

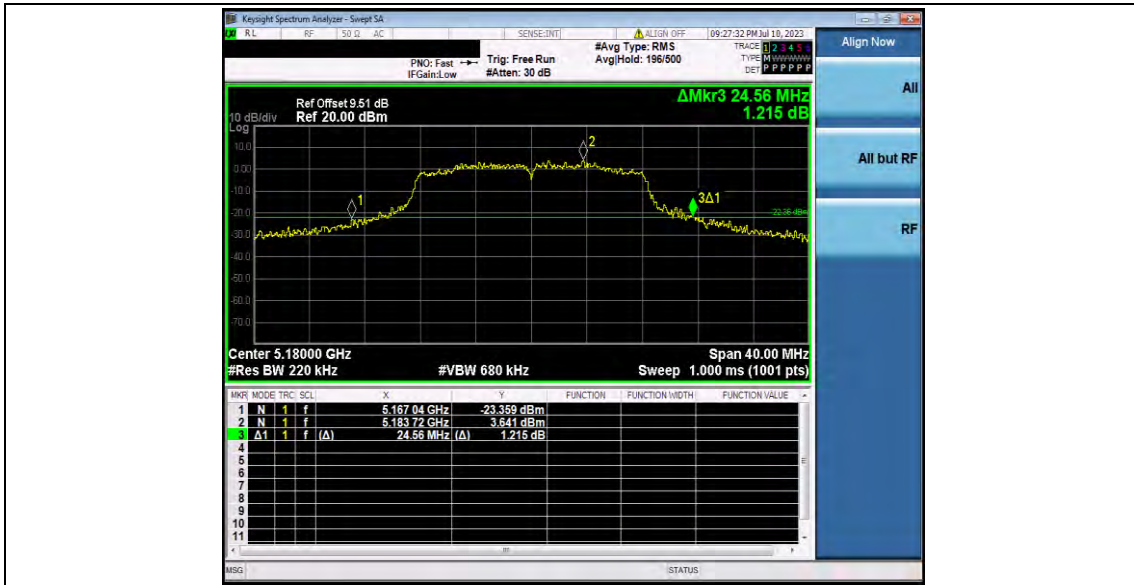
Case No. : <u>GTS20230628010-1-4</u>
Ambient Condition: <u>23</u> °C, <u>48</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.7.10</u> Test Engineer: <u>Jenny zeng</u>

Appendix D.1: Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5180	24.560	5167.040	5191.600	---	---
		5200	24.840	5187.880	5212.720	---	---
		5240	28.040	5226.080	5254.120	---	---
11N20SISO	Ant2	5180	25.360	5168.240	5193.600	---	---
		5200	25.600	5187.880	5213.480	---	---
		5240	27.560	5226.440	5254.000	---	---
11N40SISO	Ant2	5190	44.720	5167.680	5212.400	---	---
		5230	58.480	5206.960	5265.440	---	---
11AC20SISO	Ant2	5180	26.240	5166.960	5193.200	---	---
		5200	24.000	5188.440	5212.440	---	---
		5240	27.080	5227.280	5254.360	---	---
11AC40SISO	Ant2	5190	44.800	5167.680	5212.480	---	---
		5230	49.200	5207.760	5256.960	---	---
11AC80SISO	Ant2	5210	115.840	5163.120	5278.960	---	---

Test Graphs



11A_Ant2_5180



11A_Ant2_5200



11A_Ant2_5240



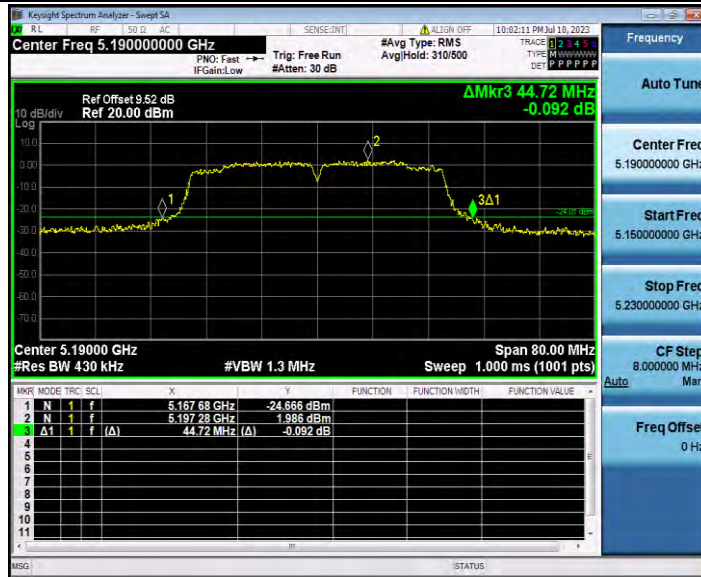
11N20SISO_Ant2_5180



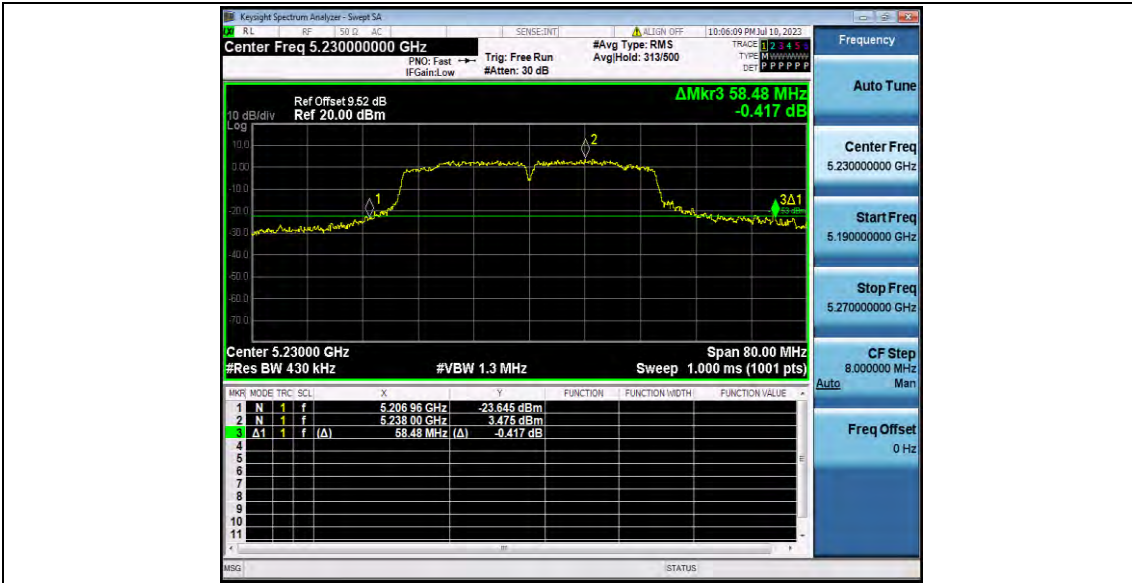
11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



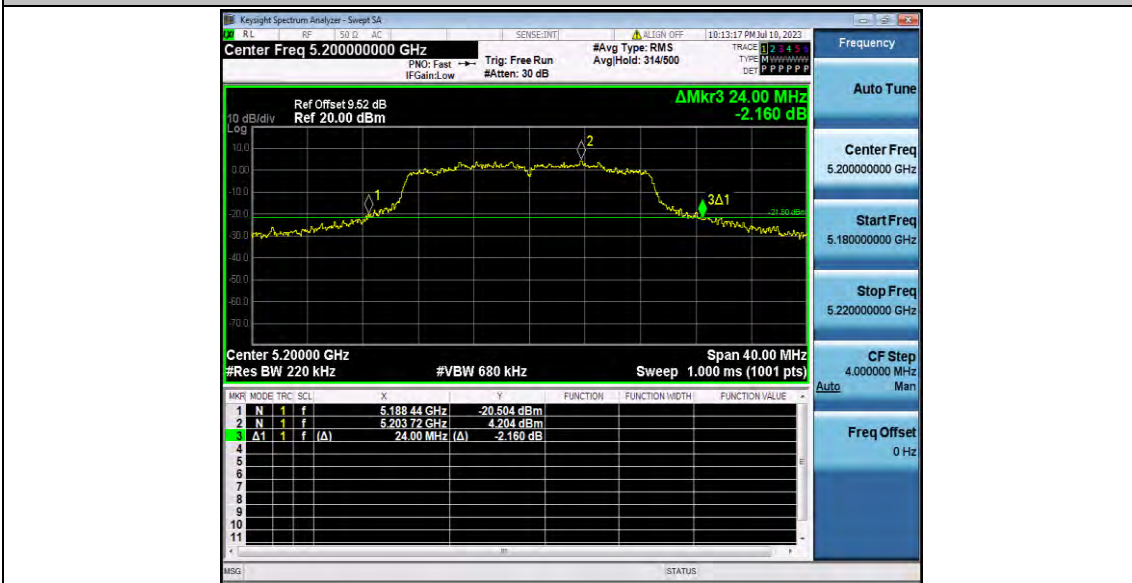
11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



