

Case No. : <u>GTS20230628010-1-4</u>
Ambient Condition: <u>24</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.7.11</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	Ant1	5180	22.520	5169.040	5191.560	---	---
		5200	22.280	5188.760	5211.040	---	---
		5240	21.840	5229.040	5250.880	---	---
11N20SISO	Ant1	5180	23.960	5168.200	5192.160	---	---
		5200	23.600	5187.640	5211.240	---	---
		5240	22.360	5228.680	5251.040	---	---
11N40SISO	Ant1	5190	43.200	5168.080	5211.280	---	---
		5230	41.840	5209.360	5251.200	---	---
11AC20SISO	Ant1	5180	23.000	5168.240	5191.240	---	---
		5200	22.760	5188.640	5211.400	---	---
		5240	22.480	5228.440	5250.920	---	---
11AC40SISO	Ant1	5190	42.480	5168.800	5211.280	---	---
		5230	42.800	5208.720	5251.520	---	---
11AC80SISO	Ant1	5210	81.280	5169.520	5250.800	---	---

Test Graphs



11A_Ant1_5180



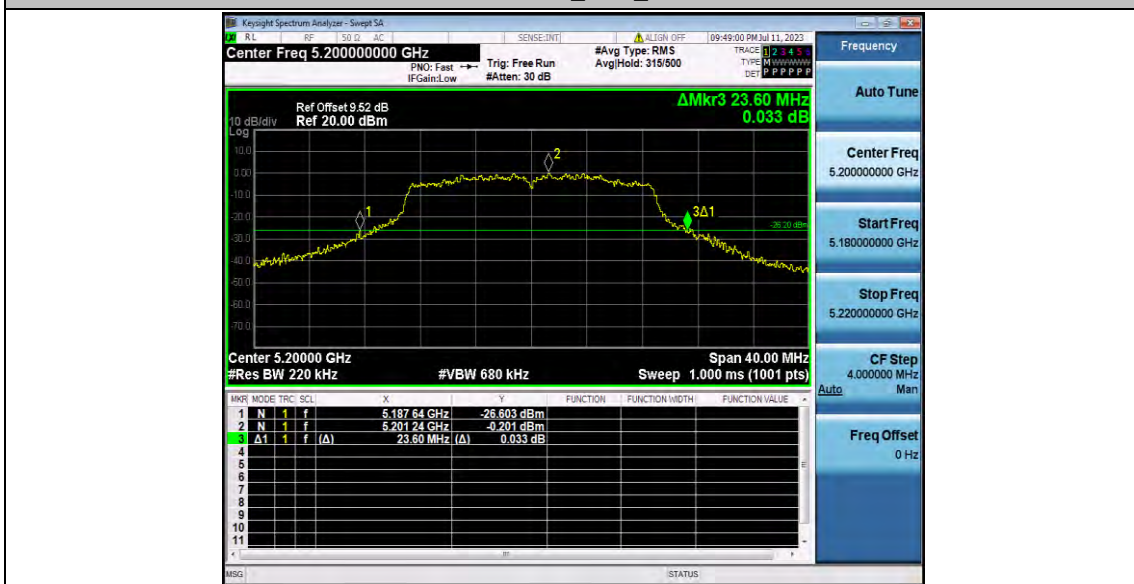
11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



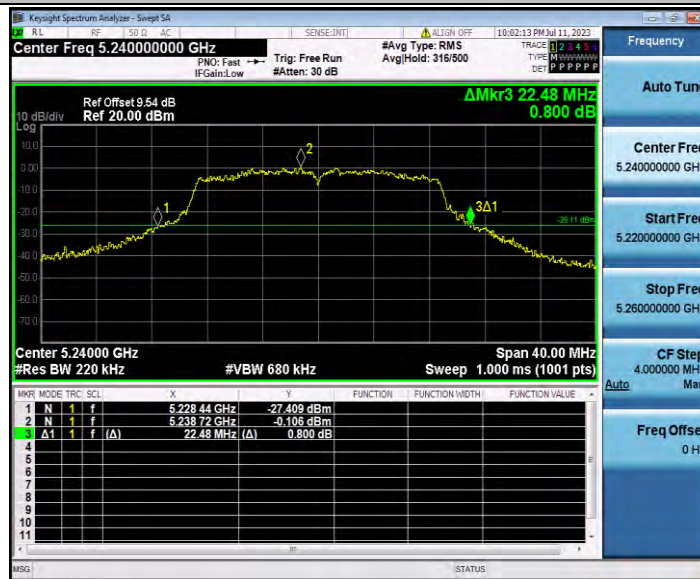
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



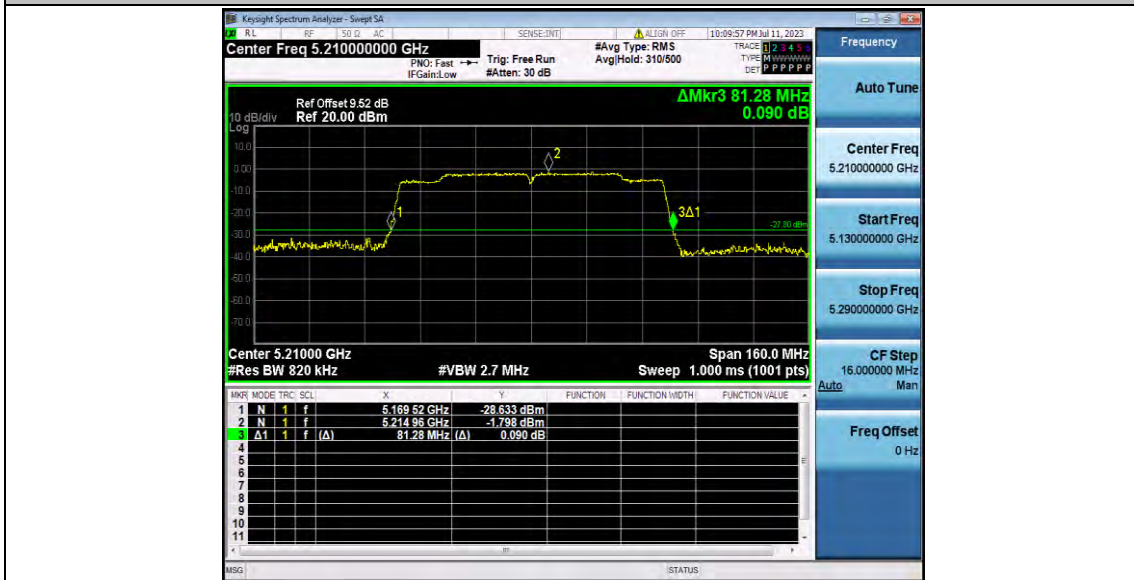
11AC20SISO_Ant1_5240



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	16.973	5171.487	5188.460	---	---
		5200	16.917	5191.520	5208.437	---	---
		5240	16.936	5231.513	5248.449	---	---
11N20SISO	Ant1	5180	18.114	5170.928	5189.042	---	---
		5200	18.016	5191.003	5209.019	---	---
		5240	18.015	5231.015	5249.030	---	---
11N40SISO	Ant1	5190	36.371	5171.840	5208.211	---	---
		5230	36.369	5211.749	5248.118	---	---
11AC20SISO	Ant1	5180	18.056	5170.967	5189.023	---	---
		5200	18.057	5190.973	5209.030	---	---
		5240	18.002	5231.000	5249.002	---	---
11AC40SISO	Ant1	5190	36.234	5171.905	5208.139	---	---
		5230	36.309	5211.867	5248.176	---	---
11AC80SISO	Ant1	5210	75.371	5172.434	5247.805	---	---

Test Graphs



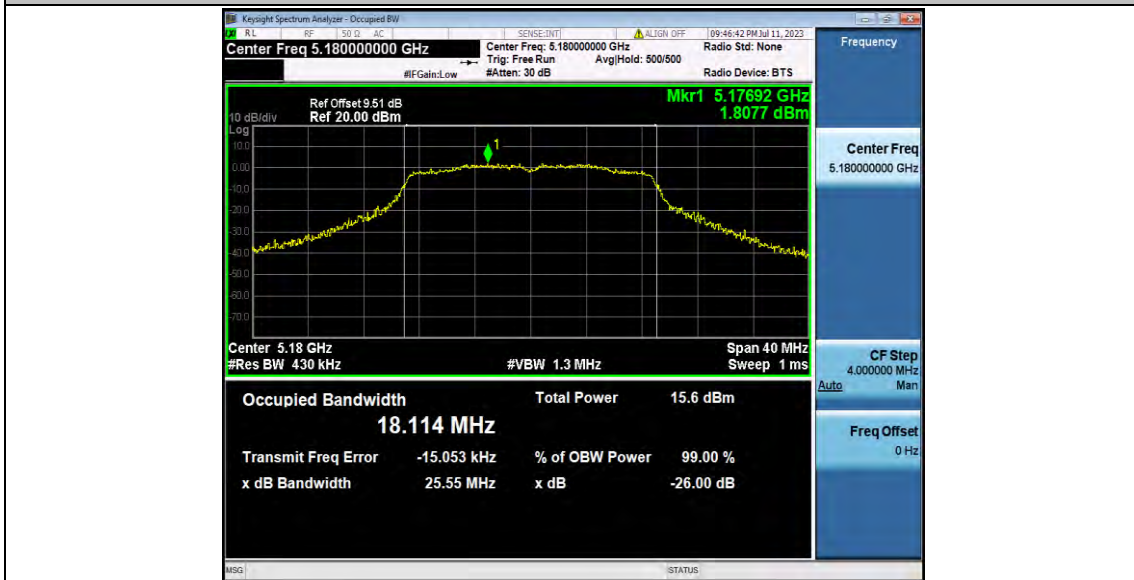
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



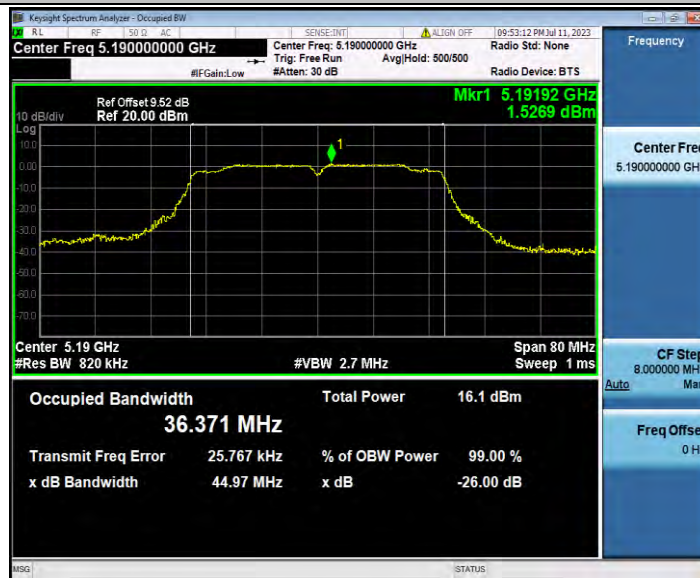
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



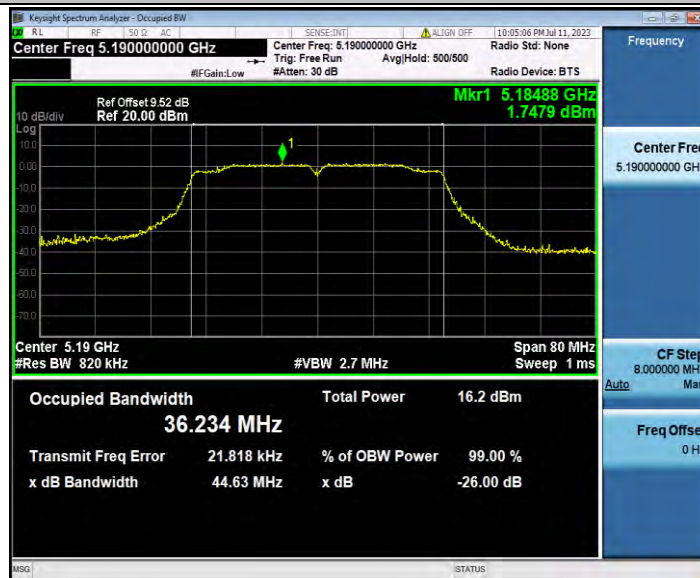
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



