

Case No. : <u>CTA24081600604</u>	
Ambient Condition: <u>22</u> °C, <u>53</u> %RH	
According Standard: ■PART 15E	
Test Date: <u>2024.8.13</u>	Test Engineer: <u>Lushan Kong</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	23.320	5168.600	5191.920	---	---
		5200	23.400	5188.280	5211.680	---	---
		5240	23.680	5228.480	5252.160	---	---
11N20SISO	Ant2	5180	23.760	5168.320	5192.080	---	---
		5200	23.560	5188.080	5211.640	---	---
		5240	24.040	5227.880	5251.920	---	---
11N40SISO	Ant2	5190	44.320	5167.520	5211.840	---	---
		5230	43.760	5208.000	5251.760	---	---
11AC20SISO	Ant2	5180	23.600	5168.280	5191.880	---	---
		5200	23.560	5188.360	5211.920	---	---
		5240	23.080	5228.440	5251.520	---	---
11AC40SISO	Ant2	5190	44.800	5167.680	5212.480	---	---
		5230	44.080	5207.840	5251.920	---	---
11AC80SISO	Ant2	5210	82.400	5168.720	5251.120	---	---

Test Graphs

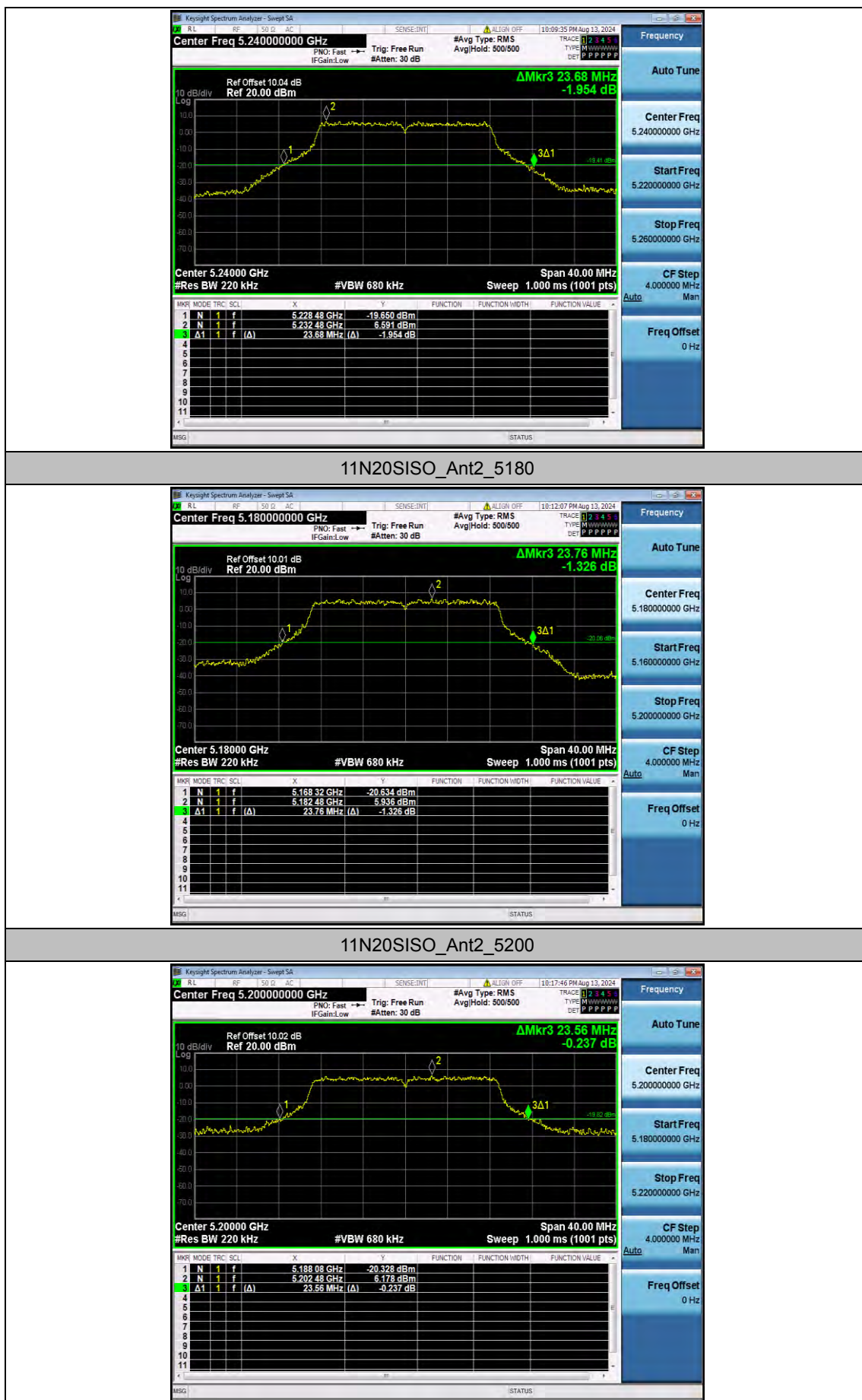
11A_Ant2_5180



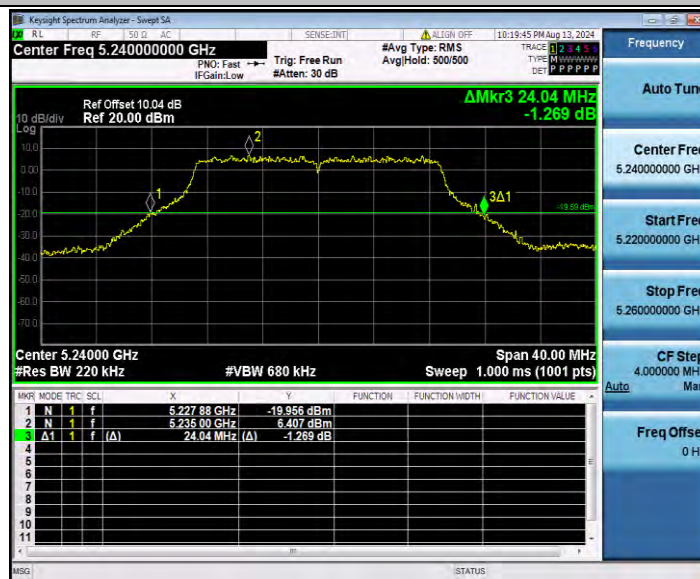
11A_Ant2_5200



11A_Ant2_5240



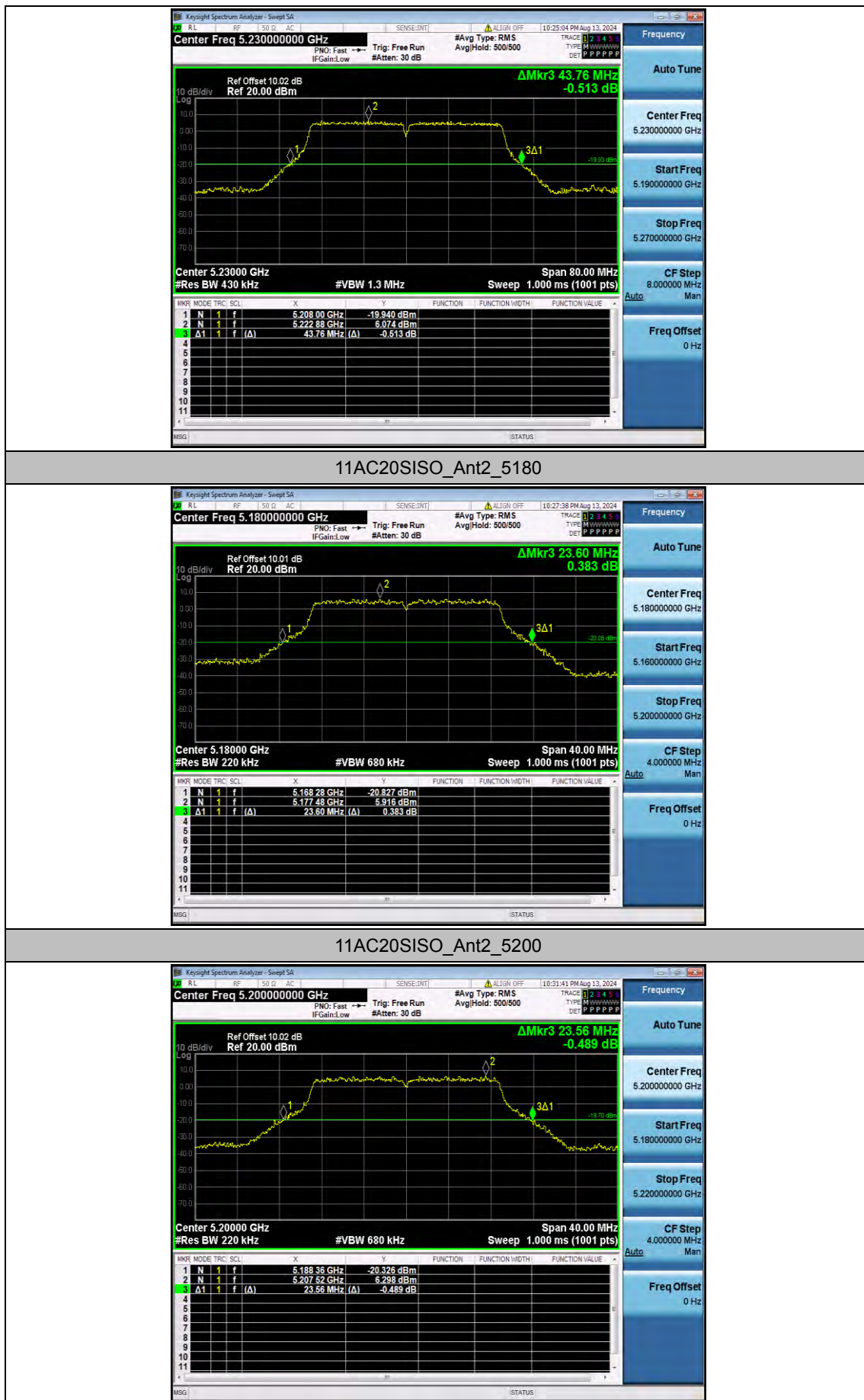
11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



