

Case No. : <u>GTS20230822007-1-4</u>
Ambient Condition: <u>24</u> °C, <u>51</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.9.22</u> Test Engineer: <u>Evan ouyang</u>

Appendix E.1: Occupied channel bandwidth

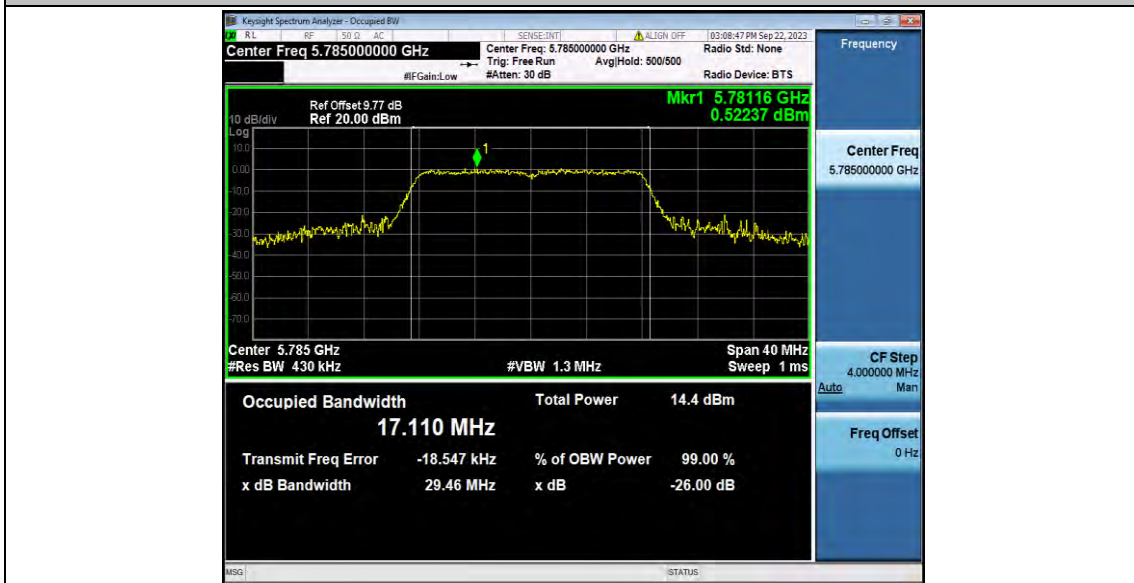
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.055	5736.472	5753.527	---	---
		5785	17.110	5776.426	5793.536	---	---
		5825	17.055	5816.462	5833.517	---	---
11N20SISO	Ant1	5745	17.893	5736.082	5753.975	---	---
		5785	17.839	5776.079	5793.918	---	---
		5825	17.904	5816.038	5833.942	---	---
11N40SISO	Ant1	5755	36.359	5736.825	5773.184	---	---
		5795	36.398	5776.810	5813.208	---	---
11AC20SISO	Ant1	5745	17.911	5736.106	5754.017	---	---
		5785	17.917	5776.036	5793.953	---	---
		5825	17.931	5816.041	5833.972	---	---
11AC40SISO	Ant1	5755	36.356	5736.821	5773.177	---	---
		5795	36.340	5776.792	5813.132	---	---
11AC80SISO	Ant1	5775	75.930	5737.134	5813.064	---	---

Test Graphs



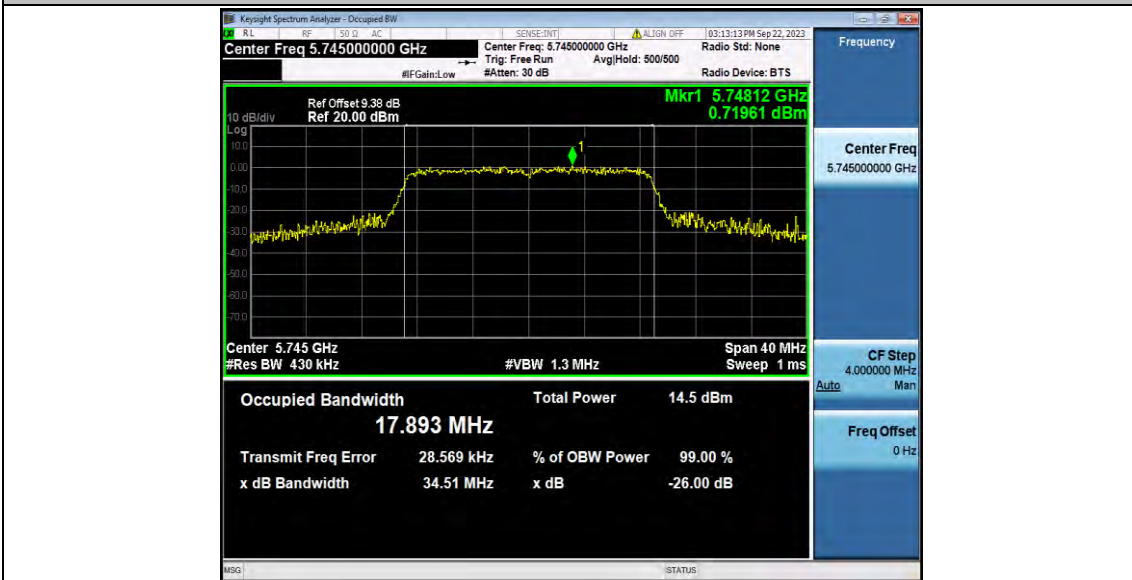
11A_Ant1_5745



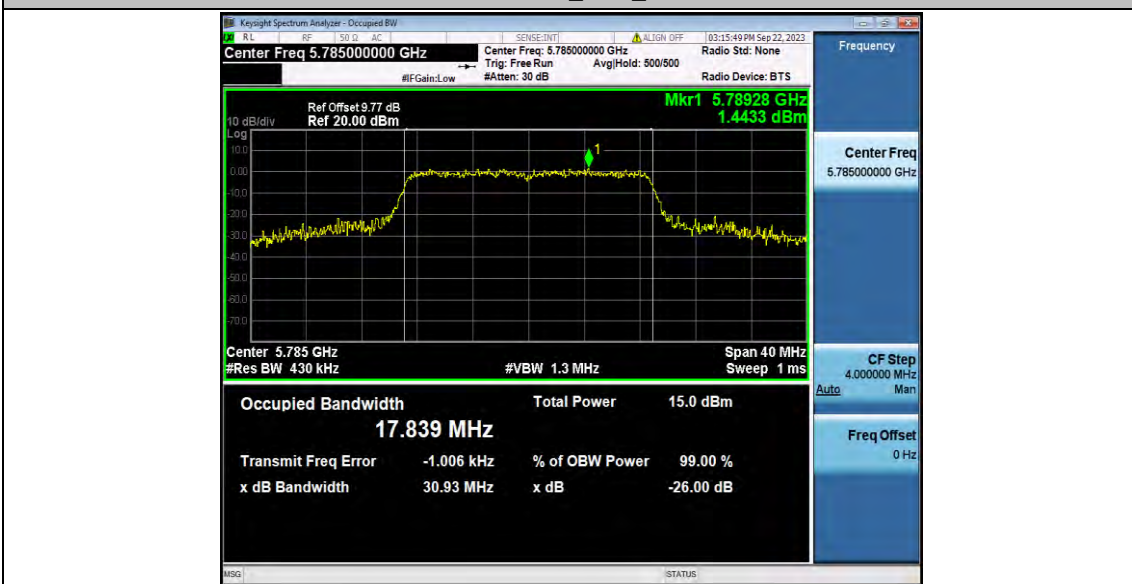
11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



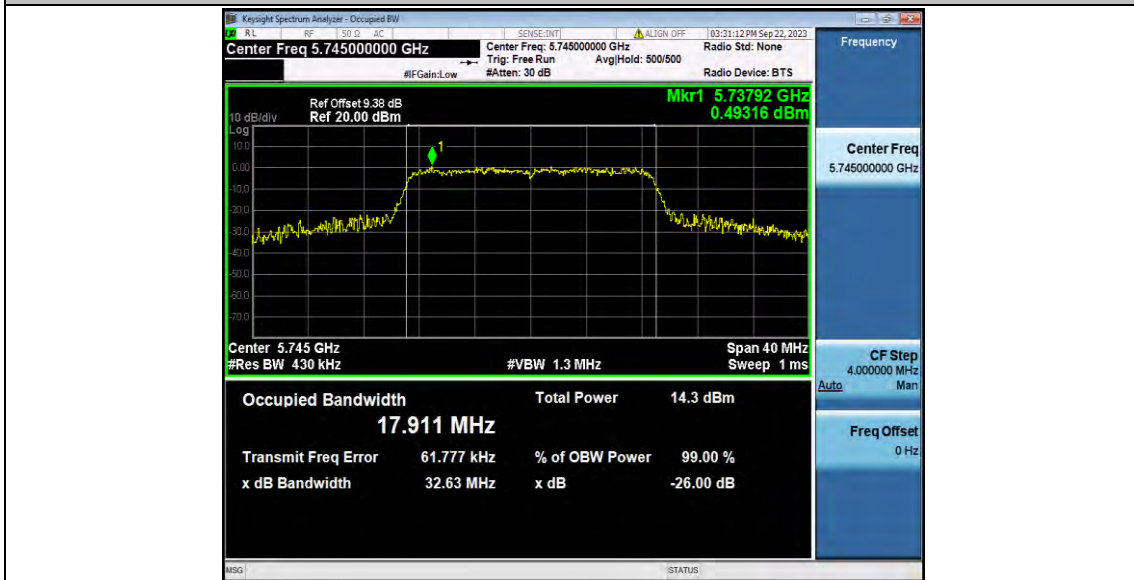
11N20SISO_Ant1_5825



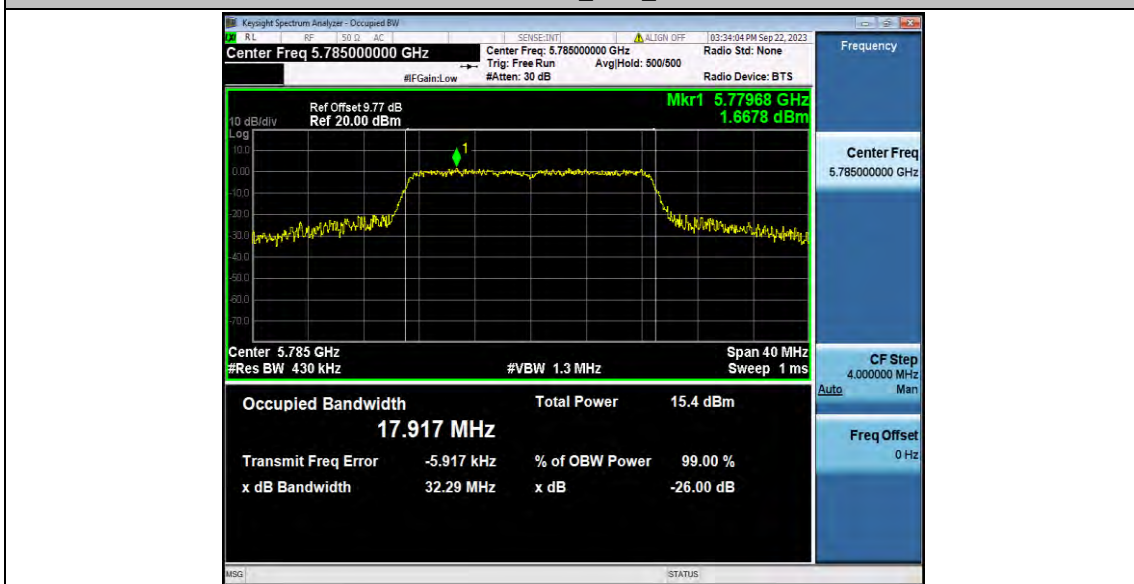
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



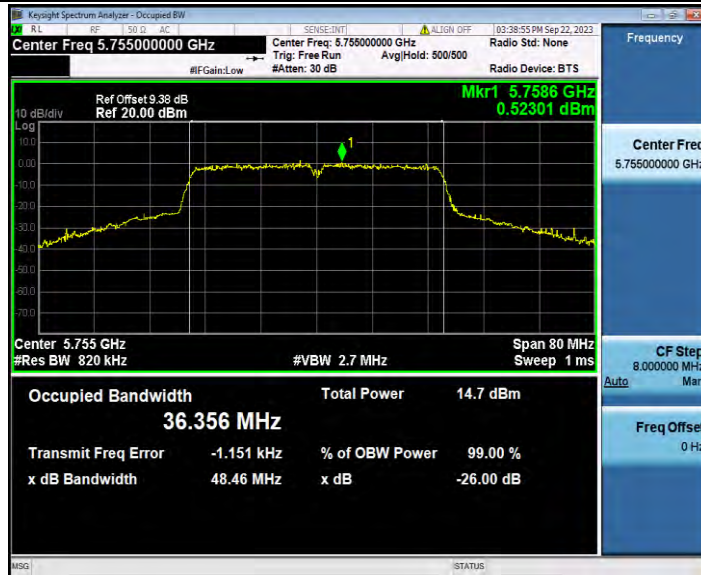
11AC20SISO_Ant1_5745



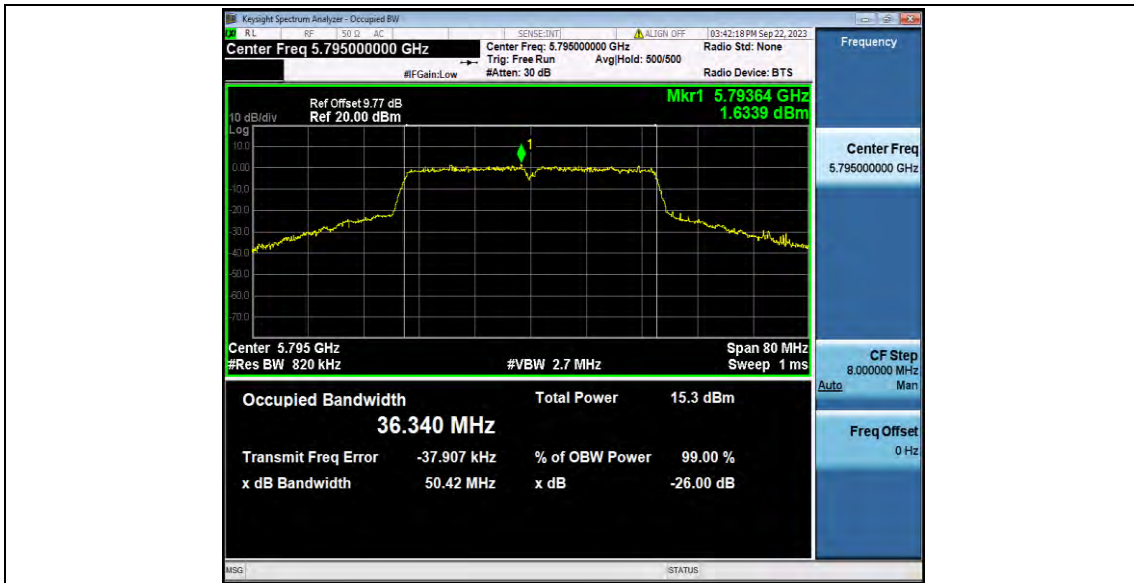
11AC20SISO_Ant1_5785



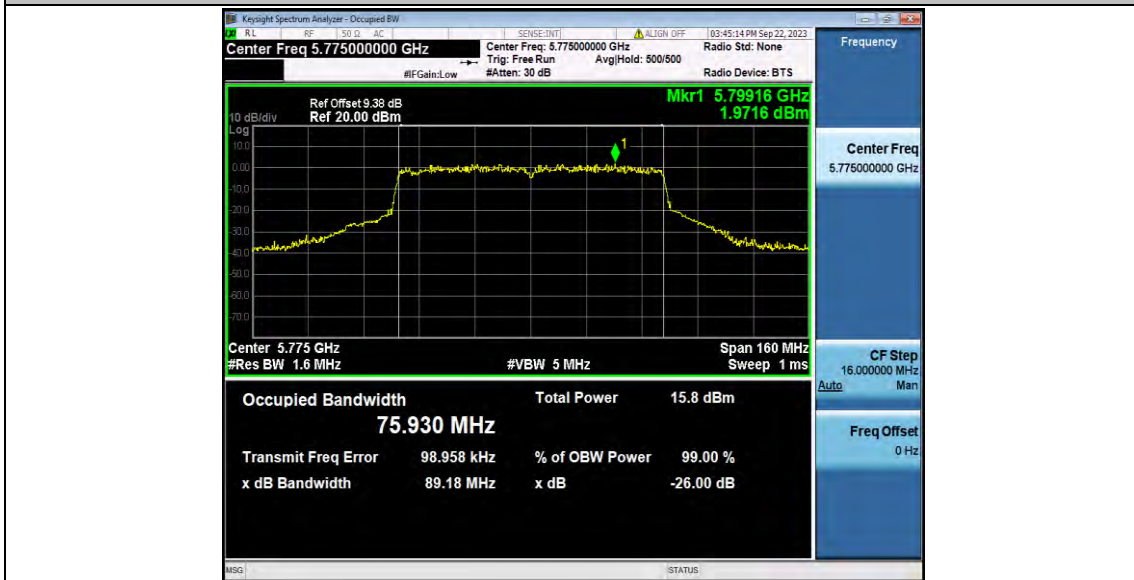
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



