

Case No. : <u>CTA24081600304</u>	
Ambient Condition: <u>23</u> °C, <u>51</u> %RH	
According Standard: <u>■Part15E</u>	
Test Date: <u>2024.8.20</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	Ant1	5180	23.760	5168.080	5191.840	---	---
		5200	22.280	5188.920	5211.200	---	---
		5240	23.360	5228.560	5251.920	---	---
11N20SISO	Ant1	5180	23.720	5168.040	5191.760	---	---
		5200	23.640	5188.320	5211.960	---	---
		5240	23.680	5228.200	5251.880	---	---
11N40SISO	Ant1	5190	44.560	5167.680	5212.240	---	---
		5230	44.560	5207.520	5252.080	---	---
11AC20SISO	Ant1	5180	23.720	5168.000	5191.720	---	---
		5200	23.480	5188.520	5212.000	---	---
		5240	23.880	5228.040	5251.920	---	---
11AC40SISO	Ant1	5190	44.080	5168.000	5212.080	---	---
		5230	43.600	5208.080	5251.680	---	---
11AC80SISO	Ant1	5210	83.200	5169.040	5252.240	---	---

Test Graphs

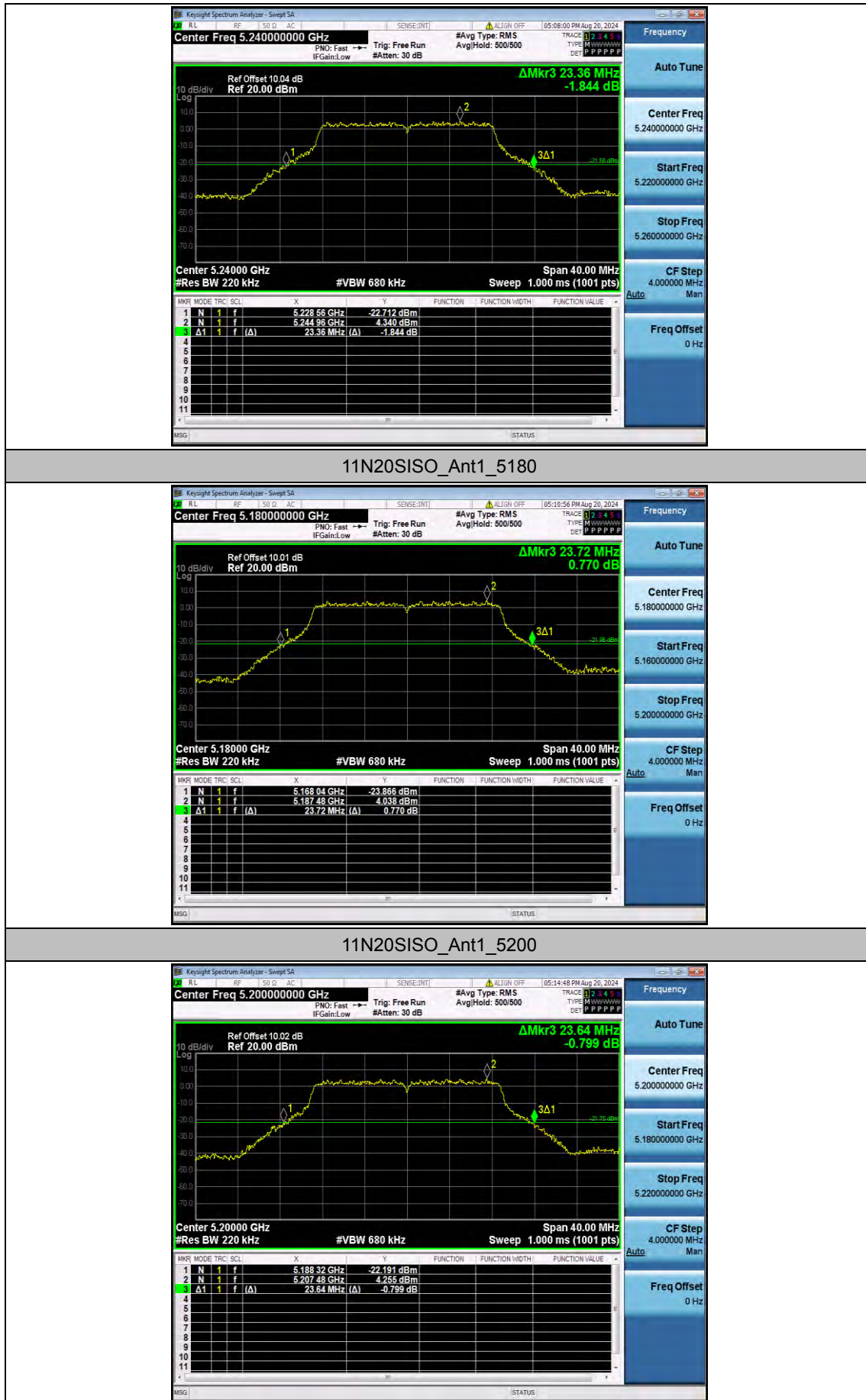
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



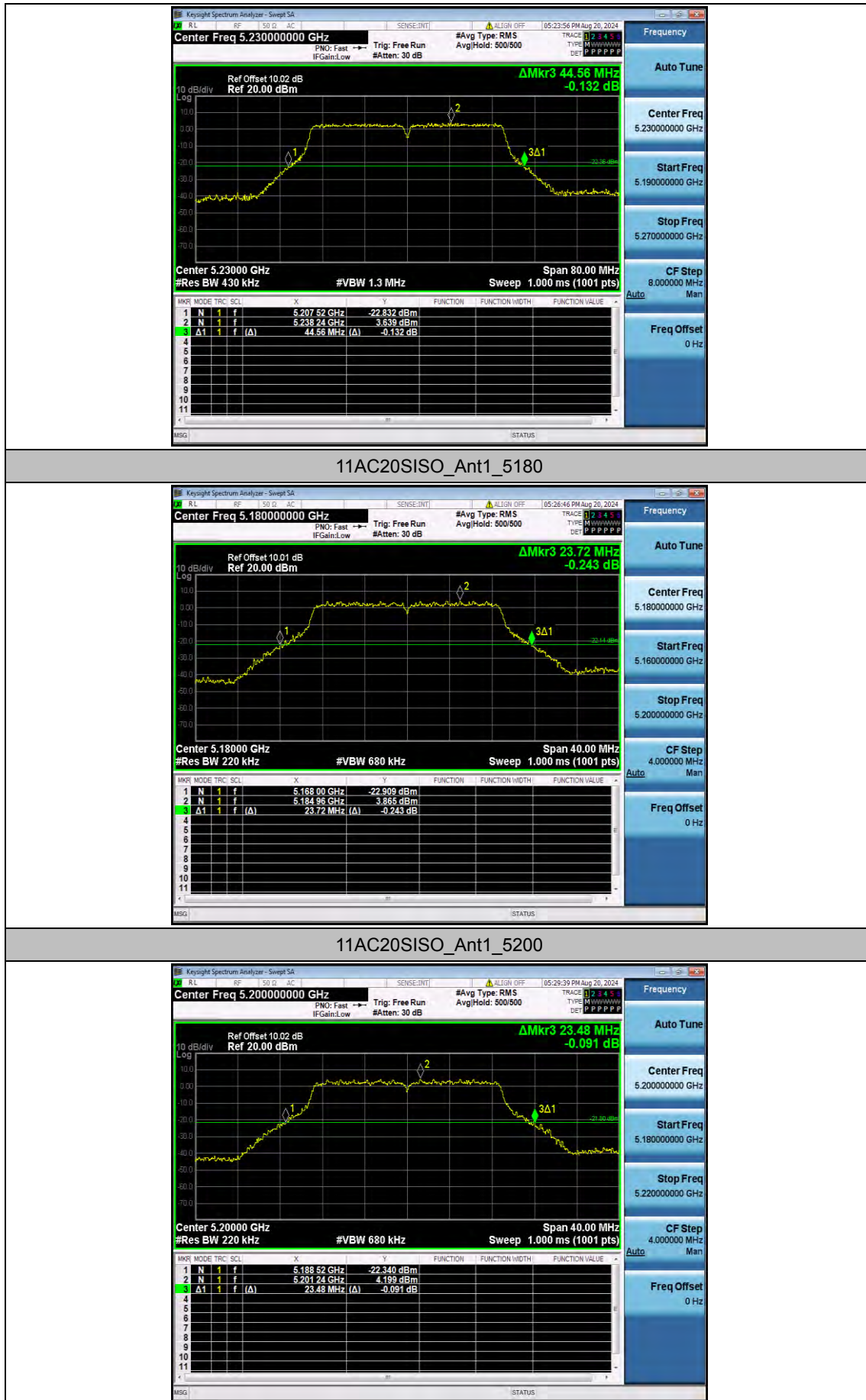
11N20SISO_Ant1_5240



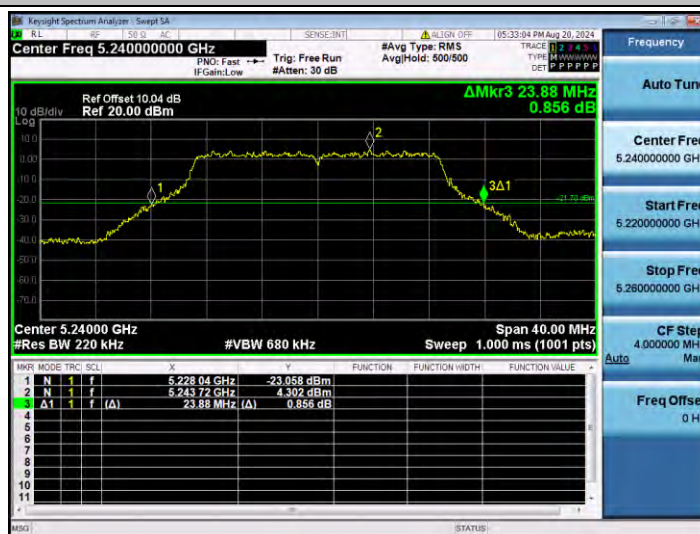
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230





Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.284	5171.3553	5188.6393	---	---
		5200	17.253	5191.3613	5208.6143	---	---
		5240	17.259	5231.3620	5248.6210	---	---
11N20SISO	Ant1	5180	18.298	5170.8601	5189.1581	---	---
		5200	18.291	5190.8476	5209.1386	---	---
		5240	18.323	5230.8287	5249.1517	---	---
11N40SISO	Ant1	5190	36.750	5171.6538	5208.4038	---	---
		5230	36.778	5211.6549	5248.4329	---	---
11AC20SISO	Ant1	5180	18.302	5170.8428	5189.1448	---	---
		5200	18.323	5190.8350	5209.1580	---	---
		5240	18.304	5230.8620	5249.1660	---	---
11AC40SISO	Ant1	5190	36.753	5171.6736	5208.4266	---	---
		5230	36.768	5211.6255	5248.3935	---	---
11AC80SISO	Ant1	5210	75.084	5172.6119	5247.6959	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



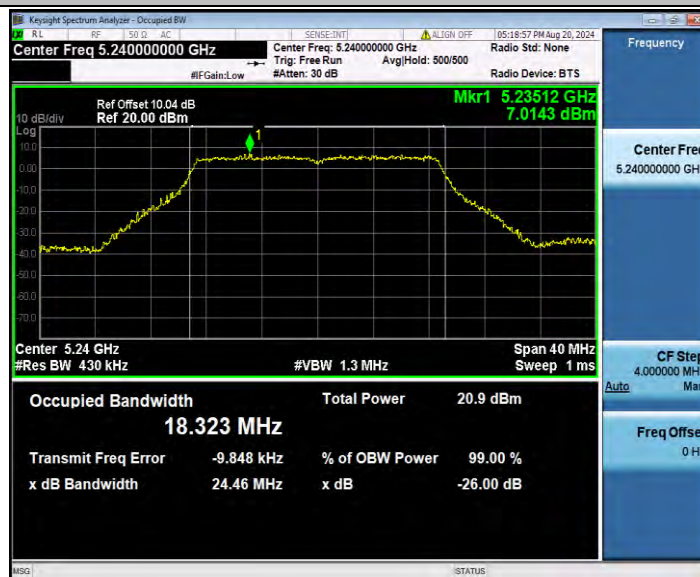
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240

