



Appendix D

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: Tablet

Test Model: Puya

Environmental Conditions

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





D.1 Emission Bandwidth

Test Result

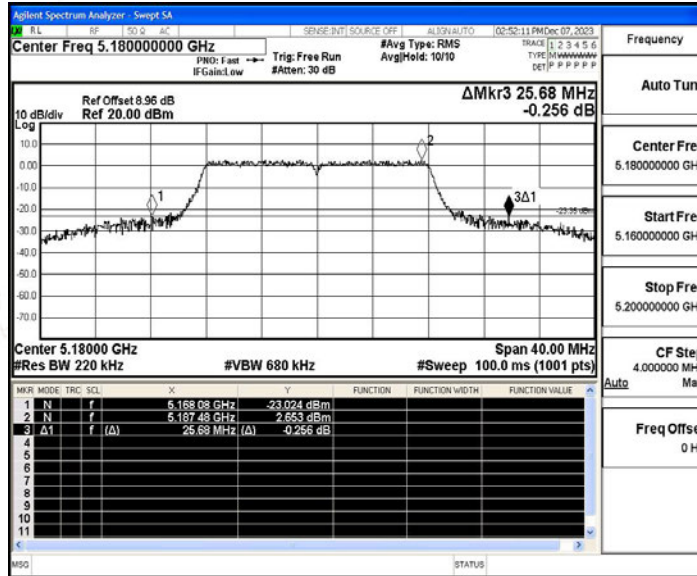
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	25.680	5168.080	5193.760	---	---
		5220	27.760	5205.800	5233.560	---	---
		5240	26.760	5225.760	5252.520	---	---
11N20SISO	Ant1	5180	27.520	5166.640	5194.160	---	---
		5220	30.000	5204.240	5234.240	---	---
		5240	30.320	5223.960	5254.280	---	---
11N40SISO	Ant1	5190	44.640	5168.640	5213.280	---	---
		5230	44.240	5206.400	5250.640	---	---
11AC20SISO	Ant1	5180	29.080	5166.760	5195.840	---	---
		5220	28.840	5206.680	5235.520	---	---
		5240	26.160	5226.440	5252.600	---	---
11AC40SISO	Ant1	5190	42.480	5168.960	5211.440	---	---
		5230	42.400	5208.720	5251.120	---	---
11AC80SISO	Ant1	5210	82.560	5169.040	5251.600	---	---



