

Case No. : <u>GTS20231017004-1-13</u>
Ambient Condition: <u>23</u> °C, <u>48</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.30</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	22.720	5168.640	5191.360	---	---
		5200	22.600	5188.600	5211.200	---	---
		5240	22.720	5228.440	5251.160	---	---
11N20SISO	Ant2	5180	23.040	5168.520	5191.560	---	---
		5200	22.480	5188.600	5211.080	---	---
		5240	22.800	5228.680	5251.480	---	---
11N40SISO	Ant2	5190	42.880	5168.480	5211.360	---	---
		5230	43.440	5208.320	5251.760	---	---
11AC20SISO	Ant2	5180	22.280	5168.760	5191.040	---	---
		5200	22.640	5188.600	5211.240	---	---
		5240	22.560	5228.480	5251.040	---	---
11AC40SISO	Ant2	5190	44.000	5167.840	5211.840	---	---
		5230	43.280	5208.160	5251.440	---	---
11AC80SISO	Ant2	5210	83.360	5168.400	5251.760	---	---

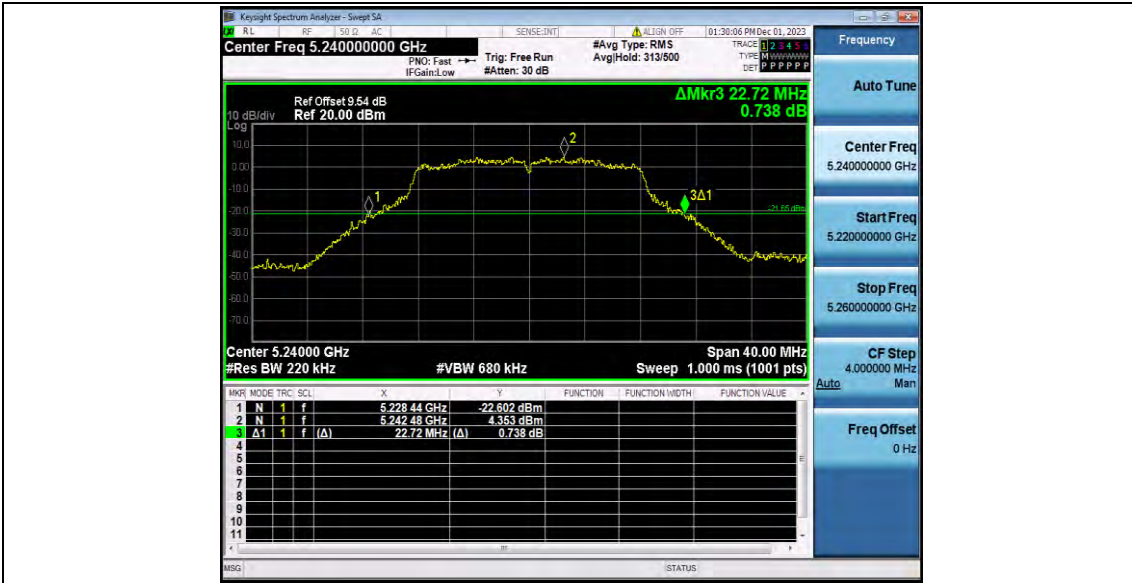
Test Graphs



11A_Ant2_5180



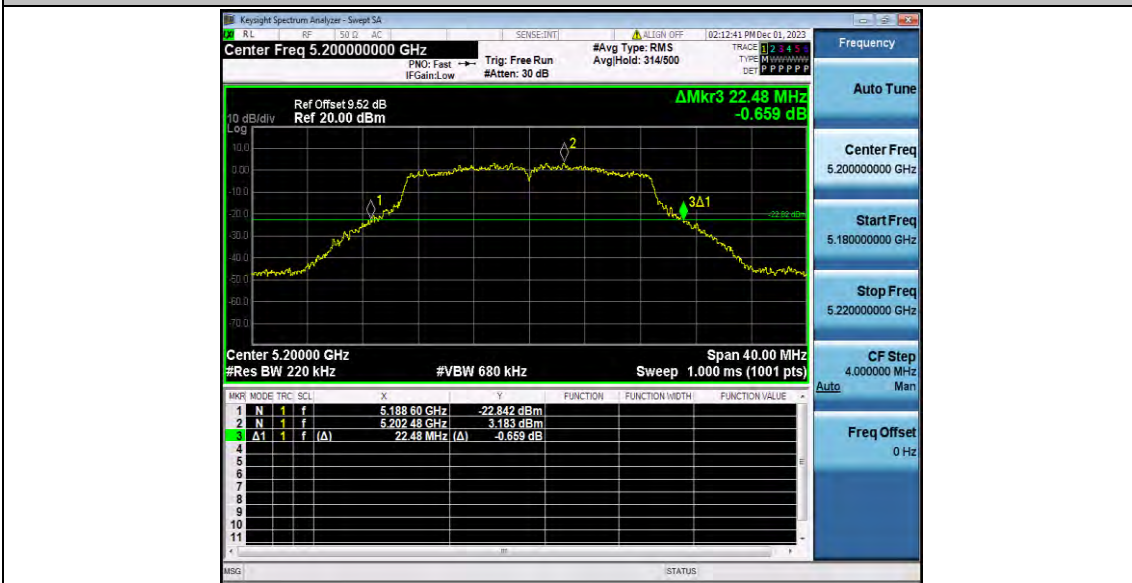
11A_Ant2_5200



11A_Ant2_5240



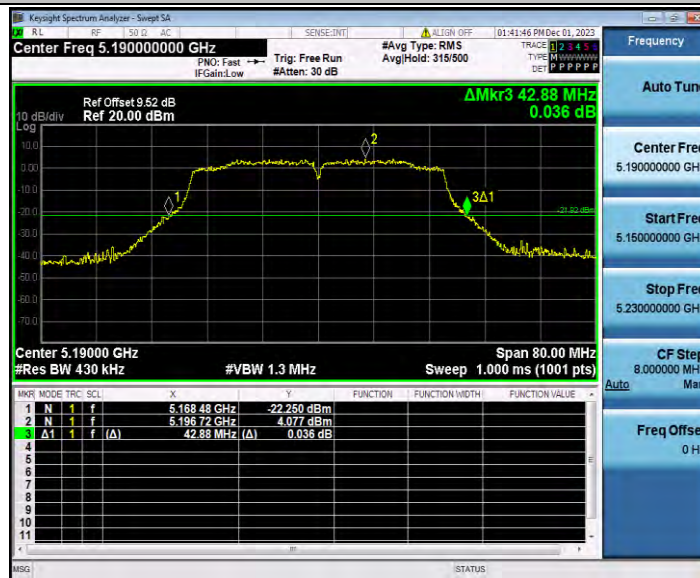
11N20SISO_Ant2_5180



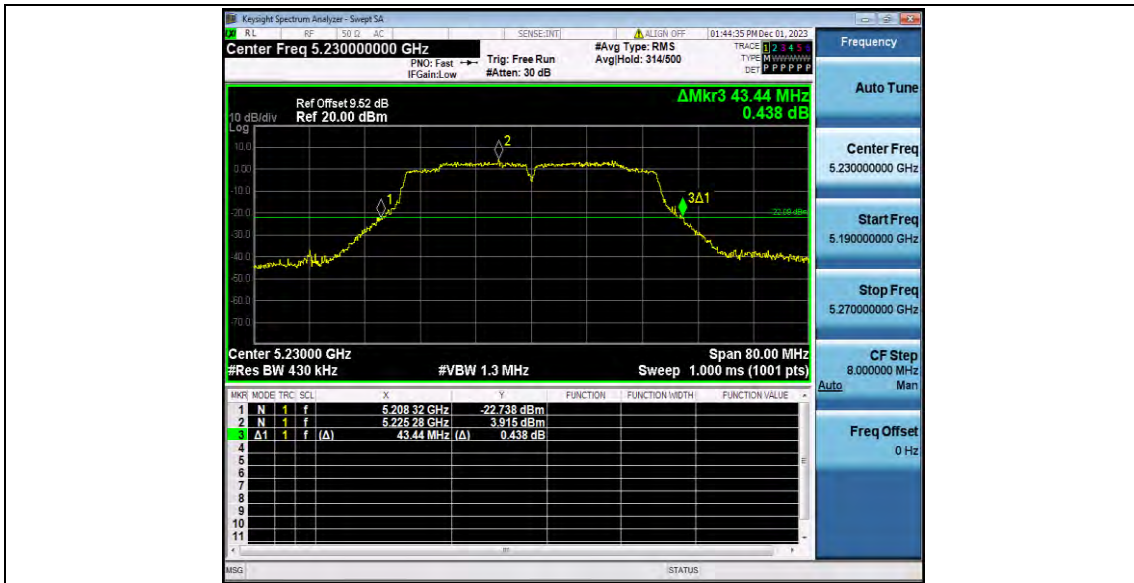
11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



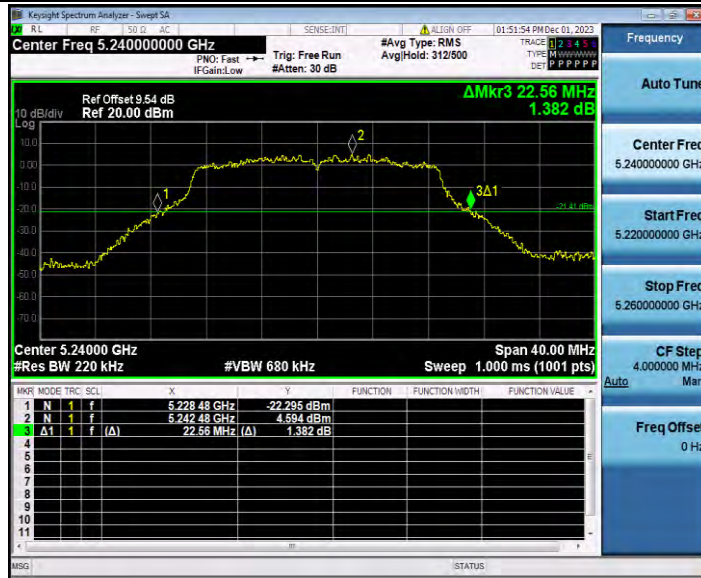
11N40SISO_Ant2_5230



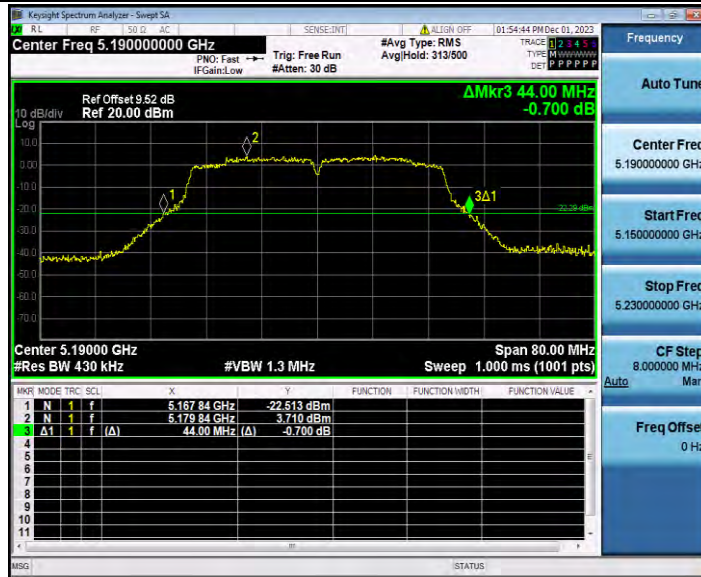
11AC20SISO_Ant2_5180



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	16.982	5171.490	5188.472	---	---
		5200	16.953	5191.510	5208.463	---	---
		5240	17.036	5231.432	5248.468	---	---
11N20SISO	Ant2	5180	17.972	5170.986	5188.958	---	---
		5200	18.009	5190.989	5208.998	---	---
		5240	17.967	5230.991	5248.958	---	---
11N40SISO	Ant2	5190	36.234	5171.874	5208.108	---	---
		5230	36.301	5211.799	5248.100	---	---
11AC20SISO	Ant2	5180	17.993	5170.961	5188.954	---	---
		5200	18.006	5190.970	5208.976	---	---
		5240	17.955	5230.984	5248.939	---	---
11AC40SISO	Ant2	5190	36.217	5171.917	5208.134	---	---
		5230	36.235	5211.896	5248.131	---	---
11AC80SISO	Ant2	5210	75.140	5172.475	5247.615	---	---