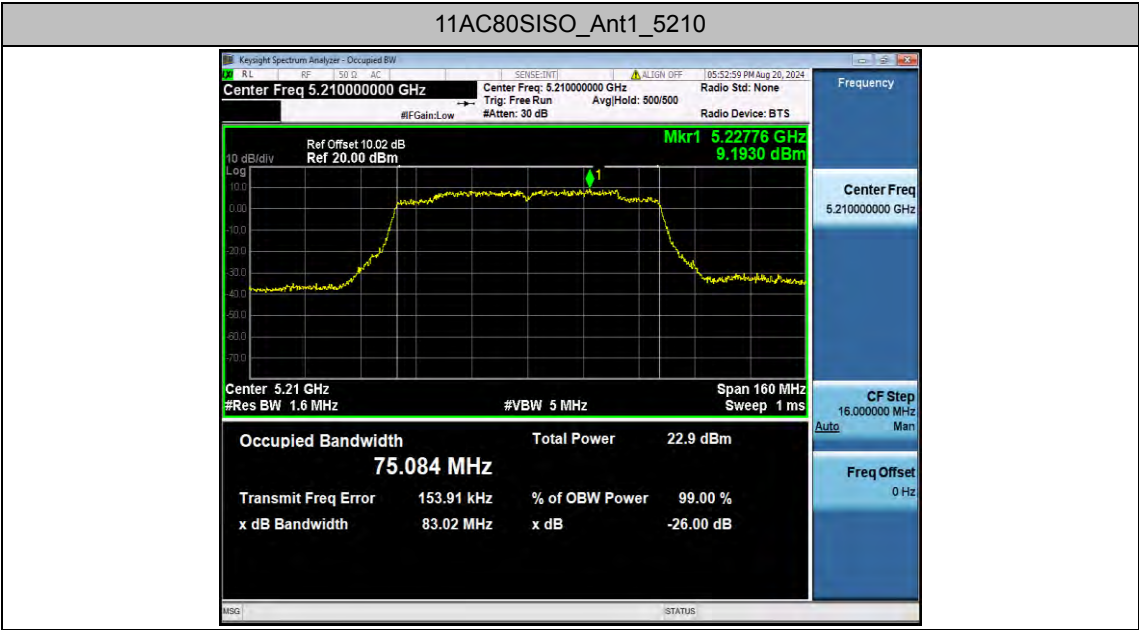


11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230





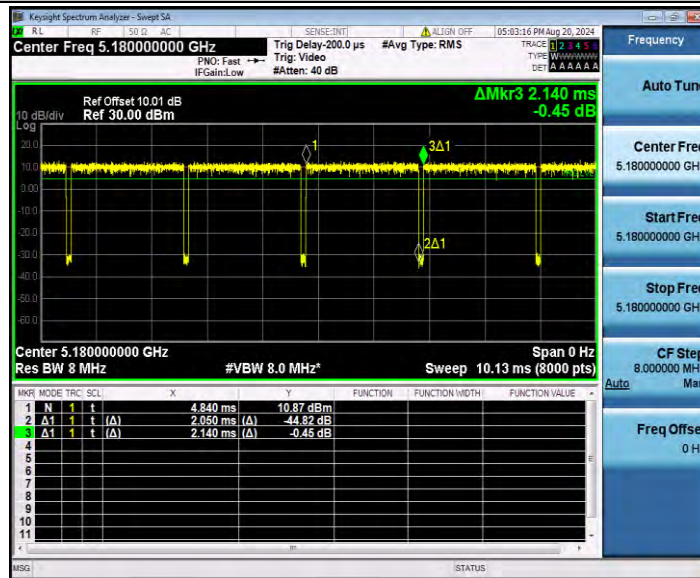
Appendix D.3: Duty Cycle

Test Result

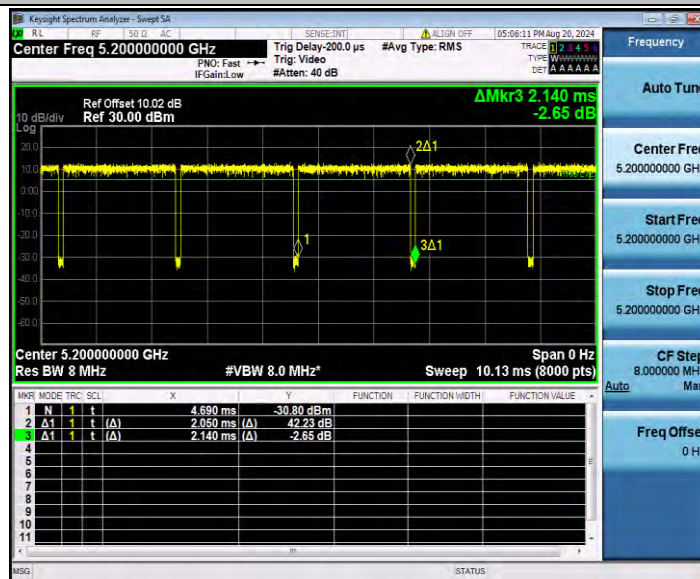
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	2.05	2.14	95.79	0.19	0.49
		5200	2.05	2.14	95.79	0.19	0.49
		5240	2.05	2.14	95.79	0.19	0.49
11N20SISO	Ant1	5180	1.91	2.00	95.50	0.20	0.52
		5200	1.91	1.99	95.98	0.18	0.52
		5240	1.90	1.99	95.48	0.20	0.53
11N40SISO	Ant1	5190	0.94	0.98	95.92	0.18	1.06
		5230	0.94	0.98	95.92	0.18	1.06
11AC20SISO	Ant1	5180	1.92	2.00	96.00	0.18	0.52
		5200	1.91	2.00	95.50	0.20	0.52
		5240	1.91	2.00	95.50	0.20	0.52
11AC40SISO	Ant1	5190	0.94	0.99	94.95	0.23	1.06
		5230	0.94	0.99	94.95	0.23	1.06
11AC80SISO	Ant1	5210	0.46	0.49	93.88	0.27	2.17

