Case No. : GTS20230215013-1-10	
Ambient Condition: 22 ℃, 53 %RH, Atmos100.1Kpa,	
Test Date: 2023.3.15	**Test Engineer:** Jenny zeng

Appendix D.1: Occupied channel bandwidth

Test Result

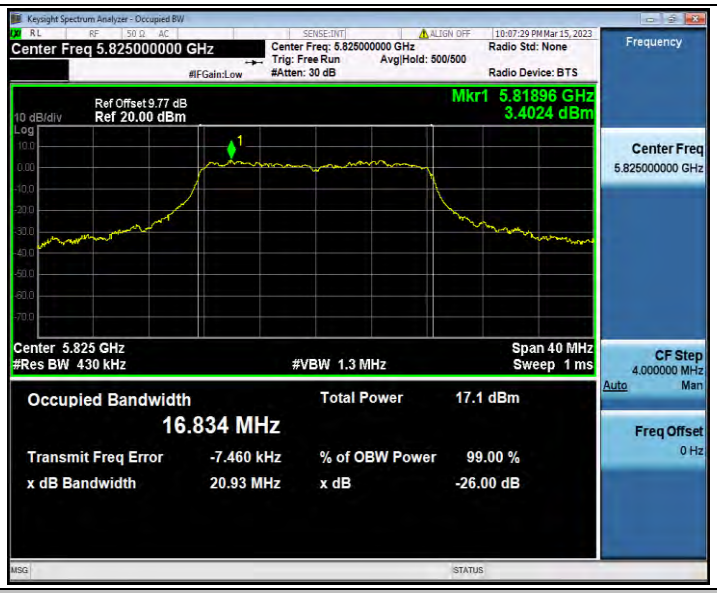
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.855	5736.589	5753.444	---	---
		5785	16.801	5776.582	5793.383	---	---
		5825	16.834	5816.576	5833.410	---	---
11N20SISO	Ant1	5745	17.924	5736.043	5753.967	---	---
		5785	18.032	5775.910	5793.942	---	---
		5825	17.833	5816.057	5833.890	---	---
11N40SISO	Ant1	5755	36.339	5736.818	5773.157	---	---
		5795	36.485	5776.812	5813.297	---	---
11AC20SISO	Ant1	5745	17.893	5735.927	5753.820	---	---
		5785	17.985	5775.995	5793.980	---	---
		5825	17.887	5815.958	5833.845	---	---
11AC40SISO	Ant1	5755	36.446	5736.803	5773.249	---	---
		5795	36.459	5776.705	5813.164	---	---
11AC80SISO	Ant1	5775	76.136	5736.872	5813.008	---	---

Test Graphs

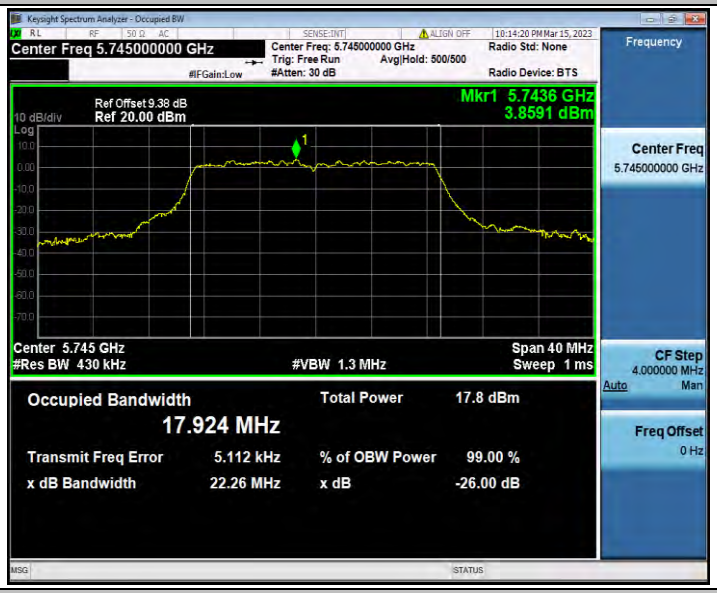
11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825

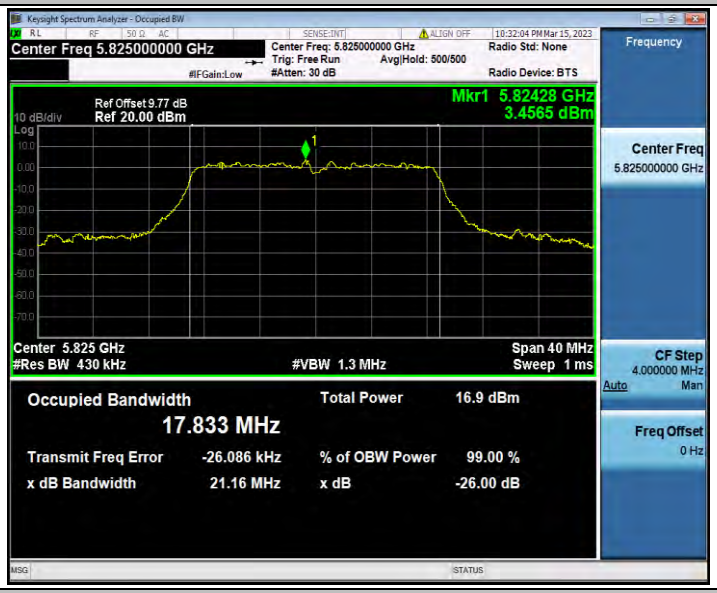


11N20SISO_Ant1_5745

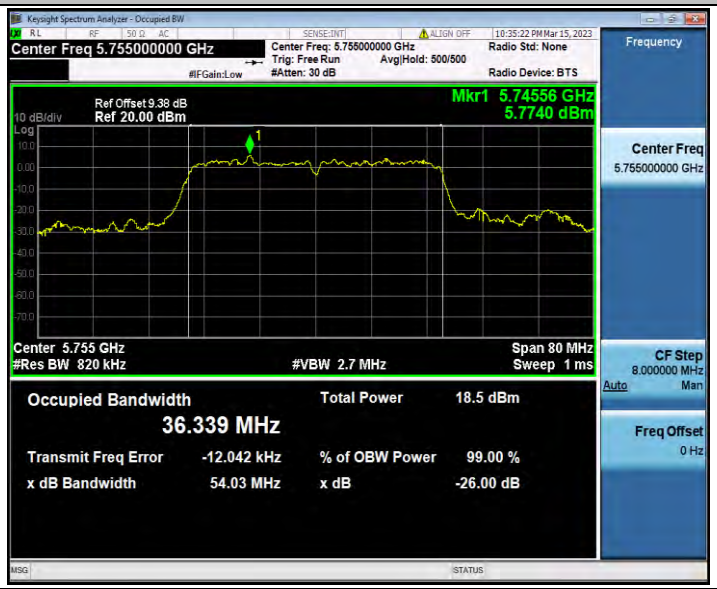


11N20SISO_Ant1_5785

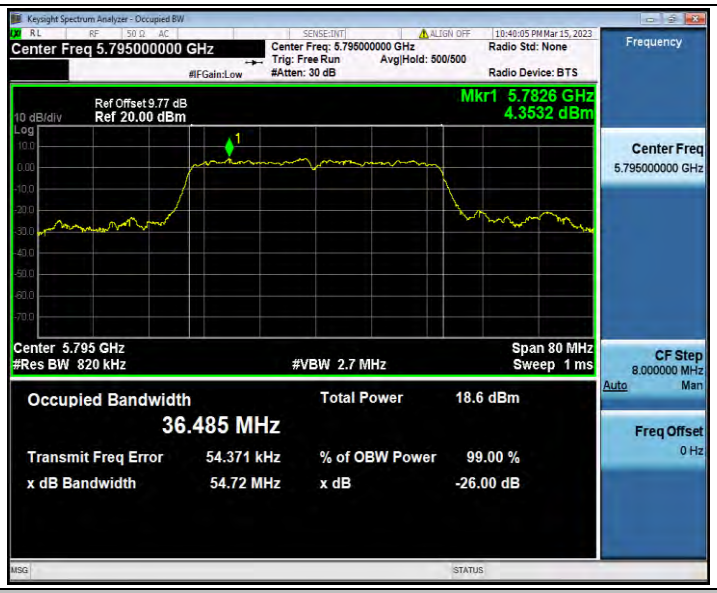
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



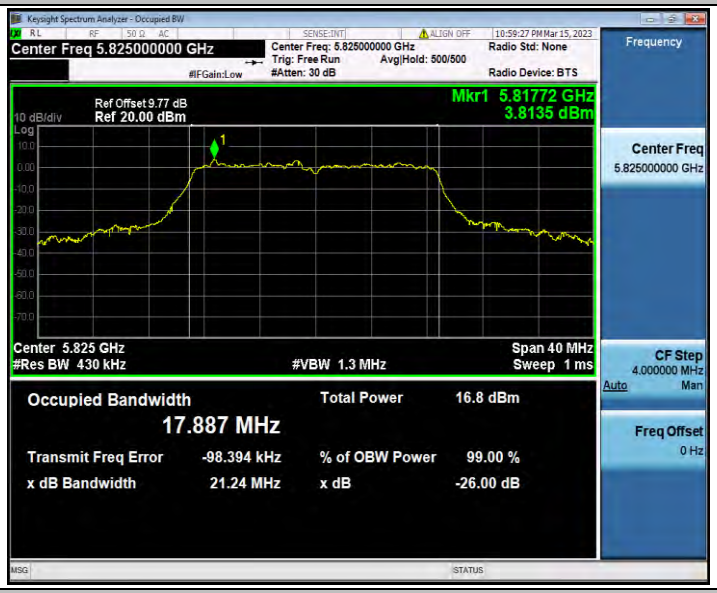
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5775