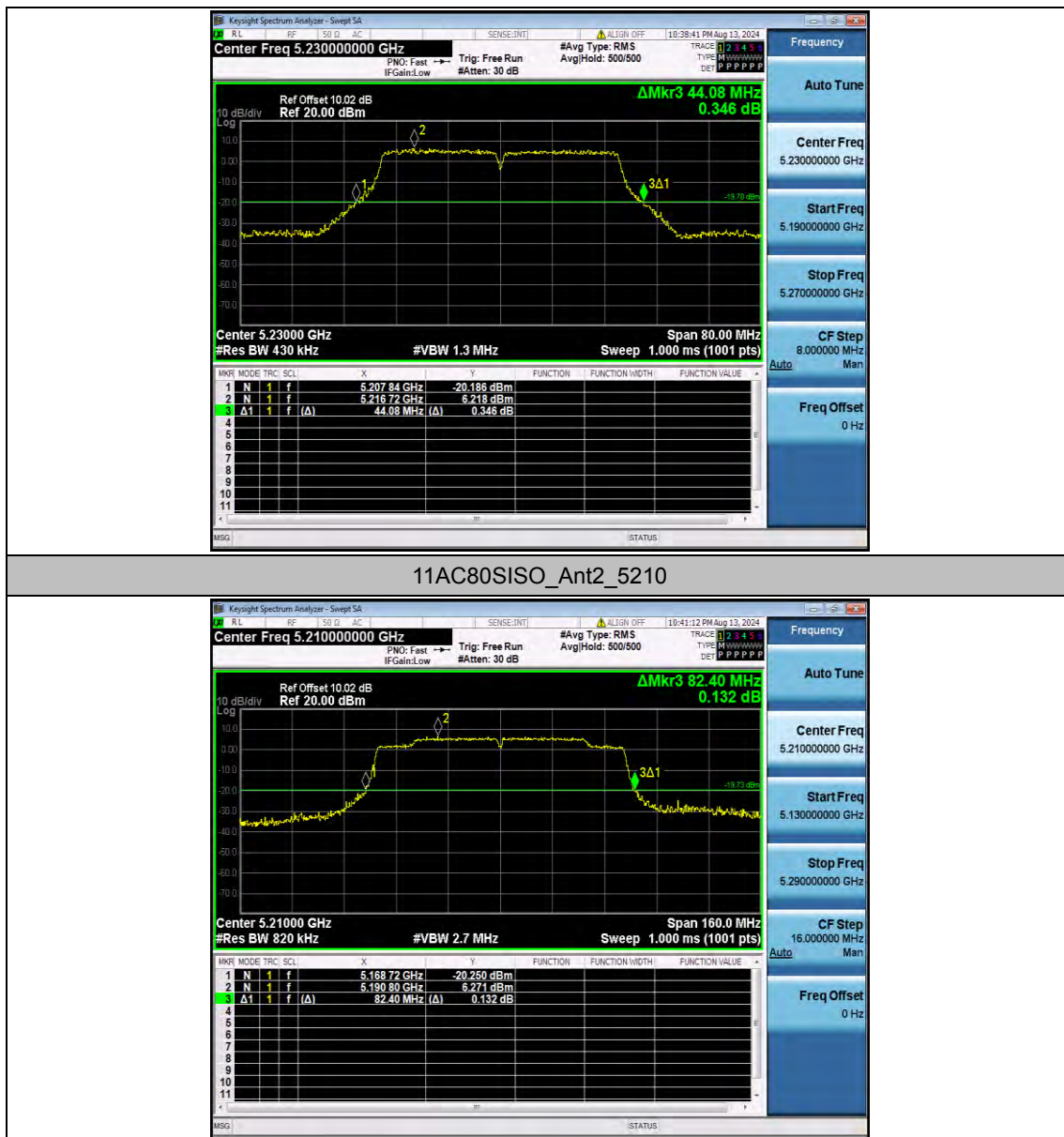
11AC20SISO_Ant2_5240



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	17.262	5171.3790	5188.6410	---	---
		5200	17.267	5191.3852	5208.6522	---	---
		5240	17.269	5231.3359	5248.6049	---	---
11N20SISO	Ant2	5180	18.314	5170.8340	5189.1480	---	---
		5200	18.431	5190.7666	5209.1976	---	---
		5240	18.276	5230.8459	5249.1219	---	---
11N40SISO	Ant2	5190	36.763	5171.6480	5208.4110	---	---
		5230	36.732	5211.6000	5248.3320	---	---
11AC20SISO	Ant2	5180	18.318	5170.8430	5189.1610	---	---
		5200	18.313	5190.8426	5209.1556	---	---
		5240	18.346	5230.7888	5249.1348	---	---
11AC40SISO	Ant2	5190	36.807	5171.6425	5208.4495	---	---
		5230	36.743	5211.5845	5248.3275	---	---
11AC80SISO	Ant2	5210	75.139	5172.4627	5247.6017	---	---

