

Case No. : <u>GTS20230629015-1-13</u>
Ambient Condition: <u>23 °C, 50 %RH, Atmos100.1Kpa,</u>
Test Date: <u>2023.7.19</u> Test Engineer: <u>Evan Ouyang</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	29.160	5167.240	5196.400	---	---
		5200	31.000	5185.480	5216.480	---	---
		5240	31.320	5225.360	5256.680	---	---
11N20SISO	Ant2	5180	27.080	5169.920	5197.000	---	---
		5200	30.360	5186.680	5217.040	---	---
		5240	34.960	5224.120	5259.080	---	---
11N40SISO	Ant2	5190	50.800	5169.680	5220.480	---	---
		5230	64.960	5201.280	5266.240	---	---
11AC20SISO	Ant2	5180	19.560	5170.320	5189.880	---	---
		5200	20.120	5190.320	5210.440	---	---
		5240	32.640	5225.920	5258.560	---	---
11AC40SISO	Ant2	5190	40.880	5169.760	5210.640	---	---
		5230	48.000	5209.280	5257.280	---	---
11AC80SISO	Ant2	5210	90.880	5170.000	5260.880	---	---

Test Graphs



11A_Ant2_5180



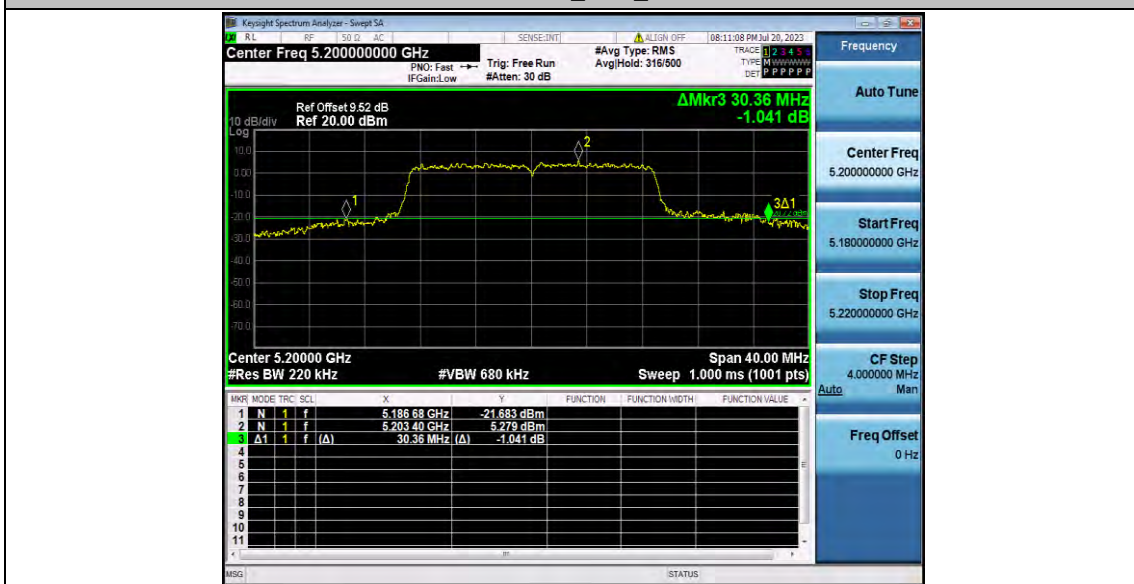
11A_Ant2_5200



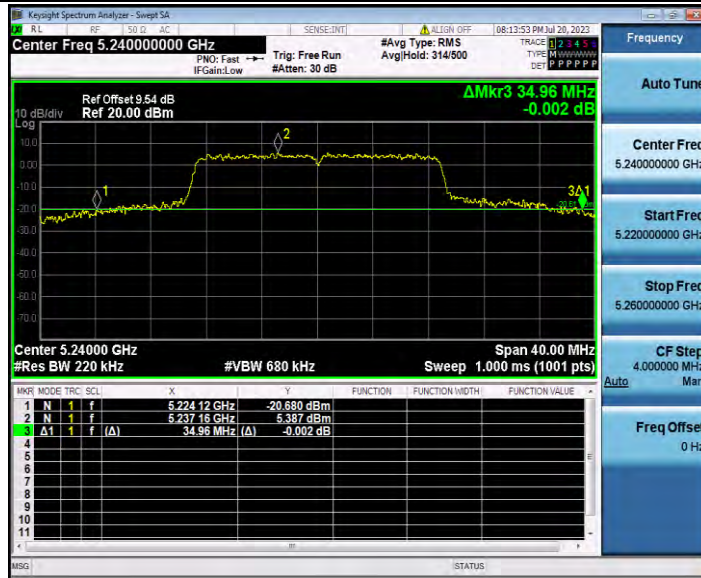
11A_Ant2_5240



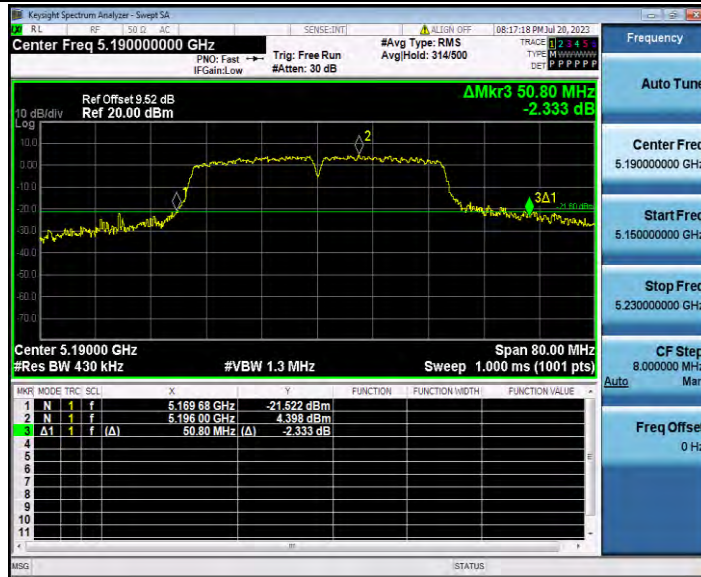
11N20SISO_Ant2_5180



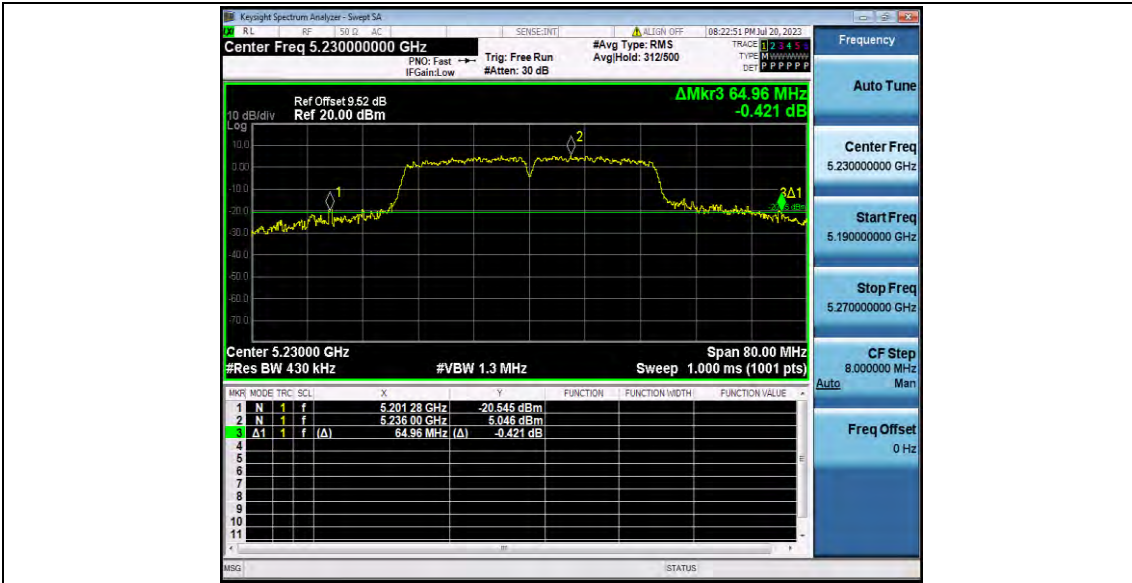
11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



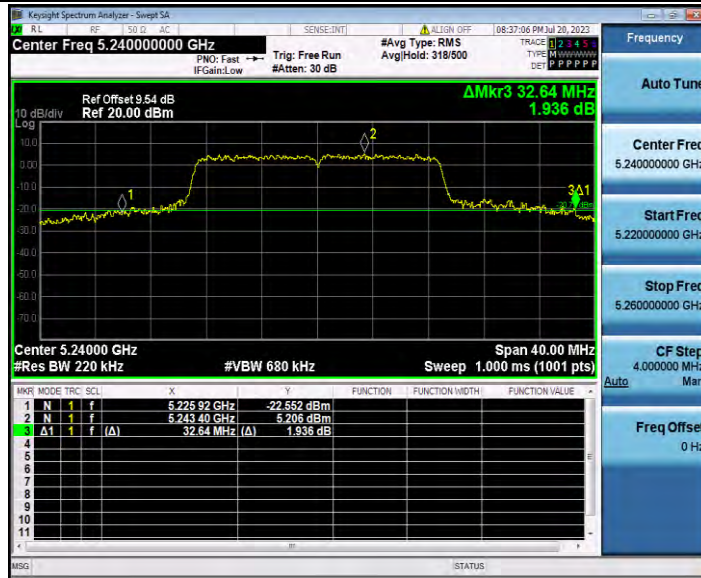
11N40SISO_Ant2_5230



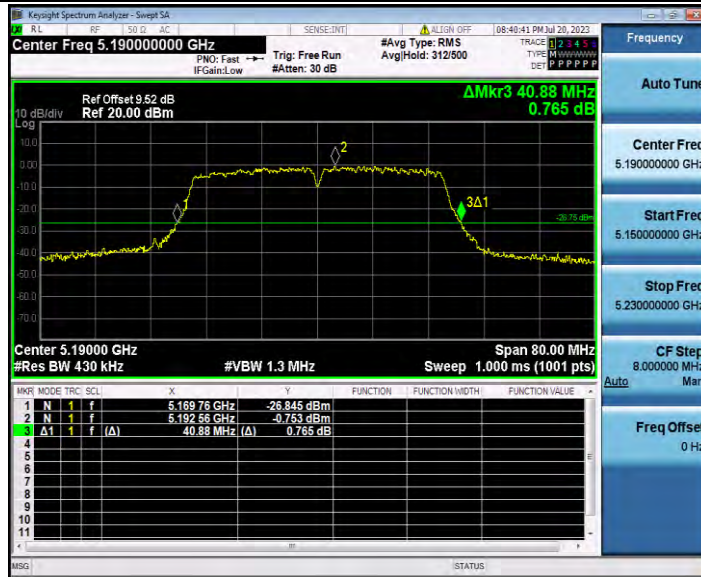
11AC20SISO_Ant2_5180



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	17.118	5171.612	5188.730	---	---
		5200	17.103	5191.593	5208.696	---	---
		5240	18.040	5231.354	5249.394	---	---
11N20SISO	Ant2	5180	17.860	5171.230	5189.090	---	---
		5200	18.002	5191.186	5209.188	---	---
		5240	18.541	5231.070	5249.611	---	---
11N40SISO	Ant2	5190	36.684	5172.013	5208.697	---	---
		5230	37.043	5211.912	5248.955	---	---
11AC20SISO	Ant2	5180	17.676	5171.253	5188.929	---	---
		5200	17.683	5191.243	5208.926	---	---
		5240	18.172	5231.127	5249.299	---	---
11AC40SISO	Ant2	5190	36.265	5172.076	5208.341	---	---
		5230	36.583	5211.994	5248.577	---	---
11AC80SISO	Ant2	5210	74.729	5173.209	5247.938	---	---