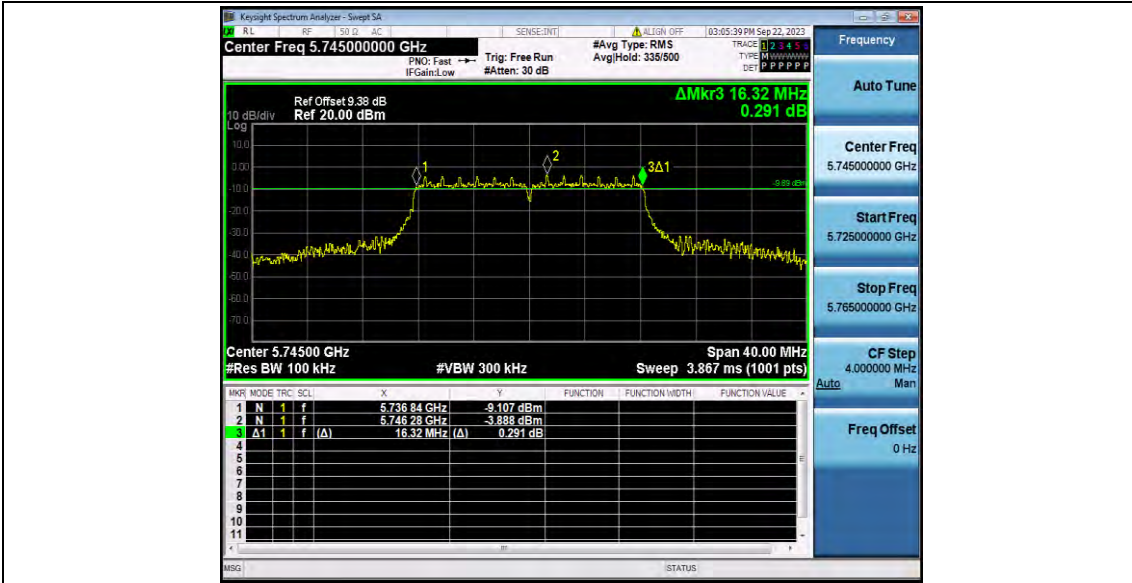
11AC80SISO_Ant1_5775

Appendix E.2: Min emission bandwidth

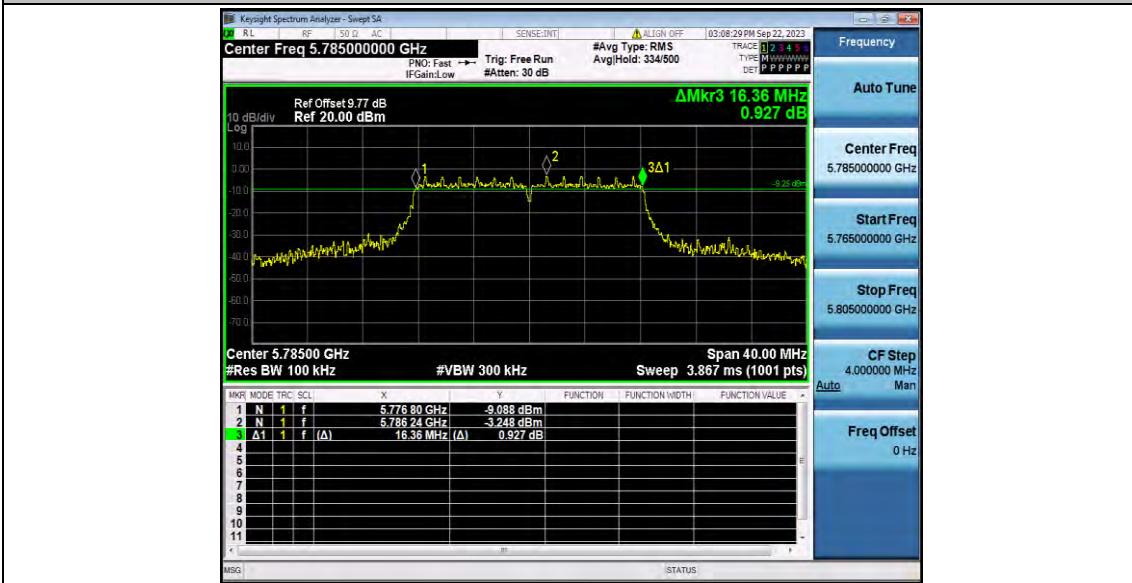
Test Result B4

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.360	5776.800	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.160	5736.440	5753.600	0.5	PASS
		5785	17.520	5776.240	5793.760	0.5	PASS
		5825	17.360	5816.240	5833.600	0.5	PASS
11N40SISO	Ant1	5755	35.840	5737.080	5772.920	0.5	PASS
		5795	35.520	5777.320	5812.840	0.5	PASS
11AC20SISO	Ant1	5745	17.200	5736.400	5753.600	0.5	PASS
		5785	17.440	5776.320	5793.760	0.5	PASS
		5825	17.080	5816.400	5833.480	0.5	PASS
11AC40SISO	Ant1	5755	35.600	5737.320	5772.920	0.5	PASS
		5795	35.600	5777.320	5812.920	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

