

Case No. : <u>GTS20231017004-1-13</u>
Ambient Condition: <u>24</u> °C, <u>48</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.27</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	23.800	5167.960	5191.760	---	---
		5200	23.000	5188.280	5211.280	---	---
		5240	23.240	5228.400	5251.640	---	---
11N20SISO	Ant1	5180	23.880	5168.040	5191.920	---	---
		5200	23.520	5188.000	5211.520	---	---
		5240	23.280	5228.320	5251.600	---	---
11N40SISO	Ant1	5190	43.440	5168.320	5211.760	---	---
		5230	43.840	5208.240	5252.080	---	---
11AC20SISO	Ant1	5180	23.560	5168.120	5191.680	---	---
		5200	23.000	5188.440	5211.440	---	---
		5240	23.440	5227.960	5251.400	---	---
11AC40SISO	Ant1	5190	44.160	5167.840	5212.000	---	---
		5230	44.400	5207.760	5252.160	---	---
11AC80SISO	Ant1	5210	82.720	5168.880	5251.600	---	---

Test Graphs



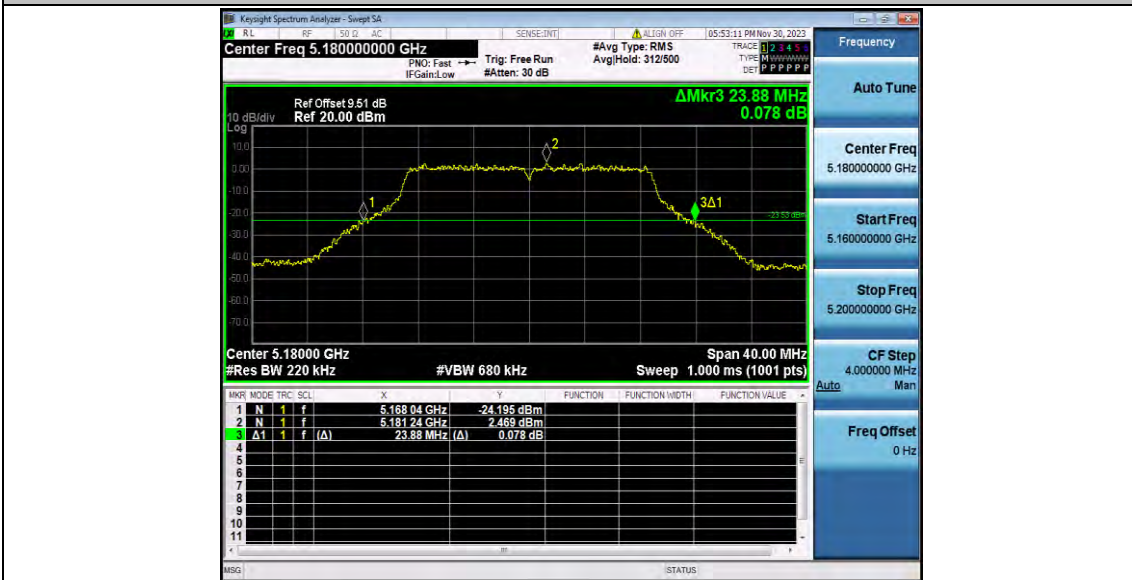
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



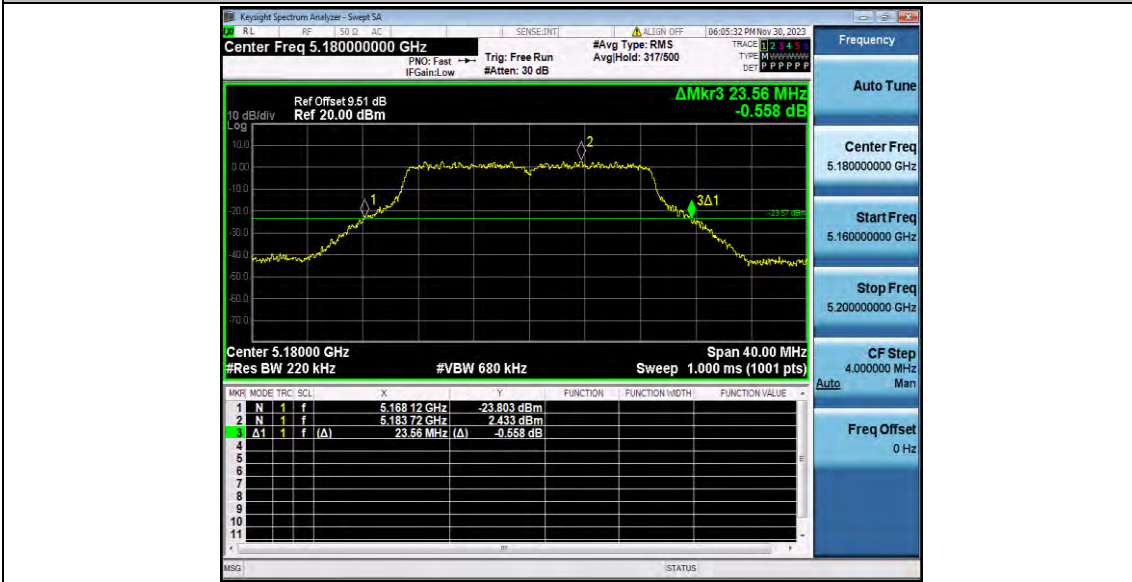
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



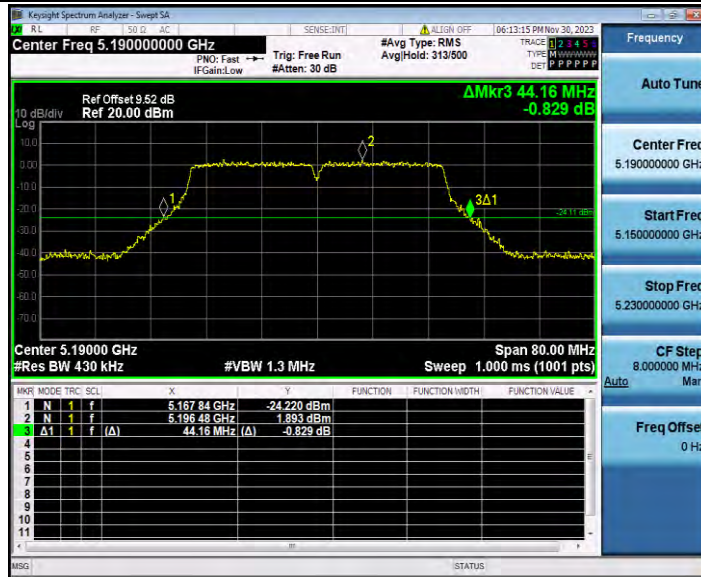
11AC20SISO_Ant1_5180



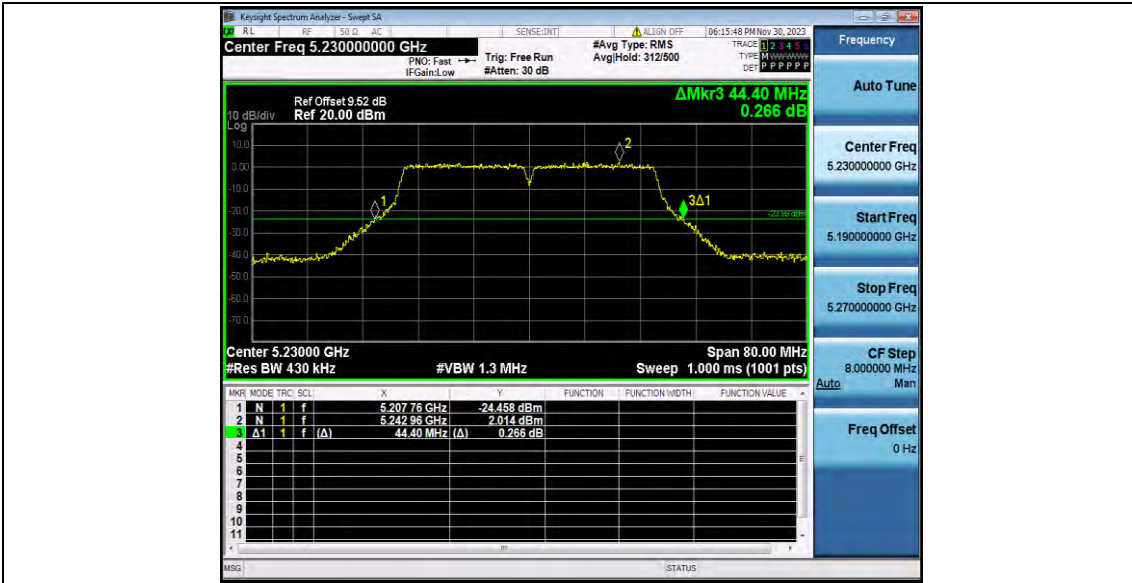
11AC20SISO_Ant1_5200



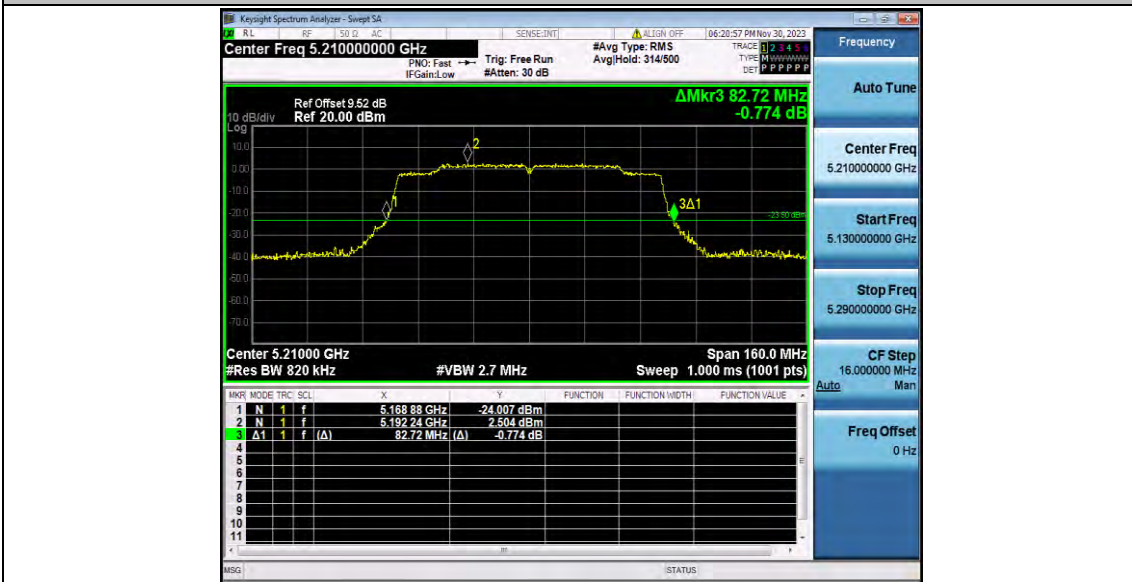
11AC20SISO_Ant1_5240



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	17.296	5171.341	5188.637	---	---
		5200	17.269	5191.333	5208.602	---	---
		5240	17.226	5231.346	5248.572	---	---
11N20SISO	Ant1	5180	18.343	5170.802	5189.145	---	---
		5200	18.319	5190.814	5209.133	---	---
		5240	18.319	5230.835	5249.154	---	---
11N40SISO	Ant1	5190	36.810	5171.599	5208.409	---	---
		5230	36.749	5211.600	5248.349	---	---
11AC20SISO	Ant1	5180	18.326	5170.802	5189.128	---	---
		5200	18.277	5190.843	5209.120	---	---
		5240	18.342	5230.790	5249.132	---	---
11AC40SISO	Ant1	5190	36.724	5171.630	5208.354	---	---
		5230	36.883	5211.531	5248.414	---	---
11AC80SISO	Ant1	5210	75.226	5172.423	5247.649	---	---