Test Graphs



11A_Ant2_5180



11A_Ant2_5200



11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



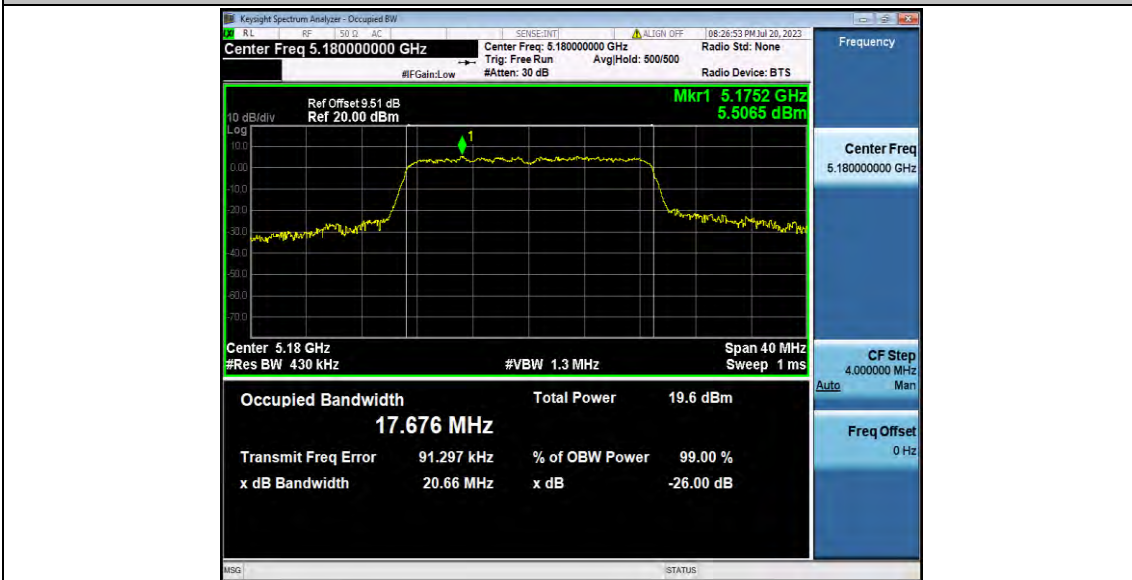
11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



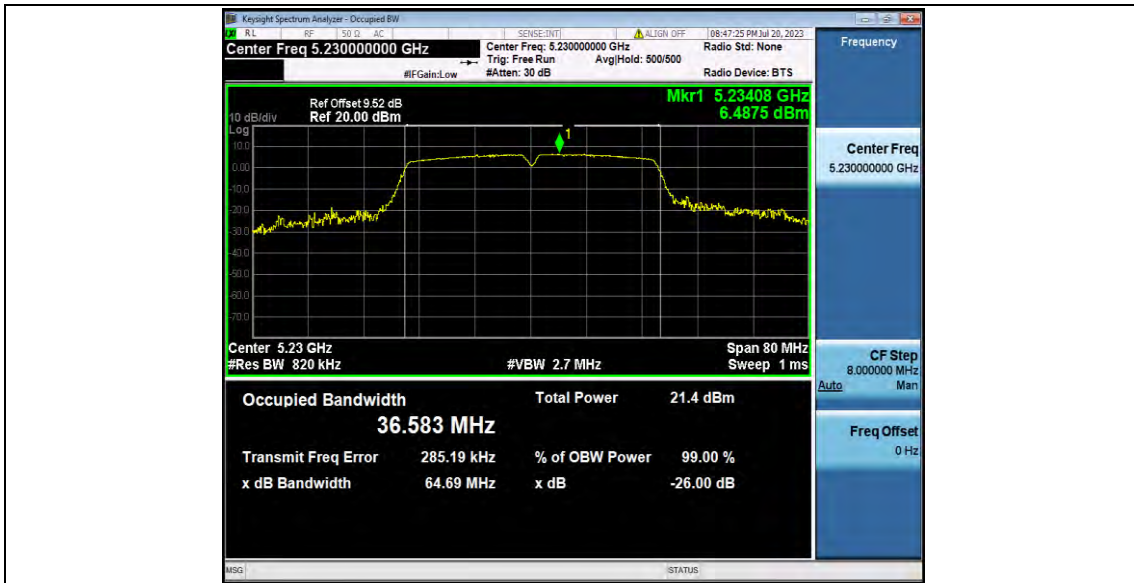
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11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



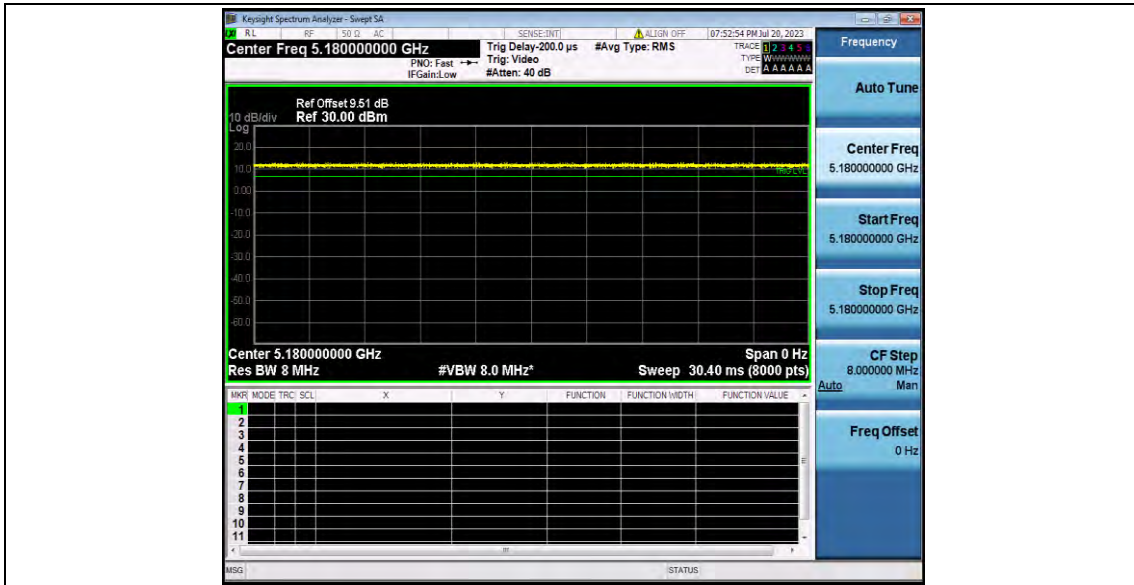
11AC80SISO_Ant2_5210

Appendix D.3: Duty Cycle

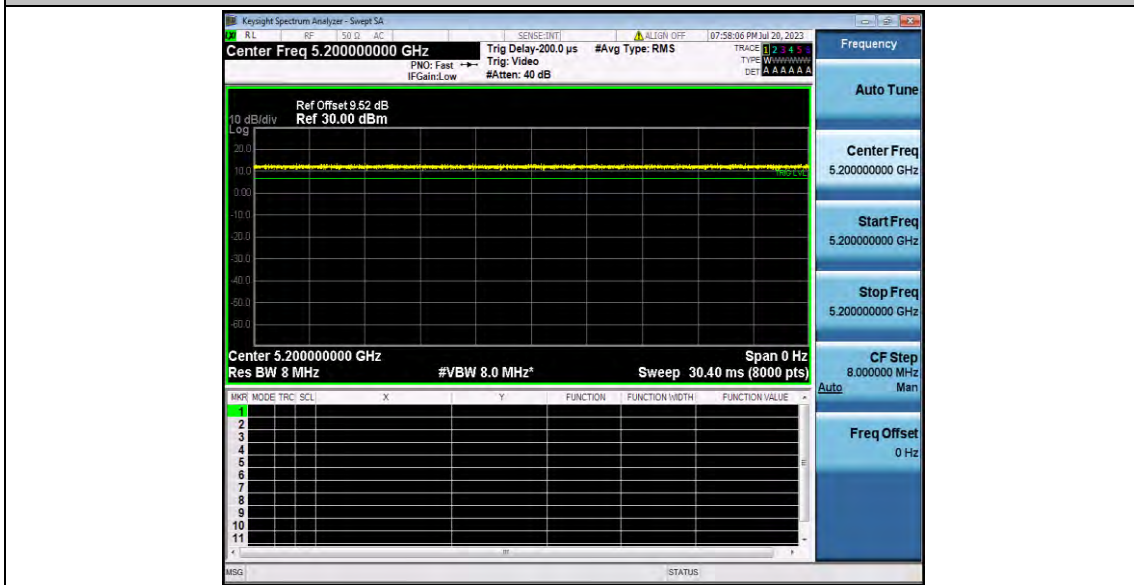
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant2	5180	30.00	30.00	100.00
		5200	30.00	30.00	100.00
		5240	30.00	30.00	100.00
11N20SISO	Ant2	5180	30.00	30.00	100.00
		5200	30.00	30.00	100.00
		5240	30.00	30.00	100.00
11N40SISO	Ant2	5190	30.00	30.00	100.00
		5230	30.00	30.00	100.00
11AC20SISO	Ant2	5180	30.00	30.00	100.00
		5200	30.00	30.00	100.00
		5240	30.00	30.00	100.00
11AC40SISO	Ant2	5190	30.00	30.00	100.00
		5230	30.00	30.00	100.00
11AC80SISO	Ant2	5210	30.00	30.00	100.00