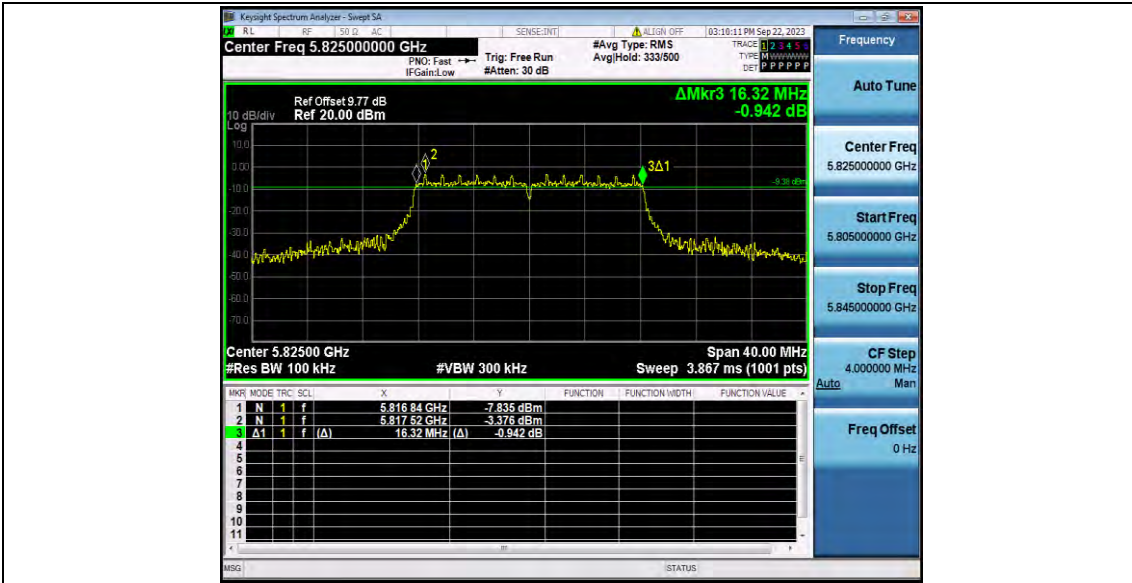
Test Graphs B4



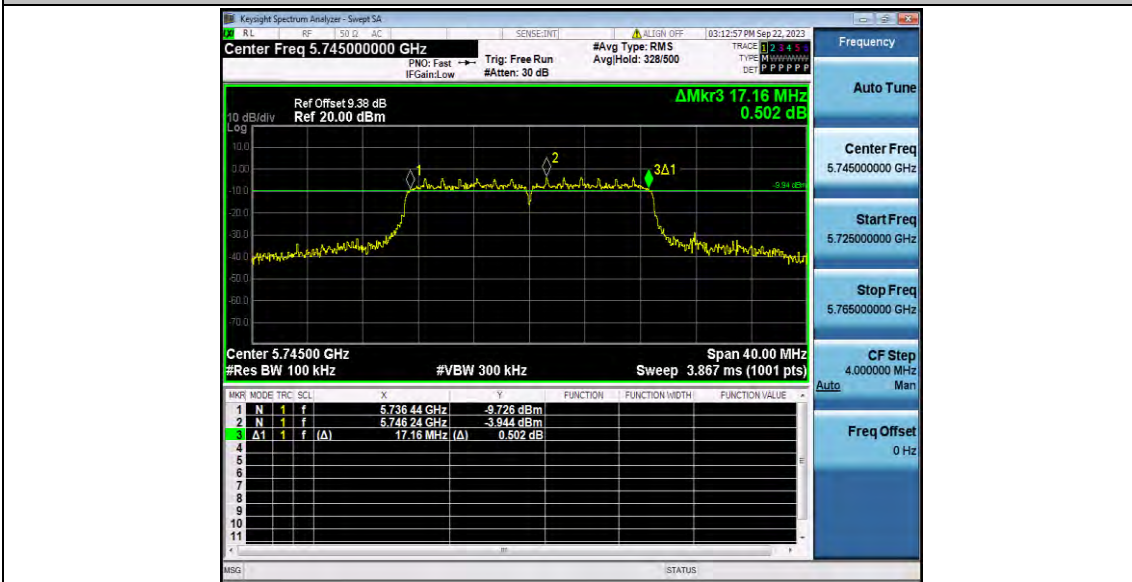
11A_Ant1_5745



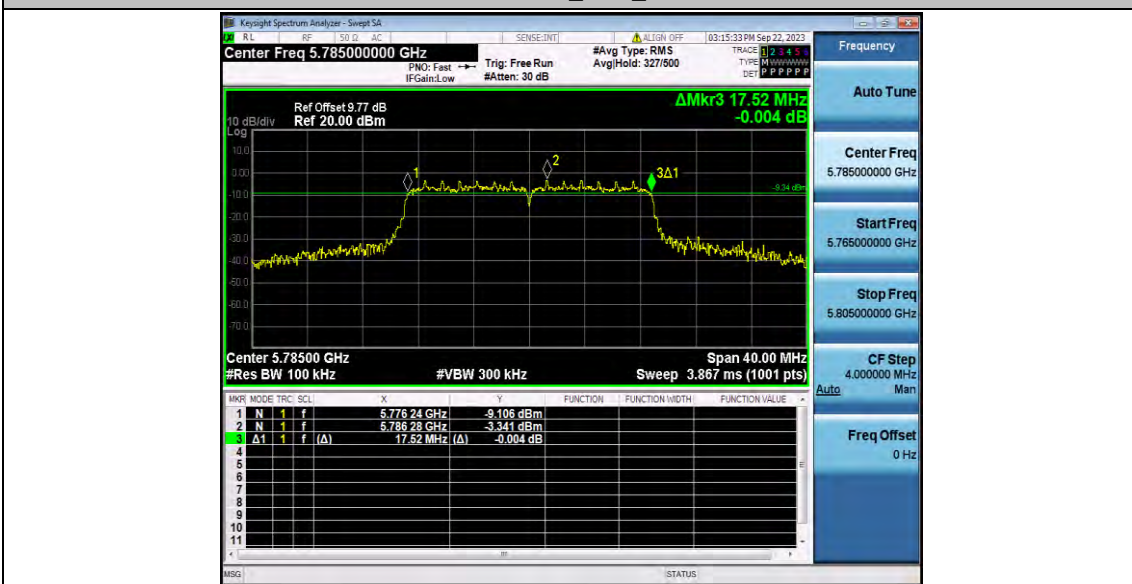
11A_Ant1_5785



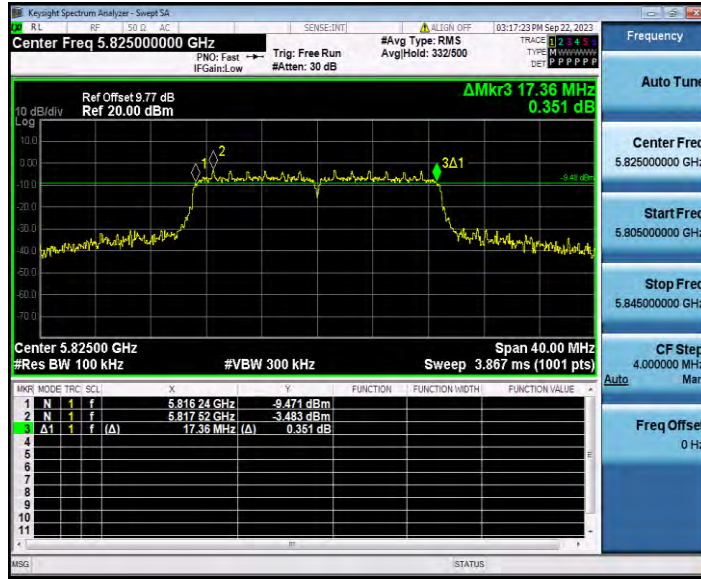
11A_Ant1_5825



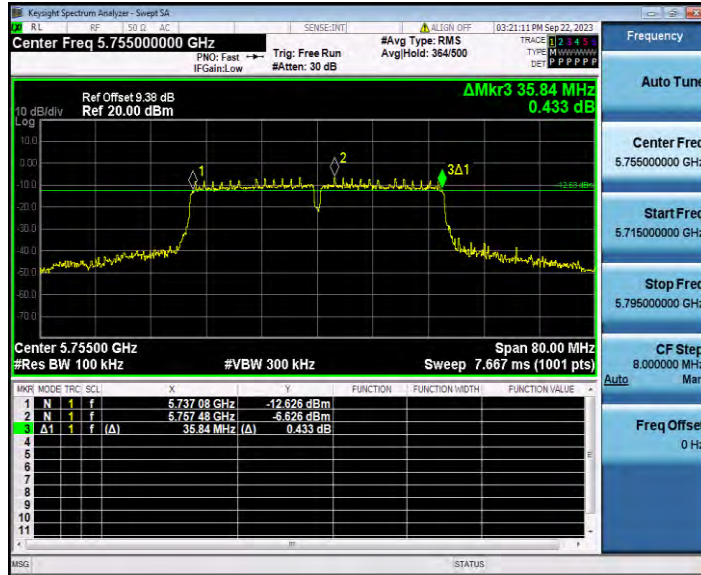
11N20SISO_Ant1_5745



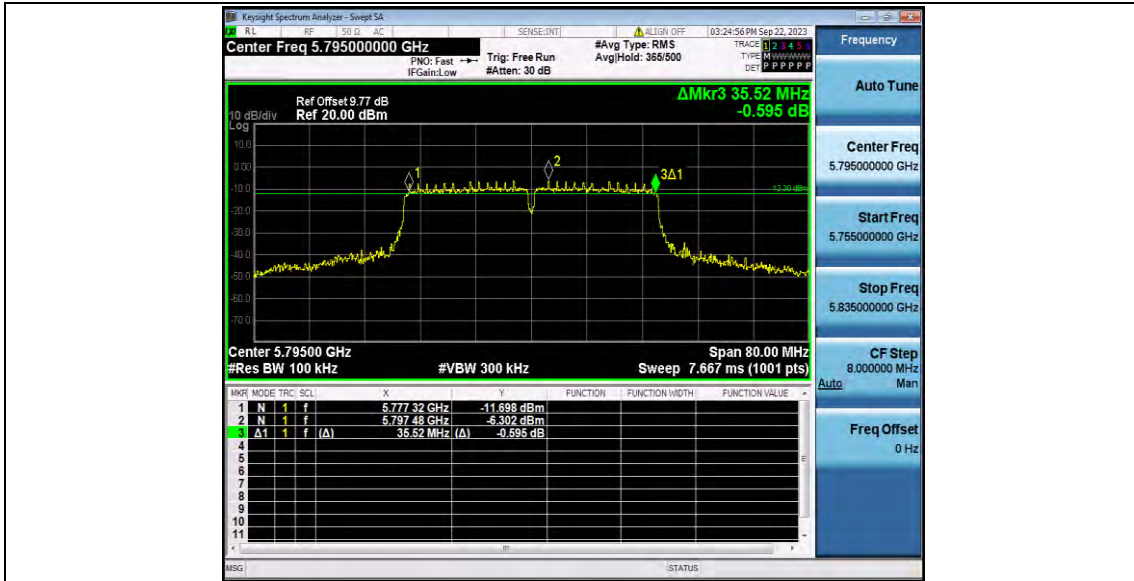
11N20SISO_Ant1_5785



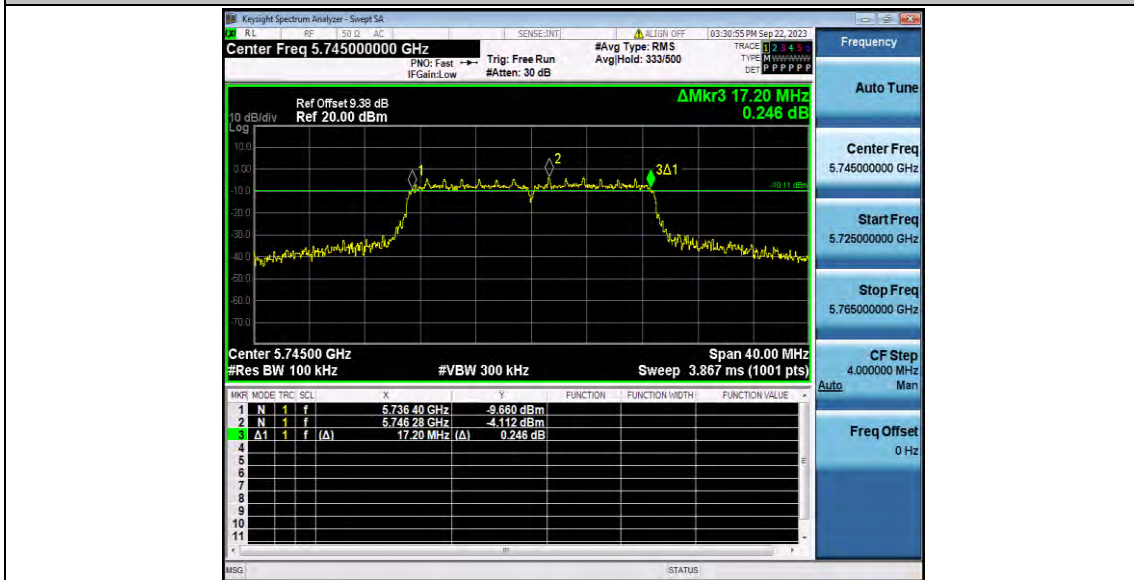
11N20SISO_Ant1_5825



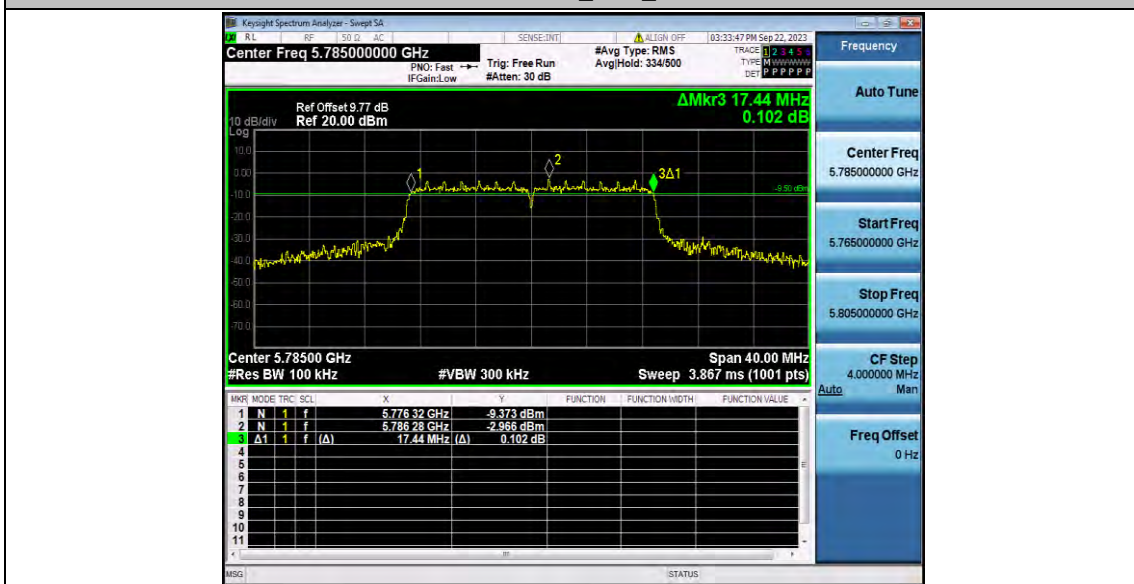
11N40SISO_Ant1_5755



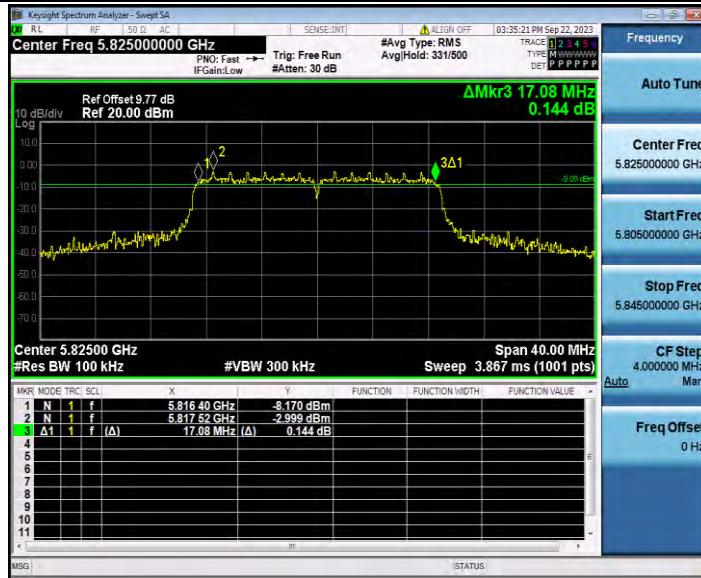
11N40SISO_Ant1_5795



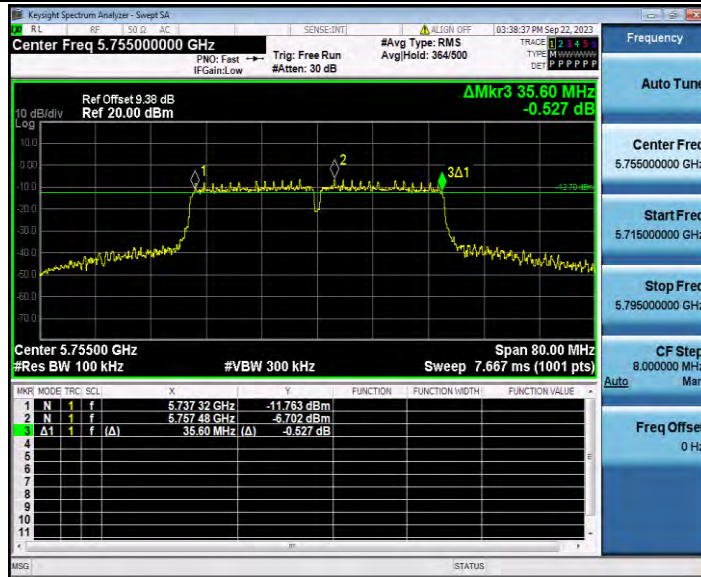
11AC20SISO_Ant1_5745



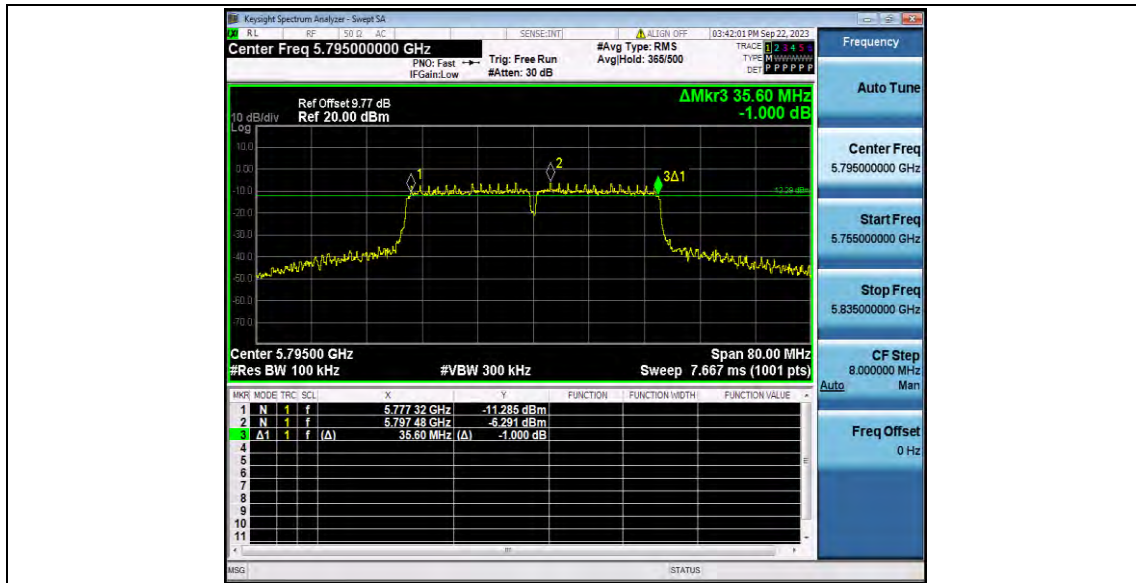
11AC20SISO_Ant1_5785



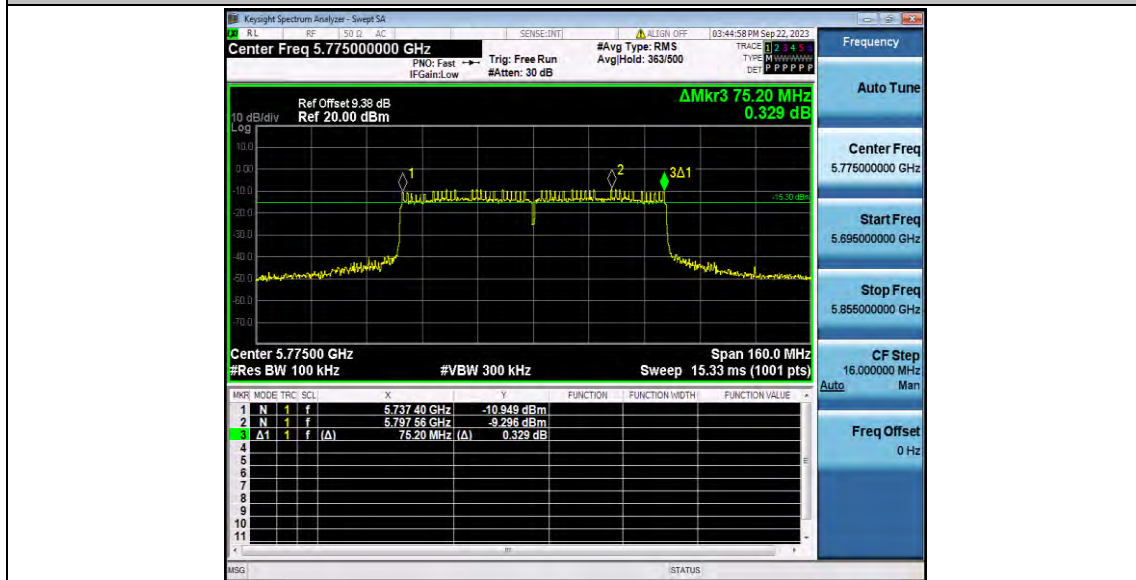
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



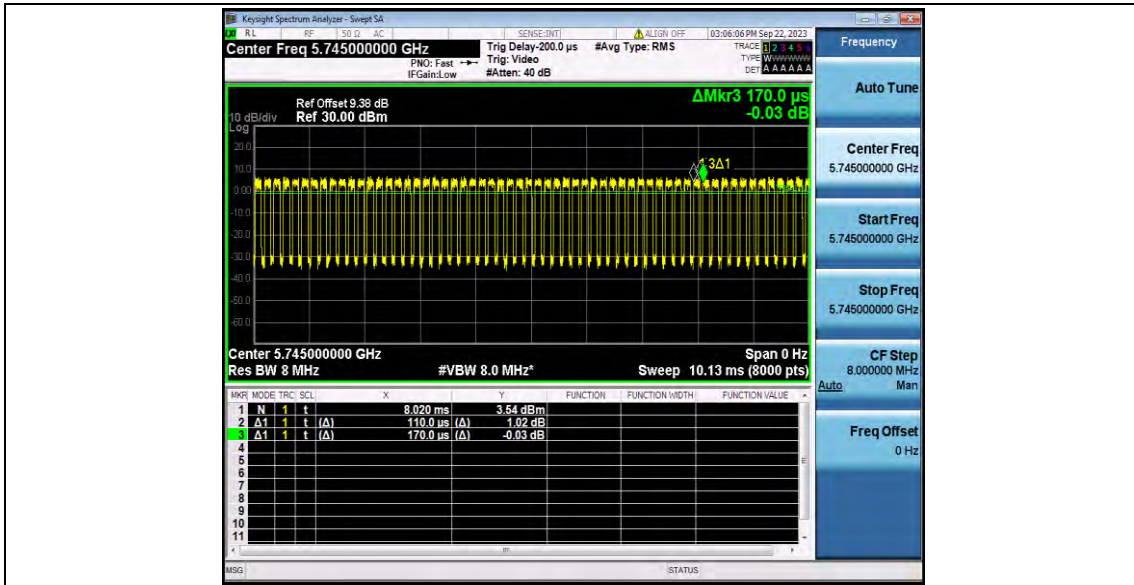
11AC80SISO_Ant1_5775

Appendix E.3: Duty Cycle

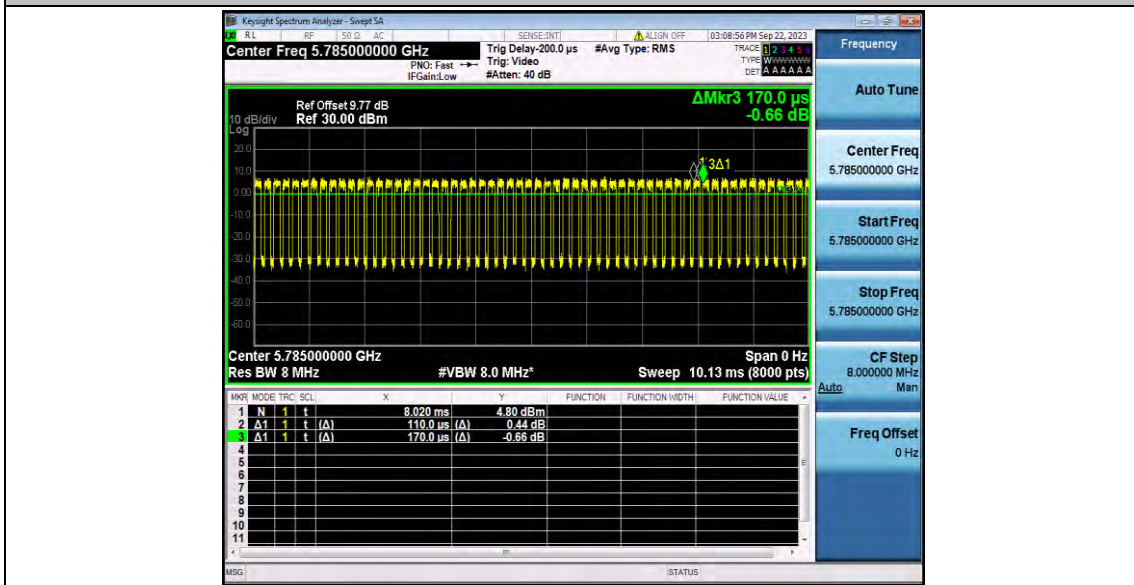
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	0.11	0.17	64.71
		5785	0.11	0.17	64.71
		5825	0.12	0.17	70.59
11N20SISO	Ant1	5745	0.11	0.17	64.71
		5785	0.11	0.17	64.71
		5825	0.11	0.17	64.71
11N40SISO	Ant1	5755	0.07	0.13	53.85
		5795	0.07	0.13	53.85
11AC20SISO	Ant1	5745	0.12	0.18	66.67
		5785	0.12	0.18	66.67
		5825	0.12	0.18	66.67
11AC40SISO	Ant1	5755	0.08	0.14	57.14
		5795	0.08	0.14	57.14
11AC80SISO	Ant1	5775	0.06	0.11	54.55

