

Appendix B

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: Dashcam

Test Model: C6 Pro

Environmental Conditions

Temperature:	24.1°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Fengliu Tang

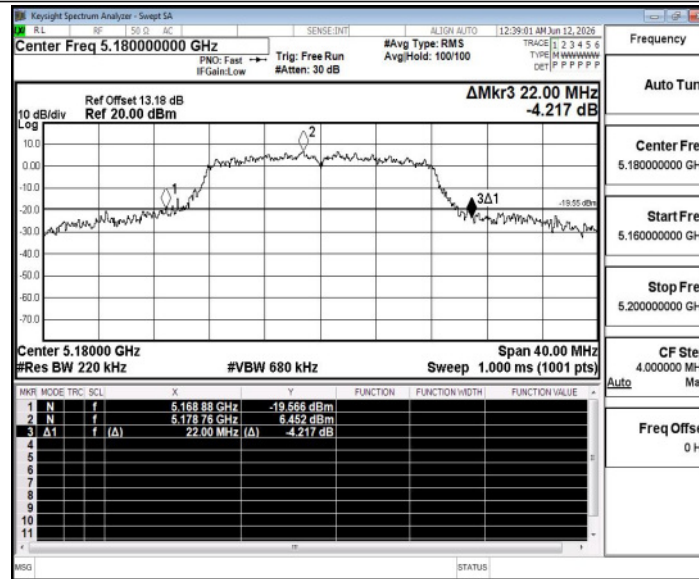
B.1 26dB Bandwidth

Test Result

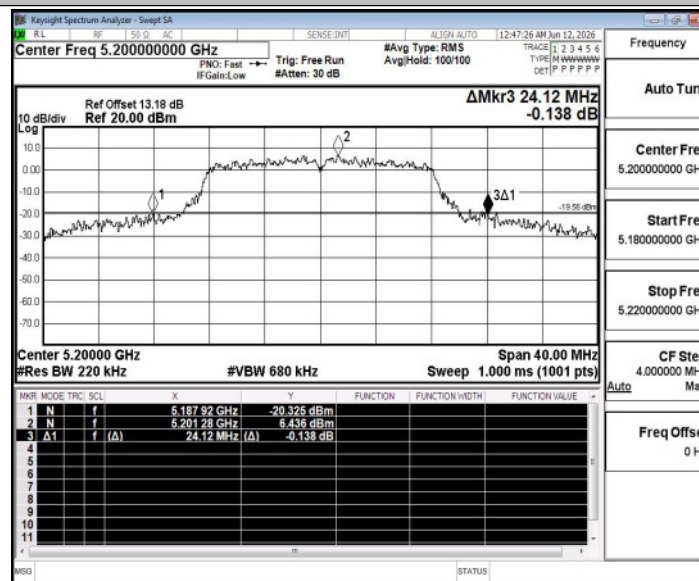
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.000	5168.880	5190.880	---	---
		5200	24.120	5187.920	5212.040	---	---
		5240	21.360	5229.680	5251.040	---	---
11N20SISO	Ant1	5180	25.640	5165.960	5191.600	---	---
		5200	22.760	5188.880	5211.640	---	---
		5240	22.000	5229.640	5251.640	---	---
11N40SISO	Ant1	5190	61.760	5161.040	5222.800	---	---
		5230	65.040	5197.600	5262.640	---	---
11AC20SISO	Ant1	5180	22.880	5167.360	5190.240	---	---
		5200	27.440	5187.200	5214.640	---	---
		5240	25.720	5229.280	5255.000	---	---
11AC40SISO	Ant1	5190	58.160	5159.360	5217.520	---	---
		5230	57.520	5197.840	5255.360	---	---

