Case No. : GTS20230203009-1-13	
Ambient Condition: 23 ℃, 50 %RH, Atmos100.1Kpa,	
Test Date: 2023.3.21	**Test Engineer:** Jenny zeng

Appendix E.1: Occupied channel bandwidth

Test Result

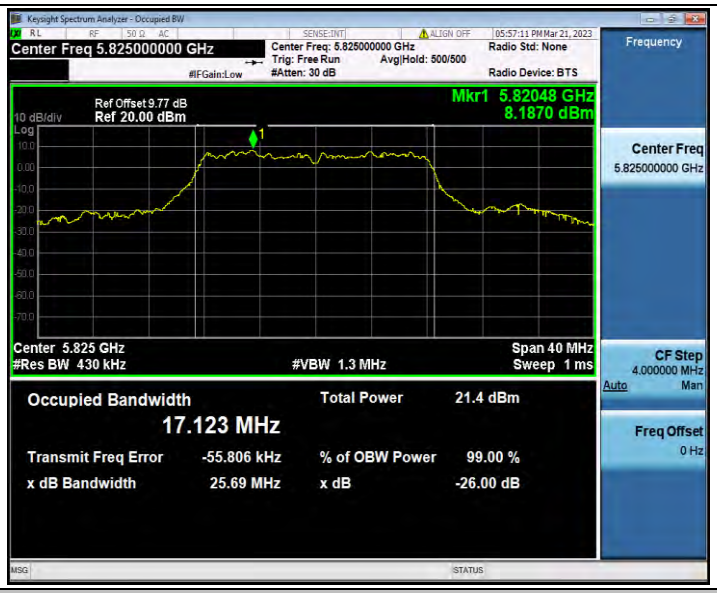
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.928	5736.532	5753.460	---	---
		5785	17.065	5776.497	5793.562	---	---
		5825	17.123	5816.383	5833.506	---	---
11N20SISO	Ant1	5745	18.109	5735.951	5754.060	---	---
		5785	18.024	5775.986	5794.010	---	---
		5825	18.091	5815.921	5834.012	---	---
11N40SISO	Ant1	5755	37.089	5736.665	5773.754	---	---
		5795	37.246	5776.702	5813.948	---	---
11AC20SISO	Ant1	5745	17.914	5736.037	5753.951	---	---
		5785	18.086	5775.965	5794.051	---	---
		5825	17.994	5816.003	5833.997	---	---
11AC40SISO	Ant1	5755	36.474	5736.745	5773.219	---	---
		5795	36.522	5776.728	5813.250	---	---
11AC80SISO	Ant1	5775	76.626	5736.884	5813.510	---	---

Test Graphs

11A_Ant1_5745

11A_Ant1_5785

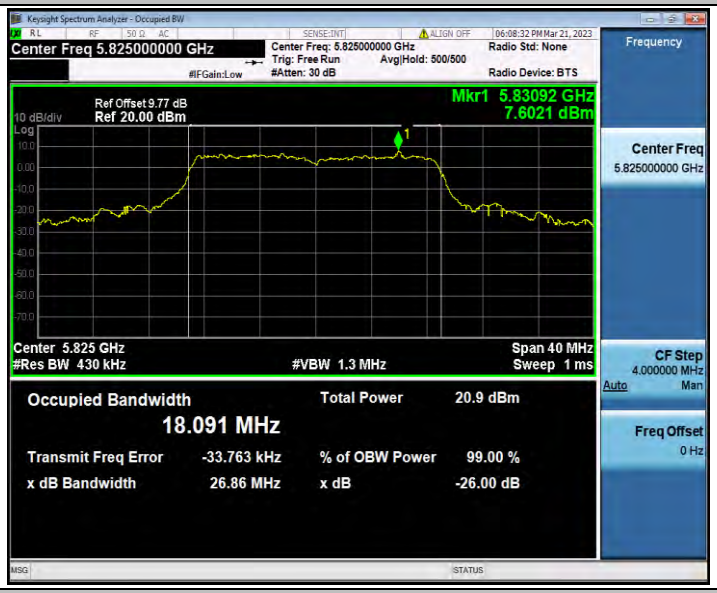
11A_Ant1_5825



11N20SISO_Ant1_5745

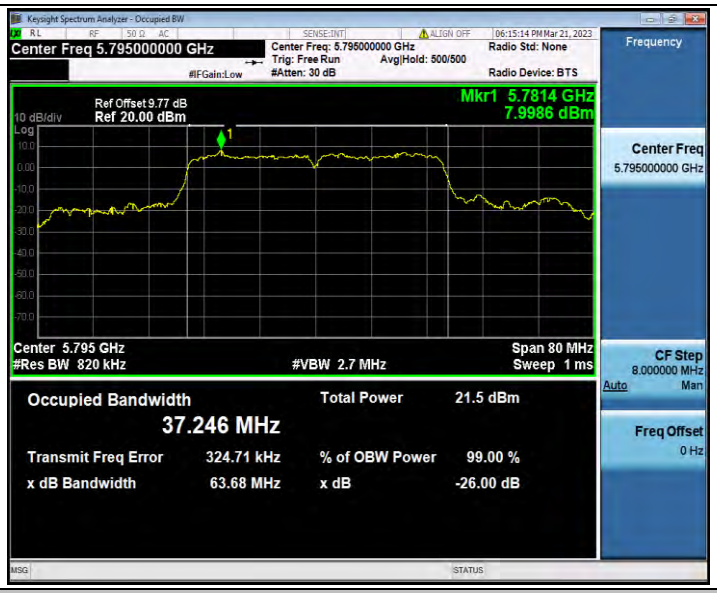
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

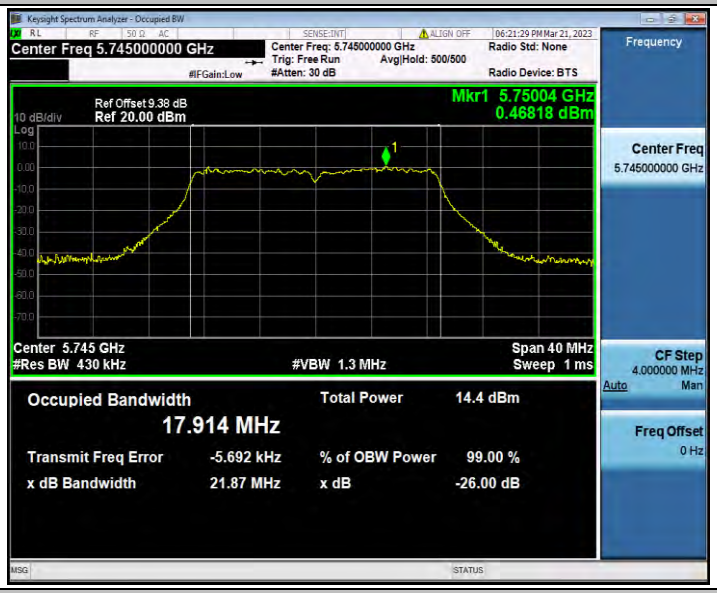


11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5775

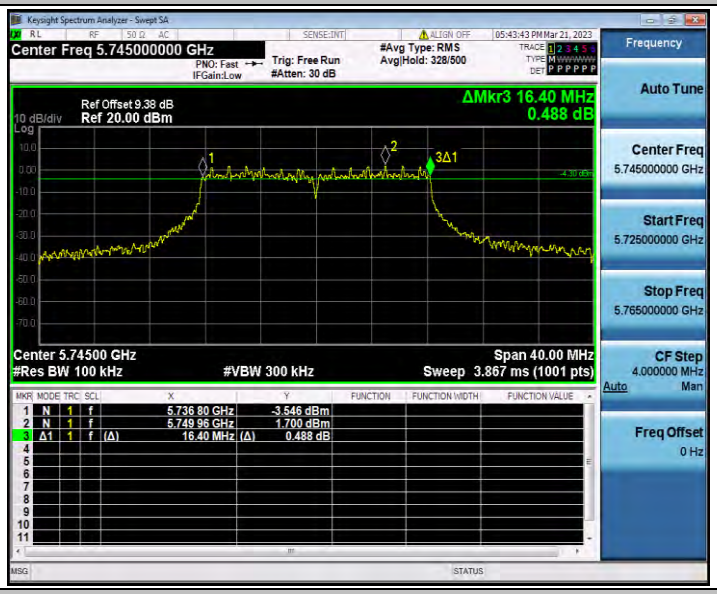
Appendix E.2: Min emission bandwidth

Test Result B4

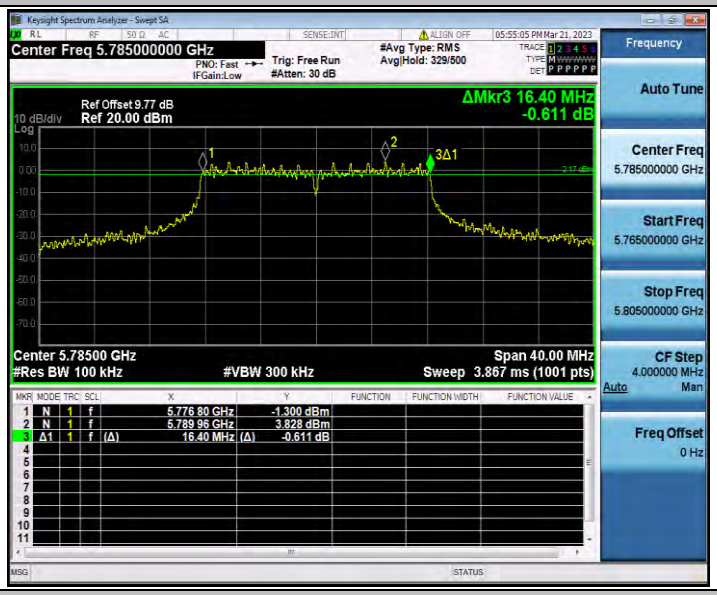
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.400	5736.800	5753.200	0.5	PASS
		5785	16.400	5776.800	5793.200	0.5	PASS
		5825	16.360	5816.800	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.560	5736.200	5753.760	0.5	PASS
		5785	17.640	5776.160	5793.800	0.5	PASS
		5825	16.840	5816.440	5833.280	0.5	PASS
11N40SISO	Ant1	5755	36.080	5736.760	5772.840	0.5	PASS
		5795	35.680	5777.080	5812.760	0.5	PASS
11AC20SISO	Ant1	5745	17.560	5736.200	5753.760	0.5	PASS
		5785	17.080	5776.760	5793.840	0.5	PASS
		5825	16.920	5816.840	5833.760	0.5	PASS
11AC40SISO	Ant1	5755	36.240	5736.760	5773.000	0.5	PASS
		5795	35.680	5777.400	5813.080	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