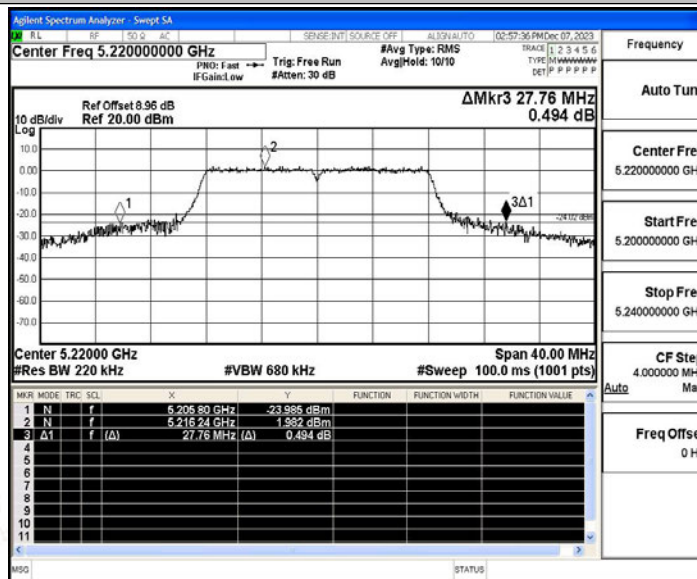


Test Graphs

11A_Ant1_5180

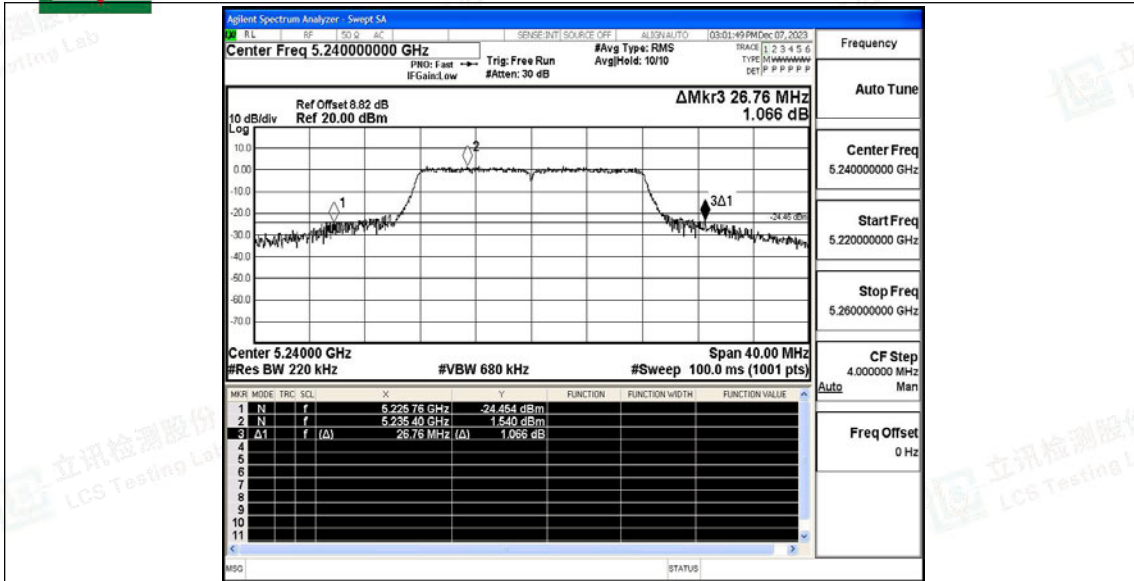


11A_Ant1_5220

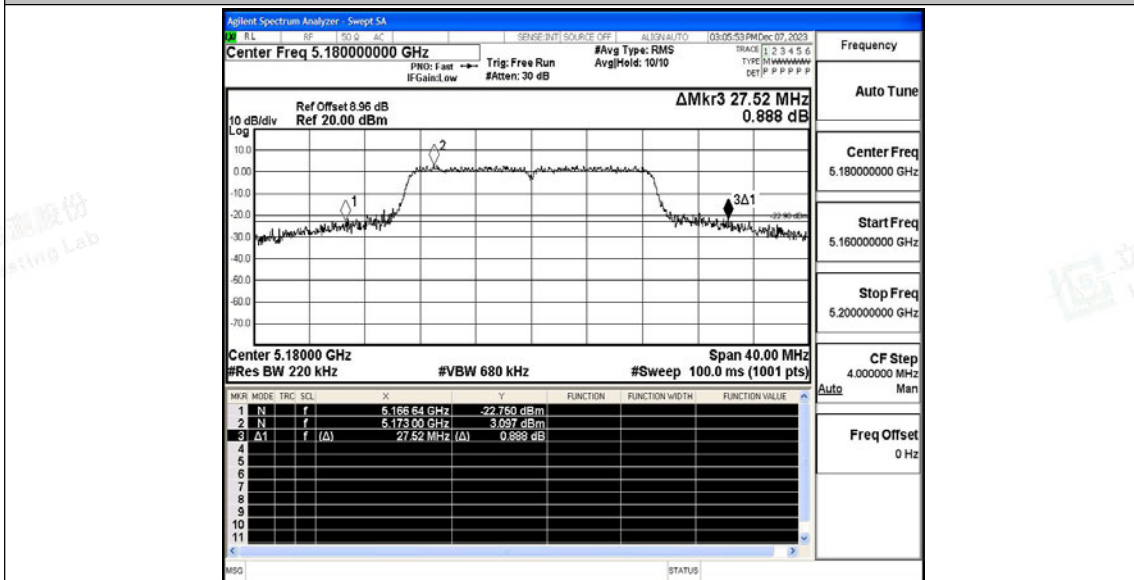


11A_Ant1_5240



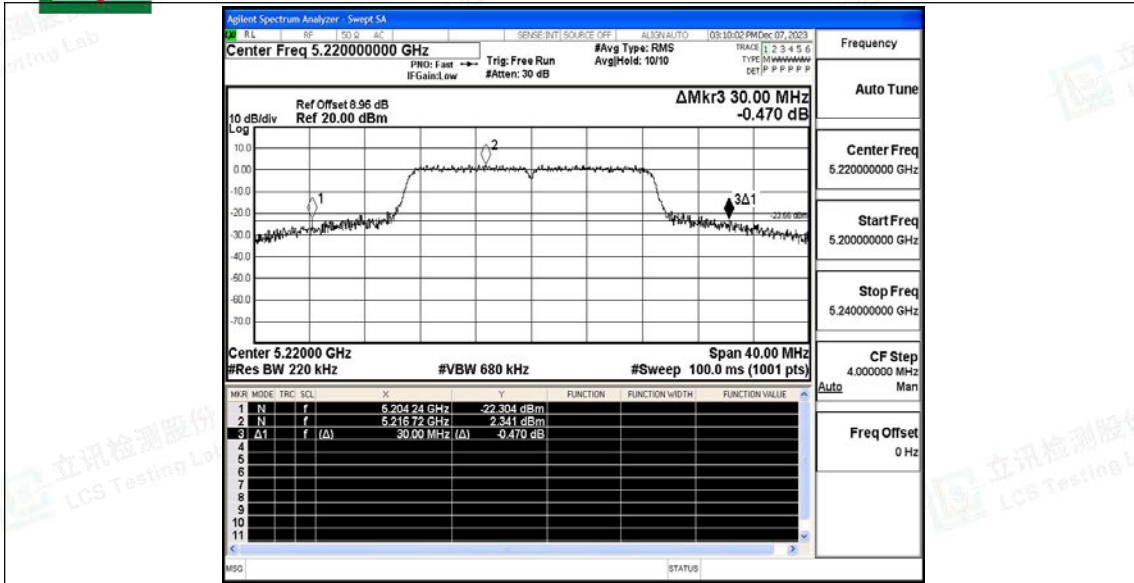


11N20SISO_Ant1_5180

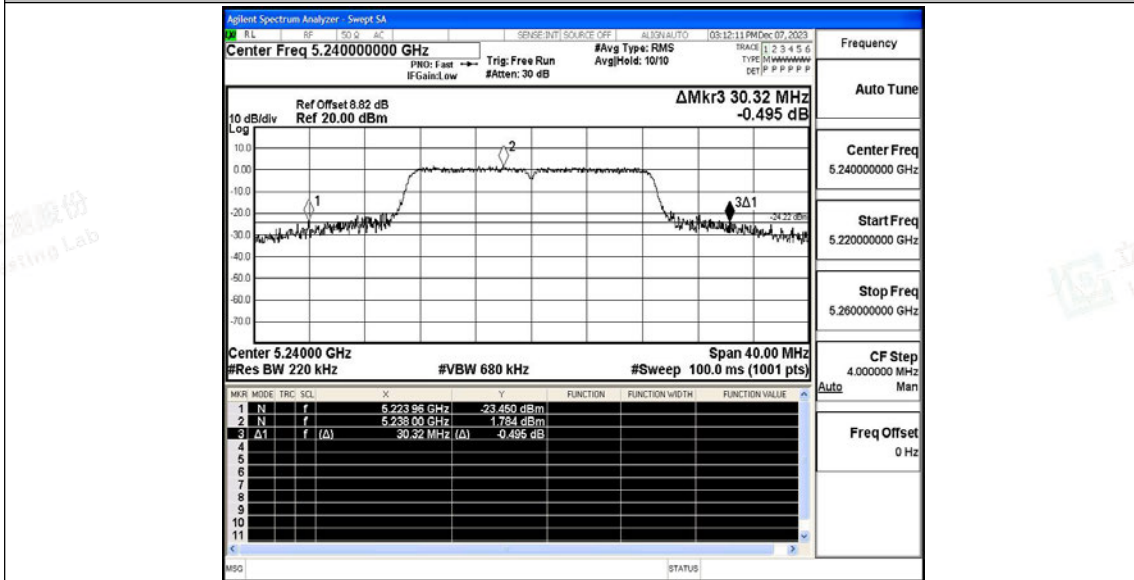


11N20SISO_Ant1_5220



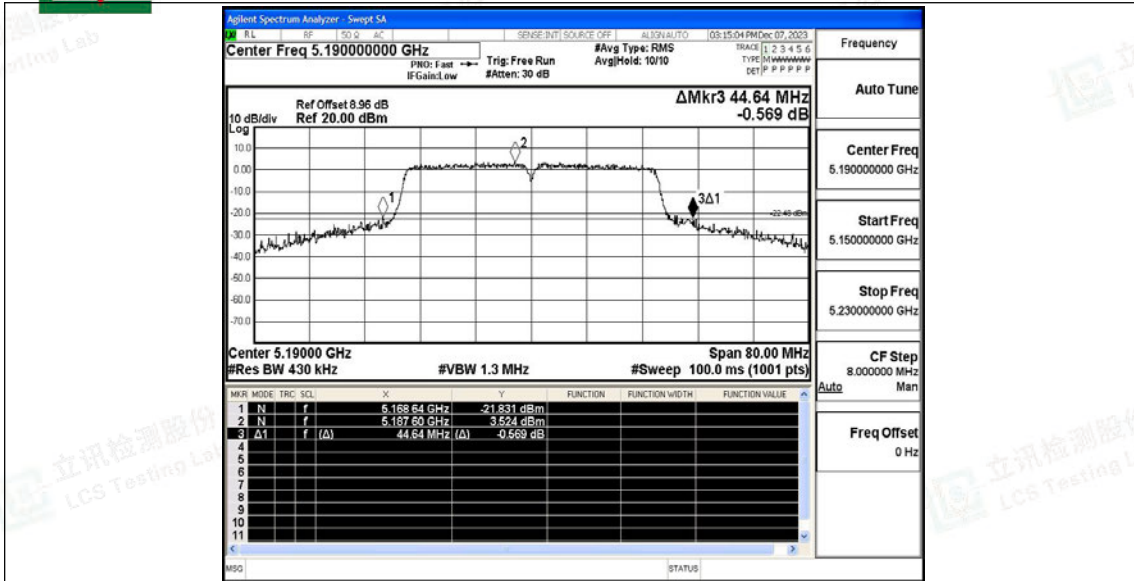


11N20SISO_Ant1_5240

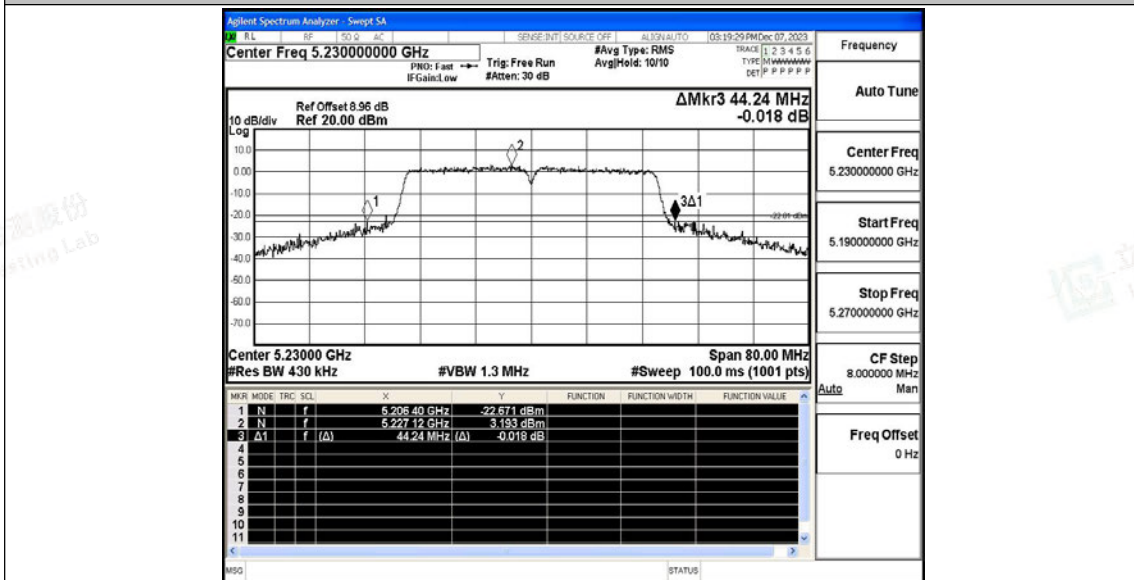


11N40SISO_Ant1_5190



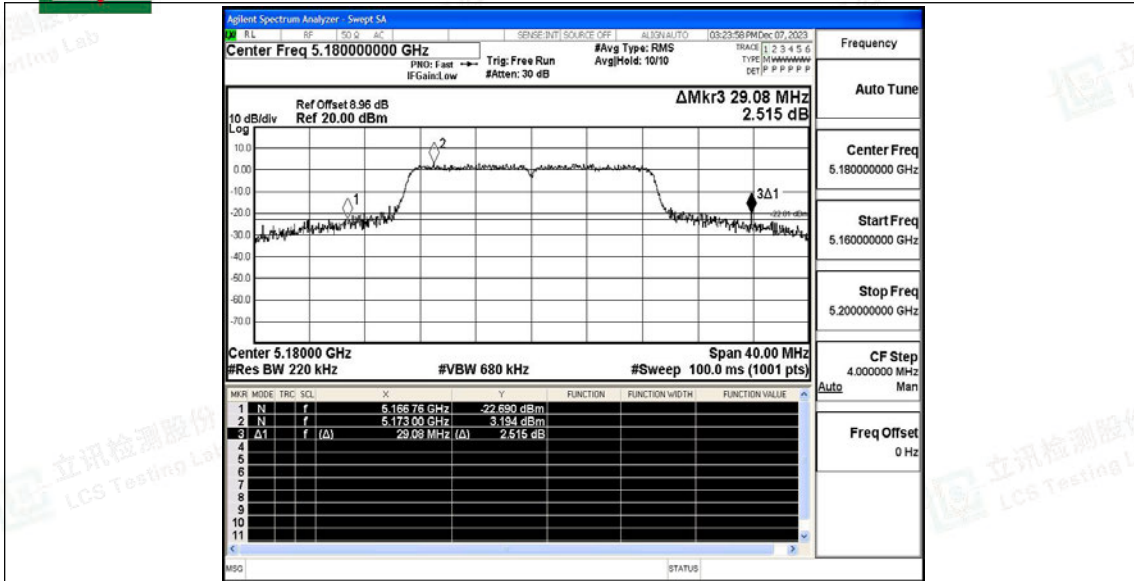


11N40SISO_Ant1_5230

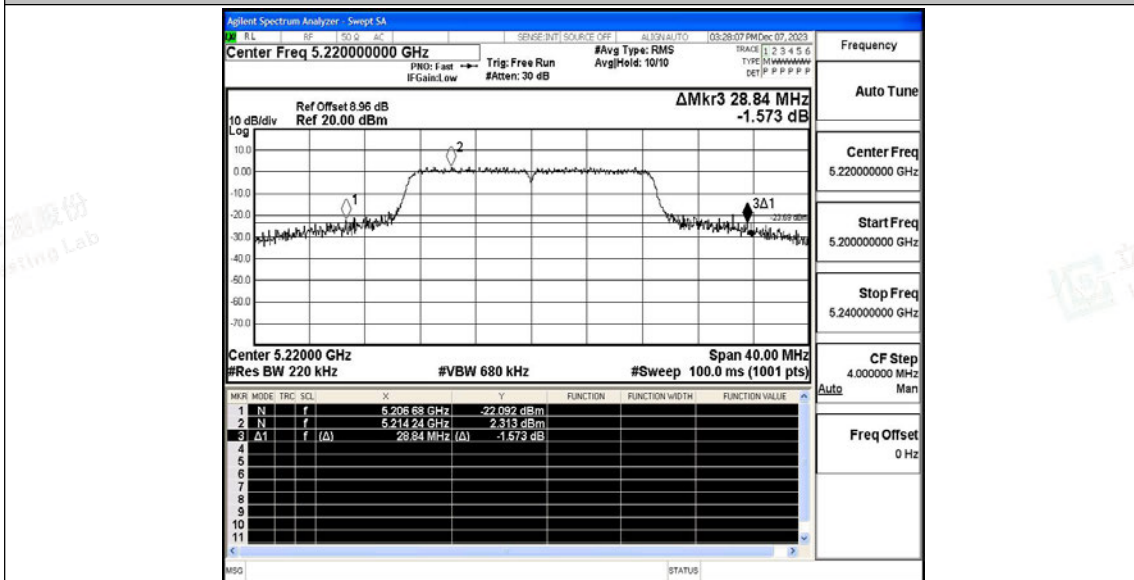


11AC20SISO_Ant1_5180



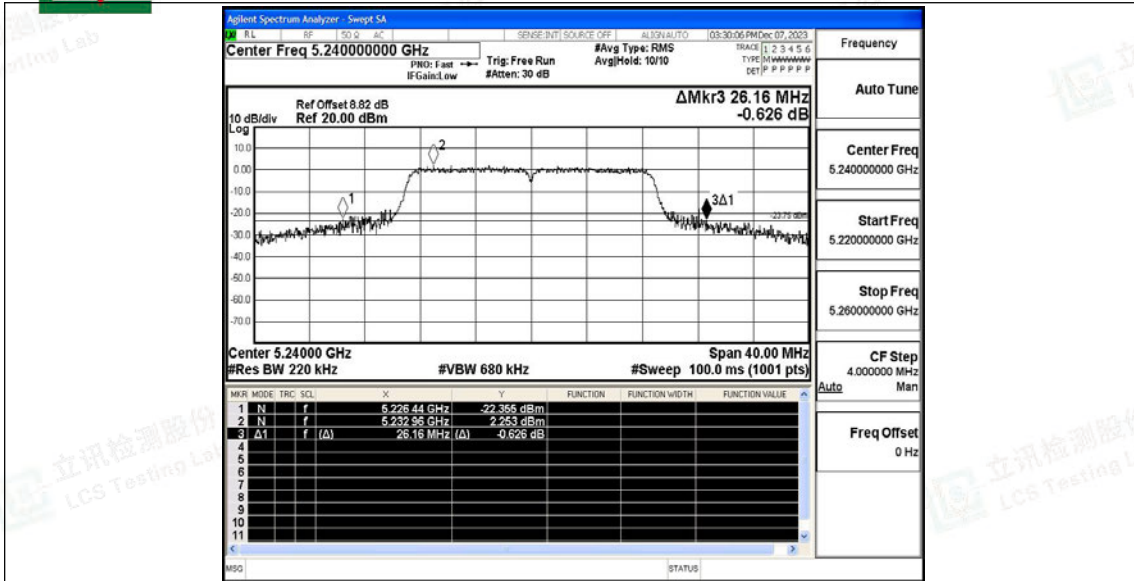


11AC20SISO_Ant1_5220

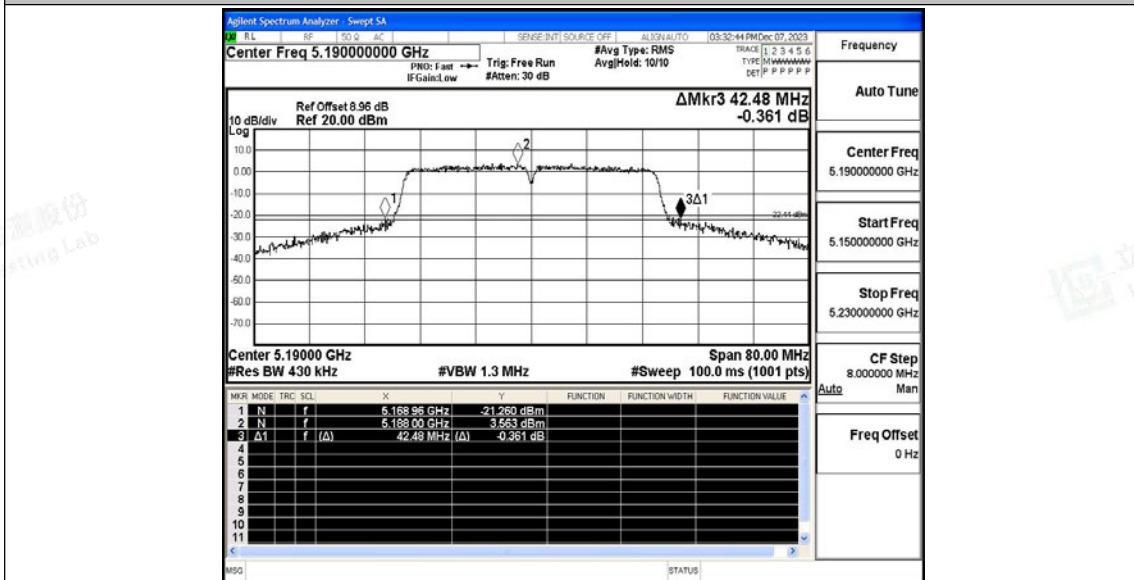


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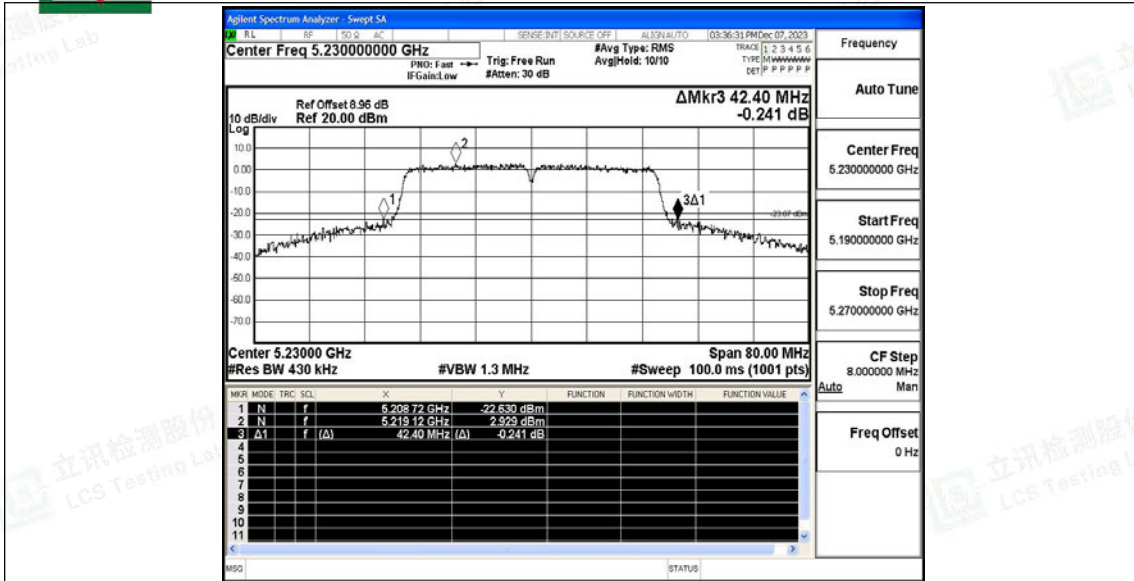


11AC40SISO_Ant1_5190

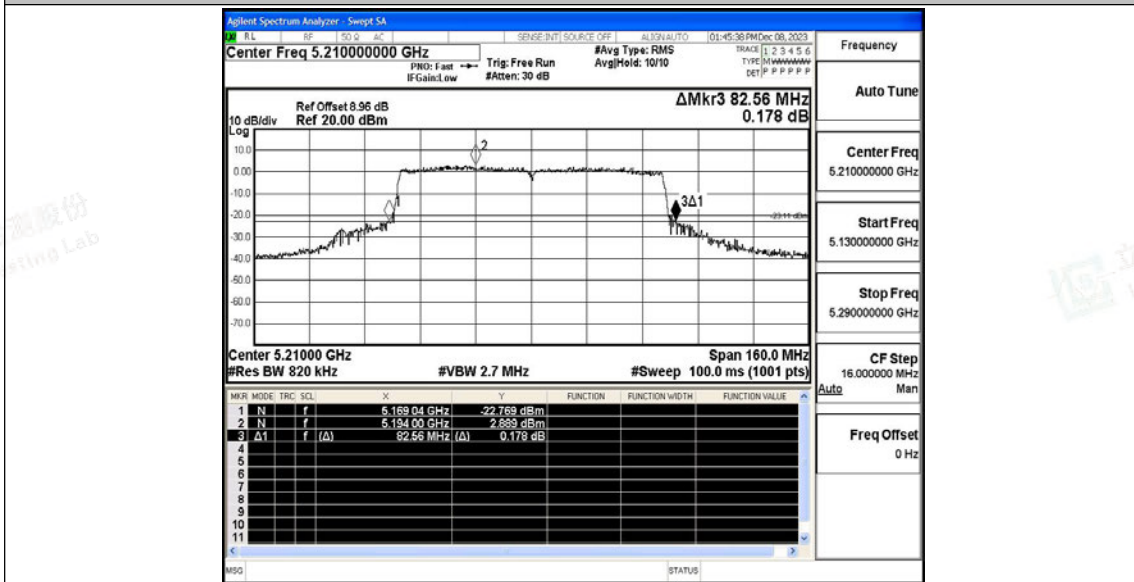


11AC40SISO_Ant1_5230





11AC80SISO_Ant1_5210





D.2 Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	12.78	95.89	0.18	12.96	≤24	PASS
		5220	12.07	95.89	0.18	12.25	≤24	PASS
		5240	11.55	95.21	0.21	11.76	≤24	PASS
11N20SISO	Ant1	5180	13.00	94.40	0.25	13.25	≤24	PASS
		5220	12.34	95.16	0.22	12.56	≤24	PASS
		5240	11.84	94.40	0.25	12.09	≤24	PASS
11N40SISO	Ant1	5190	12.50	90.63	0.43	12.93	≤24	PASS
		5230	11.84	90.77	0.42	12.26	≤24	PASS
11AC20SISO	Ant1	5180	13.08	94.40	0.25	13.33	≤24	PASS
		5220	12.35	94.40	0.25	12.60	≤24	PASS
		5240	11.88	95.20	0.21	12.09	≤24	PASS
11AC40SISO	Ant1	5190	12.52	90.91	0.41	12.93	≤24	PASS
		5230	11.87	90.91	0.41	12.28	≤24	PASS
11AC80SISO	Ant1	5210	11.36	83.33	0.79	12.15	≤24	PASS

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



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D.3 Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	1.5	≤11.00	PASS
		5220	0.84	≤11.00	PASS
		5240	0.32	≤11.00	PASS
11N20SISO	Ant1	5180	1.59	≤11.00	PASS
		5220	0.85	≤11.00	PASS
		5240	0.56	≤11.00	PASS
11N40SISO	Ant1	5190	-1.36	≤11.00	PASS
		5230	-2.08	≤11.00	PASS
11AC20SISO	Ant1	5180	1.65	≤11.00	PASS
		5220	0.91	≤11.00	PASS
		5240	0.44	≤11.00	PASS
11AC40SISO	Ant1	5190	-1.45	≤11.00	PASS
		5230	-2.22	≤11.00	PASS
11AC80SISO	Ant1	5210	-5.08	≤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.



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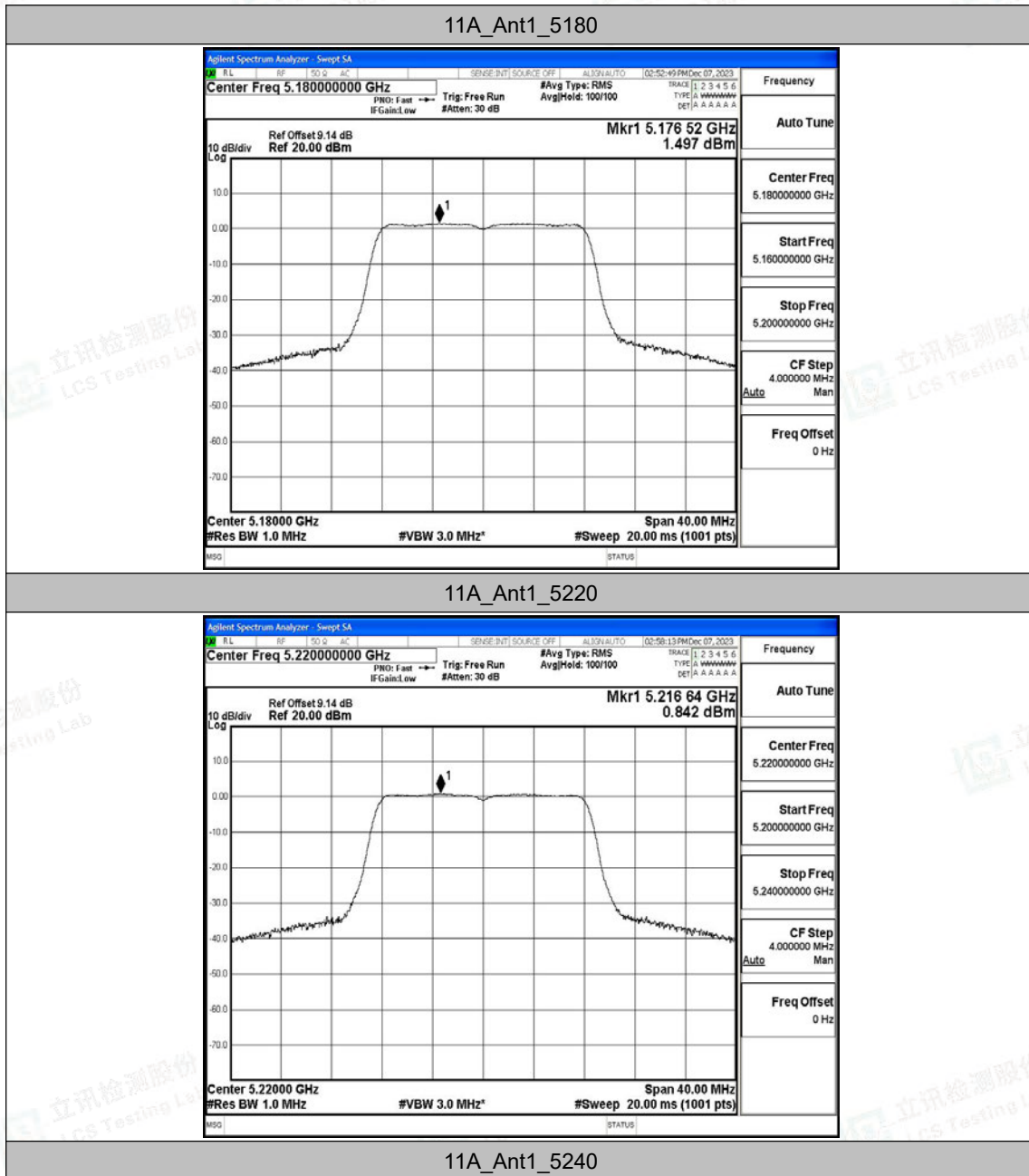
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

