



Appendix E

RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: Legends Ultimate Mini Home Arcade

Test Model: HA8811

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li huan



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E.1 6dB bandwidth

Test Result

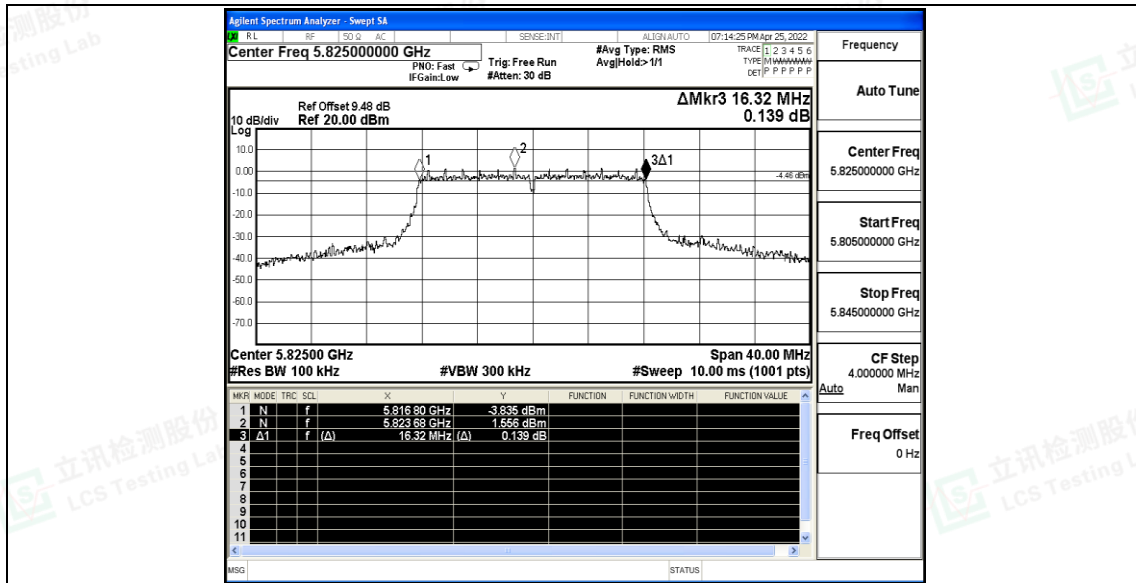
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant	5745	16.320	5736.800	5753.120	0.5	PASS
		5785	16.320	5776.800	5793.120	0.5	PASS
		5825	16.320	5816.800	5833.120	0.5	PASS
11N20SISO	Ant	5745	17.520	5736.200	5753.720	0.5	PASS
		5785	17.520	5776.200	5793.720	0.5	PASS
		5825	17.520	5816.200	5833.720	0.5	PASS
11N40SISO	Ant	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant	5745	17.520	5736.200	5753.720	0.5	PASS
		5785	17.280	5776.440	5793.720	0.5	PASS
		5825	17.280	5816.440	5833.720	0.5	PASS
11AC40SISO	Ant	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant	5775	72.480	5739.960	5812.440	0.5	PASS



