

Case No. : <u>GTS20231017004-1-24</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.14</u> Test Engineer: <u>Evan ouyang</u>

Appendix D.1: Emission Bandwidth

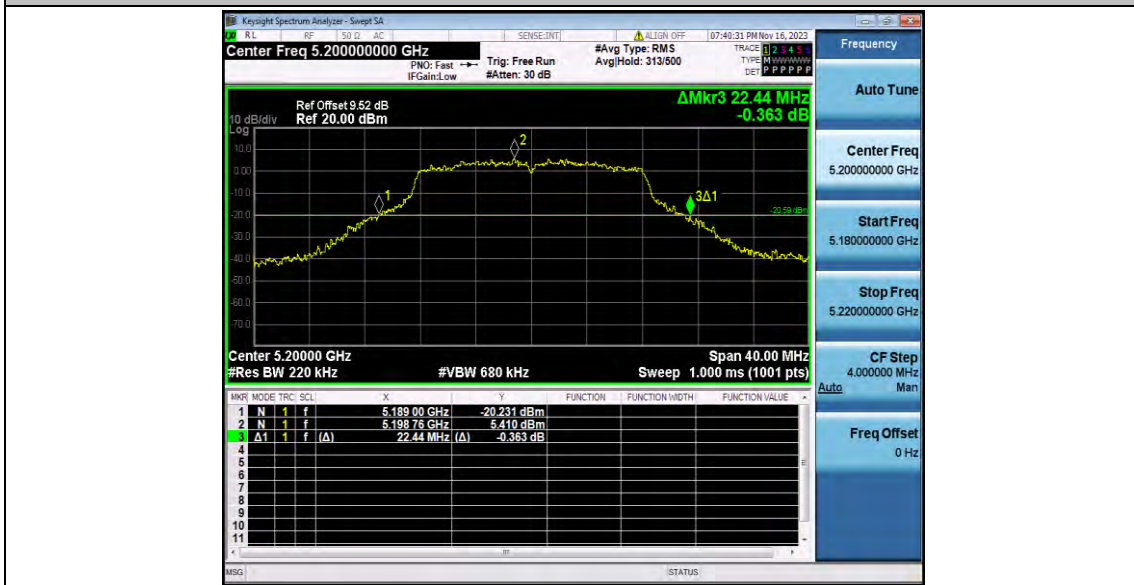
Test Result

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.480	5168.640	5191.120	---	---
		5200	22.440	5189.000	5211.440	---	---
		5240	22.400	5228.520	5250.920	---	---
11N20SISO	Ant1	5180	23.040	5168.600	5191.640	---	---
		5200	22.280	5188.440	5210.720	---	---
		5240	22.560	5229.000	5251.560	---	---
11N40SISO	Ant1	5190	42.880	5168.400	5211.280	---	---
		5230	43.440	5208.400	5251.840	---	---
11AC20SISO	Ant1	5180	22.680	5168.440	5191.120	---	---
		5200	22.480	5188.720	5211.200	---	---
		5240	22.480	5228.840	5251.320	---	---
11AC40SISO	Ant1	5190	42.960	5168.720	5211.680	---	---
		5230	44.080	5207.840	5251.920	---	---
11AC80SISO	Ant1	5210	84.480	5167.600	5252.080	---	---

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

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.047	5171.459	5188.506	---	---
		5200	16.995	5191.489	5208.484	---	---
		5240	16.939	5231.498	5248.437	---	---
11N20SISO	Ant1	5180	18.036	5170.992	5189.028	---	---
		5200	17.975	5191.013	5208.988	---	---
		5240	18.054	5230.954	5249.008	---	---
11N40SISO	Ant1	5190	36.226	5171.938	5208.164	---	---
		5230	36.228	5211.875	5248.103	---	---
11AC20SISO	Ant1	5180	18.025	5170.976	5189.001	---	---
		5200	18.022	5190.994	5209.016	---	---
		5240	18.019	5230.965	5248.984	---	---
11AC40SISO	Ant1	5190	36.205	5171.957	5208.162	---	---
		5230	36.192	5211.928	5248.120	---	---
11AC80SISO	Ant1	5210	75.171	5172.469	5247.640	---	---

Test Graphs



11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



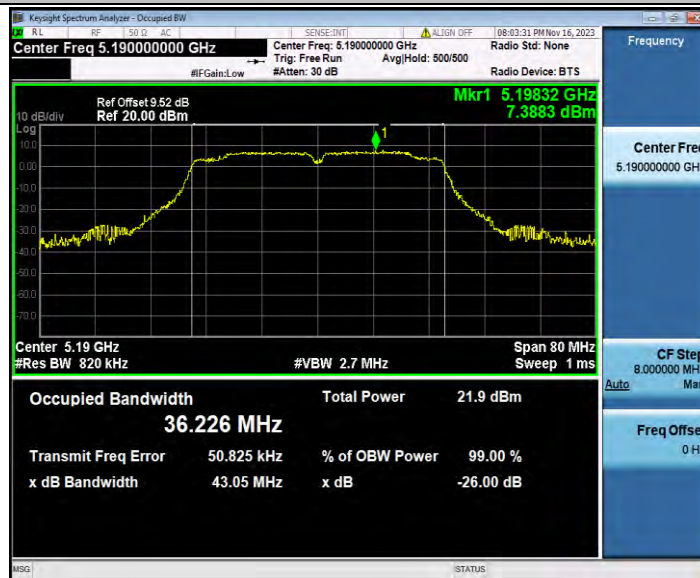
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



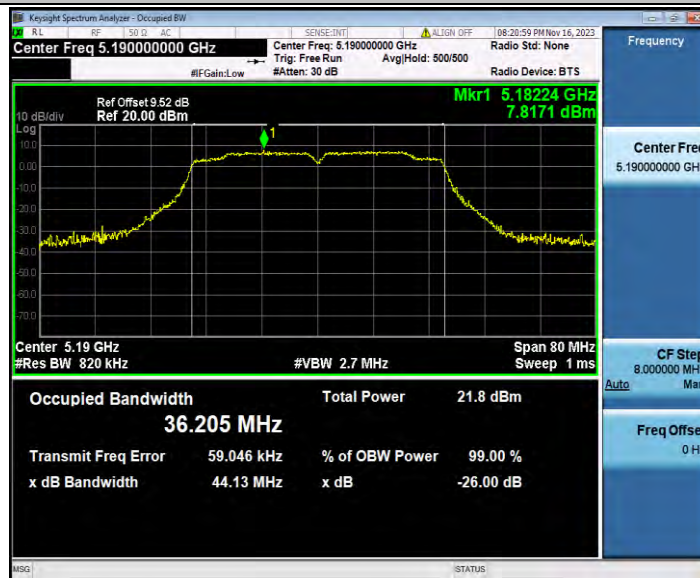
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



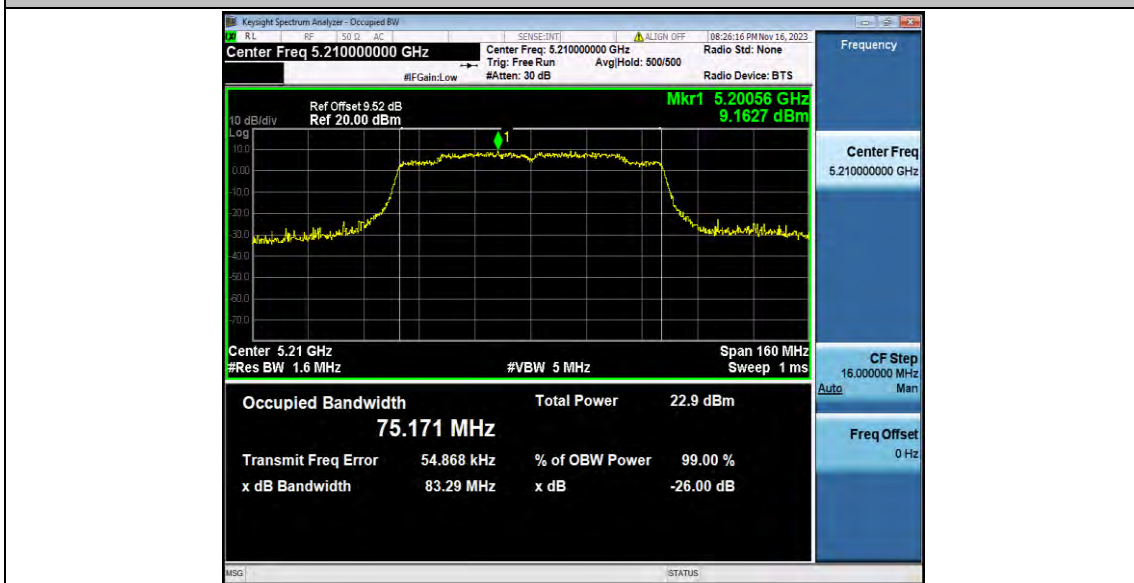
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



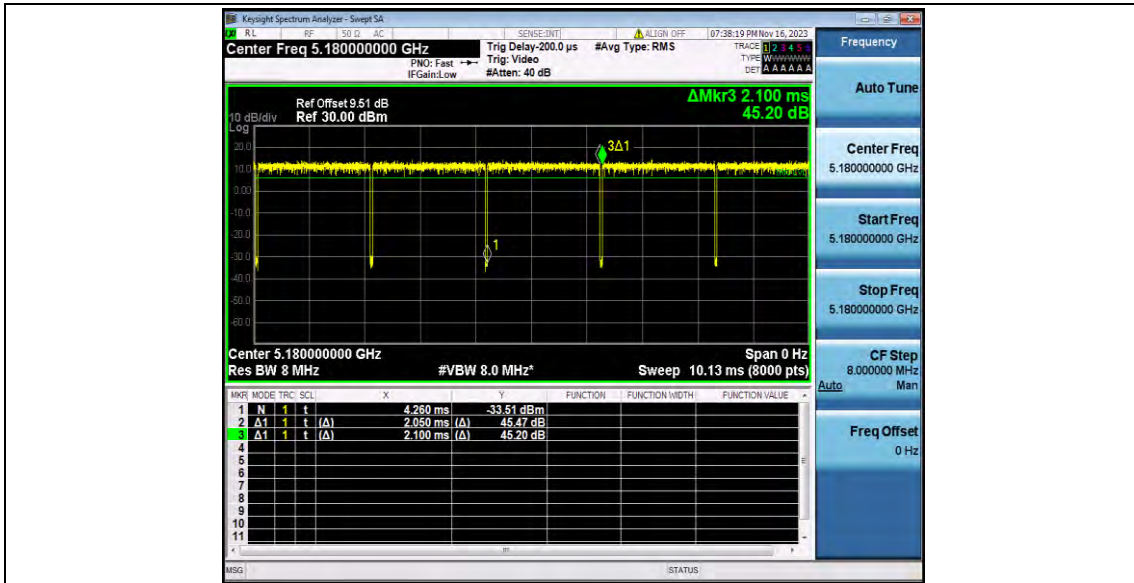
11AC80SISO_Ant1_5210

Appendix D.3: Duty Cycle

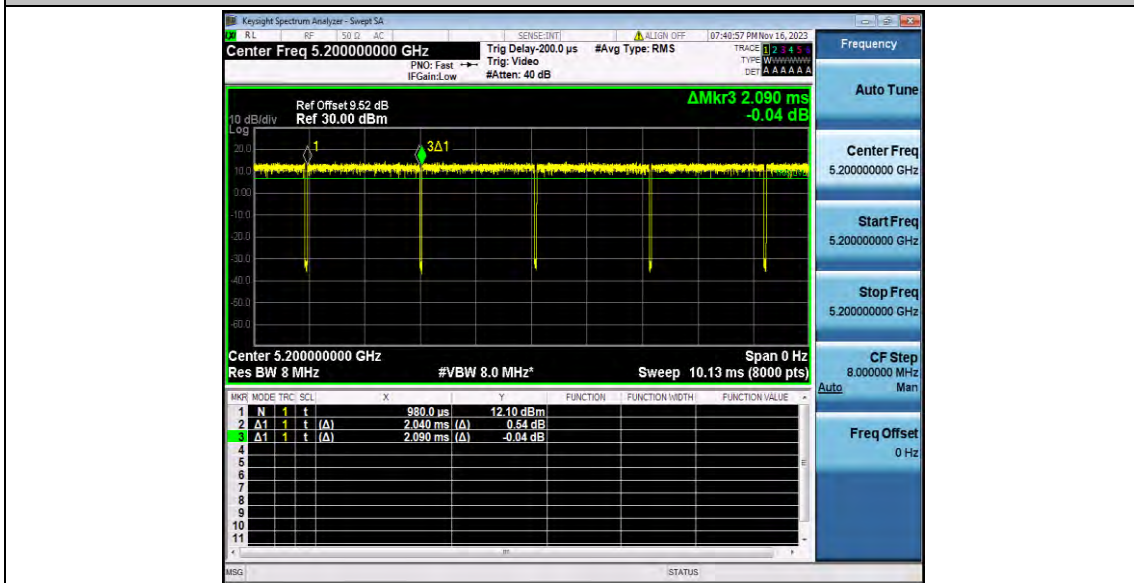
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.05	2.10	97.62
		5200	2.04	2.09	97.61
		5240	2.05	2.09	98.09
11N20SISO	Ant1	5180	1.91	1.95	97.95
		5200	1.90	1.95	97.44
		5240	1.91	1.96	97.45
11N40SISO	Ant1	5190	0.94	0.98	95.92
		5230	0.94	0.98	95.92
11AC20SISO	Ant1	5180	1.92	1.97	97.46
		5200	1.91	1.96	97.45
		5240	1.92	1.96	97.96
11AC40SISO	Ant1	5190	0.94	0.99	94.95
		5230	0.94	0.99	94.95
11AC80SISO	Ant1	5210	0.46	0.51	90.20

