

Appendix G

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: Smart Phone

Test Model: Air 1

Environmental Conditions

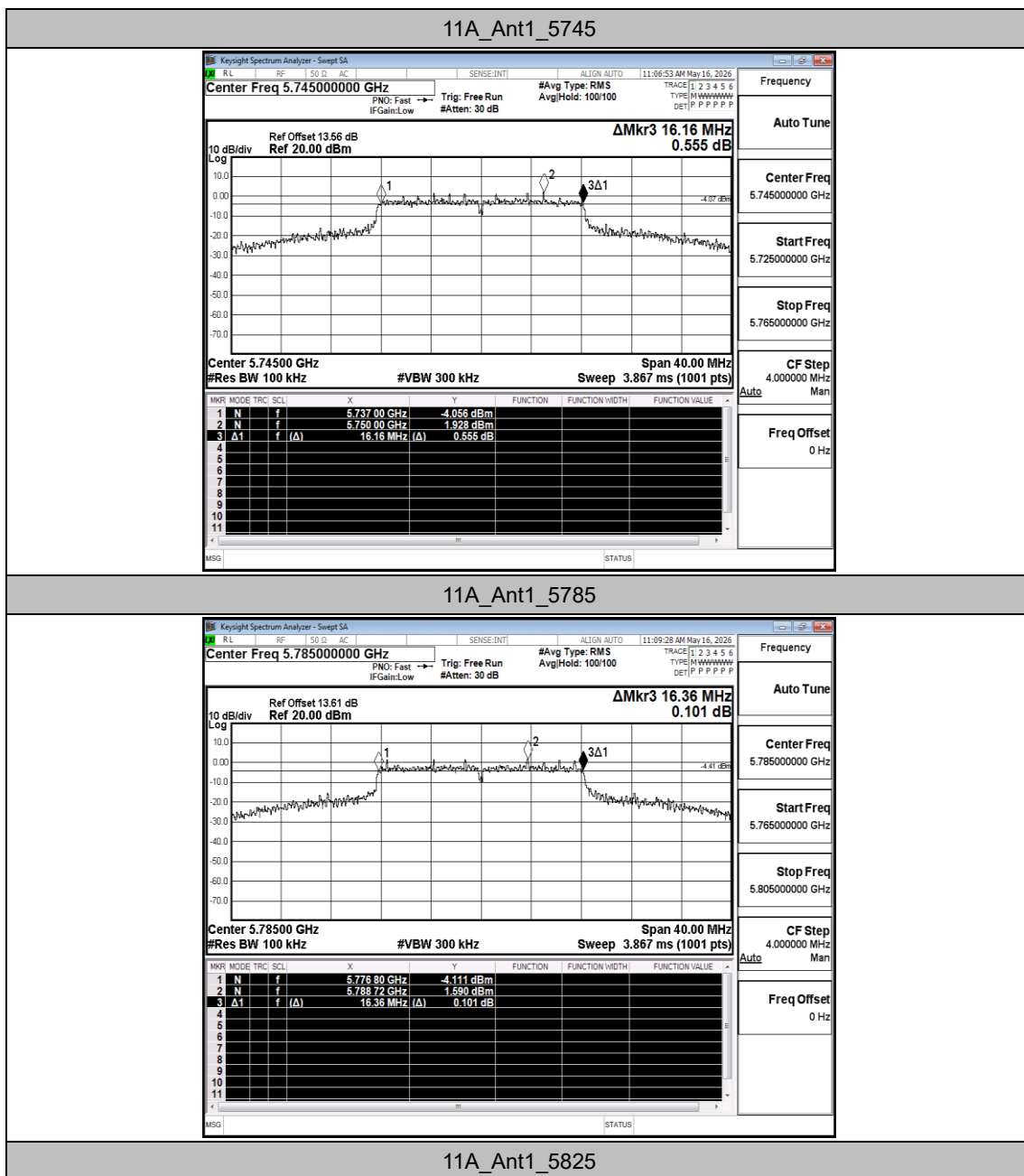
Temperature:	24.6°C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