Test Graphs

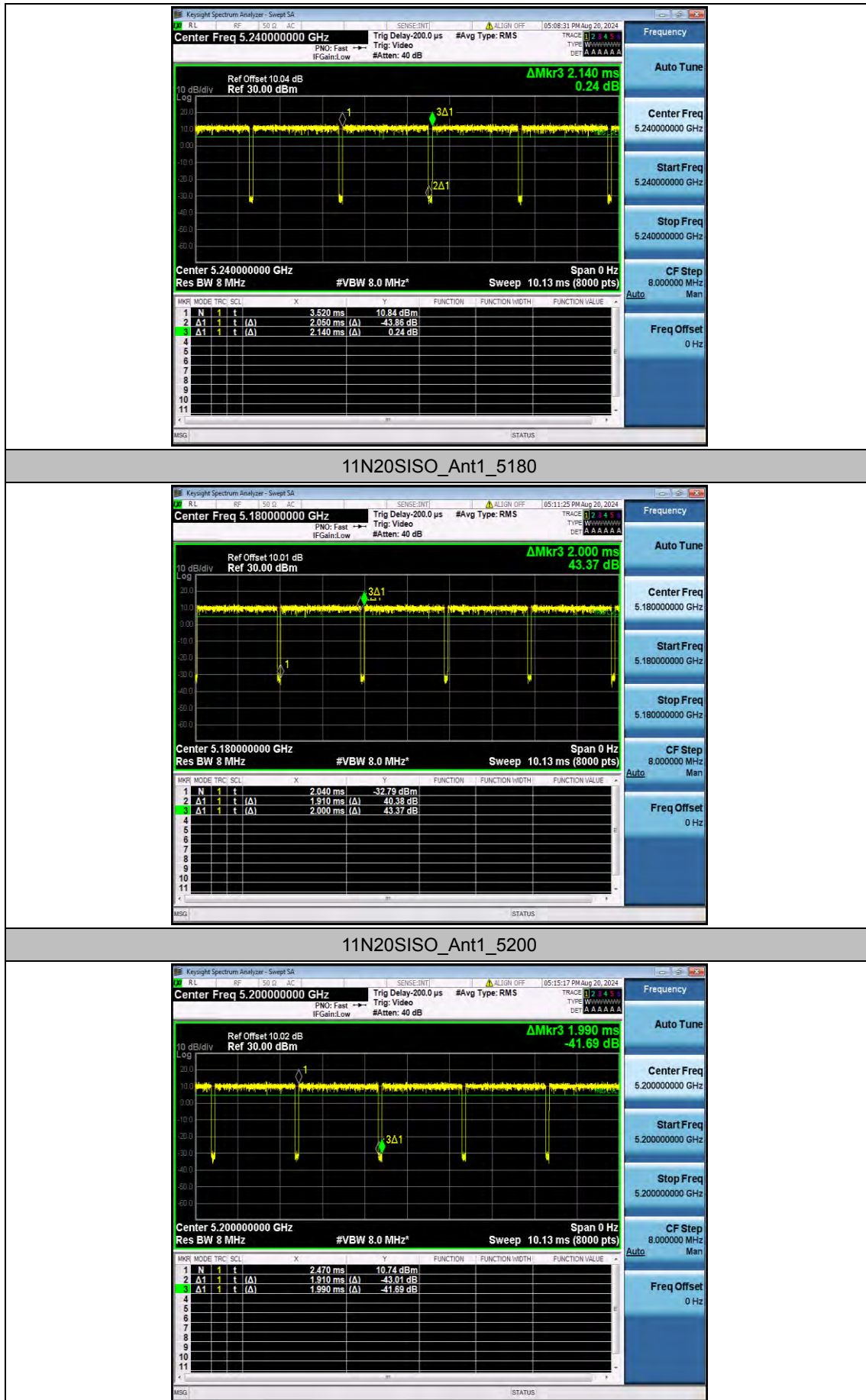
11A_Ant1_5180



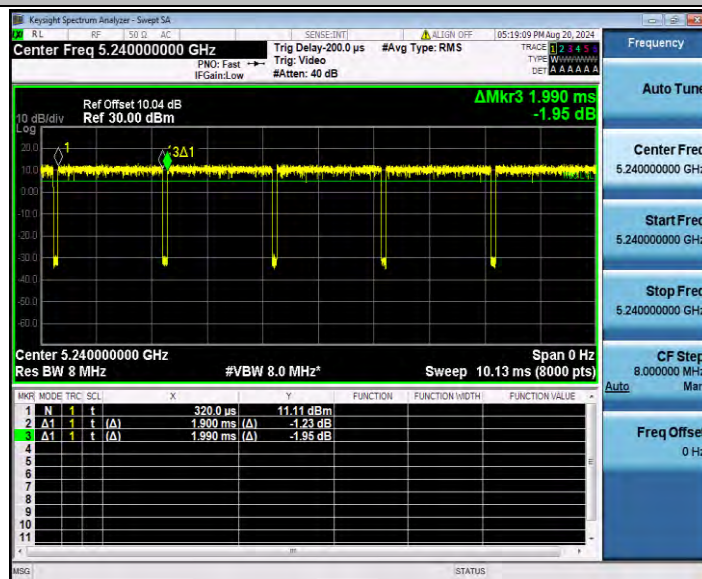
11A_Ant1_5200



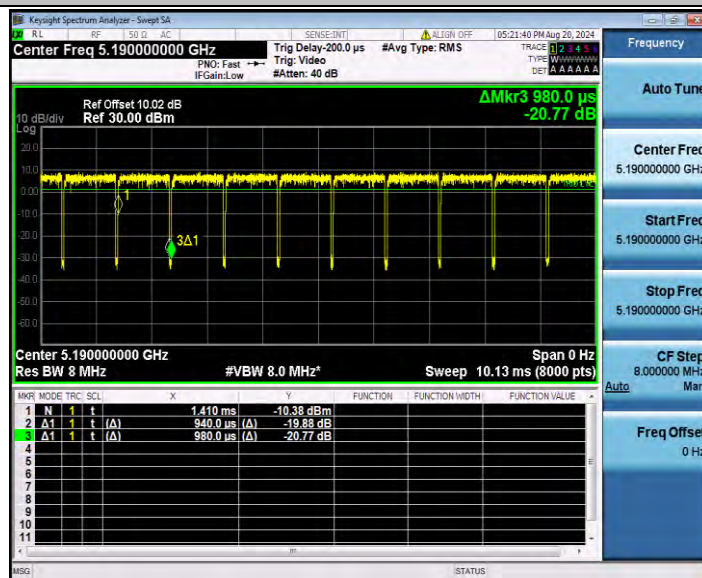
11A_Ant1_5240



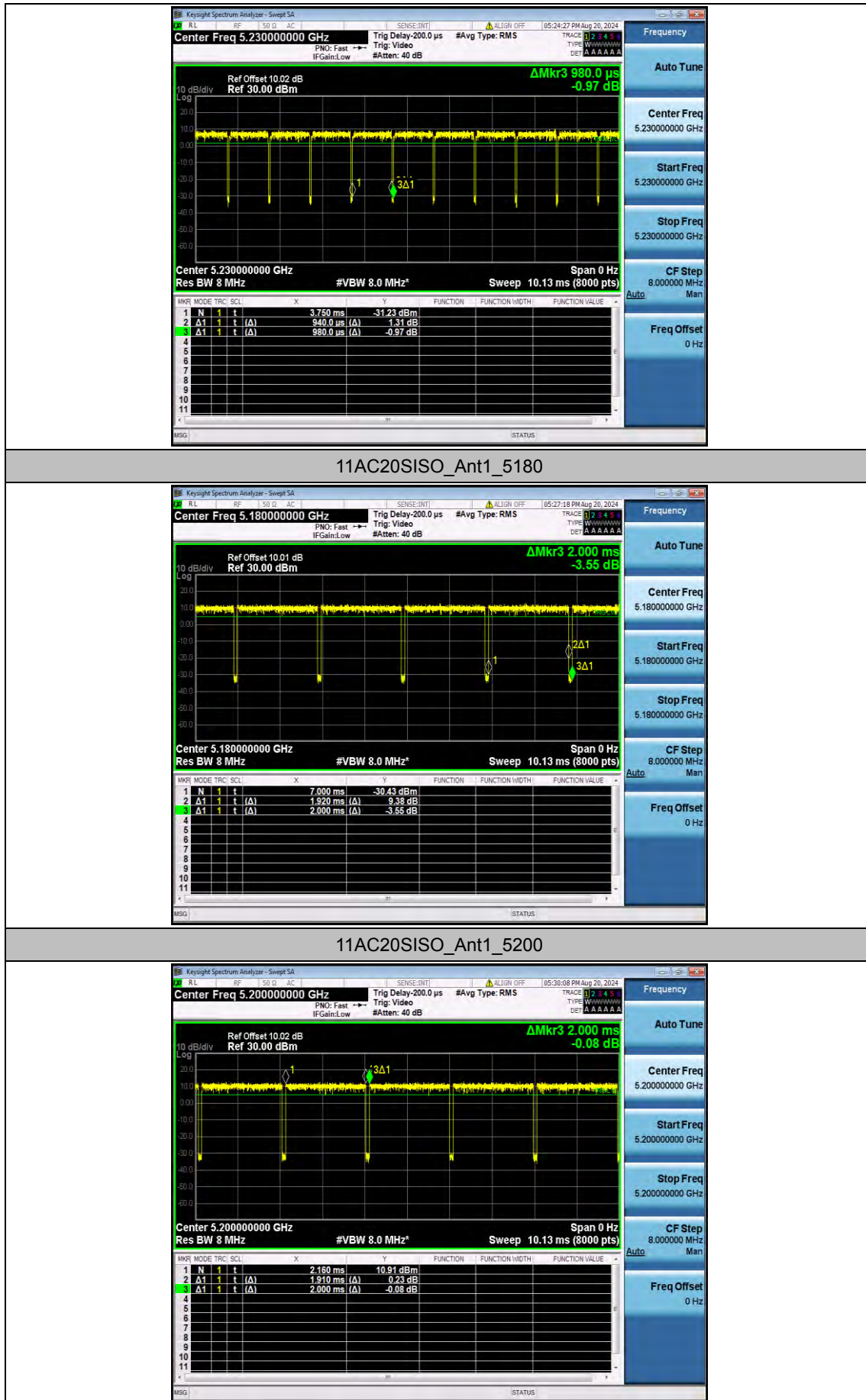
11N20SISO_Ant1_5240



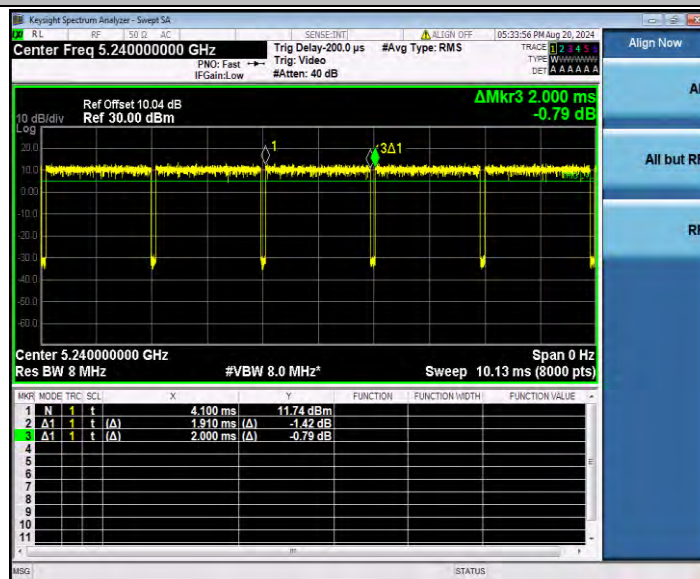
11N40SISO_Ant1_5190



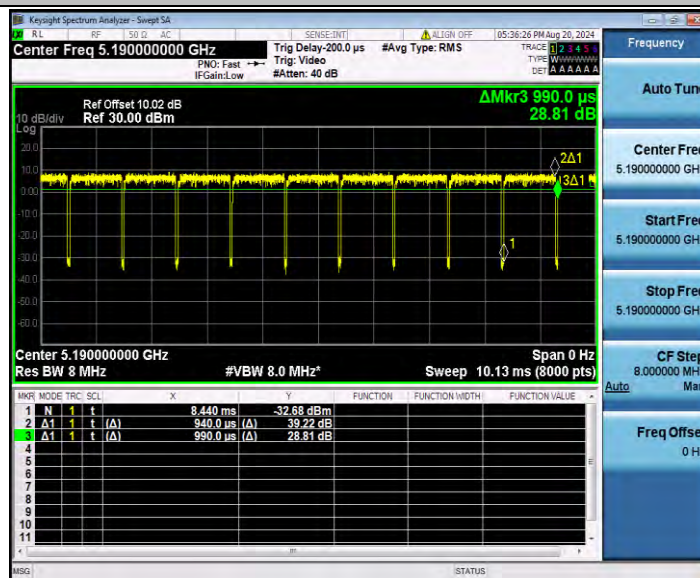
11N40SISO_Ant1_5230



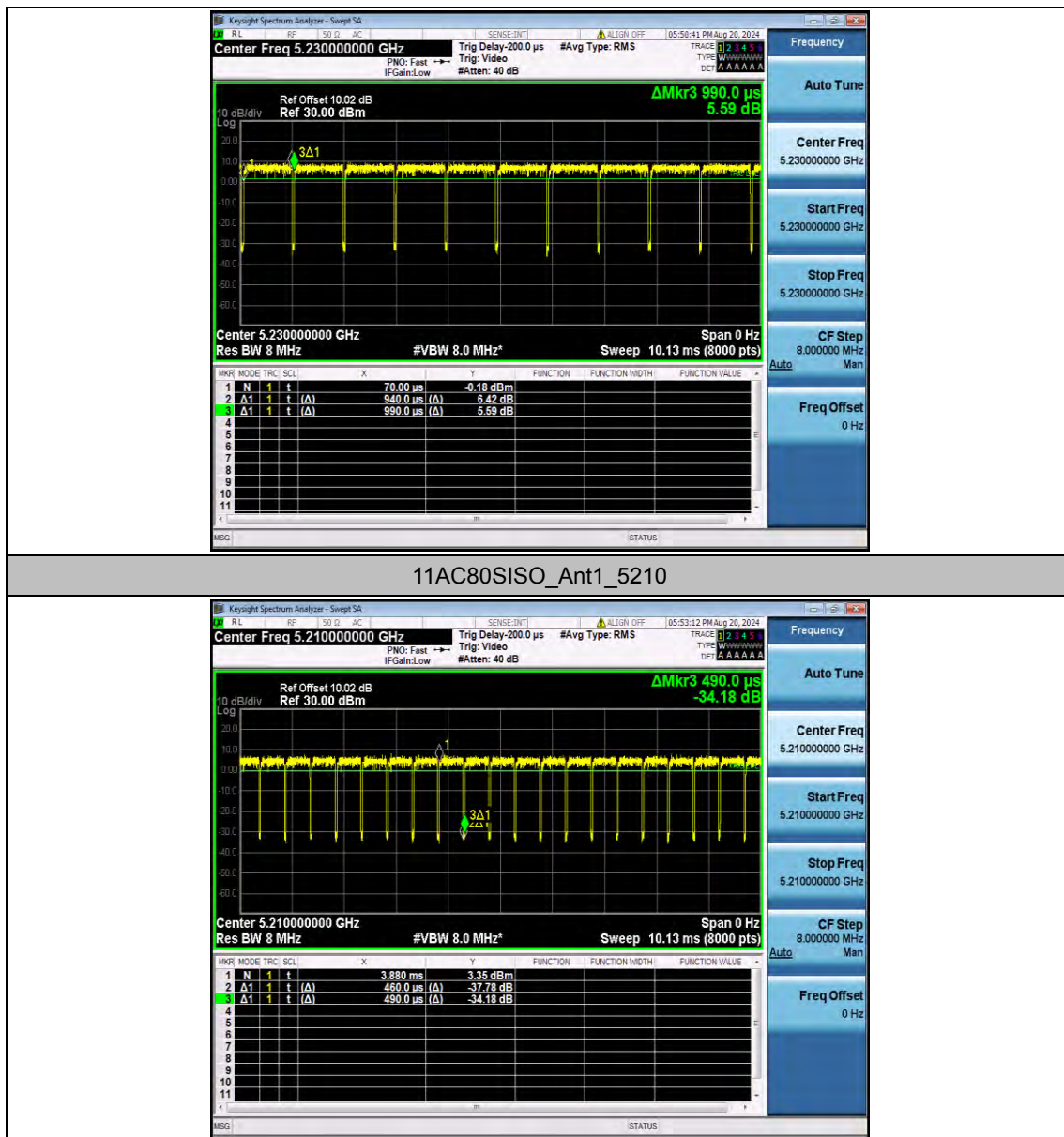
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_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	Ant1	5180	13.46	95.79	0.19	13.65	≤23.98	PASS
		5200	13.85	95.79	0.19	14.04	≤23.98	PASS
		5240	13.97	95.79	0.19	14.16	≤23.98	PASS
11N20SISO	Ant1	5180	13.50	95.50	0.20	13.70	≤23.98	PASS
		5200	13.70	95.98	0.18	13.88	≤23.98	PASS
		5240	13.87	95.48	0.20	14.07	≤23.98	PASS
11N40SISO	Ant1	5190	13.50	95.92	0.18	13.68	≤23.98	PASS
		5230	13.91	95.92	0.18	14.09	≤23.98	PASS
11AC20SISO	Ant1	5180	13.45	96.00	0.18	13.63	≤23.98	PASS
		5200	13.76	95.50	0.20	13.96	≤23.98	PASS
		5240	13.92	95.50	0.20	14.12	≤23.98	PASS
11AC40SISO	Ant1	5190	13.54	94.95	0.23	13.77	≤23.98	PASS
		5230	14.05	94.95	0.23	14.28	≤23.98	PASS
11AC80SISO	Ant1	5210	13.70	93.88	0.27	13.97	≤23.98	PASS