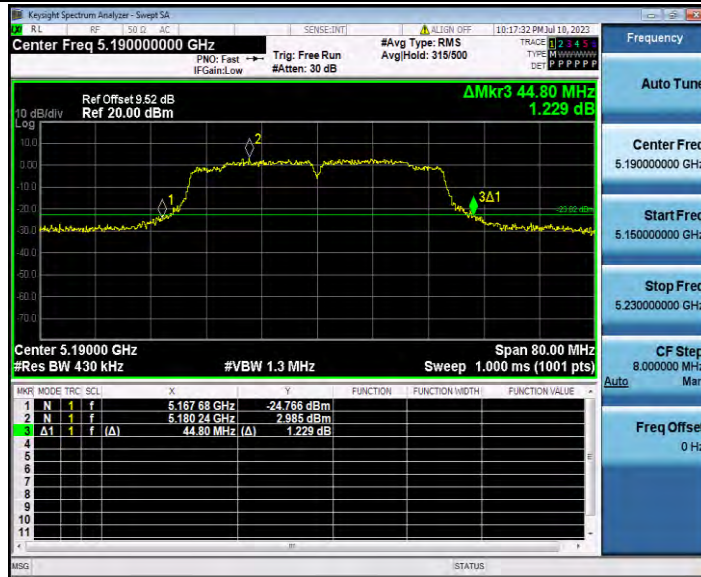
11AC20SISO_Ant2_5180



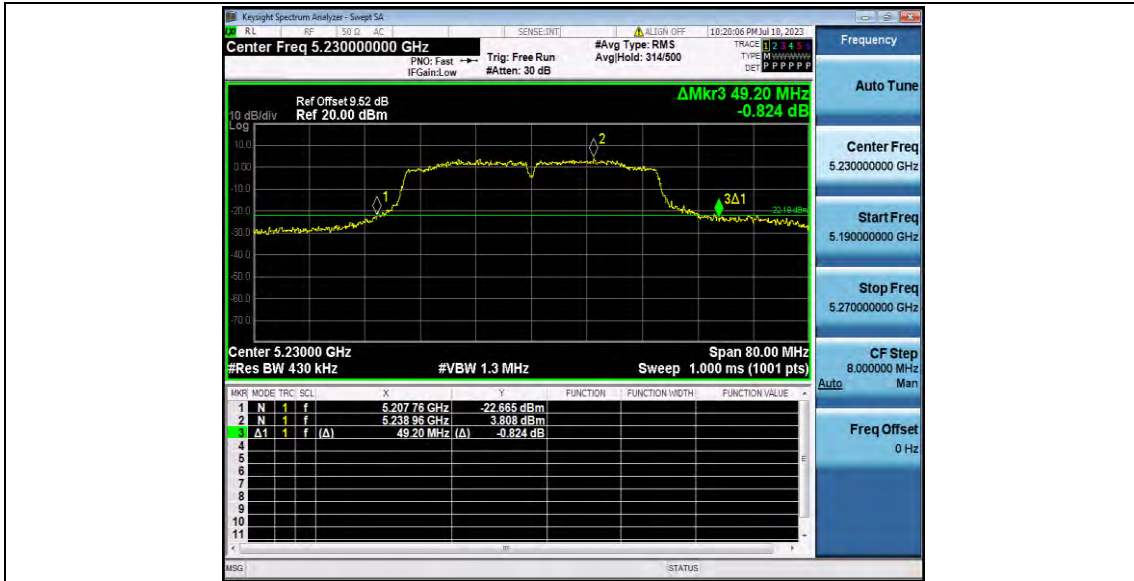
11AC20SISO_Ant2_5200



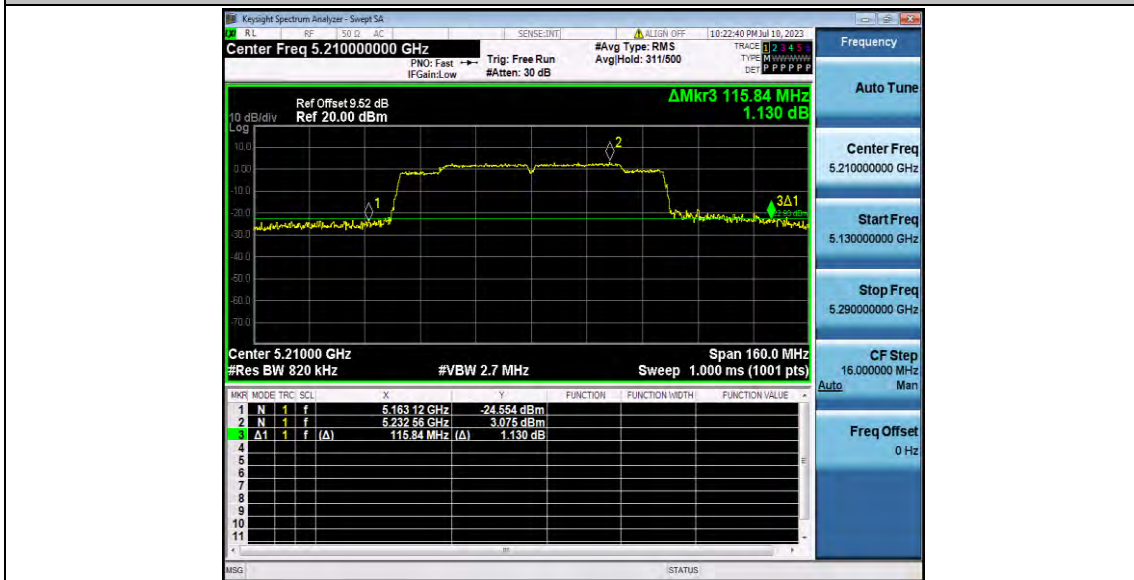
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210

Appendix D.2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5180	17.166	5171.432	5188.598	---	---
		5200	17.257	5191.417	5208.674	---	---
		5240	17.665	5231.300	5248.965	---	---
11N20SISO	Ant2	5180	18.221	5170.918	5189.139	---	---
		5200	18.323	5190.884	5209.207	---	---
		5240	18.568	5230.798	5249.366	---	---
11N40SISO	Ant2	5190	36.567	5171.760	5208.327	---	---
		5230	36.547	5211.881	5248.428	---	---
11AC20SISO	Ant2	5180	18.246	5170.902	5189.148	---	---
		5200	18.293	5190.886	5209.179	---	---
		5240	18.628	5230.787	5249.415	---	---
11AC40SISO	Ant2	5190	36.387	5171.836	5208.223	---	---
		5230	36.708	5211.812	5248.520	---	---
11AC80SISO	Ant2	5210	75.910	5172.322	5248.232	---	---

Test Graphs



11A_Ant2_5180



11A_Ant2_5200



11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



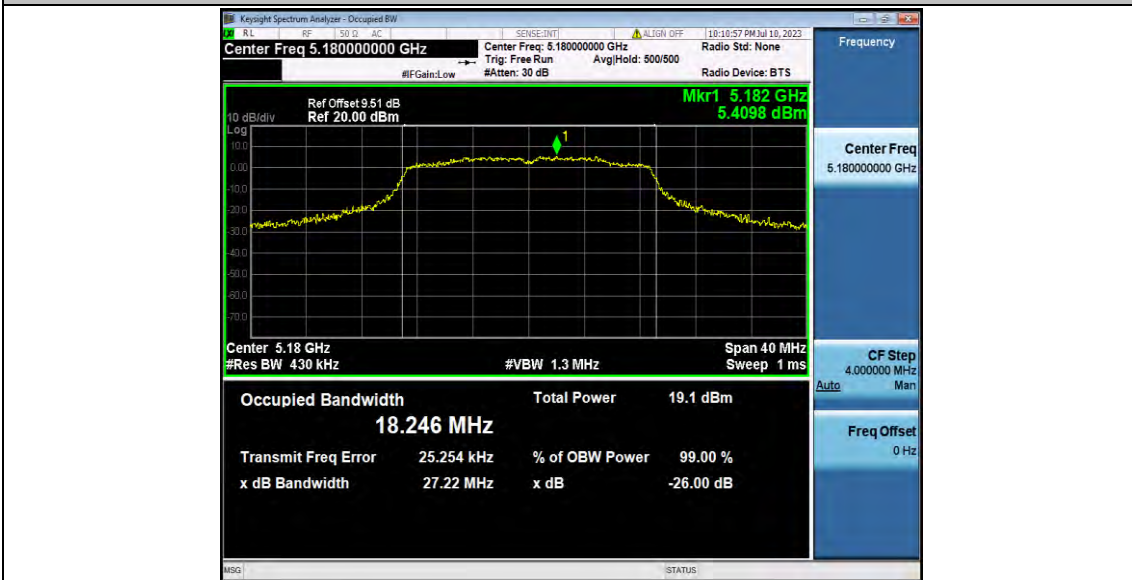
11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



11AC20SISO_Ant2_5200



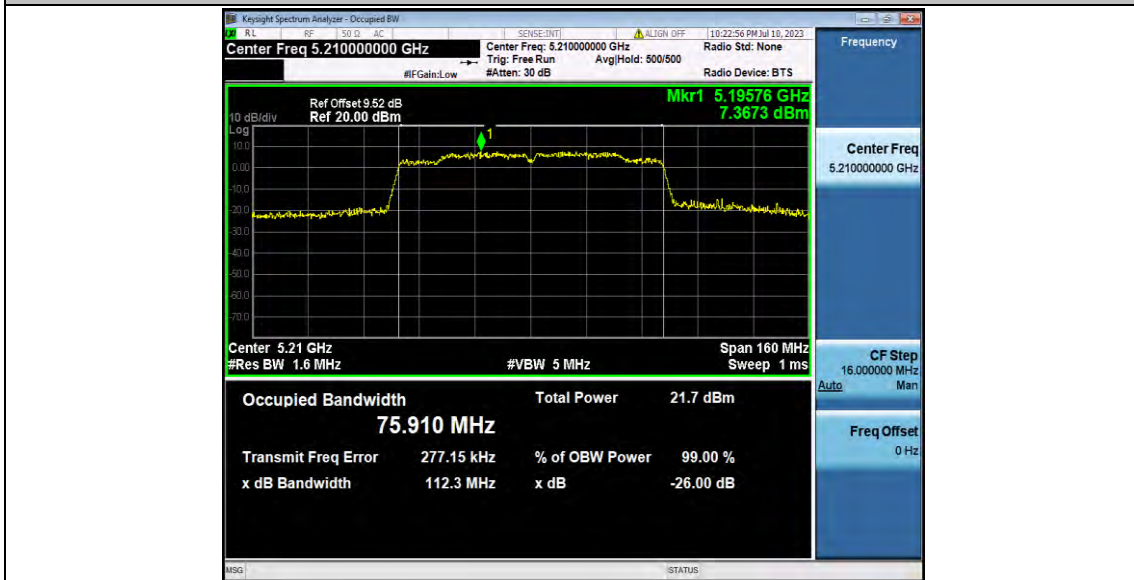
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



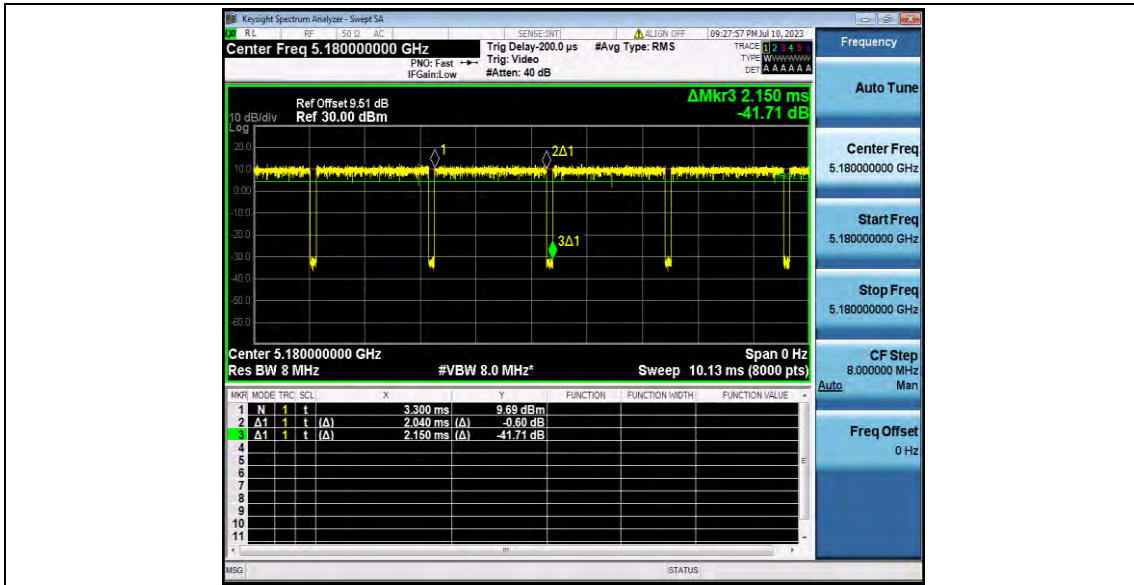
11AC80SISO_Ant2_5210

Appendix D.3: Duty Cycle

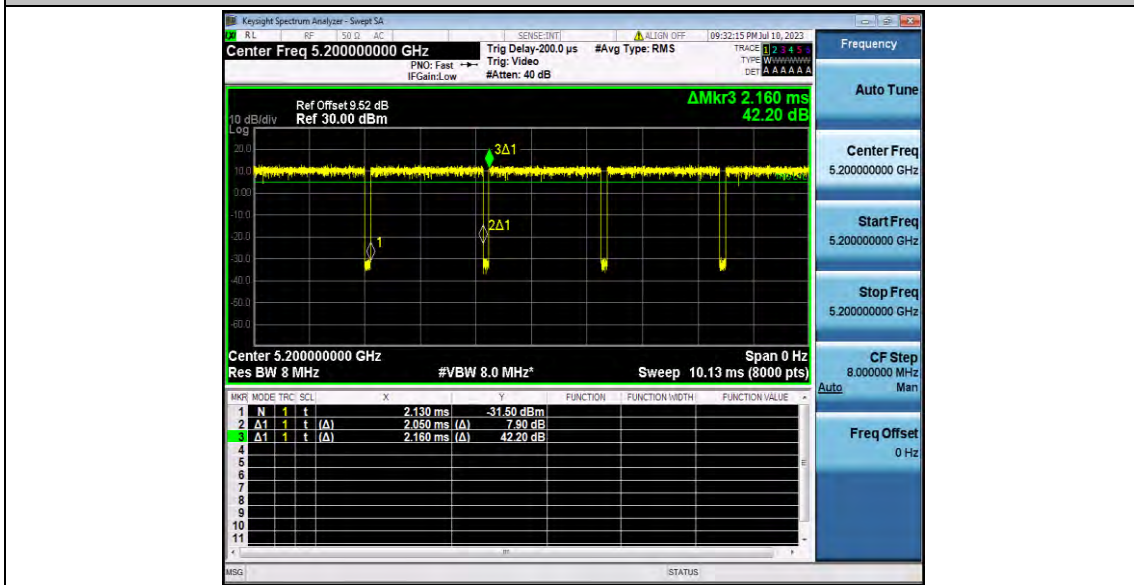
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant2	5180	2.04	2.15	94.88
		5200	2.05	2.16	94.91
		5240	2.05	2.16	94.91
11N20SISO	Ant2	5180	1.91	1.99	95.98
		5200	1.91	1.99	95.98
		5240	1.91	2.00	95.50
11N40SISO	Ant2	5190	0.93	1.10	84.55
		5230	0.93	1.10	84.55
11AC20SISO	Ant2	5180	1.92	2.00	96.00
		5200	1.92	2.00	96.00
		5240	1.91	2.00	95.50
11AC40SISO	Ant2	5190	0.94	1.11	84.68
		5230	0.95	1.12	84.82
11AC80SISO	Ant2	5210	0.46	0.55	83.64