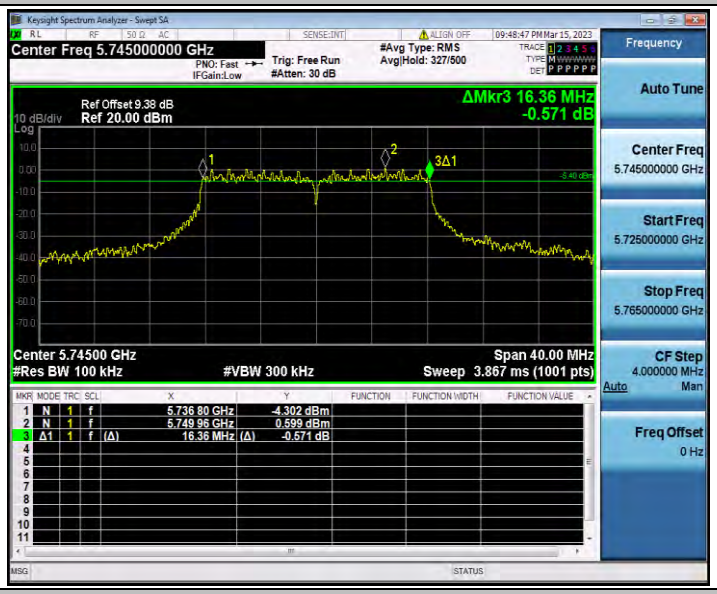
Appendix D.2: Min emission bandwidth

Test Result B4

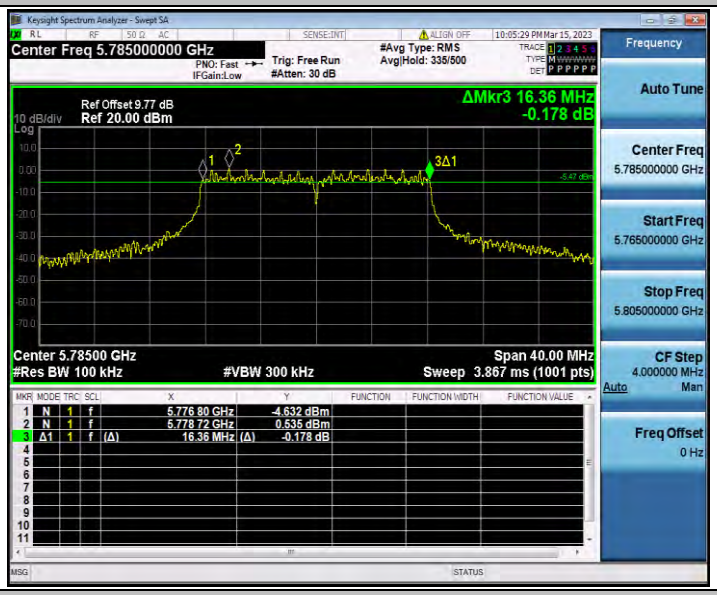
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.360	5736.800	5753.160	0.5	PASS
		5785	16.360	5776.800	5793.160	0.5	PASS
		5825	16.320	5816.760	5833.080	0.5	PASS
11N20SISO	Ant1	5745	17.560	5736.200	5753.760	0.5	PASS
		5785	17.560	5776.120	5793.680	0.5	PASS
		5825	17.200	5816.160	5833.360	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.360	5777.400	5812.760	0.5	PASS
11AC20SISO	Ant1	5745	17.320	5736.160	5753.480	0.5	PASS
		5785	17.360	5776.440	5793.800	0.5	PASS
		5825	16.680	5816.560	5833.240	0.5	PASS
11AC40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

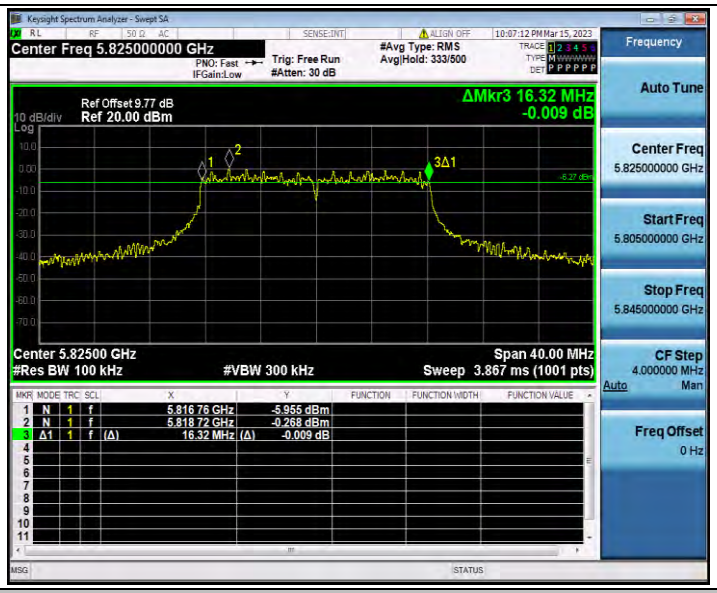
11A_Ant1_5745



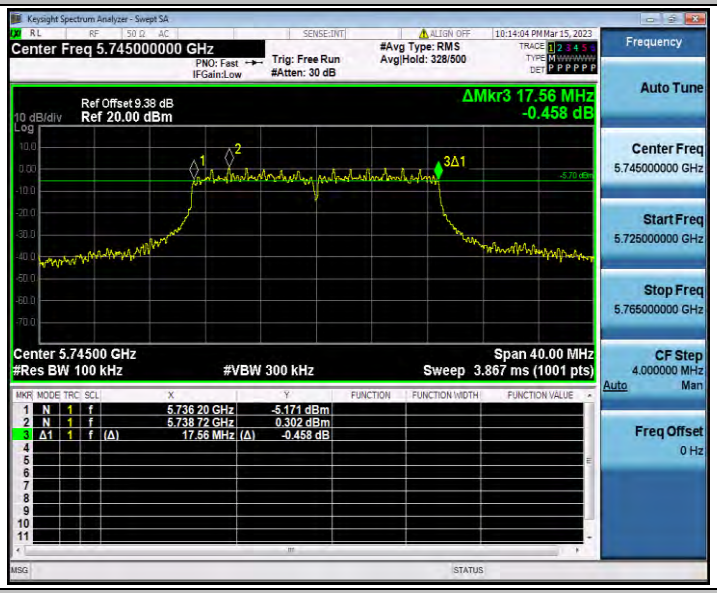
11A_Ant1_5785



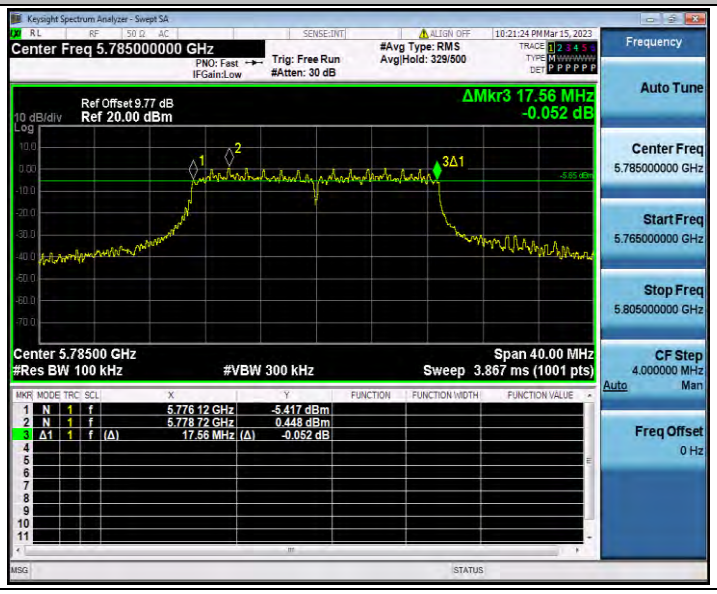
11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