Test Graphs



11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



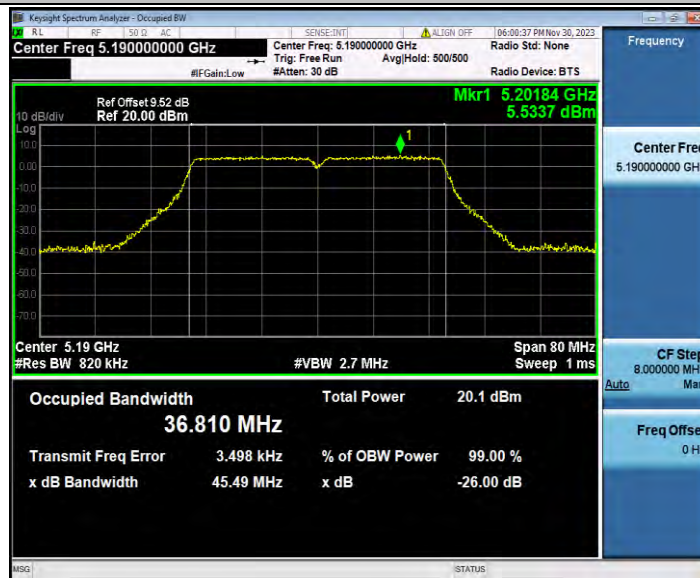
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



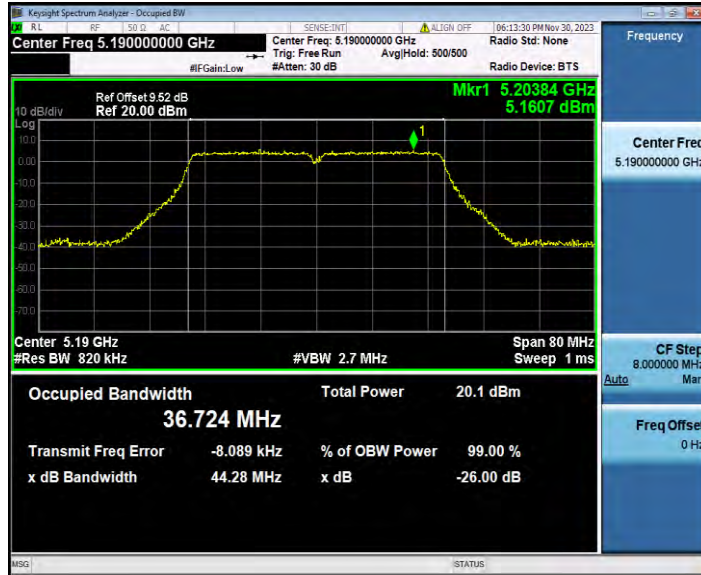
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



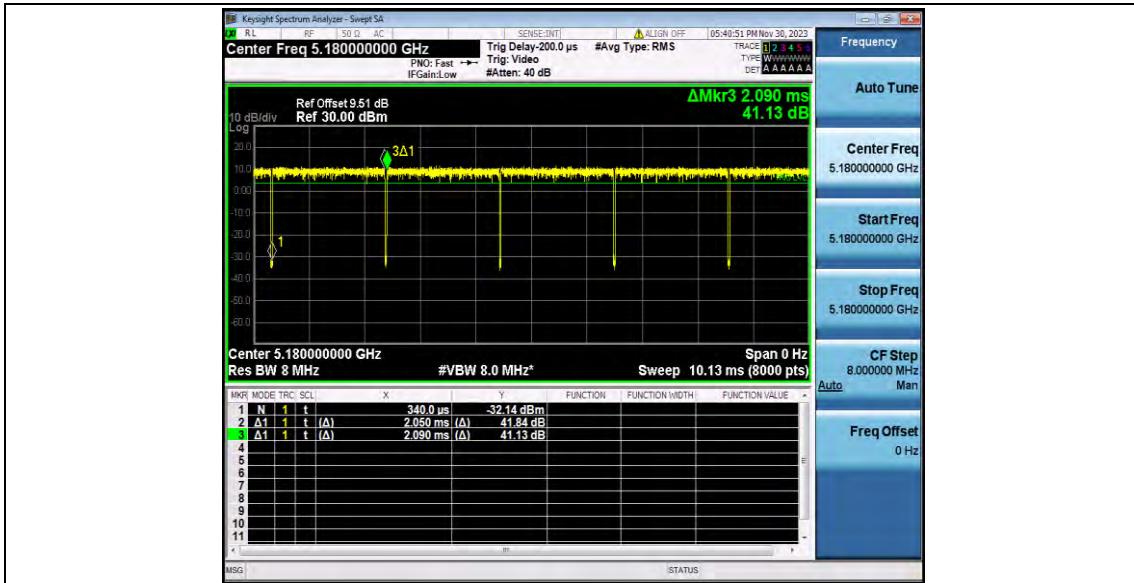
11AC80SISO_Ant1_5210

Appendix D.3: Duty Cycle

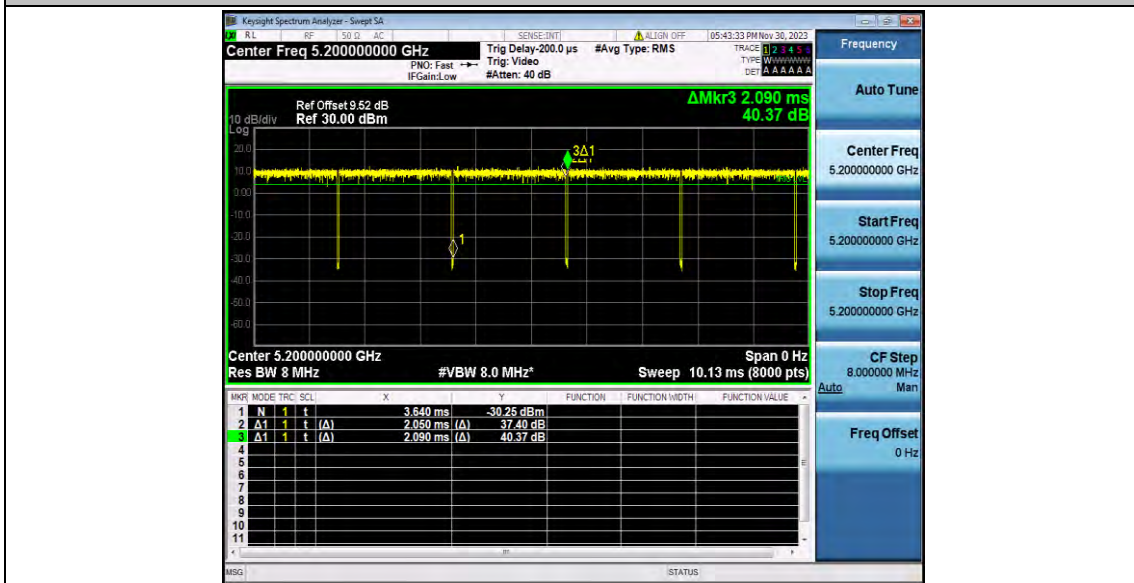
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.05	2.09	98.09
		5200	2.05	2.09	98.09
		5240	2.04	2.08	98.08
11N20SISO	Ant1	5180	1.91	1.95	97.95
		5200	1.91	1.95	97.95
		5240	1.91	1.94	98.45
11N40SISO	Ant1	5190	0.94	0.97	96.91
		5230	0.94	0.98	95.92
11AC20SISO	Ant1	5180	1.92	1.96	97.96
		5200	1.91	1.96	97.45
		5240	1.92	1.96	97.96
11AC40SISO	Ant1	5190	0.95	0.98	96.94
		5230	0.94	0.98	95.92
11AC80SISO	Ant1	5210	0.46	0.50	92.00