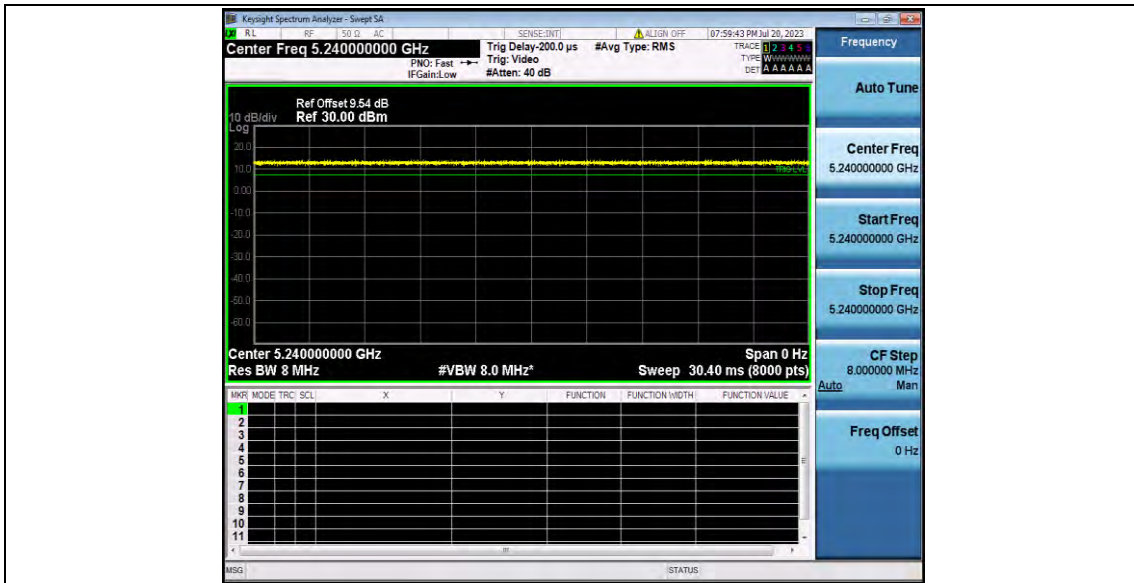
Test Graphs



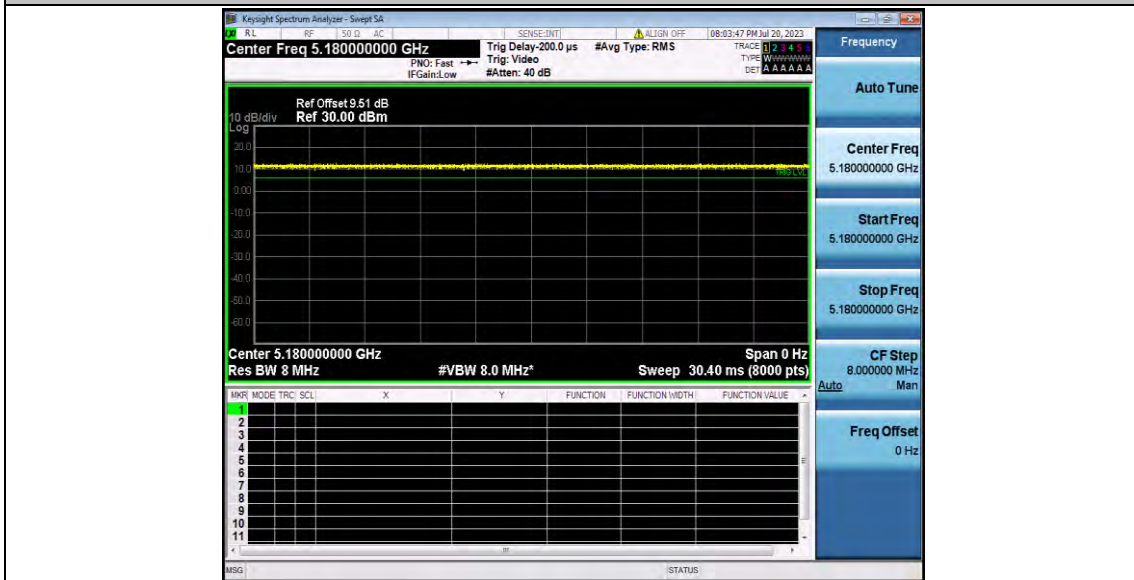
11A_Ant2_5180



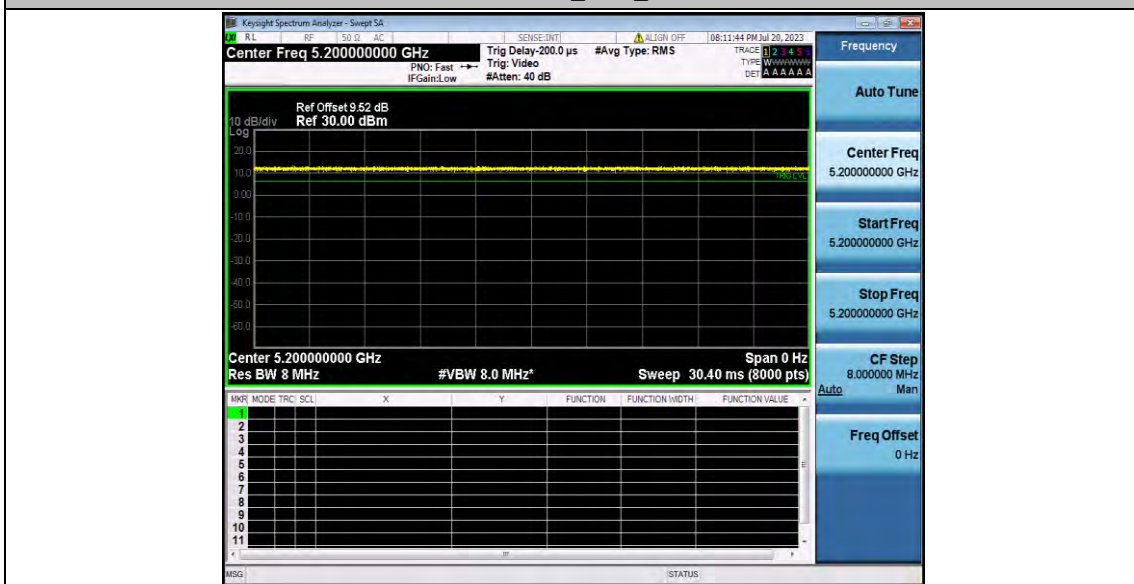
11A_Ant2_5200



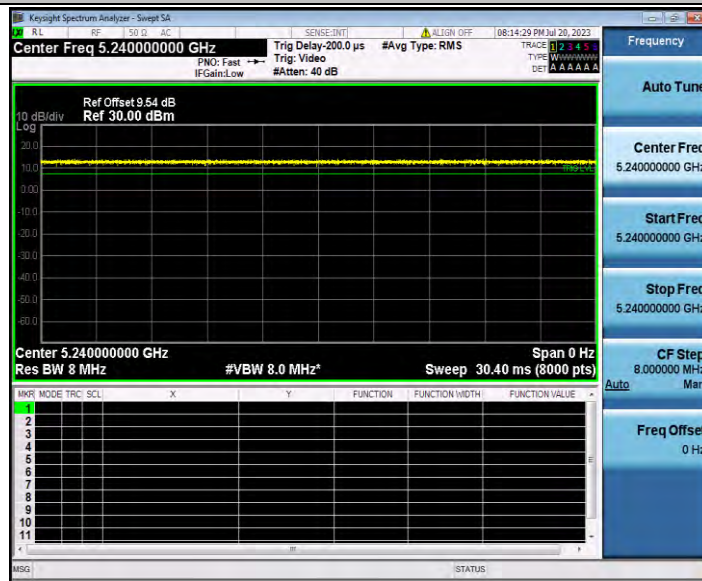
11A_Ant2_5240



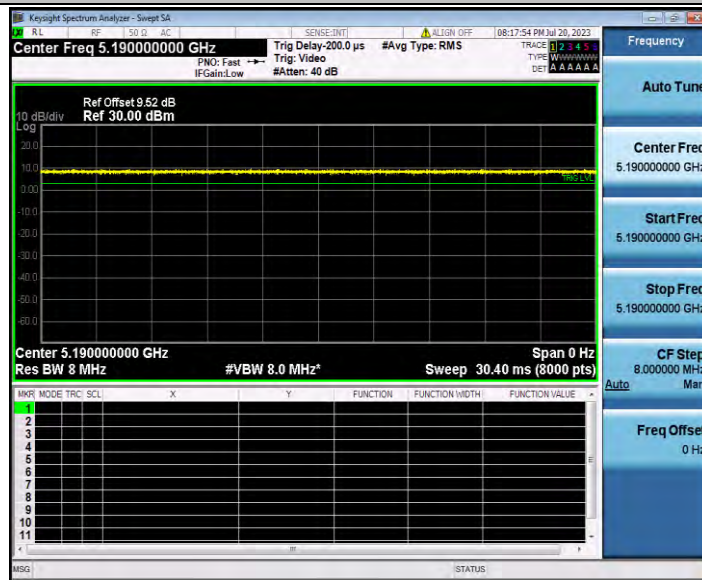