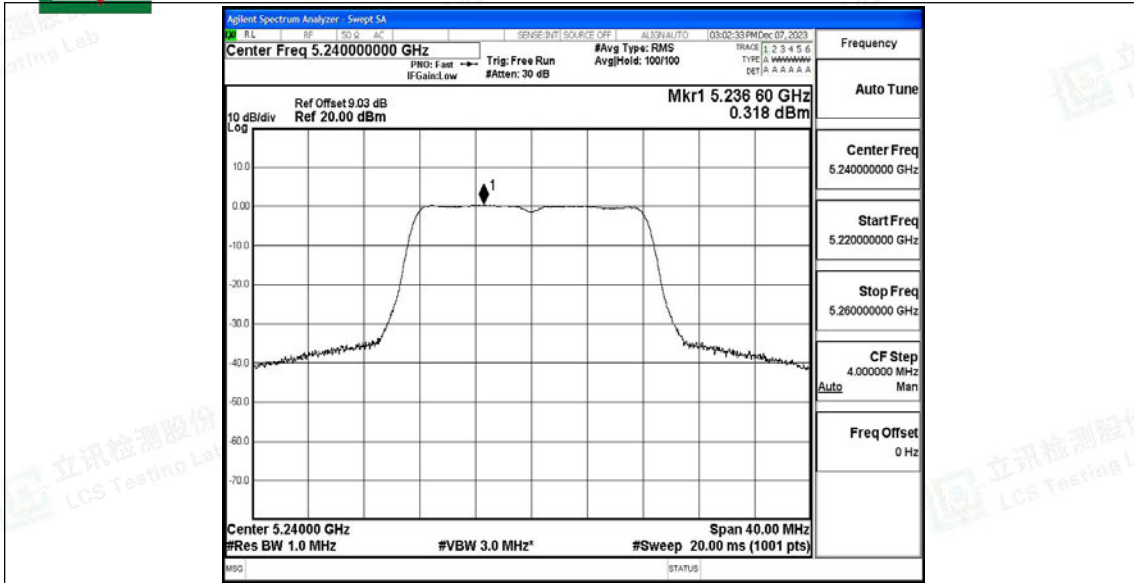
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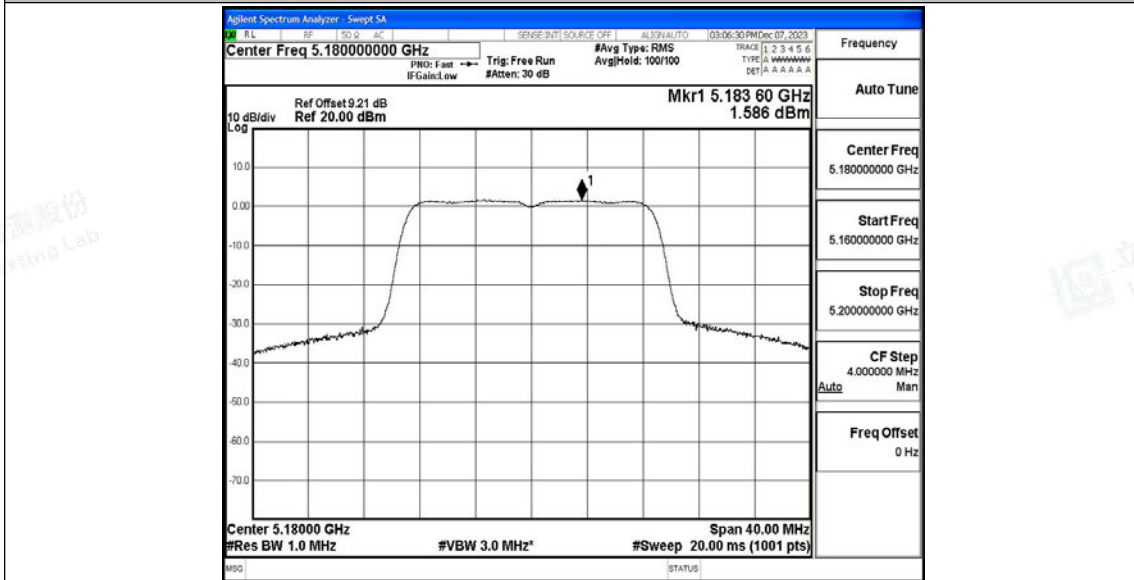