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	2.04	≤11.00	PASS
		5200	2.47	≤11.00	PASS
		5240	2.80	≤11.00	PASS
11N20SISO	Ant1	5180	1.71	≤11.00	PASS
		5200	2.06	≤11.00	PASS
		5240	2.31	≤11.00	PASS
11N40SISO	Ant1	5190	-1.10	≤11.00	PASS
		5230	-0.83	≤11.00	PASS
11AC20SISO	Ant1	5180	1.72	≤11.00	PASS
		5200	2.16	≤11.00	PASS
		5240	2.29	≤11.00	PASS
11AC40SISO	Ant1	5190	-1.04	≤11.00	PASS
		5230	-0.65	≤11.00	PASS
11AC80SISO	Ant1	5210	-3.05	≤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



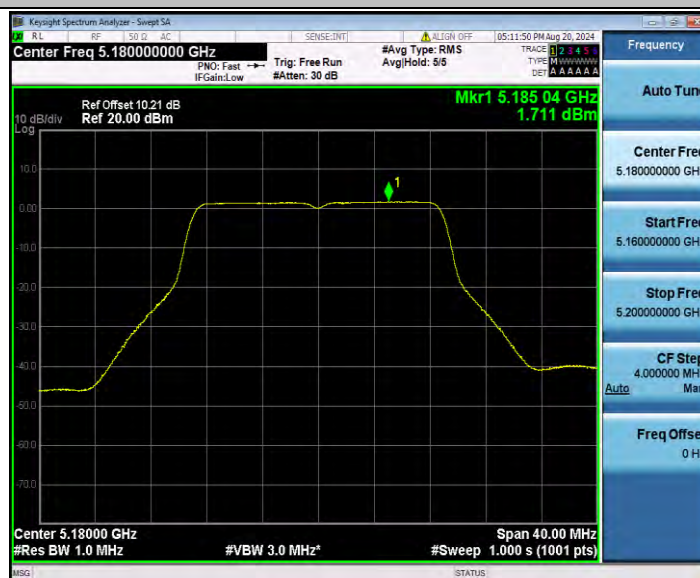
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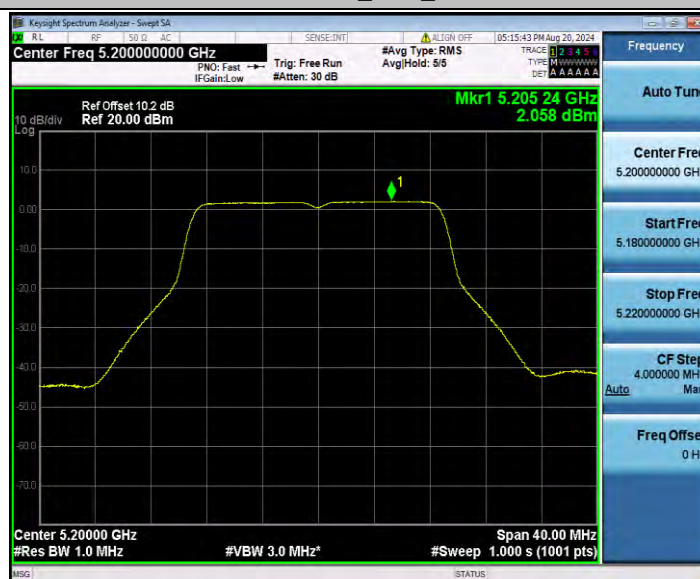
11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



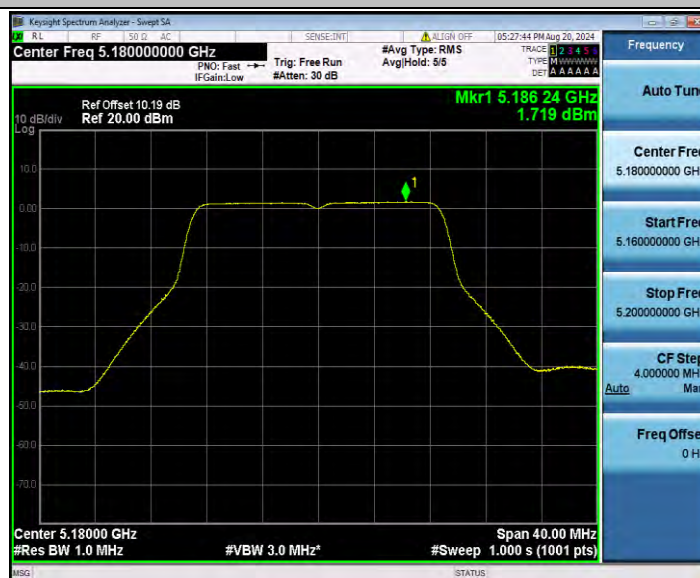
11N40SISO_Ant1_5190



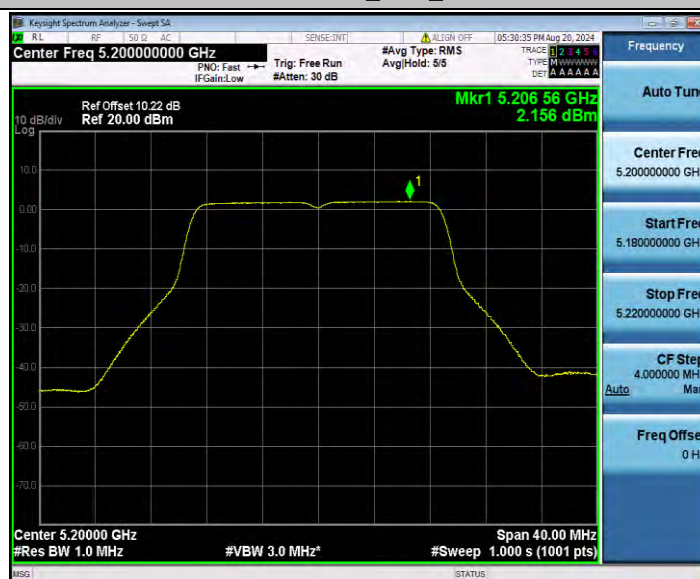
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



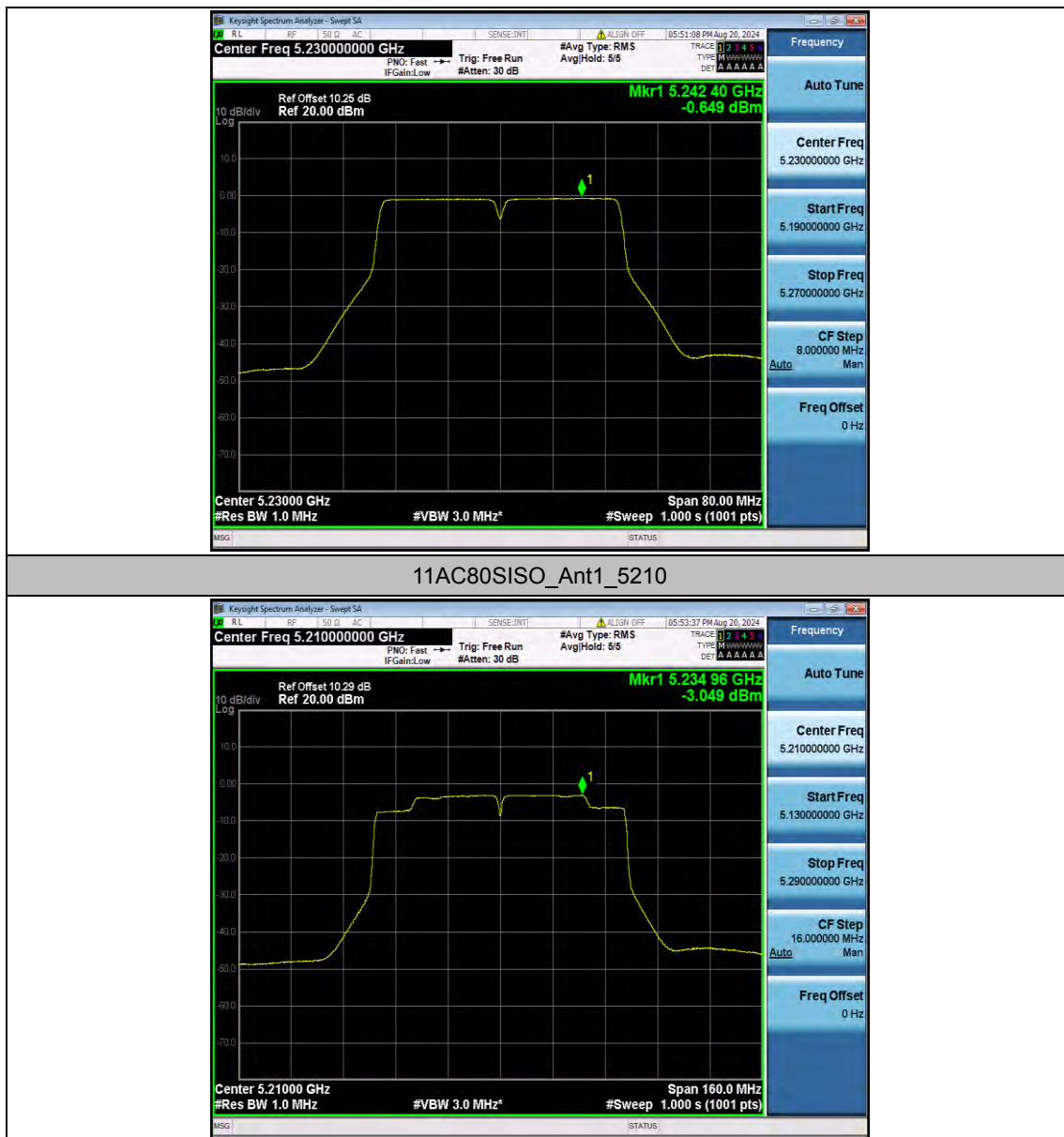
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



