



Appendix C

RF Test Data for 5.2GWIFI(Conducted Measurement)

Product Name: Tablet device

Test Model: Sundial

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu





C.1 26dB Emission Bandwidth

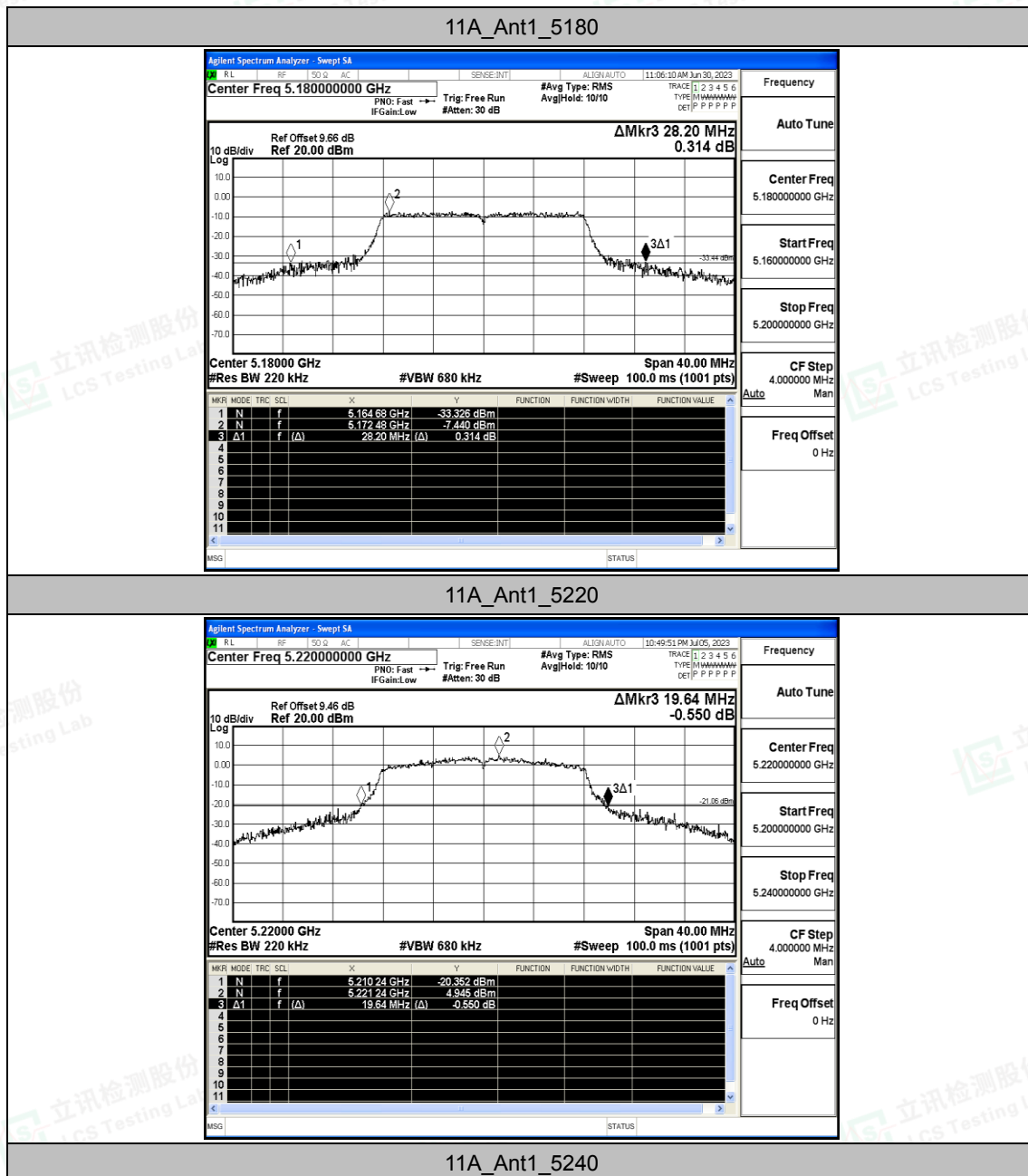
Test Result

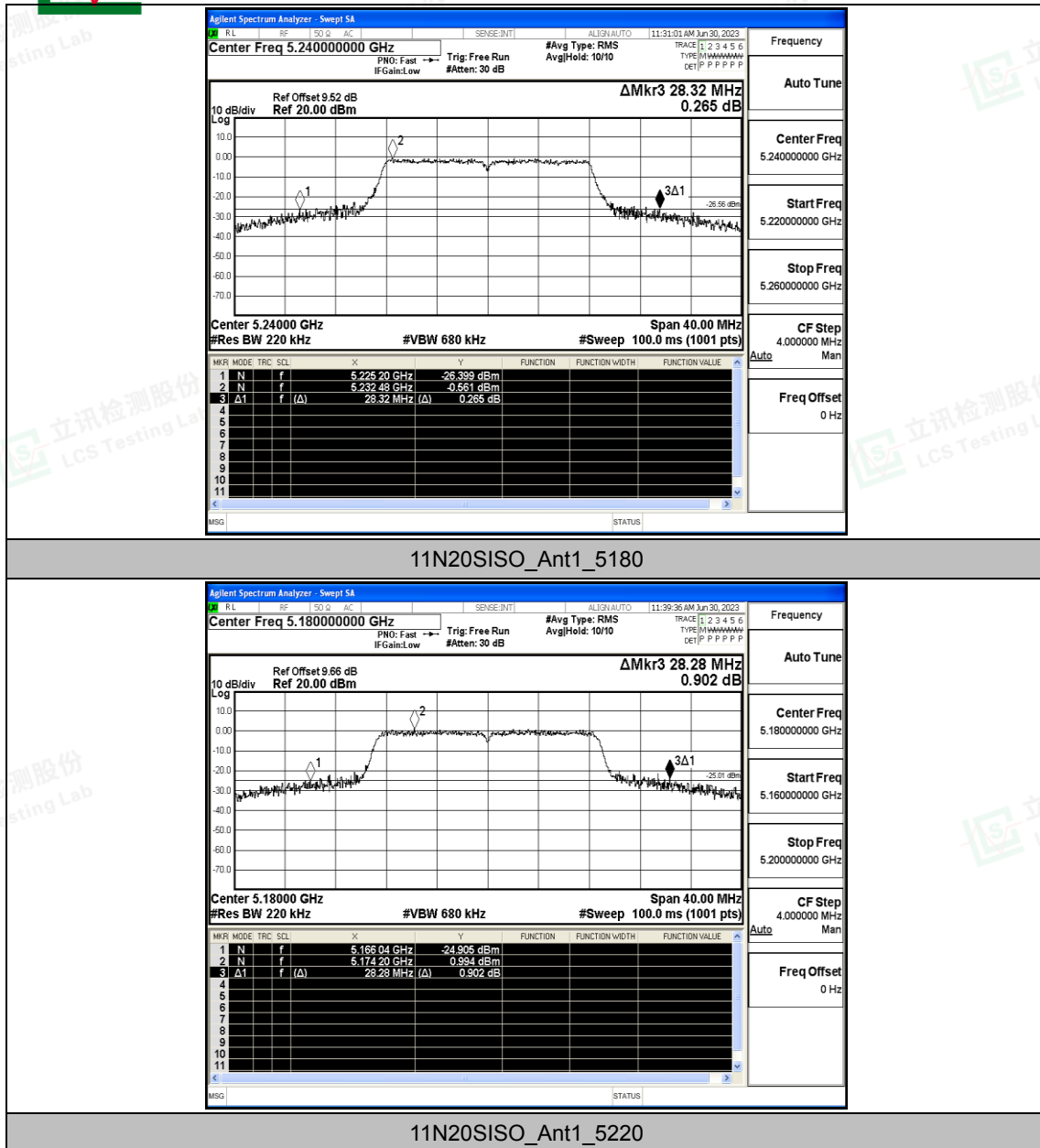
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	28.200	5164.680	5192.880	---	---
		5220	19.640	5210.240	5229.880	---	---
		5240	28.320	5225.200	5253.520	---	---
11N20SISO	Ant1	5180	28.280	5166.040	5194.320	---	---
		5220	28.640	5206.960	5235.600	---	---
		5240	30.000	5225.200	5255.200	---	---
11N40SISO	Ant1	5190	53.360	5162.640	5216.000	---	---
		5230	51.680	5204.000	5255.680	---	---
11AC20SISO	Ant1	5180	28.440	5165.760	5194.200	---	---
		5220	29.840	5205.440	5235.280	---	---
		5240	32.200	5223.800	5256.000	---	---
11AC40SISO	Ant1	5190	54.160	5162.240	5216.400	---	---
		5230	52.480	5203.680	5256.160	---	---
11AC80SISO	Ant1	5210	85.280	5168.080	5253.360	---	---