Test Graphs



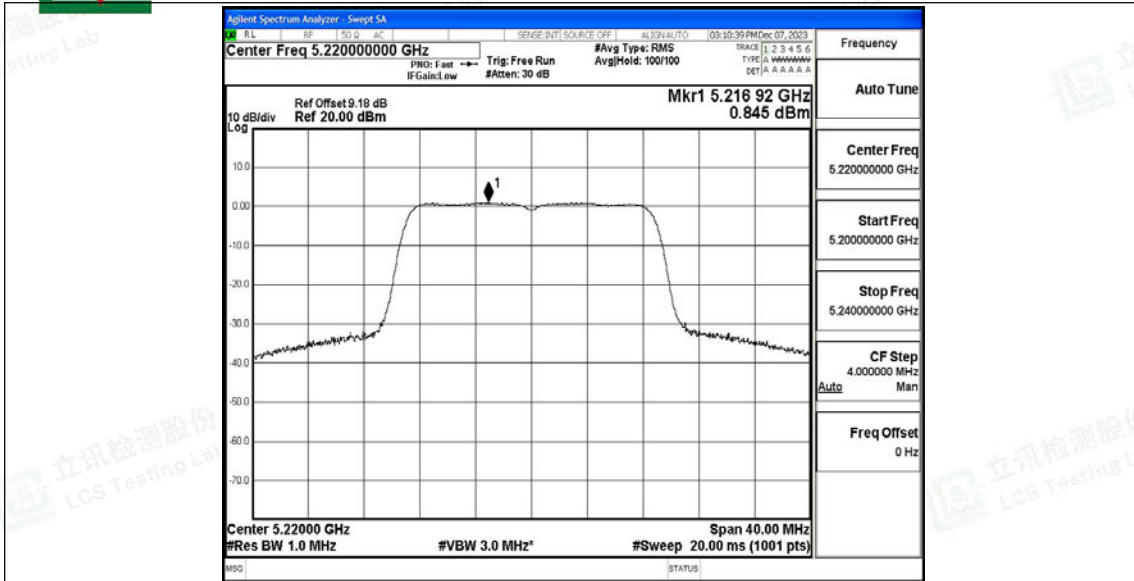


11N20SISO_Ant1_5180

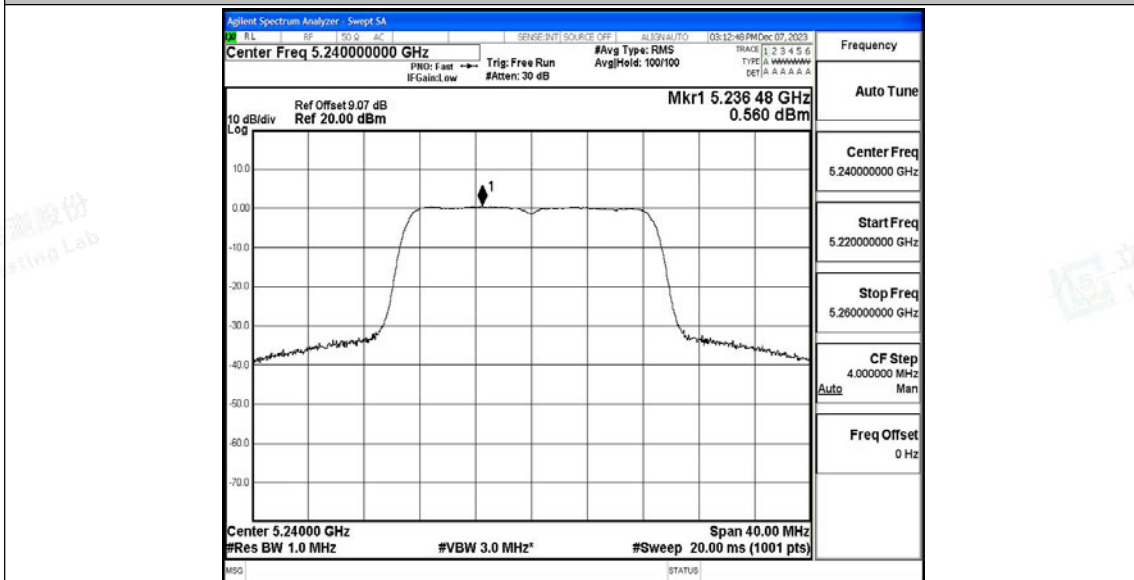


11N20SISO_Ant1_5220



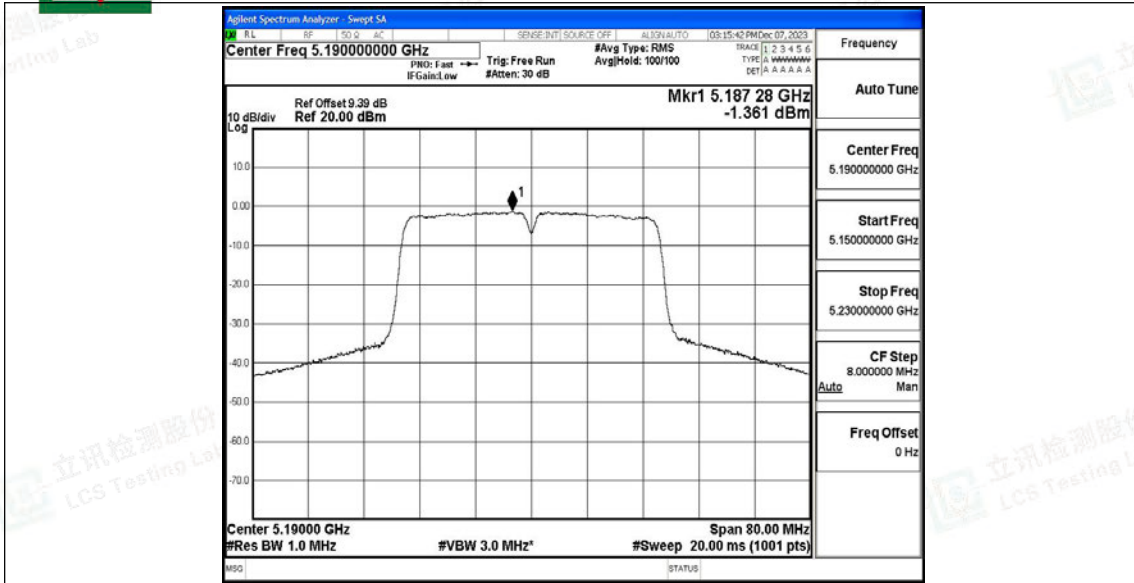


11N20SISO_Ant1_5240

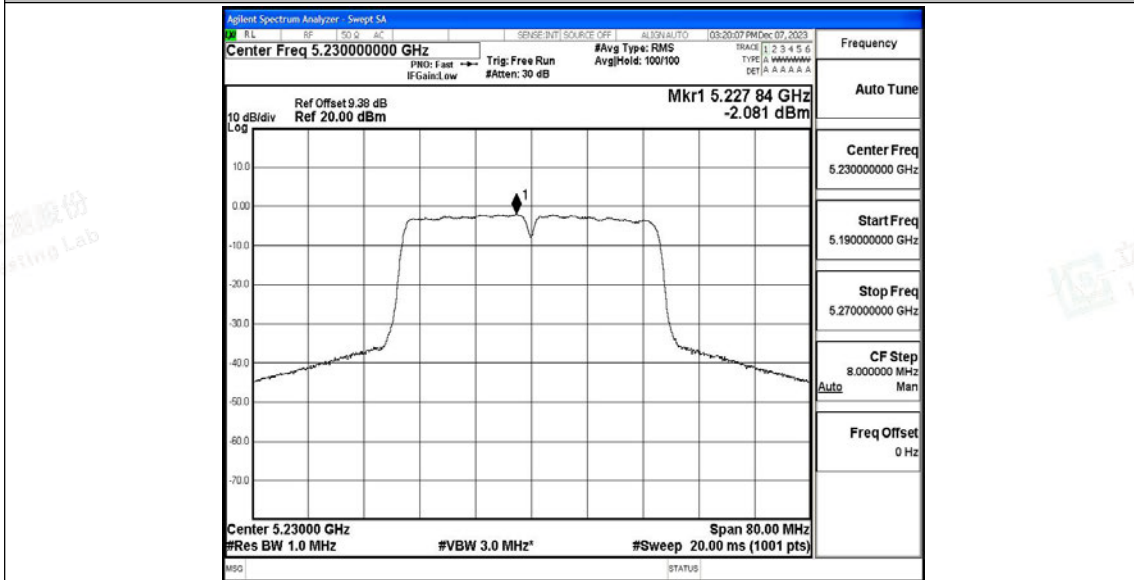


11N40SISO_Ant1_5190



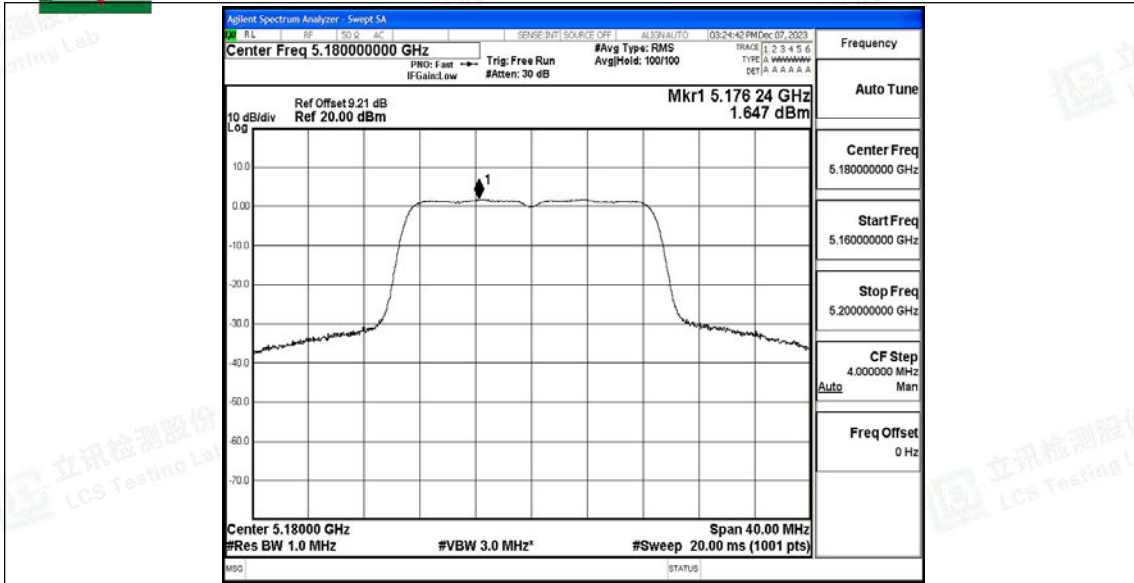


11N40SISO_Ant1_5230

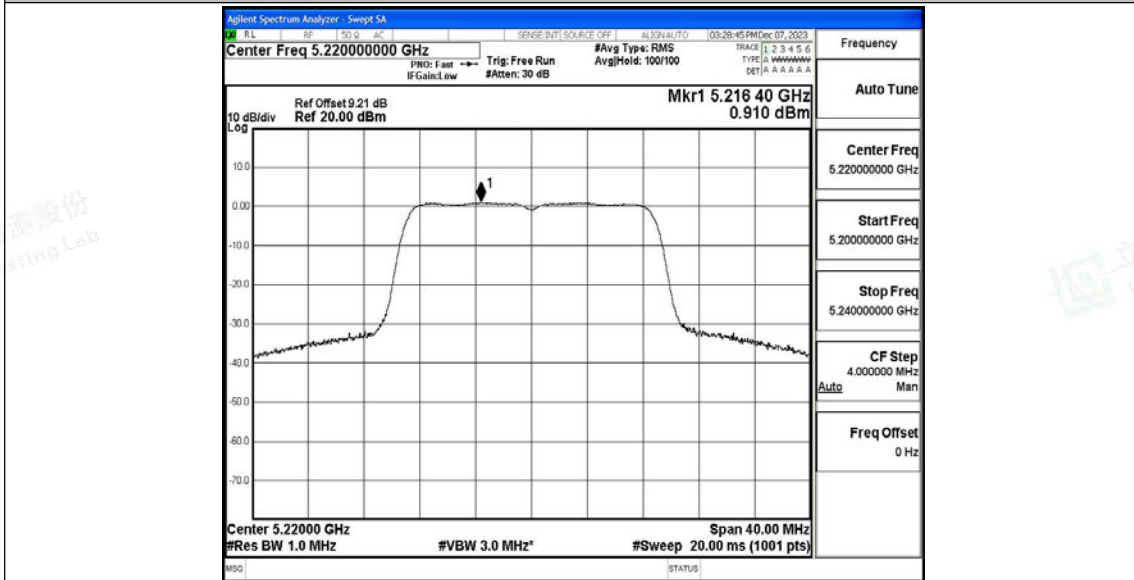


11A20SISO_Ant1_5180



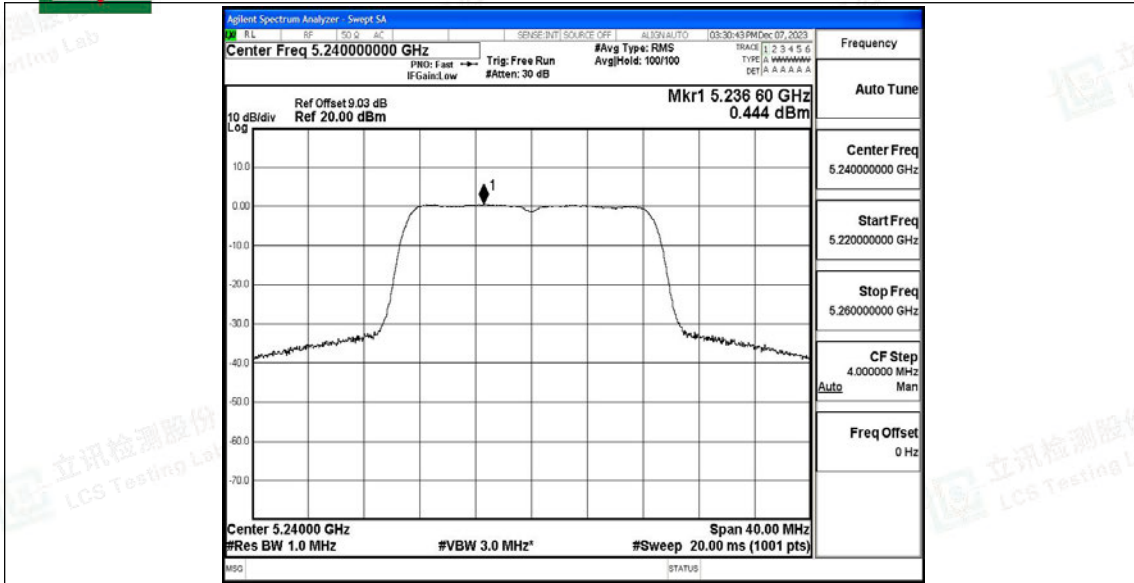


11AC20SISO_Ant1_5220

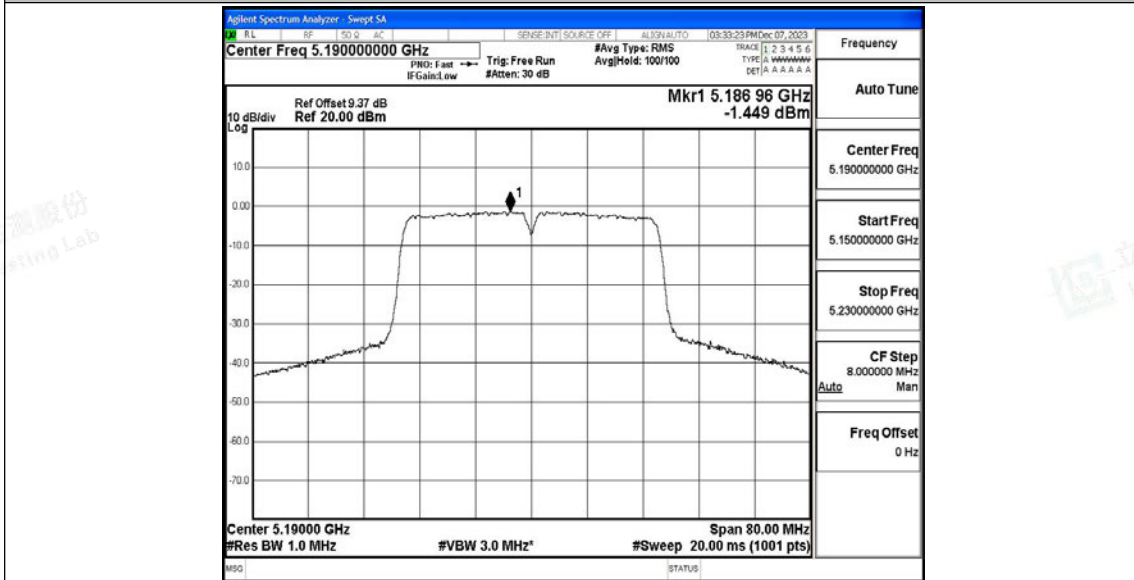


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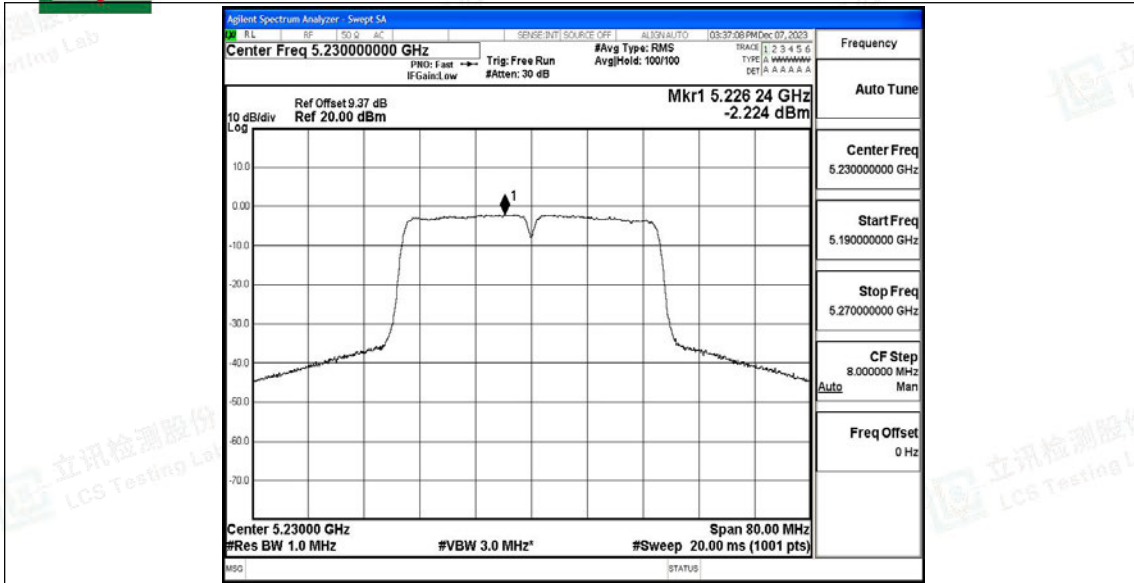


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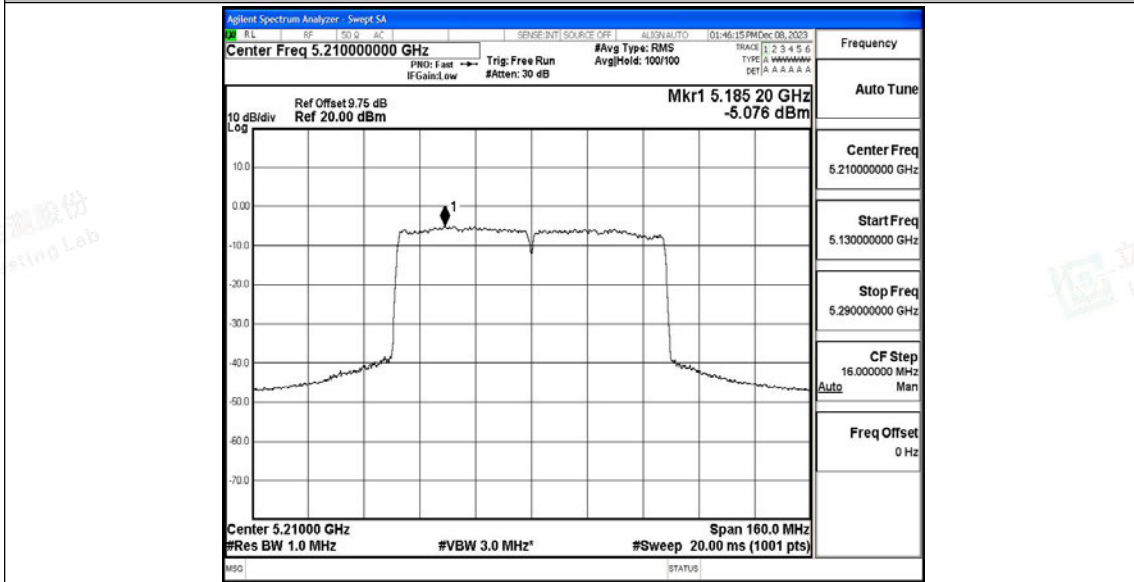


11AC40SISO_Ant1_5230





11AC80SISO_Ant1_5210





D.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	-57.55	≤-41.20	37.65	≤54	PASS
				AV	5149.600	-44.84	≤-41.20	50.36	≤54	PASS
				AV	5150.000	-44.25	≤-41.20	50.95	≤54	PASS
				Peak	4500.000	-50.93	≤-21.20	44.27	≤74	PASS
				Peak	5148.200	-33.29	≤-21.20	61.91	≤74	PASS
				Peak	5150.000	-36.75	≤-21.20	58.45	≤74	PASS
		High	5240	AV	5350.000	-55.48	≤-41.20	39.72	≤54	PASS
				AV	5351.280	-55.39	≤-41.20	39.81	≤54	PASS
				AV	5460.000	-56.45	≤-41.20	38.75	≤54	PASS
				Peak	5350.000	-48.34	≤-21.20	46.86	≤74	PASS
				Peak	5444.880	-46.63	≤-21.20	48.57	≤74	PASS
				Peak	5460.000	-50.98	≤-21.20	44.22	≤74	PASS
11N20SIS O	Ant1	Low	5180	AV	4500.000	-57.52	≤-41.20	37.68	≤54	PASS
				AV	5149.600	-42.32	≤-41.20	52.88	≤54	PASS
				AV	5150.000	-42.13	≤-41.20	53.07	≤54	PASS
				Peak	4500.000	-52.96	≤-21.20	42.24	≤74	PASS
				Peak	5148.900	-32.31	≤-21.20	62.89	≤74	PASS
				Peak	5150.000	-35.28	≤-21.20	59.92	≤74	PASS
		High	5240	AV	5350.000	-55.38	≤-41.20	39.82	≤54	PASS
				AV	5350.800	-55.18	≤-41.20	40.02	≤54	PASS
				AV	5460.000	-56.52	≤-41.20	38.68	≤54	PASS
				Peak	5350.000	-49.67	≤-21.20	45.53	≤74	PASS
				Peak	5351.760	-46.19	≤-21.20	49.01	≤74	PASS
				Peak	5460.000	-48.59	≤-21.20	46.61	≤74	PASS
11N40SIS O	Ant1	Low	5190	AV	4500.000	-57.08	≤-41.20	38.12	≤54	PASS
				AV	5149.600	-51.69	≤-41.20	43.51	≤54	PASS
				AV	5150.000	-51.62	≤-41.20	43.58	≤54	PASS
				Peak	4500.000	-51.8	≤-21.20	43.40	≤74	PASS
				Peak	5149.600	-41.46	≤-21.20	53.74	≤74	PASS
				Peak	5150.000	-38.55	≤-21.20	56.65	≤74	PASS
		High	5230	AV	5350.000	-55.27	≤-41.20	39.93	≤54	PASS
				AV	5351.580	-55.15	≤-41.20	40.05	≤54	PASS
				AV	5460.000	-55.63	≤-41.20	39.57	≤54	PASS
				Peak	5350.000	-51.35	≤-21.20	43.85	≤74	PASS
				Peak	5352.620	-46.45	≤-21.20	48.75	≤74	PASS
				Peak	5460.000	-46.45	≤-21.20	48.75	≤74	PASS



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11AC20SI SO	Ant1	Low	5180	Peak	5460.000	-49.33	≤-21.20	45.87	≤74	PASS				
				AV	4500.000	-57.52	≤-41.20	37.68	≤54	PASS				
				AV	5149.600	-42.39	≤-41.20	52.81	≤54	PASS				
				AV	5150.000	-41.98	≤-41.20	53.22	≤54	PASS				
				Peak	4500.000	-52.95	≤-21.20	42.25	≤74	PASS				
				Peak	5145.400	-34.98	≤-21.20	60.22	≤74	PASS				
		High	5240	Peak	5150.000	-31.75	≤-21.20	63.45	≤74	PASS				
				AV	5350.000	-55.33	≤-41.20	39.87	≤54	PASS				
				AV	5350.080	-55.33	≤-41.20	39.87	≤54	PASS				
				AV	5460.000	-56.46	≤-41.20	38.74	≤54	PASS				
				Peak	5350.000	-48.83	≤-21.20	46.37	≤74	PASS				
				Peak	5351.760	-46.1	≤-21.20	49.10	≤74	PASS				
				Peak	5460.000	-49.99	≤-21.20	45.21	≤74	PASS				
				11AC40SI SO	Ant1	Low	5190	AV	4500.000	-57.27	≤-41.20	37.93	≤54	PASS
								AV	5149.600	-52.01	≤-41.20	43.19	≤54	PASS
AV	5150.000	-51.57	≤-41.20					43.63	≤54	PASS				
Peak	4500.000	-50.59	≤-21.20					44.61	≤74	PASS				
Peak	5149.600	-41.49	≤-21.20					53.71	≤74	PASS				
Peak	5150.000	-45.05	≤-21.20					50.15	≤74	PASS				
High	5230	AV	5350.000			-55.14	≤-41.20	40.06	≤54	PASS				
		AV	5350.020			-55.14	≤-41.20	40.06	≤54	PASS				
		AV	5460.000			-56.13	≤-41.20	39.07	≤54	PASS				
11AC80SI SO	Ant1	Low	5210	Peak	5350.000	-50.33	≤-21.20	44.87	≤74	PASS				
				Peak	5421.260	-47.3	≤-21.20	47.90	≤74	PASS				
				Peak	5460.000	-50.81	≤-21.20	44.39	≤74	PASS				
				AV	4500.000	-56.75	≤-41.20	38.45	≤54	PASS				
				AV	5148.750	-50.35	≤-41.20	44.85	≤54	PASS				
				AV	5150.000	-49.66	≤-41.20	45.54	≤54	PASS				
		High	5210	Peak	4500.000	-51.93	≤-21.20	43.27	≤74	PASS				
				Peak	5147.250	-40.16	≤-21.20	55.04	≤74	PASS				
				Peak	5150.000	-42.52	≤-21.20	52.68	≤74	PASS				
				AV	5350.000	-53.9	≤-41.20	41.30	≤54	PASS				
				AV	5350.520	-53.79	≤-41.20	41.41	≤54	PASS				
				AV	5460.000	-55.65	≤-41.20	39.55	≤54	PASS				
Peak	5350.000	-46.54	≤-21.20	48.66	≤74	PASS								
Peak	5403.440	-46.32	≤-21.20	48.88	≤74	PASS								
Peak	5460.000	-49.44	≤-21.20	45.76	≤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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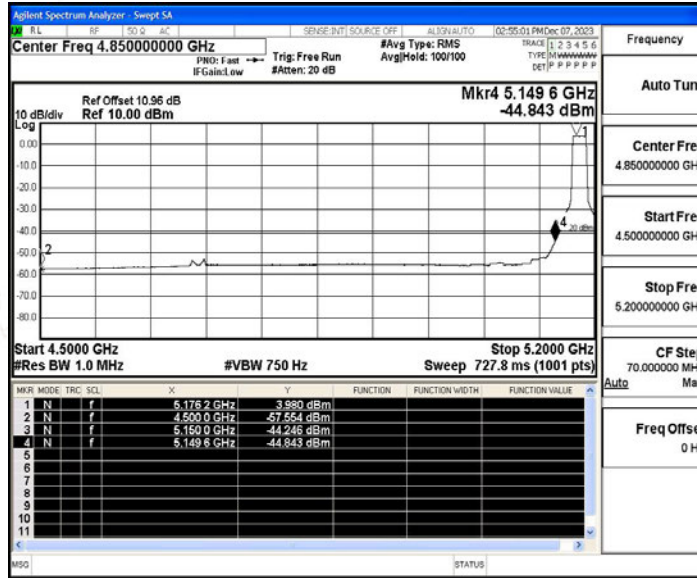
average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



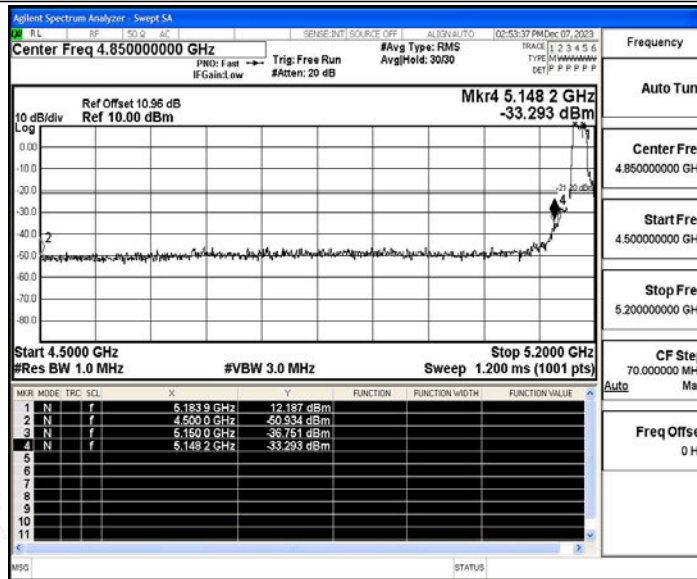


Test Graphs

11A_Ant1_Low_5180_AV

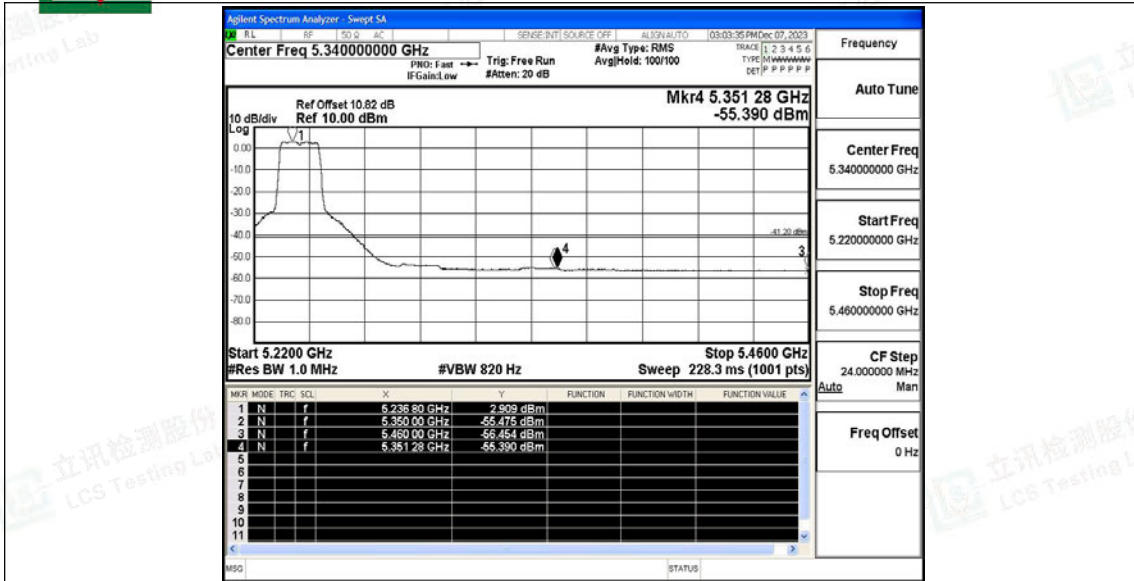


11A_Ant1_Low_5180_Peak

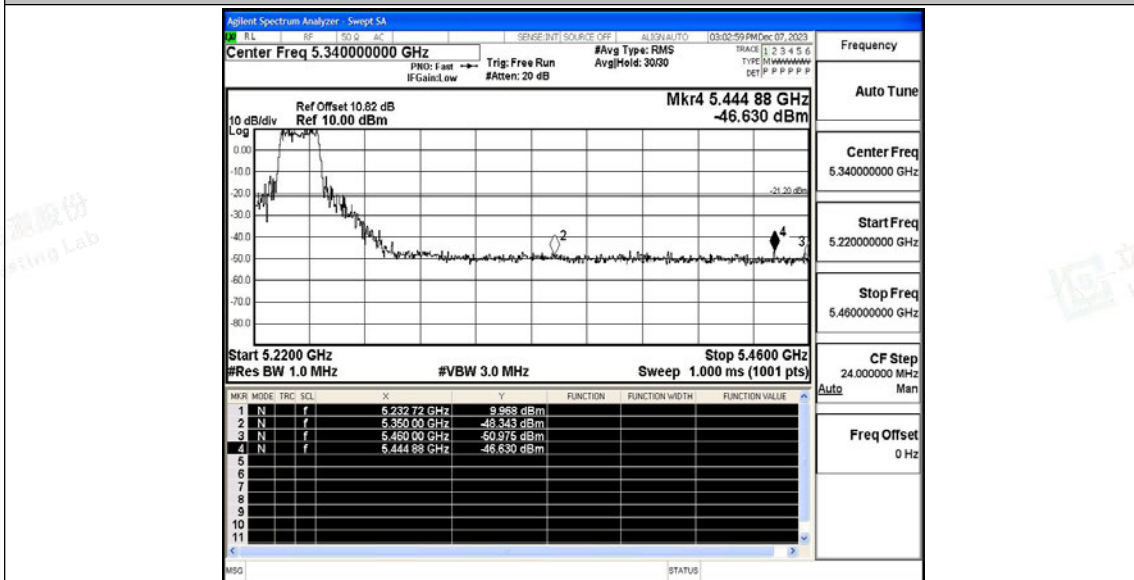


11A_Ant1_High_5240_AV



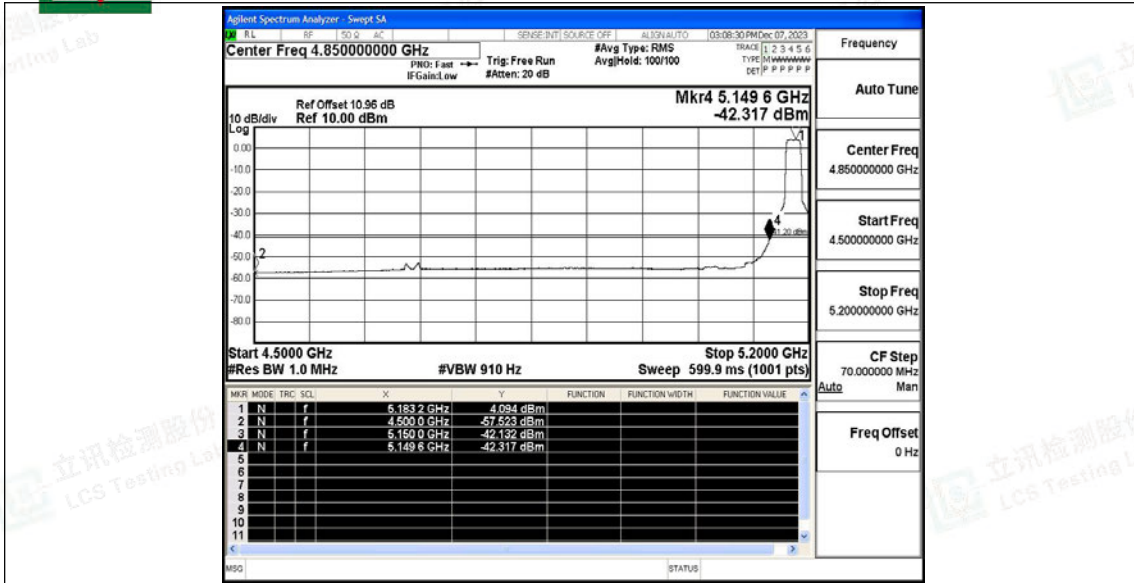


11A_Ant1_High_5240_Peak

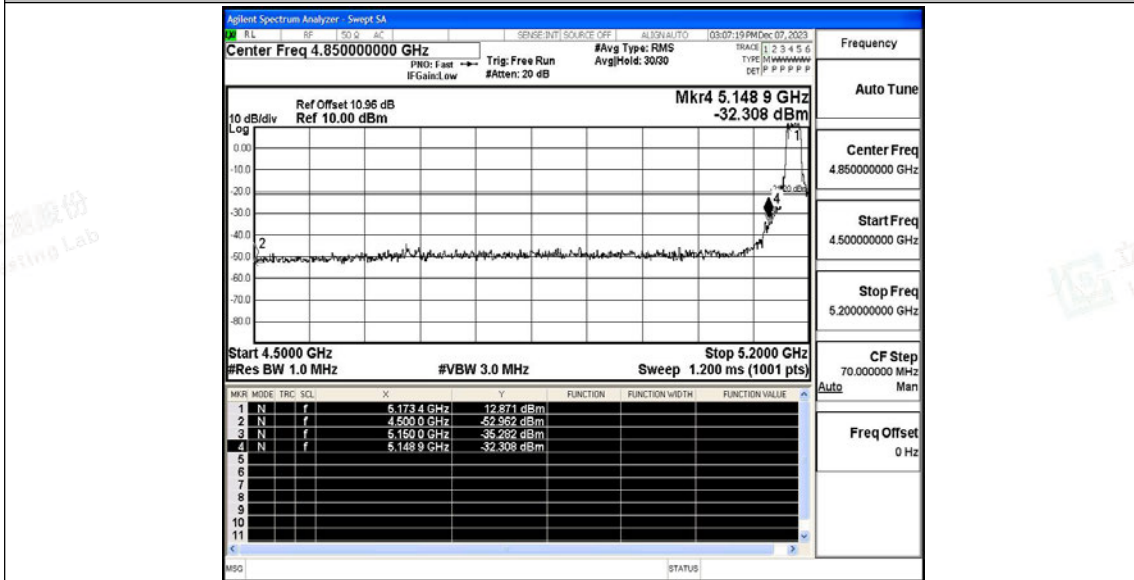


11N20SISO_Ant1_Low_5180_AV



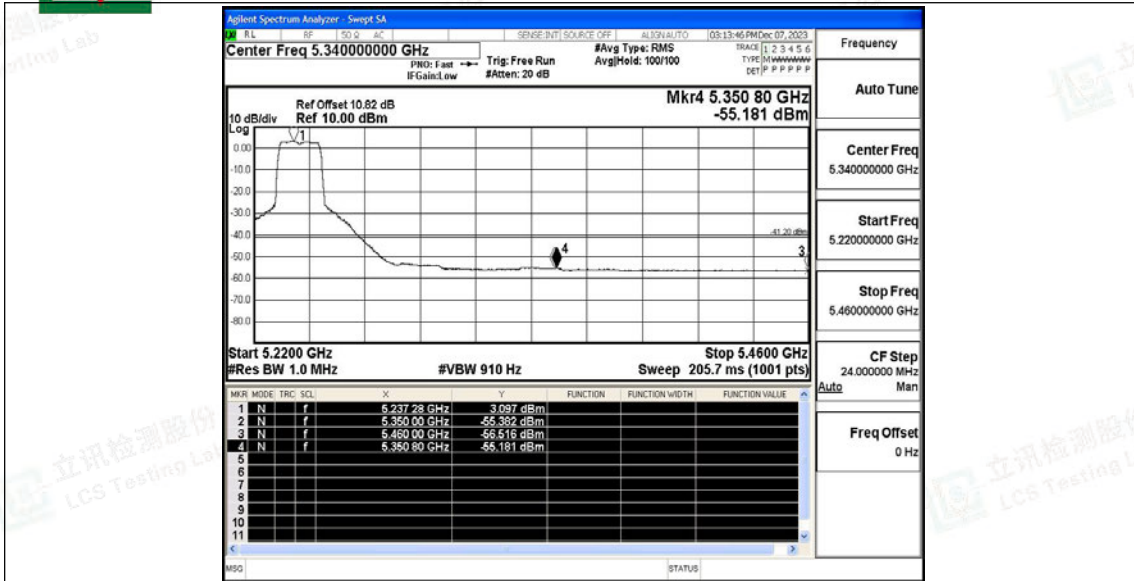


11N20SISO_Ant1_Low_5180_Peak

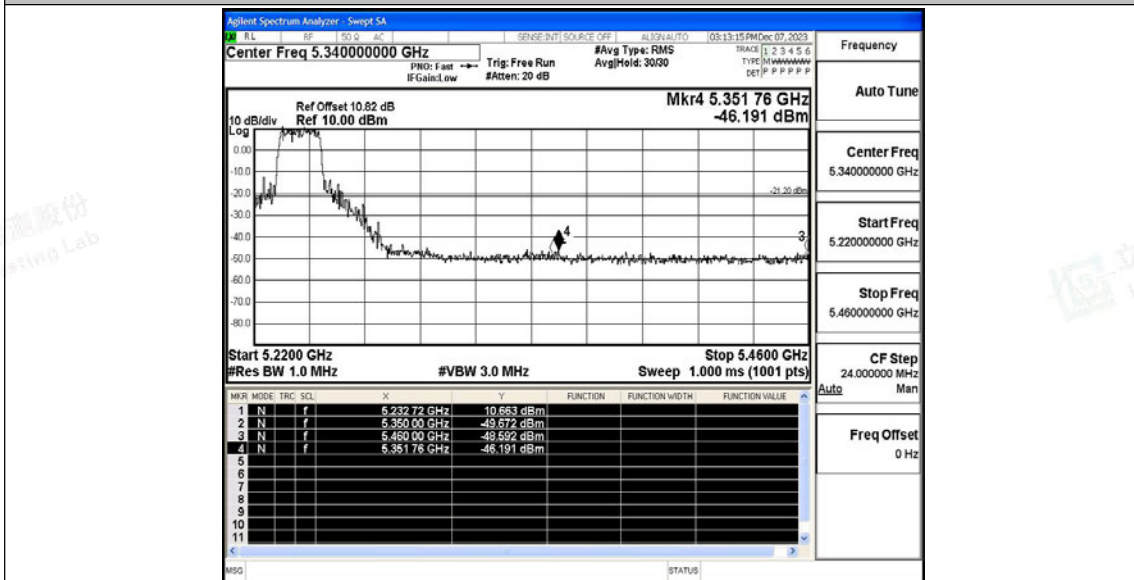


11N20SISO_Ant1_High_5240_AV



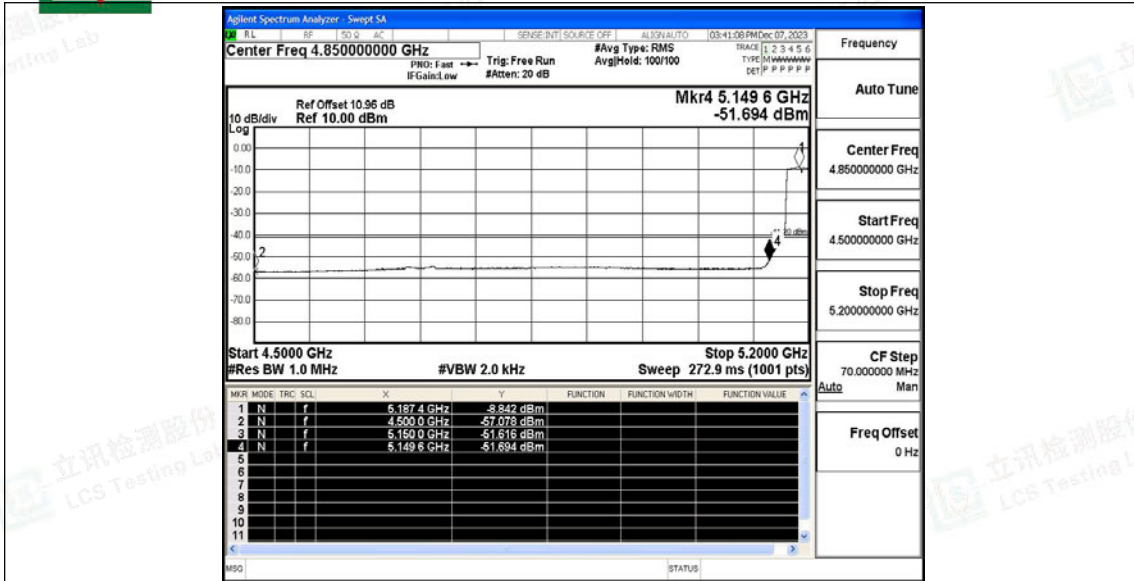


11N20SISO_Ant1_High_5240_Peak

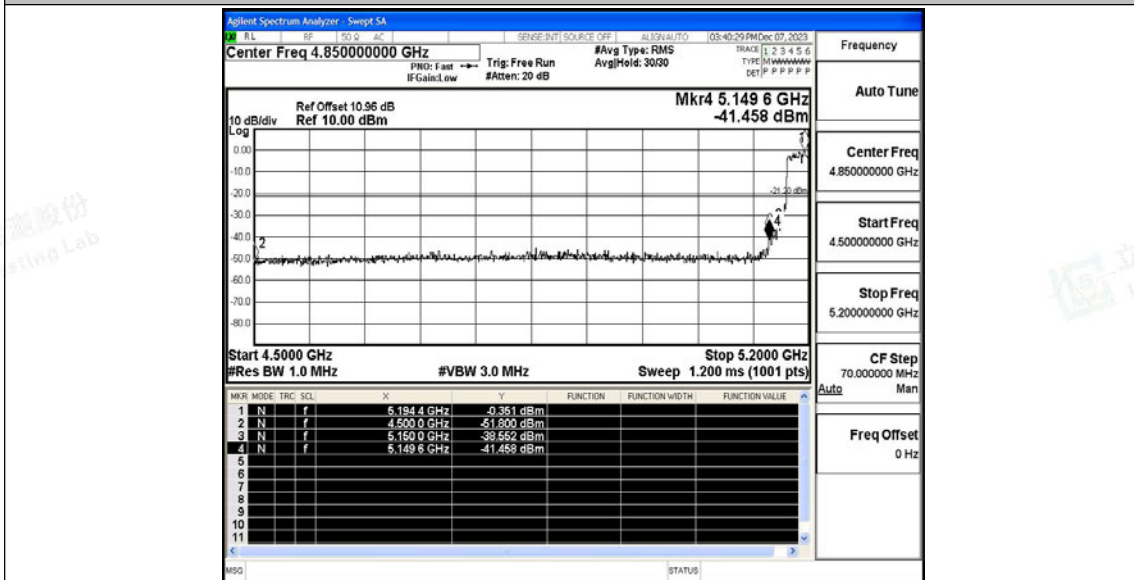


11N40SISO_Ant1_Low_5190_AV



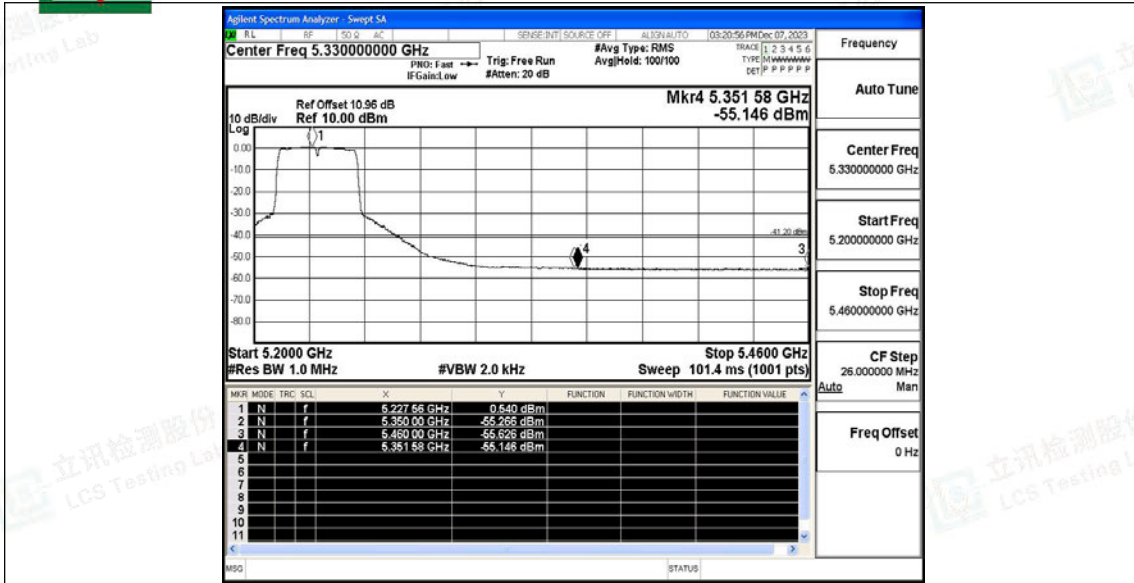