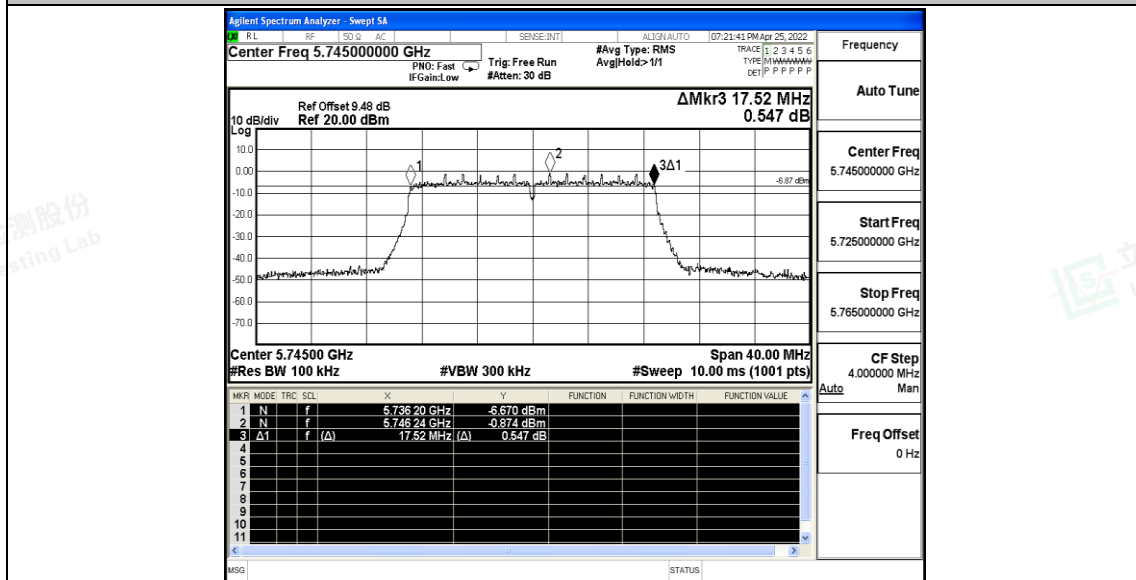


Test Graphs



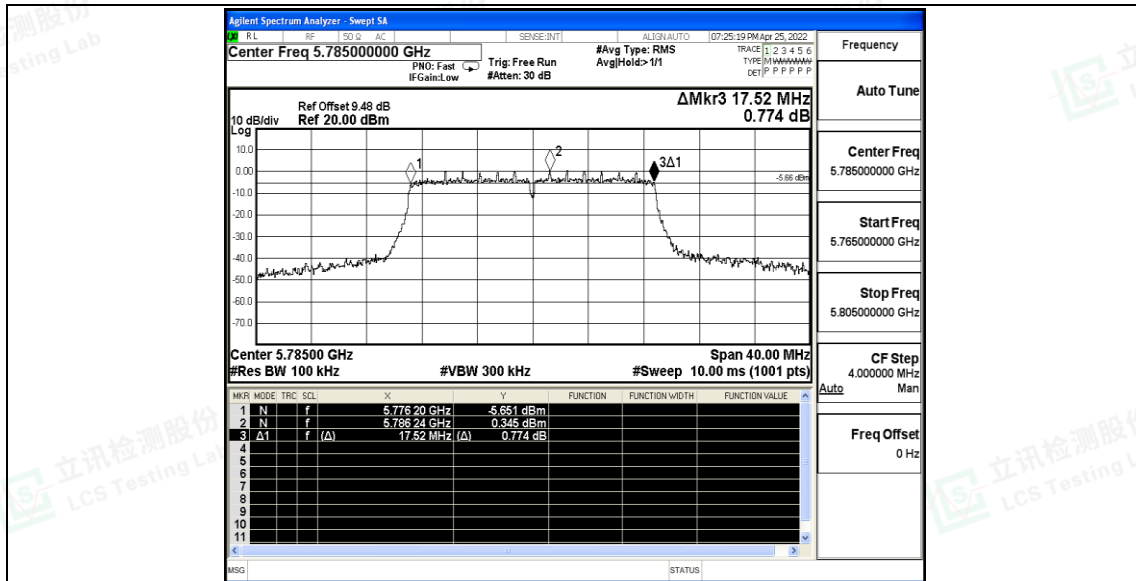


11N20SISO_Ant_5745

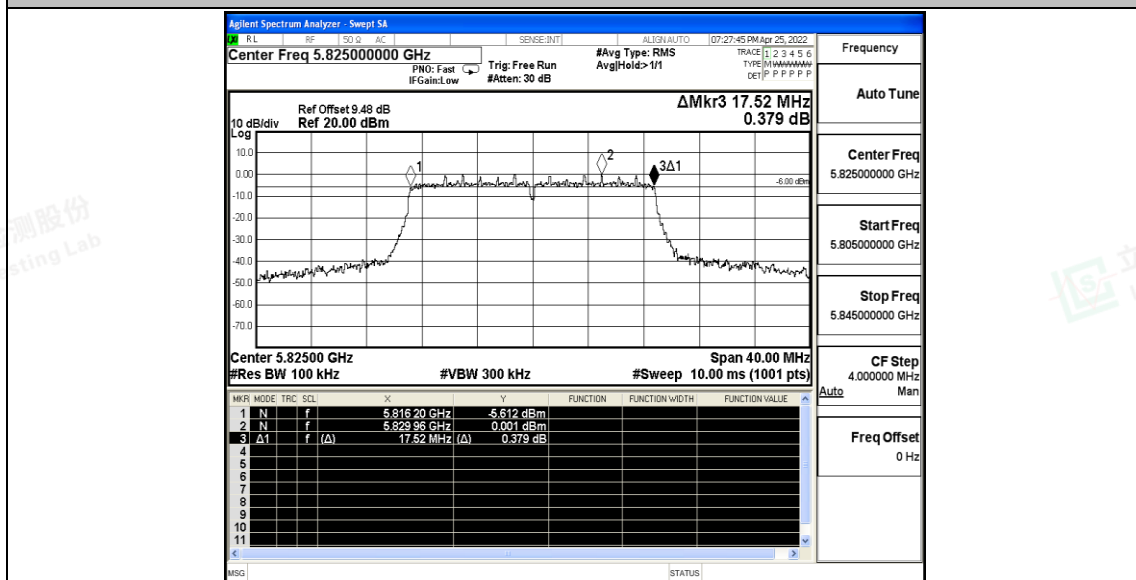


11N20SISO_Ant_5785



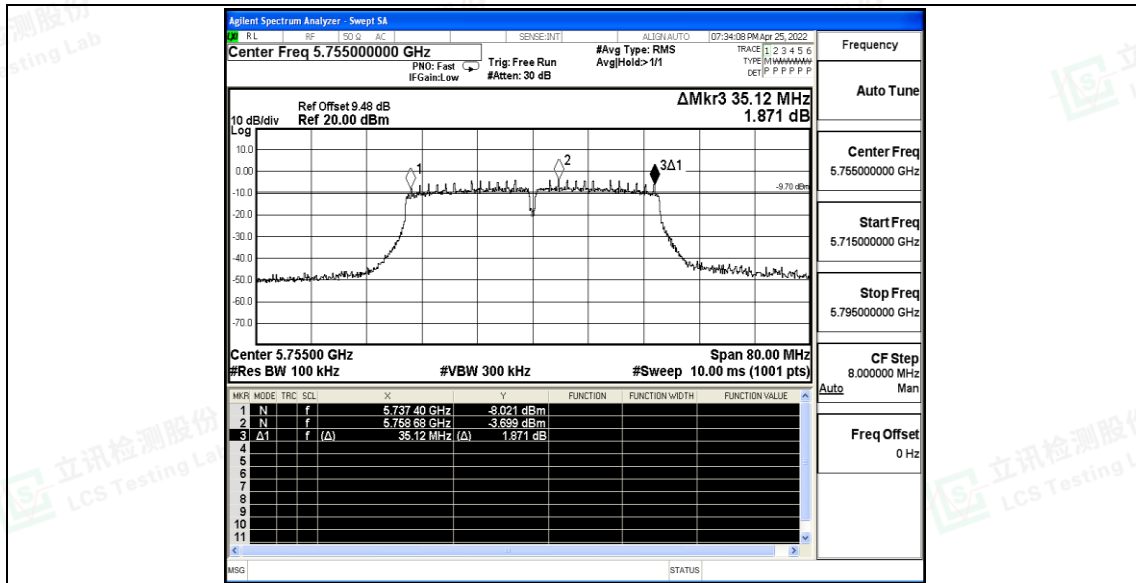


11N20SISO_Ant_5825

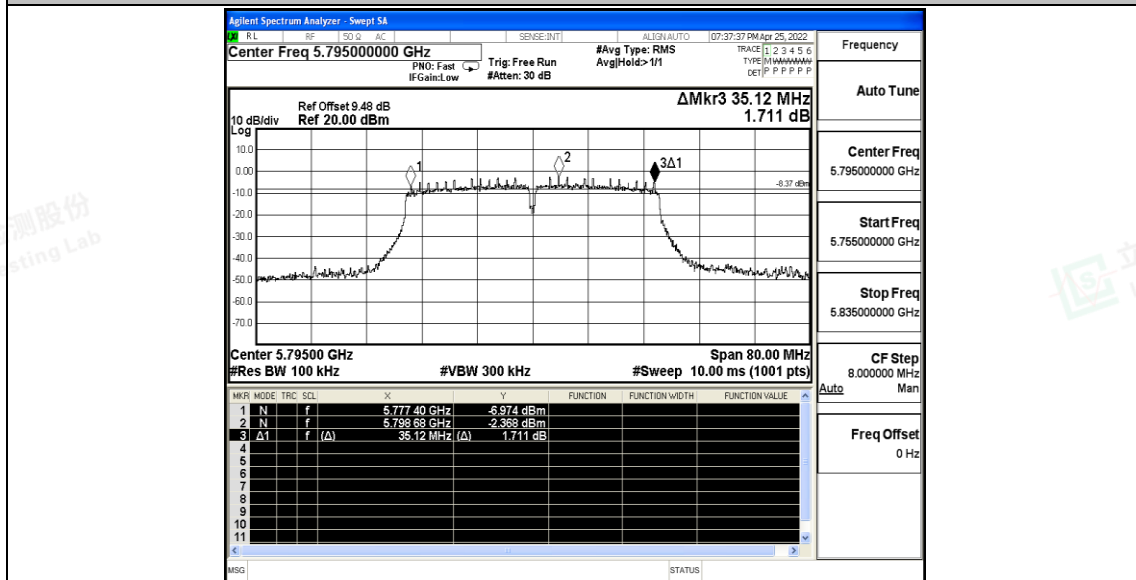


11N40SISO_Ant_5755



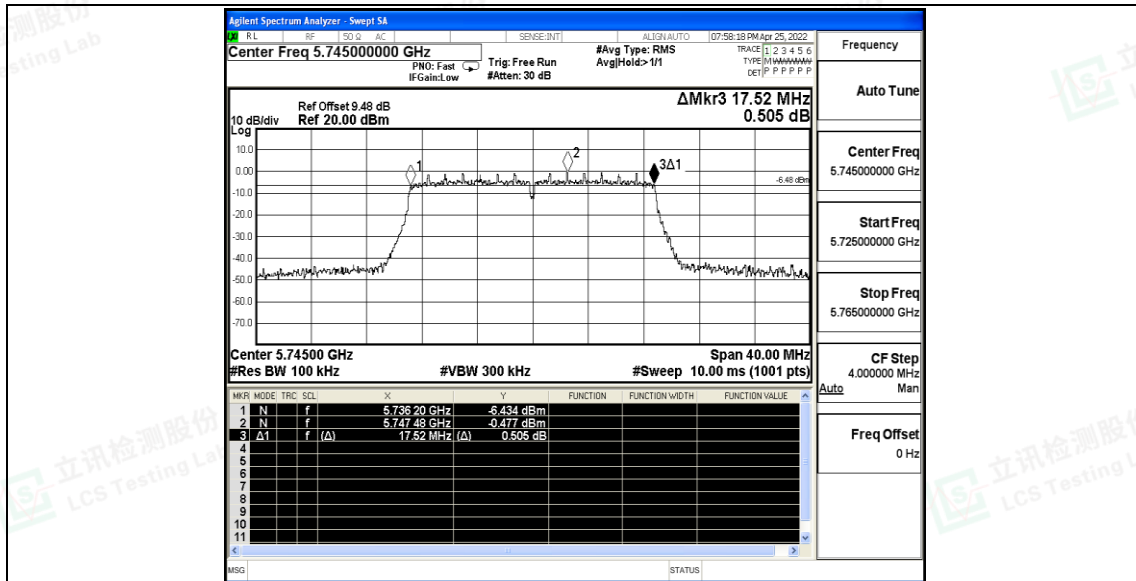


11N40SISO_Ant_5795

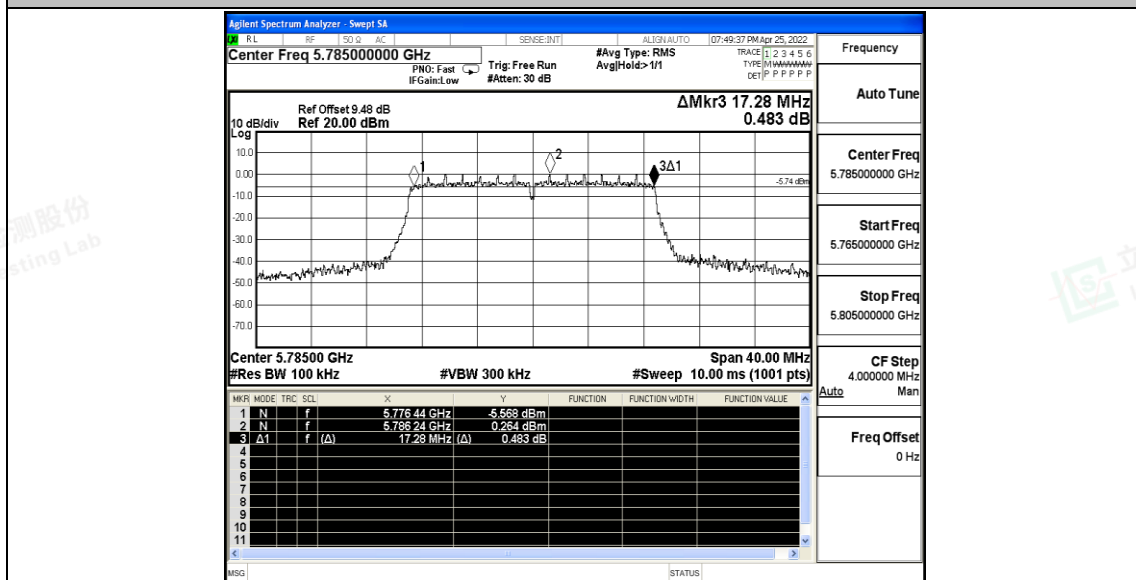


11AC20SISO_Ant_5745



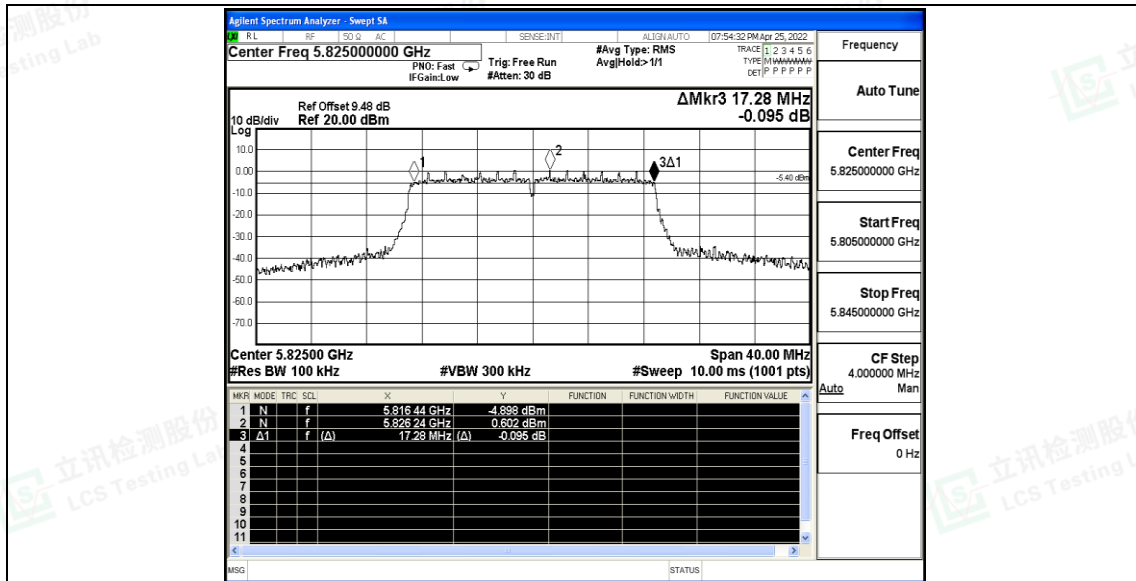


11AC20SISO_Ant_5785

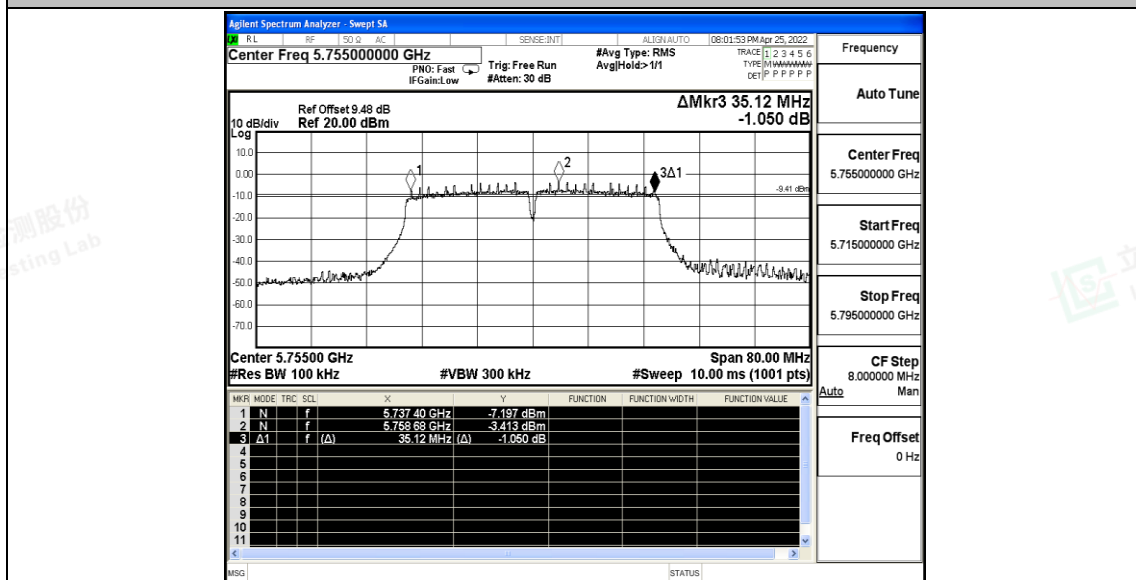


11AC20SISO_Ant_5825



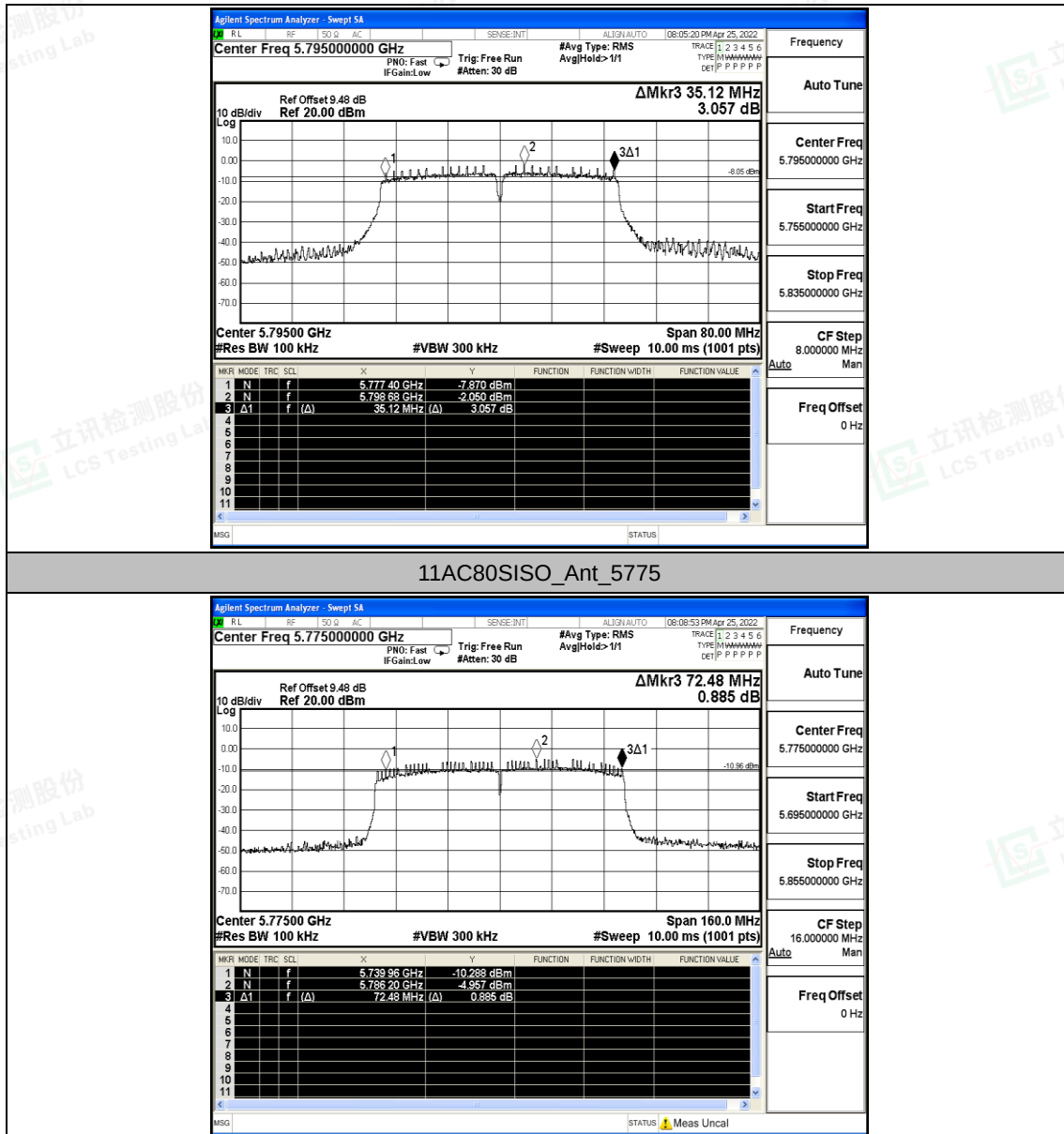


11AC40SISO_Ant_5755



11AC40SISO_Ant_5795







E.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant	5745	11.15	≤30.00	PASS
		5785	12.37	≤30.00	PASS
		5825	12.98	≤30.00	PASS
11N20SISO	Ant	5745	10.40	≤30.00	PASS
		5785	11.60	≤30.00	PASS
		5825	11.36	≤30.00	PASS
11N40SISO	Ant	5755	10.01	≤30.00	PASS
		5795	11.16	≤30.00	PASS
11AC20SISO	Ant	5745	10.73	≤30.00	PASS
		5785	11.55	≤30.00	PASS
		5825	11.96	≤30.00	PASS
11AC40SISO	Ant	5755	10.31	≤30.00	PASS
		5795	11.61	≤30.00	PASS
11AC80SISO	Ant	5775	10.79	≤30.00	PASS

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





E.3 Maximum power spectral density

Test Result

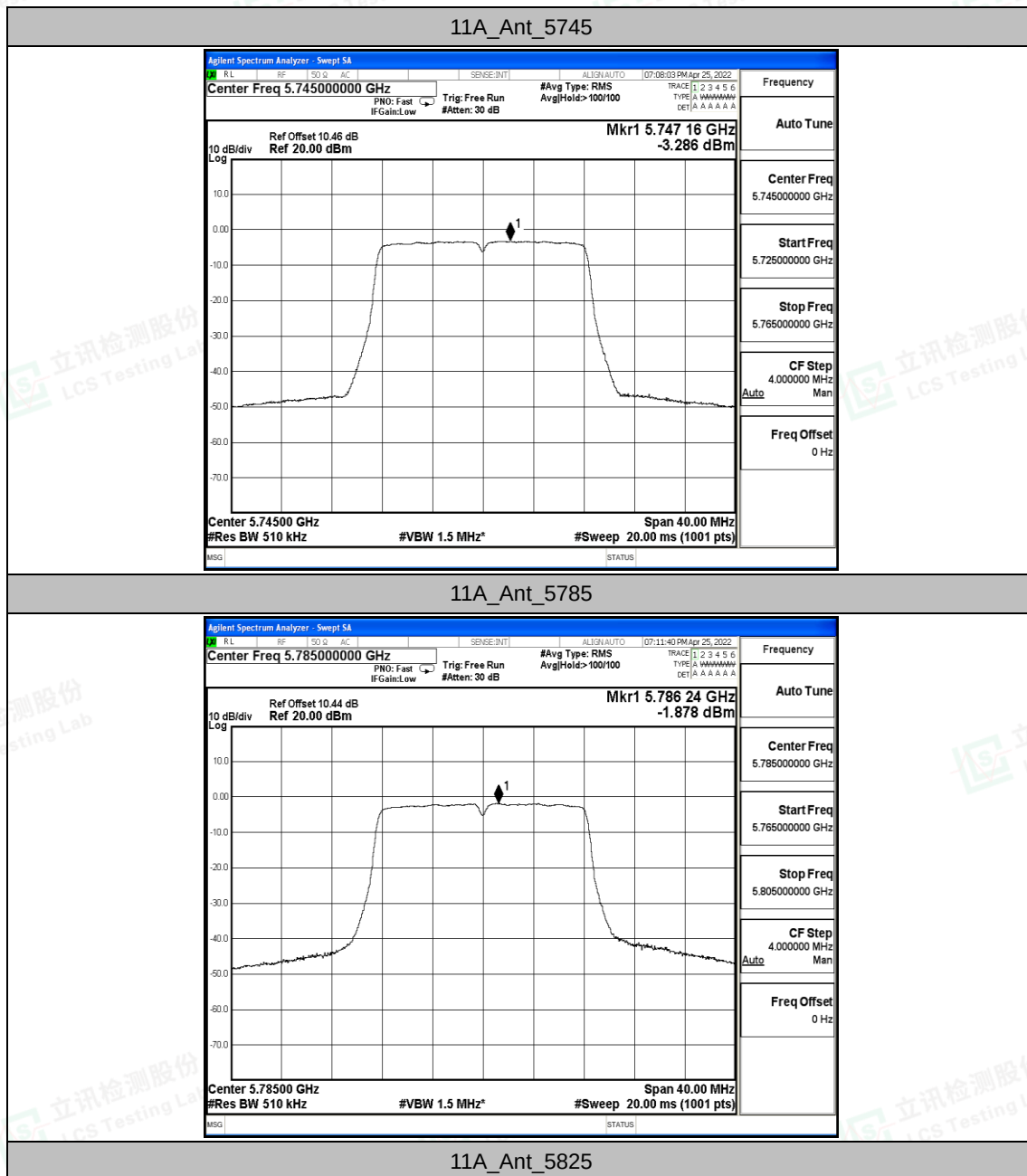
TestMode	Antenna	Channel	Result [dBm/500KHz]	Limit[dBm/500KHz]	Verdict
11A	Ant	5745	-3.29	≤30.00	PASS
		5785	-1.90	≤30.00	PASS
		5825	-1.07	≤30.00	PASS
11N20SISO	Ant	5745	-4.05	≤30.00	PASS
		5785	-2.88	≤30.00	PASS
		5825	-3.15	≤30.00	PASS
11N40SISO	Ant	5755	-7.12	≤30.00	PASS
		5795	-5.59	≤30.00	PASS
11AC20SISO	Ant	5745	-3.89	≤30.00	PASS
		5785	-3.01	≤30.00	PASS
		5825	-2.71	≤30.00	PASS
11AC40SISO	Ant	5755	-6.79	≤30.00	PASS
		5795	-5.07	≤30.00	PASS
11AC80SISO	Ant	5775	-8.61	≤30.00	PASS

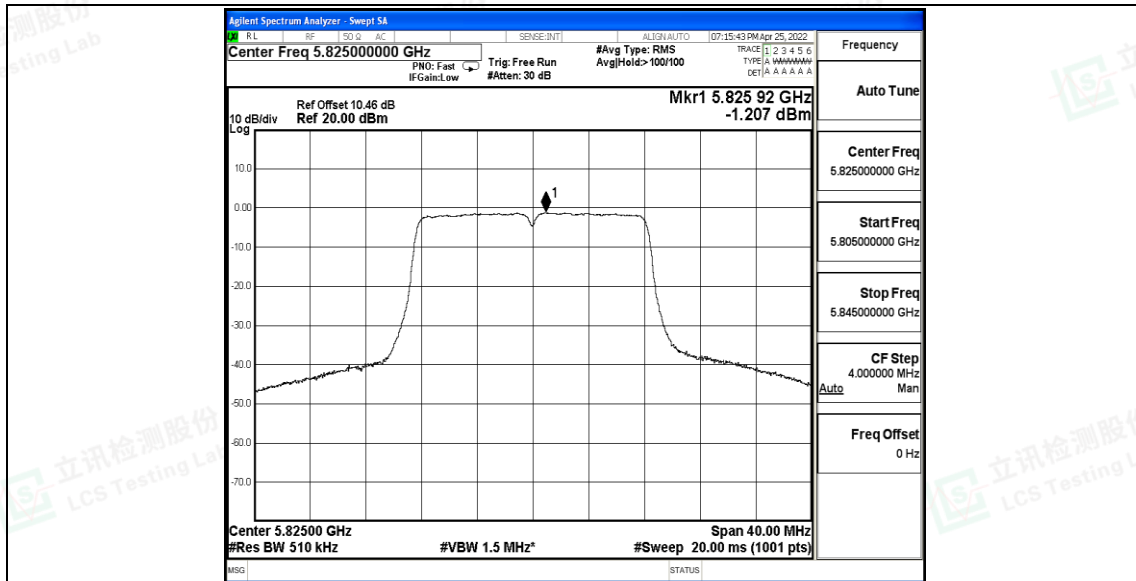
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.



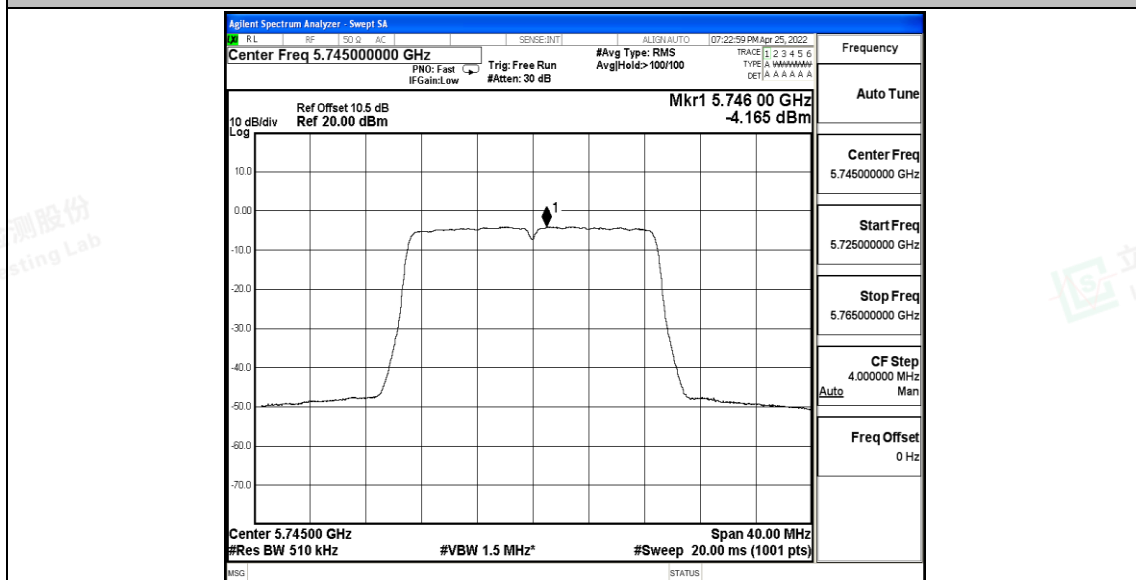


Test Graphs



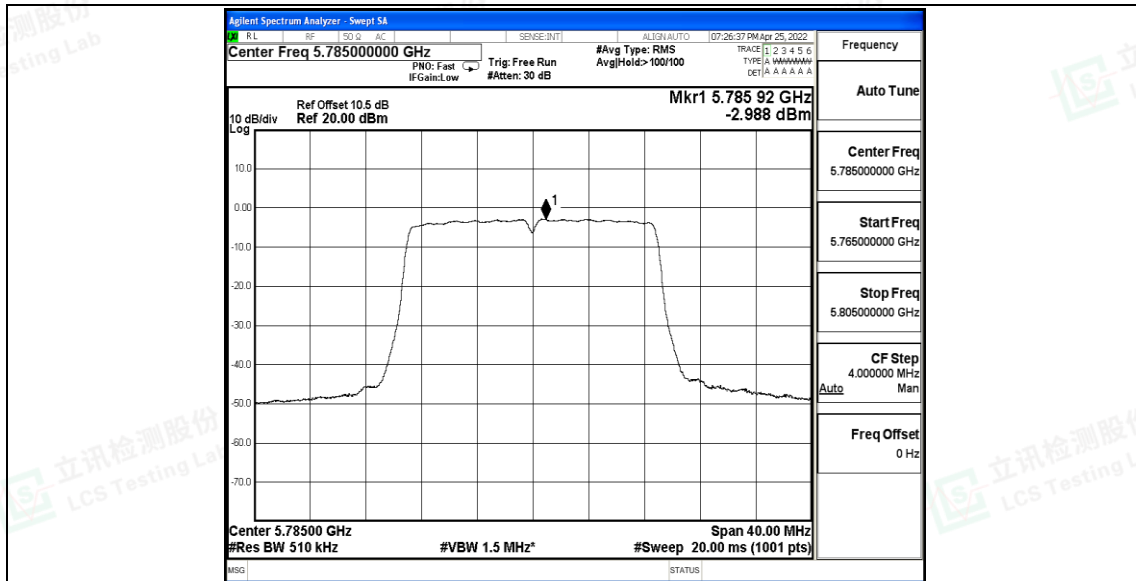


11N20SISO_Ant_5745

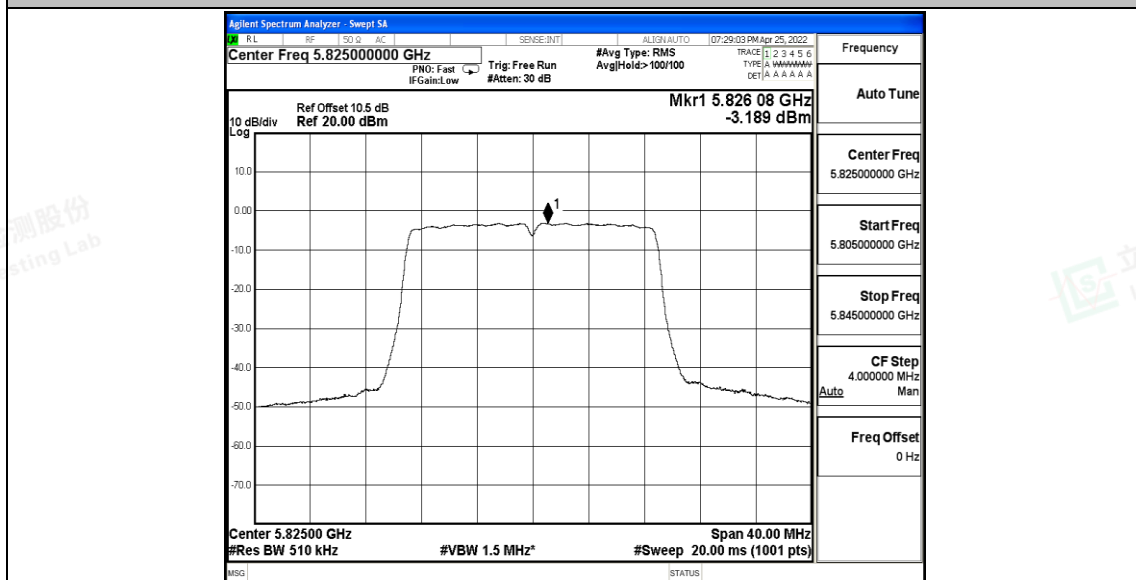


11N20SISO_Ant_5785



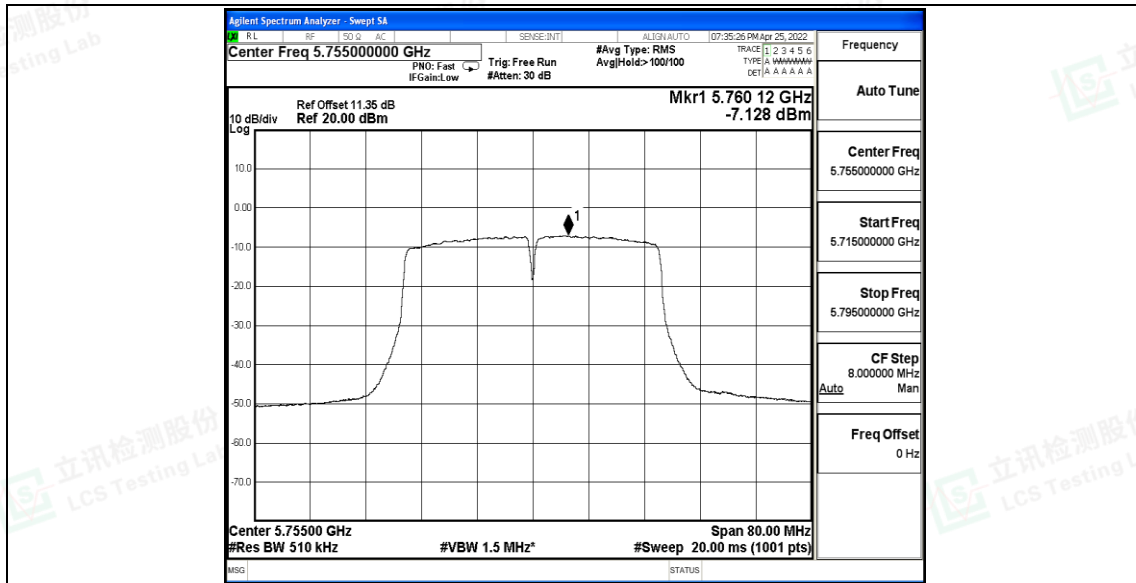


11N20SISO_Ant_5825

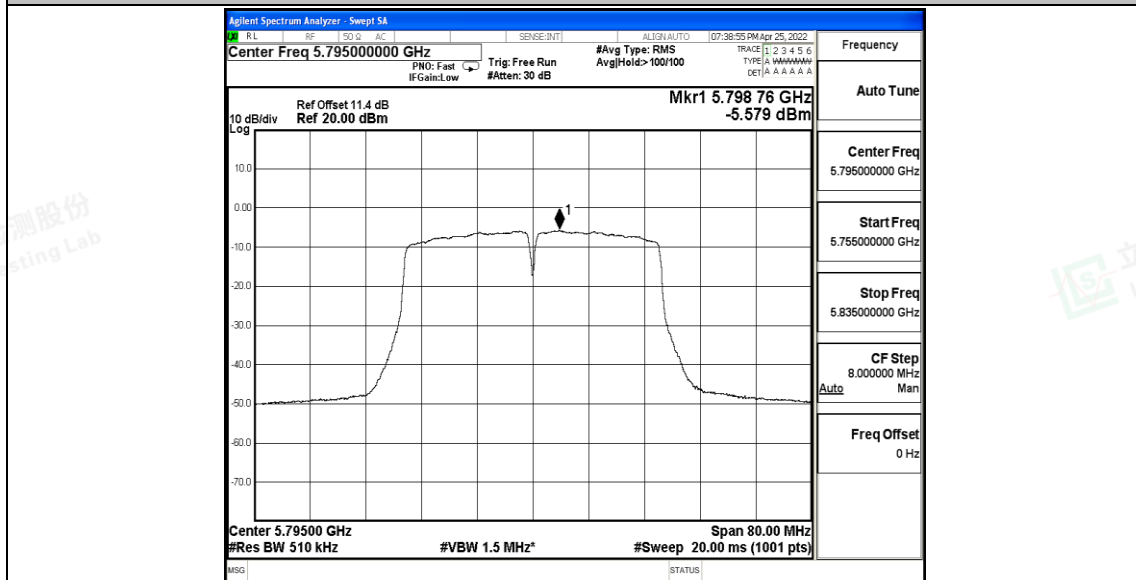


11N40SISO_Ant_5755



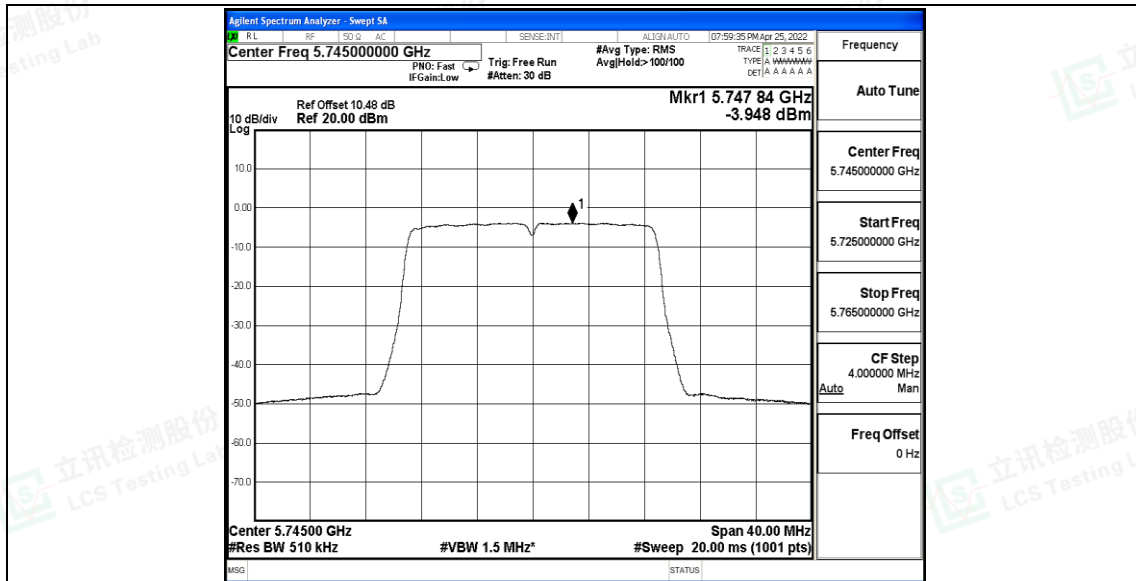


11N40SISO_Ant_5795

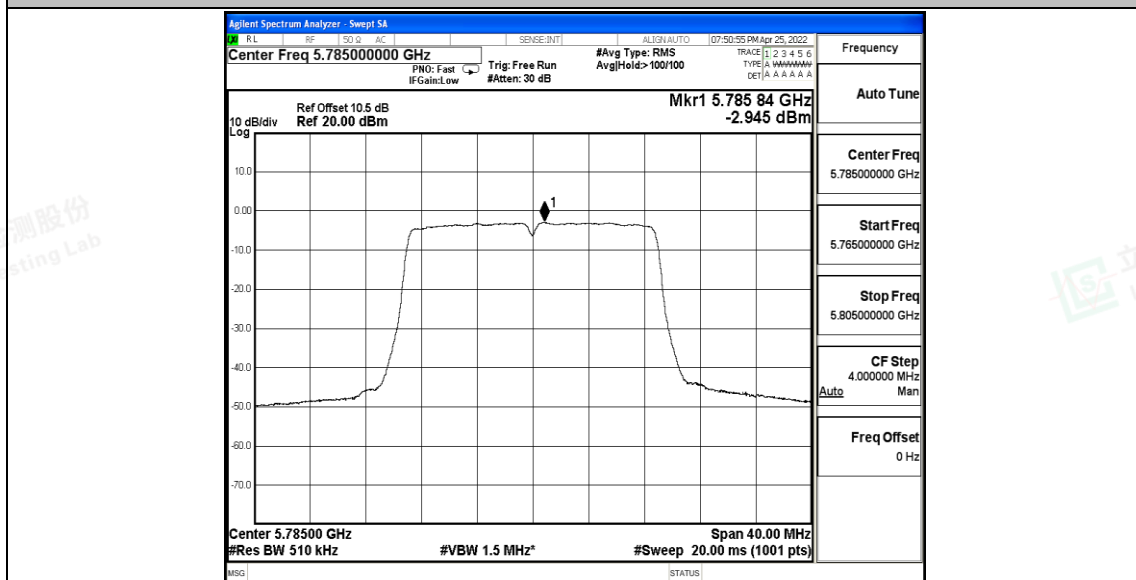


11AC20SISO_Ant_5745



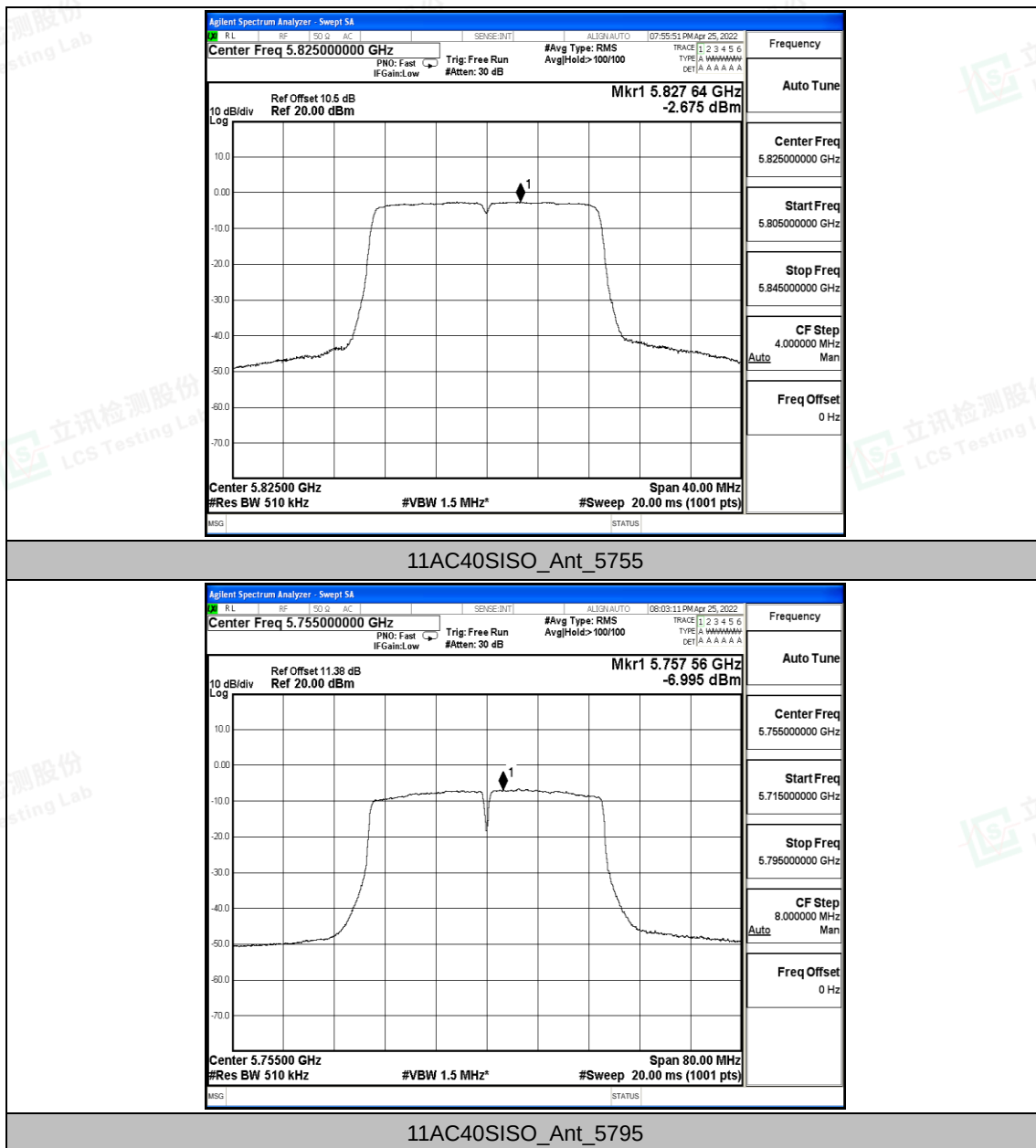


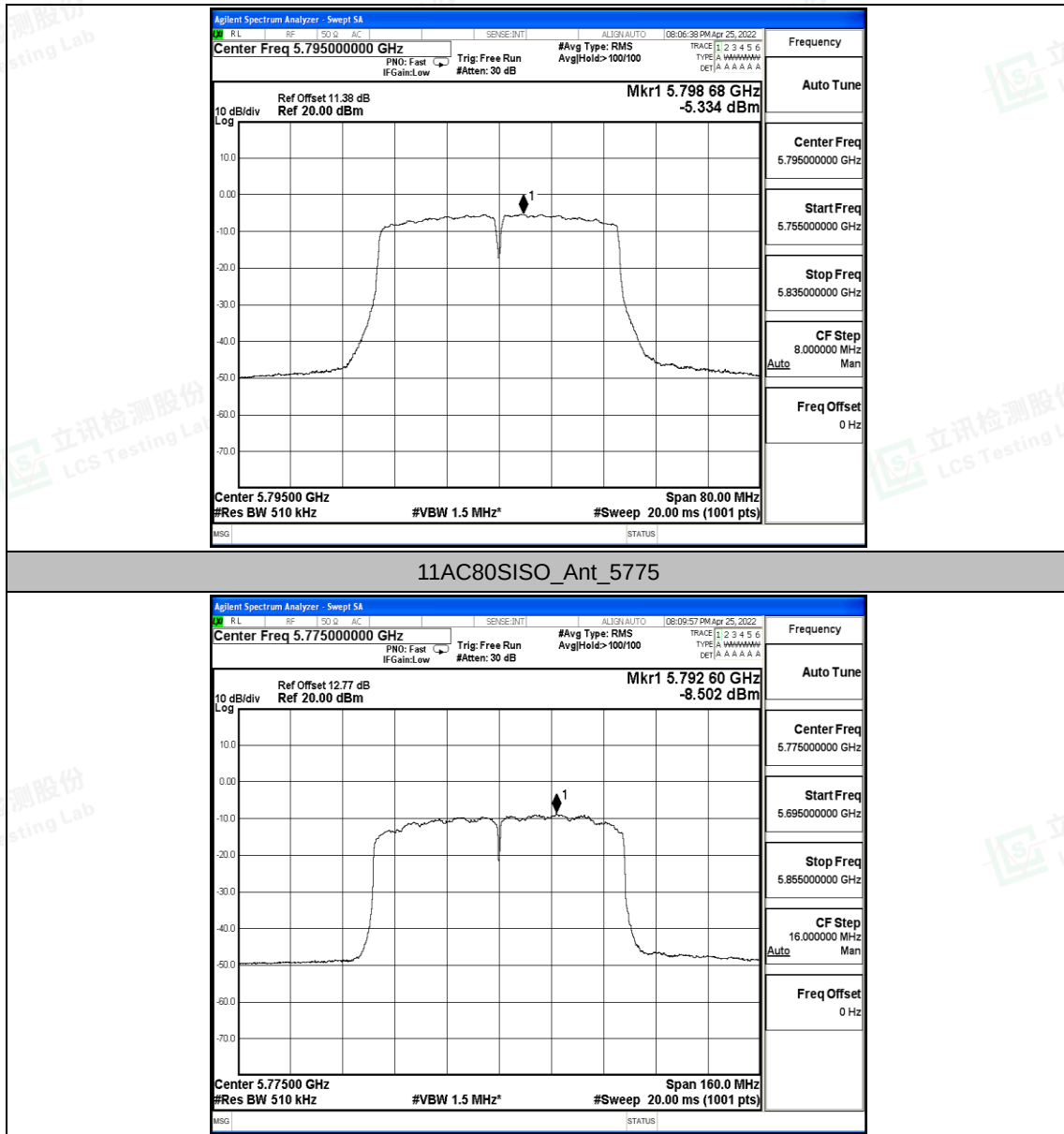
11AC20SISO_Ant_5785



11AC20SISO_Ant_5825









E.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant	Low	5745	Peak	5650.000	-38.189	≤-27.00	---	---	PASS
				Peak	5700.000	-38.6	≤10.00	---	---	PASS
				Peak	5720.000	-36.38	≤15.60	---	---	PASS
				Peak	5725.000	-33.18	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-31.431	≤15.60	---	---	PASS
				Peak	5855.000	-35.91	≤27.00	---	---	PASS
				Peak	5875.000	-38.35	≤15.60	---	---	PASS
				Peak	5925.000	-38	≤10.00	---	---	PASS
11N20SISO	Ant	Low	5745	Peak	5650.000	-39.159	≤-27.00	---	---	PASS
				Peak	5700.000	-39.07	≤10.00	---	---	PASS
				Peak	5720.000	-37.6	≤15.60	---	---	PASS
				Peak	5725.000	-35.24	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-34.235	≤15.60	---	---	PASS
				Peak	5855.000	-37.22	≤27.00	---	---	PASS
				Peak	5875.000	-38.72	≤15.60	---	---	PASS
				Peak	5925.000	-38.43	≤10.00	---	---	PASS
11N40SISO	Ant	Low	5755	Peak	5650.000	-38.92	≤-27.00	---	---	PASS
				Peak	5700.000	-37.8	≤10.00	---	---	PASS
				Peak	5720.000	-35.67	≤15.60	---	---	PASS
				Peak	5725.000	-35.2	≤27.00	---	---	PASS