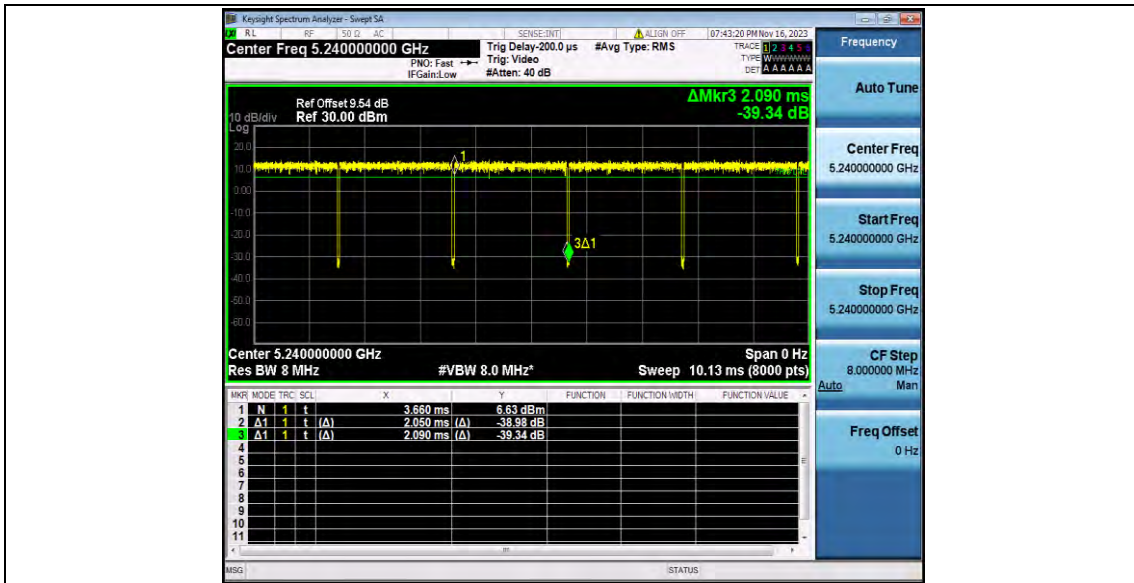
Test Graphs



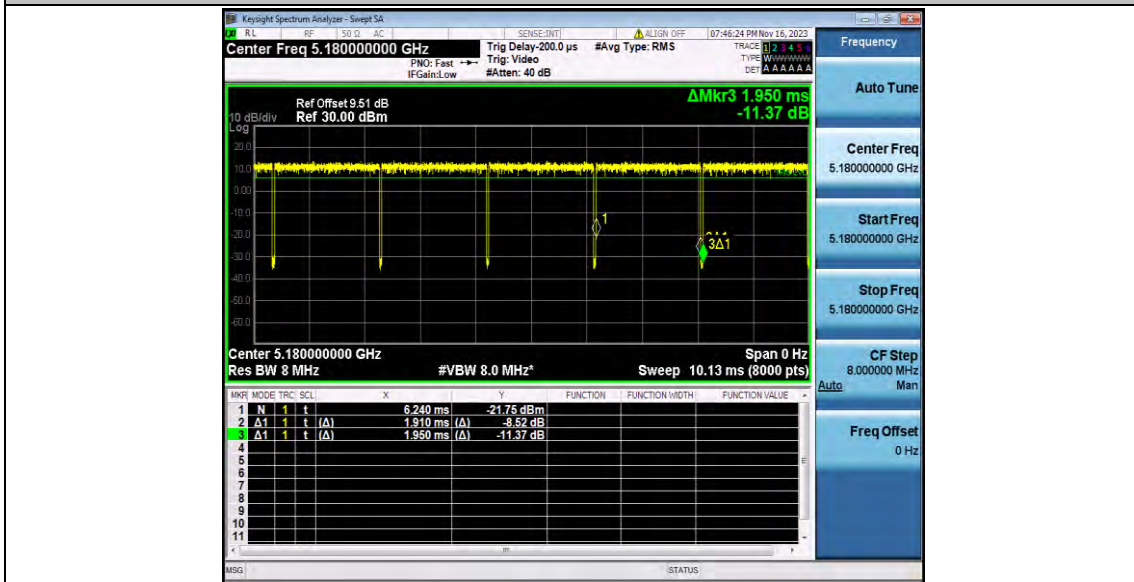
11A_Ant1_5180



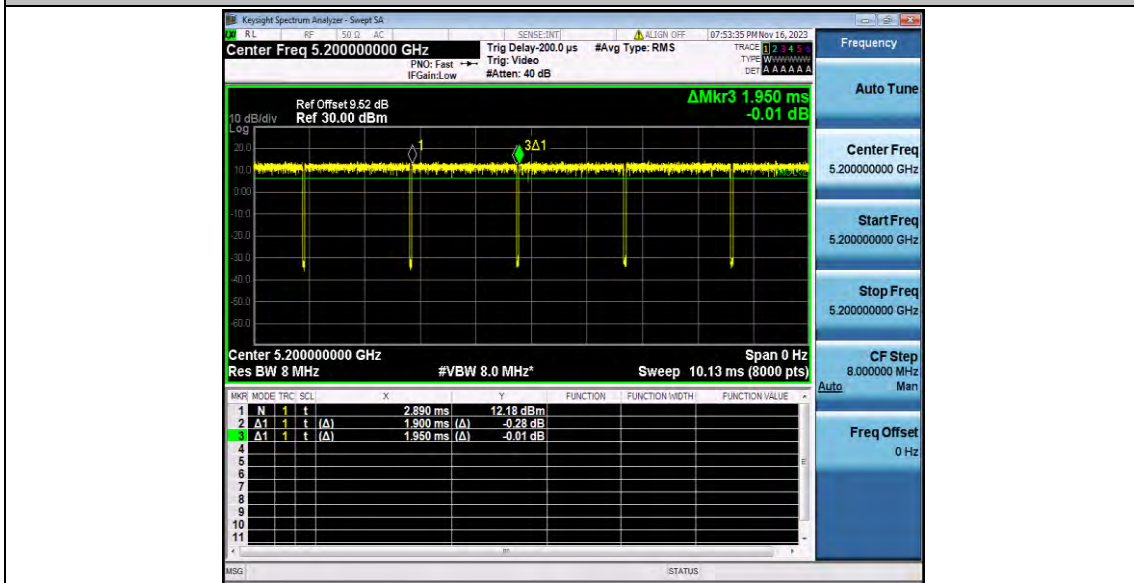
11A_Ant1_5200



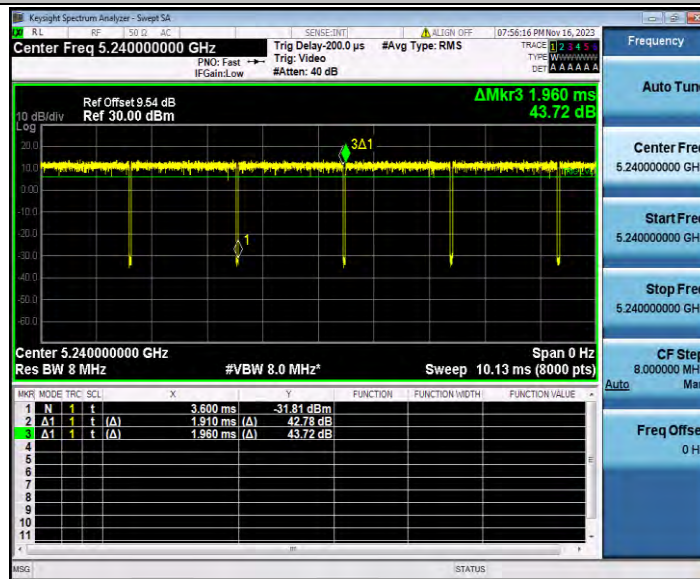
11A_Ant1_5240



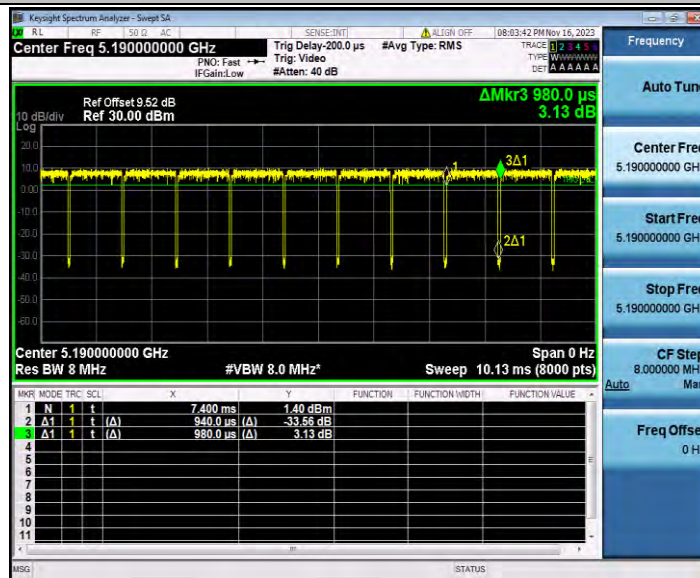
11N20SISO_Ant1_5180



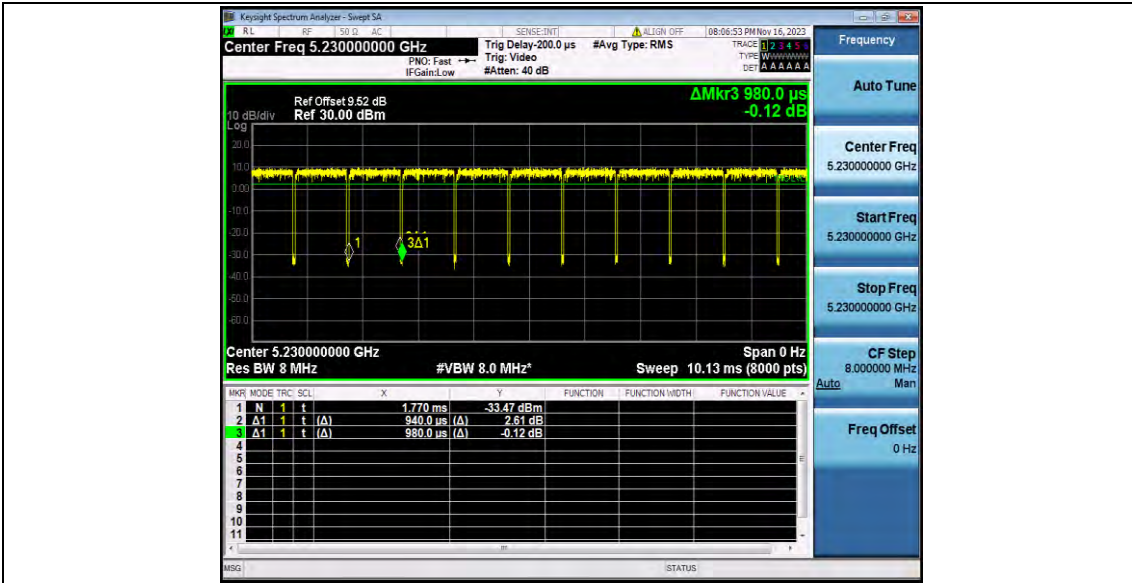
11N20SISO_Ant1_5200



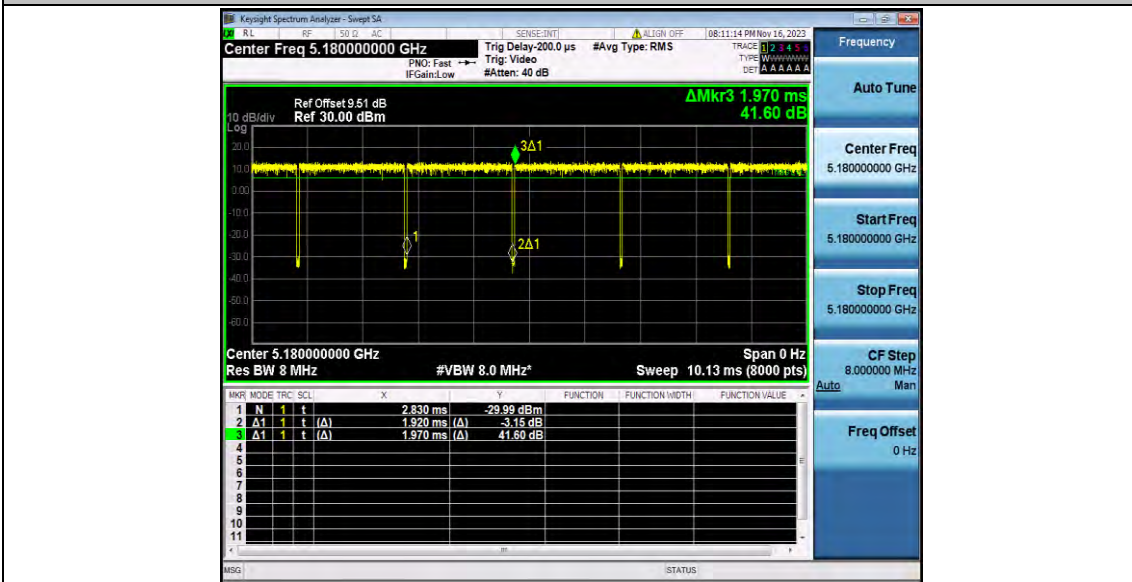
11N20SISO_Ant1_5240



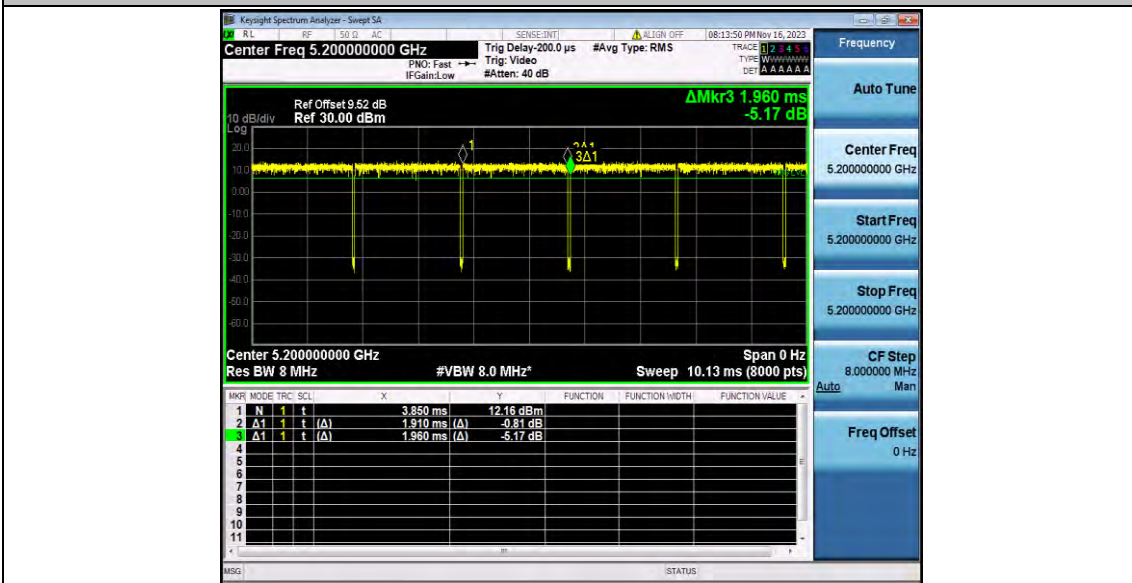
11N40SISO_Ant1_5190



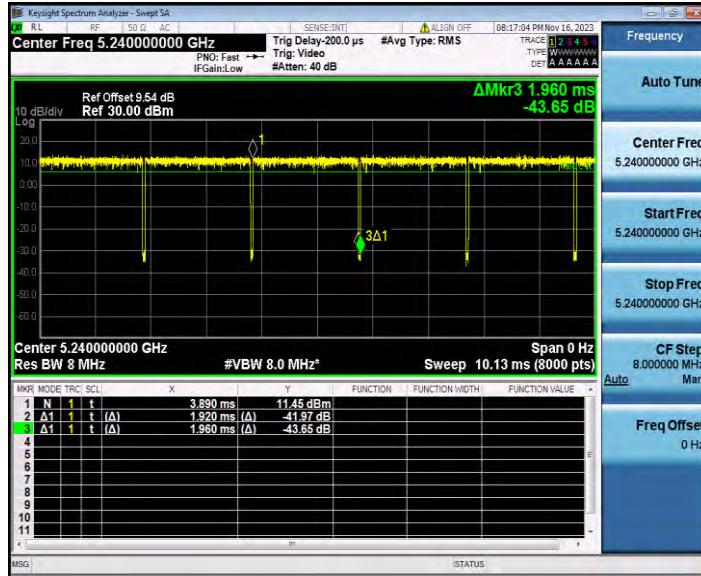
11N40SISO_Ant1_5230



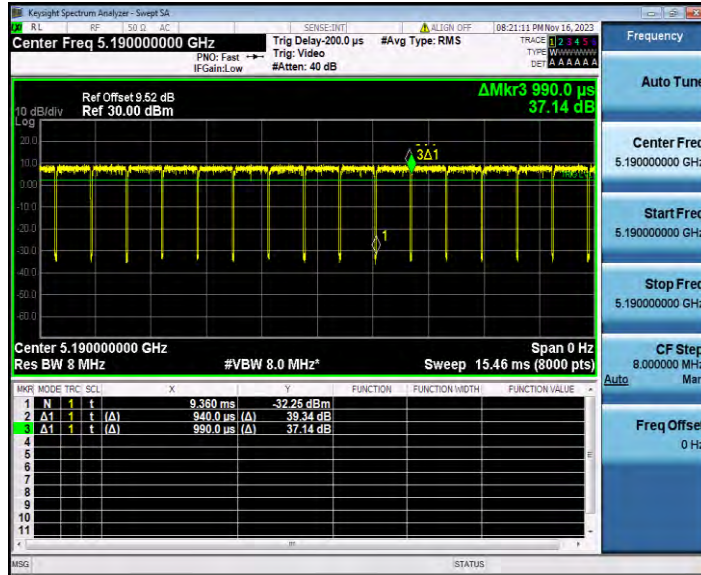
11AC20SISO_Ant1_5180



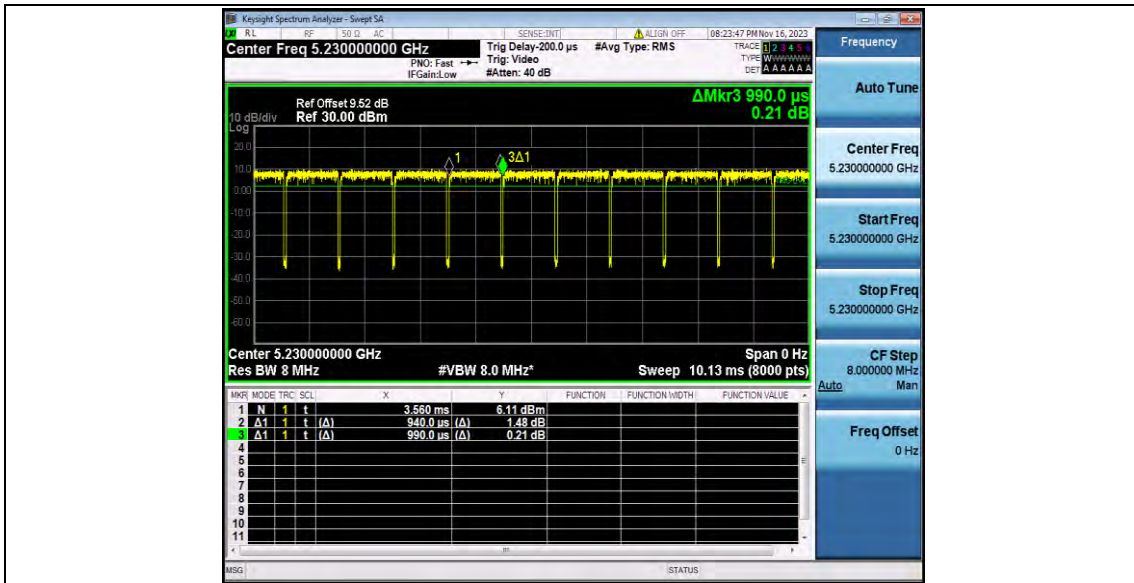
11AC20SISO_Ant1_5200



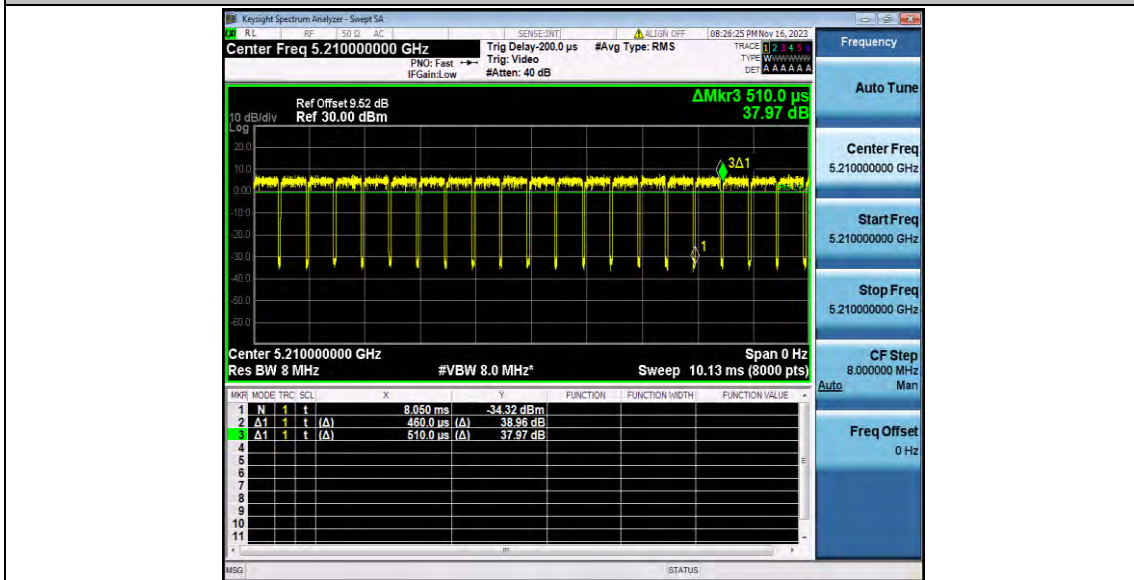
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[M Hz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.95	97.62	0.10	14.05	≤23.98	PASS
		5200	14.45	97.61	0.11	14.56	≤23.98	PASS
		5240	14.17	98.09	0.08	14.25	≤23.98	PASS
11N20SISO	Ant1	5180	13.99	97.95	0.09	14.08	≤23.98	PASS
		5200	14.35	97.44	0.11	14.46	≤23.98	PASS
		5240	14.01	97.45	0.11	14.12	≤23.98	PASS
11N40SISO	Ant1	5190	14.01	95.92	0.18	14.19	≤23.98	PASS
		5230	13.97	95.92	0.18	14.15	≤23.98	PASS
11AC20SISO	Ant1	5180	13.90	97.46	0.11	14.01	≤23.98	PASS
		5200	14.23	97.45	0.11	14.34	≤23.98	PASS
		5240	13.84	97.96	0.09	13.93	≤23.98	PASS
11AC40SISO	Ant1	5190	13.96	94.95	0.23	14.19	≤23.98	PASS
		5230	13.95	94.95	0.23	14.18	≤23.98	PASS
11AC80SISO	Ant1	5210	13.73	90.20	0.45	14.18	≤23.98	PASS