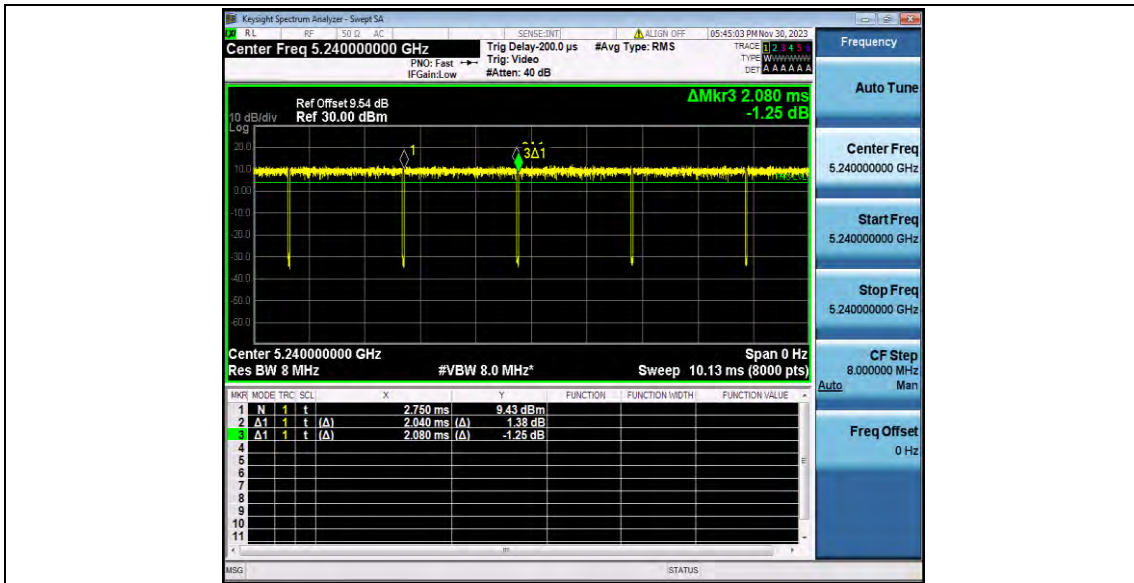
Test Graphs



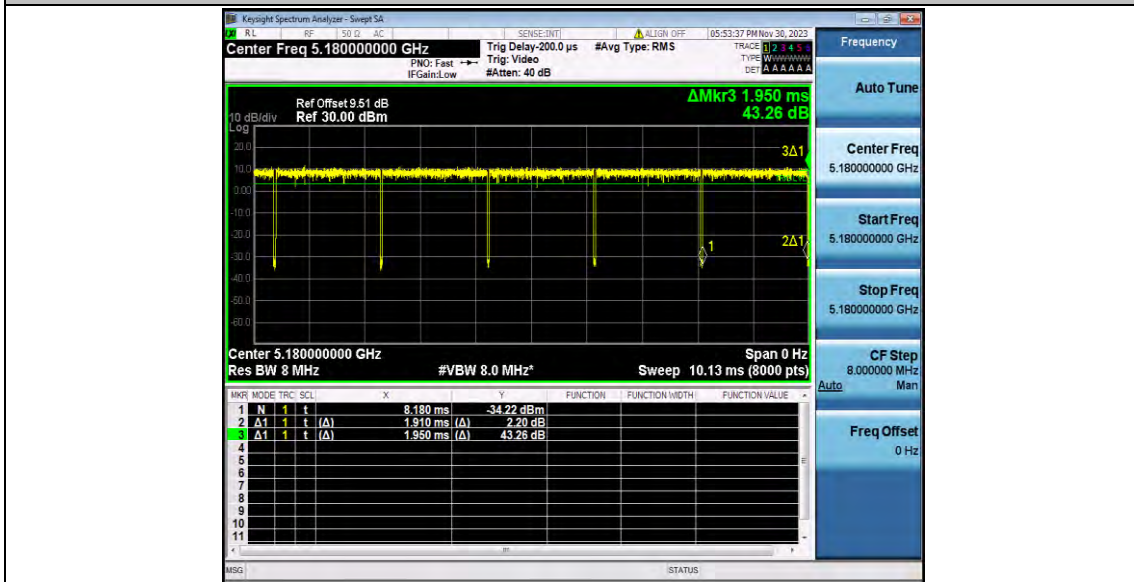
11A_Ant1_5180



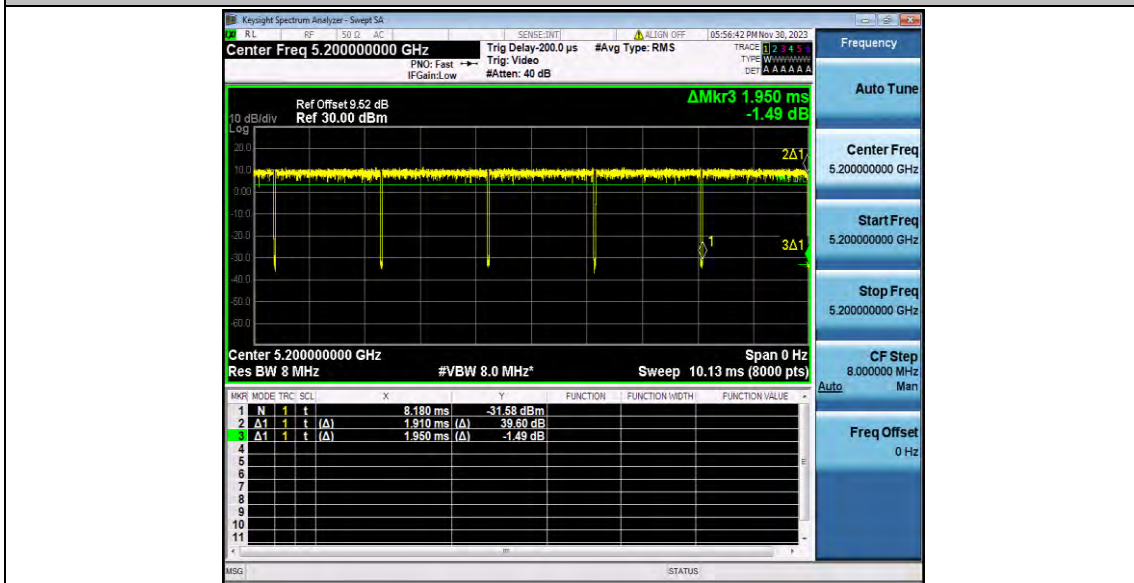
11A_Ant1_5200



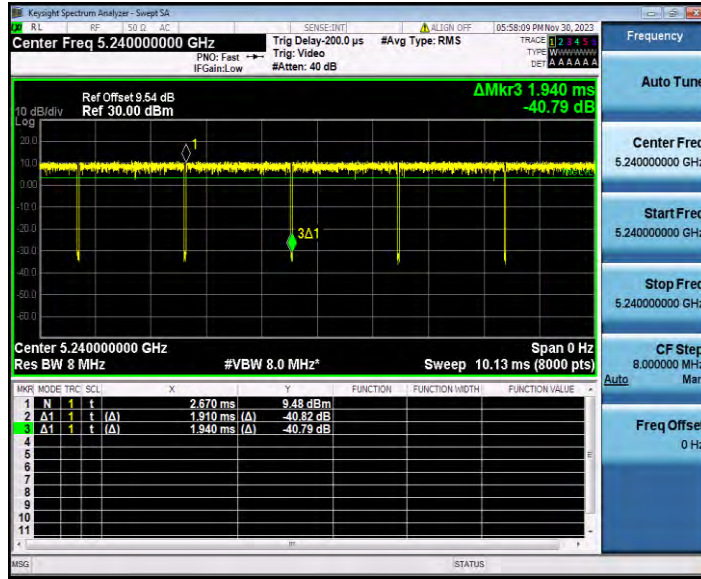
11A_Ant1_5240



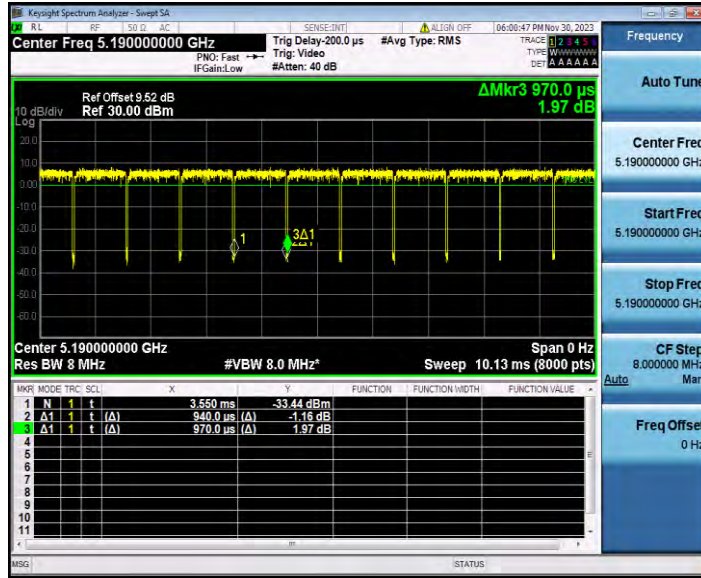
11N20SISO_Ant1_5180



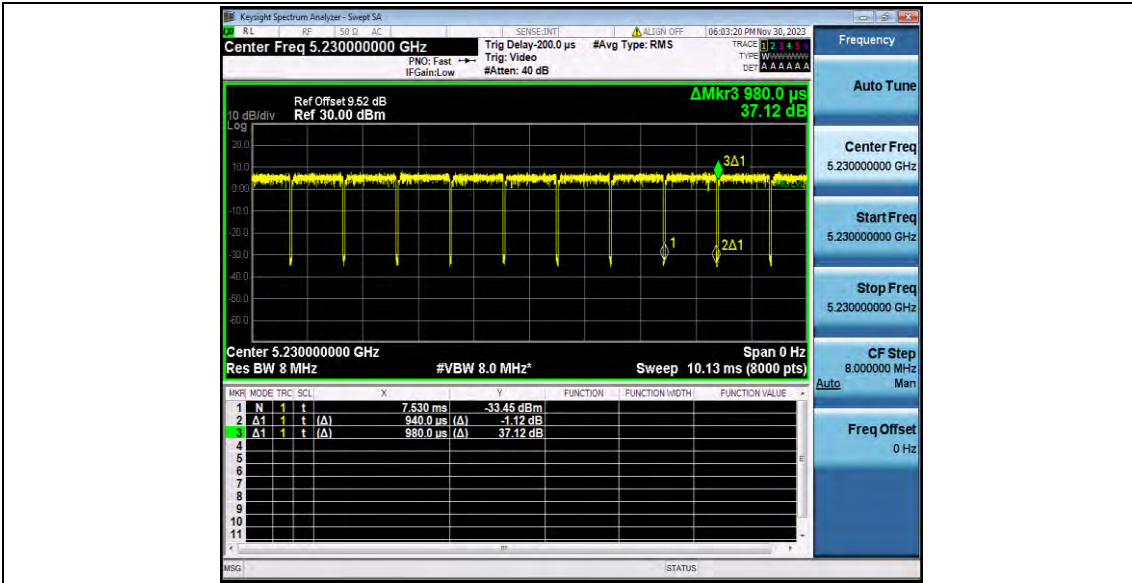
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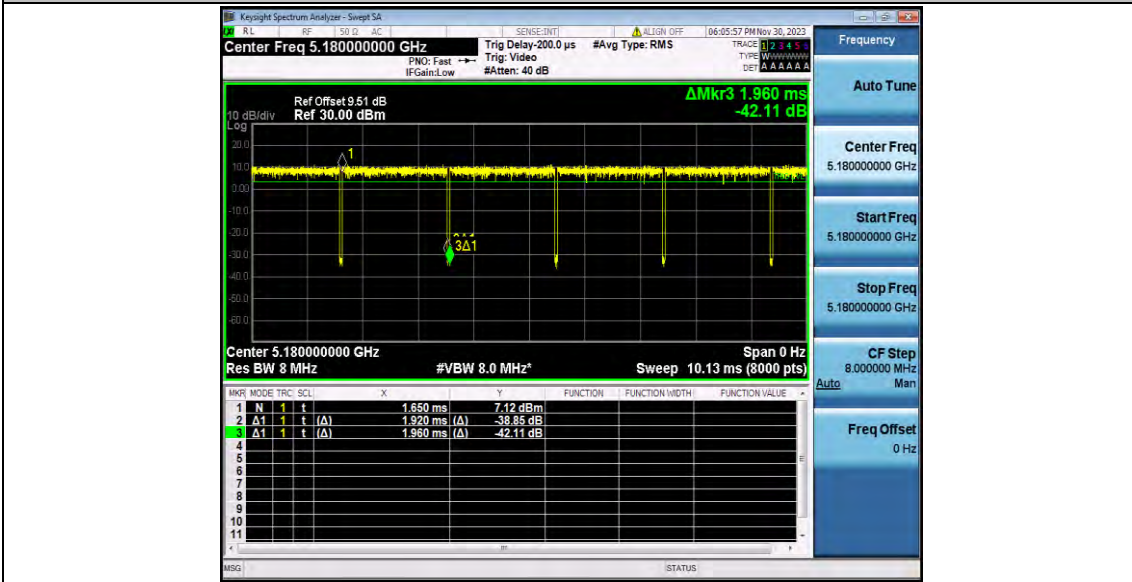
11N20SISO_Ant1_5240