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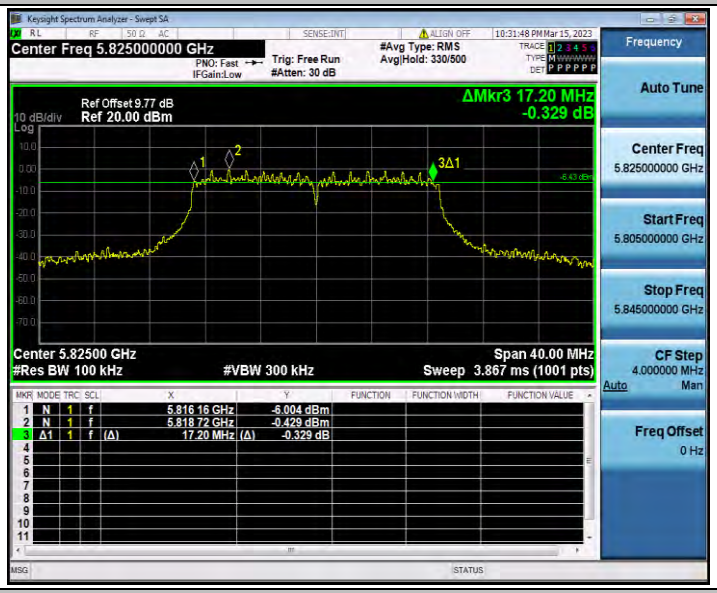
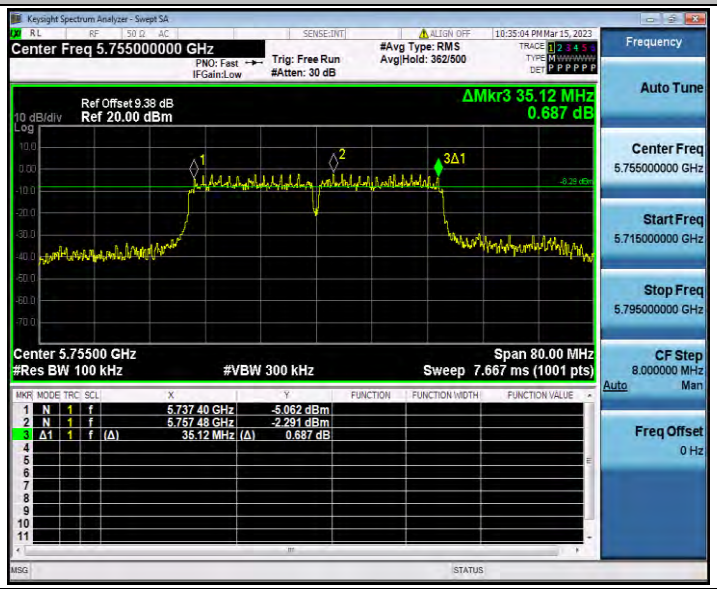
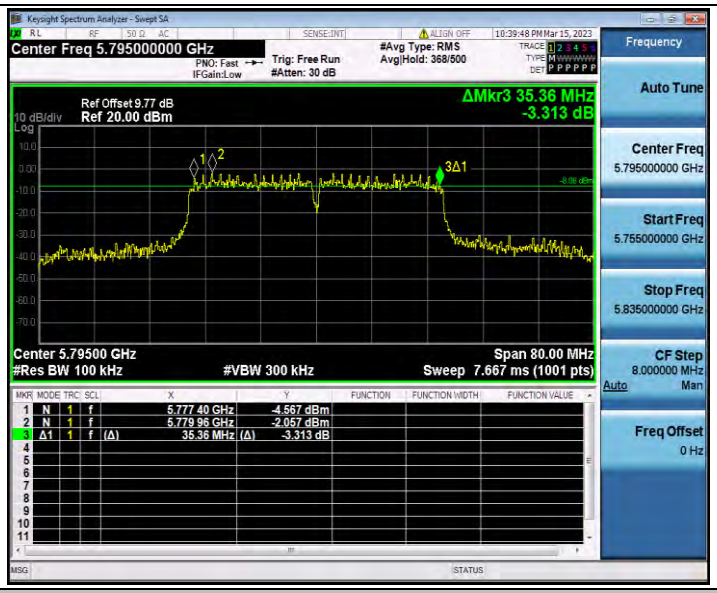
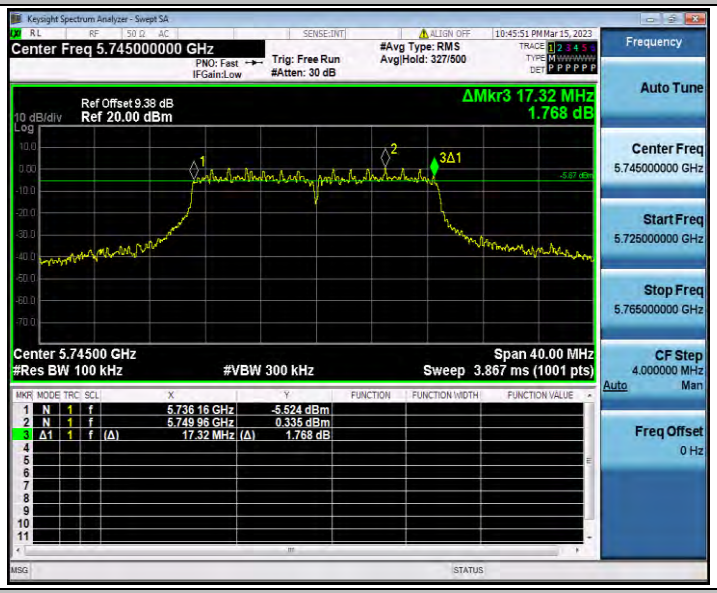


11N40SISO_Ant1_5755


11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



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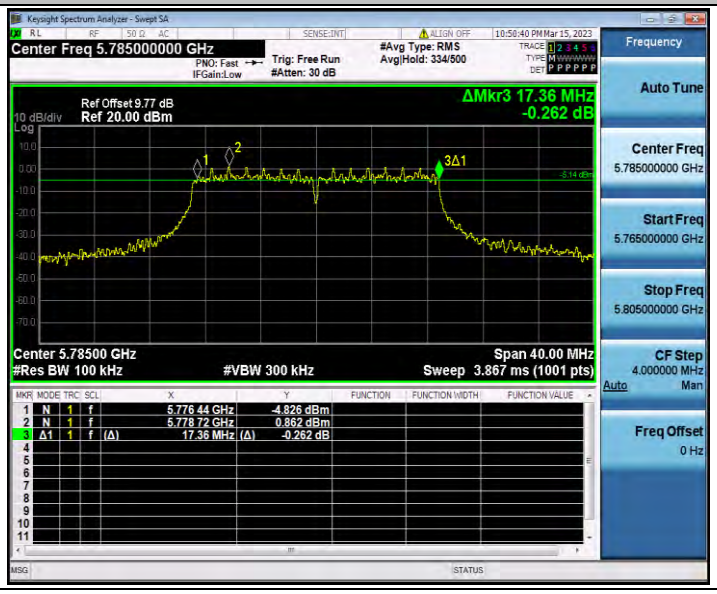

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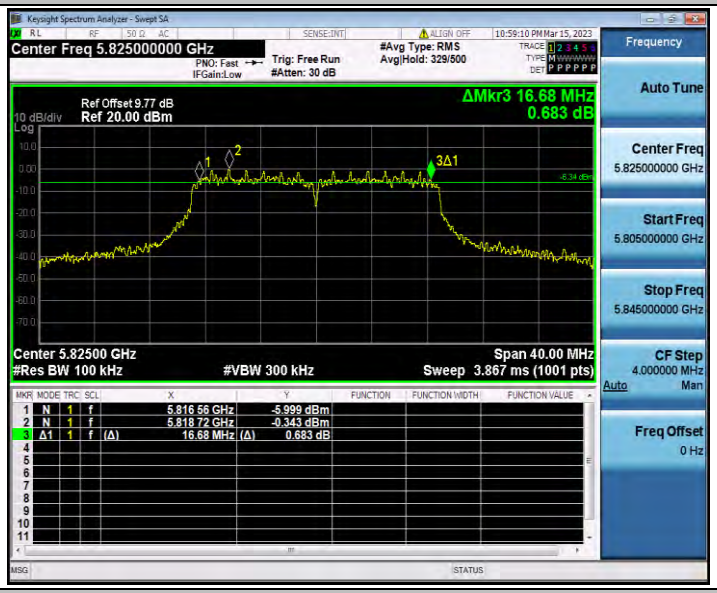

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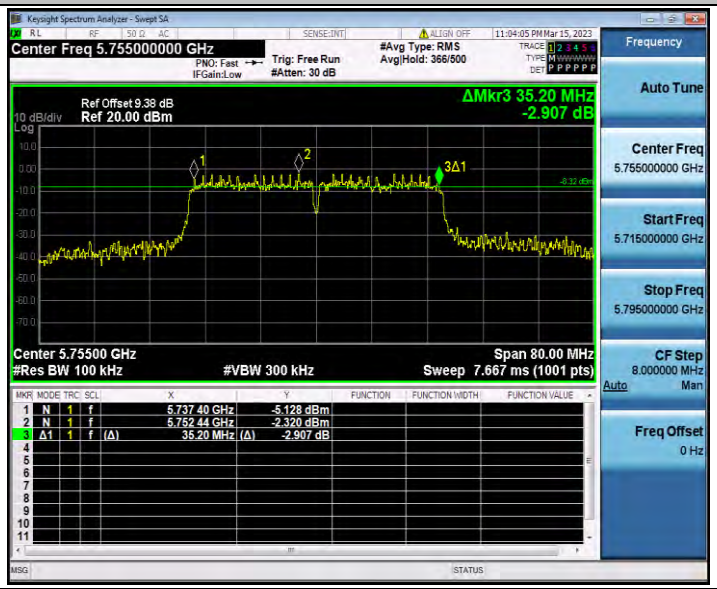
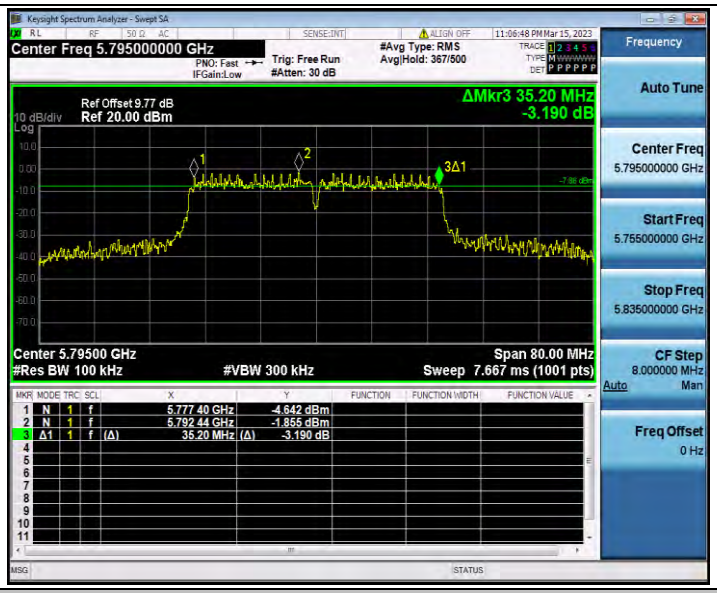
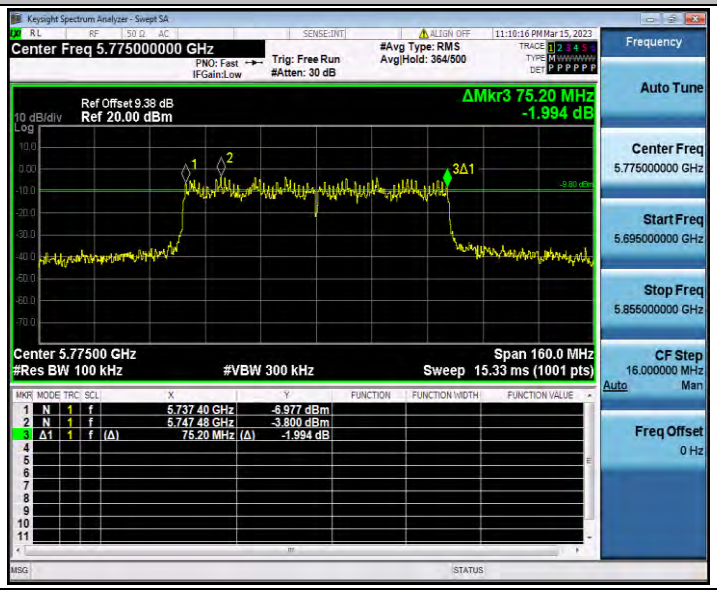