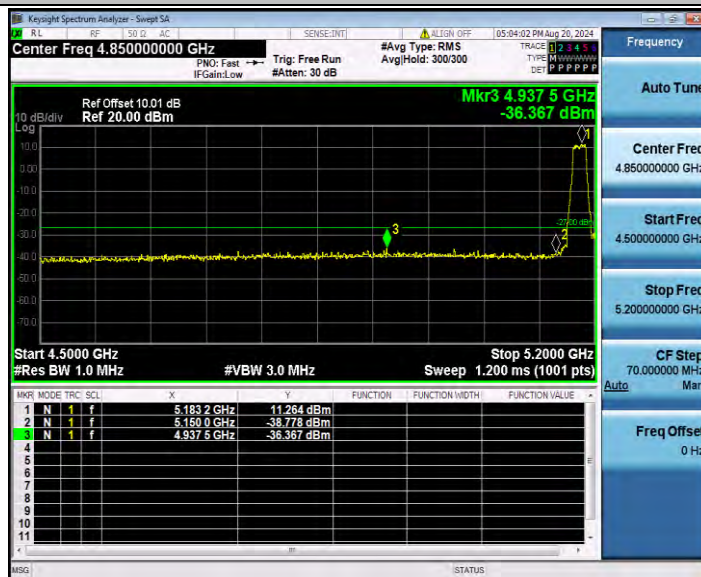
Appendix D.6: Band edge measurements

Test Result B1

TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-36.37	≤ -27	PASS
		High	5240	-36.78	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-36.98	≤ -27	PASS
		High	5240	-37.3	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-36.95	≤ -27	PASS
		High	5230	-36.44	≤ -27	PASS
11AC20SISO	Ant1	Low	5180	-36.73	≤ -27	PASS
		High	5240	-36.93	≤ -27	PASS
11AC40SISO	Ant1	Low	5190	-37.17	≤ -27	PASS
		High	5230	-36.55	≤ -27	PASS
11AC80SISO	Ant1	Low	5210	-36.19	≤ -27	PASS
		High	5210	-36.6	≤ -27	PASS