Test Graphs



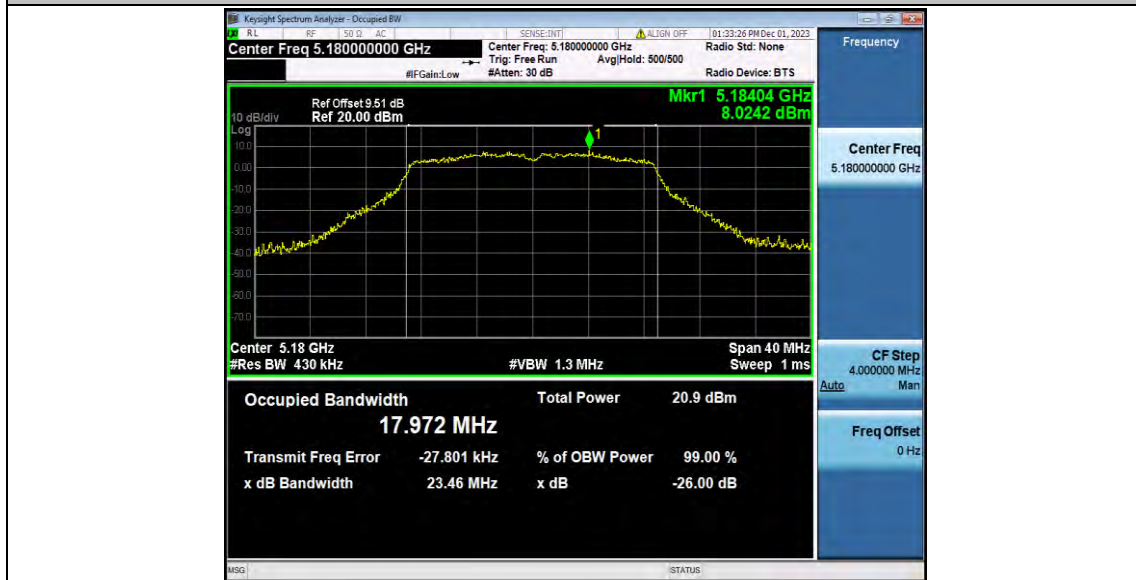
11A_Ant2_5180



11A_Ant2_5200



11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



11N20SISO_Ant2_5240



11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



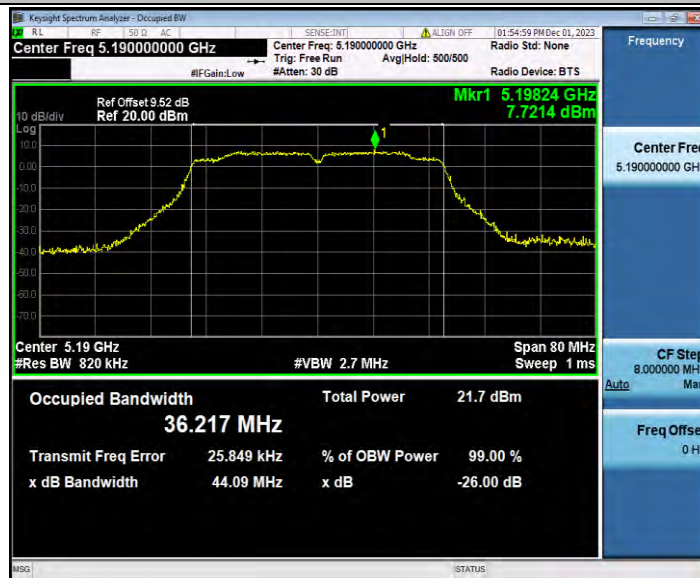
11AC20SISO_Ant2_5180



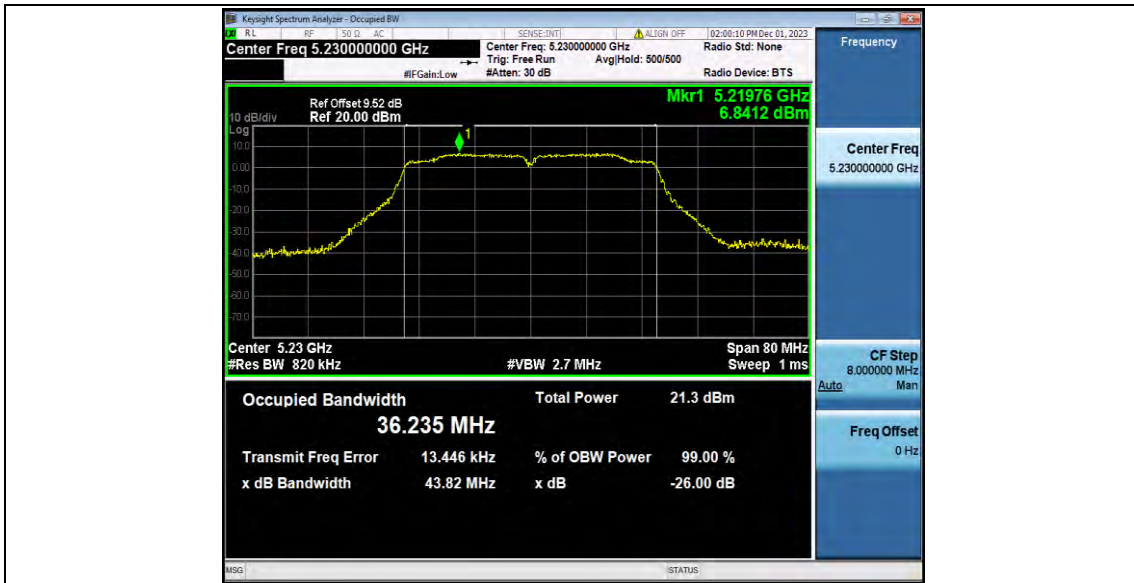
11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



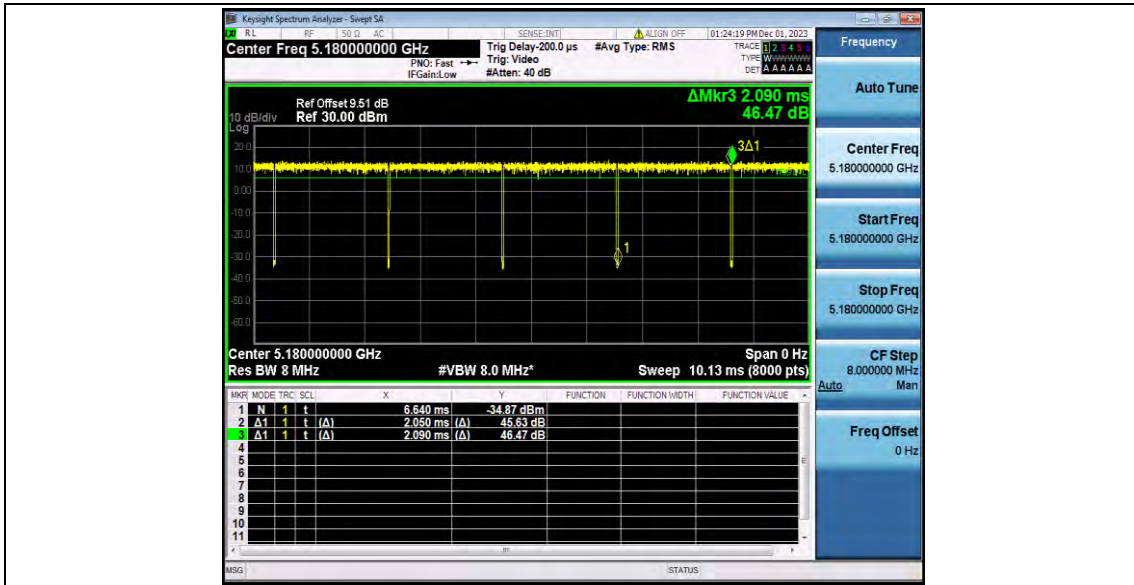
11AC80SISO_Ant2_5210

Appendix D.3: Duty Cycle

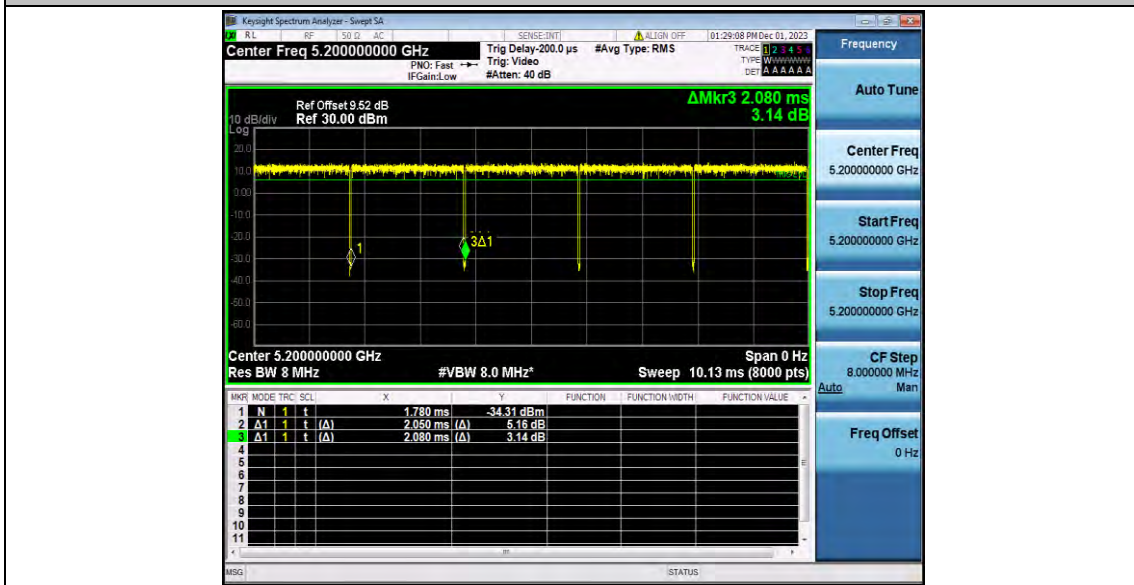
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant2	5180	2.05	2.09	98.09
		5200	2.05	2.08	98.56
		5240	2.05	2.08	98.56
11N20SISO	Ant2	5180	1.90	1.94	97.94
		5200	1.91	1.95	97.95
		5240	1.91	1.94	98.45
11N40SISO	Ant2	5190	0.94	0.97	96.91
		5230	0.94	0.97	96.91
11AC20SISO	Ant2	5180	1.92	2.07	92.75
		5200	1.92	1.96	97.96
		5240	1.91	1.96	97.45
11AC40SISO	Ant2	5190	0.94	0.98	95.92
		5230	0.95	0.98	96.94
11AC80SISO	Ant2	5210	0.46	0.49	93.88