11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



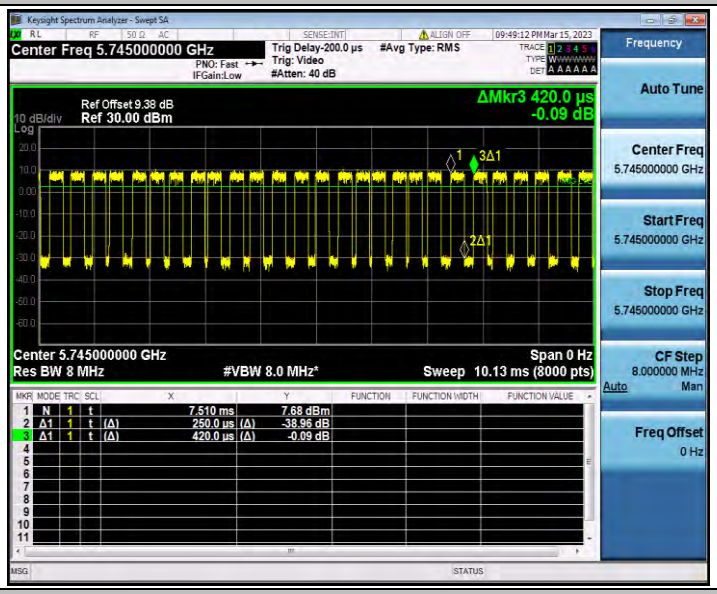
Appendix D.3: Duty Cycle

Test Result

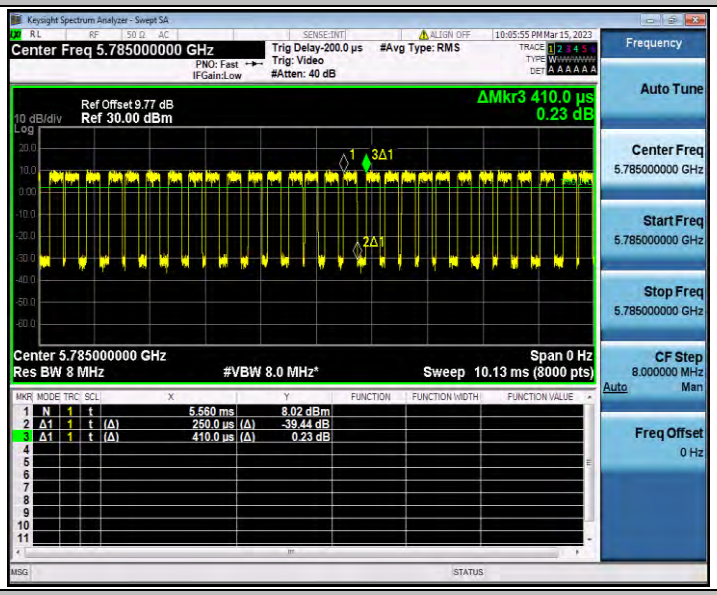
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	0.25	0.42	59.52
		5785	0.25	0.41	60.98
		5825	0.25	0.42	59.52
11N20SISO	Ant1	5745	0.22	0.40	55.00
		5785	0.23	0.41	56.10
		5825	0.23	0.39	58.97
11N40SISO	Ant1	5755	0.13	0.30	43.33
		5795	0.13	0.30	43.33
11AC20SISO	Ant1	5745	0.20	0.37	54.05
		5785	0.20	0.37	54.05
		5825	0.20	0.37	54.05
11AC40SISO	Ant1	5755	0.11	0.28	39.29
		5795	0.11	0.28	39.29
11AC80SISO	Ant1	5775	0.07	0.24	29.17

Test Graphs

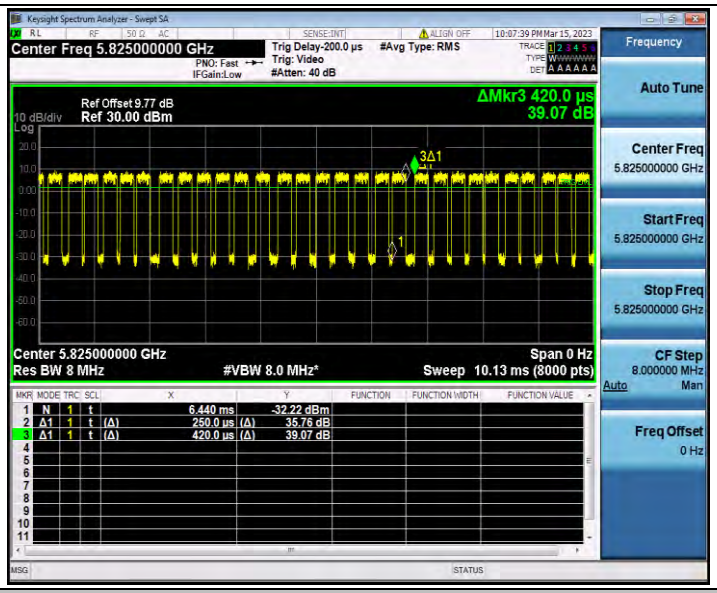
11A_Ant1_5745



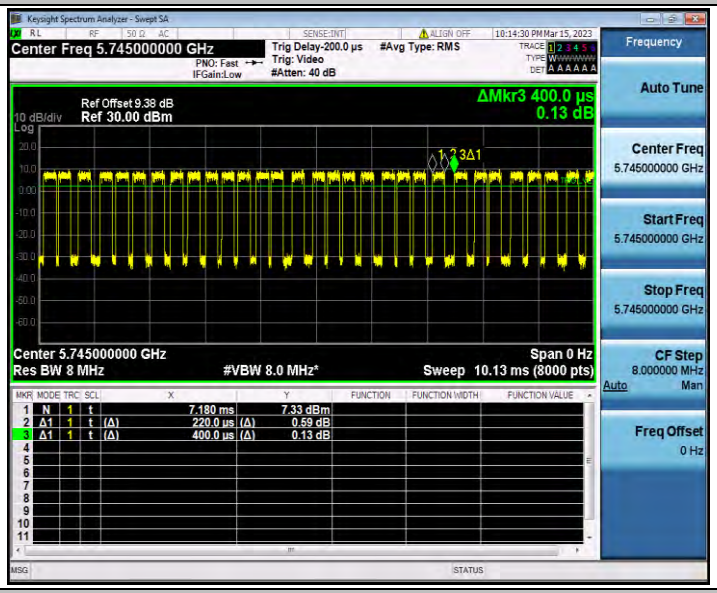
11A_Ant1_5785



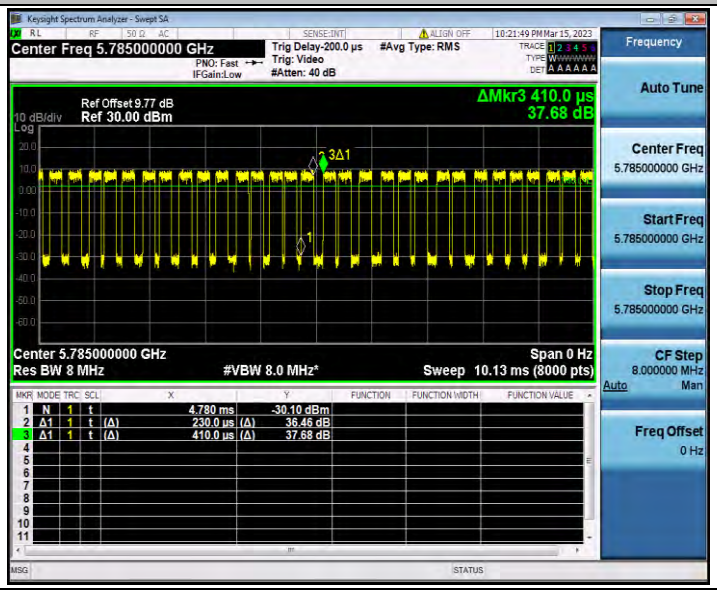
11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