11N20SISO_Ant2_5180



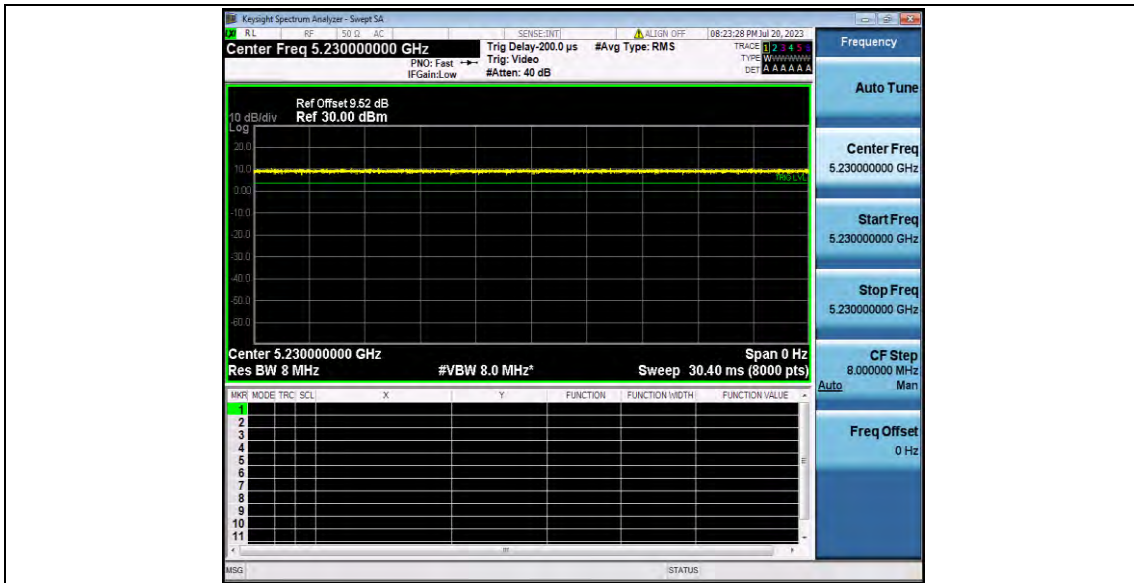
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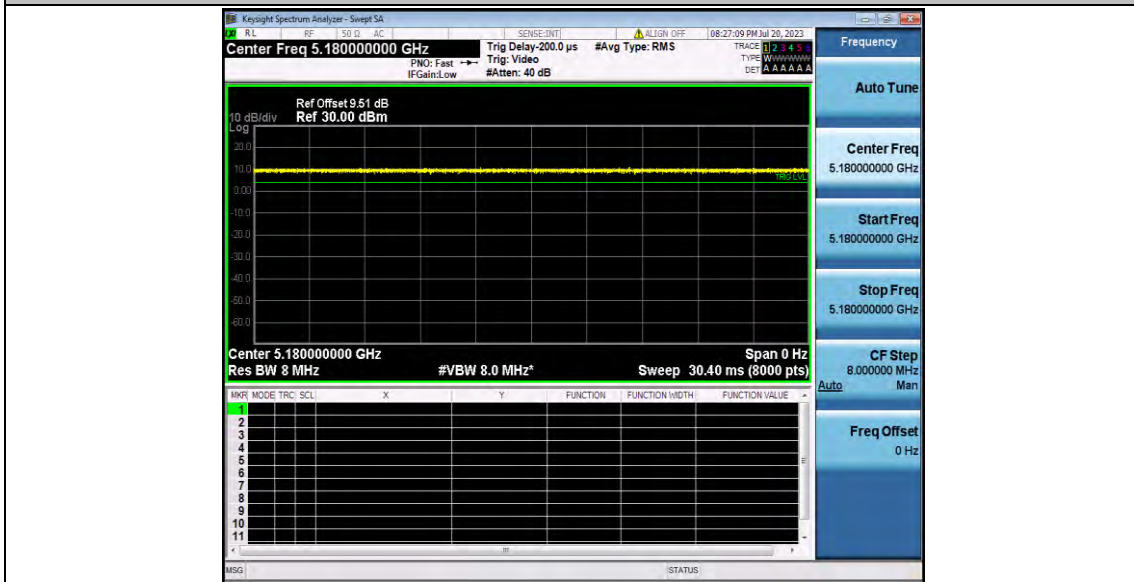
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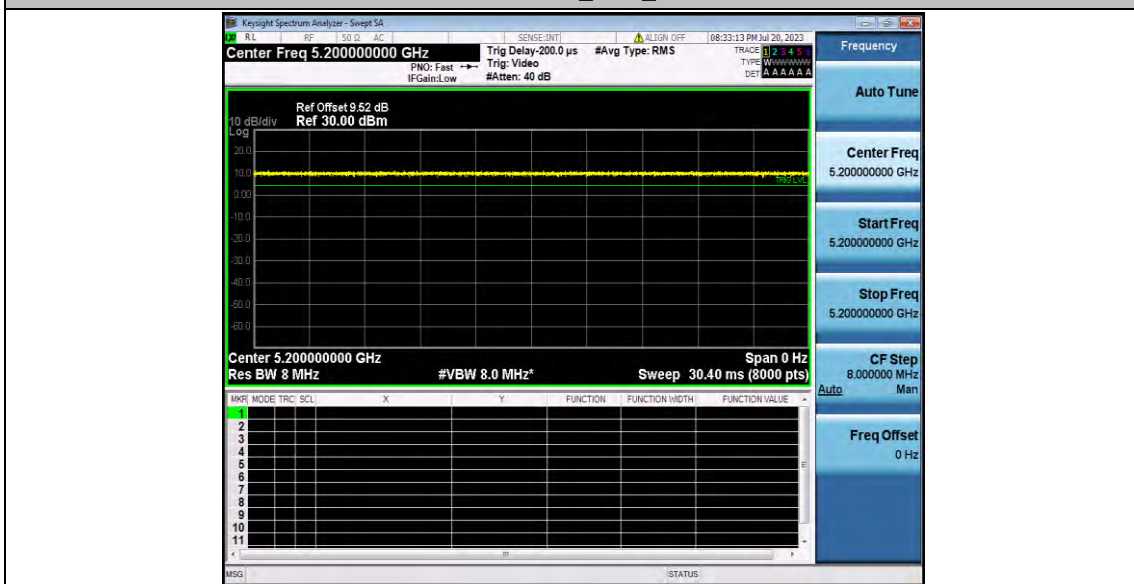
11N40SISO_Ant2_5190