11N40SISO_Ant1_Low_5190_Peak

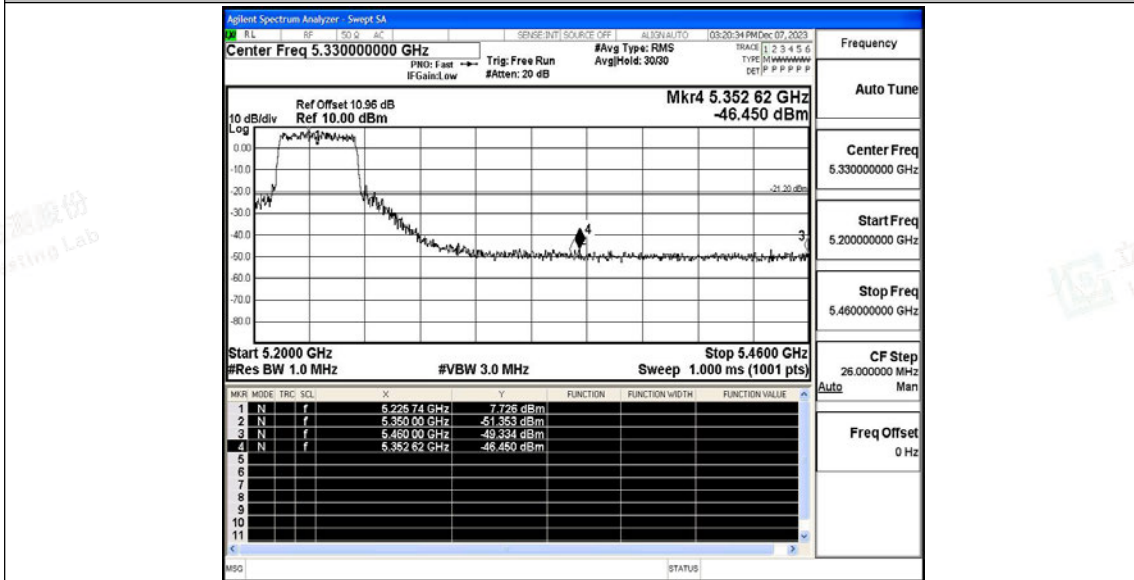


11N40SISO_Ant1_High_5230_AV



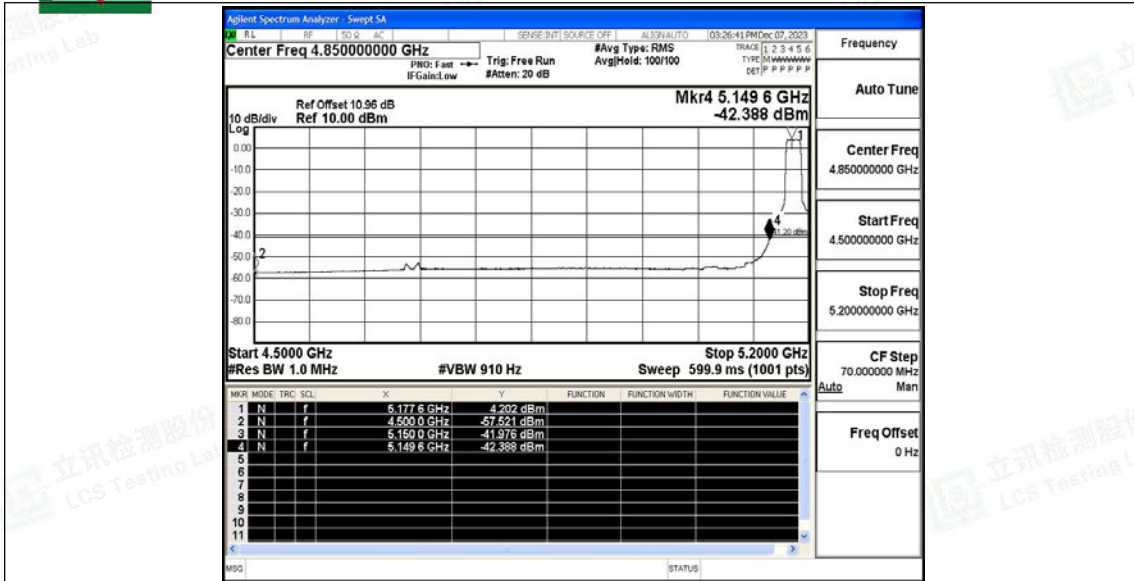


11N40SISO_Ant1_High_5230_Peak

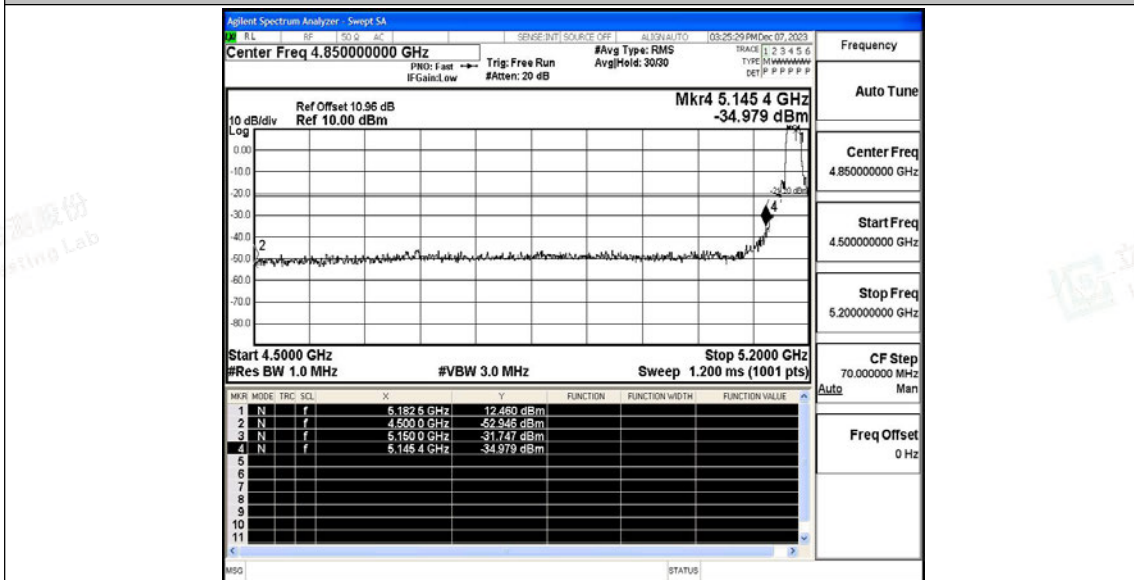


11AC20SISO_Ant1_Low_5180_AV



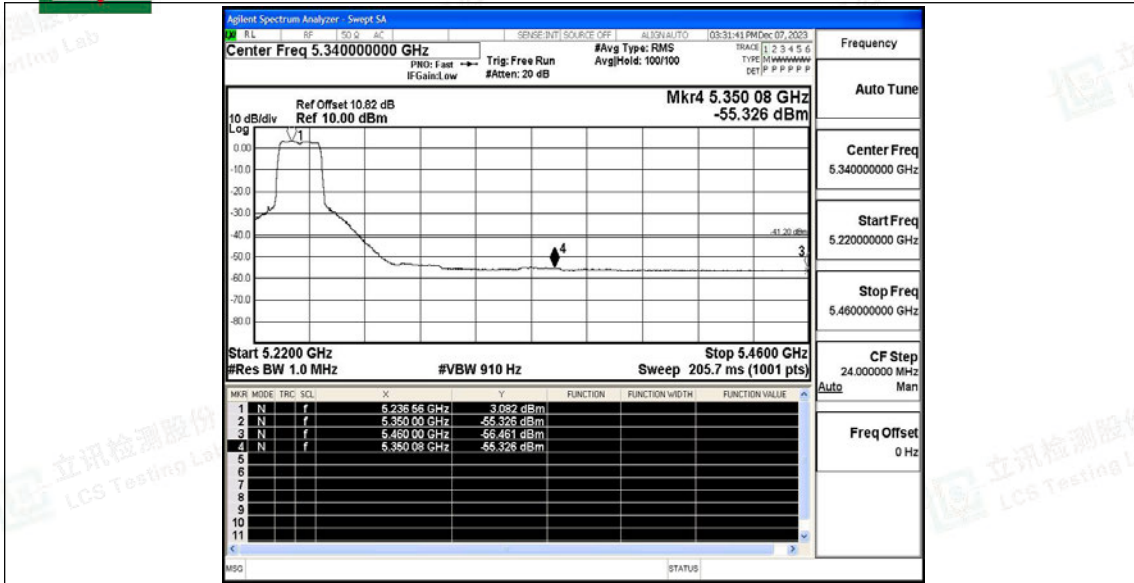


11AC20SISO_Ant1_Low_5180_Peak

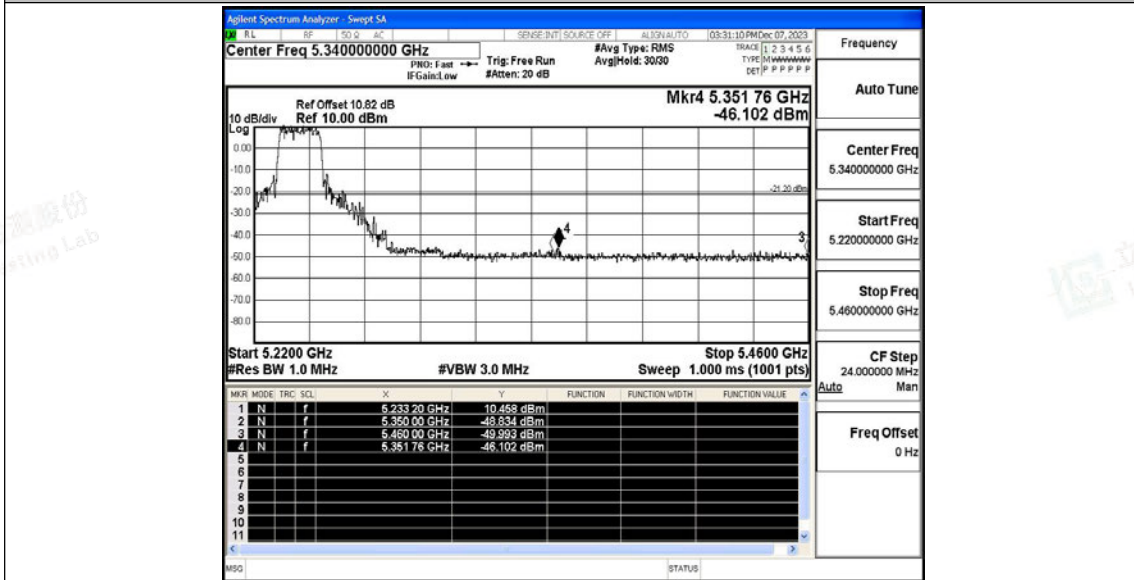


11AC20SISO_Ant1_High_5240_AV



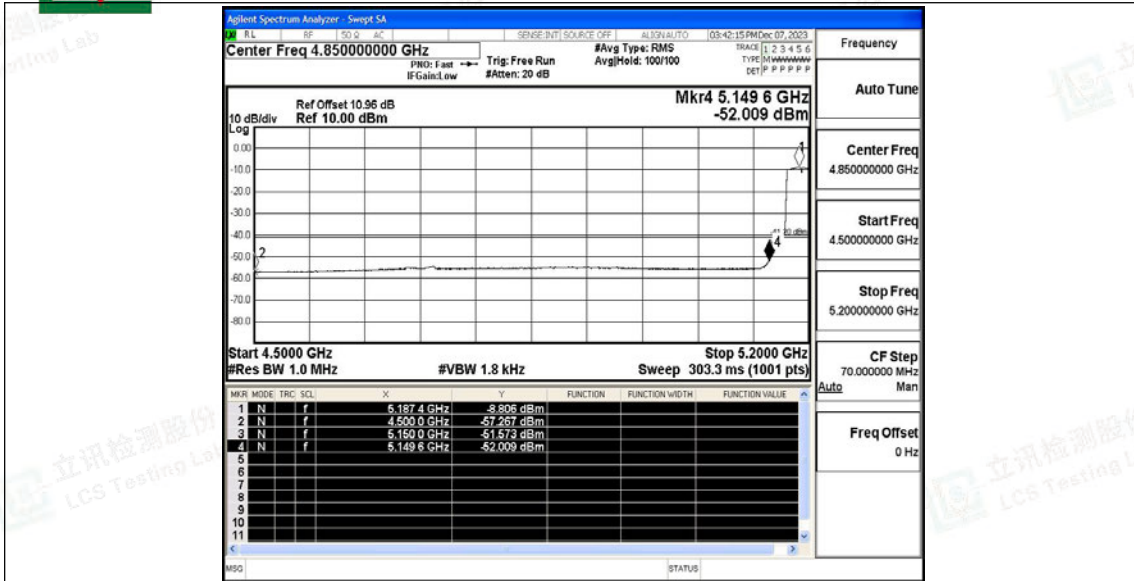


11AC20SISO_Ant1_High_5240_Peak

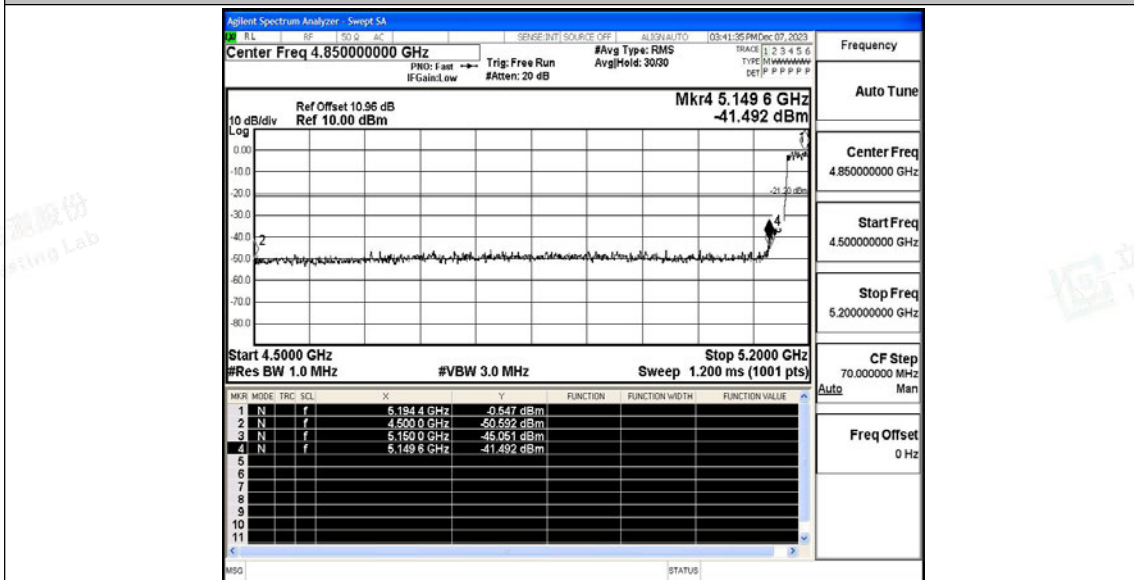


11AC40SISO_Ant1_Low_5190_AV



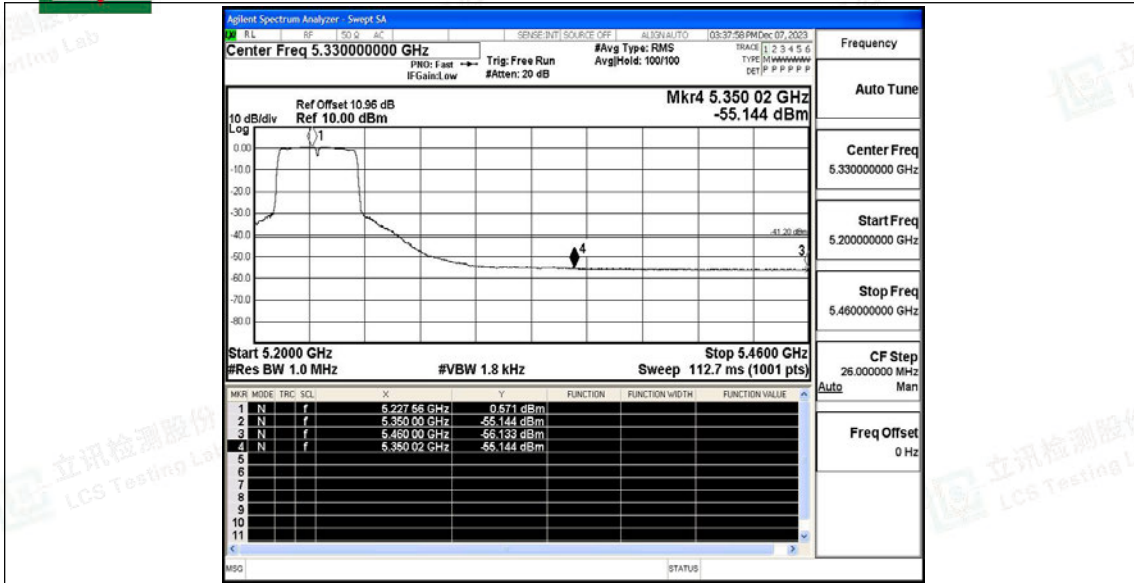


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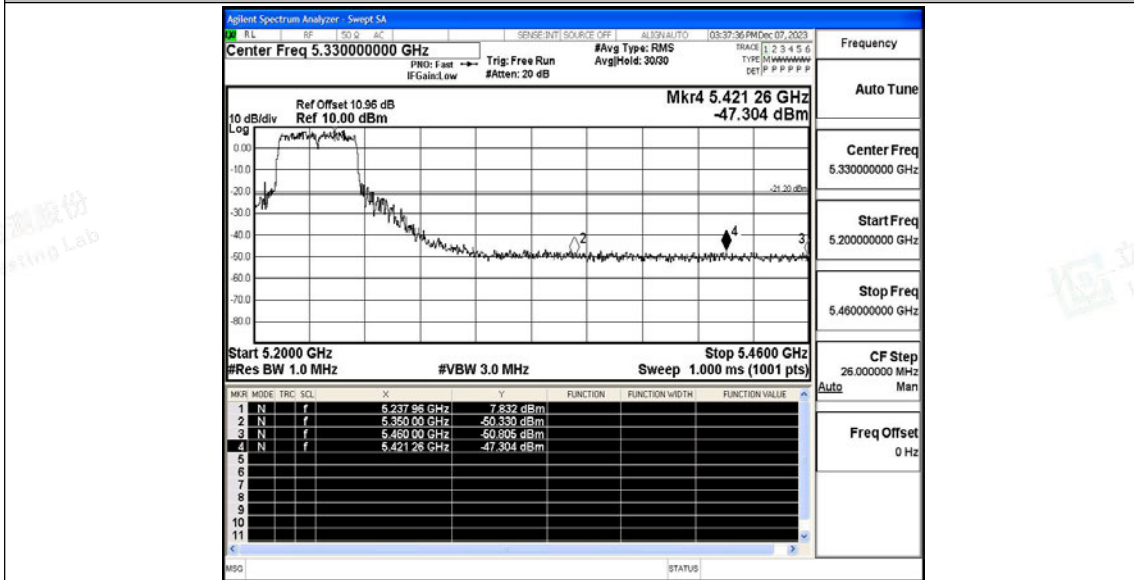