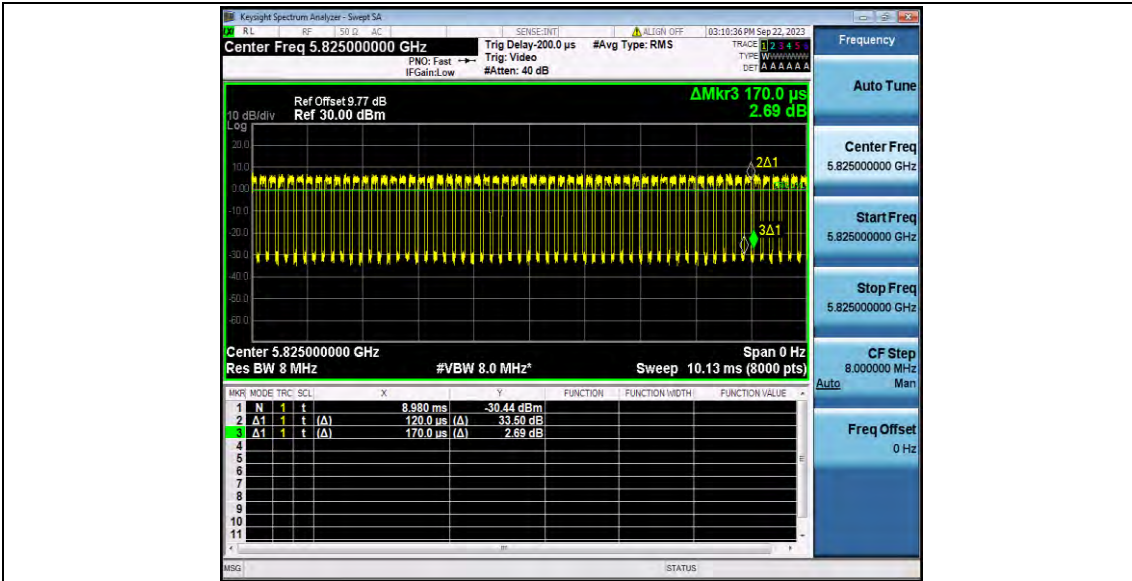
Test Graphs



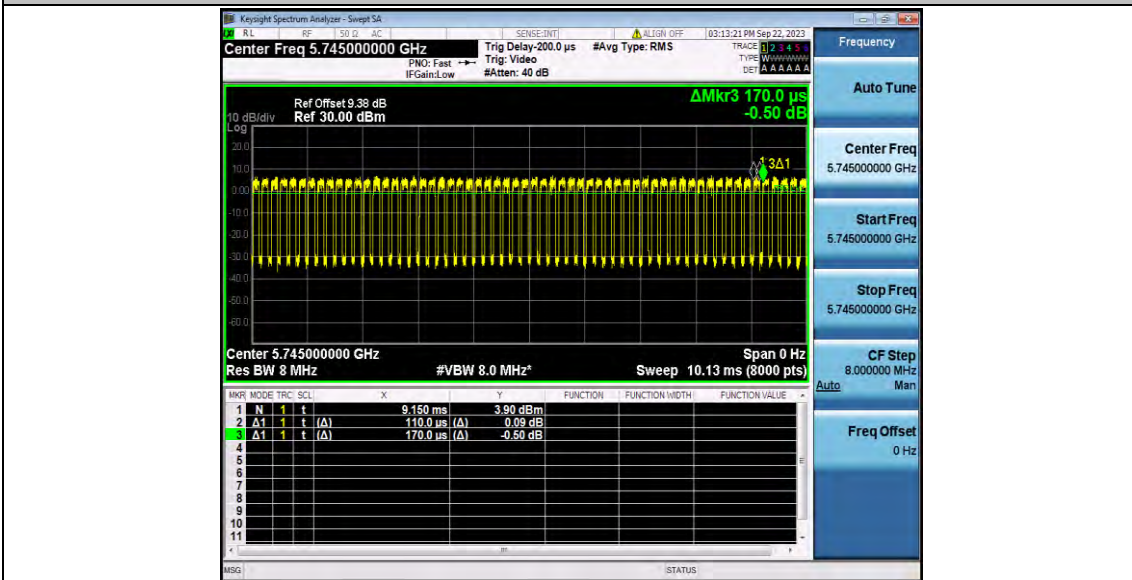
11A_Ant1_5745



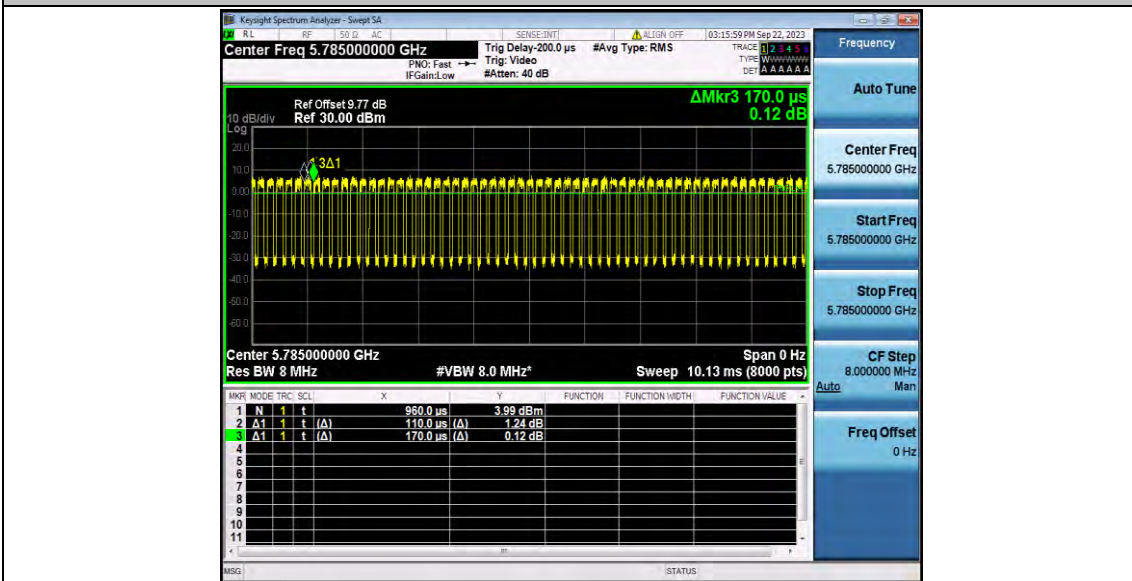
11A_Ant1_5785



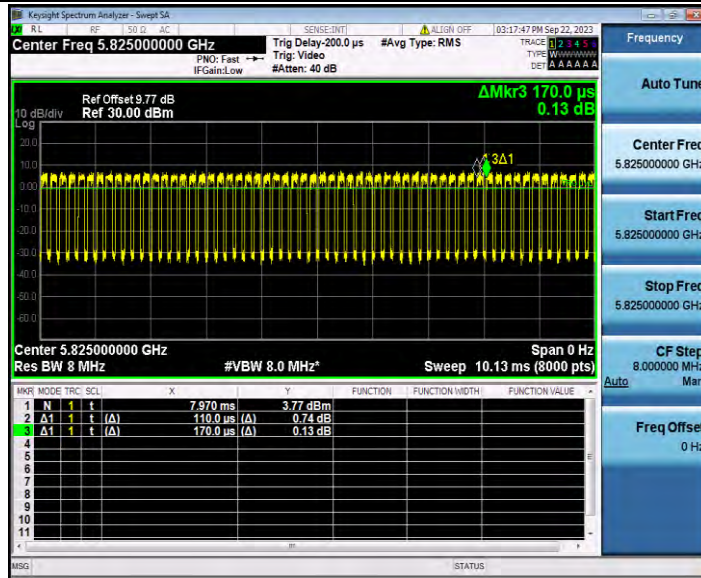
11A_Ant1_5825



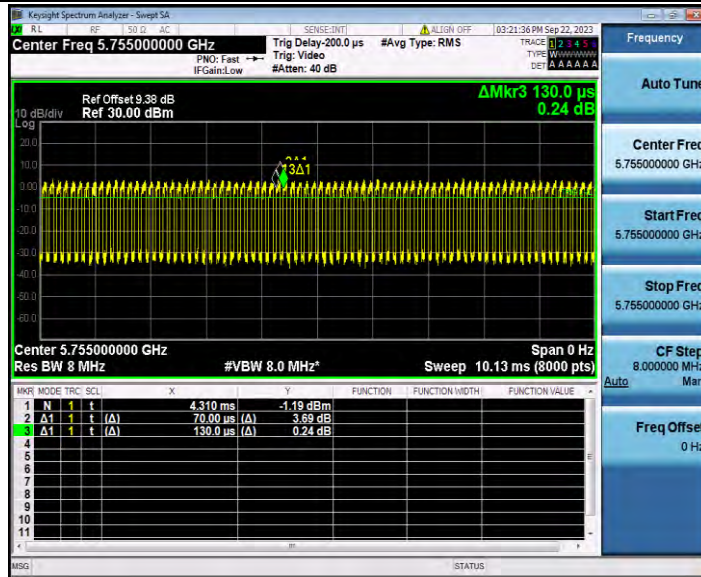
11N20SISO_Ant1_5745



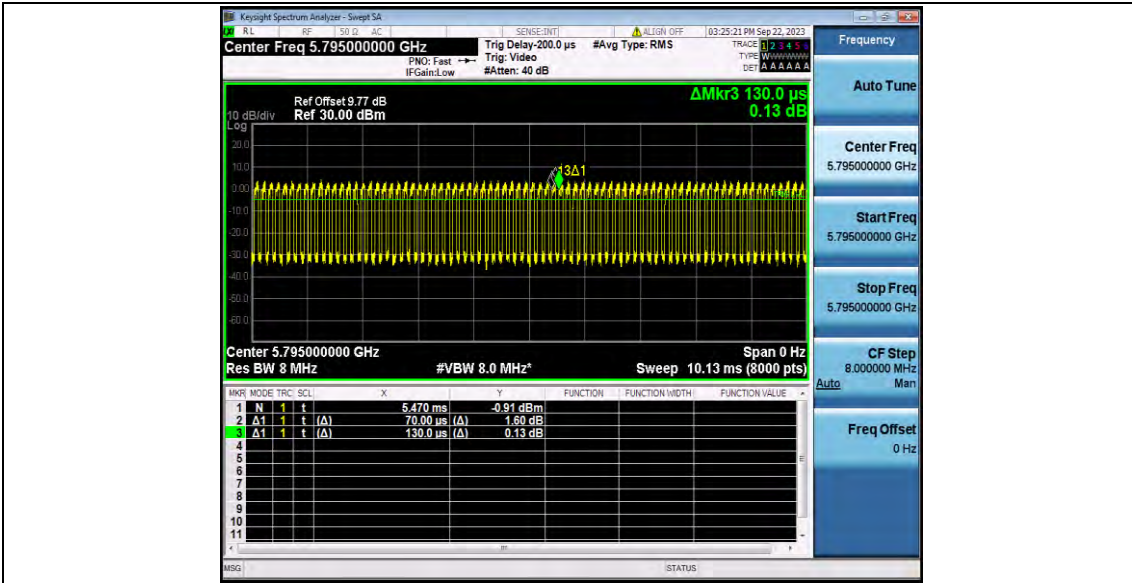
11N20SISO_Ant1_5785



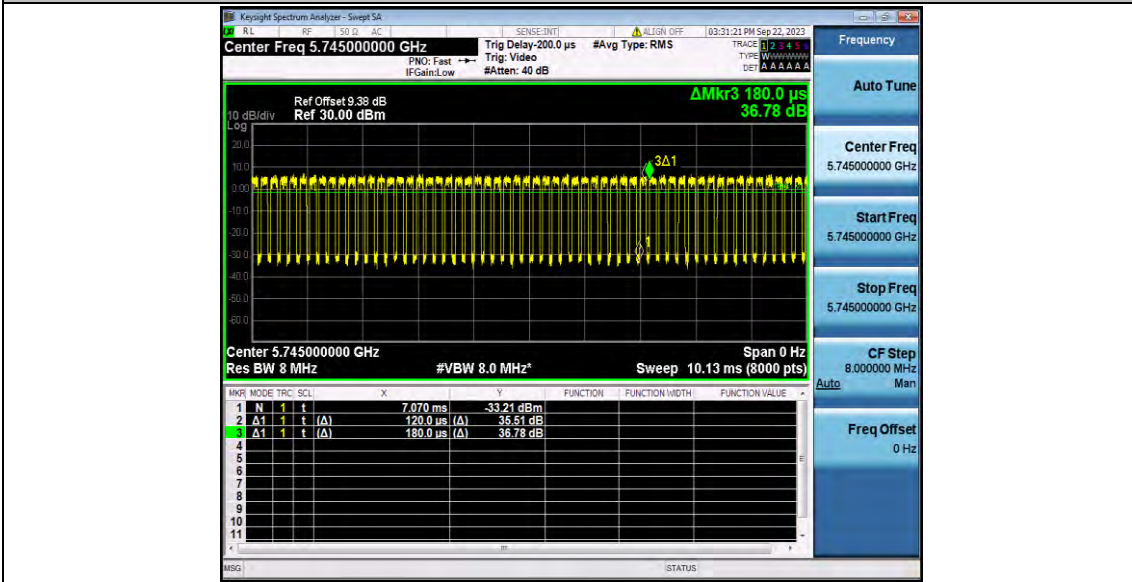
11N20SISO_Ant1_5825



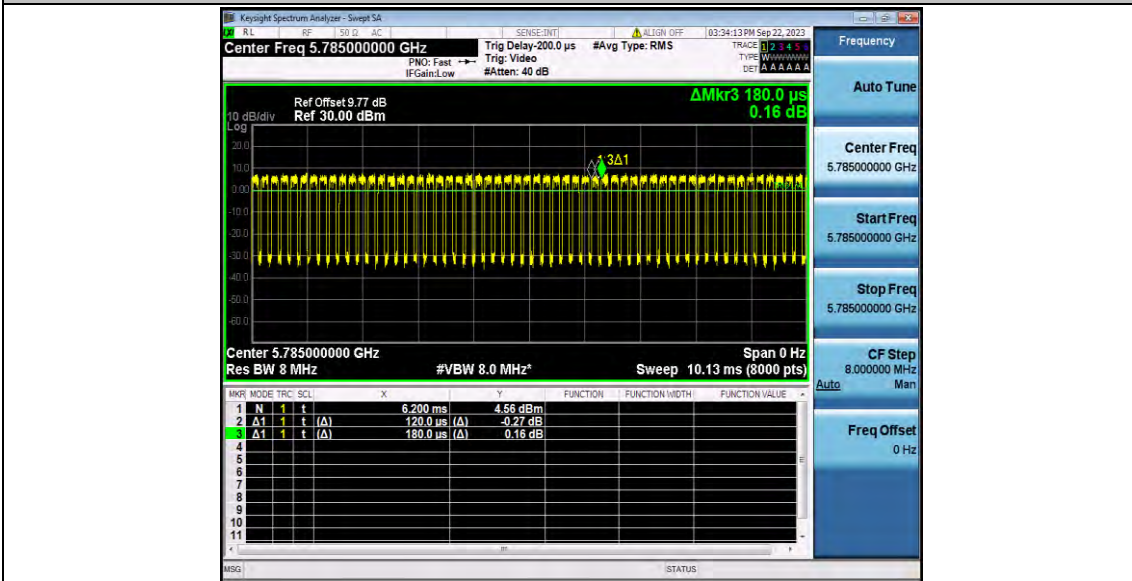
11N40SISO_Ant1_5755



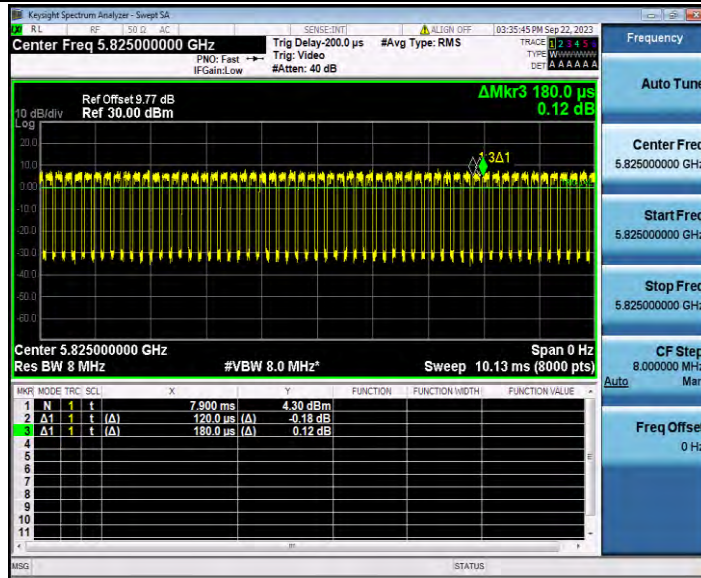
11N40SISO_Ant1_5795



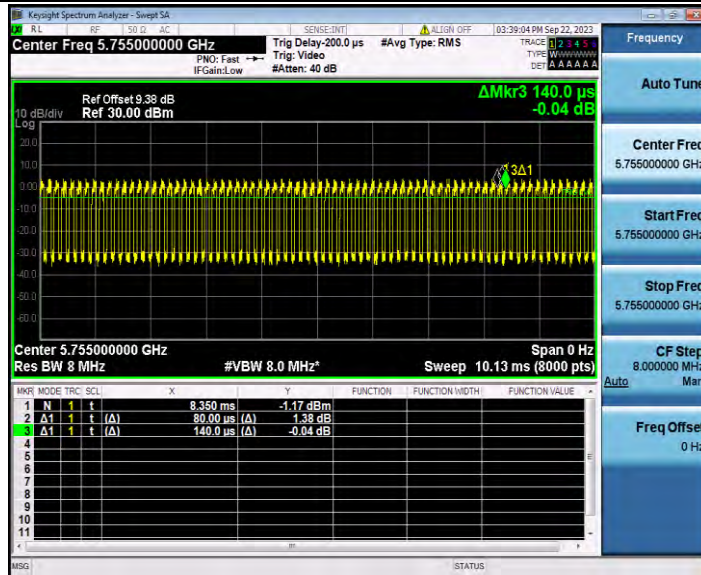
11AC20SISO_Ant1_5745



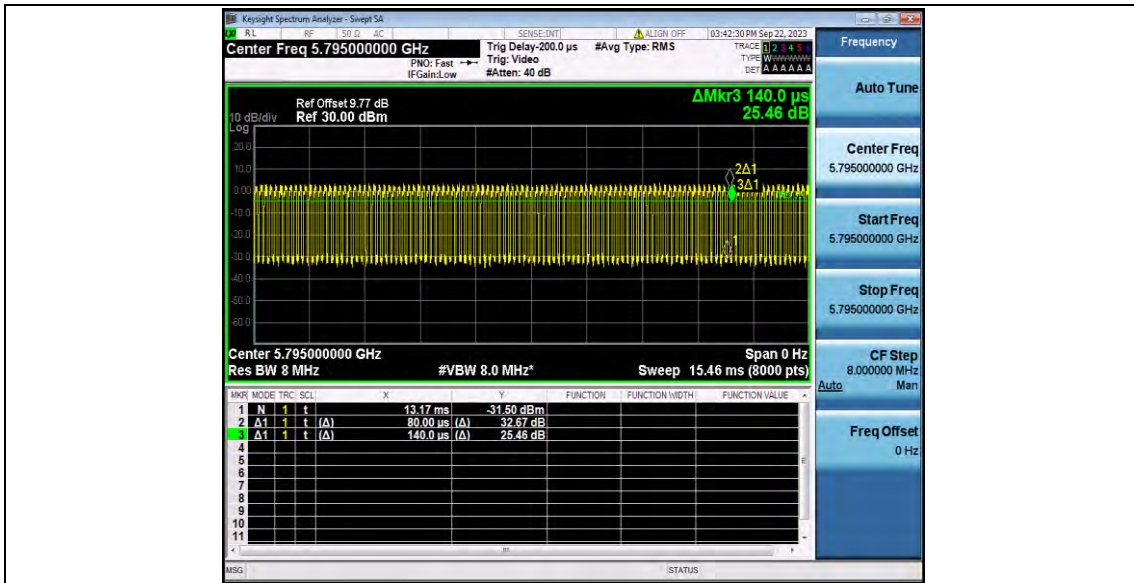
11AC20SISO_Ant1_5785



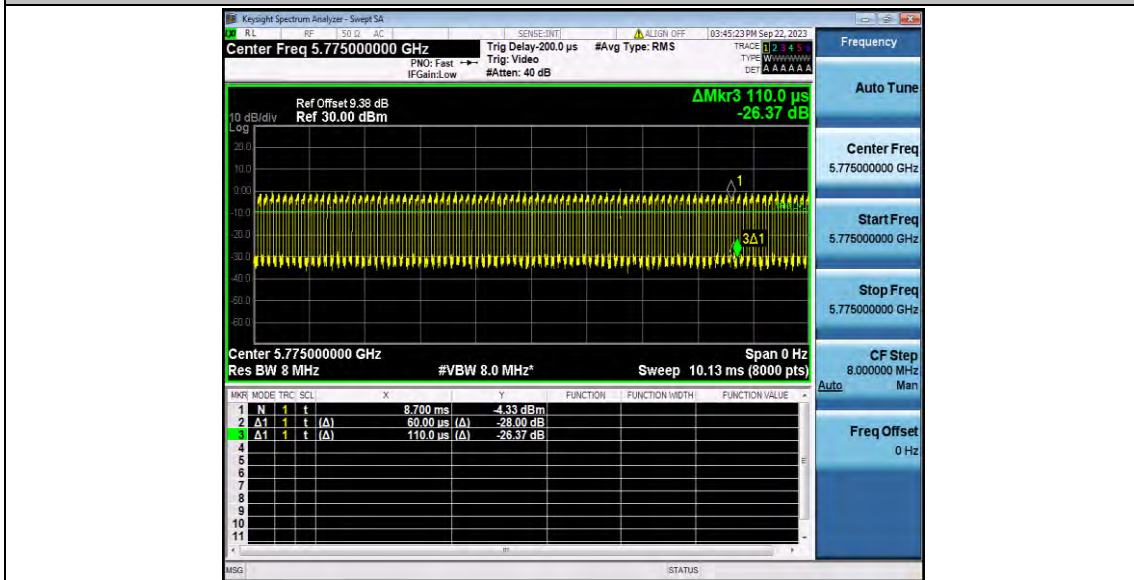
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

Appendix E.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	5745	5.59	64.71	1.89	7.48	≤30.00	PASS
		5785	6.13	64.71	1.89	8.02	≤30.00	PASS
		5825	6.17	70.59	1.51	7.68	≤30.00	PASS
11N20SISO	Ant1	5745	5.77	64.71	1.89	7.66	≤30.00	PASS
		5785	6.33	64.71	1.89	8.22	≤30.00	PASS
		5825	6.29	64.71	1.89	8.18	≤30.00	PASS