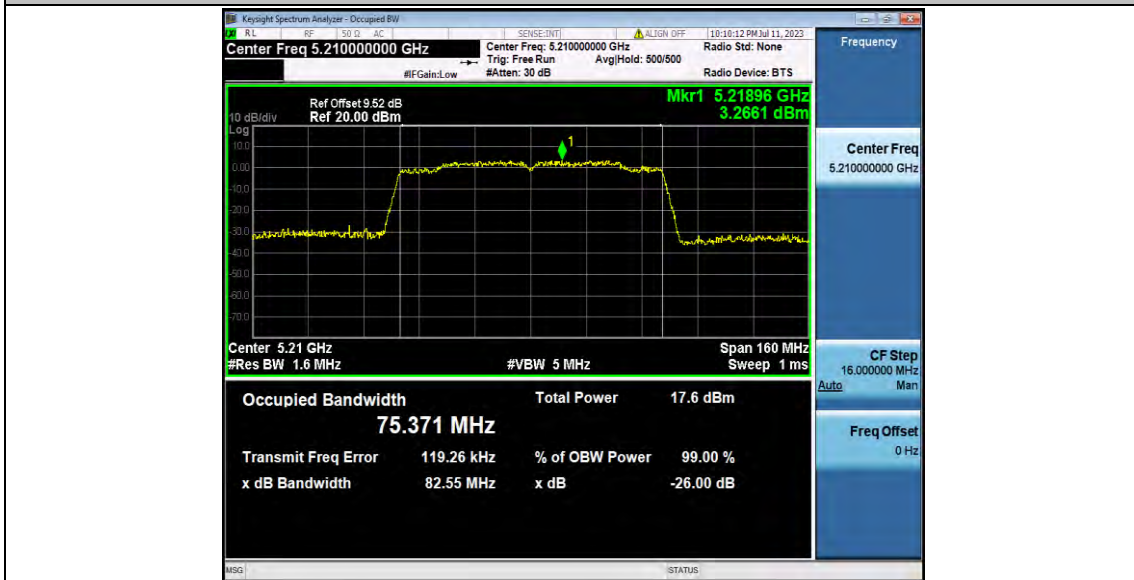
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



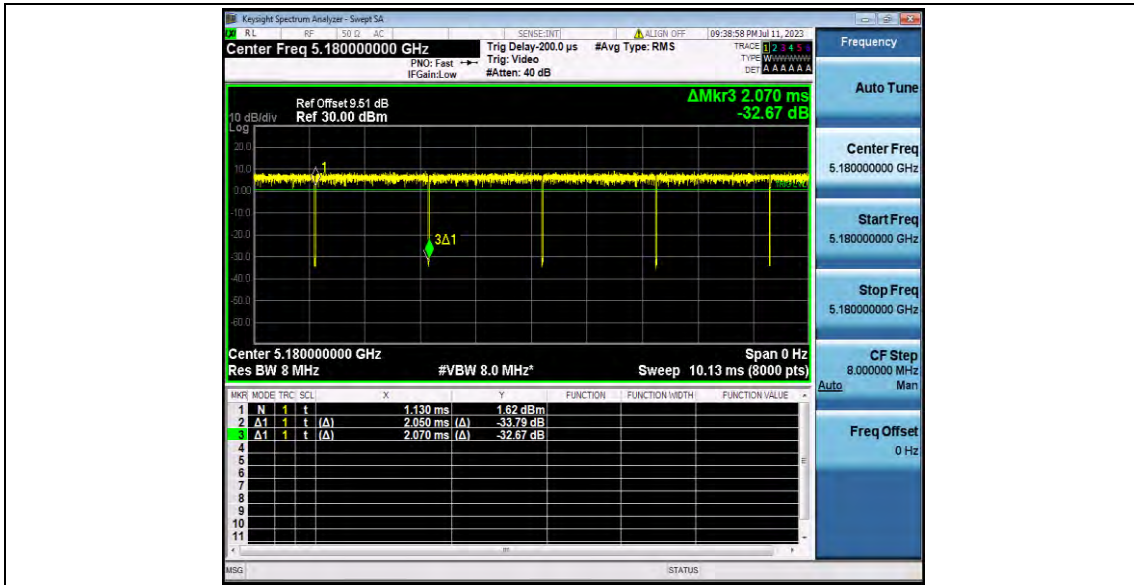
11AC80SISO_Ant1_5210

Appendix D.3: Duty Cycle

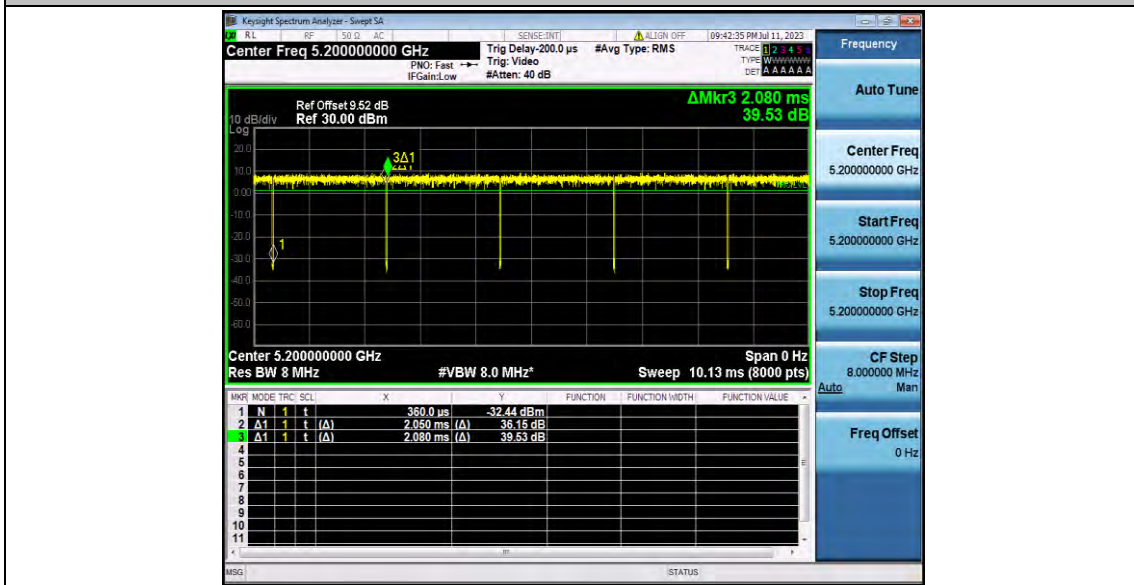
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.05	2.07	99.03
		5200	2.05	2.08	98.56
		5240	2.05	2.08	98.56
11N20SISO	Ant1	5180	1.91	1.93	98.96
		5200	1.91	1.93	98.96
		5240	1.90	1.93	98.45
11N40SISO	Ant1	5190	0.93	0.95	97.89
		5230	0.94	0.96	97.92
11AC20SISO	Ant1	5180	1.91	1.94	98.45
		5200	1.91	1.94	98.45
		5240	1.92	1.94	98.97
11AC40SISO	Ant1	5190	0.94	0.96	97.92
		5230	0.95	0.97	97.94
11AC80SISO	Ant1	5210	0.46	0.54	85.19