Test Graphs

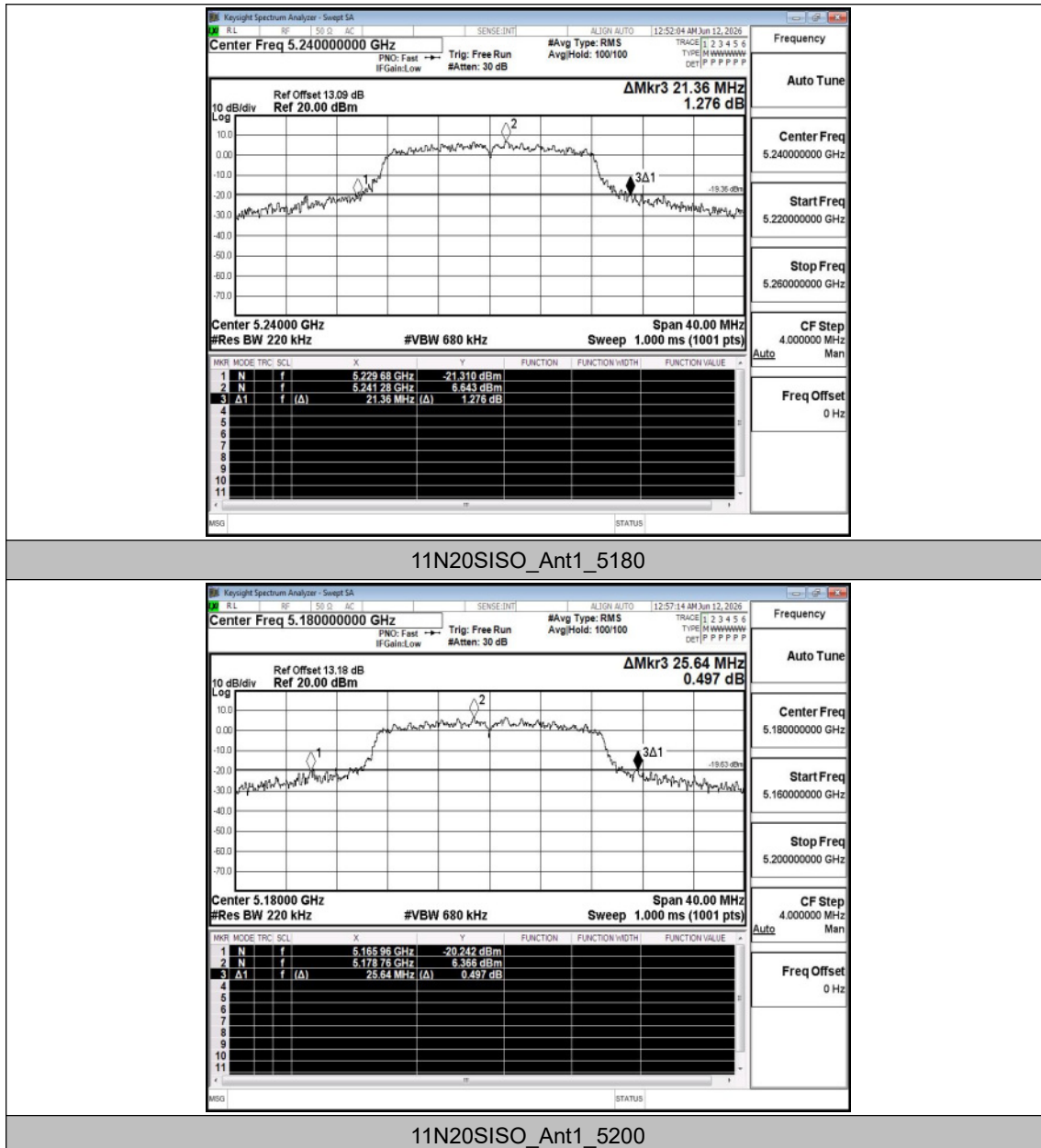
11A_Ant1_5180

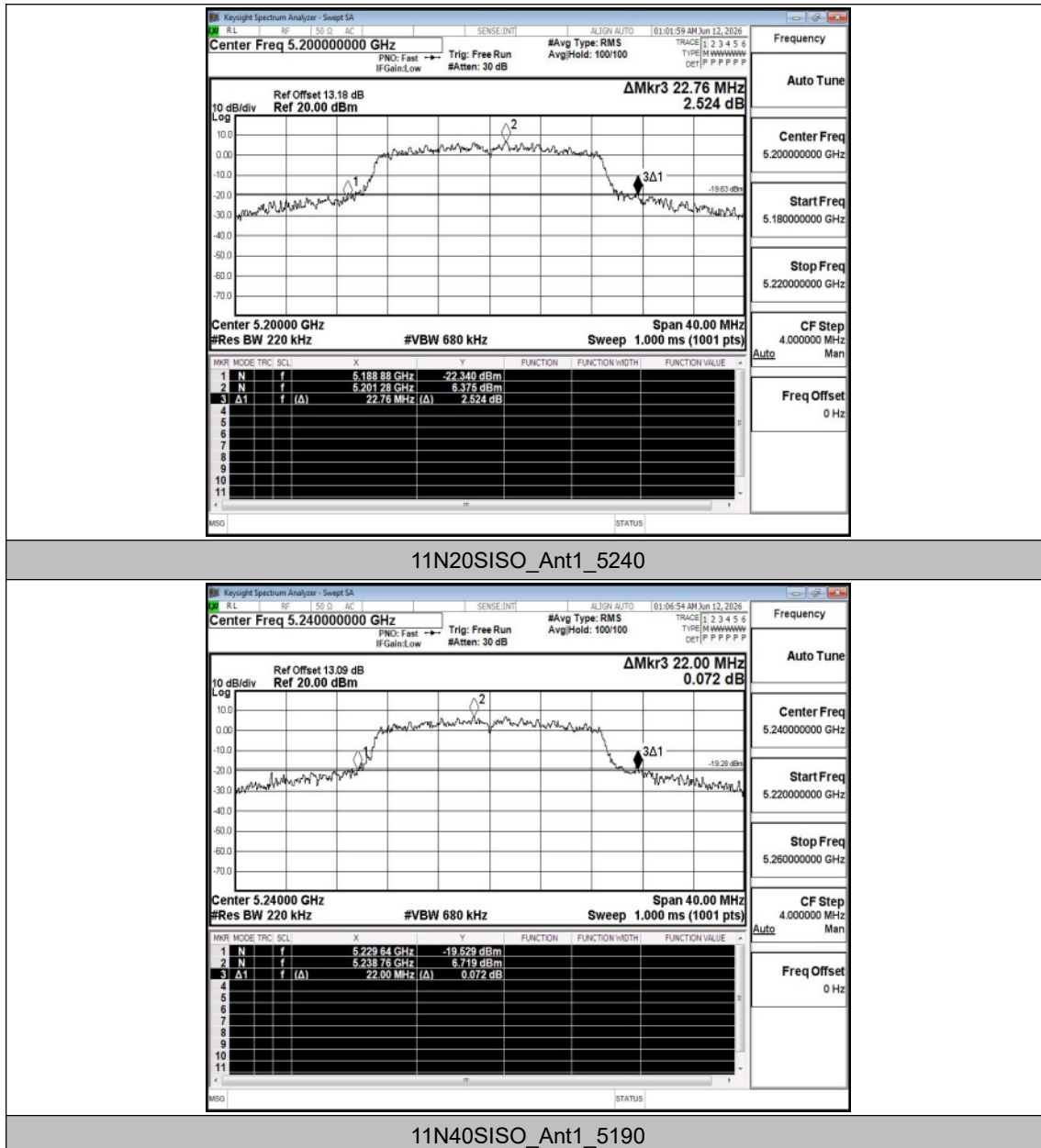


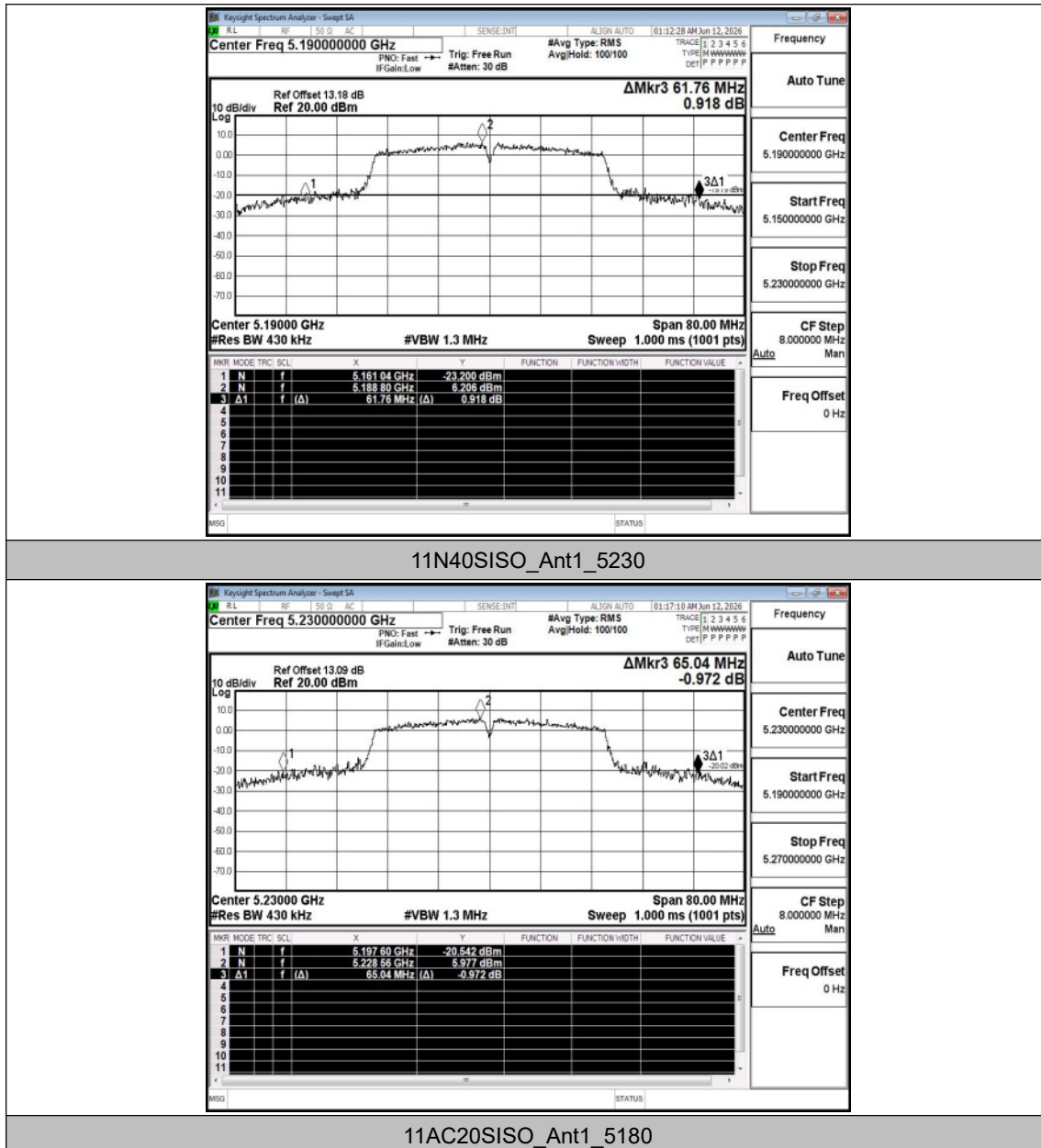
11A_Ant1_5200

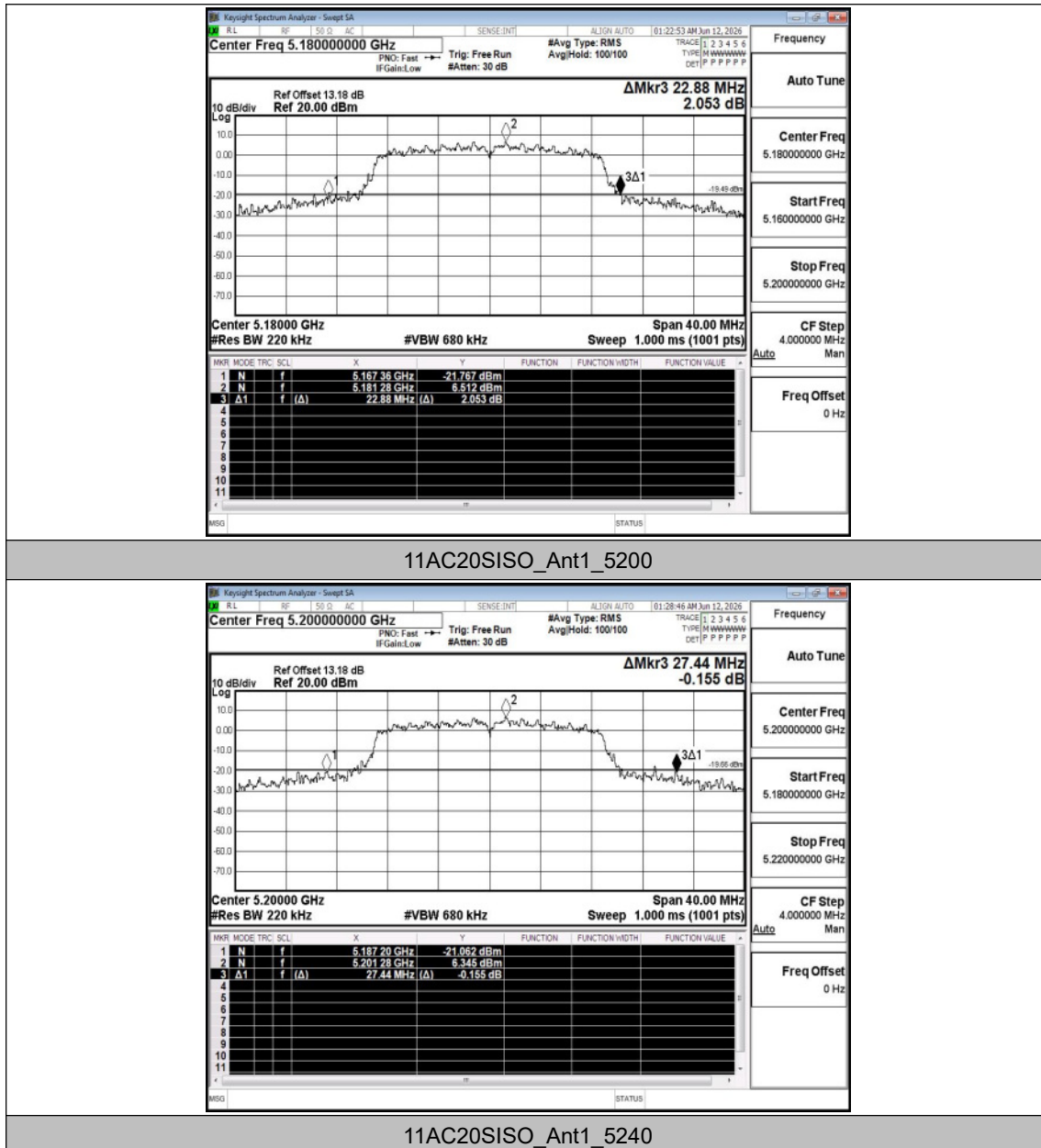


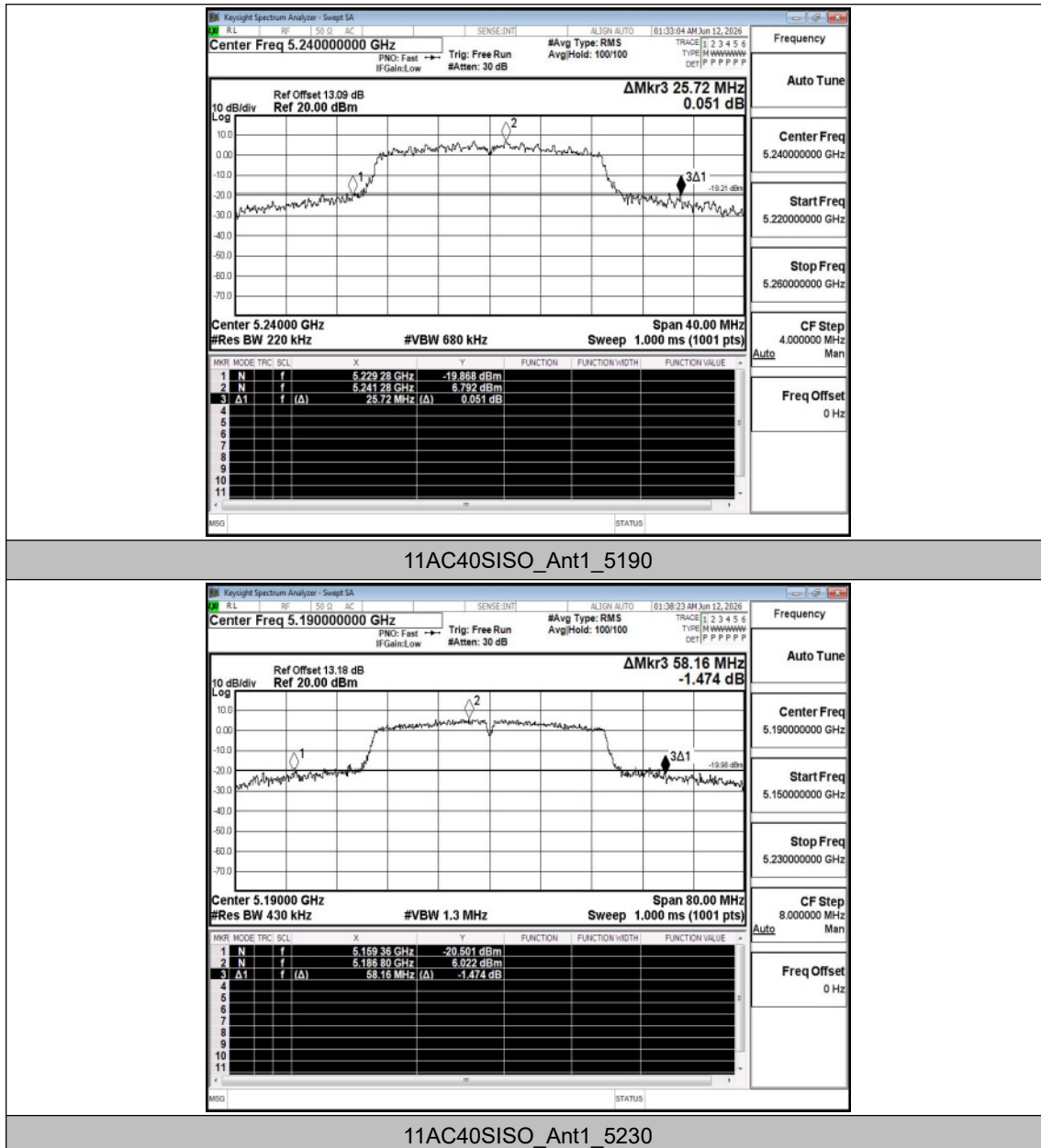
11A_Ant1_5240

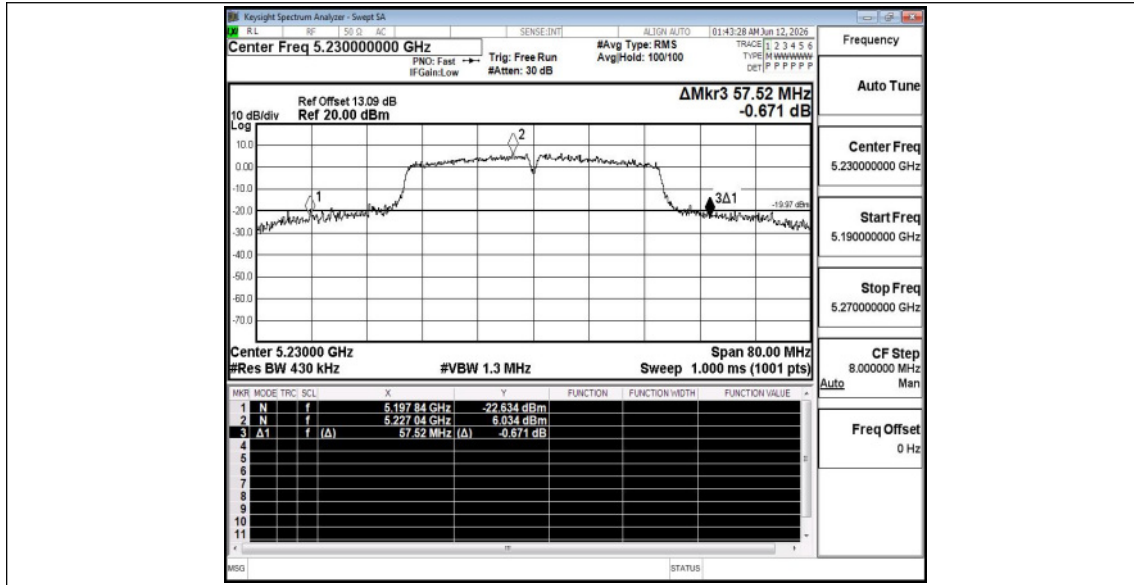












B.2 Maximum conducted output power

Test Result Power

Test Mode	Antenna	Freq(MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	NA	14.98	1.63	16.61	≤24	PASS
		5200	NA	15.00	1.35	16.35	≤24	PASS
		5240	NA	15.02	1.63	16.65	≤24	PASS
11N20SISO	Ant1	5180	NA	15.07	1.25	16.32	≤24	PASS
		5200	NA	14.92	1.51	16.43	≤24	PASS
		5240	NA	15.16	1.25	16.41	≤24	PASS
11N40SISO	Ant1	5190	NA	16.09	0.26	16.35	≤24	PASS
		5230	NA	16.10	0.32	16.42	≤24	PASS
11AC20SISO	Ant1	5180	NA	15.08	1.17	16.25	≤24	PASS
		5200	NA	15.01	1.51	16.52	≤24	PASS
		5240	NA	15.29	1.17	16.46	≤24	PASS
11AC40SISO	Ant1	5190	NA	16.01	0.26	16.27	≤24	PASS
		5230	NA	16.24	0.32	16.56	≤24	PASS