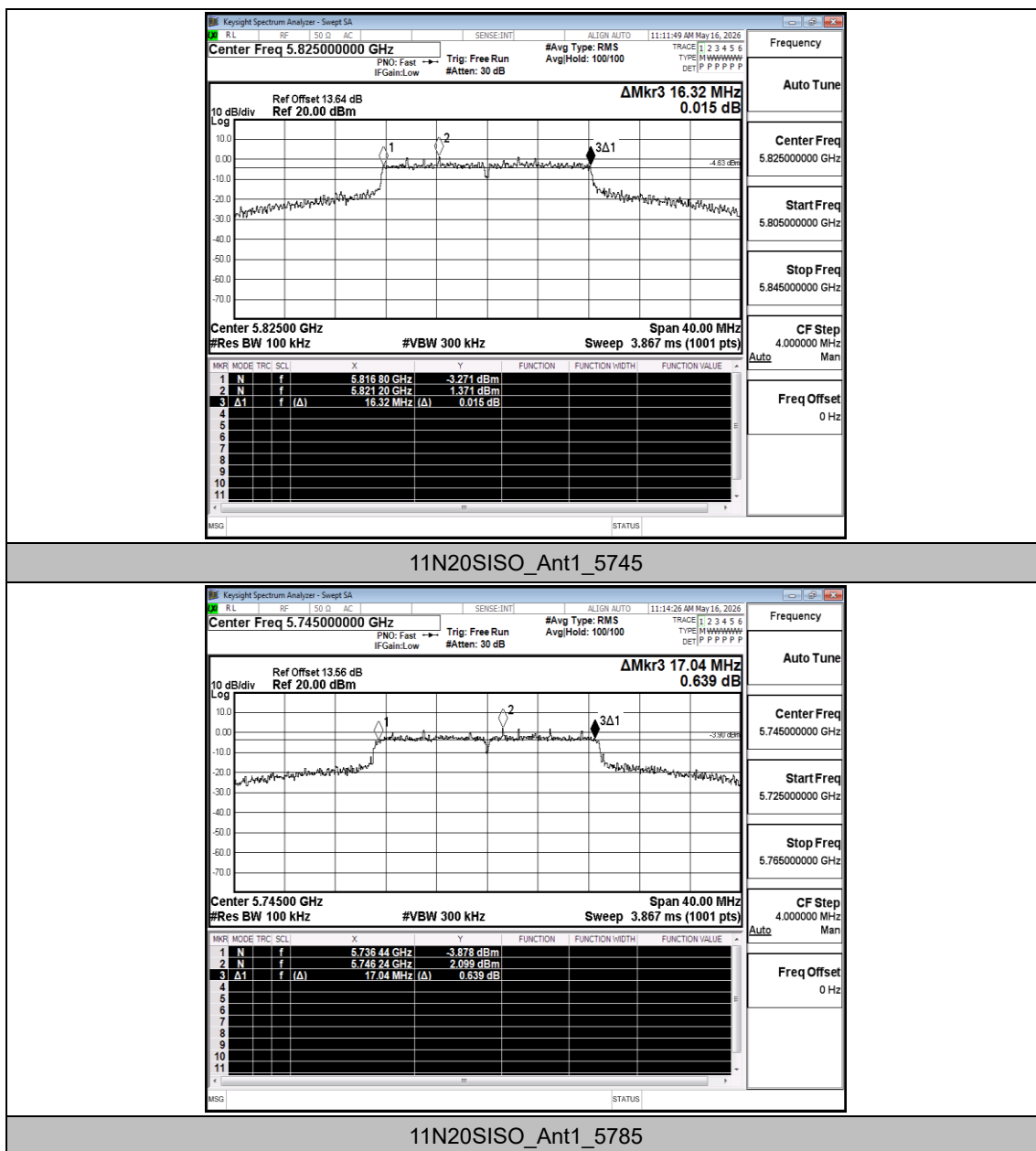
G.1 6dB bandwidth

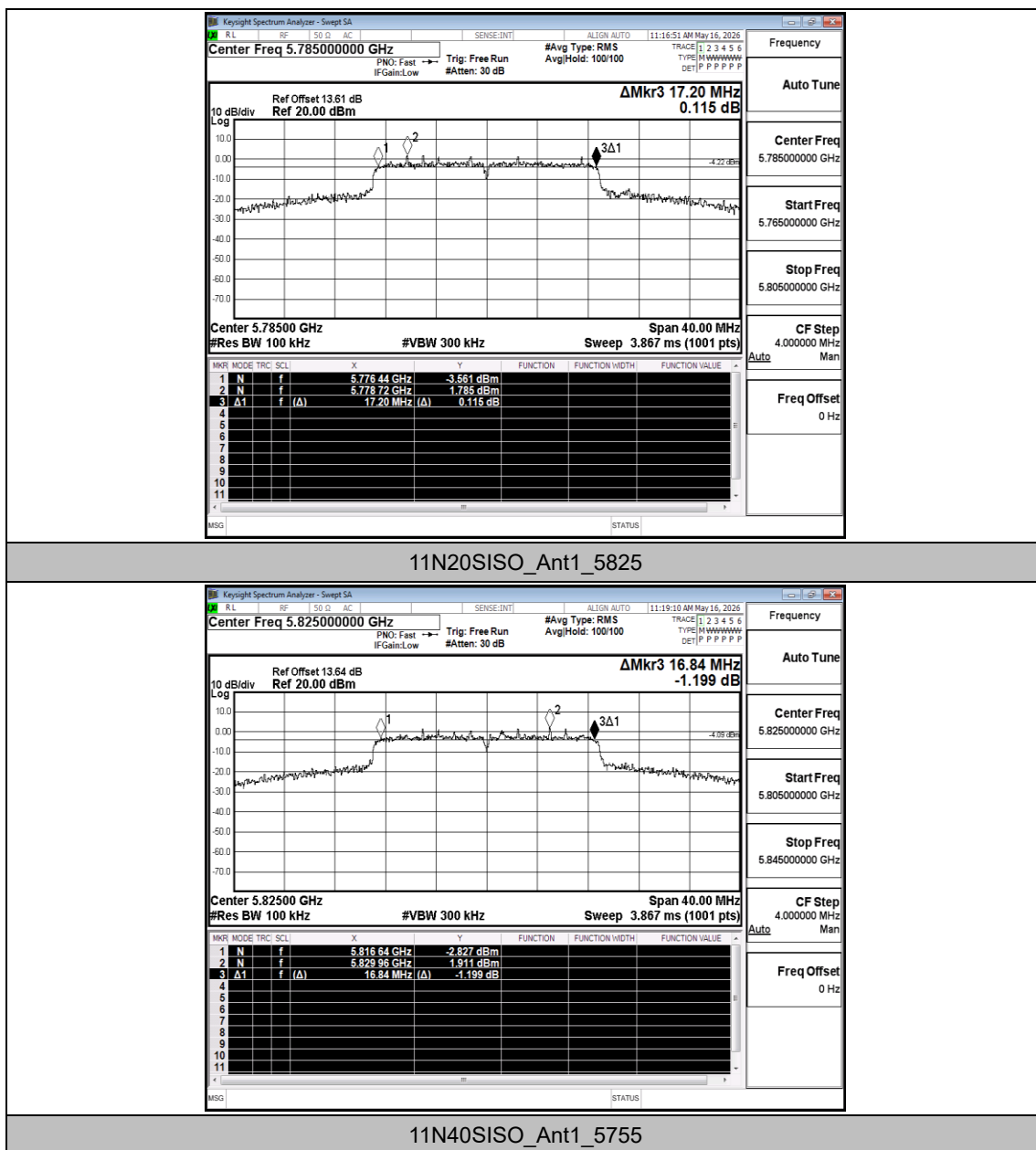
Test Result

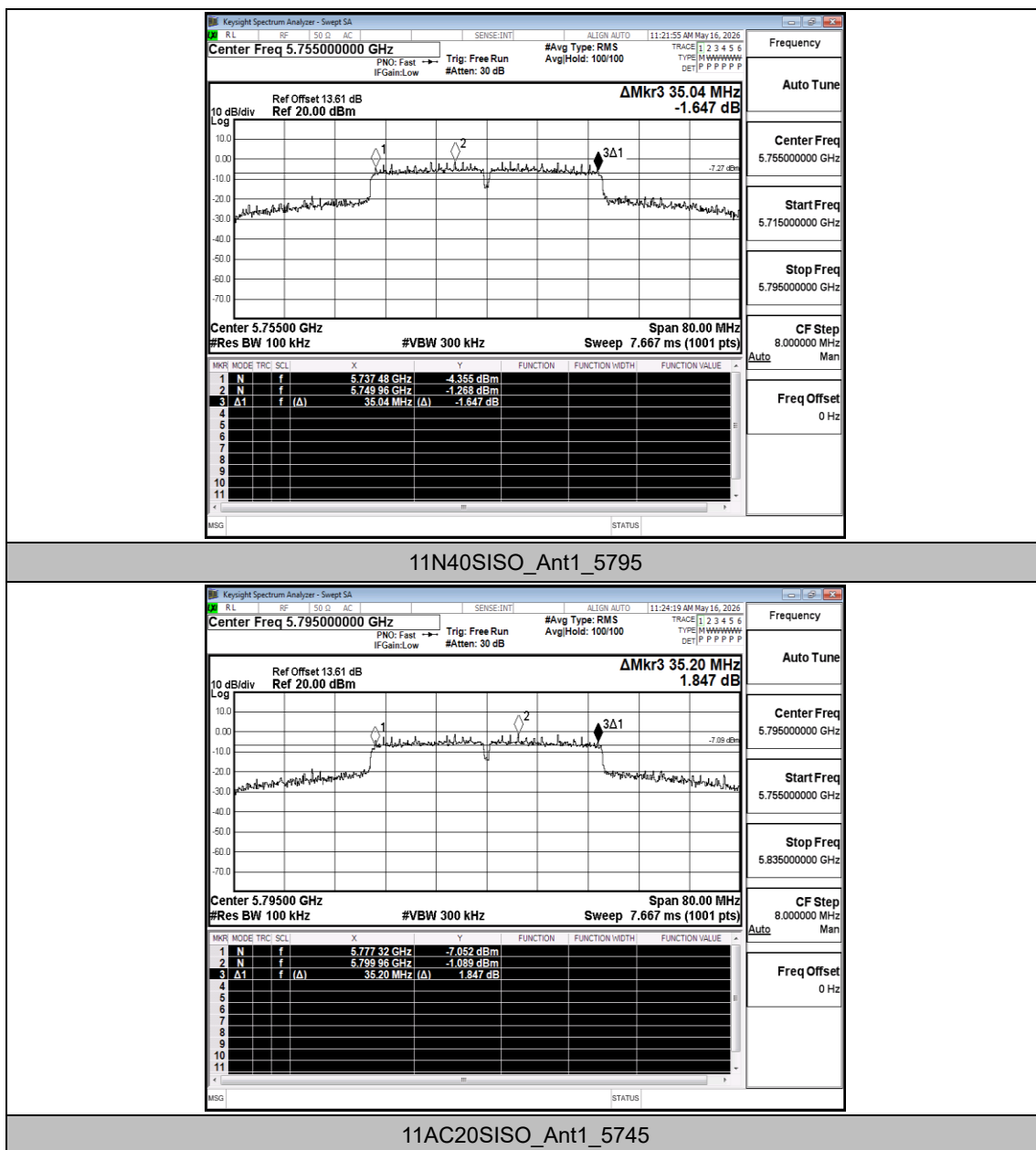
TestMode	Antenna	Freq (MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.160	5737.000	5753.160	0.5	PASS
		5785	16.360	5776.800	5793.160	0.5	PASS
		5825	16.320	5816.800	5833.120	0.5	PASS
11N20SISO	Ant1	5745	17.040	5736.440	5753.480	0.5	PASS
		5785	17.200	5776.440	5793.640	0.5	PASS
		5825	16.840	5816.640	5833.480	0.5	PASS
11N40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.200	5777.320	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	17.280	5736.480	5753.760	0.5	PASS
		5785	16.920	5776.520	5793.440	0.5	PASS
		5825	17.120	5816.360	5833.480	0.5	PASS
11AC40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.920	5777.000	5812.920	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

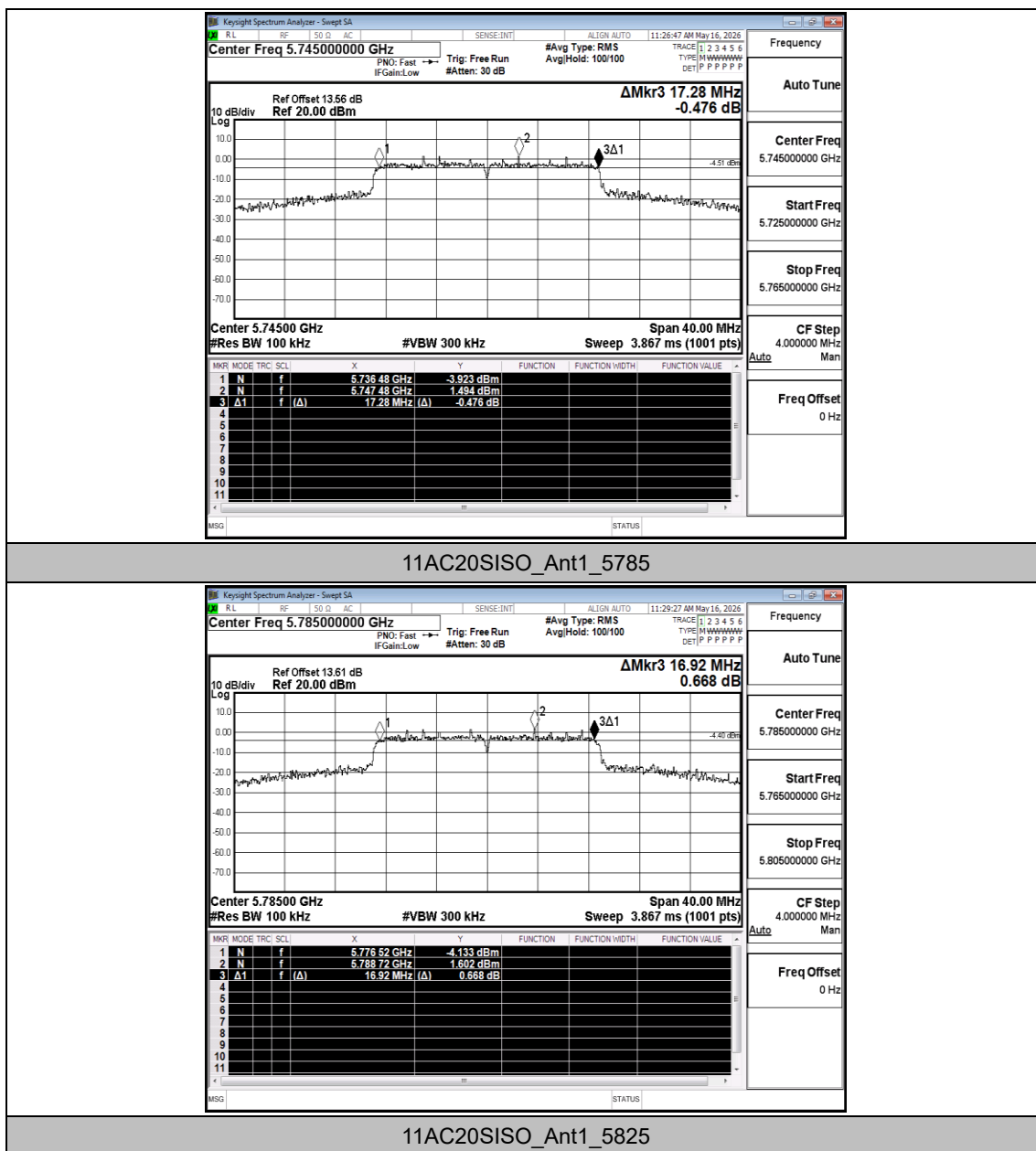
Test Graphs

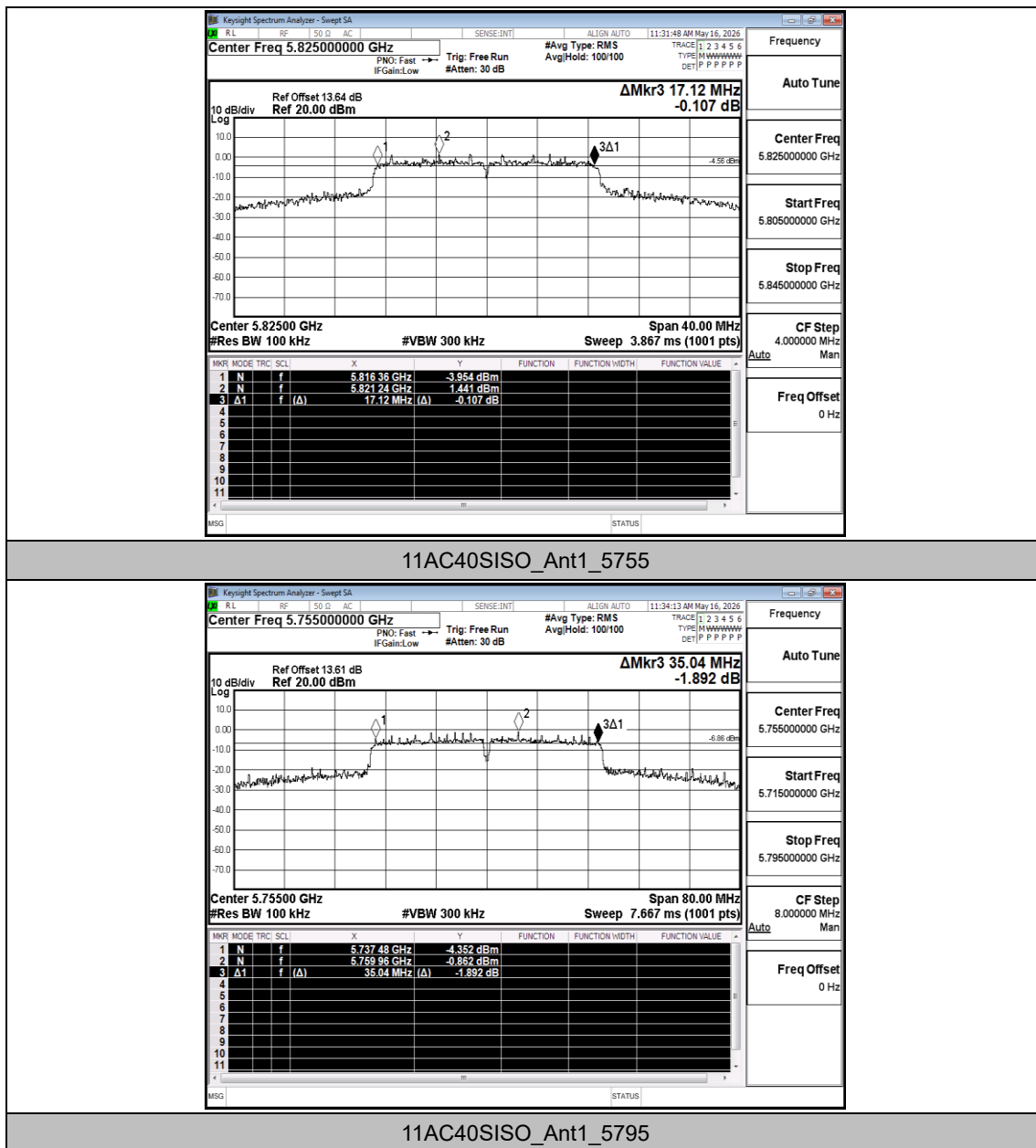


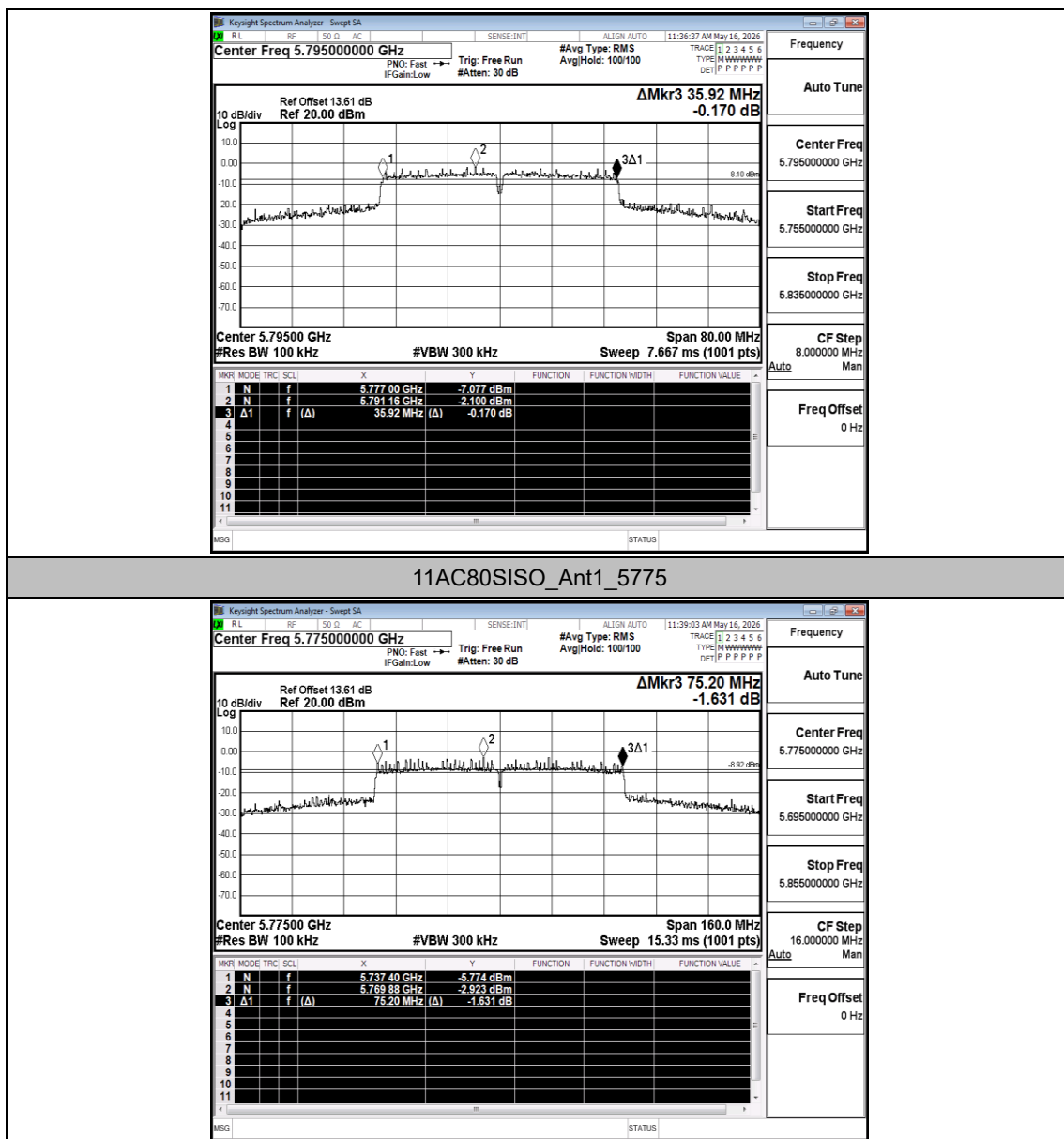












G.2 Maximum conducted output power

Test Result

TestMode	Antenna	Freq (MHz)	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	14.28	0.18	14.46	≤30.00	PASS
		5785	13.81	0.21	14.02	≤30.00	PASS
		5825	13.52	0.18	13.70	≤30.00	PASS
11N20SISO	Ant1	5745	14.38	0.22	14.60	≤30.00	PASS
		5785	13.94	0.22	14.16	≤30.00	PASS
		5825	13.63	0.25	13.88	≤30.00	PASS
11N40SISO	Ant1	5755	13.94	0.42	14.36	≤30.00	PASS
		5795	13.54	0.49	14.03	≤30.00	PASS
11AC20SISO	Ant1	5745	14.36	0.25	14.61	≤30.00	PASS
		5785	13.95	0.22	14.17	≤30.00	PASS
		5825	13.52	0.22	13.74	≤30.00	PASS
11AC40SISO	Ant1	5755	13.93	0.42	14.35	≤30.00	PASS
		5795	13.48	0.49	13.97	≤30.00	PASS
11AC80SISO	Ant1	5775	13.52	0.79	14.31	≤30.00	PASS

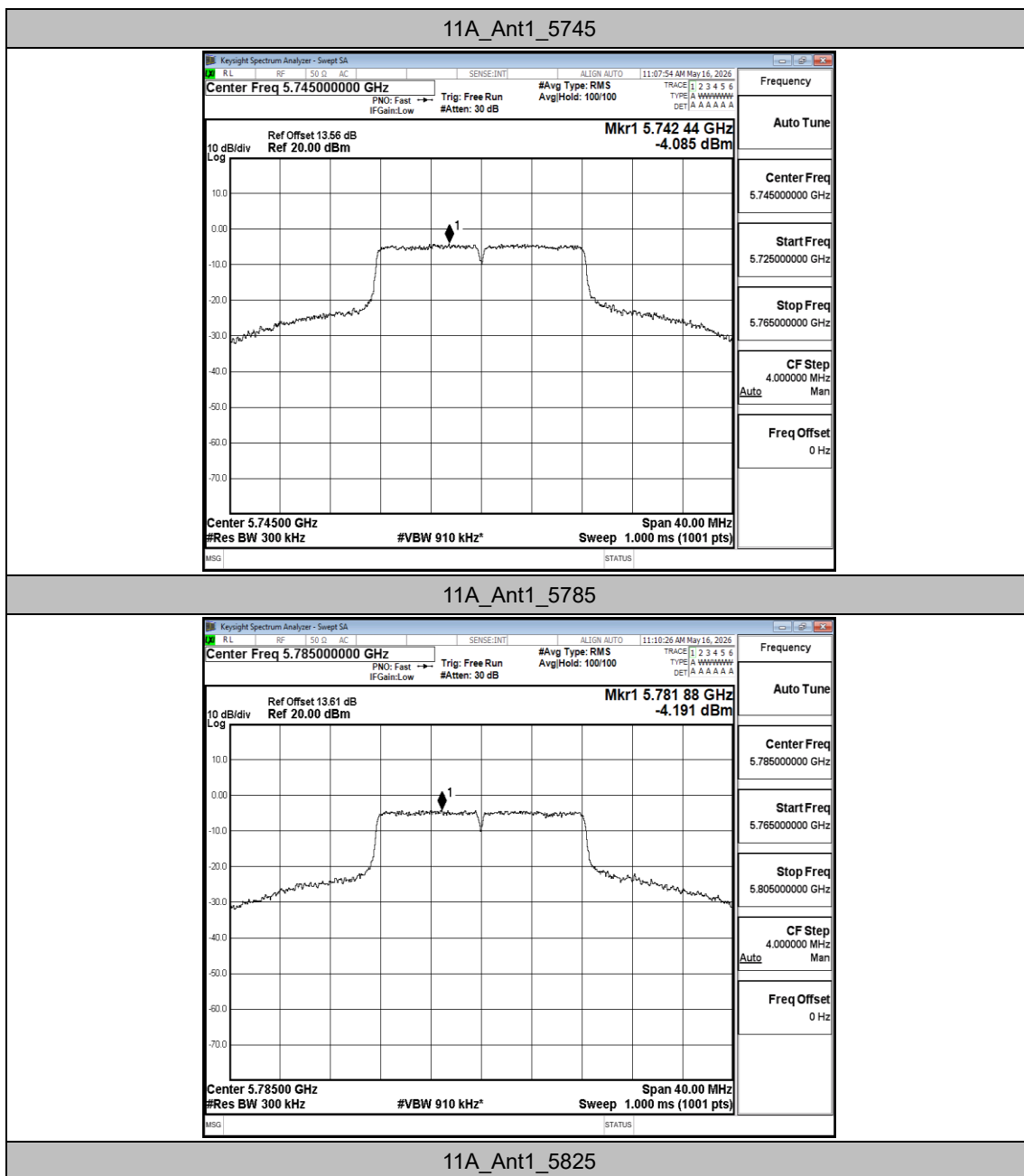
G.3 Maximum power spectral density

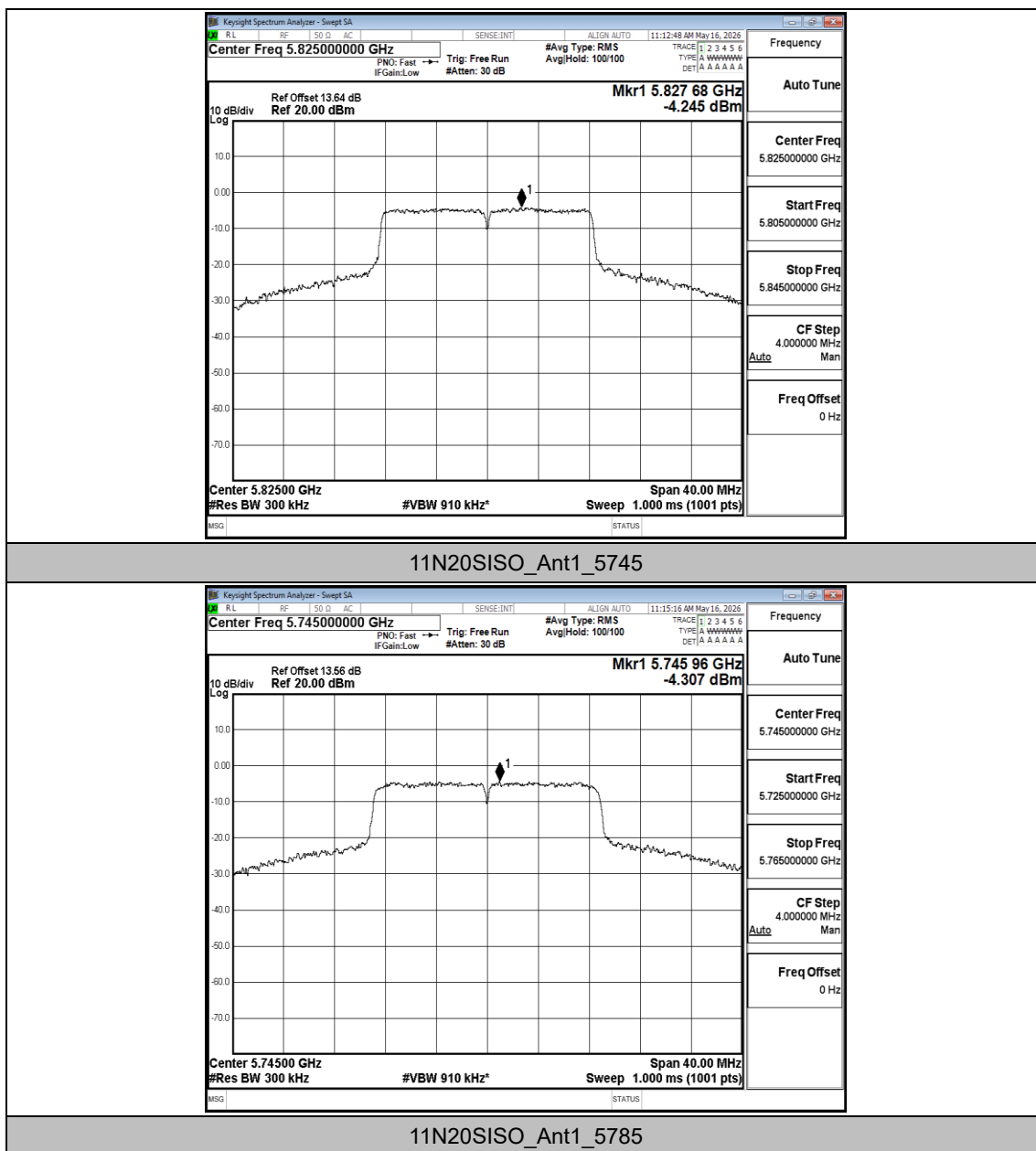
Test Result

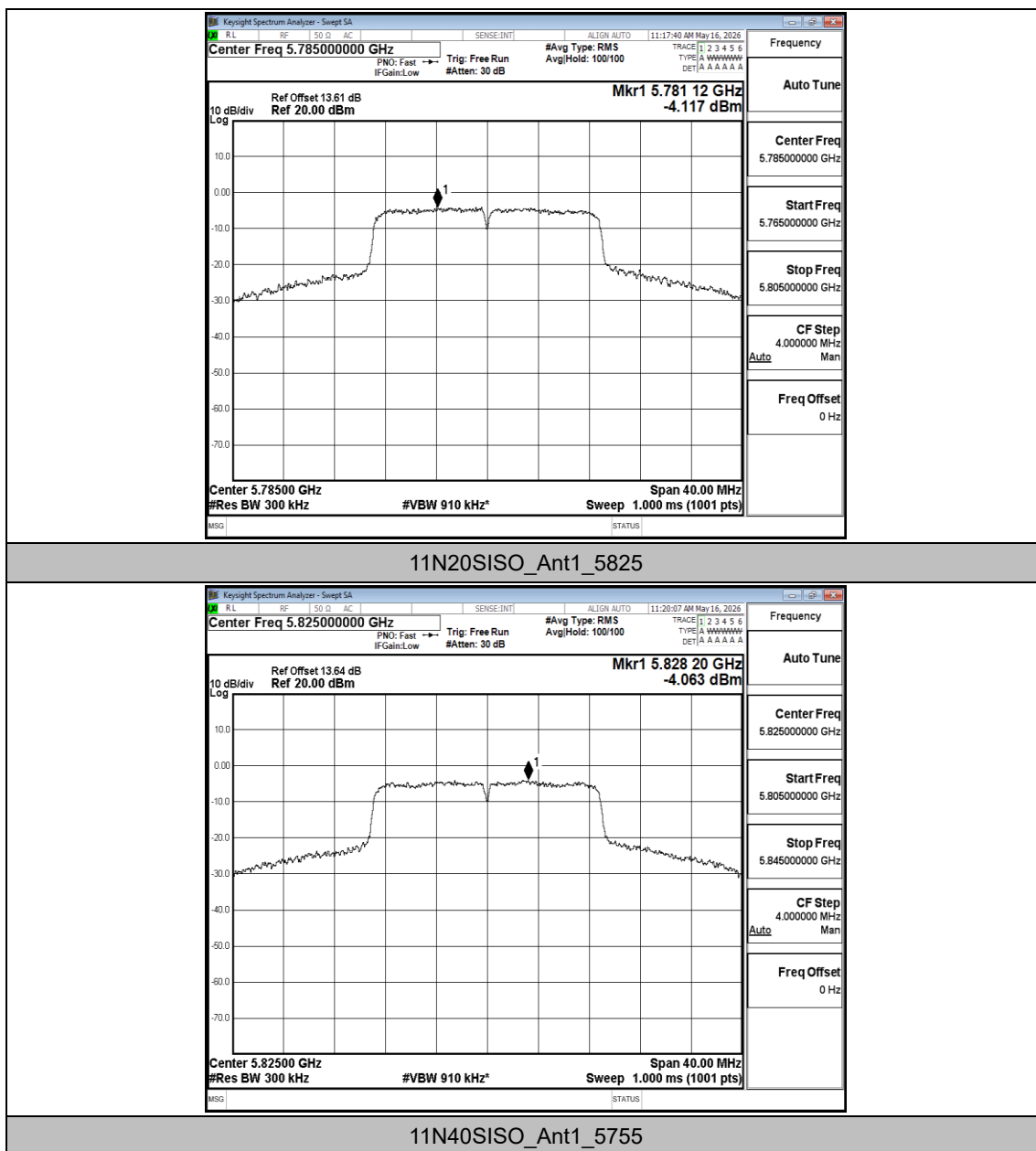
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/500KHz]	DC Factor	RBW Factor	Result [dBm/500KHz]	Limit [dBm/500KHz]	Verdict
11A	Ant1	5745	-4.09	0.18	2.22	-1.69	≤30.00	PASS
		5785	-4.19	0.21	2.22	-1.76	≤30.00	PASS
		5825	-4.25	0.18	2.22	-1.85	≤30.00	PASS
11N20SISO	Ant1	5745	-4.31	0.22	2.22	-1.87	≤30.00	PASS
		5785	-4.12	0.22	2.22	-1.68	≤30.00	PASS
		5825	-4.06	0.25	2.22	-1.59	≤30.00	PASS
11N40SISO	Ant1	5755	-7.02	0.42	2.22	-4.38	≤30.00	PASS
		5795	-7.27	0.49	2.22	-4.56	≤30.00	PASS
11AC20SISO	Ant1	5745	-4.3	0.25	2.22	-1.83	≤30.00	PASS
		5785	-4.09	0.22	2.22	-1.65	≤30.00	PASS
		5825	-4.13	0.22	2.22	-1.69	≤30.00	PASS
11AC40SISO	Ant1	5755	-6.91	0.42	2.22	-4.27	≤30.00	PASS
		5795	-7.06	0.49	2.22	-4.35	≤30.00	PASS
11AC80SISO	Ant1	5775	-9.94	0.79	2.22	-6.93	≤30.00	PASS

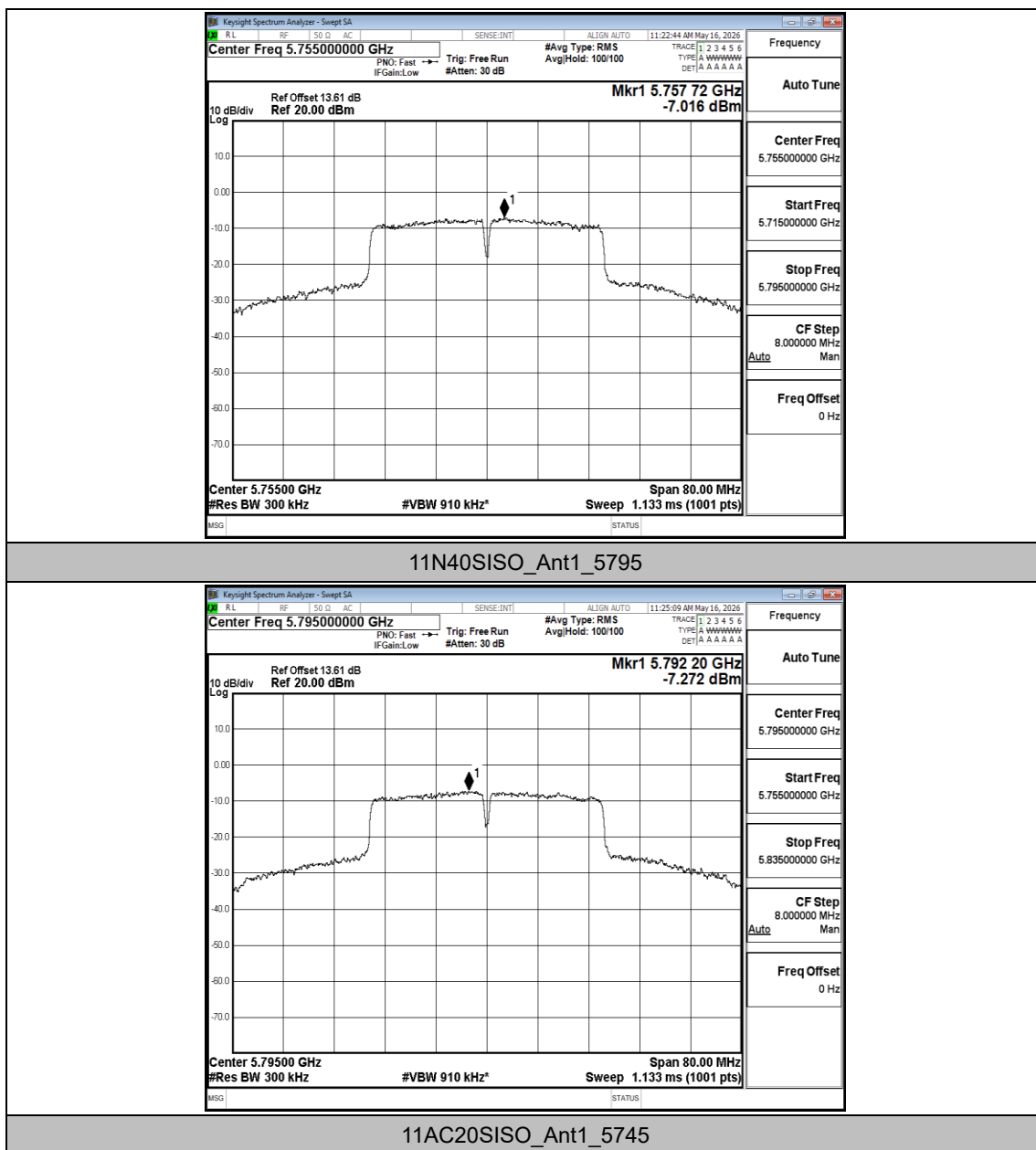
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

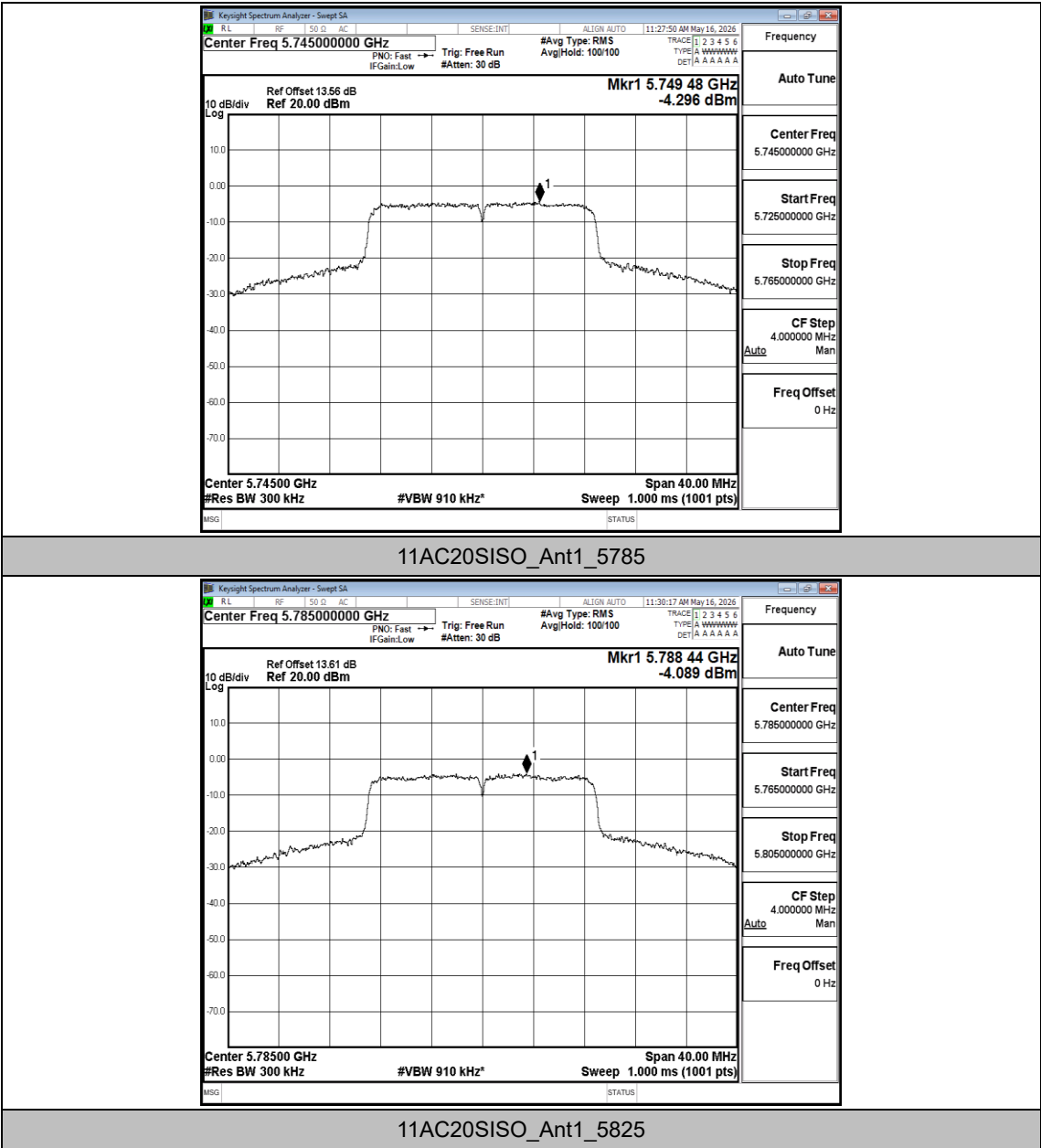
Test Graphs

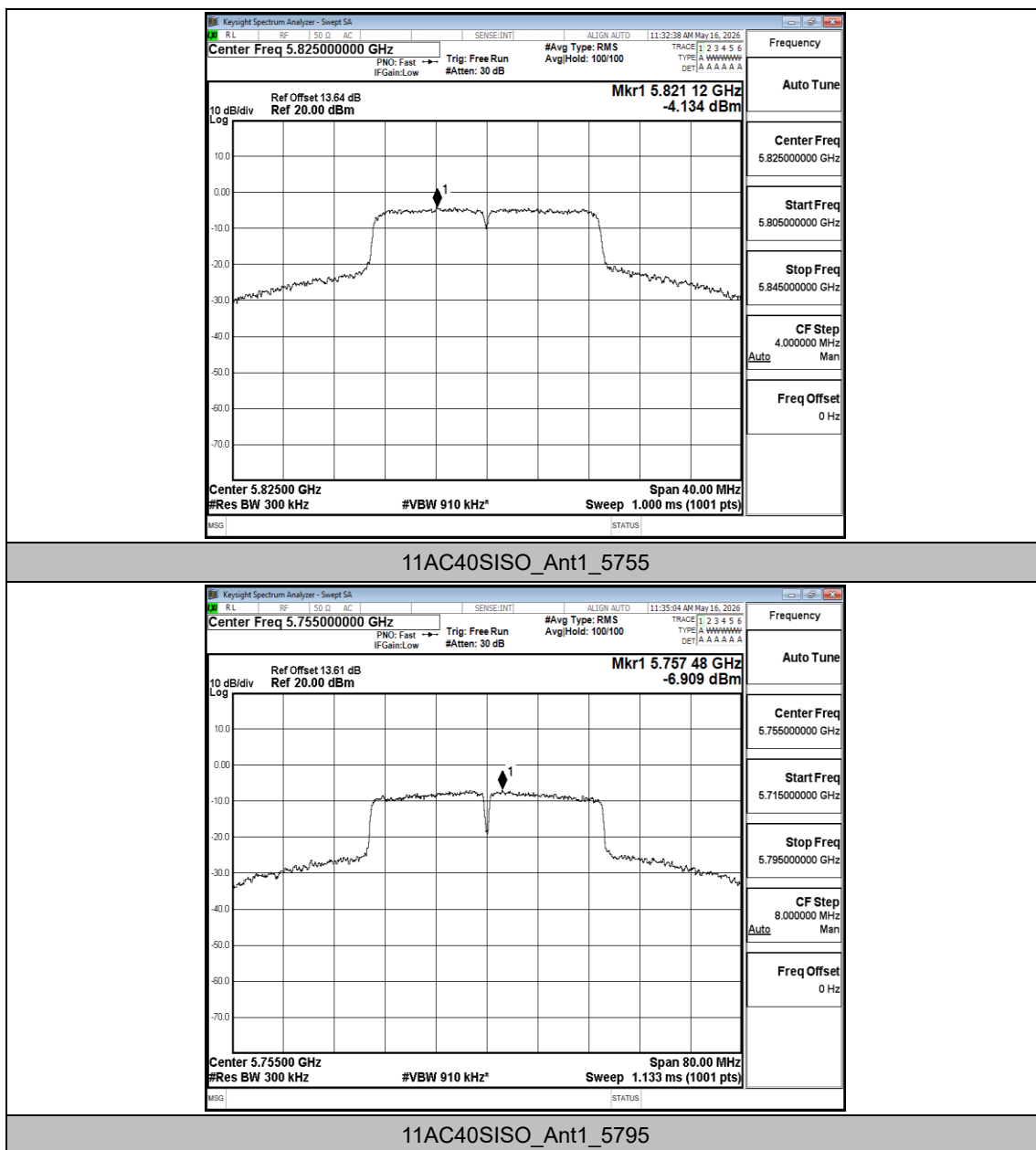


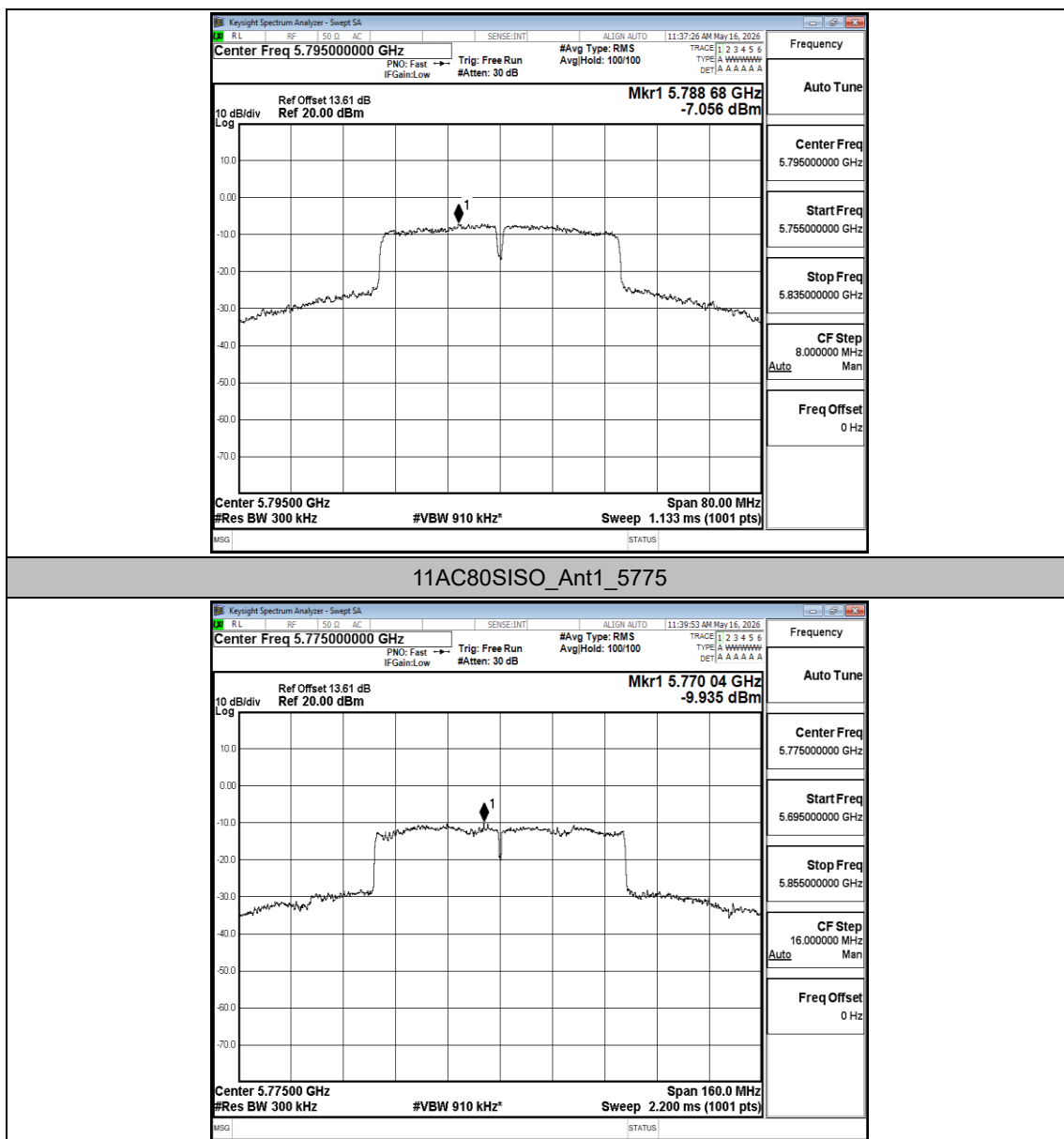












G.4 Emissions in Restricted Bands

Test Result

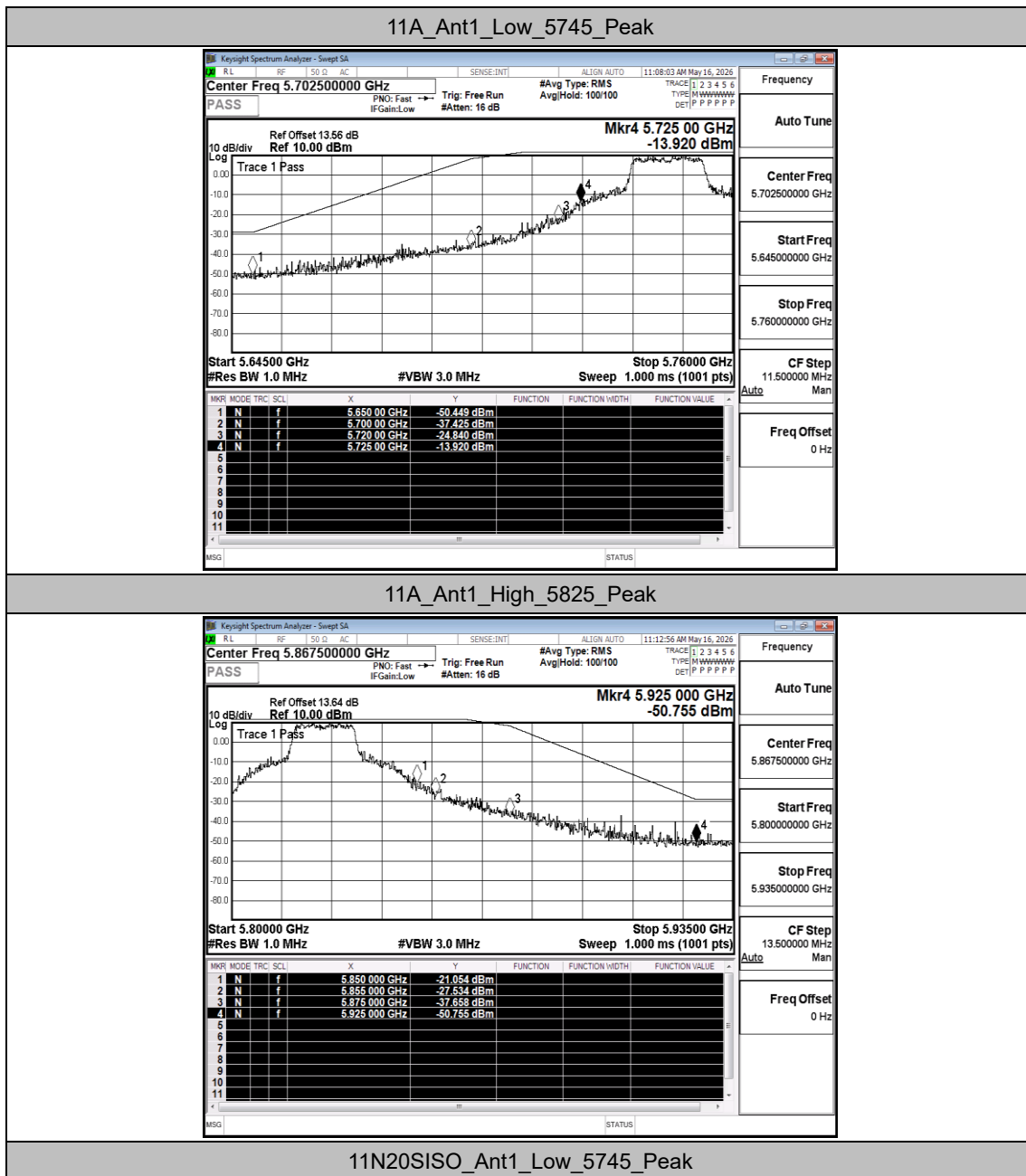
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Gain [dBi]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-50.449	≤-29.00	2.00	PASS
				Peak	5700.000	-37.43	≤8.00	2.00	PASS
				Peak	5720.000	-24.84	≤13.60	2.00	PASS
				Peak	5725.000	-13.92	≤25.00	2.00	PASS
		High	5825	Peak	5850.000	-21.054	≤25.00	2.00	PASS
				Peak	5855.000	-27.53	≤13.60	2.00	PASS
				Peak	5875.000	-37.66	≤8.00	2.00	PASS
				Peak	5925.000	-50.76	≤-27.00	2.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-50.185	≤-29.00	2.00	PASS
				Peak	5700.000	-33.33	≤8.00	2.00	PASS
				Peak	5720.000	-23.23	≤13.60	2.00	PASS
				Peak	5725.000	-14.7	≤25.00	2.00	PASS
		High	5825	Peak	5850.000	-21.207	≤25.00	2.00	PASS
				Peak	5855.000	-24.89	≤13.60	2.00	PASS
				Peak	5875.000	-35.46	≤8.00	2.00	PASS
				Peak	5925.000	-47.12	≤-27.00	2.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-42.547	≤-29.00	2.00	PASS
				Peak	5700.000	-26.96	≤8.00	2.00	PASS
				Peak	5720.000	-15.94	≤13.60	2.00	PASS
				Peak	5725.000	-15.17	≤25.00	2.00	PASS
		High	5795	Peak	5850.000	-28.244	≤25.00	2.00	PASS
				Peak	5855.000	-28.63	≤13.60	2.00	PASS
				Peak	5875.000	-34.92	≤8.00	2.00	PASS
				Peak	5925.000	-42.33	≤-27.00	2.00	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-49.849	≤-29.00	2.00	PASS
				Peak	5700.000	-34.54	≤8.00	2.00	PASS
				Peak	5720.000	-19.45	≤13.60	2.00	PASS
				Peak	5725.000	-14.93	≤25.00	2.00	PASS
		High	5825	Peak	5850.000	-20.442	≤25.00	2.00	PASS
				Peak	5855.000	-24.11	≤13.60	2.00	PASS
				Peak	5875.000	-34.62	≤8.00	2.00	PASS
				Peak	5925.000	-48.98	≤-27.00	2.00	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-44.171	≤-29.00	2.00	PASS
				Peak	5700.000	-24.05	≤8.00	2.00	PASS
				Peak	5720.000	-16.4	≤13.60	2.00	PASS

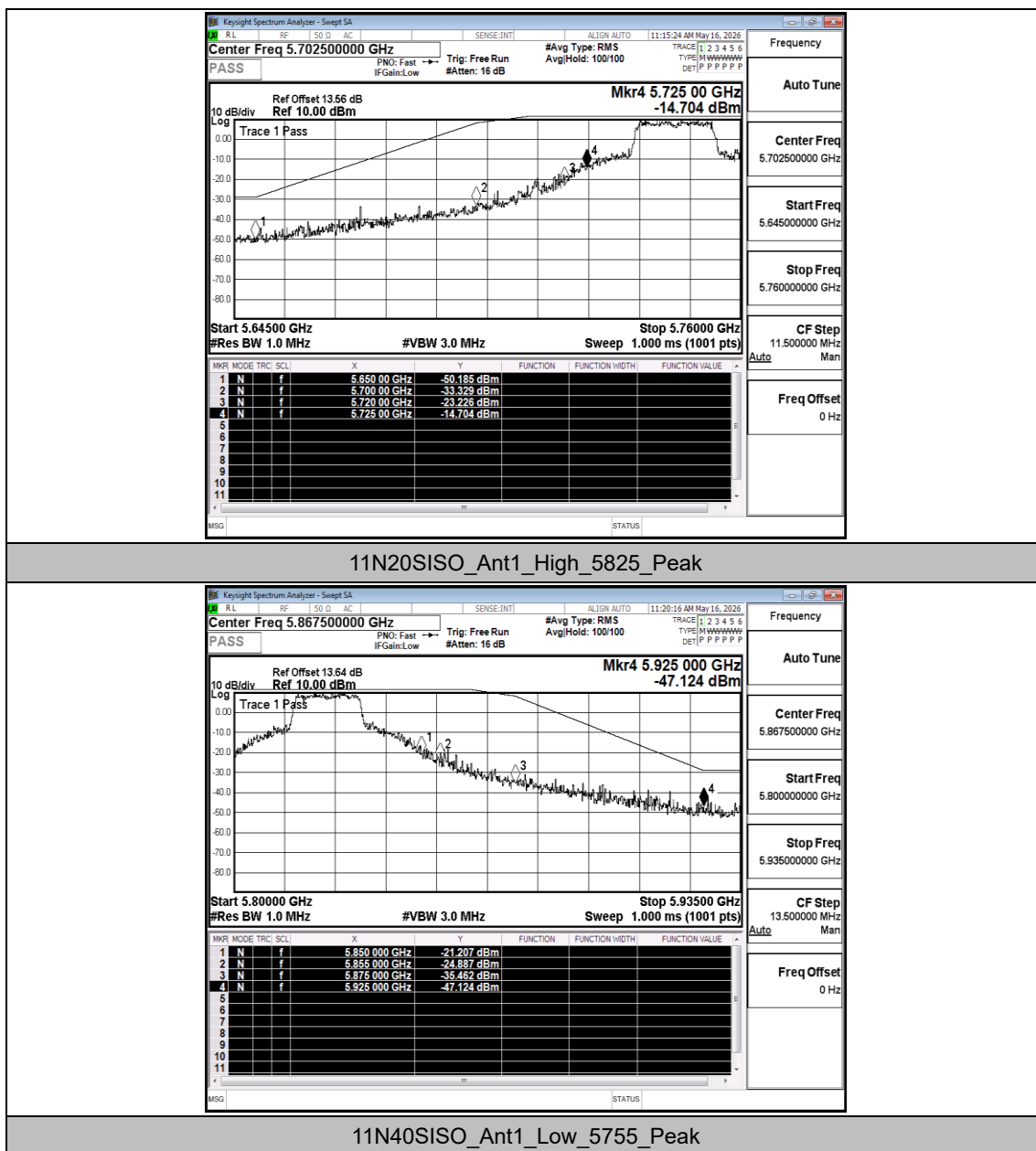
		High	5795	Peak	5725.000	-15.16	≤25.00	2.00	PASS
				Peak	5850.000	-24.105	≤25.00	2.00	PASS
				Peak	5855.000	-28.97	≤13.60	2.00	PASS
				Peak	5875.000	-34.98	≤8.00	2.00	PASS
				Peak	5925.000	-42.47	≤-27.00	2.00	PASS
11AC80SISO	Ant1	Low	5775	Peak	5650.000	-32.444	≤-29.00	2.00	PASS
				Peak	5700.000	-20.43	≤8.00	2.00	PASS
				Peak	5720.000	-14.58	≤13.60	2.00	PASS
				Peak	5725.000	-15.89	≤25.00	2.00	PASS
		High	5775	Peak	5850.000	-20.324	≤25.00	2.00	PASS
				Peak	5855.000	-18.52	≤13.60	2.00	PASS
				Peak	5875.000	-25.58	≤8.00	2.00	PASS
				Peak	5925.000	-33.89	≤-27.00	2.00	PASS

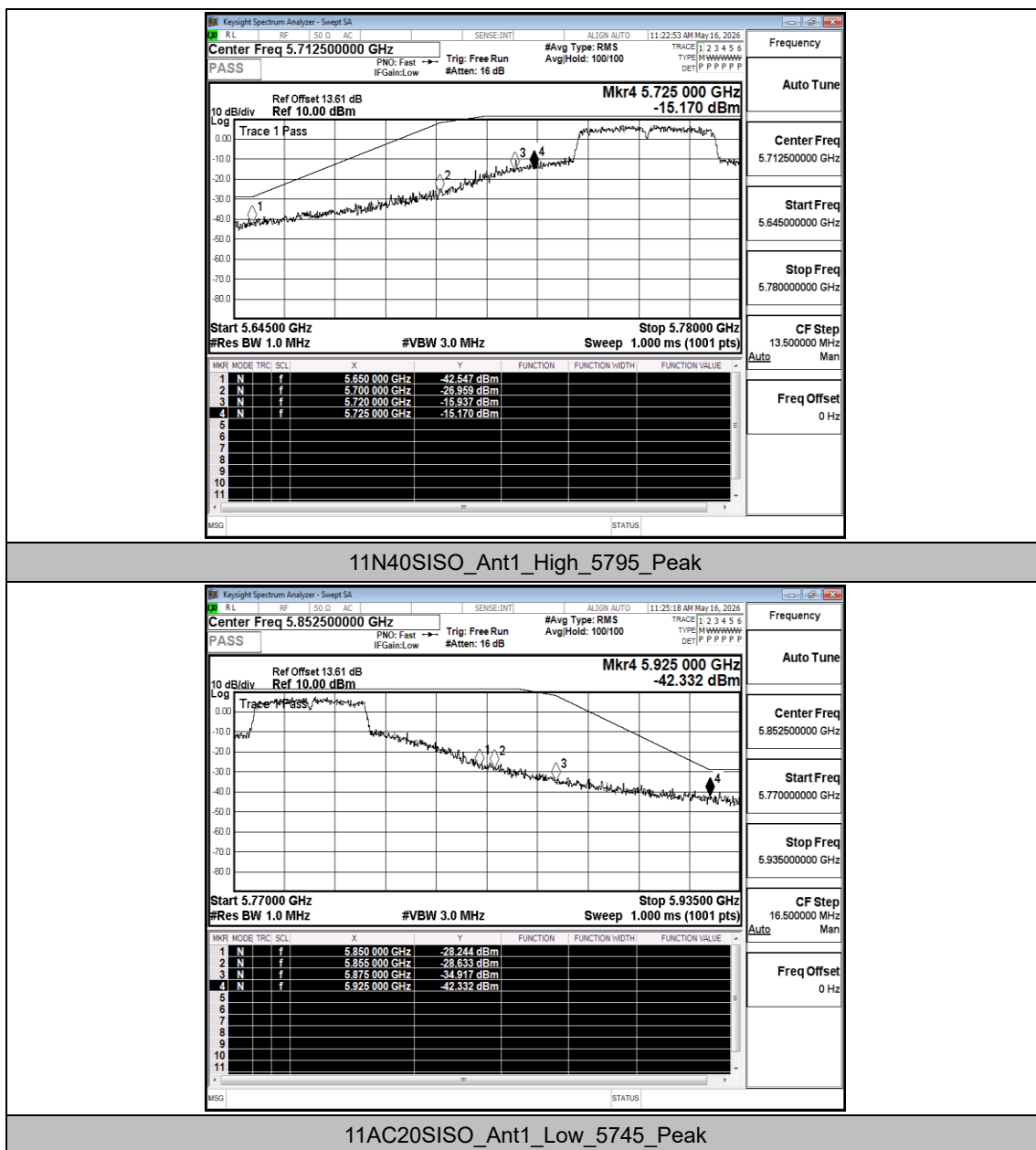
Note:

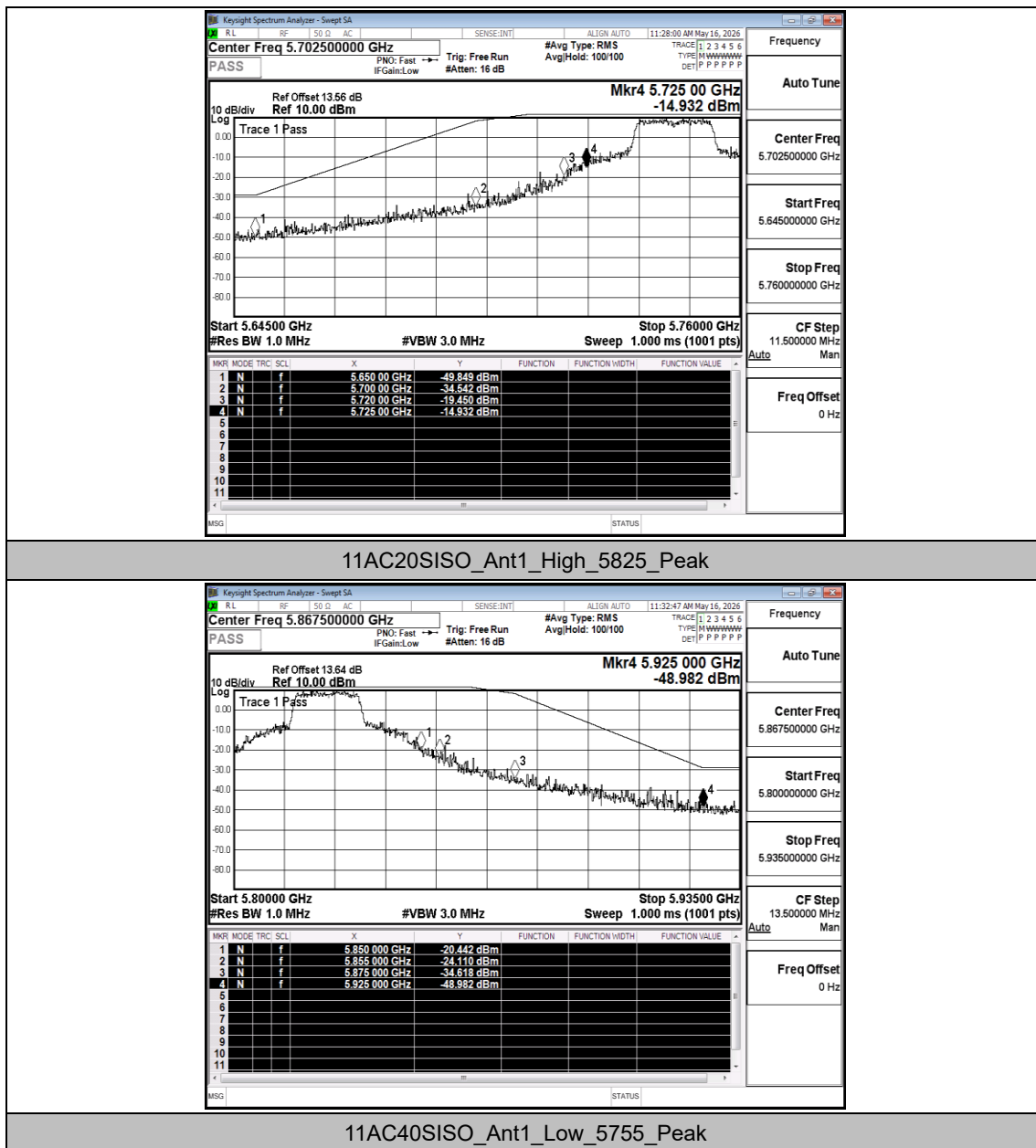
1. The Antenna Gain is compensated in the graph.

