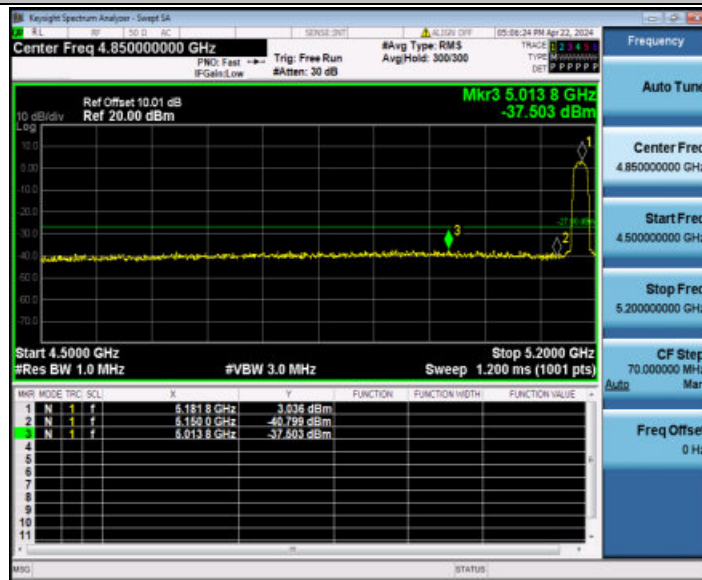
11N40SISO_Ant1_Low_5190



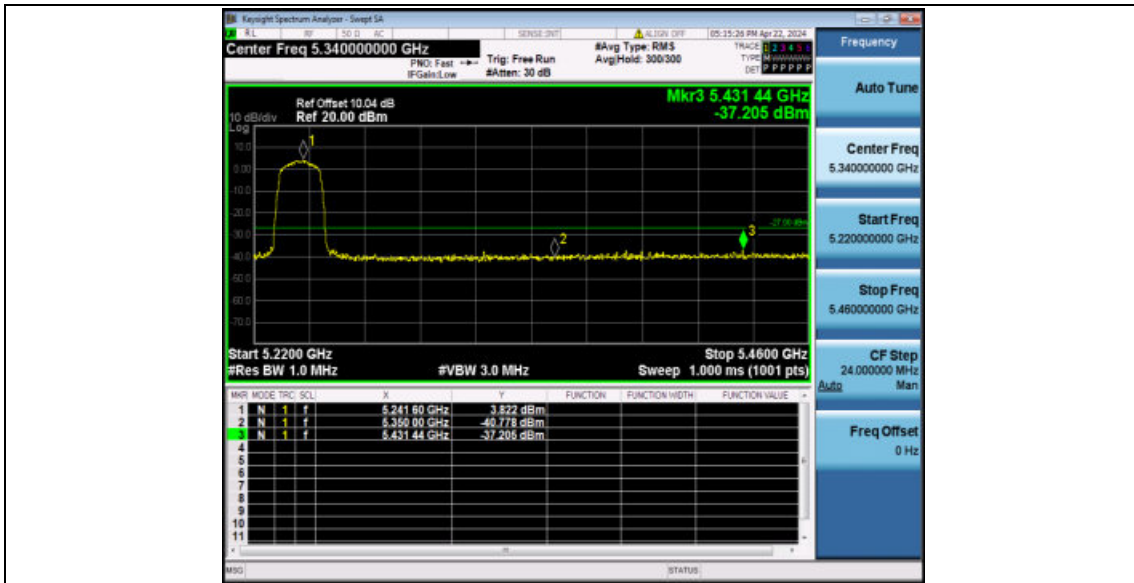
11N40SISO_Ant1_High_5230



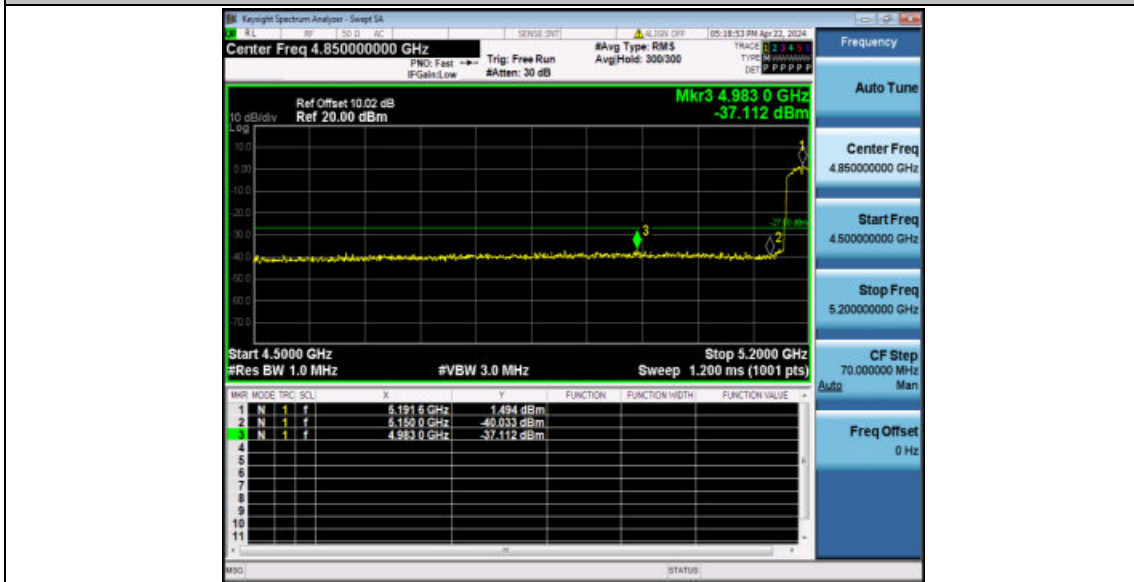
11AC20SISO_Ant1_Low_5180



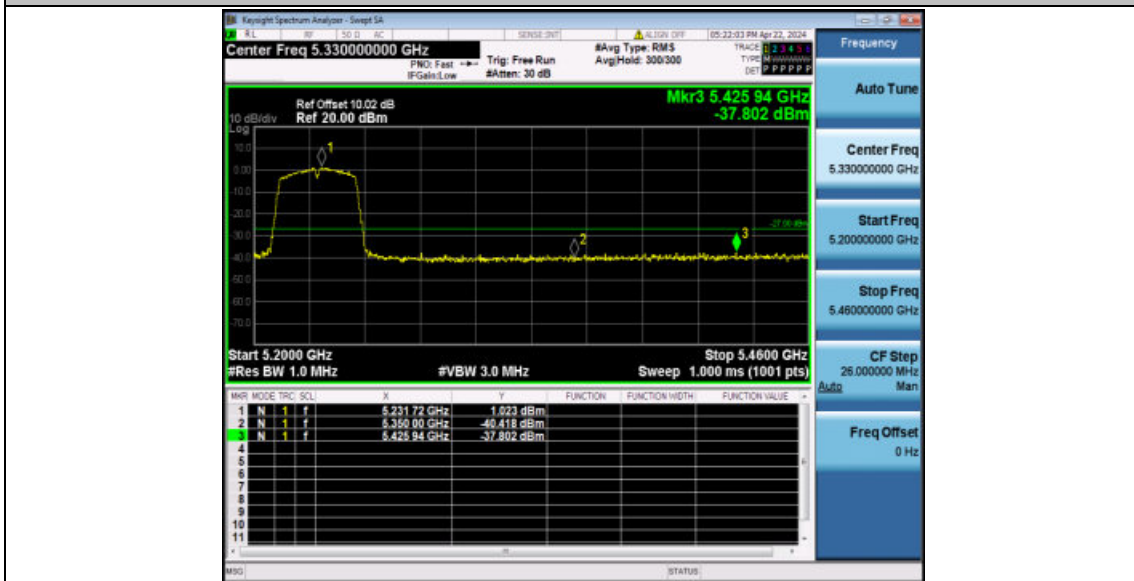
11AC20SISO_Ant1_High_5240



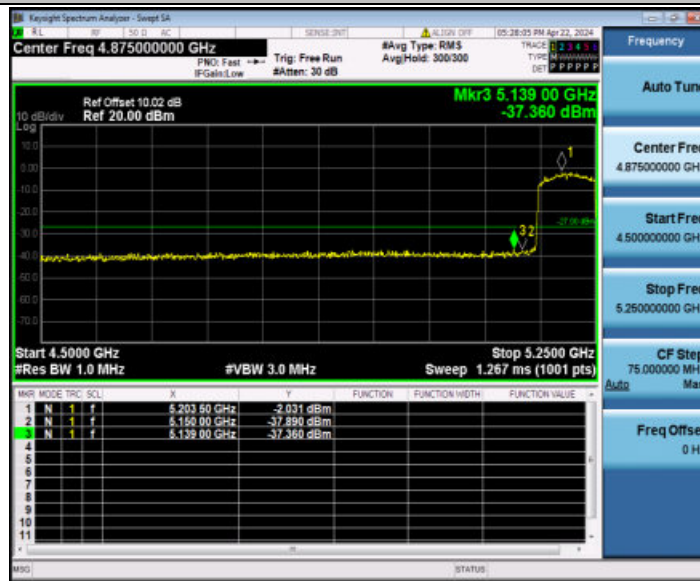
11AC40SISO_Ant1_Low_5190



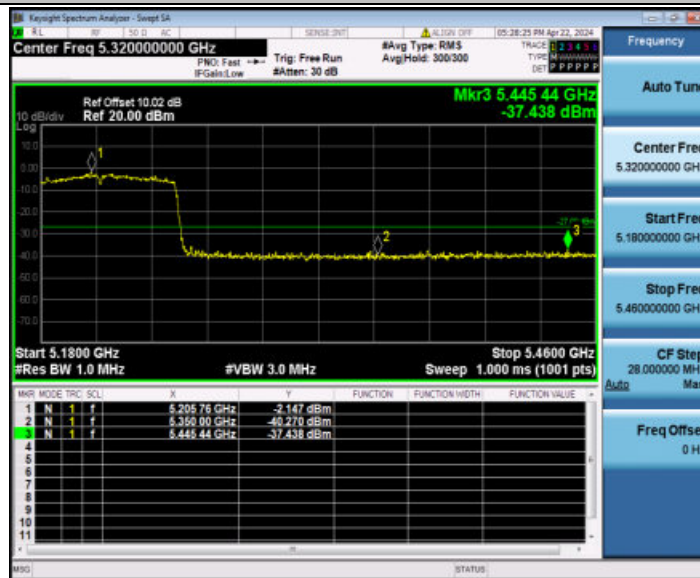
11AC40SISO_Ant1_High_5230



11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210



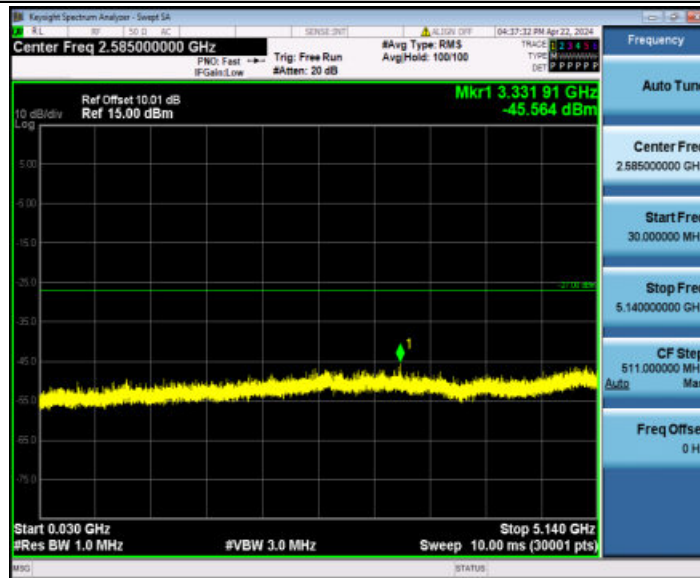
Appendix D.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	3331.91	-45.56	≤-27	PASS
			5360~27000	26484.97	-36.83	≤-27	PASS
		5200	30~5140	5079.7	-46.25	≤-27	PASS
			5360~27000	24934.1	-37.12	≤-27	PASS
		5240	30~5140	3194.28	-46.06	≤-27	PASS
			5360~27000	26542.67	-36.79	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	2663.86	-45.99	≤-27	PASS
			5360~27000	24216.37	-37.36	≤-27	PASS
		5200	30~5140	2605.61	-46.32	≤-27	PASS
			5360~27000	24239.46	-37.09	≤-27	PASS
		5240	30~5140	4994.71	-45.66	≤-27	PASS
			5360~27000	24289.23	-37.01	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	4896.25	-45.92	≤-27	PASS
			5360~27000	26632.12	-36.89	≤-27	PASS
		5230	30~5140	1749.17	-44.96	≤-27	PASS
			5360~27000	26808.13	-37.48	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	4969.16	-46	≤-27	PASS
			5360~27000	26601.82	-37.07	≤-27	PASS
		5200	30~5140	1747.47	-40.99	≤-27	PASS
			5360~27000	24944.92	-36.17	≤-27	PASS
		5240	30~5140	2635.59	-46.13	≤-27	PASS
			5360~27000	24781.9	-37.41	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	5106.61	-45.46	≤-27	PASS
			5360~27000	26488.57	-37.56	≤-27	PASS
		5230	30~5140	4938.33	-46.19	≤-27	PASS
			5360~27000	24193.29	-37.44	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5138.3	-42.83	≤-27	PASS
			5360~27000	24240.9	-36.66	≤-27	PASS