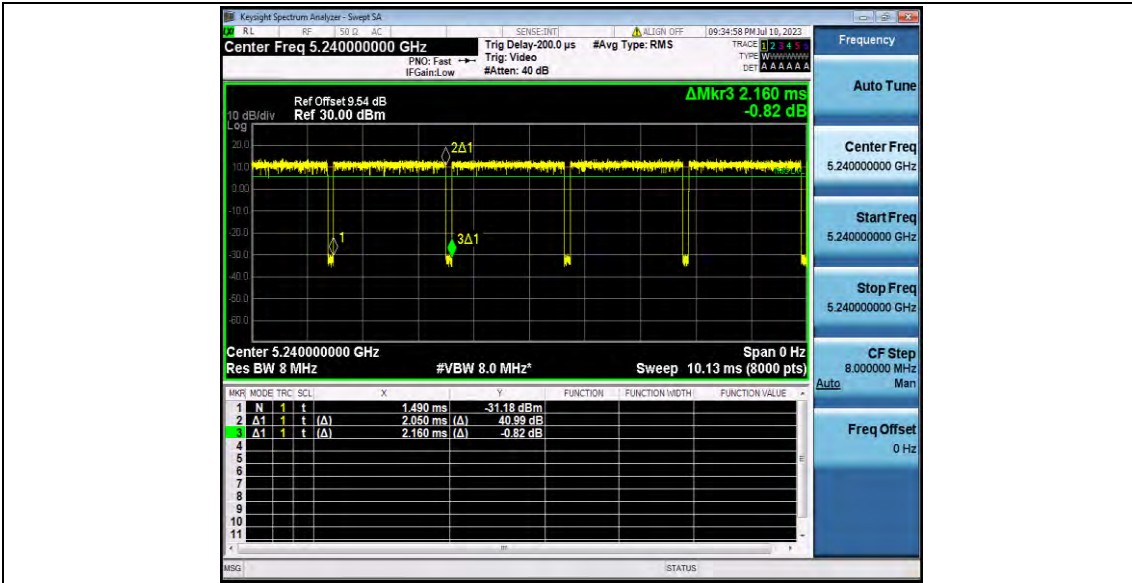
Test Graphs



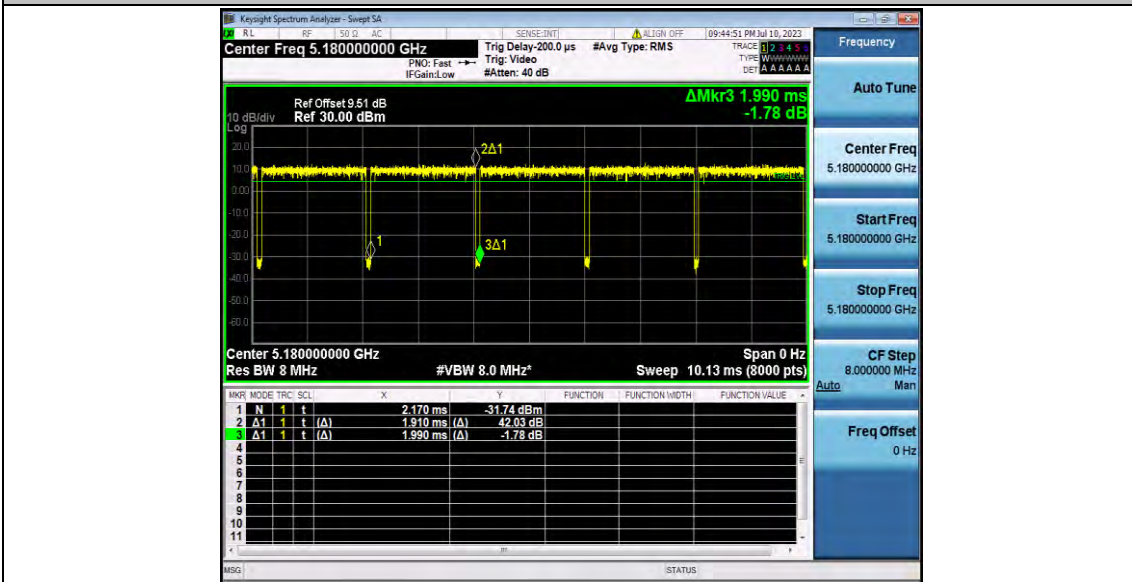
11A_Ant2_5180



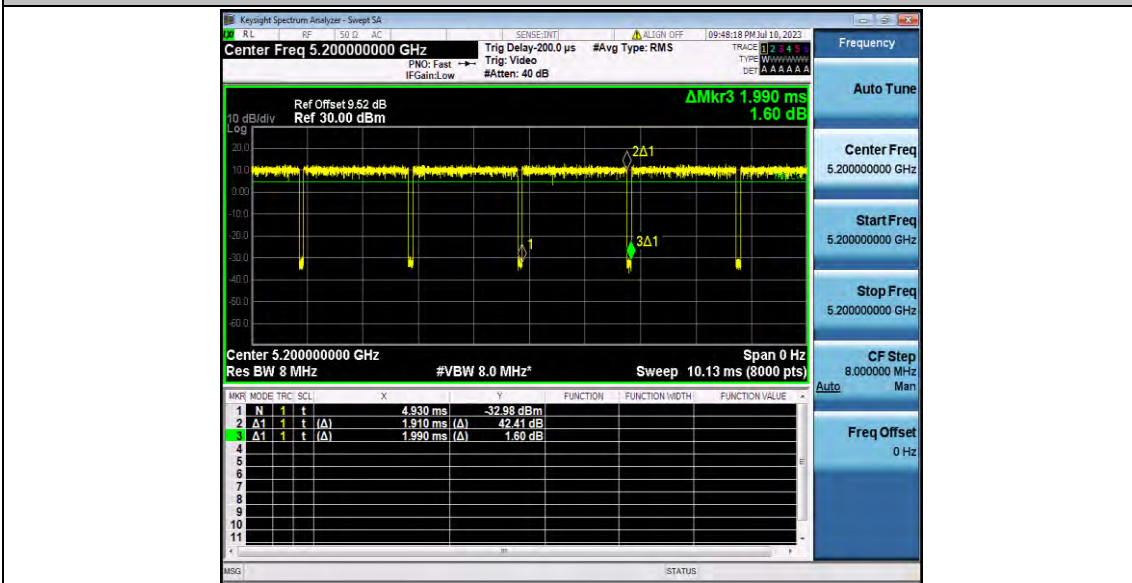
11A_Ant2_5200



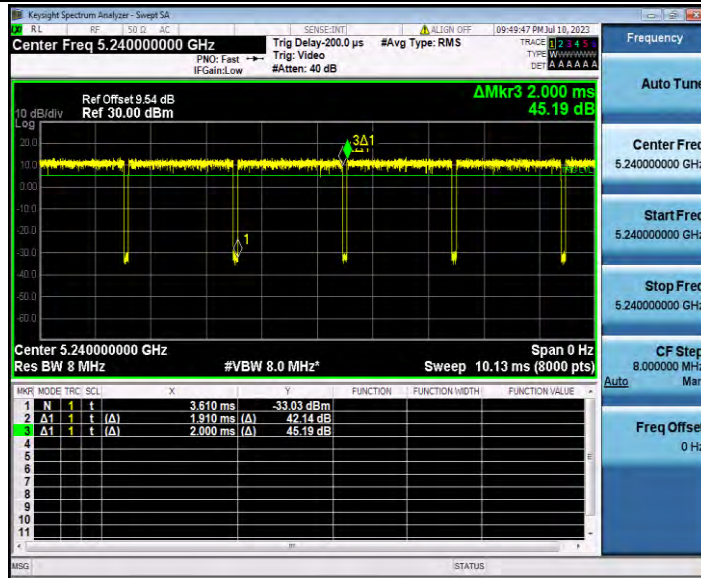
11A_Ant2_5240



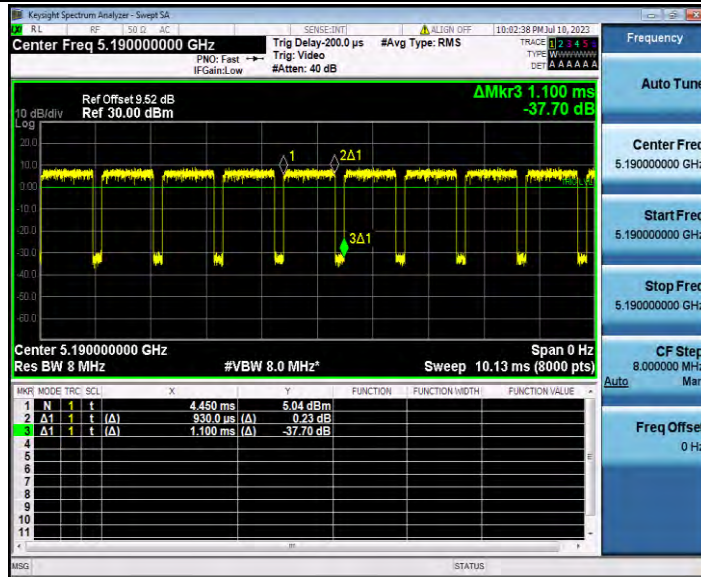
11N20SISO_Ant2_5180



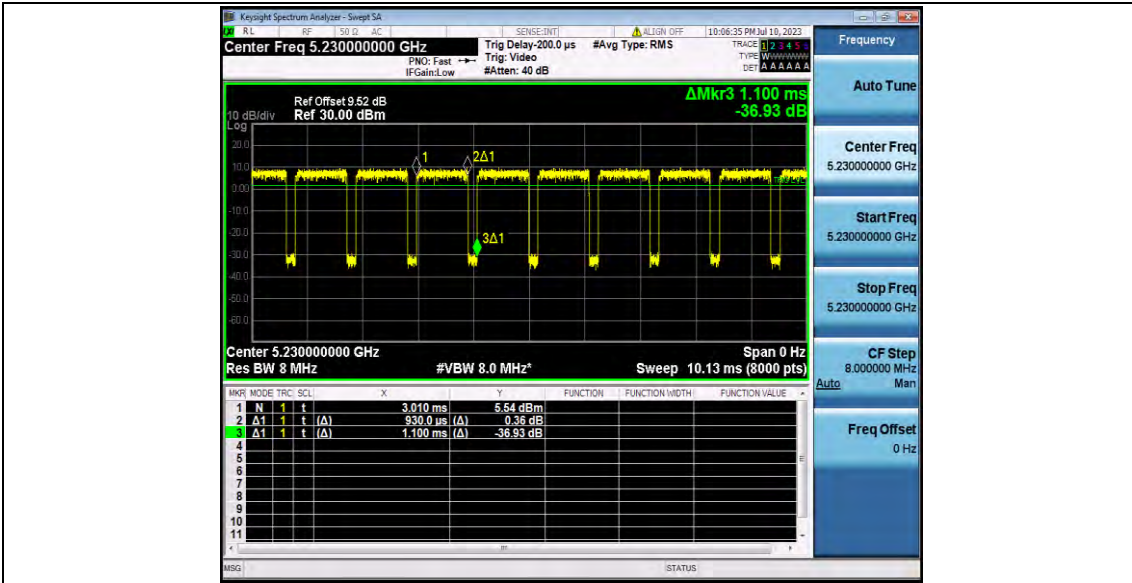
11N20SISO_Ant2_5200



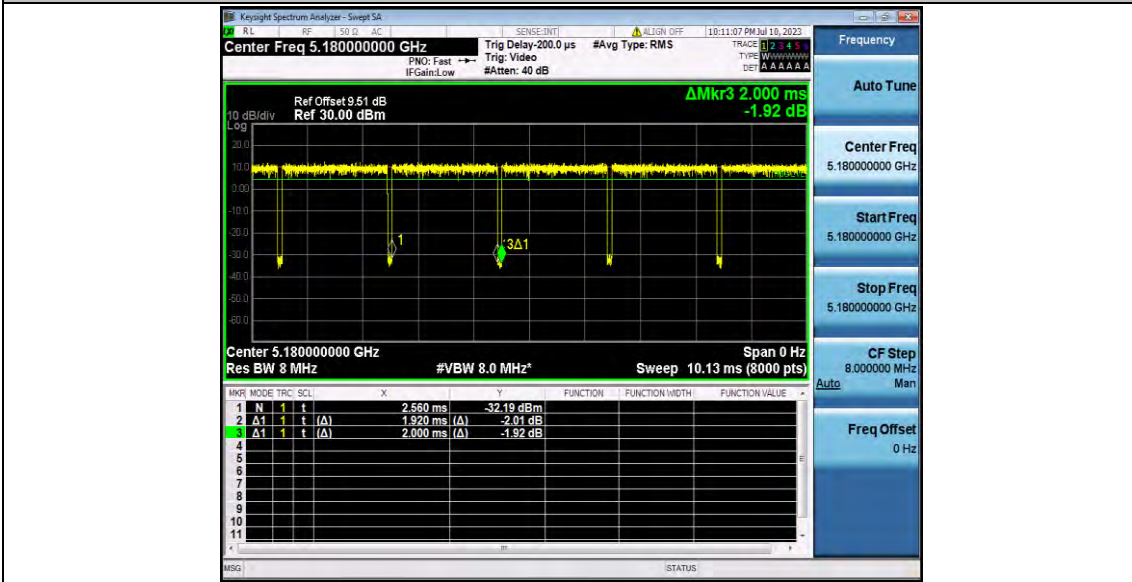