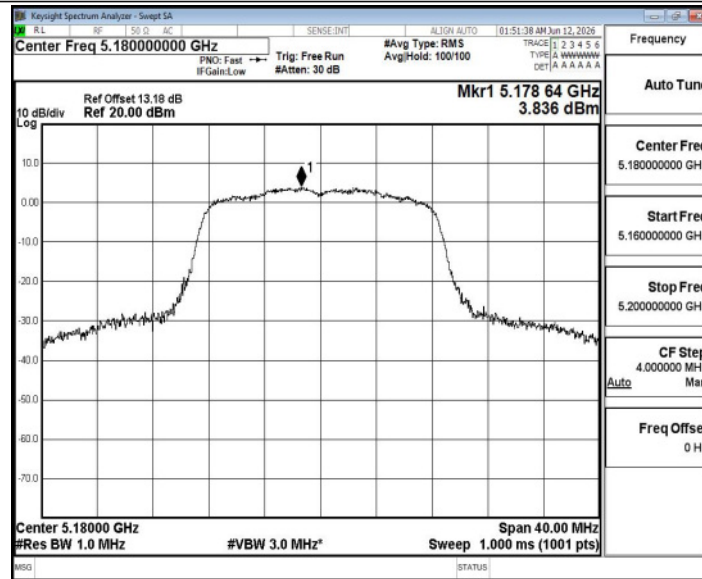
B.3 Maximum power spectral density

Test Result

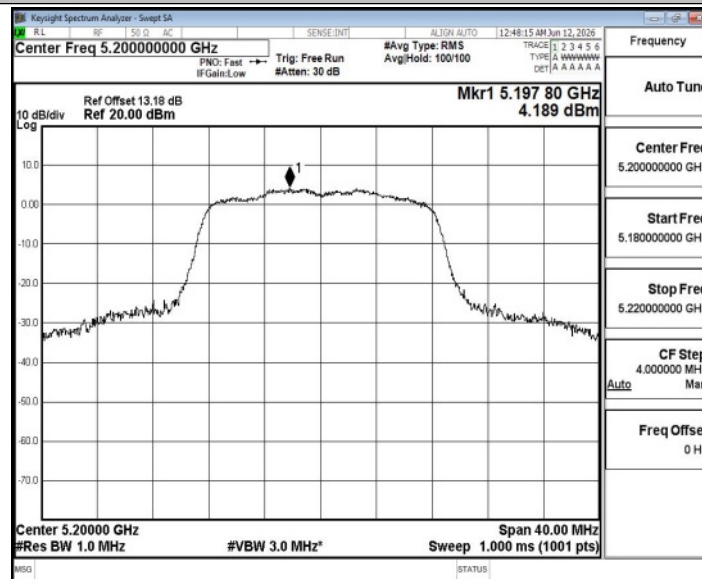
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.84	1.63	5.47	≤11.00	PASS
		5200	4.19	1.35	5.54	≤11.00	PASS
		5240	3.74	1.63	5.37	≤11.00	PASS
11N20SISO	Ant1	5180	4.37	1.25	5.62	≤11.00	PASS
		5200	4.13	1.51	5.64	≤11.00	PASS
		5240	4.44	1.25	5.69	≤11.00	PASS
11N40SISO	Ant1	5190	2.25	0.26	2.51	≤11.00	PASS
		5230	2.36	0.32	2.68	≤11.00	PASS
11AC20SISO	Ant1	5180	4.27	1.17	5.44	≤11.00	PASS
		5200	4.08	1.51	5.59	≤11.00	PASS
		5240	4.52	1.17	5.69	≤11.00	PASS
11AC40SISO	Ant1	5190	2.21	0.26	2.47	≤11.00	PASS
		5230	2.69	0.32	3.01	≤11.00	PASS