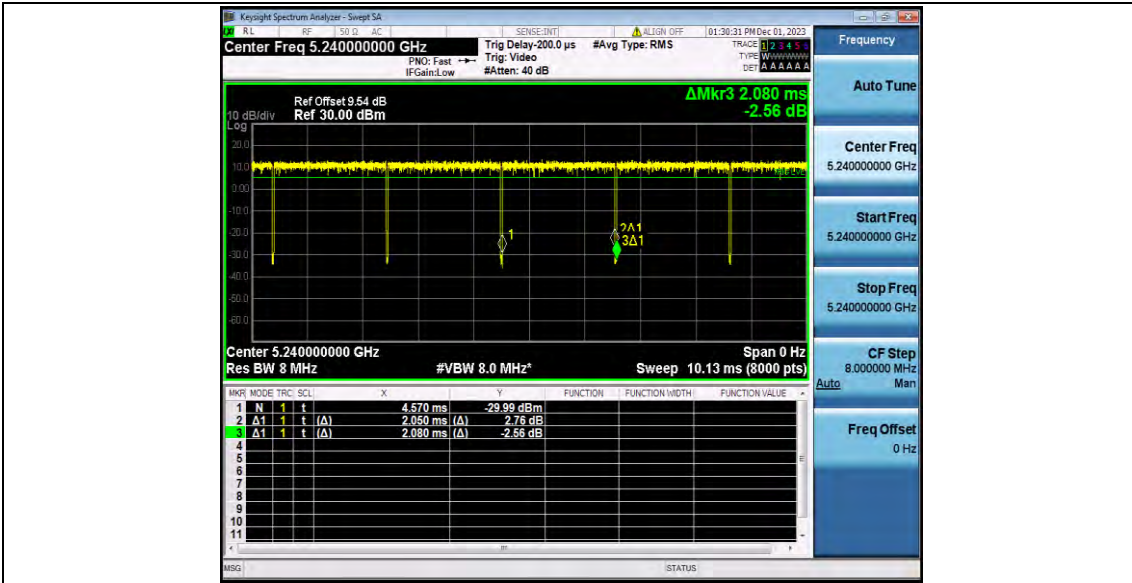
Test Graphs



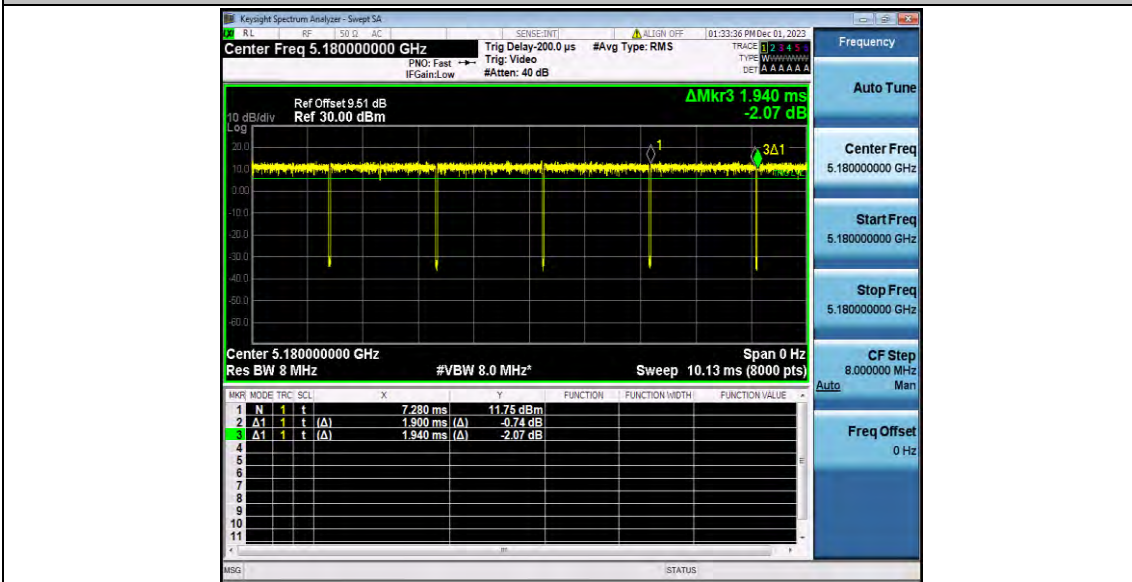
11A_Ant2_5180



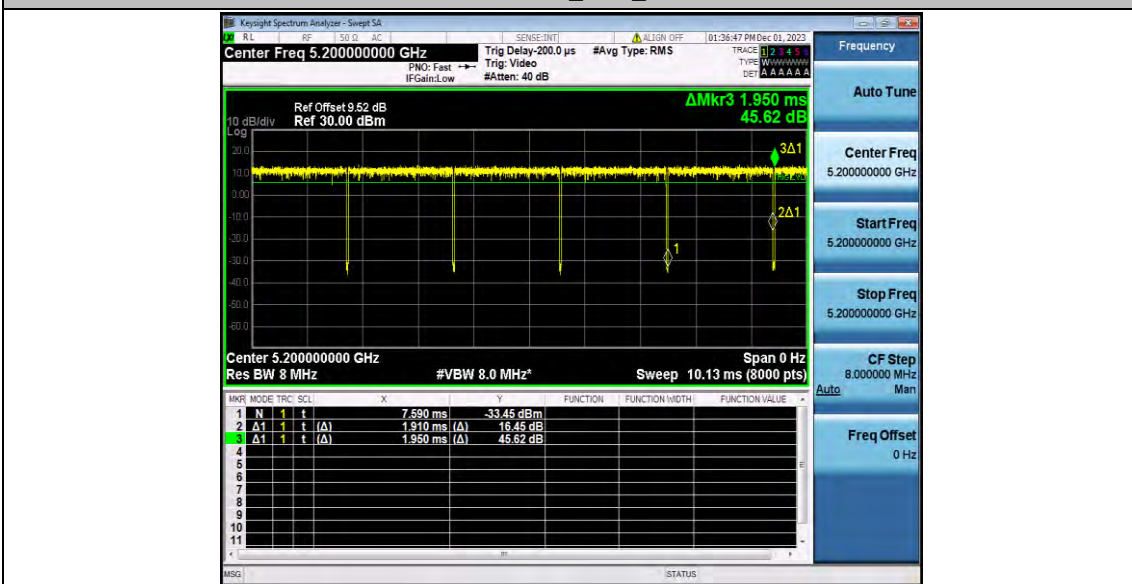
11A_Ant2_5200



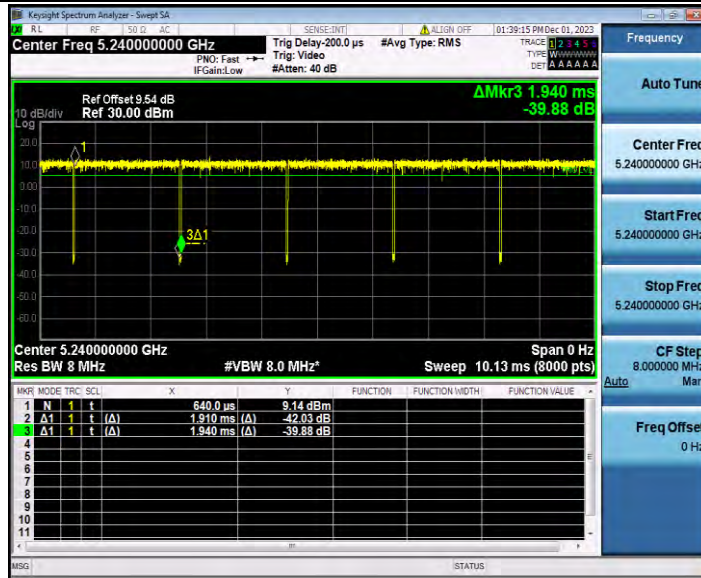
11A_Ant2_5240



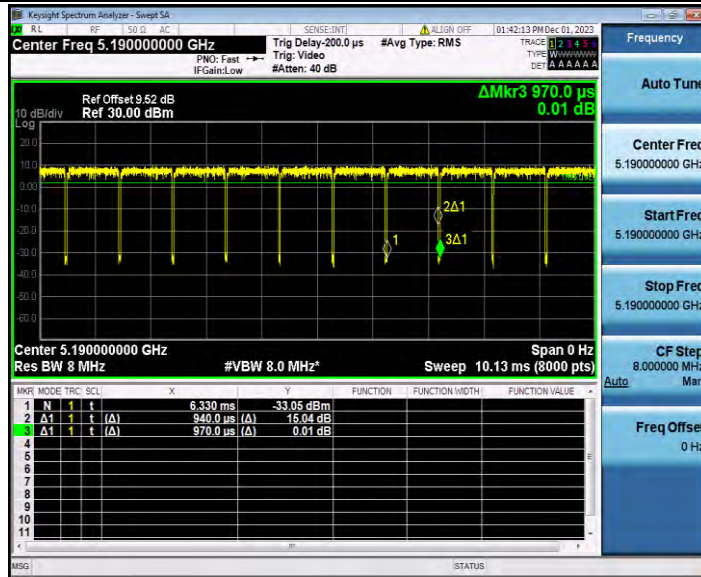
11N20SISO_Ant2_5180



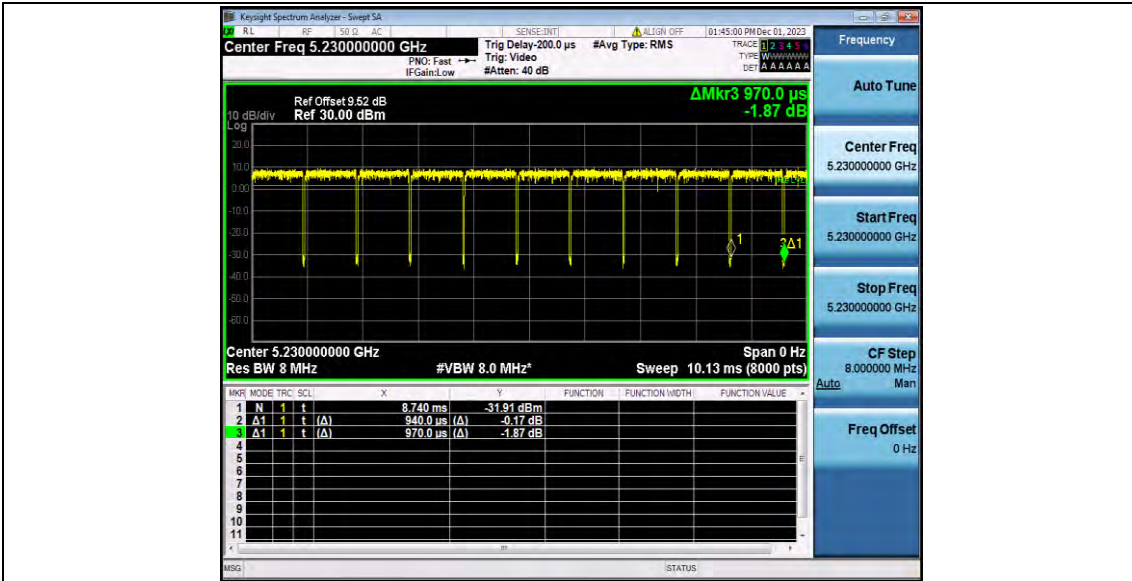
11N20SISO_Ant2_5200



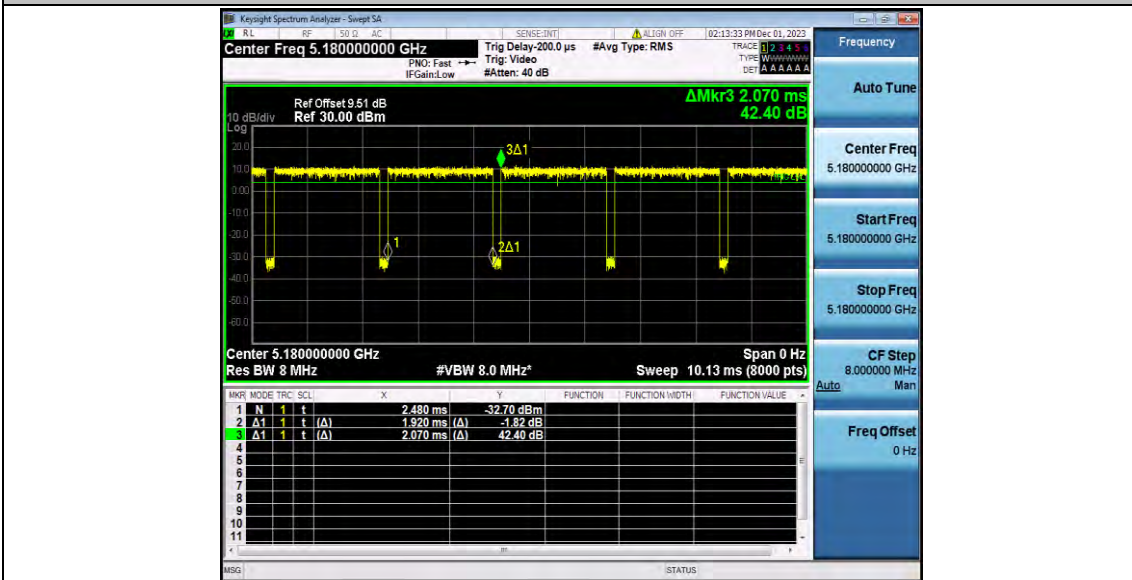