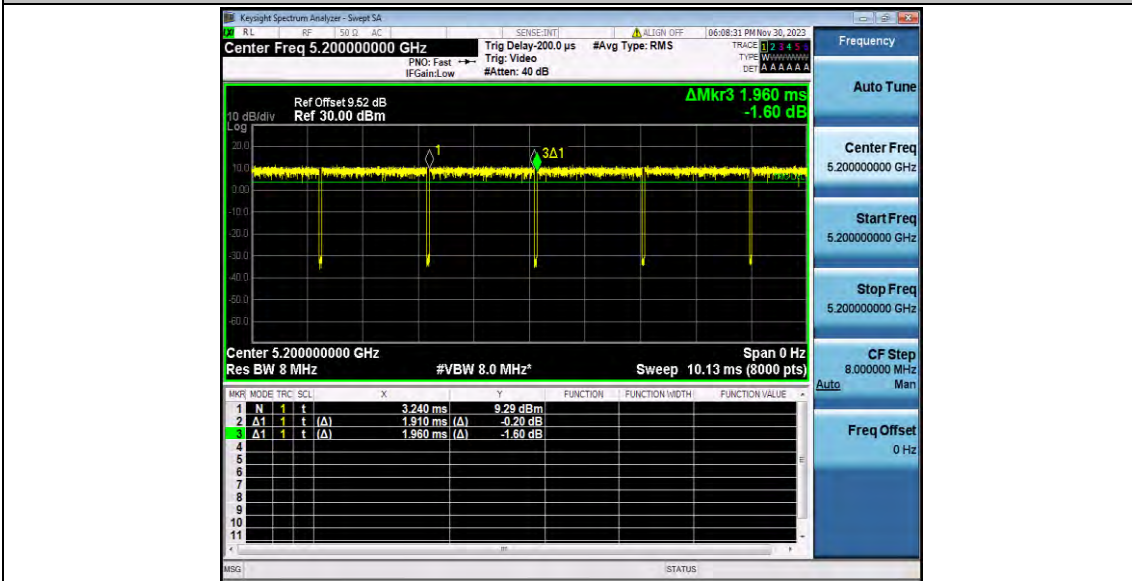
11N40SISO_Ant1_5190



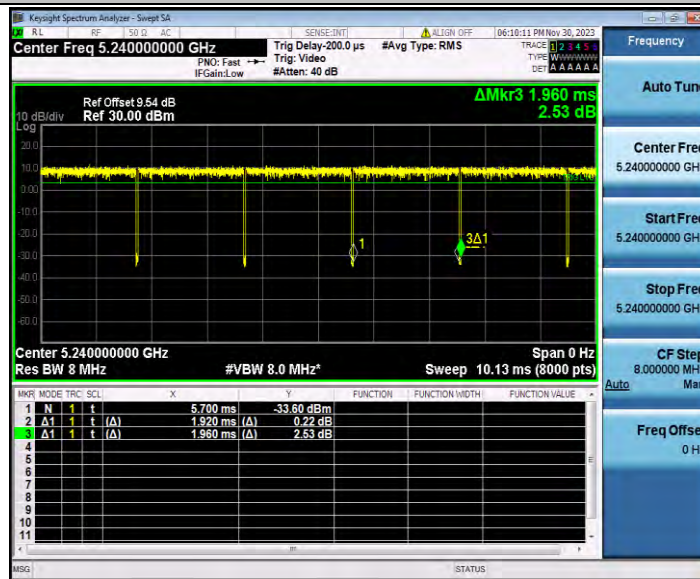
11N40SISO_Ant1_5230



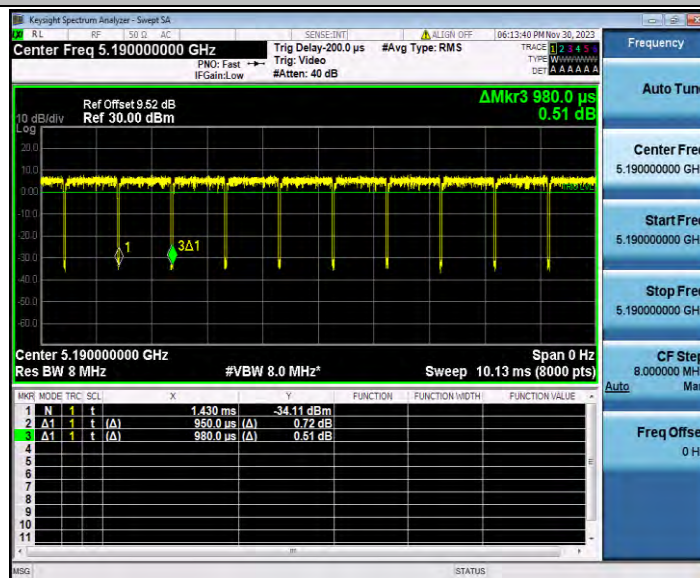
11AC20SISO_Ant1_5180



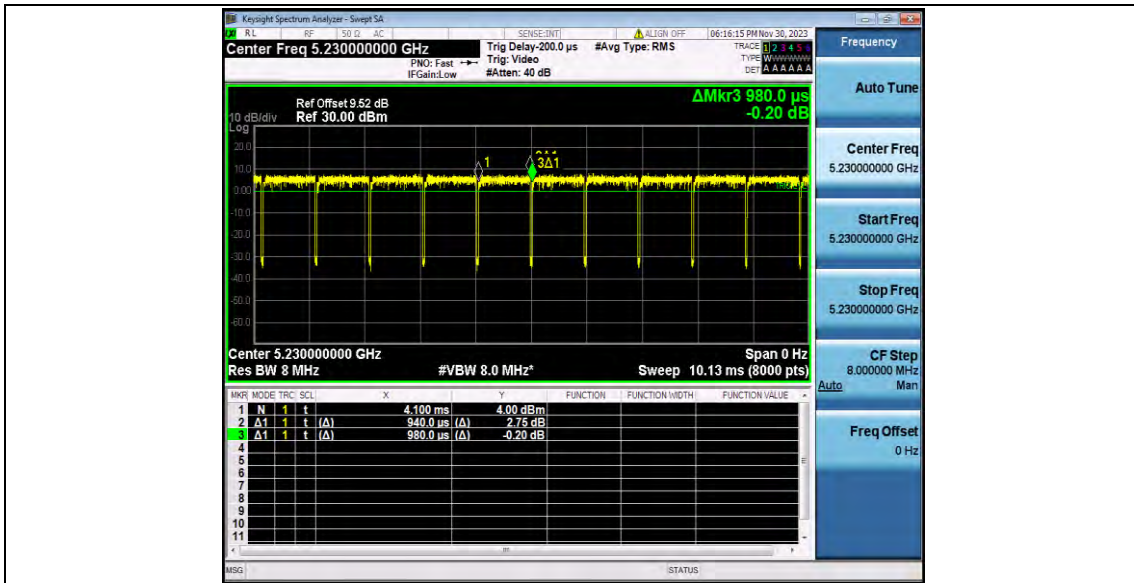
11AC20SISO_Ant1_5200



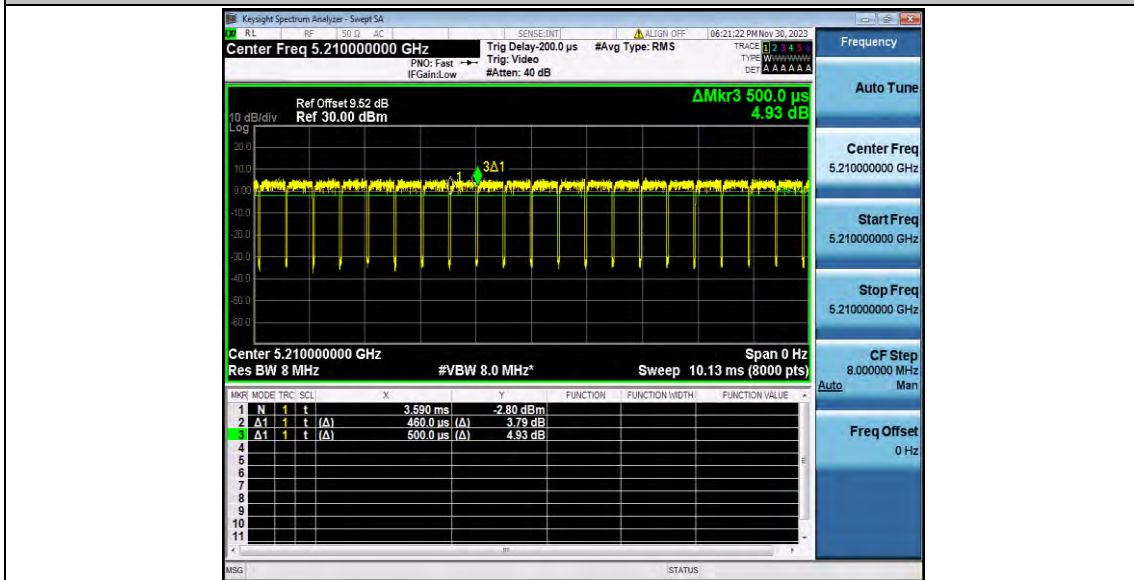
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	12.51	98.09	0.08	12.59	≤23.98	PASS
		5200	12.91	98.09	0.08	12.99	≤23.98	PASS
		5240	12.76	98.08	0.08	12.84	≤23.98	PASS
11N20SISO	Ant1	5180	12.26	97.95	0.09	12.35	≤23.98	PASS
		5200	12.52	97.95	0.09	12.61	≤23.98	PASS
		5240	12.31	98.45	0.07	12.38	≤23.98	PASS
11N40SISO	Ant1	5190	12.29	96.91	0.14	12.43	≤23.98	PASS
		5230	12.31	95.92	0.18	12.49	≤23.98	PASS
11AC20SISO	Ant1	5180	12.26	97.96	0.09	12.35	≤23.98	PASS
		5200	12.53	97.45	0.11	12.64	≤23.98	PASS
		5240	12.34	97.96	0.09	12.43	≤23.98	PASS
11AC40SISO	Ant1	5190	12.30	96.94	0.13	12.43	≤23.98	PASS
		5230	12.36	95.92	0.18	12.54	≤23.98	PASS
11AC80SISO	Ant1	5210	12.21	92.00	0.36	12.57	≤23.98	PASS

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

Appendix D.5: Maximum power spectral density

Test Result

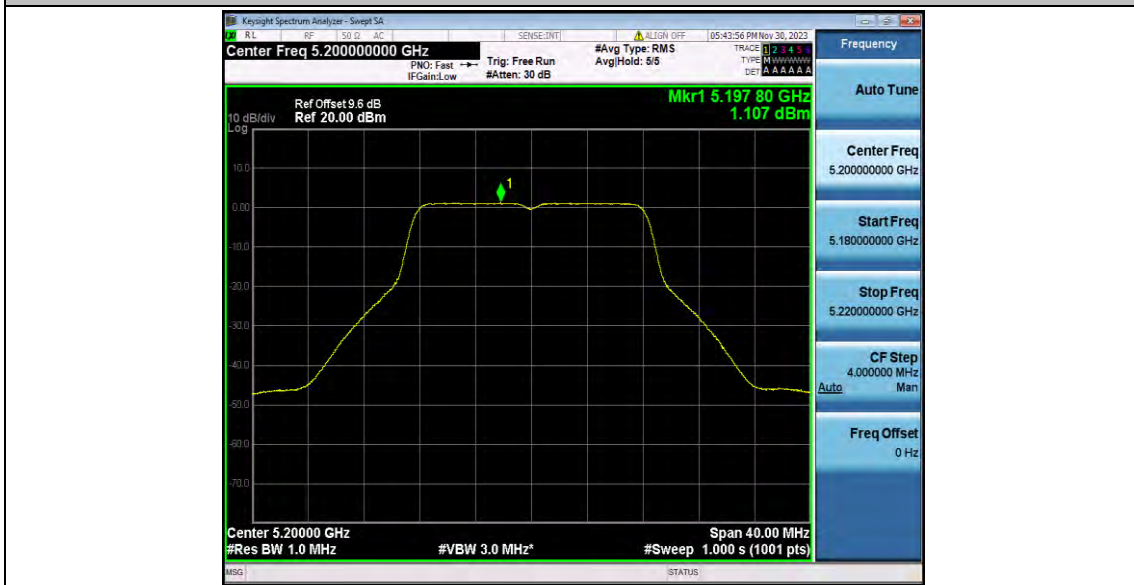
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	0.67	≤11.00	PASS
		5200	1.11	≤11.00	PASS
		5240	0.72	≤11.00	PASS
11N20SISO	Ant1	5180	0.18	≤11.00	PASS
		5200	0.48	≤11.00	PASS
		5240	0.32	≤11.00	PASS
11N40SISO	Ant1	5190	-2.54	≤11.00	PASS
		5230	-2.51	≤11.00	PASS
11AC20SISO	Ant1	5180	0.18	≤11.00	PASS
		5200	0.5	≤11.00	PASS
		5240	0.35	≤11.00	PASS
11AC40SISO	Ant1	5190	-2.57	≤11.00	PASS
		5230	-2.54	≤11.00	PASS
11AC80SISO	Ant1	5210	-4.73	≤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