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

Appendix D.5: Maximum power spectral density

Test Result

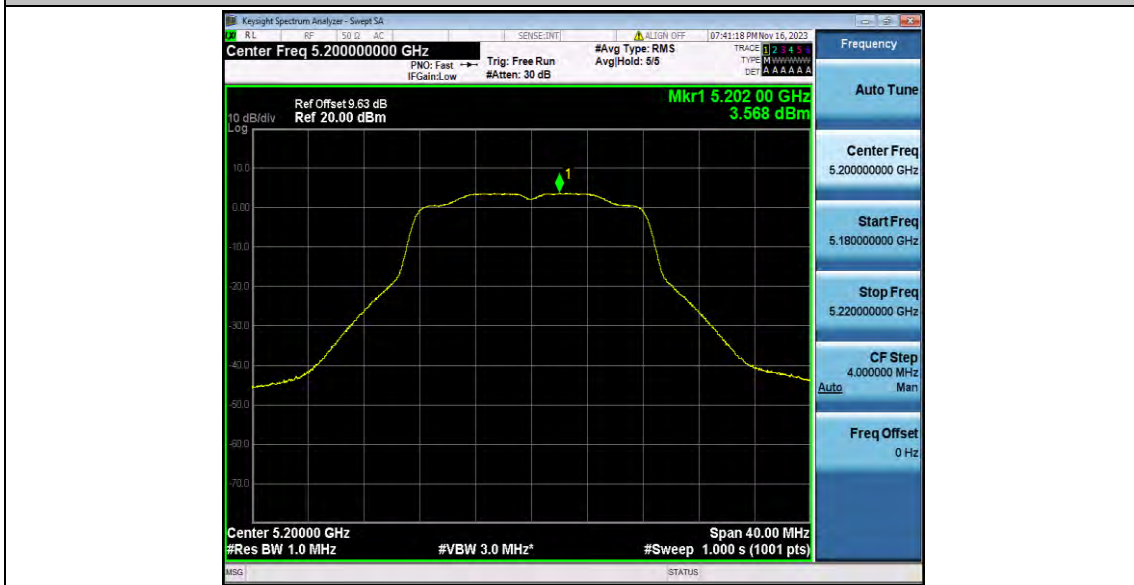
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.14	≤11.00	PASS
		5200	3.57	≤11.00	PASS
		5240	3.4	≤11.00	PASS
11N20SISO	Ant1	5180	2.87	≤11.00	PASS
		5200	3.32	≤11.00	PASS
		5240	3.09	≤11.00	PASS
11N40SISO	Ant1	5190	-0.13	≤11.00	PASS
		5230	-0.23	≤11.00	PASS
11AC20SISO	Ant1	5180	2.81	≤11.00	PASS
		5200	3.15	≤11.00	PASS
		5240	2.96	≤11.00	PASS
11AC40SISO	Ant1	5190	-0.11	≤11.00	PASS
		5230	-0.29	≤11.00	PASS
11AC80SISO	Ant1	5210	-3.09	≤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



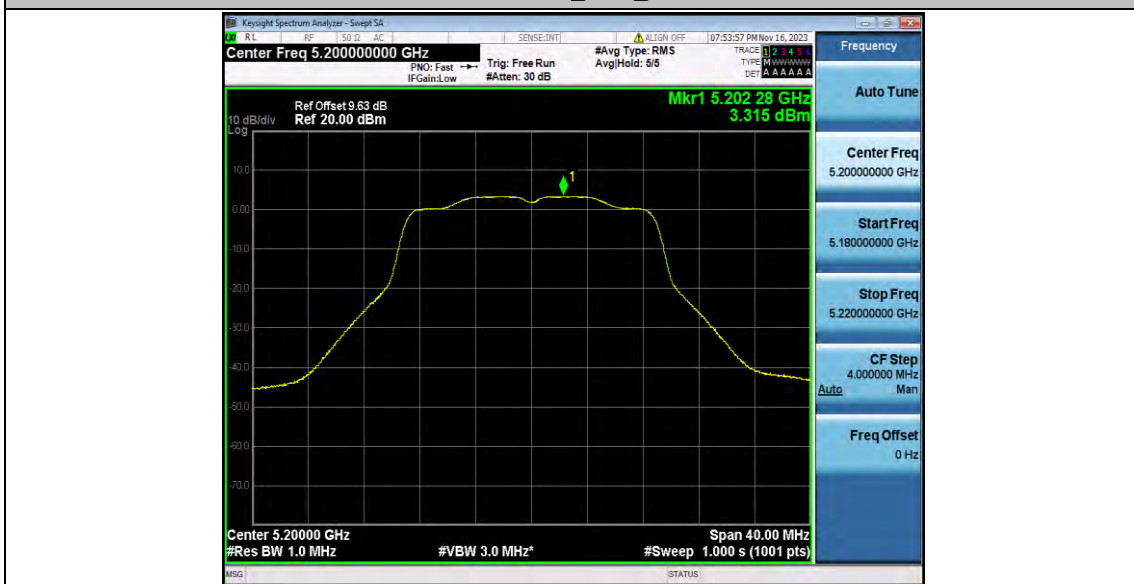
11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



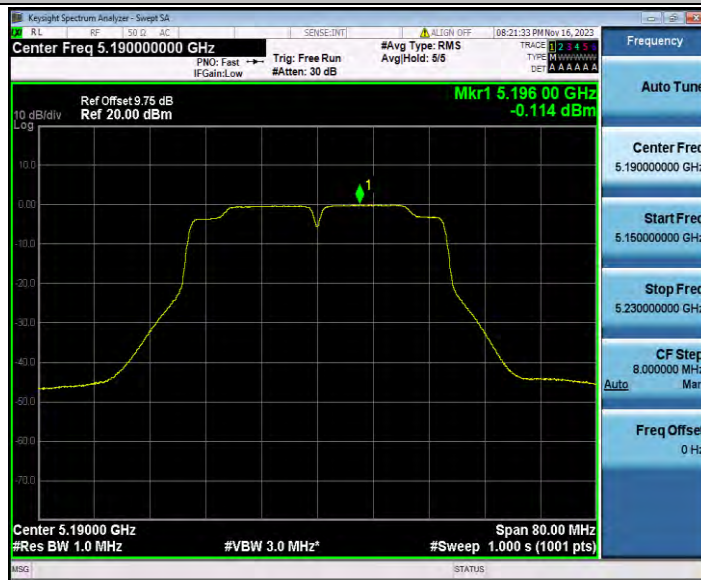
11AC20SISO_Ant1_5180



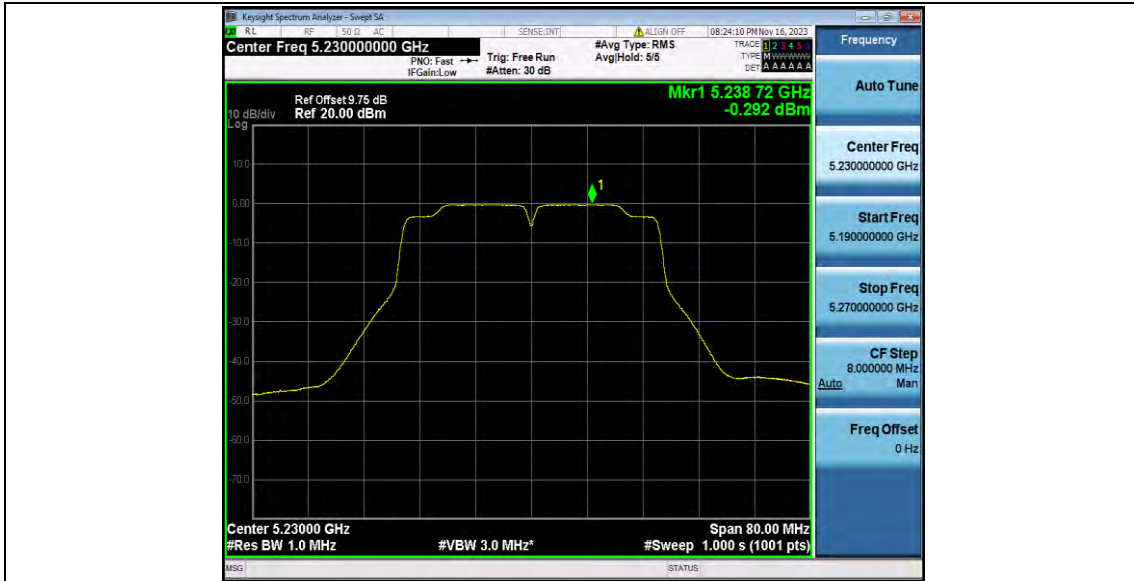
11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