11N20SISO_Ant2_5240



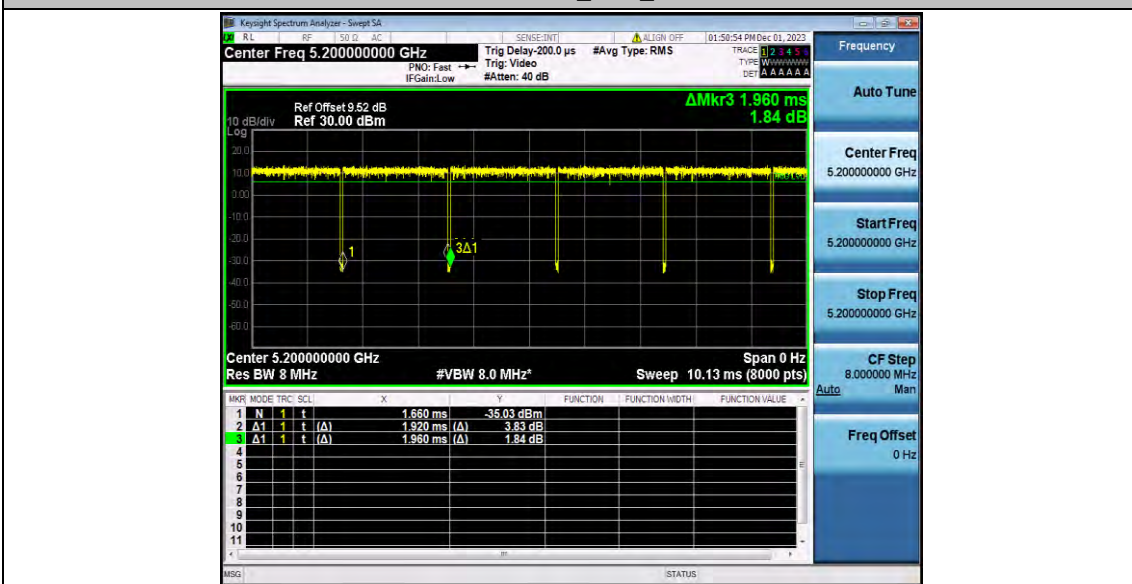
11N40SISO_Ant2_5190



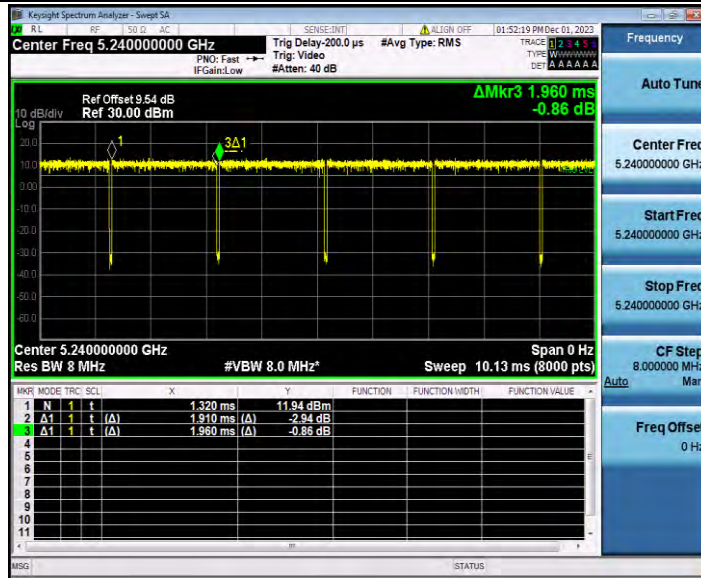
11N40SISO_Ant2_5230



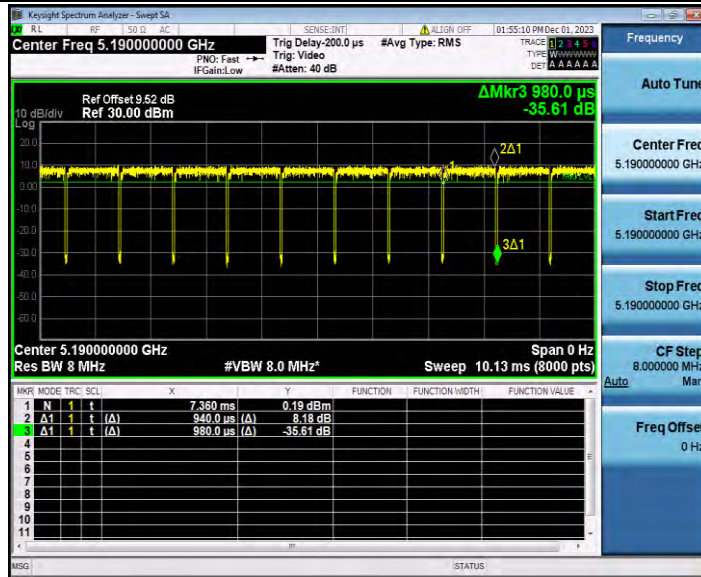
11AC20SISO_Ant2_5180



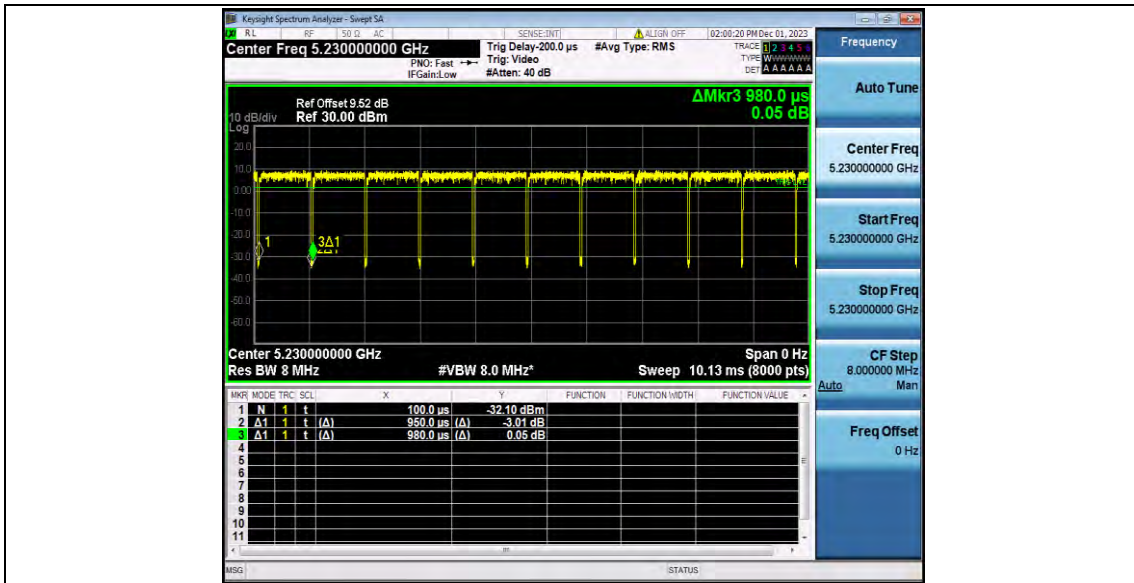
11AC20SISO_Ant2_5200



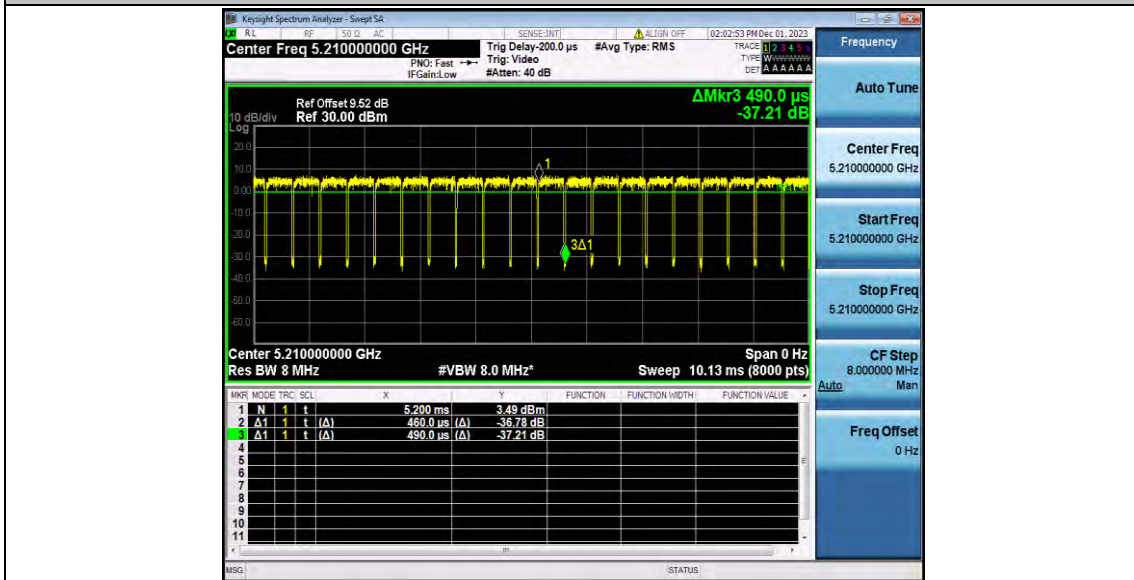
11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