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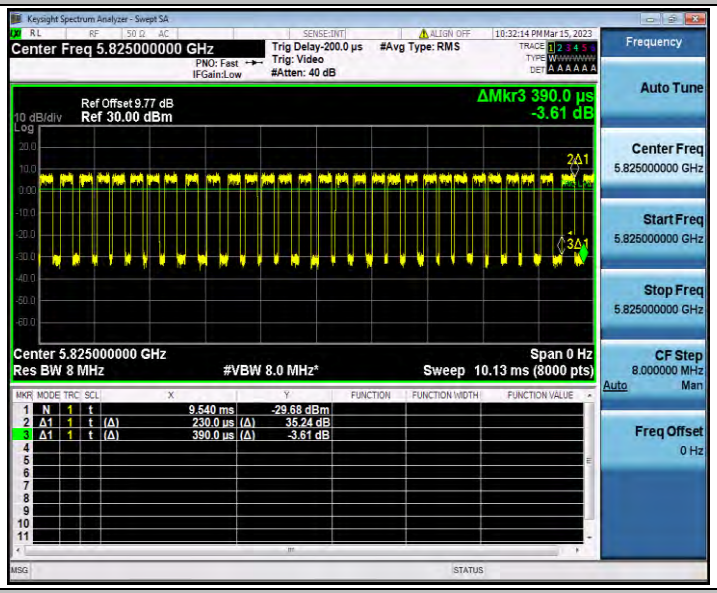
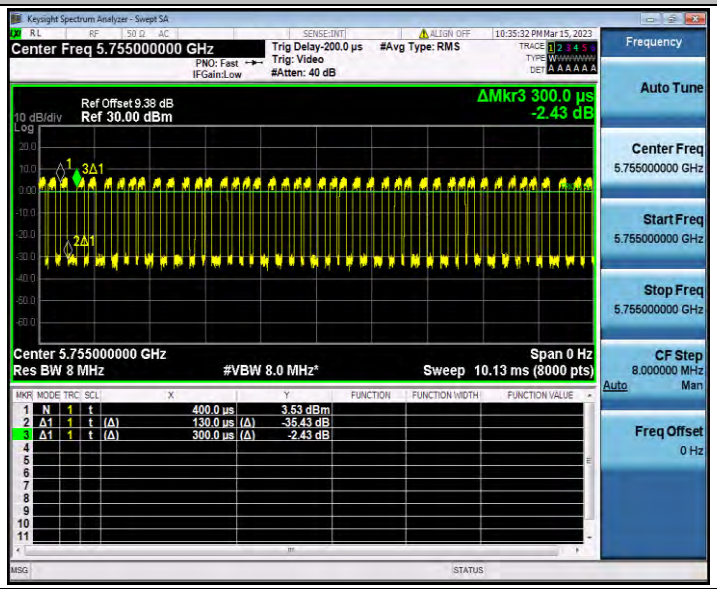
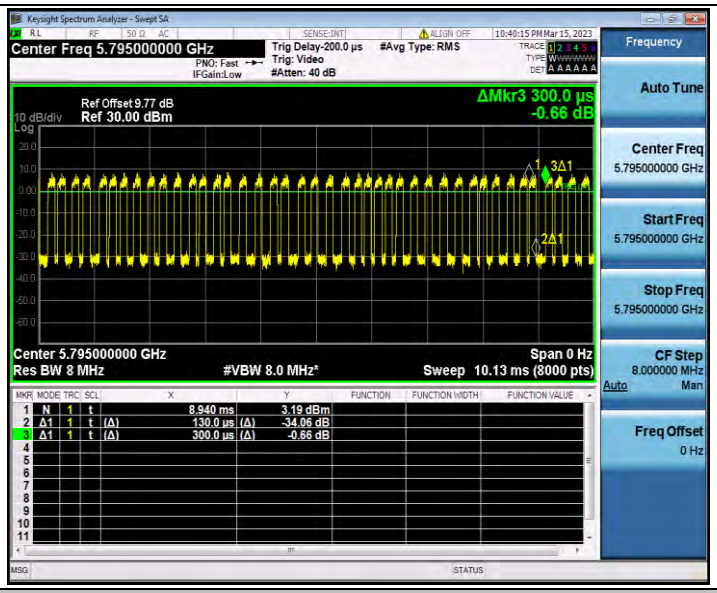
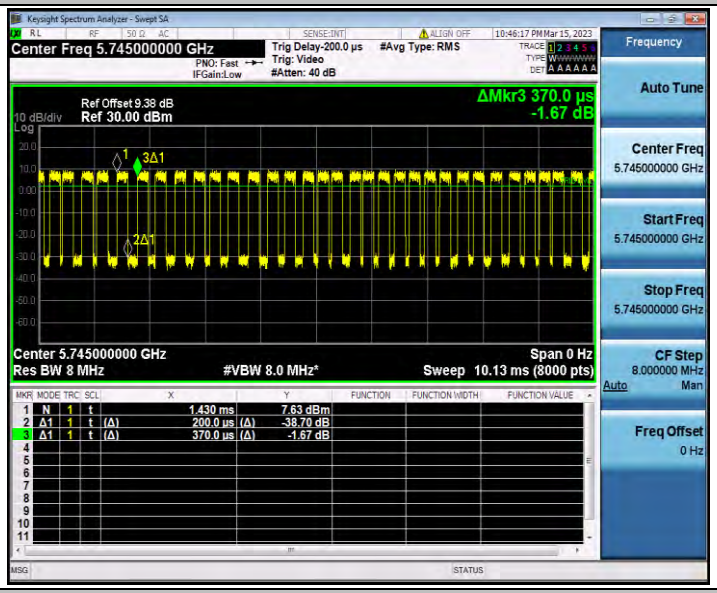

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



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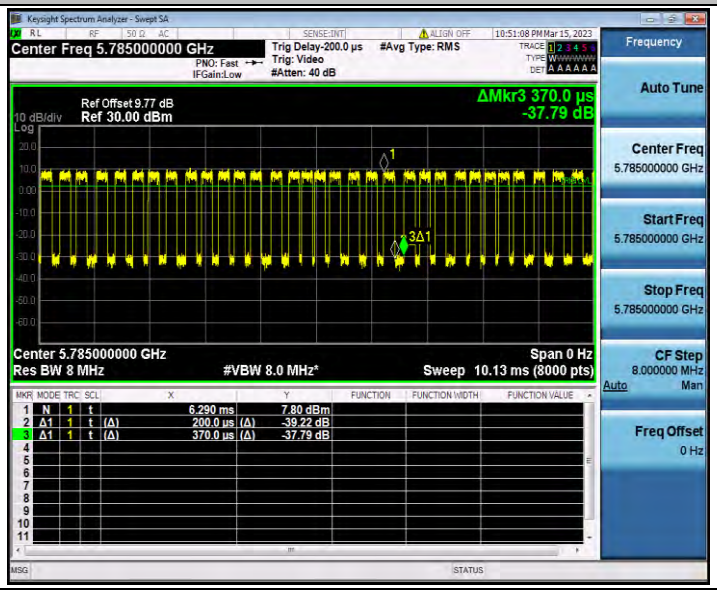
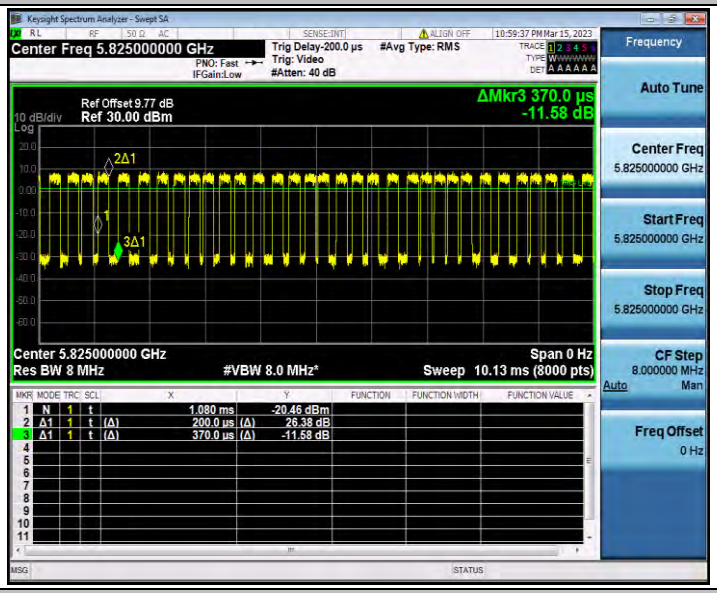
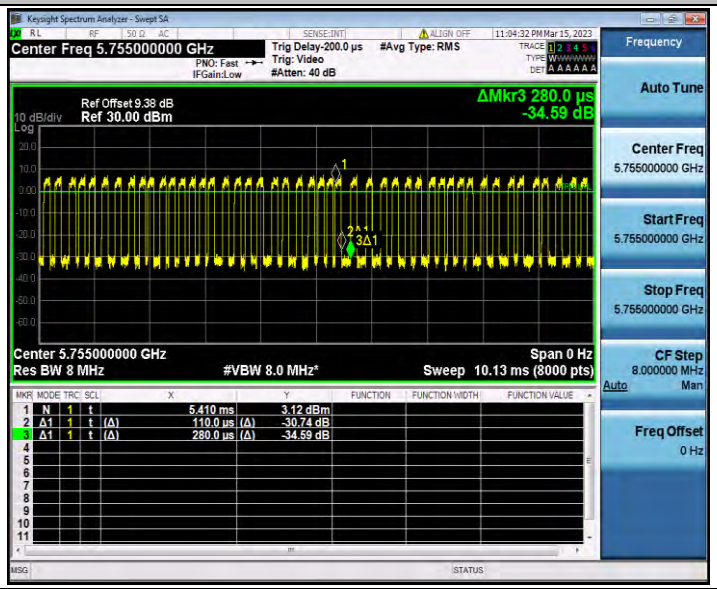
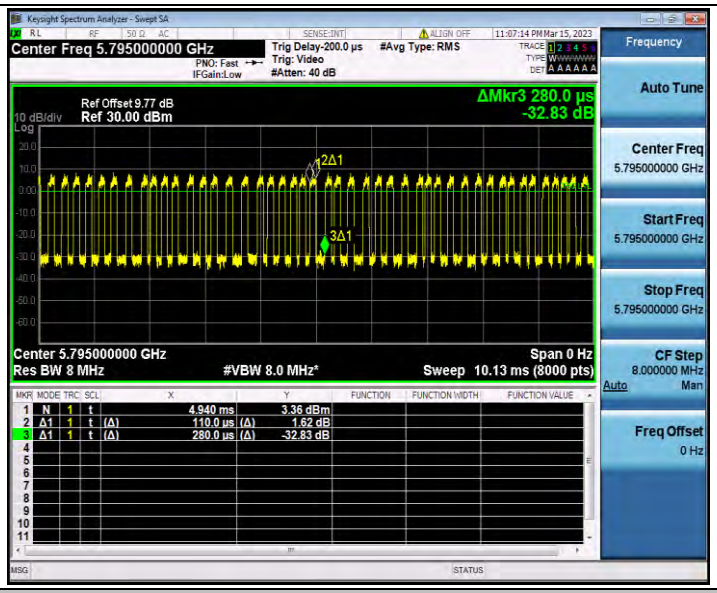