Test Graphs

11A_Ant2_5180



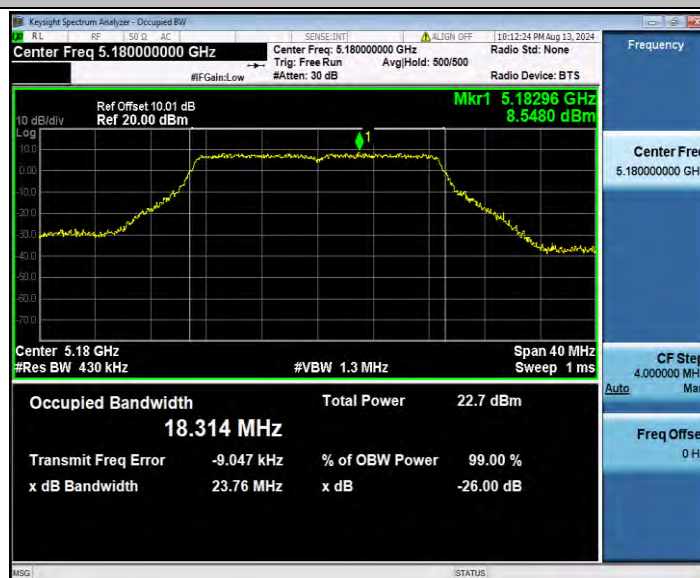
11A_Ant2_5200



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

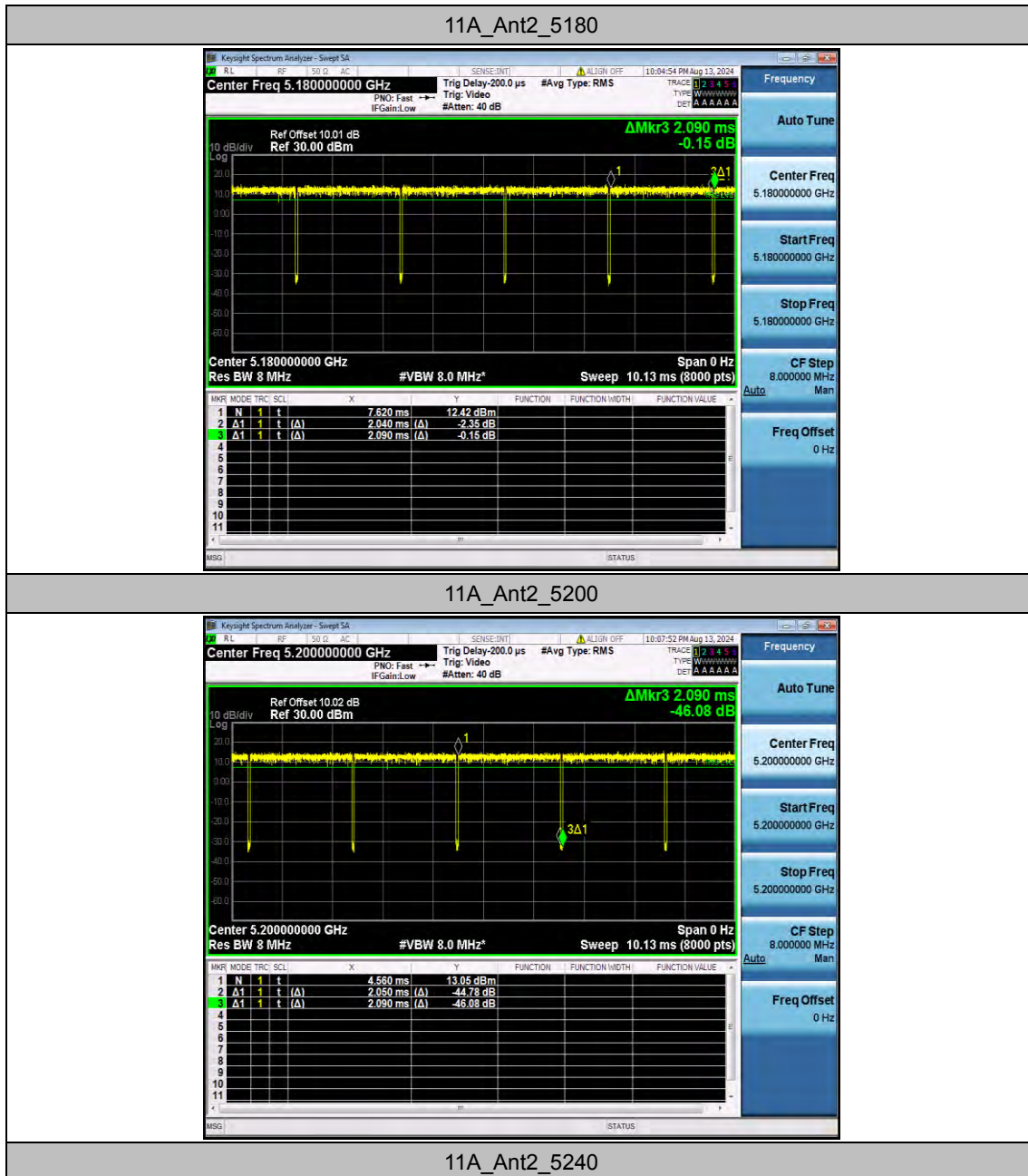


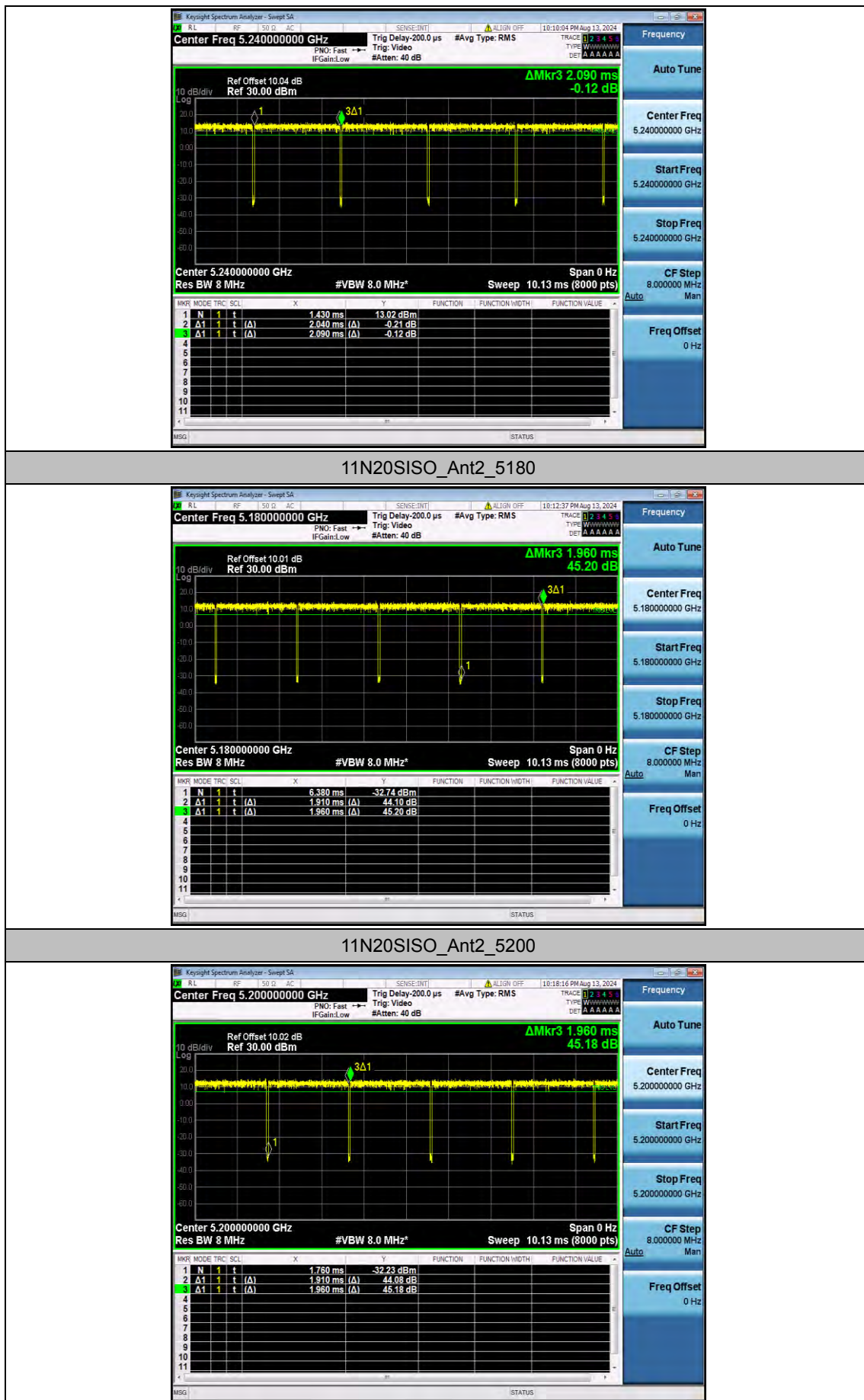
Appendix D.3: Duty Cycle

Test Result

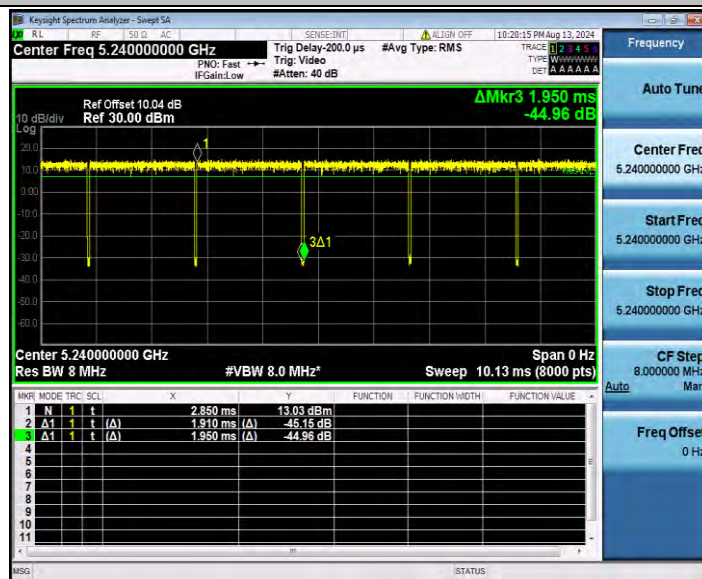
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant2	5180	2.04	2.09	97.61	0.11	0.49
		5200	2.05	2.09	98.09	0.08	0.49
		5240	2.04	2.09	97.61	0.11	0.49
11N20SISO	Ant2	5180	1.91	1.96	97.45	0.11	0.52
		5200	1.91	1.96	97.45	0.11	0.52
		5240	1.91	1.95	97.95	0.09	0.52
11N40SISO	Ant2	5190	0.94	0.97	96.91	0.14	1.06
		5230	0.94	0.98	95.92	0.18	1.06
11AC20SISO	Ant2	5180	1.92	1.96	97.96	0.09	0.52
		5200	1.91	1.96	97.45	0.11	0.52
		5240	1.92	1.96	97.96	0.09	0.52
11AC40SISO	Ant2	5190	0.94	0.98	95.92	0.18	1.06
		5230	0.95	0.99	95.96	0.18	1.05
11AC80SISO	Ant2	5210	0.46	0.49	93.88	0.27	2.17