11AC80SISO_Ant2_5210

Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[M Hz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	14.06	98.09	0.08	14.14	≤23.98	PASS
		5200	14.04	98.56	0.06	14.10	≤23.98	PASS
		5240	13.36	98.56	0.06	13.42	≤23.98	PASS
11N20SISO	Ant2	5180	13.91	97.94	0.09	14.00	≤23.98	PASS
		5200	13.97	97.95	0.09	14.06	≤23.98	PASS
		5240	13.29	98.45	0.07	13.36	≤23.98	PASS
11N40SISO	Ant2	5190	13.80	96.91	0.14	13.94	≤23.98	PASS
		5230	13.45	96.91	0.14	13.59	≤23.98	PASS
11AC20SIS O	Ant2	5180	11.74	92.75	0.33	12.07	≤23.98	PASS
		5200	13.93	97.96	0.09	14.02	≤23.98	PASS
		5240	13.28	97.45	0.11	13.39	≤23.98	PASS
11AC40SIS O	Ant2	5190	13.91	95.92	0.18	14.09	≤23.98	PASS
		5230	13.50	96.94	0.13	13.63	≤23.98	PASS
11AC80SIS O	Ant2	5210	13.62	93.88	0.27	13.89	≤23.98	PASS

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

Appendix D.5: Maximum power spectral density

Test Result

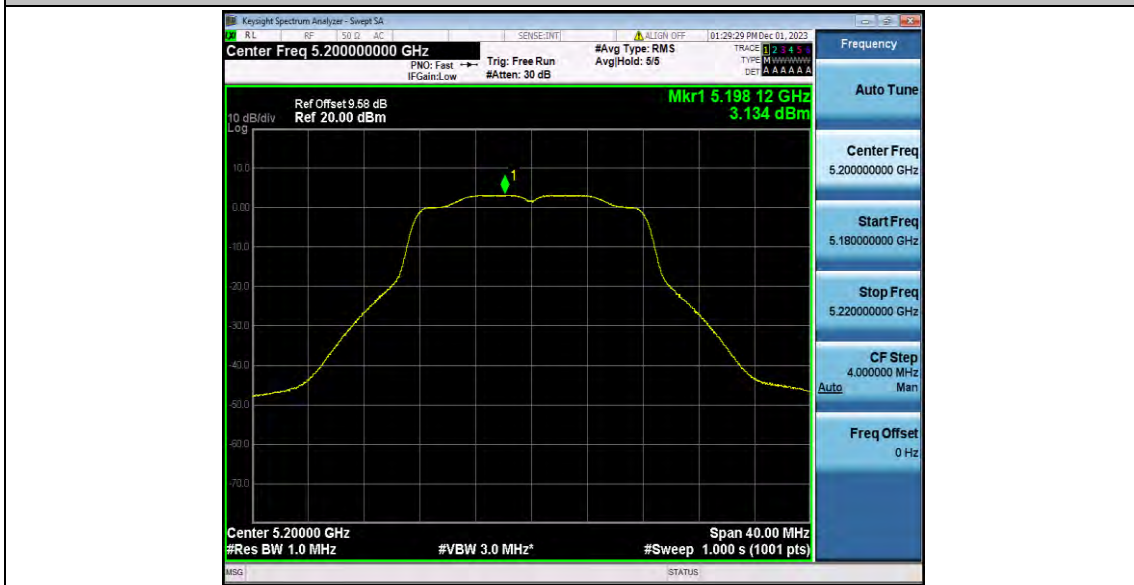
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant2	5180	3.11	≤11.00	PASS
		5200	3.13	≤11.00	PASS
		5240	2.55	≤11.00	PASS
11N20SISO	Ant2	5180	2.78	≤11.00	PASS
		5200	2.9	≤11.00	PASS
		5240	2.33	≤11.00	PASS
11N40SISO	Ant2	5190	-0.39	≤11.00	PASS
		5230	-0.81	≤11.00	PASS
11AC20SISO	Ant2	5180	1.09	≤11.00	PASS
		5200	2.9	≤11.00	PASS
		5240	2.4	≤11.00	PASS
11AC40SISO	Ant2	5190	-0.29	≤11.00	PASS
		5230	-0.77	≤11.00	PASS
11AC80SISO	Ant2	5210	-3.4	≤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