11N40SISO	Ant1	5755	4.78	53.85	2.69	7.47	≤30.00	PASS
		5795	5.31	53.85	2.69	8.00	≤30.00	PASS
11AC20SISO	Ant1	5745	5.71	66.67	1.76	7.47	≤30.00	PASS
		5785	6.91	66.67	1.76	8.67	≤30.00	PASS
		5825	6.92	66.67	1.76	8.68	≤30.00	PASS
11AC40SISO	Ant1	5755	4.85	57.14	2.43	7.28	≤30.00	PASS
		5795	5.47	57.14	2.43	7.90	≤30.00	PASS
11AC80SISO	Ant1	5775	4.95	54.55	2.63	7.58	≤30.00	PASS

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

Appendix E.5: Maximum power spectral density

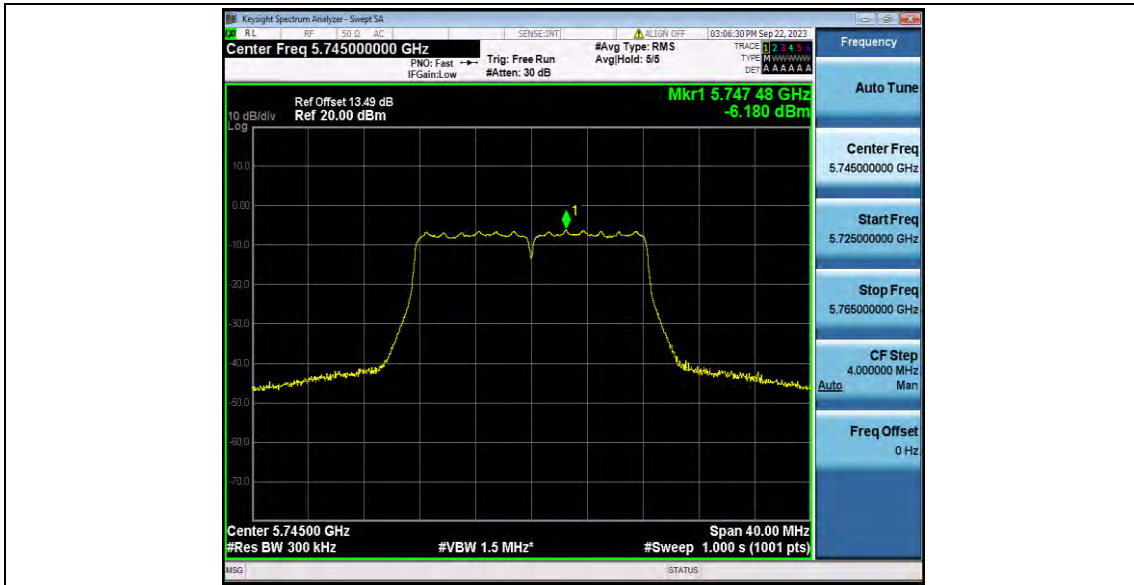
Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-6.18	≤30.00	PASS
		5785	-5.73	≤30.00	PASS
		5825	-6.17	≤30.00	PASS
11N20SISO	Ant1	5745	-6.04	≤30.00	PASS
		5785	-5.54	≤30.00	PASS
		5825	-5.6	≤30.00	PASS
11N40SISO	Ant1	5755	-8.31	≤30.00	PASS
		5795	-7.78	≤30.00	PASS
11AC20SISO	Ant1	5745	-6.02	≤30.00	PASS
		5785	-5	≤30.00	PASS
		5825	-5.09	≤30.00	PASS
11AC40SISO	Ant1	5755	-8.53	≤30.00	PASS
		5795	-7.98	≤30.00	PASS
11AC80SISO	Ant1	5775	-11.23	≤30.00	PASS

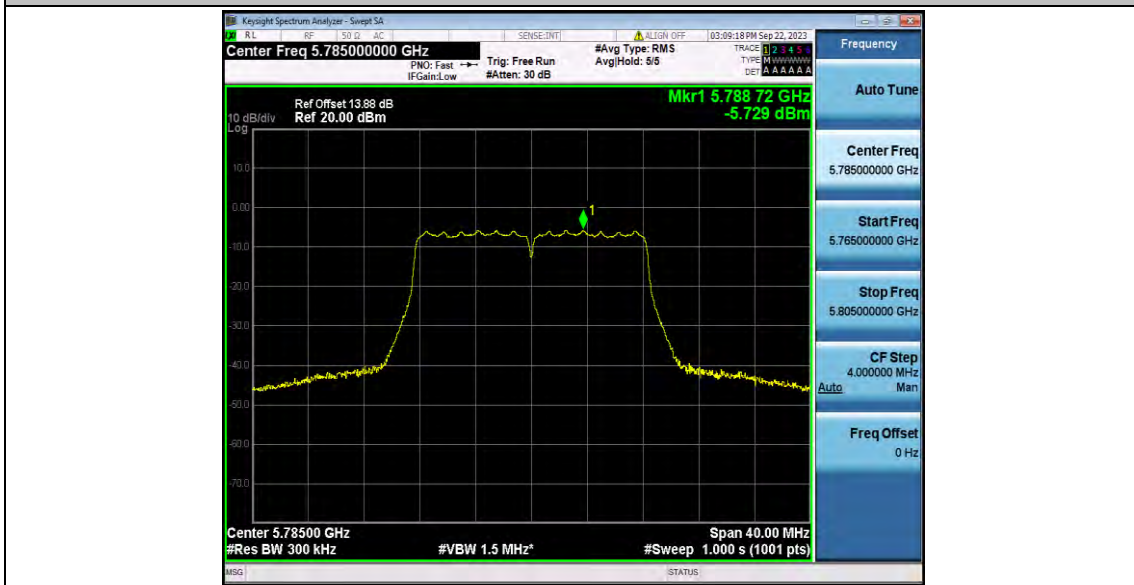
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs



11A_Ant1_5745



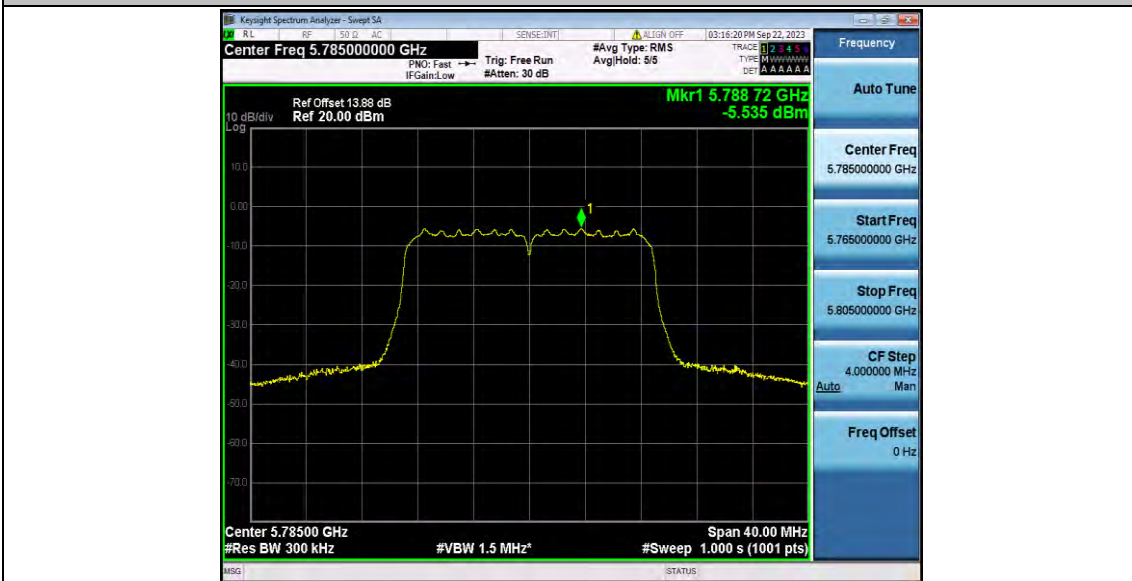
11A_Ant1_5785



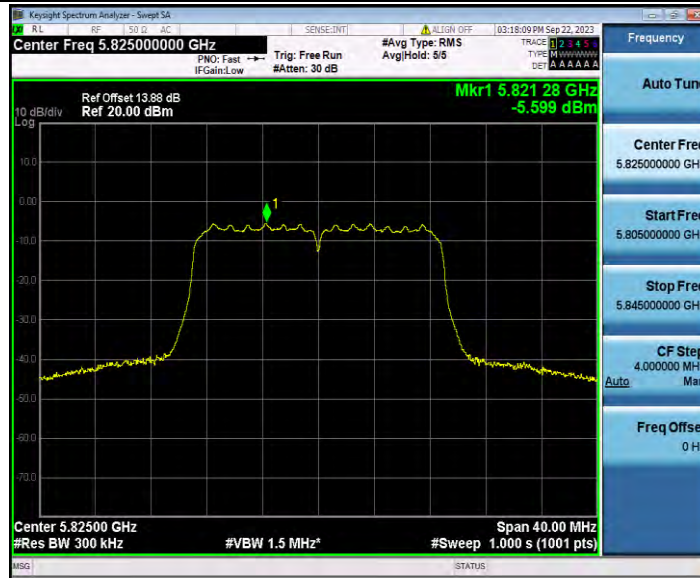
11A_Ant1_5825



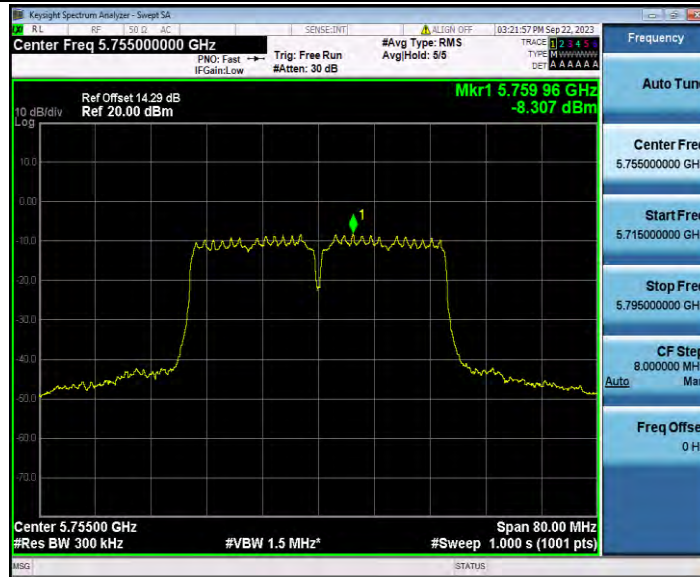
11N20SISO_Ant1_5745



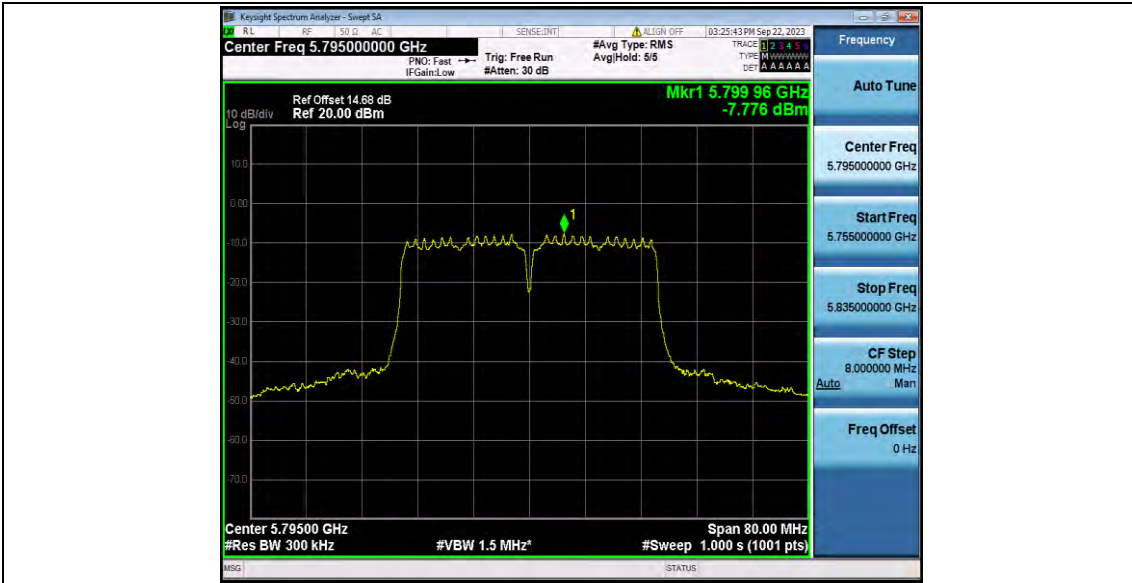
11N20SISO_Ant1_5785



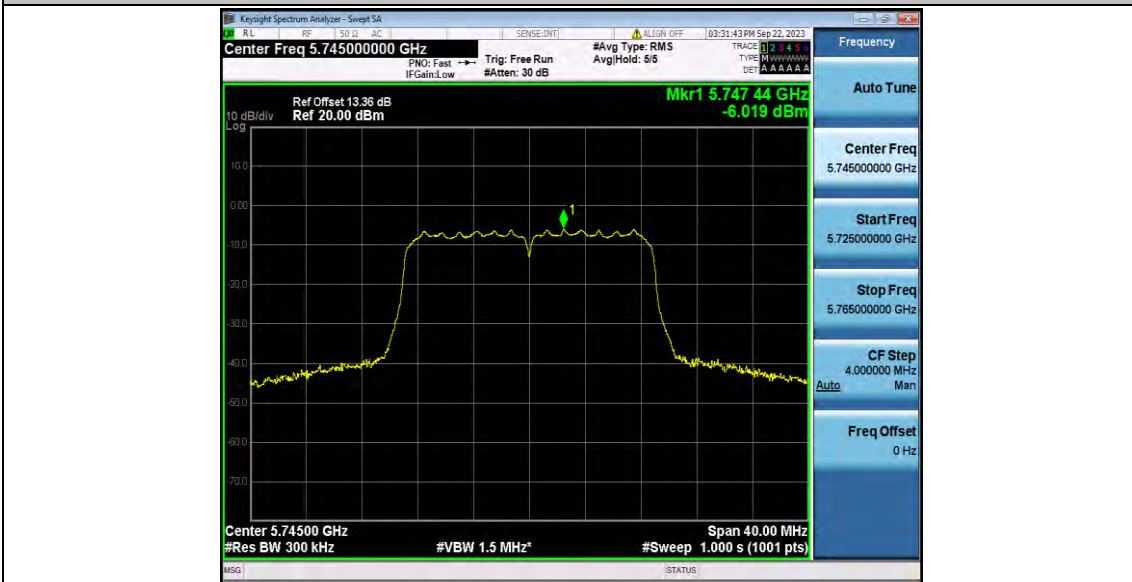
11N20SISO_Ant1_5825



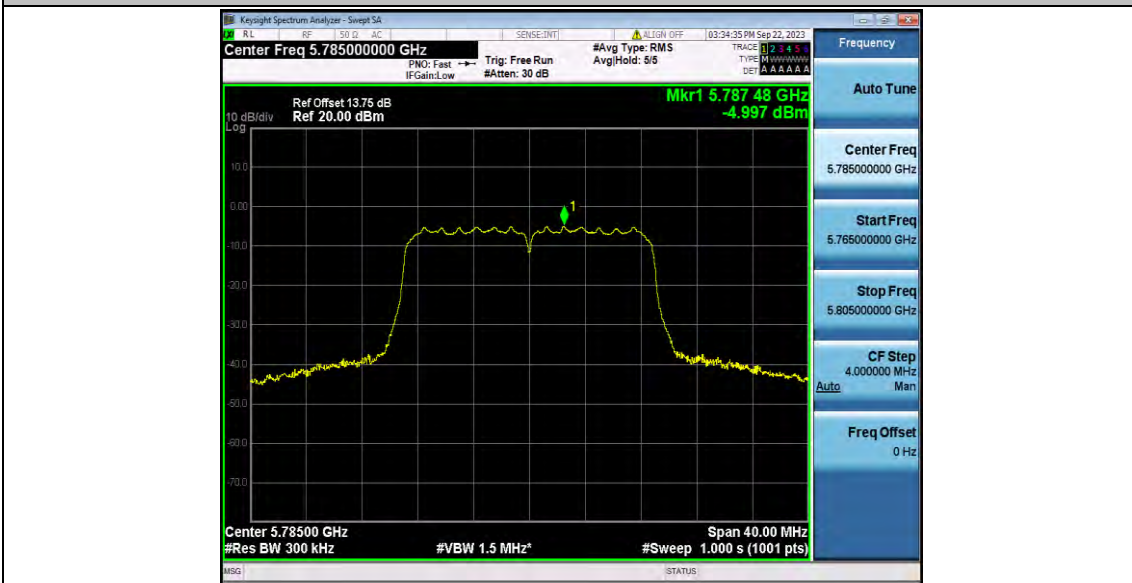
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



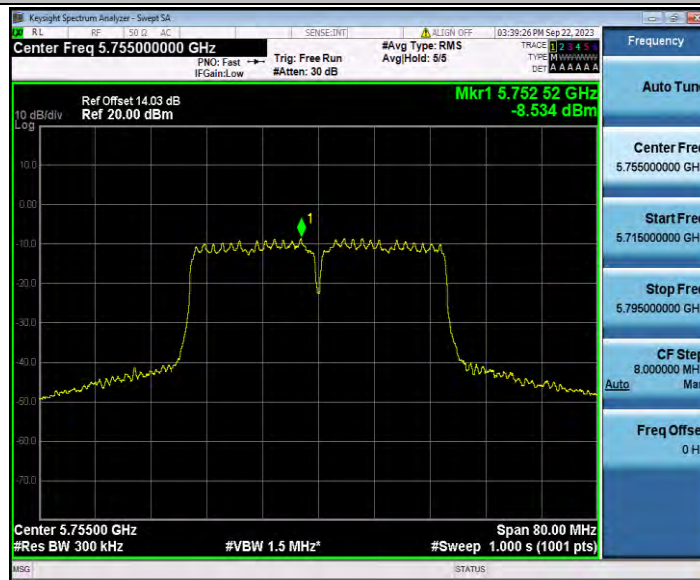
11AC20SISO_Ant1_5745



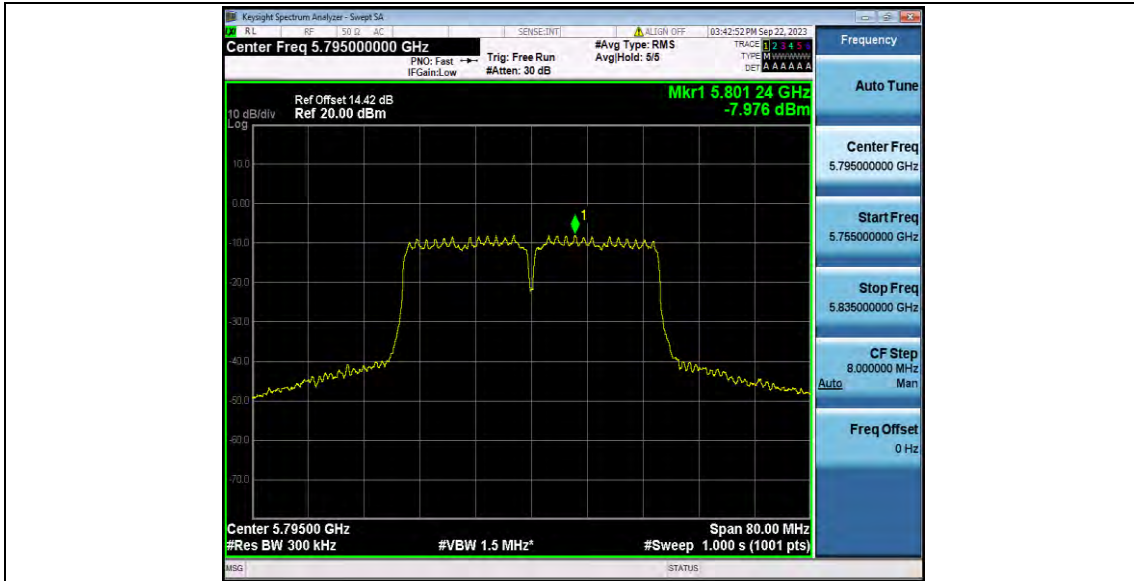
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

Appendix E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-39.2	≤-18.11	PASS
				5700~5720	-32.29	≤15.50	PASS
				5720~5725	-27.99	≤24.21	PASS
				5760~5650	-39.68	≤-27	PASS
		High	5825	5850~5855	-32.34	≤24.41	PASS
				5855~5875	-38.24	≤14.26	PASS
				5875~5925	-38.67	≤8.71	PASS
				5925~5935	-38.44	≤-27	PASS
11N20SIS O	Ant1	Low	5745	5650~5700	-39.68	≤-6.45	PASS
				5700~5720	-32.82	≤15.47	PASS
				5720~5725	-25.98	≤23.94	PASS
				5760~5650	-40.4	≤-27	PASS
		High	5825	5850~5855	-31.59	≤15.79	PASS
				5855~5875	-33.66	≤10.25	PASS
				5875~5925	-38.74	≤-17.76	PASS
				5925~5935	-39.22	≤-27	PASS
11N40SIS O	Ant1	Low	5755	5650~5700	-38.87	≤-0.63	PASS
				5700~5720	-30.53	≤15.35	PASS
				5720~5725	-28.9	≤26.82	PASS
				5780~5650	-40.87	≤-27	PASS
		High	5795	5850~5855	-38.98	≤26.94	PASS
				5855~5875	-38.56	≤15.44	PASS
				5875~5925	-38.73	≤-18.01	PASS
				5925~5935	-38.15	≤-27	PASS
11AC20SI SO	Ant1	Low	5745	5650~5700	-38.9	≤3.85	PASS
				5700~5720	-32.82	≤15.43	PASS
				5720~5725	-25.51	≤26.04	PASS
				5760~5650	-40.29	≤-27	PASS
		High	5825	5850~5855	-31.03	≤18.87	PASS
				5855~5875	-34.45	≤10.02	PASS
				5875~5925	-38.2	≤3.91	PASS
				5925~5935	-38.66	≤-27	PASS
11AC40SI SO	Ant1	Low	5755	5650~5700	-39.2	≤3.07	PASS
				5700~5720	-30.84	≤15.50	PASS
				5720~5725	-27.82	≤26.82	PASS
				5780~5650	-40.22	≤-27	PASS

		High	5795	5850~5855	-39.73	≤ 23.18	PASS
				5855~5875	-38.96	≤ 13.18	PASS
				5875~5925	-38.13	≤ 2.63	PASS
				5925~5935	-39.4	≤ -27	PASS
11AC80SI SO	Ant1	Low	5775	5650~5700	-38.06	≤ 9.33	PASS
				5700~5720	-33.54	≤ 15.35	PASS
				5720~5725	-30.21	≤ 23.42	PASS
				5800~5650	-39.83	≤ -27	PASS
		High	5775	5850~5855	-37.78	≤ 22.12	PASS
				5855~5875	-38.07	≤ 13.03	PASS
				5875~5925	-38.61	≤ -18.47	PASS
				5925~5935	-39.89	≤ -27	PASS