		High	5795	Peak	5850.000	-37.781	≤15.60	---	---	PASS
				Peak	5855.000	-38.43	≤27.00	---	---	PASS
				Peak	5875.000	-36.57	≤15.60	---	---	PASS
				Peak	5925.000	-38.79	≤10.00	---	---	PASS
11AC20SISO	Ant	Low	5745	Peak	5650.000	-38.631	≤-27.00	---	---	PASS
				Peak	5700.000	-38.91	≤10.00	---	---	PASS
				Peak	5720.000	-37.13	≤15.60	---	---	PASS
				Peak	5725.000	-34.48	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-32.56	≤15.60	---	---	PASS
				Peak	5855.000	-38.15	≤27.00	---	---	PASS
				Peak	5875.000	-38.91	≤15.60	---	---	PASS
				Peak	5925.000	-39.43	≤10.00	---	---	PASS
11AC40SISO	Ant	Low	5755	Peak	5650.000	-37.986	≤-27.00	---	---	PASS
				Peak	5700.000	-38.09	≤10.00	---	---	PASS





		High	5795	Peak	5720.000	-35.02	≤15.60	---	---	PASS
				Peak	5725.000	-32.59	≤27.00	---	---	PASS
				Peak	5850.000	-37.235	≤15.60	---	---	PASS
				Peak	5855.000	-38.61	≤27.00	---	---	PASS
				Peak	5875.000	-37.1	≤15.60	---	---	PASS
				Peak	5925.000	-39.01	≤10.00	---	---	PASS
11AC80SI SO	Ant	Low	5775	Peak	5650.000	-38.685	≤27.00	---	---	PASS
				Peak	5700.000	-37.27	≤10.00	---	---	PASS
				Peak	5720.000	-30.2	≤15.60	---	---	PASS
				Peak	5725.000	-30.44	≤27.00	---	---	PASS
		High	5775	Peak	5850.000	-31.218	≤15.60	---	---	PASS
				Peak	5855.000	-36.02	≤27.00	---	---	PASS
				Peak	5875.000	-36.19	≤15.60	---	---	PASS
				Peak	5925.000	-38.74	≤10.00	---	---	PASS

Note:

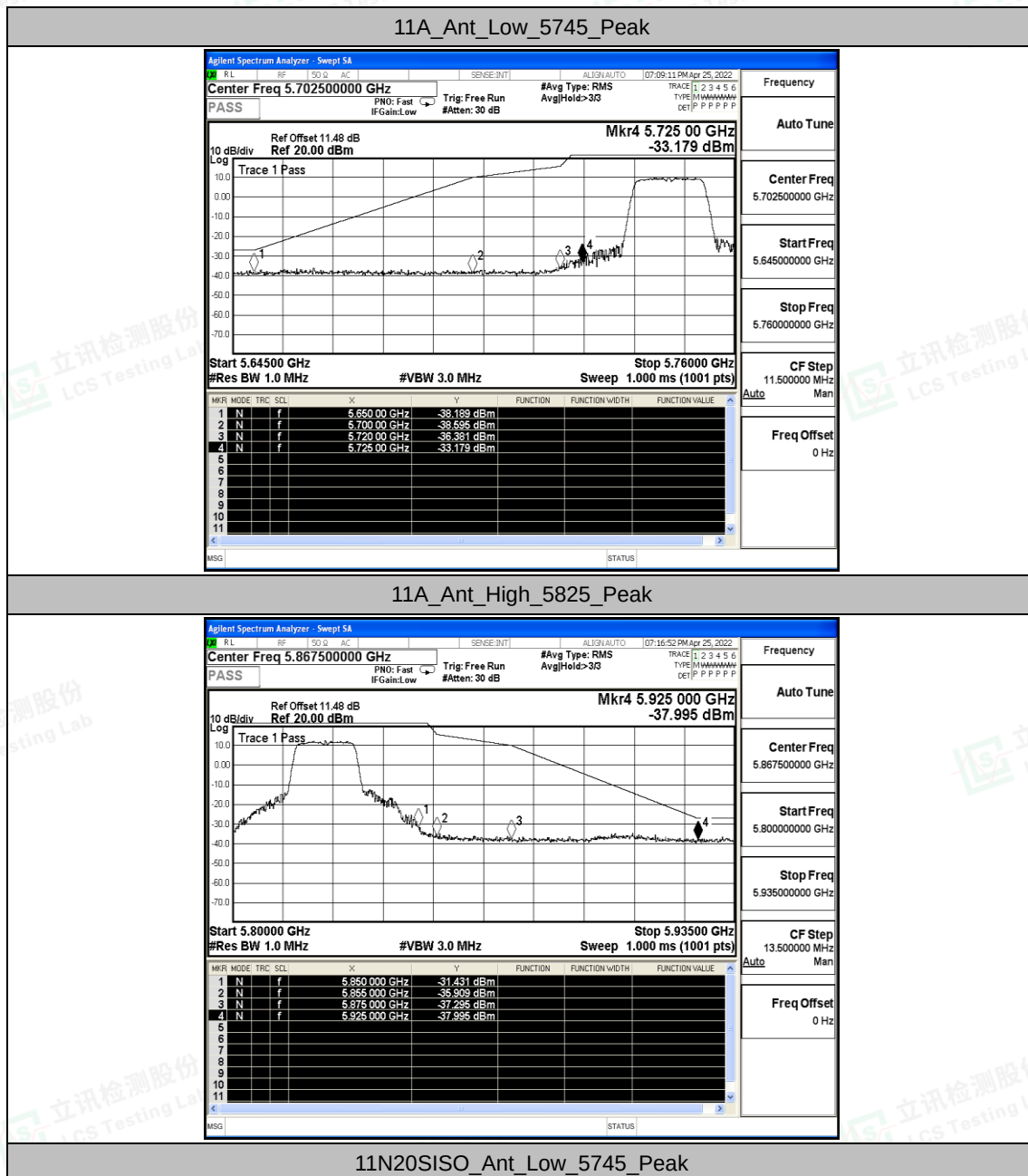
1. The Antenna Gain is compensated in the graph.

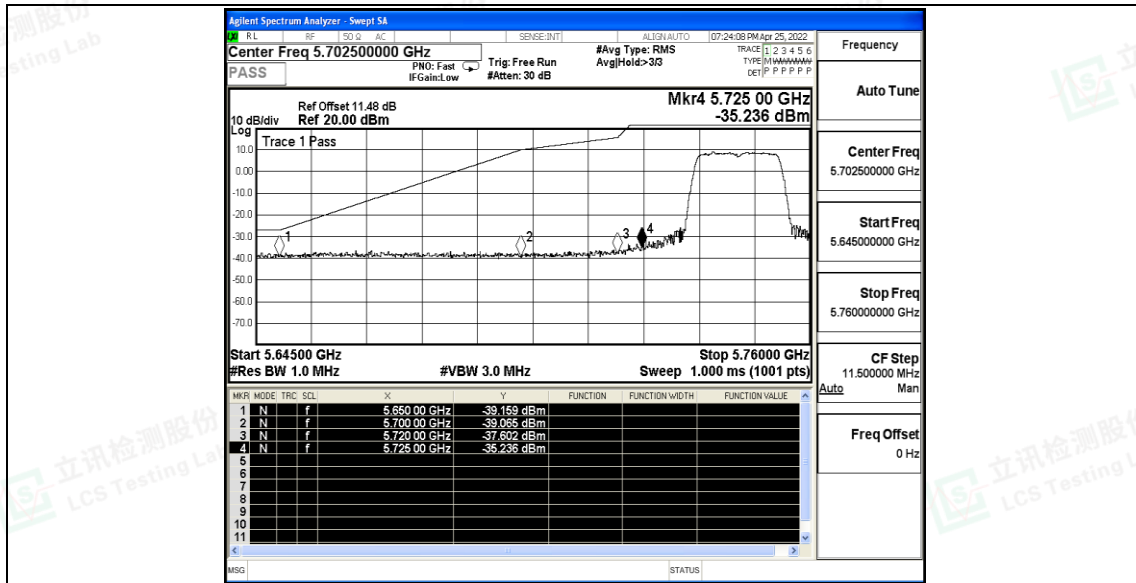


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518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

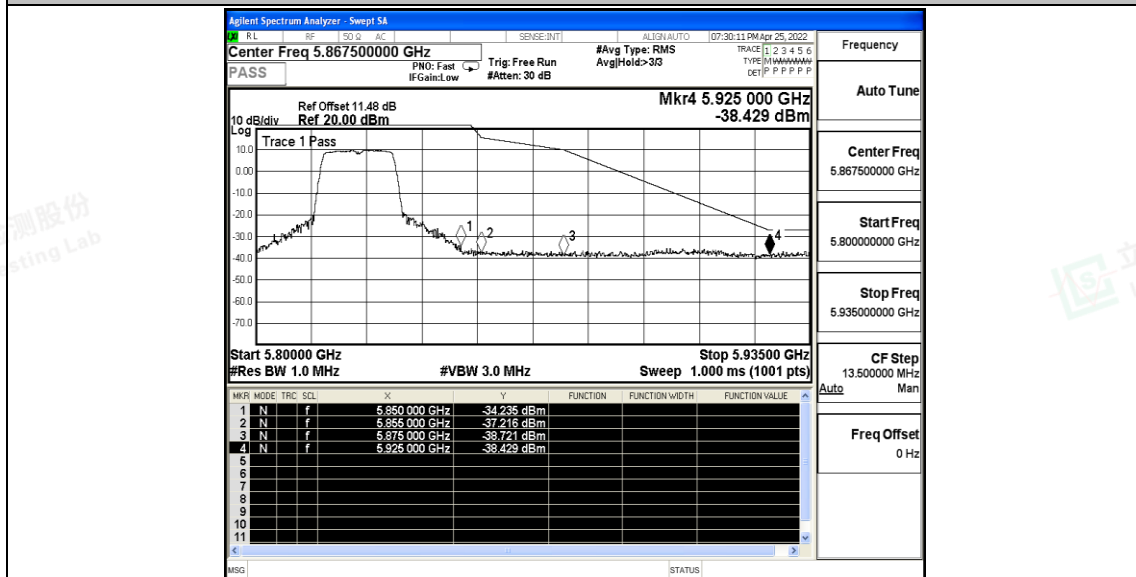


Test Graphs



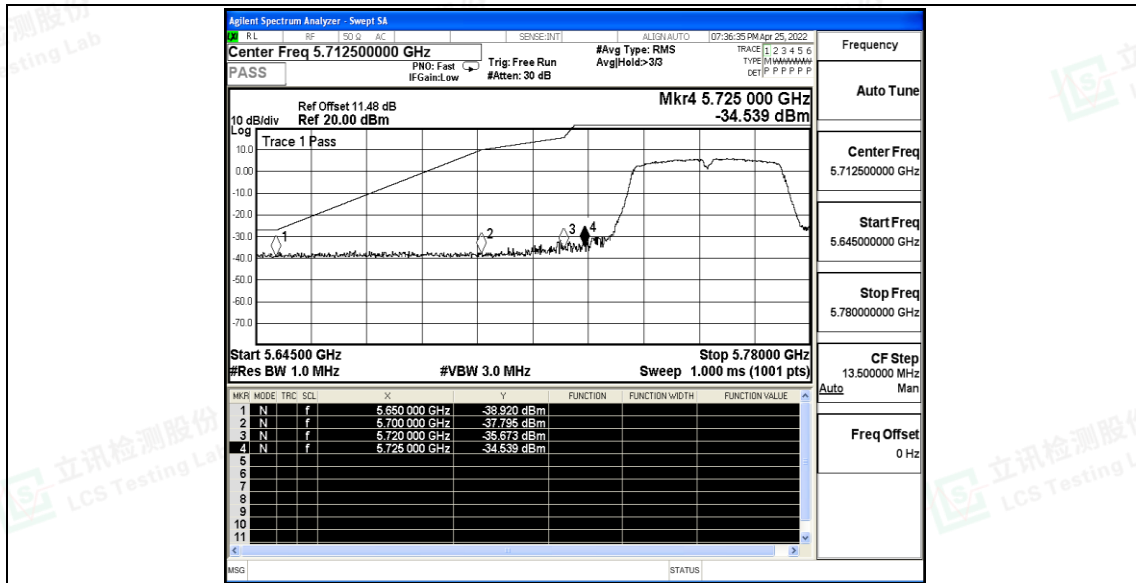


11N20SISO_Ant_High_5825_Peak

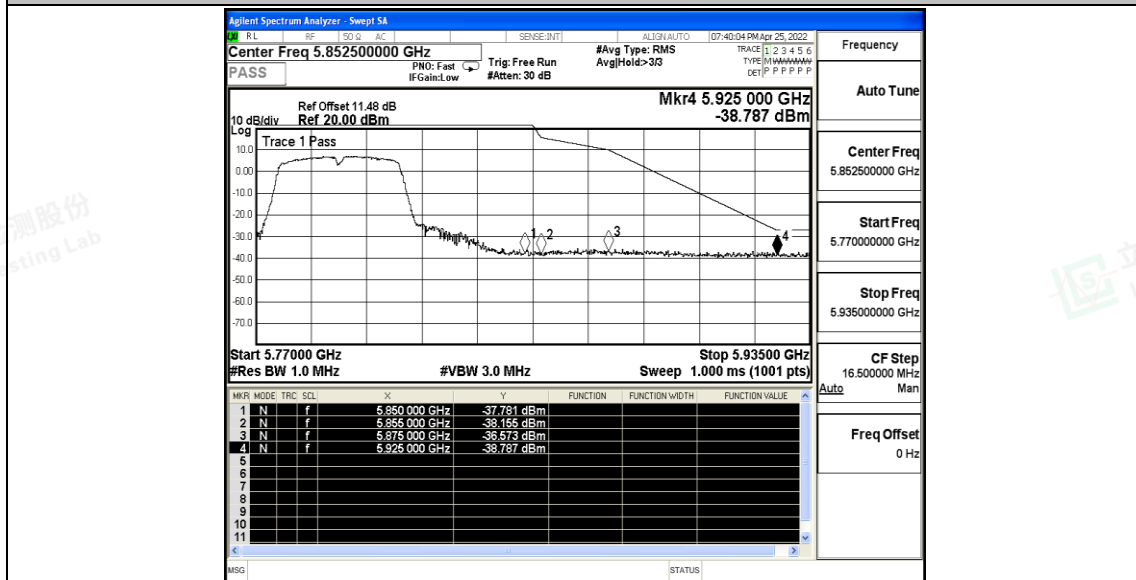


11N40SISO_Ant_Low_5755_Peak



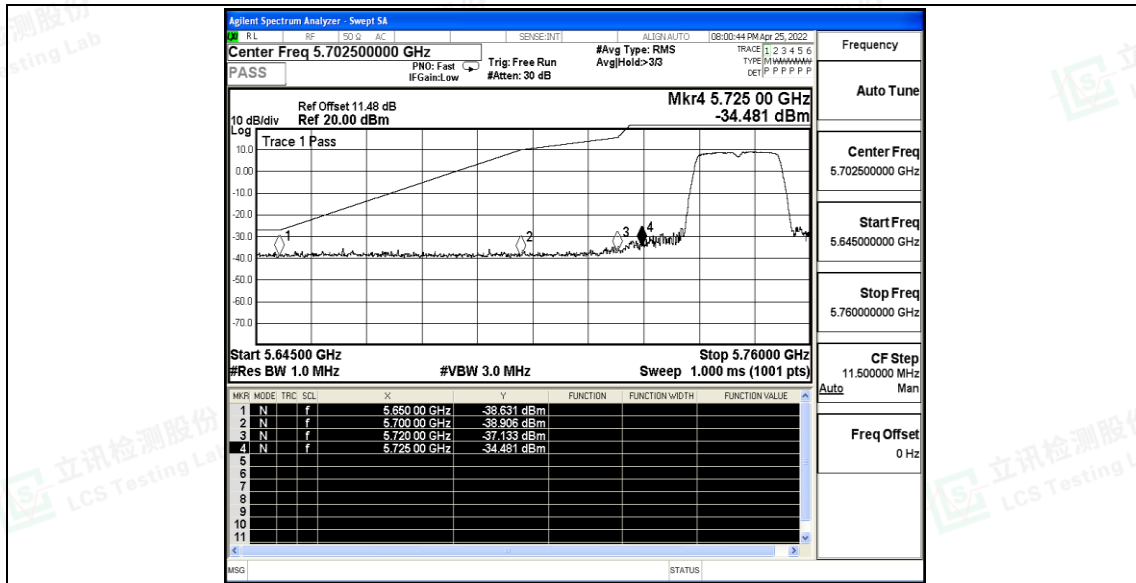


11N40SISO_Ant_High_5795_Peak

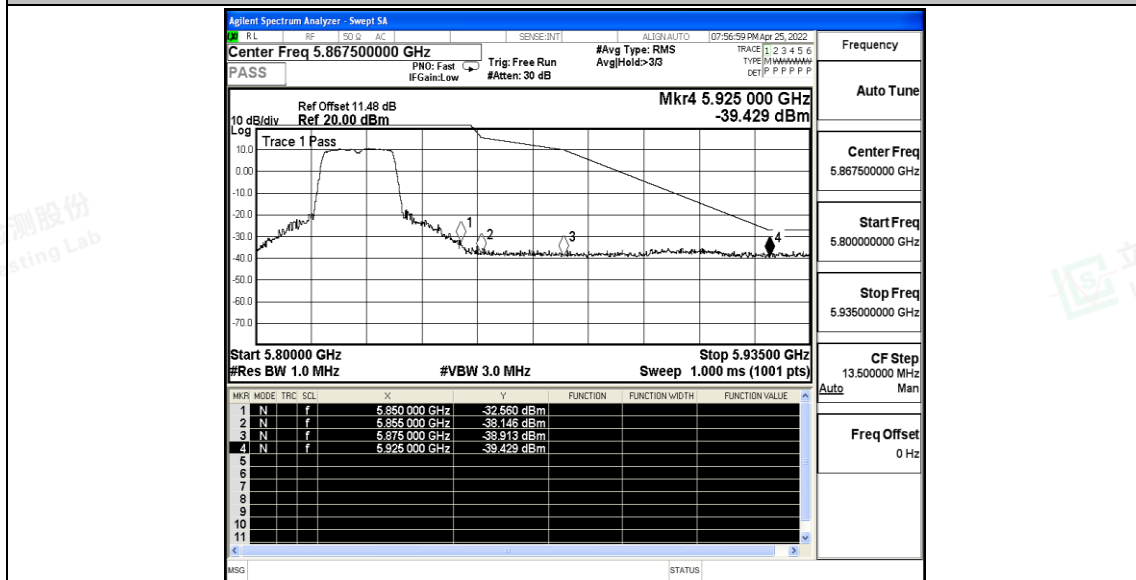


11AC20SISO_Ant_Low_5745_Peak



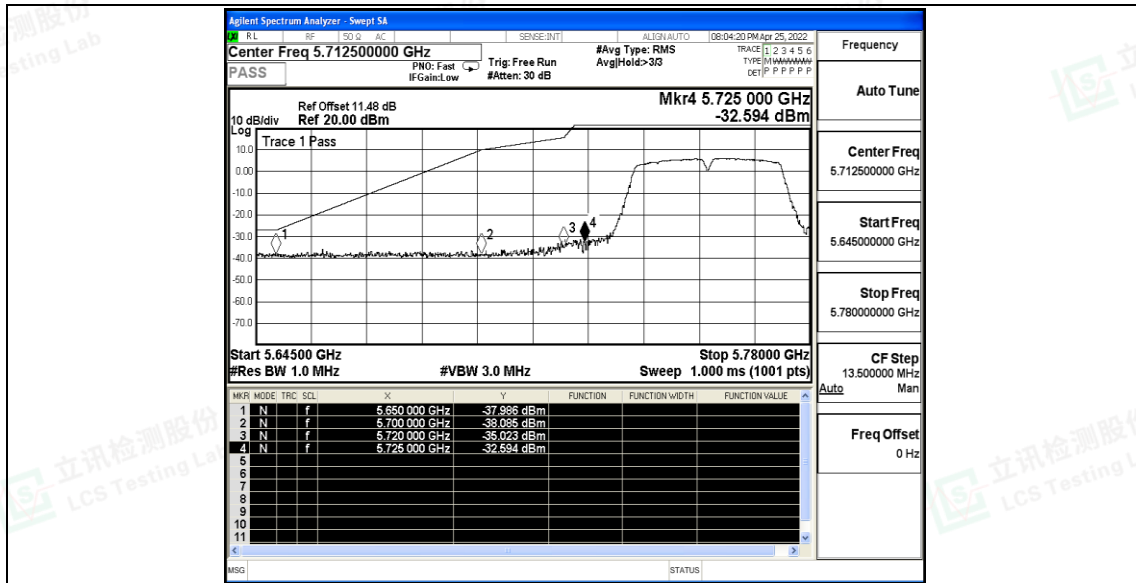


11AC20SISO_Ant_High_5825_Peak

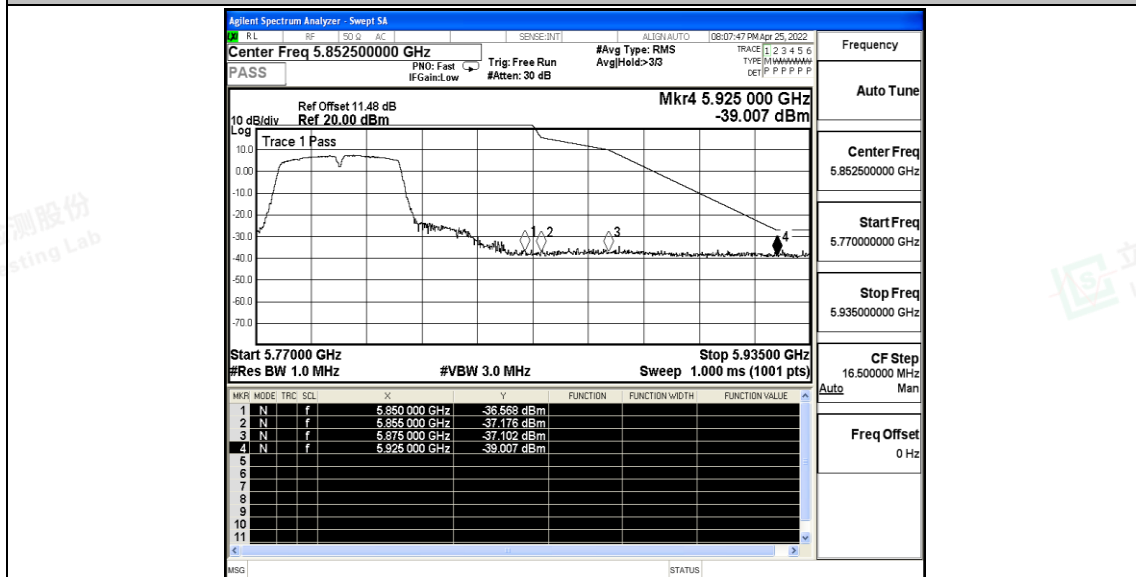


11AC40SISO_Ant_Low_5755_Peak



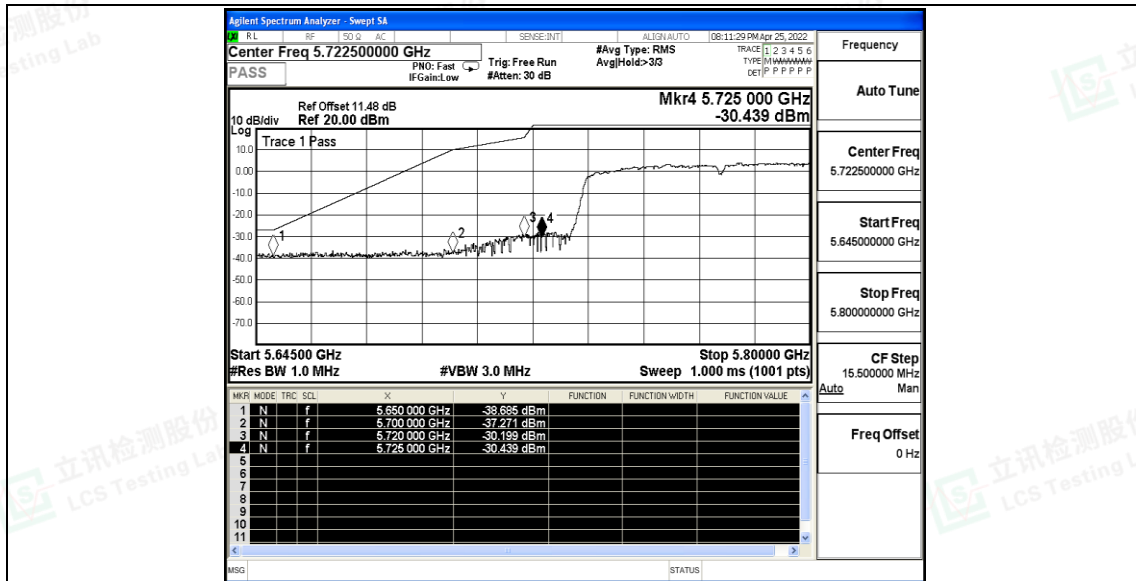


11AC40SISO_Ant_High_5795_Peak

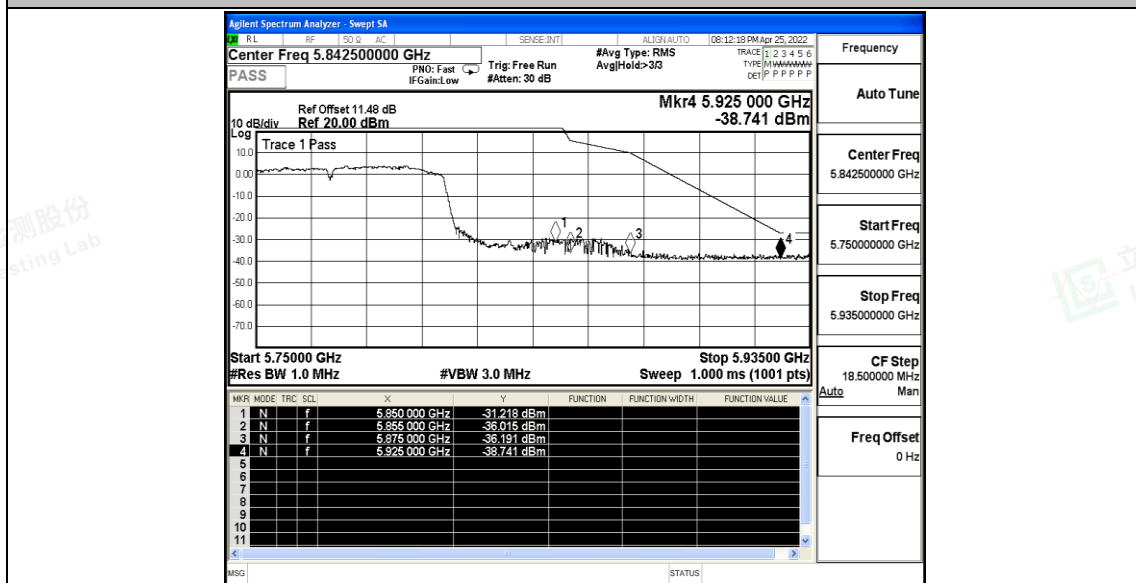


11AC80SISO_Ant_Low_5775_Peak





11AC80SISO_Ant_High_5775_Peak





E.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20S ISO	Ant	5745	NV	NT	-4000	-0.696258	20	PASS
			LV	NT	-4000	-0.696258	20	PASS
			HV	NT	-4000	-0.696258	20	PASS
		5785	NV	NT	-4000	-0.691443	20	PASS
			LV	NT	-4000	-0.691443	20	PASS
			HV	NT	-4000	-0.691443	20	PASS
		5825	NV	NT	-4000	-0.686695	20	PASS
			LV	NT	-4000	-0.686695	20	PASS
			HV	NT	-4000	-0.686695	20	PASS
11AC40S ISO	Ant	5755	NV	NT	-5000	-0.86881	20	PASS
			LV	NT	-5000	-0.86881	20	PASS
			HV	NT	-4000	-0.695048	20	PASS
		5795	NV	NT	-5000	-0.862813	20	PASS
			LV	NT	-5000	-0.862813	20	PASS
			HV	NT	-4000	-0.69025	20	PASS
11AC80S ISO	Ant	5775	NV	NT	-4000	-0.692641	20	PASS
			LV	NT	-4000	-0.692641	20	PASS
			HV	NT	-4000	-0.692641	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20S ISO	Ant	5745	NV	-30	-4000	-0.696258	20	PASS
			NV	-20	-4000	-0.696258	20	PASS
			NV	-10	-4000	-0.696258	20	PASS
			NV	0	-4000	-0.696258	20	PASS
			NV	10	-4000	-0.696258	20	PASS
			NV	20	-4000	-0.696258	20	PASS
			NV	30	-4000	-0.696258	20	PASS
			NV	40	-4000	-0.696258	20	PASS
			NV	50	-4000	-0.696258	20	PASS
		5785	NV	-30	-4000	-0.691443	20	PASS
			NV	-20	-4000	-0.691443	20	PASS





			NV	-10	-4000	-0.691443	20	PASS
			NV	0	-4000	-0.691443	20	PASS
			NV	10	-4000	-0.691443	20	PASS
			NV	20	-4000	-0.691443	20	PASS
			NV	30	-4000	-0.691443	20	PASS
			NV	40	-4000	-0.691443	20	PASS
			NV	50	-4000	-0.691443	20	PASS
		5825	NV	-30	-4000	-0.686695	20	PASS
			NV	-20	-4000	-0.686695	20	PASS
			NV	-10	-4000	-0.686695	20	PASS
			NV	0	-4000	-0.686695	20	PASS
			NV	10	-4000	-0.686695	20	PASS
			NV	20	-4000	-0.686695	20	PASS
			NV	30	-4000	-0.686695	20	PASS
11AC40S ISO	Ant	5755	NV	-30	-5000	-0.86881	20	PASS
			NV	-20	-4000	-0.695048	20	PASS
			NV	-10	-5000	-0.86881	20	PASS
			NV	0	-4000	-0.695048	20	PASS
			NV	10	-4000	-0.695048	20	PASS
			NV	20	-4000	-0.695048	20	PASS
			NV	30	-4000	-0.695048	20	PASS
			NV	40	-4000	-0.695048	20	PASS
			NV	50	-4000	-0.695048	20	PASS
		5795	NV	-30	-4000	-0.69025	20	PASS
			NV	-20	-4000	-0.69025	20	PASS
			NV	-10	-4000	-0.69025	20	PASS
			NV	0	-4000	-0.69025	20	PASS
			NV	10	-4000	-0.69025	20	PASS
			NV	20	-4000	-0.69025	20	PASS
			NV	30	-4000	-0.69025	20	PASS
			NV	40	-4000	-0.69025	20	PASS
			NV	50	-4000	-0.69025	20	PASS
11AC80S ISO	Ant	5775	NV	-30	-4000	-0.692641	20	PASS
			NV	-20	-4000	-0.692641	20	PASS
			NV	-10	-4000	-0.692641	20	PASS
			NV	0	-4000	-0.692641	20	PASS
			NV	10	-4000	-0.692641	20	PASS
			NV	20	-4000	-0.692641	20	PASS