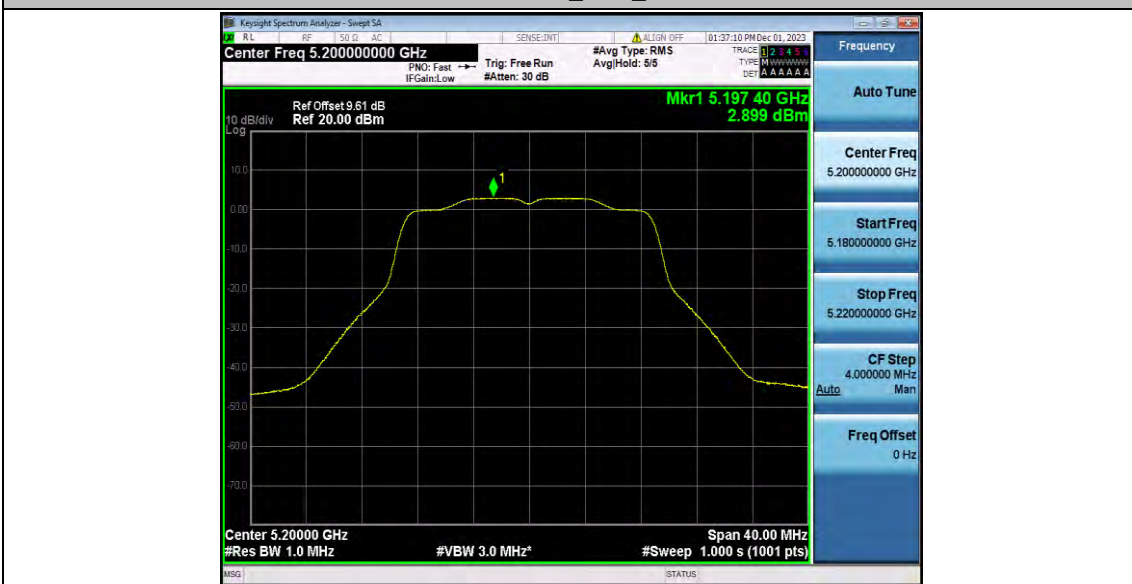
11A_Ant2_5200



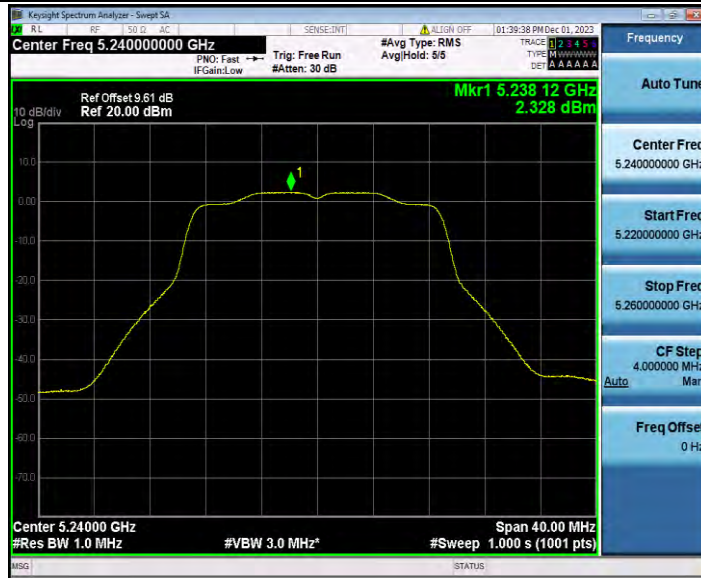
11A_Ant2_5240



11N20SISO_Ant2_5180



11N20SISO_Ant2_5200



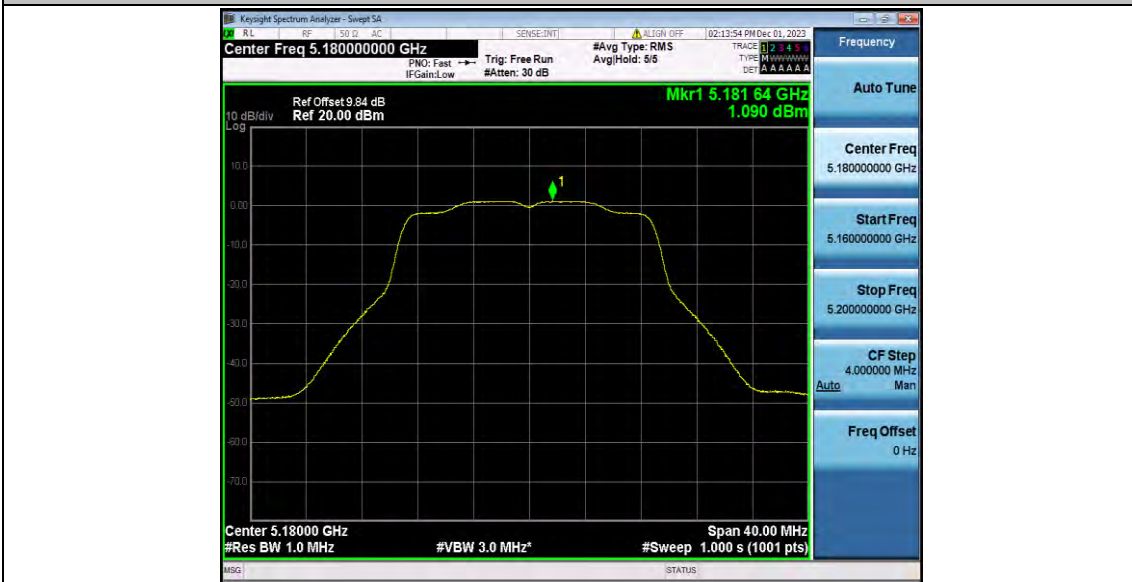
11N20SISO_Ant2_5240



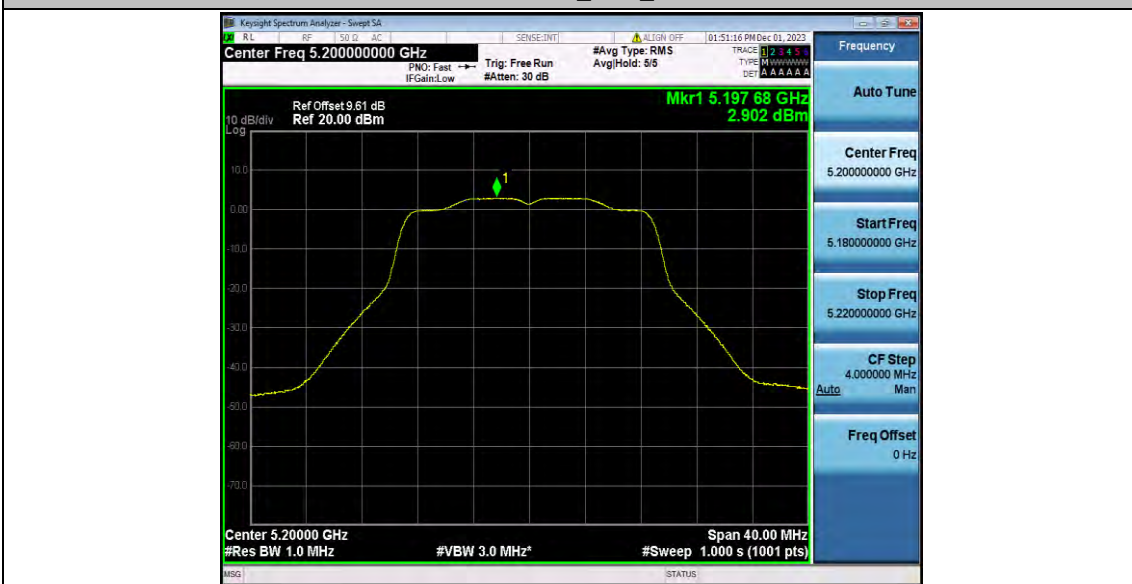
11N40SISO_Ant2_5190



11N40SISO_Ant2_5230



11AC20SISO_Ant2_5180



11AC20SISO_Ant2_5200



11AC20SISO_Ant2_5240



11AC40SISO_Ant2_5190



11AC40SISO_Ant2_5230



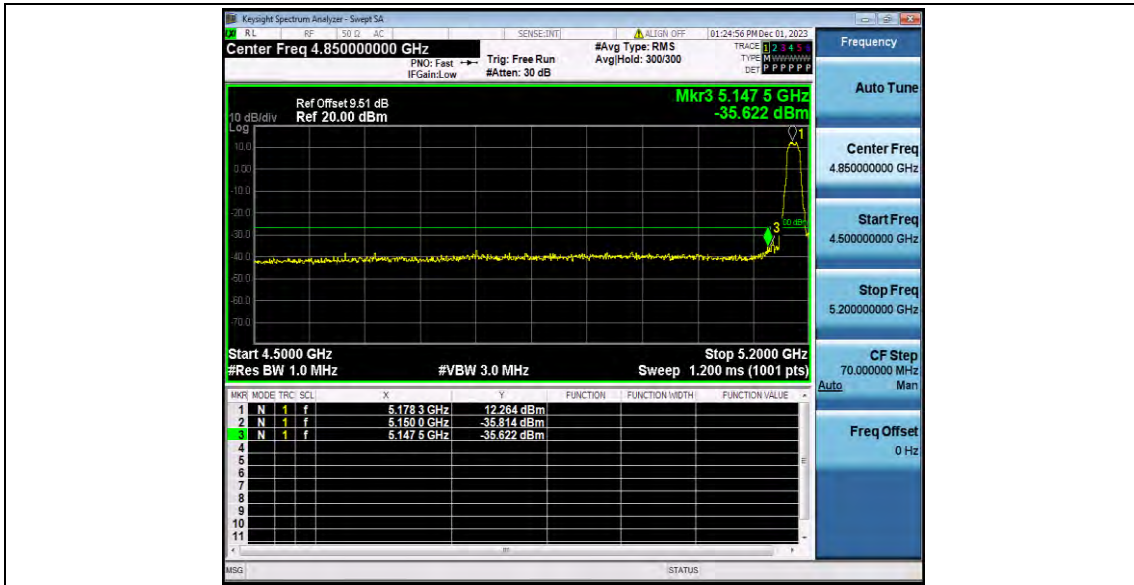
11AC80SISO_Ant2_5210

Appendix D.6: Band edge measurements

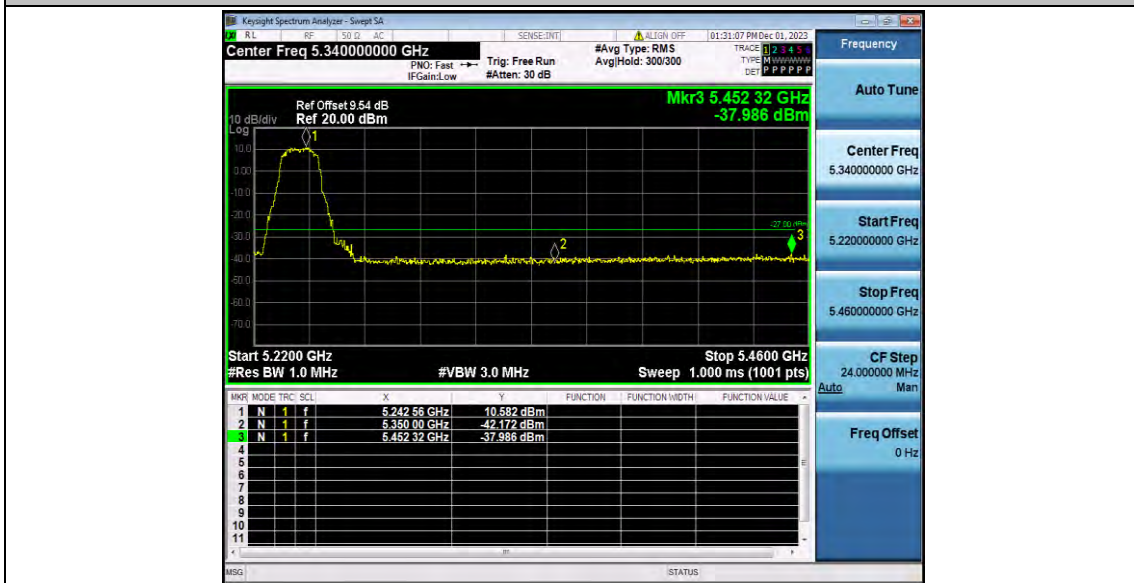
Test Result B1

Test Mode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant2	Low	5180	-35.62	≤ -27	PASS
		High	5240	-37.99	≤ -27	PASS
11N20SISO	Ant2	Low	5180	-35.97	≤ -27	PASS
		High	5240	-37.43	≤ -27	PASS
11N40SISO	Ant2	Low	5190	-36.39	≤ -27	PASS
		High	5230	-38.18	≤ -27	PASS
11AC20SISO	Ant2	Low	5180	-38.13	≤ -27	PASS
		High	5240	-37.36	≤ -27	PASS
11AC40SISO	Ant2	Low	5190	-37.04	≤ -27	PASS
		High	5230	-37.19	≤ -27	PASS
11AC80SISO	Ant2	Low	5210	-29.76	≤ -27	PASS
		High	5210	-37.92	≤ -27	PASS