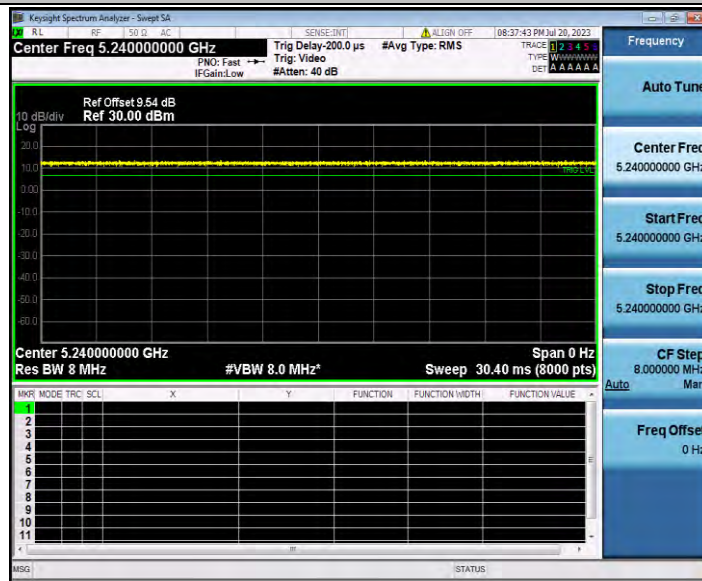
11N40SISO_Ant2_5230



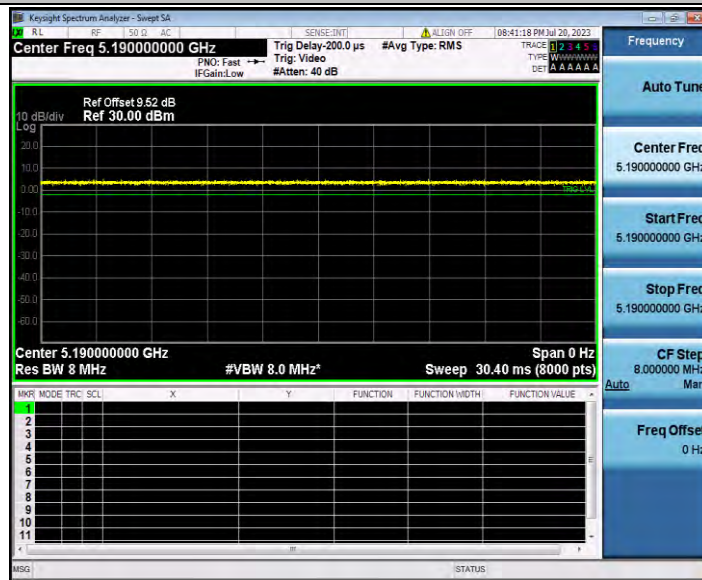
11AC20SISO_Ant2_5180



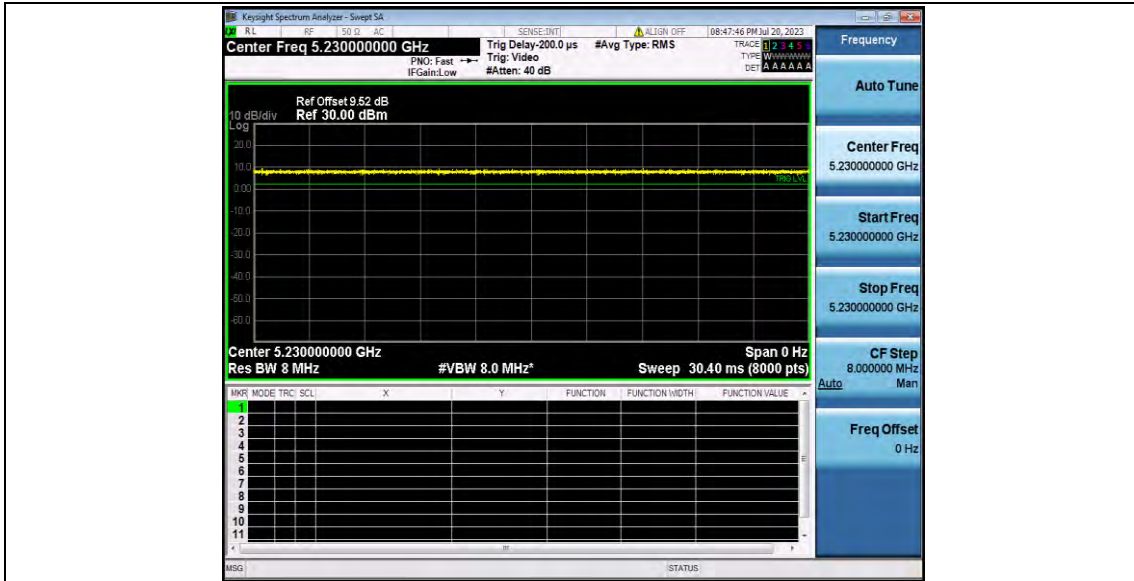
11AC20SISO_Ant2_5200



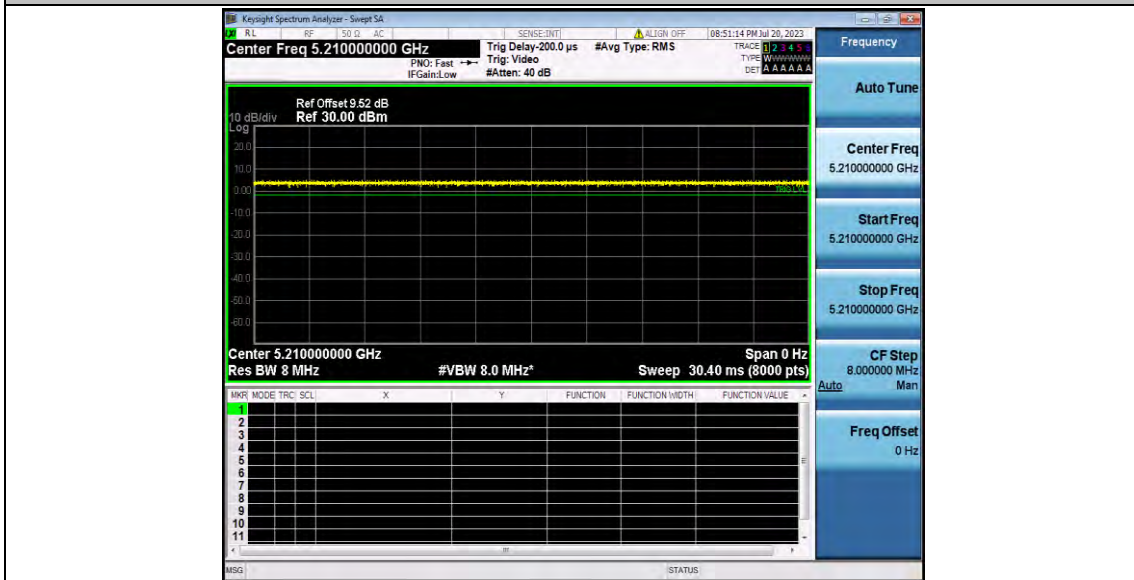
11AC20SISO_Ant2_5240



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	14.97	100.00	0.00	14.97	≤23.98	PASS
		5200	15.27	100.00	0.00	15.27	≤23.98	PASS
		5240	16.08	100.00	0.00	16.08	≤23.98	PASS
11N20SISO	Ant2	5180	14.93	100.00	0.00	14.93	≤23.98	PASS
		5200	15.56	100.00	0.00	15.56	≤23.98	PASS
		5240	16.27	100.00	0.00	16.27	≤23.98	PASS
11N40SISO	Ant2	5190	14.75	100.00	0.00	14.75	≤23.98	PASS
		5230	15.39	100.00	0.00	15.39	≤23.98	PASS
11AC20SISO	Ant2	5180	12.92	100.00	0.00	12.92	≤23.98	PASS
		5200	13.38	100.00	0.00	13.38	≤23.98	PASS
		5240	15.68	100.00	0.00	15.68	≤23.98	PASS
11AC40SISO	Ant2	5190	9.85	100.00	0.00	9.85	≤23.98	PASS
		5230	14.09	100.00	0.00	14.09	≤23.98	PASS
11AC80SISO	Ant2	5210	13.36	100.00	0.00	13.36	≤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	3.24	≤11.00	PASS
		5200	3.56	≤11.00	PASS
		5240	4.48	≤11.00	PASS
11N20SISO	Ant2	5180	3.02	≤11.00	PASS
		5200	3.63	≤11.00	PASS
		5240	4.41	≤11.00	PASS
11N40SISO	Ant2	5190	0.4	≤11.00	PASS
		5230	1.08	≤11.00	PASS
11AC20SISO	Ant2	5180	0.99	≤11.00	PASS
		5200	1.42	≤11.00	PASS
		5240	3.8	≤11.00	PASS
11AC40SISO	Ant2	5190	-4.52	≤11.00	PASS
		5230	-0.19	≤11.00	PASS
11AC80SISO	Ant2	5210	-3.63	≤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



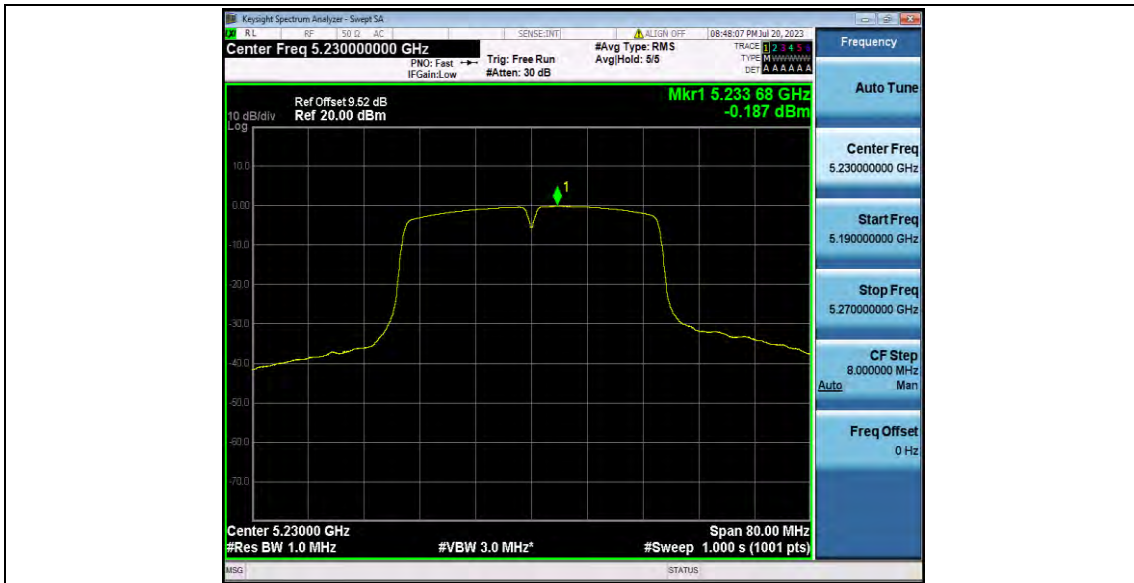
11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



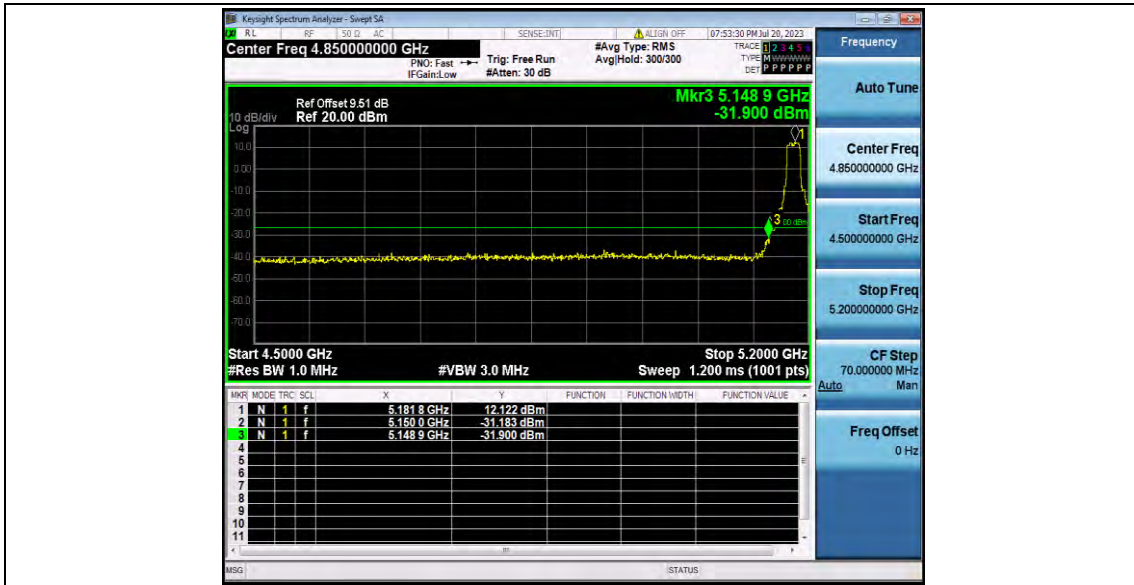
11AC80SISO_Ant2_5210

Appendix D.6: Band edge measurements

Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant2	Low	5180	-31.9	≤ -27	PASS
		High	5240	-36.5	≤ -27	PASS
11N20SISO	Ant2	Low	5180	-28.29	≤ -27	PASS
		High	5240	-37.85	≤ -27	PASS
11N40SISO	Ant2	Low	5190	-36.47	≤ -27	PASS
		High	5230	-37.73	≤ -27	PASS
11AC20SISO	Ant2	Low	5180	-34.64	≤ -27	PASS
		High	5240	-37.49	≤ -27	PASS
11AC40SISO	Ant2	Low	5190	-36.93	≤ -27	PASS
		High	5230	-37.58	≤ -27	PASS
11AC80SISO	Ant2	Low	5210	-29.33	≤ -27	PASS
		High	5210	-36.52	≤ -27	PASS