Test Graphs

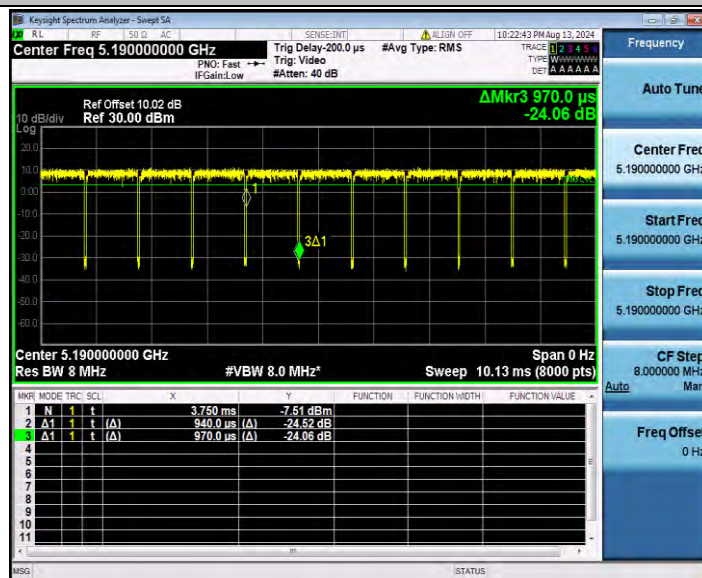




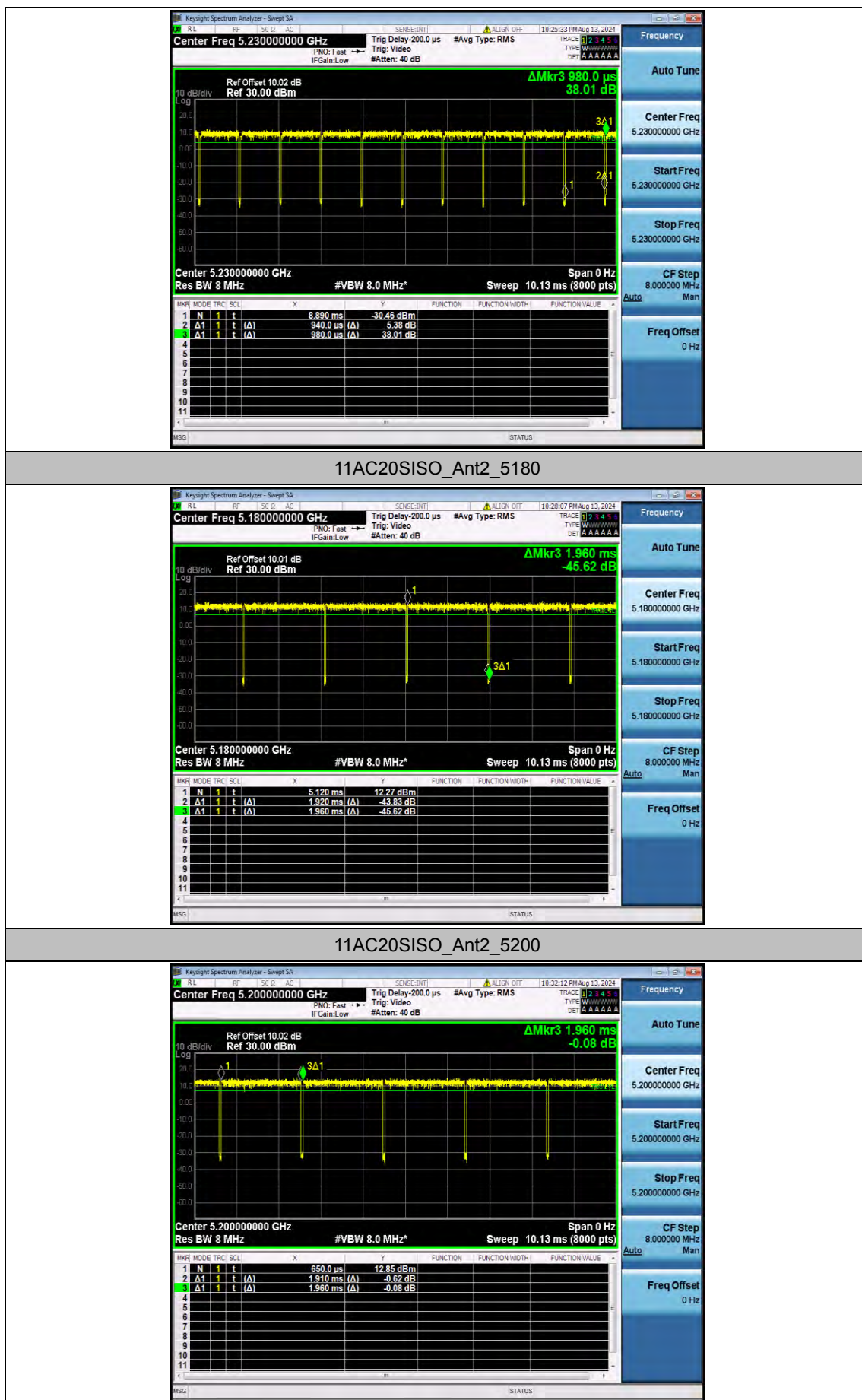
11N20SISO_Ant2_5240



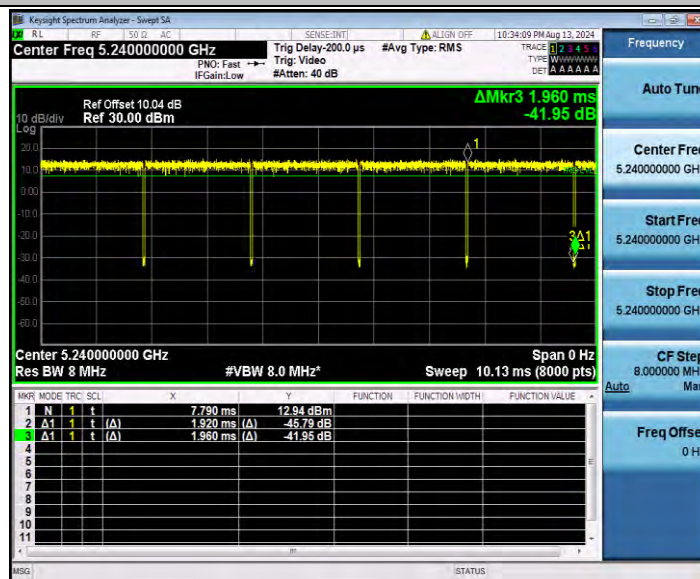
11N40SISO_Ant2_5190



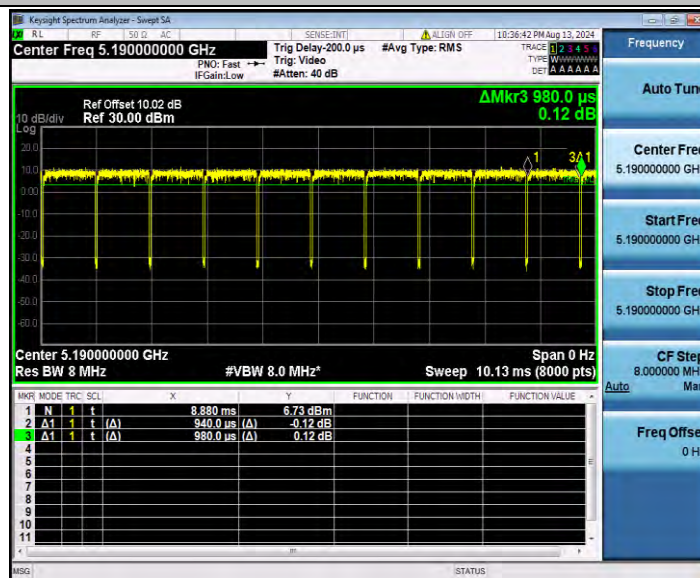
11N40SISO_Ant2_5230



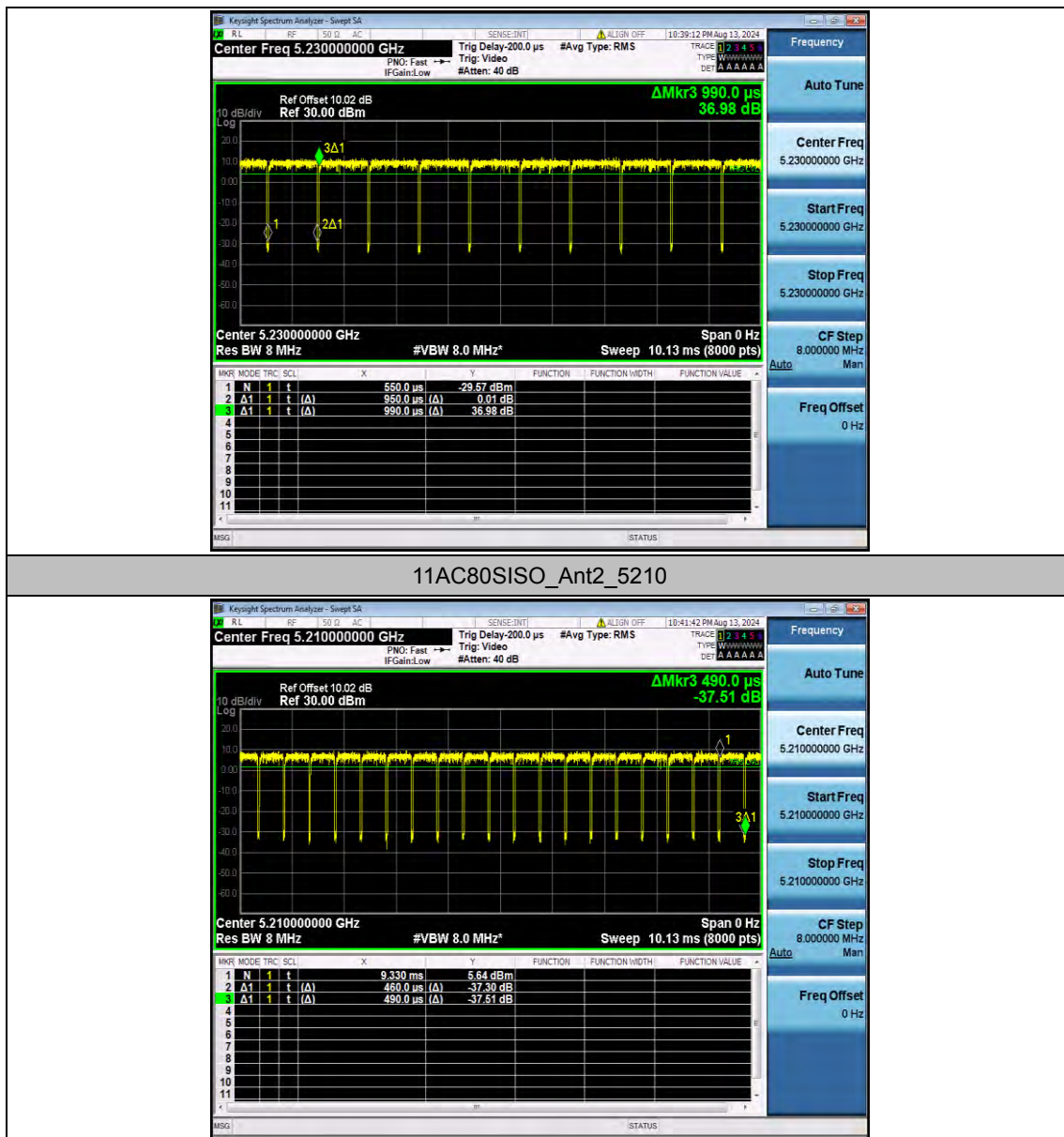
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



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	15.76	97.61	0.11	15.87	≤23.98	PASS
		5200	16.14	98.09	0.08	16.22	≤23.98	PASS
		5240	16.30	97.61	0.11	16.41	≤23.98	PASS
11N20SIS O	Ant2	5180	15.73	97.45	0.11	15.84	≤23.98	PASS
		5200	16.04	97.45	0.11	16.15	≤23.98	PASS
		5240	16.25	97.95	0.09	16.34	≤23.98	PASS
11N40SIS O	Ant2	5190	15.73	96.91	0.14	15.87	≤23.98	PASS
		5230	16.27	95.92	0.18	16.45	≤23.98	PASS
11AC20SIS O	Ant2	5180	15.67	97.96	0.09	15.76	≤23.98	PASS
		5200	16.03	97.45	0.11	16.14	≤23.98	PASS
		5240	16.27	97.96	0.09	16.36	≤23.98	PASS
11AC40SIS O	Ant2	5190	15.69	95.92	0.18	15.87	≤23.98	PASS
		5230	16.28	95.96	0.18	16.46	≤23.98	PASS
11AC80SIS O	Ant2	5210	15.74	93.88	0.27	16.01	≤23.98	PASS

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant2	5180	3.93	≤11.00	PASS
		5200	4.42	≤11.00	PASS
		5240	4.66	≤11.00	PASS
11N20SISO	Ant2	5180	3.59	≤11.00	PASS
		5200	4.03	≤11.00	PASS
		5240	4.33	≤11.00	PASS
11N40SISO	Ant2	5190	0.79	≤11.00	PASS
		5230	1.43	≤11.00	PASS
11AC20SISO	Ant2	5180	3.59	≤11.00	PASS
		5200	4.02	≤11.00	PASS
		5240	4.34	≤11.00	PASS
11AC40SISO	Ant2	5190	0.82	≤11.00	PASS
		5230	1.45	≤11.00	PASS
11AC80SISO	Ant2	5210	-1.13	≤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