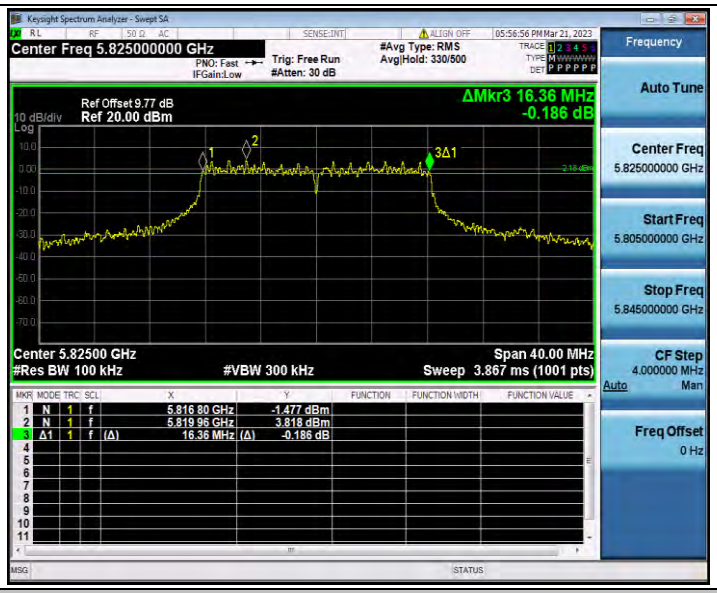
11A_Ant1_5745



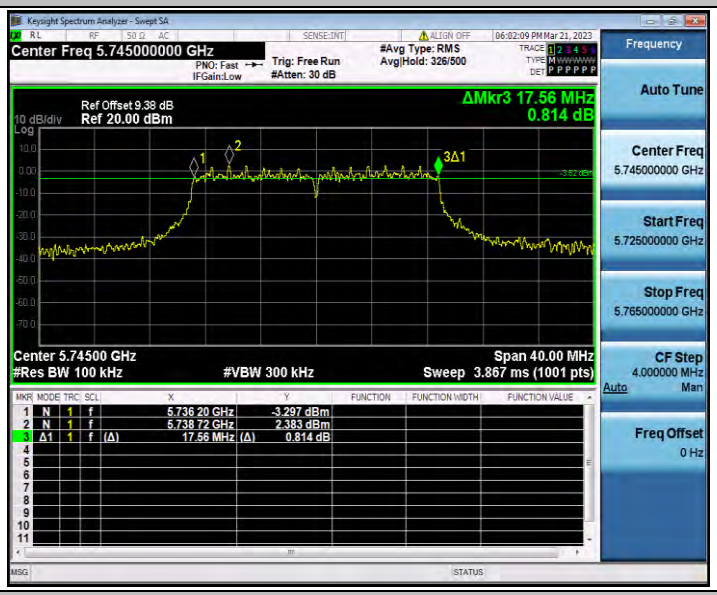
11A_Ant1_5785



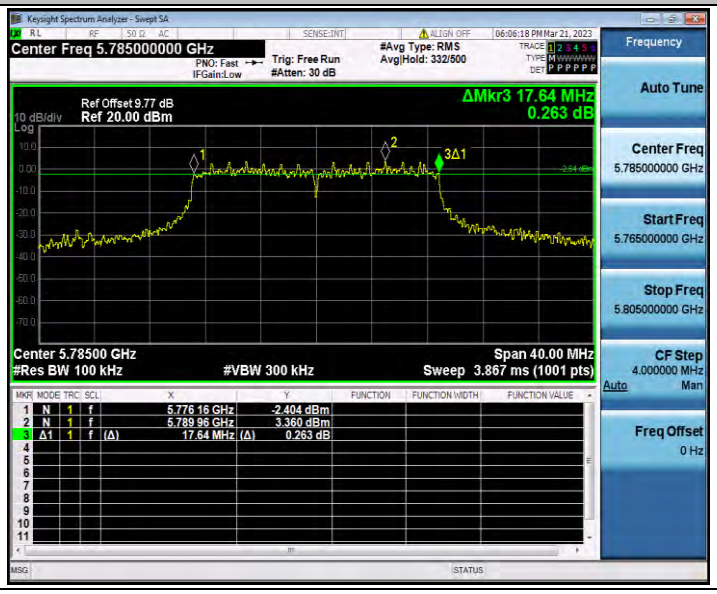
11A_Ant1_5825



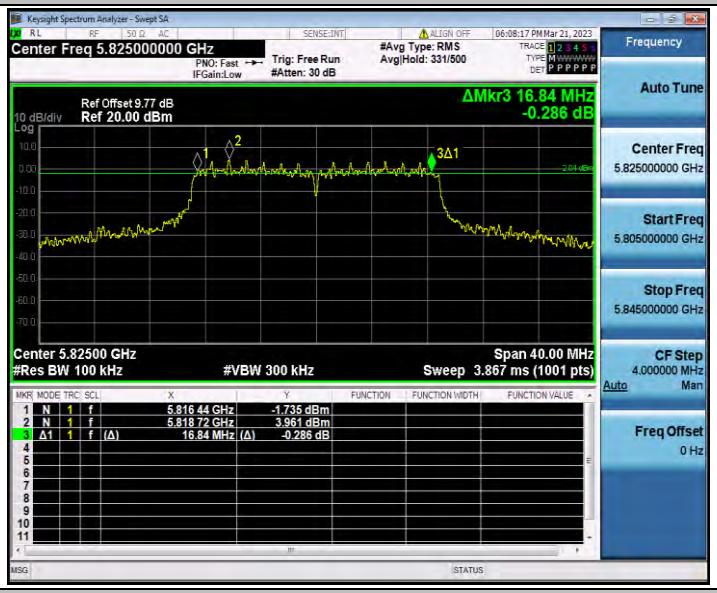
11N20SISO_Ant1_5745



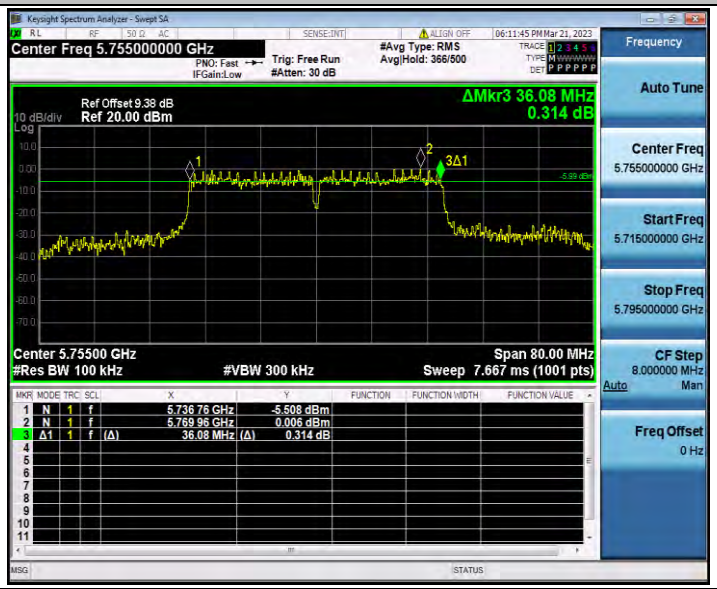
11N20SISO_Ant1_5785



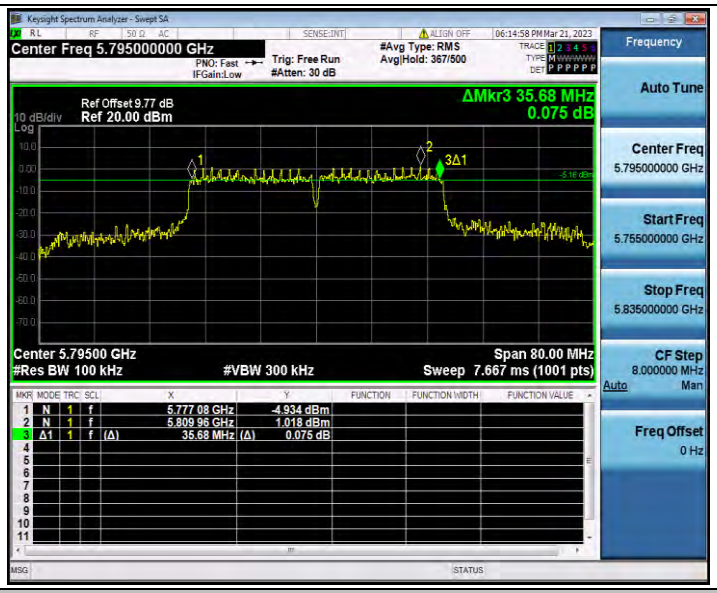