Test Graphs B1



11A_Ant2_Low_5180



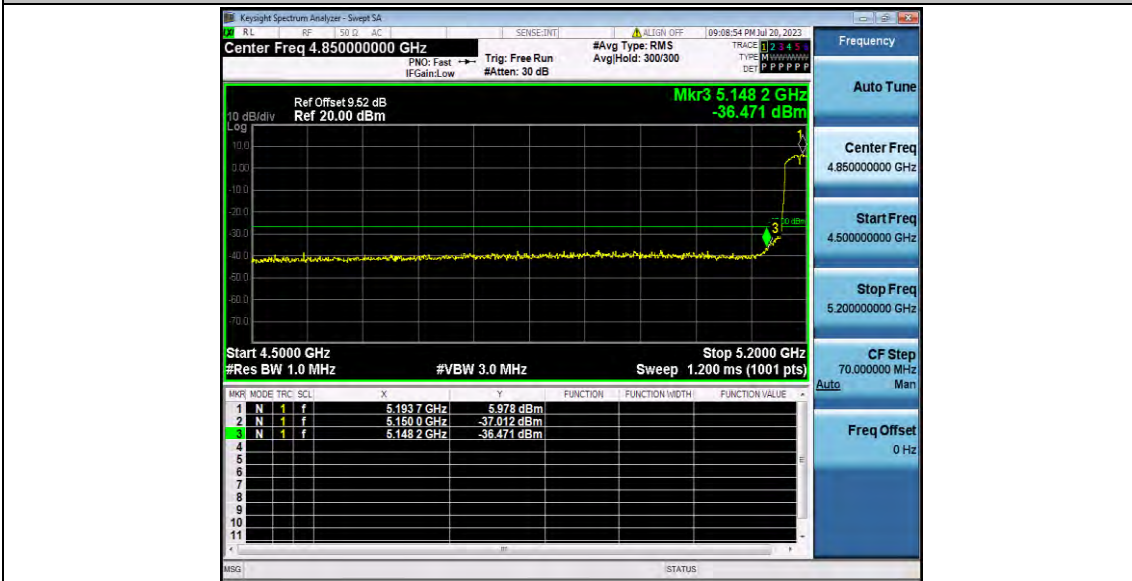
11A_Ant2_High_5240



11N20SISO_Ant2_Low_5180



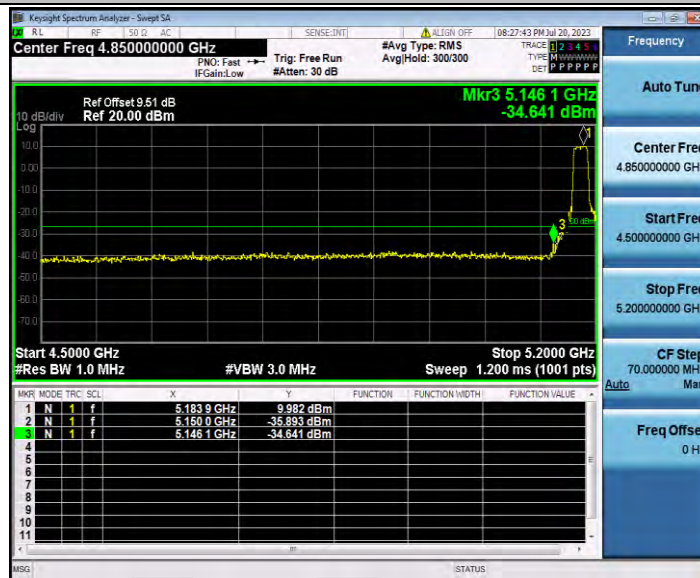
11N20SISO_Ant2_High_5240



11N40SISO_Ant2_Low_5190



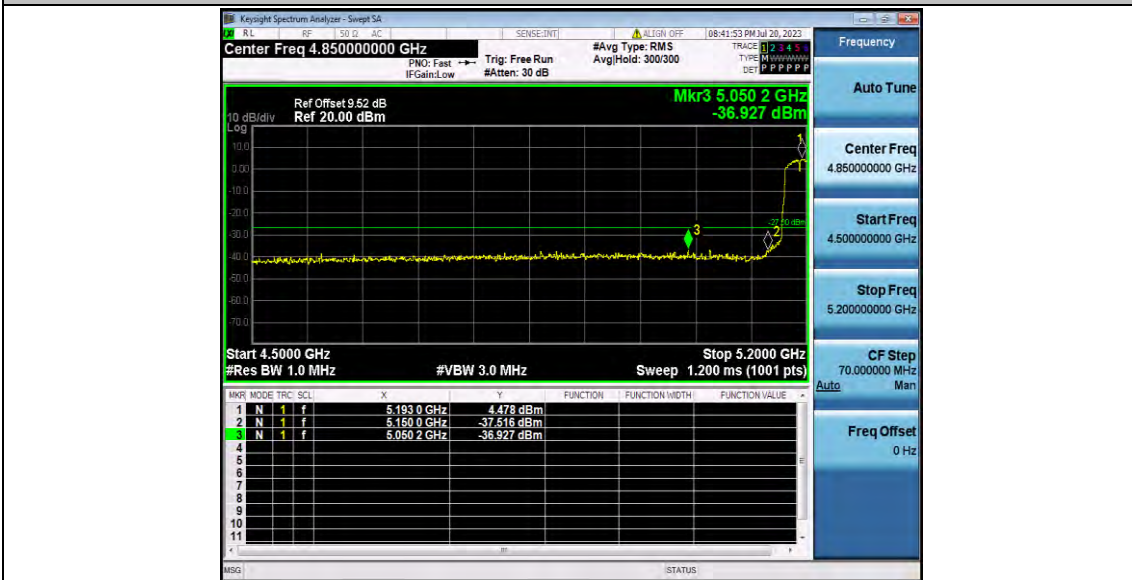
11N40SISO_Ant2_High_5230



11AC20SISO_Ant2_Low_5180



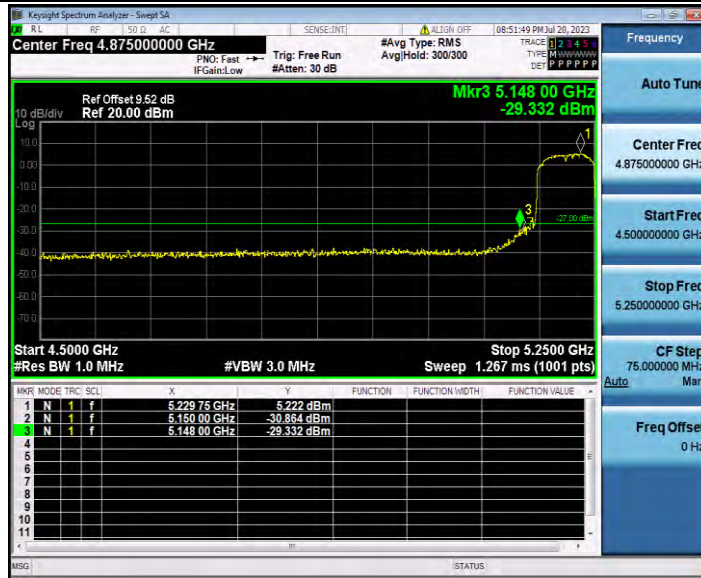
11AC20SISO_Ant2_High_5240



11AC40SISO_Ant2_Low_5190



11AC40SISO_Ant2_High_5230



11AC80SISO_Ant2_Low_5210



11AC80SISO_Ant2_High_5210

Appendix D.7: Conducted Spurious Emission

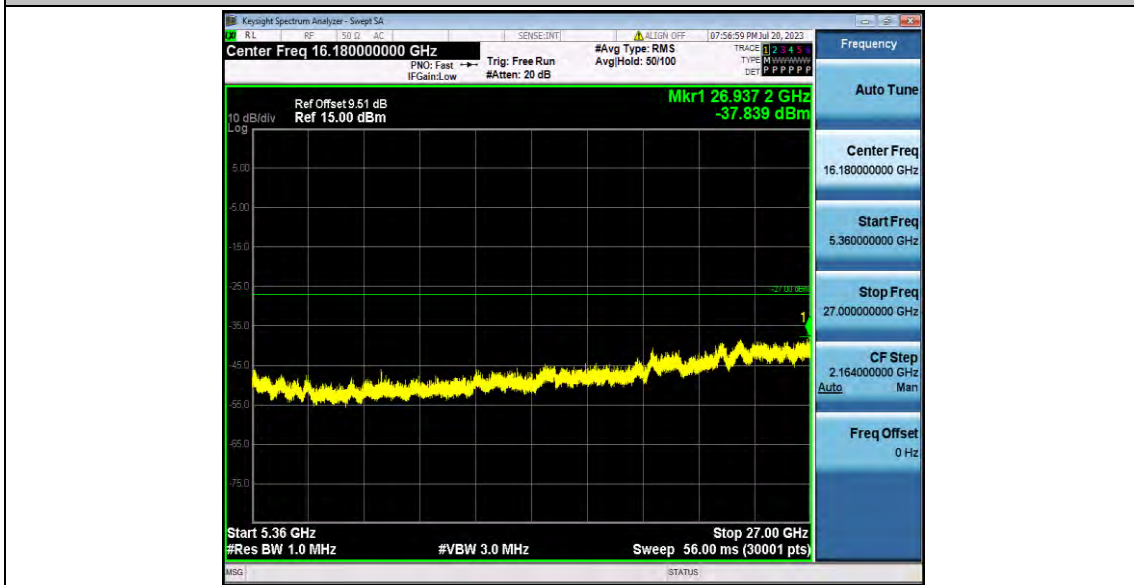
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	30~5140	5139.66	-41.35	≤-27	PASS
			5360~40000	26937.24	-37.84	≤-27	PASS
		5200	30~5140	2811.03	-45.9	≤-27	PASS
			5360~40000	26531.13	-37.37	≤-27	PASS
		5240	30~5140	910.45	-46.23	≤-27	PASS
			5360~40000	26879.54	-37.21	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	5136.59	-42.28	≤-27	PASS
			5360~40000	24859.8	-38.16	≤-27	PASS
		5200	30~5140	4956.55	-46.09	≤-27	PASS
			5360~40000	26514.54	-38.14	≤-27	PASS
		5240	30~5140	4910.9	-47.48	≤-27	PASS
			5360~40000	26054.33	-37.62	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	5139.66	-36.5	≤-27	PASS
			5360~40000	24260.38	-37.74	≤-27	PASS
		5230	30~5140	4947.35	-46.6	≤-27	PASS
			5360~40000	24144.96	-38.04	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	3293.76	-47.66	≤-27	PASS
			5360~40000	23585.93	-37.98	≤-27	PASS
		5200	30~5140	4756.75	-46.31	≤-27	PASS
			5360~40000	26046.4	-37.91	≤-27	PASS
		5240	30~5140	5084.64	-47.31	≤-27	PASS
			5360~40000	24248.83	-37.93	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	910.79	-43.5	≤-27	PASS
			5360~40000	26712.91	-37.87	≤-27	PASS
		5230	30~5140	4974.44	-46.53	≤-27	PASS
			5360~40000	24242.34	-36.8	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	5139.15	-36.09	≤-27	PASS
			5360~40000	24285.62	-37.59	≤-27	PASS