Test Graphs

11A_Ant1_5180_30~5140



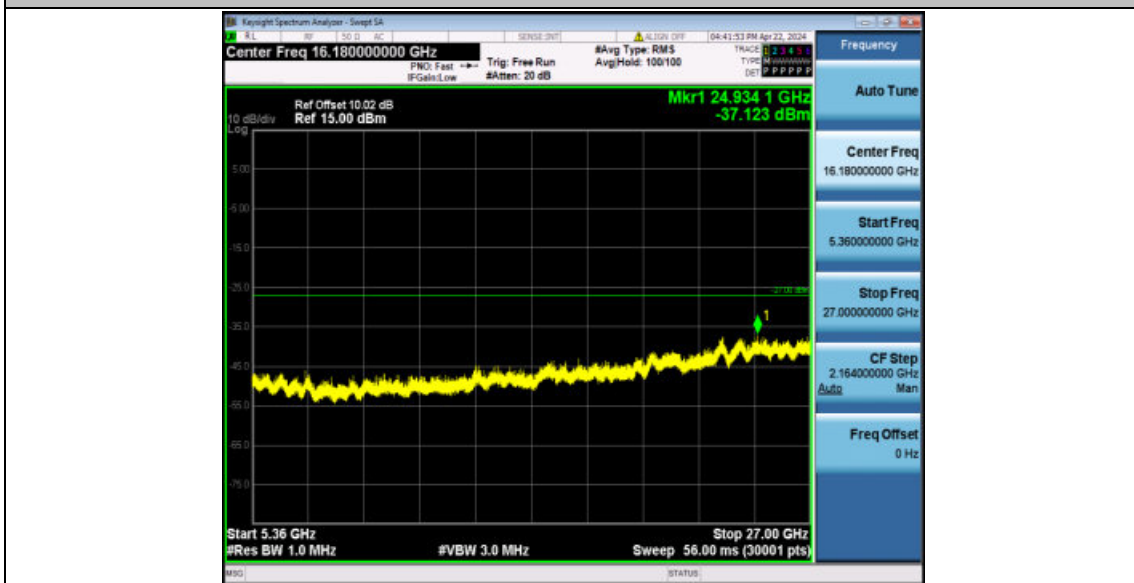
11A_Ant1_5180_5360~27000



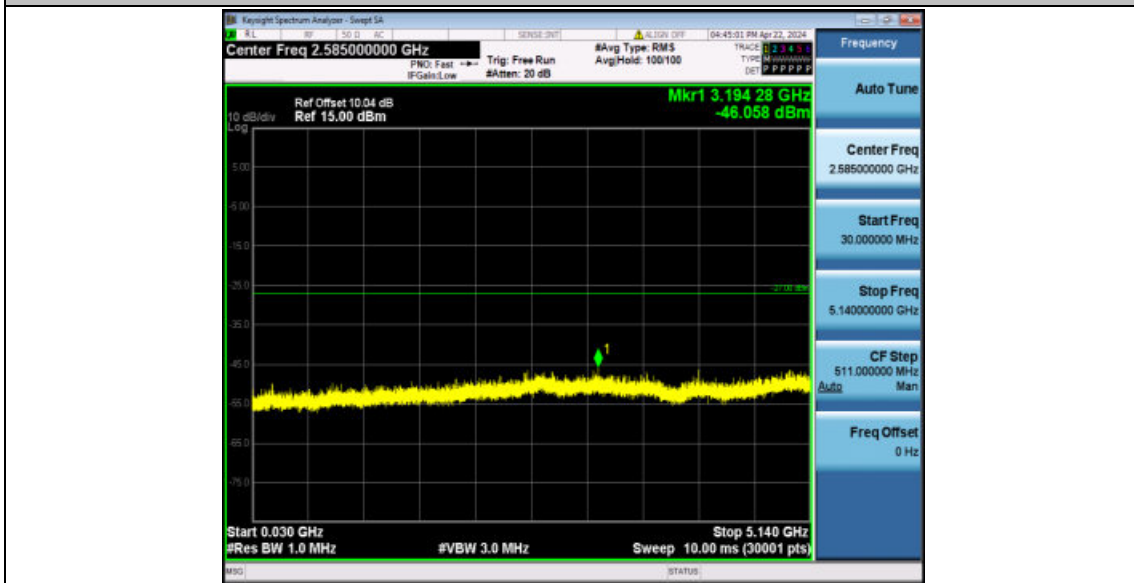
11A_Ant1_5200_30~5140



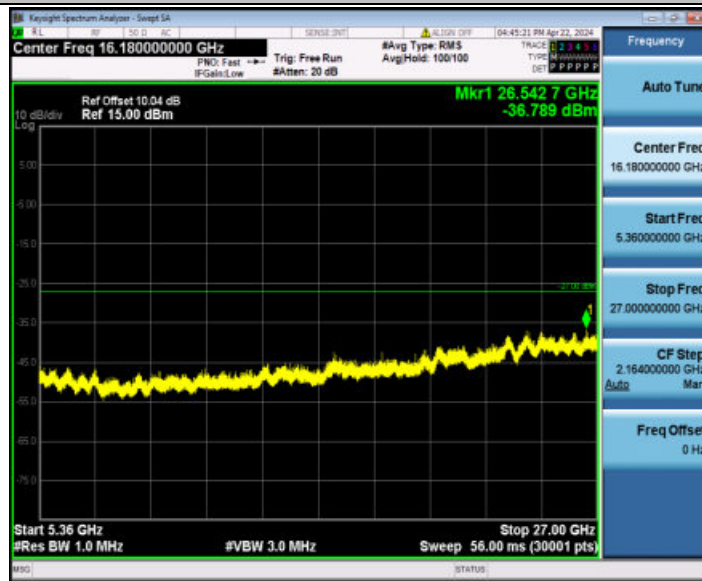
11A_Ant1_5200_5360~27000



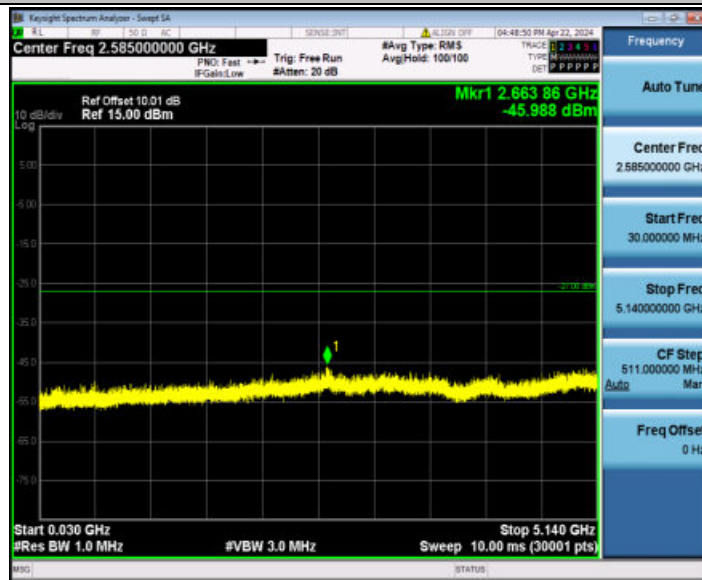
11A_Ant1_5240_30~5140



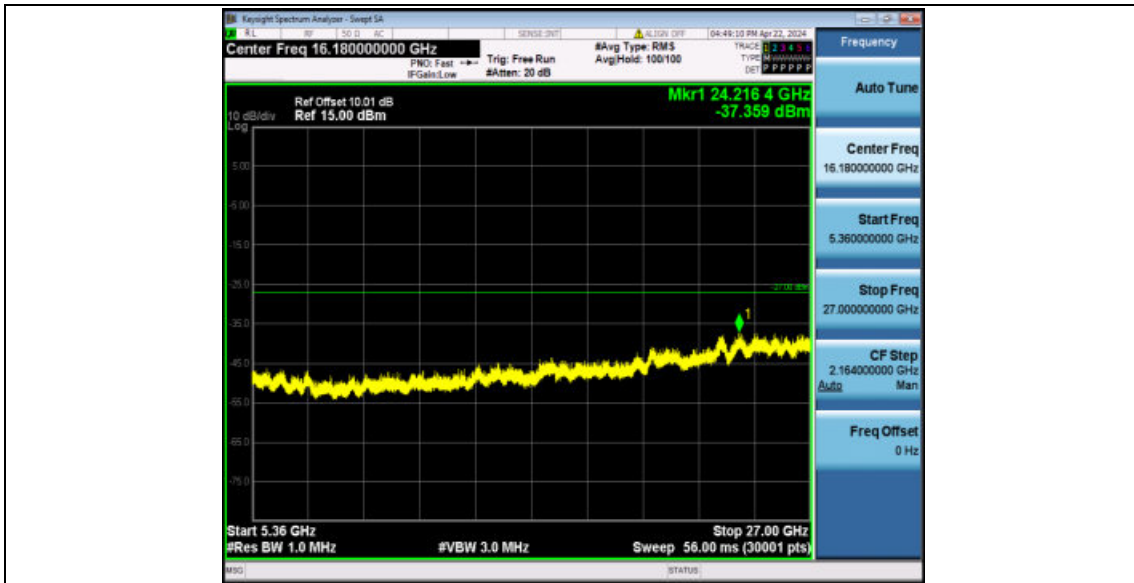
11A_Ant1_5240_5360~27000



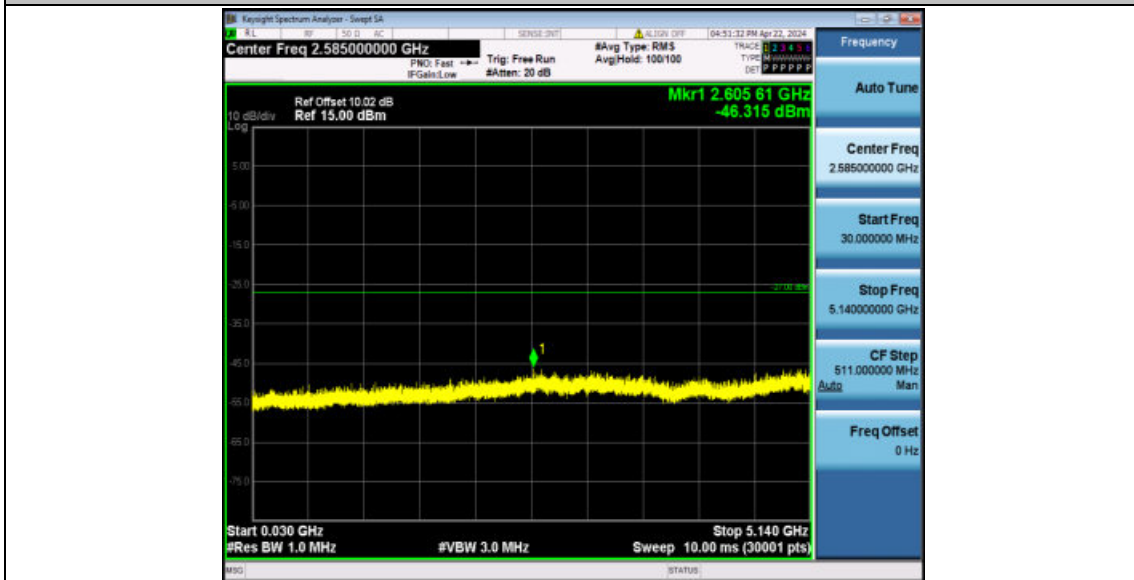
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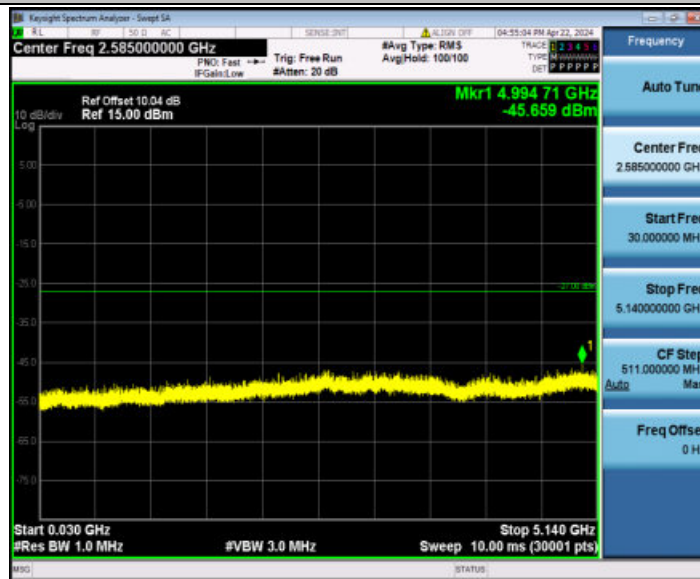
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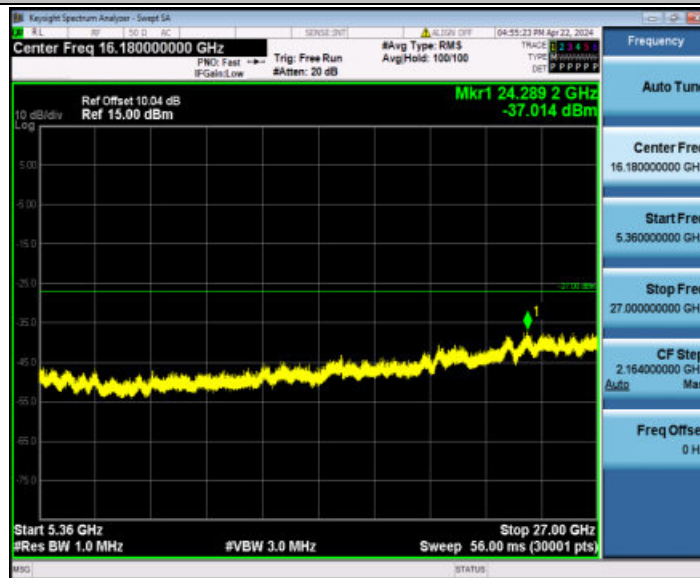
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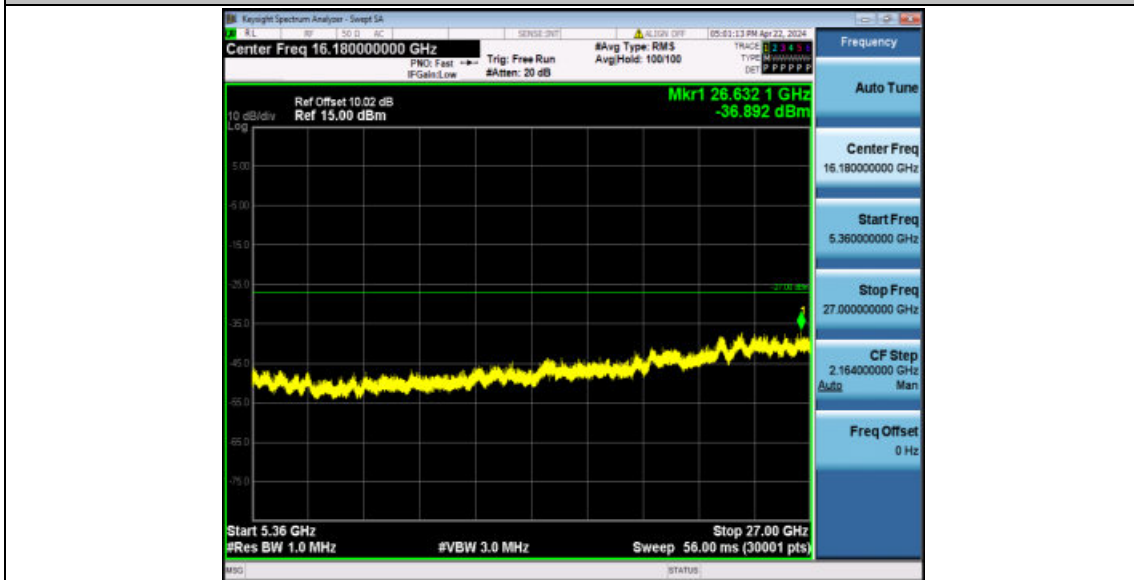
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11N40SISO_Ant1_5190_30~5140