11N20SISO_Ant2_5240



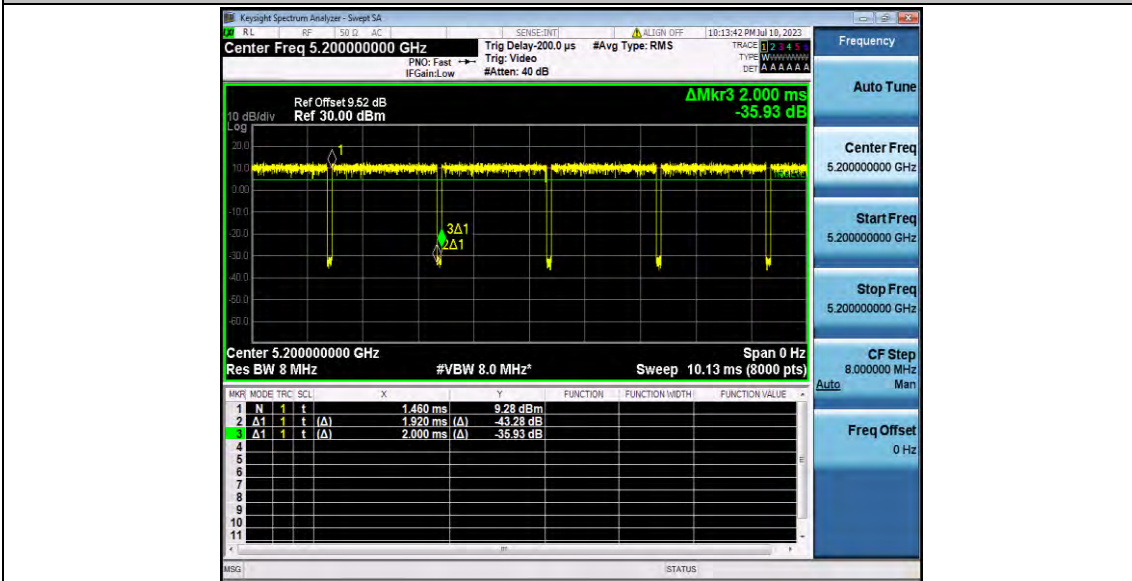
11N40SISO_Ant2_5190



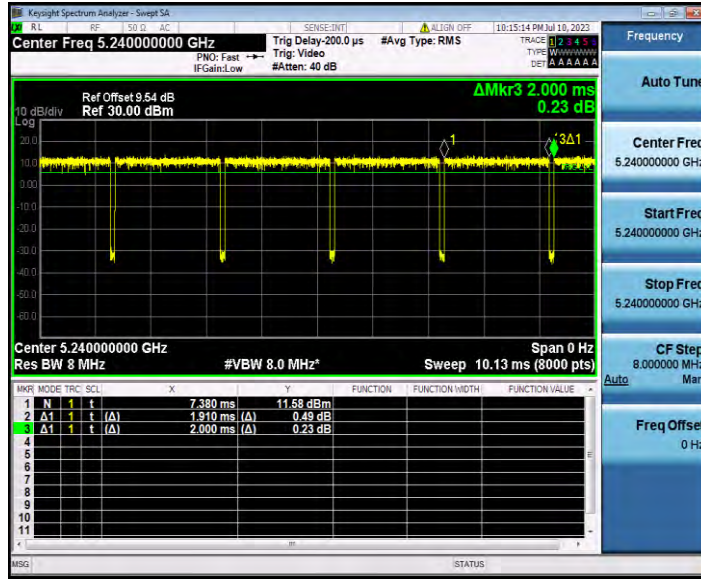
11N40SISO_Ant2_5230



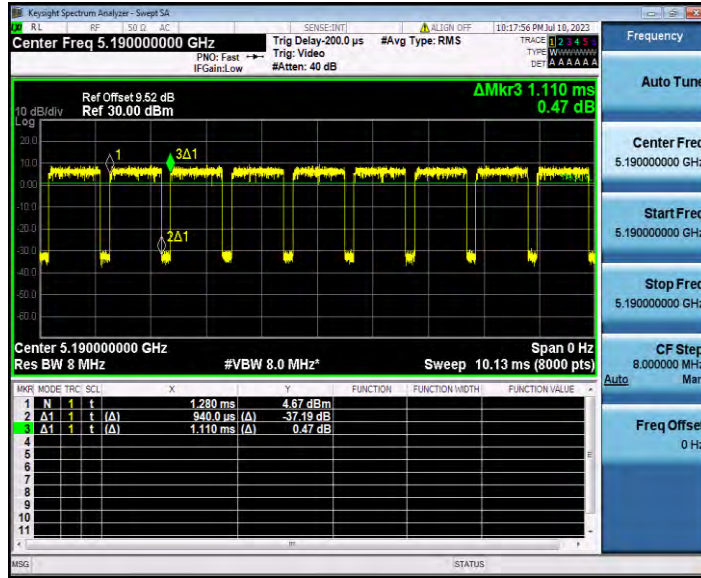
11AC20SISO_Ant2_5180



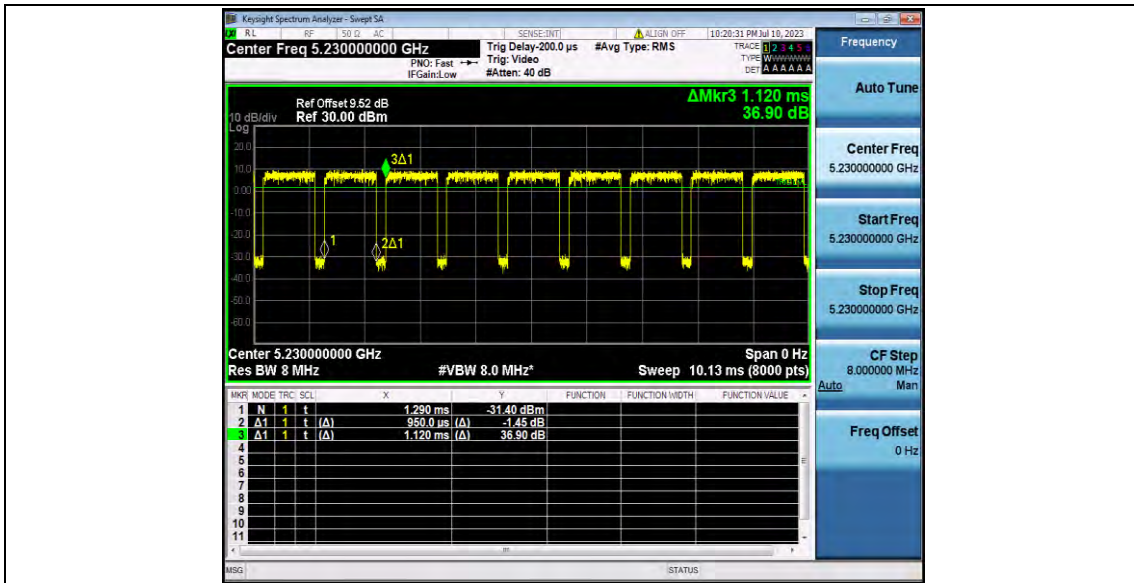
11AC20SISO_Ant2_5200



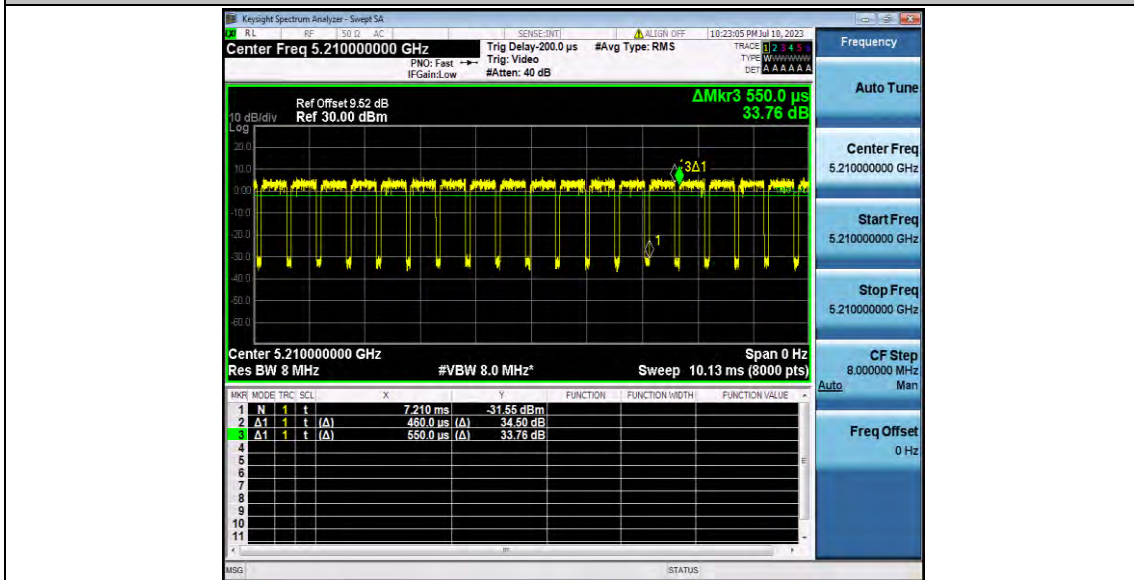
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210

Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	12.00	94.88	0.23	12.23	≤23.98	PASS
		5200	12.98	94.91	0.23	13.21	≤23.98	PASS
		5240	13.60	94.91	0.23	13.83	≤23.98	PASS
11N20SISO	Ant2	5180	12.11	95.98	0.18	12.29	≤23.98	PASS
		5200	12.67	95.98	0.18	12.85	≤23.98	PASS
		5240	13.38	95.50	0.20	13.58	≤23.98	PASS
11N40SISO	Ant2	5190	11.90	84.55	0.73	12.63	≤23.98	PASS
		5230	12.77	84.55	0.73	13.50	≤23.98	PASS
11AC20SISO	Ant2	5180	12.13	96.00	0.18	12.31	≤23.98	PASS
		5200	12.79	96.00	0.18	12.97	≤23.98	PASS
		5240	13.39	95.50	0.20	13.59	≤23.98	PASS
11AC40SISO	Ant2	5190	12.04	84.68	0.72	12.76	≤23.98	PASS
		5230	12.70	84.82	0.72	13.42	≤23.98	PASS
11AC80SISO	Ant2	5210	12.02	83.64	0.78	12.80	≤23.98	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Appendix D.5: Maximum power spectral density

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant2	5180	1.53	≤11.00	PASS
		5200	2.37	≤11.00	PASS
		5240	3.49	≤11.00	PASS
11N20SISO	Ant2	5180	1.33	≤11.00	PASS
		5200	1.91	≤11.00	PASS
		5240	3.03	≤11.00	PASS
11N40SISO	Ant2	5190	-0.87	≤11.00	PASS
		5230	-0.28	≤11.00	PASS
11AC20SISO	Ant2	5180	1.33	≤11.00	PASS
		5200	2.43	≤11.00	PASS
		5240	2.7	≤11.00	PASS
11AC40SISO	Ant2	5190	-0.71	≤11.00	PASS
		5230	-0.26	≤11.00	PASS
11AC80SISO	Ant2	5210	-3.95	≤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



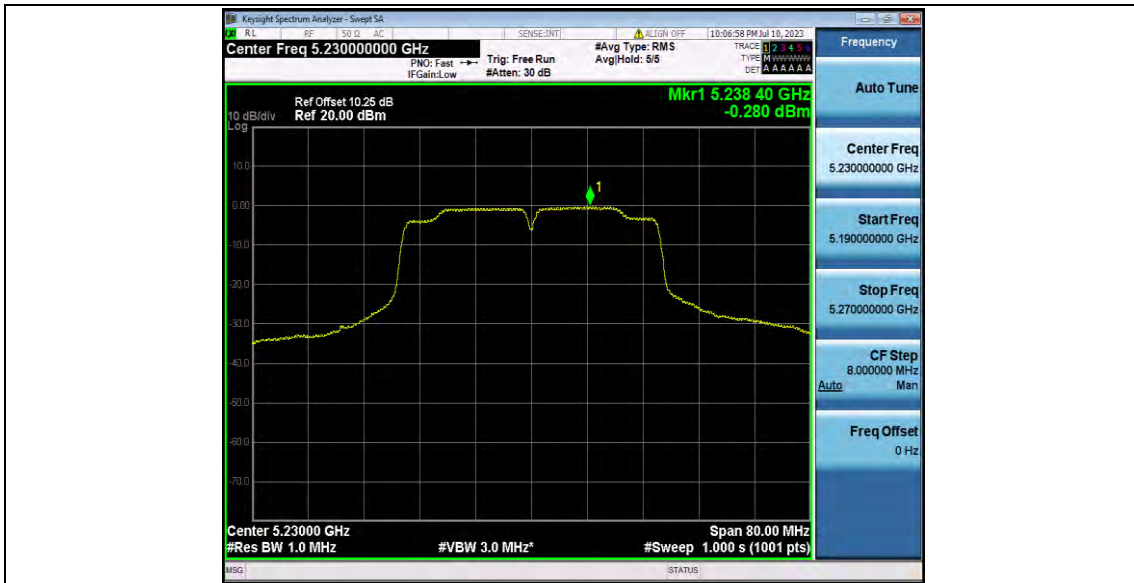
11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



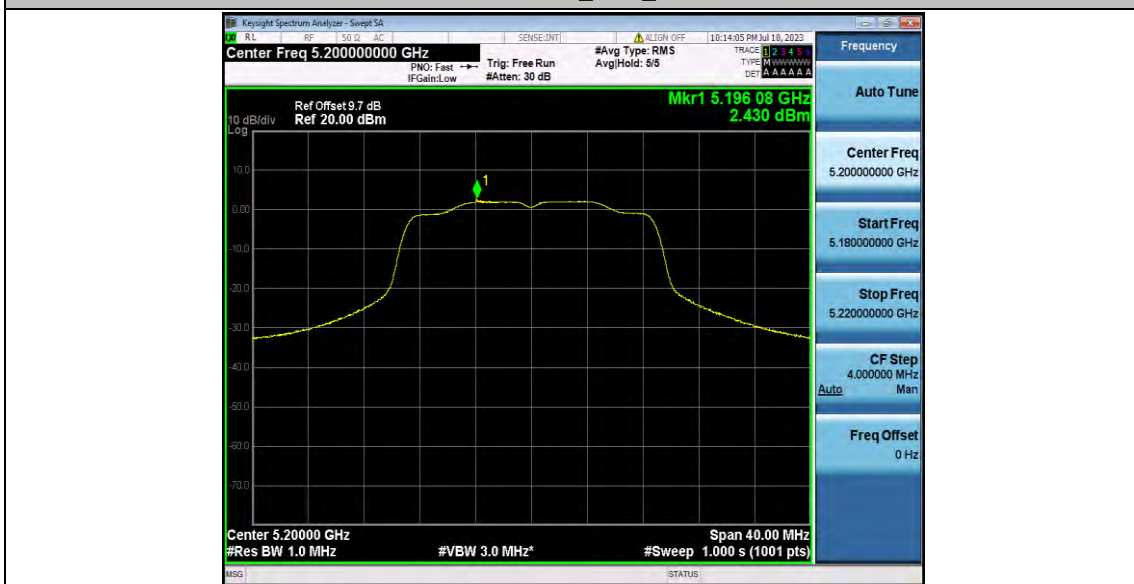
11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



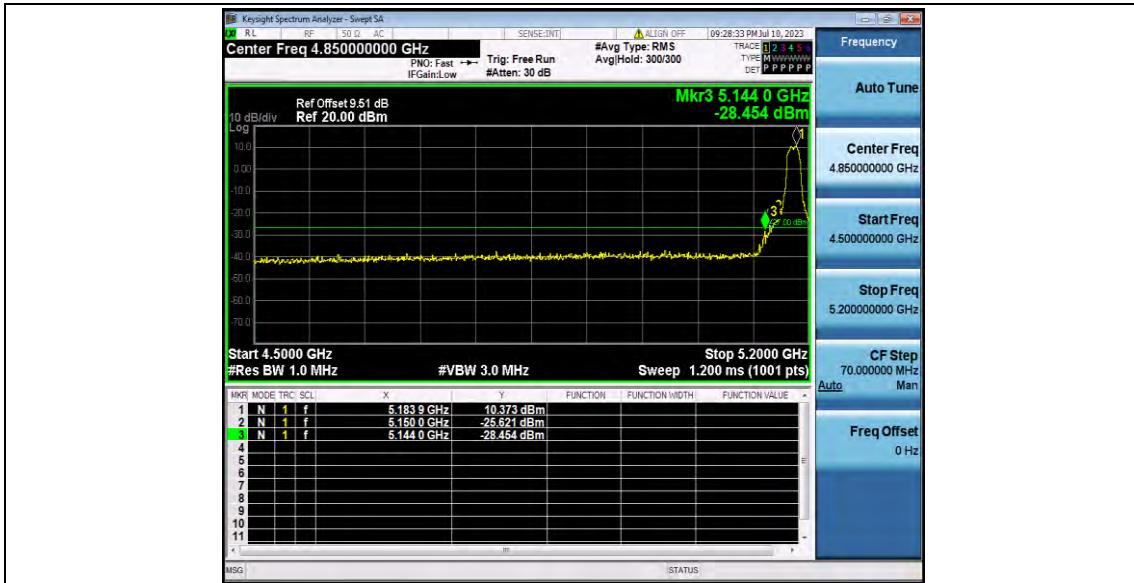
11AC80SISO_Ant2_5210

Appendix D.6: Band edge measurements

Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant2	Low	5180	-28.45	≤ -27	PASS
		High	5240	-37.74	≤ -27	PASS
11N20SISO	Ant2	Low	5180	-37.88	≤ -27	PASS
		High	5240	-37.9	≤ -27	PASS
11N40SISO	Ant2	Low	5190	-37.8	≤ -27	PASS
		High	5230	-37.93	≤ -27	PASS
11AC20SISO	Ant2	Low	5180	-37.91	≤ -27	PASS
		High	5240	-37.68	≤ -27	PASS
11AC40SISO	Ant2	Low	5190	-38	≤ -27	PASS
		High	5230	-37.58	≤ -27	PASS
11AC80SISO	Ant2	Low	5210	-35.6	≤ -27	PASS
		High	5210	-35.71	≤ -27	PASS