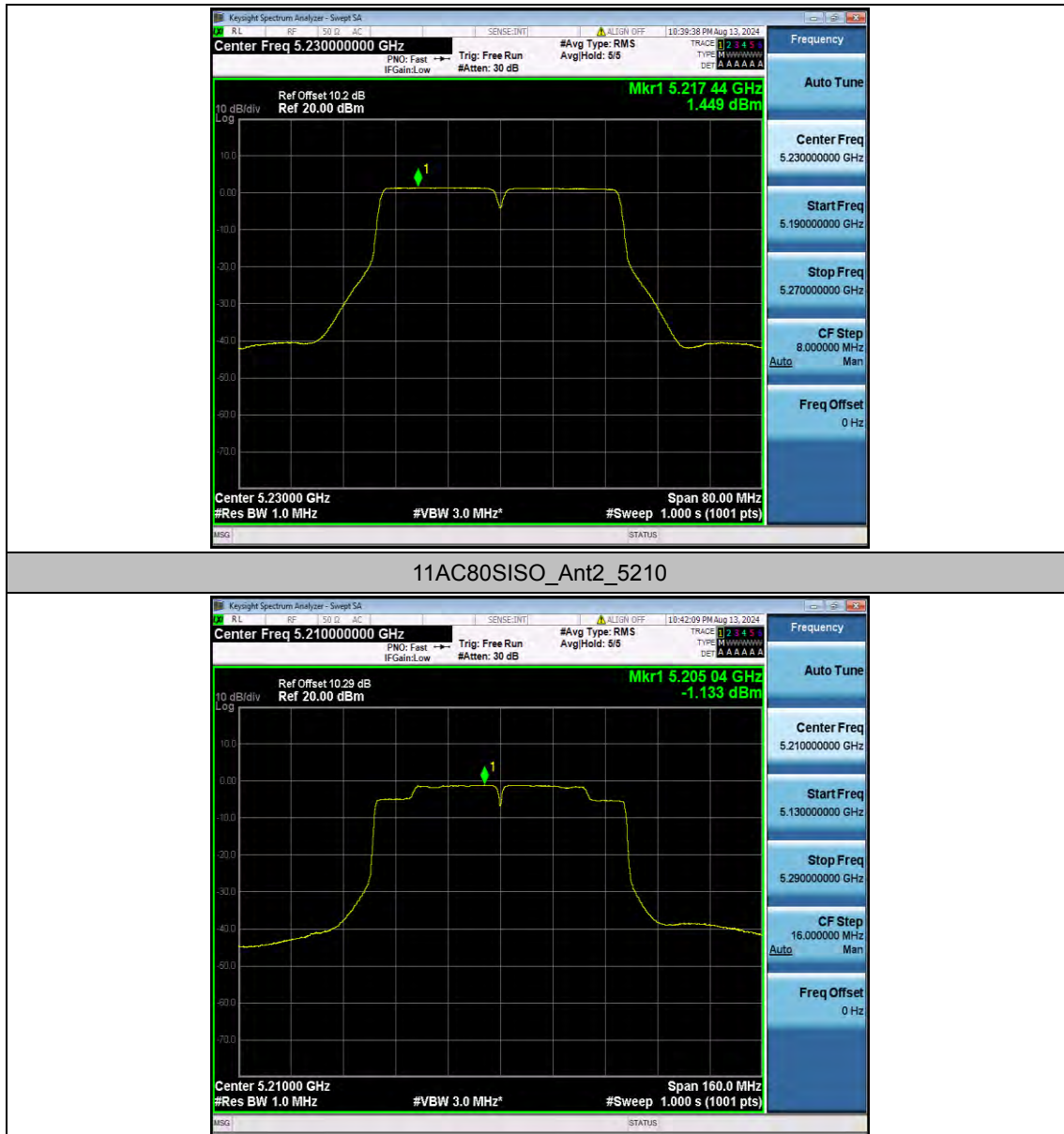
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



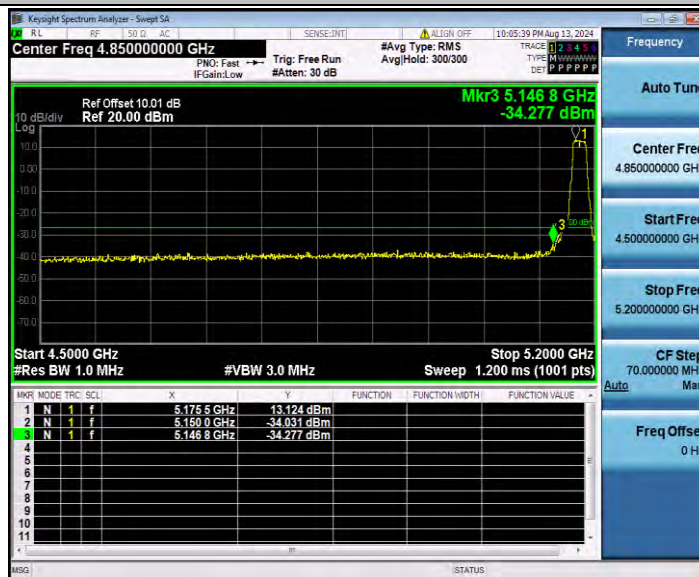
Appendix D.6: Band edge measurements

Test Result B1

TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant2	Low	5180	-34.28	≤ -27	PASS
		High	5240	-36.51	≤ -27	PASS
11N20SISO	Ant2	Low	5180	-33.42	≤ -27	PASS
		High	5240	-37.6	≤ -27	PASS
11N40SISO	Ant2	Low	5190	-32.76	≤ -27	PASS
		High	5230	-37.55	≤ -27	PASS
11AC20SISO	Ant2	Low	5180	-33.64	≤ -27	PASS
		High	5240	-36.64	≤ -27	PASS
11AC40SISO	Ant2	Low	5190	-33.37	≤ -27	PASS
		High	5230	-37.81	≤ -27	PASS
11AC80SISO	Ant2	Low	5210	-31.14	≤ -27	PASS
		High	5210	-36.2	≤ -27	PASS

