

Appendix E

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: Android Head Unit with Floating Screen

Test Model: RVHU-130-ADF

Environmental Conditions

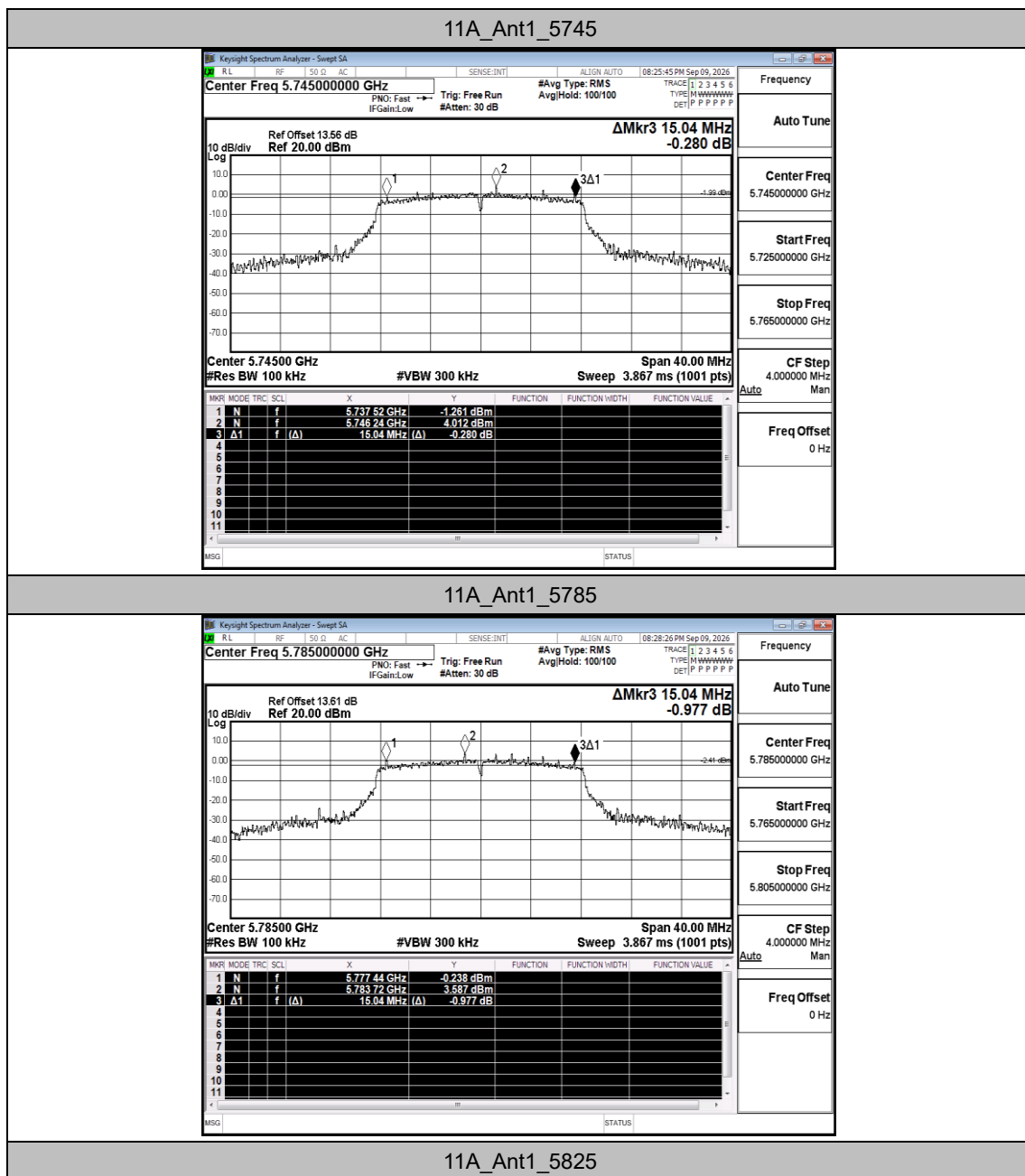
Temperature:	26.3°C
Relative Humidity:	54.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

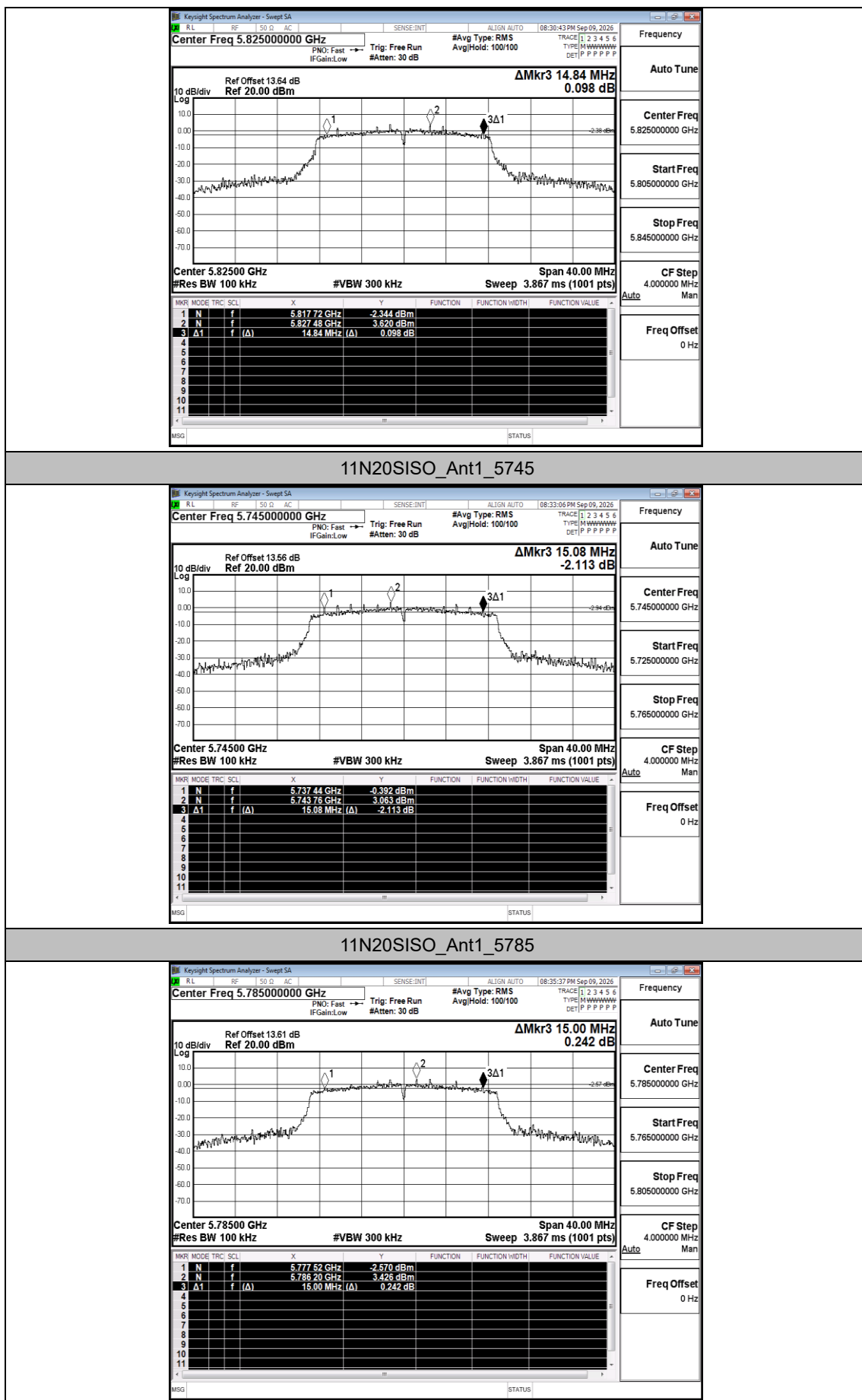
E.1 Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq (MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	15.040	5737.520	5752.560	0.5	PASS
		5785	15.040	5777.440	5792.480	0.5	PASS
		5825	14.840	5817.720	5832.560	0.5	PASS
11N20SISO	Ant1	5745	15.080	5737.440	5752.520	0.5	PASS
		5785	15.000	5777.520	5792.520	0.5	PASS
		5825	15.560	5817.200	5832.760	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.040	5777.400	5812.440	0.5	PASS
11AC20SISO	Ant1	5745	14.840	5737.720	5752.560	0.5	PASS
		5785	15.040	5777.440	5792.480	0.5	PASS
		5825	14.160	5818.360	5832.520	0.5	PASS
11AC40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	33.840	5778.680	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.040	5737.560	5812.600	0.5	PASS

Test Graphs B4



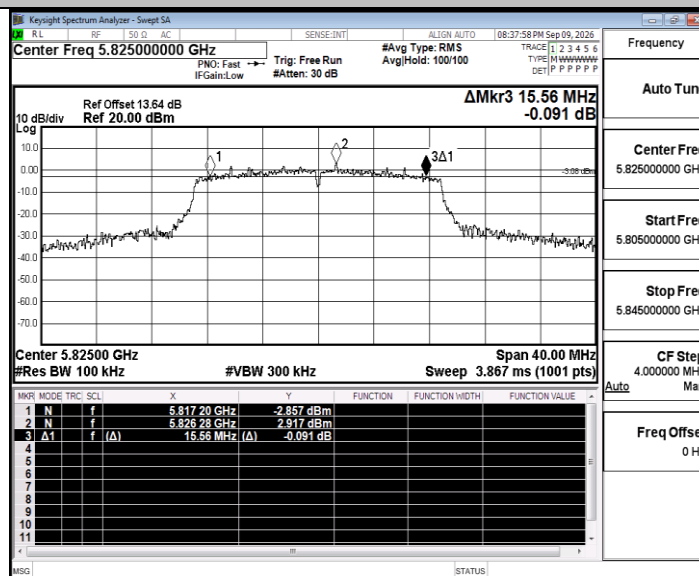


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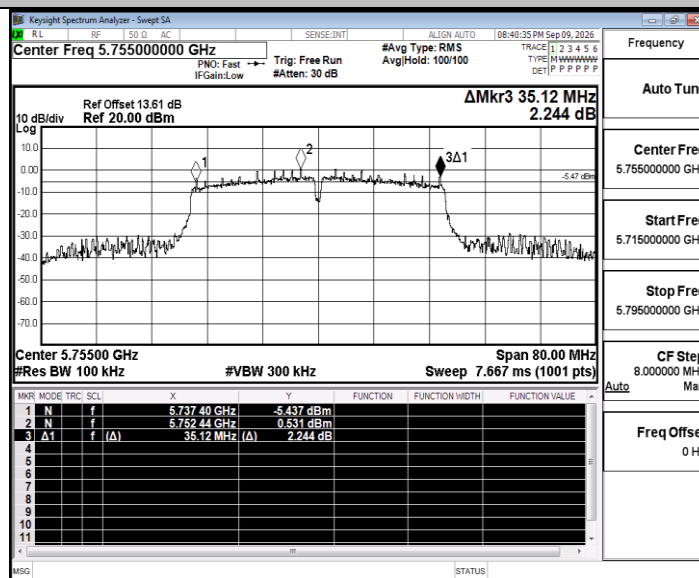
Add: No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou, Guangdong, China

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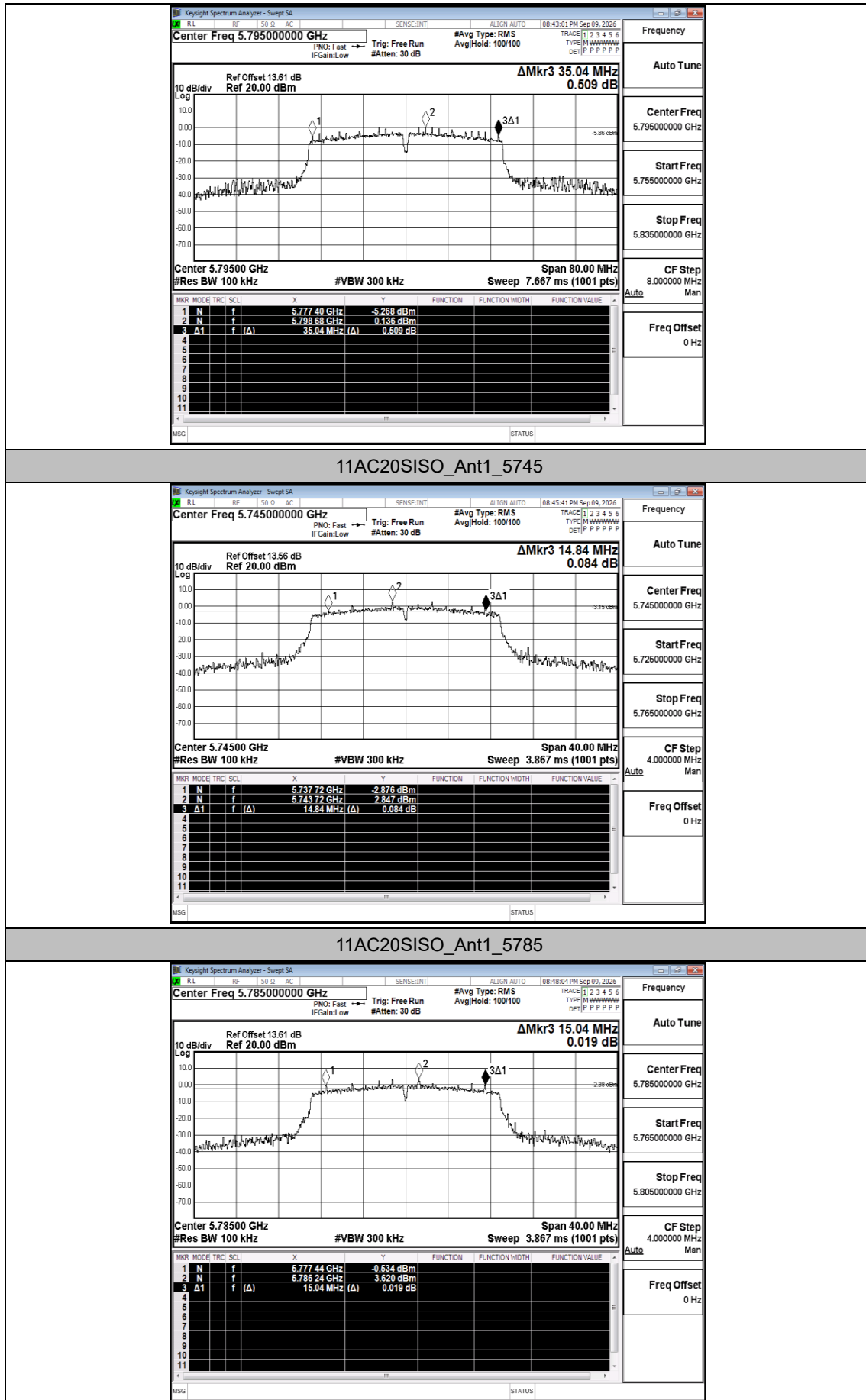
11N20SISO_Ant1_5825

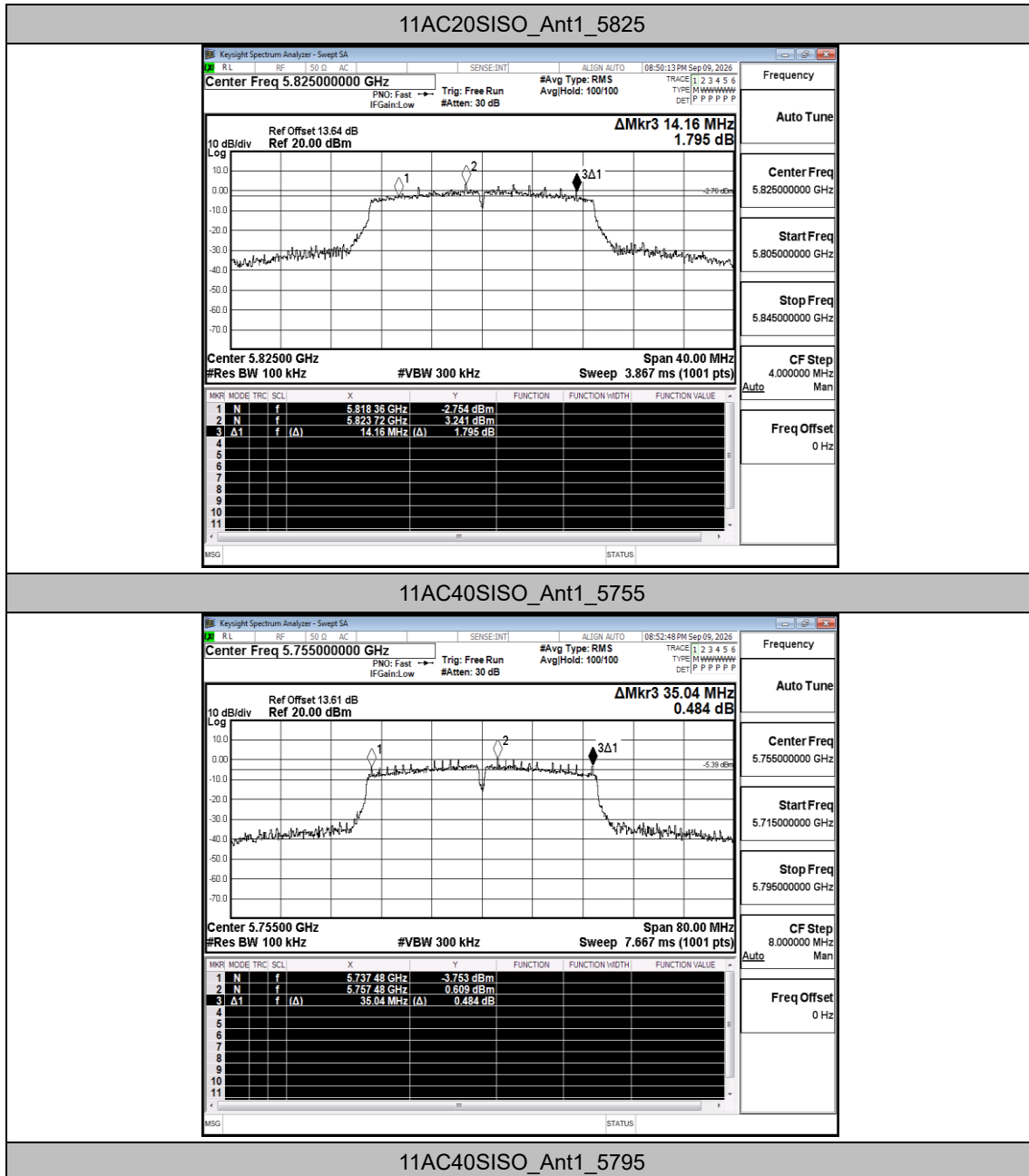


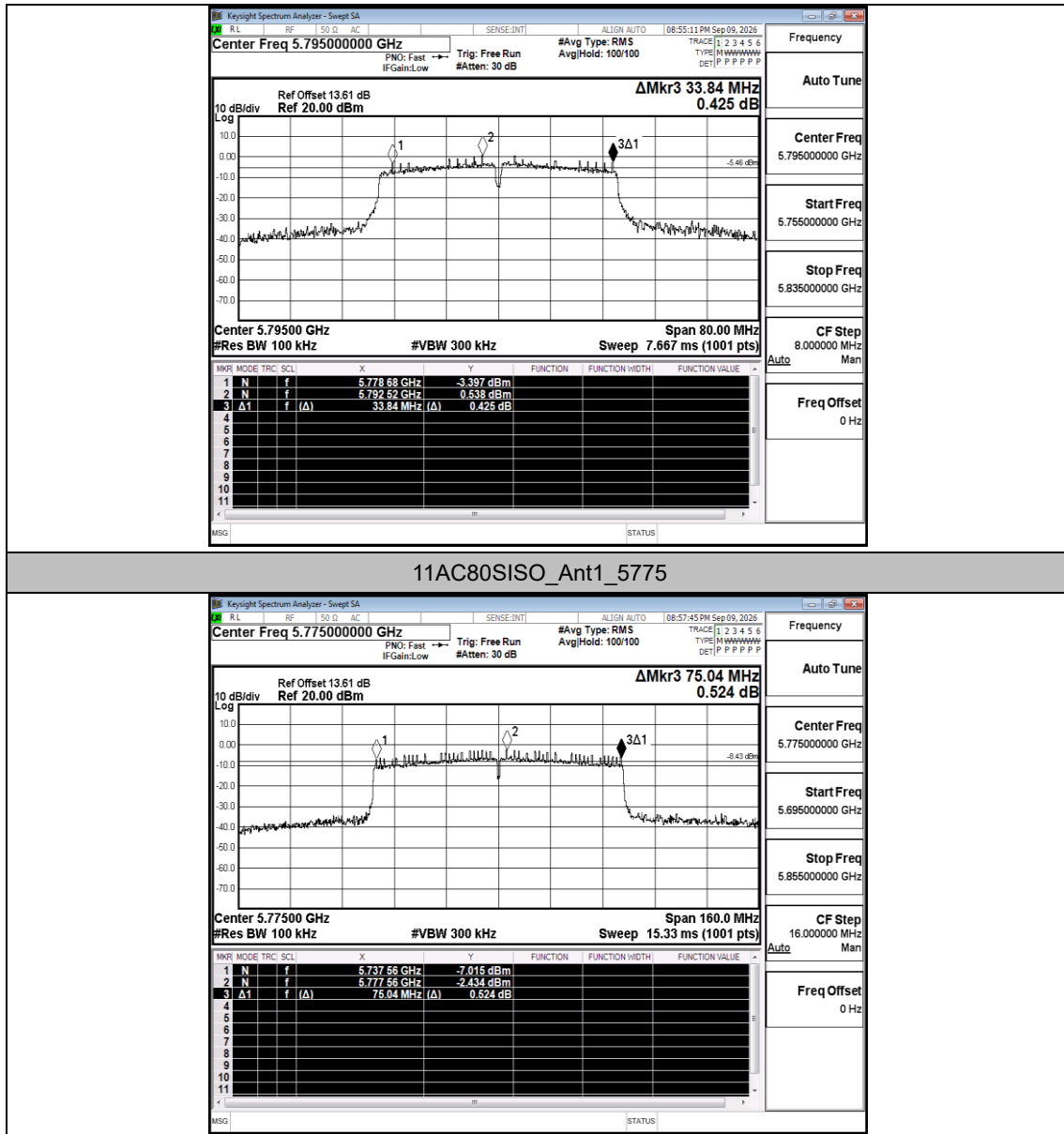
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795







E.2 Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	NA	15.52	0.15	15.67	≤30.00	PASS
		5785	NA	15.46	0.15	15.61	≤30.00	PASS
		5825	NA	15.61	0.15	15.76	≤30.00	PASS
11N20SISO	Ant1	5745	NA	15.50	0.13	15.63	≤30.00	PASS
		5785	NA	15.44	0.16	15.60	≤30.00	PASS
		5825	NA	15.44	0.16	15.60	≤30.00	PASS
11N40SISO	Ant1	5755	NA	14.72	0.32	15.04	≤30.00	PASS
		5795	NA	14.57	0.32	14.89	≤30.00	PASS
11AC20SISO	Ant1	5745	NA	15.07	0.16	15.23	≤30.00	PASS
		5785	NA	14.93	0.13	15.06	≤30.00	PASS
		5825	NA	14.97	0.16	15.13	≤30.00	PASS
11AC40SISO	Ant1	5755	NA	14.82	0.26	15.08	≤30.00	PASS
		5795	NA	14.63	0.26	14.89	≤30.00	PASS
11AC80SISO	Ant1	5775	NA	14.64	0.63	15.27	≤30.00	PASS

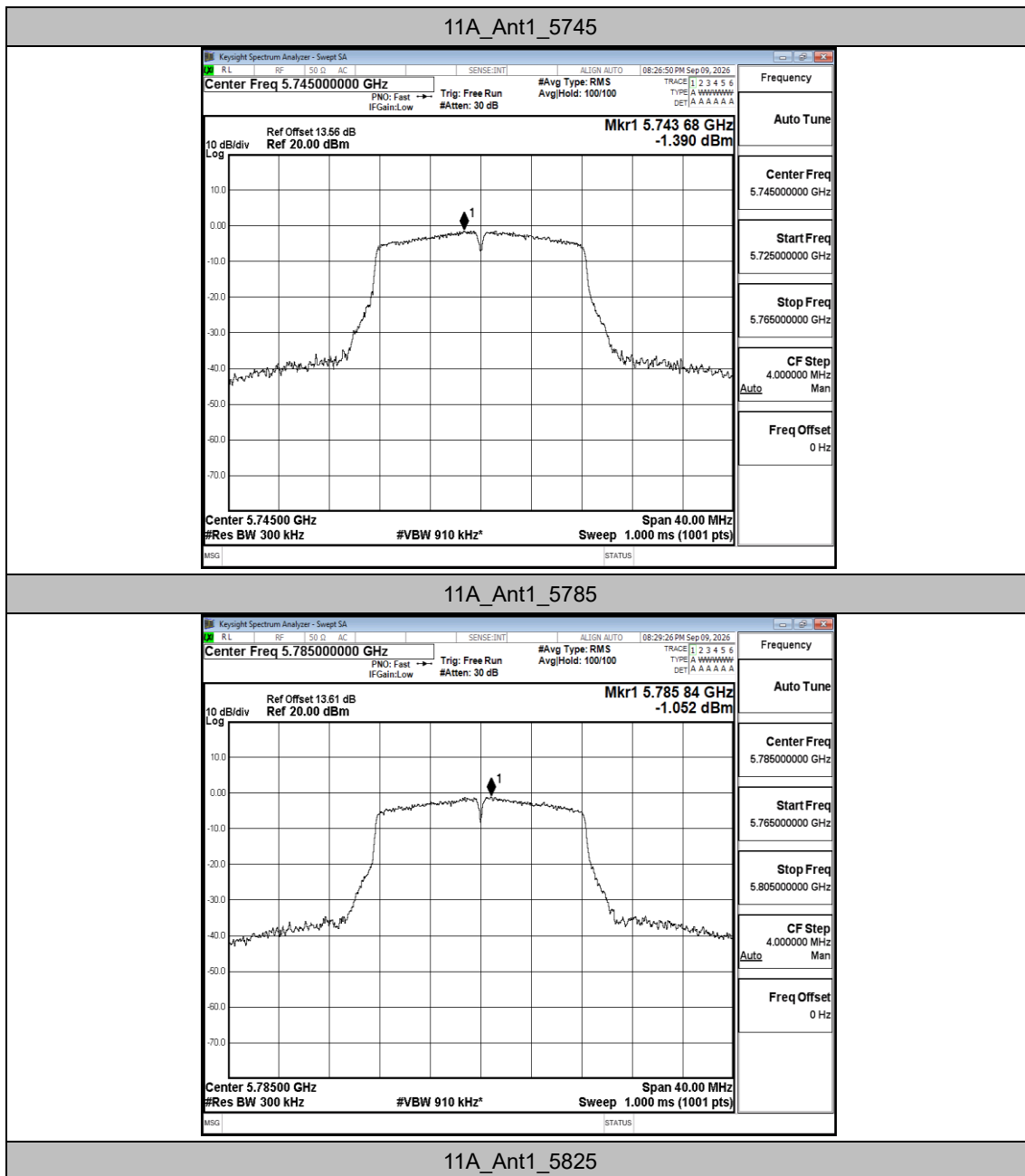
E.3 Maximum power spectral density

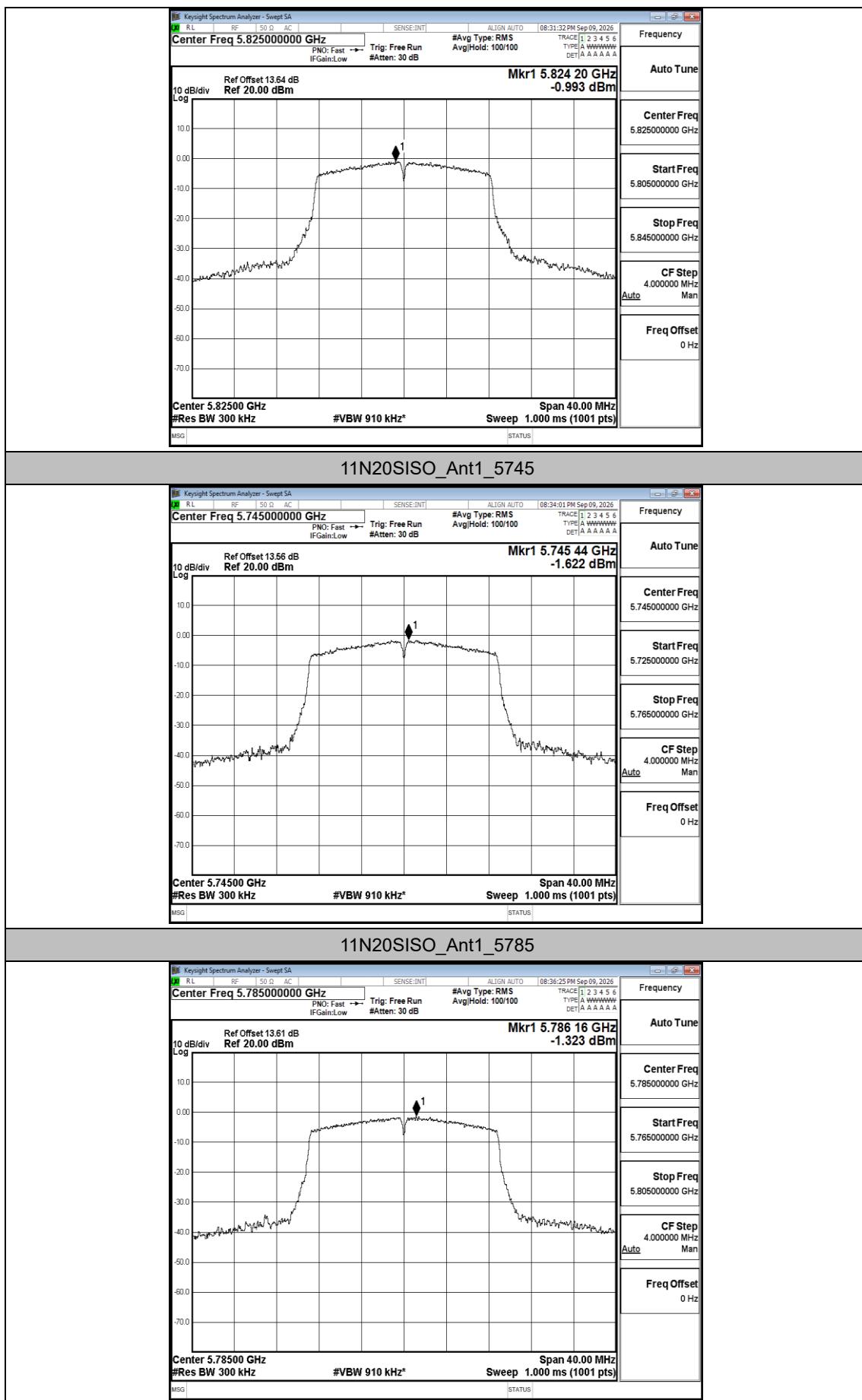
Test Result

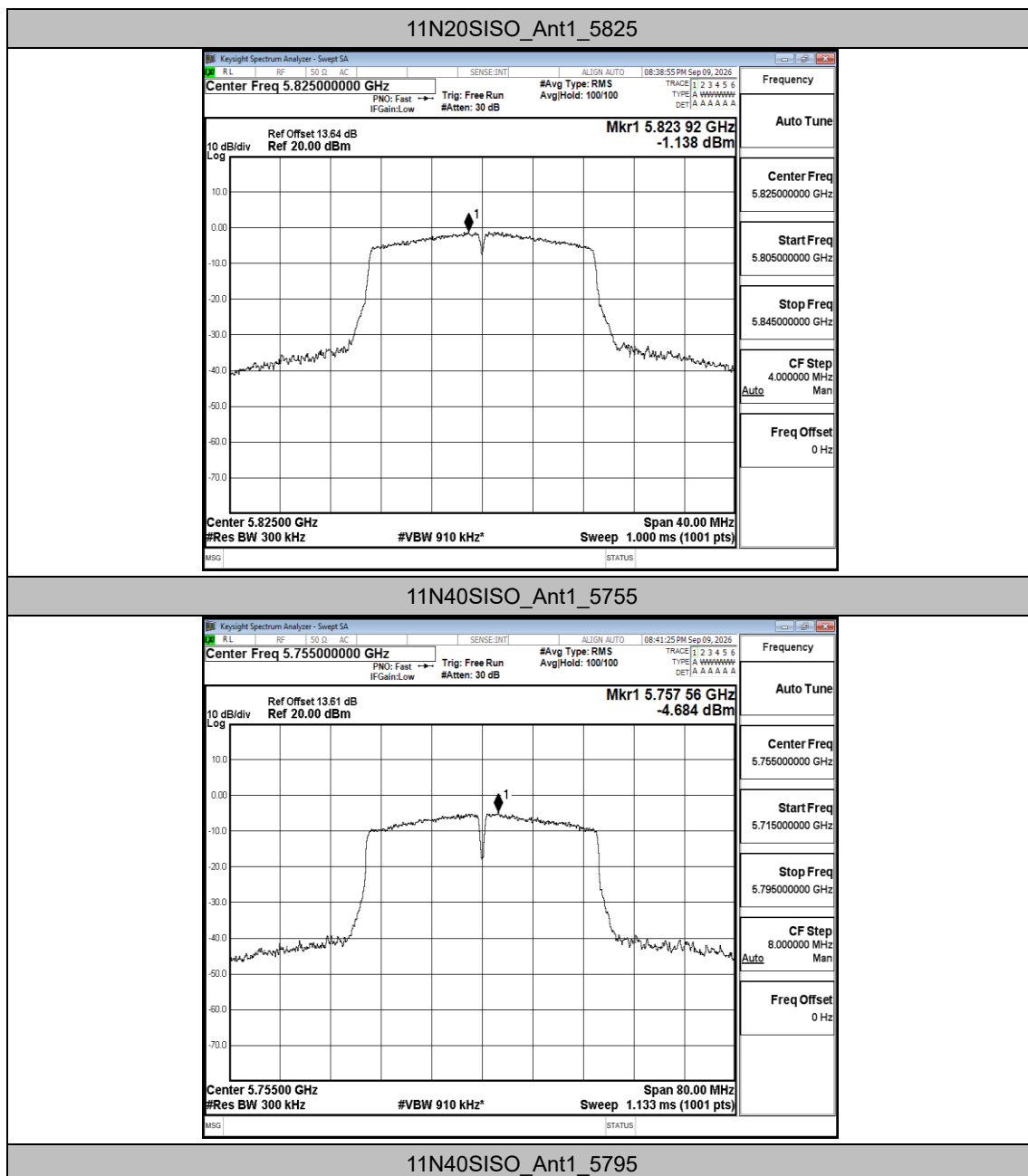
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	RBW Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5745	-1.39	0.15	2.22	0.98	≤30.00	PASS
		5785	-1.05	0.15	2.22	1.32	≤30.00	PASS
		5825	-0.99	0.15	2.22	1.38	≤30.00	PASS
11N20SISO	Ant1	5745	-1.62	0.13	2.22	0.73	≤30.00	PASS
		5785	-1.32	0.16	2.22	1.06	≤30.00	PASS
		5825	-1.14	0.16	2.22	1.24	≤30.00	PASS
11N40SISO	Ant1	5755	-4.68	0.32	2.22	-2.14	≤30.00	PASS
		5795	-4.74	0.32	2.22	-2.20	≤30.00	PASS
11AC20SISO	Ant1	5745	-1.96	0.16	2.22	0.42	≤30.00	PASS
		5785	-1.81	0.13	2.22	0.54	≤30.00	PASS
		5825	-1.66	0.16	2.22	0.72	≤30.00	PASS
11AC40SISO	Ant1	5755	-5.3	0.26	2.22	-2.82	≤30.00	PASS
		5795	-5.23	0.26	2.22	-2.75	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.47	0.63	2.22	-5.62	≤30.00	PASS

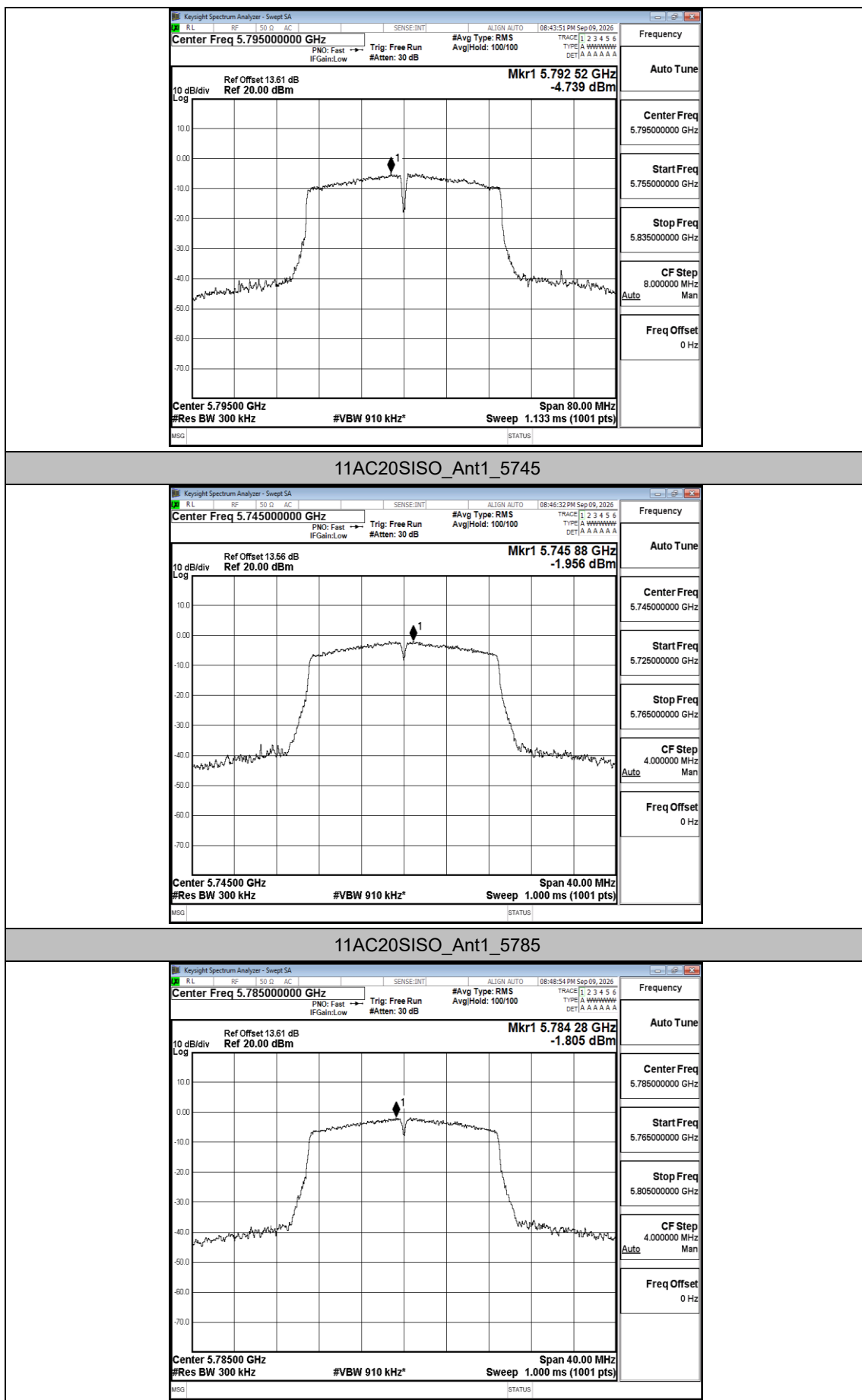
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

Test Graphs





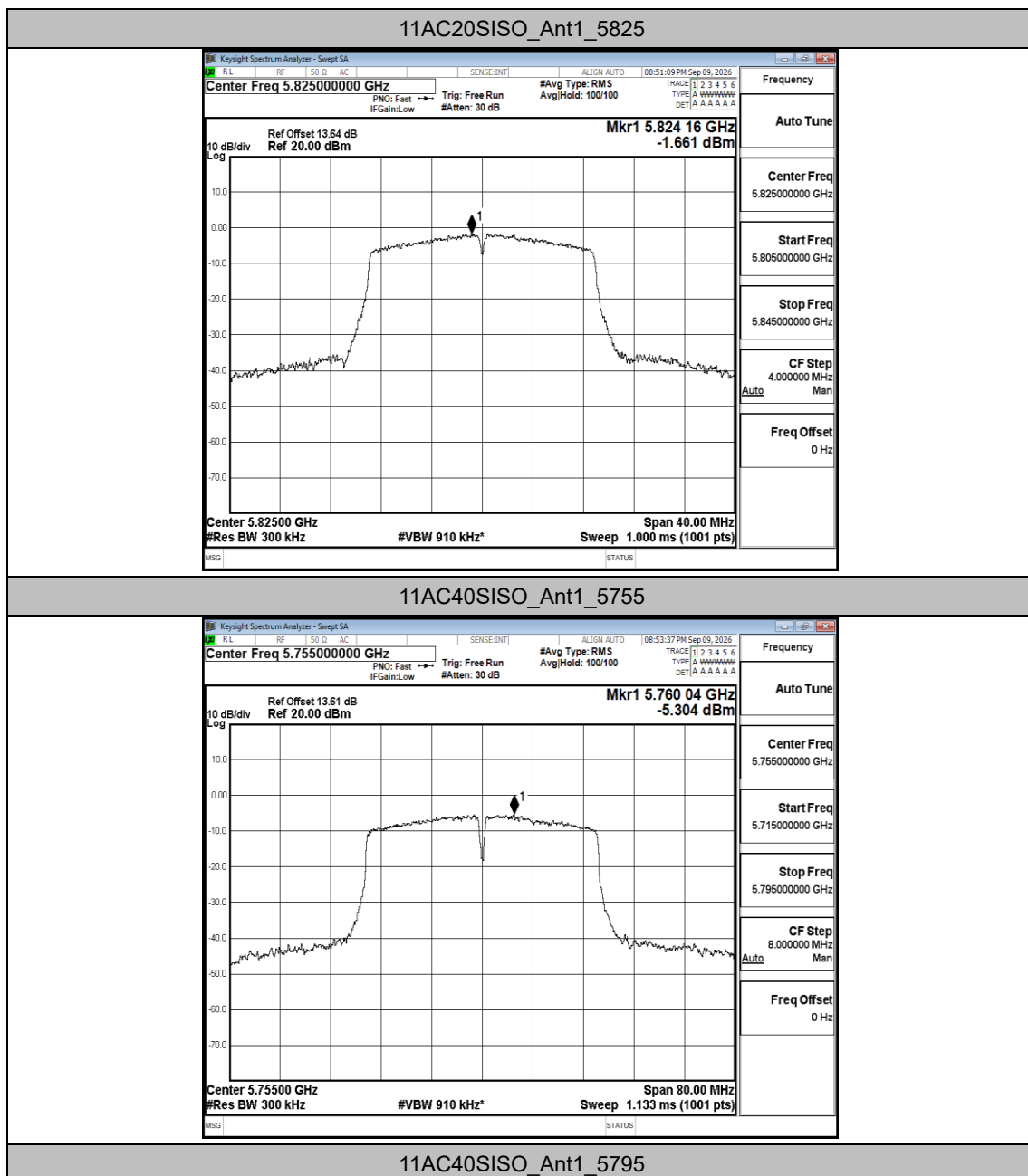


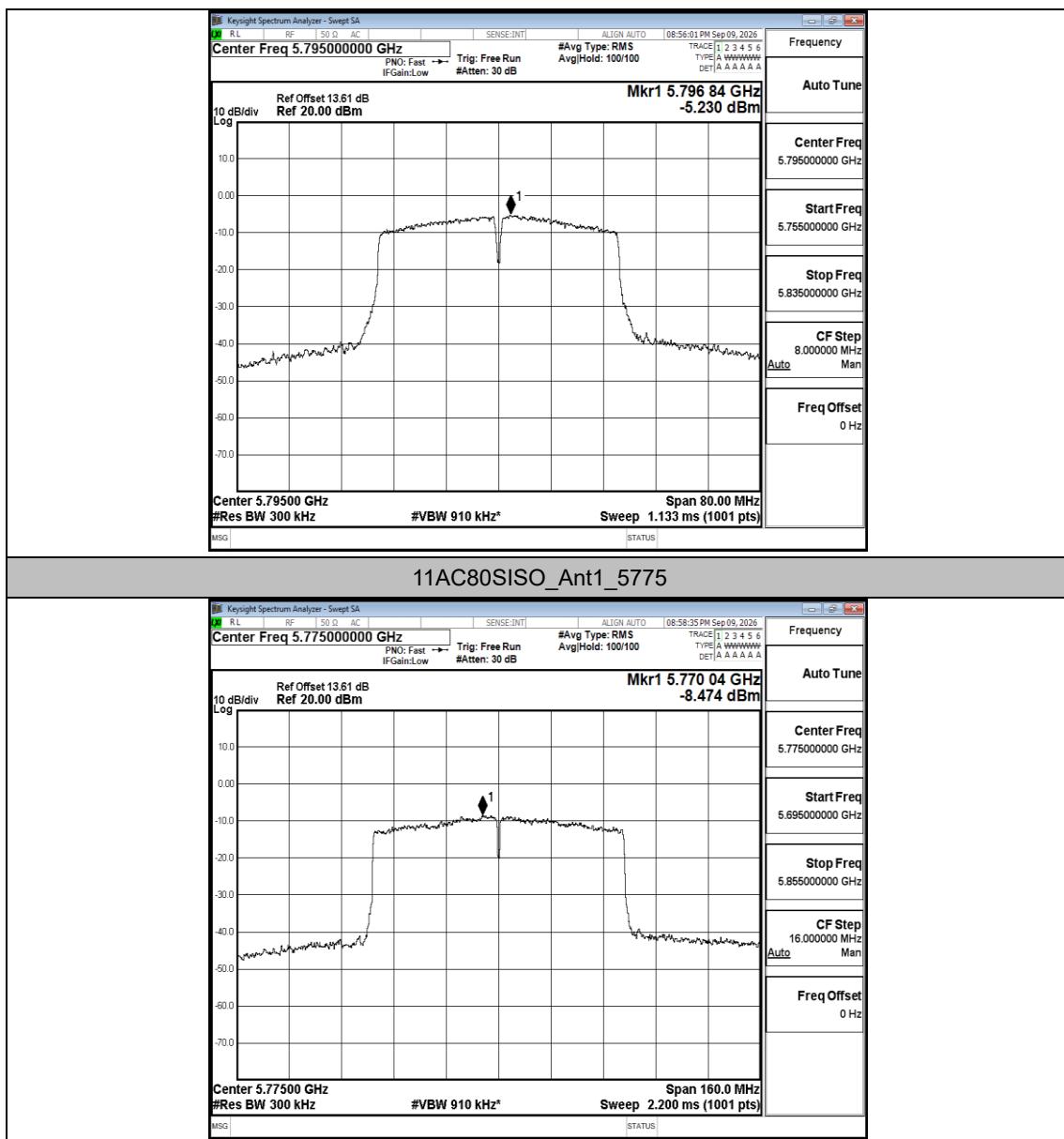


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E.4 Emissions in Restricted Bands

Test Result

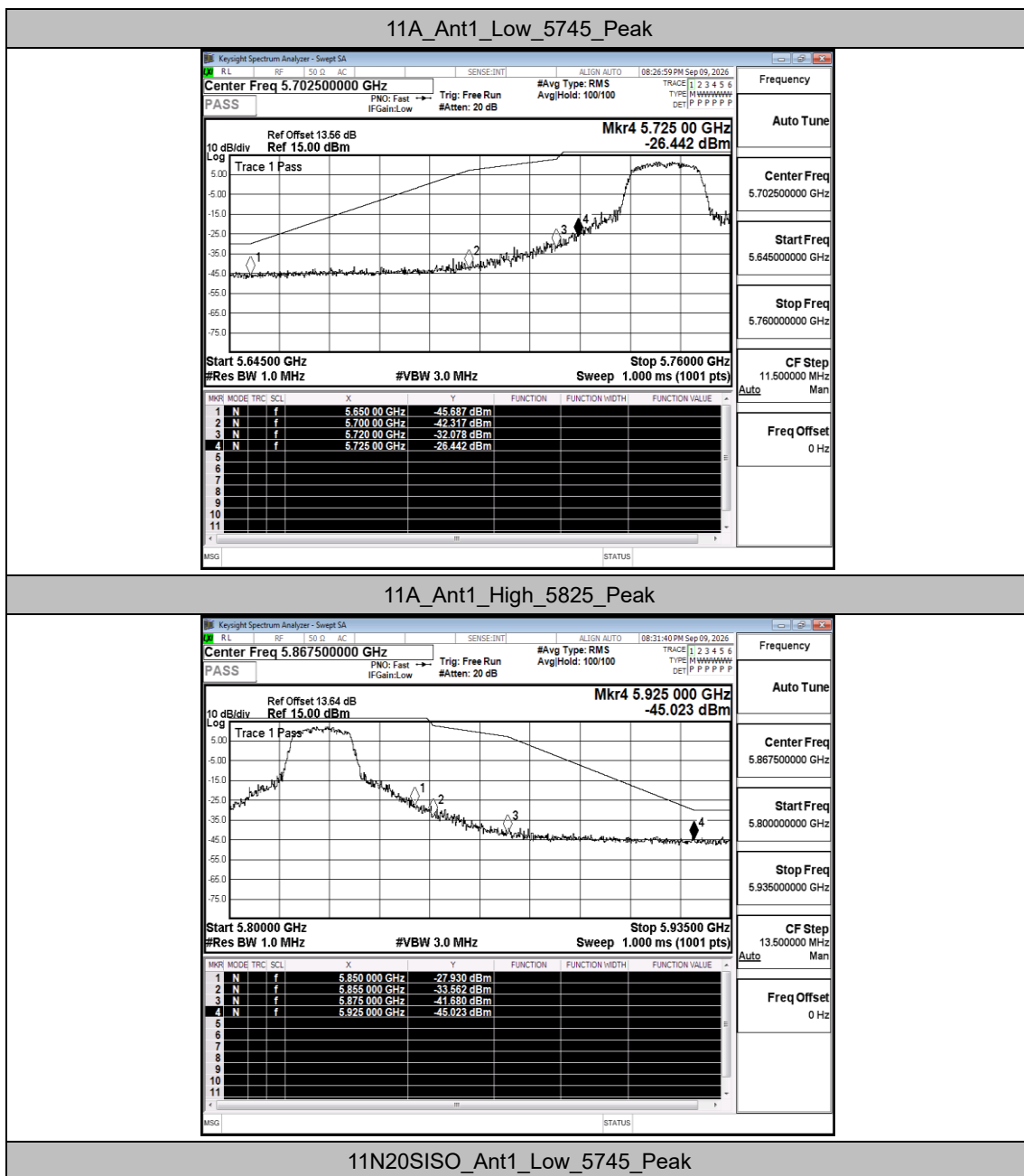
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm/ MHz]	Limit [dBm/MHz]	Gain [dBi]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-42.75	≤-29.00	2.94	PASS
				Peak	5700.000	-39.38	≤8.00	2.94	PASS
				Peak	5720.000	-29.14	≤13.60	2.94	PASS
				Peak	5725.000	-23.50	≤25.00	2.94	PASS
		High	5825	Peak	5850.000	-24.99	≤25.00	2.94	PASS
				Peak	5855.000	-30.62	≤13.60	2.94	PASS
				Peak	5875.000	-38.74	≤8.00	2.94	PASS
				Peak	5925.000	-42.08	≤-29.00	2.94	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-43.86	≤-29.00	2.94	PASS
				Peak	5700.000	-36.91	≤8.00	2.94	PASS
				Peak	5720.000	-27.24	≤13.60	2.94	PASS
				Peak	5725.000	-24.57	≤25.00	2.94	PASS
		High	5825	Peak	5850.000	-23.21	≤25.00	2.94	PASS
				Peak	5855.000	-28.48	≤13.60	2.94	PASS
				Peak	5875.000	-35.86	≤8.00	2.94	PASS
				Peak	5925.000	-41.75	≤-29.00	2.94	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-43.59	≤-29.00	2.94	PASS
				Peak	5700.000	-28.70	≤8.00	2.94	PASS
				Peak	5720.000	-23.43	≤13.60	2.94	PASS
				Peak	5725.000	-17.28	≤25.00	2.94	PASS
		High	5795	Peak	5850.000	-30.72	≤25.00	2.94	PASS
				Peak	5855.000	-33.79	≤13.60	2.94	PASS
				Peak	5875.000	-39.49	≤8.00	2.94	PASS
				Peak	5925.000	-44.34	≤-29.00	2.94	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-42.86	≤-29.00	2.94	PASS
				Peak	5700.000	-39.58	≤8.00	2.94	PASS
				Peak	5720.000	-29.71	≤13.60	2.94	PASS
				Peak	5725.000	-19.66	≤25.00	2.94	PASS
		High	5825	Peak	5850.000	-25.41	≤25.00	2.94	PASS
				Peak	5855.000	-28.43	≤13.60	2.94	PASS
				Peak	5875.000	-40.67	≤8.00	2.94	PASS
				Peak	5925.000	-41.60	≤-29.00	2.94	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-43.39	≤-29.00	2.94	PASS
				Peak	5700.000	-36.32	≤8.00	2.94	PASS
				Peak	5720.000	-24.29	≤13.60	2.94	PASS
				Peak	5725.000	-20.10	≤25.00	2.94	PASS
		High	5795	Peak	5850.000	-32.10	≤25.00	2.94	PASS

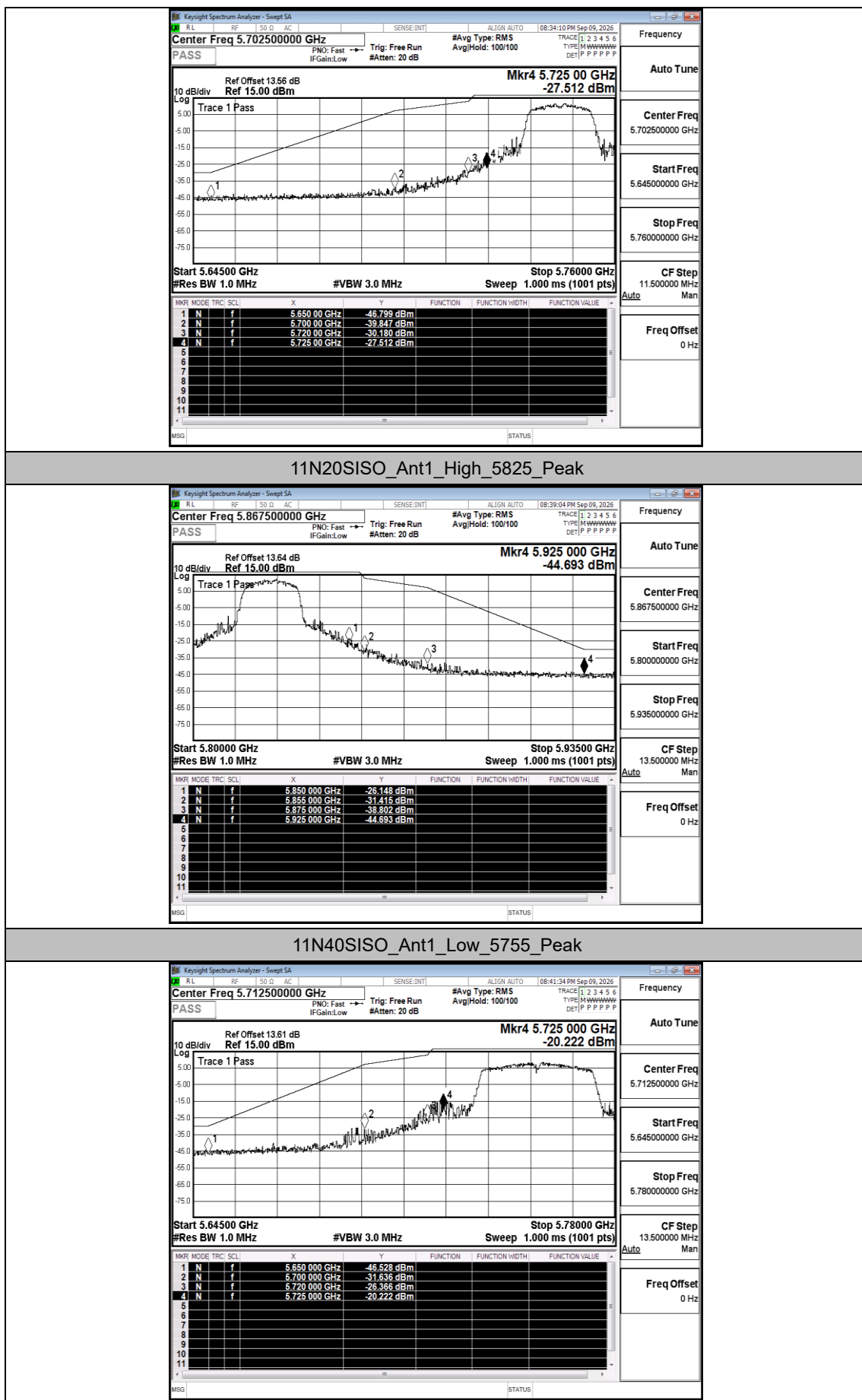
11AC80SISO	Ant1			Peak	5855.000	-31.58	≤13.60	2.94	PASS
				Peak	5875.000	-39.41	≤8.00	2.94	PASS
				Peak	5925.000	-43.38	≤-29.00	2.94	PASS
		Low	5775	Peak	5650.000	-39.21	≤-29.00	2.94	PASS
				Peak	5700.000	-27.39	≤8.00	2.94	PASS
				Peak	5720.000	-21.72	≤13.60	2.94	PASS
				Peak	5725.000	-22.90	≤25.00	2.94	PASS
		High	5775	Peak	5850.000	-24.15	≤25.00	2.94	PASS
				Peak	5855.000	-26.20	≤13.60	2.94	PASS
				Peak	5875.000	-30.19	≤8.00	2.94	PASS
				Peak	5925.000	-34.96	≤-29.00	2.94	PASS

Note:

1. The Antenna Gain is compensated in the graph.

Test Graphs



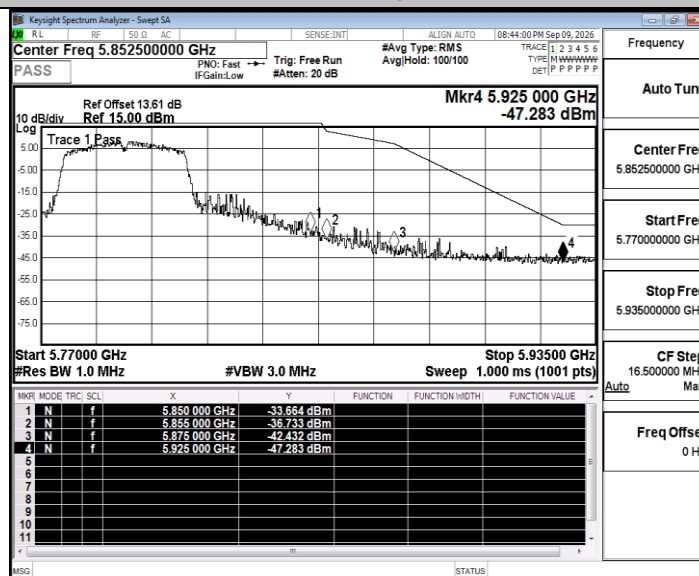


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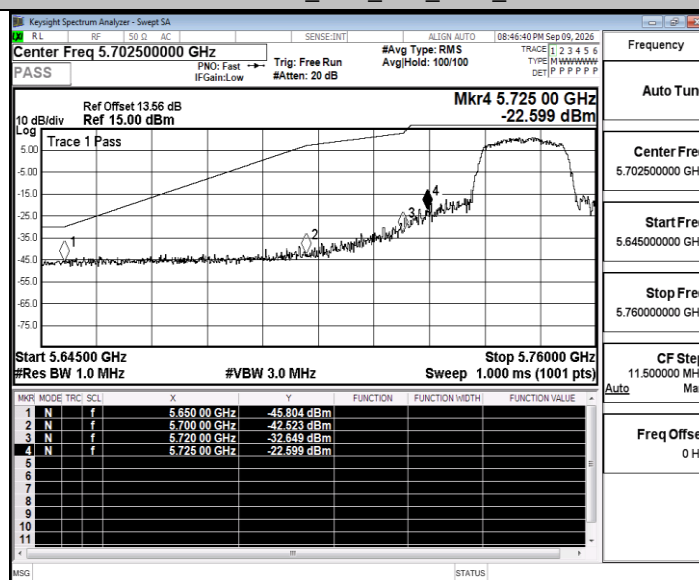
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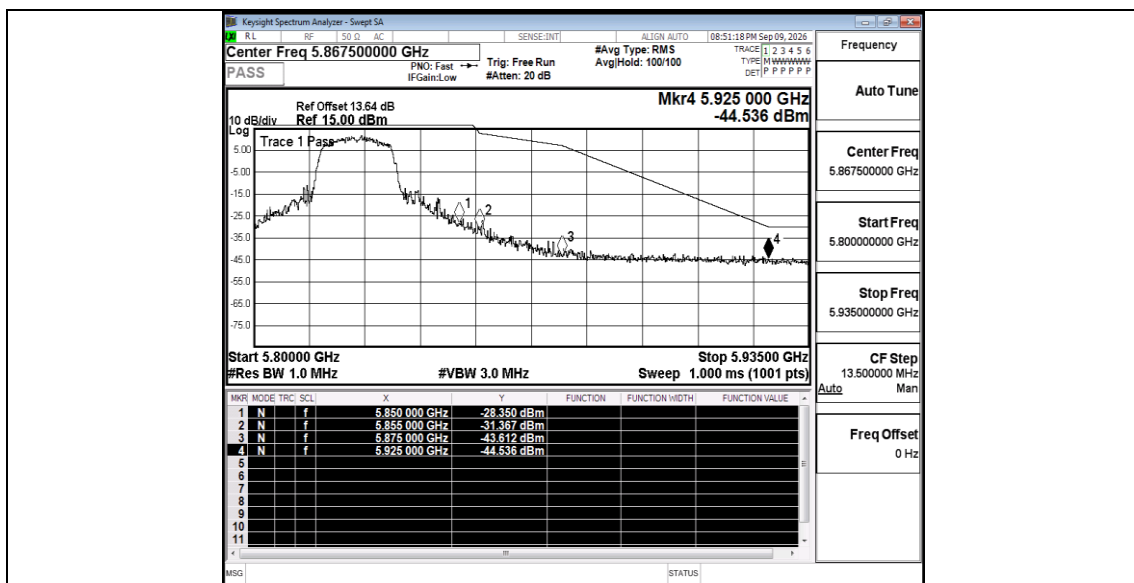
11N40SISO_Ant1_High_5795_Peak



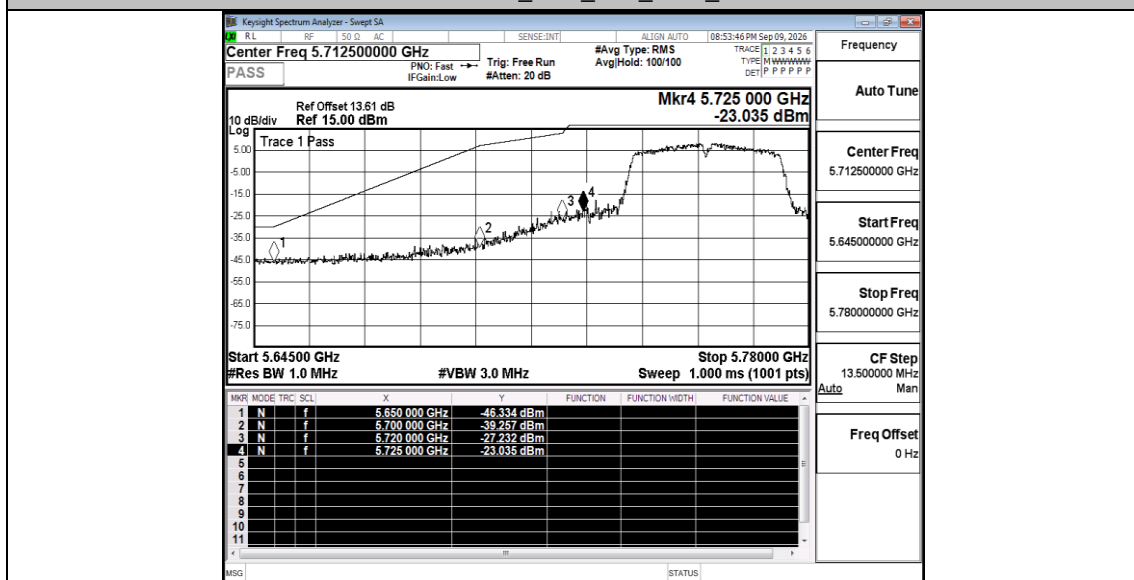
11AC20SISO_Ant1_Low_5745_Peak



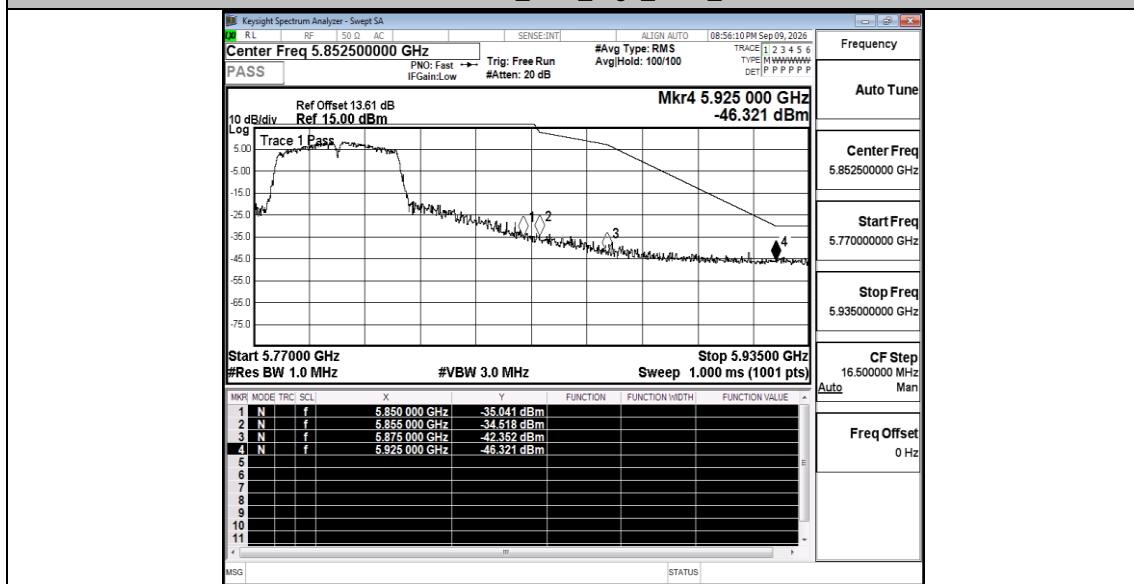
11AC20SISO_Ant1_High_5825_Peak



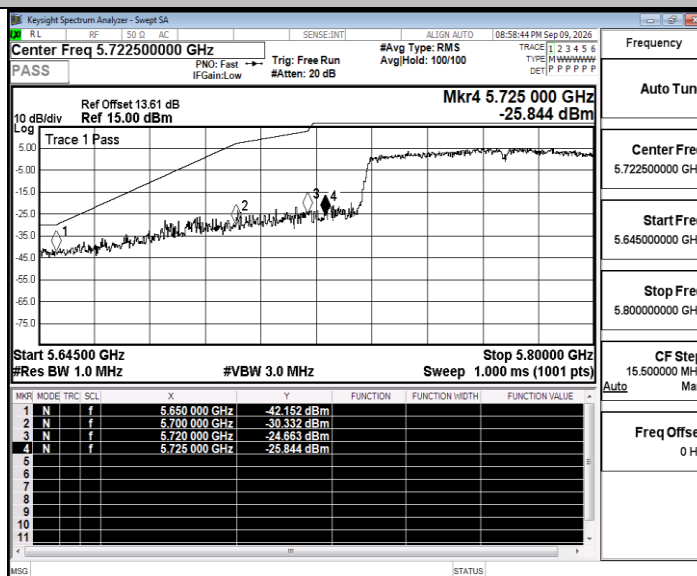
11AC40SISO_Ant1_Low_5755_Peak



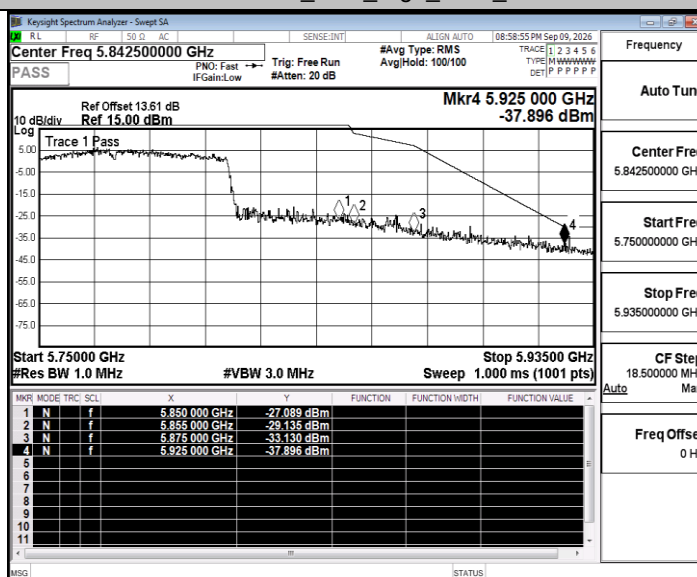
11AC40SISO_Ant1_High_5795_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak



E.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	20000.00	3.481288	20	PASS
			HV	NT	20000.00	3.481288	20	PASS
		5785	NV	NT	20000.00	3.481288	20	PASS
			LV	NT	20000.00	3.481288	20	PASS
			HV	NT	-20000.00	-3.457217	20	PASS
		5825	NV	NT	20000.00	3.481288	20	PASS
			LV	NT	-40000.00	-6.866953	20	PASS
			HV	NT	40000.00	6.866953	20	PASS
11N20SISO	Ant1	5745	NV	NT	-20000.00	-3.481288	20	PASS
			LV	NT	-60000.00	-10.443864	20	PASS
			HV	NT	-60000.00	-10.443864	20	PASS
		5785	NV	NT	-20000.00	-3.457217	20	PASS
			LV	NT	20000.00	3.457217	20	PASS
			HV	NT	-40000.00	-6.914434	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	-40000.00	-6.950478	20	PASS
			LV	NT	-80000.00	-13.900956	20	PASS
			HV	NT	-80000.00	-13.805004	20	PASS
		5795	NV	NT	-80000.00	-13.805004	20	PASS
			LV	NT	-80000.00	-13.805004	20	PASS
			HV	NT	-80000.00	-13.805004	20	PASS
11AC20SISO	Ant1	5745	NV	NT	0.00	0.000000	20	PASS
			LV	NT	40000.00	6.962576	20	PASS
			HV	NT	40000.00	6.962576	20	PASS
		5785	NV	NT	-40000.00	-6.914434	20	PASS
			LV	NT	-40000.00	-6.914434	20	PASS
			HV	NT	-20000.00	-3.457217	20	PASS
		5825	NV	NT	-60000.00	-10.300429	20	PASS
			LV	NT	80000.00	13.733906	20	PASS
			HV	NT	80000.00	13.733906	20	PASS
11AC40SISO	Ant1	5755	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS

		5795	NV	NT	-80000.00	-13.852814	20	PASS
			LV	NT	-80000.00	-13.852814	20	PASS
			HV	NT	-80000.00	-13.852814	20	PASS
11AC80SISO	Ant1	5775	NV	NT	-80000.00	-13.852814	20	PASS
			LV	NT	0.00	0.000000	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	-20000.00	-3.481288	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	-60000.00	-10.443864	20	PASS
			NV	0	-20000.00	-3.481288	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	20000.00	3.481288	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
			NV	40	40000.00	6.962576	20	PASS
			NV	50	-20000.00	-3.481288	20	PASS
		5785	NV	-30	-60000.00	-10.371651	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	-40000.00	-6.914434	20	PASS
			NV	0	-40000.00	-6.914434	20	PASS
			NV	10	-40000.00	-6.914434	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	-20000.00	-3.457217	20	PASS
			NV	40	-20000.00	-3.457217	20	PASS
			NV	50	-40000.00	-6.914434	20	PASS
		5825	NV	-30	40000.00	6.866953	20	PASS
			NV	-20	20000.00	3.433476	20	PASS
			NV	-10	-60000.00	-10.300429	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	80000.00	13.733906	20	PASS
			NV	40	80000.00	13.733906	20	PASS
			NV	50	-40000.00	-6.866953	20	PASS
11N20SISO	Ant1	5745	NV	-30	100000.00	17.406440	20	PASS
			NV	-20	-80000.00	-13.925152	20	PASS
			NV	-10	-40000.00	-6.962576	20	PASS
			NV	0	-40000.00	-6.962576	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-40000.00	-6.962576	20	PASS
			NV	30	-80000.00	-13.925152	20	PASS
			NV	40	20000.00	3.481288	20	PASS
			NV	50	20000.00	3.481288	20	PASS
		5785	NV	-30	-40000.00	-6.914434	20	PASS
			NV	-20	20000.00	3.457217	20	PASS
			NV	-10	-40000.00	-6.914434	20	PASS
			NV	0	-40000.00	-6.914434	20	PASS

			NV	10	-20000.00	-3.457217	20	PASS
			NV	20	-20000.00	-3.457217	20	PASS
			NV	30	60000.00	10.371651	20	PASS
			NV	40	-20000.00	-3.457217	20	PASS
			NV	50	-20000.00	-3.457217	20	PASS
		5825	NV	-30	20000.00	3.433476	20	PASS
			NV	-20	-40000.00	-6.866953	20	PASS
			NV	-10	20000.00	3.433476	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-20000.00	-3.433476	20	PASS
			NV	20	100000.00	17.167382	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	0.00	0.000000	20	PASS
			NV	-20	-40000.00	-6.950478	20	PASS
			NV	-10	-40000.00	-6.950478	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-40000.00	-6.950478	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	40000.00	6.950478	20	PASS
			NV	40	40000.00	6.950478	20	PASS
			NV	50	40000.00	6.950478	20	PASS
		5795	NV	-30	40000.00	6.950478	20	PASS
			NV	-20	40000.00	6.950478	20	PASS
			NV	-10	-40000.00	-6.902502	20	PASS
			NV	0	-40000.00	-6.902502	20	PASS
			NV	10	-80000.00	-13.805004	20	PASS
			NV	20	-80000.00	-13.805004	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
11AC20SISO	Ant1	5745	NV	-30	-20000.00	-3.481288	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	-60000.00	-10.443864	20	PASS
			NV	0	-40000.00	-6.962576	20	PASS
			NV	10	20000.00	3.481288	20	PASS
			NV	20	20000.00	3.481288	20	PASS
			NV	30	20000.00	3.481288	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	-80000.00	-13.925152	20	PASS
		5785	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-20000.00	-3.457217	20	PASS

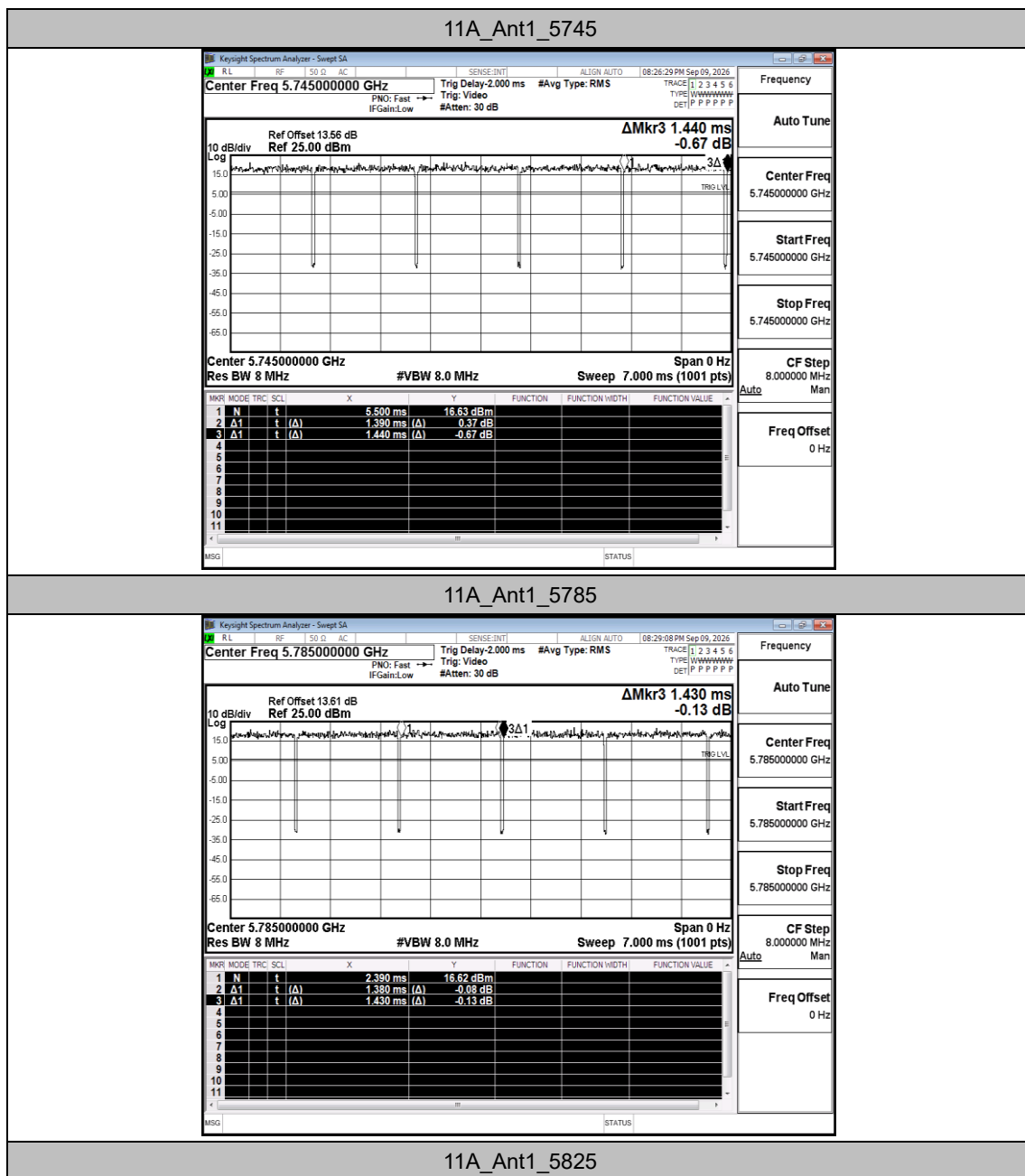
			NV	-10	-100000.00	-17.286085	20	PASS
			NV	0	-60000.00	-10.371651	20	PASS
			NV	10	-80000.00	-13.828868	20	PASS
			NV	20	-80000.00	-13.828868	20	PASS
			NV	30	20000.00	3.457217	20	PASS
			NV	40	60000.00	10.371651	20	PASS
			NV	50	0.00	0.000000	20	PASS
		5825	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-40000.00	-6.866953	20	PASS
			NV	-10	-40000.00	-6.866953	20	PASS
			NV	0	20000.00	3.433476	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-60000.00	-10.300429	20	PASS
			NV	30	-60000.00	-10.300429	20	PASS
			NV	40	-60000.00	-10.300429	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	0.00	0.000000	20	PASS
			NV	0	-80000.00	-13.900956	20	PASS
			NV	10	0.00	0.000000	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	-40000.00	-6.902502	20	PASS
			NV	-20	-40000.00	-6.902502	20	PASS
			NV	-10	-40000.00	-6.902502	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	-40000.00	-6.902502	20	PASS
			NV	40	-40000.00	-6.902502	20	PASS
			NV	50	80000.00	13.805004	20	PASS
11AC80SISO	Ant1	5775	NV	-30	0.00	0.000000	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	0.00	0.000000	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	80000.00	13.852814	20	PASS
			NV	50	80000.00	13.852814	20	PASS