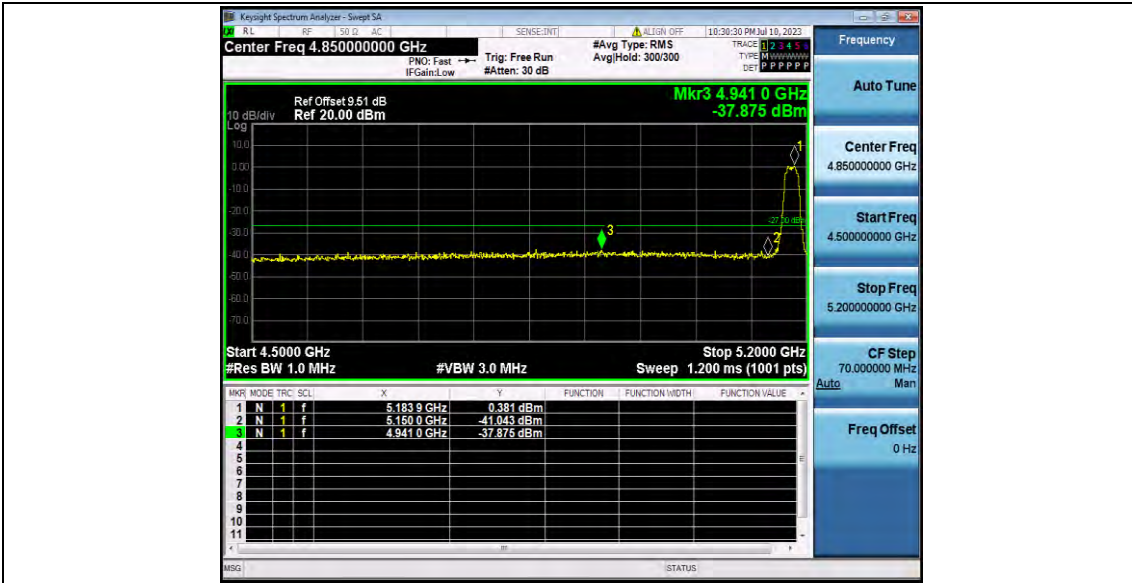
Test Graphs B1



11A_Ant2_Low_5180



11A_Ant2_High_5240



11N20SISO_Ant2_Low_5180



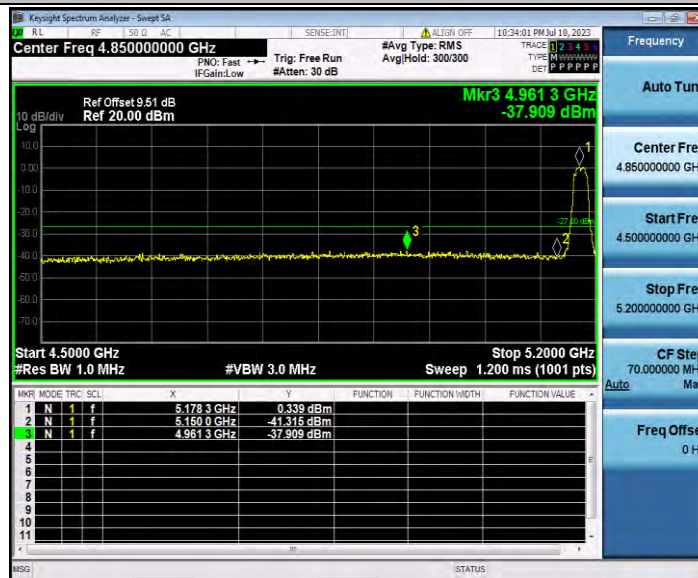
11N20SISO_Ant2_High_5240



11N40SISO_Ant2_Low_5190



11N40SISO_Ant2_High_5230



11AC20SISO_Ant2_Low_5180



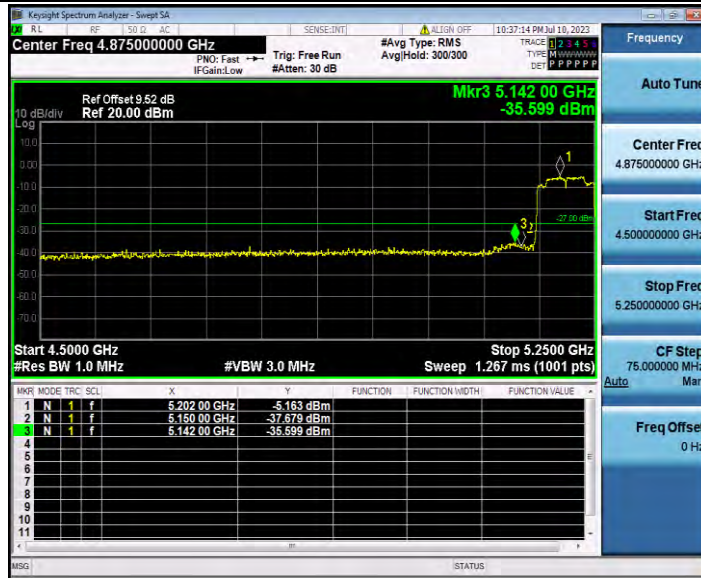
11AC20SISO_Ant2_High_5240



11AC40SISO_Ant2_Low_5190



11AC40SISO_Ant2_High_5230



11AC80SISO_Ant2_Low_5210



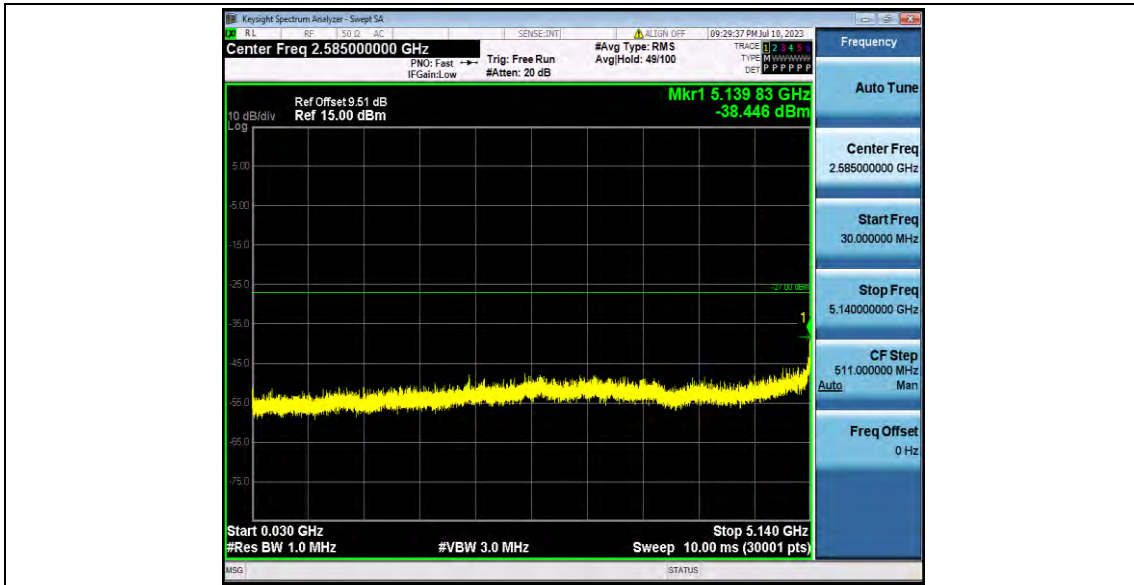
11AC80SISO_Ant2_High_5210

Appendix D.7: Conducted Spurious Emission

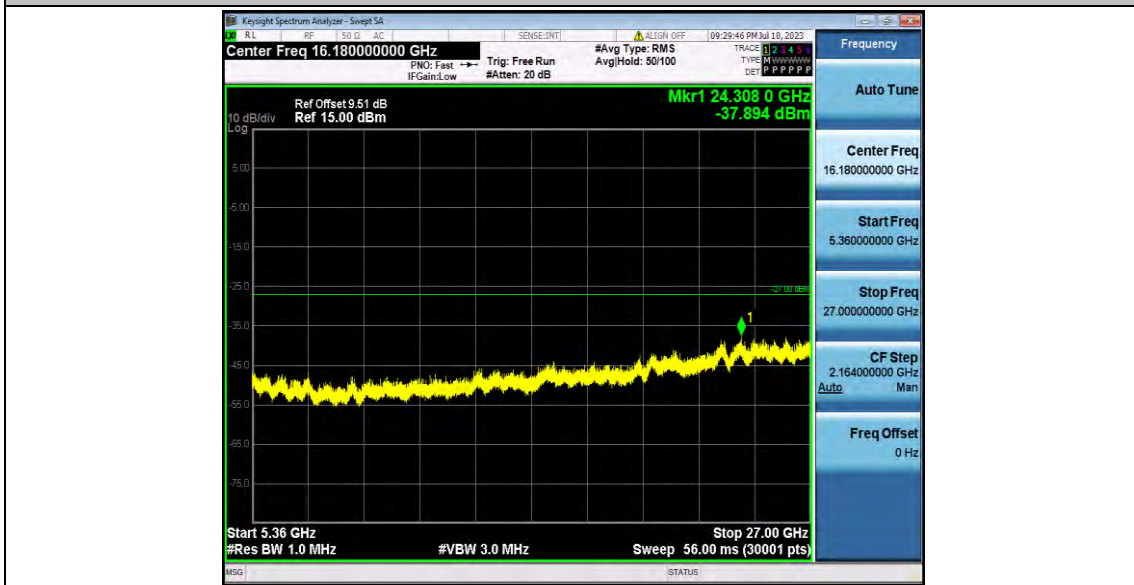
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	30~5140	5139.83	-38.45	≤-27	PASS
			5360~40000	24307.98	-37.89	≤-27	PASS
		5200	30~5140	5137.62	-44.31	≤-27	PASS
			5360~40000	24204.83	-37.92	≤-27	PASS
		5240	30~5140	5081.92	-46.05	≤-27	PASS
			5360~40000	26801.63	-37.49	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	5139.66	-35.81	≤-27	PASS
			5360~40000	25048.07	-37.57	≤-27	PASS
		5200	30~5140	5137.45	-44.13	≤-27	PASS
			5360~40000	24745.83	-37.62	≤-27	PASS
		5240	30~5140	5084.13	-45.09	≤-27	PASS
			5360~40000	24228.64	-37.86	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	5138.3	-27.93	≤-27	PASS
			5360~40000	25995.18	-38.11	≤-27	PASS
		5230	30~5140	5138.64	-39.92	≤-27	PASS
			5360~40000	24269.03	-37.24	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	5139.49	-38.35	≤-27	PASS
			5360~40000	25034.37	-37.7	≤-27	PASS
		5200	30~5140	5131.48	-44.27	≤-27	PASS
			5360~40000	26513.82	-37.98	≤-27	PASS
		5240	30~5140	5082.77	-45.58	≤-27	PASS
			5360~40000	25996.63	-37.66	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	5137.45	-27.33	≤-27	PASS
			5360~40000	23536.88	-37.76	≤-27	PASS
		5230	30~5140	5140	-40.17	≤-27	PASS
			5360~40000	24237.29	-38.13	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	5132.85	-34.98	≤-27	PASS
			5360~40000	24237.29	-37.84	≤-27	PASS