Test Graphs

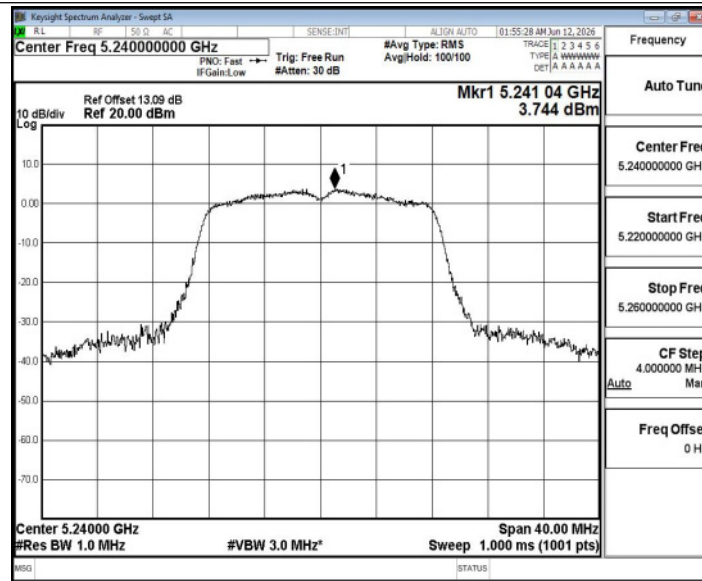
11A_Ant1_5180



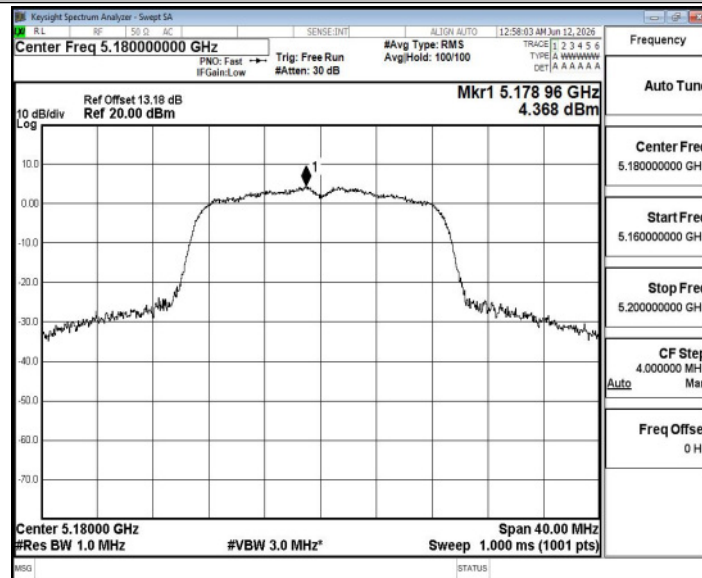
11A_Ant1_5200



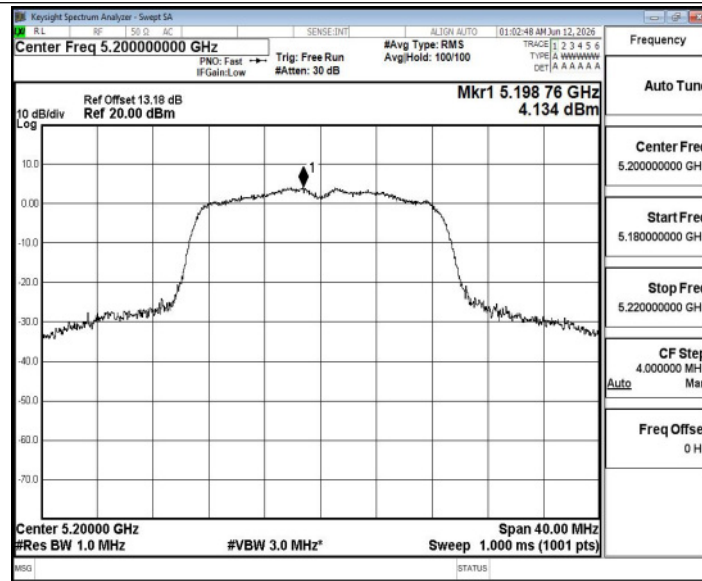
11A_Ant1_5240



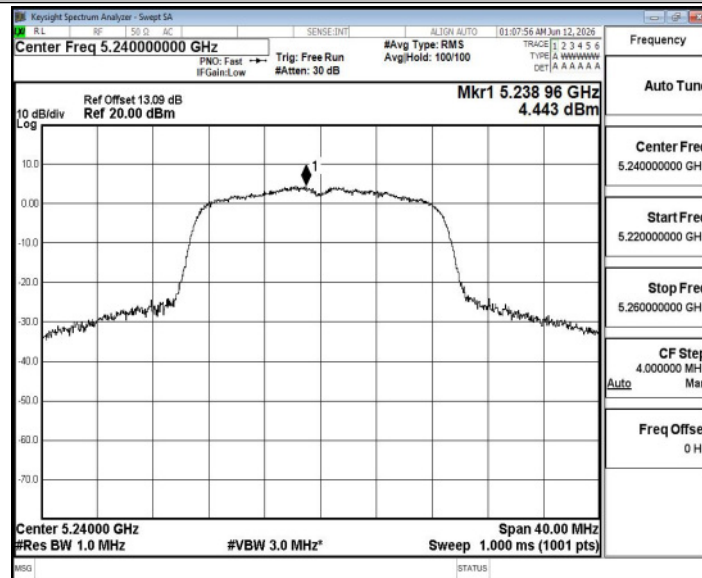
11N20SISO_Ant1_5180



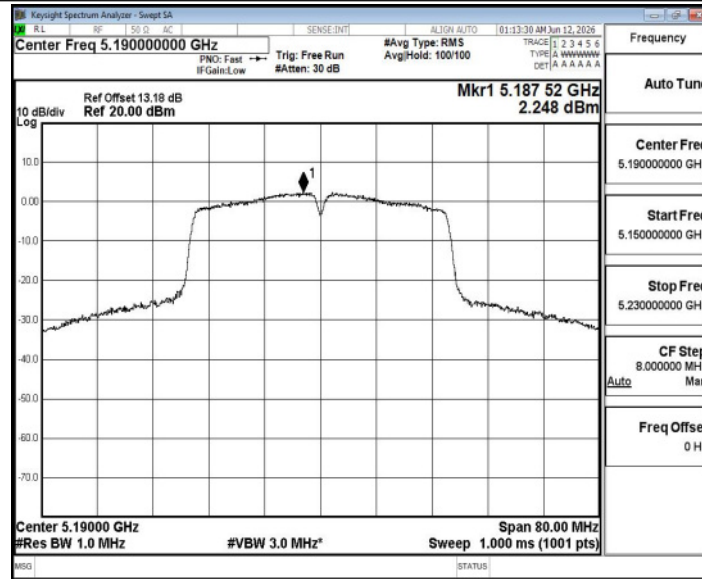
11N20SISO_Ant1_5200



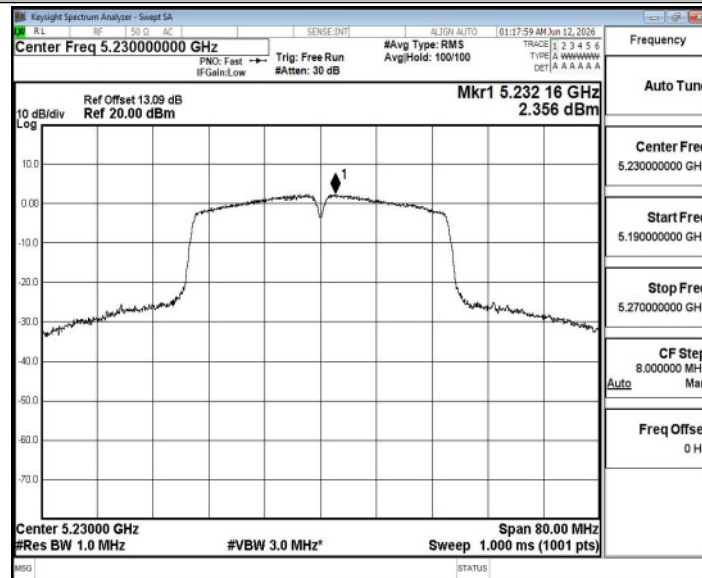
11N20SISO_Ant1_5240



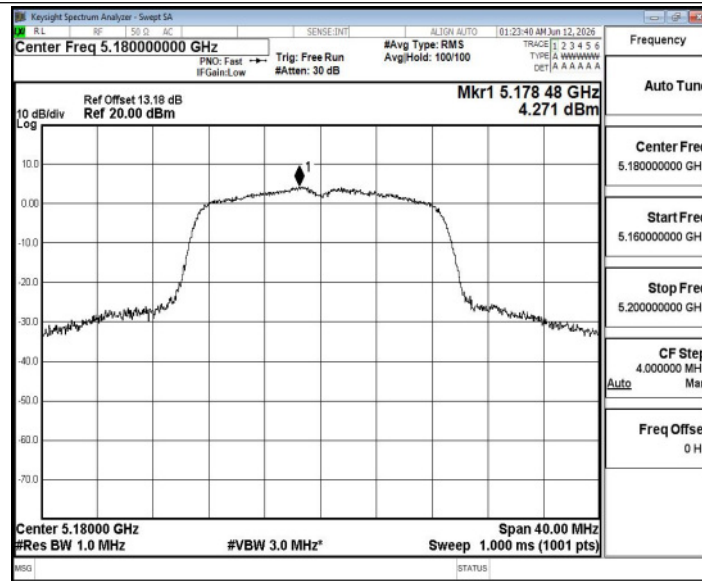
11N40SISO_Ant1_5190



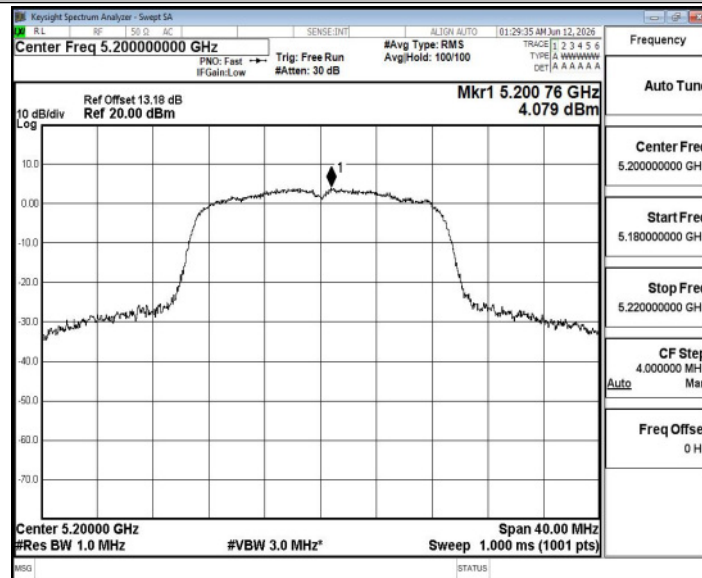
11N40SISO_Ant1_5230



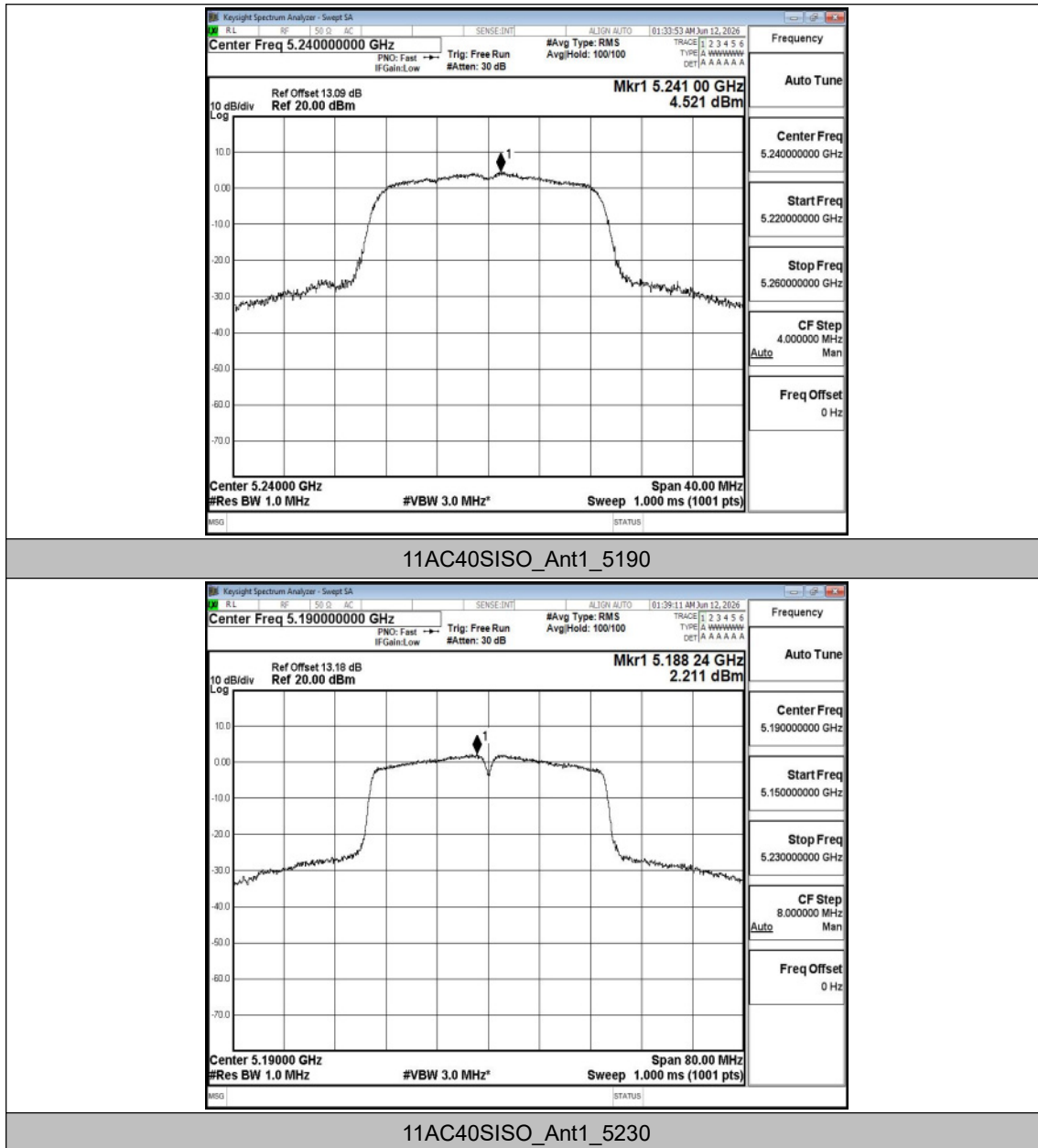
11AC20SISO_Ant1_5180

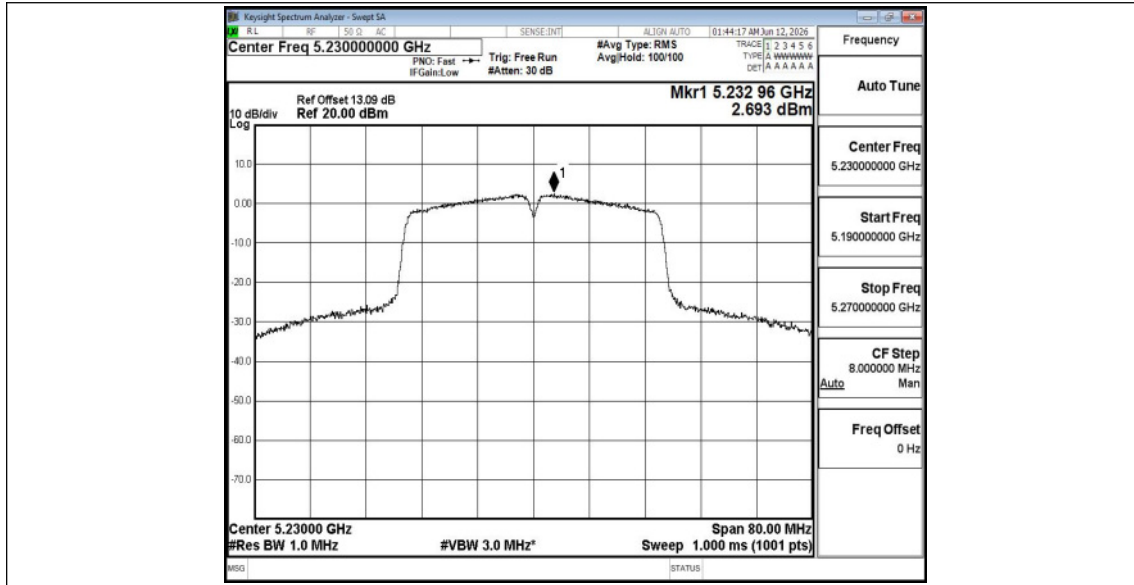


11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240





B.4 Emissions in Restricted Bands

Test Result

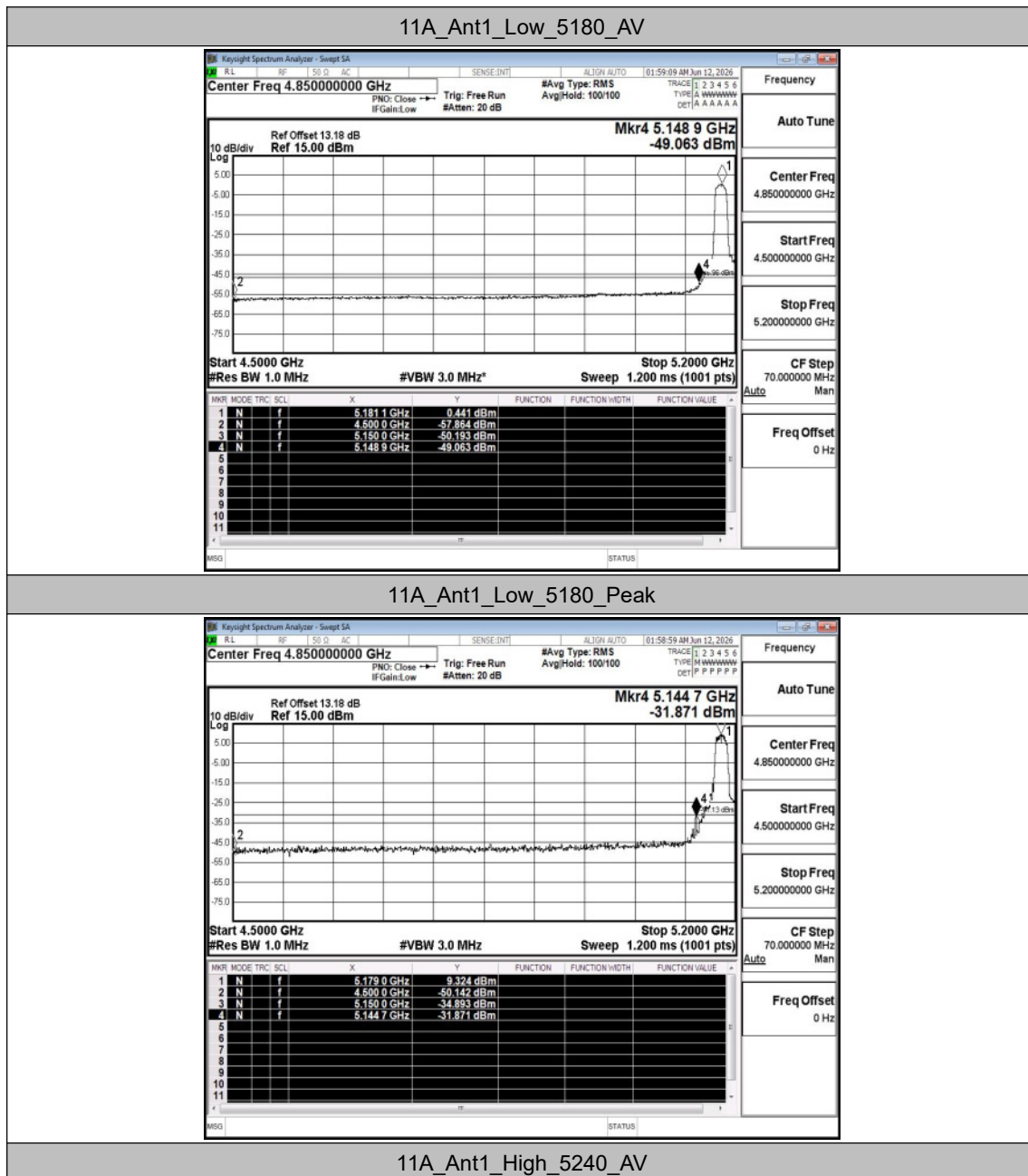
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBUV/m]	Limit [dBUV/m]	Verdict
11A	Ant1	Low	5180	AV	4500.000	-57.86	≤-46.96	2.69	1.63	41.69	≤54	PASS
				AV	5148.900	-49.06	≤-46.96	2.69	1.63	50.49	≤54	PASS
				AV	5150.000	-50.19	≤-46.96	2.69	1.63	49.36	≤54	PASS
				Peak	4500.000	-50.14	≤-31.13	2.69	0.00	47.78	≤68.2	PASS
				Peak	5144.700	-31.87	≤-31.13	2.69	0.00	66.05	≤68.2	PASS
				Peak	5150.000	-34.89	≤-31.13	2.69	0.00	63.03	≤68.2	PASS
		High	5240	AV	5350.000	-55.66	≤-46.96	2.69	1.63	43.89	≤54	PASS
				AV	5352.720	-55.06	≤-46.96	2.69	1.63	44.49	≤54	PASS
				AV	5460.000	-57.82	≤-46.96	2.69	1.63	41.73	≤54	PASS
				Peak	5350.000	-47.42	≤-31.13	2.69	0.00	50.5	≤68.2	PASS
				Peak	5358.720	-43.8	≤-31.13	2.69	0.00	54.12	≤68.2	PASS
				Peak	5460.000	-49.79	≤-31.13	2.69	0.00	48.13	≤68.2	PASS
11N20SISO	Ant1	Low	5180	AV	4500.000	-58.14	≤-46.58	2.69	1.25	41.03	≤54	PASS
				AV	5149.600	-50	≤-46.58	2.69	1.25	49.17	≤54	PASS
				AV	5150.000	-49.97	≤-46.58	2.69	1.25	49.2	≤54	PASS
				Peak	4500.000	-50.21	≤-31.13	2.69	0.00	47.71	≤68.2	PASS
				Peak	5146.800	-33.73	≤-31.13	2.69	0.00	64.19	≤68.2	PASS
				Peak	5150.000	-36.98	≤-31.13	2.69	0.00	60.94	≤68.2	PASS
		High	5240	AV	5350.000	-55.6	≤-46.58	2.69	1.25	43.57	≤54	PASS
				AV	5352.720	-55.28	≤-46.58	2.69	1.25	43.89	≤54	PASS
				AV	5460.000	-56.51	≤-46.58	2.69	1.25	42.66	≤54	PASS
				Peak	5350.000	-48.24	≤-31.13	2.69	0.00	49.68	≤68.2	PASS
				Peak	5405.280	-44.79	≤-31.13	2.69	0.00	53.13	≤68.2	PASS
				Peak	5460.000	-46.88	≤-31.13	2.69	0.00	51.04	≤68.2	PASS
11N40SISO	Ant1	Low	5190	AV	4500.000	-57.9	≤-45.59	2.69	0.26	40.28	≤54	PASS
				AV	5143.300	-53.08	≤-45.59	2.69	0.26	45.1	≤54	PASS
				AV	5150.000	-53.69	≤-45.59	2.69	0.26	44.49	≤54	PASS
				Peak	4500.000	-49.37	≤-31.13	2.69	0.00	48.55	≤68.2	PASS
				Peak	5148.900	-35.88	≤-31.13	2.69	0.00	62.04	≤68.2	PASS
				Peak	5150.000	-40.28	≤-31.13	2.69	0.00	57.64	≤68.2	PASS
		High	5230	AV	5350.000	-53.98	≤-45.65	2.69	0.32	44.26	≤54	PASS
				AV	5353.660	-53.61	≤-45.65	2.69	0.32	44.63	≤54	PASS
				AV	5460.000	-57.52	≤-45.65	2.69	0.32	40.72	≤54	PASS
				Peak	5350.000	-43.91	≤-31.13	2.69	0.00	54.01	≤68.2	PASS

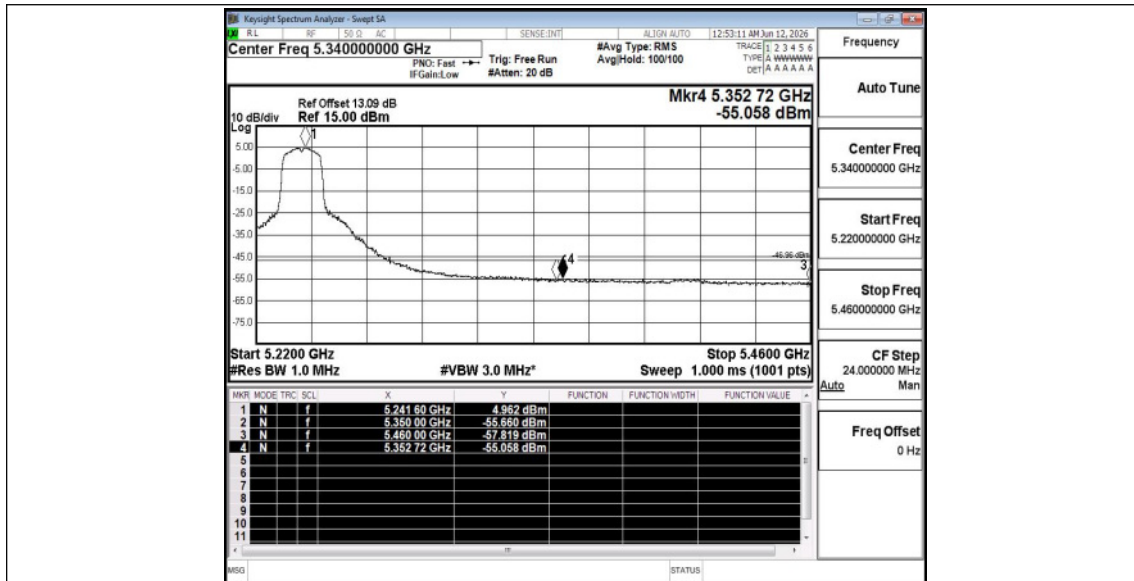
				Peak	5366.920	-42.76	≤-31.13	2.69	0.00	55.16	≤68.2	PASS
				Peak	5460.000	-48.85	≤-31.13	2.69	0.00	49.07	≤68.2	PASS
11AC20SISO	Ant1	Low	5180	AV	4500.000	-58.08	≤-46.50	2.69	1.17	41.01	≤54	PASS
				AV	5148.200	-49.94	≤-46.50	2.69	1.17	49.15	≤54	PASS
				AV	5150.000	-50.27	≤-46.50	2.69	1.17	48.82	≤54	PASS
				Peak	4500.000	-48.72	≤-31.13	2.69	0.00	49.2	≤68.2	PASS
				Peak	5148.900	-34.07	≤-31.13	2.69	0.00	63.85	≤68.2	PASS
				Peak	5150.000	-38.88	≤-31.13	2.69	0.00	59.04	≤68.2	PASS
		High	5240	AV	5350.000	-55.81	≤-46.50	2.69	1.17	43.28	≤54	PASS
				AV	5406.960	-55	≤-46.50	2.69	1.17	44.09	≤54	PASS
				AV	5460.000	-57.09	≤-46.50	2.69	1.17	42	≤54	PASS
				Peak	5350.000	-48.33	≤-31.13	2.69	0.00	49.59	≤68.2	PASS
				Peak	5364.000	-45.25	≤-31.13	2.69	0.00	52.67	≤68.2	PASS
				Peak	5460.000	-49.62	≤-31.13	2.69	0.00	48.3	≤68.2	PASS
11AC40SISO	Ant1	Low	5190	AV	4500.000	-58.21	≤-45.59	2.69	0.26	39.97	≤54	PASS
				AV	5149.600	-49.47	≤-45.59	2.69	0.26	48.71	≤54	PASS
				AV	5150.000	-48.69	≤-45.59	2.69	0.26	49.49	≤54	PASS
				Peak	4500.000	-49.64	≤-31.13	2.69	0.00	48.28	≤68.2	PASS
				Peak	5147.500	-33.69	≤-31.13	2.69	0.00	64.23	≤68.2	PASS
				Peak	5150.000	-31.43	≤-31.13	2.69	0.00	66.49	≤68.2	PASS
		High	5230	AV	5350.000	-54.05	≤-45.65	2.69	0.32	44.19	≤54	PASS
				AV	5352.880	-53.73	≤-45.65	2.69	0.32	44.51	≤54	PASS
				AV	5460.000	-57.08	≤-45.65	2.69	0.32	41.16	≤54	PASS
				Peak	5350.000	-44.5	≤-31.13	2.69	0.00	53.42	≤68.2	PASS
				Peak	5351.840	-41.61	≤-31.13	2.69	0.00	56.31	≤68.2	PASS
				Peak	5460.000	-49.09	≤-31.13	2.69	0.00	48.83	≤68.2	PASS

Note:

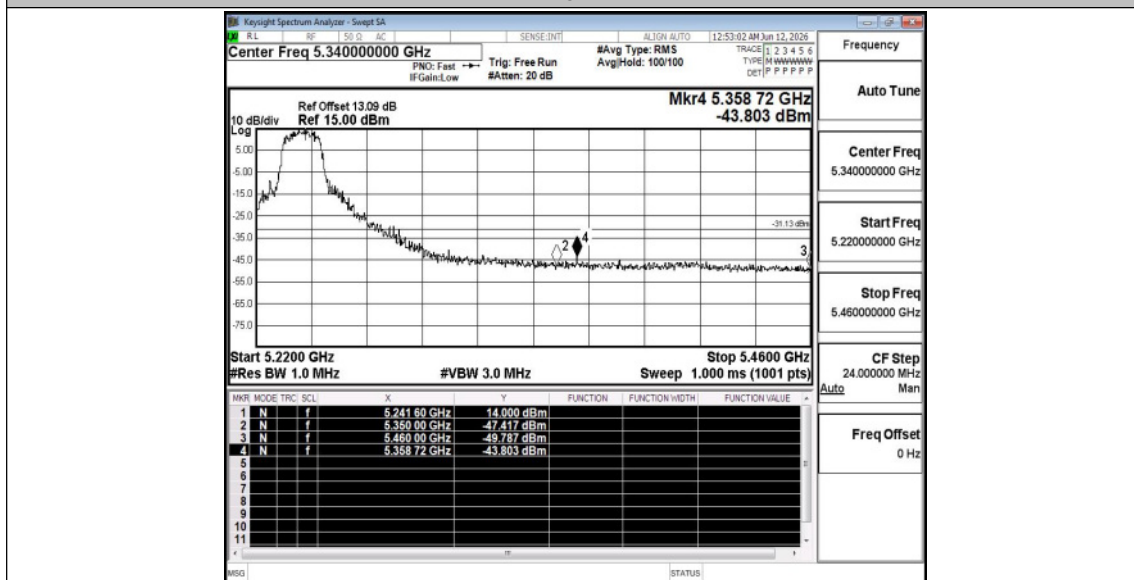
1. The Antenna Gain is compensated in the graph.