Test Graphs B1

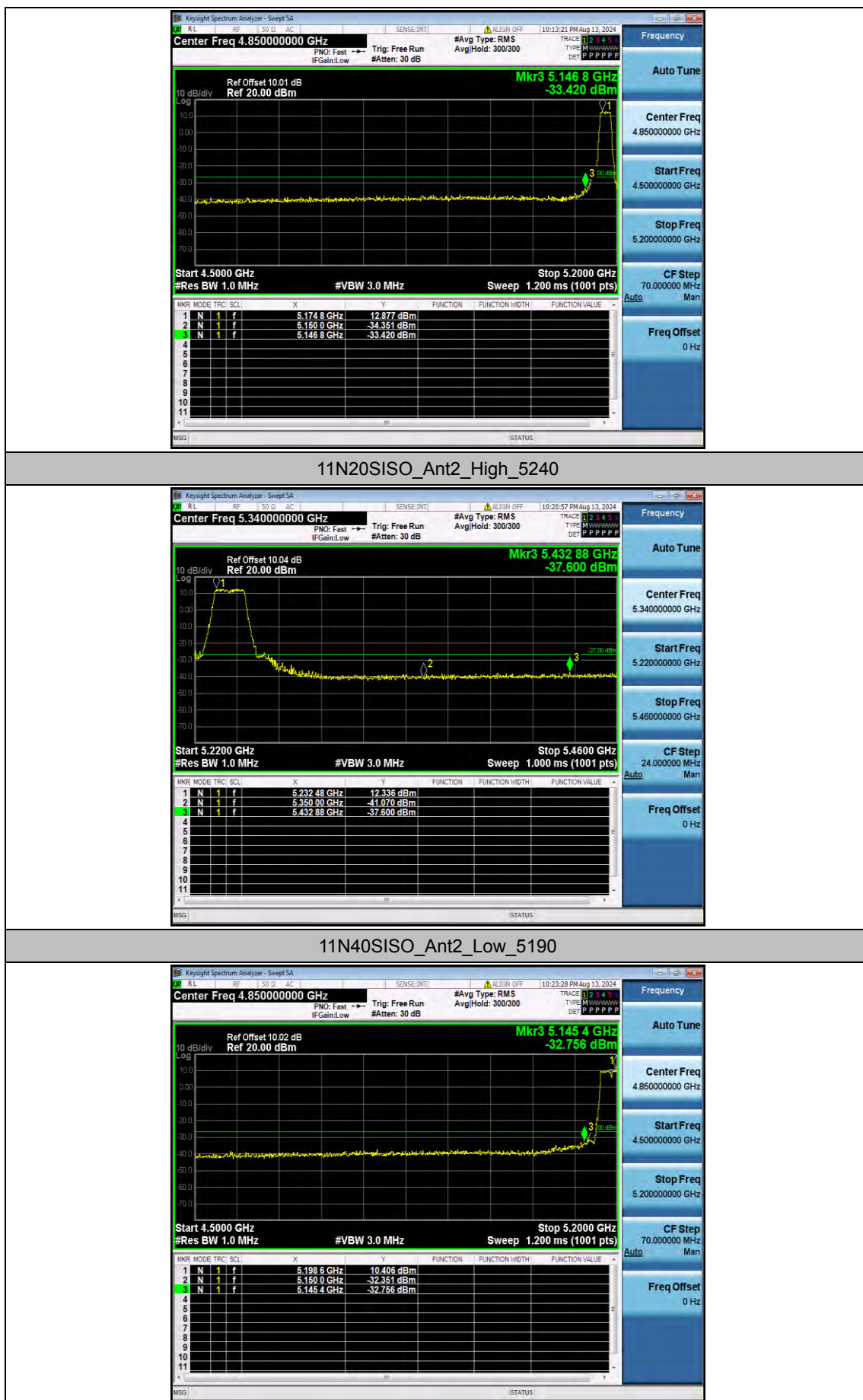
11A_Ant2_Low_5180



11A_Ant2_High_5240



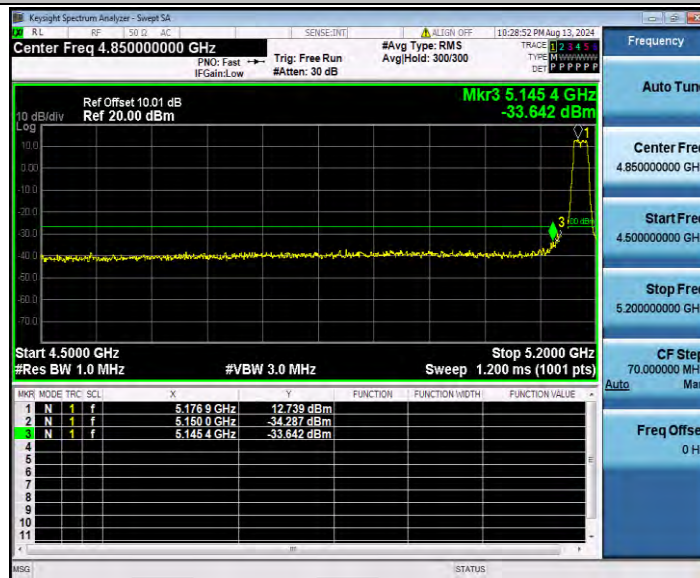
11N20SISO_Ant2_Low_5180



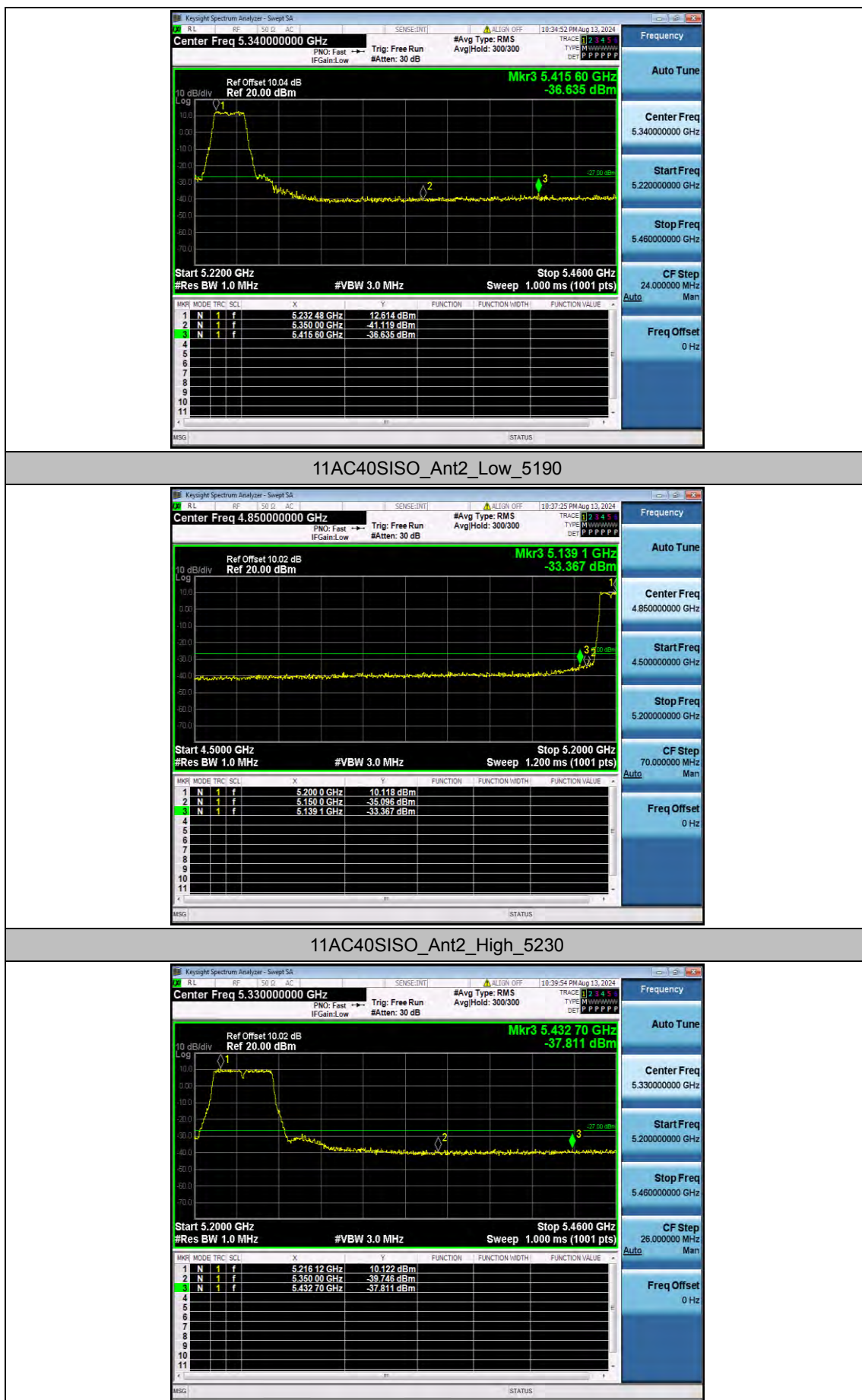
11N40SISO_Ant2_High_5230



11AC20SISO_Ant2_Low_5180



11AC20SISO_Ant2_High_5240



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	5139.32	-41.63	≤-27	PASS
			5360~27000	26056.5	-37.23	≤-27	PASS
		5200	30~5140	5139.32	-44.76	≤-27	PASS
			5360~27000	23516.68	-37.5	≤-27	PASS
		5240	30~5140	3170.61	-45.89	≤-27	PASS
			5360~27000	26527.53	-36.83	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	5137.79	-41.39	≤-27	PASS
			5360~27000	24292.84	-37.36	≤-27	PASS
		5200	30~5140	5052.62	-45.49	≤-27	PASS
			5360~27000	26491.46	-37.23	≤-27	PASS
		5240	30~5140	4950.42	-44.79	≤-27	PASS
			5360~27000	24248.83	-37.41	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	5123.99	-37.1	≤-27	PASS
			5360~27000	24204.83	-37.15	≤-27	PASS
		5230	30~5140	5132.68	-38.23	≤-27	PASS
			5360~27000	24263.98	-36.87	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	5136.42	-38.75	≤-27	PASS
			5360~27000	23473.4	-37.27	≤-27	PASS
		5200	30~5140	5137.96	-45.13	≤-27	PASS
			5360~27000	24741.51	-36.96	≤-27	PASS
		5240	30~5140	5008.16	-46.43	≤-27	PASS
			5360~27000	23471.24	-35.77	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	5138.81	-37.13	≤-27	PASS
			5360~27000	25177.91	-37.3	≤-27	PASS
		5230	30~5140	5136.76	-40.18	≤-27	PASS
			5360~27000	23572.95	-37.37	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	5137.1	-34.95	≤-27	PASS
			5360~27000	26977.64	-37.29	≤-27	PASS

Test Graphs

11A_Ant2_5180_30~5140



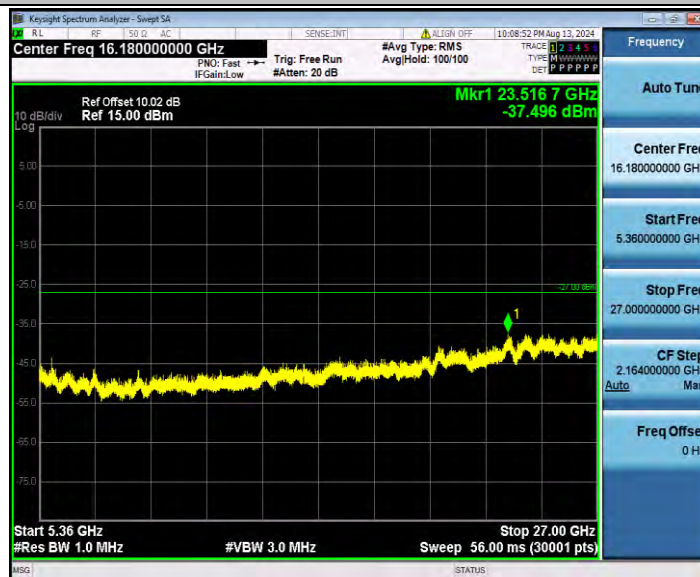
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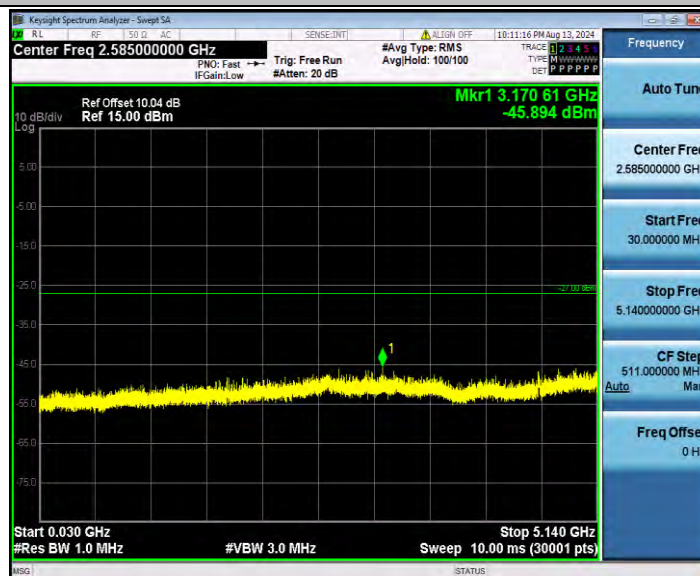
11A_Ant2_5200_30~5140