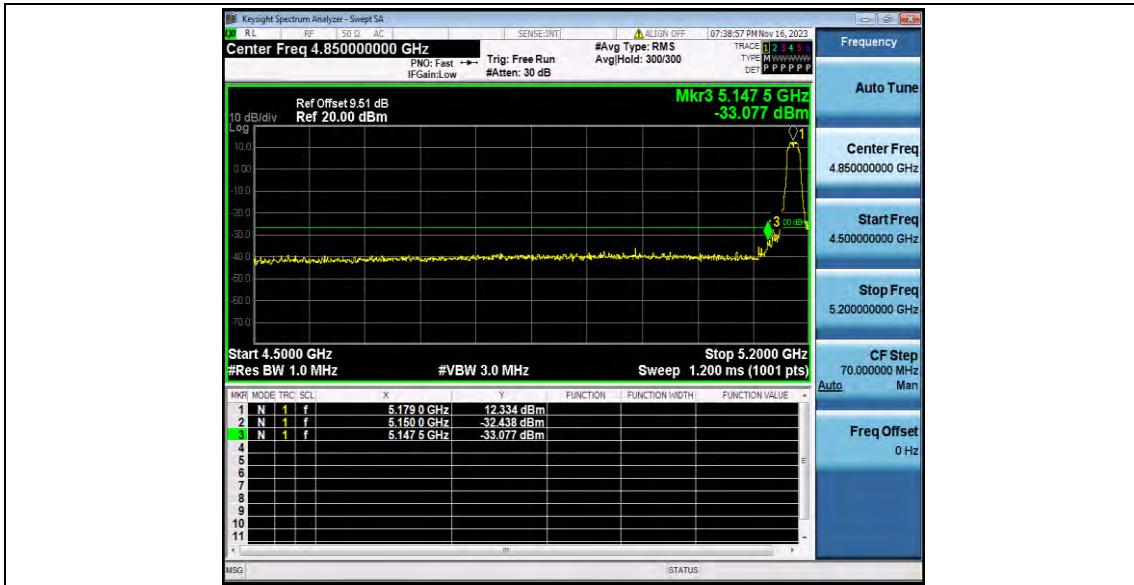
11AC80SISO_Ant1_5210

Appendix D.6: Band edge measurements

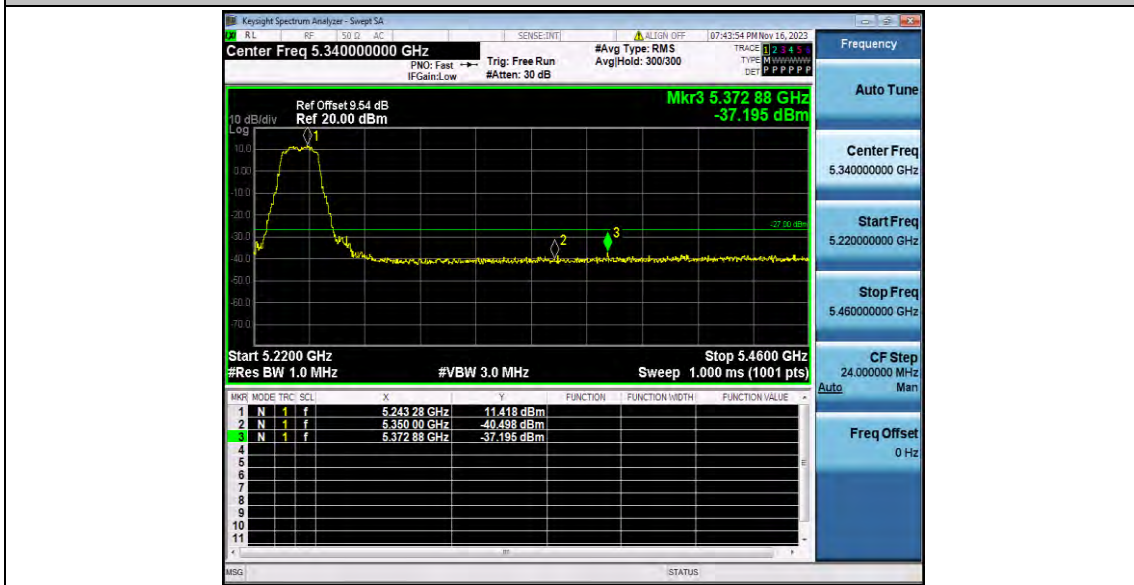
Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-33.08	≤ -27	PASS
		High	5240	-37.2	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-35.37	≤ -27	PASS
		High	5240	-38.01	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-31.9	≤ -27	PASS
		High	5230	-37.66	≤ -27	PASS
11AC20SISO	Ant1	Low	5180	-35.14	≤ -27	PASS
		High	5240	-37.99	≤ -27	PASS
11AC40SISO	Ant1	Low	5190	-33.39	≤ -27	PASS
		High	5230	-37.7	≤ -27	PASS
11AC80SISO	Ant1	Low	5210	-29.19	≤ -27	PASS
		High	5210	-37.28	≤ -27	PASS