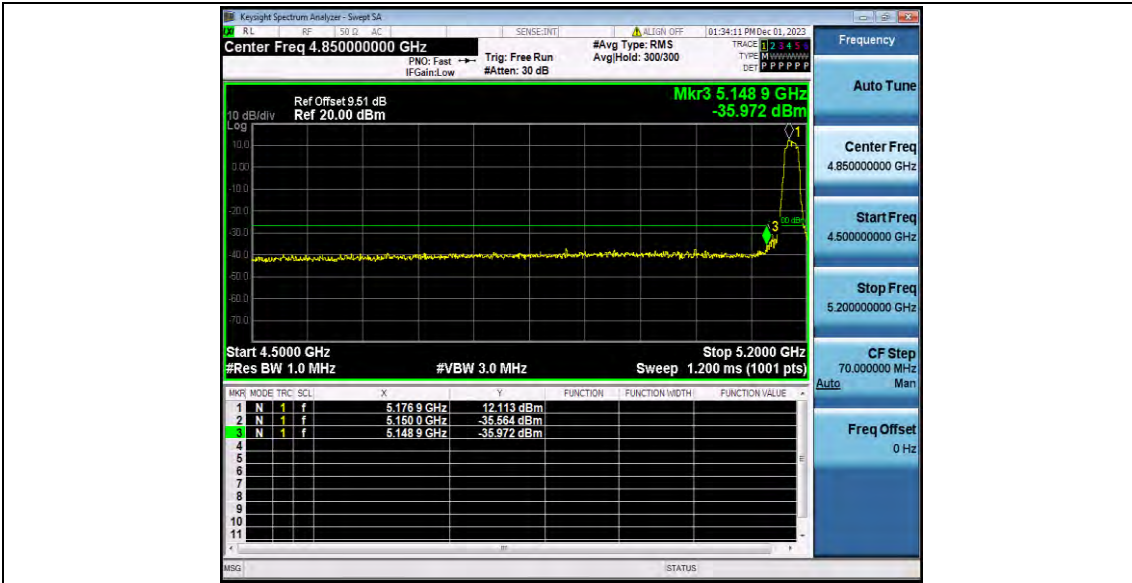
Test Graphs B1



11A_Ant2_Low_5180



11A_Ant2_High_5240



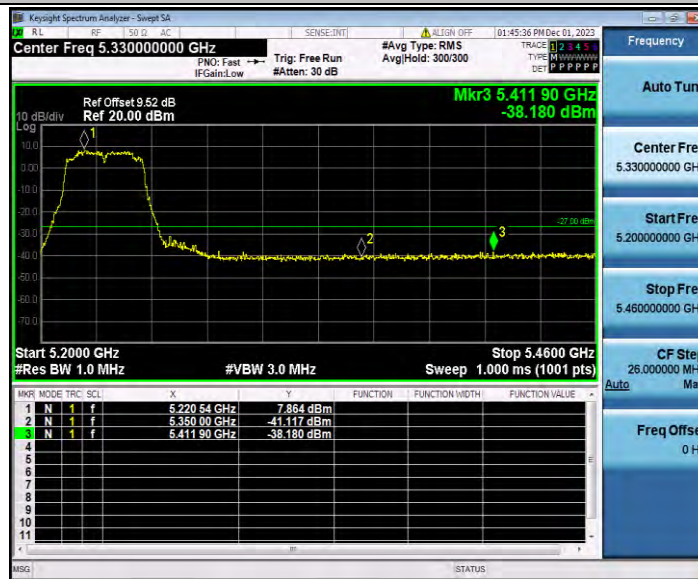
11N20SISO_Ant2_Low_5180



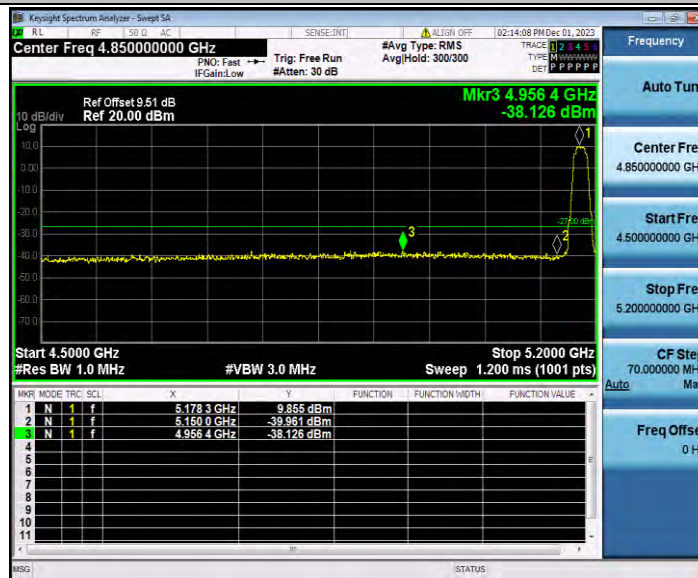
11N20SISO_Ant2_High_5240



11N40SISO_Ant2_Low_5190



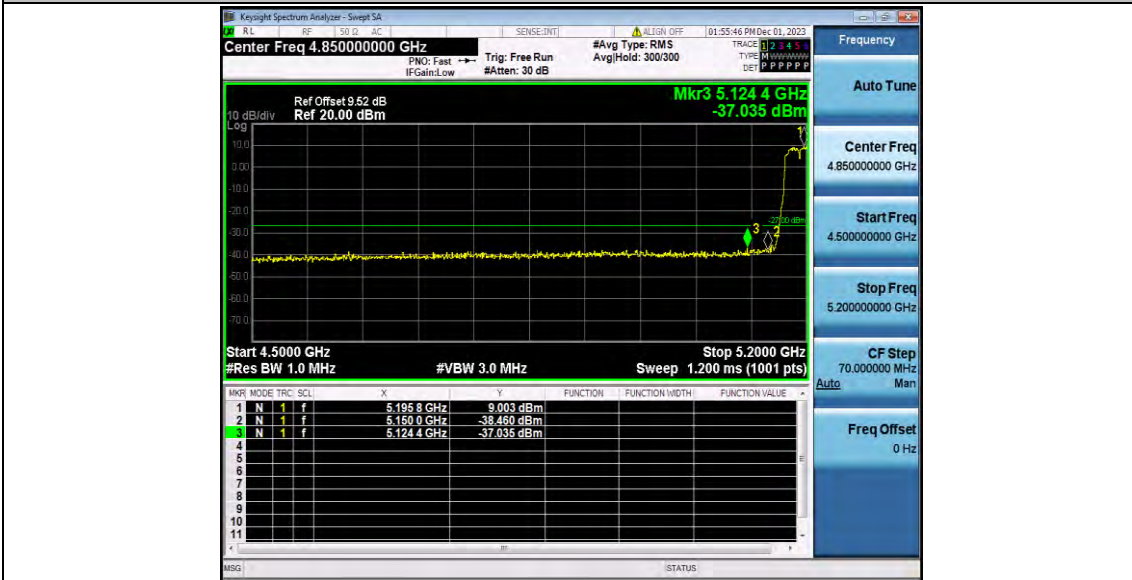
11N40SISO_Ant2_High_5230



11AC20SISO_Ant2_Low_5180



11AC20SISO_Ant2_High_5240



11AC40SISO_Ant2_Low_5190



11AC40SISO_Ant2_High_5230



11AC80SISO_Ant2_Low_5210



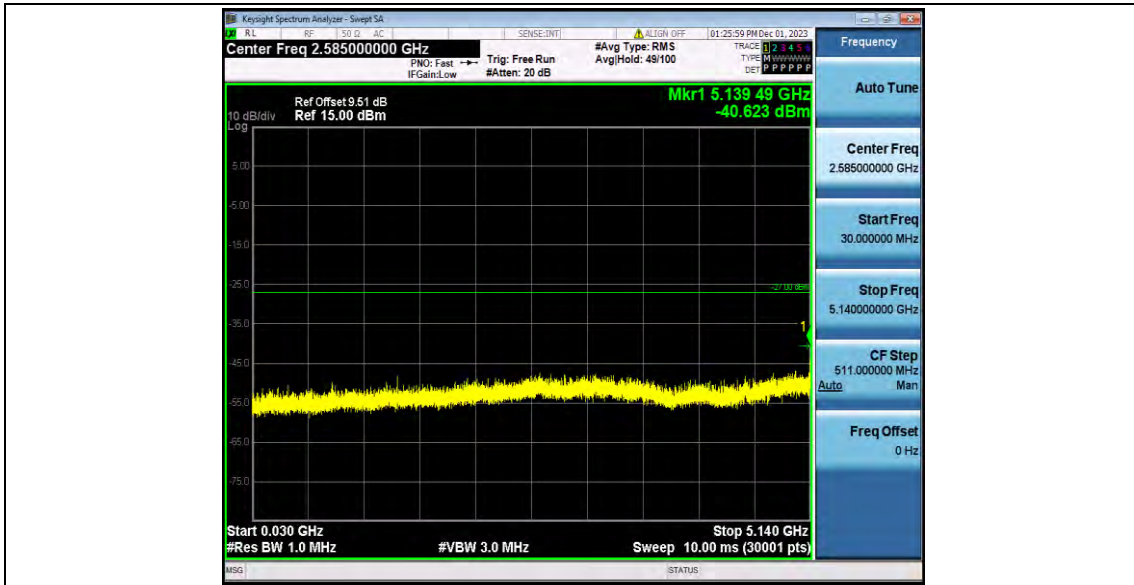
11AC80SISO_Ant2_High_5210

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	5139.49	-40.62	≤-27	PASS
			5360~40000	25598.45	-37.47	≤-27	PASS
		5200	30~5140	4562.57	-46.34	≤-27	PASS
			5360~40000	24287.79	-38.47	≤-27	PASS
		5240	30~5140	4994.02	-45.9	≤-27	PASS
			5360~40000	24864.13	-37.92	≤-27	PASS
11N20SISO	Ant2	5180	30~5140	5135.4	-43.41	≤-27	PASS
			5360~40000	23543.37	-37.73	≤-27	PASS
		5200	30~5140	5016.85	-46.17	≤-27	PASS
			5360~40000	26505.17	-37.47	≤-27	PASS
		5240	30~5140	1744.58	-45.66	≤-27	PASS
			5360~40000	25276.73	-38.26	≤-27	PASS
11N40SISO	Ant2	5190	30~5140	5137.45	-41.01	≤-27	PASS
			5360~40000	26047.12	-37.3	≤-27	PASS
		5230	30~5140	5036.78	-47.01	≤-27	PASS
			5360~40000	26540.51	-37.82	≤-27	PASS
11AC20SISO	Ant2	5180	30~5140	4955.02	-45.65	≤-27	PASS
			5360~40000	26952.39	-38.23	≤-27	PASS
		5200	30~5140	2636.27	-46.13	≤-27	PASS
			5360~40000	24285.62	-38.16	≤-27	PASS
		5240	30~5140	5030.65	-46.45	≤-27	PASS
			5360~40000	26829.04	-37.72	≤-27	PASS
11AC40SISO	Ant2	5190	30~5140	5136.25	-42.64	≤-27	PASS
			5360~40000	24241.62	-37.94	≤-27	PASS
		5230	30~5140	5137.96	-45.4	≤-27	PASS
			5360~40000	24230.8	-38.02	≤-27	PASS
11AC80SISO	Ant2	5210	30~5140	5138.98	-36.26	≤-27	PASS
			5360~40000	24246.67	-37.79	≤-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