Test Graphs

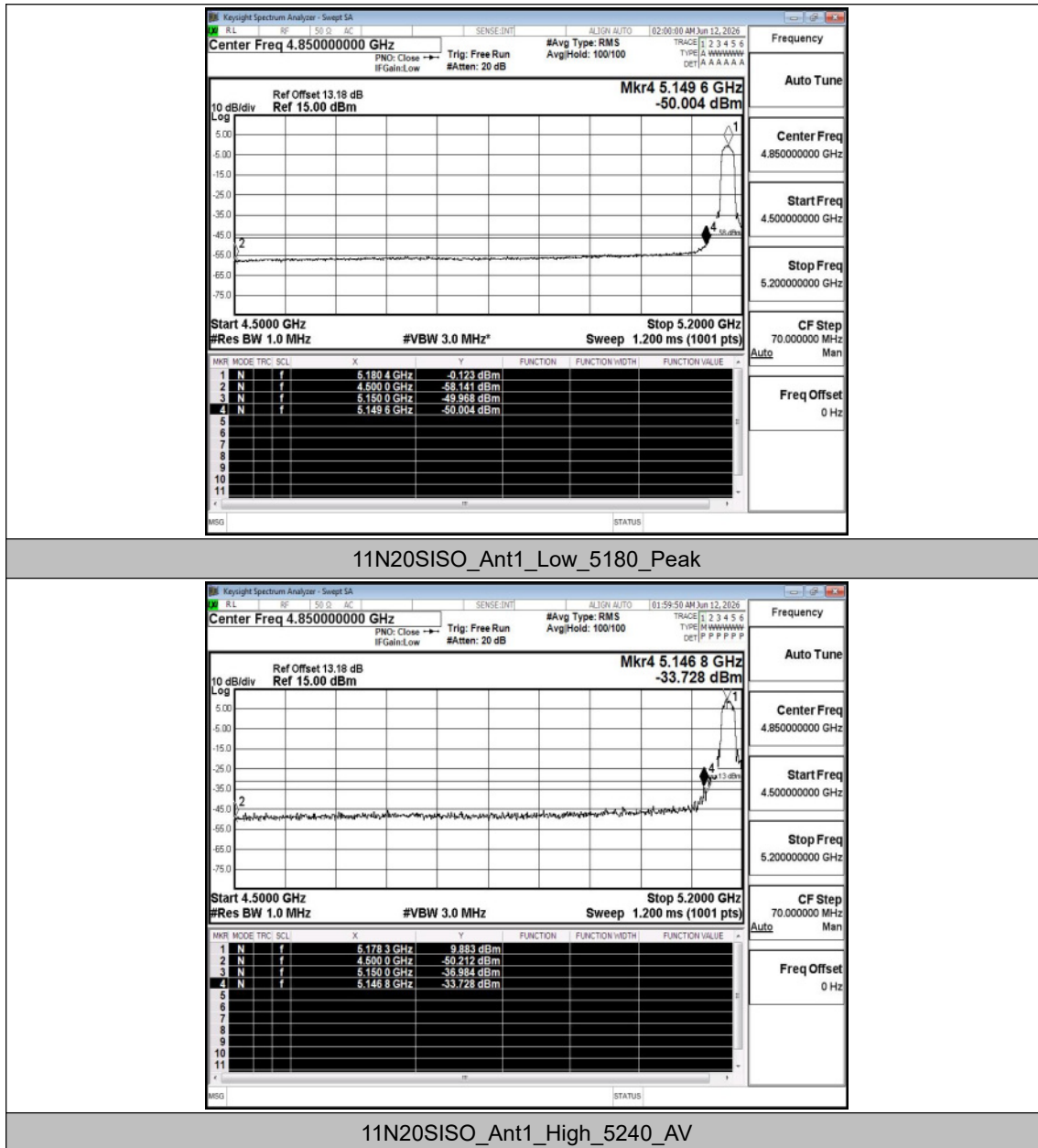


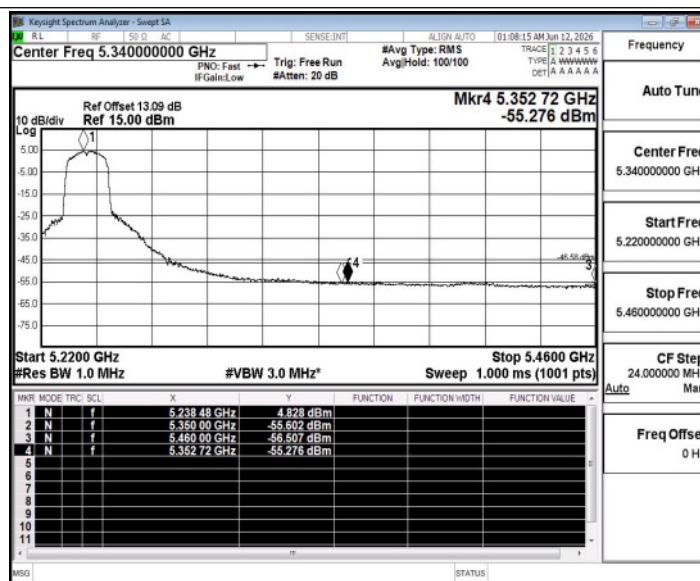


11A_Ant1_High_5240_Peak

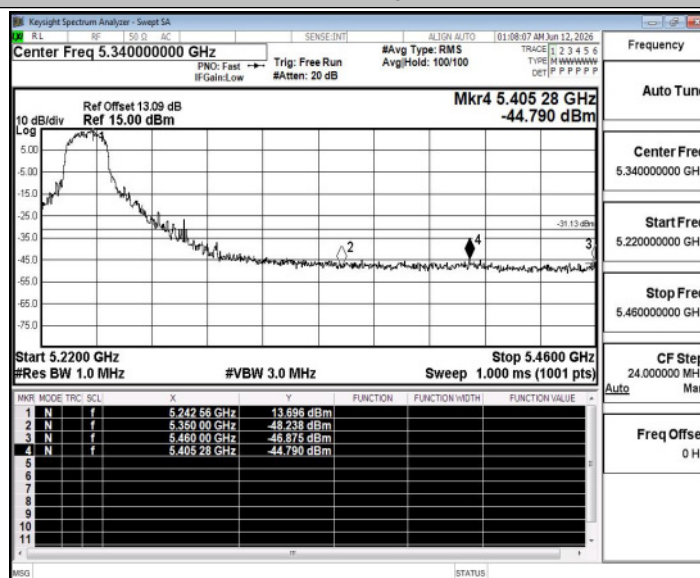


11N20SISO_Ant1_Low_5180_AV

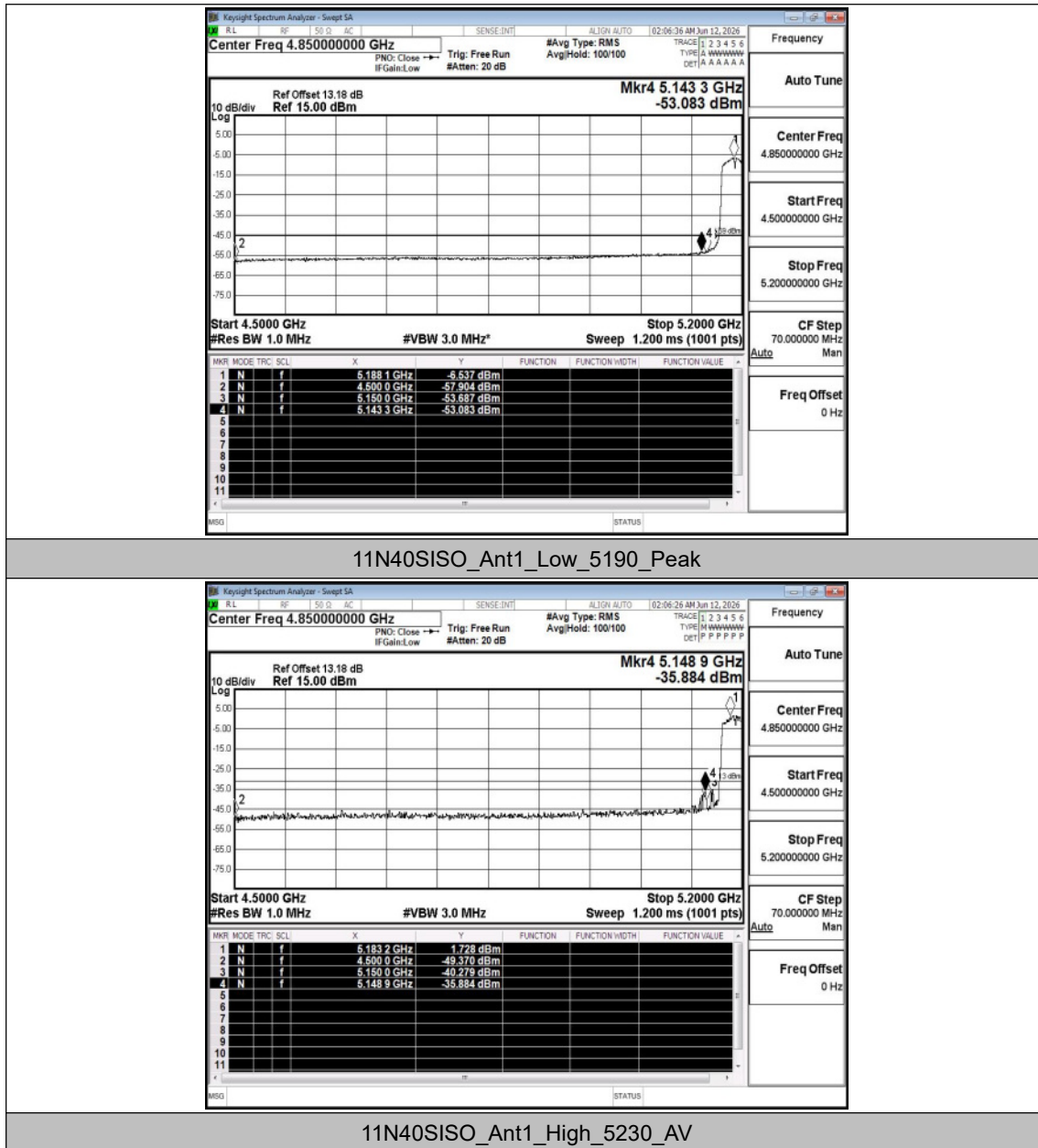


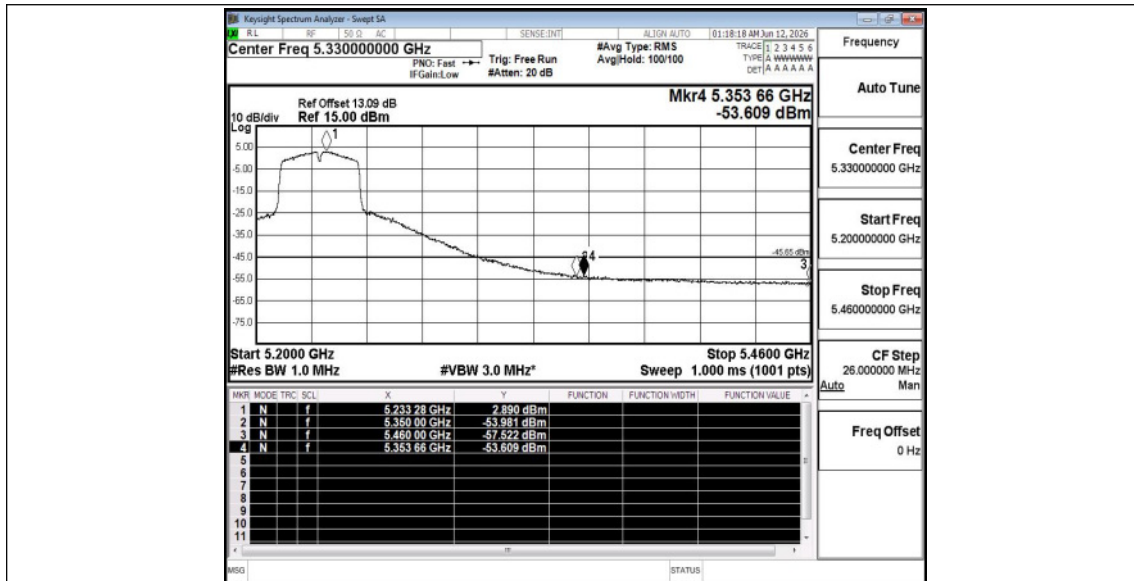


11N20SISO Ant1 High 5240 Peak

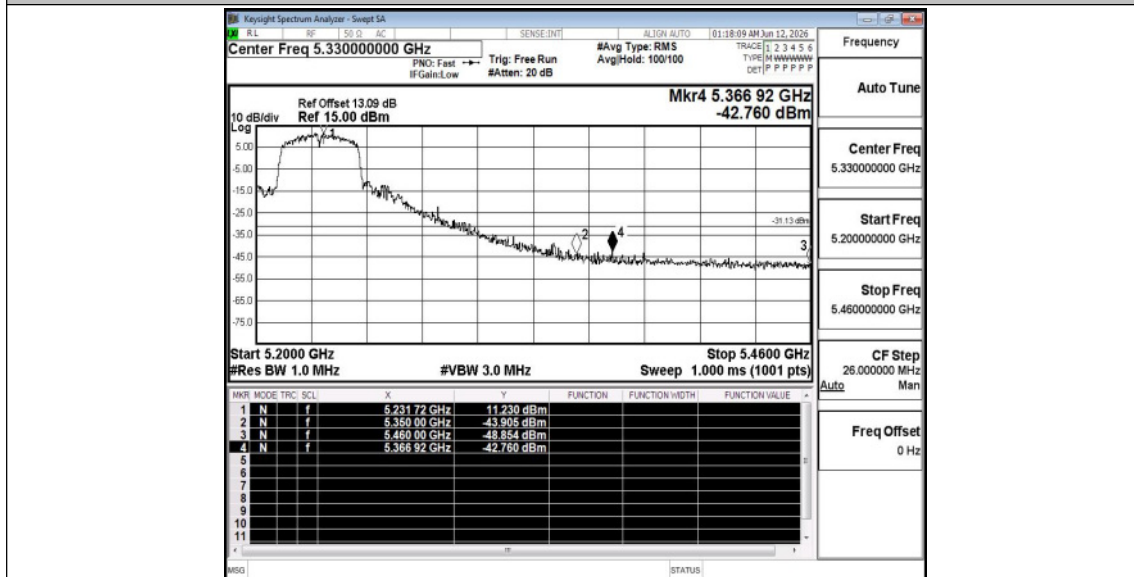


11N40SISO Ant1 Low 5190 AV

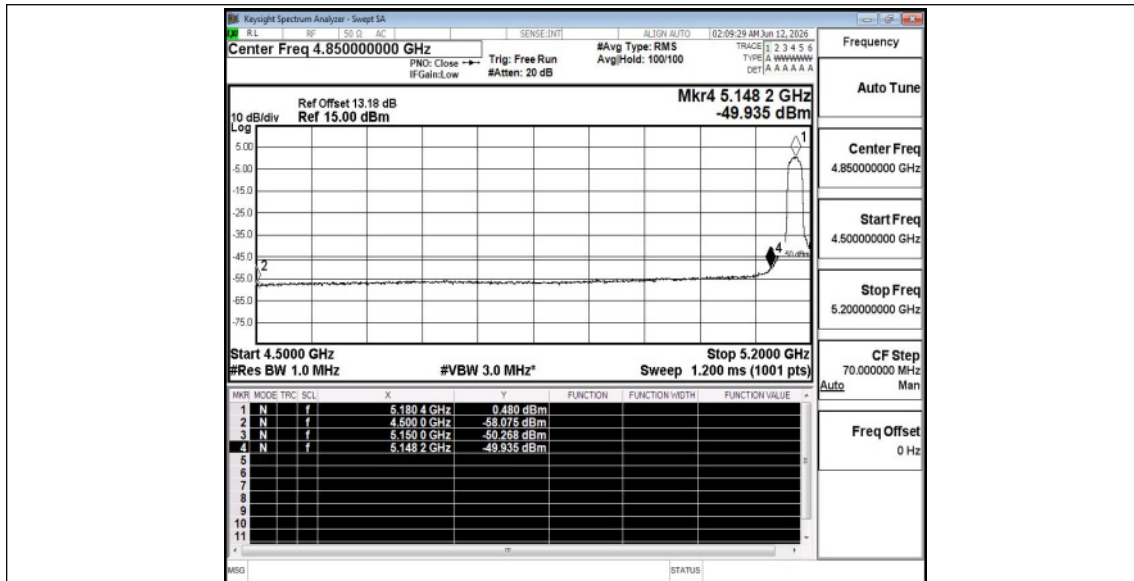




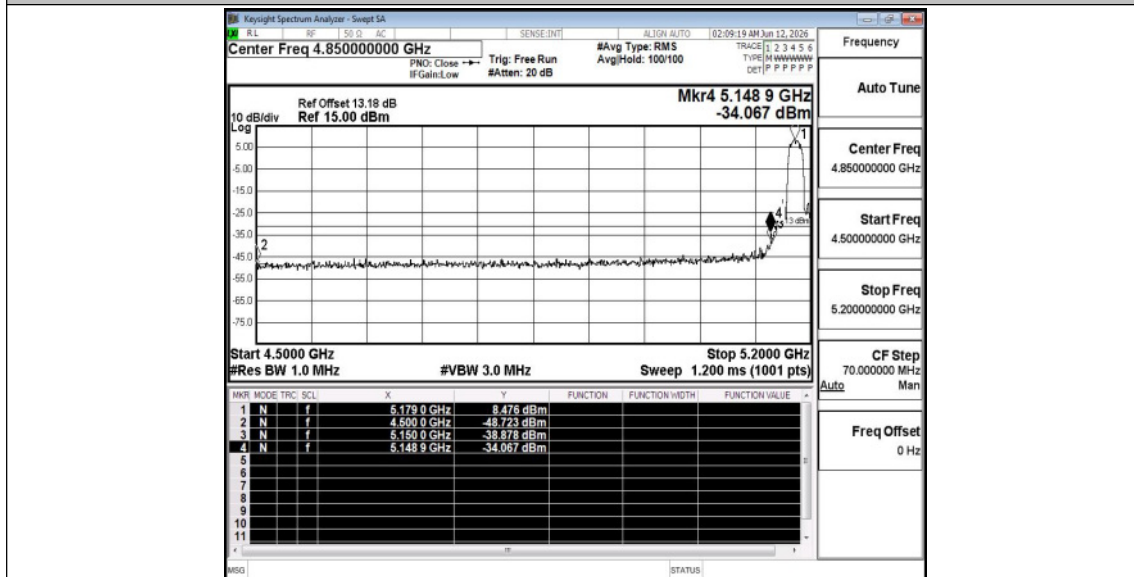
11N40SISO_Ant1_High_5230_Peak



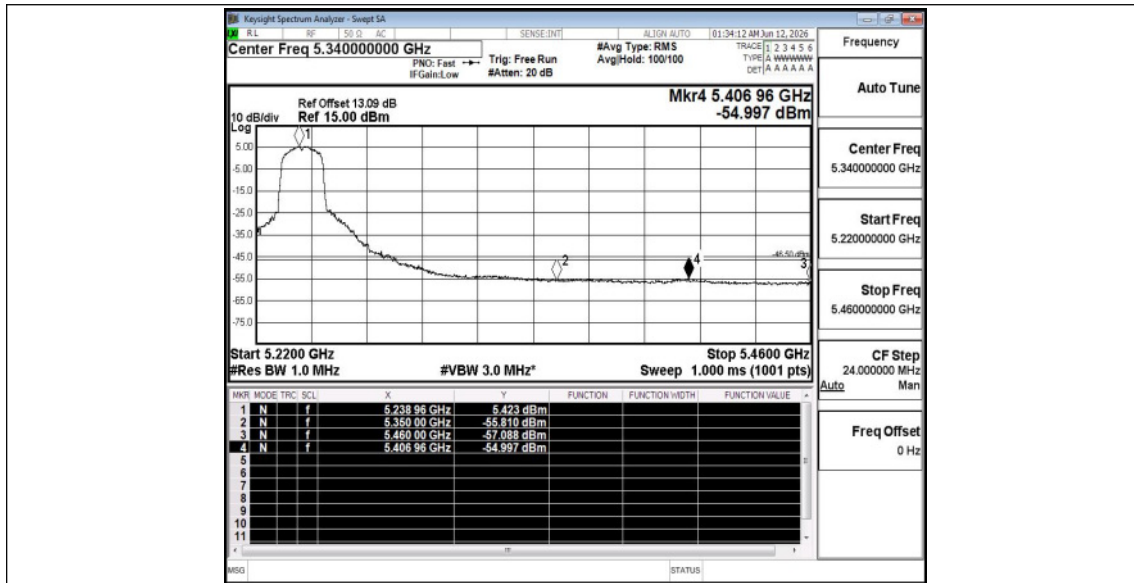
11AC20SISO_Ant1_Low_5180_AV



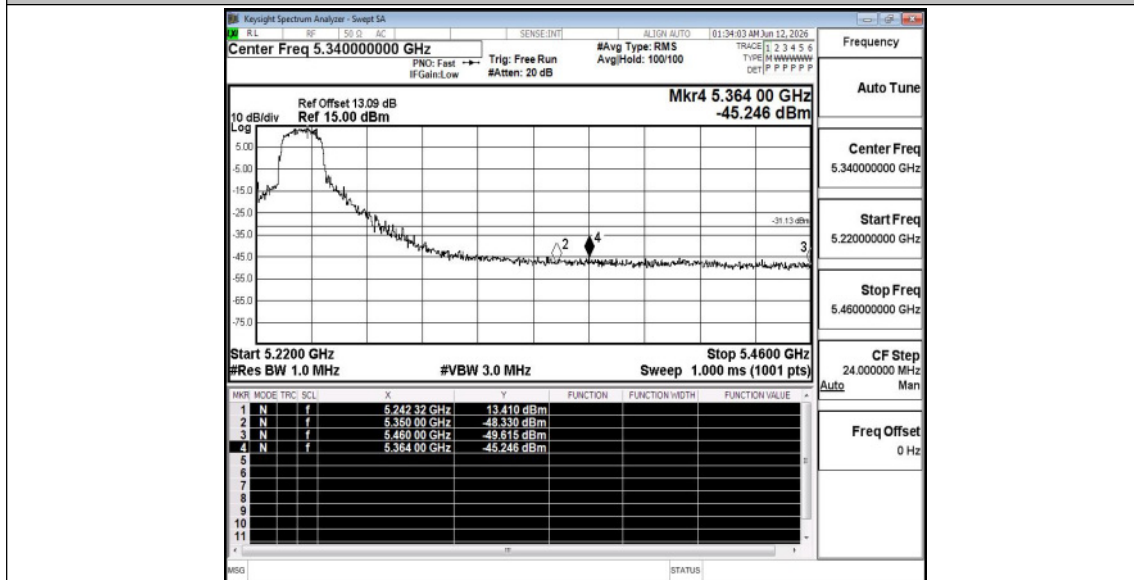
11AC20SISO_Ant1_Low_5180_Peak



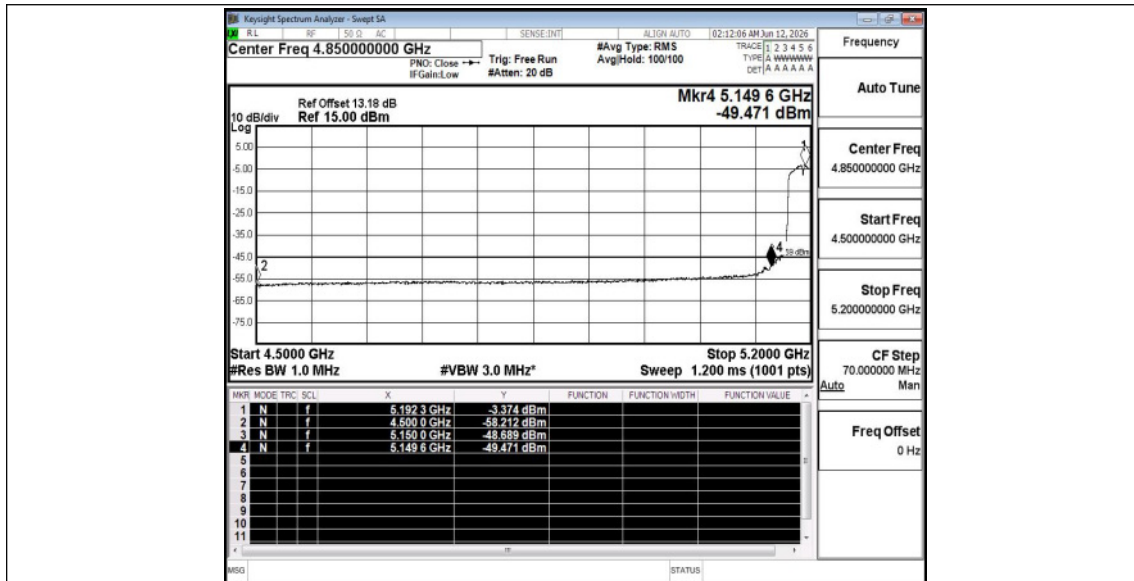
11AC20SISO_Ant1_High_5240_AV



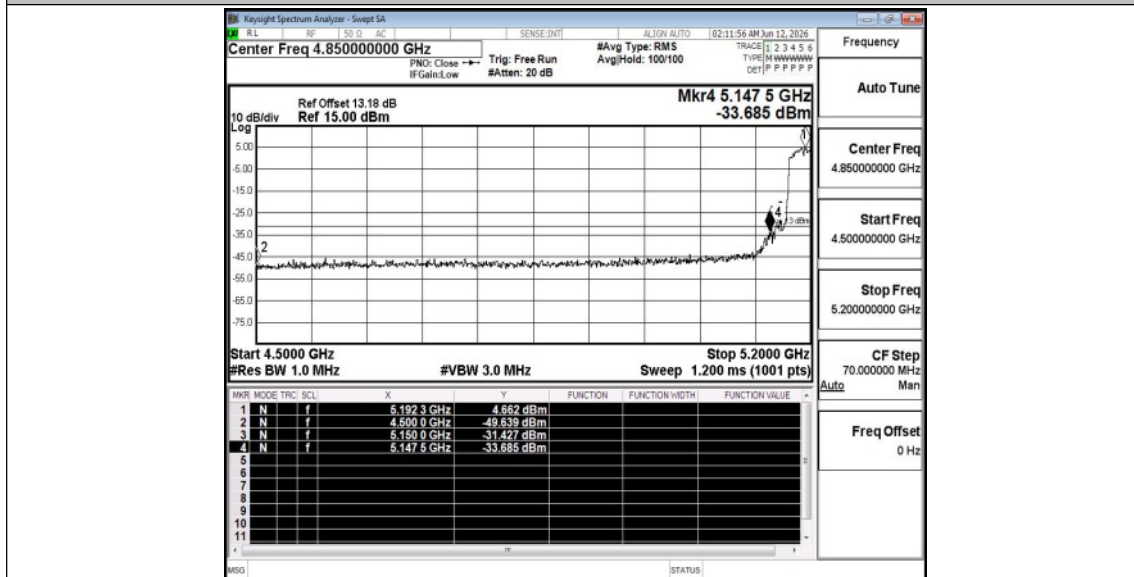
11AC20SISO_Ant1_High_5240_Peak



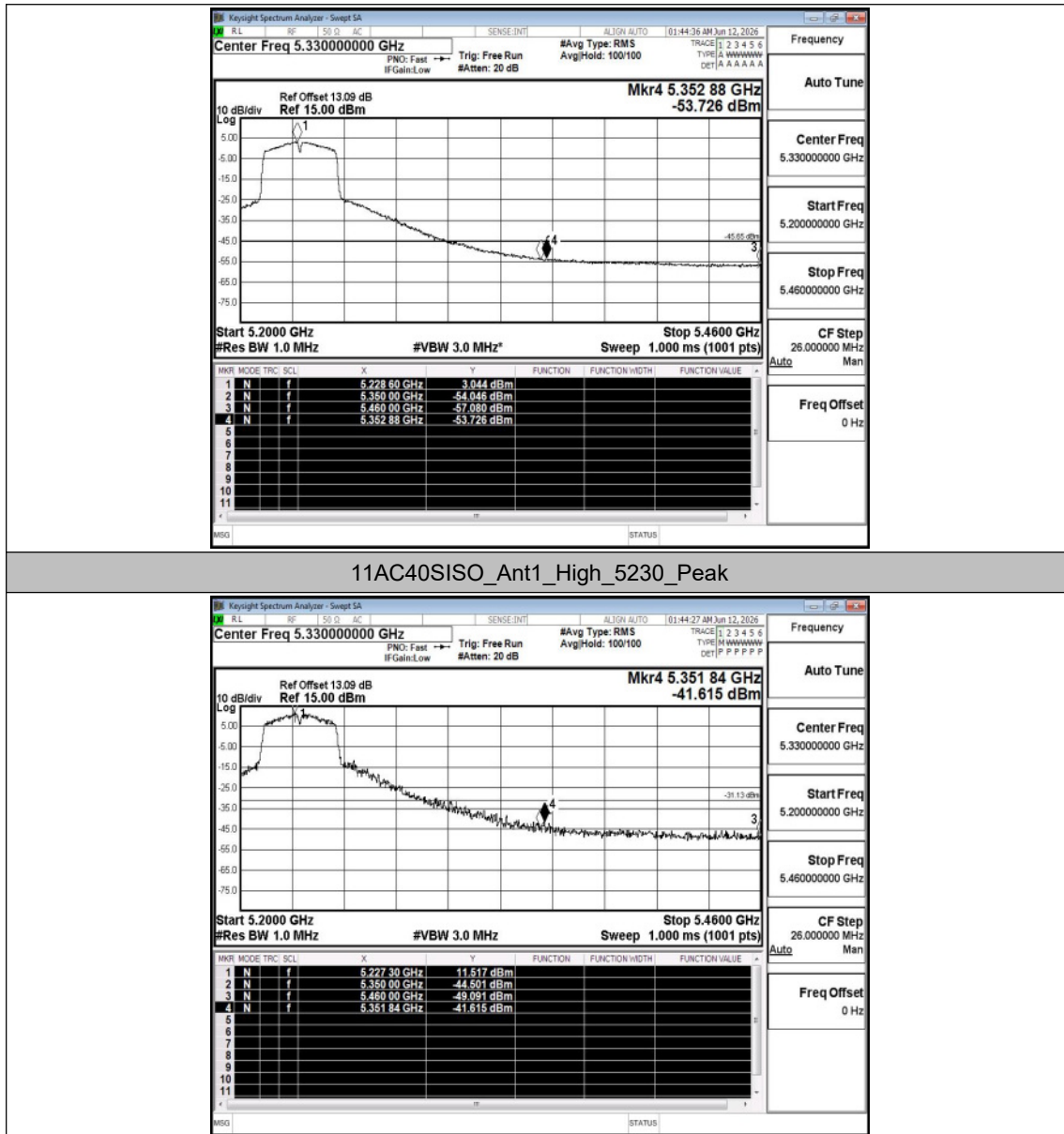
11AC40SISO_Ant1_Low_5190_AV



11AC40SISO_Ant1_Low_5190_Peak



11AC40SISO_Ant1_High_5230_AV



B.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Freq(M Hz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-20000.00	-3.861004	20	PASS
		5200	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5240	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11N20SI SO	Ant1	5180	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5200	NV	NT	20000.00	3.846154	20	PASS
			LV	NT	20000.00	3.846154	20	PASS
			HV	NT	20000.00	3.846154	20	PASS
		5240	NV	NT	-20000.00	-3.816794	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11N40SI SO	Ant1	5190	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-40000.00	-7.707129	20	PASS
			HV	NT	-40000.00	-7.707129	20	PASS
		5230	NV	NT	0.00	0.000000	20	PASS
			LV	NT	40000.00	7.648184	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11AC20S ISO	Ant1	5180	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	20000.00	3.861004	20	PASS
		5200	NV	NT	-20000.00	-3.846154	20	PASS
			LV	NT	-40000.00	-7.692308	20	PASS
			HV	NT	20000.00	3.846154	20	PASS
		5240	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11AC40S	Ant1	5190	NV	NT	0.00	0.000000	20	PASS