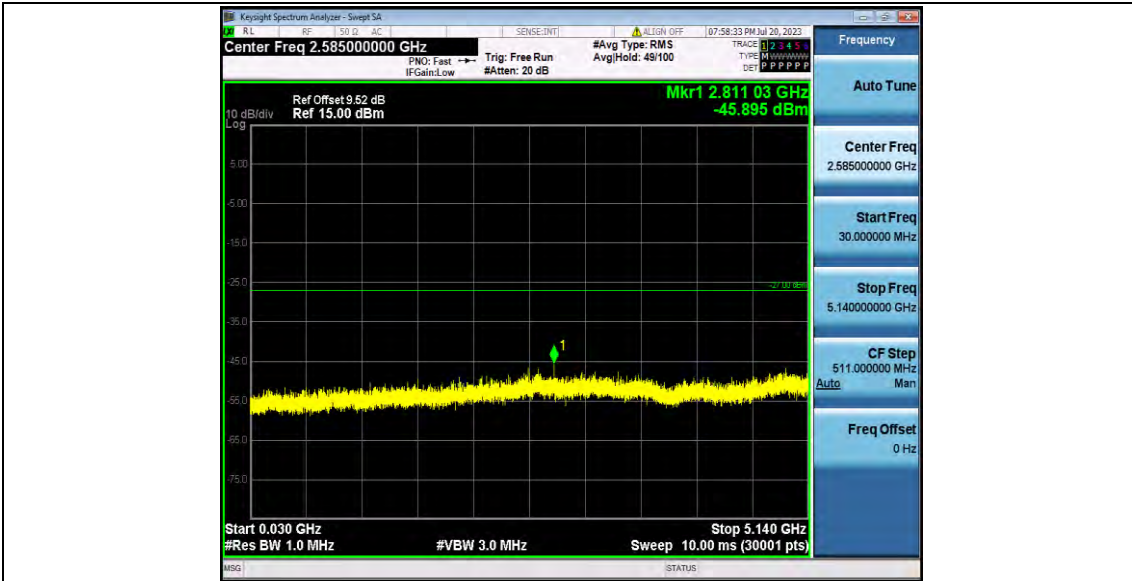
Test Graphs



11A_Ant2_5180_30~5140



11A_Ant2_5180_5360~40000



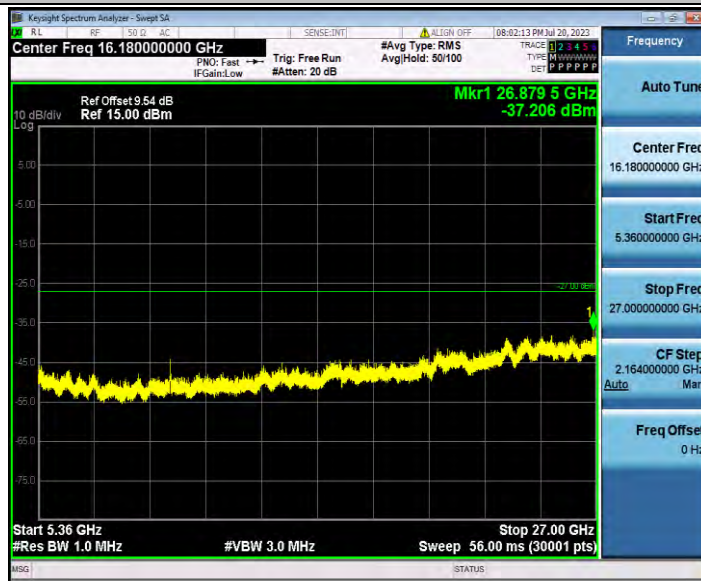
11A_Ant2_5200_30~5140



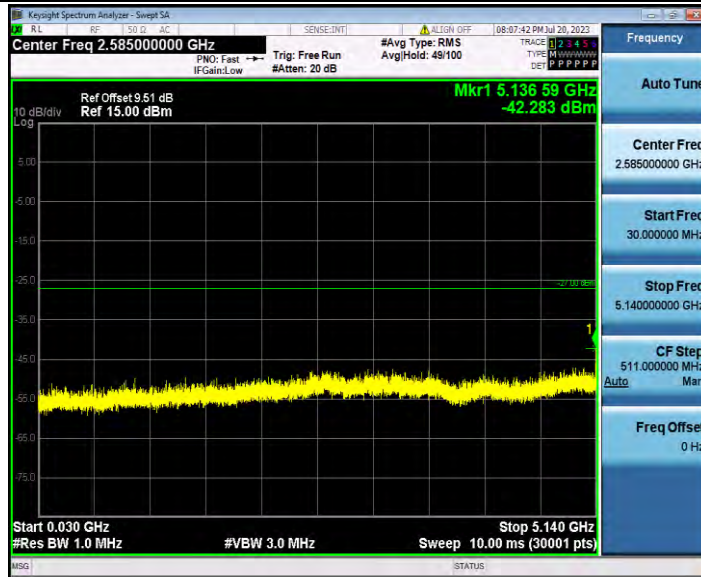
11A_Ant2_5200_5360~40000



11A_Ant2_5240_30~5140



11A_Ant2_5240_5360~40000



11N20SISO_Ant2_5180_30~5140



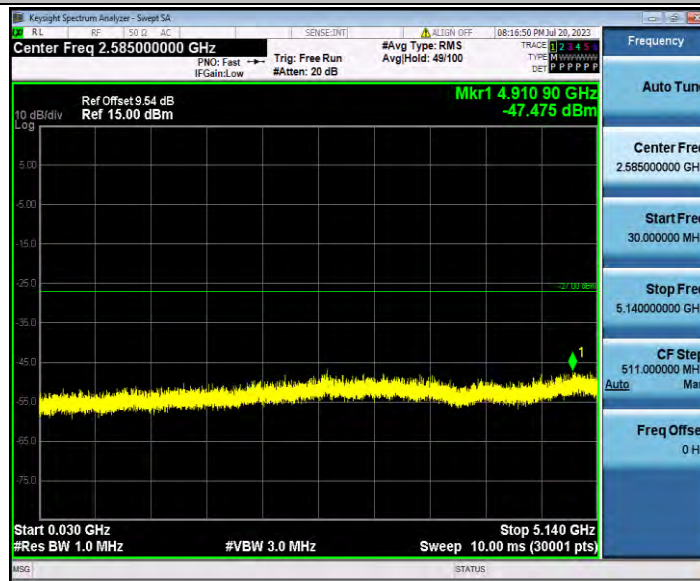
11N20SISO_Ant2_5180_5360~40000



11N20SISO_Ant2_5200_30~5140



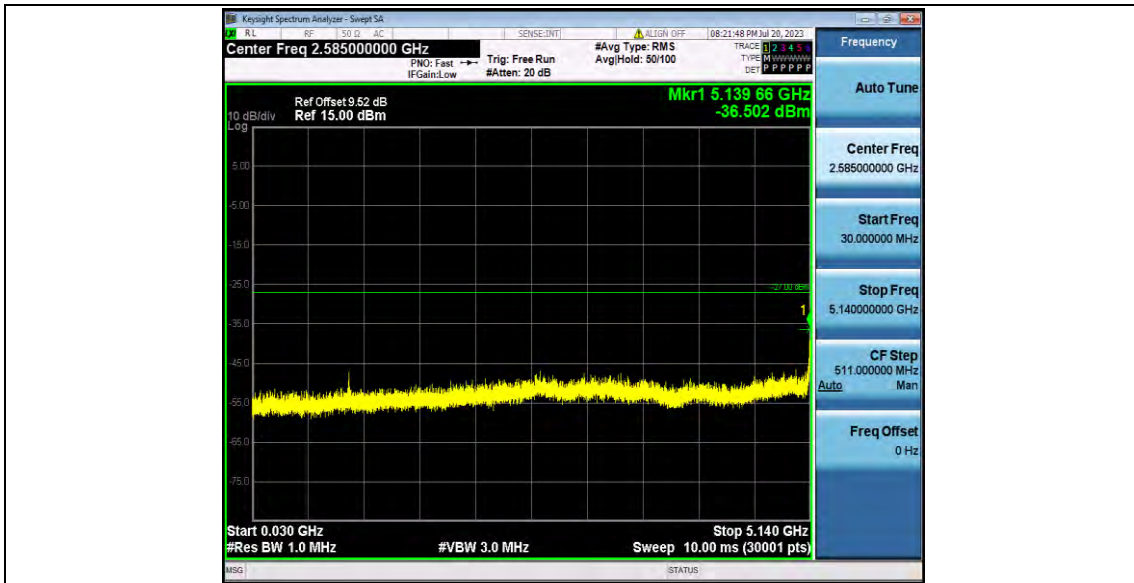
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11N20SISO_Ant2_5240_30~5140