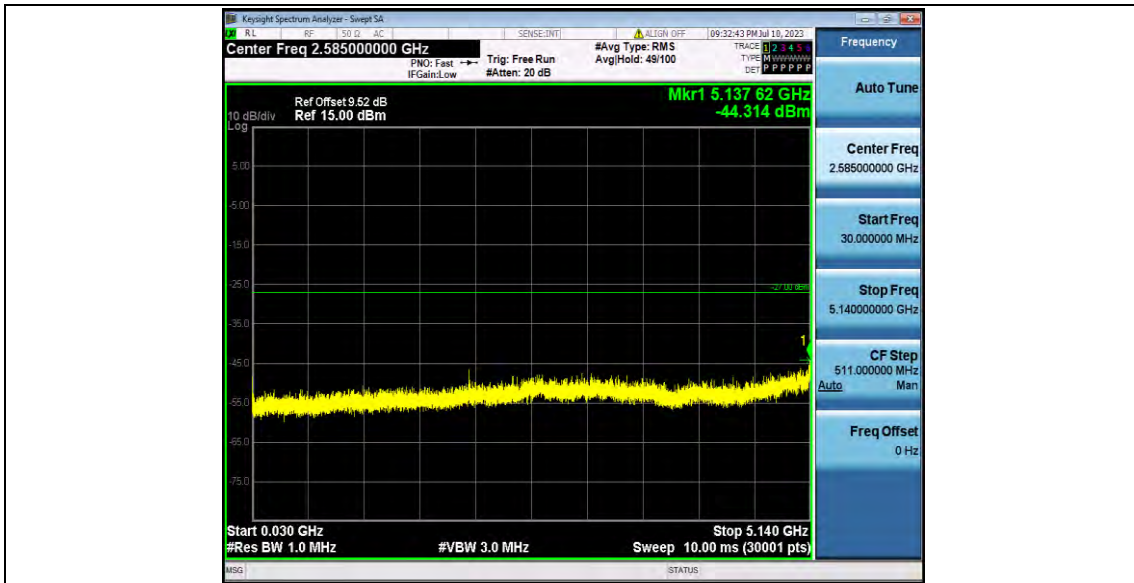
Test Graphs



11A_Ant2_5180_30~5140



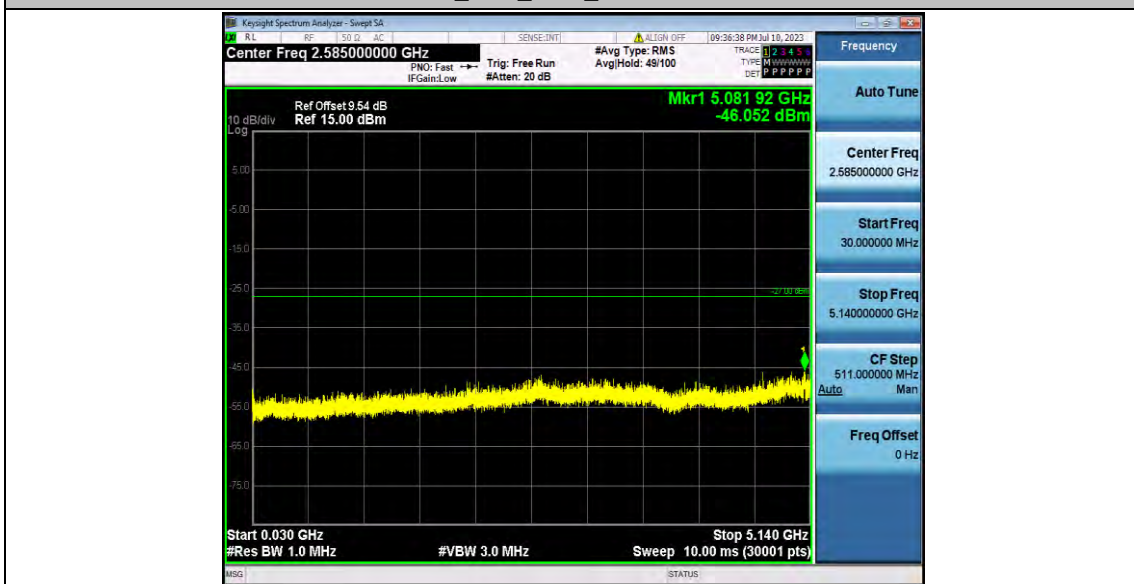
11A_Ant2_5180_5360~40000



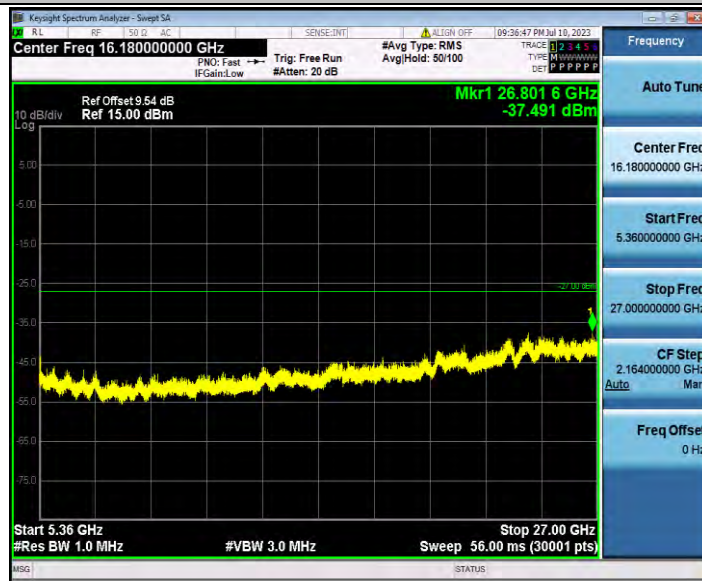
11A_Ant2_5200_30~5140



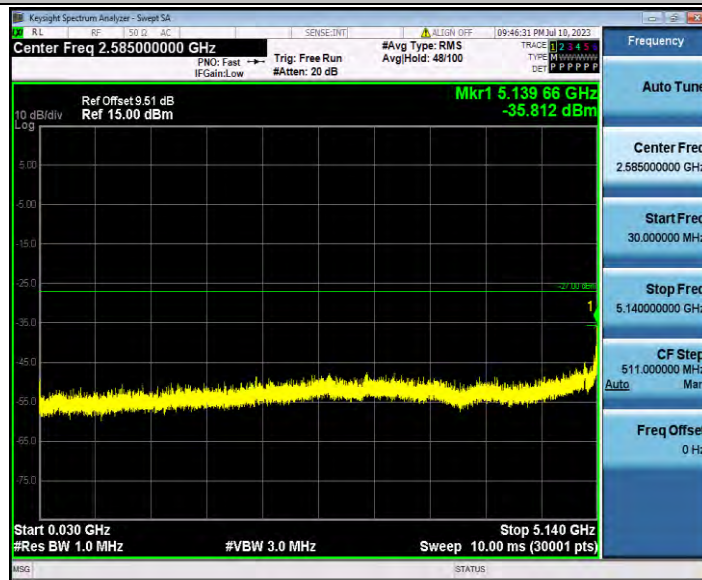
11A_Ant2_5200_5360~40000



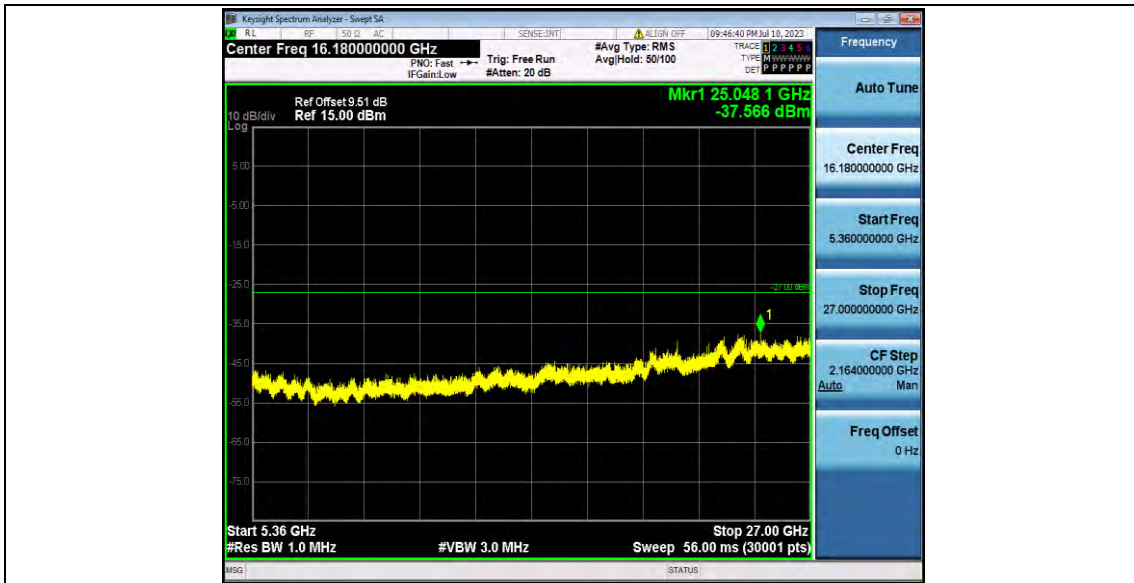
11A_Ant2_5240_30~5140



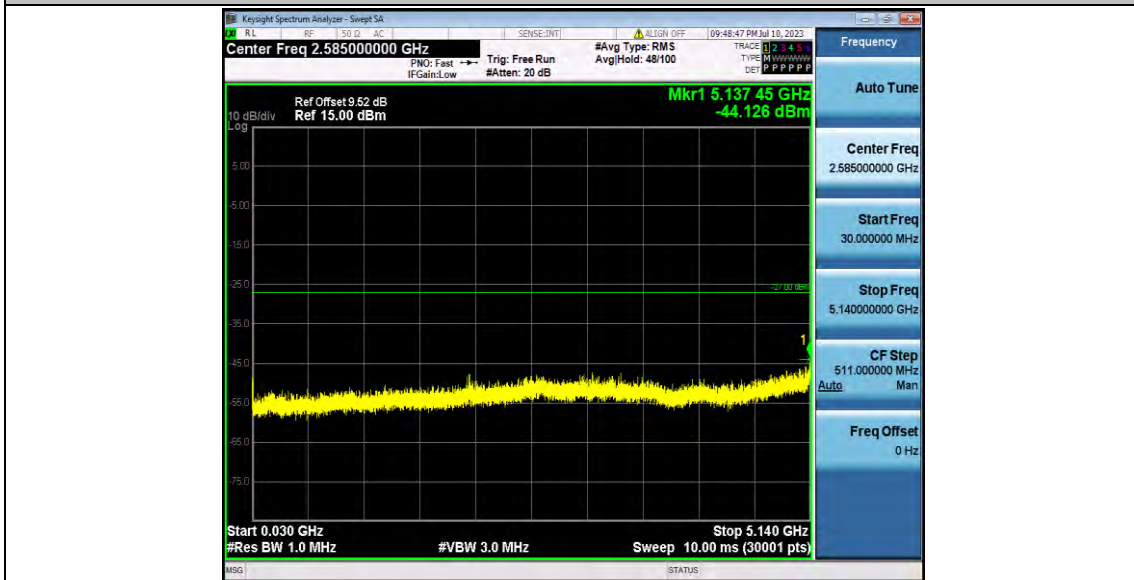
11A_Ant2_5240_5360~40000



11N20SISO_Ant2_5180_30~5140



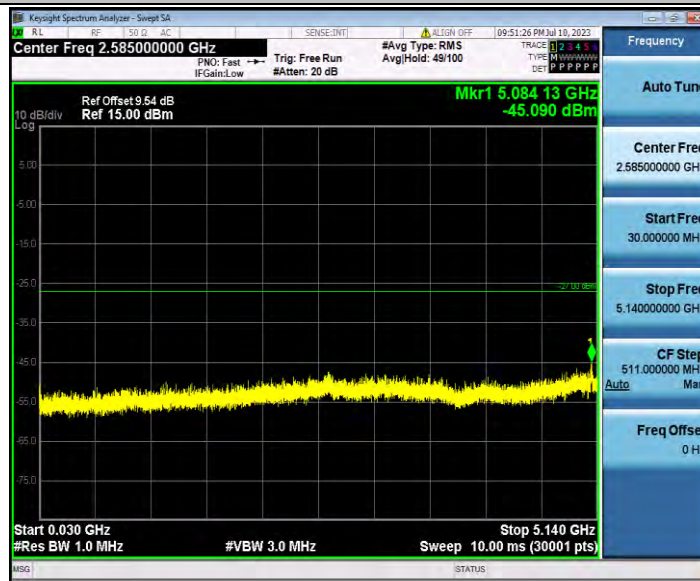
11N20SISO_Ant2_5180_5360~40000



11N20SISO_Ant2_5200_30~5140



11N20SISO_Ant2_5200_5360~40000



11N20SISO_Ant2_5240_30~5140



11N20SISO_Ant2_5240_5360~40000



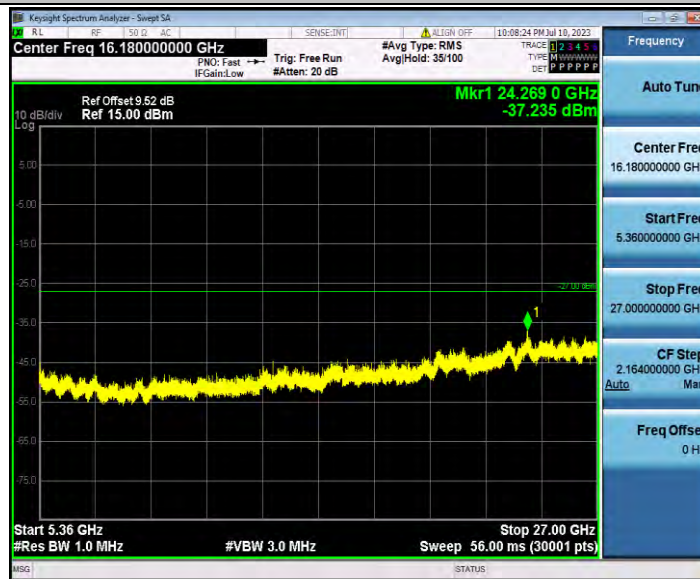
11N40SISO_Ant2_5190_30~5140



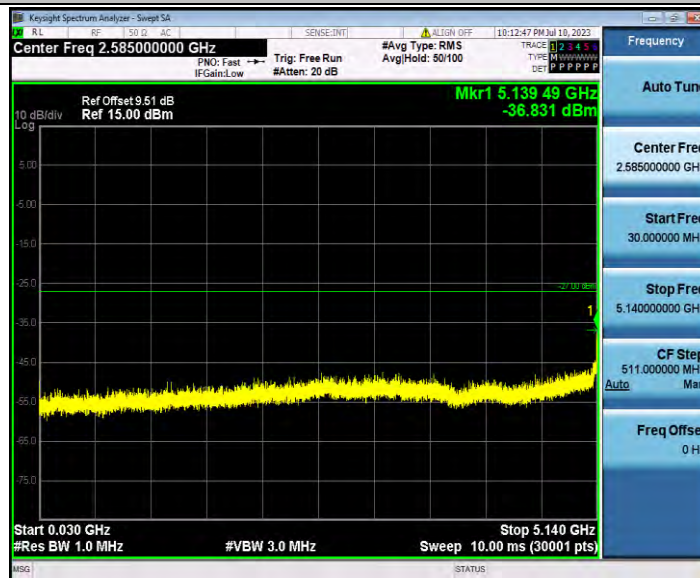
11N40SISO_Ant2_5190_5360~40000