			NV	30	-4000	-0.692641	20	PASS
			NV	40	-4000	-0.692641	20	PASS
			NV	50	-4000	-0.692641	20	PASS





E.6 Duty Cycle

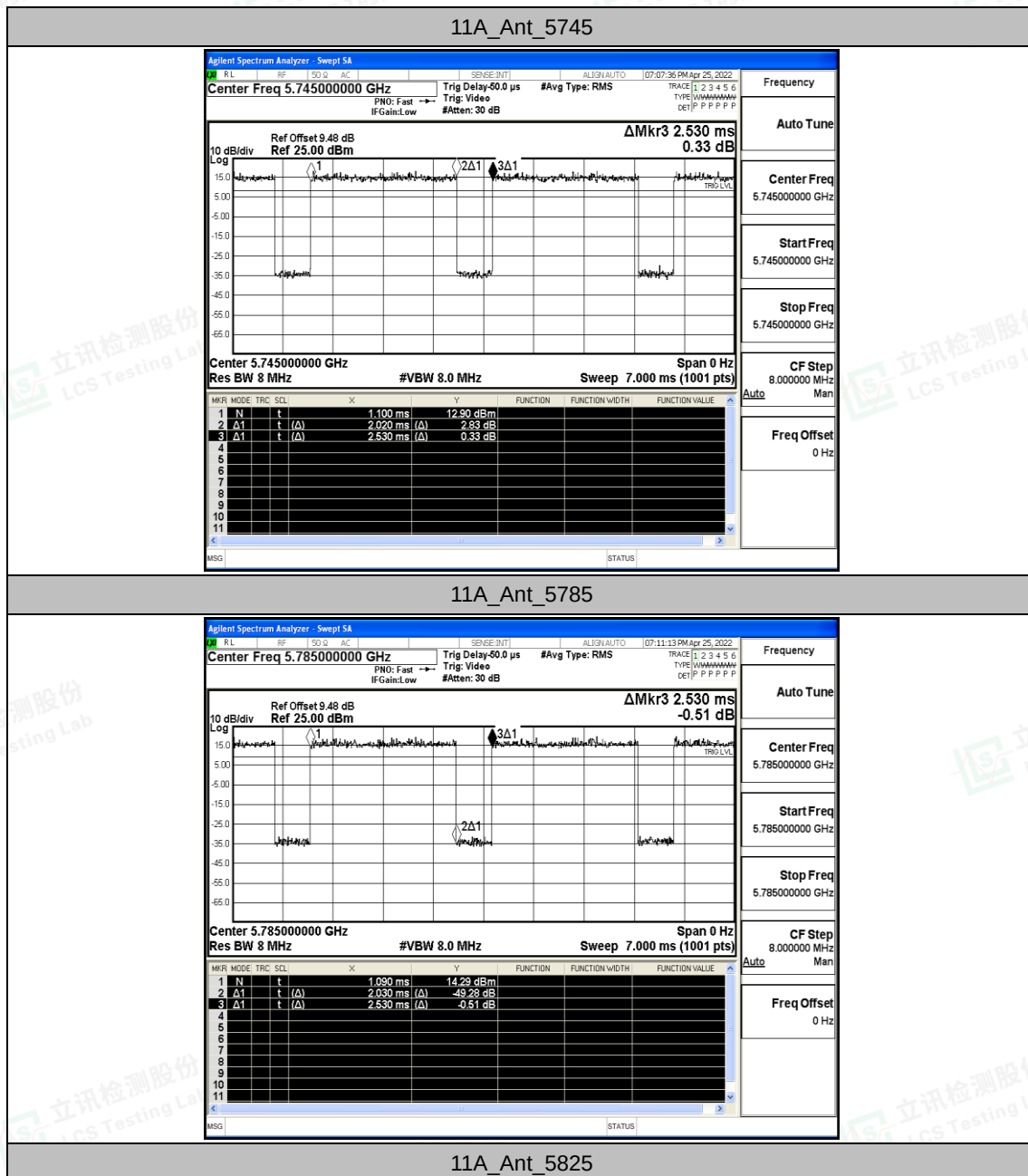
Test Result

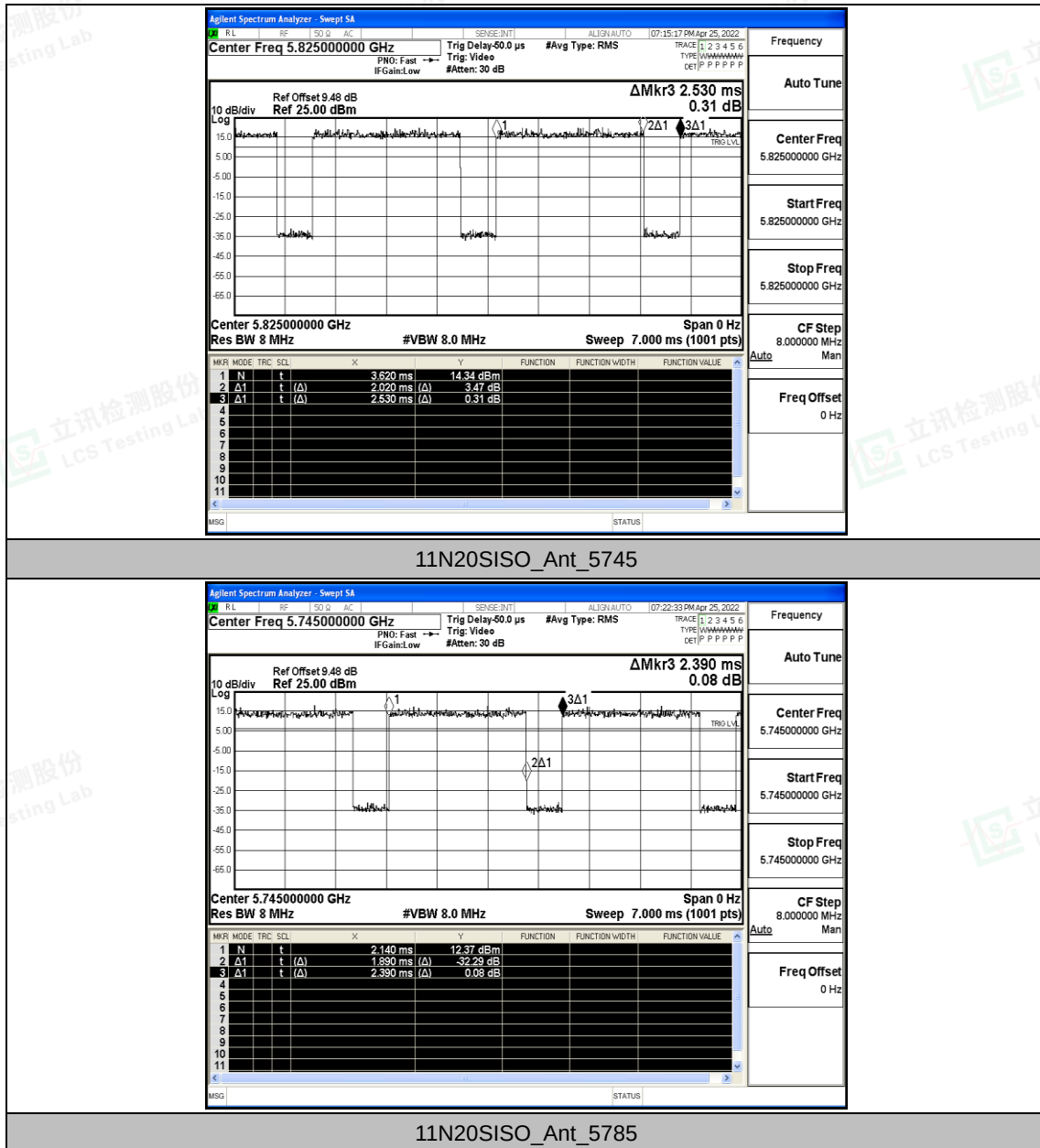
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant	5745	2.02	2.53	79.84	---	---
		5785	2.03	2.53	80.24	---	---
		5825	2.02	2.53	79.84	---	---
11N20SISO	Ant	5745	1.89	2.39	79.08	---	---
		5785	1.89	2.39	79.08	---	---
		5825	1.89	2.39	79.08	---	---
11N40SISO	Ant	5755	0.93	1.43	65.03	---	---
		5795	0.92	1.43	64.34	---	---
11AC20SISO	Ant	5745	1.89	2.38	79.41	---	---
		5785	1.89	2.39	79.08	---	---
		5825	1.89	2.39	79.08	---	---
11AC40SISO	Ant	5755	0.93	1.44	64.58	---	---
		5795	0.93	1.44	64.58	---	---
11AC80SISO	Ant	5775	0.45	0.96	46.88	---	---

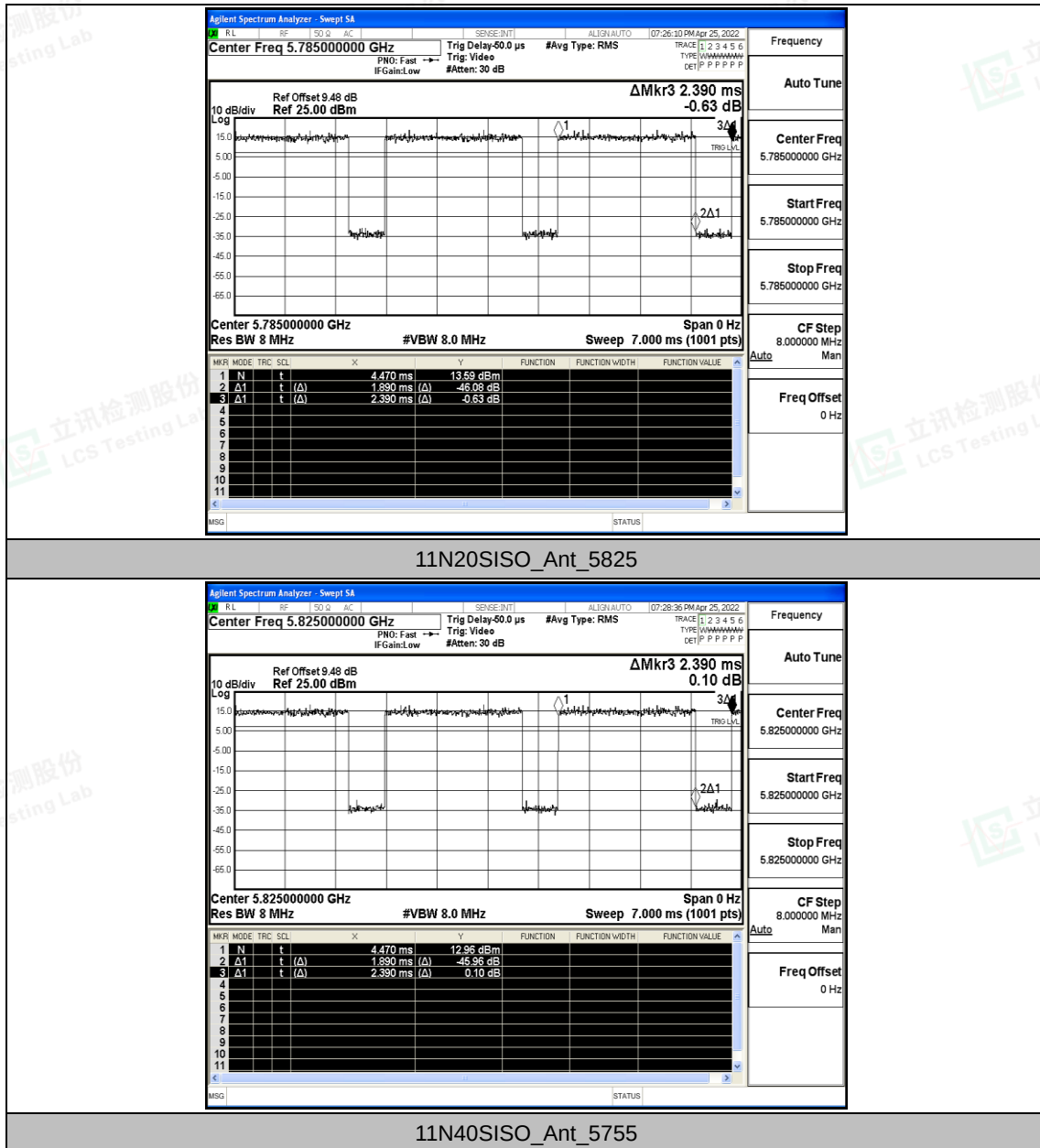


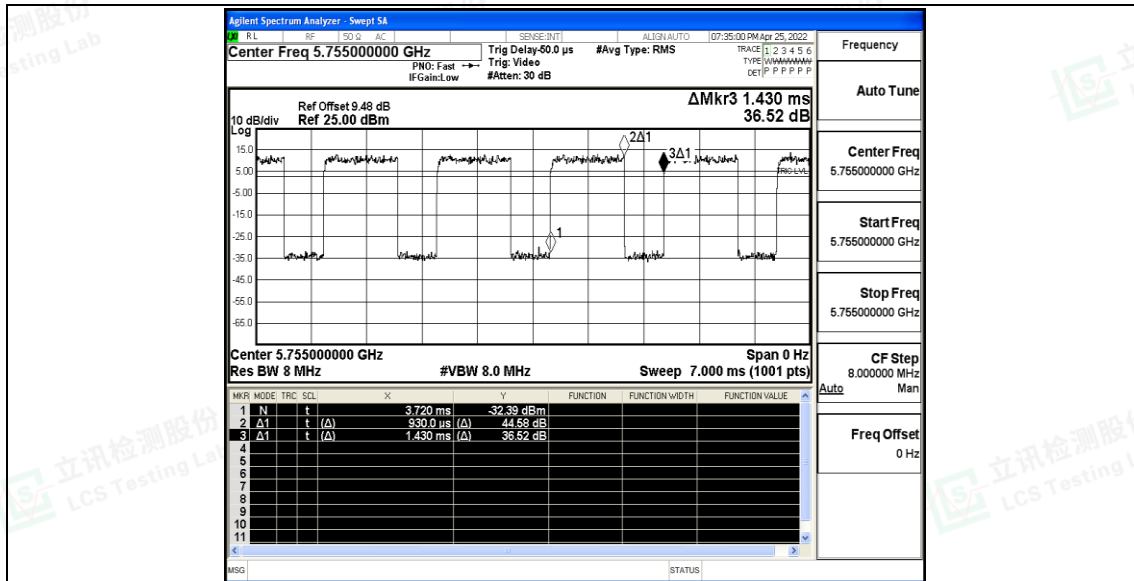


Test Graphs

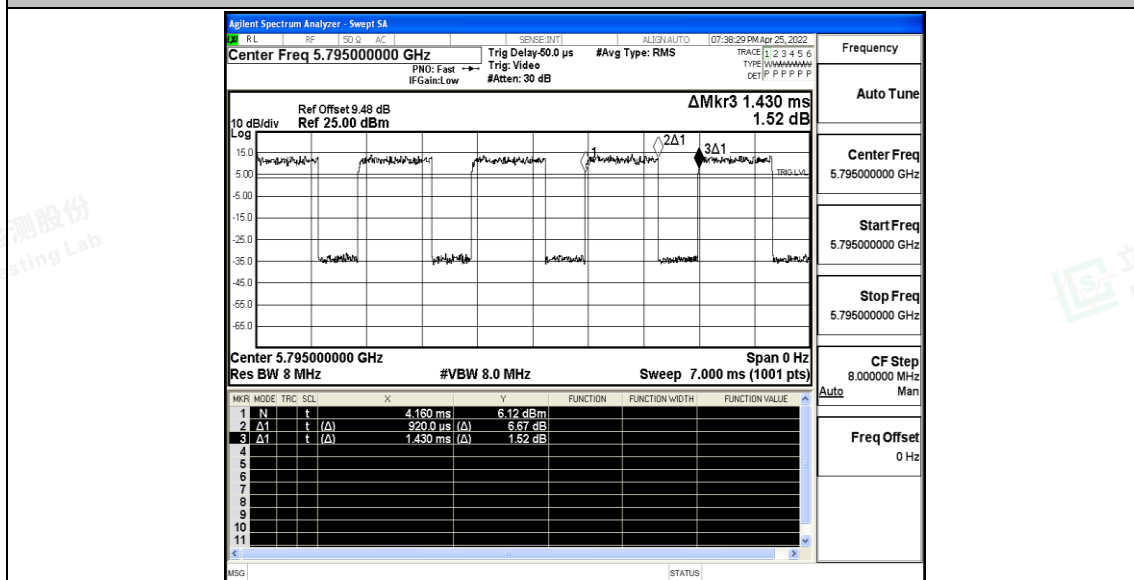








11N40SISO_Ant_5795



11AC20SISO_Ant_5745