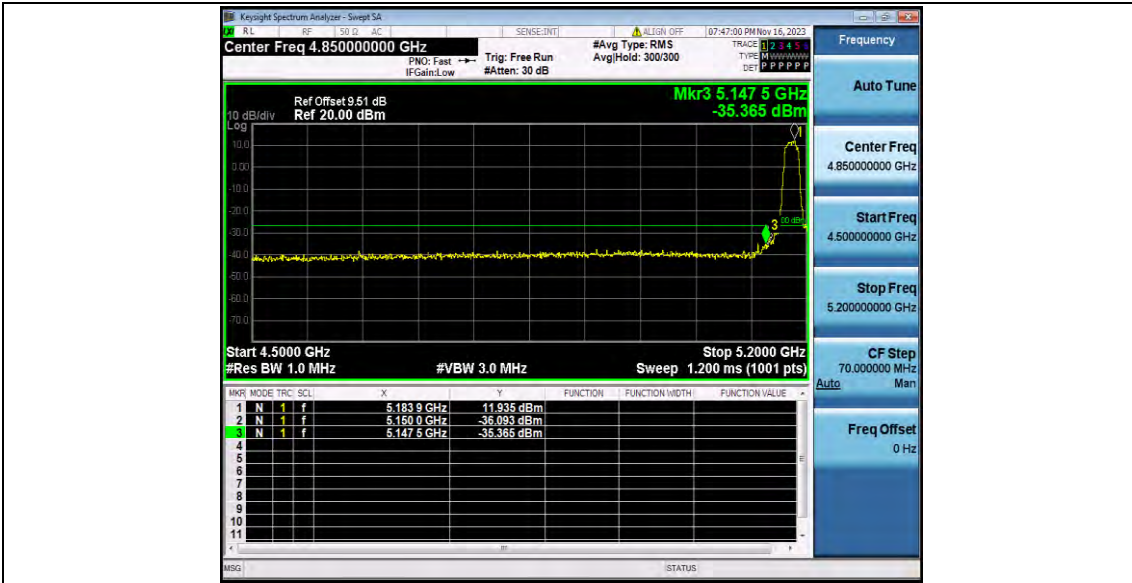
Test Graphs B1



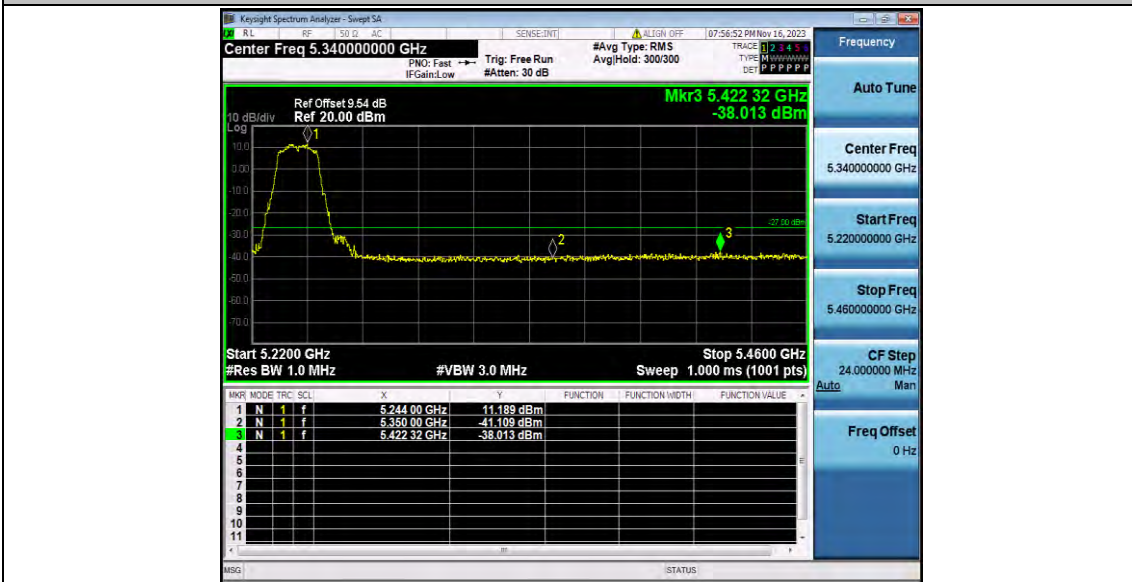
11A_Ant1_Low_5180



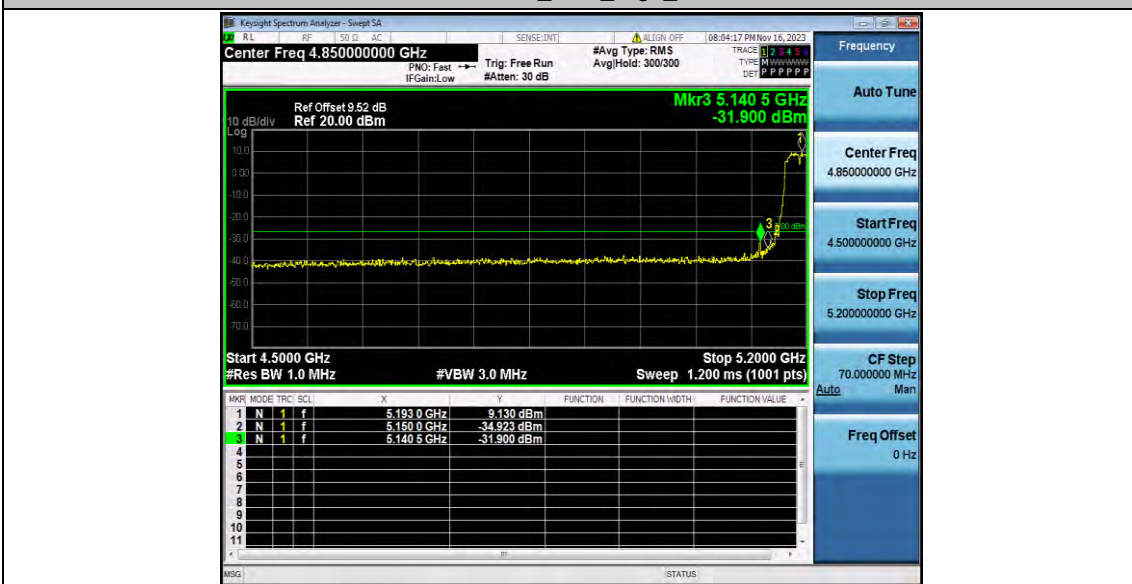
11A_Ant1_High_5240



11N20SISO_Ant1_Low_5180



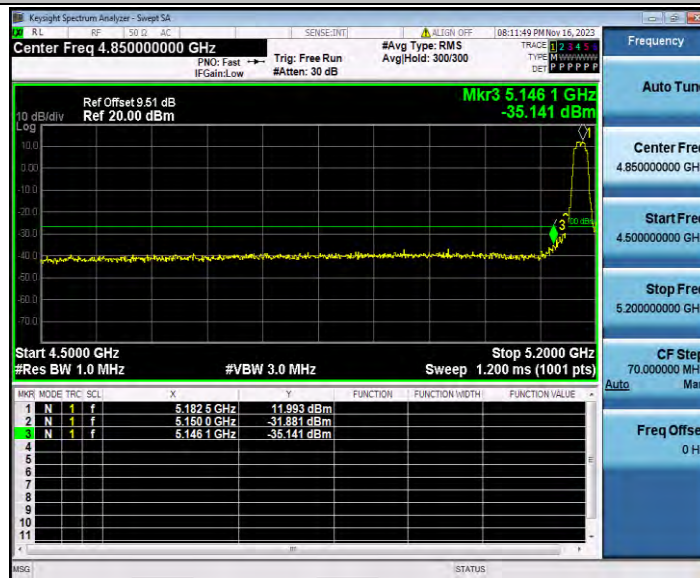
11N20SISO_Ant1_High_5240



11N40SISO_Ant1_Low_5190



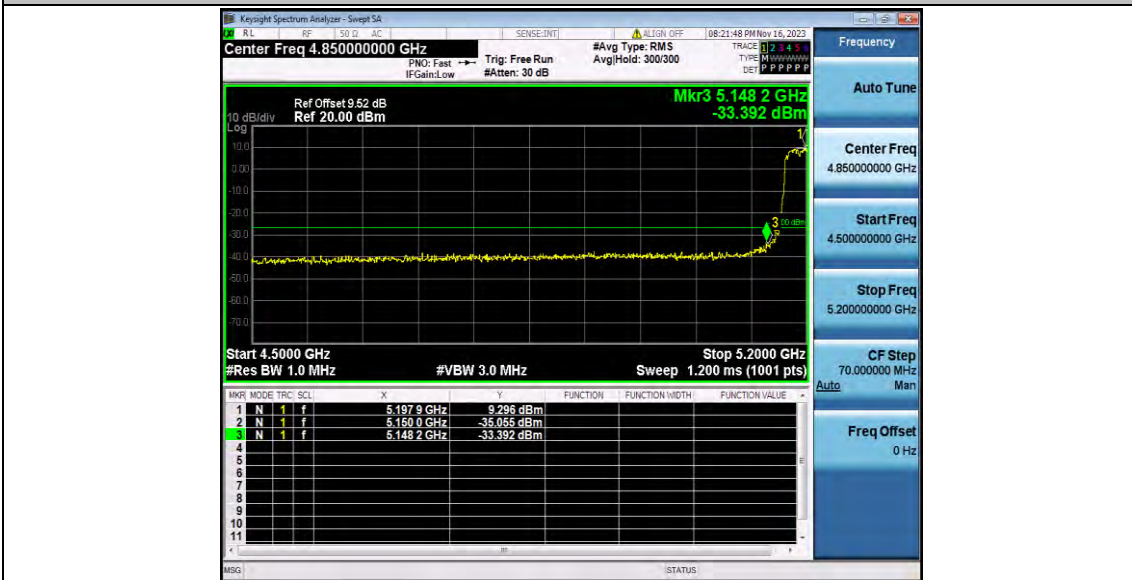
11N40SISO_Ant1_High_5230



11AC20SISO_Ant1_Low_5180



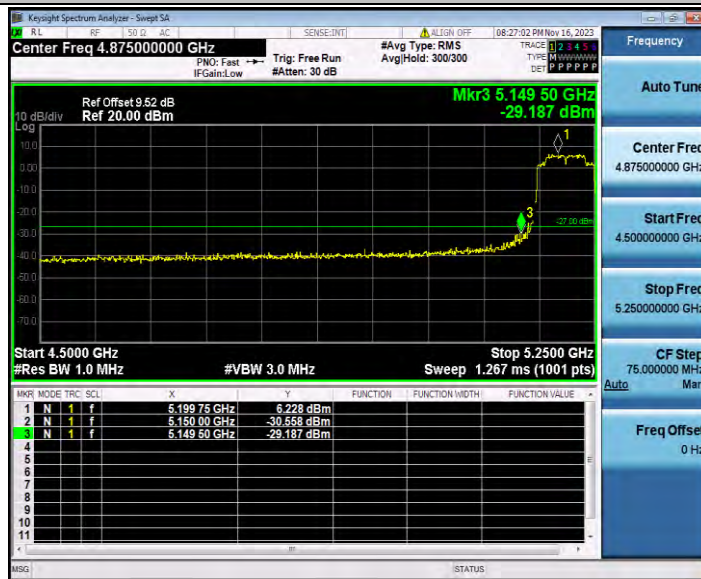
11AC20SISO_Ant1_High_5240



11AC40SISO_Ant1_Low_5190



11AC40SISO_Ant1_High_5230



11AC80SISO_Ant1_Low_5210



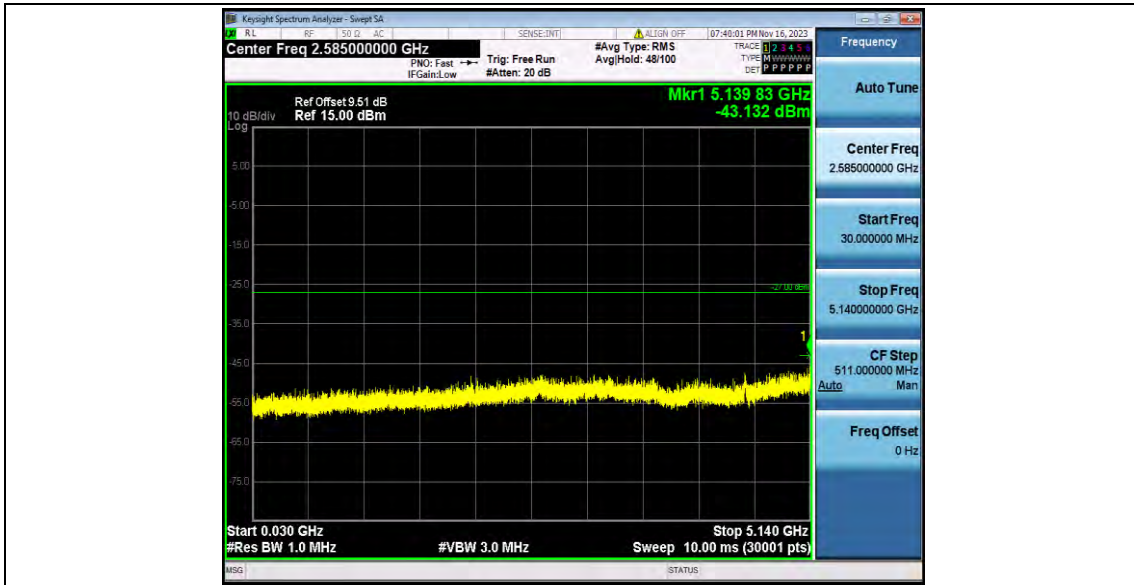
11AC80SISO_Ant1_High_5210

Appendix D.7: Conducted Spurious Emission

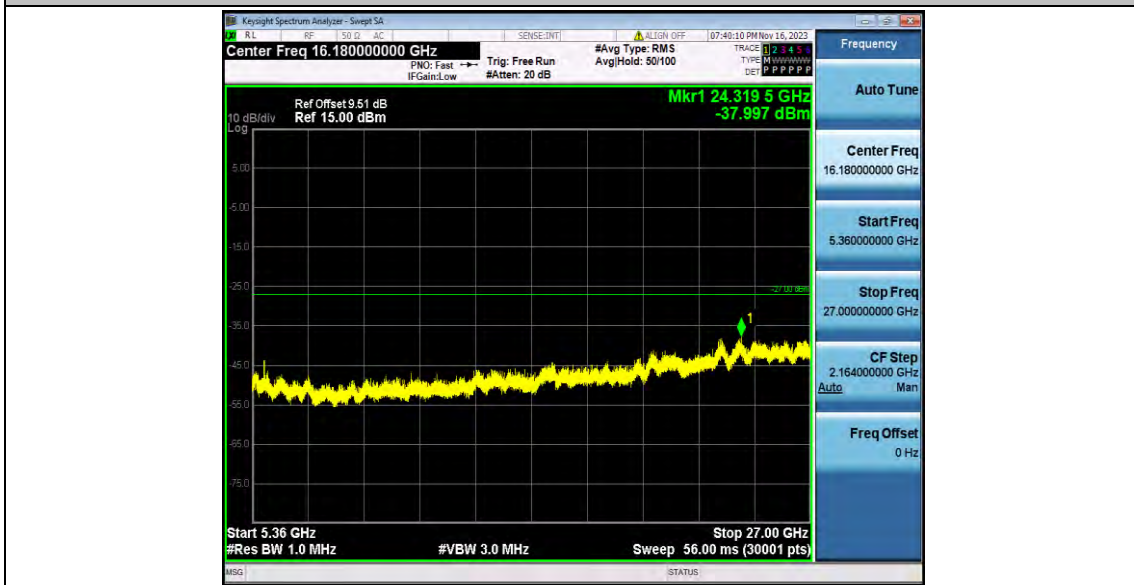
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5139.83	-43.13	≤-27	PASS
			5360~40000	24319.53	-38	≤-27	PASS
		5200	30~5140	5067.95	-45.92	≤-27	PASS
			5360~40000	24278.41	-37.91	≤-27	PASS
		5240	30~5140	5030.48	-46.49	≤-27	PASS
			5360~40000	24155.78	-38.44	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5136.93	-42.1	≤-27	PASS
			5360~40000	26024.04	-38.54	≤-27	PASS
		5200	30~5140	4954.68	-45.58	≤-27	PASS
			5360~40000	24965.12	-37.29	≤-27	PASS
		5240	30~5140	4602.77	-45.56	≤-27	PASS
			5360~40000	24271.2	-38.16	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5136.08	-40.69	≤-27	PASS
			5360~40000	24841.77	-37.49	≤-27	PASS
		5230	30~5140	4934.58	-47.11	≤-27	PASS
			5360~40000	26056.5	-38.34	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	5138.47	-39.9	≤-27	PASS
			5360~40000	24234.41	-37.66	≤-27	PASS
		5200	30~5140	4559.33	-46.41	≤-27	PASS
			5360~40000	24314.48	-38.23	≤-27	PASS
		5240	30~5140	5029.62	-46.87	≤-27	PASS
			5360~40000	26686.94	-37.6	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	5139.32	-40.58	≤-27	PASS
			5360~40000	25231.29	-38.06	≤-27	PASS
		5230	30~5140	5087.88	-47.4	≤-27	PASS
			5360~40000	26938.69	-37.18	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5138.3	-31.16	≤-27	PASS
			5360~40000	23570.78	-37.54	≤-27	PASS