Test Graphs B1

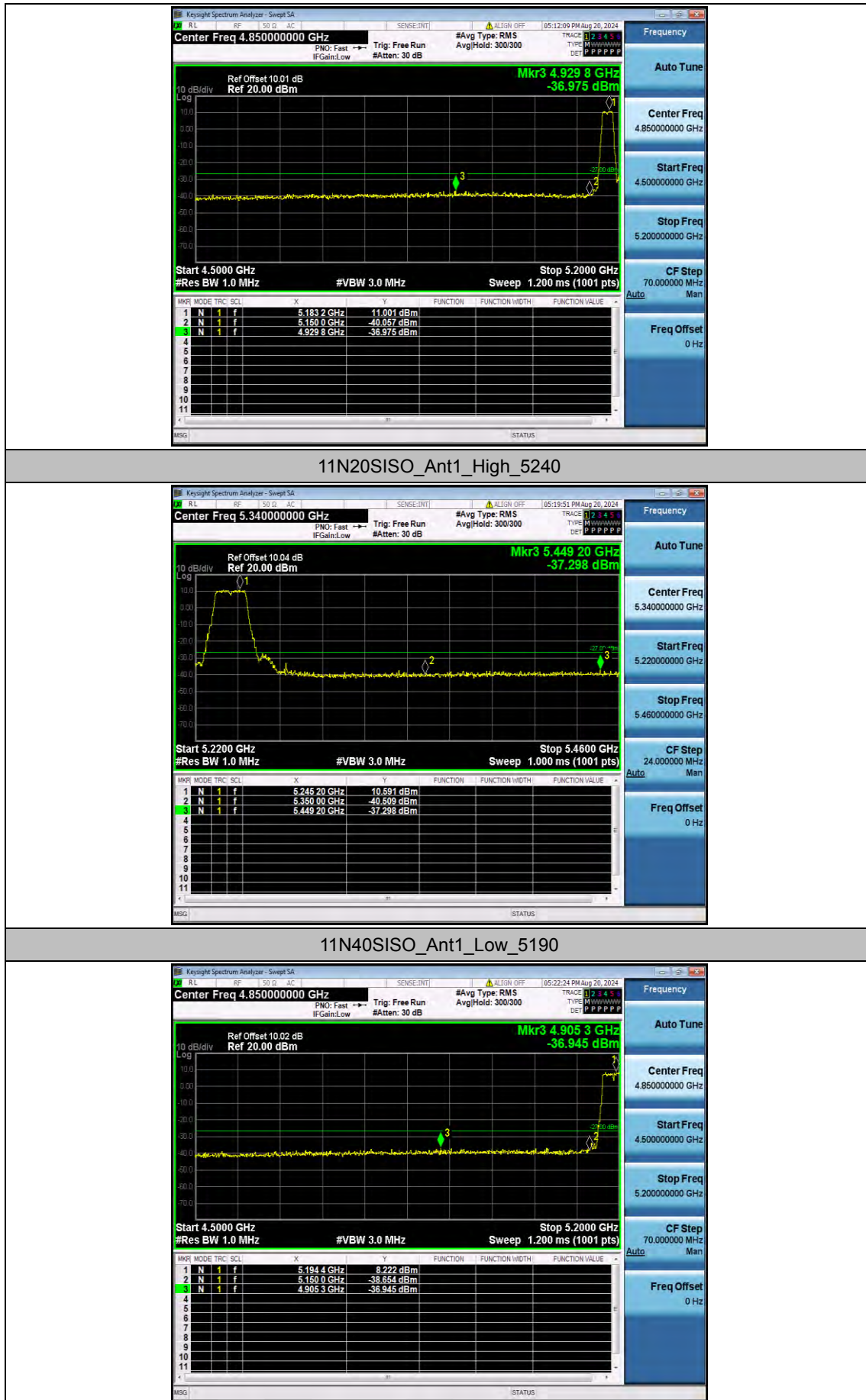
11A_Ant1_Low_5180



11A_Ant1_High_5240



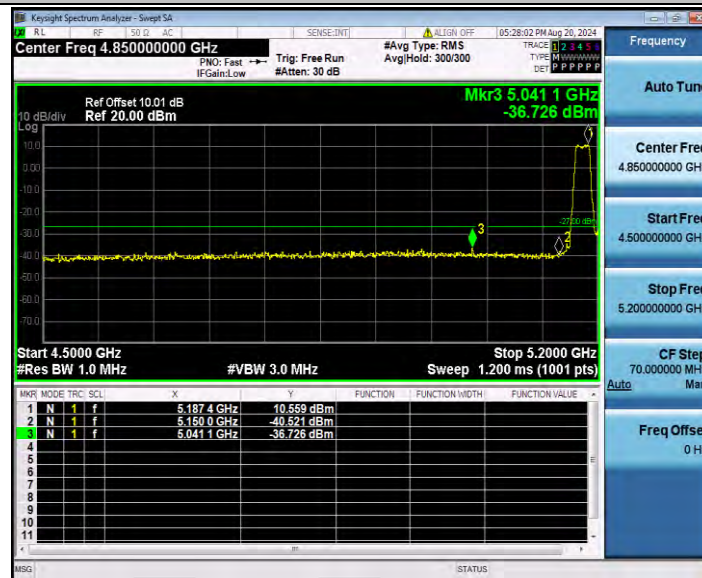
11N20SISO_Ant1_Low_5180



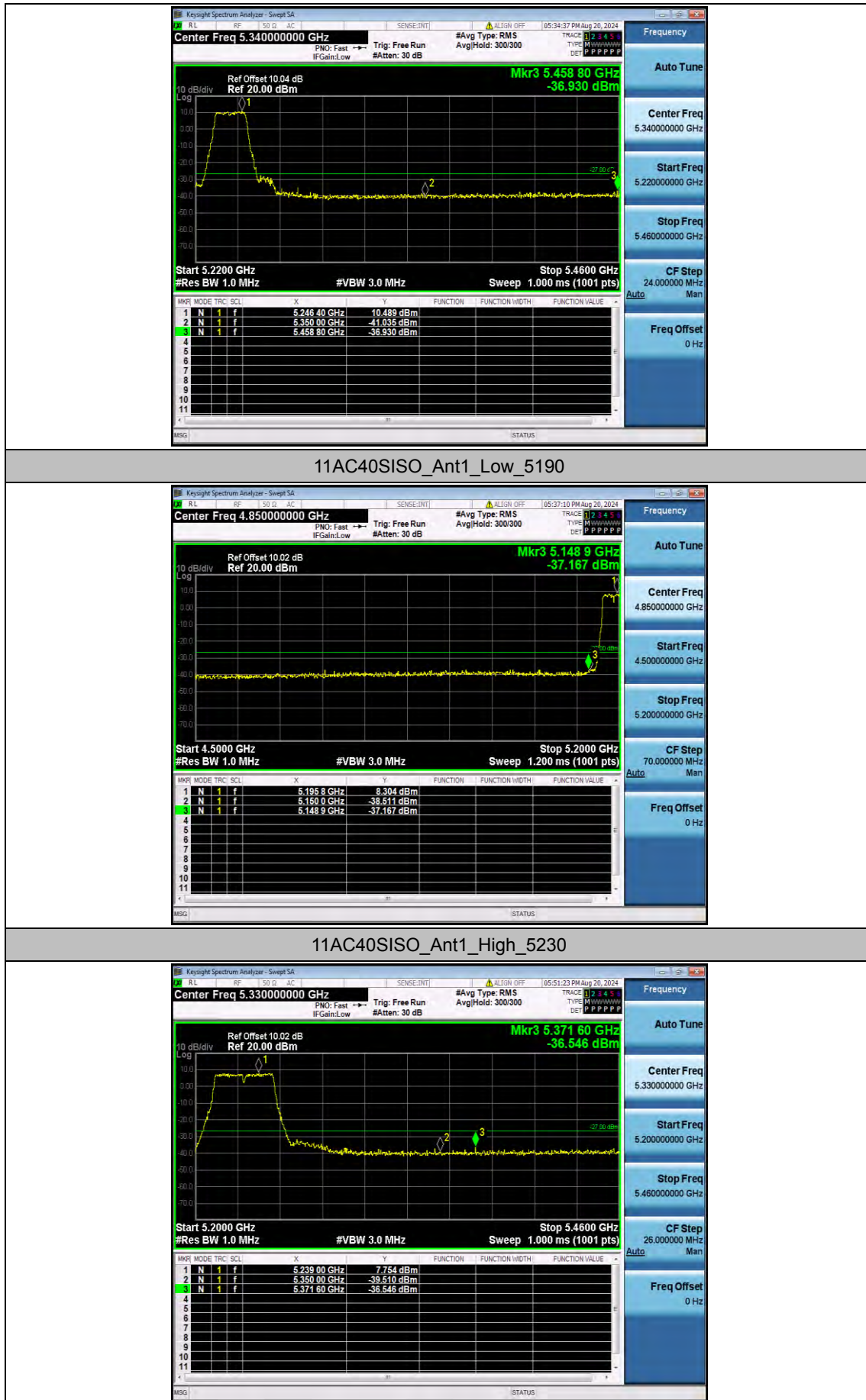
11N40SISO_Ant1_High_5230



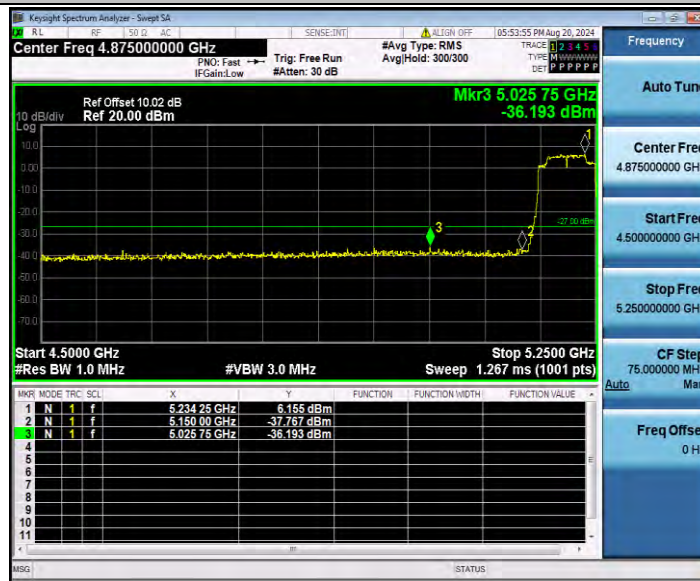
11AC20SISO_Ant1_Low_5180



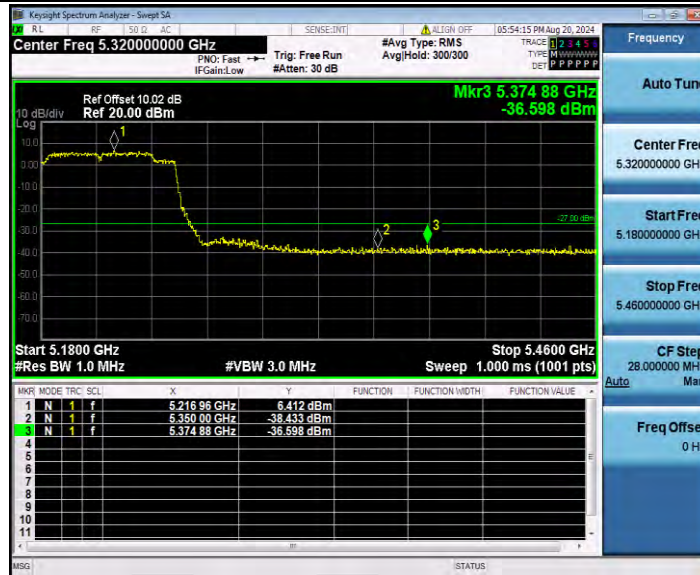
11AC20SISO_Ant1_High_5240



11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210



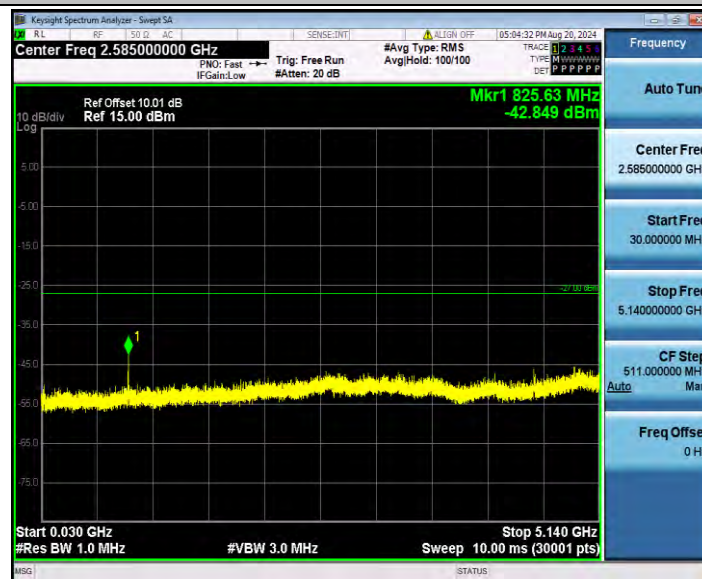
Appendix D.7: Conducted Spurious Emission

Test Result

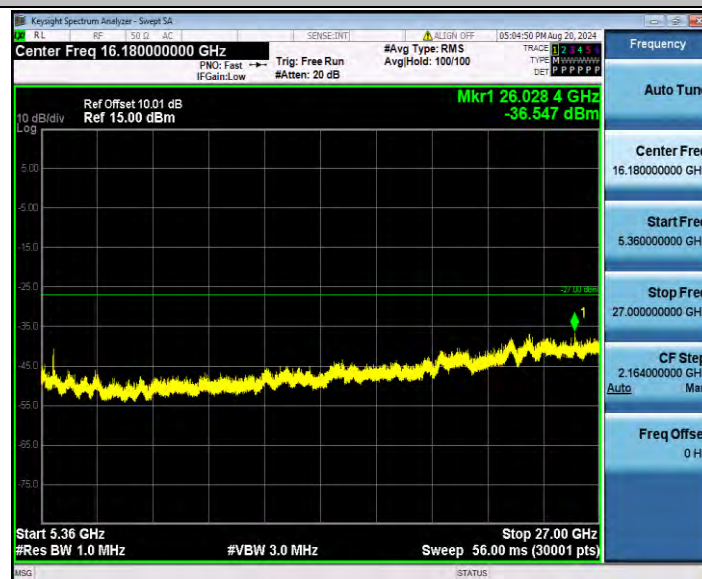
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	825.63	-42.85	≤-27	PASS
			5360~27000	26028.36	-36.55	≤-27	PASS
		5200	30~5140	4924.53	-46.4	≤-27	PASS
			5360~27000	25060.33	-37.65	≤-27	PASS
		5240	30~5140	4597.49	-45.96	≤-27	PASS
			5360~27000	26852.85	-37.44	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5009.35	-46.06	≤-27	PASS
			5360~27000	26973.31	-37.33	≤-27	PASS
		5200	30~5140	2597.6	-46.49	≤-27	PASS
			5360~27000	26565.76	-37.55	≤-27	PASS
		5240	30~5140	4949.06	-46.31	≤-27	PASS
			5360~27000	23505.86	-36.69	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	832.95	-42.55	≤-27	PASS
			5360~27000	26642.94	-37.13	≤-27	PASS
		5230	30~5140	5060.97	-46.03	≤-27	PASS
			5360~27000	26575.13	-37.24	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	4966.43	-45.42	≤-27	PASS
			5360~27000	24233.69	-36.33	≤-27	PASS
		5200	30~5140	5053.64	-46.16	≤-27	PASS
			5360~27000	24212.77	-36.78	≤-27	PASS
		5240	30~5140	3046.43	-45.51	≤-27	PASS
			5360~27000	25120.21	-36.94	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	826.48	-37.13	≤-27	PASS
			5360~27000	24279.85	-37.25	≤-27	PASS
		5230	30~5140	825.63	-43.95	≤-27	PASS
			5360~27000	24786.23	-37.31	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	1751.22	-42.2	≤-27	PASS
			5360~27000	24199.78	-37.46	≤-27	PASS