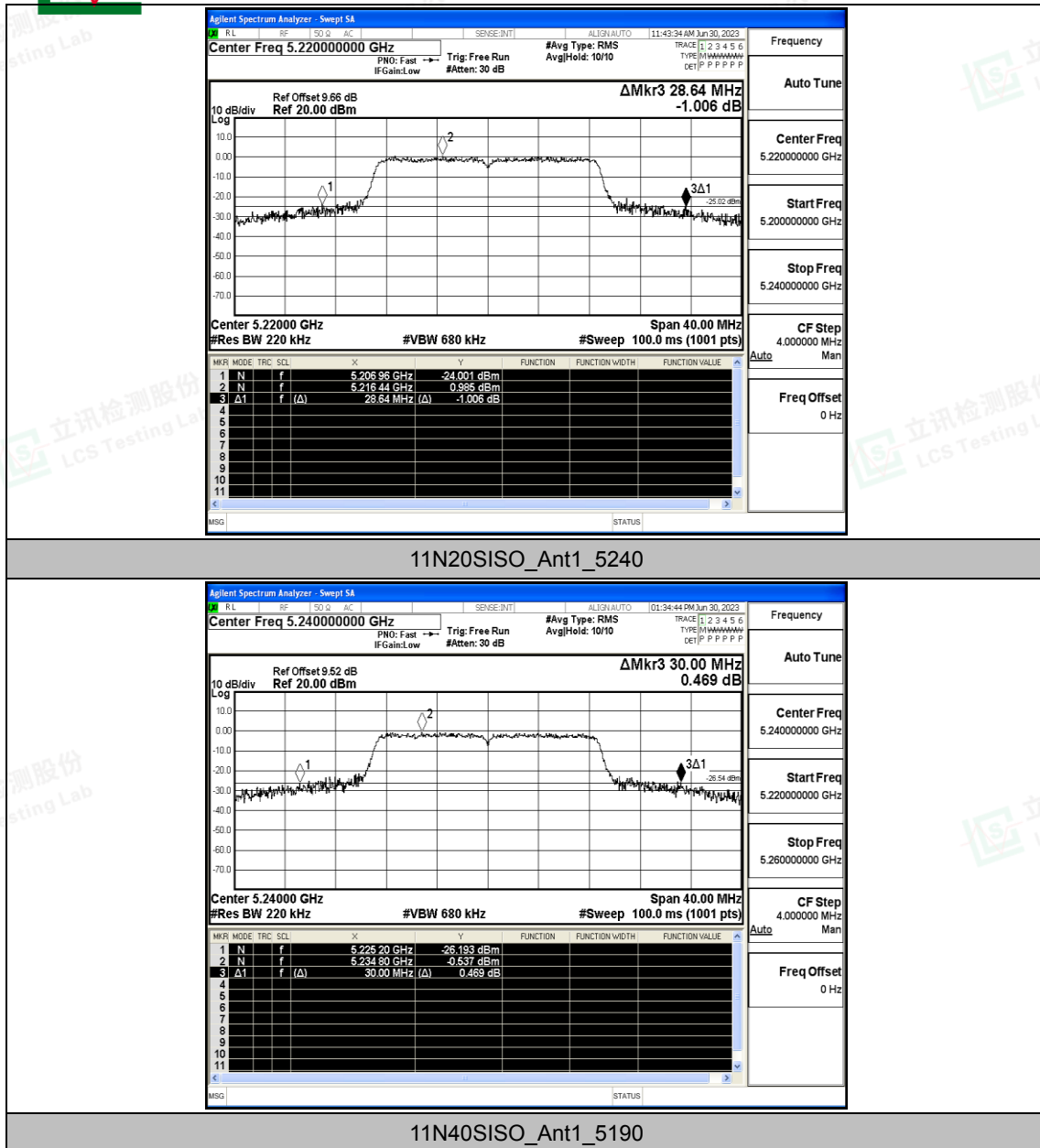


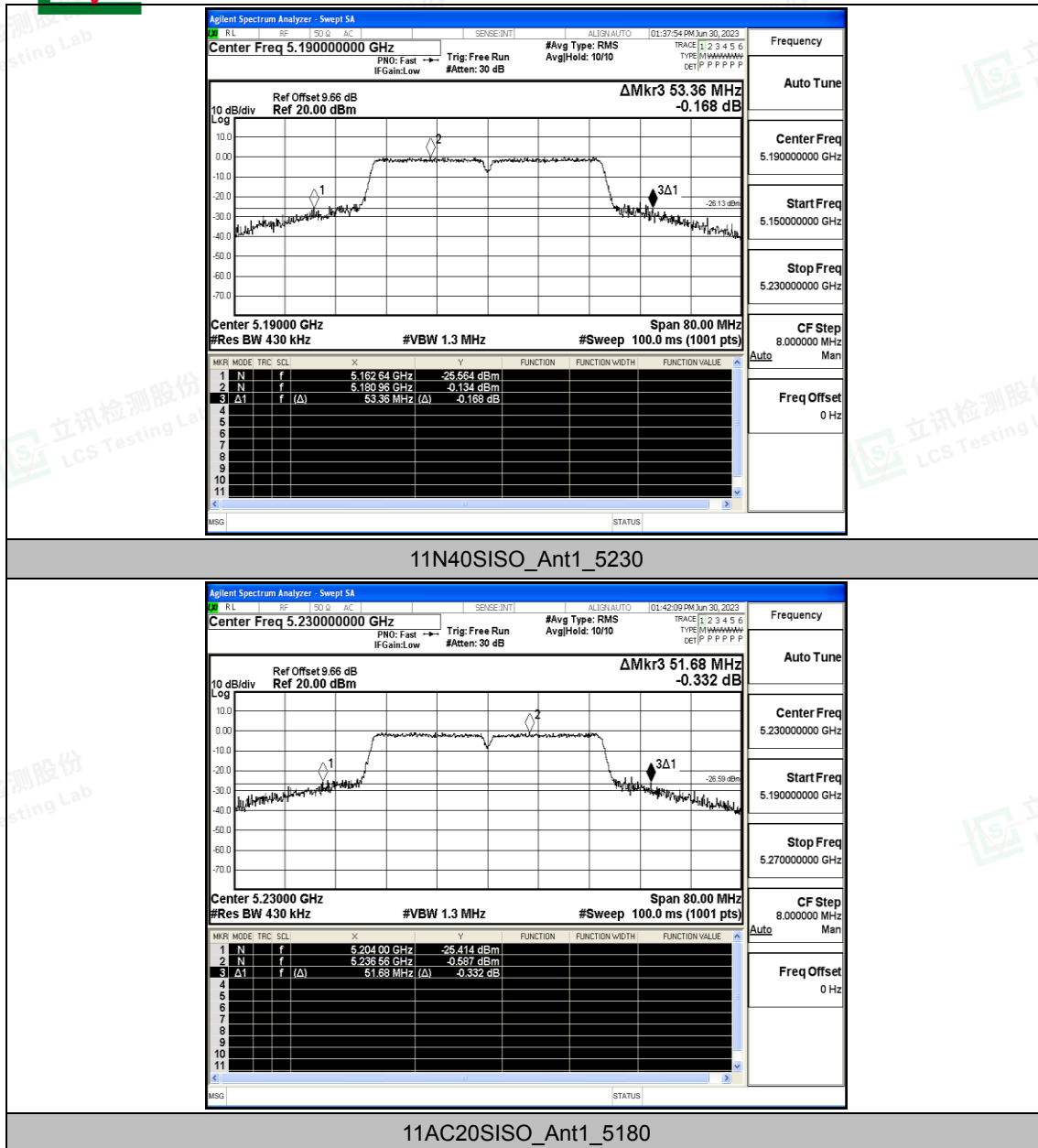


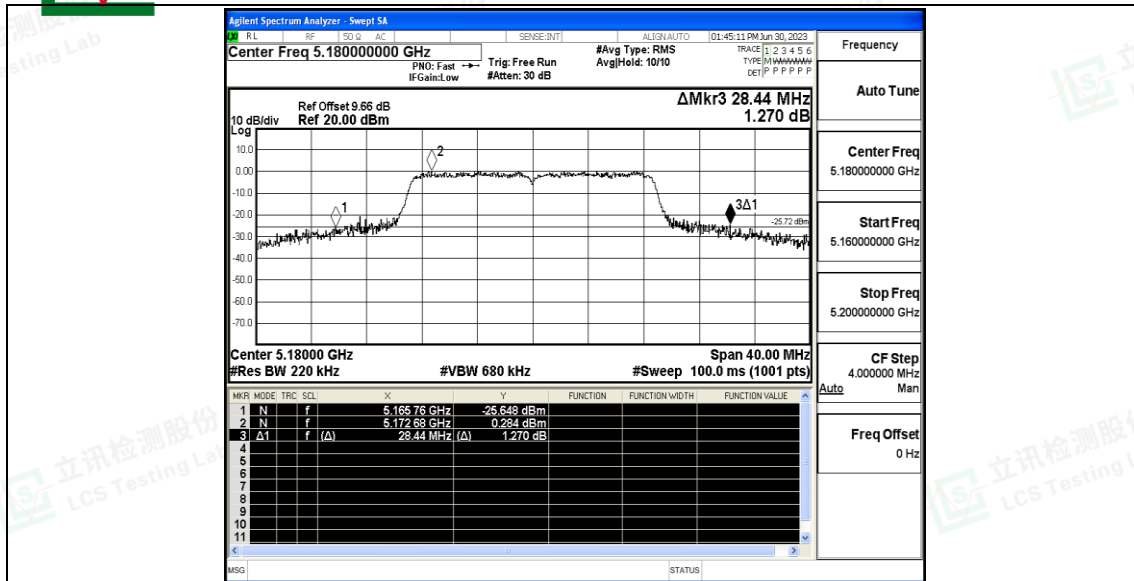
Test Graphs



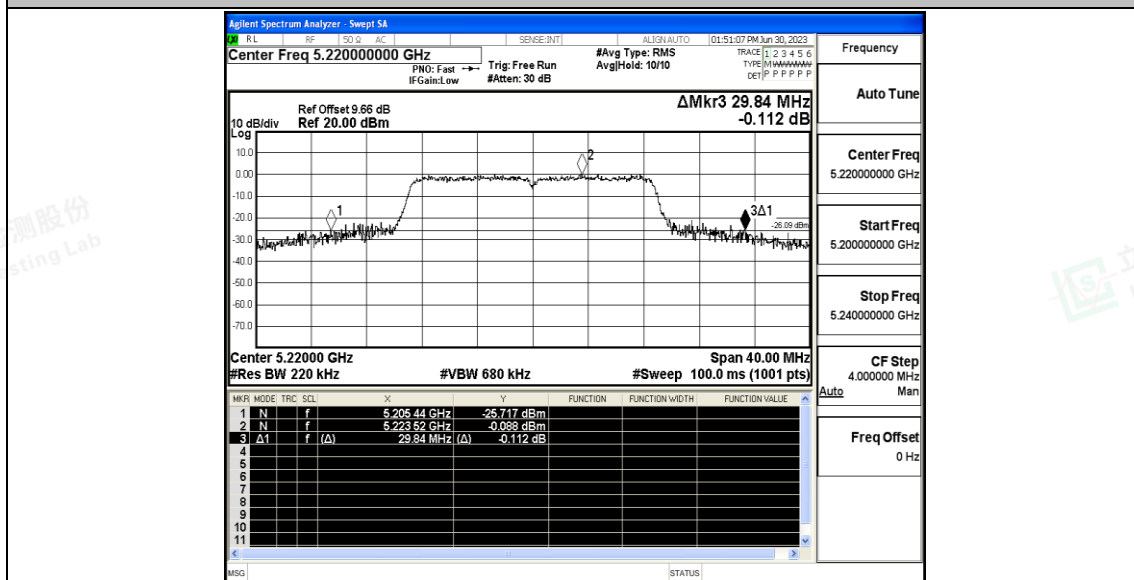






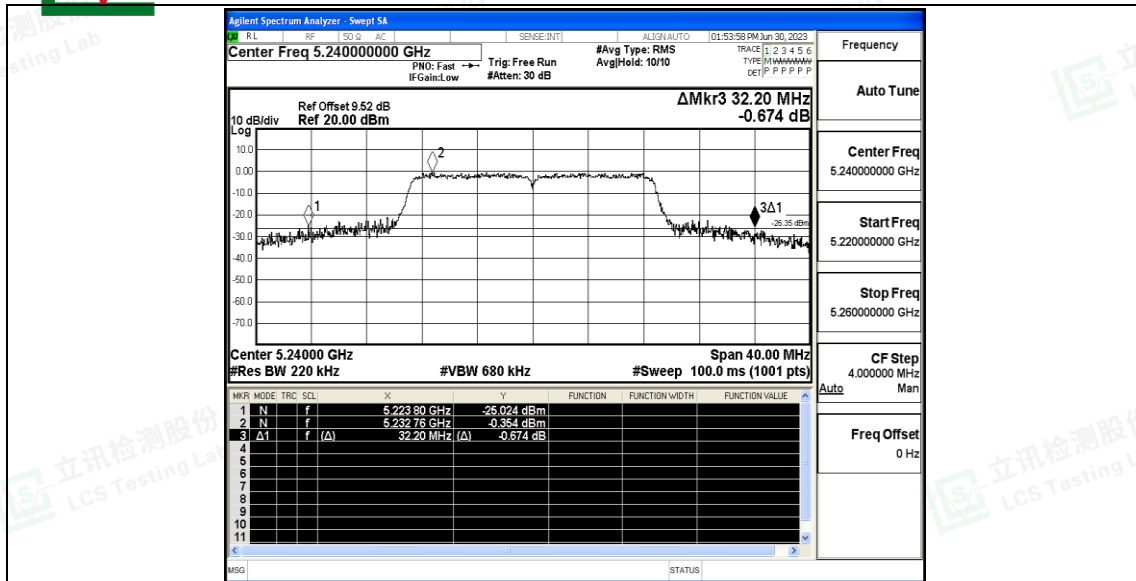


11AC20SISO_Ant1_5220

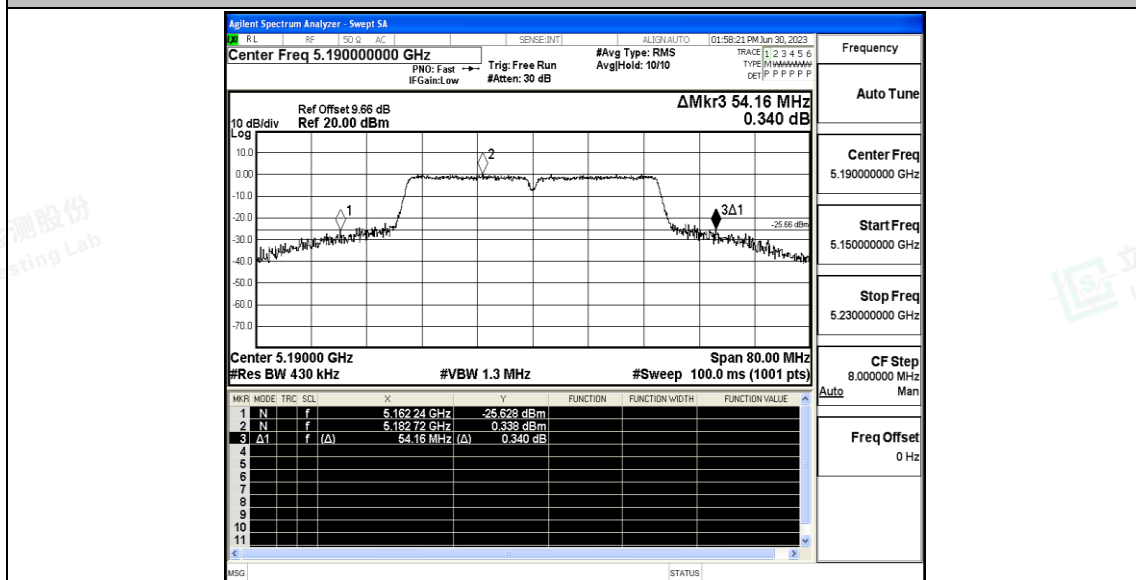


11AC20SISO_Ant1_5240



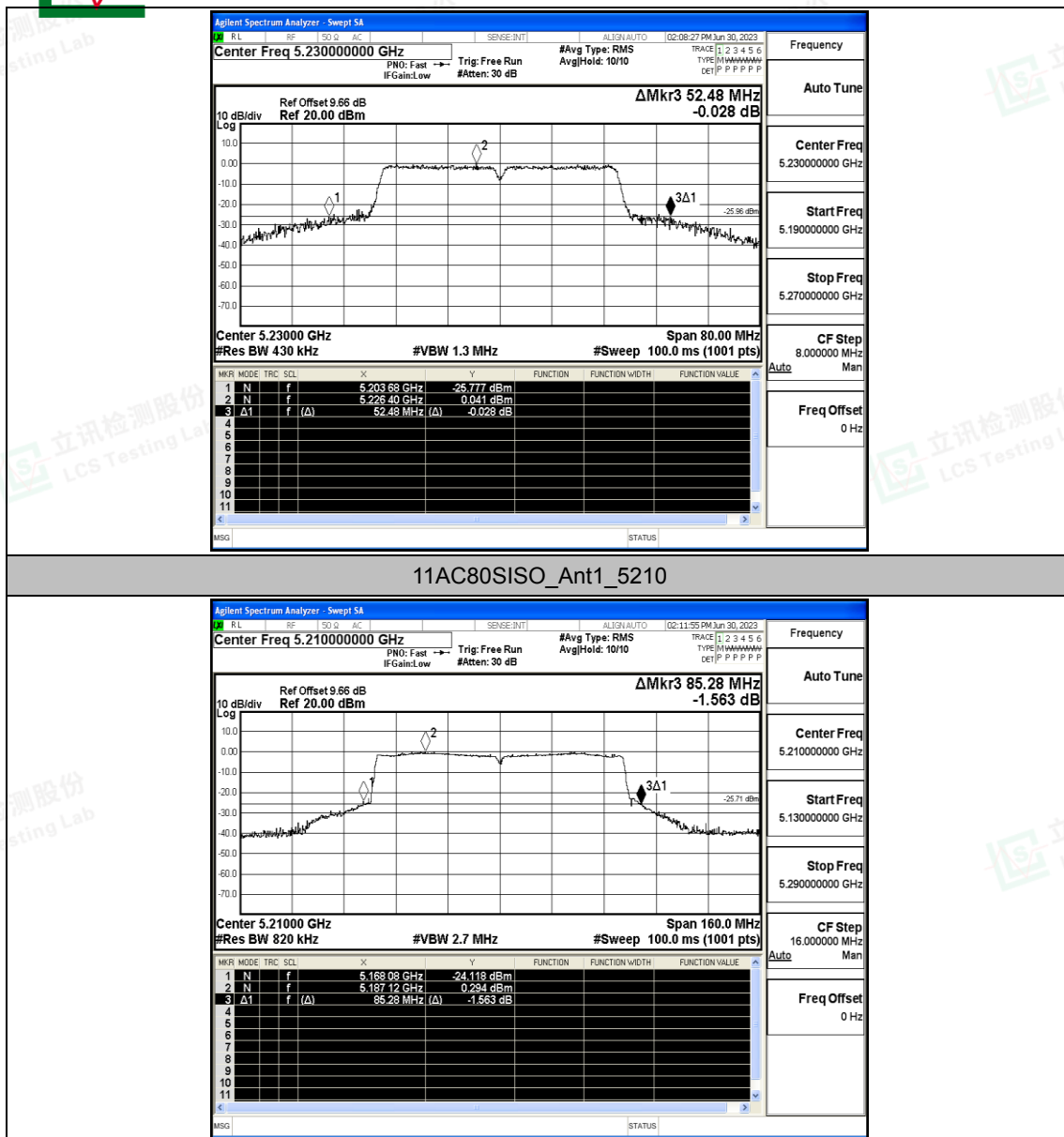


11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230







C.2 Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.26	≤24	PASS
		5220	13.45	≤24	PASS
		5240	13.51	≤24	PASS
11N20SISO	Ant1	5180	13.43	≤24	PASS
		5220	13.72	≤24	PASS
		5240	13.80	≤24	PASS
11N40SISO	Ant1	5190	12.68	≤24	PASS
		5230	13.05	≤24	PASS
11AC20SISO	Ant1	5180	13.49	≤24	PASS
		5220	13.73	≤24	PASS
		5240	13.80	≤24	PASS
11AC40SISO	Ant1	5190	12.23	≤24	PASS
		5230	12.58	≤24	PASS
11AC80SISO	Ant1	5210	10.51	≤24	PASS

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





C.3 Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-8.48	≤11.00	PASS
		5220	-0.88	≤11.00	PASS
		5240	-1.92	≤11.00	PASS
11N20SISO	Ant1	5180	-0.49	≤11.00	PASS
		5220	-0.92	≤11.00	PASS
		5240	-1.54	≤11.00	PASS
11N40SISO	Ant1	5190	-3.73	≤11.00	PASS
		5230	-4.14	≤11.00	PASS
11AC20SISO	Ant1	5180	-0.78	≤11.00	PASS
		5220	-1.18	≤11.00	PASS
		5240	-1.61	≤11.00	PASS
11AC40SISO	Ant1	5190	-4.15	≤11.00	PASS
		5230	-4.19	≤11.00	PASS
11AC80SISO	Ant1	5210	-6.45	≤11.00	PASS

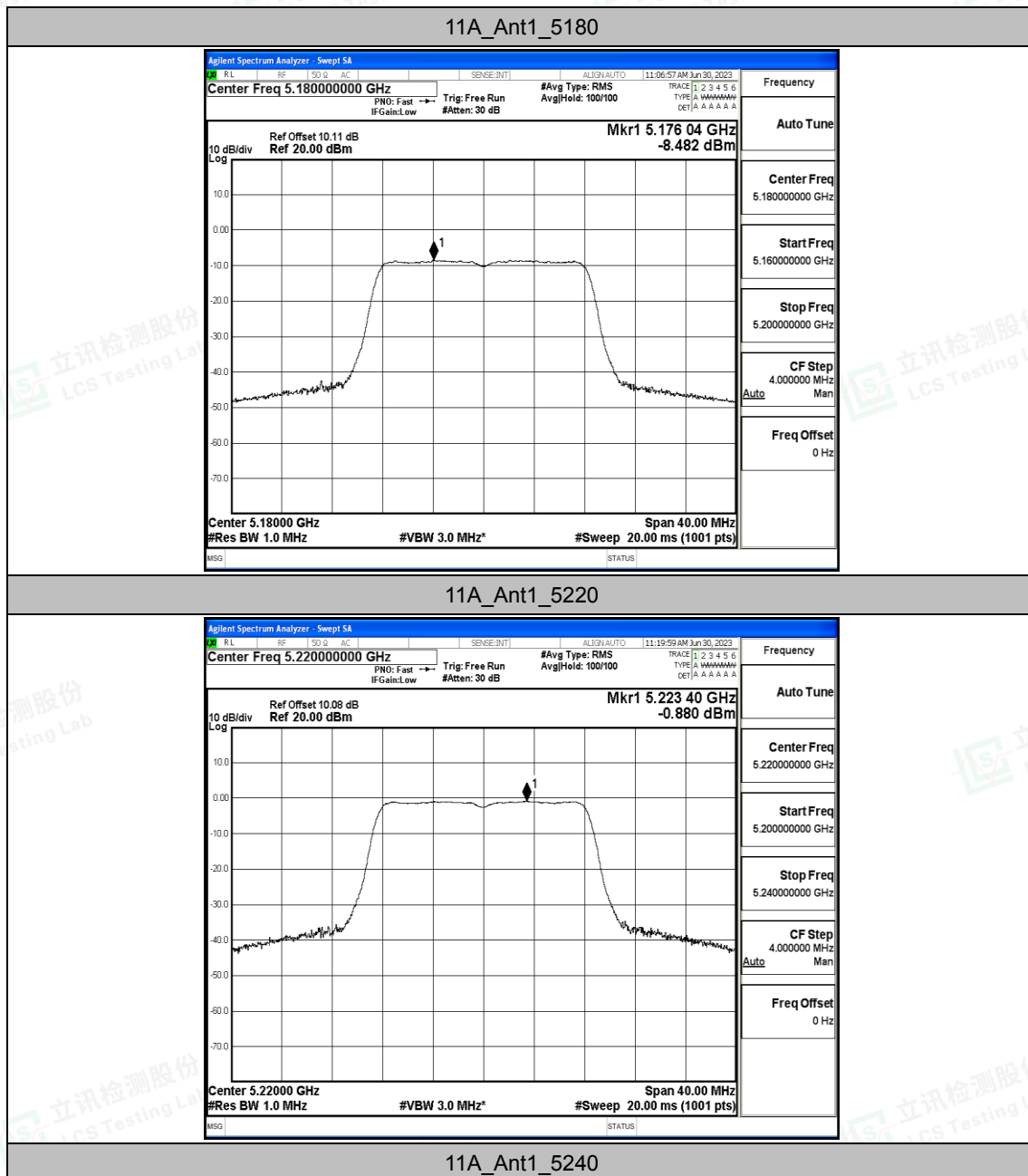
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

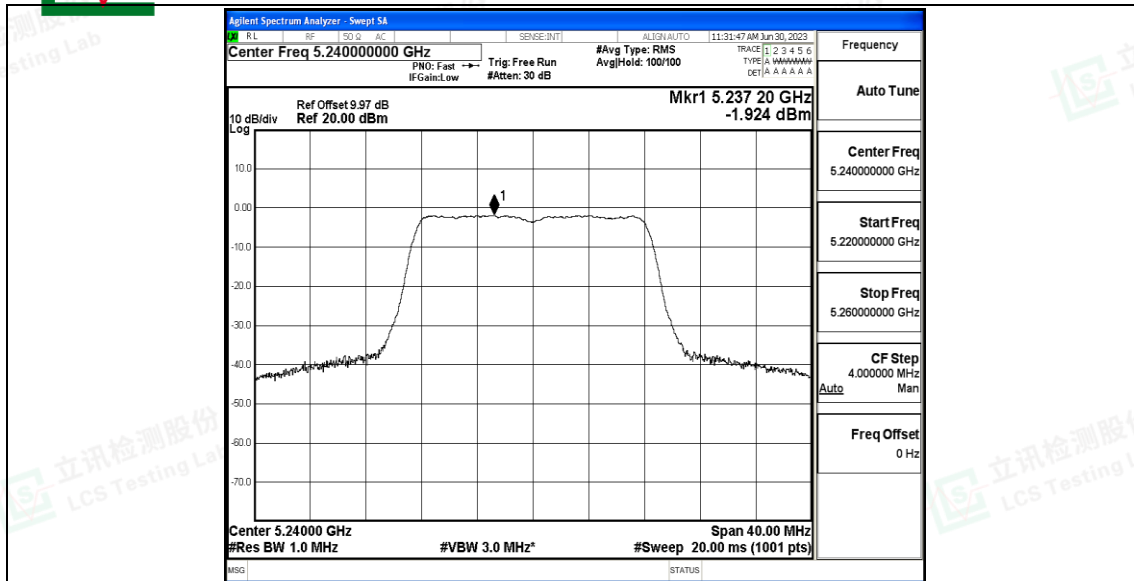
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.