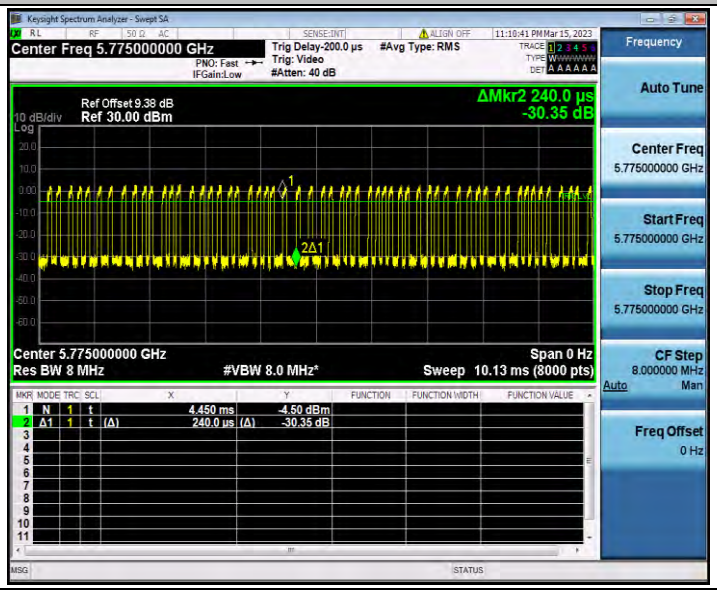
11AC20SISO_Ant1_5825


11AC40SISO_Ant1_5755


11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	9.64	59.52	2.25	11.89	≤30.00	PASS
		5785	9.62	60.98	2.15	11.77	≤30.00	PASS
		5825	8.76	59.52	2.25	11.01	≤30.00	PASS
11N20SISO	Ant1	5745	9.57	55.00	2.60	12.17	≤30.00	PASS
		5785	9.59	56.10	2.51	12.10	≤30.00	PASS
		5825	8.49	58.97	2.29	10.78	≤30.00	PASS
11N40SISO	Ant1	5755	8.48	43.33	3.63	12.11	≤30.00	PASS
		5795	8.68	43.33	3.63	12.31	≤30.00	PASS
11AC20SISO	Ant1	5745	9.09	54.05	2.67	11.76	≤30.00	PASS
		5785	9.58	54.05	2.67	12.25	≤30.00	PASS
		5825	8.35	54.05	2.67	11.02	≤30.00	PASS
11AC40SISO	Ant1	5755	8.30	39.29	4.06	12.36	≤30.00	PASS
		5795	8.59	39.29	4.06	12.65	≤30.00	PASS
11AC80SISO	Ant1	5775	7.46	29.17	5.35	12.81	≤30.00	PASS

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

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-1.33	≤30.00	PASS
		5785	-1.51	≤30.00	PASS
		5825	-2.39	≤30.00	PASS
11N20SISO	Ant1	5745	-1.16	≤30.00	PASS
		5785	-1.26	≤30.00	PASS
		5825	-2.89	≤30.00	PASS
11N40SISO	Ant1	5755	-3.59	≤30.00	PASS
		5795	-3.36	≤30.00	PASS
11AC20SISO	Ant1	5745	-1.33	≤30.00	PASS
		5785	-0.6	≤30.00	PASS
		5825	-2.14	≤30.00	PASS
11AC40SISO	Ant1	5755	-2.95	≤30.00	PASS
		5795	-2.83	≤30.00	PASS
11AC80SISO	Ant1	5775	-4.29	≤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

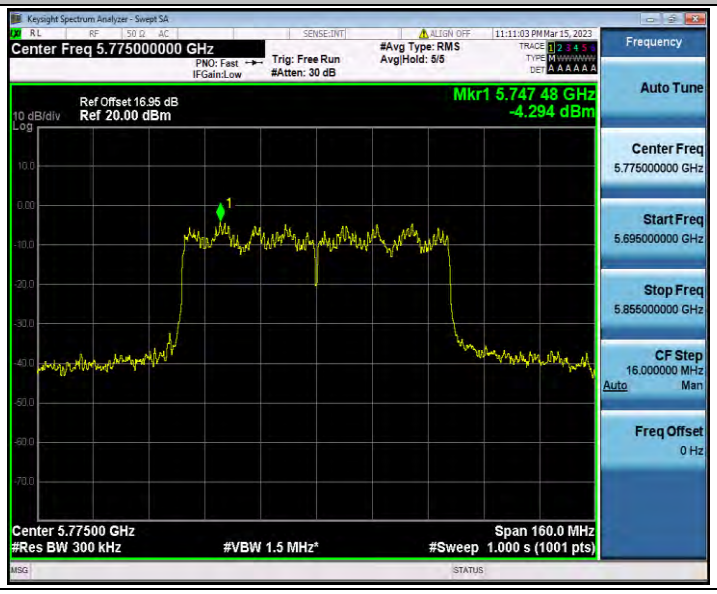
11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5775



Appendix D.6: Band edge measurements

Test Result B4

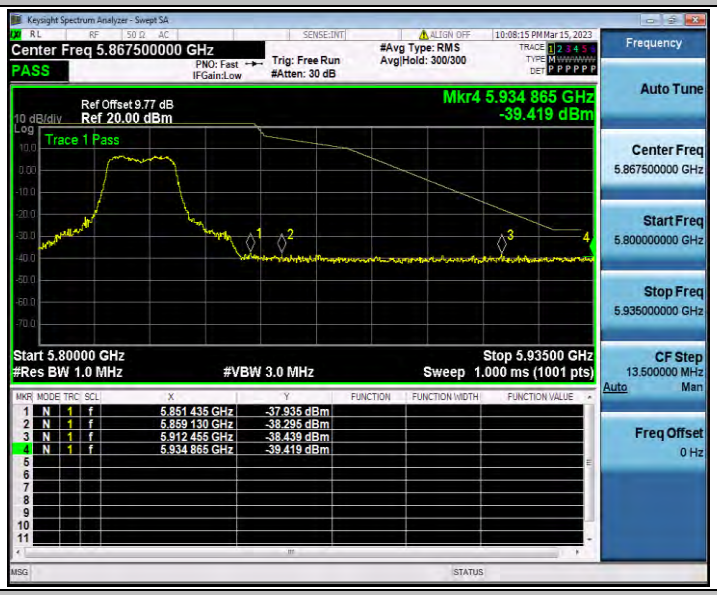
TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-38.64	≤8.70	PASS
				5700~5720	-32.94	≤15.59	PASS
				5720~5725	-27.29	≤25.52	PASS
				5760~5650	-40.49	≤-27	PASS
		High	5825	5850~5855	-37.94	≤18.87	PASS
				5855~5875	-38.3	≤11.16	PASS
				5875~5925	-38.44	≤0.72	PASS
				5925~5935	-39.42	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-39.32	≤5.47	PASS
				5700~5720	-33.6	≤14.73	PASS
				5720~5725	-29.52	≤24.99	PASS
				5760~5650	-40.15	≤-27	PASS
		High	5825	5850~5855	-37.97	≤15.79	PASS
				5855~5875	-37.98	≤10.36	PASS
				5875~5925	-38.14	≤-9.47	PASS
				5925~5935	-39.62	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-33.8	≤9.36	PASS
				5700~5720	-24.66	≤15.05	PASS
				5720~5725	-25.87	≤16.97	PASS
				5780~5650	-40.83	≤-27	PASS
		High	5795	5850~5855	-37.86	≤22.05	PASS
				5855~5875	-37.28	≤10.09	PASS
				5875~5925	-38.53	≤-2.38	PASS
				5925~5935	-39.06	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-38.46	≤9.47	PASS
				5700~5720	-33.24	≤15.11	PASS
				5720~5725	-29.96	≤21.32	PASS
				5760~5650	-40.37	≤-27	PASS
		High	5825	5850~5855	-36.27	≤16.72	PASS
				5855~5875	-38.69	≤10.78	PASS
				5875~5925	-38.35	≤8.11	PASS
				5925~5935	-39	≤-27	PASS
11AC40SISO	Ant1	Low	5755	5650~5700	-34.61	≤9.46	PASS
				5700~5720	-27.12	≤15.47	PASS
				5720~5725	-24.21	≤22.51	PASS