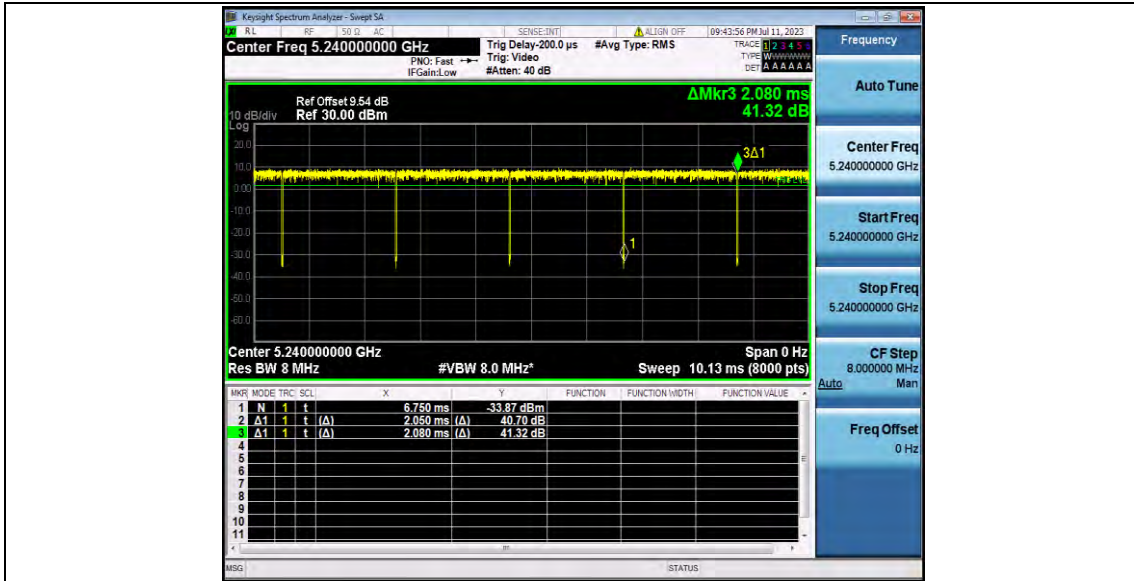
Test Graphs



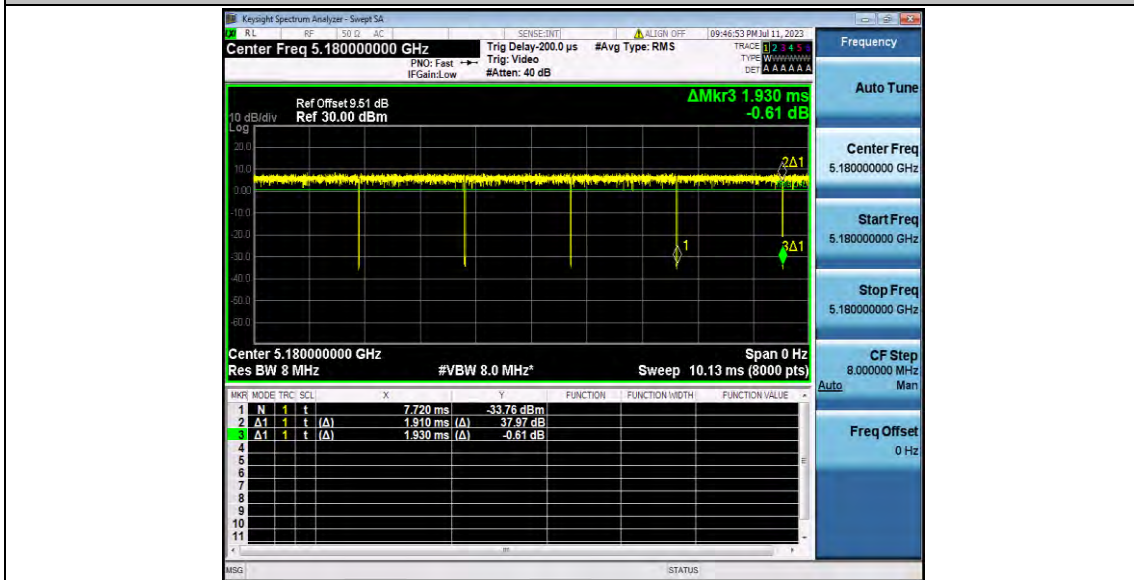
11A_Ant1_5180



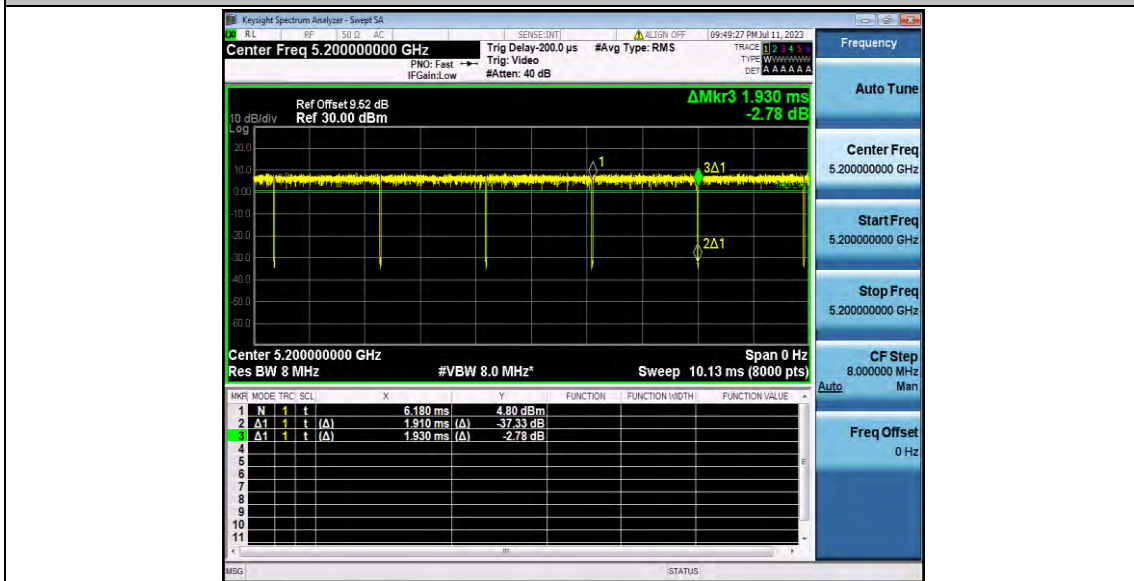
11A_Ant1_5200



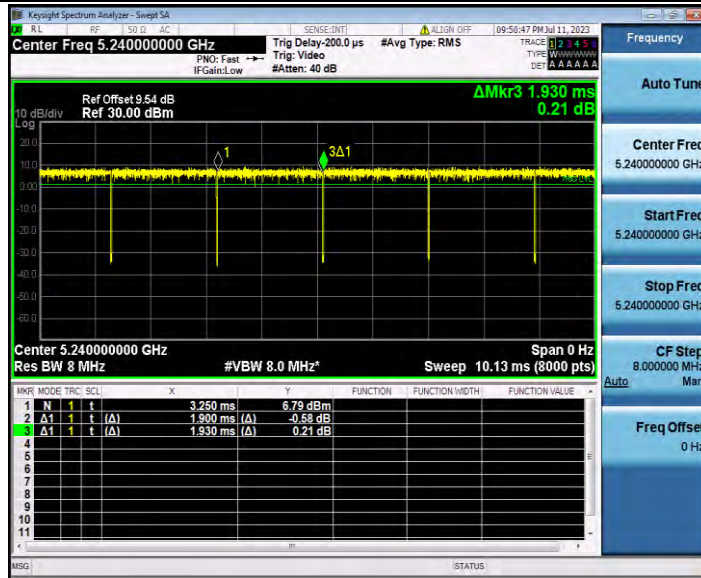
11A_Ant1_5240



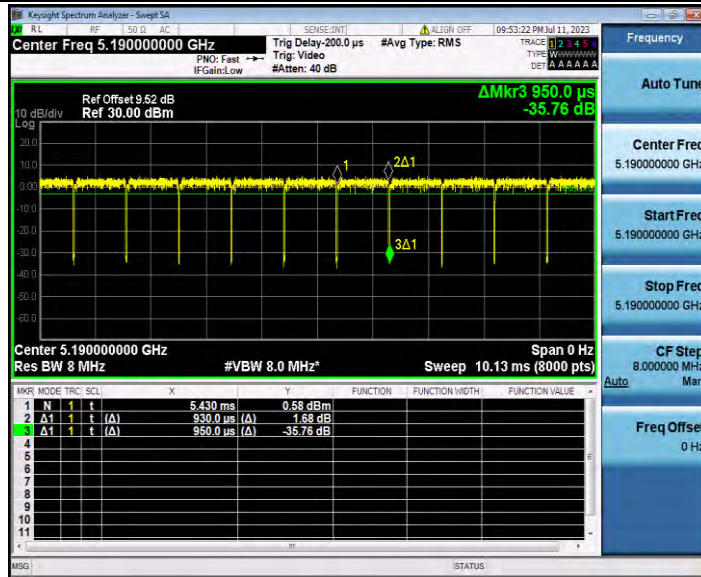
11N20SISO_Ant1_5180



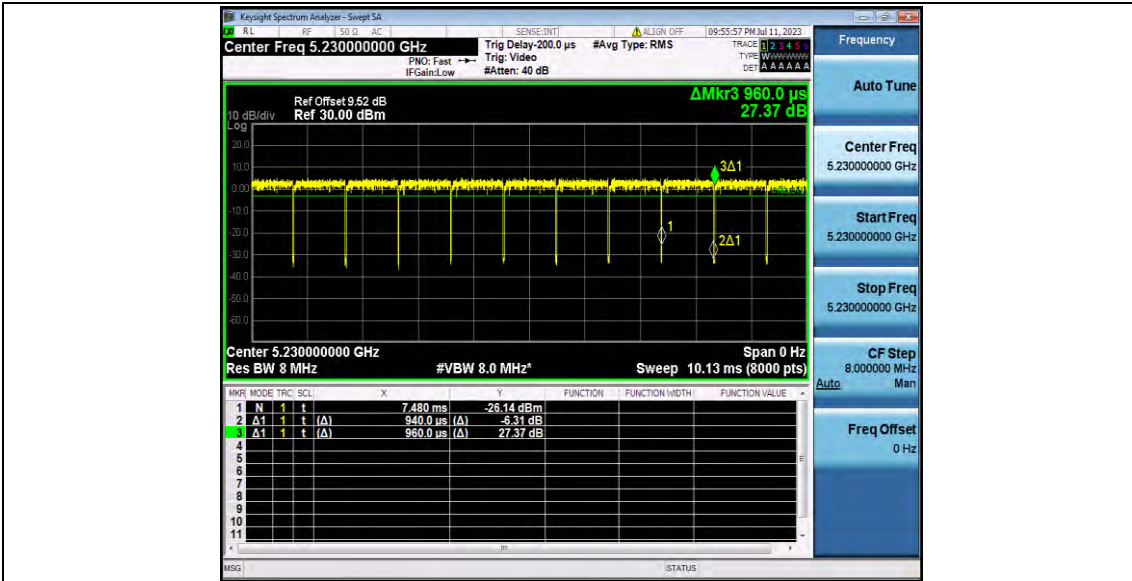
11N20SISO_Ant1_5200



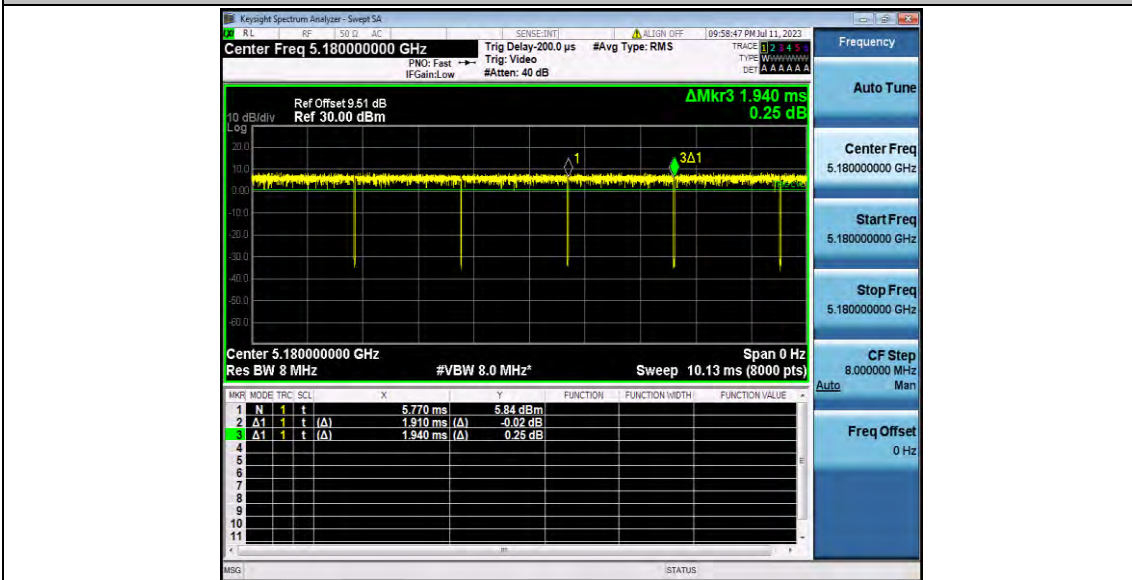
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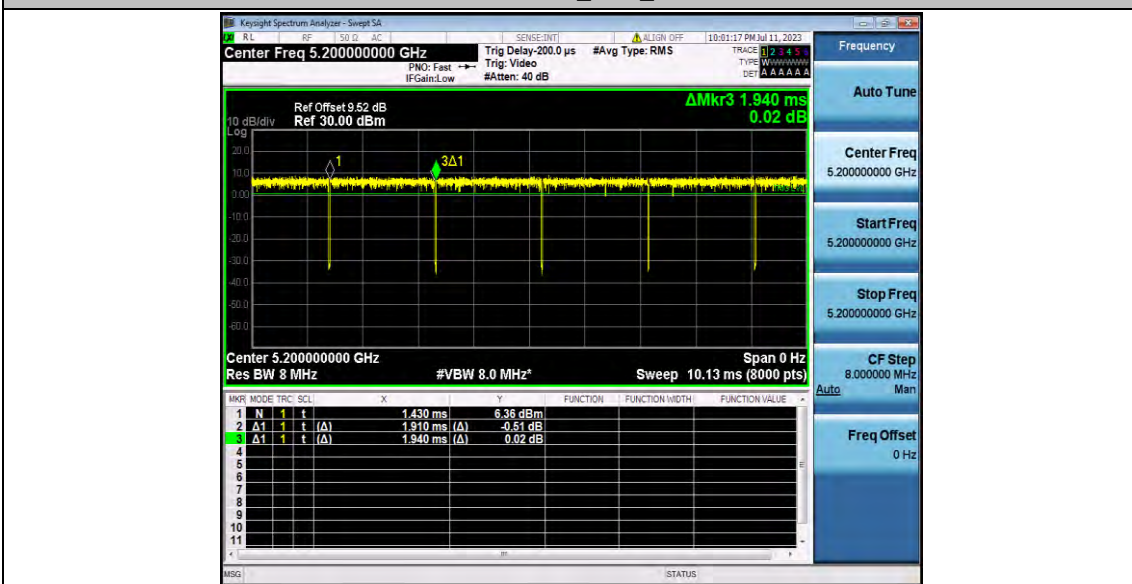
11N40SISO_Ant1_5190