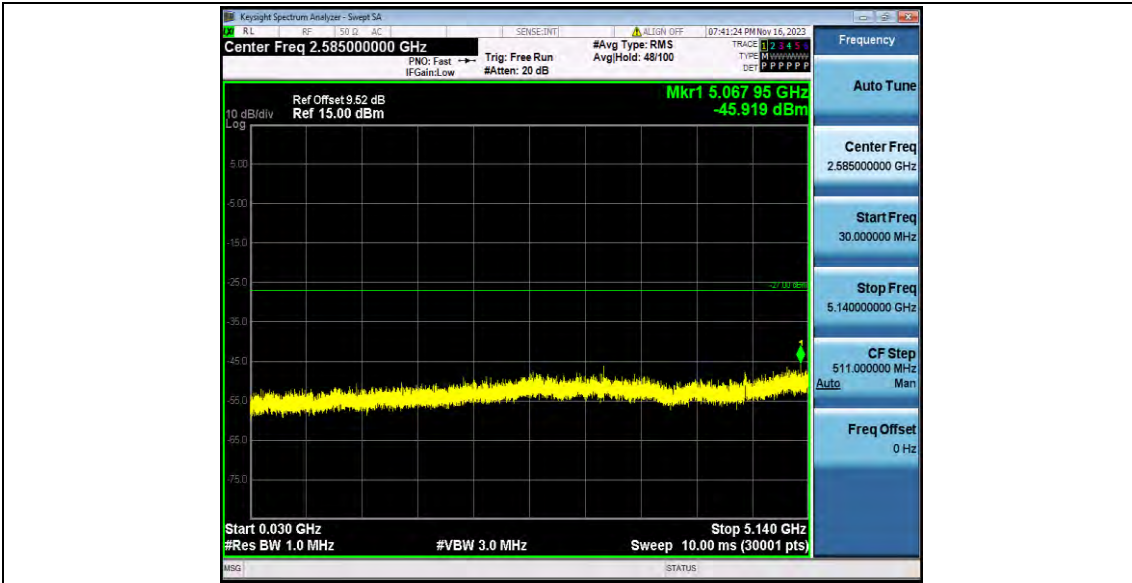
Test Graphs



11A_Ant1_5180_30~5140



11A_Ant1_5180_5360~40000



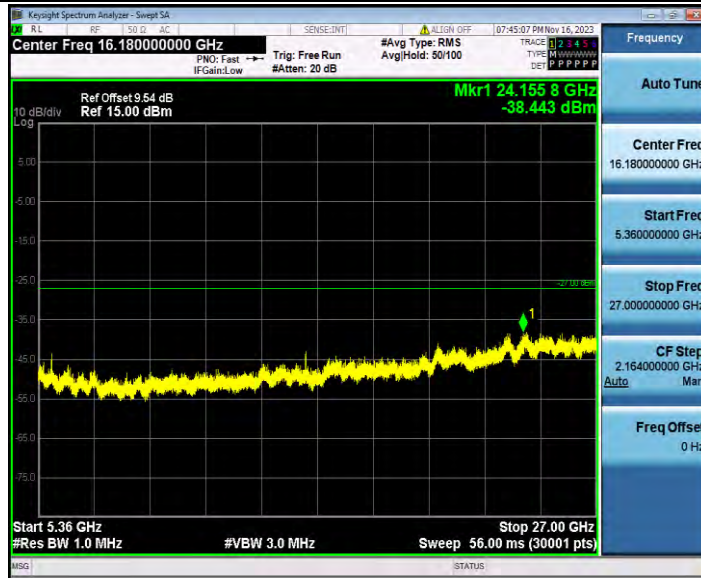
11A_Ant1_5200_30~5140



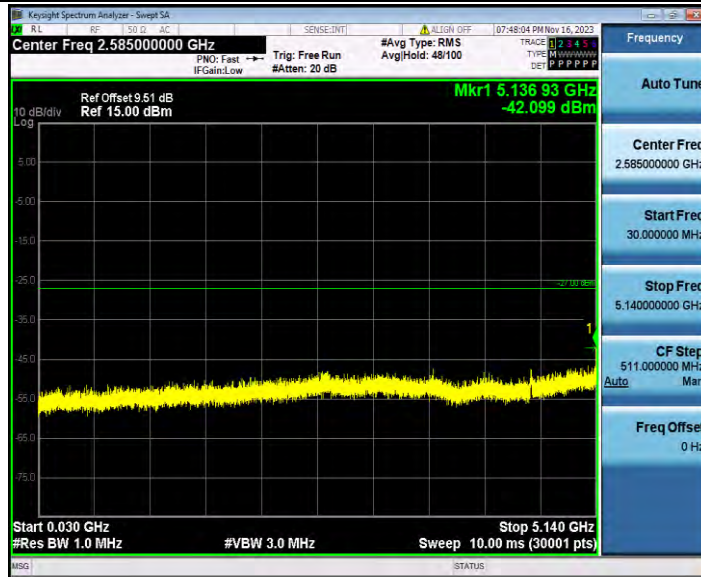
11A_Ant1_5200_5360~40000



11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~40000



11N20SISO_Ant1_5180_30~5140



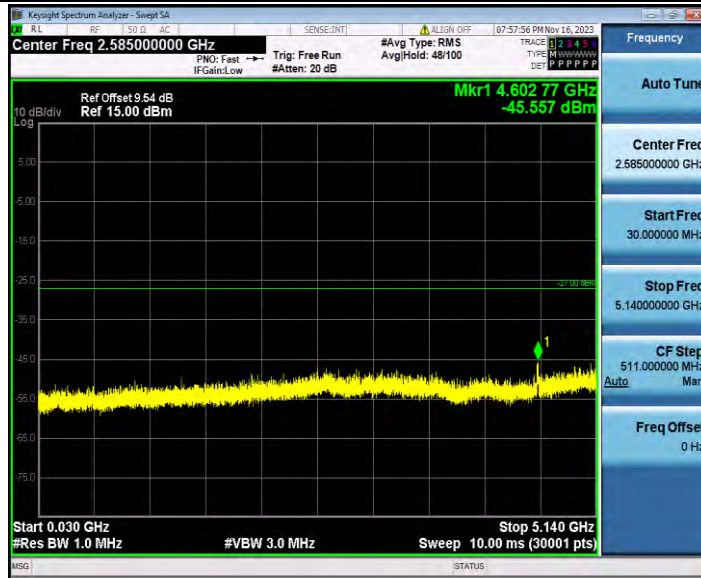
11N20SISO_Ant1_5180_5360~40000



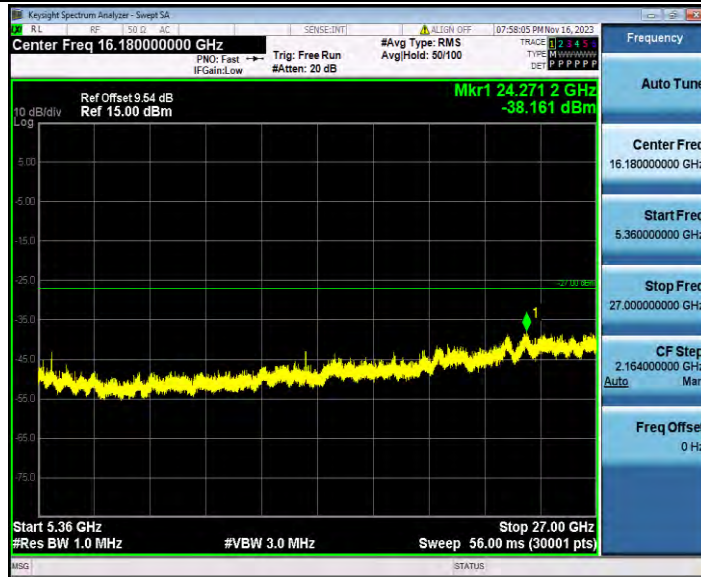
11N20SISO_Ant1_5200_30~5140



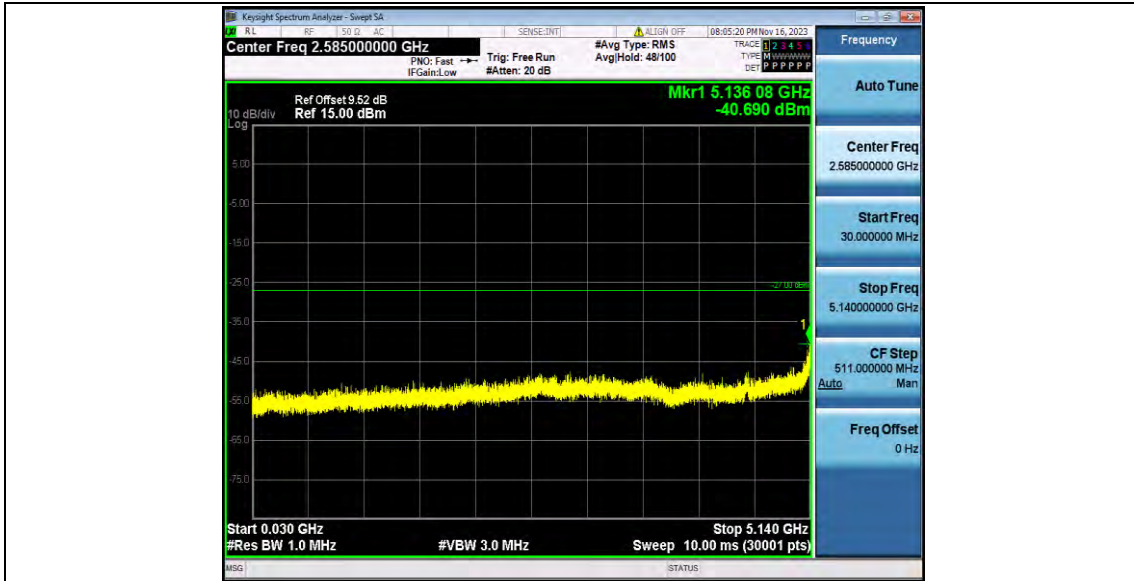
11N20SISO_Ant1_5200_5360~40000



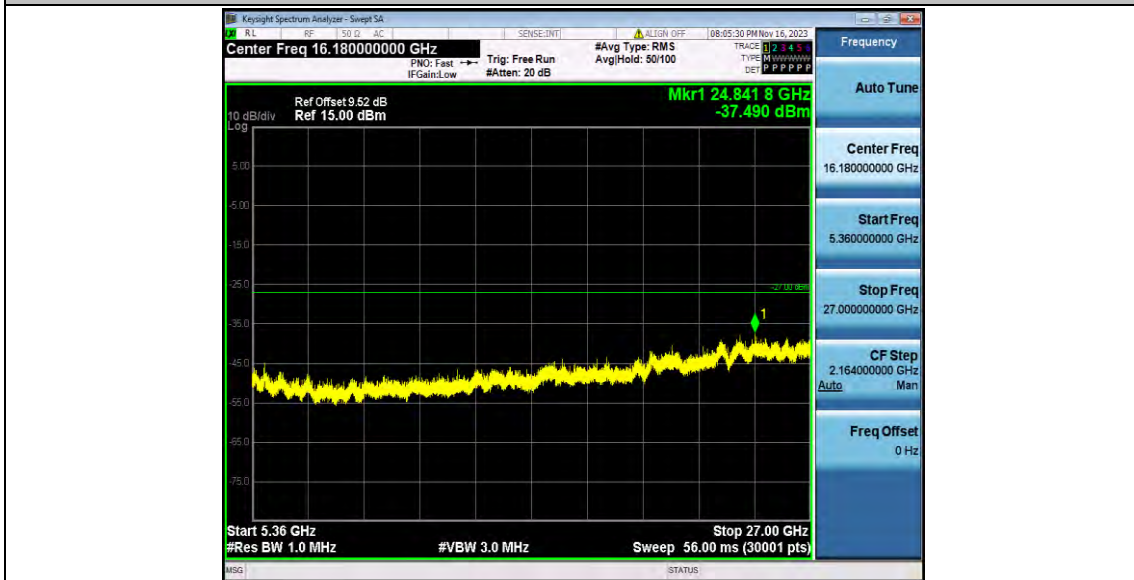
11N20SISO_Ant1_5240_30~5140



11N20SISO_Ant1_5240_5360~40000



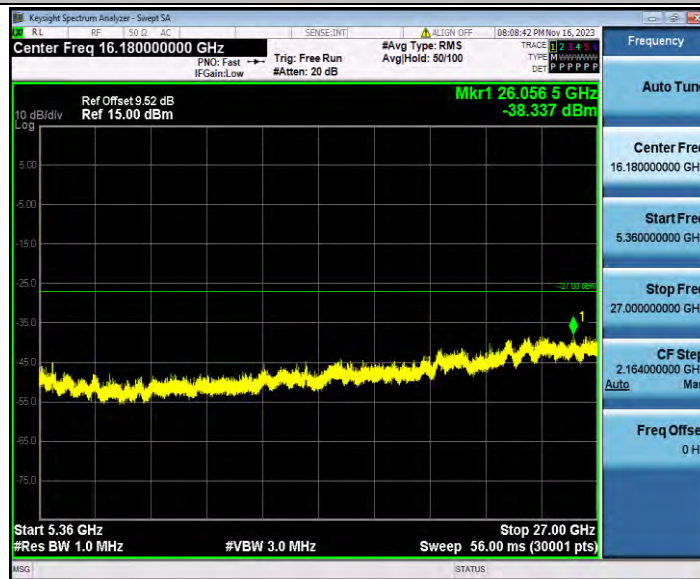
11N40SISO_Ant1_5190_30~5140



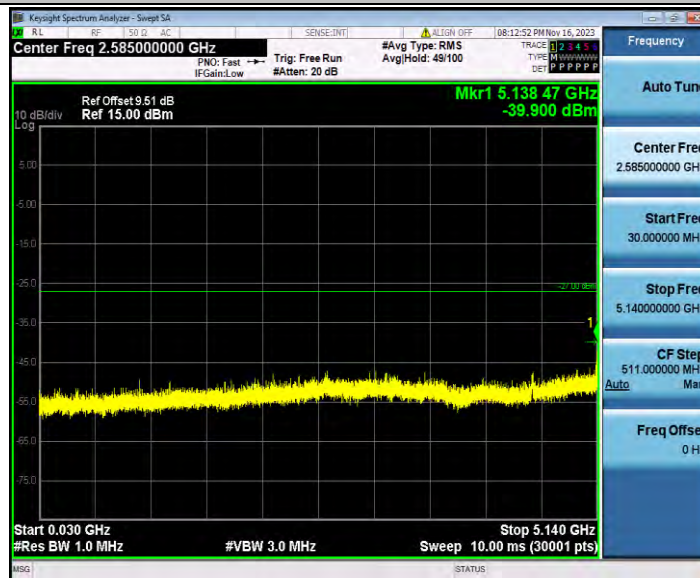
11N40SISO_Ant1_5190_5360~40000