11N20SISO_Ant1_5825



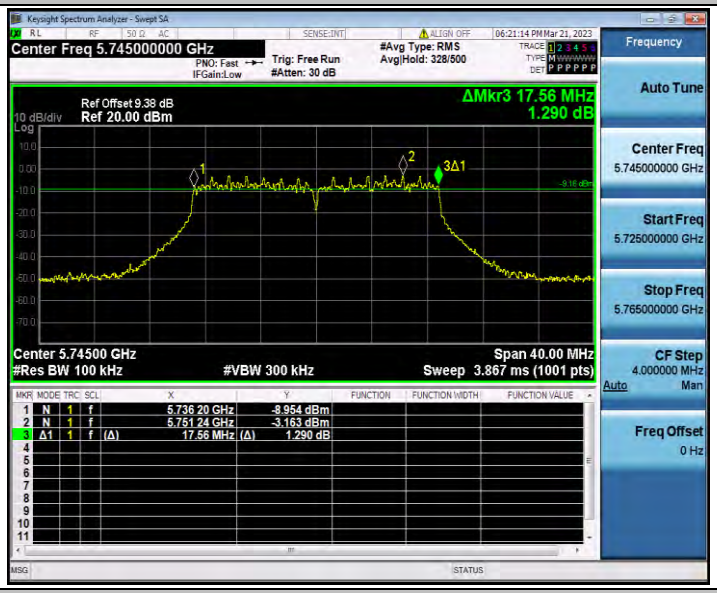
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



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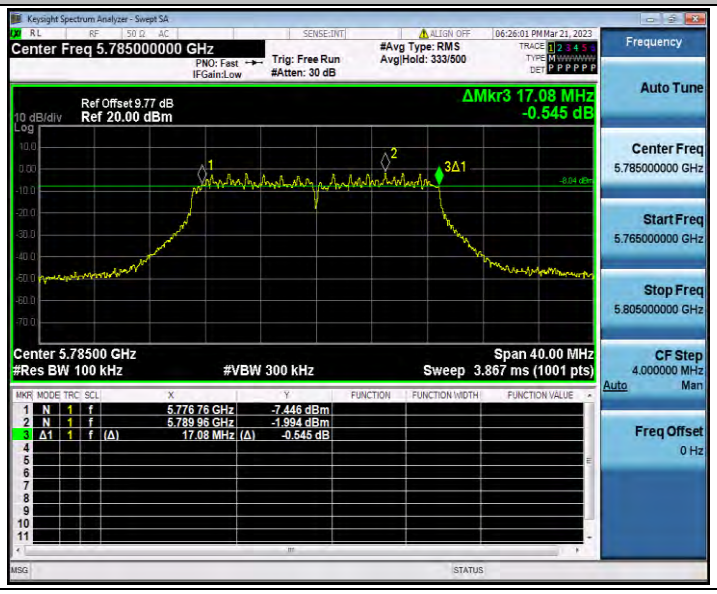
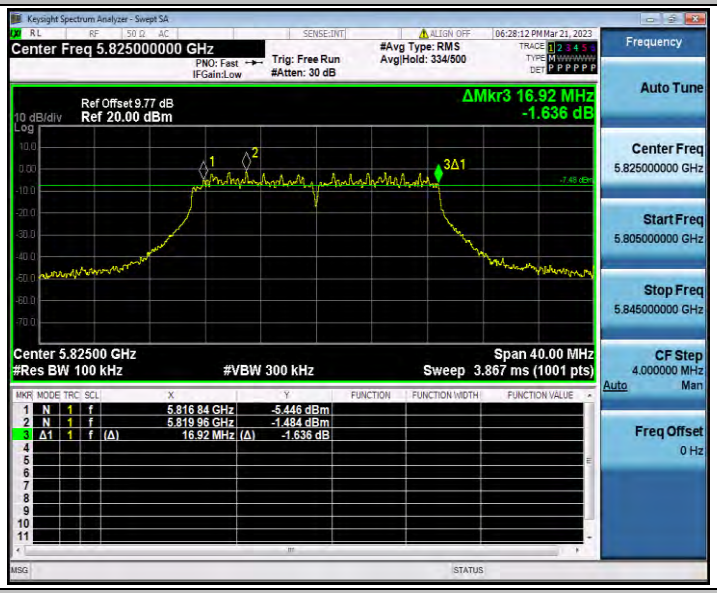
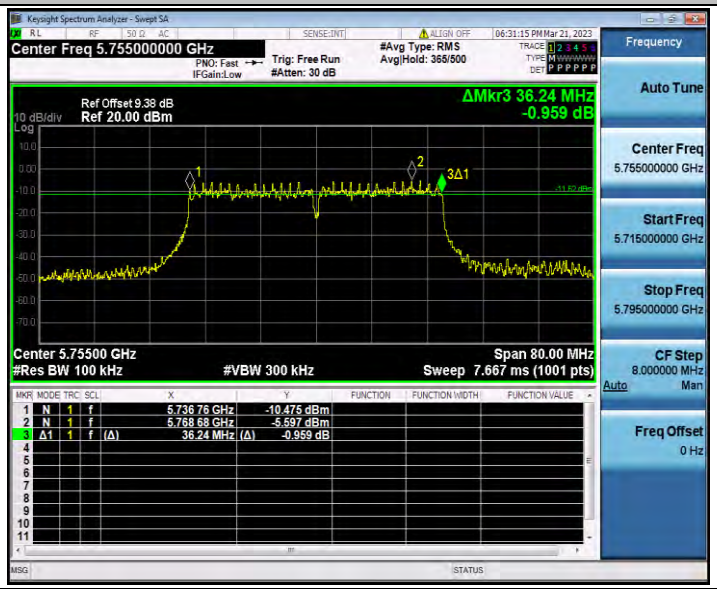
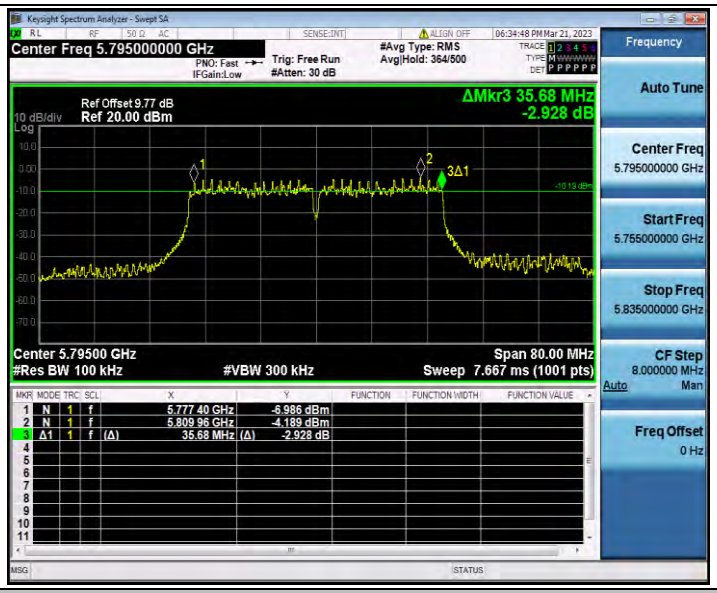