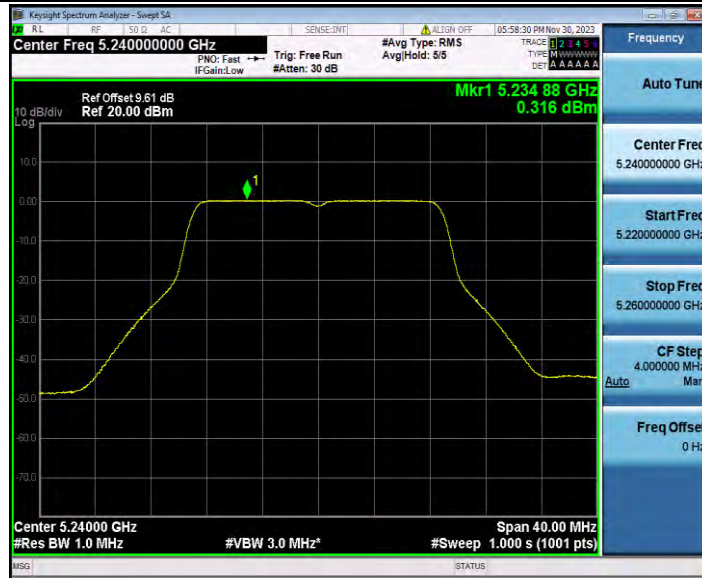
11A_Ant1_5240



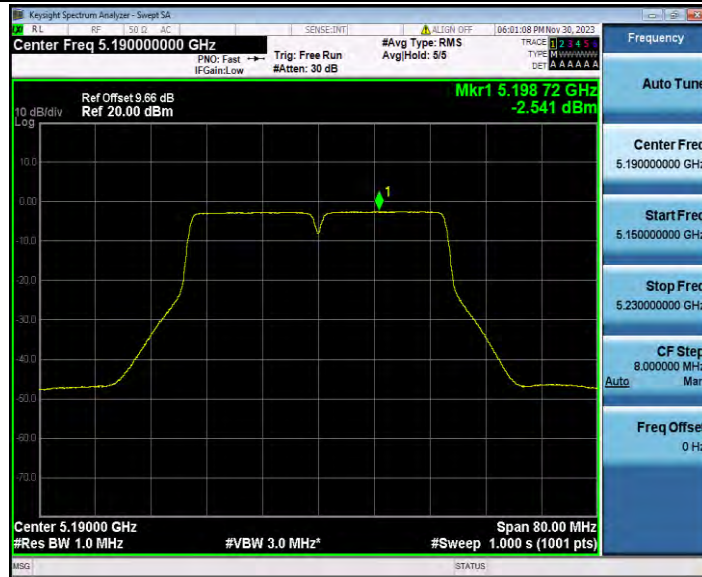
11N20SISO_Ant1_5180



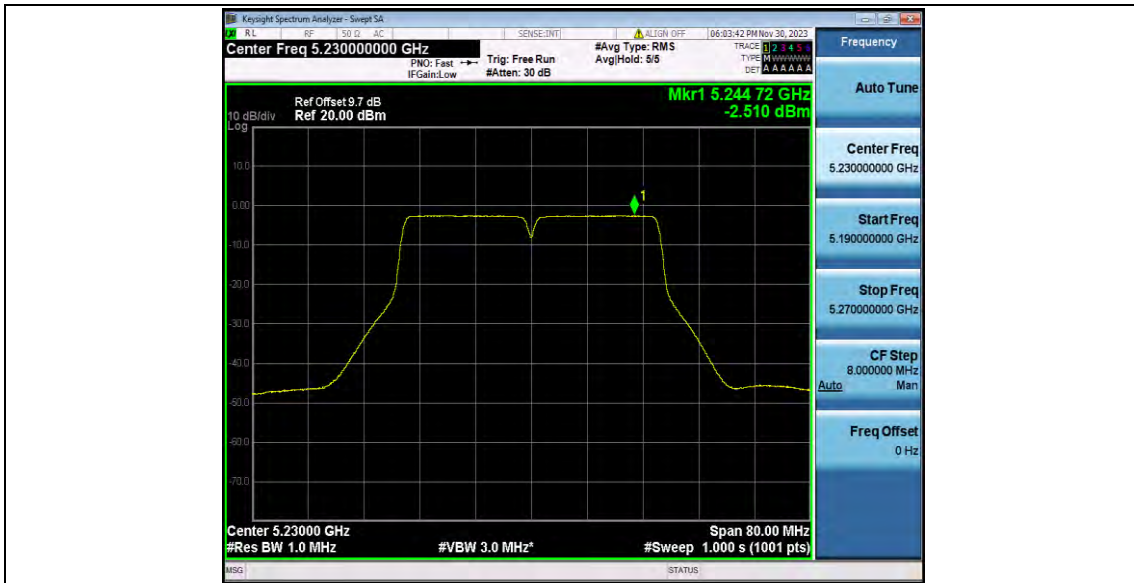
11N20SISO_Ant1_5200



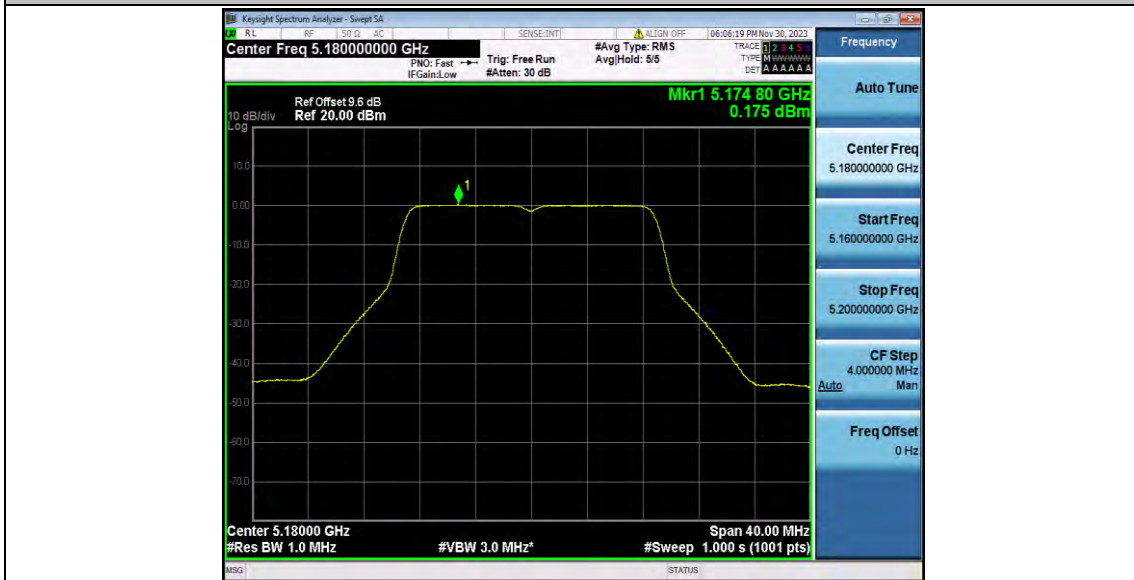
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



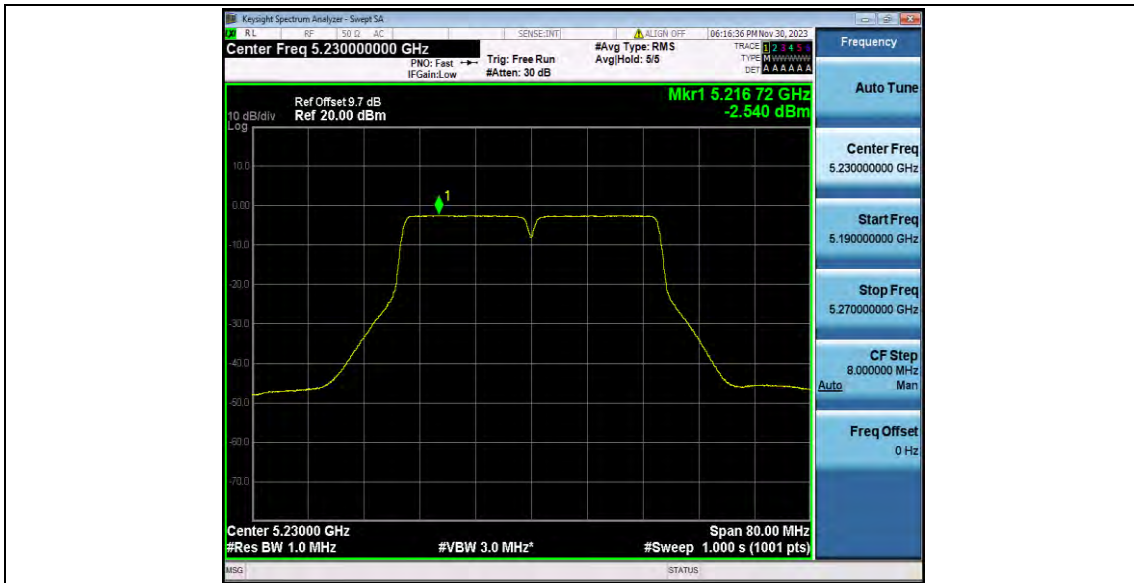
11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



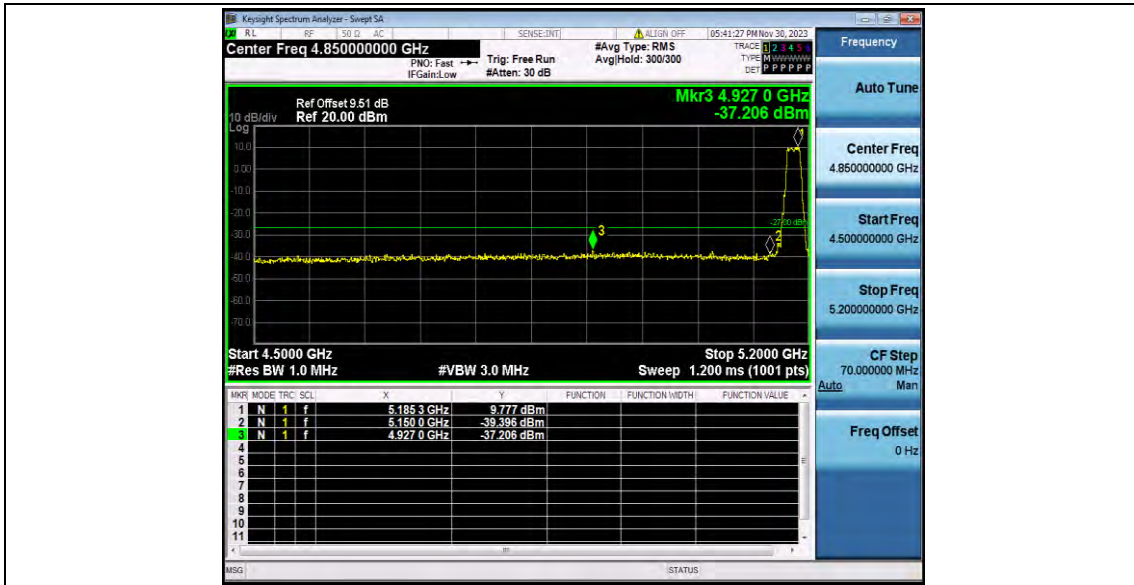
11AC80SISO_Ant1_5210

Appendix D.6: Band edge measurements

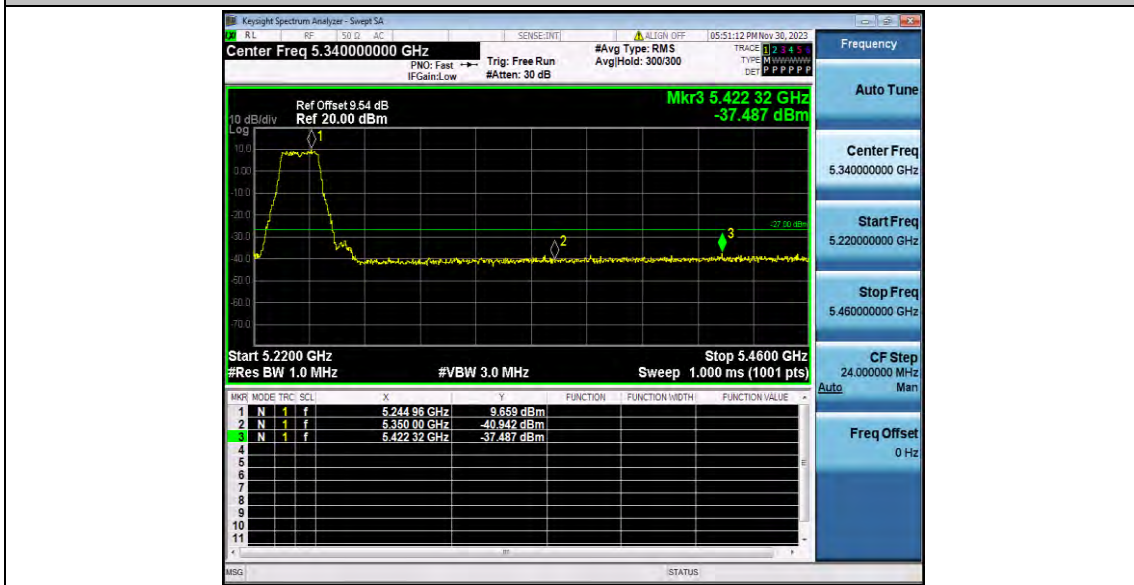
Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-37.21	≤-27	PASS
		High	5240	-37.49	≤-27	PASS
11N20SISO	Ant1	Low	5180	-37.6	≤-27	PASS
		High	5240	-37.36	≤-27	PASS
11N40SISO	Ant1	Low	5190	-37.36	≤-27	PASS
		High	5230	-37.54	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-37.57	≤-27	PASS
		High	5240	-37.46	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-37.03	≤-27	PASS
		High	5230	-38.11	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-35.33	≤-27	PASS
		High	5210	-37.68	≤-27	PASS