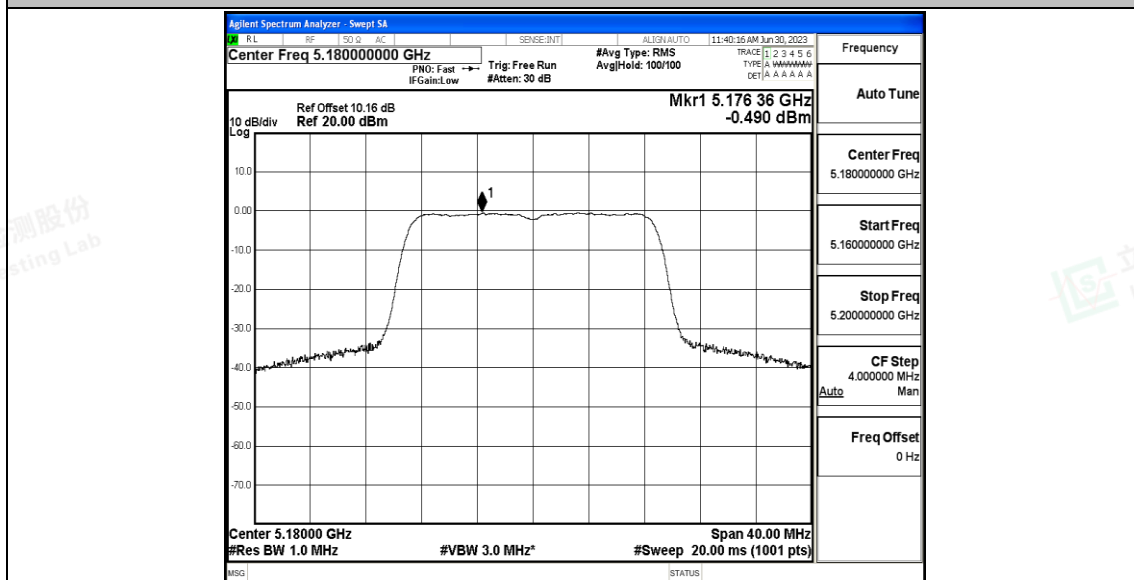


Test Graphs



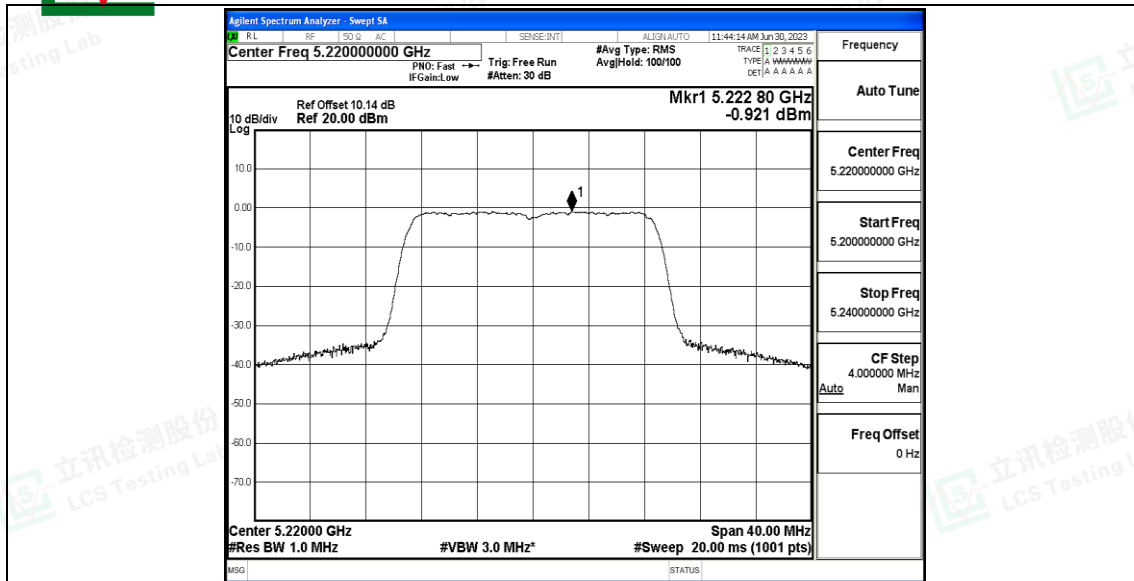


11N20SISO_Ant1_5180

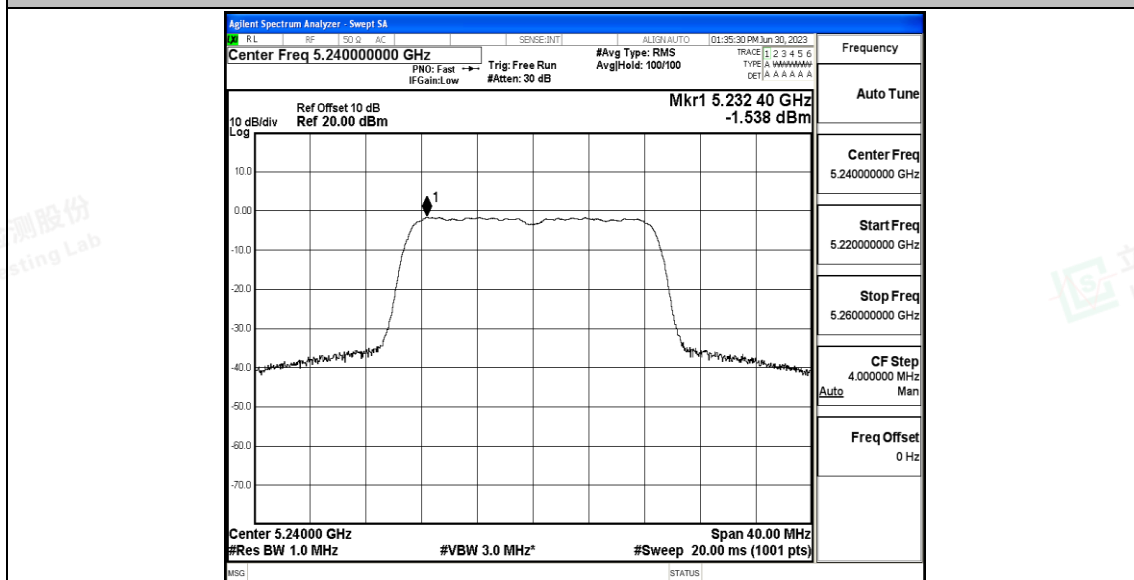


11N20SISO_Ant1_5220



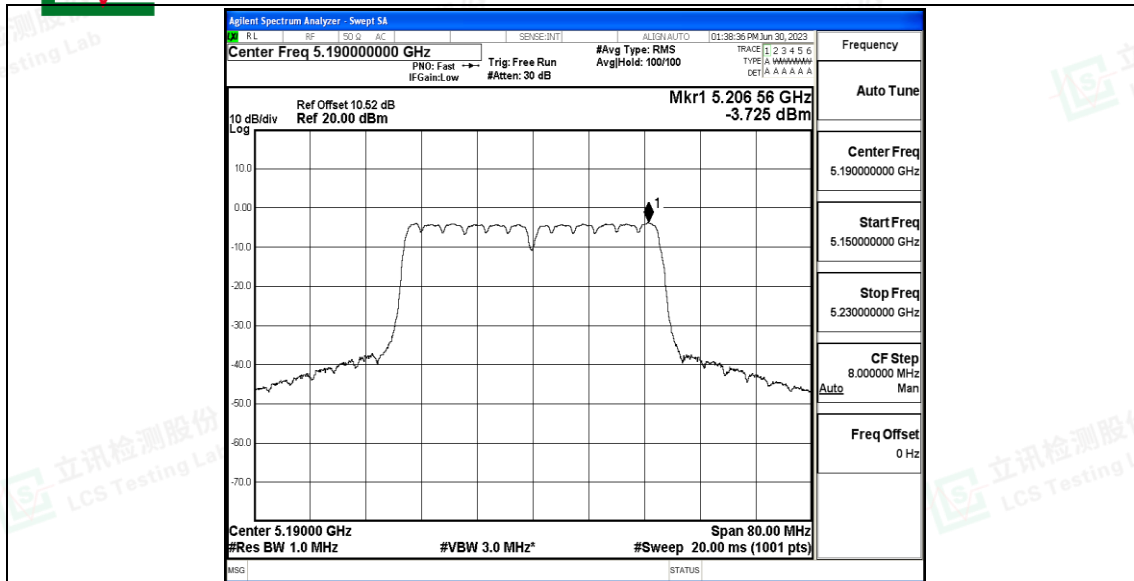


11N20SISO_Ant1_5240

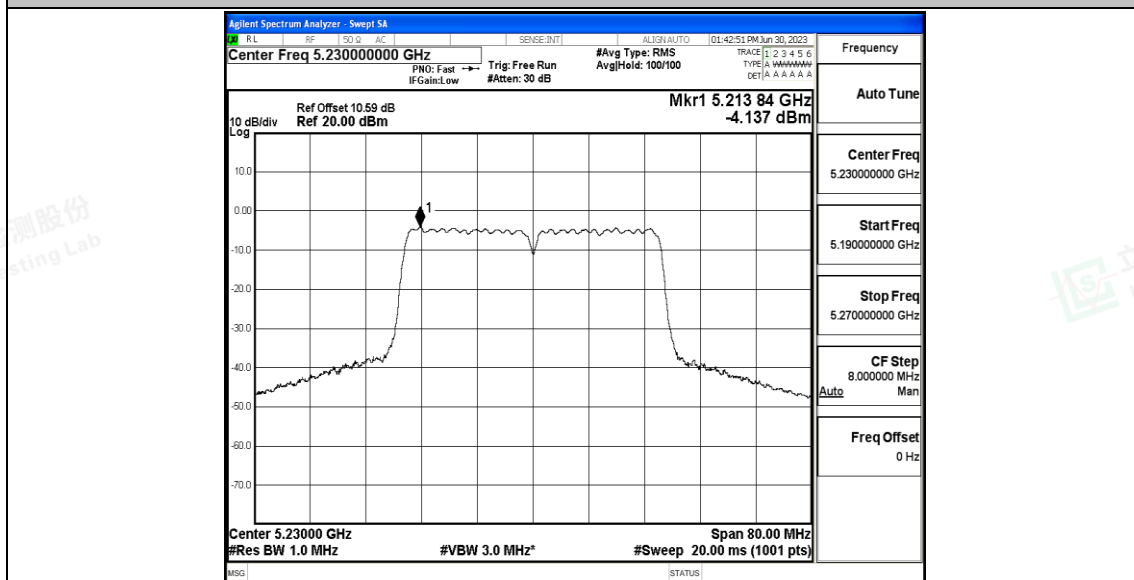


11N40SISO_Ant1_5190



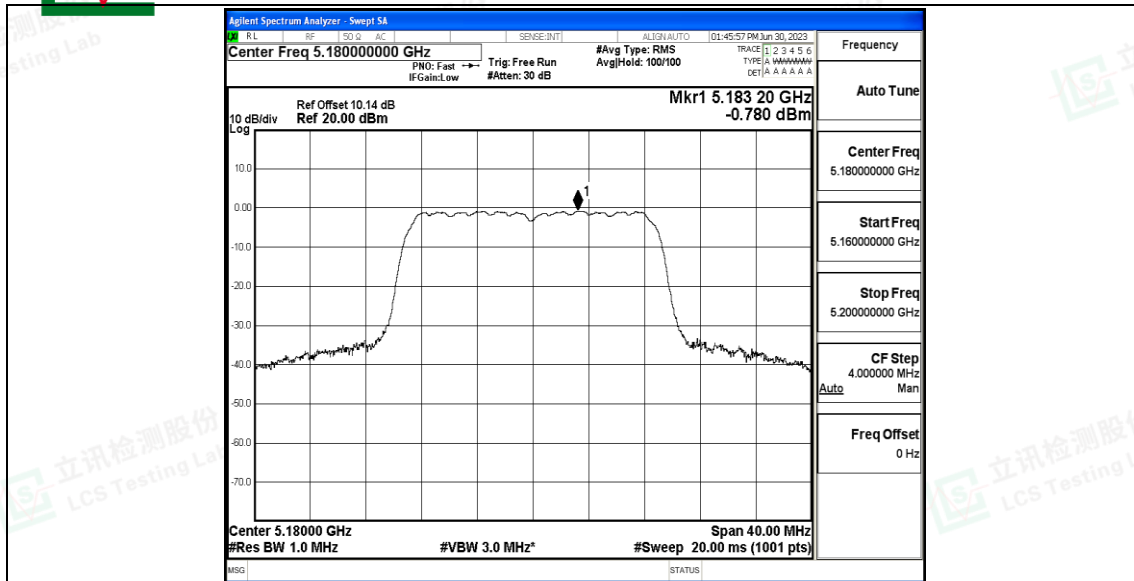


11N40SISO_Ant1_5230

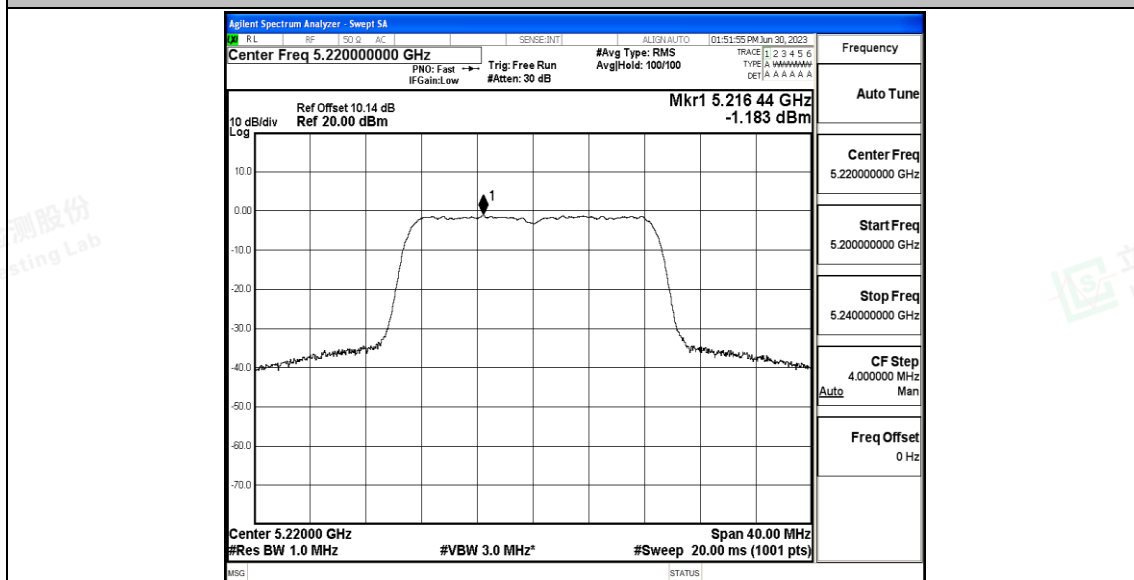


11AC20SISO_Ant1_5180



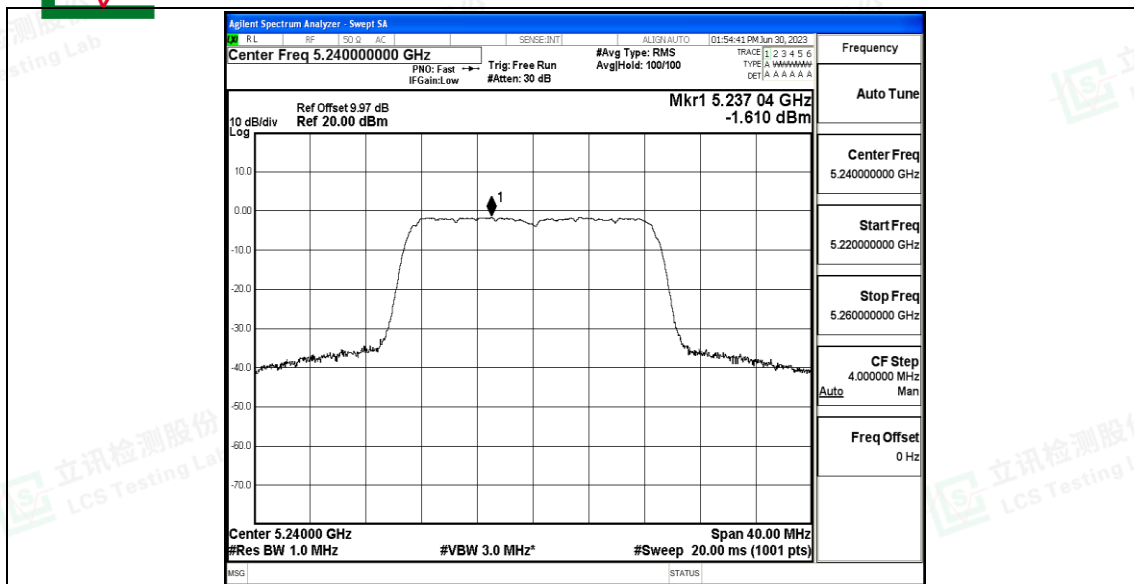


11AC20SISO_Ant1_5220

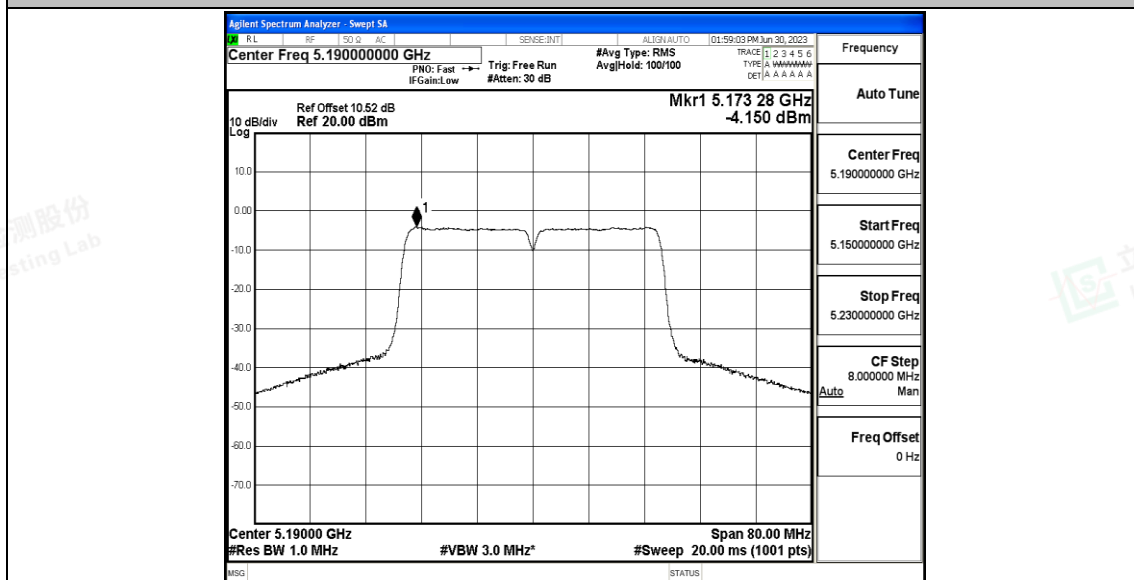


11AC20SISO_Ant1_5240



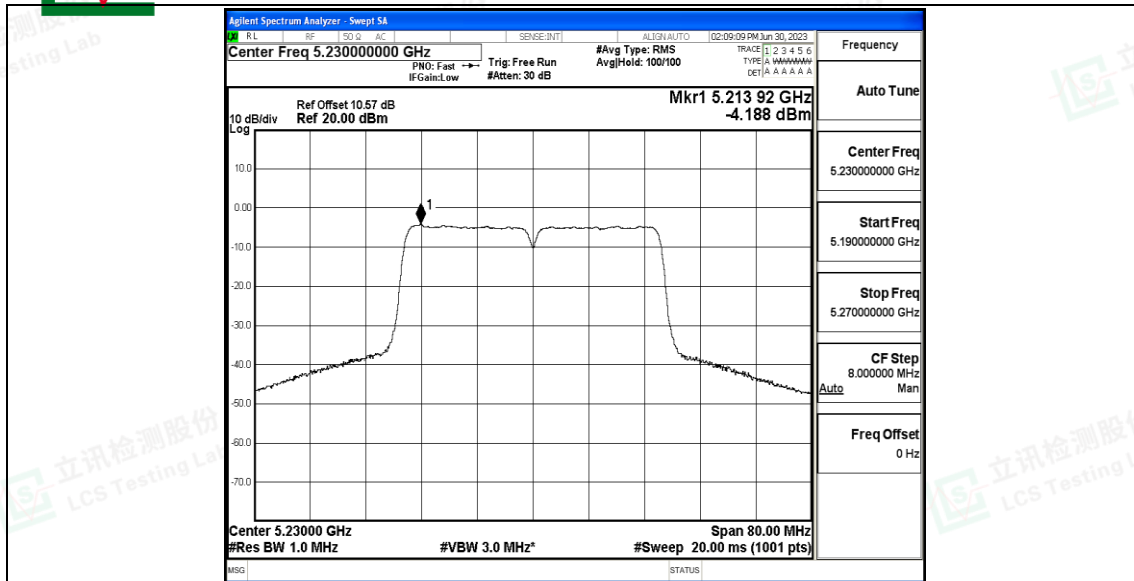


11AC40SISO_Ant1_5190

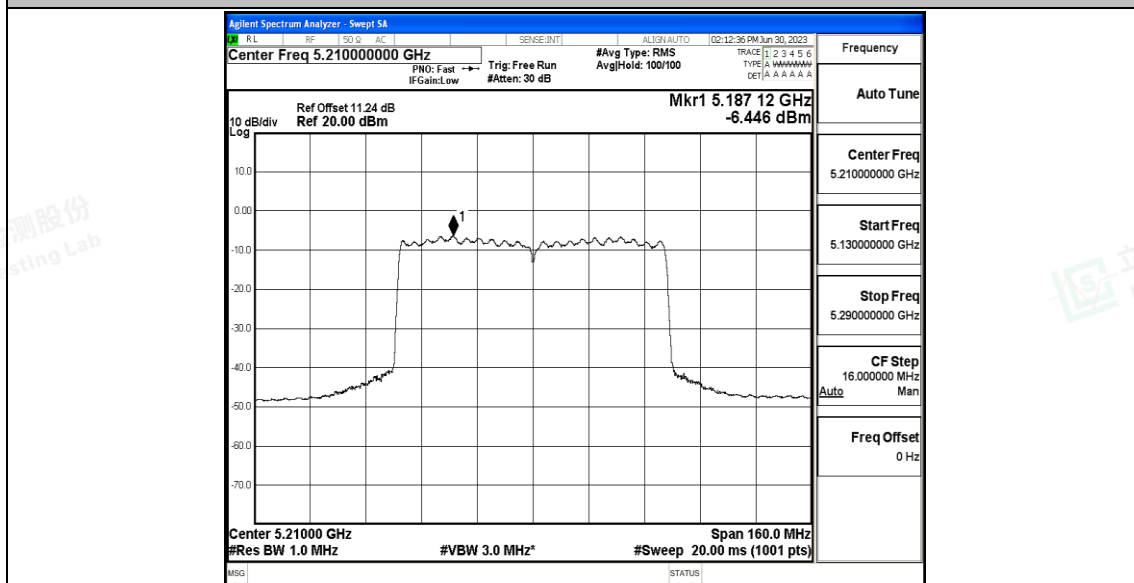


11AC40SISO_Ant1_5230





11AC80SISO_Ant1_5210





C.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5180	AV	4500.000	-57.96	≤-41.20	37.24	≤54	PASS
				AV	5149.600	-54.33	≤-41.20	40.87	≤54	PASS
				AV	5150.000	-53.81	≤-41.20	41.39	≤54	PASS
				Peak	4500.000	-52.22	≤-21.20	42.98	≤74	PASS
				Peak	4812.900	-47.36	≤-21.20	47.84	≤74	PASS
				Peak	5150.000	-49	≤-21.20	46.20	≤74	PASS
		High	5240	AV	5350.000	-56.45	≤-41.20	38.75	≤54	PASS
				AV	5350.080	-56.45	≤-41.20	38.75	≤54	PASS
				AV	5460.000	-57.12	≤-41.20	38.08	≤54	PASS
				Peak	5350.000	-54.51	≤-21.20	40.69	≤74	PASS
				Peak	5419.920	-47.36	≤-21.20	47.84	≤74	PASS
				Peak	5460.000	-55.19	≤-21.20	40.01	≤74	PASS
11N20SISO	Ant1	Low	5180	AV	4500.000	-57.95	≤-41.20	37.25	≤54	PASS
				AV	5149.600	-45.51	≤-41.20	49.69	≤54	PASS
				AV	5150.000	-44.87	≤-41.20	50.33	≤54	PASS
				Peak	4500.000	-53.81	≤-21.20	41.39	≤74	PASS
				Peak	5144.700	-35.34	≤-21.20	59.86	≤74	PASS
				Peak	5150.000	-35.29	≤-21.20	59.91	≤74	PASS
		High	5240	AV	5350.000	-56.41	≤-41.20	38.79	≤54	PASS
				AV	5351.280	-56.34	≤-41.20	38.86	≤54	PASS
				AV	5460.000	-56.92	≤-41.20	38.28	≤54	PASS
				Peak	5350.000	-52.02	≤-21.20	43.18	≤74	PASS
				Peak	5363.760	-47.96	≤-21.20	47.24	≤74	PASS
				Peak	5460.000	-51.24	≤-21.20	43.96	≤74	PASS
11N40SISO	Ant1	Low	5190	AV	4500.000	-57.96	≤-41.20	37.24	≤54	PASS
				AV	5149.600	-44.71	≤-41.20	50.49	≤54	PASS
				AV	5150.000	-44.38	≤-41.20	50.82	≤54	PASS
				Peak	4500.000	-54.67	≤-21.20	40.53	≤74	PASS
				Peak	5146.800	-41.22	≤-21.20	53.98	≤74	PASS
				Peak	5150.000	-43.42	≤-21.20	51.78	≤74	PASS