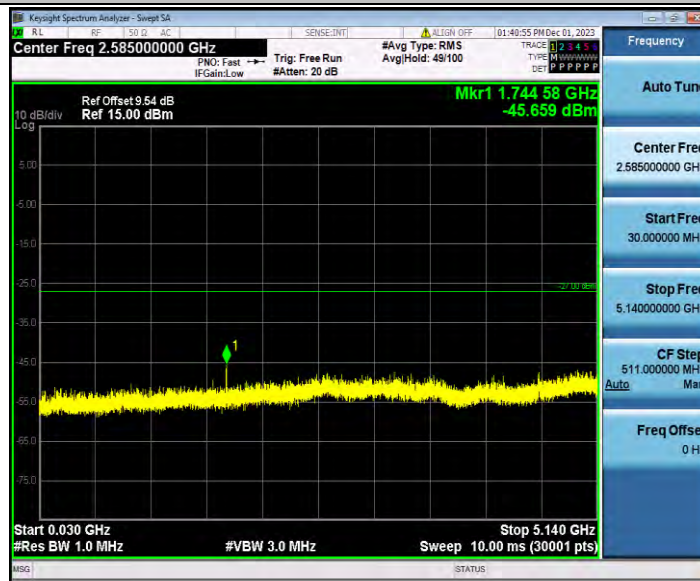
11N20SISO_Ant2_5180_5360~40000



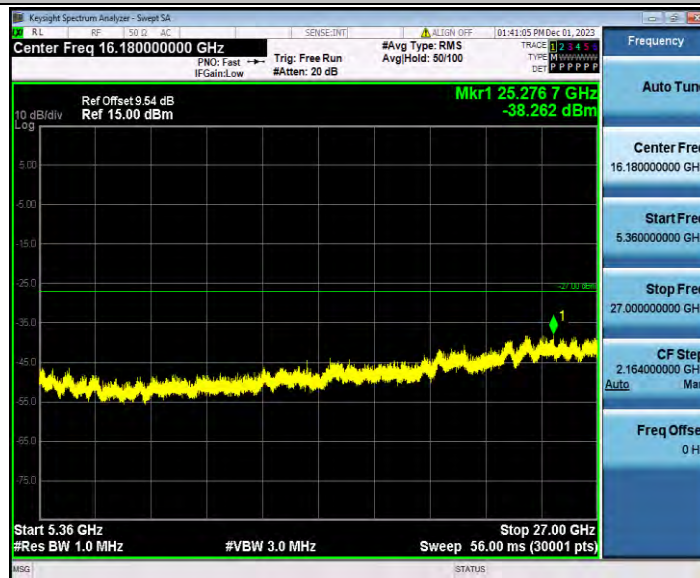
11N20SISO_Ant2_5200_30~5140



11N20SISO_Ant2_5200_5360~40000



11N20SISO_Ant2_5240_30~5140



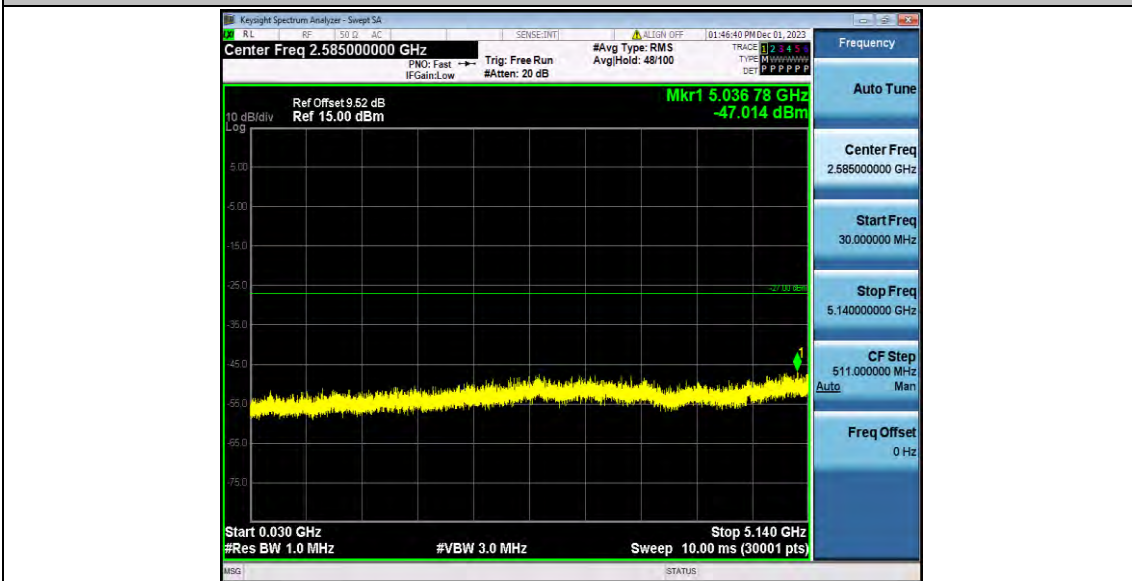
11N20SISO_Ant2_5240_5360~40000



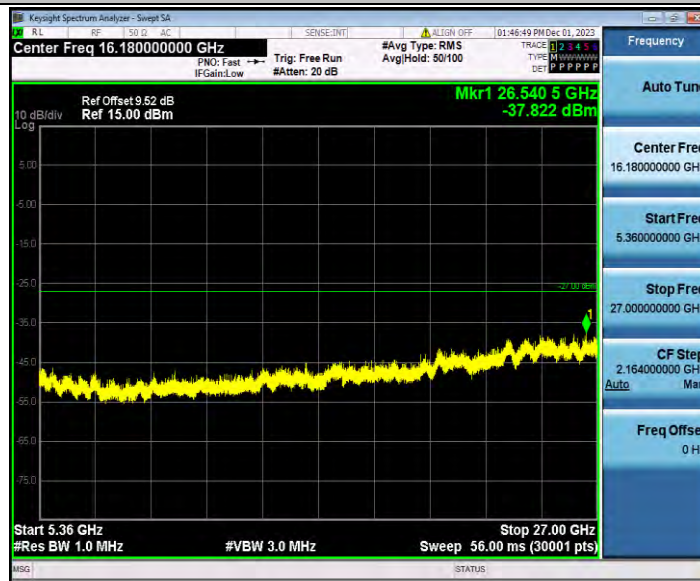
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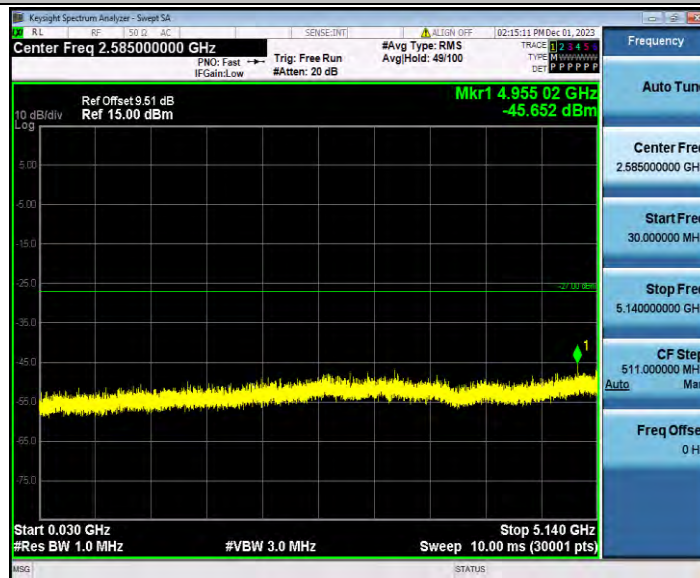
11N40SISO_Ant2_5190_5360~40000



11N40SISO_Ant2_5230_30~5140



11N40SISO_Ant2_5230_5360~40000



11AC20SISO_Ant2_5180_30~5140



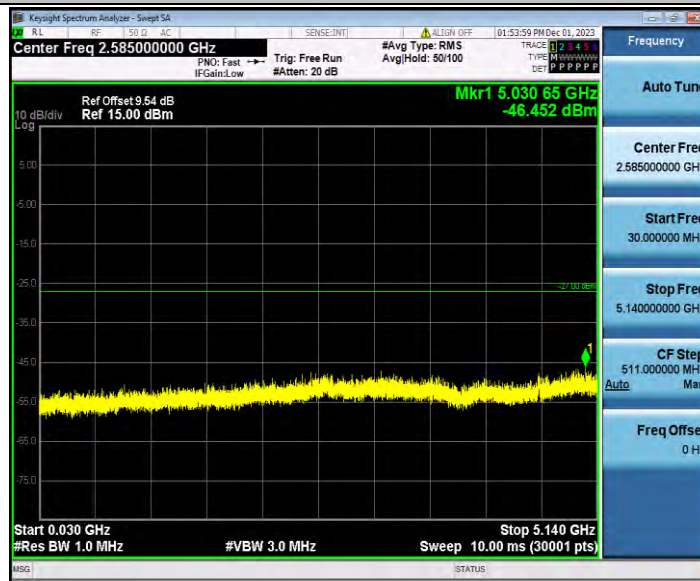
11AC20SISO_Ant2_5180_5360~4000



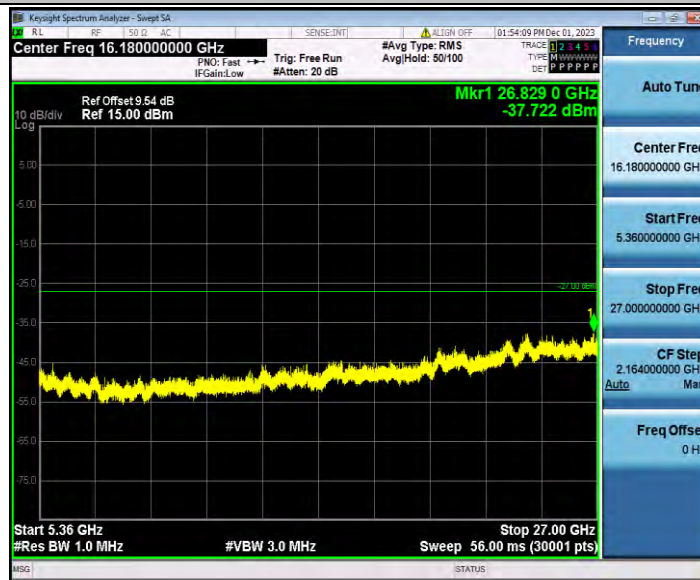
11AC20SISO_Ant2_5200_30~5140



11AC20SISO_Ant2_5200_5360~40000



11AC20SISO_Ant2_5240_30~5140



11AC20SISO_Ant2_5240_5360~40000



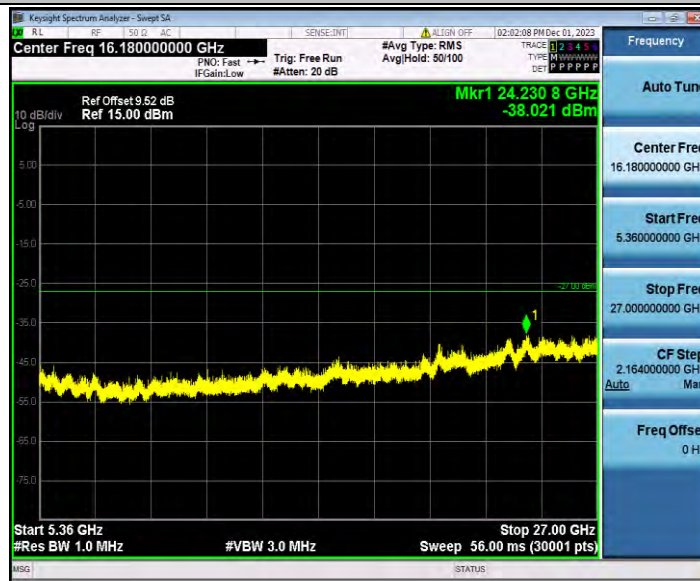
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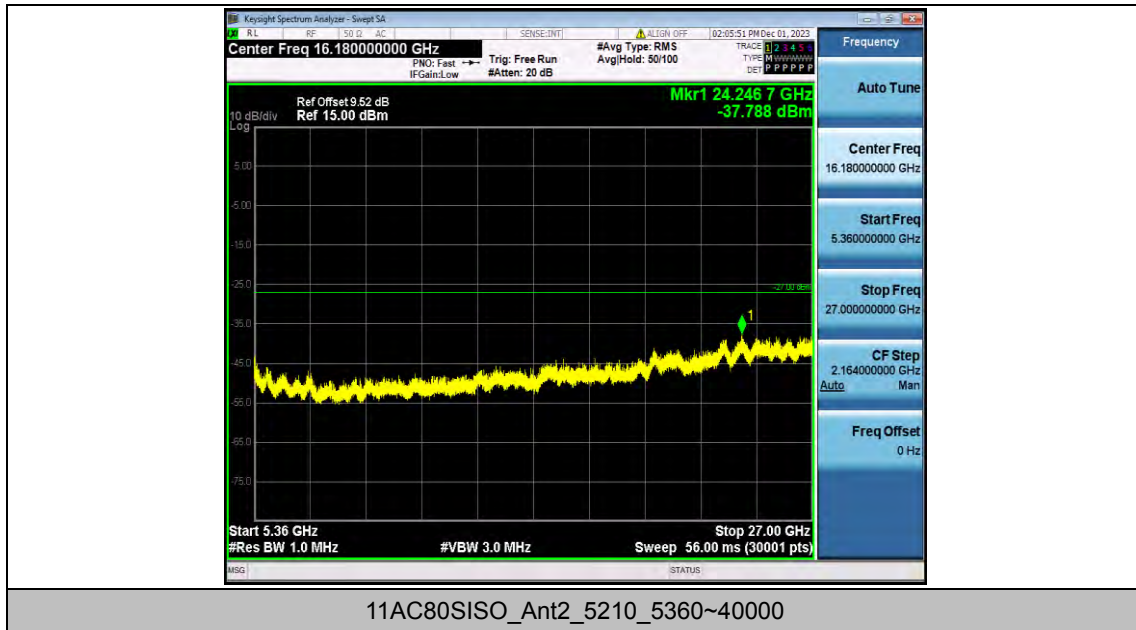
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11AC40SISO_Ant2_5230_5360~40000



11AC80SISO_Ant2_5210_30~5140



11AC80SISO_Ant2_5210_5360~40000