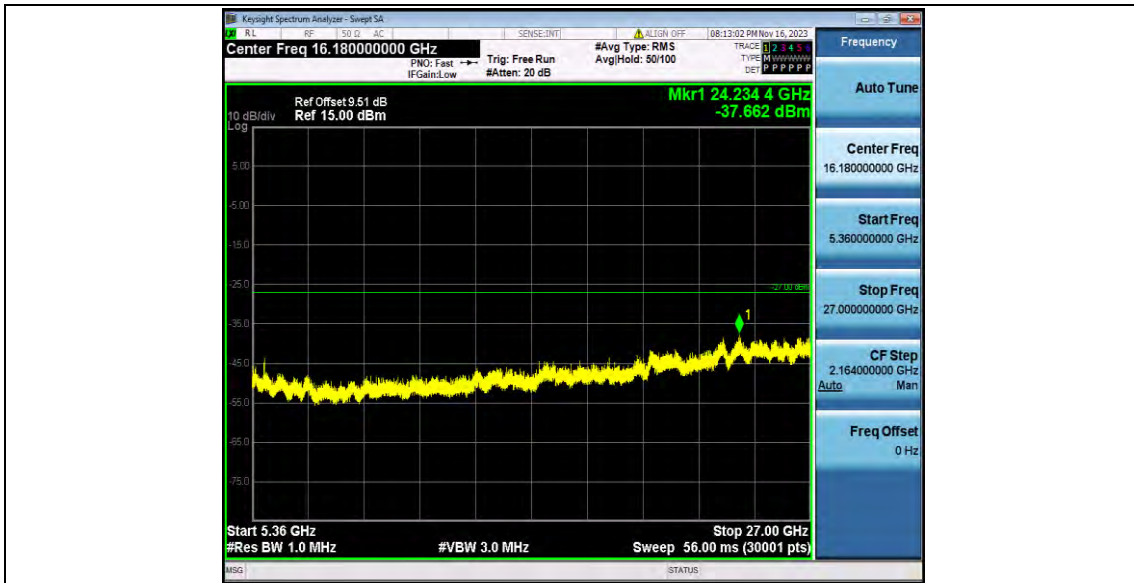
11N40SISO_Ant1_5230_30~5140



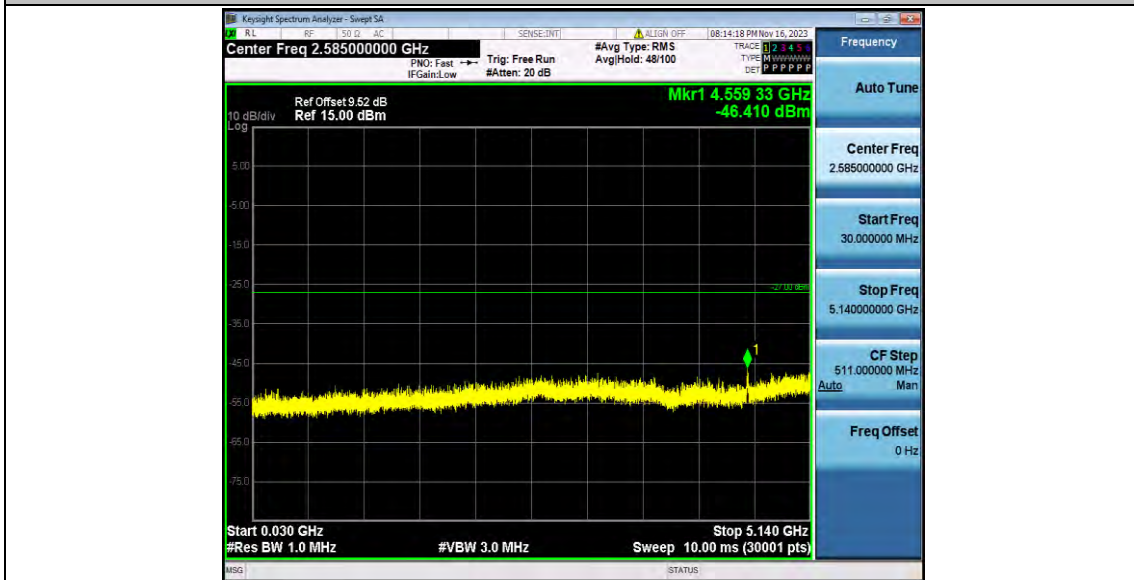
11N40SISO_Ant1_5230_5360~40000



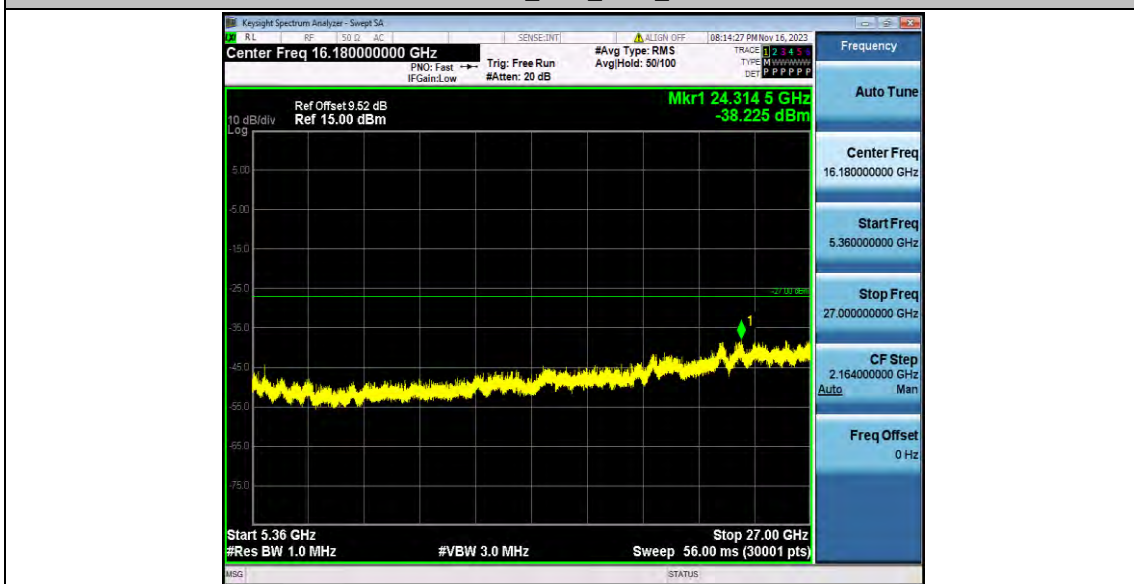
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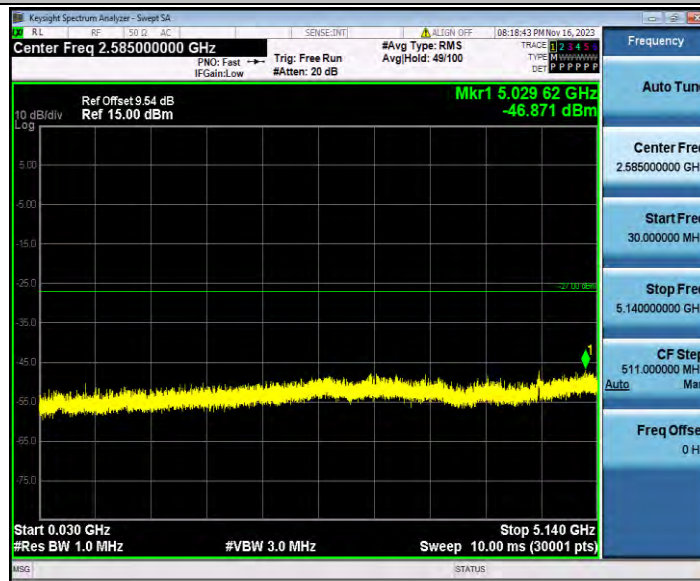
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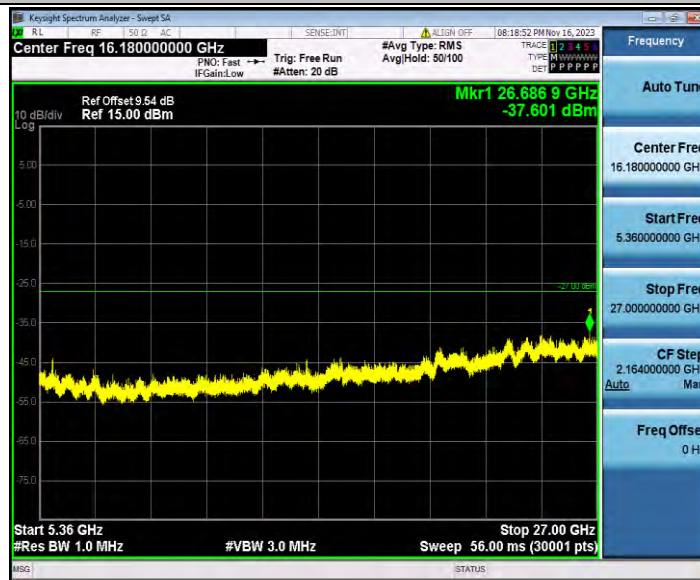
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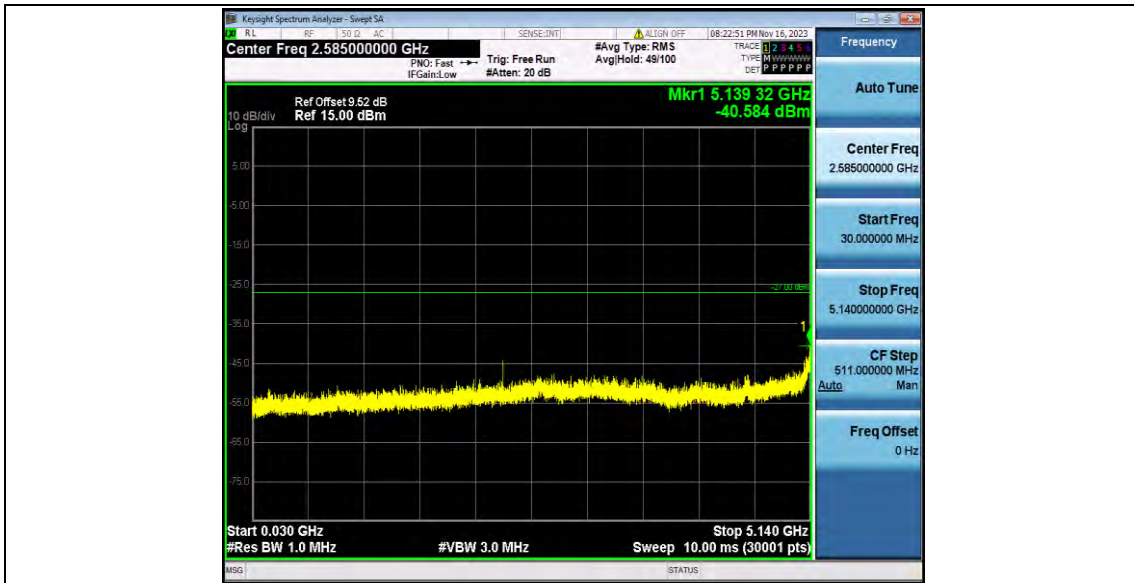
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11AC20SISO_Ant1_5240_30~5140



11AC20SISO_Ant1_5240_5360~40000



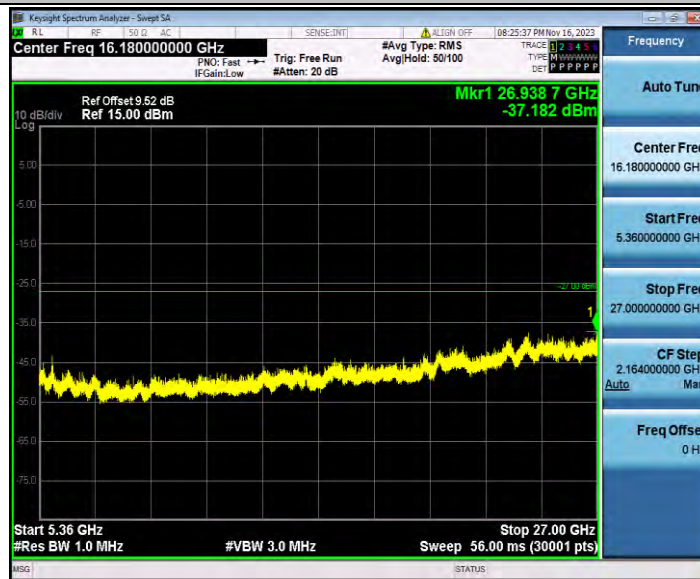
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11AC40SISO_Ant1_5190_5360~40000



11AC40SISO_Ant1_5230_30~5140



11AC40SISO_Ant1_5230_5360~40000



11AC80SISO_Ant1_5210_30~5140