		High	5230	AV	5350.000	-56.28	≤-41.20	38.92	≤54	PASS
				AV	5351.840	-56.03	≤-41.20	39.17	≤54	PASS
				AV	5460.000	-56.61	≤-41.20	38.59	≤54	PASS
				Peak	5350.000	-51.56	≤-21.20	43.64	≤74	PASS
				Peak	5373.940	-46.95	≤-21.20	48.25	≤74	PASS





11AC20SI SO	Ant1	Low	5180	Peak	5460.000	-52.54	≤-21.20	42.66	≤74	PASS
				AV	4500.000	-57.75	≤-41.20	37.45	≤54	PASS
				AV	5149.600	-47.12	≤-41.20	48.08	≤54	PASS
				AV	5150.000	-46.3	≤-41.20	48.90	≤54	PASS
				Peak	4500.000	-51.14	≤-21.20	44.06	≤74	PASS
				Peak	5145.400	-41.63	≤-21.20	53.57	≤74	PASS
				Peak	5150.000	-42.42	≤-21.20	52.78	≤74	PASS
		High	5240	AV	5350.000	-56.48	≤-41.20	38.72	≤54	PASS
				AV	5350.800	-56.44	≤-41.20	38.76	≤54	PASS
				AV	5460.000	-57.07	≤-41.20	38.13	≤54	PASS
				Peak	5350.000	-53.31	≤-21.20	41.89	≤74	PASS
				Peak	5417.280	-48.04	≤-21.20	47.16	≤74	PASS
				Peak	5460.000	-48.74	≤-21.20	46.46	≤74	PASS
11AC40SI SO	Ant1	Low	5190	AV	4500.000	-57.64	≤-41.20	37.56	≤54	PASS
				AV	5149.600	-44.49	≤-41.20	50.71	≤54	PASS
				AV	5150.000	-43.41	≤-41.20	51.79	≤54	PASS
				Peak	4500.000	-51.52	≤-21.20	43.68	≤74	PASS
				Peak	5149.600	-36.95	≤-21.20	58.25	≤74	PASS
				Peak	5150.000	-39.01	≤-21.20	56.19	≤74	PASS
		High	5230	AV	5350.000	-56.32	≤-41.20	38.88	≤54	PASS
				AV	5373.680	-55.96	≤-41.20	39.24	≤54	PASS
				AV	5460.000	-56.38	≤-41.20	38.82	≤54	PASS
				Peak	5350.000	-54.87	≤-21.20	40.33	≤74	PASS
				Peak	5377.320	-48.15	≤-21.20	47.05	≤74	PASS
				Peak	5460.000	-51.76	≤-21.20	43.44	≤74	PASS
11AC80SI SO	Ant1	Low	5210	AV	4500.000	-57.21	≤-41.20	37.99	≤54	PASS
				AV	5149.500	-46.99	≤-41.20	48.21	≤54	PASS
				AV	5150.000	-46.14	≤-41.20	49.06	≤54	PASS
				Peak	4500.000	-52.33	≤-21.20	42.87	≤74	PASS
				Peak	5145.000	-40.09	≤-21.20	55.11	≤74	PASS
				Peak	5150.000	-45.78	≤-21.20	49.42	≤74	PASS
		High	5210	AV	5350.000	-55.36	≤-41.20	39.84	≤54	PASS
				AV	5353.320	-55.28	≤-41.20	39.92	≤54	PASS
				AV	5460.000	-56.06	≤-41.20	39.14	≤54	PASS
				Peak	5350.000	-51.14	≤-21.20	44.06	≤74	PASS
				Peak	5365.640	-47.67	≤-21.20	47.53	≤74	PASS
				Peak	5460.000	-53.75	≤-21.20	41.45	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for



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



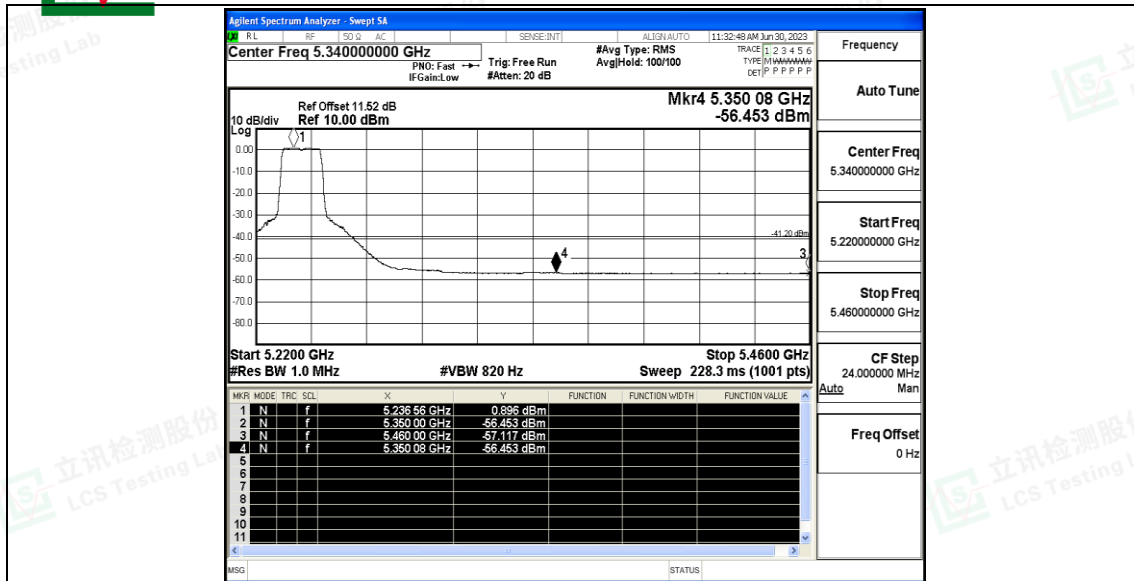
average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