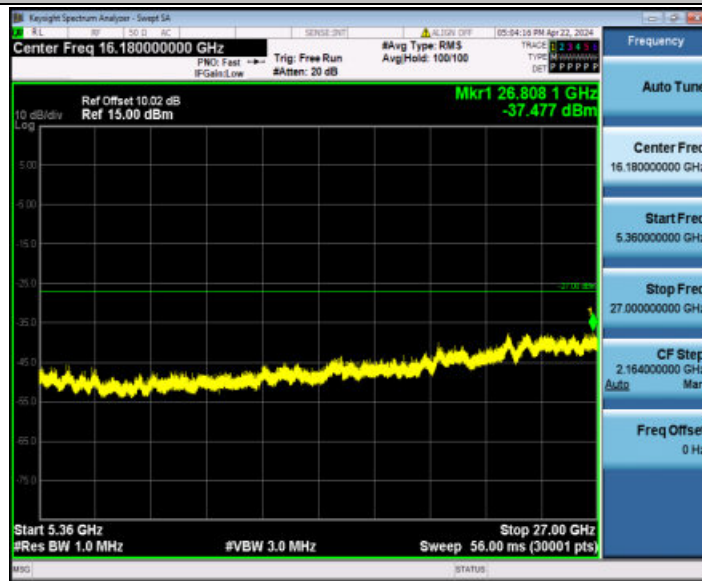
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11N40SISO_Ant1_5230_30~5140