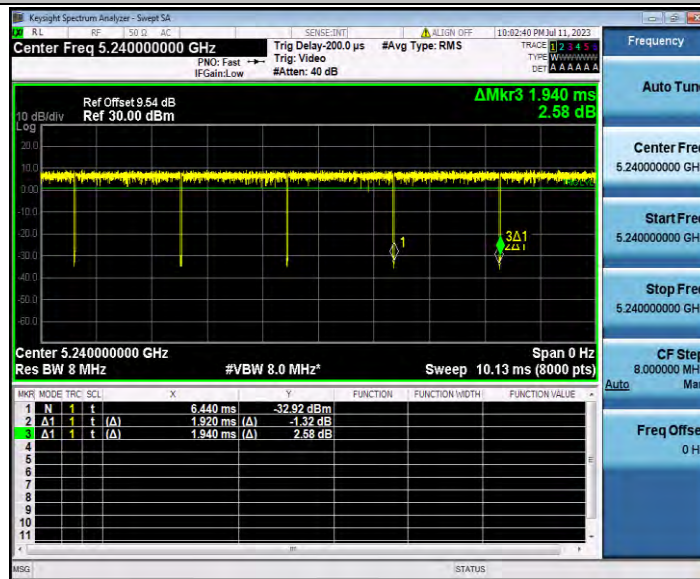
11N40SISO_Ant1_5230



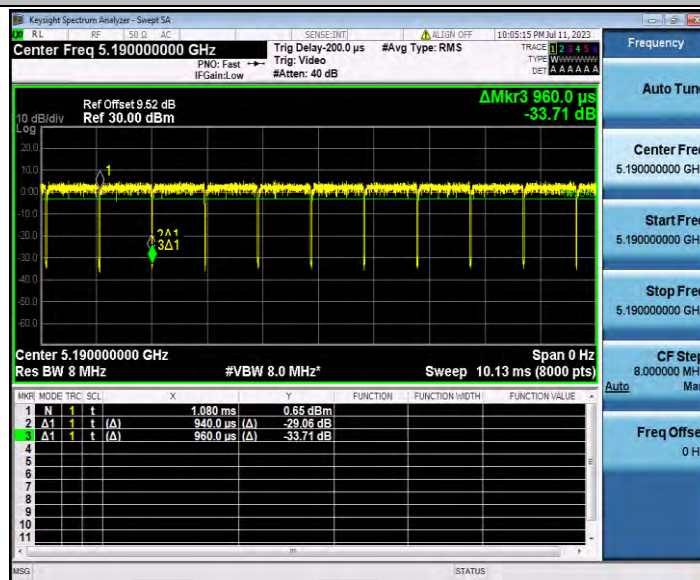
11AC20SISO_Ant1_5180



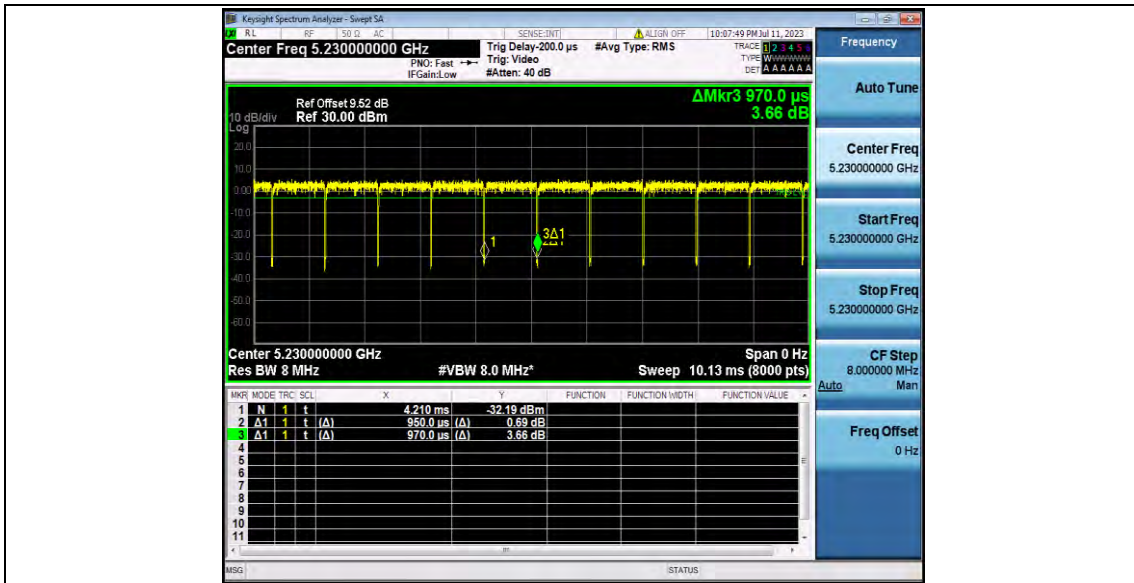
11AC20SISO_Ant1_5200



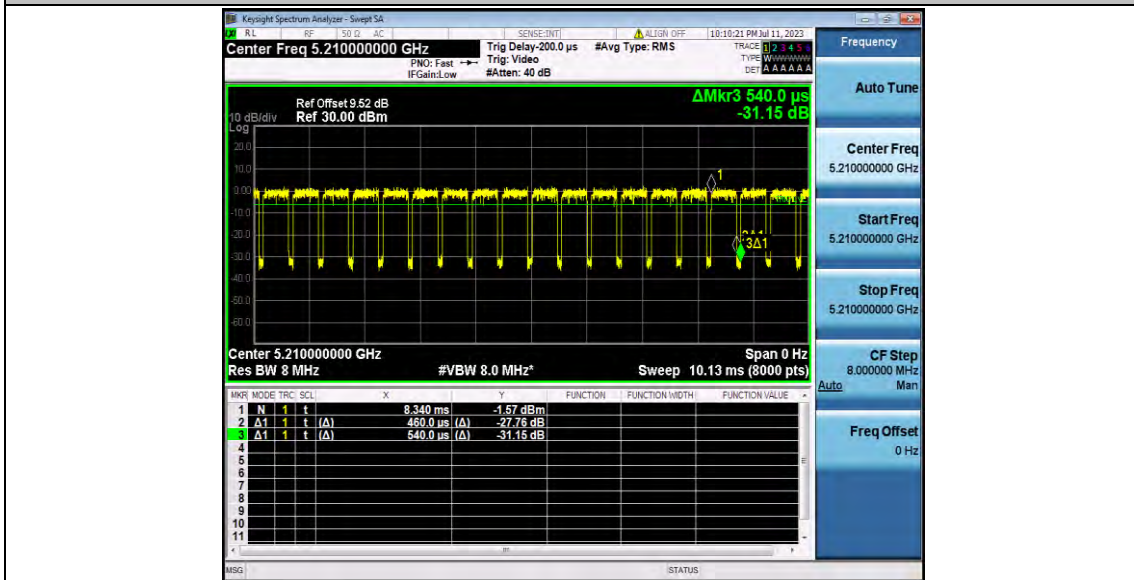
11AC20SISO_Ant1_5240



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	11.01	99.03	0.04	11.05	≤23.98	PASS
		5200	11.28	98.56	0.06	11.34	≤23.98	PASS
		5240	11.62	98.56	0.06	11.68	≤23.98	PASS
11N20SISO	Ant1	5180	10.68	98.96	0.05	10.73	≤23.98	PASS
		5200	10.91	98.96	0.05	10.96	≤23.98	PASS
		5240	11.26	98.45	0.07	11.33	≤23.98	PASS
11N40SISO	Ant1	5190	10.58	97.89	0.09	10.67	≤23.98	PASS
		5230	10.92	97.92	0.09	11.01	≤23.98	PASS
11AC20SIS O	Ant1	5180	10.67	98.45	0.07	10.74	≤23.98	PASS
		5200	10.91	98.45	0.07	10.98	≤23.98	PASS
		5240	11.22	98.97	0.04	11.26	≤23.98	PASS
11AC40SIS O	Ant1	5190	10.55	97.92	0.09	10.64	≤23.98	PASS
		5230	10.86	97.94	0.09	10.95	≤23.98	PASS
11AC80SIS O	Ant1	5210	9.98	85.19	0.70	10.68	≤23.98	PASS

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

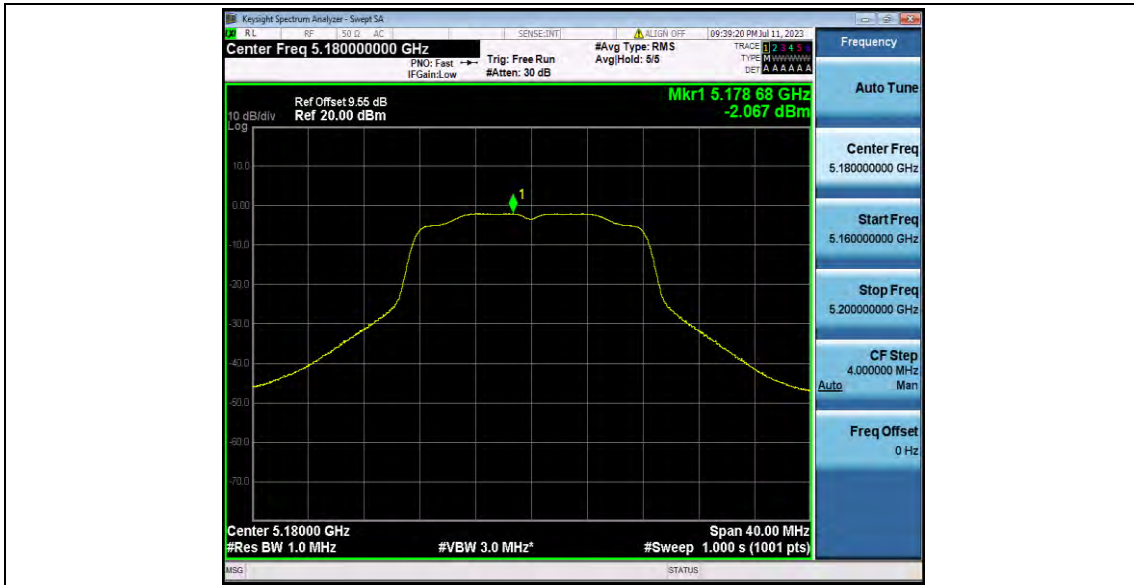
Appendix D.5: Maximum power spectral density

Test Result

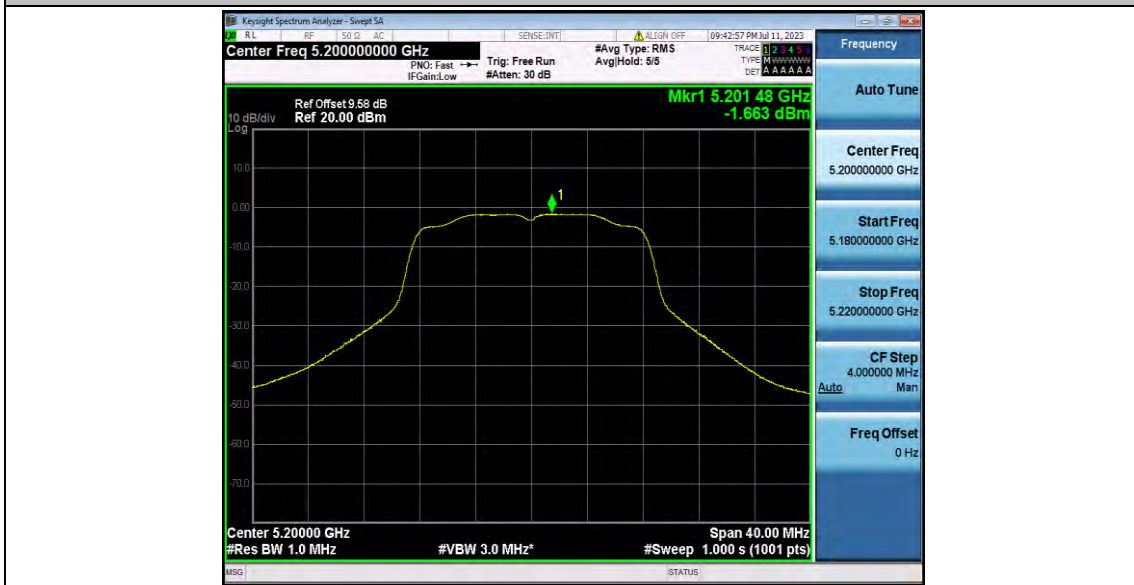
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-2.07	≤11.00	PASS
		5200	-1.66	≤11.00	PASS
		5240	-1.32	≤11.00	PASS
11N20SISO	Ant1	5180	-2.49	≤11.00	PASS
		5200	-2.21	≤11.00	PASS
		5240	-1.72	≤11.00	PASS
11N40SISO	Ant1	5190	-5.71	≤11.00	PASS
		5230	-5.12	≤11.00	PASS
11AC20SISO	Ant1	5180	-2.44	≤11.00	PASS
		5200	-2.19	≤11.00	PASS
		5240	-1.77	≤11.00	PASS
11AC40SISO	Ant1	5190	-5.71	≤11.00	PASS
		5230	-5.31	≤11.00	PASS
11AC80SISO	Ant1	5210	-8.32	≤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.