11A_Ant2_5200_5360~27000



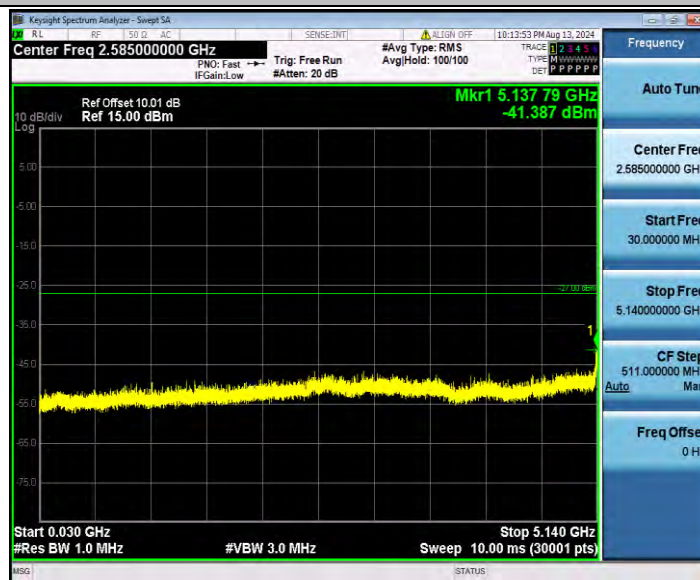
11A_Ant2_5240_30~5140



11A_Ant2_5240_5360~27000



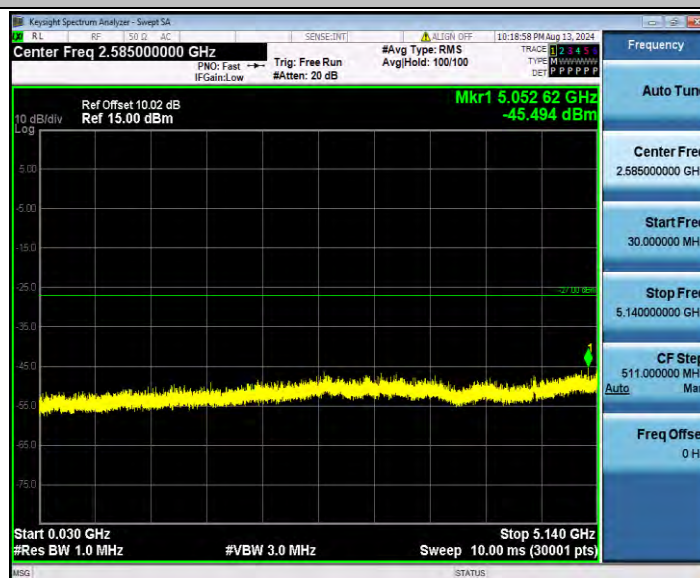
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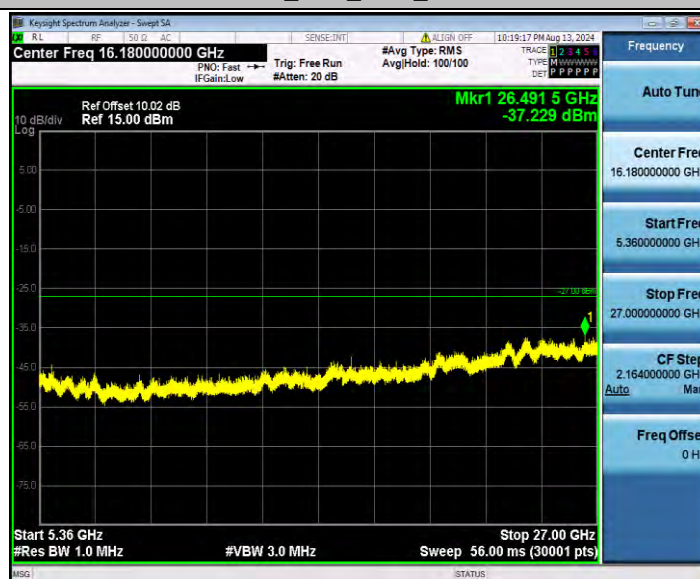
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11N20SISO_Ant2_5200_30~5140



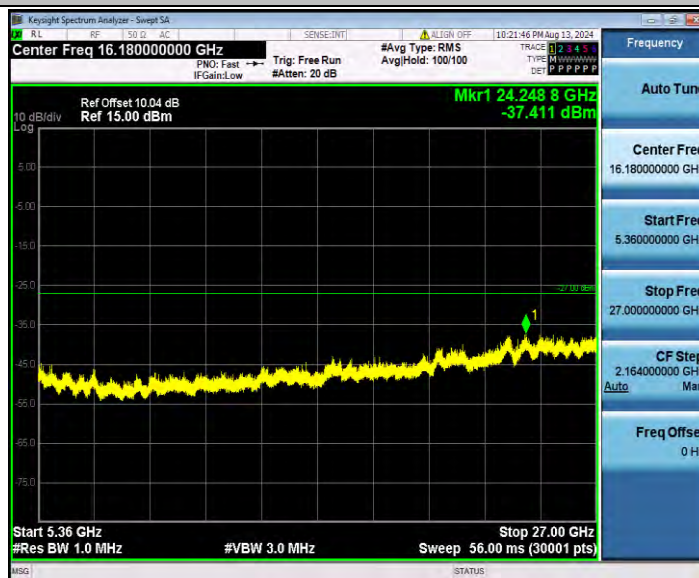
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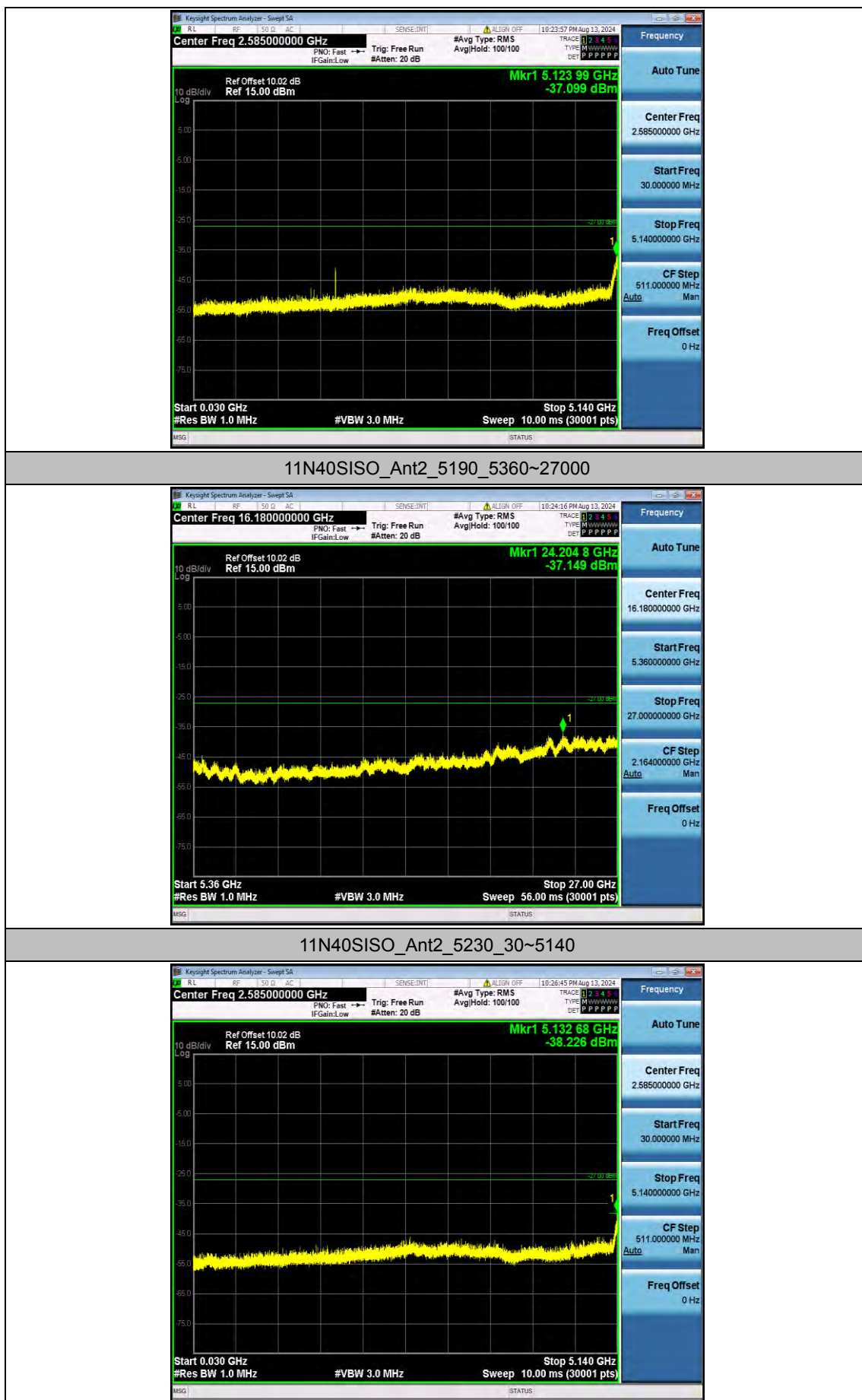
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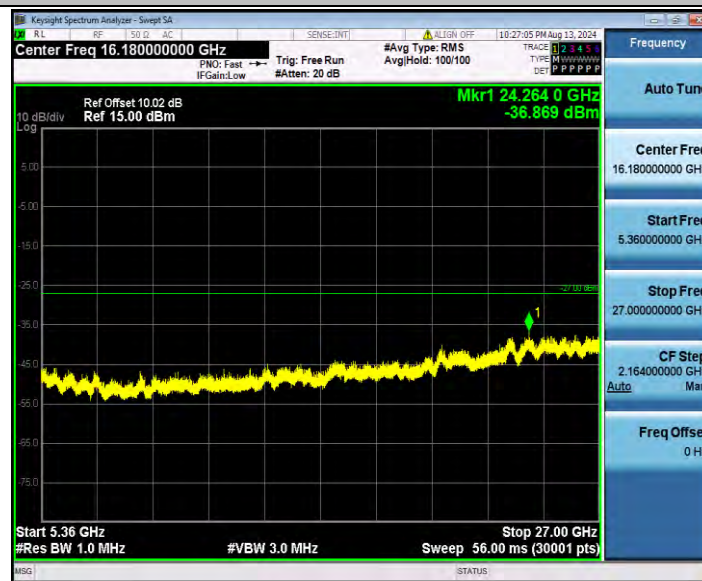
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11N40SISO_Ant2_5190_30~5140