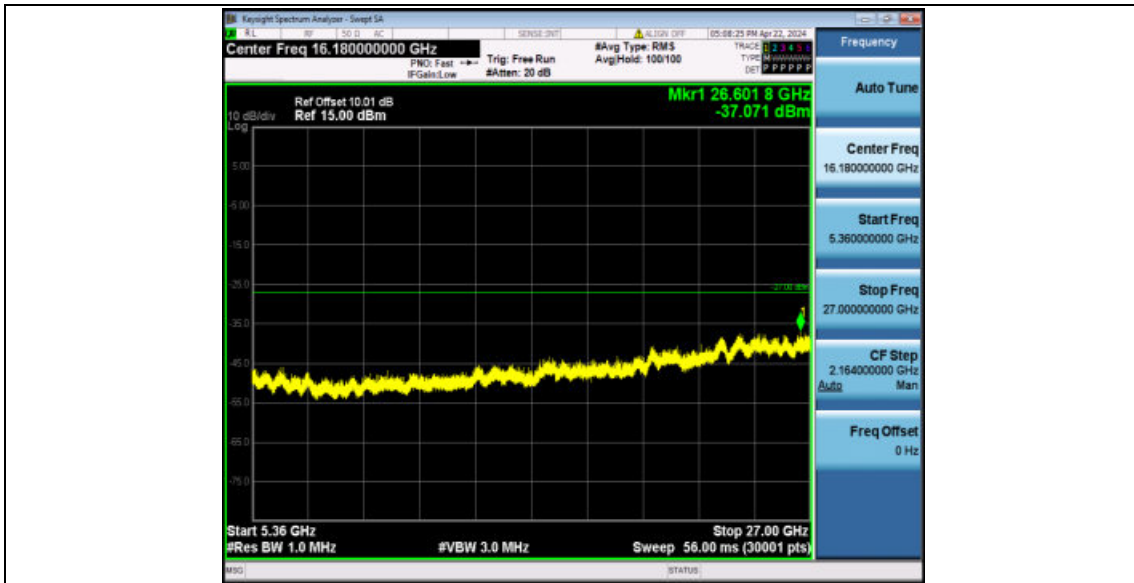
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11AC20SISO_Ant1_5180_30~5140