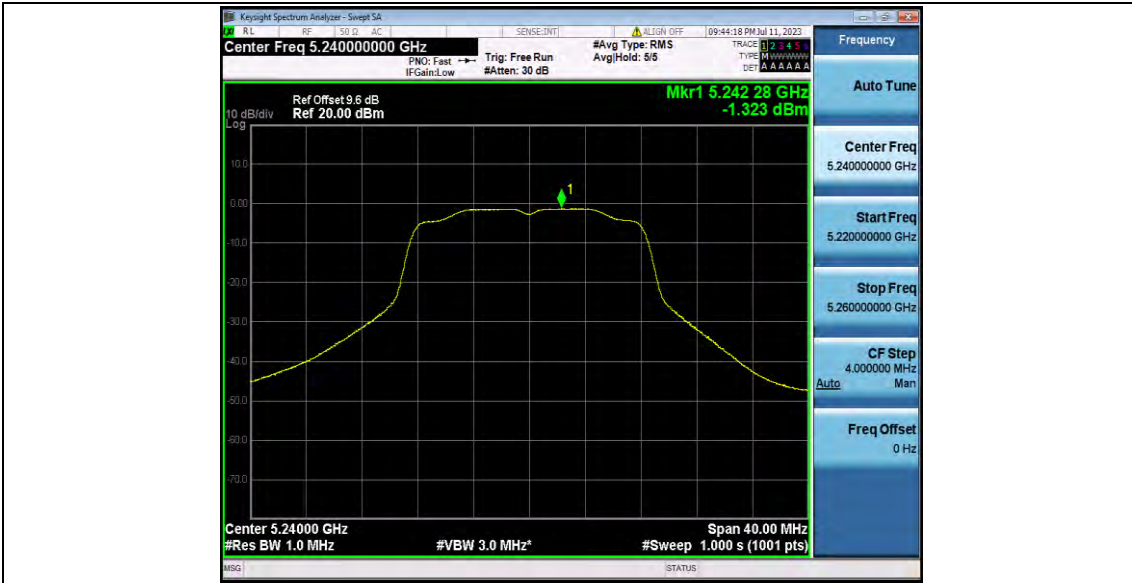
Test Graphs



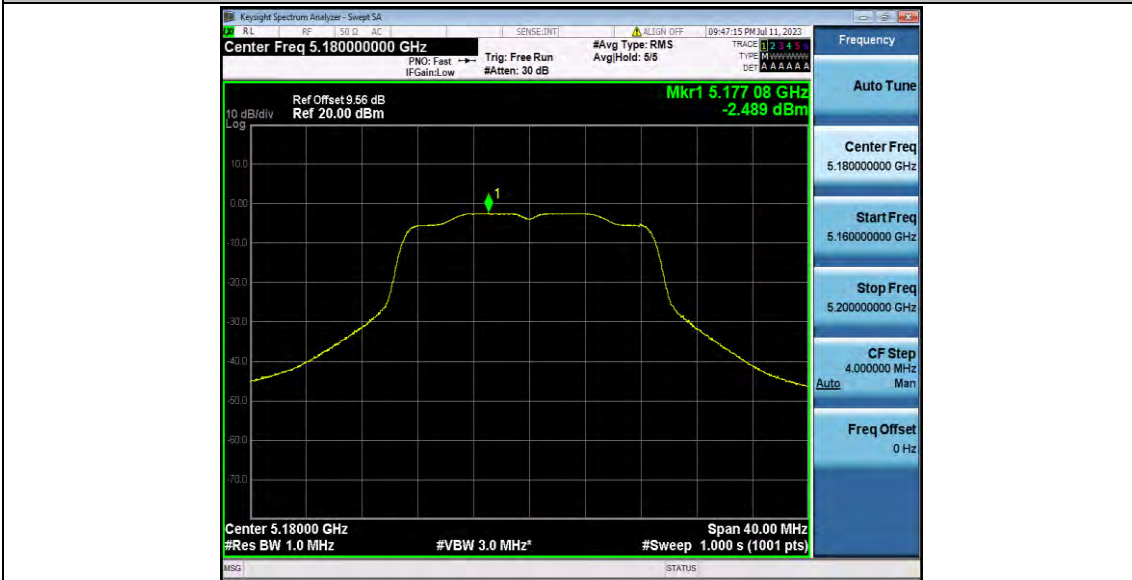
11A_Ant1_5180



11A_Ant1_5200



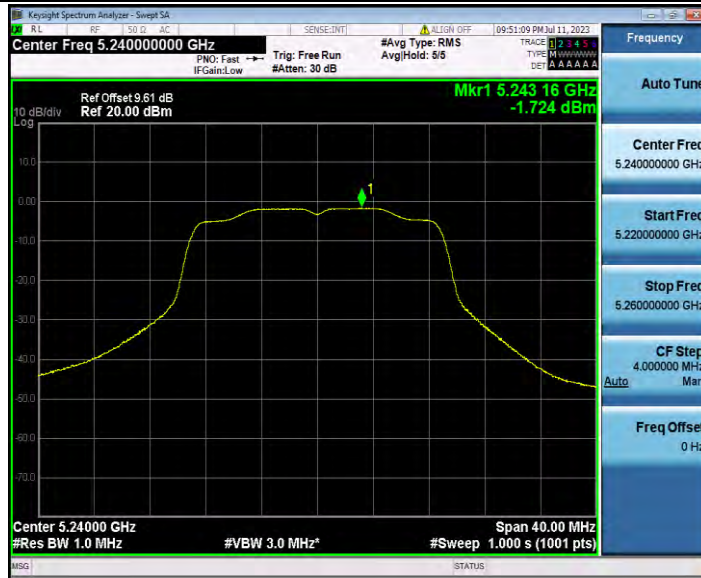
11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



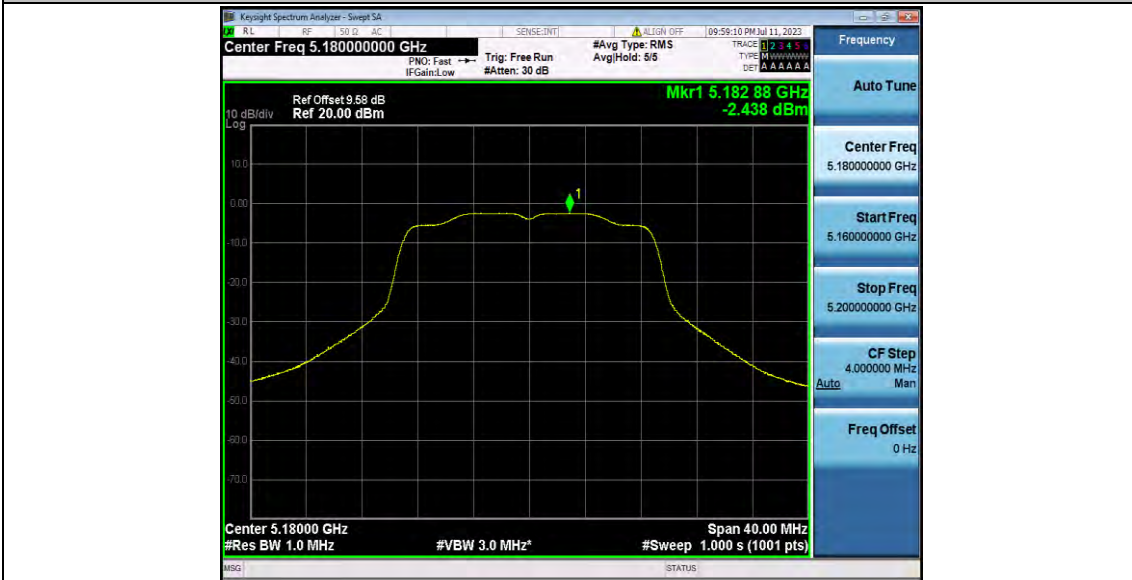
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



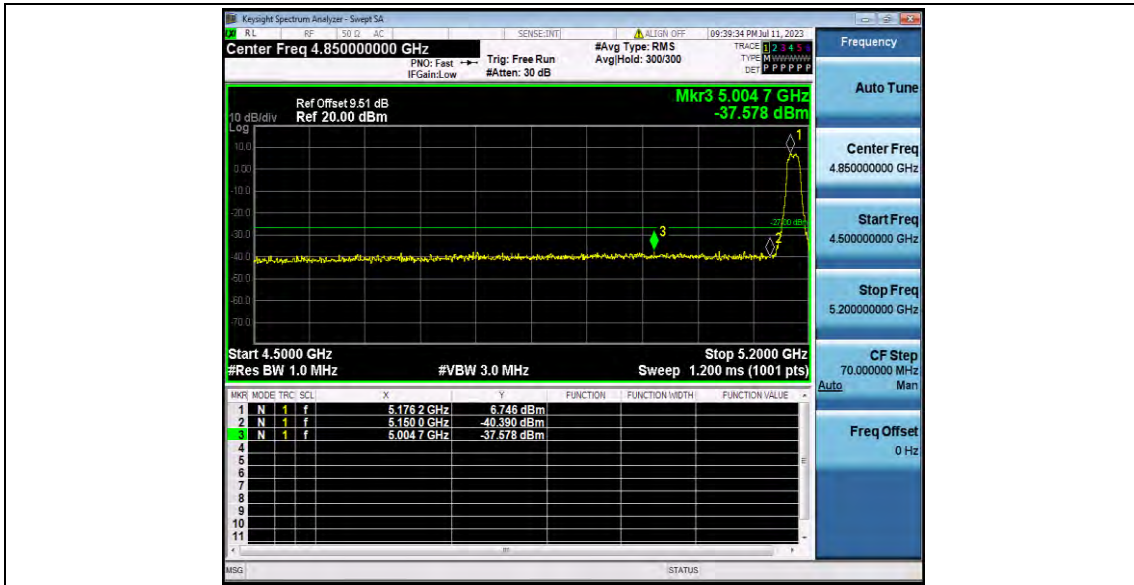
11AC80SISO_Ant1_5210

Appendix D.6: Band edge measurements

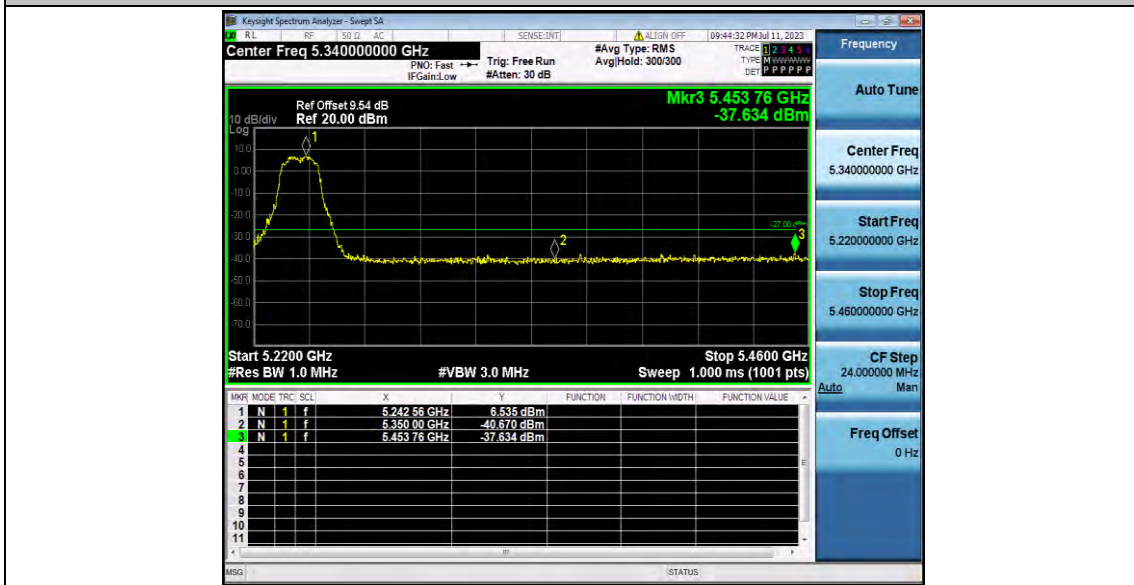
Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-37.58	≤ -27	PASS
		High	5240	-37.63	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-37.41	≤ -27	PASS
		High	5240	-37.84	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-34.94	≤ -27	PASS
		High	5230	-37.79	≤ -27	PASS
11AC20SISO	Ant1	Low	5180	-37.71	≤ -27	PASS
		High	5240	-37.71	≤ -27	PASS
11AC40SISO	Ant1	Low	5190	-34.82	≤ -27	PASS
		High	5230	-38.14	≤ -27	PASS
11AC80SISO	Ant1	Low	5210	-30.18	≤ -27	PASS
		High	5210	-37.98	≤ -27	PASS