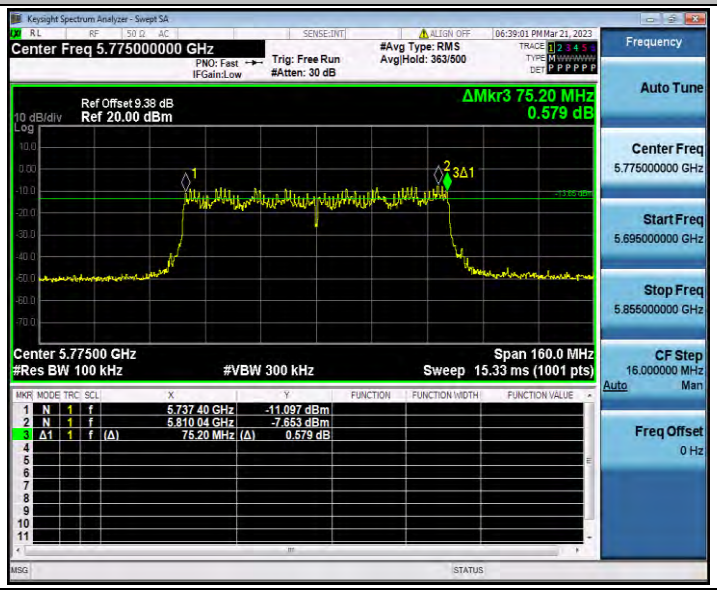
11AC20SISO_Ant1_5825


11AC40SISO_Ant1_5755


11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

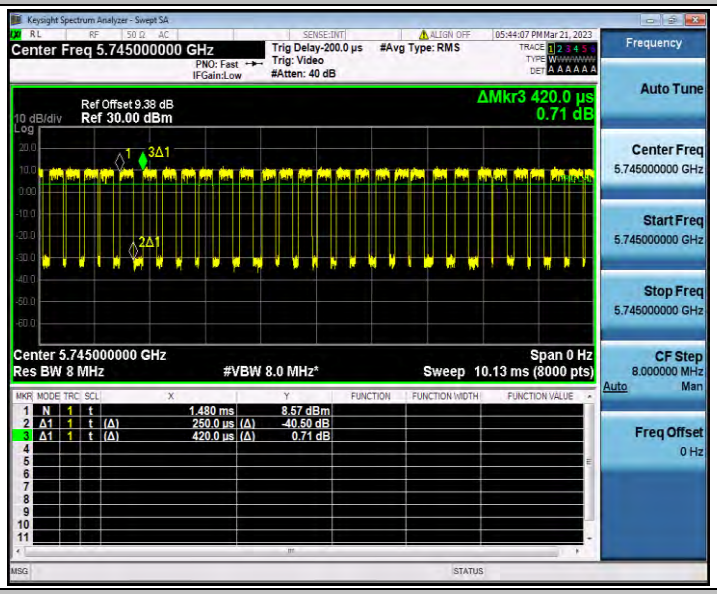
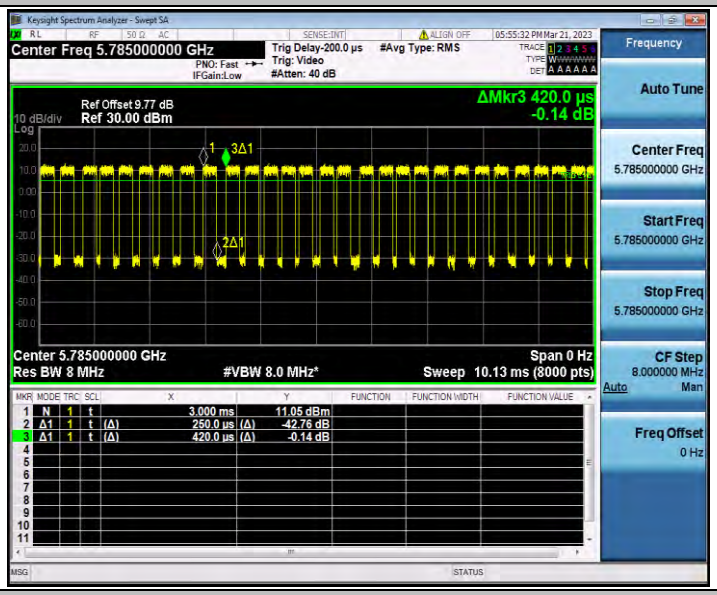


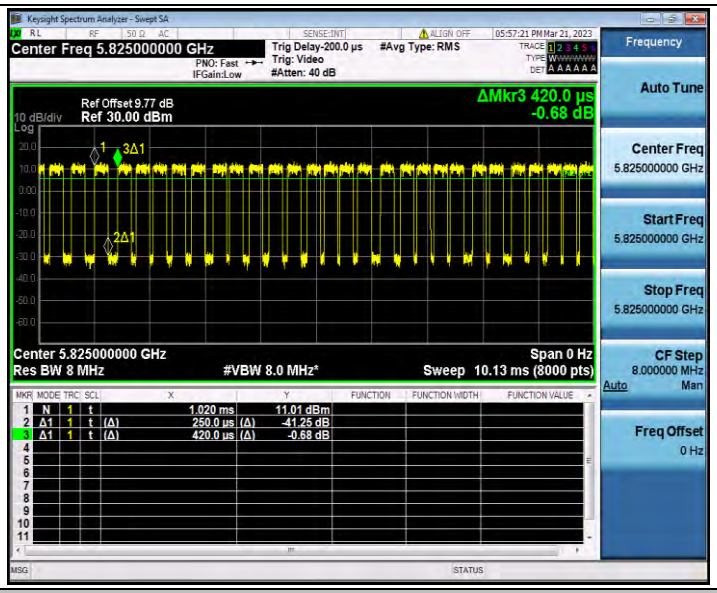
Appendix E.3: Duty Cycle

Test Result

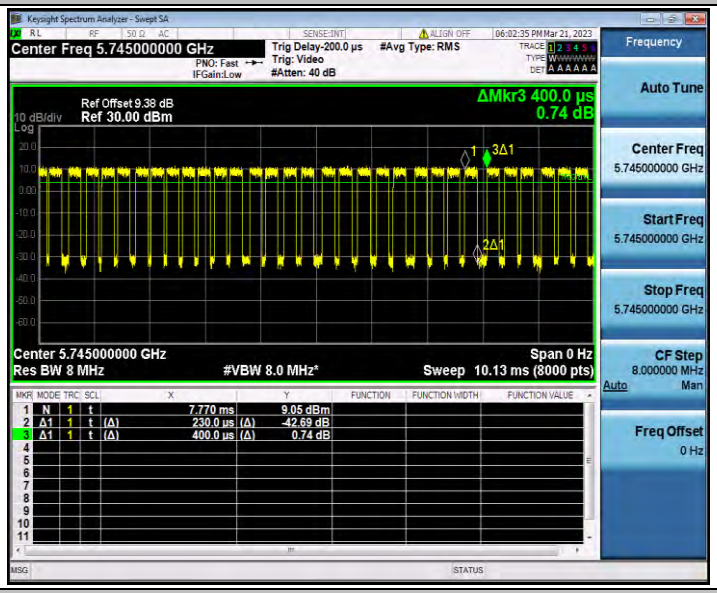
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	0.25	0.42	59.52
		5785	0.25	0.42	59.52
		5825	0.25	0.42	59.52
11N20SISO	Ant1	5745	0.23	0.40	57.50
		5785	0.23	0.40	57.50
		5825	0.23	0.41	56.10
11N40SISO	Ant1	5755	0.12	0.30	40.00
		5795	0.13	0.30	43.33
11AC20SISO	Ant1	5745	0.20	0.37	54.05
		5785	0.20	0.36	55.56
		5825	0.20	0.38	52.63
11AC40SISO	Ant1	5755	0.12	0.29	41.38
		5795	0.11	0.28	39.29
11AC80SISO	Ant1	5775	0.07	0.25	28.00

Test Graphs

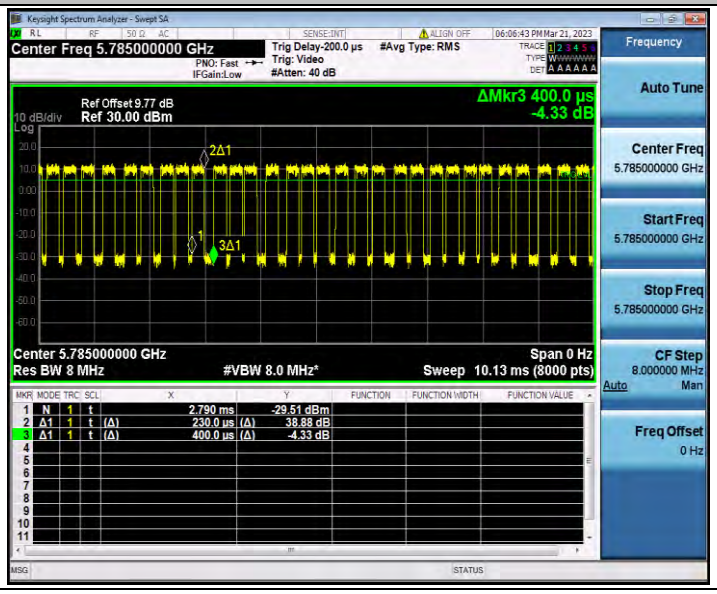
11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825