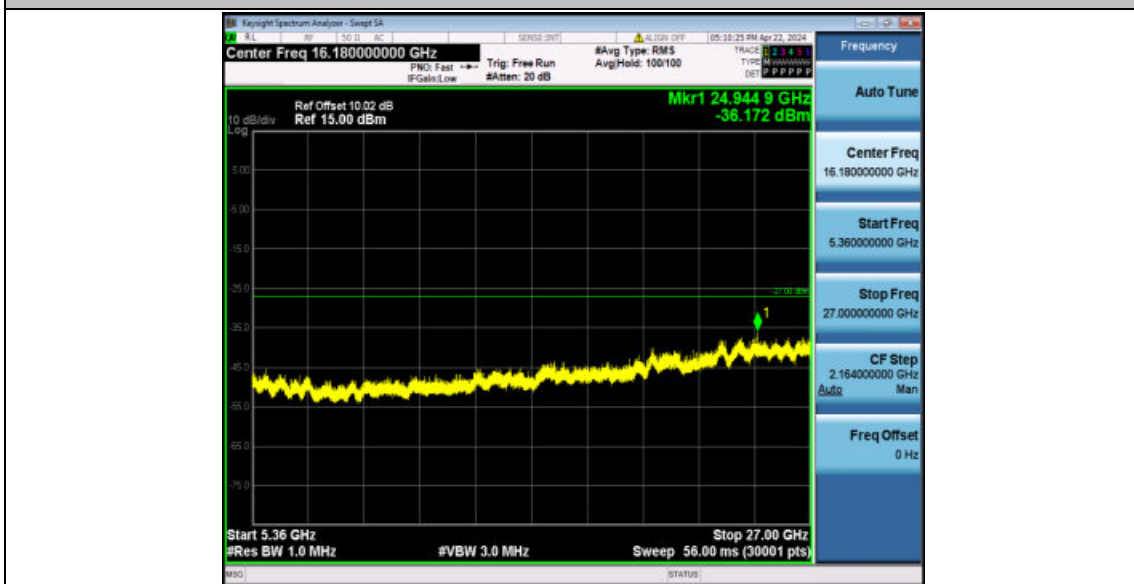
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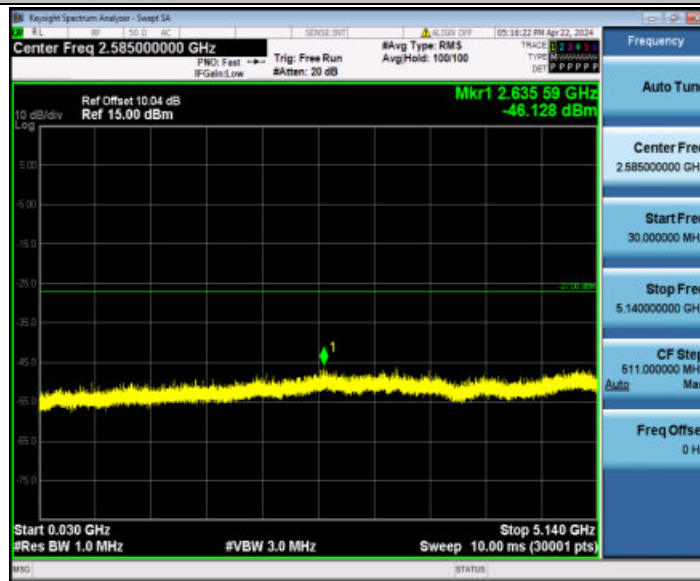
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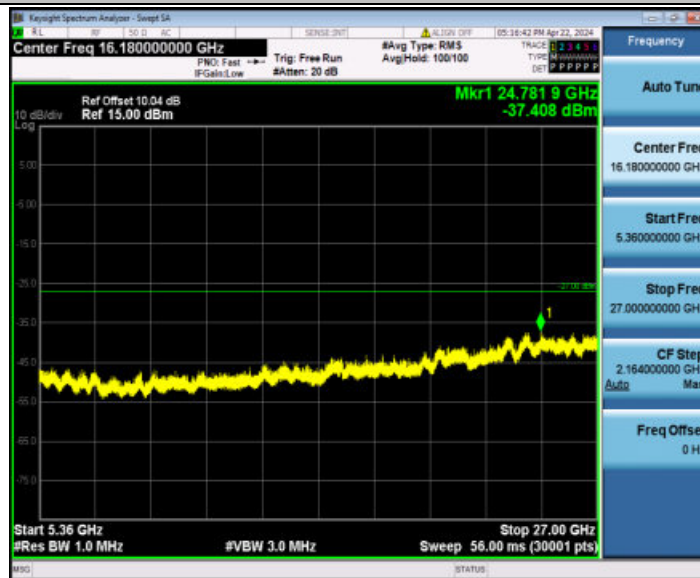
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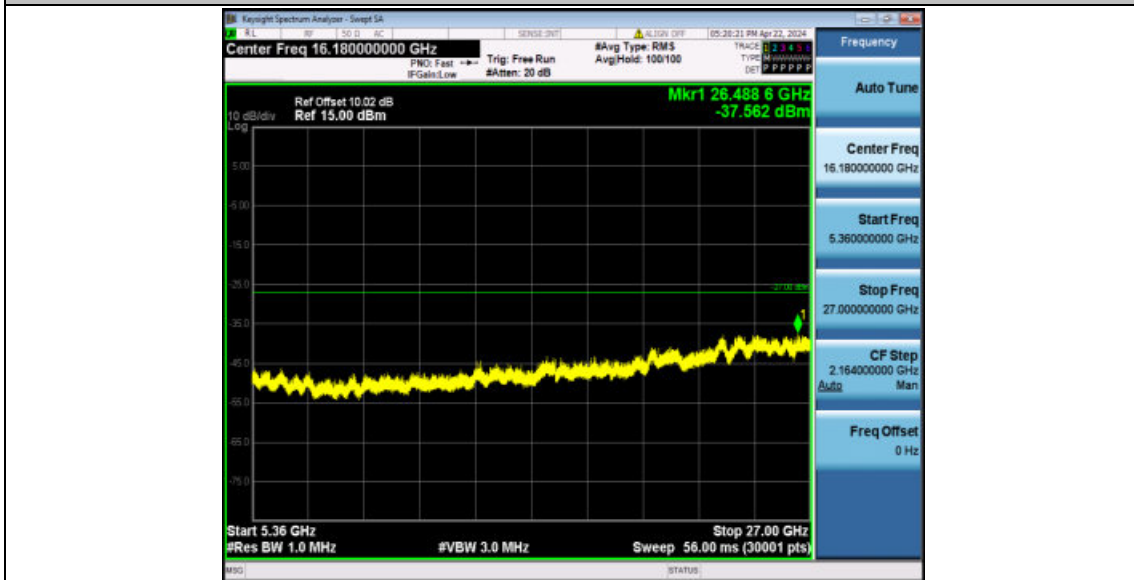
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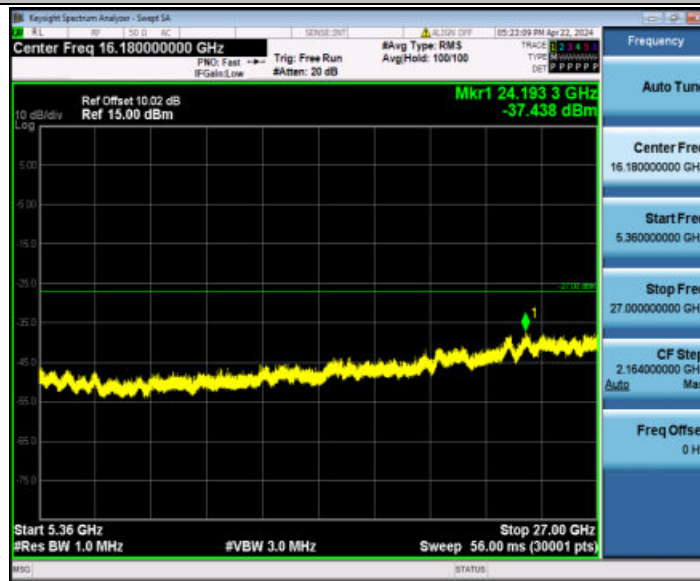
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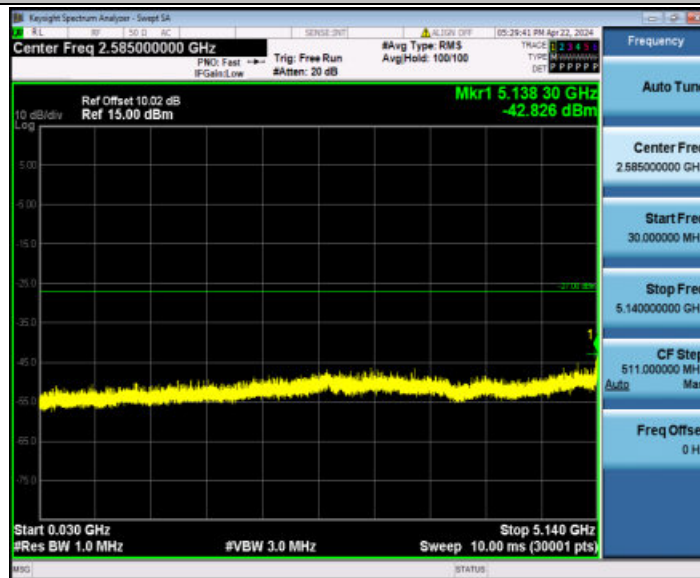
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11AC40SISO_Ant1_5230_5360~27000



11AC80SISO_Ant1_5210_30~5140



11AC80SISO_Ant1_5210_5360~27000