11N20SISO_Ant2_5240_5360~40000



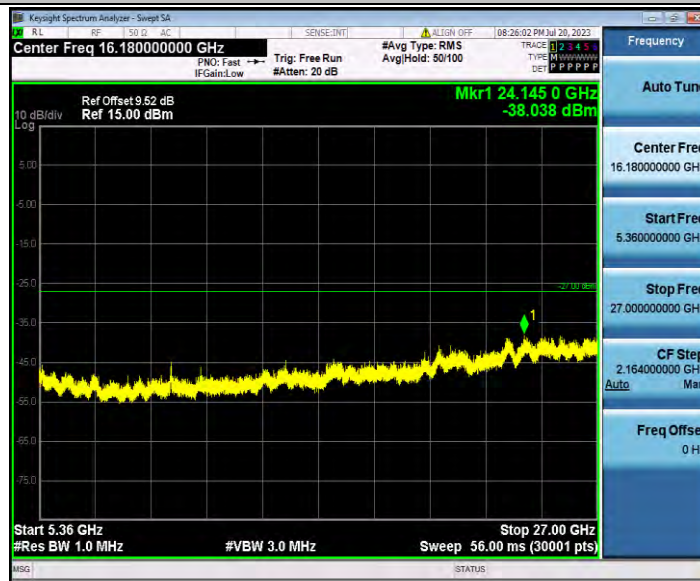
11N40SISO_Ant2_5190_30~5140



11N40SISO_Ant2_5190_5360~40000



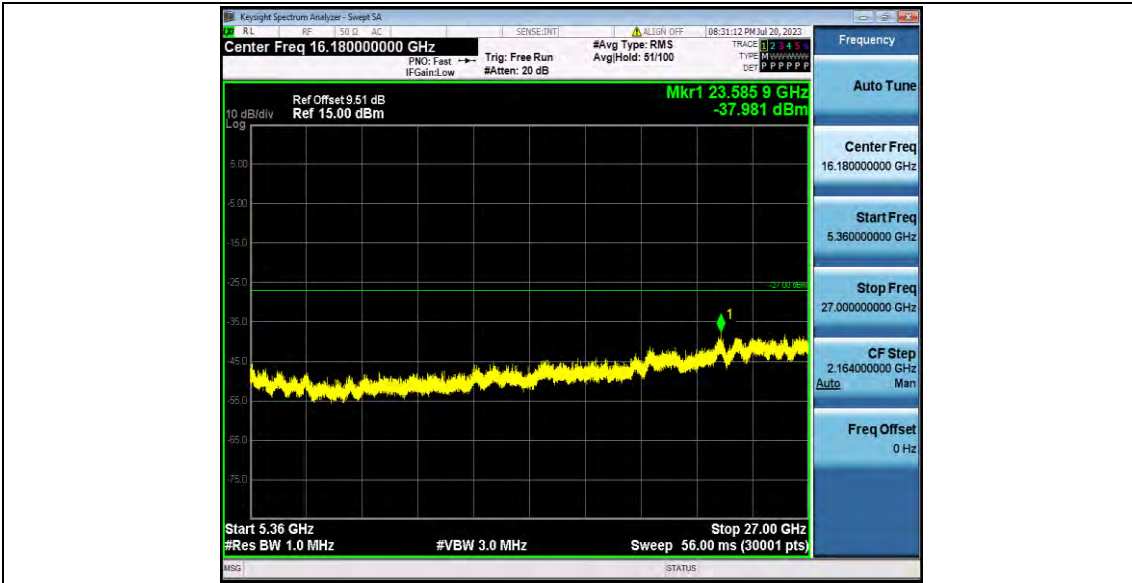
11N40SISO_Ant2_5230_30~5140



11N40SISO_Ant2_5230_5360~40000



11AC20SISO_Ant2_5180_30~5140



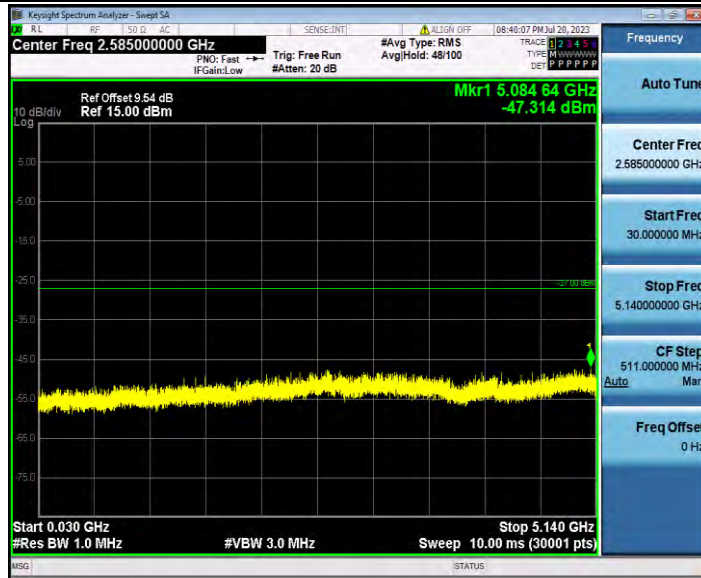
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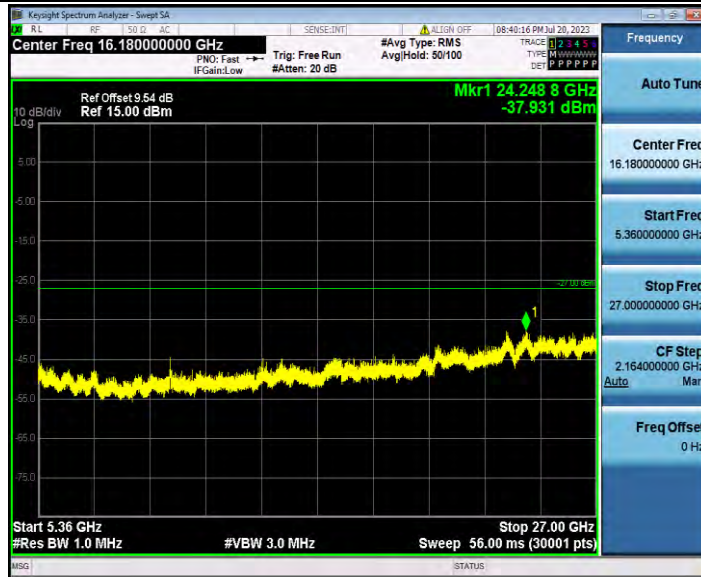
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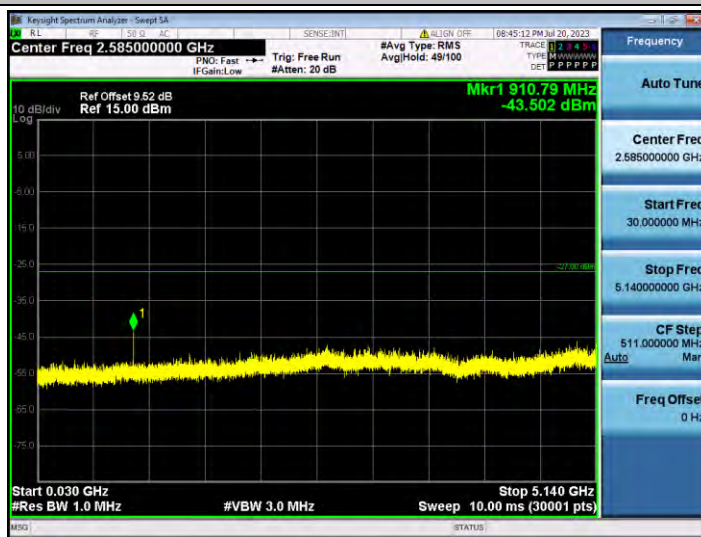
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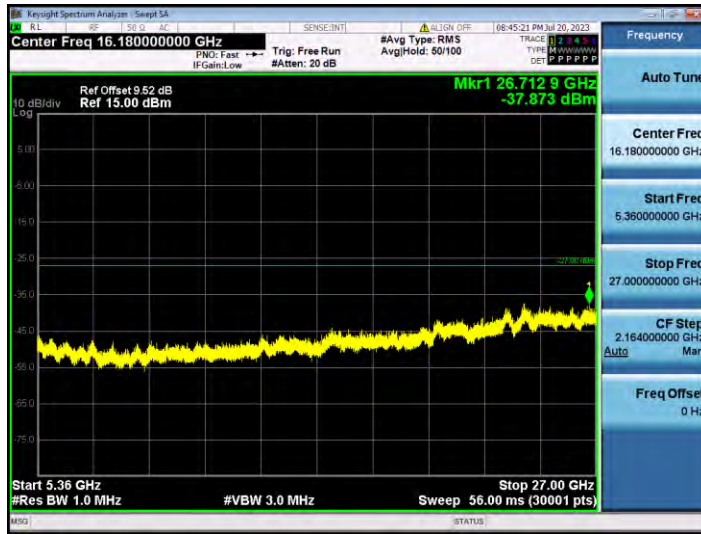
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11AC20SISO_Ant2_5240_5360~40000



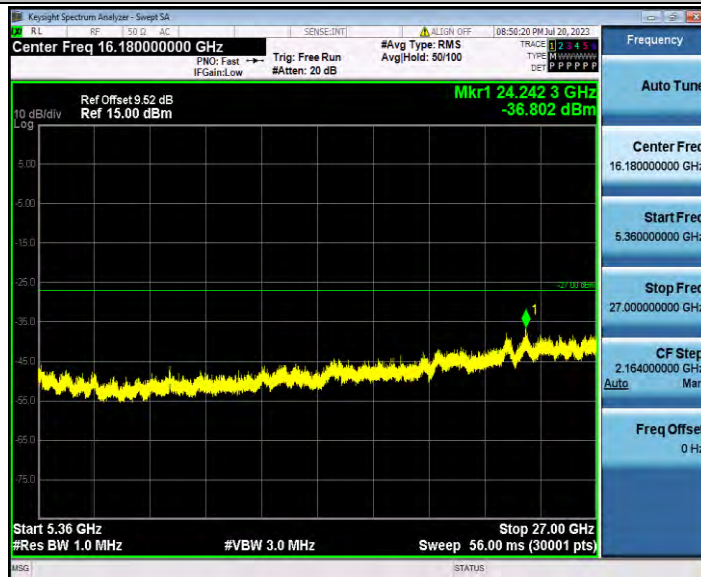
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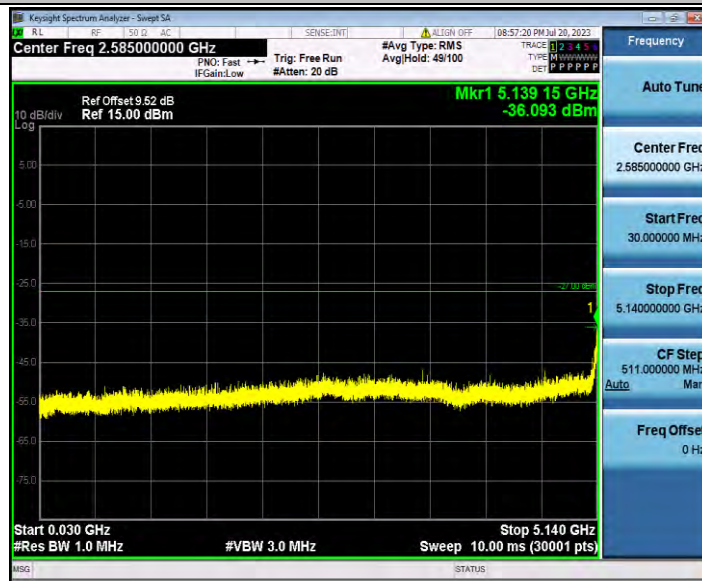
11AC40SISO_Ant2_5190_5360~40000



11AC40SISO_Ant2_5230_30~5140



11AC40SISO_Ant2_5230_5360~40000



11AC80SISO_Ant2_5210_30~5140



11AC80SISO_Ant2_5210_5360~40000