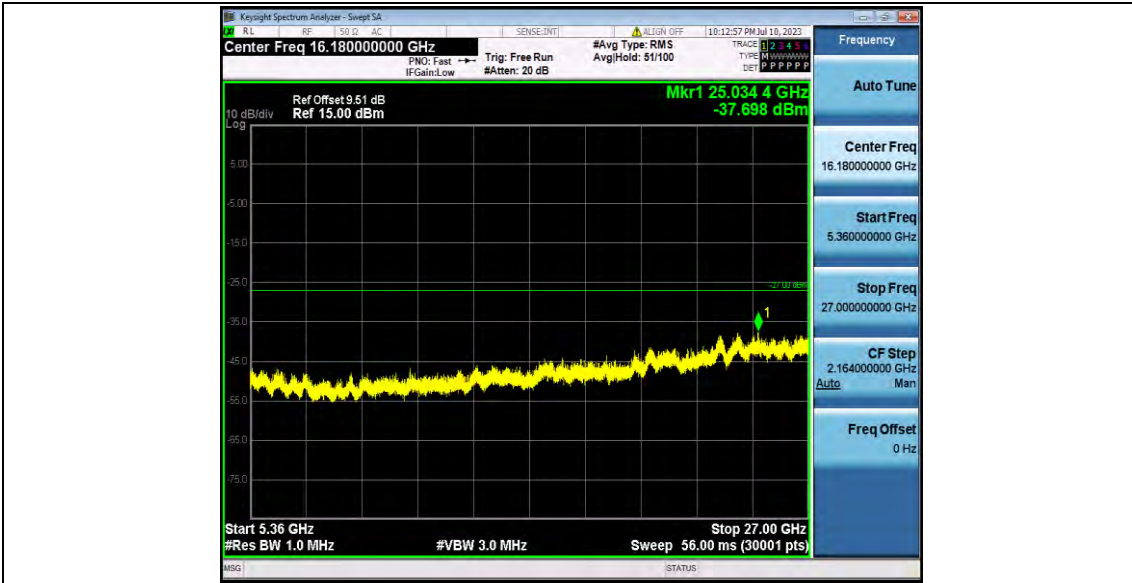
11N40SISO_Ant2_5230_30~5140



11N40SISO_Ant2_5230_5360~40000



11AC20SISO_Ant2_5180_30~5140



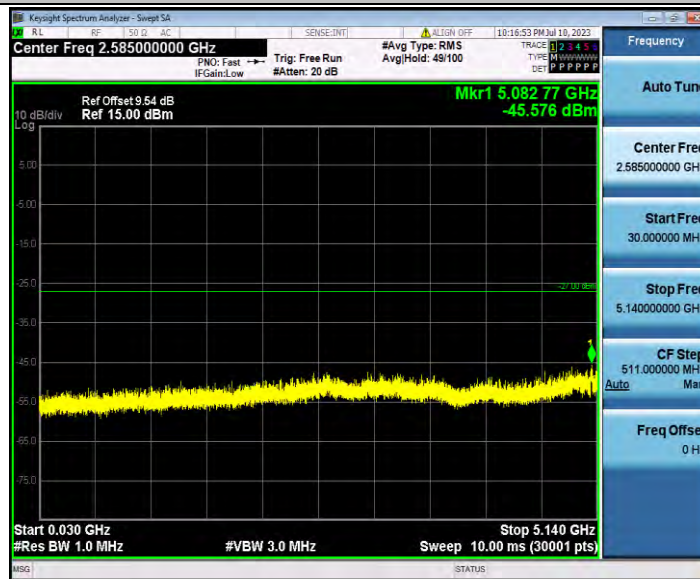
11AC20SISO_Ant2_5180_5360~4000



11AC20SISO_Ant2_5200_30~5140



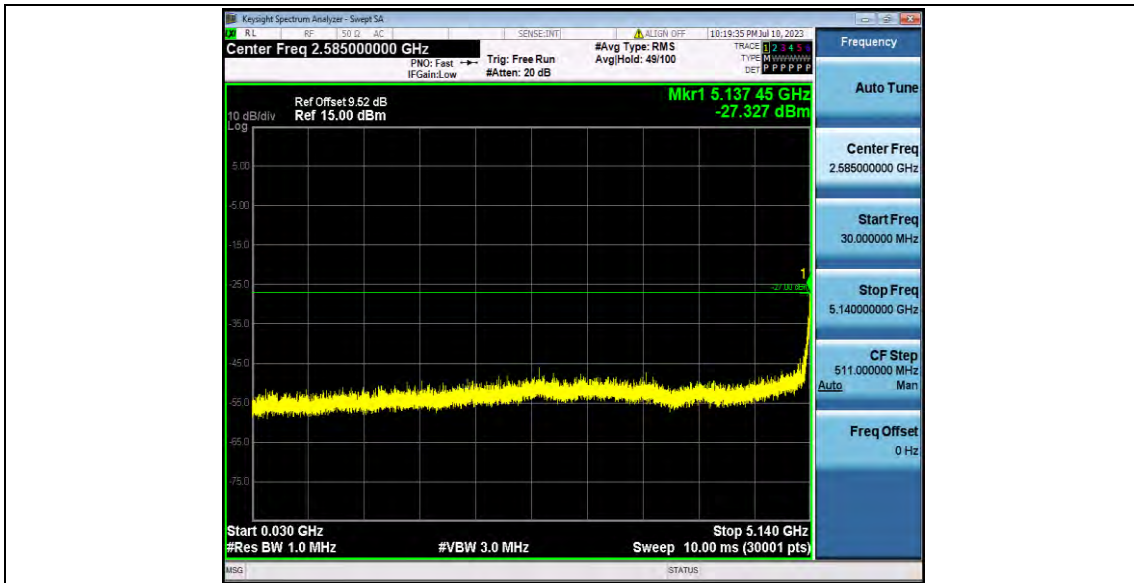
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11AC20SISO_Ant2_5240_30~5140



11AC20SISO_Ant2_5240_5360~40000



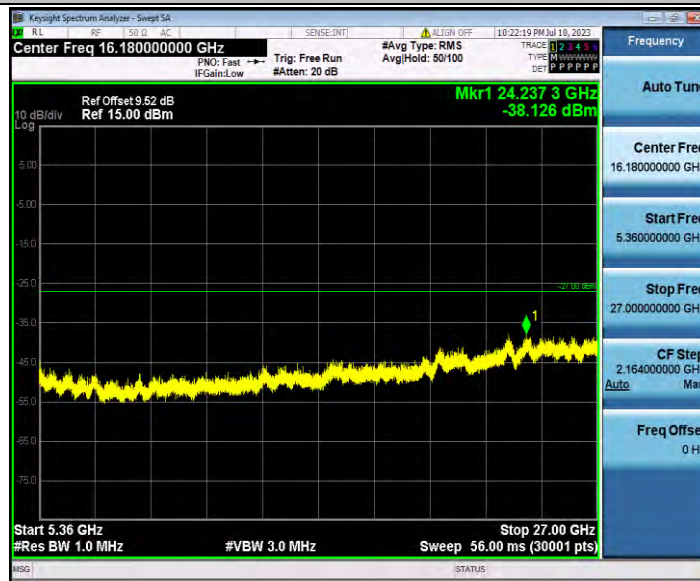
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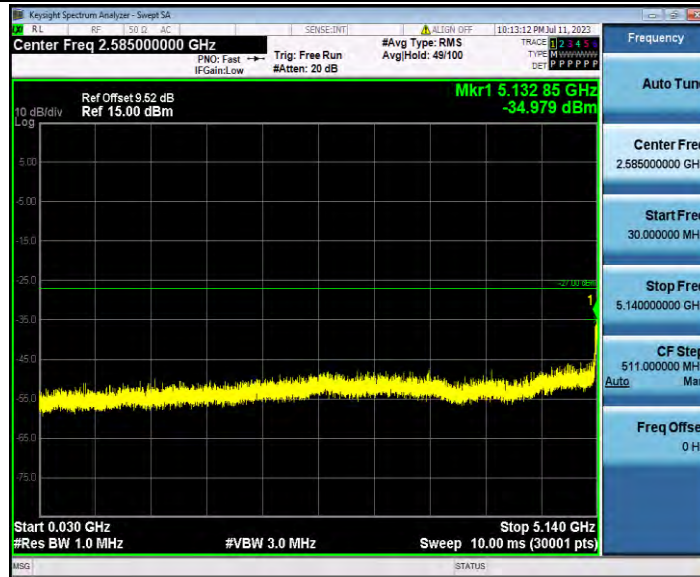
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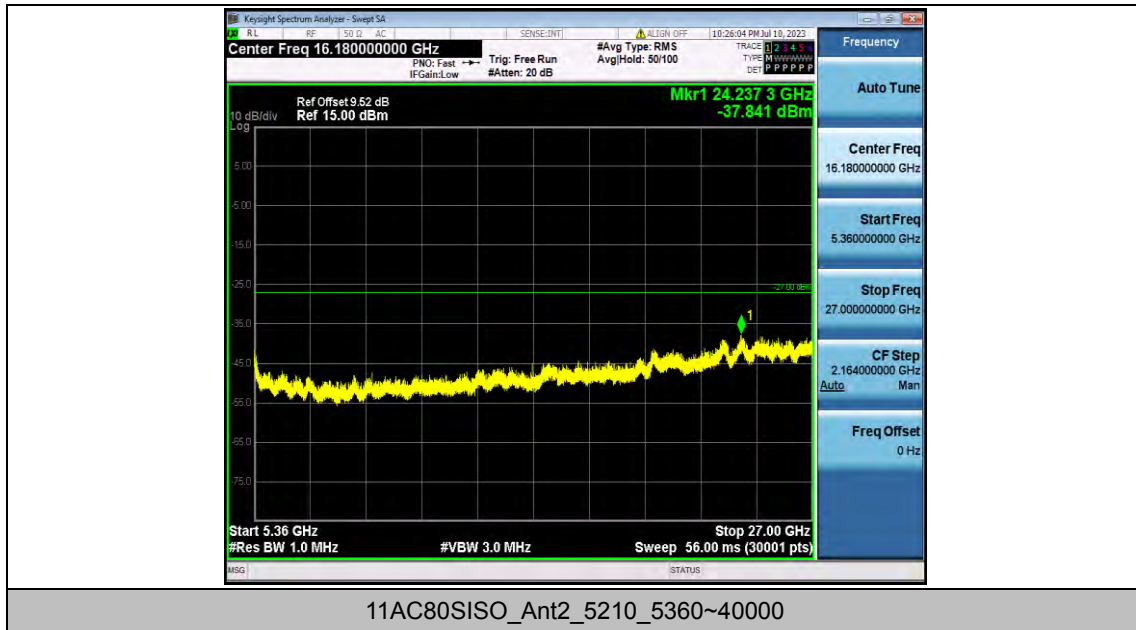
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11AC40SISO_Ant2_5230_5360~40000



11AC80SISO_Ant2_5210_30~5140



11AC80SISO_Ant2_5210_5360~40000