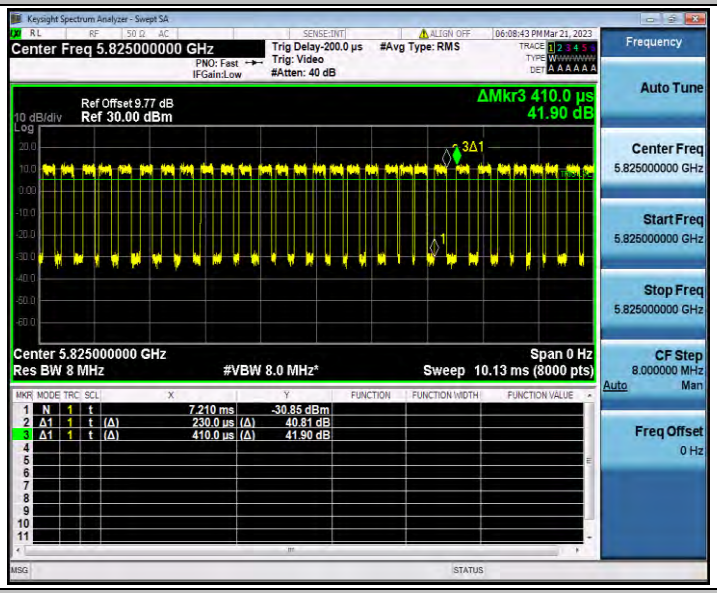
11N20SISO_Ant1_5745



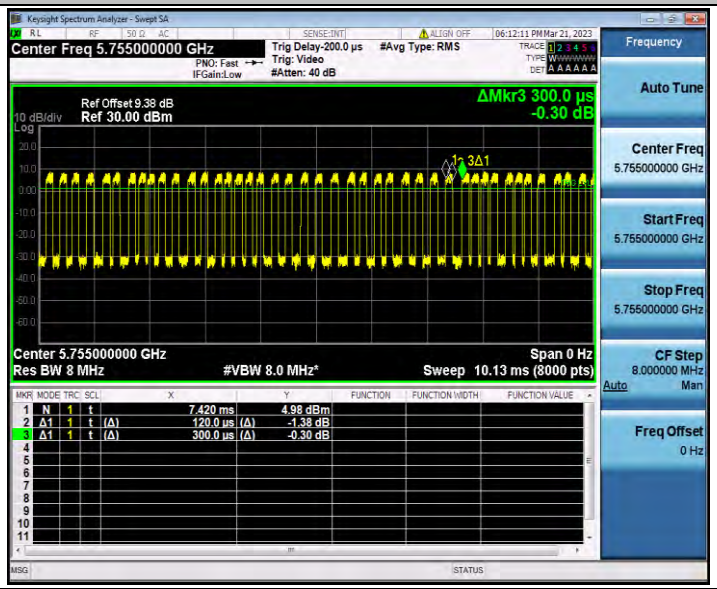
11N20SISO_Ant1_5785



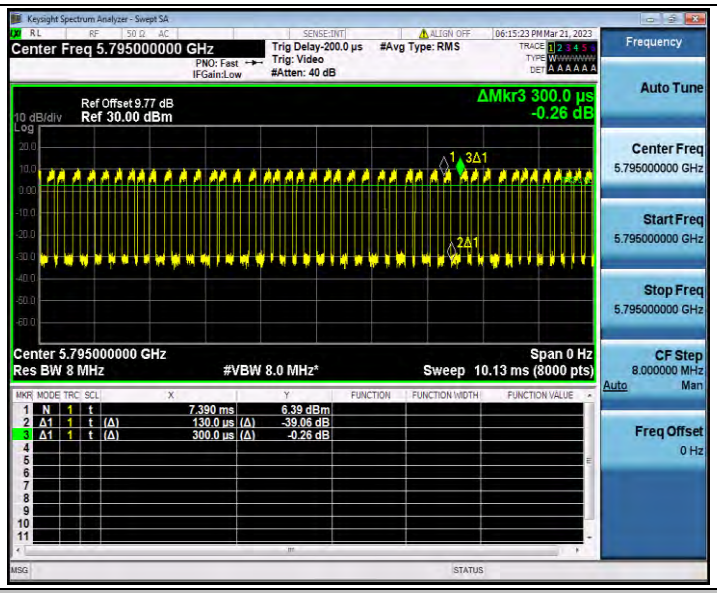
11N20SISO_Ant1_5825



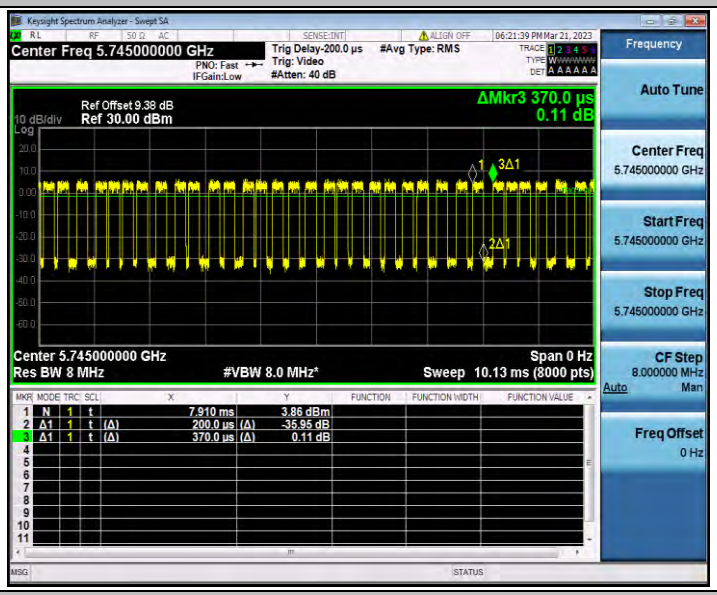
11N40SISO_Ant1_5755



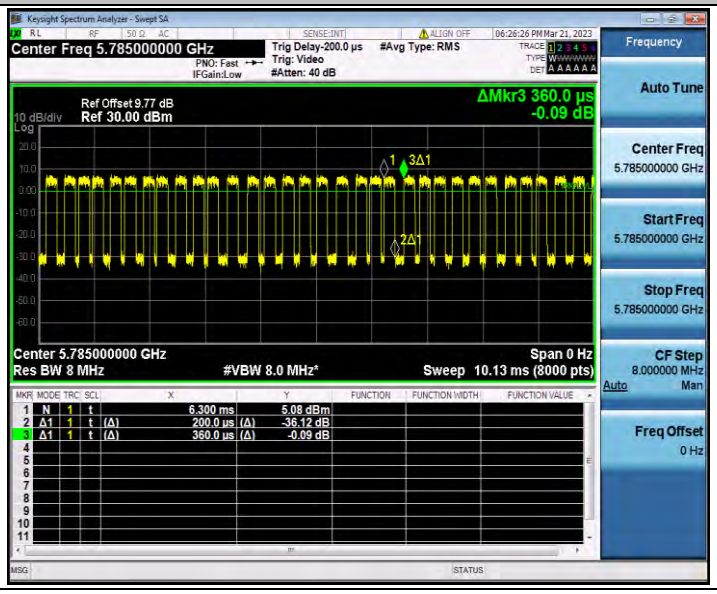
11N40SISO_Ant1_5795

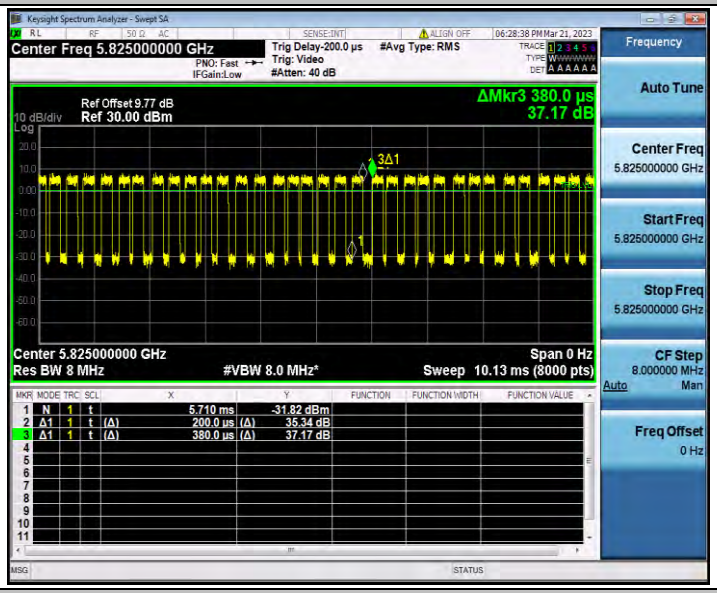


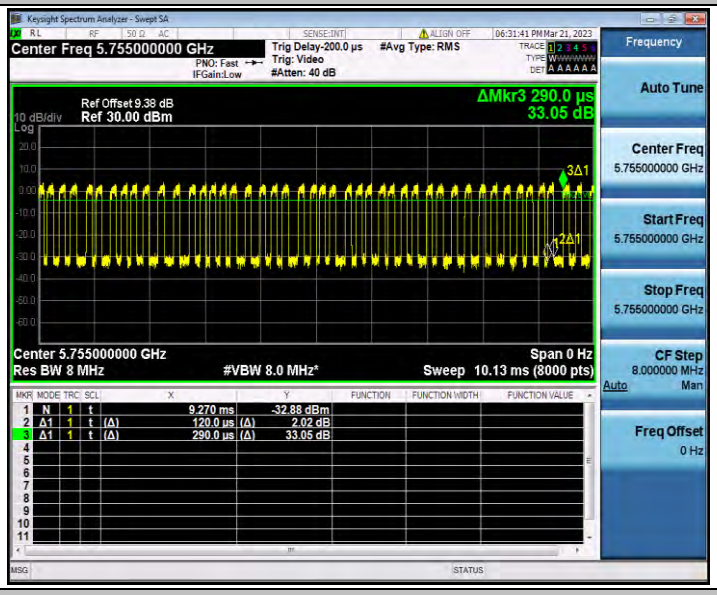
11AC20SISO_Ant1_5745



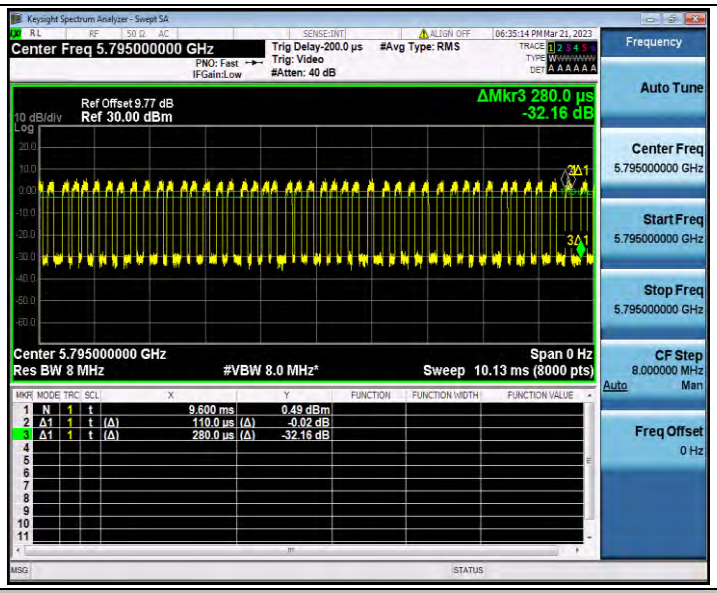
11AC20SISO_Ant1_5785



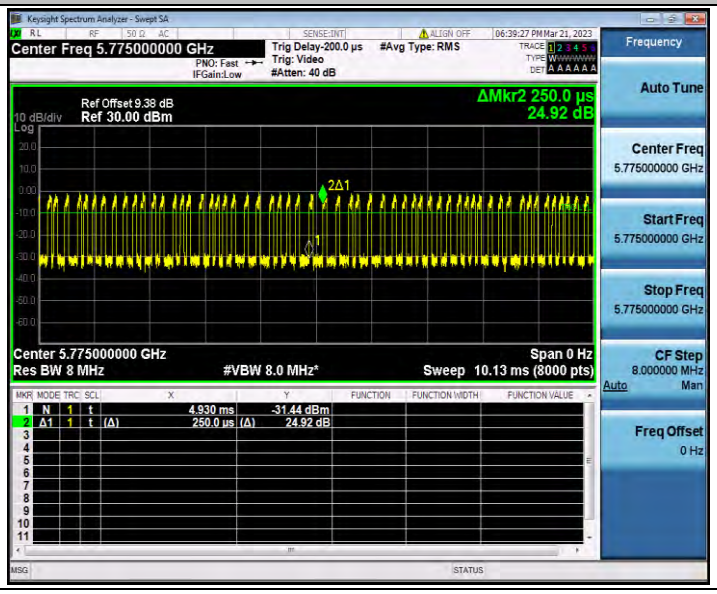
11AC20SISO_Ant1_5825


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 Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	11.37	59.52	2.25	13.62	≤30.00	PASS
		5785	12.65	59.52	2.25	14.90	≤30.00	PASS
		5825	12.92	59.52	2.25	15.17	≤30.00	PASS
11N20SISO	Ant1	5745	11.50	57.50	2.40	13.90	≤30.00	PASS
		5785	12.44	57.50	2.40	14.84	≤30.00	PASS
		5825	13.07	56.10	2.51	15.58	≤30.00	PASS
11N40SISO	Ant1	5755	10.53	40.00	3.98	14.51	≤30.00	PASS
		5795	11.69	43.33	3.63	15.32	≤30.00	PASS
11AC20SISO	Ant1	5745	5.95	54.05	2.67	8.62	≤30.00	PASS
		5785	6.84	55.56	2.55	9.39	≤30.00	PASS
		5825	7.55	52.63	2.79	10.34	≤30.00	PASS
11AC40SISO	Ant1	5755	5.03	41.38	3.83	8.86	≤30.00	PASS
		5795	6.28	39.29	4.06	10.34	≤30.00	PASS
11AC80SISO	Ant1	5775	3.41	28.00	5.53	8.94	≤30.00	PASS

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

Appendix E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	0.51	≤30.00	PASS
		5785	1.95	≤30.00	PASS
		5825	1.79	≤30.00	PASS
11N20SISO	Ant1	5745	0.46	≤30.00	PASS
		5785	1.28	≤30.00	PASS
		5825	2.12	≤30.00	PASS
11N40SISO	Ant1	5755	-0.62	≤30.00	PASS
		5795	-0.38	≤30.00	PASS
11AC20SISO	Ant1	5745	-4.81	≤30.00	PASS
		5785	-3.74	≤30.00	PASS
		5825	-2.62	≤30.00	PASS
11AC40SISO	Ant1	5755	-6.17	≤30.00	PASS
		5795	-5.11	≤30.00	PASS