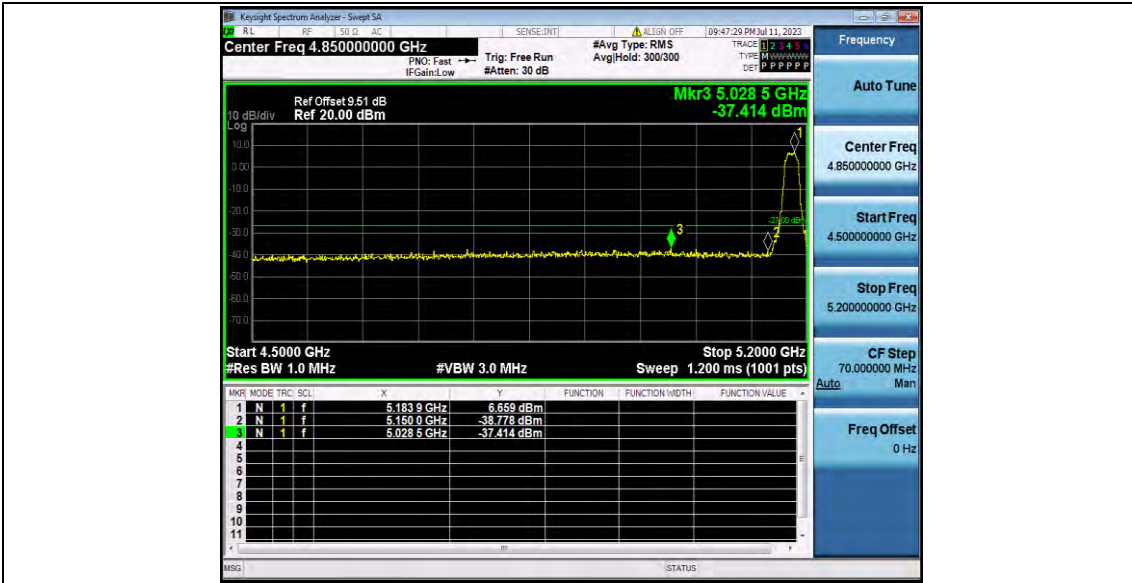
Test Graphs B1



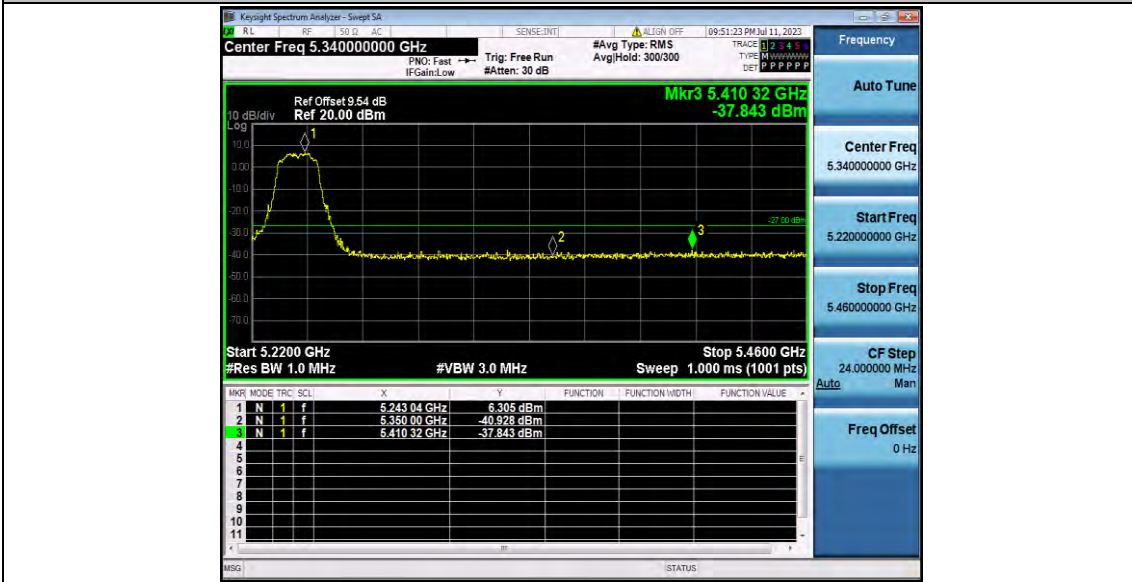
11A_Ant1_Low_5180



11A_Ant1_High_5240



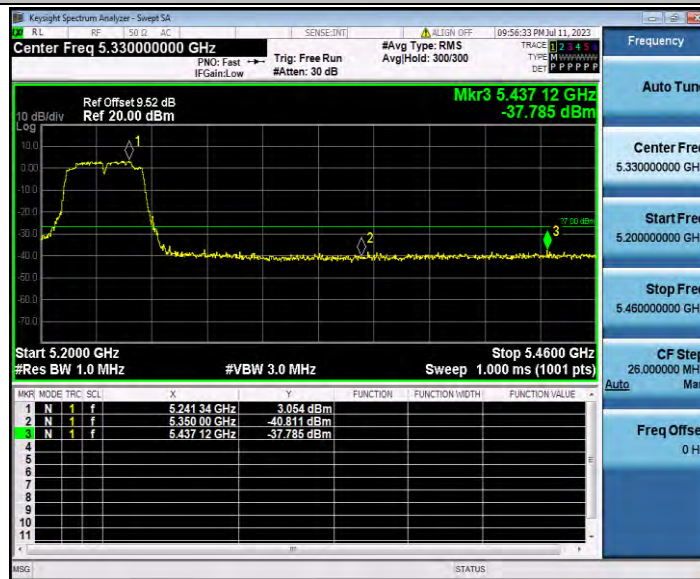
11N20SISO_Ant1_Low_5180



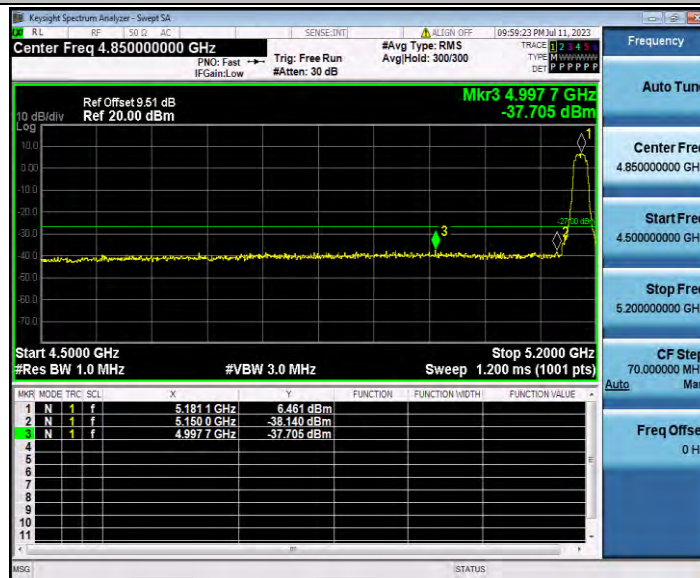
11N20SISO_Ant1_High_5240



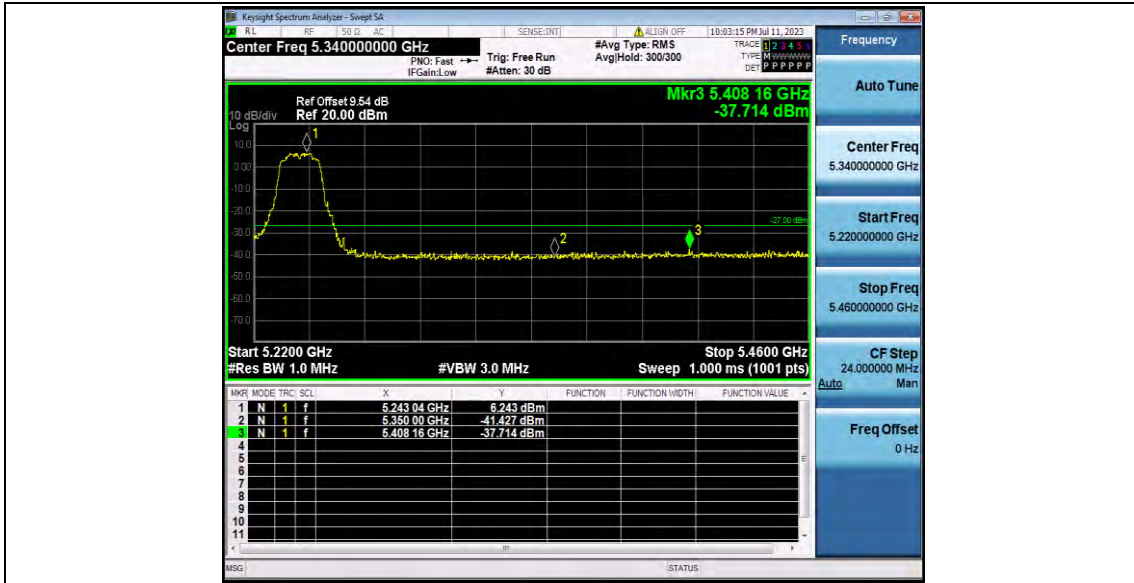
11N40SISO_Ant1_Low_5190



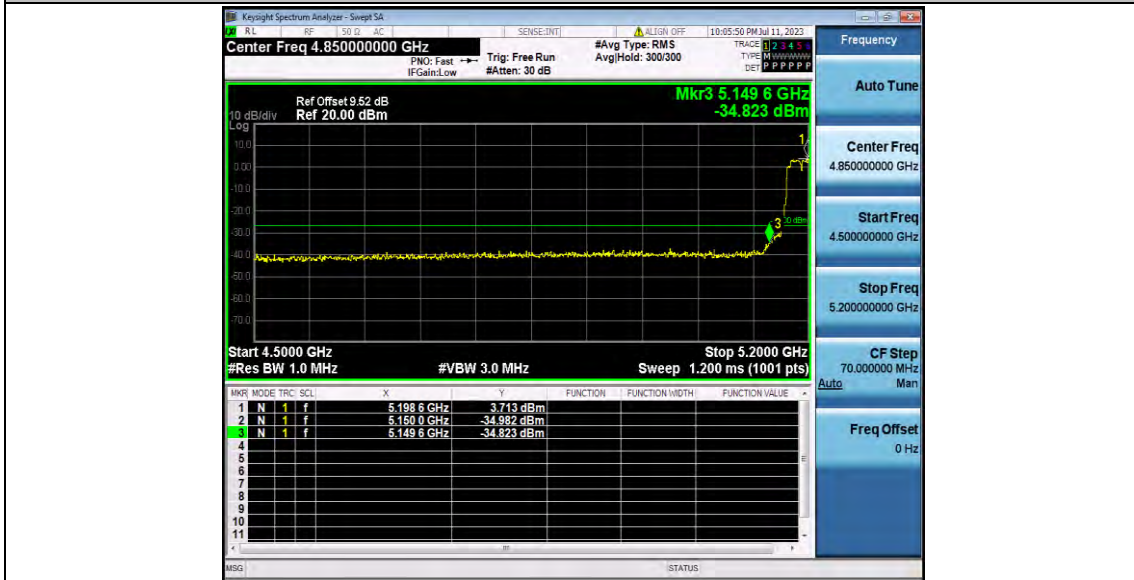
11N40SISO_Ant1_High_5230



11AC20SISO_Ant1_Low_5180



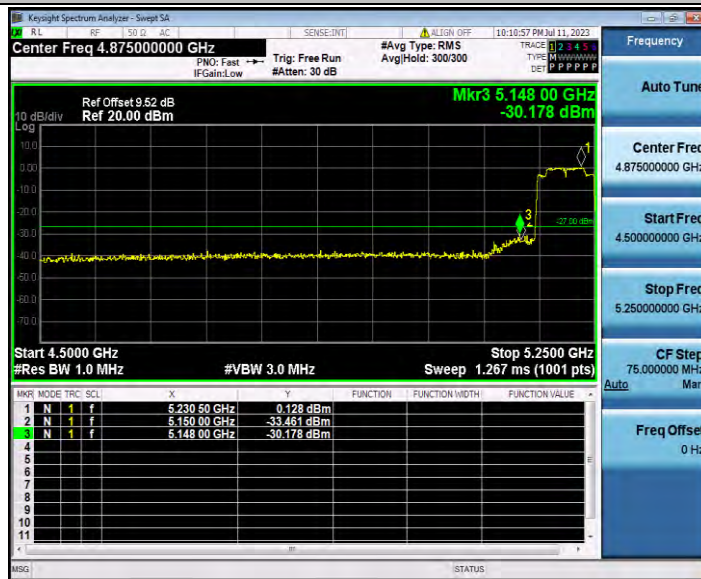
11AC20SISO_Ant1_High_5240



11AC40SISO_Ant1_Low_5190



11AC40SISO_Ant1_High_5230



11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210

Appendix D.7: Conducted Spurious Emission

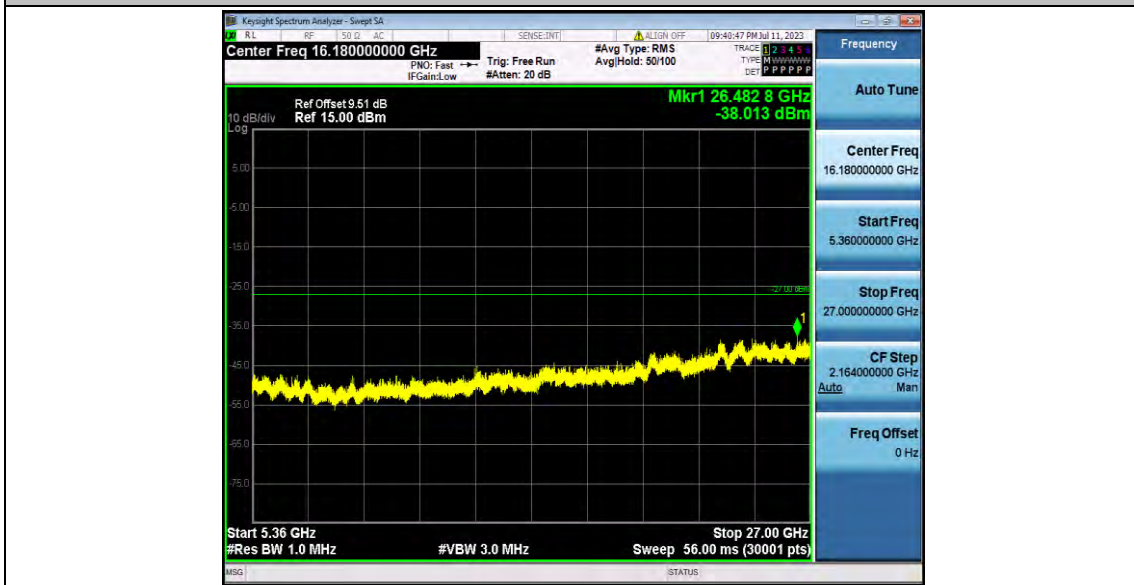
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5124.33	-44.8	≤-27	PASS
			5360~40000	26482.8	-38.01	≤-27	PASS
		5200	30~5140	5129.78	-46.39	≤-27	PASS
			5360~40000	24296.44	-37	≤-27	PASS
		5240	30~5140	5082.09	-45.08	≤-27	PASS
			5360~40000	24189.69	-37.75	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5136.08	-45.31	≤-27	PASS
			5360~40000	23574.39	-38.06	≤-27	PASS
		5200	30~5140	5136.76	-45.45	≤-27	PASS
			5360~40000	23580.16	-38.01	≤-27	PASS
		5240	30~5140	5078.85	-45.5	≤-27	PASS
			5360~40000	24247.39	-37.22	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5138.81	-42.93	≤-27	PASS
			5360~40000	24230.8	-38.13	≤-27	PASS
		5230	30~5140	4897.1	-45.1	≤-27	PASS
			5360~40000	24146.41	-37.94	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	5140	-44.45	≤-27	PASS
			5360~40000	23563.57	-37.7	≤-27	PASS
		5200	30~5140	2662.67	-45.71	≤-27	PASS
			5360~40000	26981.97	-37.74	≤-27	PASS
		5240	30~5140	5073.74	-45.72	≤-27	PASS
			5360~40000	24206.28	-38.12	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	5131.14	-43.58	≤-27	PASS
			5360~40000	26844.91	-38.28	≤-27	PASS
		5230	30~5140	5124.16	-46.88	≤-27	PASS
			5360~40000	25103.61	-38.3	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5132.85	-34.98	≤-27	PASS
			5360~40000	24261.82	-37.05	≤-27	PASS