ISO			LV	NT	-40000.00	-7.707129	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5230	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS

Temperature								
TestMode	Antenna	Freq(M Hz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	0.00	0.000000	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-20000.00	-3.861004	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
		5200	NV	-30	0.00	0.000000	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
		5240	NV	-30	0.00	0.000000	20	PASS
			NV	-20	20000.00	3.816794	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	20000.00	3.816794	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	-20000.00	-3.816794	20	PASS
11N20SI SO	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	20000.00	3.861004	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	20000.00	3.861004	20	PASS

			NV	20	-20000.00	-3.861004	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	20000.00	3.861004	20	PASS
		5200	NV	-30	20000.00	3.846154	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	20000.00	3.846154	20	PASS
			NV	10	20000.00	3.846154	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	-40000.00	-7.692308	20	PASS
			NV	40	20000.00	3.846154	20	PASS
			NV	50	20000.00	3.846154	20	PASS
		5240	NV	-30	-20000.00	-3.816794	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	20000.00	3.816794	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-20000.00	-3.816794	20	PASS
			NV	20	-20000.00	-3.816794	20	PASS
			NV	30	-20000.00	-3.816794	20	PASS
			NV	40	40000.00	7.633588	20	PASS
11N40SI SO	Ant1	5190	NV	50	0.00	0.000000	20	PASS
			NV	-30	0.00	0.000000	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	40000.00	7.707129	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-40000.00	-7.707129	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	0.00	0.000000	20	PASS
		5230	NV	40	40000.00	7.707129	20	PASS
			NV	50	0.00	0.000000	20	PASS
			NV	-30	40000.00	7.648184	20	PASS
			NV	-20	40000.00	7.648184	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	40000.00	7.648184	20	PASS
			NV	20	0.00	0.000000	20	PASS
11AC20S	Ant1	5180	NV	30	0.00	0.000000	20	PASS