Test Graphs

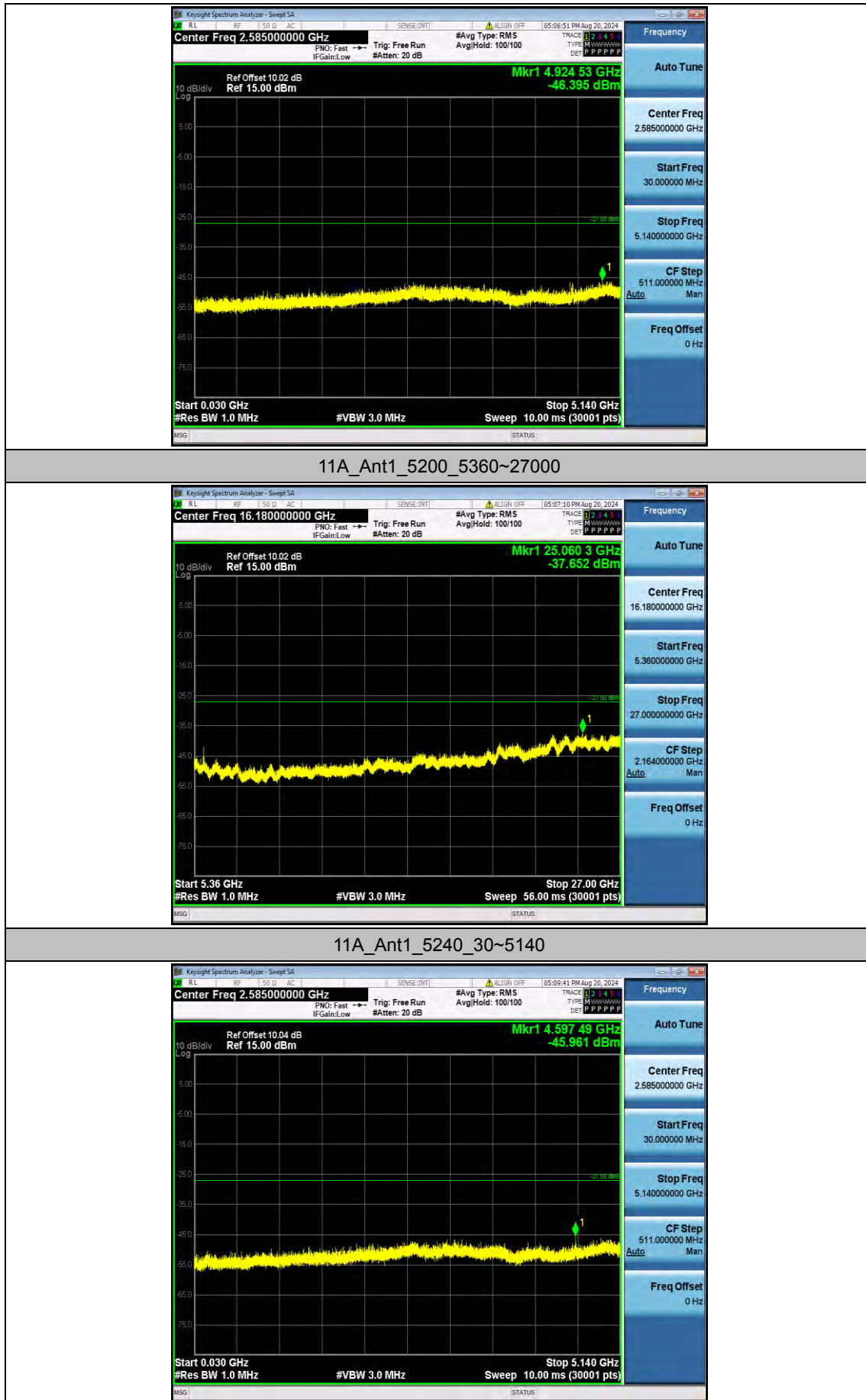
11A_Ant1_5180_30~5140



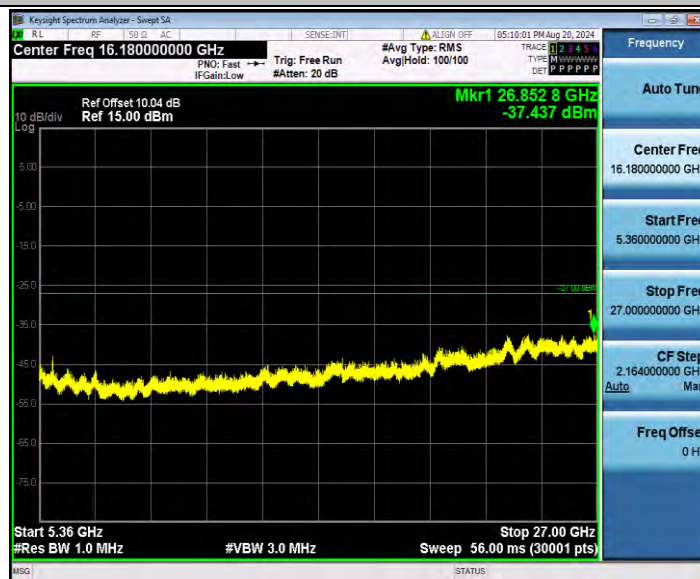
11A_Ant1_5180_5360~27000



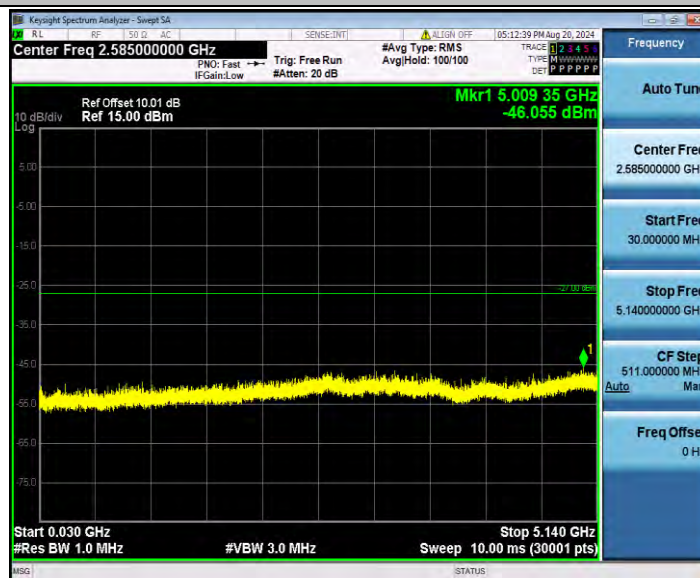
11A_Ant1_5200_30~5140



11A_Ant1_5240_5360~27000



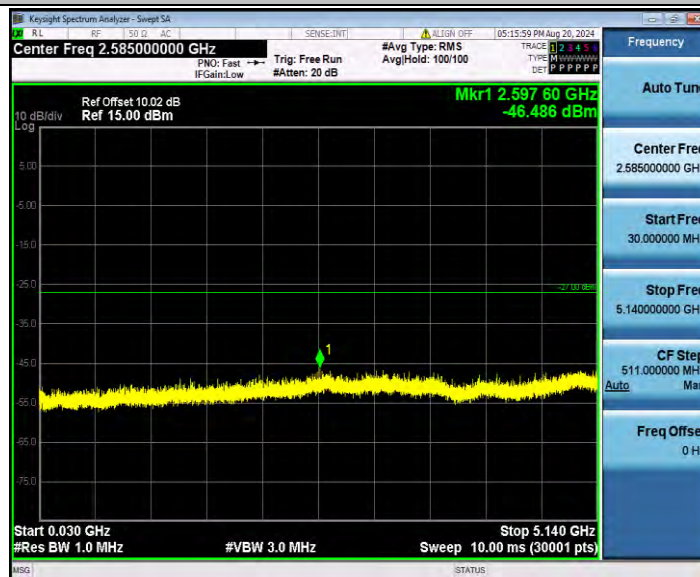
11N20SISO_Ant1_5180_30~5140



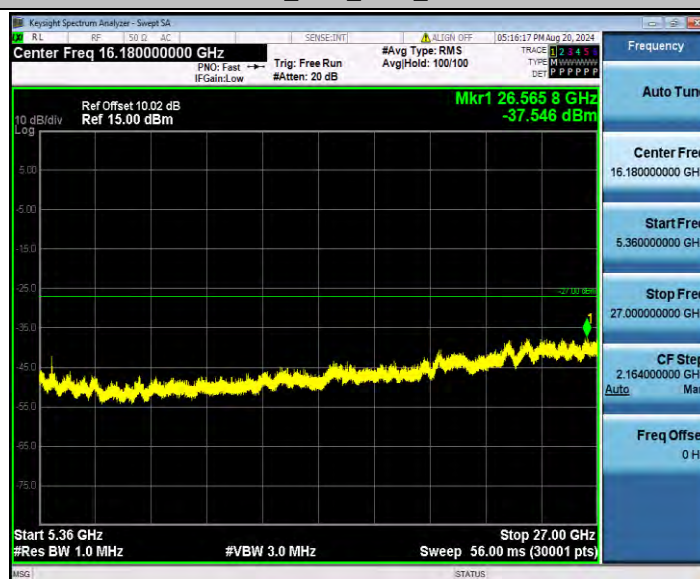
11N20SISO_Ant1_5180_5360~27000



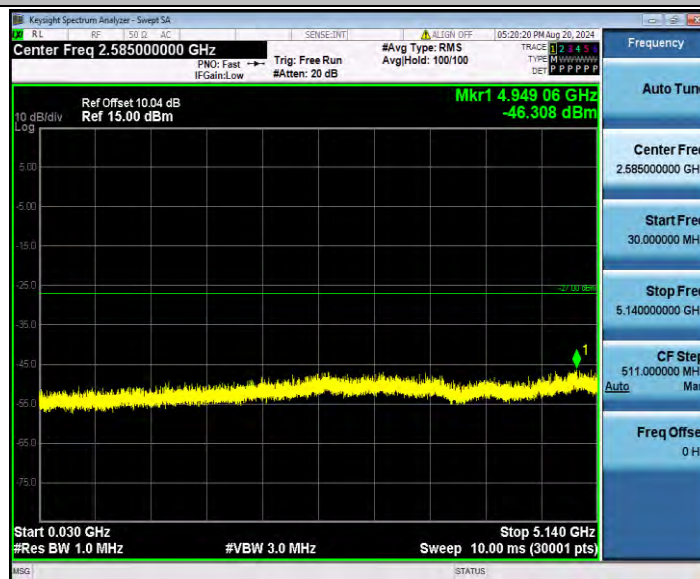
11N20SISO_Ant1_5200_30~5140



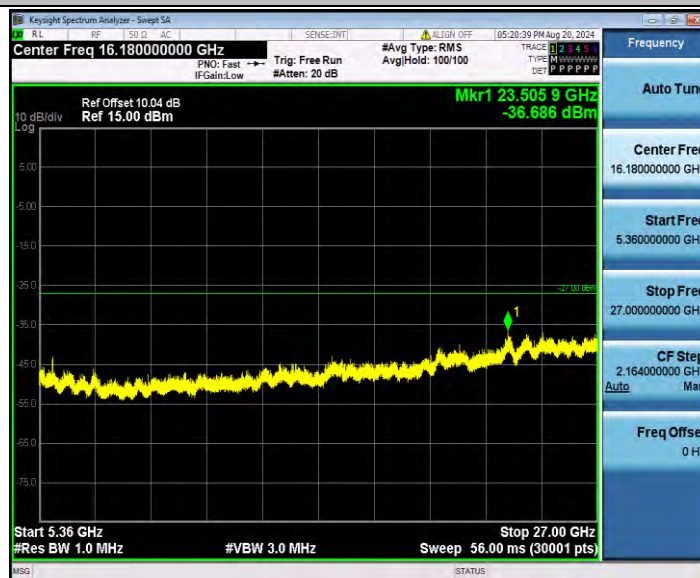
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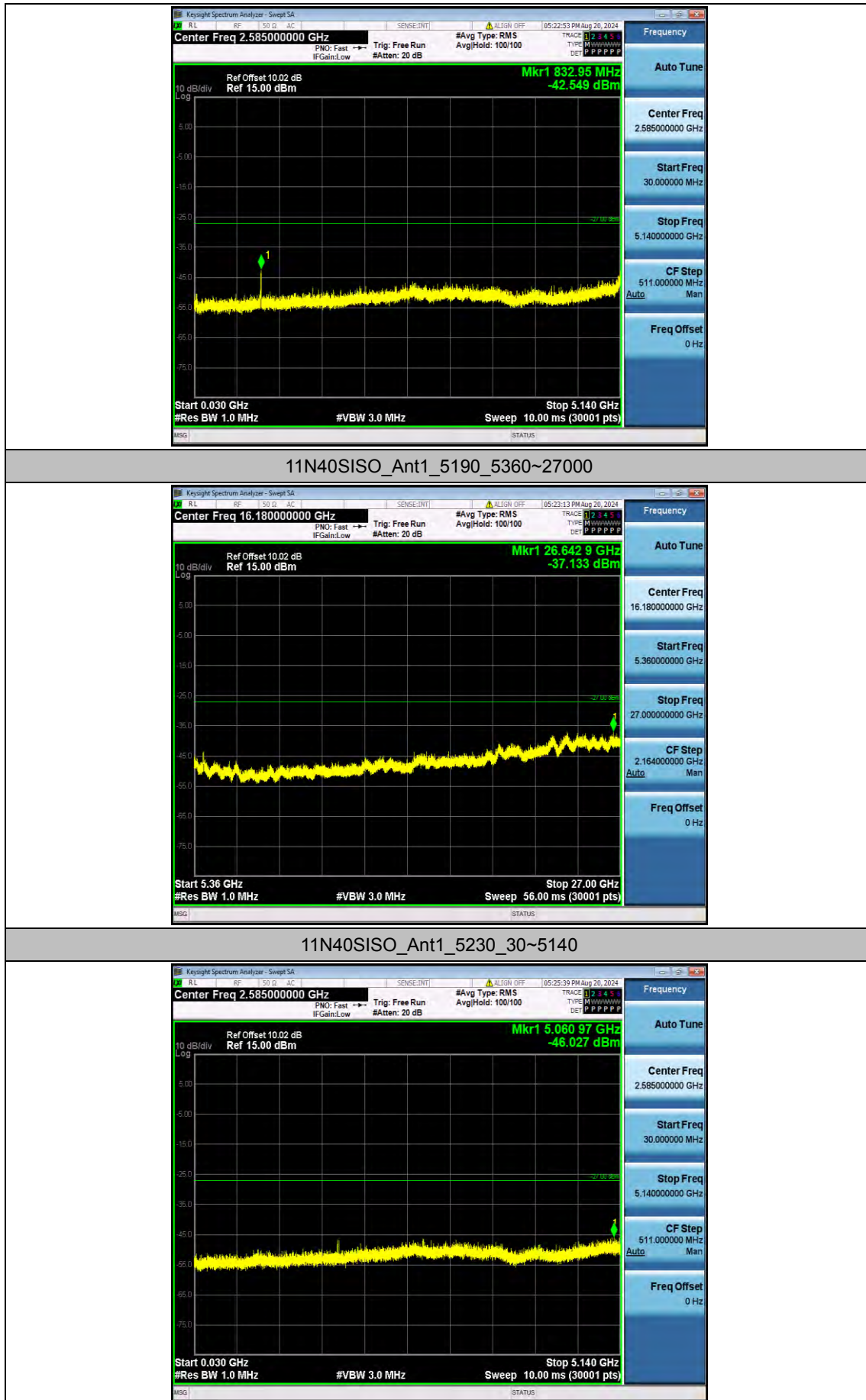
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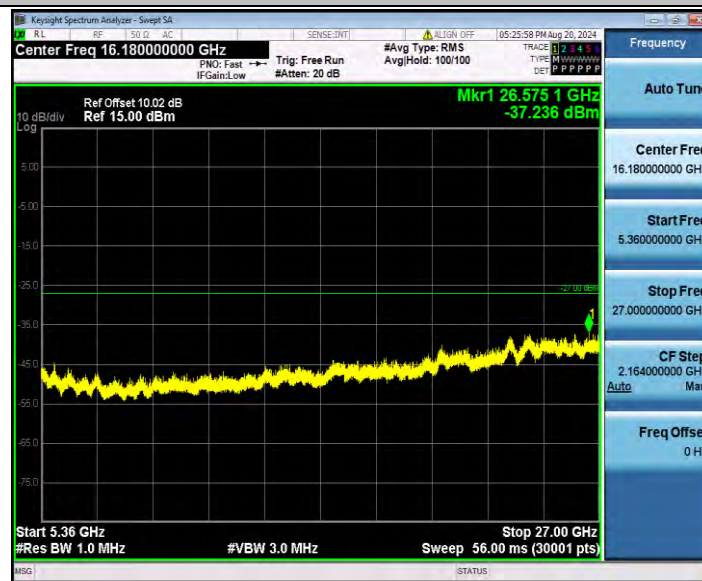
11N20SISO_Ant1_5240_5360~27000