Test Graphs



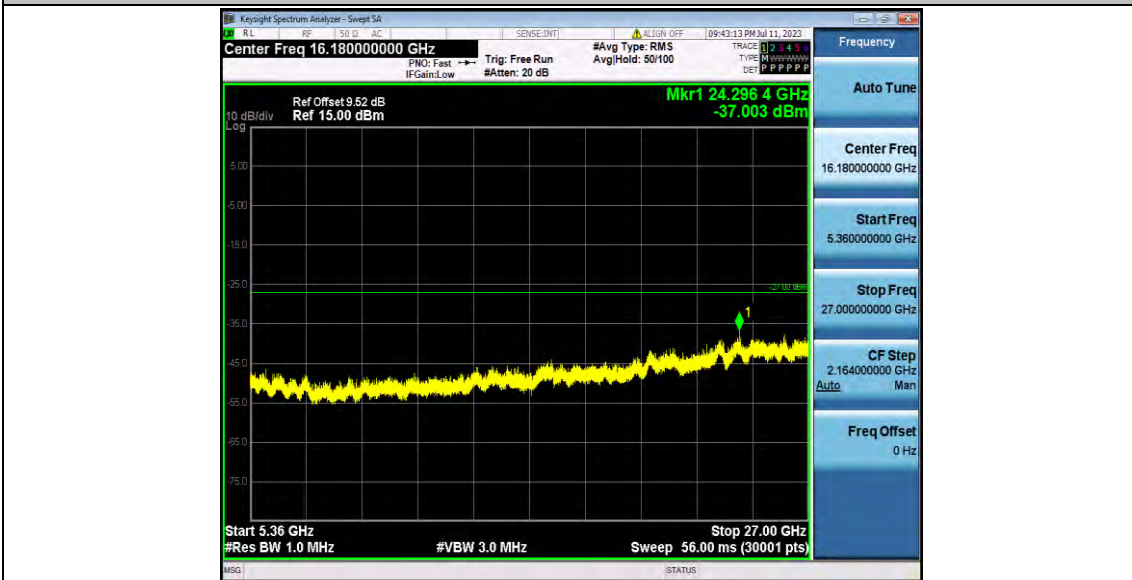
11A_Ant1_5180_30~5140



11A_Ant1_5180_5360~40000



11A_Ant1_5200_30~5140



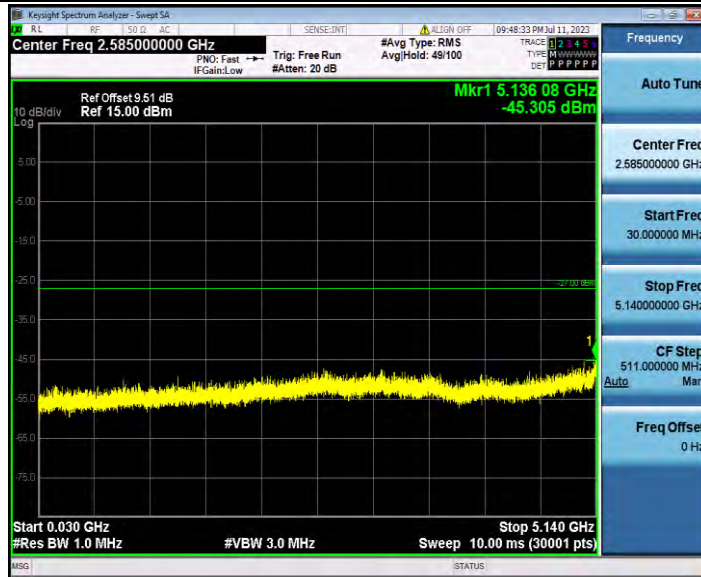
11A_Ant1_5200_5360~40000



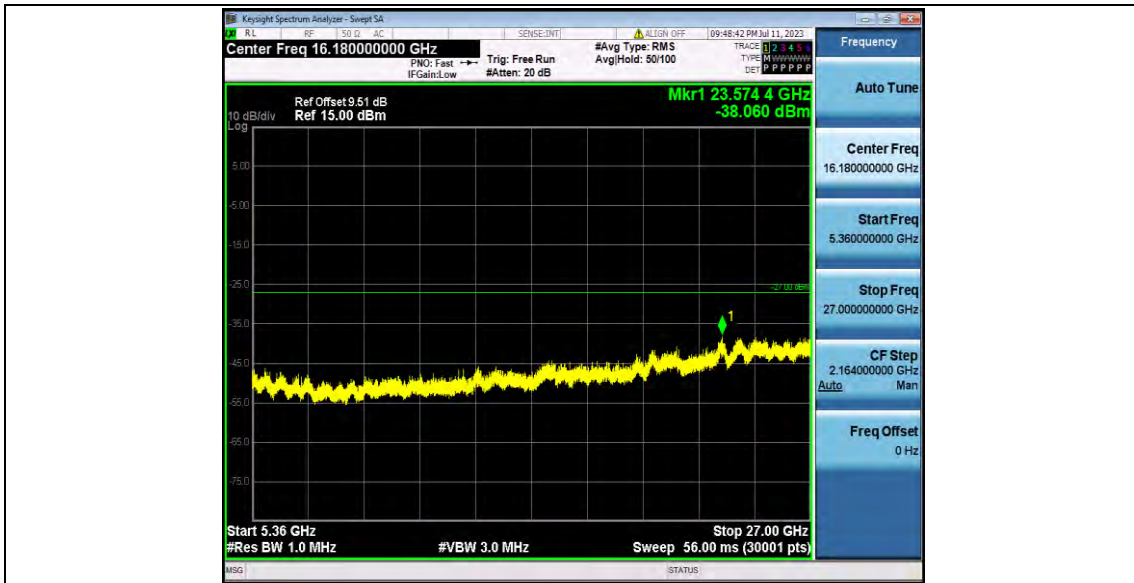
11A_Ant1_5240_30~5140



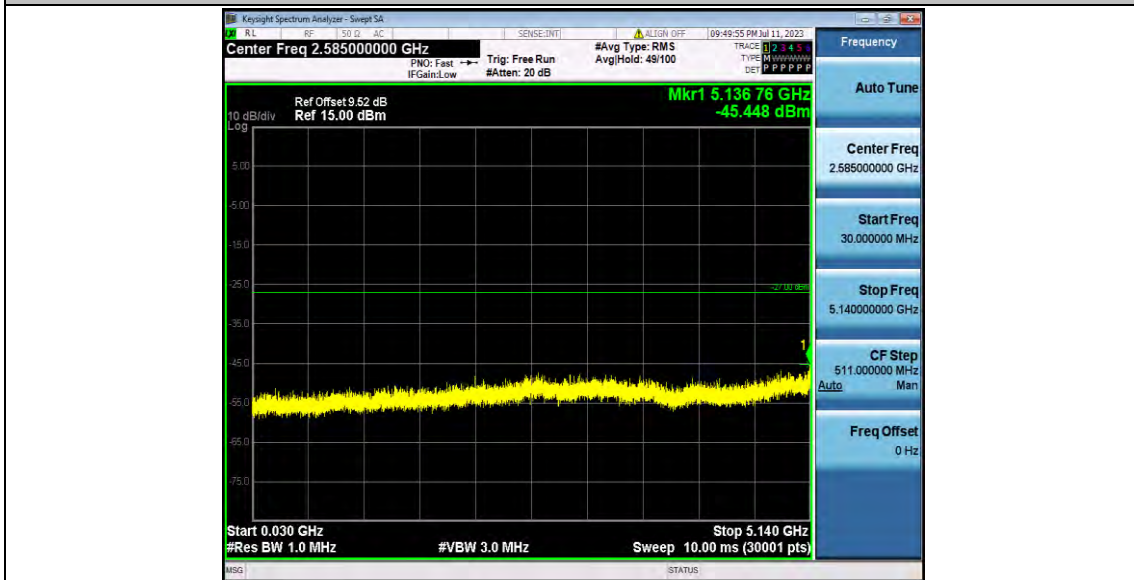
11A_Ant1_5240_5360~40000



11N20SISO_Ant1_5180_30~5140



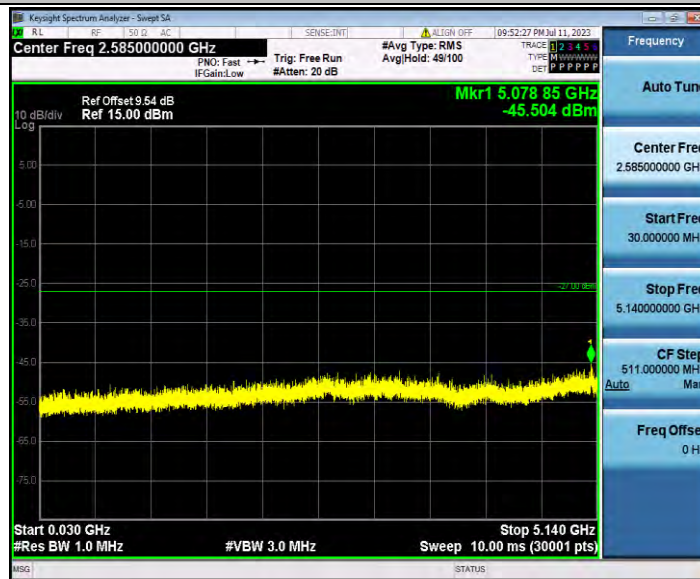
11N20SISO_Ant1_5180_5360~40000



11N20SISO_Ant1_5200_30~5140



11N20SISO_Ant1_5200_5360~40000



11N20SISO_Ant1_5240_30~5140



11N20SISO_Ant1_5240_5360~40000



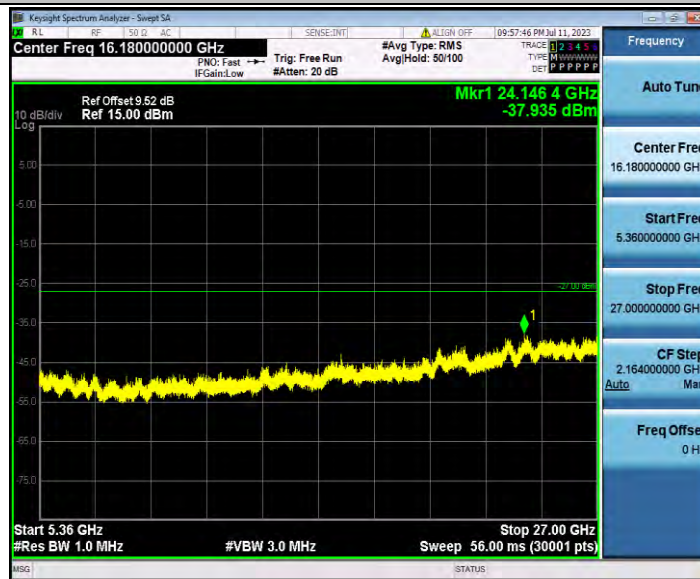
11N40SISO_Ant1_5190_30~5140



11N40SISO_Ant1_5190_5360~40000