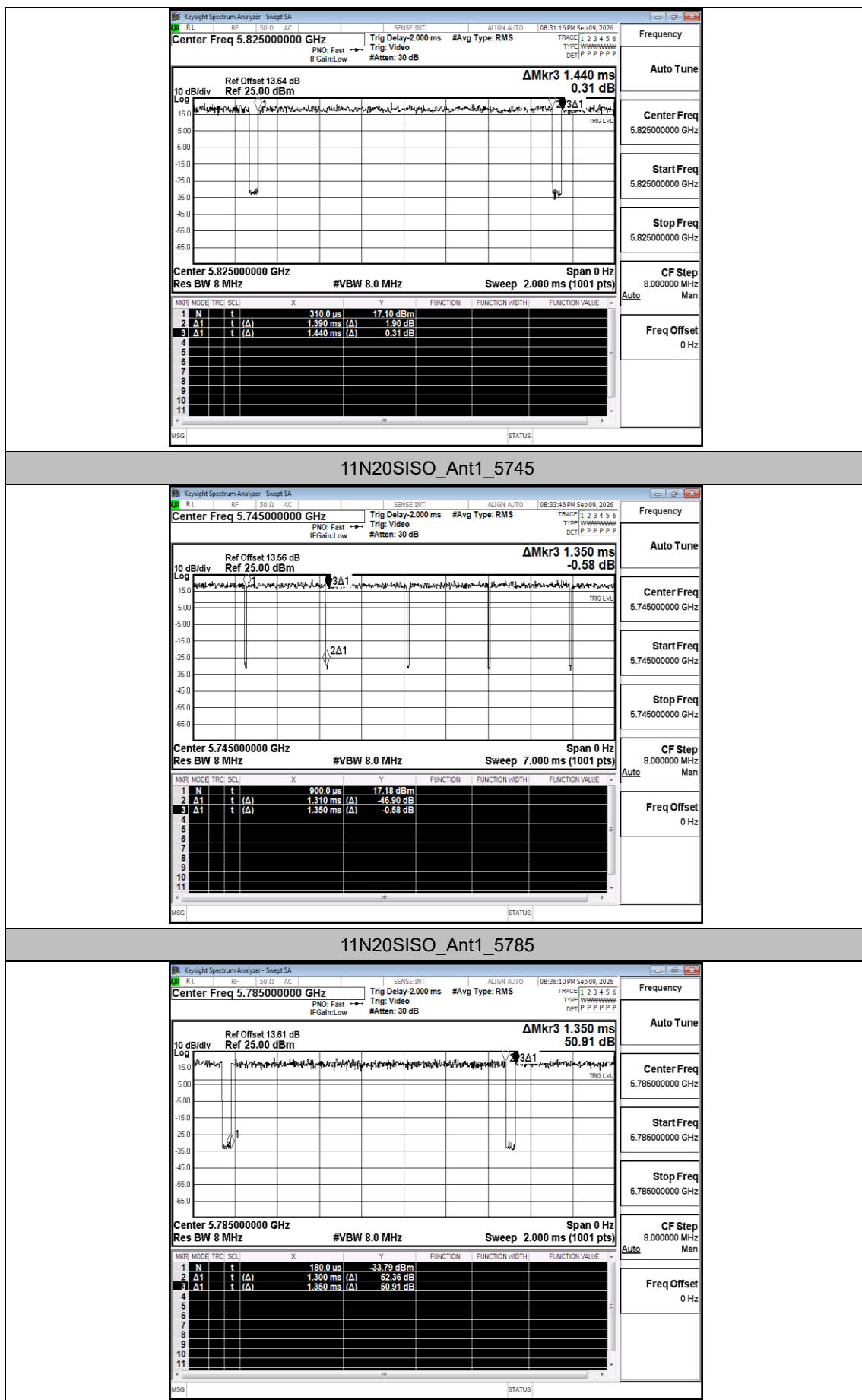
E.6 Duty Cycle

Test Result

TestMode	Antenna	Freq (MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	Limit	Verdict
11A	Ant1	5745	1.39	1.44	96.53	0.15	---	---
		5785	1.38	1.43	96.50	0.15	---	---
		5825	1.39	1.44	96.53	0.15	---	---
11N20SISO	Ant1	5745	1.31	1.35	97.04	0.13	---	---
		5785	1.30	1.35	96.30	0.16	---	---
		5825	1.30	1.35	96.30	0.16	---	---
11N40SISO	Ant1	5755	0.65	0.70	92.86	0.32	---	---
		5795	0.65	0.70	92.86	0.32	---	---
11AC20SISO	Ant1	5745	1.31	1.36	96.32	0.16	---	---
		5785	1.32	1.36	97.06	0.13	---	---
		5825	1.31	1.36	96.32	0.16	---	---
11AC40SISO	Ant1	5755	0.65	0.69	94.20	0.26	---	---
		5795	0.65	0.69	94.20	0.26	---	---
11AC80SISO	Ant1	5775	0.32	0.37	86.49	0.63	---	---

Test Graphs



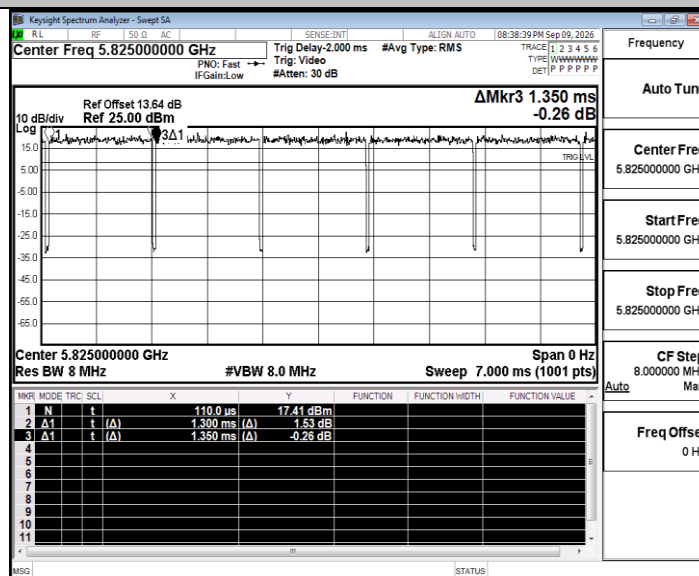


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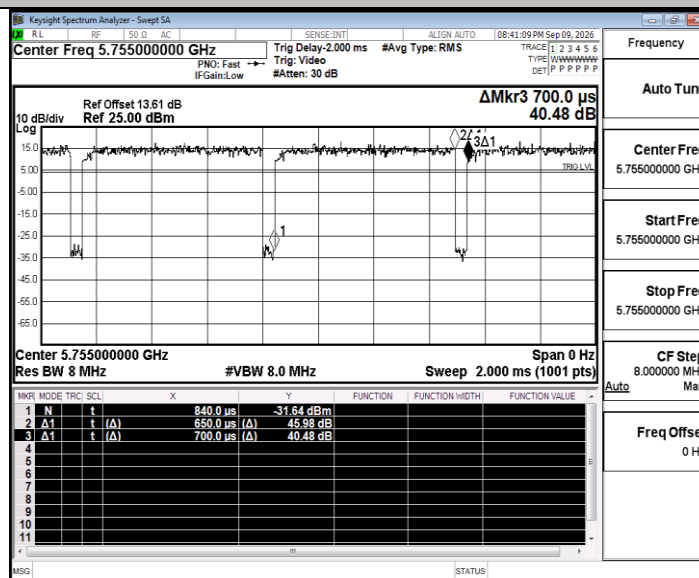
Add: No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou, Guangdong, China

Tel: +(86) 020-39166689 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

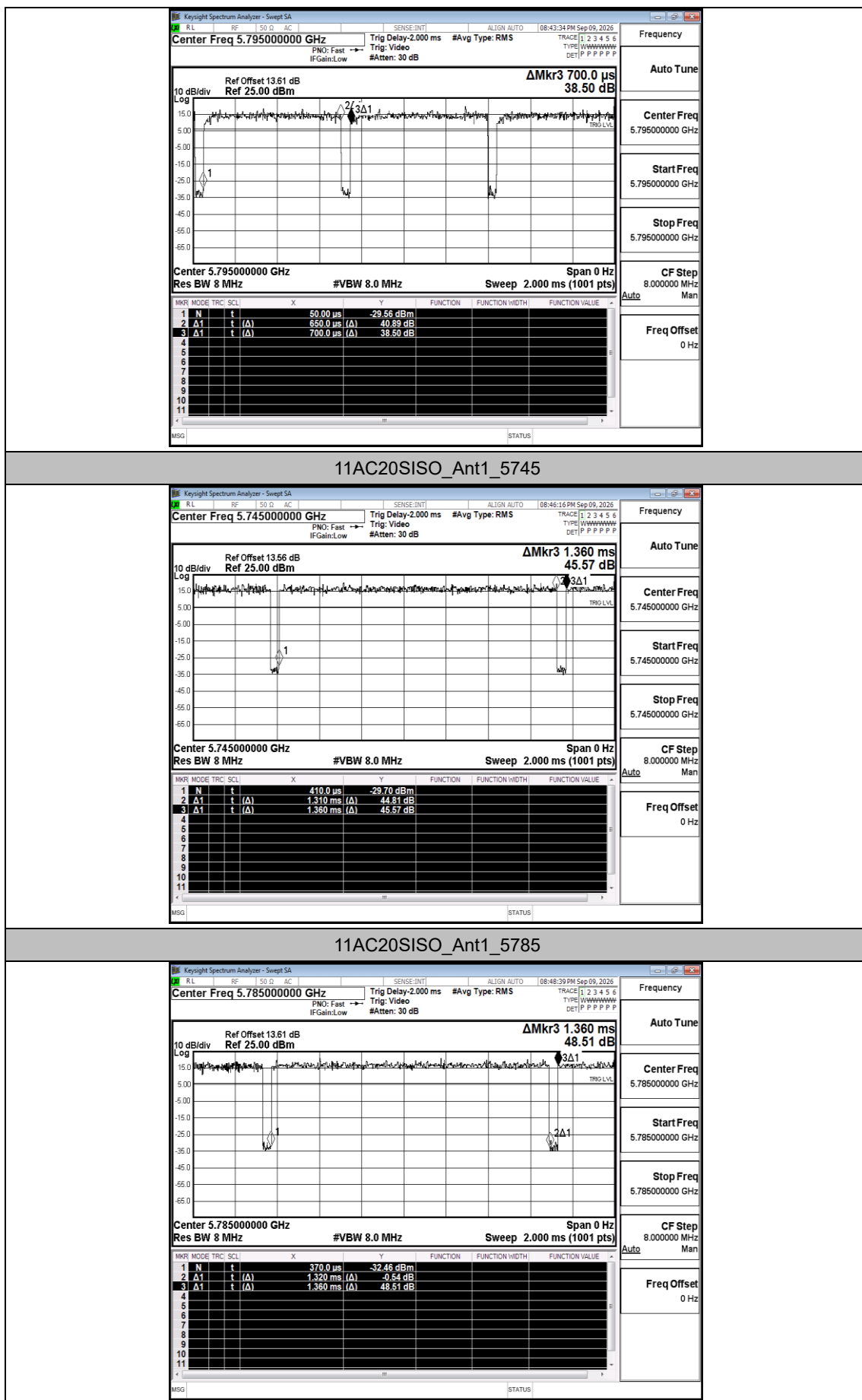
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

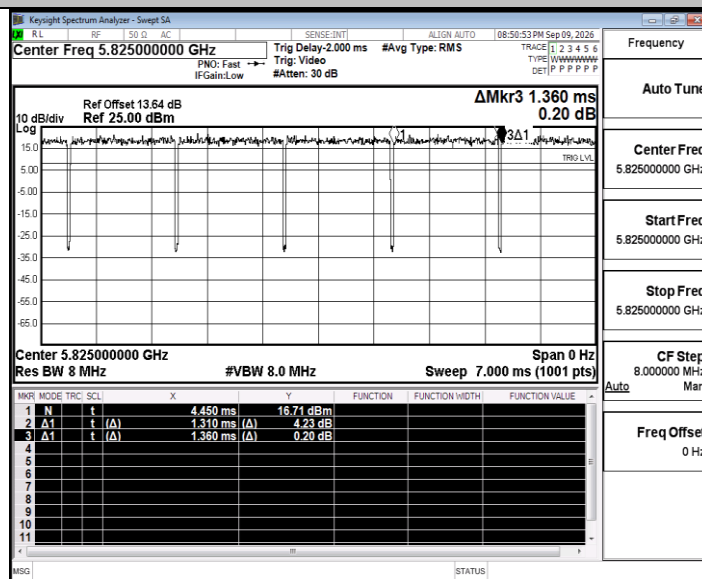


Guangzhou LCS Compliance Testing Laboratory Ltd.

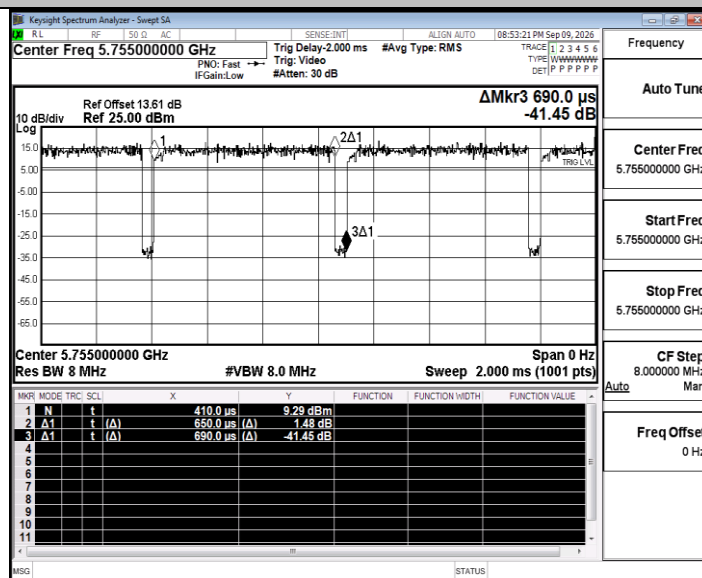
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11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