				5780~5650	-39.84	≤-27	PASS
		High	5795	5850~5855	-37.44	≤18.67	PASS
				5855~5875	-37.87	≤10.96	PASS
				5875~5925	-38.43	≤8.24	PASS
				5925~5935	-39.21	≤-27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-28.16	≤-0.19	PASS
				5700~5720	-28.13	≤15.26	PASS
				5720~5725	-25.92	≤25.89	PASS
				5800~5650	-37.09	≤-27	PASS
		High	5775	5850~5855	-29.04	≤17.90	PASS
				5855~5875	-27.15	≤13.03	PASS
				5875~5925	-35.23	≤-24.63	PASS
				5925~5935	-39.35	≤-27	PASS

Test Graphs B4

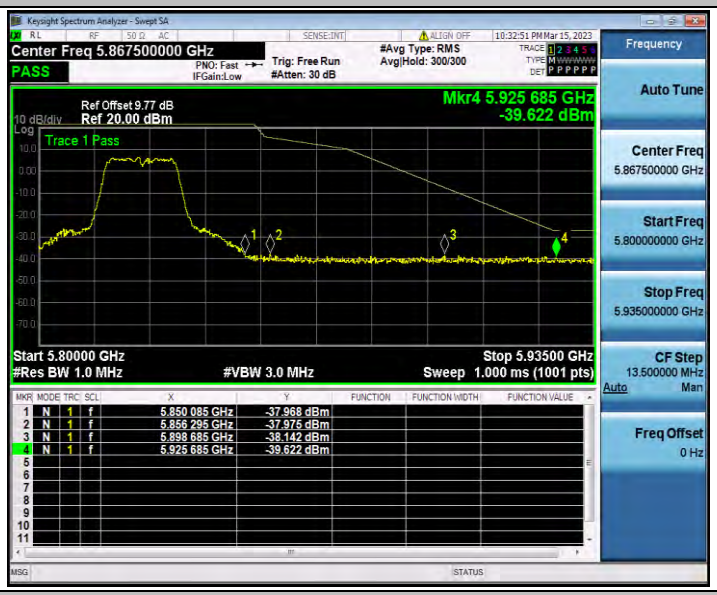
11A_Ant1_Low_5745

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 D.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5431.38	-41.03	≤-27	PASS
			5925~40000	24245.5	-32.87	≤-27	PASS
		5785	30~5650	2572.86	-39.57	≤-27	PASS
			5925~40000	24326.29	-32.25	≤-27	PASS
		5825	30~5650	5410.78	-38.5	≤-27	PASS
			5925~40000	25958.9	-32.73	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	2600.78	-40.26	≤-27	PASS
			5925~40000	24277.11	-32.18	≤-27	PASS
		5785	30~5650	5569.63	-40.57	≤-27	PASS
			5925~40000	24296.78	-31.73	≤-27	PASS
		5825	30~5650	2622.51	-40.57	≤-27	PASS
			5925~40000	24279.92	-32.41	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	3008.41	-40.9	≤-27	PASS
			5925~40000	24258.85	-32.58	≤-27	PASS
		5795	30~5650	3332.31	-40.97	≤-27	PASS
			5925~40000	26631.89	-31.95	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	904.66	-34.82	≤-27	PASS
			5925~40000	26053.73	-32.59	≤-27	PASS
		5785	30~5650	5476.72	-40.2	≤-27	PASS
			5925~40000	24308.02	-32.09	≤-27	PASS
		5825	30~5650	5441.5	-40.58	≤-27	PASS
			5925~40000	23533.87	-32.14	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5530.29	-40.3	≤-27	PASS
			5925~40000	24183.68	-32.27	≤-27	PASS
		5795	30~5650	5350.45	-40.98	≤-27	PASS
			5925~40000	23607.63	-30.92	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5631.27	-39.77	≤-27	PASS
			5925~40000	24296.78	-32.59	≤-27	PASS