			NV	40	-40000.00	-7.648184	20	PASS
			NV	50	40000.00	7.648184	20	PASS
			NV	-30	0.00	0.000000	20	PASS

ISO			NV	-20	-20000.00	-3.861004	20	PASS
			NV	-10	20000.00	3.861004	20	PASS
			NV	0	20000.00	3.861004	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	20000.00	3.861004	20	PASS
			NV	40	20000.00	3.861004	20	PASS
			NV	50	20000.00	3.861004	20	PASS
		5200	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-20000.00	-3.846154	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-20000.00	-3.846154	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	-20000.00	-3.846154	20	PASS
			NV	40	40000.00	7.692308	20	PASS
			NV	50	20000.00	3.846154	20	PASS
		5240	NV	-30	-20000.00	-3.816794	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
11AC40S ISO	Ant1	5190	NV	-30	40000.00	7.707129	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-40000.00	-7.707129	20	PASS
			NV	20	40000.00	7.707129	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	-40000.00	-7.707129	20	PASS
		5230	NV	-30	0.00	0.000000	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	40000.00	7.648184	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-40000.00	-7.648184	20	PASS
			NV	20	-40000.00	-7.648184	20	PASS

			NV	30	0.00	0.000000	20	PASS
			NV	40	-40000.00	-7.648184	20	PASS
			NV	50	0.00	0.000000	20	PASS

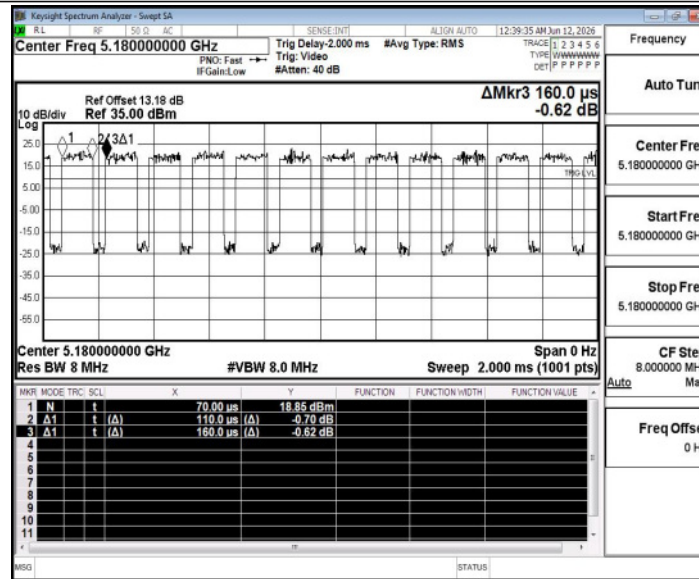
B.6 Duty Cycle

Test Result

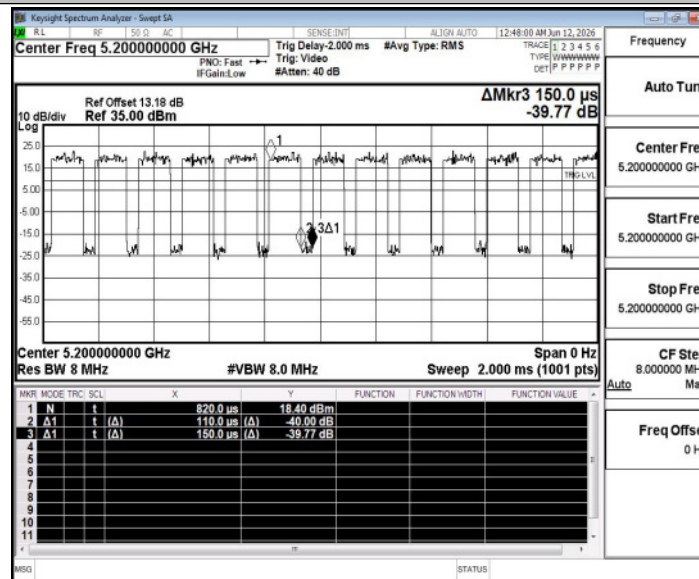
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	Limit	Verdict
11A	Ant1	5180	0.11	0.16	68.75	1.63	---	---
		5200	0.11	0.15	73.33	1.35	---	---
		5240	0.11	0.16	68.75	1.63	---	---
11N20SISO	Ant1	5180	0.12	0.16	75.00	1.25	---	---
		5200	0.12	0.17	70.59	1.51	---	---
		5240	0.12	0.16	75.00	1.25	---	---
11N40SISO	Ant1	5190	0.65	0.69	94.20	0.26	---	---
		5230	0.65	0.70	92.86	0.32	---	---
11AC20SISO	Ant1	5180	0.13	0.17	76.47	1.17	---	---
		5200	0.12	0.17	70.59	1.51	---	---
		5240	0.13	0.17	76.47	1.17	---	---
11AC40SISO	Ant1	5190	0.65	0.69	94.20	0.26	---	---
		5230	0.65	0.70	92.86	0.32	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240