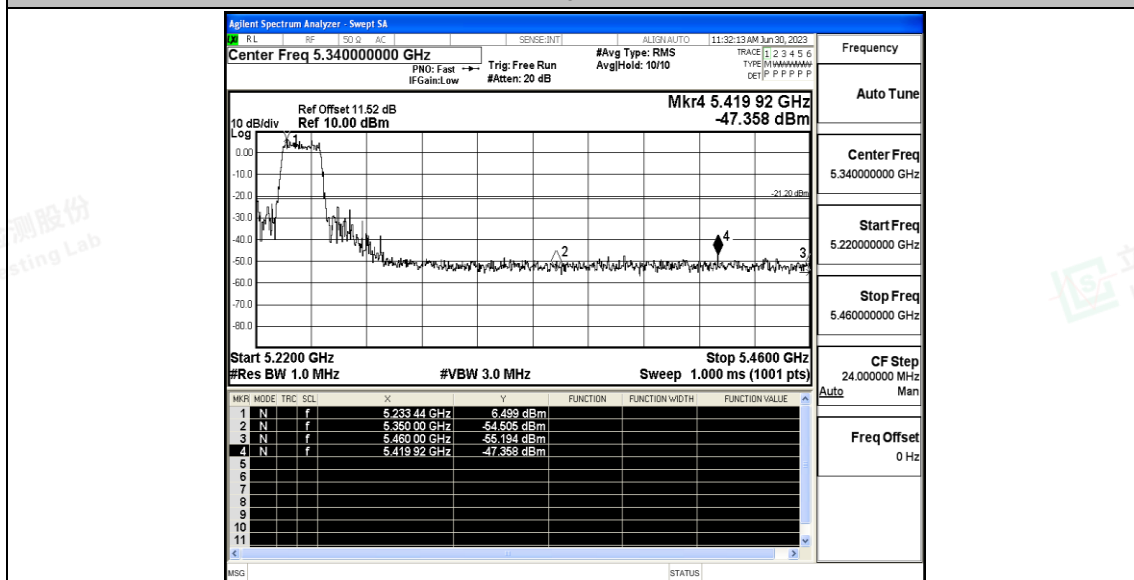


Test Graphs



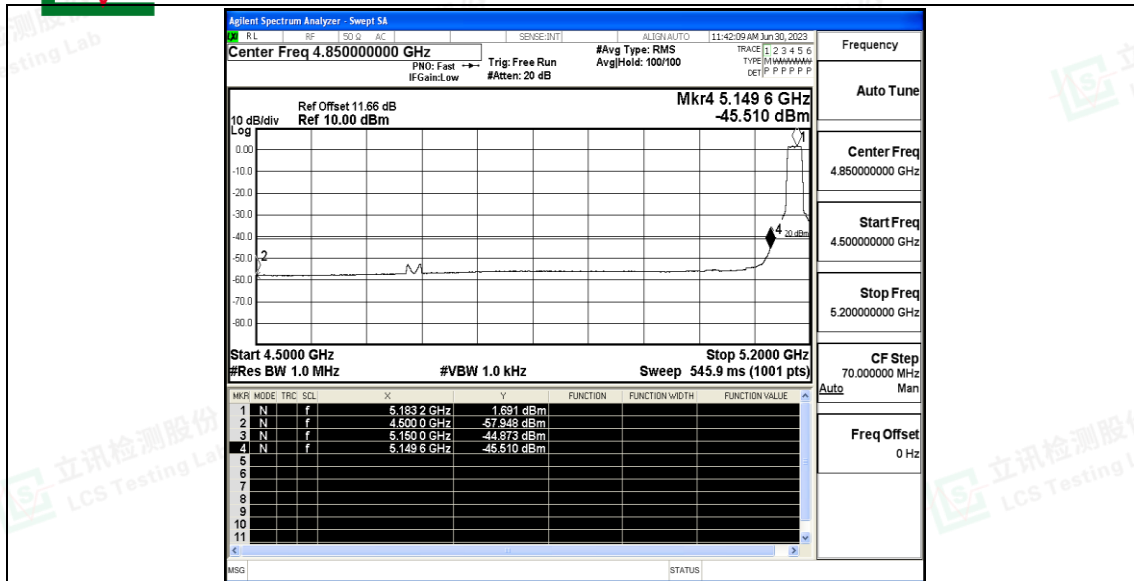


11A_Ant1_High_5240_Peak

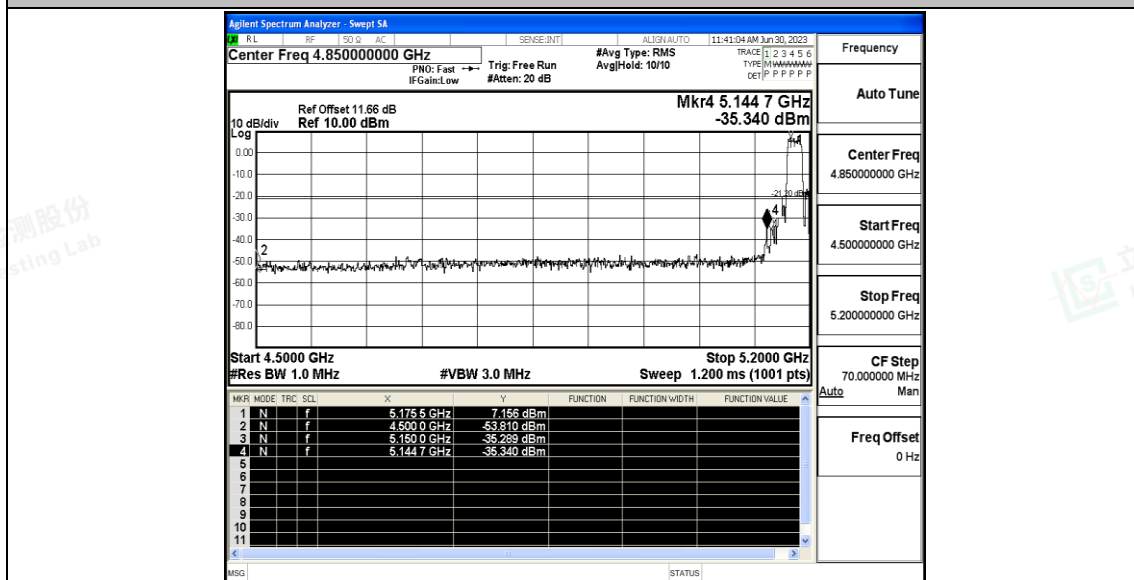


11N20SISO_Ant1_Low_5180_AV



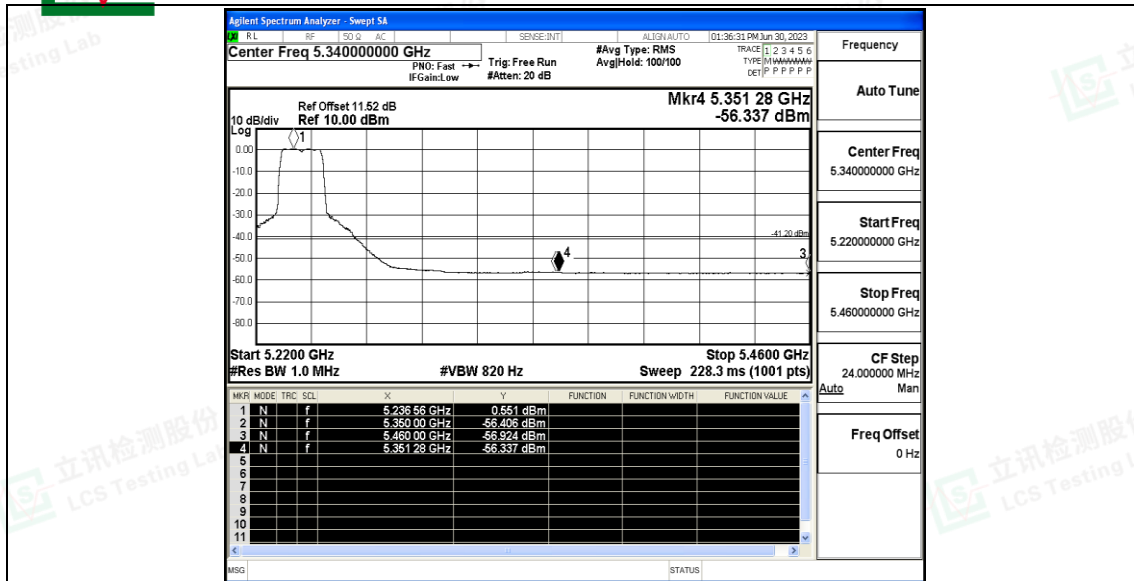


11N20SISO_Ant1_Low_5180_Peak

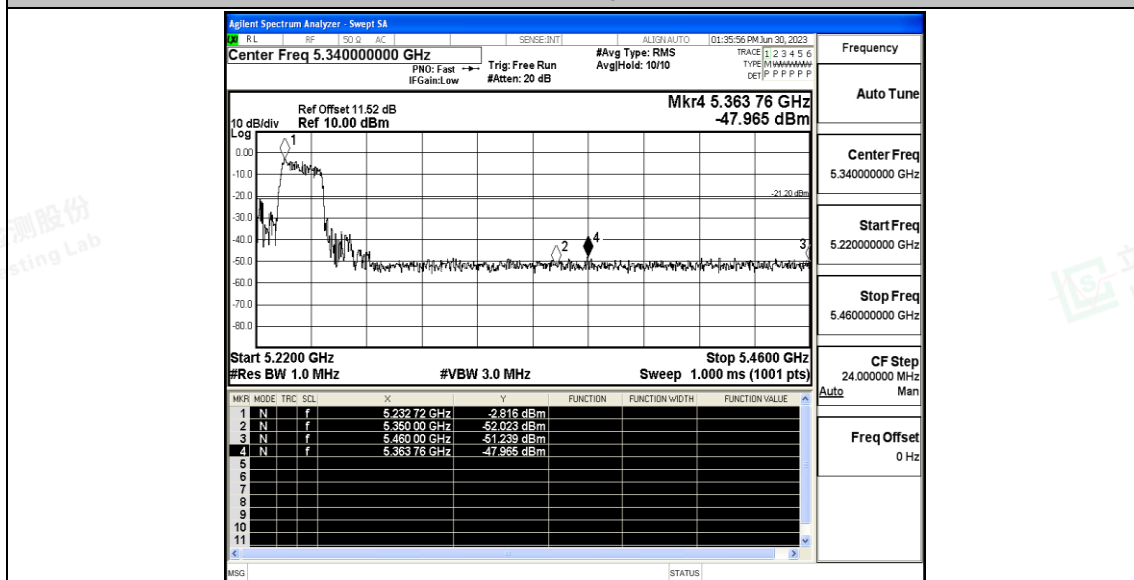


11N20SISO_Ant1_High_5240_AV



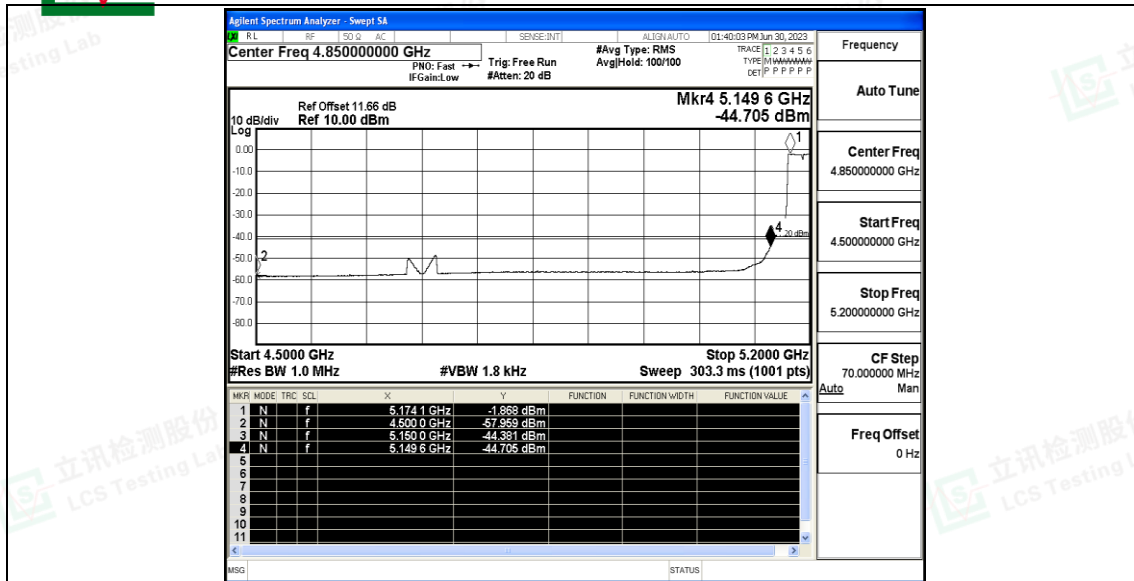


11N20SISO_Ant1_High_5240_Peak

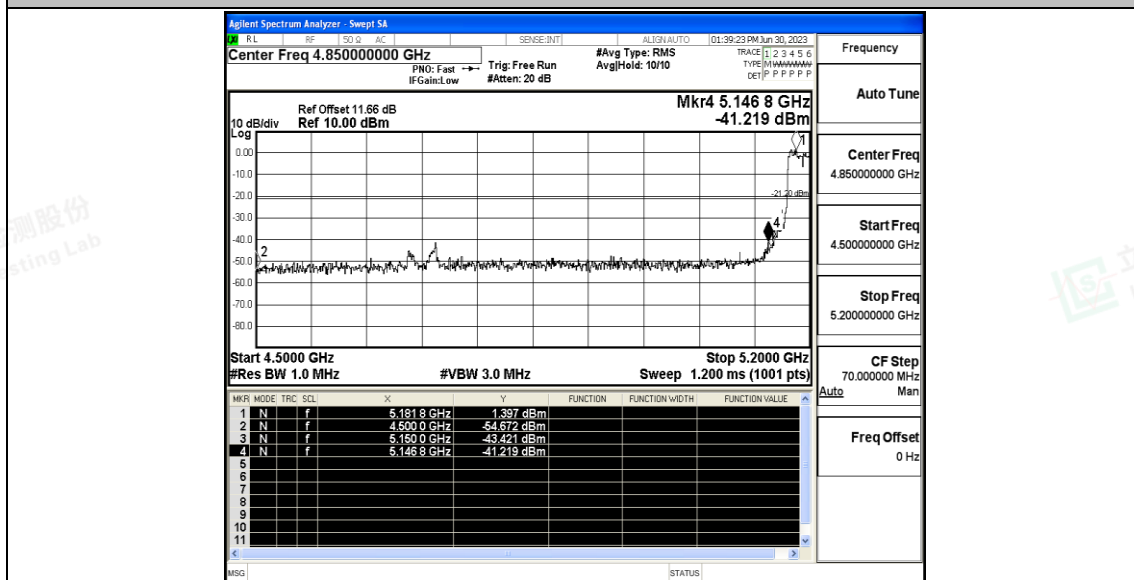


11N40SISO_Ant1_Low_5190_AV



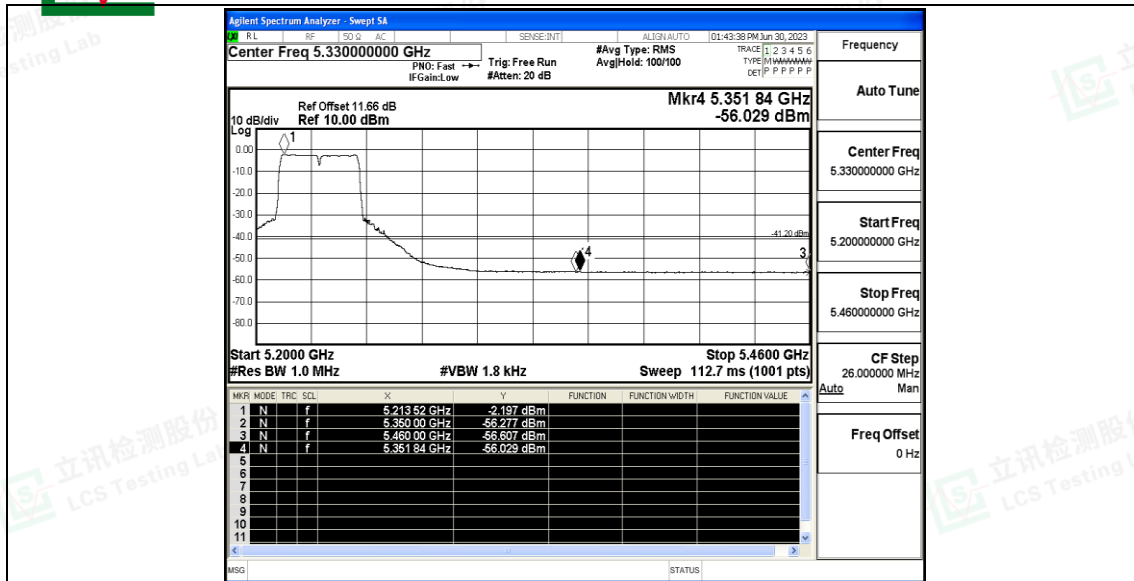


11N40SISO_Ant1_Low_5190_Peak

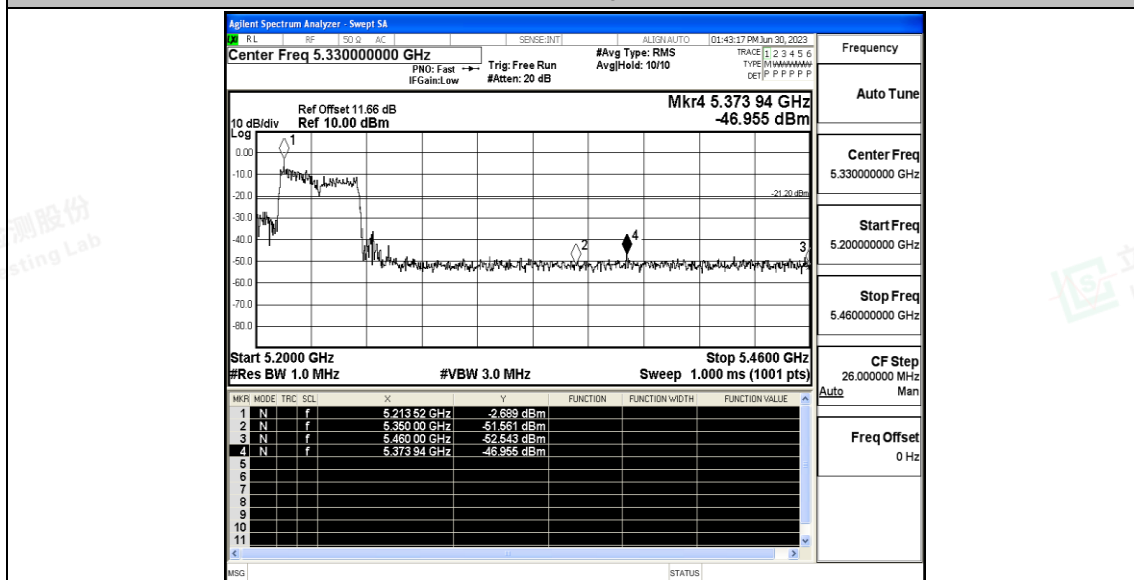


11N40SISO_Ant1_High_5230_AV



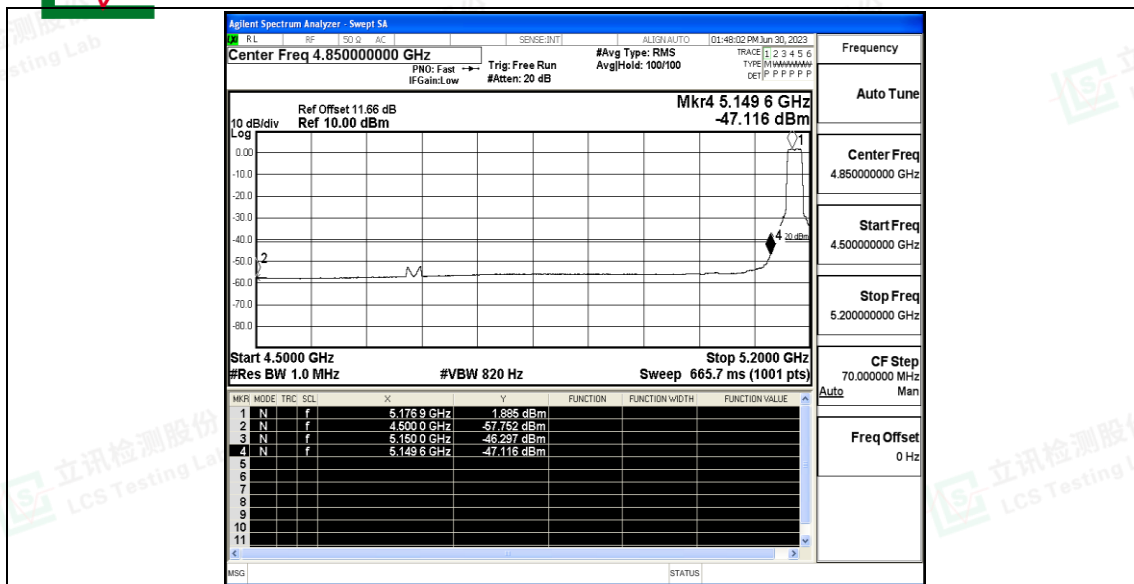