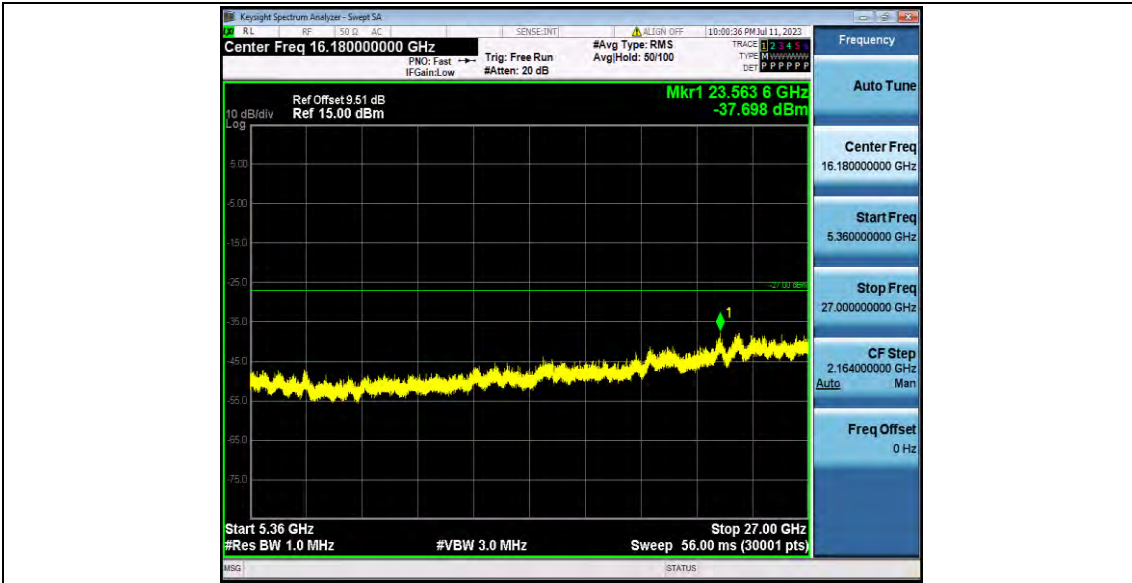
11N40SISO_Ant1_5230_30~5140



11N40SISO_Ant1_5230_5360~40000



11AC20SISO_Ant1_5180_30~5140



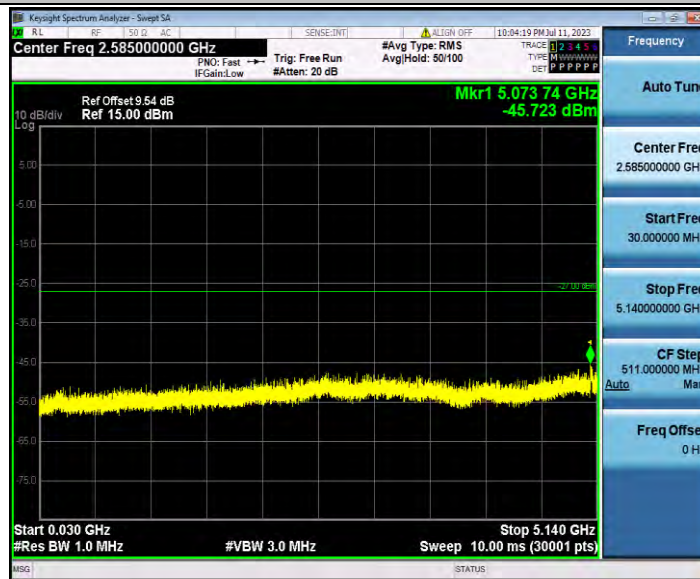
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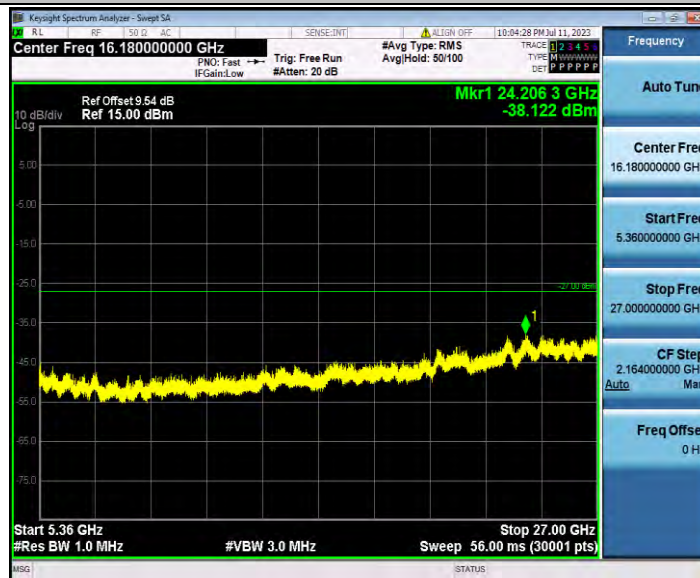
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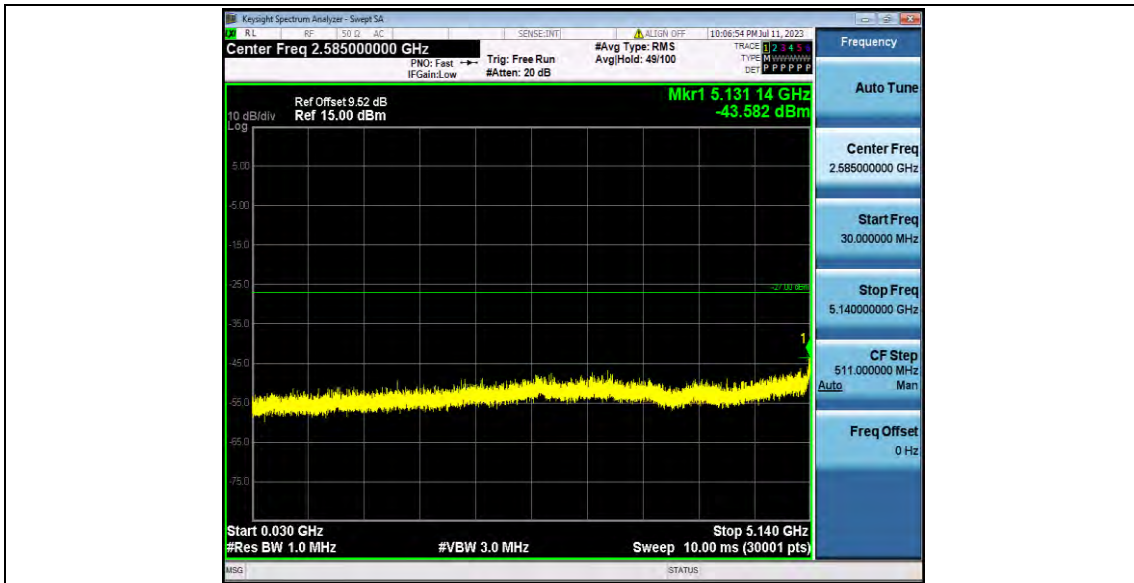
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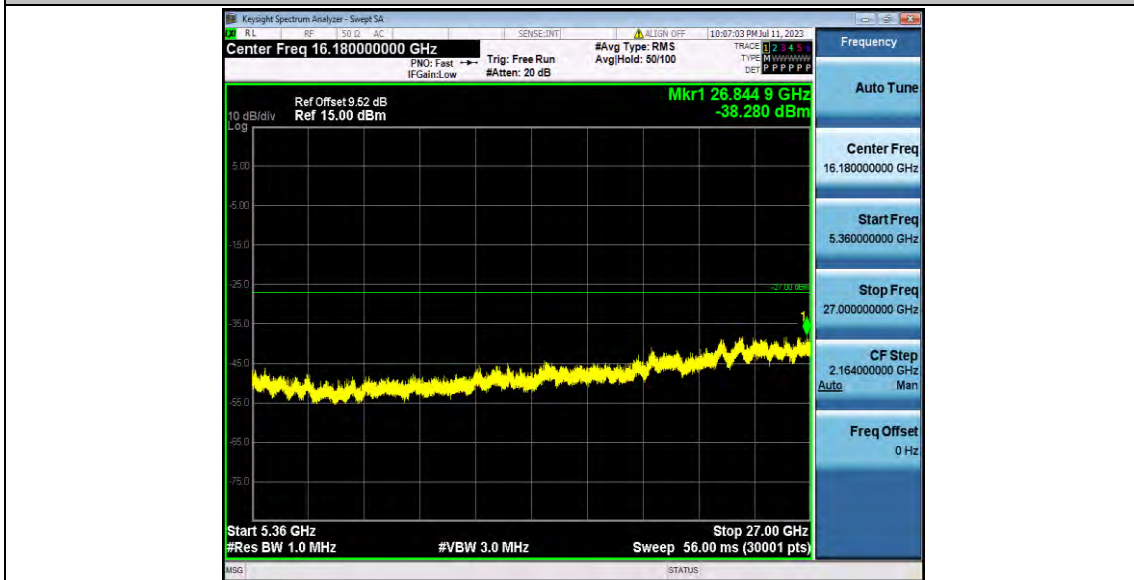
11AC20SISO_Ant1_5240_30~5140



11AC20SISO_Ant1_5240_5360~40000



11AC40SISO_Ant1_5190_30~5140



11AC40SISO_Ant1_5190_5360~40000



11AC40SISO_Ant1_5230_30~5140



11AC40SISO_Ant1_5230_5360~40000



11AC80SISO_Ant1_5210_30~5140