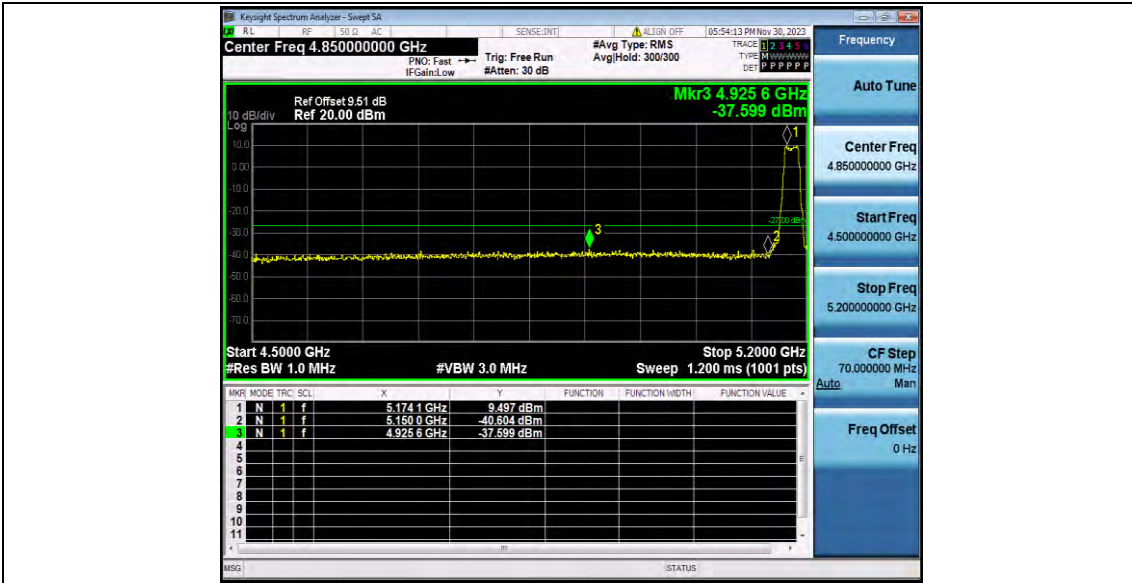
Test Graphs B1



11A_Ant1_Low_5180



11A_Ant1_High_5240



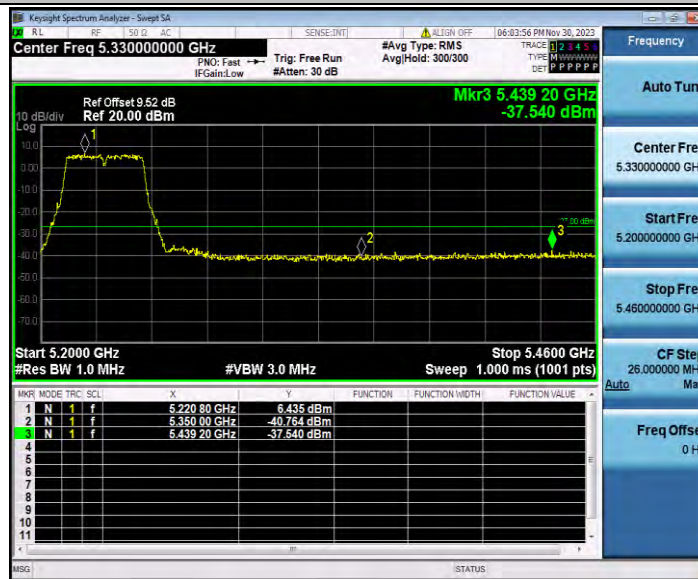
11N20SISO_Ant1_Low_5180



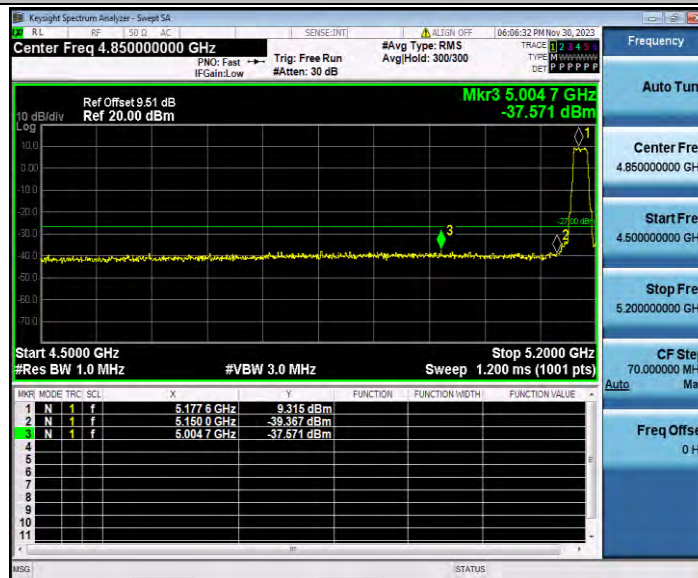
11N20SISO_Ant1_High_5240



11N40SISO_Ant1_Low_5190



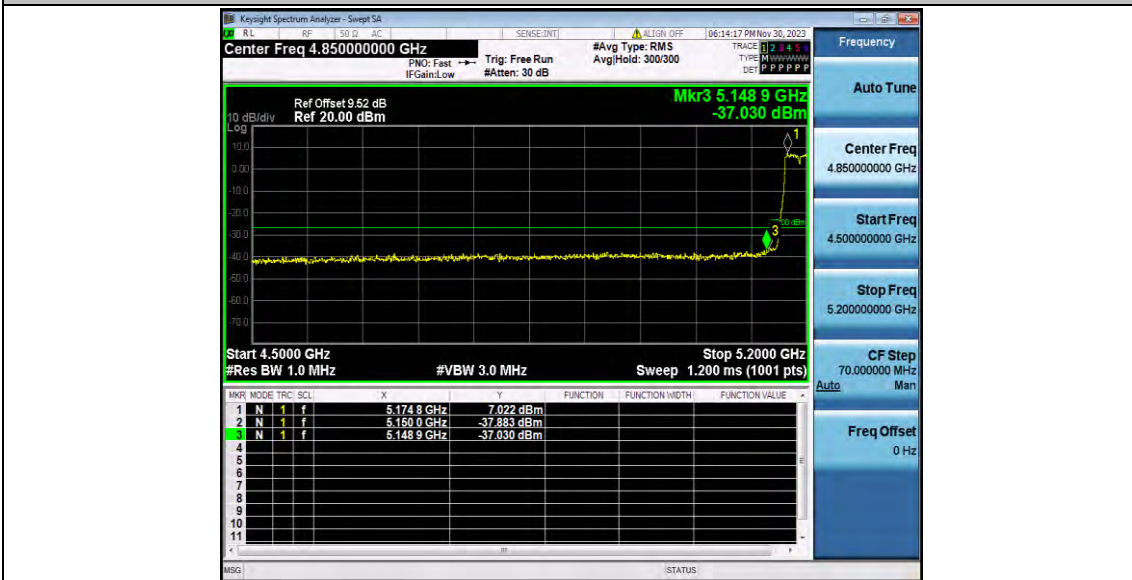
11N40SISO_Ant1_High_5230



11AC20SISO_Ant1_Low_5180



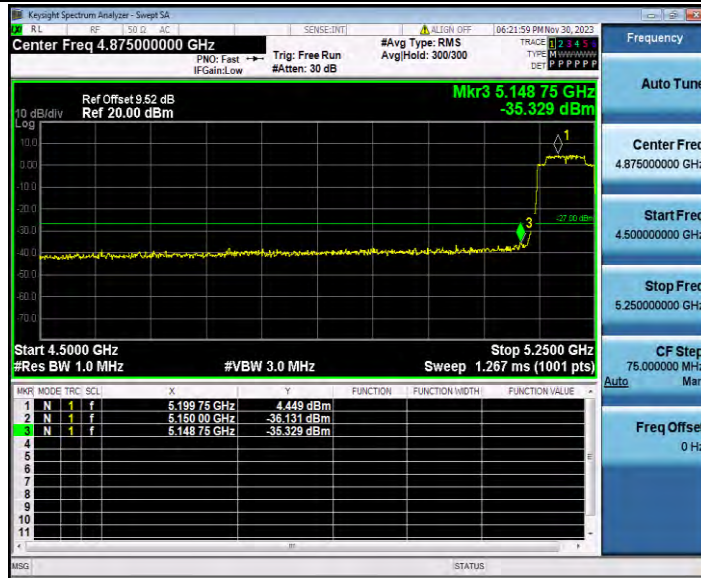
11AC20SISO_Ant1_High_5240



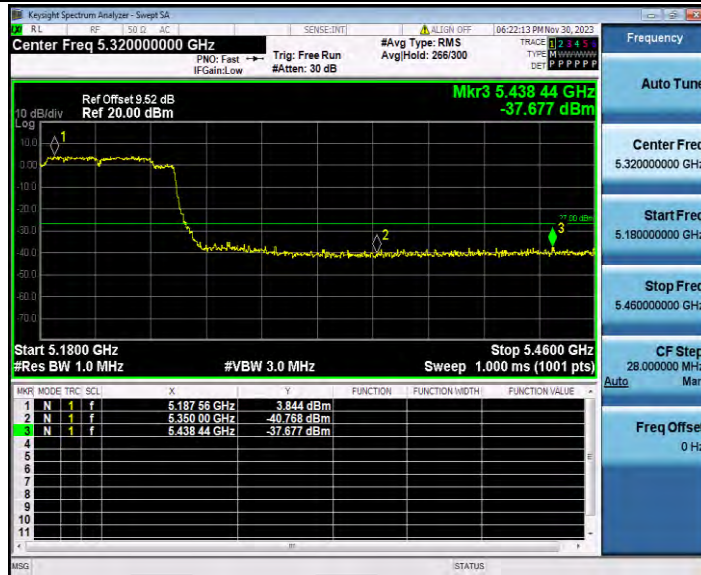
11AC40SISO_Ant1_Low_5190



11AC40SISO_Ant1_High_5230



11AC80SISO_Ant1_Low_5210



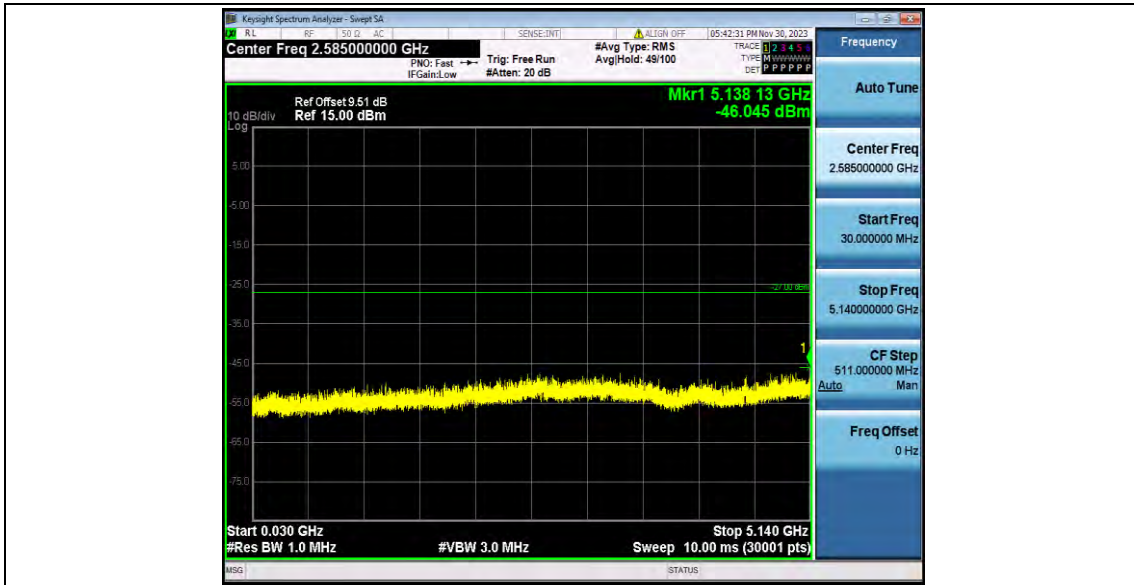
11AC80SISO_Ant1_High_5210

Appendix D.7: Conducted Spurious Emission

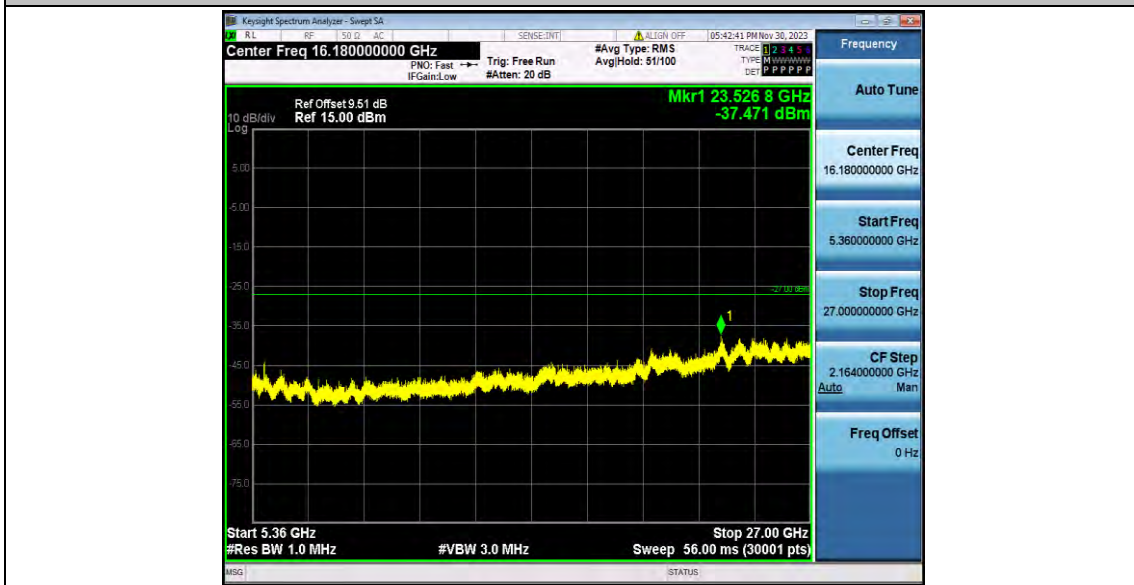
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5138.13	-46.05	≤-27	PASS
			5360~40000	23526.78	-37.47	≤-27	PASS
		5200	30~5140	2678	-47.48	≤-27	PASS
			5360~40000	24031.71	-37.87	≤-27	PASS
		5240	30~5140	2702.53	-47.16	≤-27	PASS
			5360~40000	26653.76	-37.6	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5139.15	-47.09	≤-27	PASS
			5360~40000	26784.32	-37.86	≤-27	PASS
		5200	30~5140	4964.05	-45.62	≤-27	PASS
			5360~40000	24344.05	-37.9	≤-27	PASS