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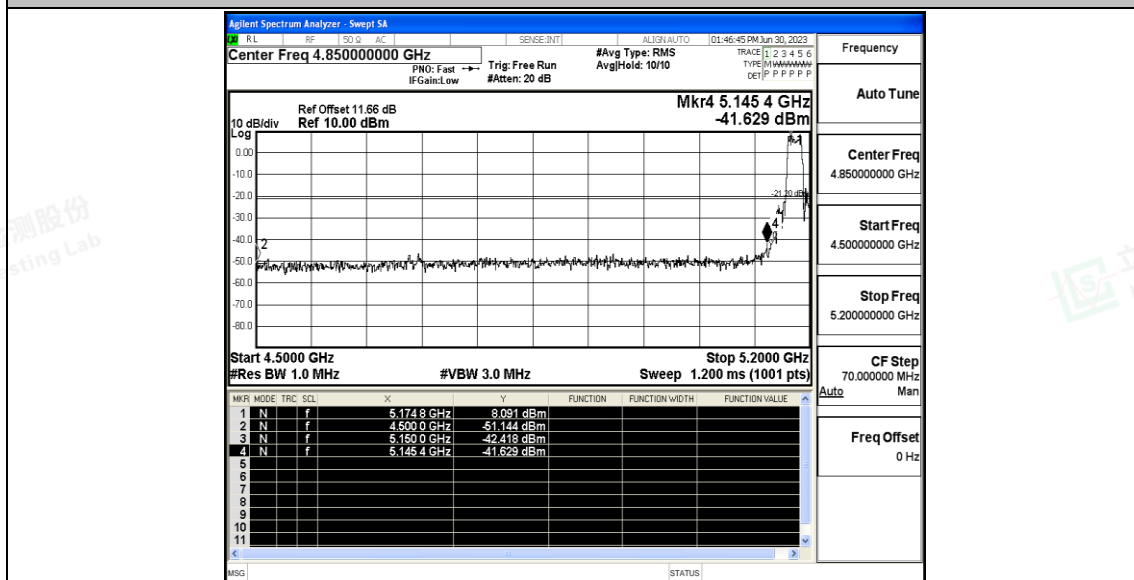


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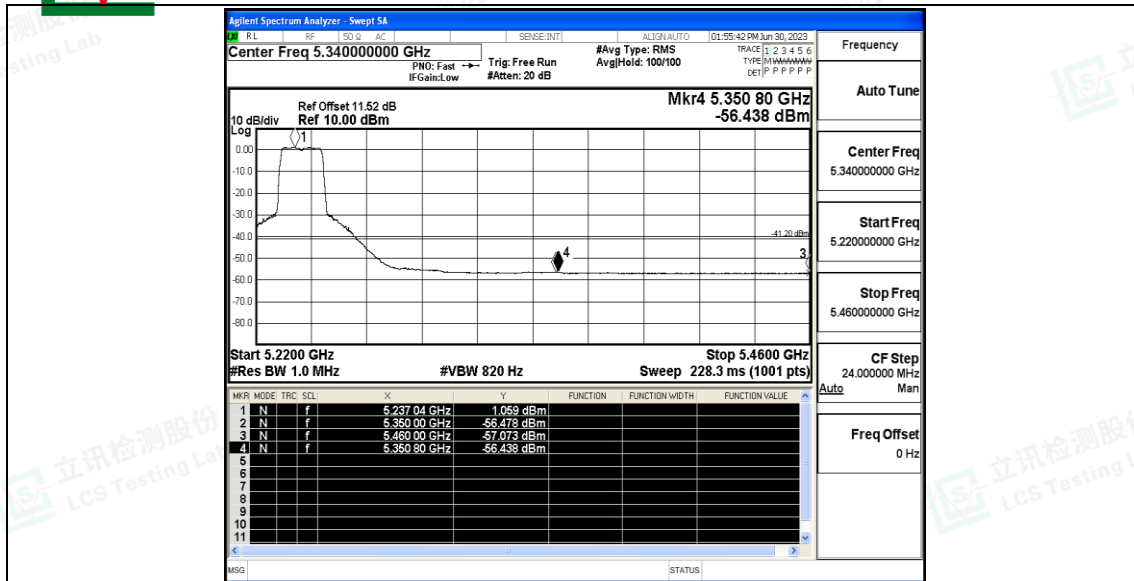


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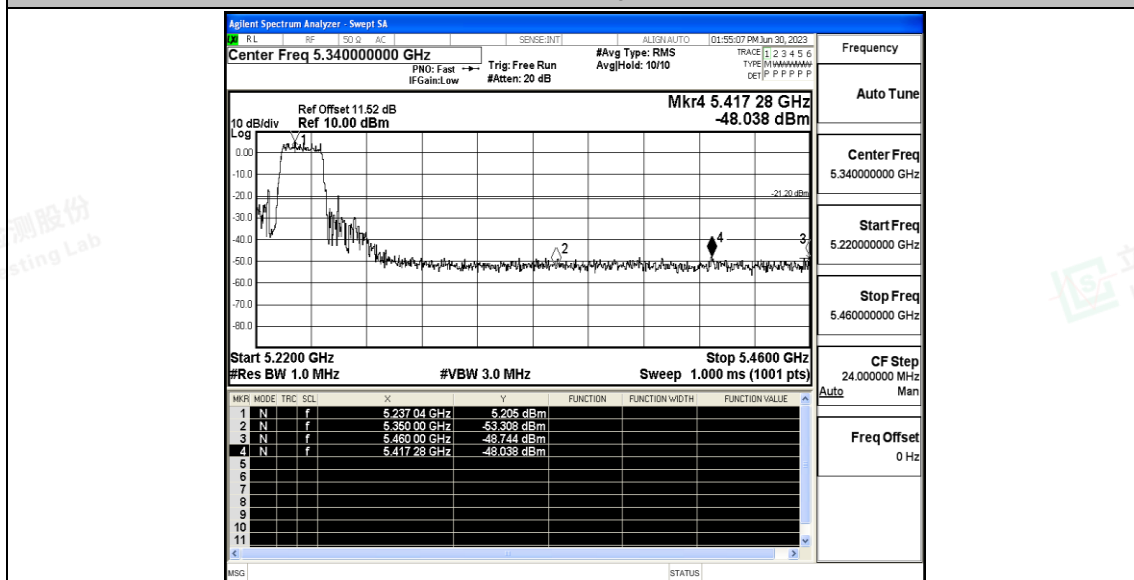


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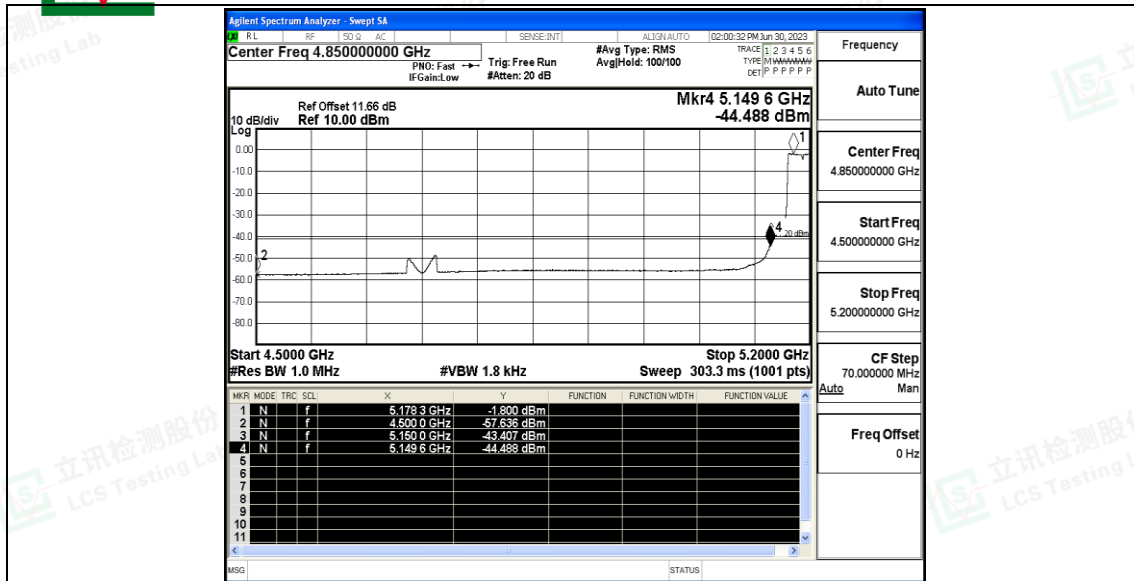


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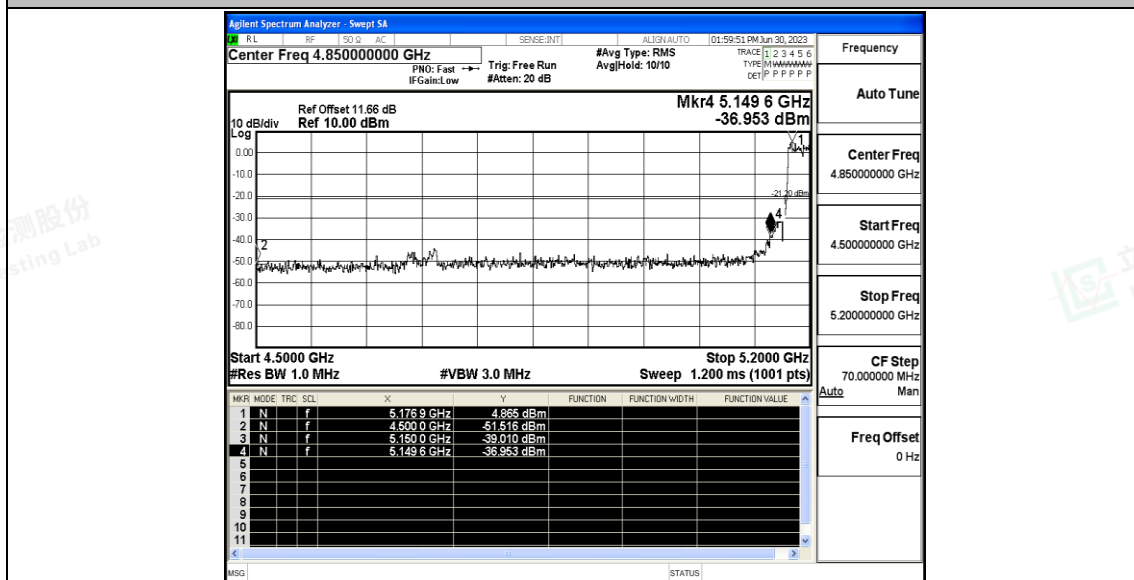


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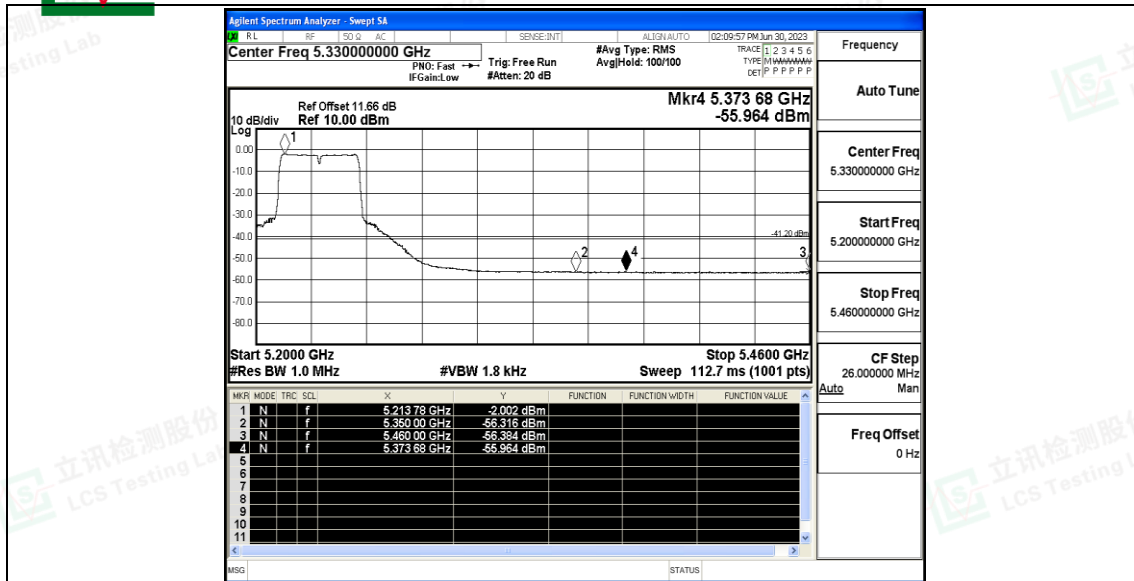


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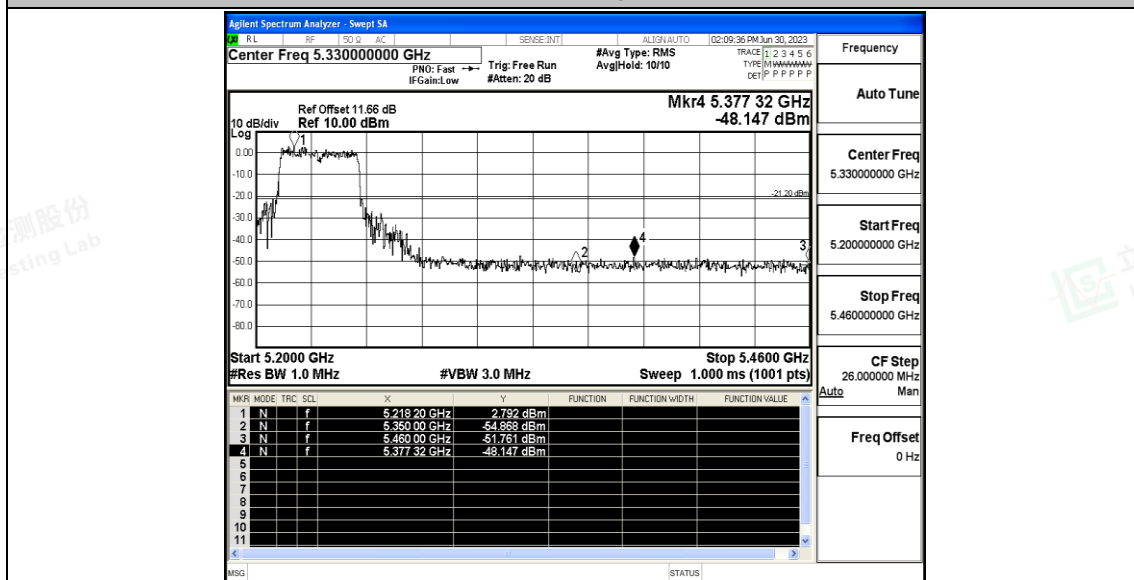