Test Graphs

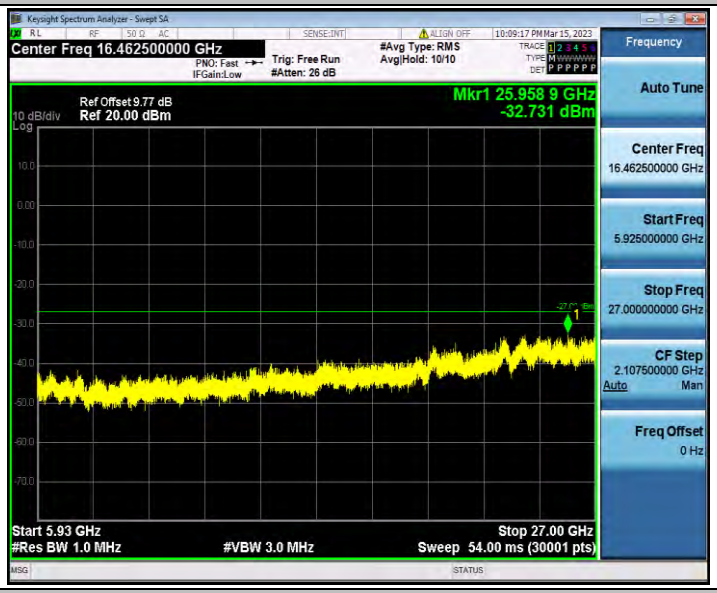
11A_Ant1_5745_30~5650

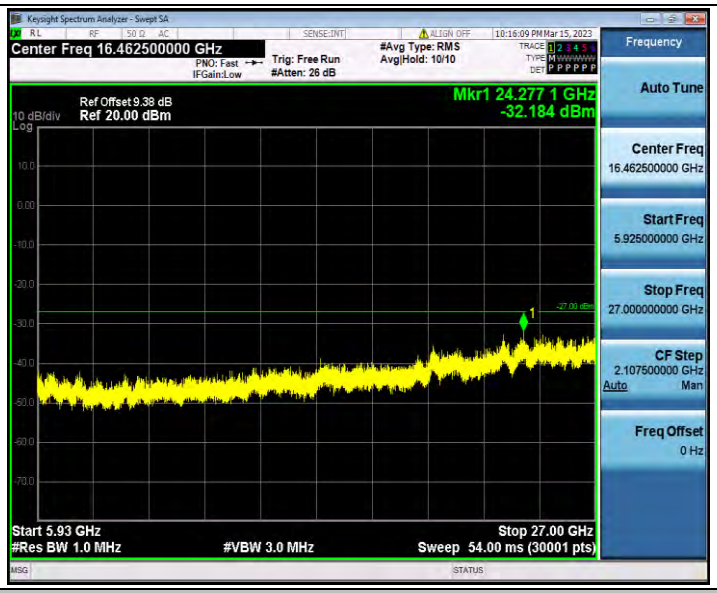
11A_Ant1_5745_5925~40000

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

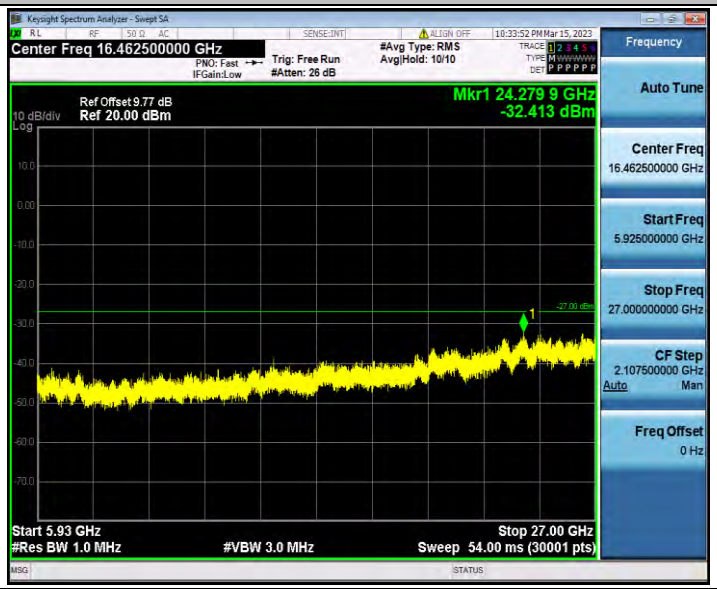


11N20SISO_Ant1_5785_30~5650

11N20SISO_Ant1_5785_5925~40000

11N20SISO_Ant1_5825_30~5650

11N20SISO_Ant1_5825_5925~40000

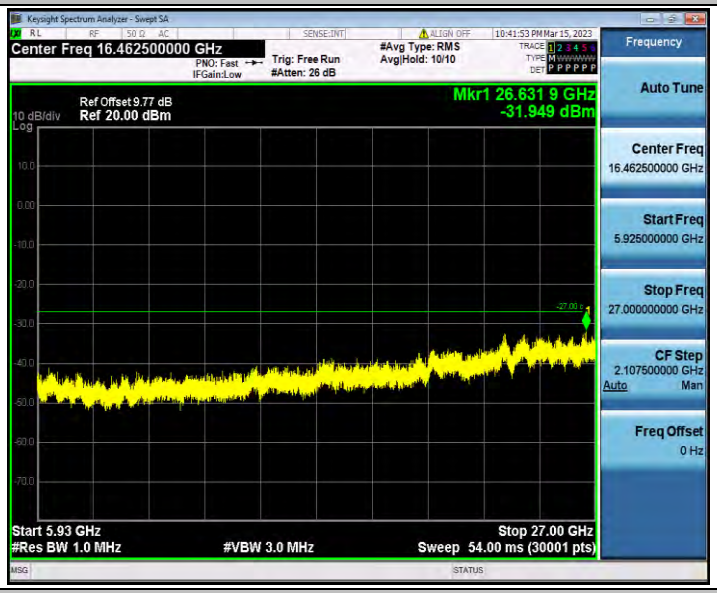


11N40SISO_Ant1_5755_30~5650

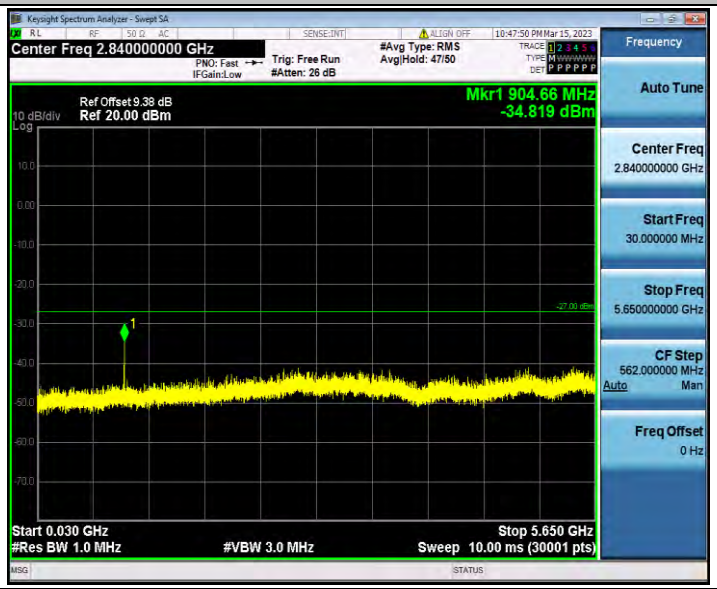
11N40SISO_Ant1_5755_5925~40000

11N40SISO_Ant1_5795_30~5650

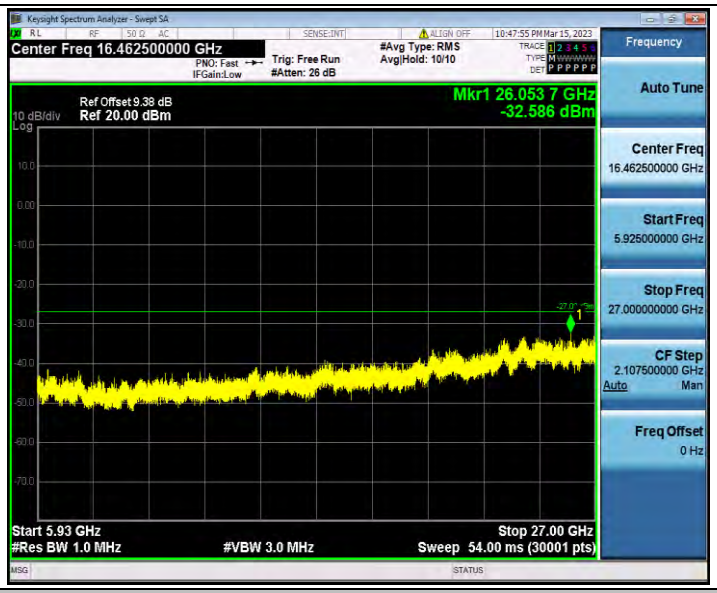
11N40SISO_Ant1_5795_5925~40000



11AC20SISO_Ant1_5745_30~5650

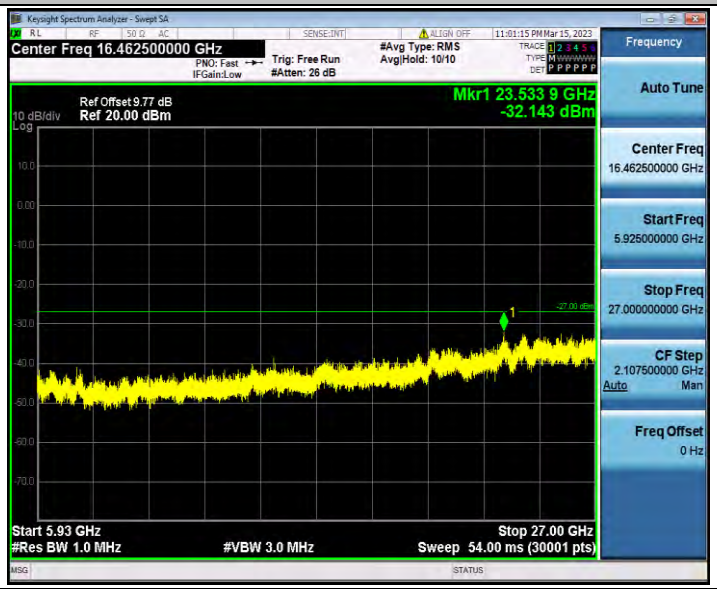


11AC20SISO_Ant1_5745_5925~40000

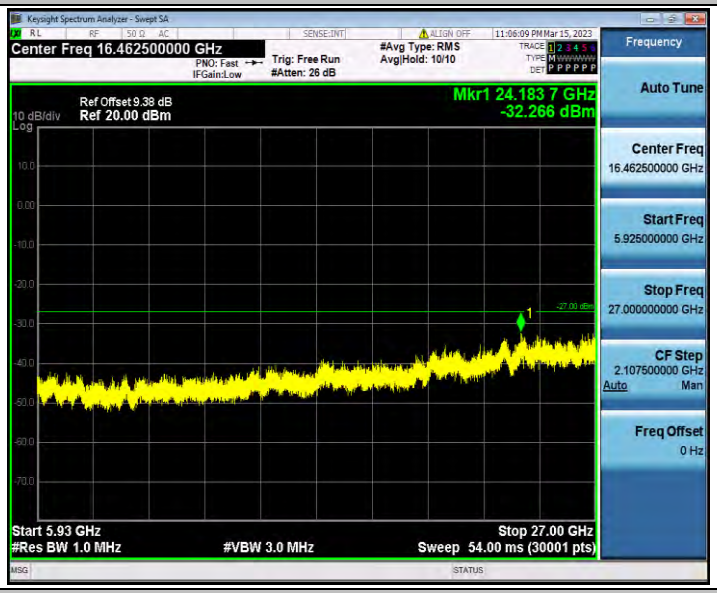


11AC20SISO_Ant1_5785_30~5650

11AC20SISO_Ant1_5785_5925~40000

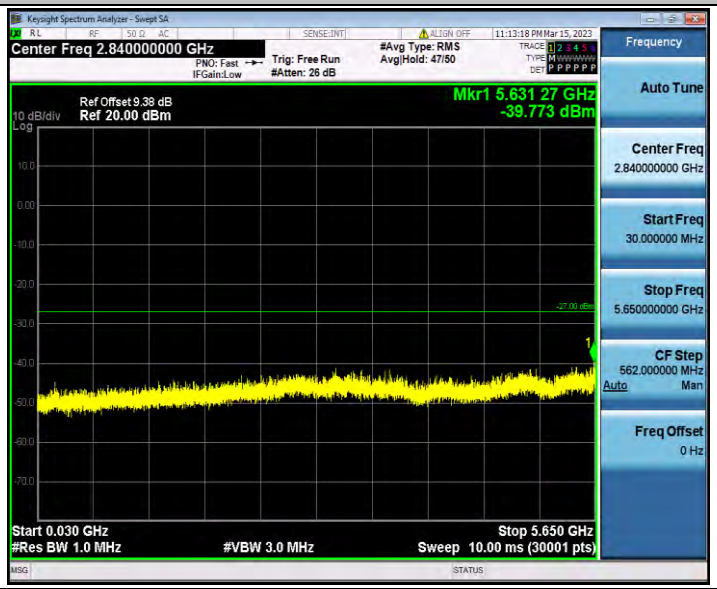
11AC20SISO_Ant1_5825_30~5650
11AC20SISO_Ant1_5825_5925~40000

11AC40SISO_Ant1_5755_30~5650

11AC40SISO_Ant1_5755_5925~40000

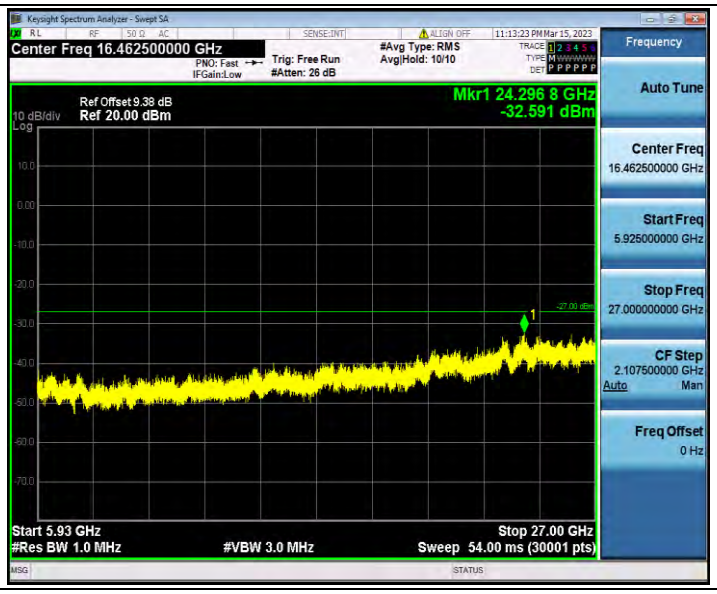


11AC40SISO_Ant1_5795_30~5650

11AC40SISO_Ant1_5795_5925~40000

11AC80SISO_Ant1_5775_30~5650


11AC80SISO_Ant1_5775_5925~40000


Keysight Spectrum Analyzer - Swept SA
Center Freq 16.462500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
#Avg Type: RMS
Avg|Hold: 10/10
11:13:23 PM Mar 15, 2023
Ref Offset 9.38 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 24.296 8 GHz
-32.591 dBm
Start 5.93 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 27.00 GHz
Sweep 54.00 ms (30001 pts)
Frequency
Auto Tune
Center Freq
16.462500000 GHz
Start Freq
5.925000000 GHz
Stop Freq
27.000000000 GHz
CF Step
2.107500000 GHz
Auto
Man
Freq Offset
0 Hz