11AC80SISO	Ant1	5775	-6.78	≤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.

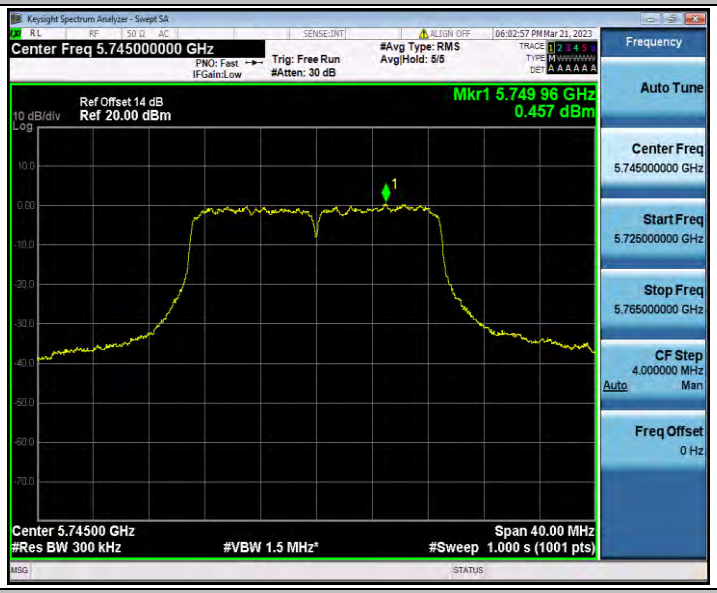
Test Graphs

11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825

11N20SISO_Ant1_5745



11N20SISO_Ant1_5785

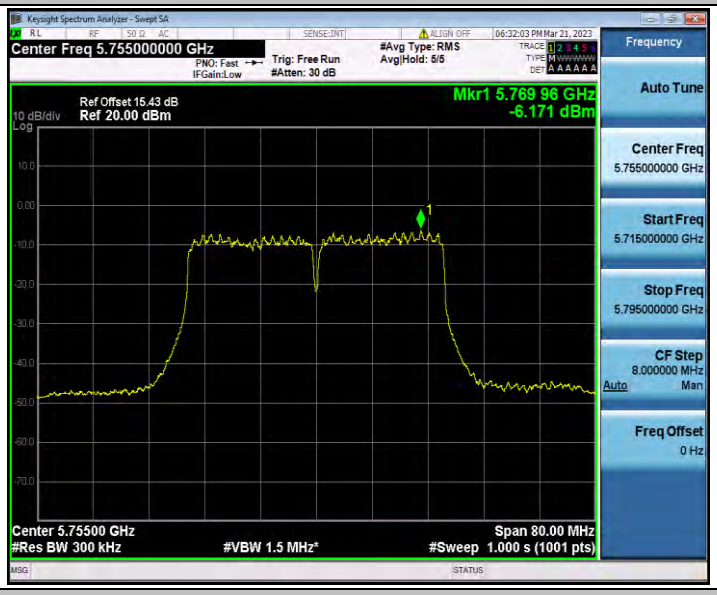
11N20SISO_Ant1_5825
11N40SISO_Ant1_5755
11N40SISO_Ant1_5795

11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

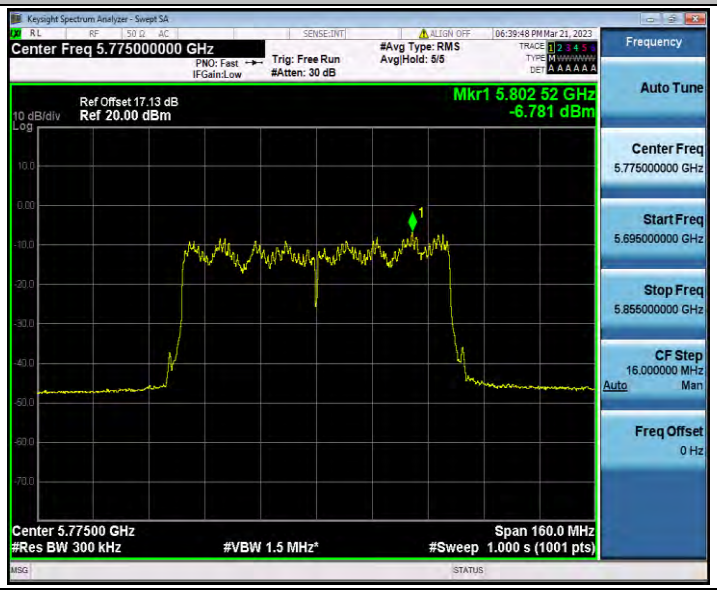
11AC20SISO_Ant1_5825

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	-38.93	≤-5.26	PASS
				5700~5720	-33.14	≤15.47	PASS
				5720~5725	-22.23	≤26.83	PASS
				5760~5650	-39.29	≤-27	PASS
		High	5825	5850~5855	-26.66	≤17.95	PASS
				5855~5875	-32.89	≤10.10	PASS
				5875~5925	-38.09	≤3.51	PASS
				5925~5935	-38.77	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-37.94	≤9.55	PASS
				5700~5720	-31.45	≤15.59	PASS
				5720~5725	-19.15	≤26.30	PASS
				5760~5650	-39.56	≤-27	PASS
		High	5825	5850~5855	-30.07	≤18.26	PASS
				5855~5875	-35.39	≤10.82	PASS
				5875~5925	-38.46	≤-16.47	PASS
				5925~5935	-38.8	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-35.73	≤8.66	PASS
				5700~5720	-20.58	≤15.09	PASS
				5720~5725	-20.17	≤17.28	PASS
				5780~5650	-39.96	≤-27	PASS
		High	5795	5850~5855	-31.84	≤17.54	PASS
				5855~5875	-33.08	≤11.06	PASS
				5875~5925	-38.23	≤-4.94	PASS
				5925~5935	-38.33	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-39.45	≤1.72	PASS
				5700~5720	-38.7	≤13.66	PASS
				5720~5725	-37.86	≤26.83	PASS
				5760~5650	-39.58	≤-27	PASS
		High	5825	5850~5855	-38.87	≤18.87	PASS
				5855~5875	-38.62	≤11.46	PASS
				5875~5925	-38.16	≤1.72	PASS
				5925~5935	-38.69	≤-27	PASS
11AC40SISO	Ant1	Low	5755	5650~5700	-39.29	≤3.77	PASS
				5700~5720	-36.46	≤15.39	PASS
				5720~5725	-34.36	≤19.12	PASS

				5780~5650	-39.74	≤-27	PASS
		High	5795	5850~5855	-39.59	≤21.68	PASS
				5855~5875	-38.79	≤14.89	PASS
				5875~5925	-38.44	≤-3.48	PASS
				5925~5935	-38.65	≤-27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-38.77	≤-2.03	PASS
				5700~5720	-38.13	≤15.30	PASS
				5720~5725	-38.01	≤26.95	PASS
				5800~5650	-40.66	≤-27	PASS
		High	5775	5850~5855	-38.43	≤20.43	PASS
				5855~5875	-35.04	≤12.66	PASS
				5875~5925	-38.51	≤-14.91	PASS
				5925~5935	-38.9	≤-27	PASS

Test Graphs B4

11A_Ant1_Low_5745

11A_Ant1_High_5825

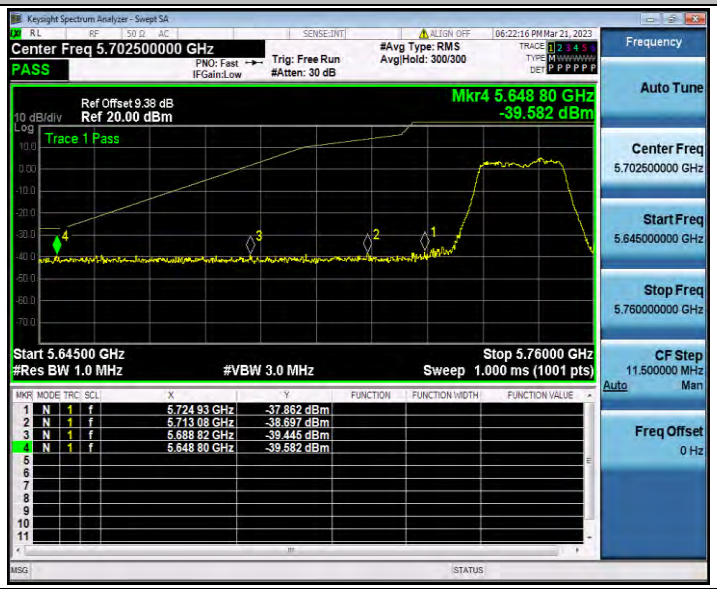
11N20SISO_Ant1_Low_5745

11N20SISO_Ant1_High_5825

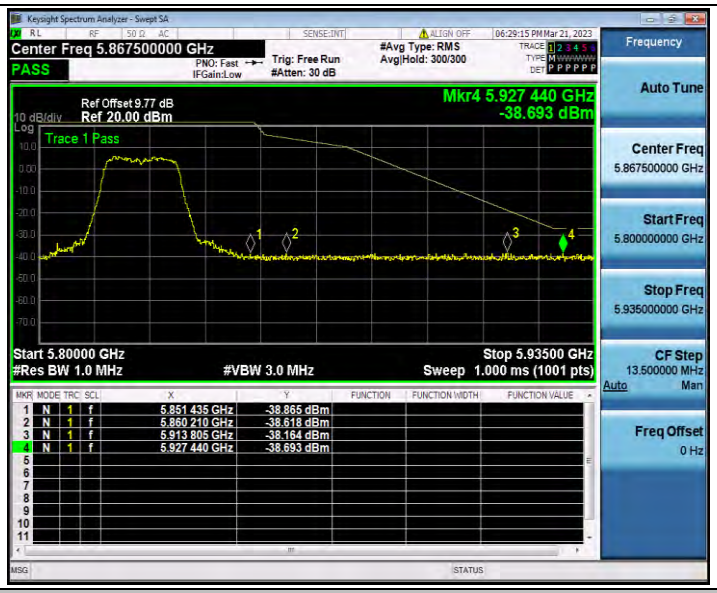
11N40SISO_Ant1_Low_5755

11N40SISO_Ant1_High_5795

11AC20SISO_Ant1_Low_5745

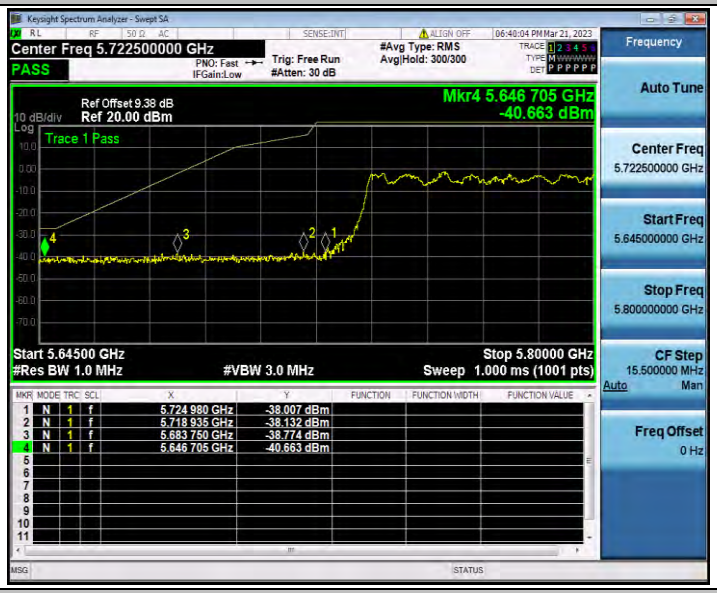


11AC20SISO_Ant1_High_5825



11AC40SISO_Ant1_Low_5755

11AC40SISO_Ant1_High_5795

11AC80SISO_Ant1_Low_5775


11AC80SISO_Ant1_High_5775

Appendix E.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	2641.99	-41.53	≤-27	PASS
			5925~40000	26923.43	-32.35	≤-27	PASS
		5785	30~5650	5470.72	-40.51	≤-27	PASS
			5925~40000	25303.46	-32.11	≤-27	PASS
		5825	30~5650	4940.19	-41.07	≤-27	PASS
			5925~40000	25200.9	-31.26	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5565.7	-40.36	≤-27	PASS
			5925~40000	24747.08	-32.06	≤-27	PASS
		5785	30~5650	5541.53	-40.45	≤-27	PASS
			5925~40000	24239.18	-31.96	≤-27	PASS
		5825	30~5650	3256.07	-40.96	≤-27	PASS
			5925~40000	26514.57	-31.39	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	3202.3	-41.02	≤-27	PASS
			5925~40000	24272.9	-32.87	≤-27	PASS
		5795	30~5650	5472.97	-41	≤-27	PASS
			5925~40000	23543	-32.32	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	4995.83	-41.19	≤-27	PASS
			5925~40000	25996.83	-32.75	≤-27	PASS
		5785	30~5650	5446.18	-40.58	≤-27	PASS
			5925~40000	24262.36	-31.97	≤-27	PASS
		5825	30~5650	5543.03	-39.33	≤-27	PASS
			5925~40000	26030.55	-31.76	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5595.11	-41.14	≤-27	PASS
			5925~40000	26006.67	-32.52	≤-27	PASS
		5795	30~5650	3057.68	-39.54	≤-27	PASS
			5925~40000	24200.54	-31.5	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	4973.16	-41.25	≤-27	PASS
			5925~40000	24806.8	-32.8	≤-27	PASS