		5240	30~5140	4602.26	-46.64	≤-27	PASS
			5360~40000	24236.57	-38.25	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5136.93	-43.5	≤-27	PASS
			5360~40000	26088.23	-38.29	≤-27	PASS
		5230	30~5140	4944.8	-46.31	≤-27	PASS
			5360~40000	26507.33	-36.7	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	5135.4	-44.8	≤-27	PASS
			5360~40000	24763.15	-37.91	≤-27	PASS
		5200	30~5140	5044.78	-47.47	≤-27	PASS
			5360~40000	26655.2	-38.31	≤-27	PASS
		5240	30~5140	2589.43	-46.87	≤-27	PASS
			5360~40000	24977.38	-37.59	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	5139.32	-41.64	≤-27	PASS
			5360~40000	25073.32	-37.42	≤-27	PASS
		5230	30~5140	2638.66	-47.26	≤-27	PASS
			5360~40000	24134.14	-38.01	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5139.32	-40.89	≤-27	PASS
			5360~40000	23515.96	-38.13	≤-27	PASS

Test Graphs



11A_Ant1_5180_30~5140



11A_Ant1_5180_5360~40000



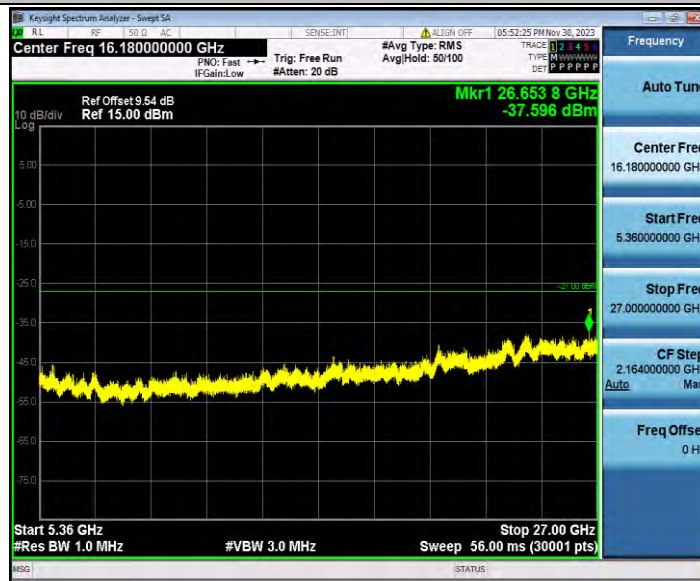
11A_Ant1_5200_30~5140



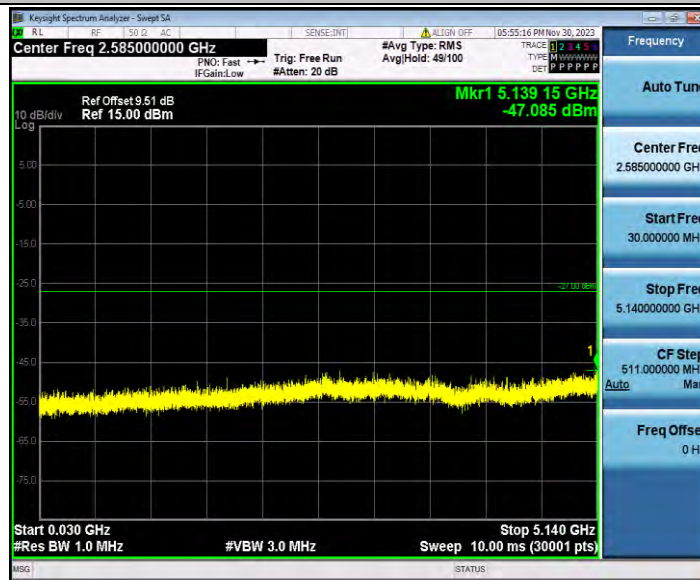
11A_Ant1_5200_5360~40000



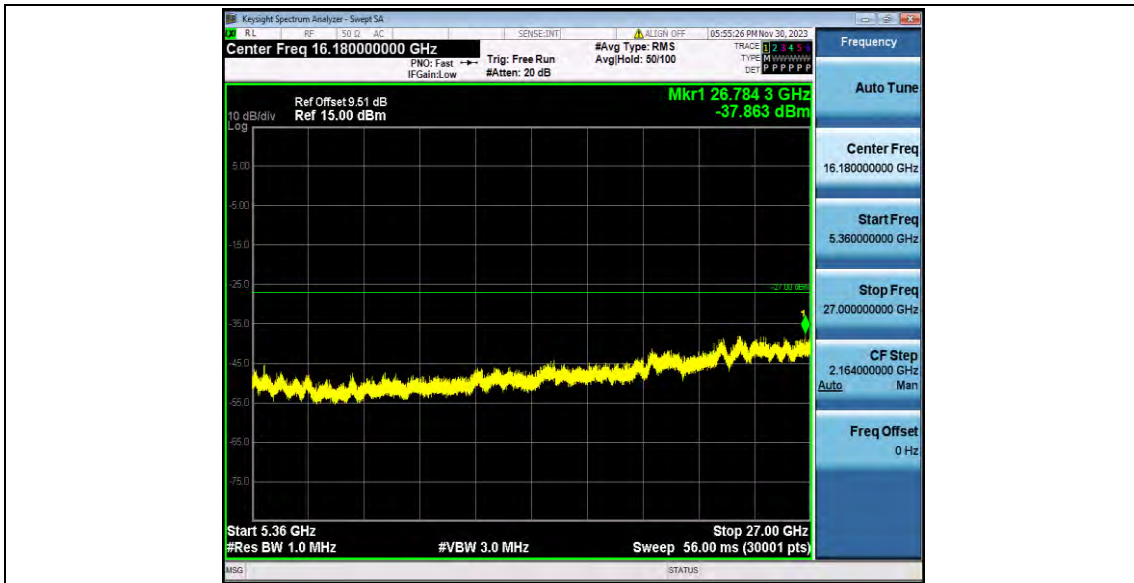
11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~40000