11N40SISO_Ant2_5230_5360~27000



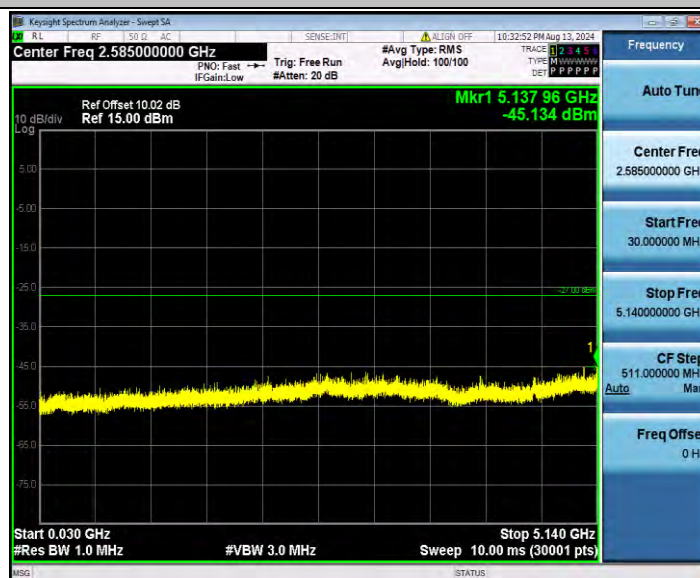
11AC20SISO_Ant2_5180_30~5140



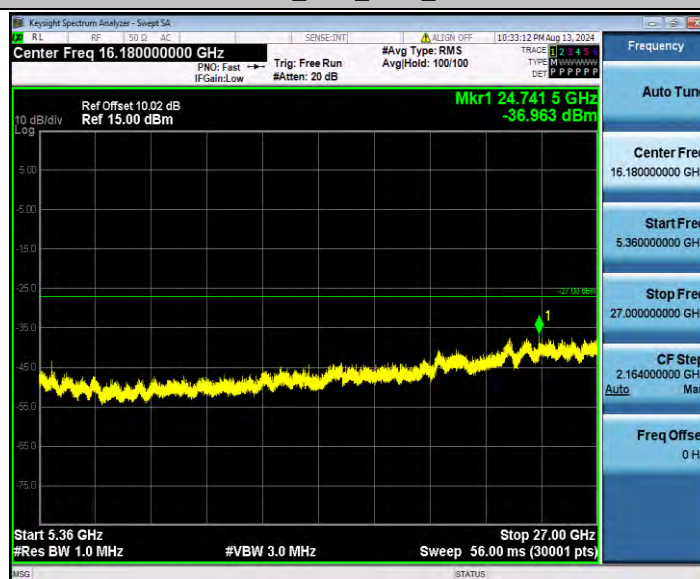
11AC20SISO_Ant2_5180_5360~27000



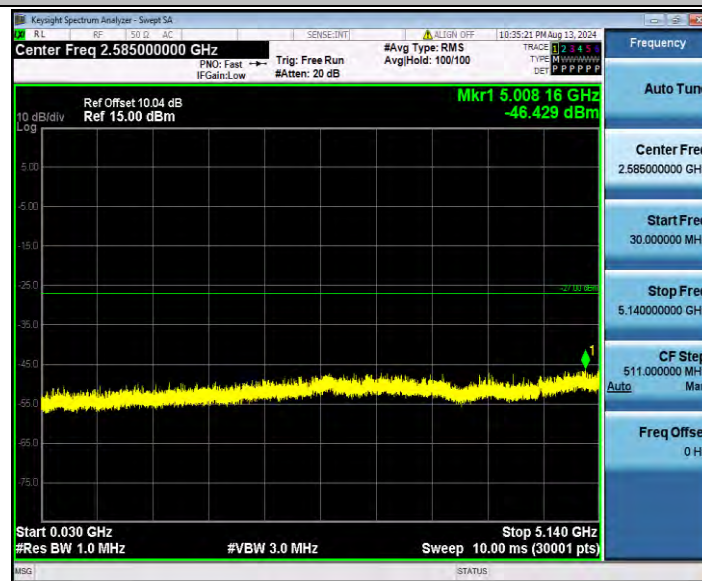
11AC20SISO_Ant2_5200_30~5140



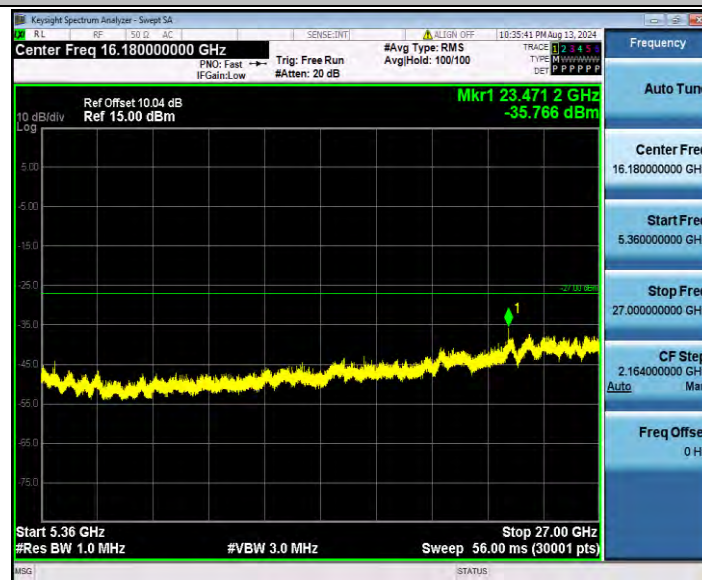
11AC20SISO_Ant2_5200_5360~27000



11AC20SISO_Ant2_5240_30~5140



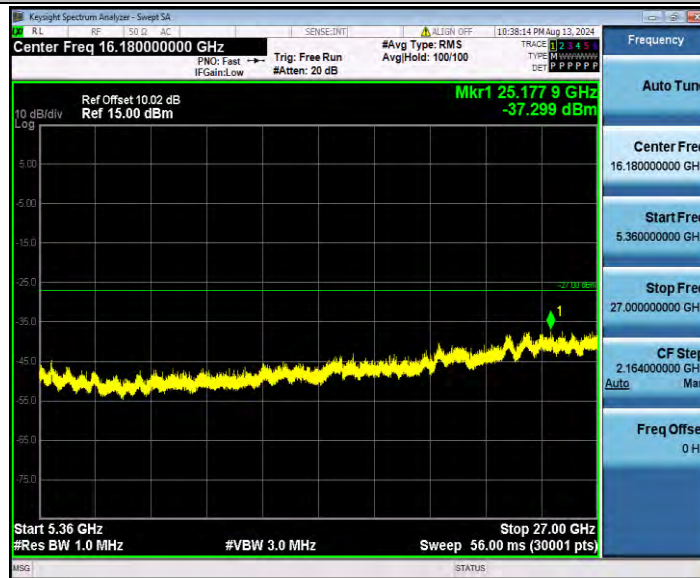
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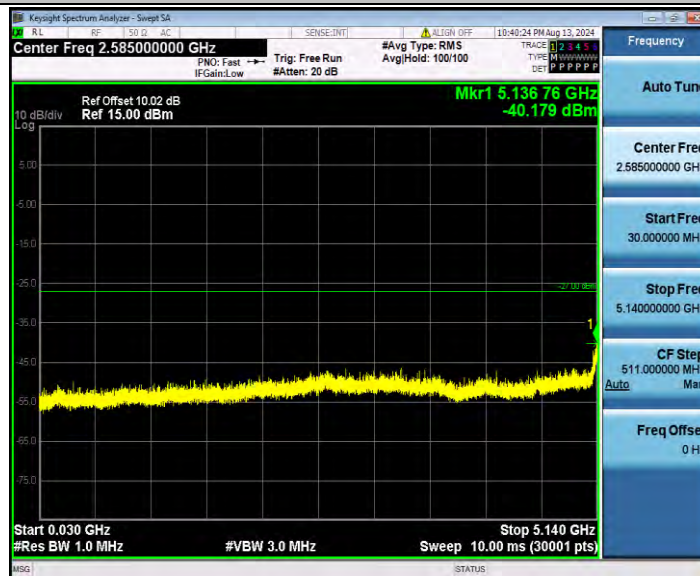
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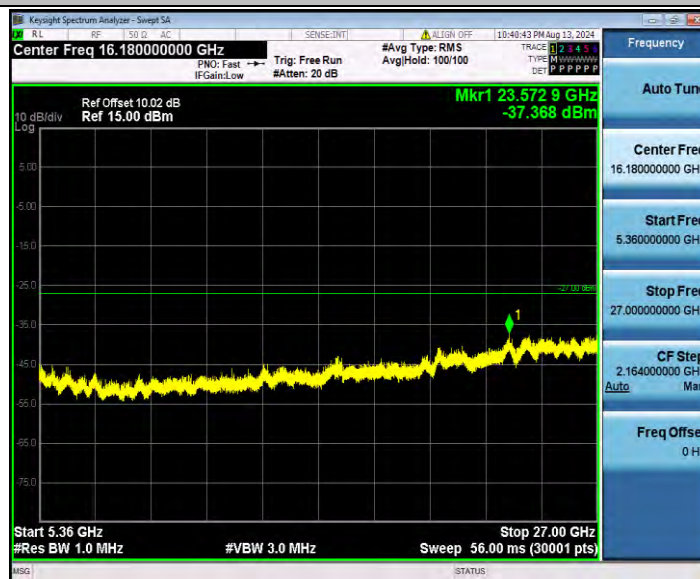
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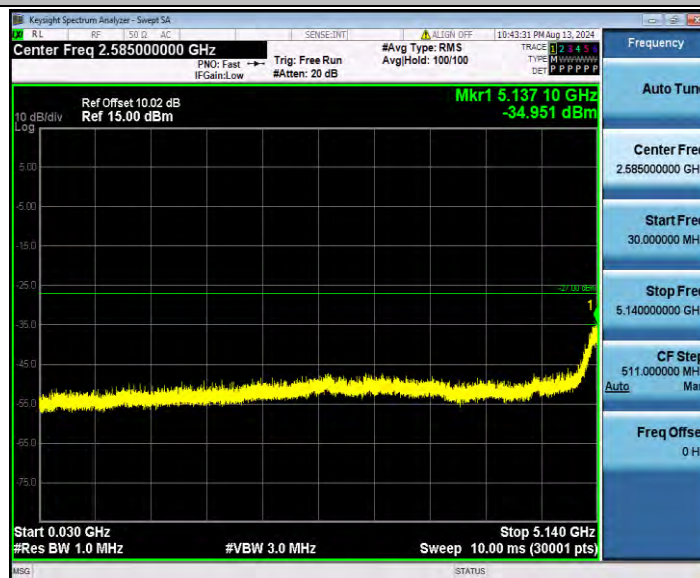
11AC40SISO_Ant2_5230_30~5140



11AC40SISO_Ant2_5230_5360~27000



11AC80SISO_Ant2_5210_30~5140



11AC80SISO_Ant2_5210_5360~27000