Test Graphs B4



11A_Ant1_Low_5745



11A_Ant1_High_5825



11N20SISO_Ant1_Low_5745



11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745



11AC20SISO_Ant1_High_5825



11AC40SISO_Ant1_Low_5755



11AC40SISO_Ant1_High_5795



11AC80SISO_Ant1_Low_5775



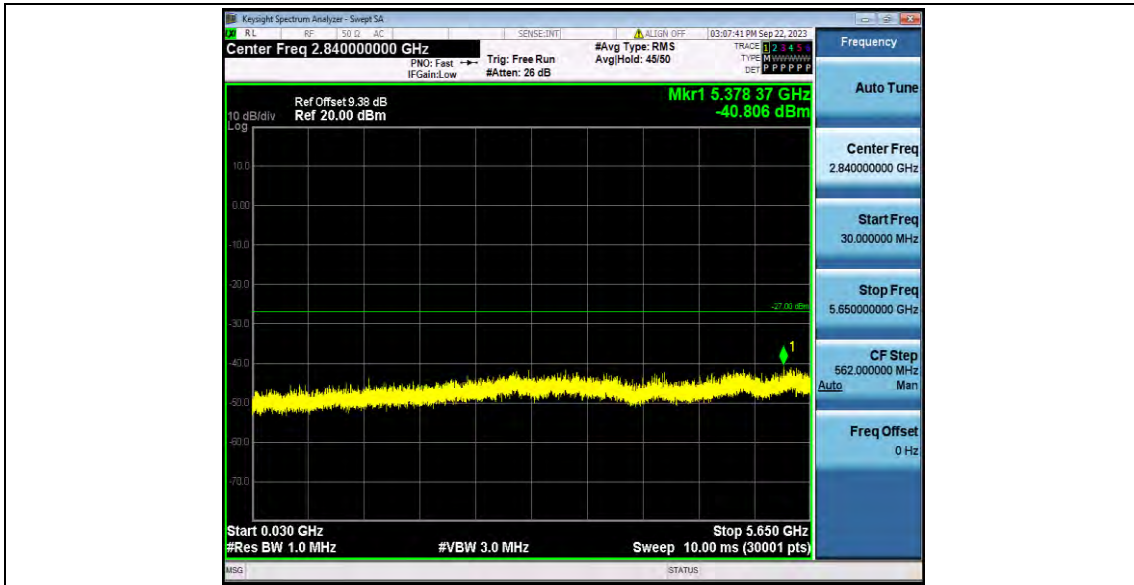
11AC80SISO_Ant1_High_5775

Appendix E.7: Conducted Spurious Emission

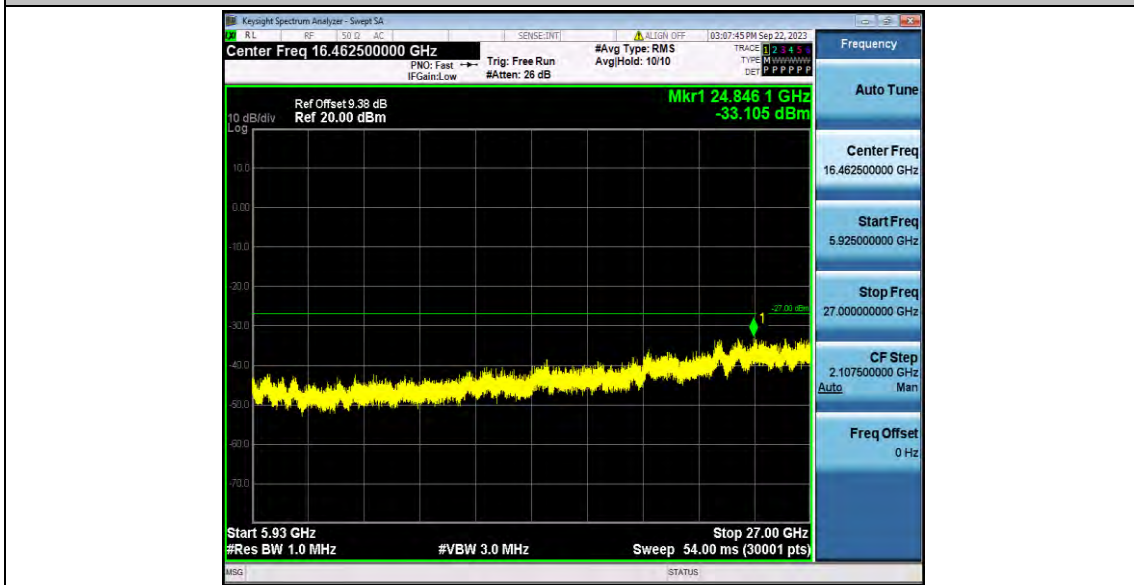
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5378.37	-40.81	≤-27	PASS
			5925~40000	24846.14	-33.11	≤-27	PASS
		5785	30~5650	5548.28	-41.11	≤-27	PASS
			5925~40000	26823.67	-31.75	≤-27	PASS
		5825	30~5650	4942.63	-39.79	≤-27	PASS
			5925~40000	26012.29	-31.62	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	4970.73	-40.51	≤-27	PASS
			5925~40000	26808.92	-32.73	≤-27	PASS
		5785	30~5650	4977.47	-40.79	≤-27	PASS
			5925~40000	26922.73	-31.43	≤-27	PASS
		5825	30~5650	2449.6	-40.25	≤-27	PASS
			5925~40000	24226.53	-32.18	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	2466.46	-40.21	≤-27	PASS
			5925~40000	26619.95	-32.81	≤-27	PASS
		5795	30~5650	2462.15	-39.35	≤-27	PASS
			5925~40000	26540.57	-32.53	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5534.98	-41.31	≤-27	PASS
			5925~40000	26908.68	-32.58	≤-27	PASS
		5785	30~5650	5433.07	-38.9	≤-27	PASS
			5925~40000	24997.17	-32.27	≤-27	PASS
		5825	30~5650	5509.87	-40.29	≤-27	PASS
			5925~40000	26669.12	-32.95	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	2677.02	-39.22	≤-27	PASS
			5925~40000	24305.91	-32	≤-27	PASS
		5795	30~5650	5420.7	-39.25	≤-27	PASS
			5925~40000	24257.44	-31.76	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5402.91	-40.68	≤-27	PASS
			5925~40000	24897.42	-32.75	≤-27	PASS

Test Graphs



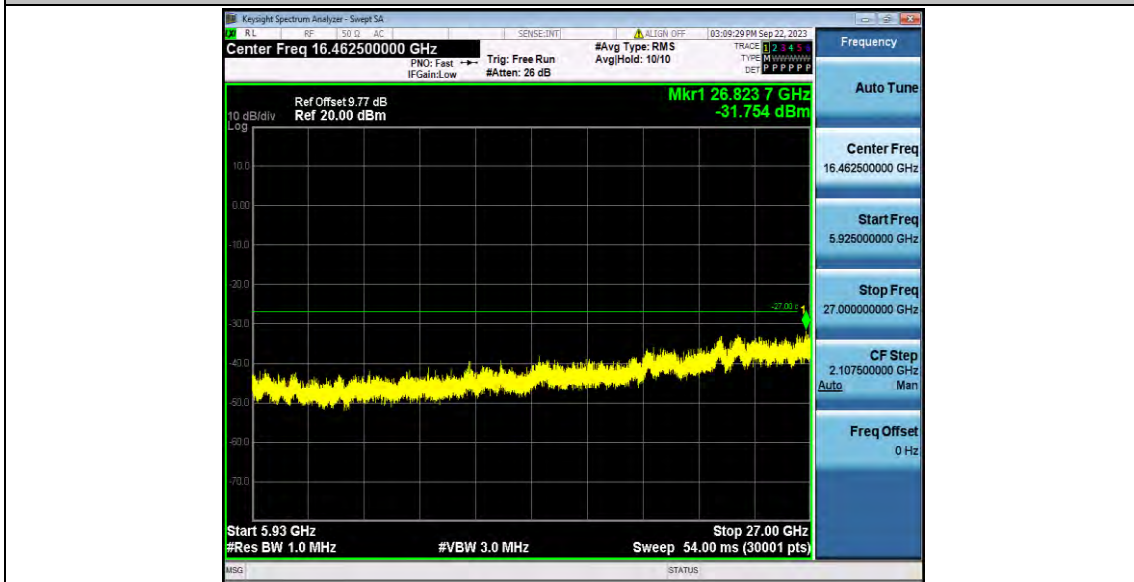
11A_Ant1_5745_30~5650



11A_Ant1_5745_5925~40000



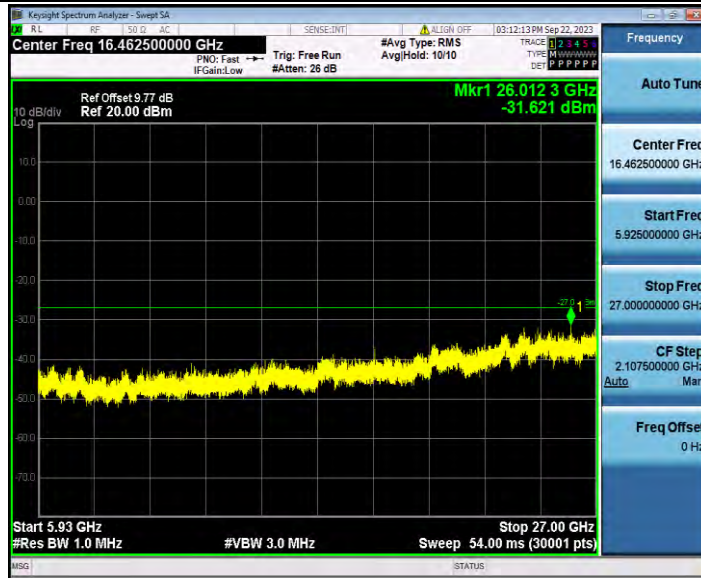
11A_Ant1_5785_30~5650



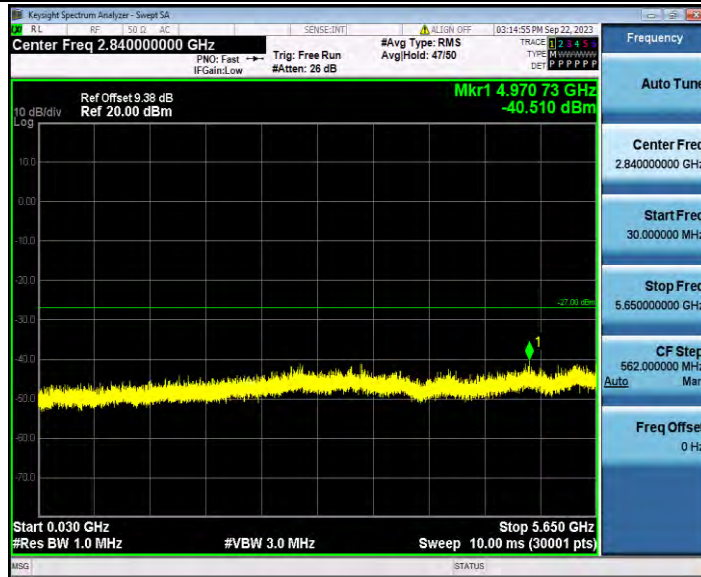
11A_Ant1_5785_5925~40000



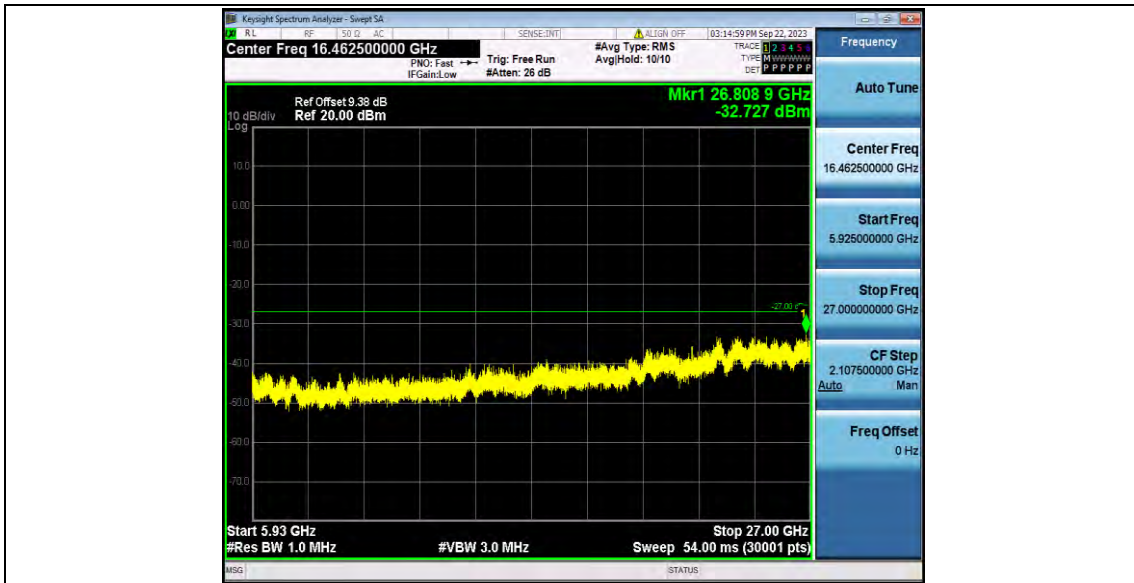
11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~40000