11AC40SISO_Ant1_High_5230_AV



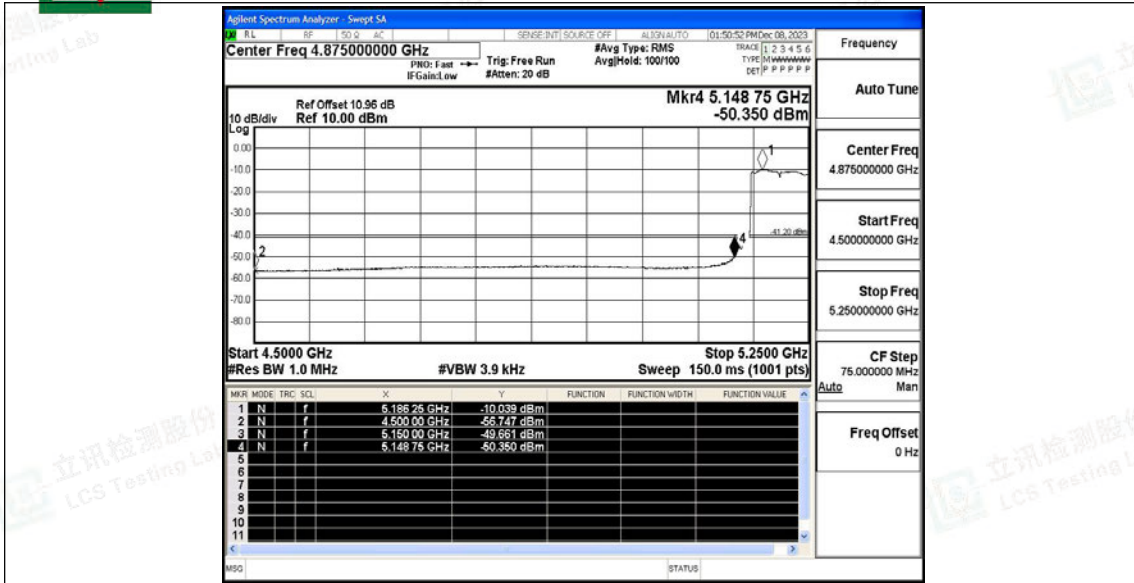


11AC40SISO_Ant1_High_5230_Peak

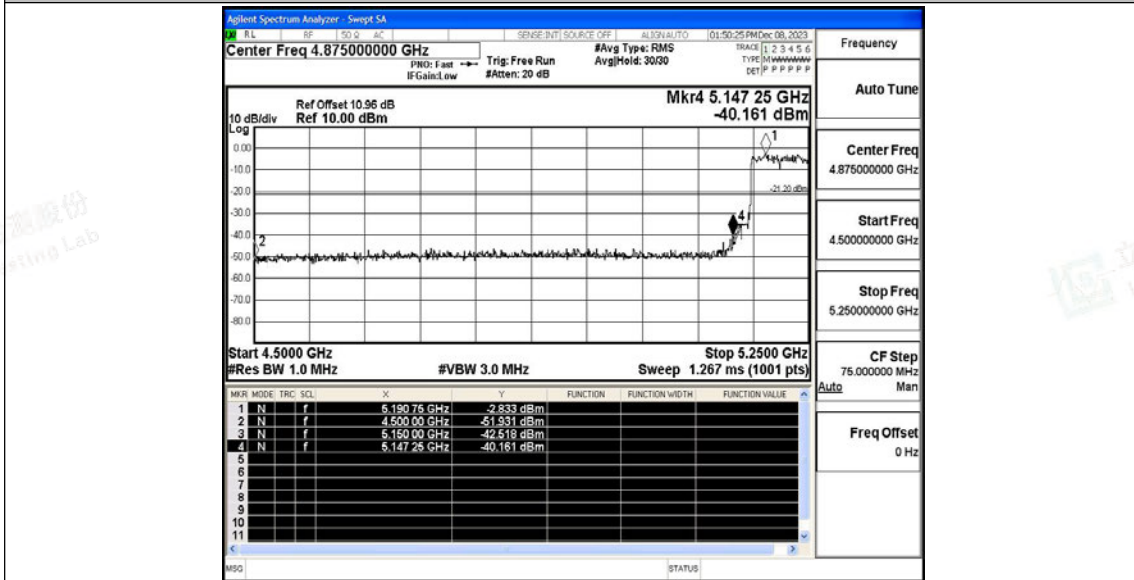


11AC80SISO_Ant1_Low_5210_AV



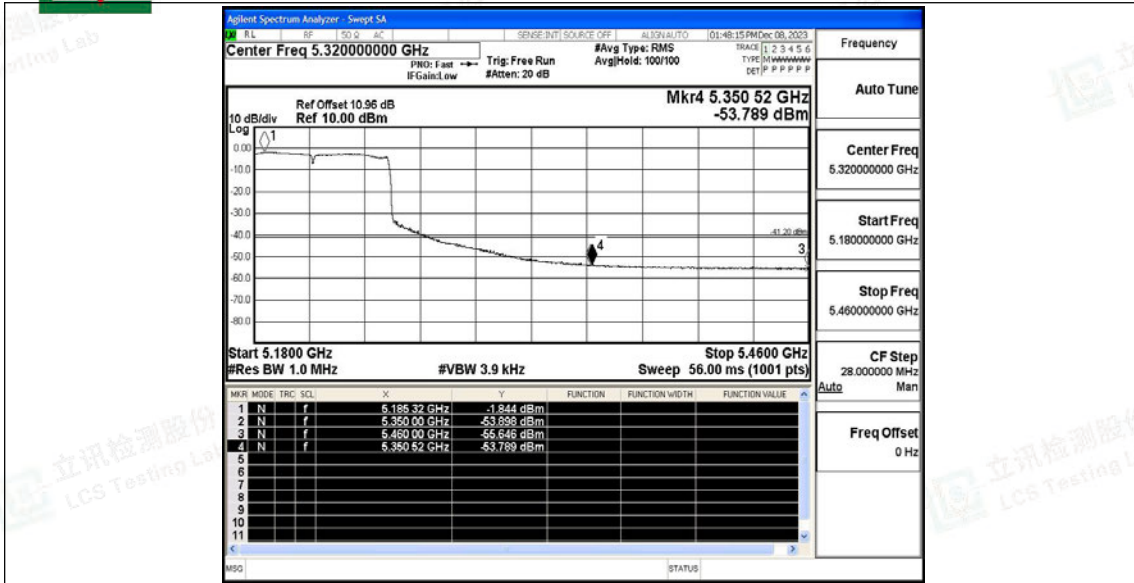


11AC80SISO_Ant1_Low_5210_Peak

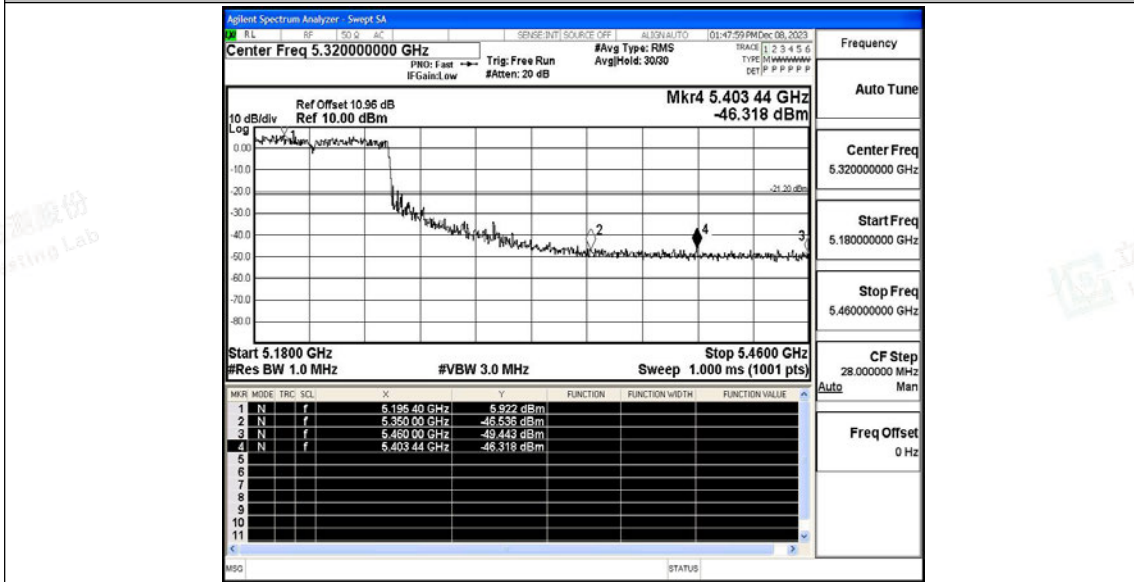


11AC80SISO_Ant1_High_5210_AV





11AC80SISO_Ant1_High_5210_Peak





D.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-20000.00	-3.861004	20	PASS
			HV	NT	-20000.00	-3.861004	20	PASS
		5220	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-20000.00	-3.831418	20	PASS
			HV	NT	-20000.00	-3.831418	20	PASS
		5240	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-20000.00	-3.816794	20	PASS
			HV	NT	-20000.00	-3.816794	20	PASS
11N40SI SO	Ant1	5190	NV	NT	0.00	0.000000	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	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS
11AC80S ISO	Ant1	5210	NV	NT	-80000.00	-15.355086	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	0.00	0.000000	20	PASS

Temperature								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	-20000.00	-3.861004	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-20000.00	-3.861004	20	PASS
			NV	20	0.00	0.000000	20	PASS
			NV	30	-20000.00	-3.861004	20	PASS
			NV	40	-20000.00	-3.861004	20	PASS
			NV	50	0.00	0.000000	20	PASS
		5220	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-20000.00	-3.831418	20	PASS
			NV	-10	0.00	0.000000	20	PASS



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Scan code to check authenticity



			NV	0	-20000.00	-3.831418	20	PASS			
			NV	10	-20000.00	-3.831418	20	PASS			
			NV	20	-20000.00	-3.831418	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	-20000.00	-3.816794	20	PASS			
			NV	0	-20000.00	-3.816794	20	PASS			
			NV	10	-20000.00	-3.816794	20	PASS			
			NV	20	-20000.00	-3.816794	20	PASS			
			NV	30	0.00	0.000000	20	PASS			
			NV	40	-20000.00	-3.816794	20	PASS			
			NV	50	0.00	0.000000	20	PASS			
			11N40SI SO	Ant1	5190	NV	-30	-40000.00	-7.707129	20	PASS
						NV	-20	-40000.00	-7.707129	20	PASS
						NV	-10	-40000.00	-7.707129	20	PASS
NV	0	-40000.00				-7.707129	20	PASS			
NV	10	0.00				0.000000	20	PASS			
NV	20	-40000.00				-7.707129	20	PASS			
NV	30	-40000.00				-7.707129	20	PASS			
NV	40	0.00				0.000000	20	PASS			
NV	50	-40000.00				-7.707129	20	PASS			
5230	NV	-30			-40000.00	-7.648184	20	PASS			
	NV	-20			0.00	0.000000	20	PASS			
	NV	-10			-40000.00	-7.648184	20	PASS			
	NV	0			-40000.00	-7.648184	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			-40000.00	-7.648184	20	PASS			
	NV	50			-40000.00	-7.648184	20	PASS			
11AC80S ISO	Ant1	5210	NV	-30	0.00	0.000000	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	0.00	0.000000	20	PASS			





		NV	40	0.00	0.000000	20	PASS
		NV	50	0.00	0.000000	20	PASS





D.6 Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5180	1.40	1.46	95.89	0.71
		5220	1.40	1.46	95.89	0.71
		5240	1.39	1.46	95.21	0.72
11N20SISO	Ant1	5180	1.18	1.25	94.40	0.85
		5220	1.18	1.24	95.16	0.85
		5240	1.18	1.25	94.40	0.85
11N40SISO	Ant1	5190	0.58	0.64	90.63	1.72
		5230	0.59	0.65	90.77	1.69
11AC20SISO	Ant1	5180	1.18	1.25	94.40	0.85
		5220	1.18	1.25	94.40	0.85
		5240	1.19	1.25	95.20	0.84
11AC40SISO	Ant1	5190	0.60	0.66	90.91	1.67
		5230	0.60	0.66	90.91	1.67
11AC80SISO	Ant1	5210	0.30	0.36	83.33	3.33



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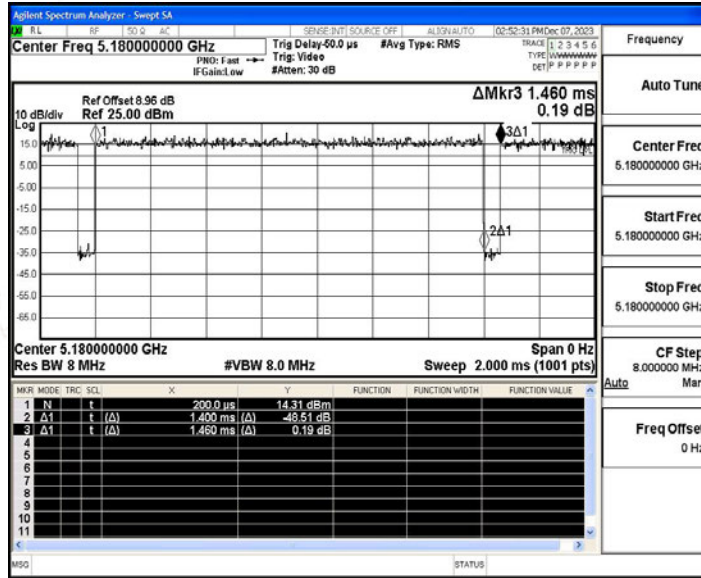
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Scan code to check authenticity

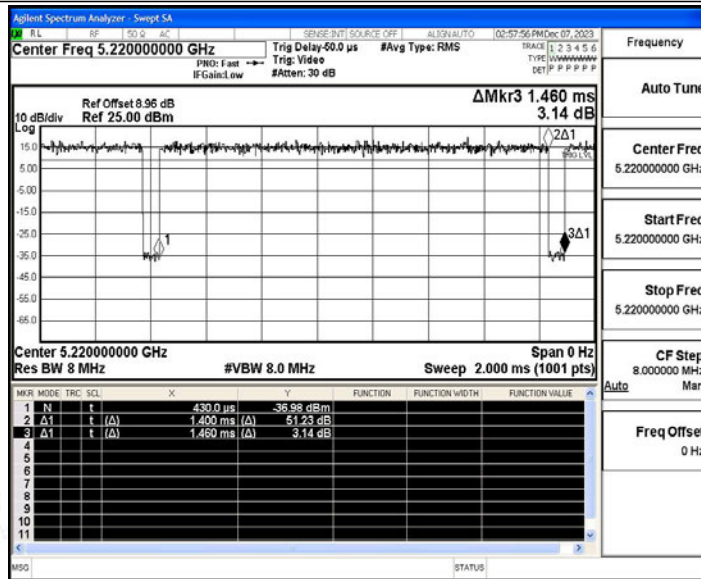


Test Graphs

11A_Ant1_5180

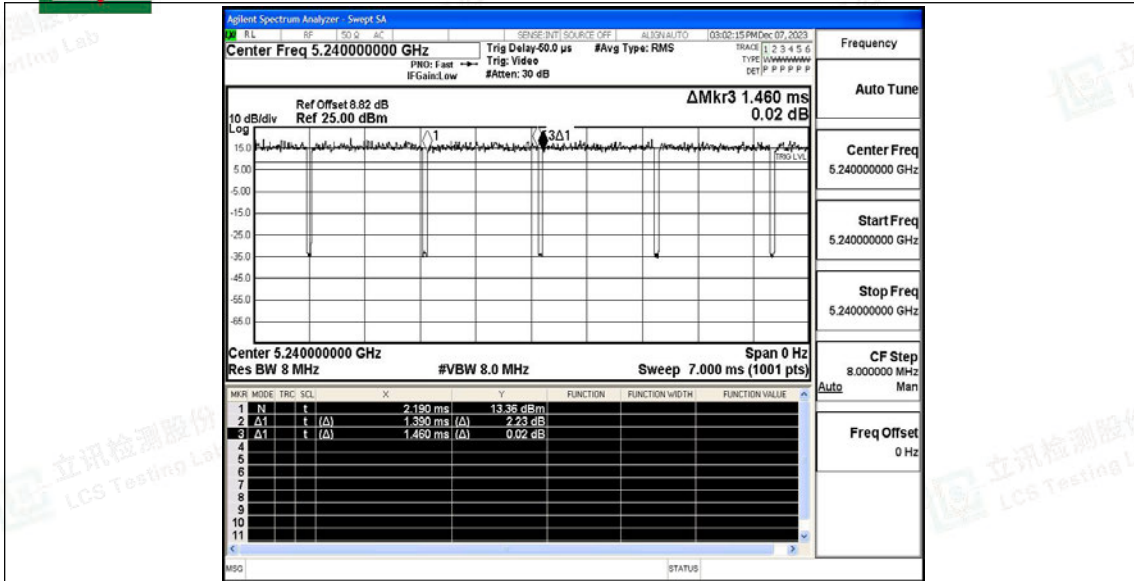


11A_Ant1_5220

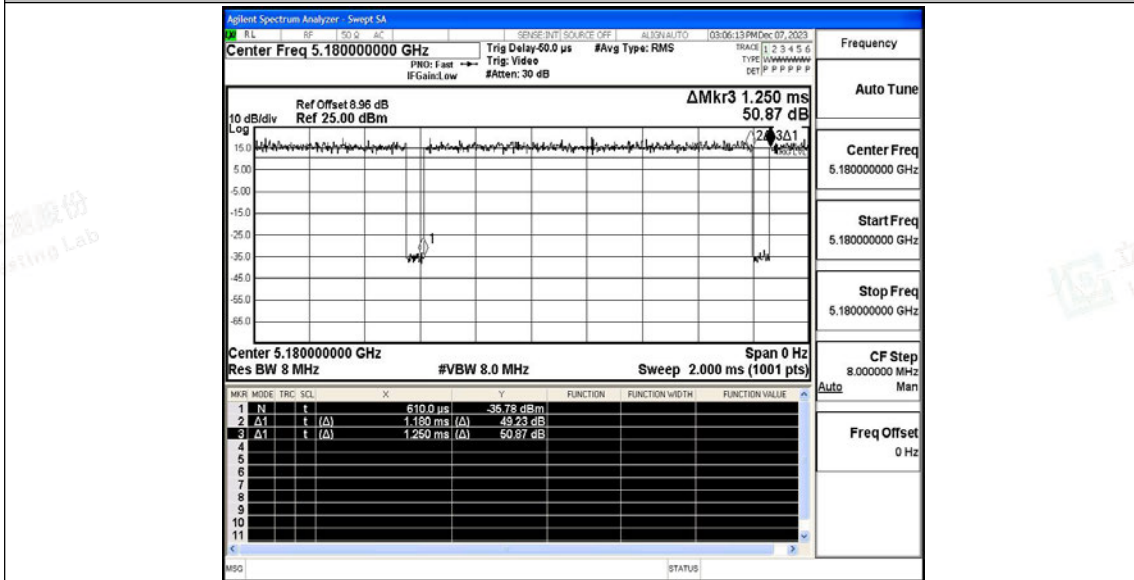


11A_Ant1_5240



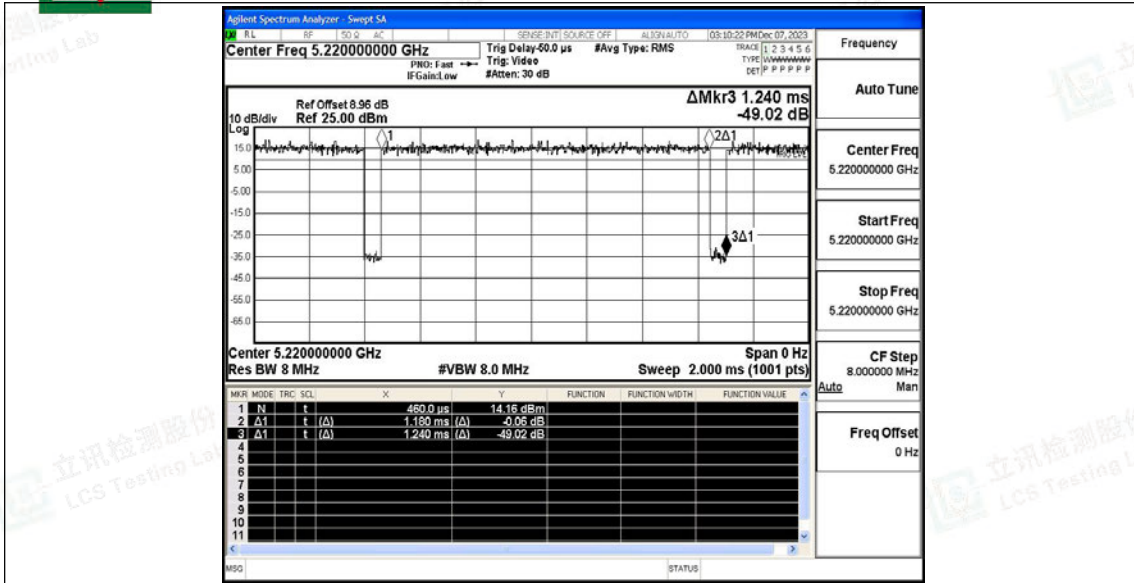


11N20SISO_Ant1_5180

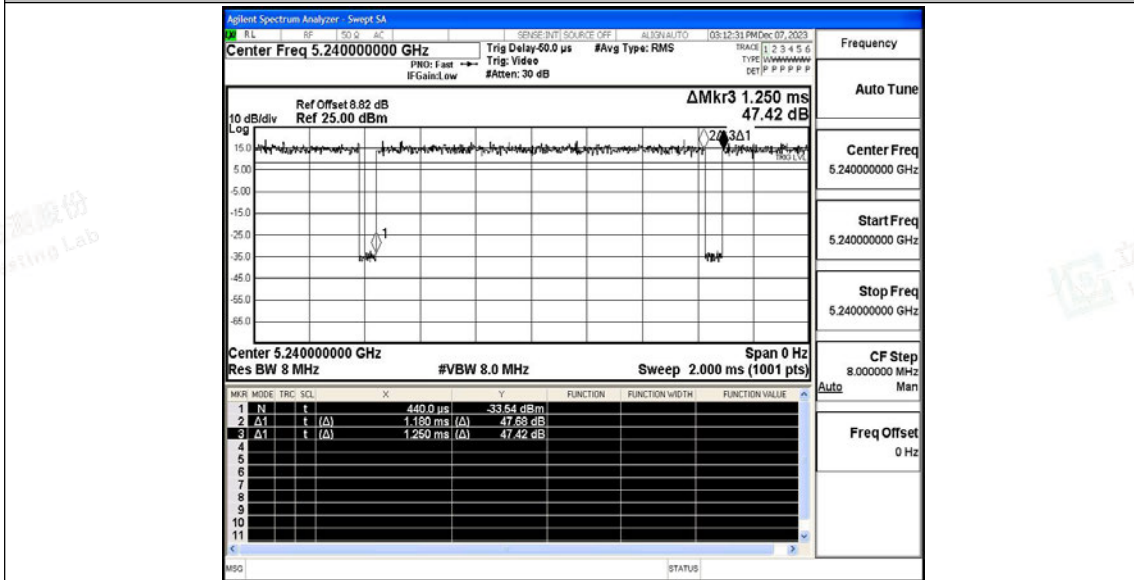


11N20SISO_Ant1_5220



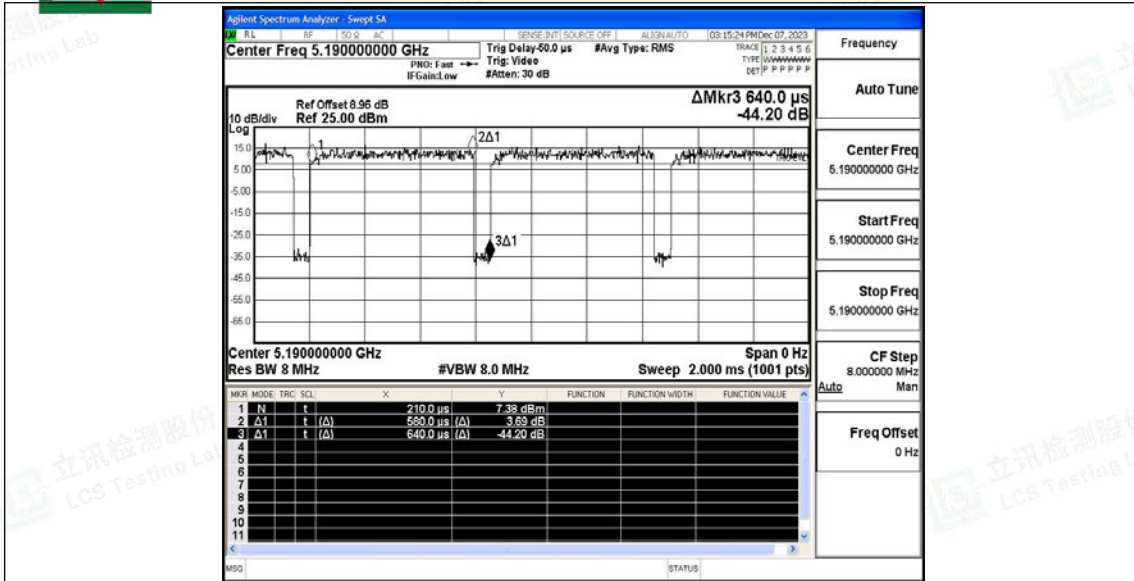


11N20SISO_Ant1_5240

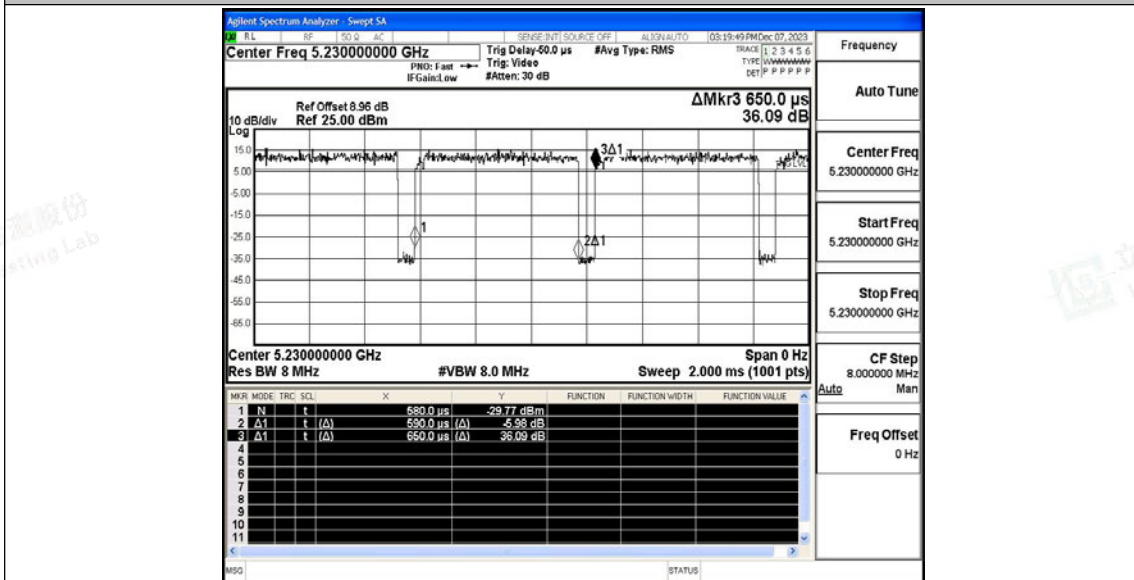


11N40SISO_Ant1_5190



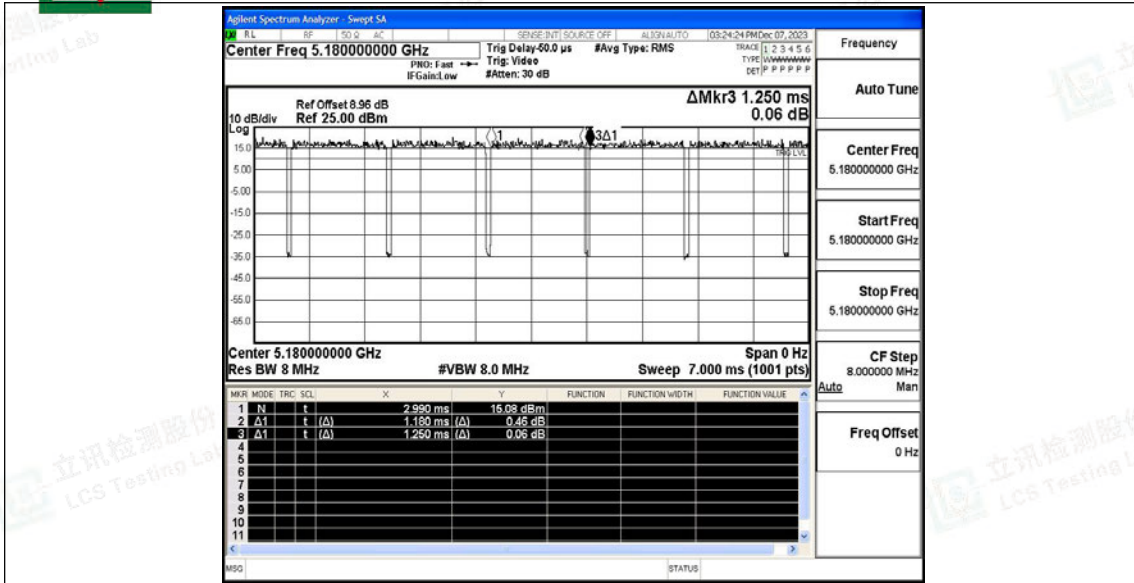


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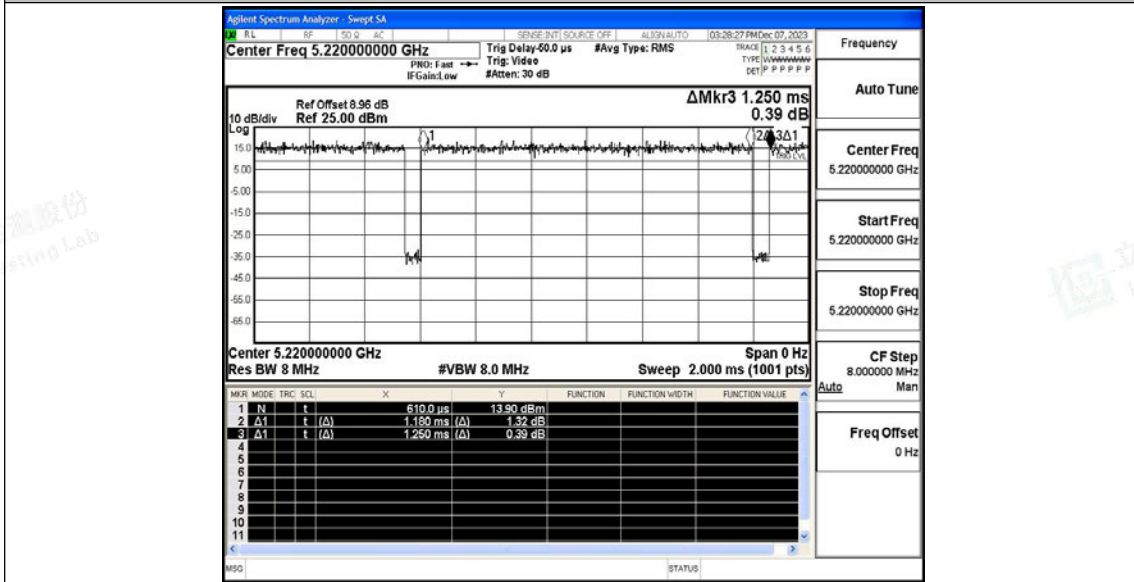


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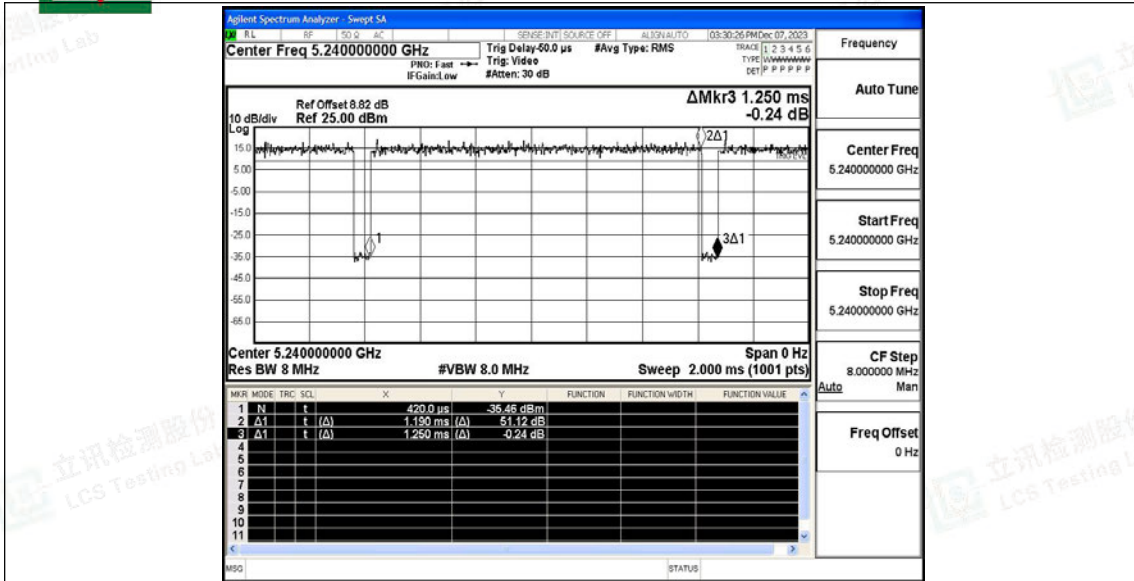


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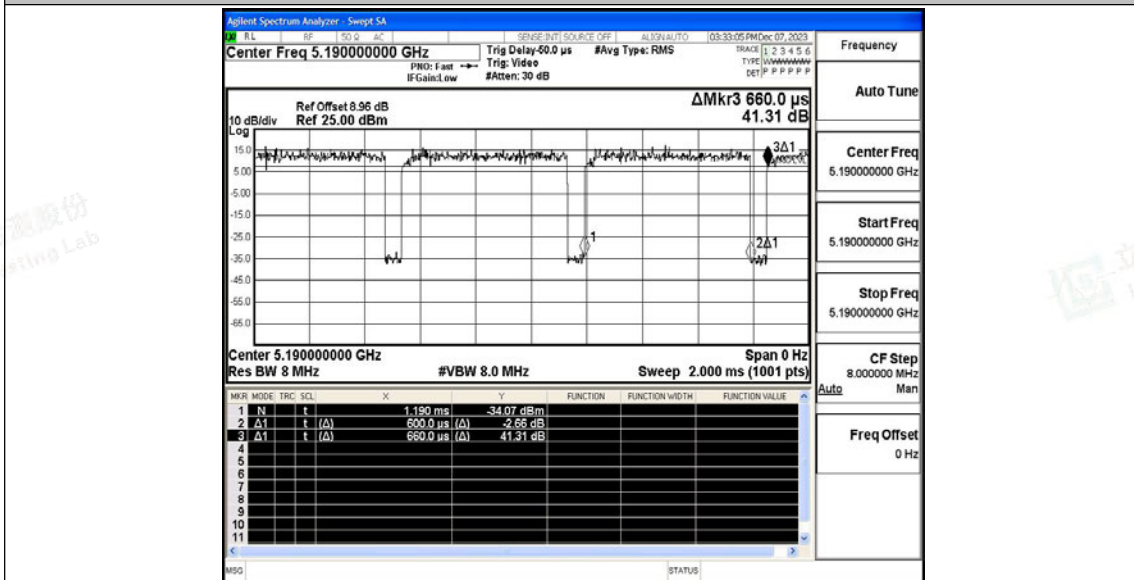


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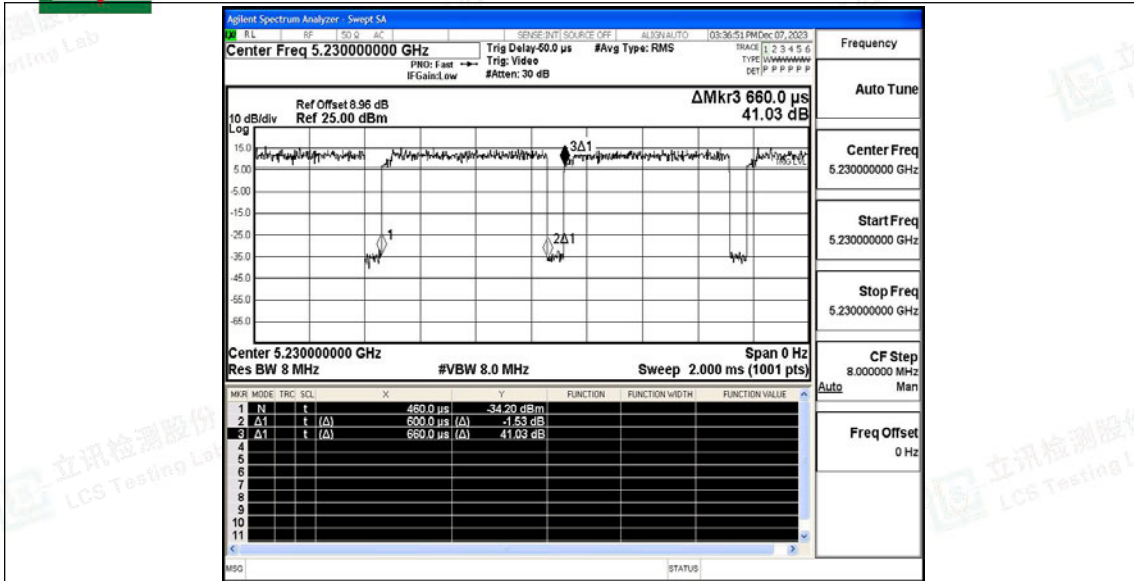


11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230





11AC80SISO_Ant1_5210