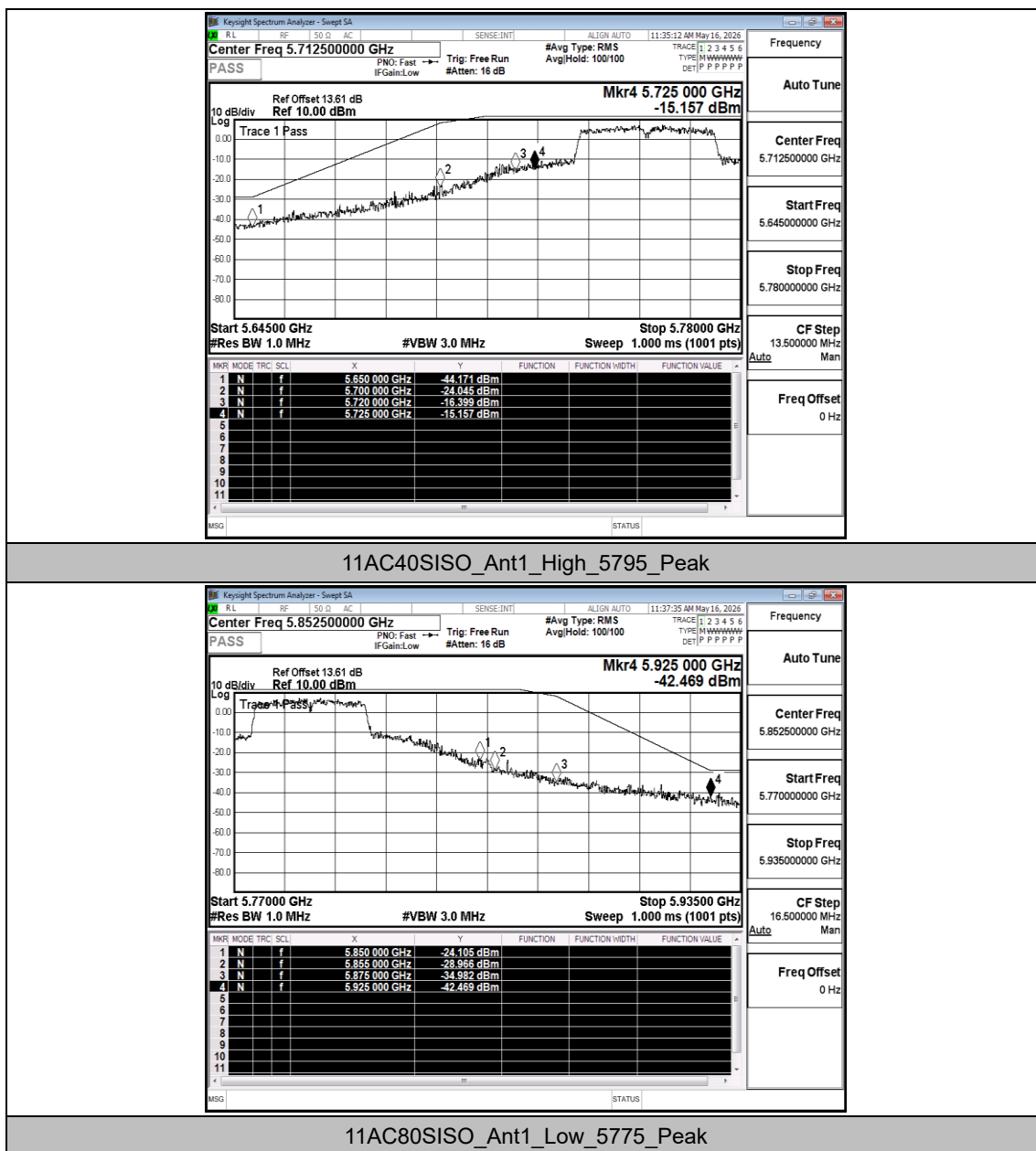
Test Graphs

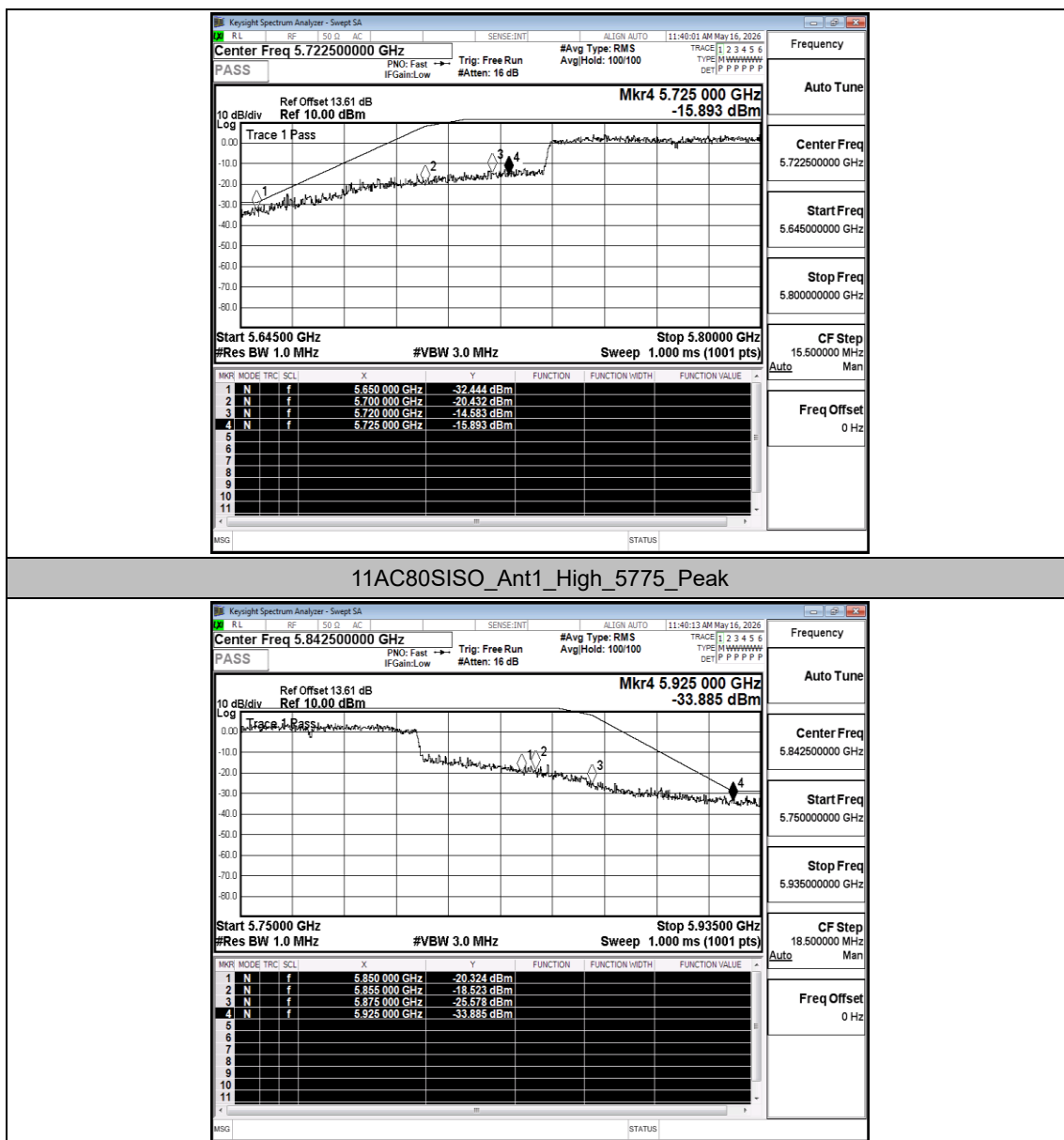












G.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Freq (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	60000.00	10.443864	20	PASS
			LV	NT	60000.00	10.443864	20	PASS
			HV	NT	60000.00	10.443864	20	PASS
		5785	NV	NT	60000.00	10.443864	20	PASS
			LV	NT	-20000.00	-3.457217	20	PASS
			HV	NT	-40000.00	-6.914434	20	PASS
		5825	NV	NT	-60000.00	-10.300429	20	PASS
			LV	NT	-20000.00	-3.433476	20	PASS
			HV	NT	-20000.00	-3.433476	20	PASS
11N20SISO	Ant1	5745	NV	NT	-100000.00	-17.406440	20	PASS
			LV	NT	-60000.00	-10.443864	20	PASS
			HV	NT	-60000.00	-10.443864	20	PASS
		5785	NV	NT	-60000.00	-10.443864	20	PASS
			LV	NT	-60000.00	-10.443864	20	PASS
			HV	NT	-60000.00	-10.443864	20	PASS
		5825	NV	NT	-40000.00	-6.866953	20	PASS
			LV	NT	-40000.00	-6.866953	20	PASS
			HV	NT	40000.00	6.866953	20	PASS
11N40SISO	Ant1	5755	NV	NT	80000.00	13.900956	20	PASS
			LV	NT	40000.00	6.950478	20	PASS
			HV	NT	40000.00	6.950478	20	PASS
		5795	NV	NT	40000.00	6.950478	20	PASS
			LV	NT	40000.00	6.902502	20	PASS
			HV	NT	40000.00	6.902502	20	PASS
11AC20SISO	Ant1	5745	NV	NT	20000.00	3.481288	20	PASS
			LV	NT	20000.00	3.481288	20	PASS
			HV	NT	80000.00	13.925152	20	PASS
		5785	NV	NT	80000.00	13.925152	20	PASS
			LV	NT	80000.00	13.925152	20	PASS
			HV	NT	80000.00	13.925152	20	PASS
		5825	NV	NT	100000.00	17.167382	20	PASS
			LV	NT	-80000.00	-13.733906	20	PASS
			HV	NT	20000.00	3.433476	20	PASS
11AC40SISO	Ant1	5755	NV	NT	40000.00	6.950478	20	PASS
			LV	NT	80000.00	13.925152	20	PASS

		5795	HV	NT	80000.00	13.925152	20	PASS
			NV	NT	80000.00	13.925152	20	PASS
			LV	NT	80000.00	13.925152	20	PASS
			HV	NT	80000.00	13.925152	20	PASS
11AC80SISO	Ant1	5775	NV	NT	80000.00	13.925152	20	PASS
			LV	NT	80000.00	13.852814	20	PASS
			HV	NT	-80000.00	-13.852814	20	PASS

Temperature								
TestMode	Antenna	Freq (MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	-30	-40000.00	-6.962576	20	PASS
			NV	-20	-40000.00	-6.962576	20	PASS
			NV	-10	-100000.00	-17.406440	20	PASS
			NV	0	-20000.00	-3.481288	20	PASS
			NV	10	-20000.00	-3.481288	20	PASS
			NV	20	-100000.00	-17.406440	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
			NV	40	-20000.00	-3.481288	20	PASS
			NV	50	-60000.00	-10.443864	20	PASS
		5785	NV	-30	-20000.00	-3.457217	20	PASS
			NV	-20	-80000.00	-13.828868	20	PASS
			NV	-10	20000.00	3.457217	20	PASS
			NV	0	-80000.00	-13.828868	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
			NV	20	-80000.00	-13.828868	20	PASS
			NV	30	-80000.00	-13.828868	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-60000.00	-10.371651	20	PASS
		5825	NV	-30	-20000.00	-3.433476	20	PASS
			NV	-20	-20000.00	-3.433476	20	PASS
			NV	-10	20000.00	3.433476	20	PASS
			NV	0	-100000.00	-17.167382	20	PASS
			NV	10	-60000.00	-10.300429	20	PASS
			NV	20	-20000.00	-3.433476	20	PASS
			NV	30	-80000.00	-13.733906	20	PASS
			NV	40	-20000.00	-3.433476	20	PASS
			NV	50	0.00	0.000000	20	PASS
11N20SISO	Ant1	5745	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-20000.00	-3.433476	20	PASS
			NV	-10	-60000.00	-10.443864	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-60000.00	-10.443864	20	PASS
			NV	30	-60000.00	-10.443864	20	PASS
			NV	40	20000.00	3.481288	20	PASS
			NV	50	-40000.00	-6.962576	20	PASS
		5785	NV	-30	-20000.00	-3.457217	20	PASS
			NV	-20	-60000.00	-10.371651	20	PASS
			NV	-10	-100000.00	-17.286085	20	PASS

			NV	0	-20000.00	-3.457217	20	PASS
			NV	10	60000.00	10.371651	20	PASS
			NV	20	60000.00	10.371651	20	PASS
			NV	30	60000.00	10.371651	20	PASS
			NV	40	-100000.00	-17.286085	20	PASS
			NV	50	-100000.00	-17.286085	20	PASS
		5825	NV	-30	-60000.00	-10.300429	20	PASS
			NV	-20	40000.00	6.866953	20	PASS
			NV	-10	-40000.00	-6.866953	20	PASS
			NV	0	-80000.00	-13.733906	20	PASS
			NV	10	-80000.00	-13.733906	20	PASS
			NV	20	-80000.00	-13.733906	20	PASS
			NV	30	-40000.00	-6.866953	20	PASS
			NV	40	-40000.00	-6.866953	20	PASS
			NV	50	-40000.00	-6.866953	20	PASS
11N40SISO	Ant1	5755	NV	-30	-40000.00	-6.866953	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	40000.00	6.950478	20	PASS
			NV	0	40000.00	6.950478	20	PASS
			NV	10	40000.00	6.950478	20	PASS
			NV	20	40000.00	6.950478	20	PASS
			NV	30	40000.00	6.950478	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	80000.00	13.900956	20	PASS
		5795	NV	-30	40000.00	6.950478	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	40000.00	6.902502	20	PASS
			NV	10	40000.00	6.902502	20	PASS
			NV	20	40000.00	6.902502	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	40000.00	6.902502	20	PASS
			NV	50	40000.00	6.902502	20	PASS
11AC20SISO	Ant1	5745	NV	-30	0.00	0.000000	20	PASS
			NV	-20	20000.00	3.481288	20	PASS
			NV	-10	100000.00	17.406440	20	PASS
			NV	0	-100000.00	-17.406440	20	PASS
			NV	10	-100000.00	-17.406440	20	PASS
			NV	20	-60000.00	-10.443864	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	-80000.00	-13.925152	20	PASS
			NV	50	-80000.00	-13.925152	20	PASS

		5785	NV	-30	-80000.00	-13.925152	20	PASS
			NV	-20	-80000.00	-13.925152	20	PASS
			NV	-10	-80000.00	-13.925152	20	PASS
			NV	0	60000.00	10.371651	20	PASS
			NV	10	-40000.00	-6.914434	20	PASS
			NV	20	40000.00	6.914434	20	PASS
			NV	30	40000.00	6.914434	20	PASS
			NV	40	-80000.00	-13.828868	20	PASS
			NV	50	-80000.00	-13.828868	20	PASS
		5825	NV	-30	-80000.00	-13.828868	20	PASS
			NV	-20	-100000.00	-17.167382	20	PASS
			NV	-10	100000.00	17.167382	20	PASS
			NV	0	20000.00	3.433476	20	PASS
			NV	10	20000.00	3.433476	20	PASS
			NV	20	20000.00	3.433476	20	PASS
			NV	30	-60000.00	-10.300429	20	PASS
			NV	40	20000.00	3.433476	20	PASS
			NV	50	-60000.00	-10.300429	20	PASS
11AC40SISO	Ant1	5755	NV	-30	-80000.00	-13.900956	20	PASS
			NV	-20	-80000.00	-13.900956	20	PASS
			NV	-10	-80000.00	-13.900956	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	-80000.00	-13.900956	20	PASS
			NV	20	-80000.00	-13.900956	20	PASS
			NV	30	-80000.00	-13.900956	20	PASS
			NV	40	-80000.00	-13.900956	20	PASS
			NV	50	-80000.00	-13.900956	20	PASS
		5795	NV	-30	-80000.00	-13.805004	20	PASS
			NV	-20	-80000.00	-13.805004	20	PASS
			NV	-10	-80000.00	-13.805004	20	PASS
			NV	0	-80000.00	-13.805004	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
			NV	20	-40000.00	-6.902502	20	PASS
			NV	30	-40000.00	-6.902502	20	PASS
			NV	40	-40000.00	-6.902502	20	PASS
			NV	50	-40000.00	-6.902502	20	PASS
11AC80SISO	Ant1	5775	NV	-30	-40000.00	-6.902502	20	PASS
			NV	-20	80000.00	13.852814	20	PASS
			NV	-10	80000.00	13.852814	20	PASS
			NV	0	80000.00	13.852814	20	PASS
			NV	10	80000.00	13.852814	20	PASS
			NV	20	80000.00	13.852814	20	PASS

			NV	30	80000.00	13.852814	20	PASS
			NV	40	80000.00	13.852814	20	PASS
			NV	50	-80000.00	-13.852814	20	PASS

G.6 Duty Cycle

Test Result

TestMode	Antenna	Freq (MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	Limit	Verdict
11A	Ant1	5745	1.39	1.45	95.86	0.18	---	---
		5785	1.38	1.45	95.17	0.21	---	---
		5825	1.39	1.45	95.86	0.18	---	---
11N20SISO	Ant1	5745	1.18	1.24	95.16	0.22	---	---
		5785	1.18	1.24	95.16	0.22	---	---
		5825	1.17	1.24	94.35	0.25	---	---
11N40SISO	Ant1	5755	0.59	0.65	90.77	0.42	---	---
		5795	0.58	0.65	89.23	0.49	---	---
11AC20SISO	Ant1	5745	1.18	1.25	94.40	0.25	---	---
		5785	1.18	1.24	95.16	0.22	---	---
		5825	1.18	1.24	95.16	0.22	---	---
11AC40SISO	Ant1	5755	0.59	0.65	90.77	0.42	---	---
		5795	0.59	0.66	89.39	0.49	---	---
11AC80SISO	Ant1	5775	0.30	0.36	83.33	0.79	---	---

Test Graphs