11N20SISO_Ant1_5180_30~5140



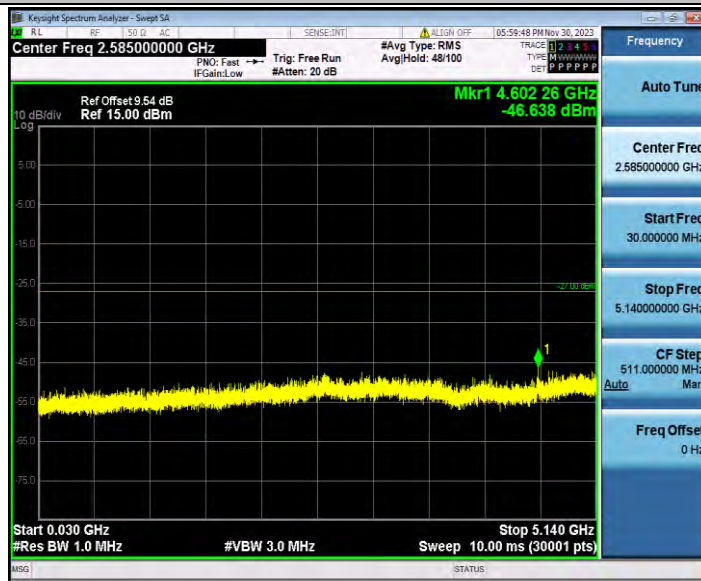
11N20SISO_Ant1_5180_5360~40000



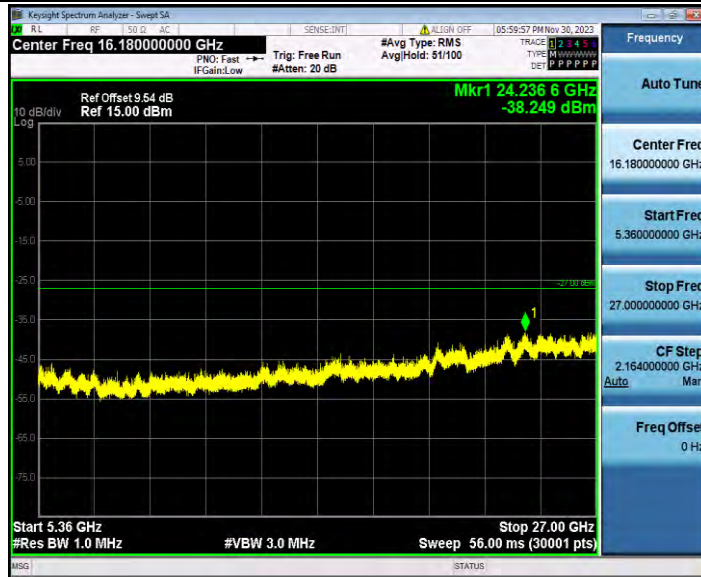
11N20SISO_Ant1_5200_30~5140



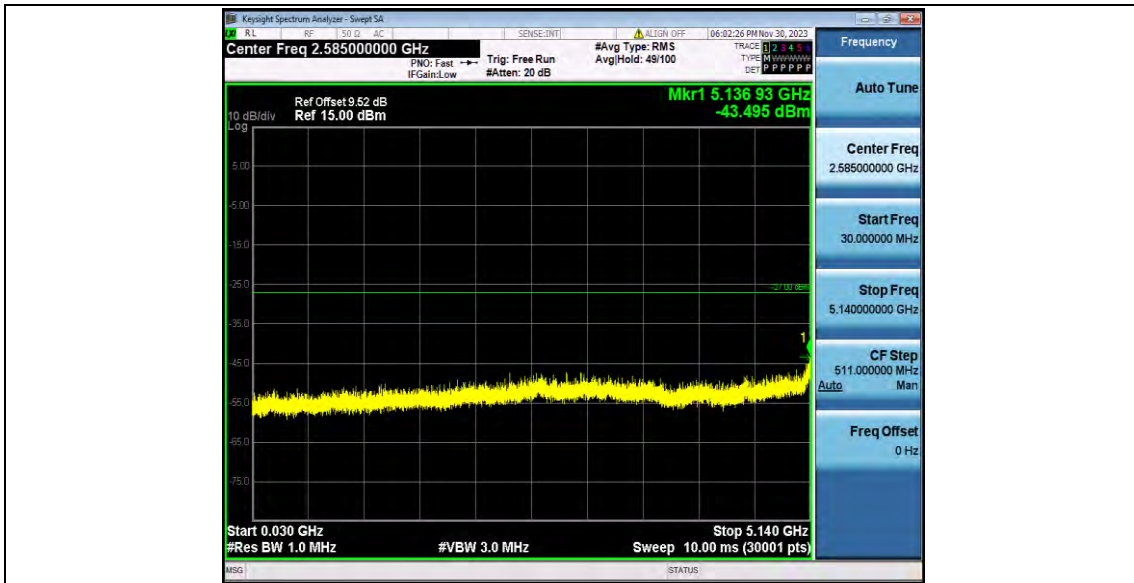
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11N20SISO_Ant1_5240_30~5140



11N20SISO_Ant1_5240_5360~40000



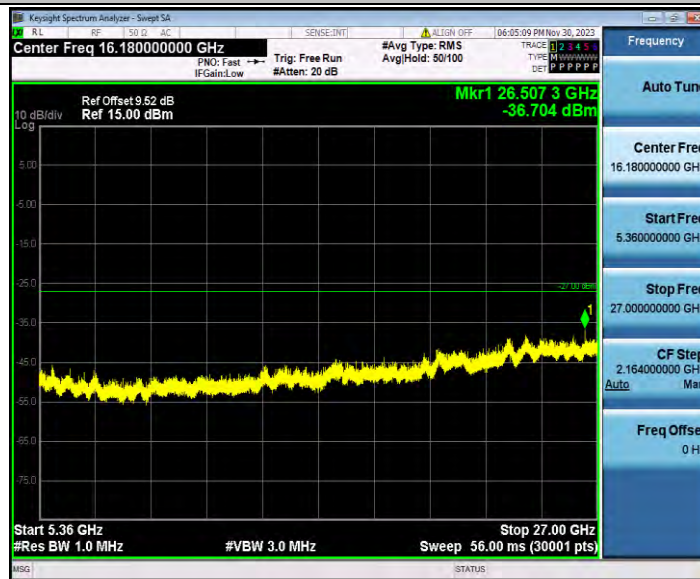
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11N40SISO_Ant1_5190_5360~40000



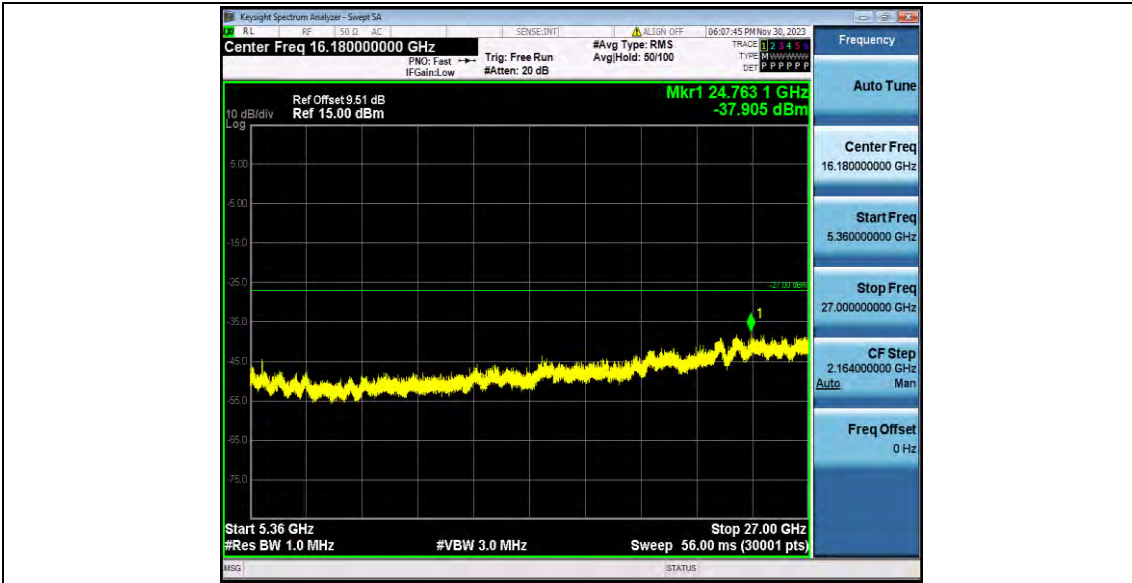
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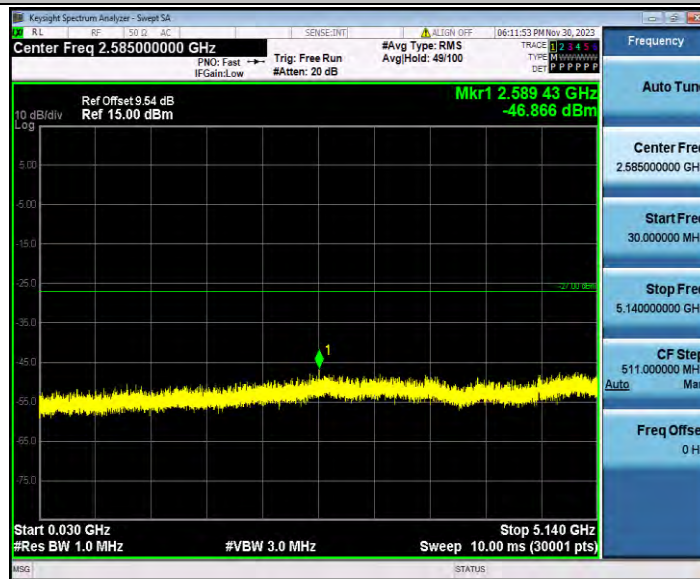
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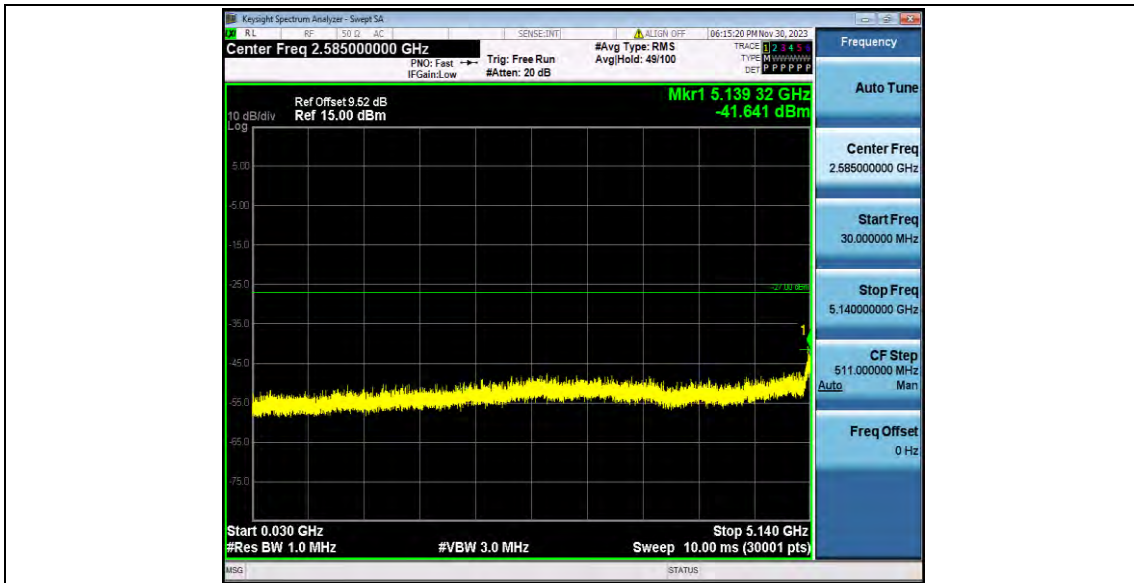
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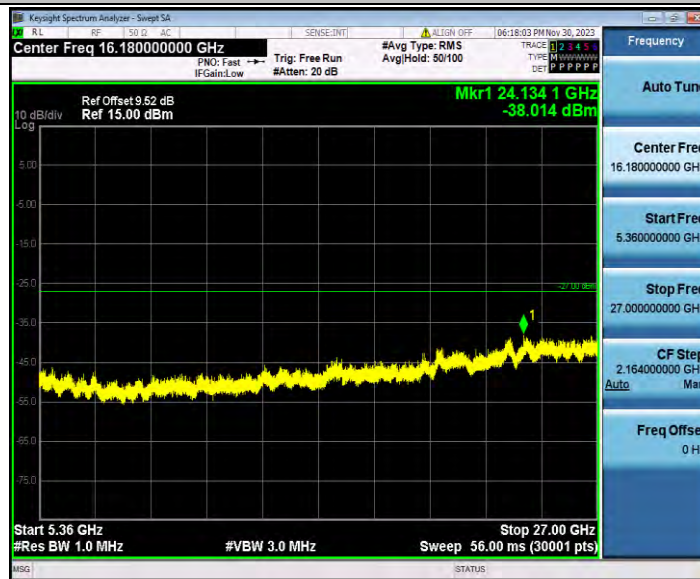
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11AC40SISO_Ant1_5190_5360~40000



11AC40SISO_Ant1_5230_30~5140



11AC40SISO_Ant1_5230_5360~40000



11AC80SISO_Ant1_5210_30~5140