Test Graphs

11A_Ant1_5745_30~5650

11A_Ant1_5745_5925~40000

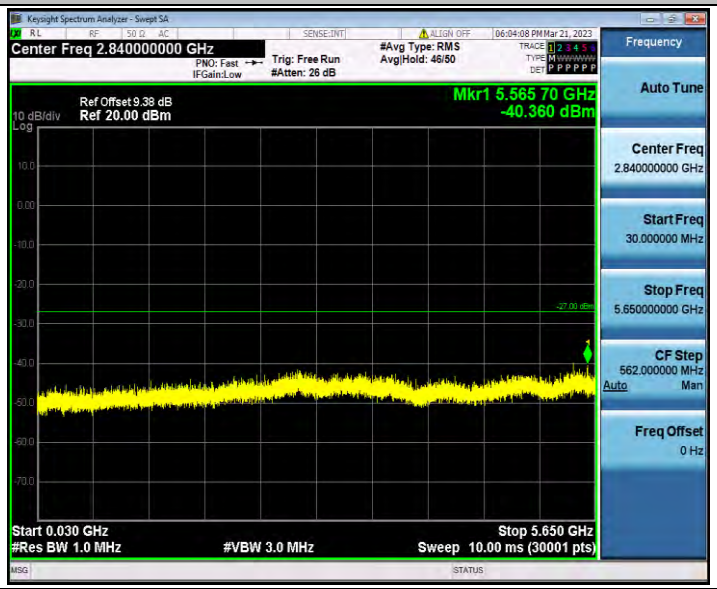
11A_Ant1_5785_30~5650

11A_Ant1_5785_5925~40000

11A_Ant1_5825_30~5650

11A_Ant1_5825_5925~40000

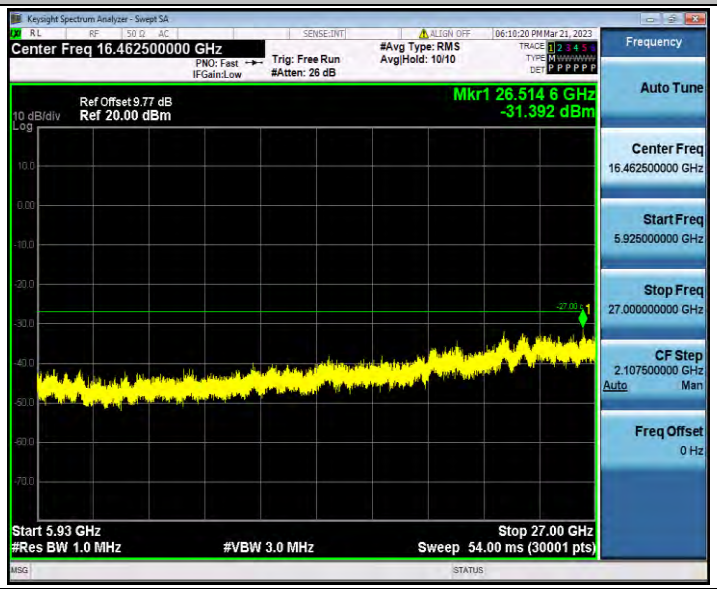
11N20SISO_Ant1_5745_30~5650



11N20SISO_Ant1_5745_5925~40000

11N20SISO_Ant1_5785_30~5650

11N20SISO_Ant1_5785_5925~40000

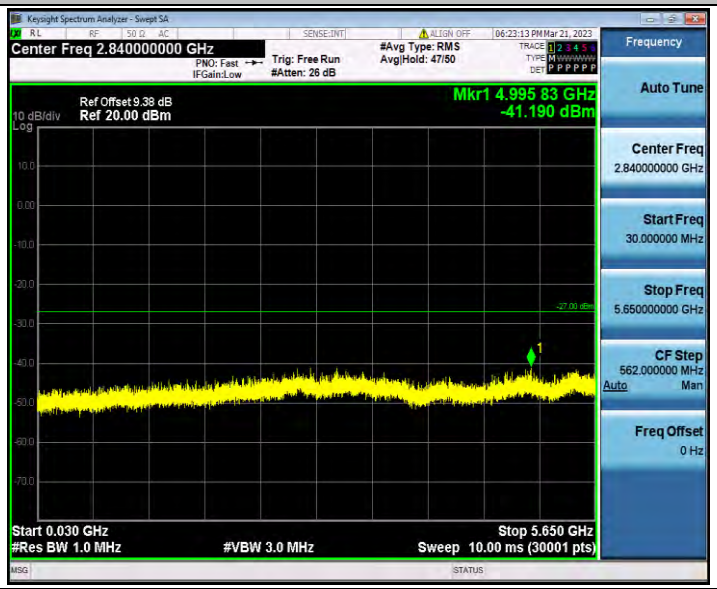
11N20SISO_Ant1_5825_30~5650
11N20SISO_Ant1_5825_5925~40000

11N40SISO_Ant1_5755_30~5650

11N40SISO_Ant1_5755_5925~40000

11N40SISO_Ant1_5795_30~5650

11N40SISO_Ant1_5795_5925~40000

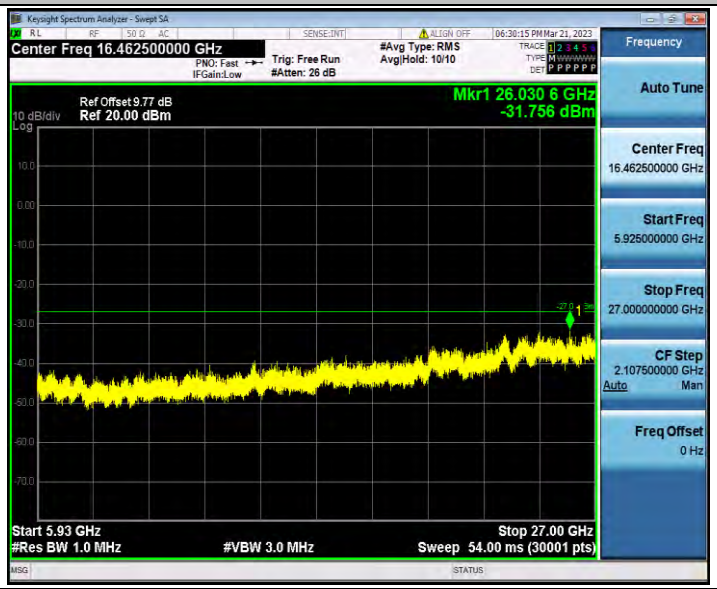
11AC20SISO_Ant1_5745_30~5650



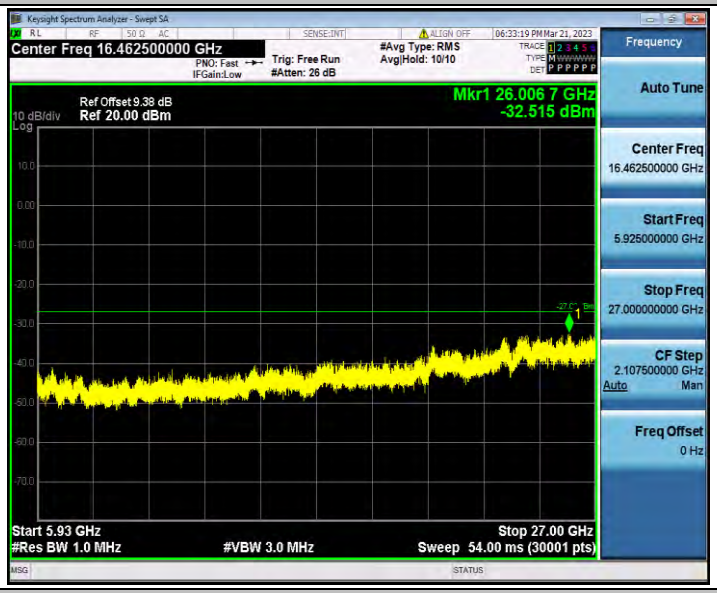
11AC20SISO_Ant1_5745_5925~40000

11AC20SISO_Ant1_5785_30~5650

11AC20SISO_Ant1_5785_5925~40000

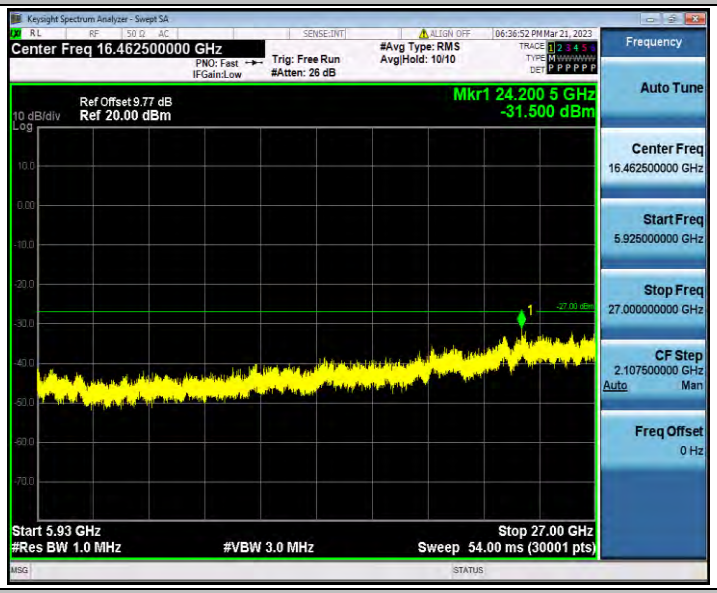
11AC20SISO_Ant1_5825_30~5650
11AC20SISO_Ant1_5825_5925~40000

11AC40SISO_Ant1_5755_30~5650

11AC40SISO_Ant1_5755_5925~40000

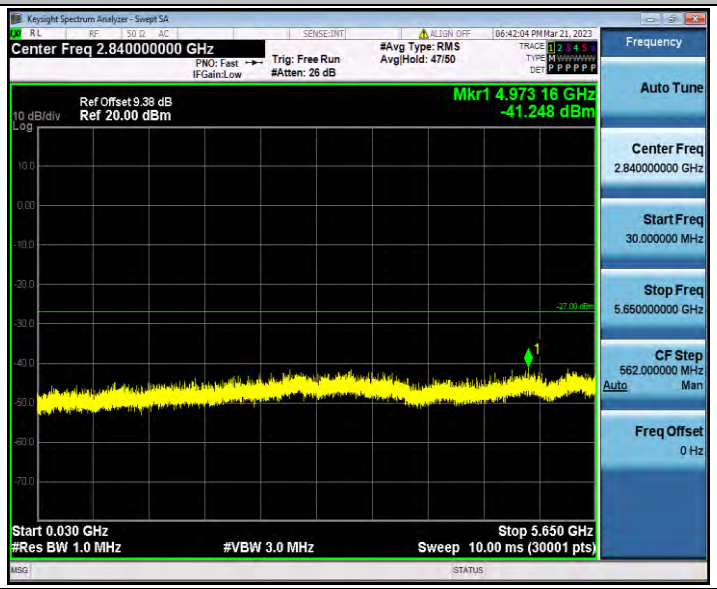


11AC40SISO_Ant1_5795_30~5650

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
06:42:09 PM Mar 21, 2023
Ref Offset 9.38 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 24.806 8 GHz
-32.795 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