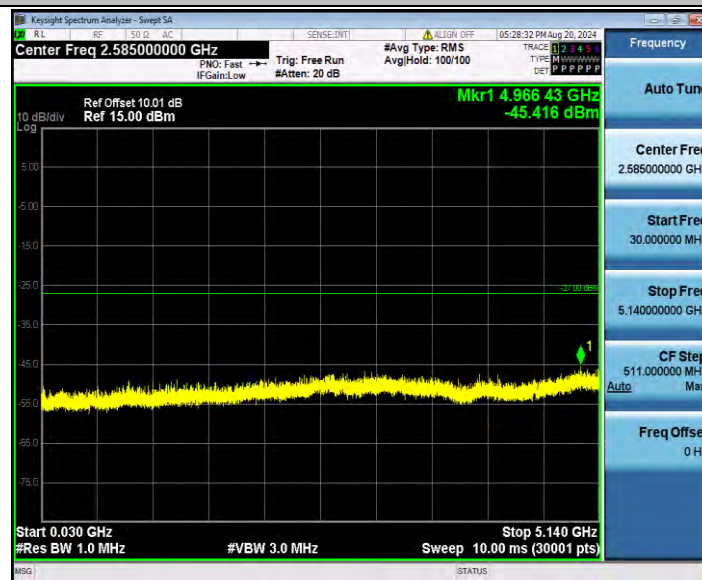
11N40SISO_Ant1_5190_30~5140



11N40SISO_Ant1_5230_5360~27000



11AC20SISO_Ant1_5180_30~5140



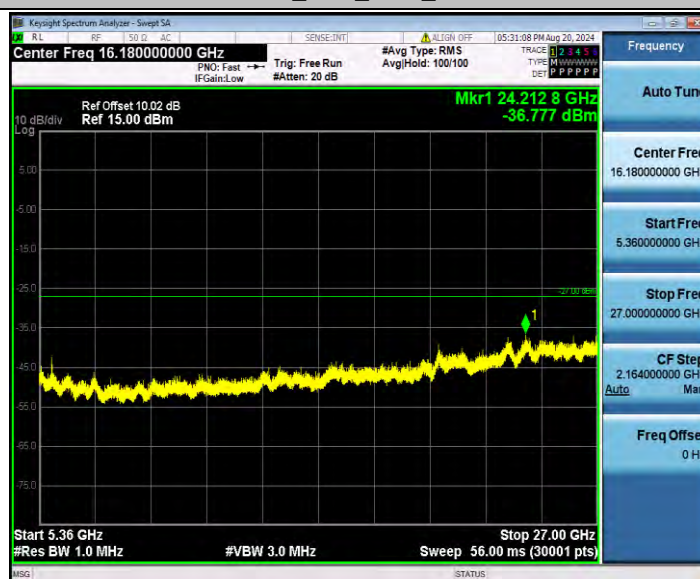
11AC20SISO_Ant1_5180_5360~27000



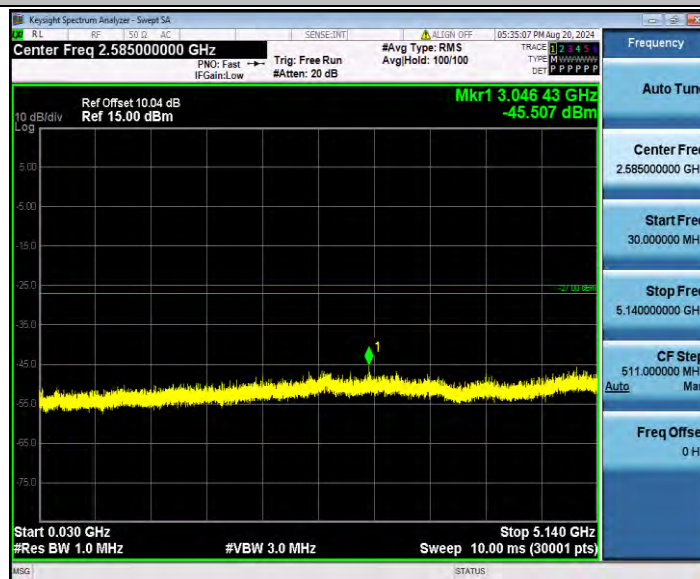
11AC20SISO_Ant1_5200_30~5140



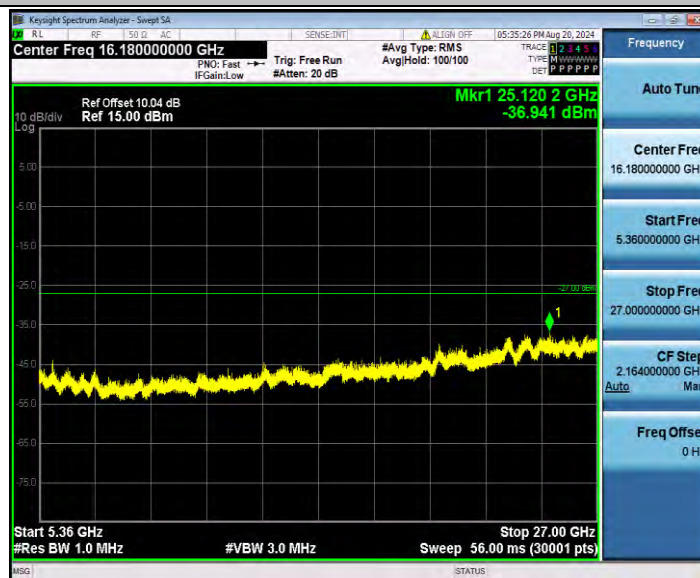
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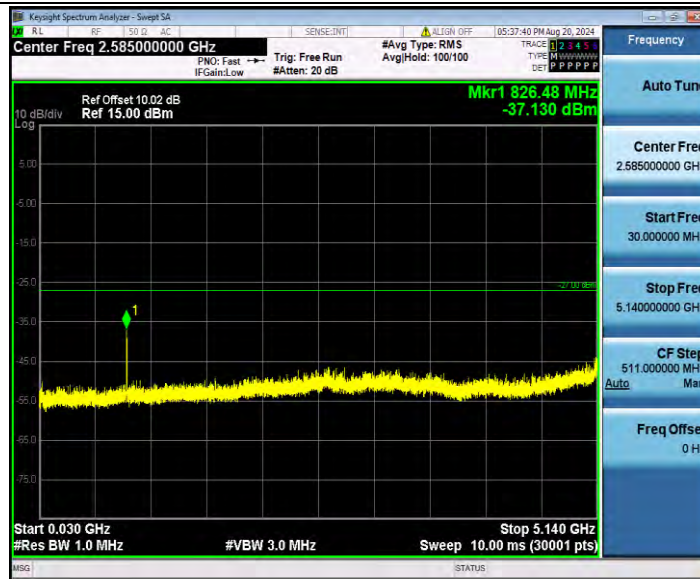
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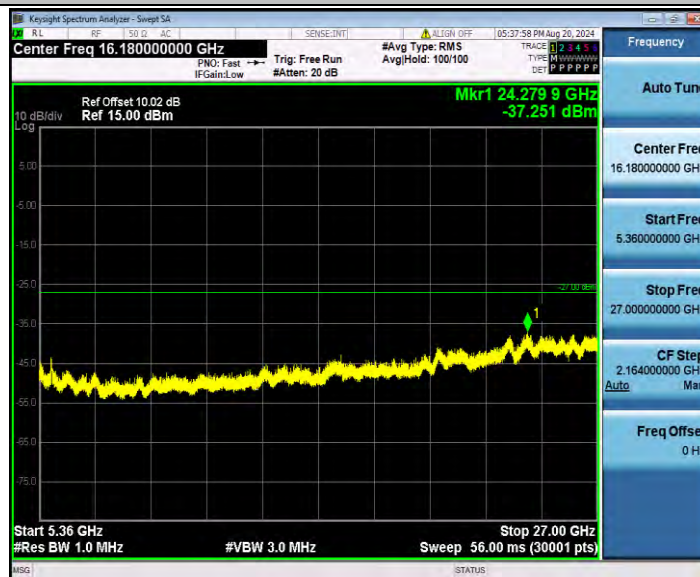
11AC20SISO_Ant1_5240_5360~27000



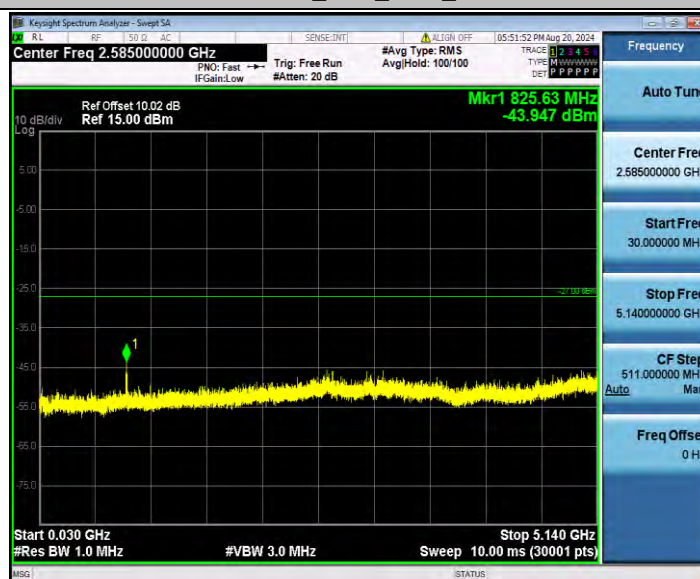
11AC40SISO_Ant1_5190_30~5140



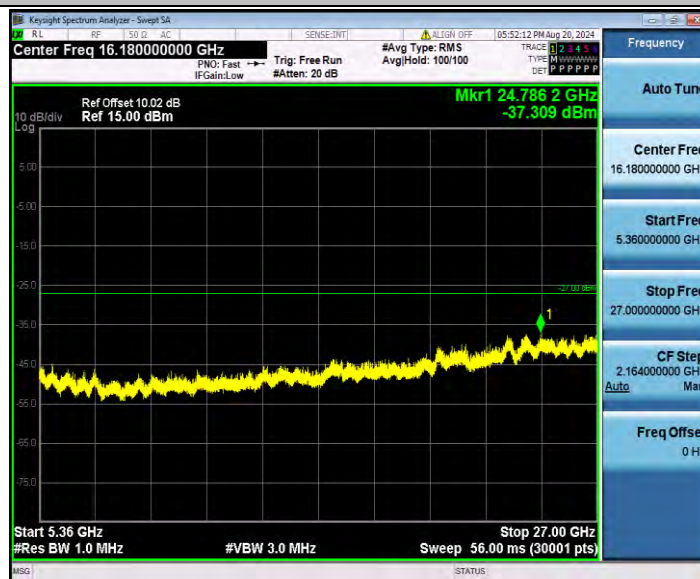
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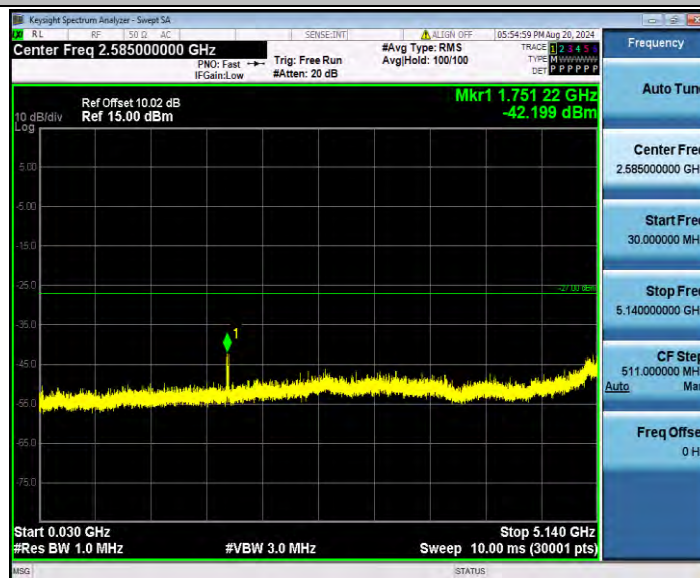
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11AC40SISO_Ant1_5230_5360~27000



11AC80SISO_Ant1_5210_30~5140



11AC80SISO_Ant1_5210_5360~27000