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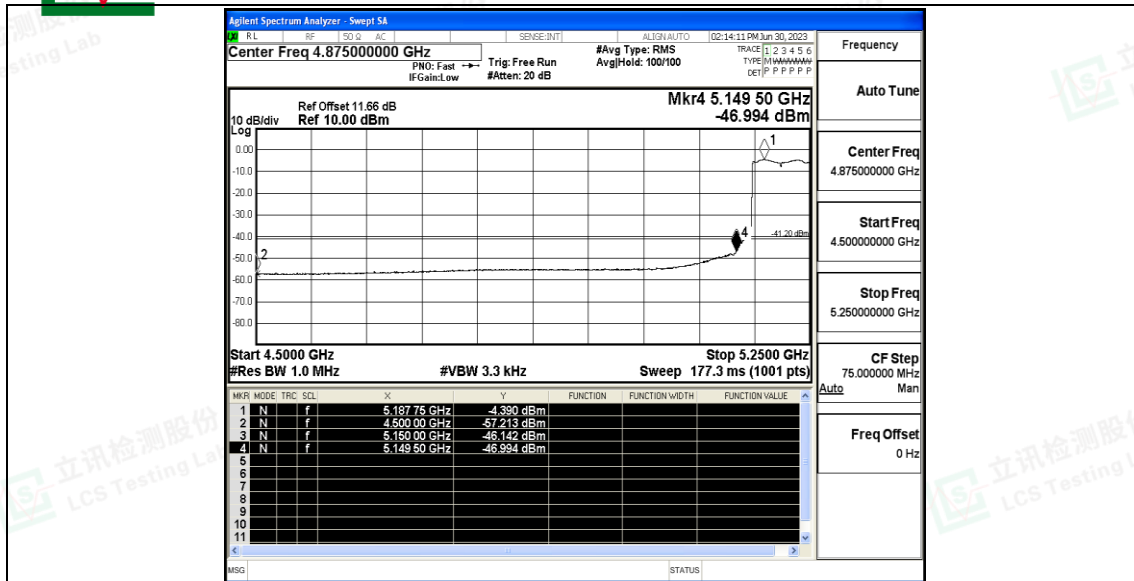


11AC40SISO_Ant1_High_5230_Peak

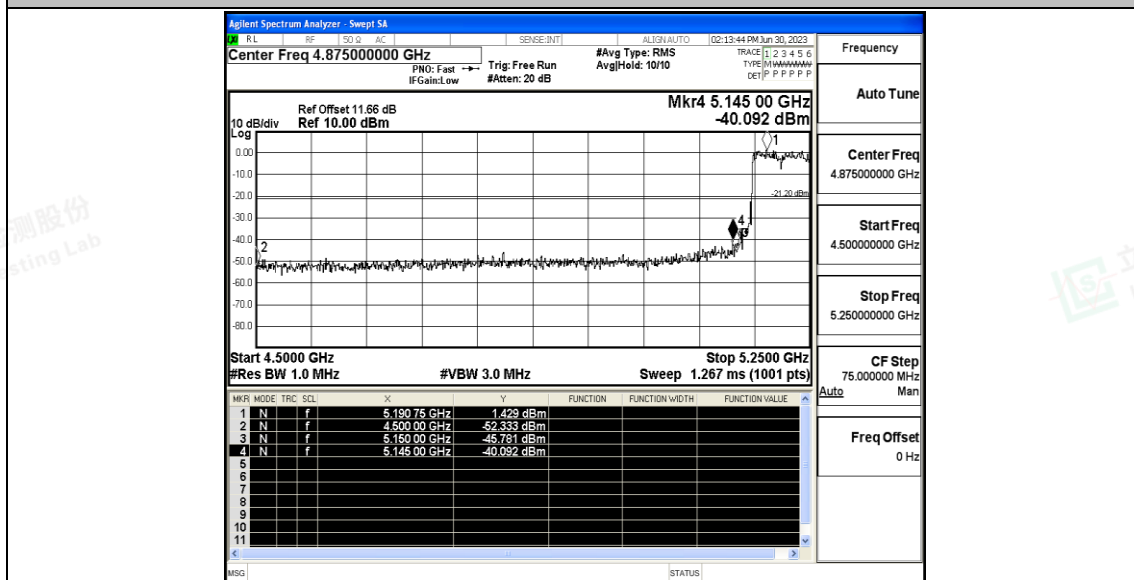


11AC80SISO_Ant1_Low_5210_AV



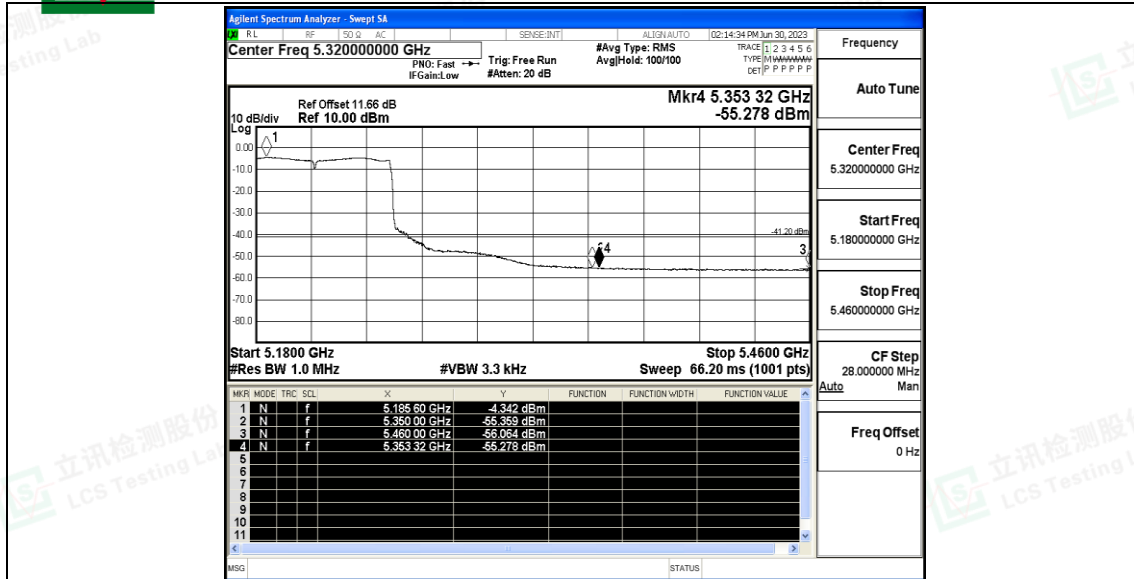


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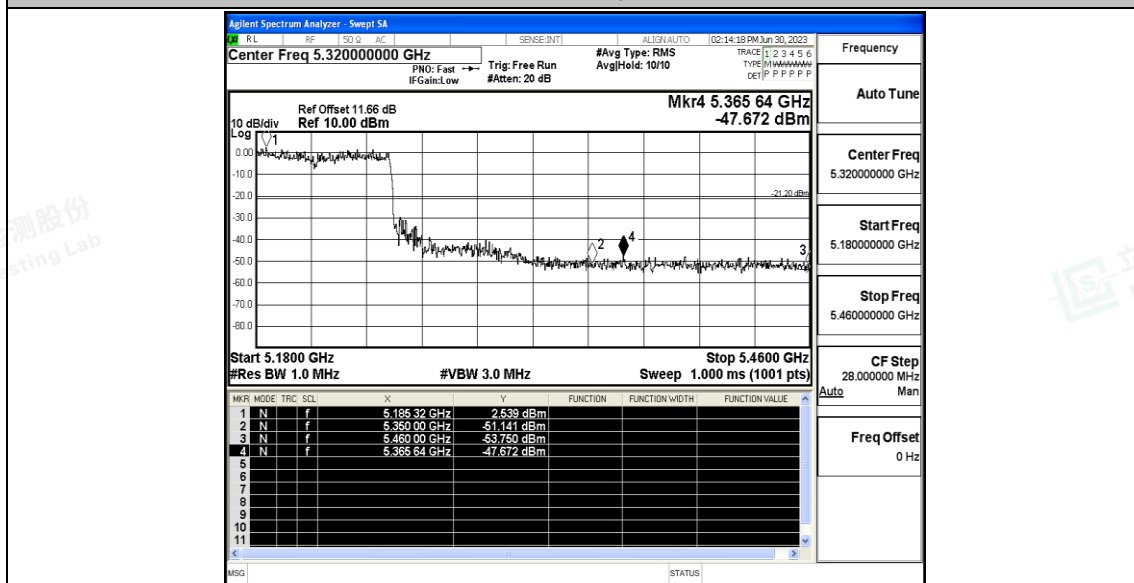


11AC80SISO_Ant1_High_5210_AV





11AC80SISO_Ant1_High_5210_Peak





C.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
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
		5220	NV	NT	-20000.00	-3.831418	20	PASS
			LV	NT	-40000.00	-7.662835	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5240	NV	NT	-40000.00	-7.633588	20	PASS
			LV	NT	-20000.00	-3.816794	20	PASS
			HV	NT	-20000.00	-3.816794	20	PASS
11AC40S ISO	Ant1	5190	NV	NT	-40000.00	-7.707129	20	PASS
			LV	NT	-40000.00	-7.707129	20	PASS
			HV	NT	-40000.00	-7.707129	20	PASS
		5230	NV	NT	-40000.00	-7.648184	20	PASS
			LV	NT	-40000.00	-7.648184	20	PASS
			HV	NT	-40000.00	-7.648184	20	PASS
11AC80S ISO	Ant1	5210	NV	NT	0.00	0.000000	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-80000.00	-15.355086	20	PASS

Temperature								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20S ISO	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
			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	-20000.00	-3.861004	20	PASS
			NV	30	-20000.00	-3.861004	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	-20000.00	-3.861004	20	PASS
		5220	NV	-30	-20000.00	-3.831418	20	PASS
			NV	-20	-20000.00	-3.831418	20	PASS
			NV	-10	-20000.00	-3.831418	20	PASS





			NV	0	-40000.00	-7.662835	20	PASS
			NV	10	-20000.00	-3.831418	20	PASS
			NV	20	-40000.00	-7.662835	20	PASS
			NV	30	-20000.00	-3.831418	20	PASS
			NV	40	-20000.00	-3.831418	20	PASS
			NV	50	-20000.00	-3.831418	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	-20000.00	-3.816794	20	PASS
			NV	10	-40000.00	-7.633588	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
			NV	50	-20000.00	-3.816794	20	PASS
11AC40S ISO	Ant1	5190	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
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
		5230	NV	-30	-40000.00	-7.648184	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	-40000.00	-7.648184	20	PASS
			NV	40	-40000.00	-7.648184	20	PASS
			NV	50	0.00	0.000000	20	PASS
11AC80S ISO	Ant1	5210	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-80000.00	-15.355086	20	PASS
			NV	-10	-80000.00	-15.355086	20	PASS
			NV	0	-80000.00	-15.355086	20	PASS
			NV	10	-80000.00	-15.355086	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	80000.00	15.355086	20	PASS





C.6 Duty Cycle

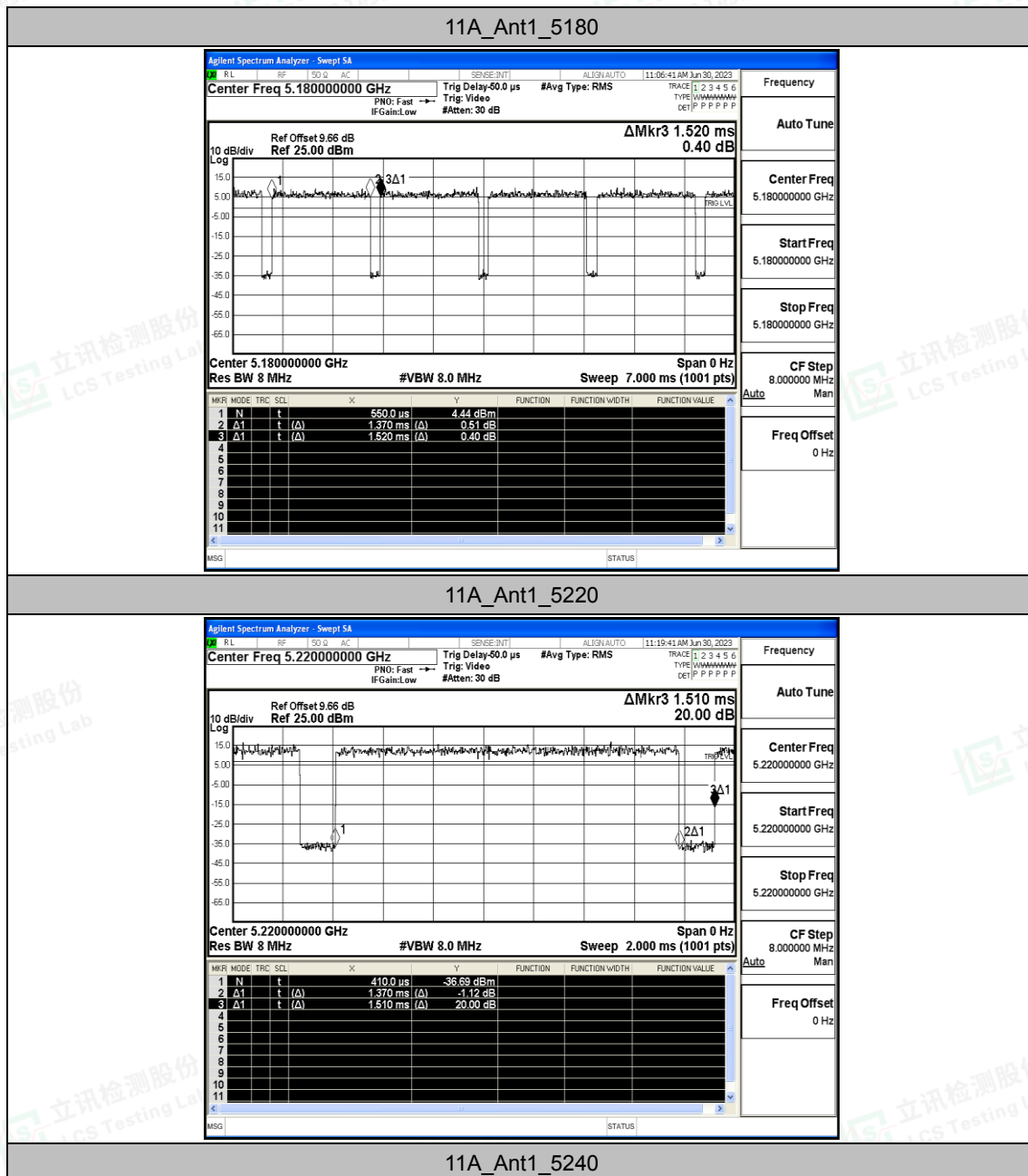
Test Result

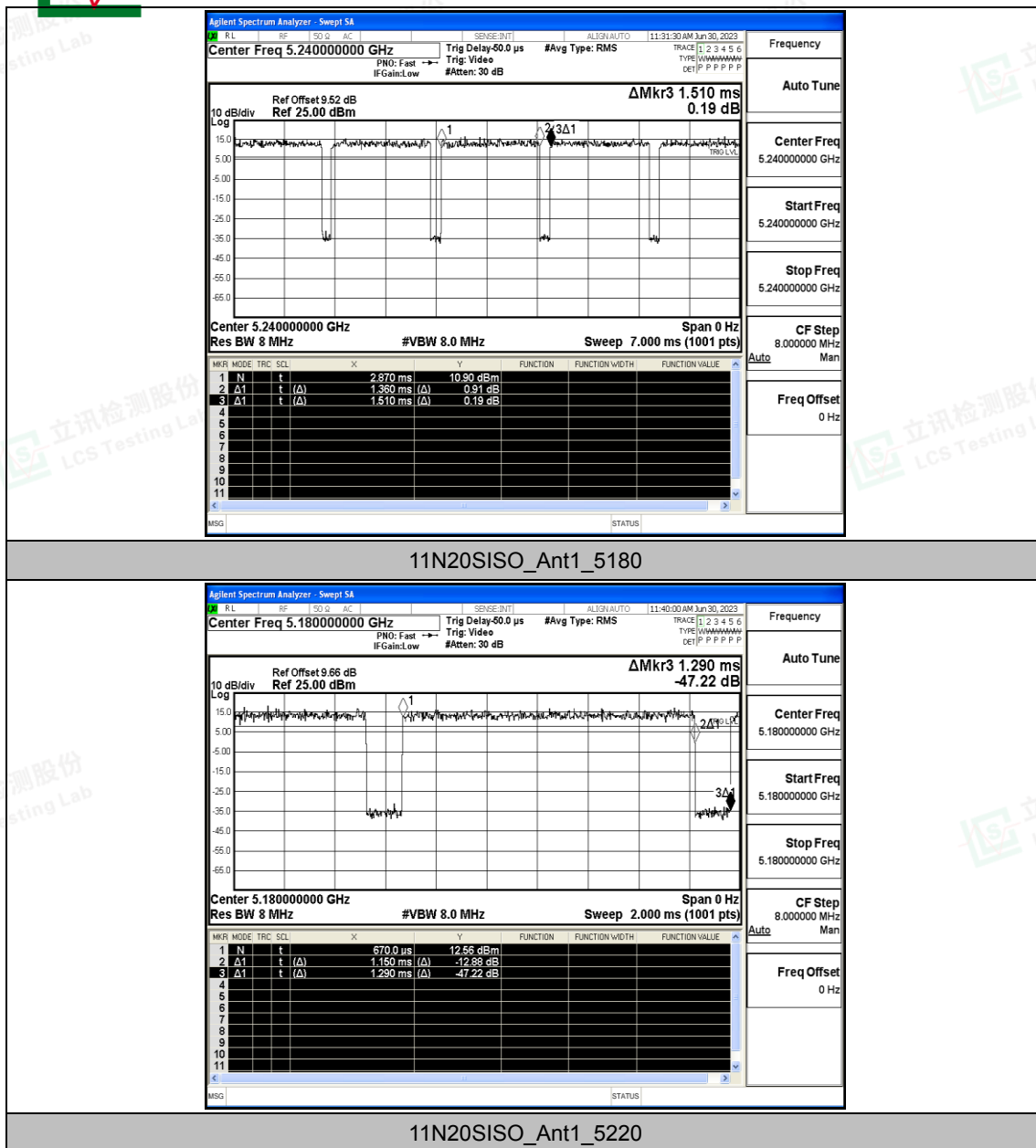
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.37	1.52	90.13
		5220	1.37	1.51	90.73
		5240	1.36	1.51	90.07
11N20SISO	Ant1	5180	1.15	1.29	89.15
		5220	1.27	1.42	89.44
		5240	1.27	1.42	89.44
11N40SISO	Ant1	5190	0.64	0.78	82.05
		5230	0.63	0.78	80.77
11AC20SISO	Ant1	5180	1.28	1.43	89.51
		5220	1.28	1.43	89.51
		5240	1.29	1.43	90.21
11AC40SISO	Ant1	5190	0.64	0.78	82.05
		5230	0.64	0.79	81.01
11AC80SISO	Ant1	5210	0.32	0.46	69.57