11N20SISO_Ant1_5745_30~5650



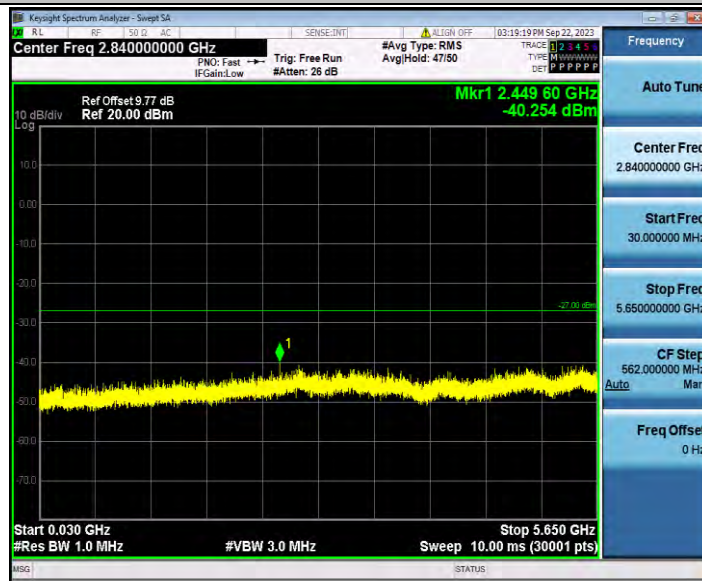
11N20SISO_Ant1_5745_5925~40000



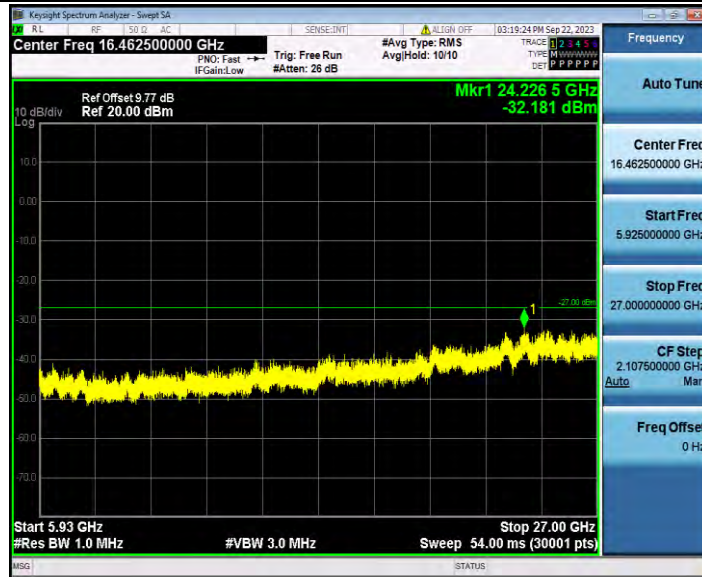
11N20SISO_Ant1_5785_30~5650



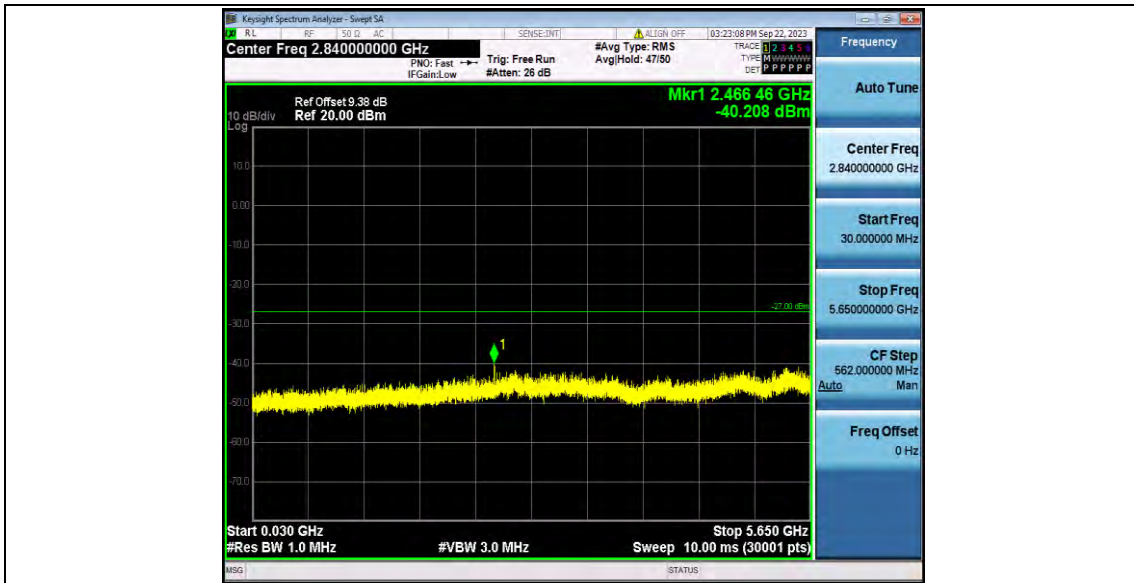
11N20SISO_Ant1_5785_5925~40000



11N20SISO_Ant1_5825_30~5650



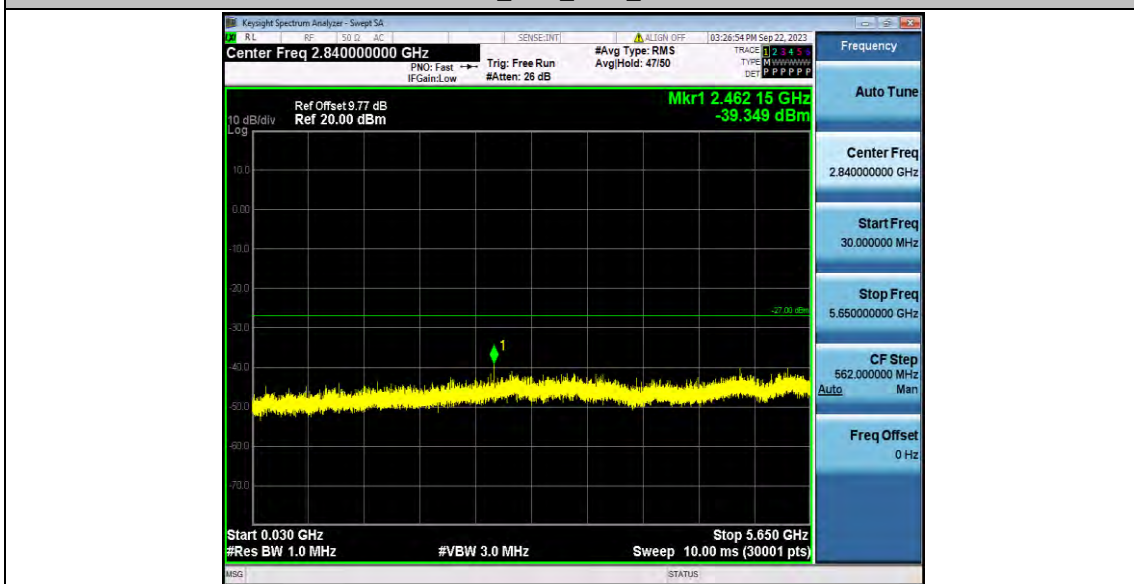
11N20SISO_Ant1_5825_5925~40000



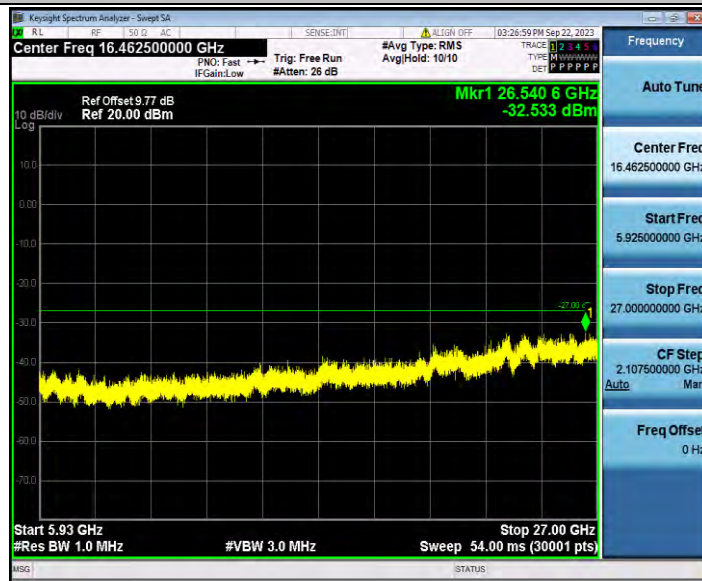
11N40SISO_Ant1_5755_30~5650



11N40SISO_Ant1_5755_5925~40000



11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~40000



11AC20SISO_Ant1_5745_30~5650



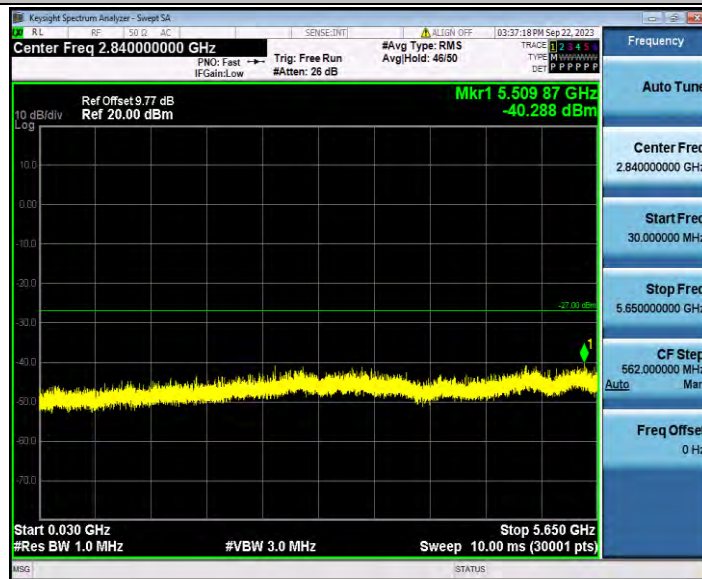
11AC20SISO_Ant1_5745_5925~4000



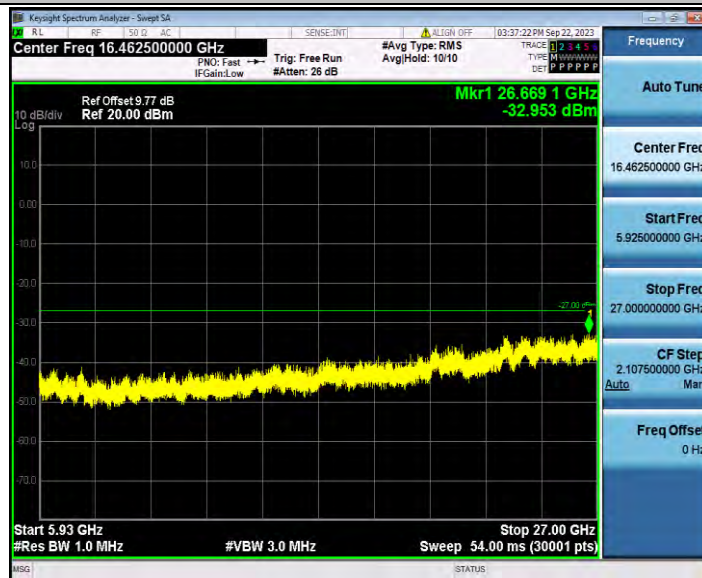
11AC20SISO_Ant1_5785_30~5650



11AC20SISO_Ant1_5785_5925~40000



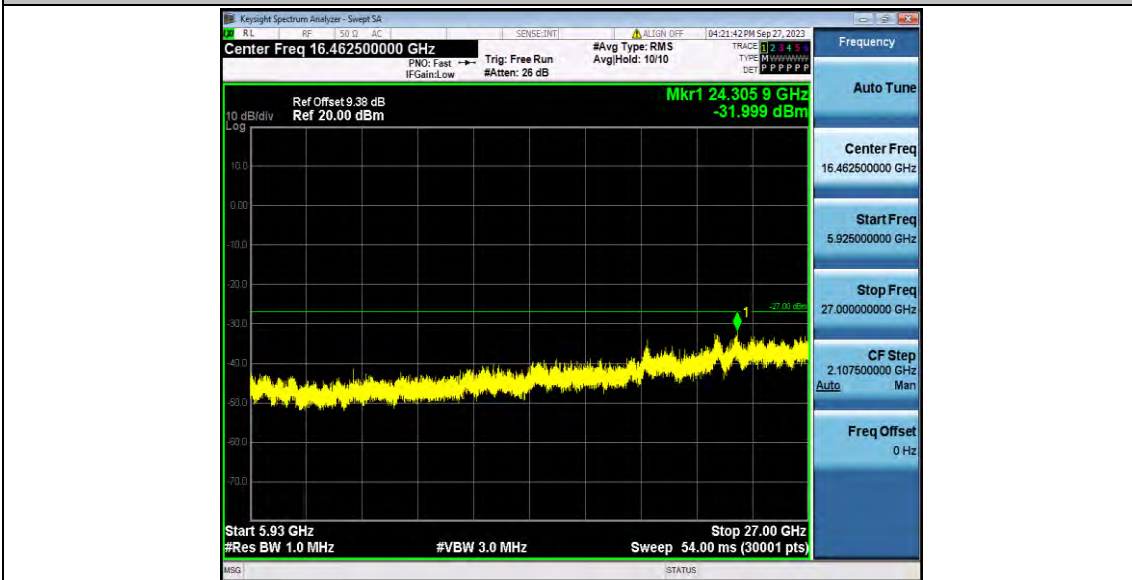
11AC20SISO_Ant1_5825_30~5650



11AC20SISO_Ant1_5825_5925~40000



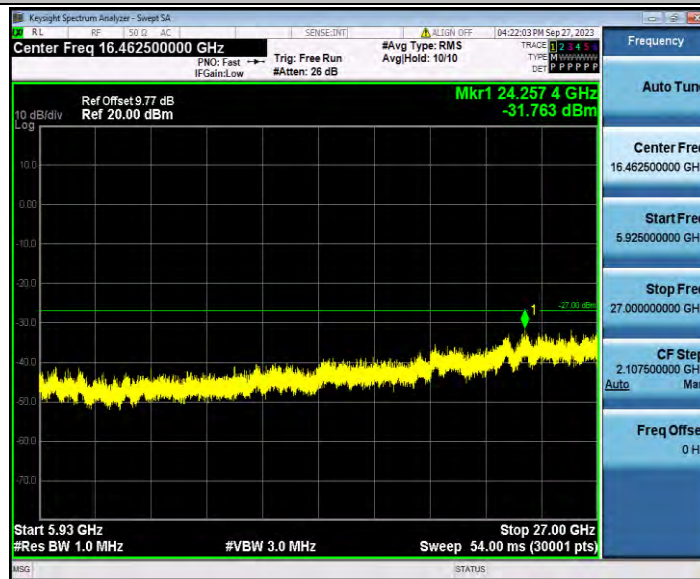
11AC40SISO_Ant1_5755_30~5650



11AC40SISO_Ant1_5755_5925~40000



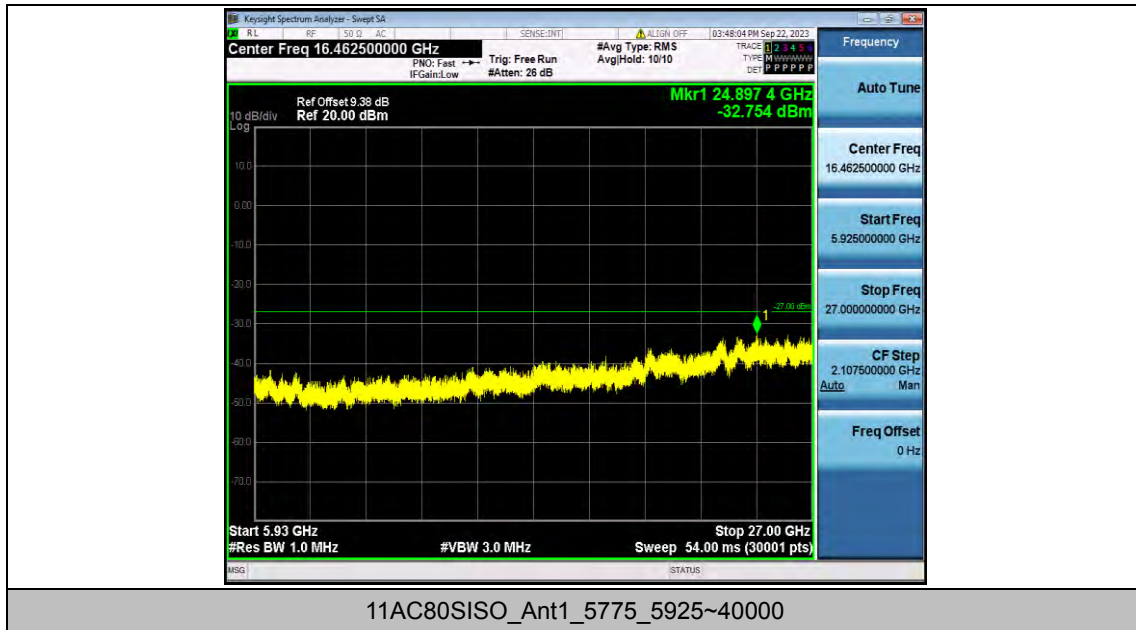
11AC40SISO_Ant1_5795_30~5650



11AC40SISO_Ant1_5795_5925~40000



11AC80SISO_Ant1_5775_30~5650



Appendix E.8: Emissions in Restricted Bands

Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-40.34 2	≤-27.00	---	---	PASS
				Peak	5700.000	-37.59	≤10.00	---	---	PASS
				Peak	5720.000	-34.63	≤15.60	---	---	PASS
				Peak	5725.000	-32.04	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-37.41 9	≤15.60	---	---	PASS
				Peak	5855.000	-36.16	≤27.00	---	---	PASS
				Peak	5875.000	-39.52	≤15.60	---	---	PASS
Peak	5925.000	-38.3	≤10.00	---	---	PASS				
11N20SIS O	Ant1	Low	5745	Peak	5650.000	-41.86 5	≤-27.00	---	---	PASS
				Peak	5700.000	-40.01	≤10.00	---	---	PASS
				Peak	5720.000	-35.15	≤15.60	---	---	PASS
				Peak	5725.000	-31.02	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-32.78 7	≤15.60	---	---	PASS
				Peak	5855.000	-38.27	≤27.00	---	---	PASS
				Peak	5875.000	-39.03	≤15.60	---	---	PASS
Peak	5925.000	-40.17	≤10.00	---	---	PASS				
11N40SIS O	Ant1	Low	5755	Peak	5650.000	-39.90 8	≤-27.00	---	---	PASS
				Peak	5700.000	-39.46	≤10.00	---	---	PASS
				Peak	5720.000	-34.26	≤15.60	---	---	PASS
				Peak	5725.000	-27.48	≤27.00	---	---	PASS
		High	5795	Peak	5850.000	-38.86 9	≤15.60	---	---	PASS
				Peak	5855.000	-39.9	≤27.00	---	---	PASS
				Peak	5875.000	-39.54	≤15.60	---	---	PASS
Peak	5925.000	-40.2	≤10.00	---	---	PASS				
11AC20SI SO	Ant1	Low	5745	Peak	5650.000	-40.86	≤-27.00	---	---	PASS
				Peak	5700.000	-39.67	≤10.00	---	---	PASS
				Peak	5720.000	-34.85	≤15.60	---	---	PASS
				Peak	5725.000	-27.83	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-31.48 4	≤15.60	---	---	PASS

				Peak	5855.000	-37.3	≤ 27.00	---	---	PASS
				Peak	5875.000	-38.81	≤ 15.60	---	---	PASS
				Peak	5925.000	-40.03	≤ 10.00	---	---	PASS
11AC40SI SO	Ant1	Low	5755	Peak	5650.000	-41.97 8	≤ -27.00	---	---	PASS
				Peak	5700.000	-39.06	≤ 10.00	---	---	PASS
				Peak	5720.000	-31.57	≤ 15.60	---	---	PASS
				Peak	5725.000	-27.61	≤ 27.00	---	---	PASS
		High	5795	Peak	5850.000	-38.84 3	≤ 15.60	---	---	PASS
				Peak	5855.000	-39.44	≤ 27.00	---	---	PASS
				Peak	5875.000	-39.7	≤ 15.60	---	---	PASS
				Peak	5925.000	-38.56	≤ 10.00	---	---	PASS
11AC80SI SO	Ant1	Low	5775	Peak	5650.000	-39.30 4	≤ -27.00	---	---	PASS
				Peak	5700.000	-39.47	≤ 10.00	---	---	PASS
				Peak	5720.000	-32.63	≤ 15.60	---	---	PASS
				Peak	5725.000	-28.87	≤ 27.00	---	---	PASS
		High	5775	Peak	5850.000	-38.19 2	≤ 15.60	---	---	PASS
				Peak	5855.000	-38.62	≤ 27.00	---	---	PASS
				Peak	5875.000	-39.77	≤ 15.60	---	---	PASS
				Peak	5925.000	-39.7	≤ 10.00	---	---	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs



11A_Ant1_Low_5745_Peak



11A_Ant1_High_5825_Peak



11N20SISO_Ant1_Low_5745_Peak



11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak



11N40SISO_Ant1_High_5795_Peak



11AC20SISO_Ant1_Low_5745_Peak



11AC20SISO_Ant1_High_5825_Peak



11AC40SISO_Ant1_Low_5755_Peak



11AC40SISO_Ant1_High_5795_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak