

Appendix D

RF Test Data for 5.5GWIFI (Conducted Measurement)

Aston Martin Valkyrie

Test Model: Aston Martin Valkyrie

Environmental Conditions

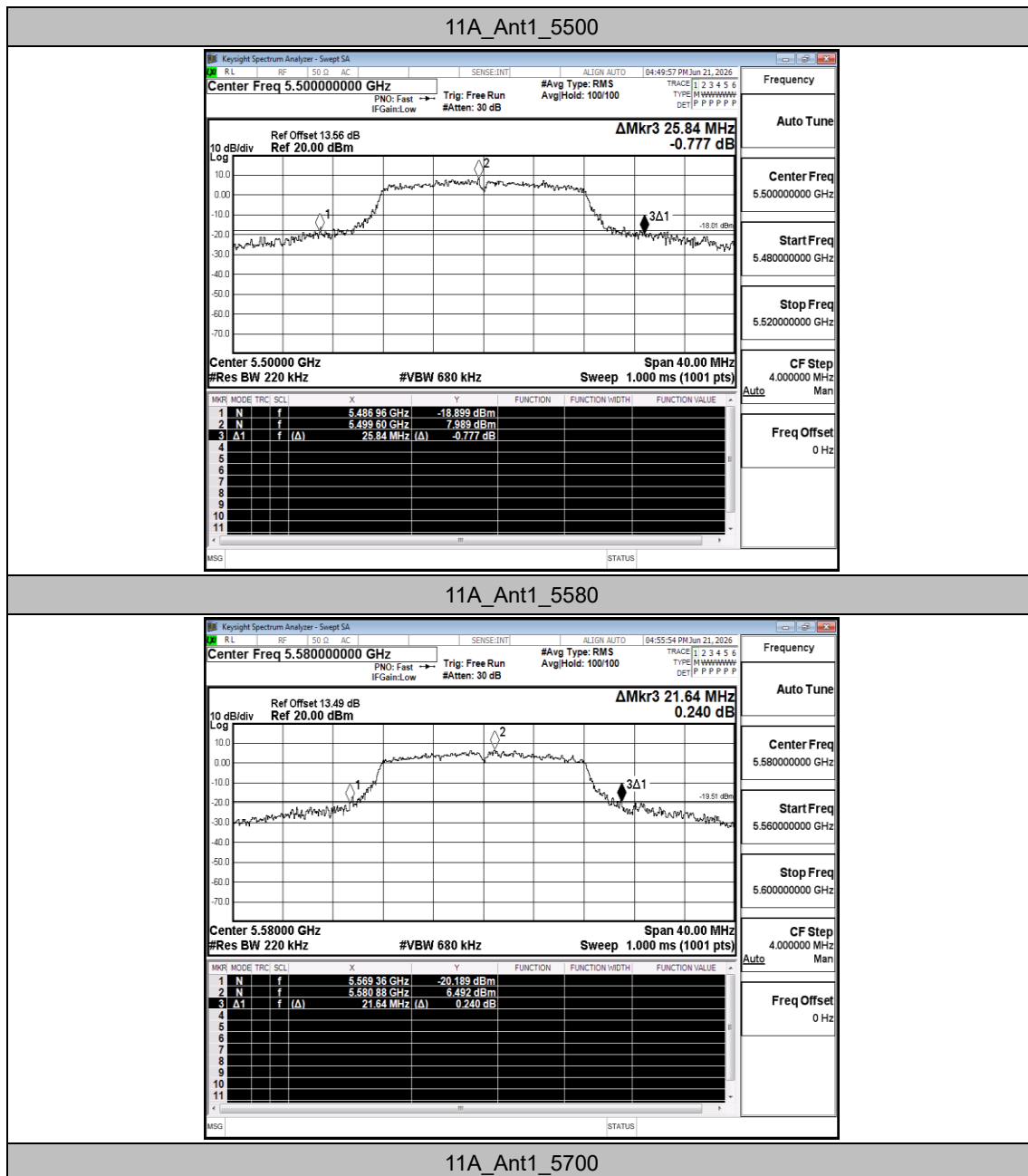
Temperature:	24.8° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Fengliu Tang

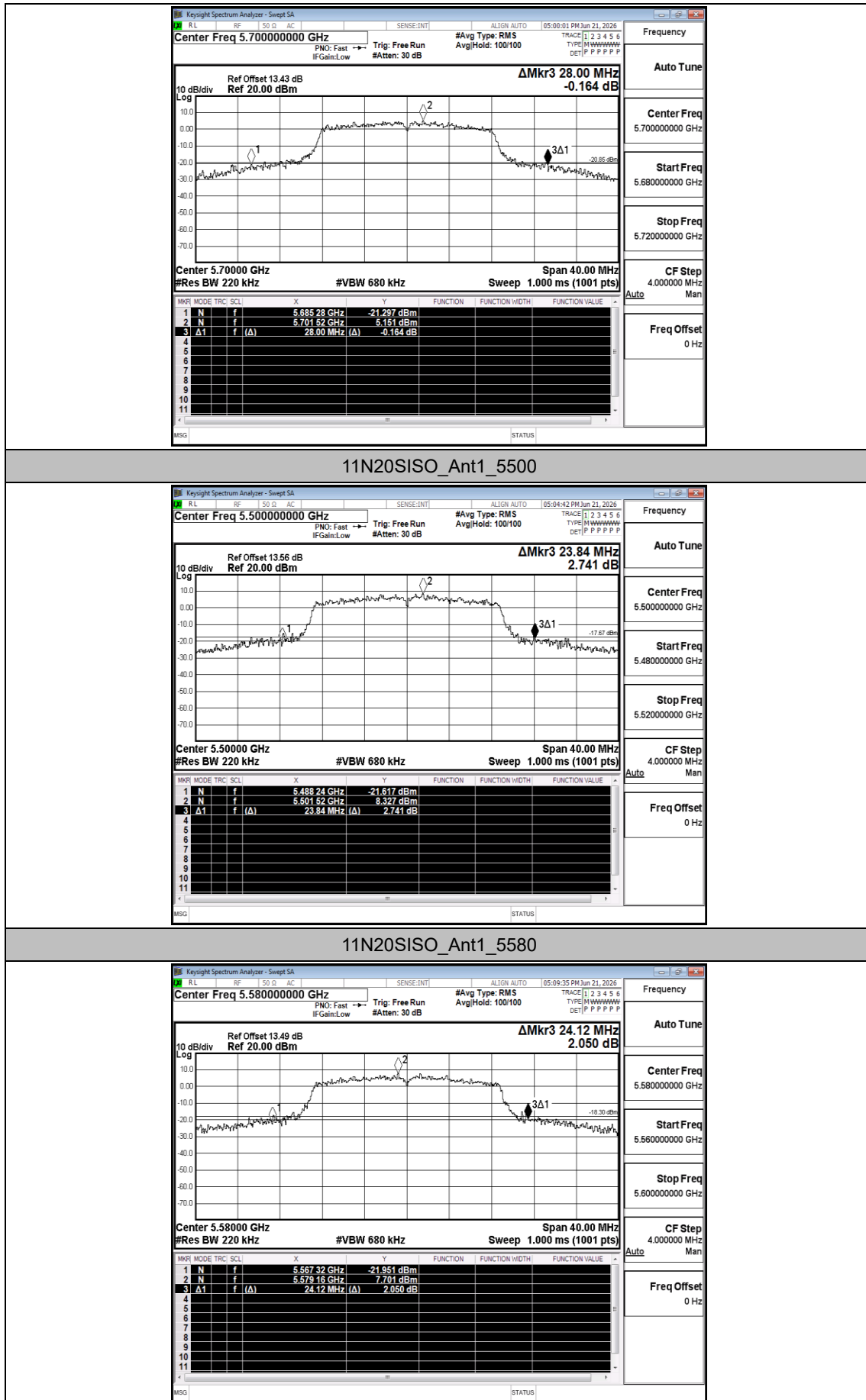
D.1 Emission Bandwidth

Test Result

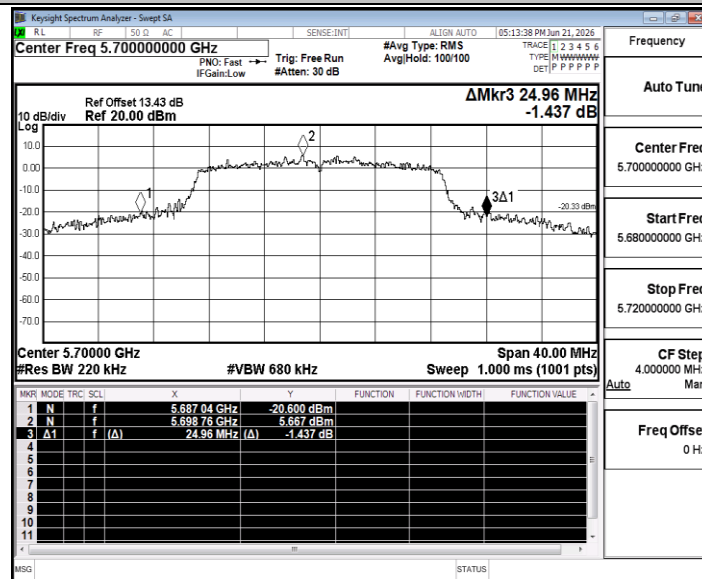
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5500	25.840	5486.960	5512.800	---	---
		5580	21.640	5569.360	5591.000	---	---
		5700	28.000	5685.280	5713.280	---	---
11N20SISO	Ant1	5500	23.840	5488.240	5512.080	---	---
		5580	24.120	5567.320	5591.440	---	---
		5700	24.960	5687.040	5712.000	---	---
11N40SISO	Ant1	5510	63.040	5479.920	5542.960	---	---
		5550	61.680	5517.440	5579.120	---	---
		5670	61.200	5635.840	5697.040	---	---
11AC20SISO	Ant1	5500	23.040	5489.520	5512.560	---	---
		5580	26.960	5565.040	5592.000	---	---
		5700	25.840	5687.080	5712.920	---	---
11AC40SISO	Ant1	5510	58.480	5479.360	5537.840	---	---
		5550	57.120	5520.880	5578.000	---	---
		5670	64.880	5634.800	5699.680	---	---
11AX20SISO	Ant1	5500	29.200	5484.480	5513.680	---	---
		5580	23.960	5566.720	5590.680	---	---
		5700	26.560	5687.000	5713.560	---	---
11AX40SISO	Ant1	5510	60.240	5479.440	5539.680	---	---
		5550	55.840	5519.520	5575.360	---	---
		5670	58.560	5634.800	5693.360	---	---

Test Graphs

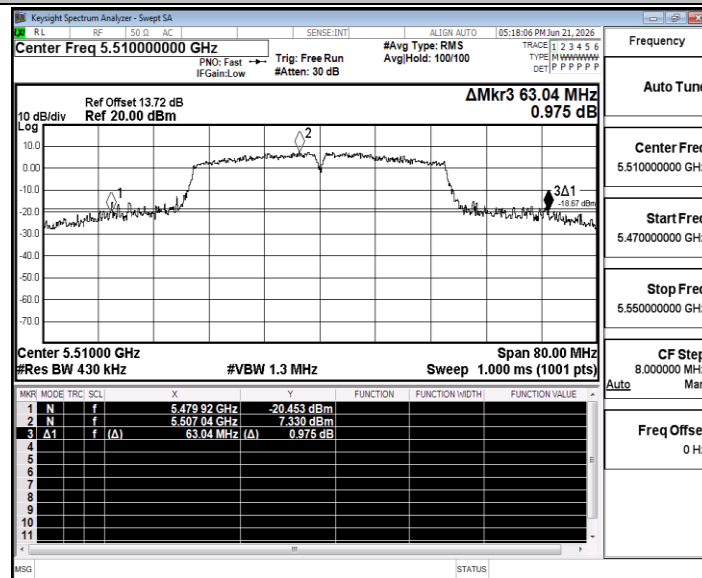




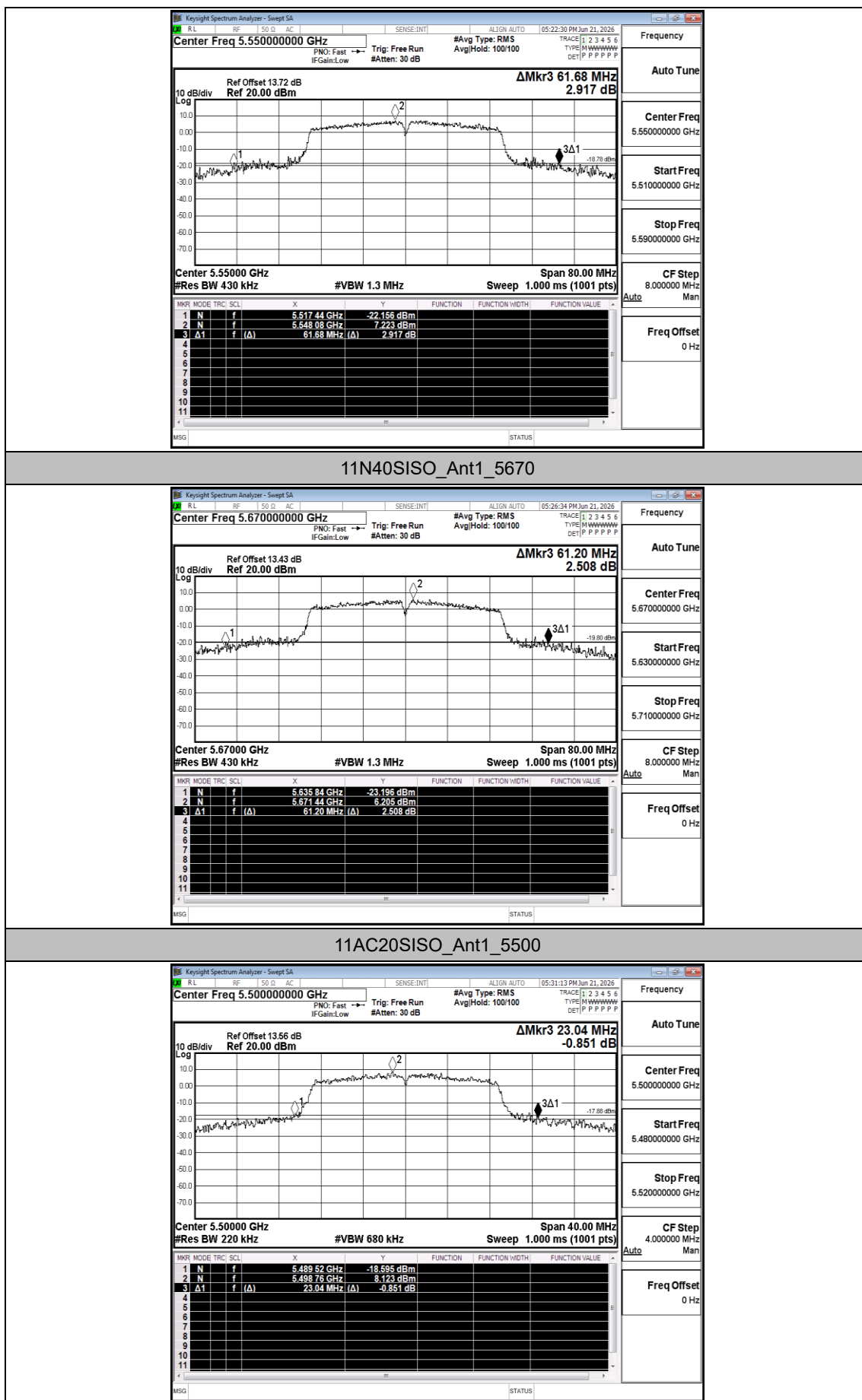
11N20SISO_Ant1_5700



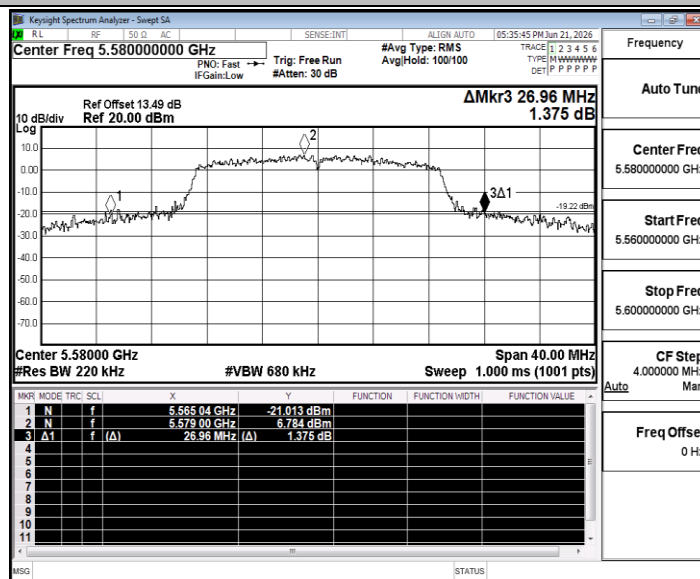
11N40SISO_Ant1_5510



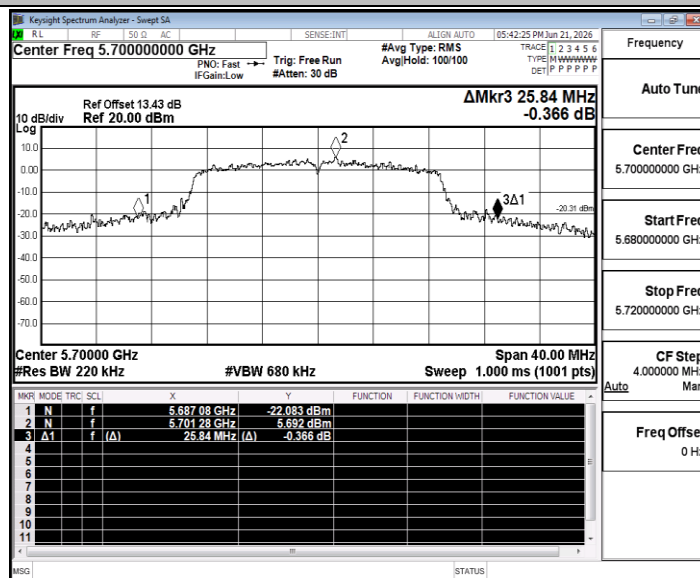
11N40SISO_Ant1_5550



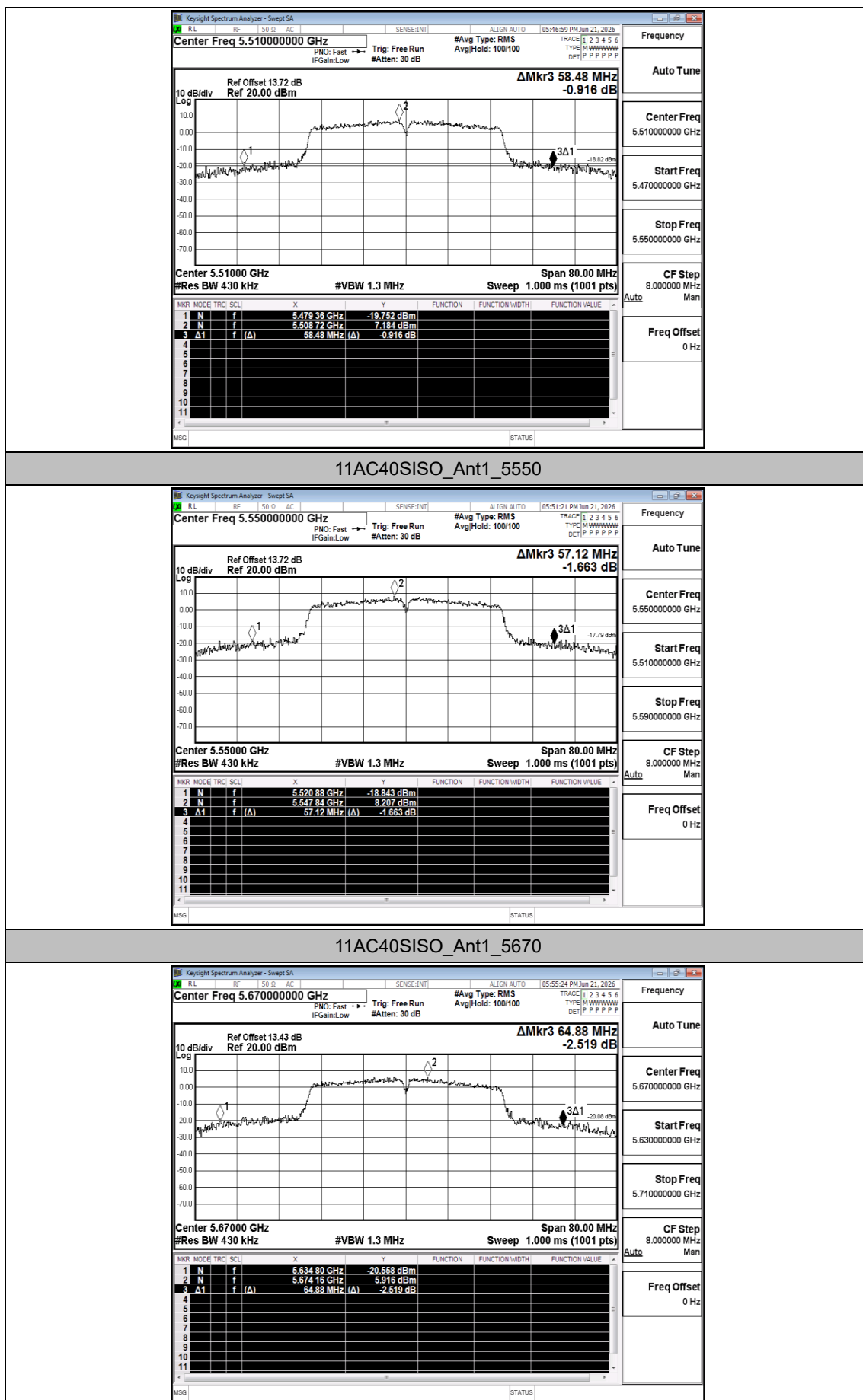
11AC20SISO_Ant1_5580



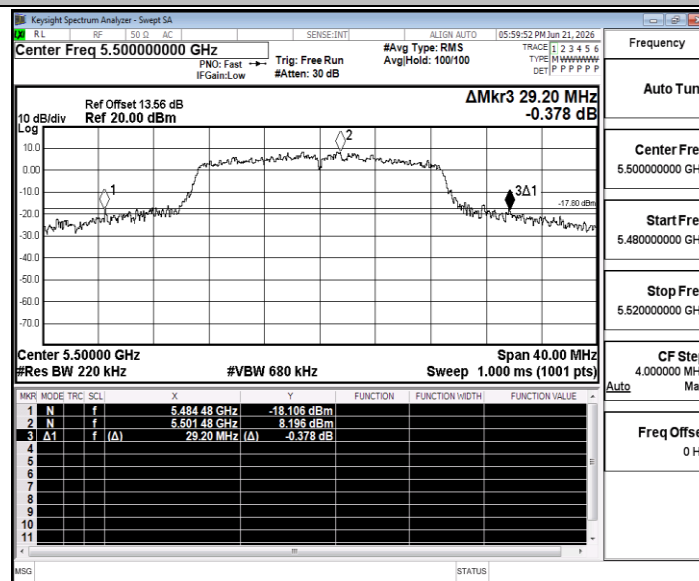
11AC20SISO_Ant1_5700



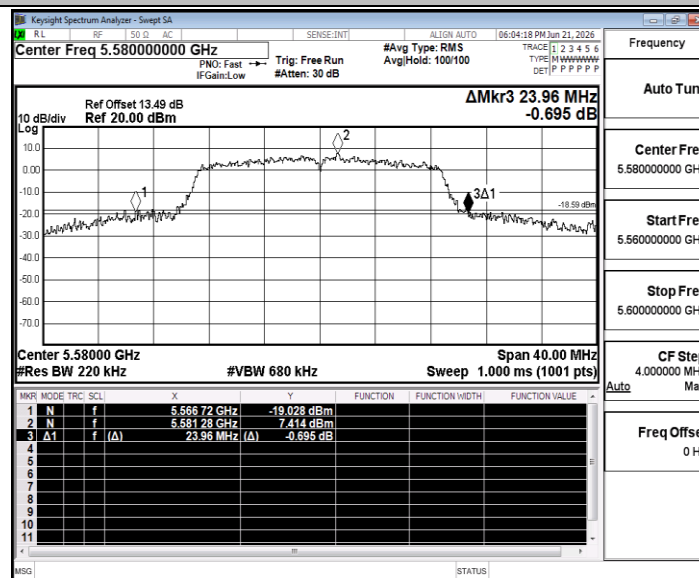
11AC40SISO_Ant1_5510



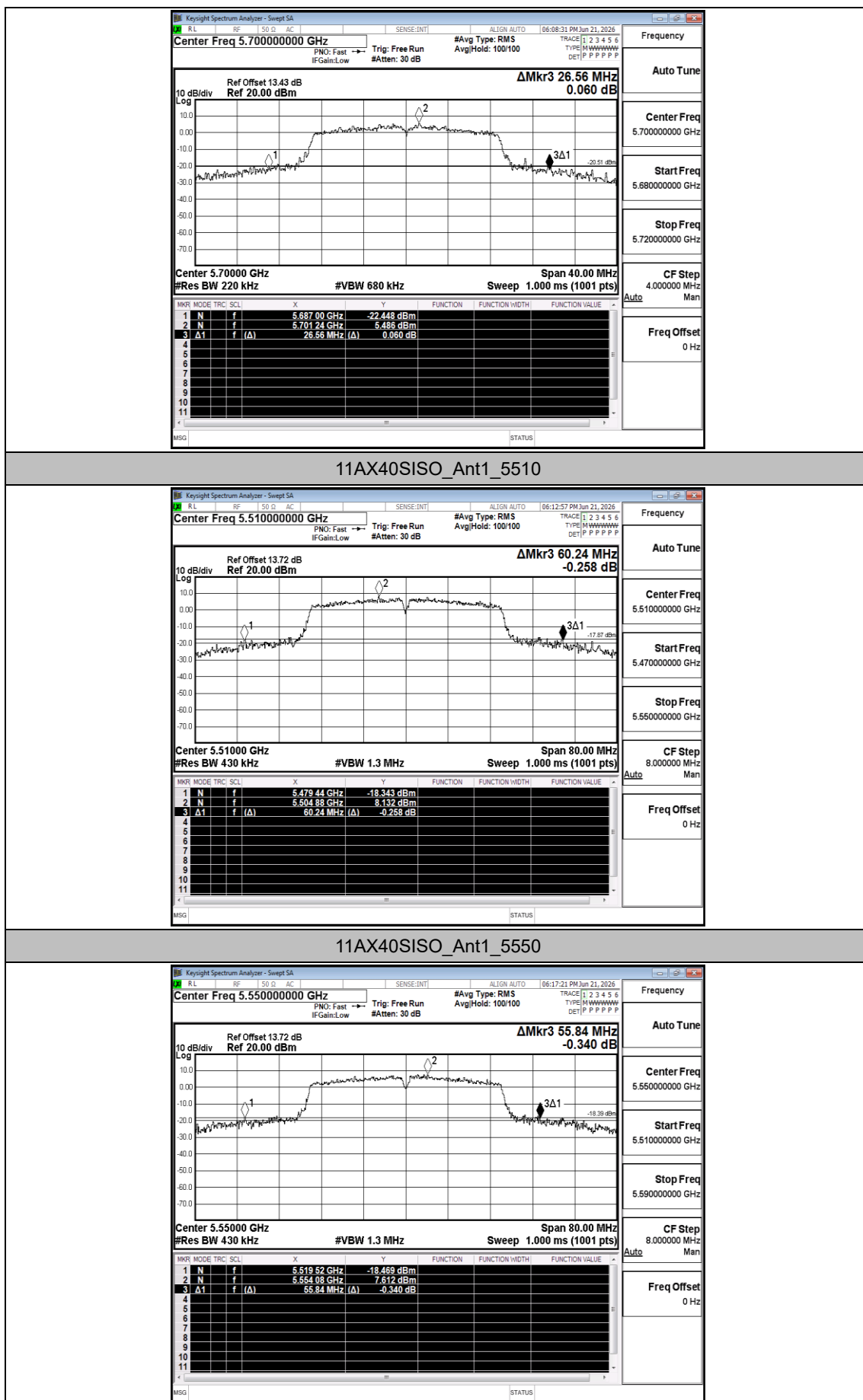
11AX20SISO_Ant1_5500

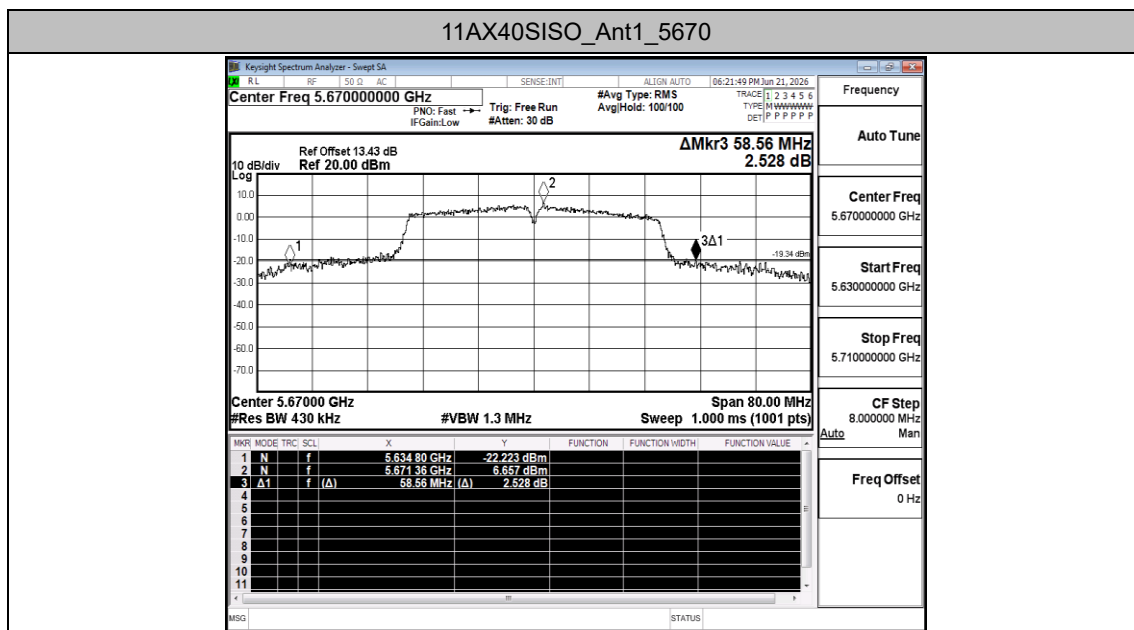


11AX20SISO_Ant1_5580



11AX20SISO_Ant1_5700





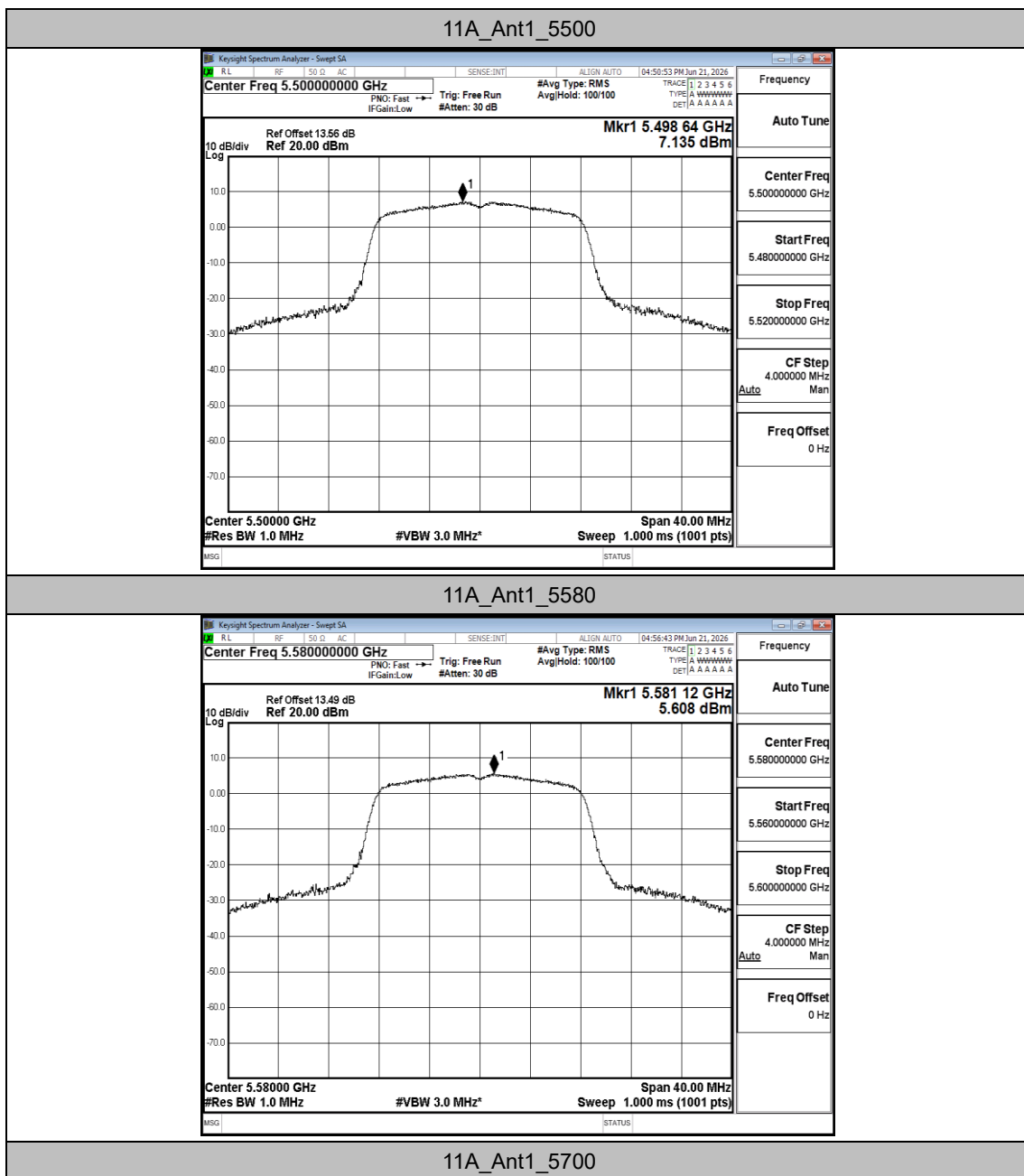
D.2 Maximum conducted output power

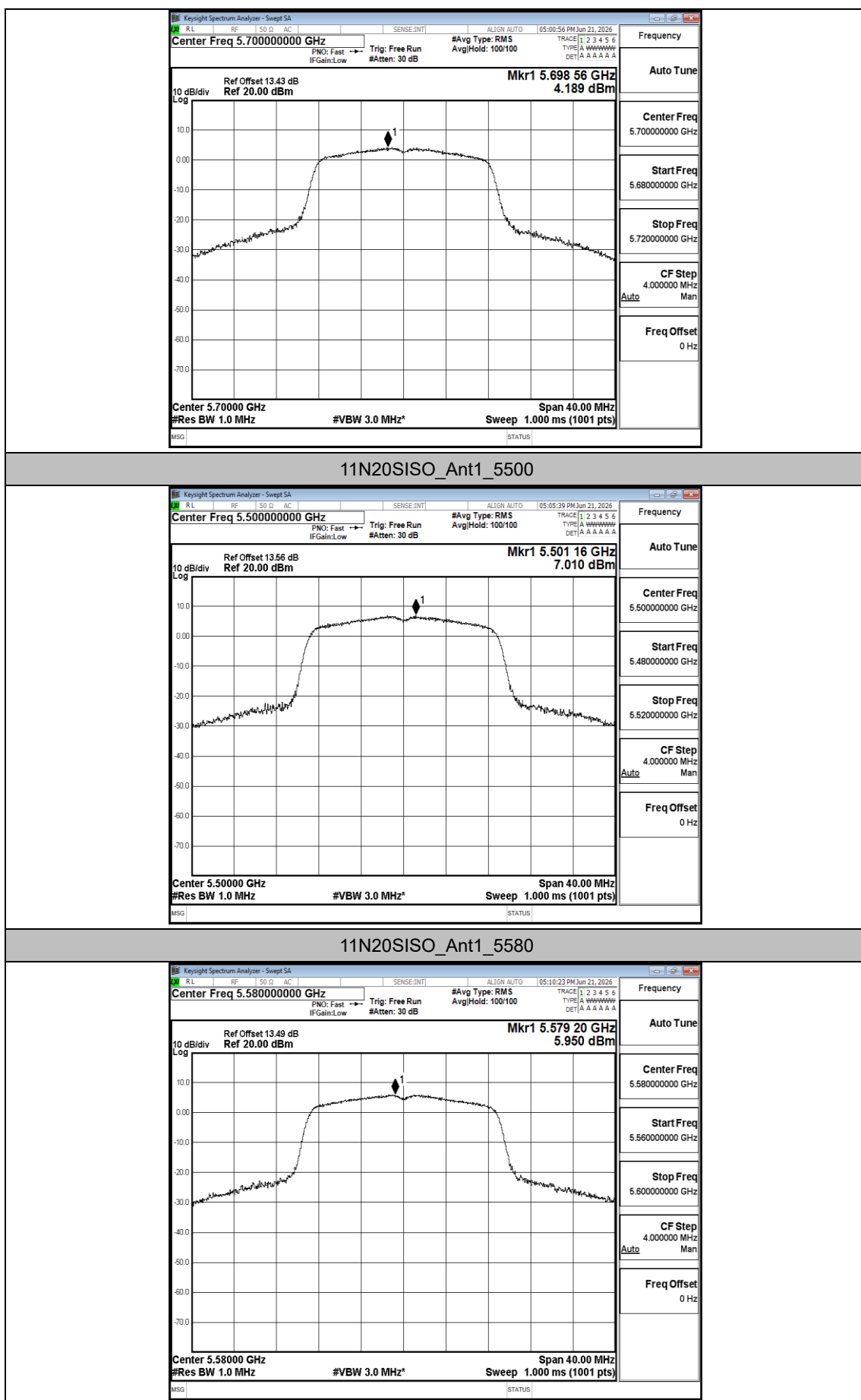
Test Mode	Antenna	Freq(MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Limit Conducted (dBm)	Verdict
11A	Ant1	5500	7.29	0.15	7.44	≤23.98	PASS
		5580	6.95	0.12	7.07	≤23.98	PASS
		5700	7.09	0.15	7.24	≤23.98	PASS
11N20SISO	Ant1	5500	6.81	0.17	6.98	≤23.98	PASS
		5580	6.67	0.13	6.80	≤23.98	PASS
		5700	6.67	0.13	6.80	≤23.98	PASS
11N40SISO	Ant1	5510	6.54	0.32	6.86	≤23.98	PASS
		5550	6.36	0.26	6.62	≤23.98	PASS
		5670	6.46	0.33	6.79	≤23.98	PASS
11AC20SISO	Ant1	5500	5.97	0.16	6.13	≤23.98	PASS
		5580	6.36	0.13	6.49	≤23.98	PASS
		5700	6.48	0.13	6.61	≤23.98	PASS
11AC40SISO	Ant1	5510	6.0	0.26	6.48	≤23.98	PASS
		5550	6.0	0.32	7.52	≤23.98	PASS
		5670	6.0	0.32	7.16	≤23.98	PASS
11AX20SISO	Ant1	5500	7.00	0.16	7.16	≤23.98	PASS
		5580	6.43	0.13	6.56	≤23.98	PASS
		5700	6.36	0.13	6.49	≤23.98	PASS
11AX40SISO	Ant1	5510	6.17	0.26	6.43	≤23.98	PASS
		5550	6.45	0.26	6.71	≤23.98	PASS
		5670	6.36	0.26	6.62	≤23.98	PASS

D.3 Maximum Power Spectral Density Level

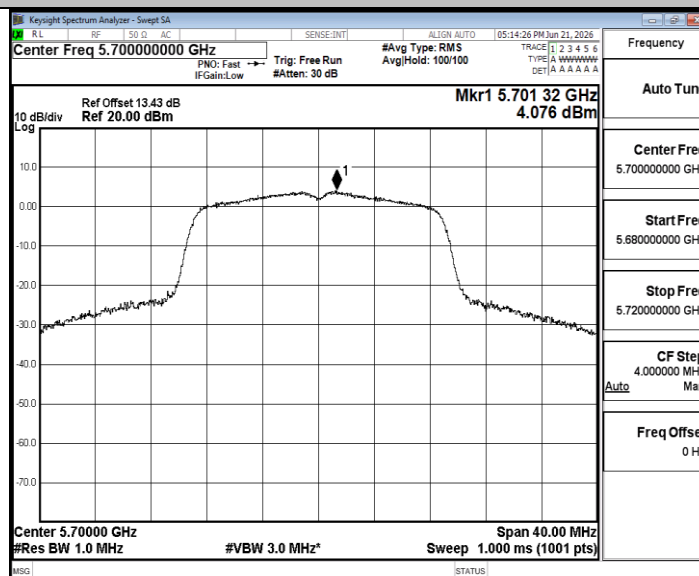
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5500	7.14	0.15	7.29	≤11.00	PASS
		5580	5.61	0.12	5.73	≤11.00	PASS
		5700	4.19	0.15	4.34	≤11.00	PASS
11N20SISO	Ant1	5500	7.01	0.17	7.18	≤11.00	PASS
		5580	5.95	0.13	6.08	≤11.00	PASS
		5700	4.08	0.13	4.21	≤11.00	PASS
11N40SISO	Ant1	5510	4	0.32	4.32	≤11.00	PASS
		5550	3.94	0.26	4.20	≤11.00	PASS
		5670	2.04	0.33	2.37	≤11.00	PASS
11AC20SISO	Ant1	5500	6.8	0.16	6.96	≤11.00	PASS
		5580	6.19	0.13	6.32	≤11.00	PASS
		5700	4.22	0.13	4.35	≤11.00	PASS
11AC40SISO	Ant1	5510	3.85	0.26	4.11	≤11.00	PASS
		5550	3.83	0.32	4.15	≤11.00	PASS
		5670	2.45	0.32	2.77	≤11.00	PASS
11AX20SISO	Ant1	5500	7.07	0.16	7.23	≤11.00	PASS
		5580	6.24	0.13	6.37	≤11.00	PASS
		5700	4.18	0.13	4.31	≤11.00	PASS
11AX40SISO	Ant1	5510	3.96	0.26	4.22	≤11.00	PASS
		5550	3.73	0.26	3.99	≤11.00	PASS
		5670	2.02	0.26	2.28	≤11.00	PASS

Test Graphs

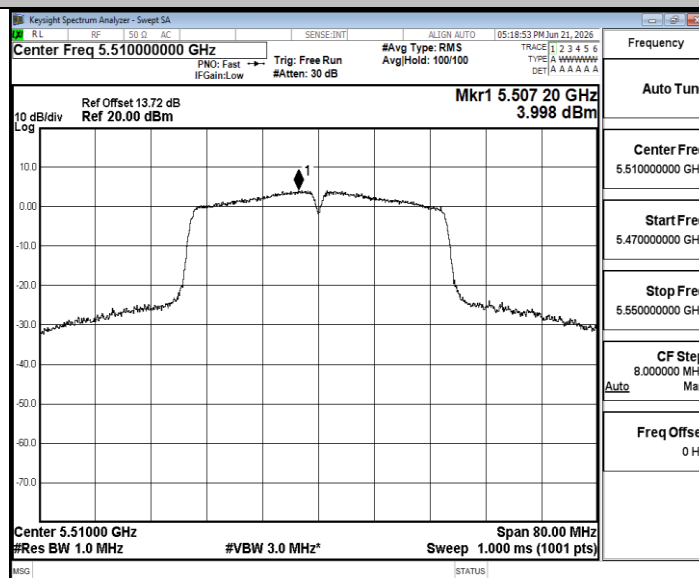




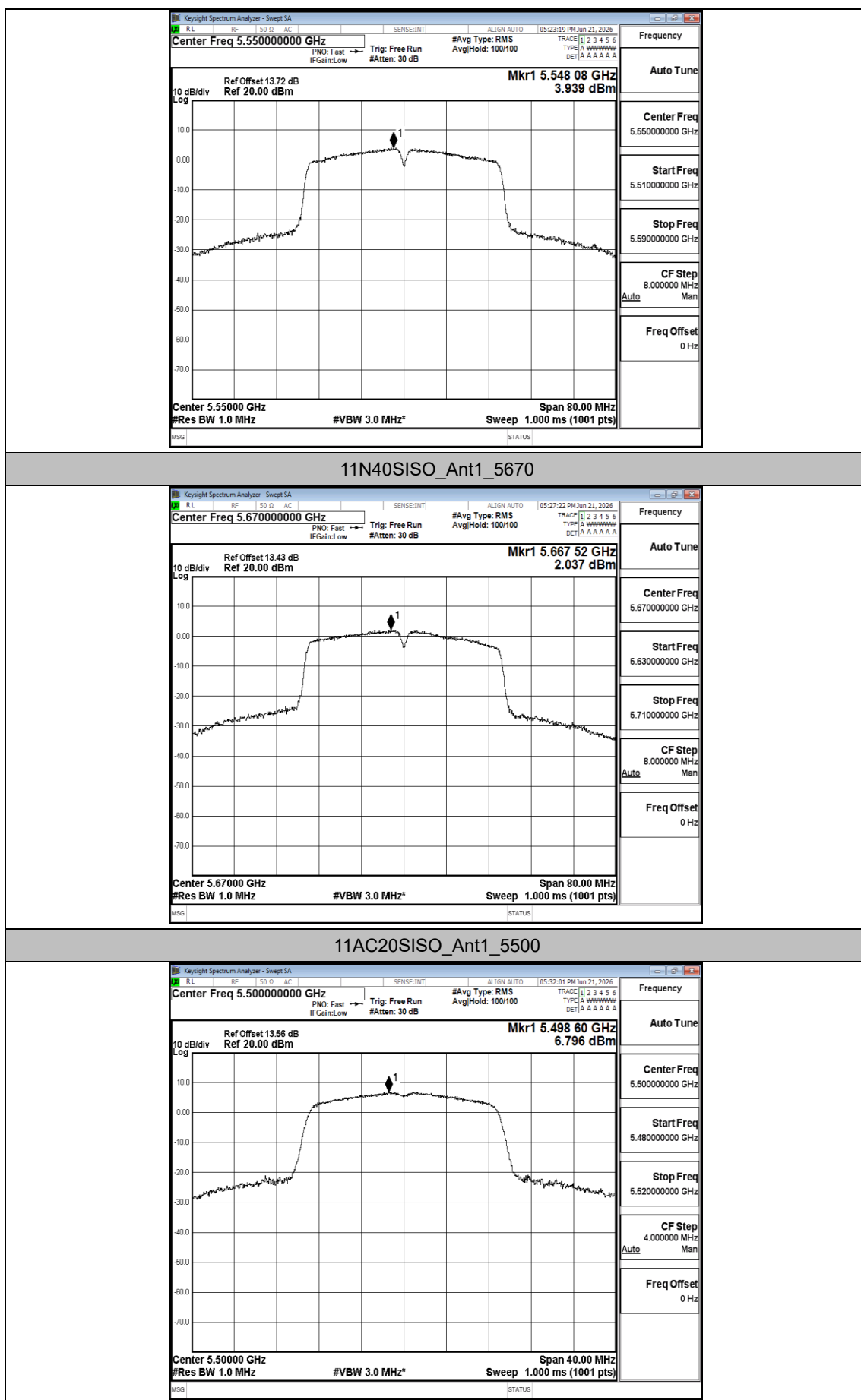
11N20SISO_Ant1_5700



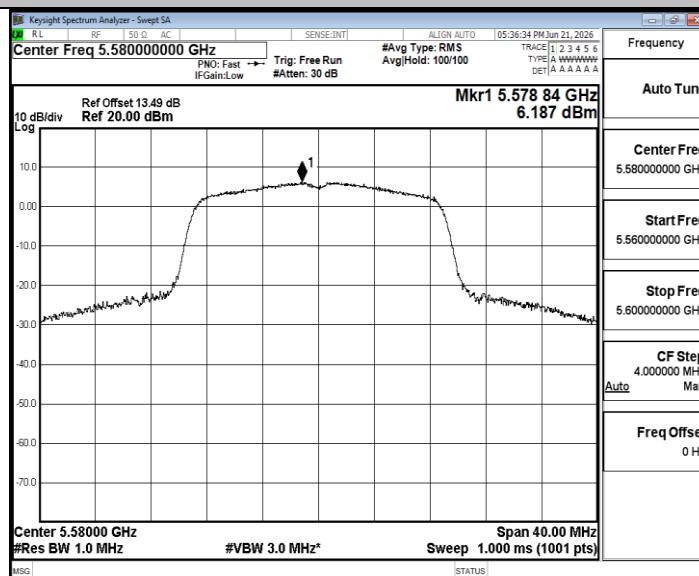
11N40SISO_Ant1_5510



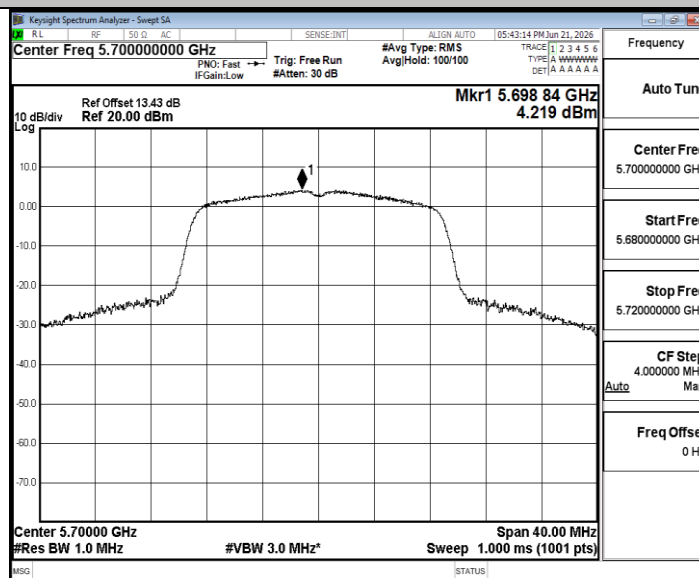
11N40SISO_Ant1_5550



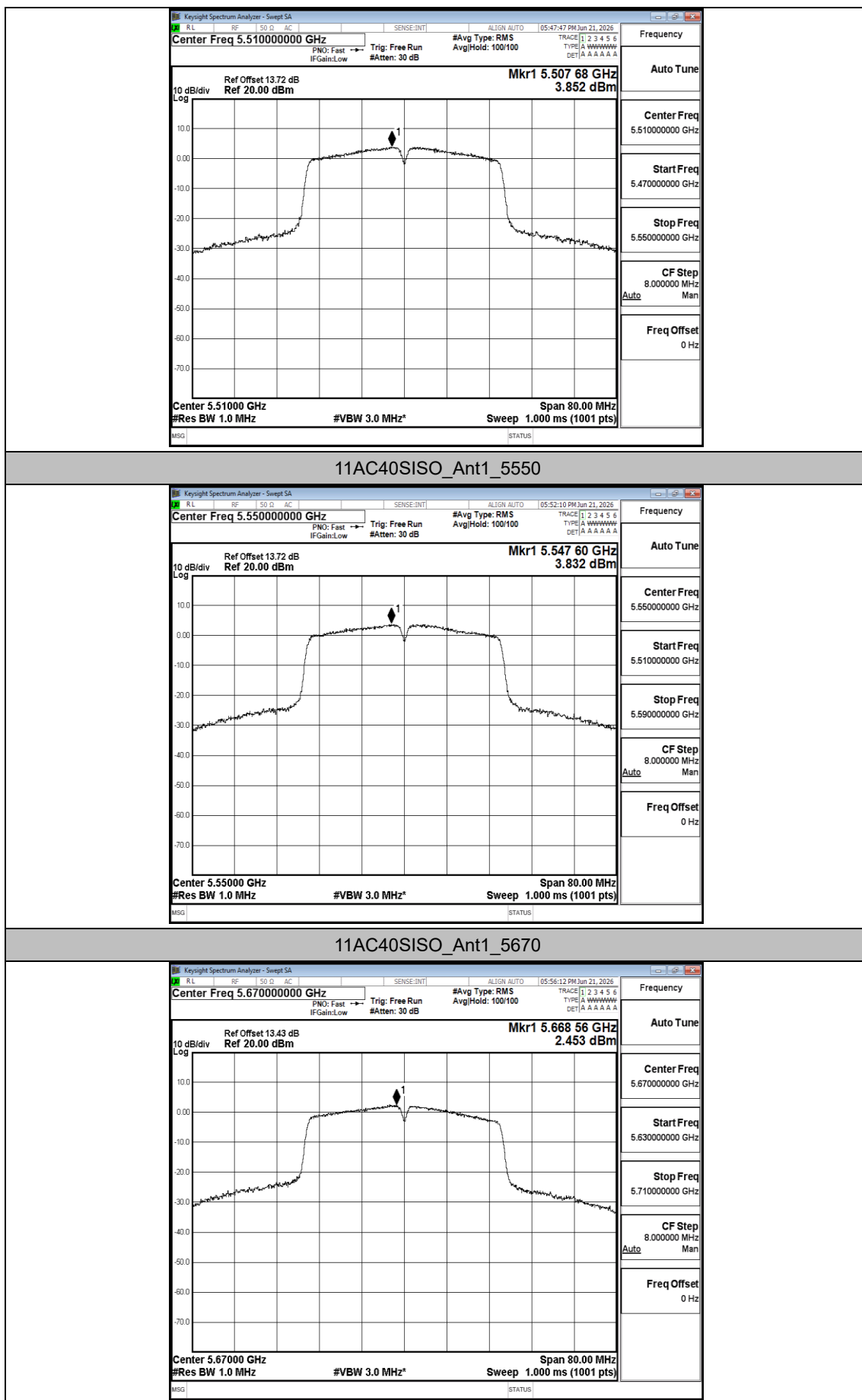
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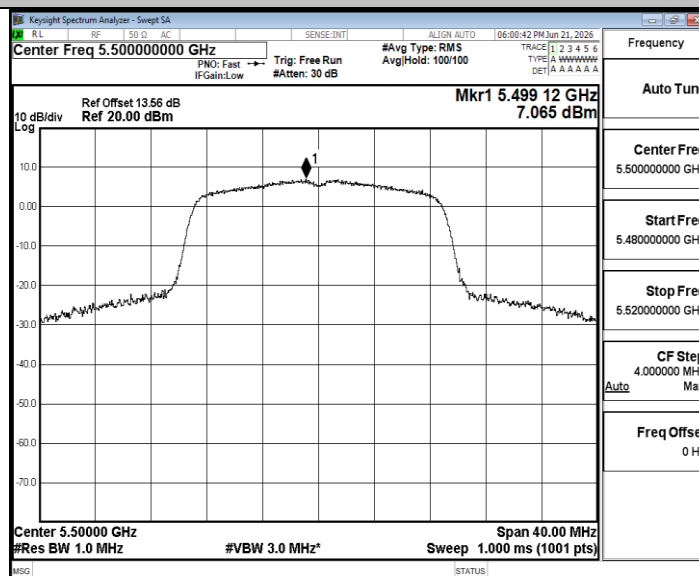
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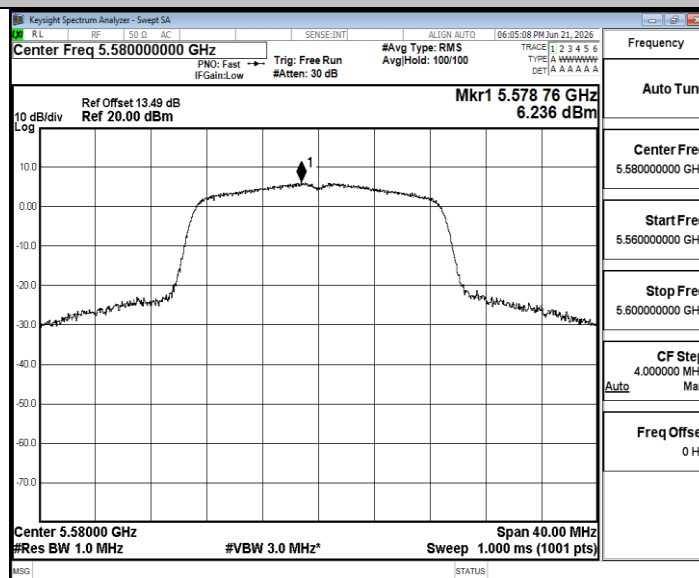
11AC40SISO_Ant1_5510



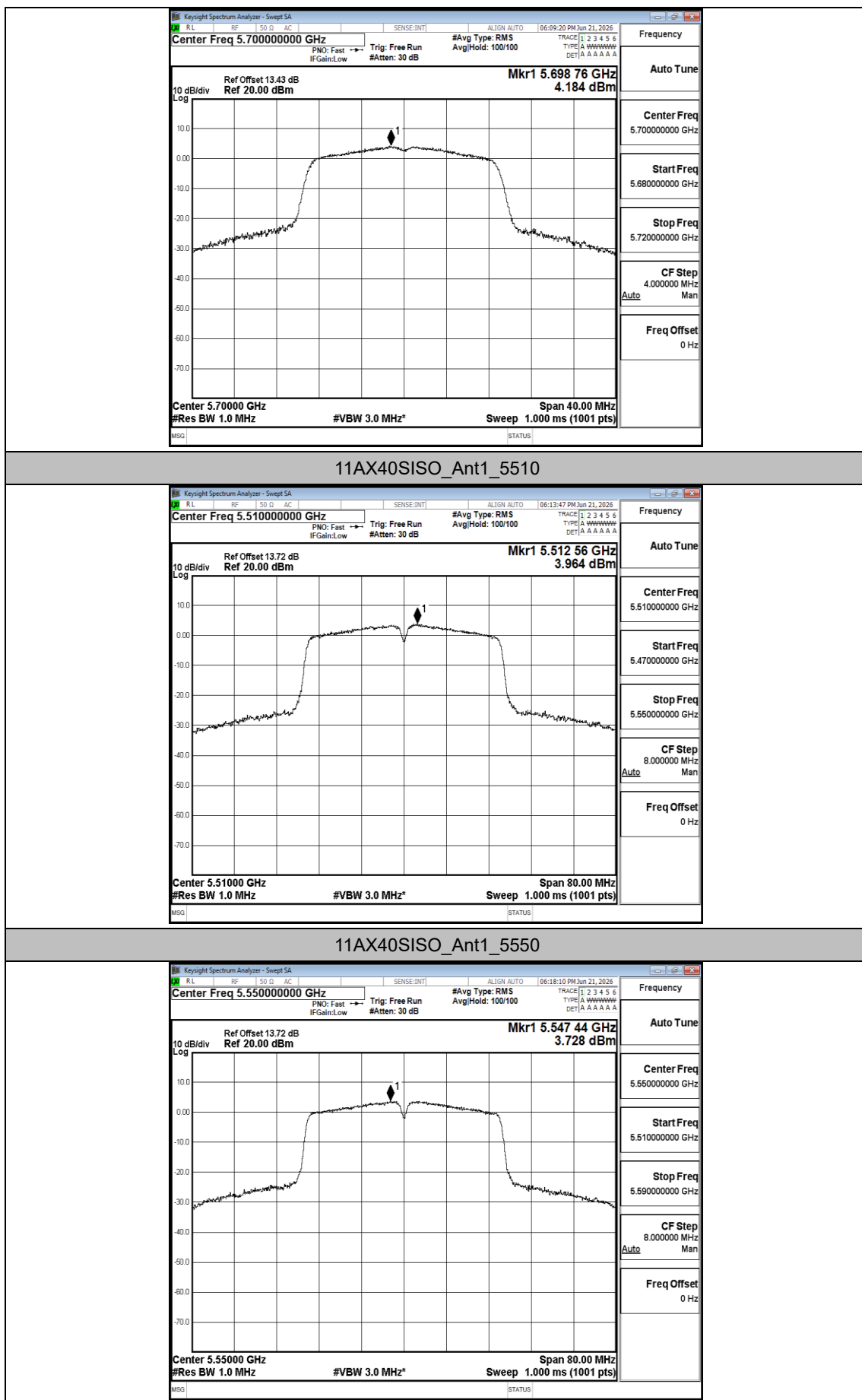
11AX20SISO_Ant1_5500

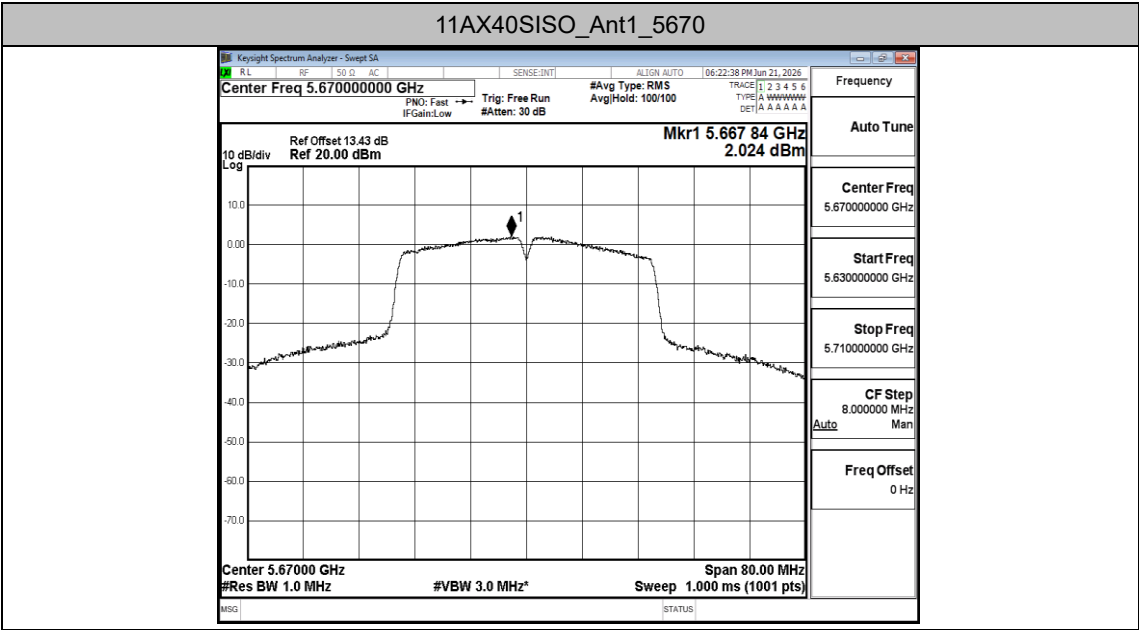


11AX20SISO_Ant1_5580



11AX20SISO_Ant1_5700





D.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	5500	AV	5350.000	-54.86	≤-46.52	3.62	0.15	43.99	≤54	PASS
				AV	5459.600	-52.72	≤-46.52	3.62	0.15	46.28	≤54	PASS
				AV	5460.000	-53.04	≤-46.52	3.62	0.15	45.81	≤54	PASS
				Peak	5350.000	-48.79	≤-32.17	3.62	0.00	50.06	≤68.2	PASS
				Peak	5423.060	-42.93	≤-32.17	3.62	0.00	55.92	≤68.2	PASS
				Peak	5460.000	-45.33	≤-32.17	3.62	0.00	53.52	≤68.2	PASS
		High	5700	AV	5725.000	-52.79	≤-46.52	3.62	0.15	46.06	≤54	PASS
				AV	5726.100	-52.47	≤-46.52	3.62	0.15	46.53	≤54	PASS
				AV	5735.000	-54.24	≤-46.52	3.62	0.15	44.61	≤54	PASS
				Peak	5725.000	-45.72	≤-32.17	3.62	0.00	53.13	≤68.2	PASS
				Peak	5727.430	-43.1	≤-32.17	3.62	0.00	55.75	≤68.2	PASS
				Peak	5735.000	-45.72	≤-32.17	3.62	0.00	53.13	≤68.2	PASS
11N20SISO	Ant1	Low	5500	AV	5350.000	-54.79	≤-46.54	3.62	0.17	44.06	≤54	PASS
				AV	5420.120	-52.27	≤-46.54	3.62	0.17	46.75	≤54	PASS
				AV	5460.000	-53.67	≤-46.54	3.62	0.17	45.35	≤54	PASS
				Peak	5350.000	-46.23	≤-32.17	3.62	0.00	52.62	≤68.2	PASS
				Peak	5381.060	-42.65	≤-32.17	3.62	0.00	56.20	≤68.2	PASS
				Peak	5460.000	-46.38	≤-32.17	3.62	0.00	52.47	≤68.2	PASS
		High	5700	AV	5725.000	-53.46	≤-46.50	3.62	0.13	45.39	≤54	PASS
				AV	5725.150	-53.52	≤-46.50	3.62	0.13	45.46	≤54	PASS
				AV	5735.000	-54.33	≤-46.50	3.62	0.13	44.52	≤54	PASS
				Peak	5725.000	-45.04	≤-32.17	3.62	0.00	53.81	≤68.2	PASS
				Peak	5728.950	-42.38	≤-32.17	3.62	0.00	56.47	≤68.2	PASS
				Peak	5735.000	-46.2	≤-32.17	3.62	0.00	52.65	≤68.2	PASS
11N40SISO	Ant1	Low	5510	AV	5350.000	-54.65	≤-46.69	3.62	0.32	44.20	≤54	PASS
				AV	5459.500	-49.89	≤-46.69	3.62	0.32	49.28	≤54	PASS
				AV	5460.000	-50.59	≤-46.69	3.62	0.32	48.26	≤54	PASS
				Peak	5350.000	-46.77	≤-32.17	3.62	0.00	52.08	≤68.2	PASS
				Peak	5459.940	-38.26	≤-32.17	3.62	0.00	60.59	≤68.2	PASS
				Peak	5460.000	-38.26	≤-32.17	3.62	0.00	60.59	≤68.2	PASS
		High	5670	AV	5725.000	-53.32	≤-46.70	3.62	0.33	45.53	≤54	PASS
				AV	5725.210	-53.19	≤-46.70	3.62	0.33	45.99	≤54	PASS
				AV	5735.000	-53.82	≤-46.70	3.62	0.33	45.03	≤54	PASS
				Peak	5725.000	-46.64	≤-32.17	3.62	0.00	52.21	≤68.2	PASS
				Peak	5727.510	-42.5	≤-32.17	3.62	0.00	56.35	≤68.2	PASS
				Peak	5735.000	-45.7	≤-32.17	3.62	0.00	53.15	≤68.2	PASS

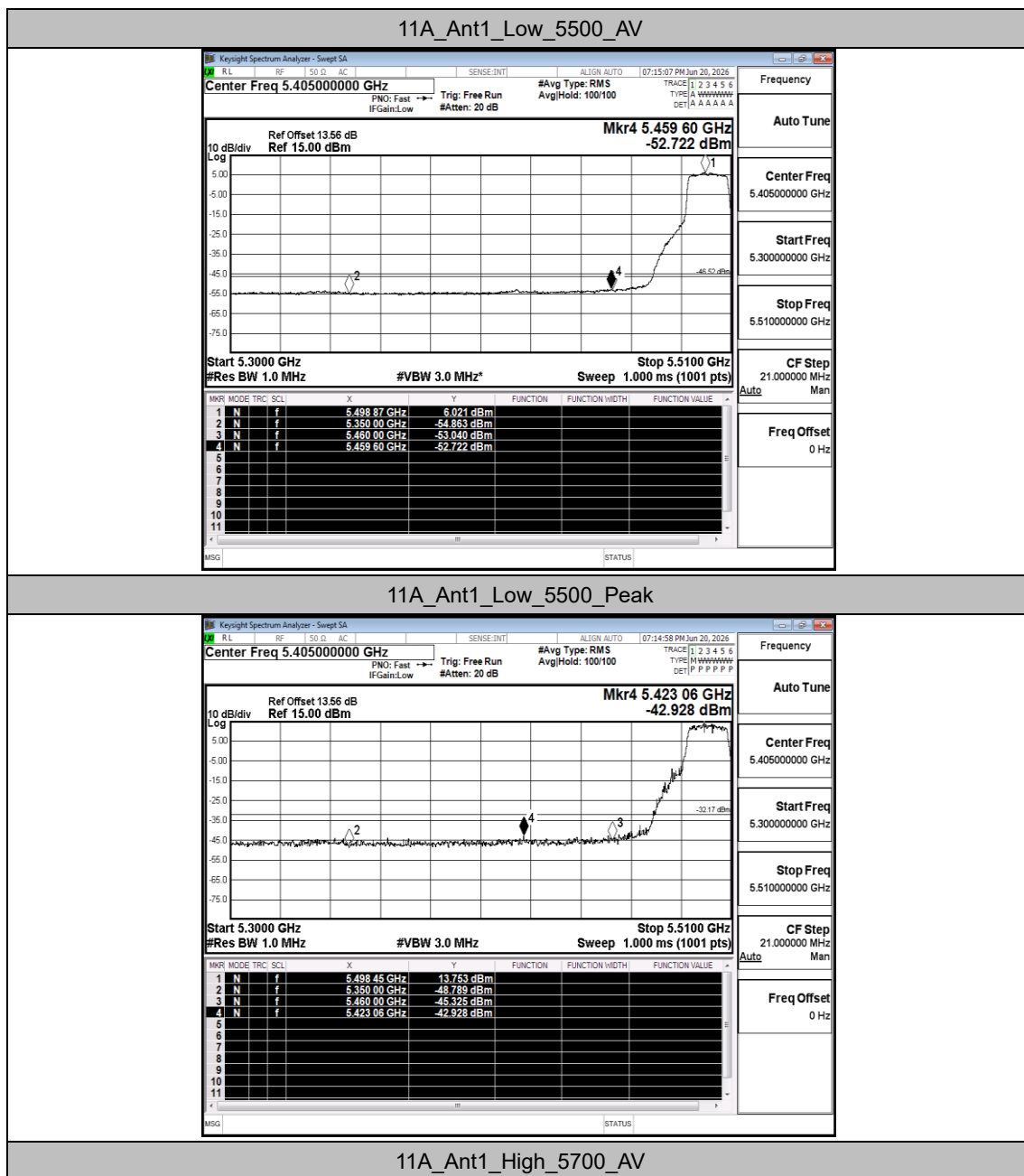
11AC20SISO	Ant1	Low	5500	AV	5350.000	-54.81	≤-46.53	3.62	0.16	44.04	≤54	PASS
				AV	5420.330	-53.25	≤-46.53	3.62	0.16	45.76	≤54	PASS
				AV	5460.000	-53.65	≤-46.53	3.62	0.16	45.20	≤54	PASS
				Peak	5350.000	-46.17	≤-32.17	3.62	0.00	52.68	≤68.2	PASS
				Peak	5387.780	-44.1	≤-32.17	3.62	0.00	54.75	≤68.2	PASS
				Peak	5460.000	-44.55	≤-32.17	3.62	0.00	54.30	≤68.2	PASS
		High	5700	AV	5725.000	-53.8	≤-46.50	3.62	0.13	45.05	≤54	PASS
				AV	5725.150	-53.92	≤-46.50	3.62	0.13	45.06	≤54	PASS
				AV	5735.000	-55.01	≤-46.50	3.62	0.13	43.84	≤54	PASS
				Peak	5725.000	-46.42	≤-32.17	3.62	0.00	52.43	≤68.2	PASS
				Peak	5728.380	-41.73	≤-32.17	3.62	0.00	57.12	≤68.2	PASS
				Peak	5735.000	-47.46	≤-32.17	3.62	0.00	51.39	≤68.2	PASS
11AC40SISO	Ant1	Low	5510	AV	5350.000	-54.58	≤-46.63	3.62	0.26	44.53	≤54	PASS
				AV	5458.840	-50.39	≤-46.63	3.62	0.26	48.46	≤54	PASS
				AV	5460.000	-50.85	≤-46.63	3.62	0.26	48.26	≤54	PASS
				Peak	5350.000	-47.06	≤-32.17	3.62	0.00	51.79	≤68.2	PASS
				Peak	5458.840	-40.25	≤-32.17	3.62	0.00	58.60	≤68.2	PASS
				Peak	5460.000	-43.33	≤-32.17	3.62	0.00	55.52	≤68.2	PASS
		High	5670	AV	5725.000	-54.12	≤-46.69	3.62	0.32	45.05	≤54	PASS
				AV	5725.900	-53.16	≤-46.69	3.62	0.32	45.69	≤54	PASS
				AV	5735.000	-54.19	≤-46.69	3.62	0.32	44.98	≤54	PASS
				Peak	5725.000	-46.11	≤-32.17	3.62	0.00	52.74	≤68.2	PASS
				Peak	5731.880	-44.14	≤-32.17	3.62	0.00	54.71	≤68.2	PASS
				Peak	5735.000	-45.23	≤-32.17	3.62	0.00	53.62	≤68.2	PASS
11AX20SISO	Ant1	Low	5500	AV	5350.000	-54.88	≤-46.53	3.62	0.16	44.13	≤54	PASS
				AV	5419.910	-53.07	≤-46.53	3.62	0.16	45.78	≤54	PASS
				AV	5460.000	-53.89	≤-46.53	3.62	0.16	45.12	≤54	PASS
				Peak	5350.000	-46.11	≤-32.17	3.62	0.00	52.74	≤68.2	PASS
				Peak	5405.000	-43.11	≤-32.17	3.62	0.00	55.74	≤68.2	PASS
				Peak	5460.000	-45.11	≤-32.17	3.62	0.00	53.74	≤68.2	PASS
		High	5700	AV	5725.000	-52.94	≤-46.50	3.62	0.13	46.04	≤54	PASS
				AV	5726.670	-52.86	≤-46.50	3.62	0.13	46.12	≤54	PASS
				AV	5735.000	-54.49	≤-46.50	3.62	0.13	44.49	≤54	PASS
				Peak	5725.000	-45.68	≤-32.17	3.62	0.00	53.17	≤68.2	PASS
				Peak	5727.050	-43.2	≤-32.17	3.62	0.00	55.65	≤68.2	PASS
				Peak	5735.000	-45.85	≤-32.17	3.62	0.00	53.00	≤68.2	PASS
11AX40SISO	Ant1	Low	5510	AV	5350.000	-54	≤-46.63	3.62	0.26	45.11	≤54	PASS
				AV	5459.940	-48.9	≤-46.63	3.62	0.26	50.21	≤54	PASS
				AV	5460.000	-48.9	≤-46.63	3.62	0.26	50.21	≤54	PASS
				Peak	5350.000	-43.48	≤-32.17	3.62	0.00	55.37	≤68.2	PASS
				Peak	5459.500	-39.14	≤-32.17	3.62	0.00	59.71	≤68.2	PASS
				Peak	5460.000	-40.55	≤-32.17	3.62	0.00	58.30	≤68.2	PASS
		High	5670	AV	5725.000	-53.59	≤-46.63	3.62	0.26	45.52	≤54	PASS

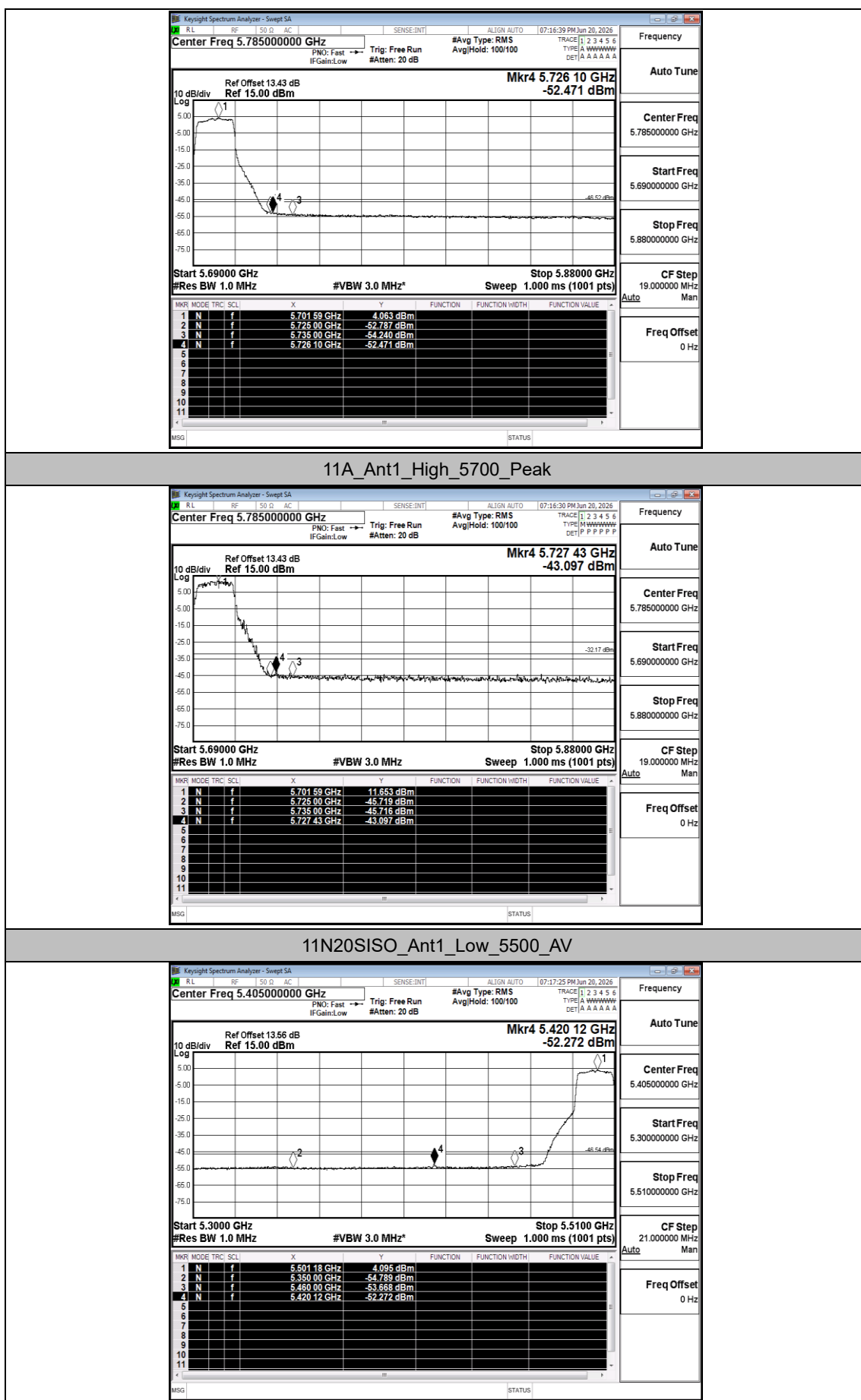
				AV	5726.130	-53.43	≤-46.63	3.62	0.26	45.68	≤54	PASS
				AV	5735.000	-54.33	≤-46.63	3.62	0.26	44.78	≤54	PASS
				Peak	5725.000	-44.78	≤-32.17	3.62	0.00	54.07	≤68.2	PASS
				Peak	5726.590	-43.59	≤-32.17	3.62	0.00	55.26	≤68.2	PASS
				Peak	5735.000	-46.04	≤-32.17	3.62	0.00	52.81	≤68.2	PASS

Note:

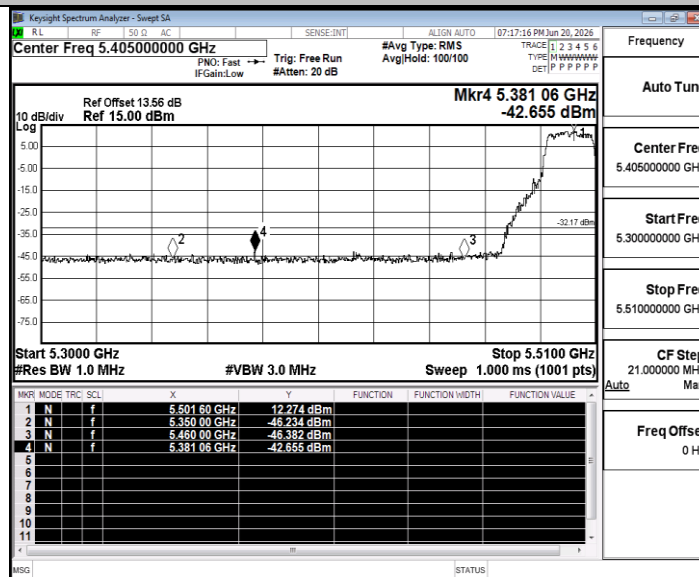
1. The Antenna Gain is compensated in the graph.

Test Graphs

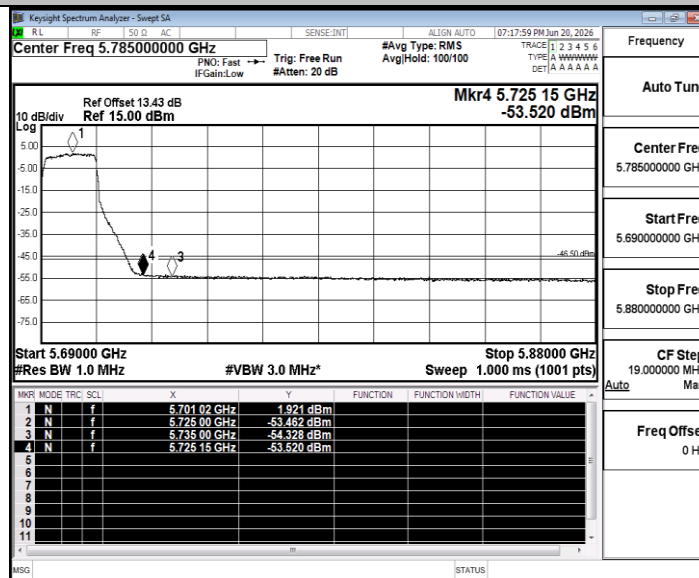




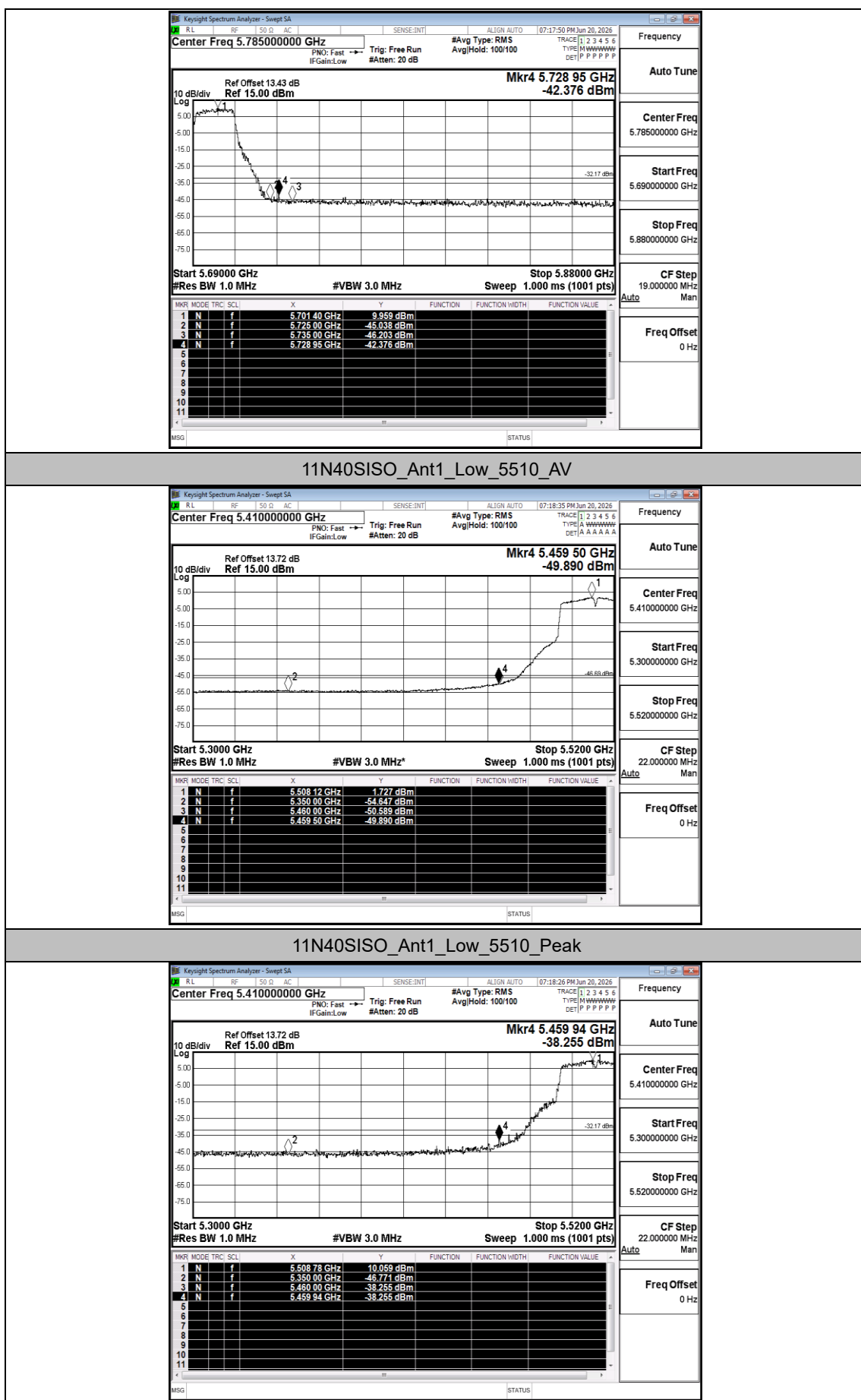
11N20SISO_Ant1_Low_5500_Peak



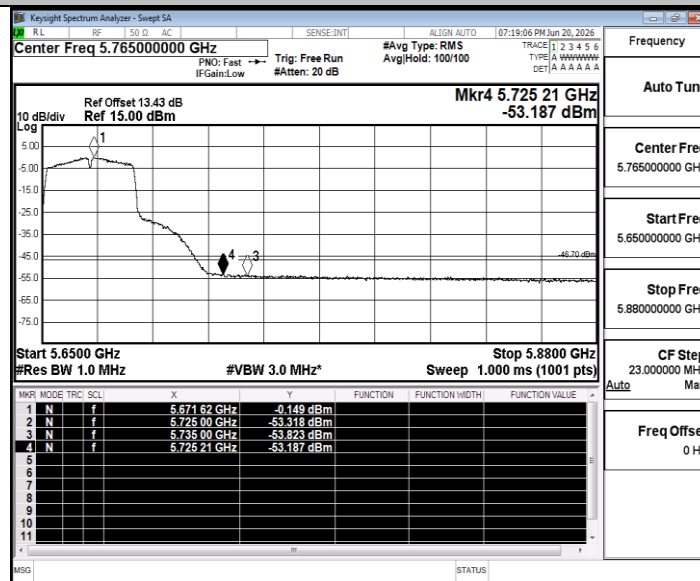
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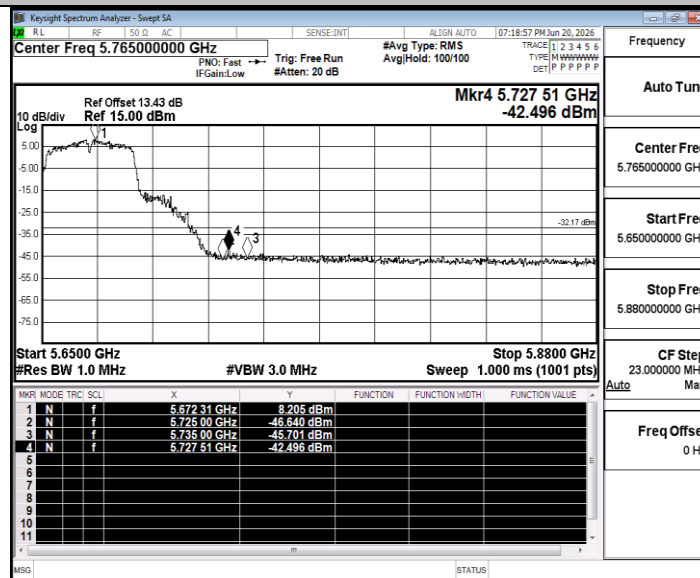
11N20SISO_Ant1_High_5700_Peak



11N40SISO_Ant1_High_5670_AV



11N40SISO_Ant1_High_5670_Peak



11AC20SISO_Ant1_Low_5500_AV