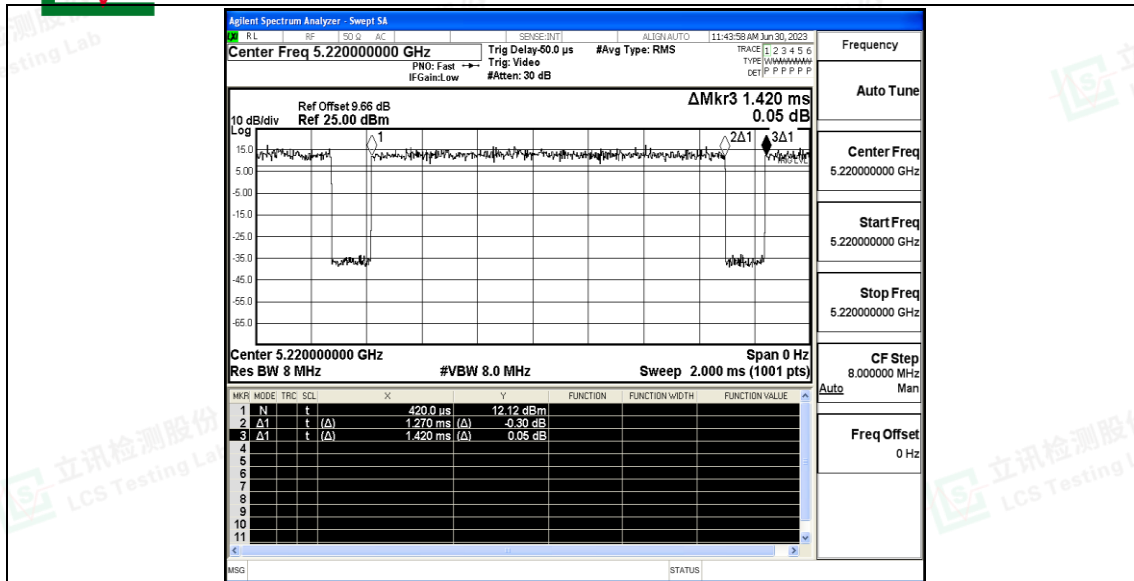




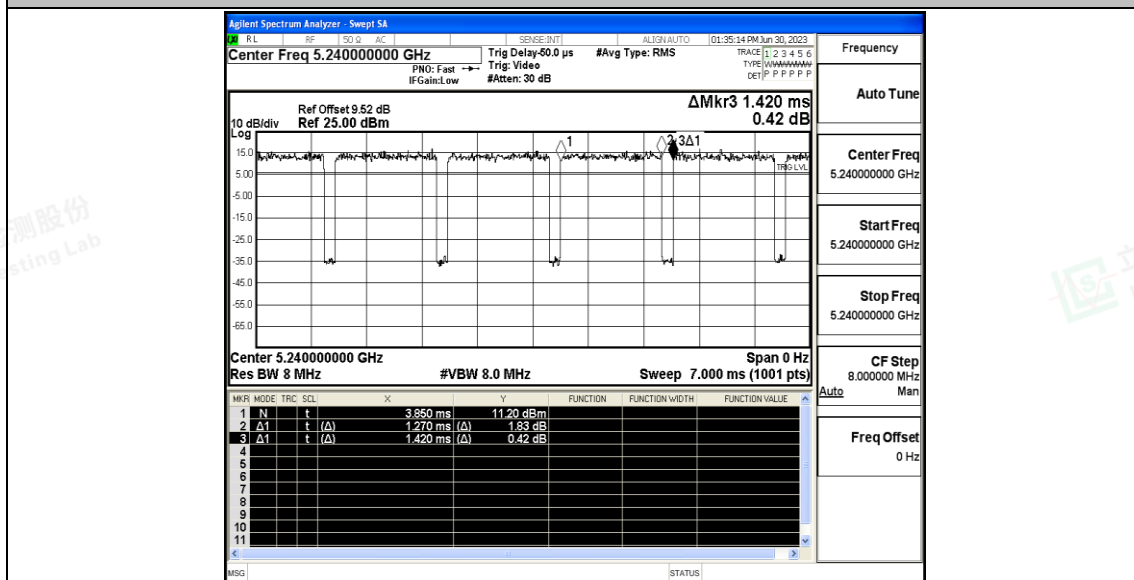
Test Graphs





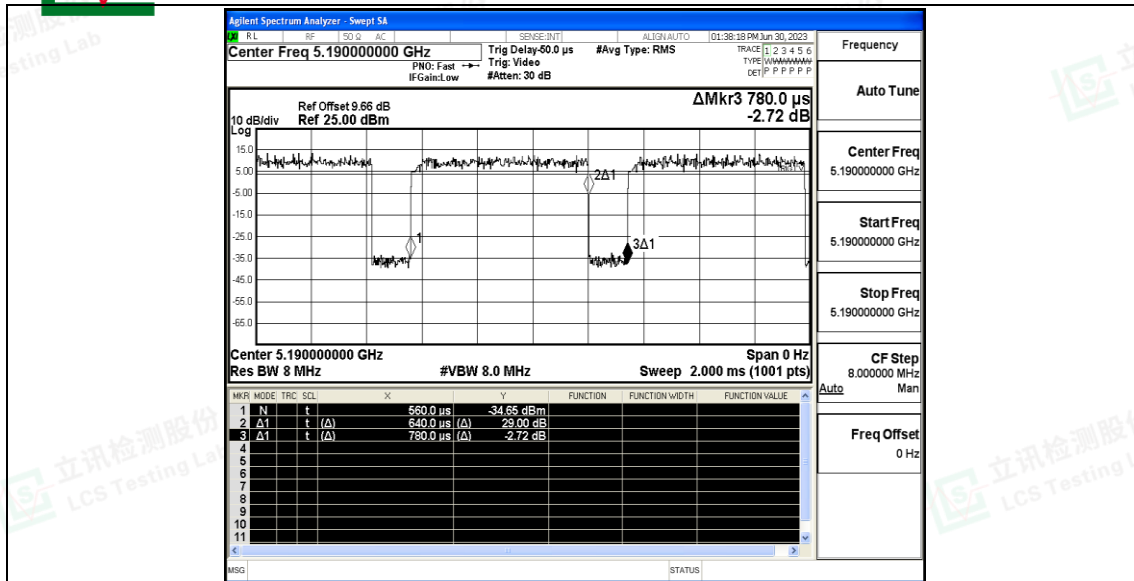


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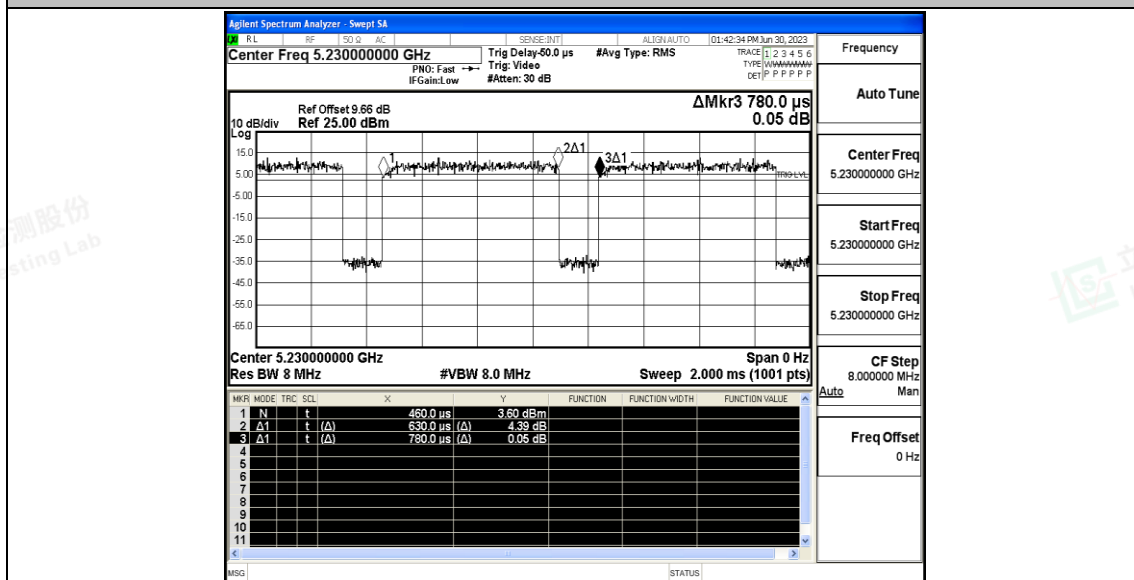


11N40SISO_Ant1_5190



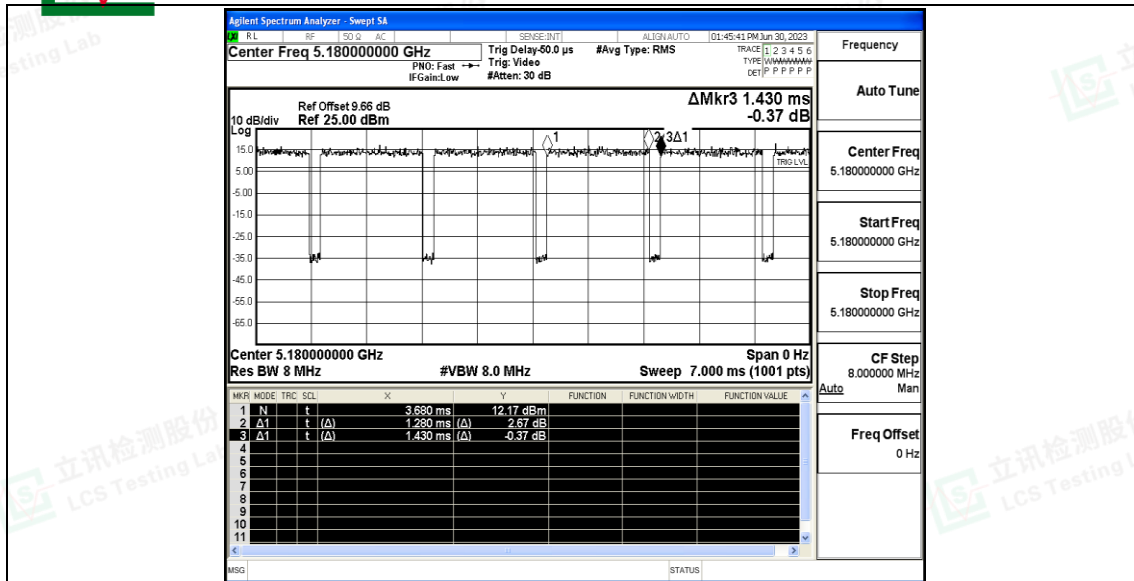


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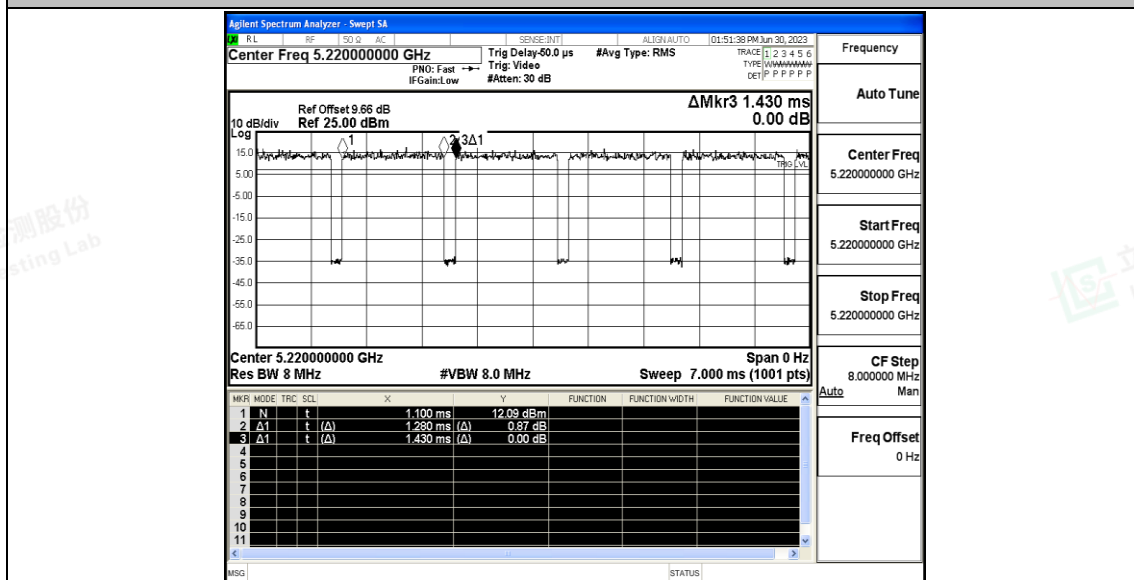


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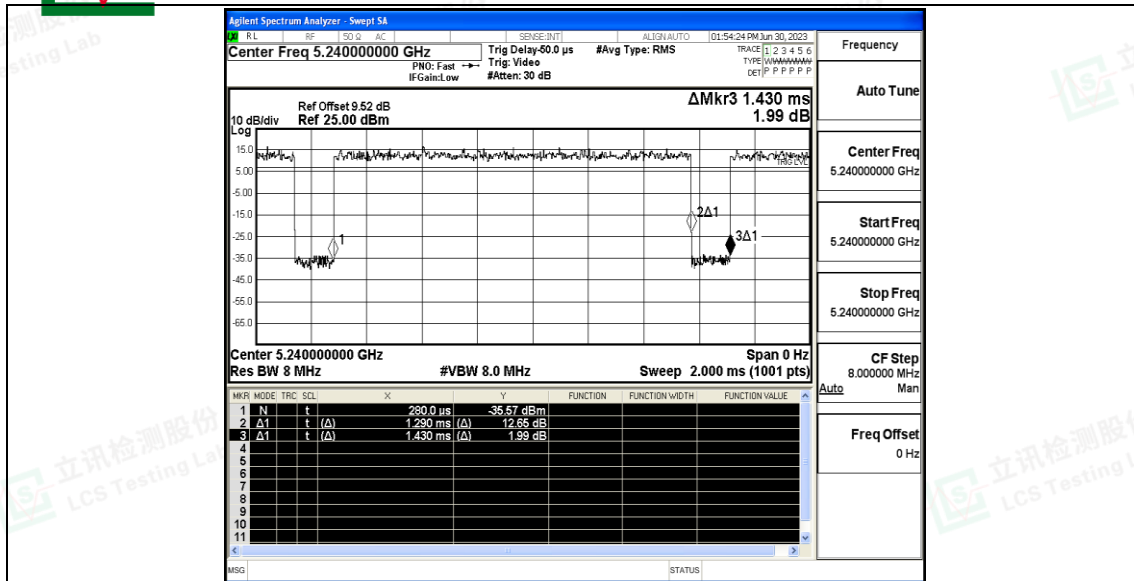


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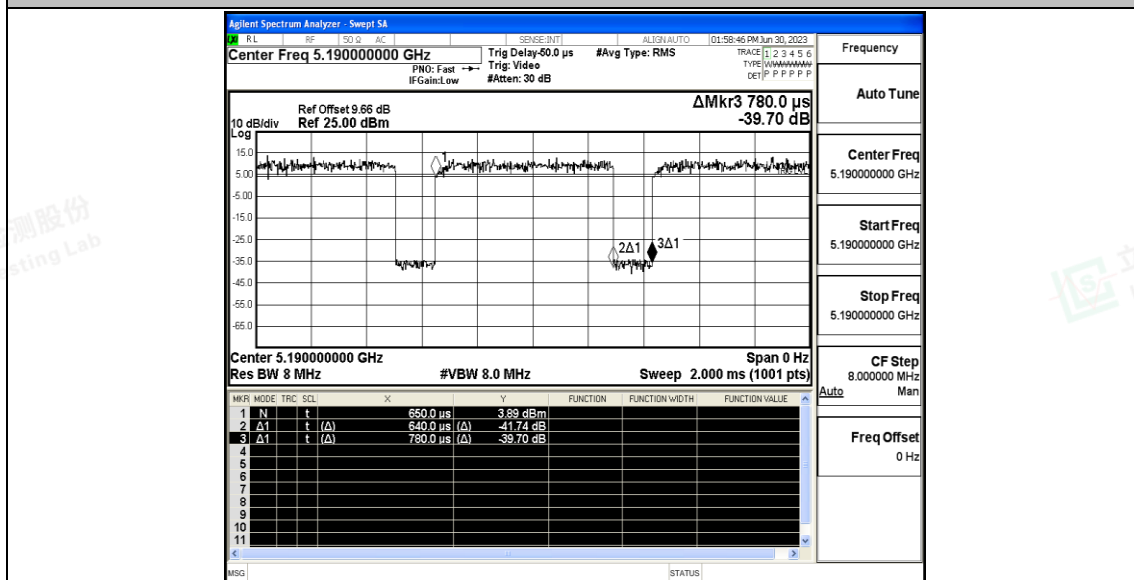


11AC20SISO_Ant1_5240





11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



