



Appendix C

RF Test Data for 2.4GWIFI(Conducted Measurement)

Product Name: Device_UI_Protech_651G

Test Model: 42-18000-0

Environmental Conditions

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



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C.1 DTS Bandwidth

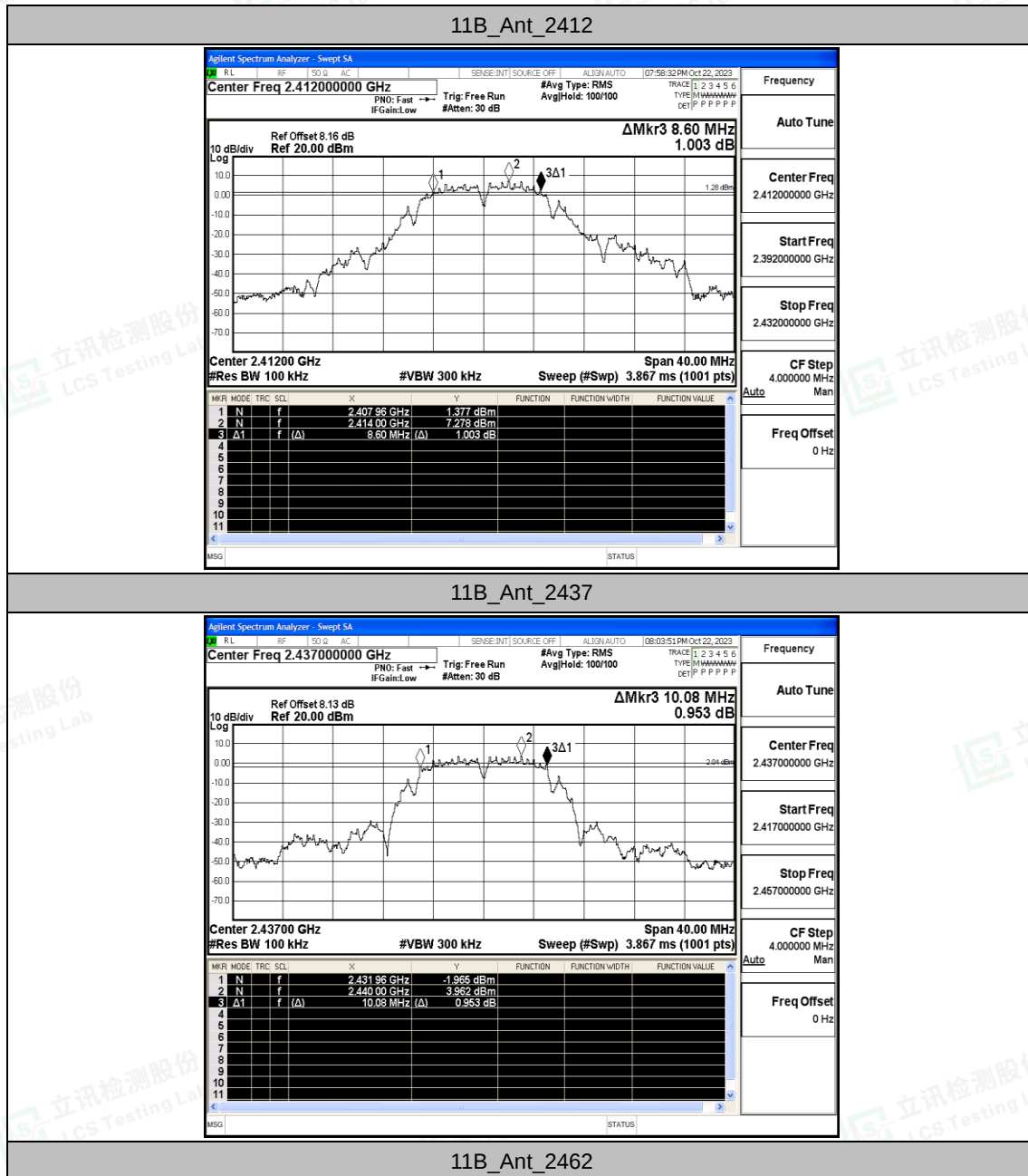
Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant	2412	8.600	2407.960	2416.560	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	9.560	2457.440	2467.000	0.5	PASS
11G	Ant	2412	16.280	2403.840	2420.120	0.5	PASS
		2437	15.960	2428.800	2444.760	0.5	PASS
		2462	15.960	2454.200	2470.160	0.5	PASS
11N20SISO	Ant	2412	16.160	2404.440	2420.600	0.5	PASS
		2437	16.160	2428.360	2444.520	0.5	PASS
		2462	16.480	2453.880	2470.360	0.5	PASS
11N40SISO	Ant	2422	33.760	2405.760	2439.520	0.5	PASS
		2437	35.600	2418.920	2454.520	0.5	PASS
		2452	36.080	2433.920	2470.000	0.5	PASS





Test Graphs

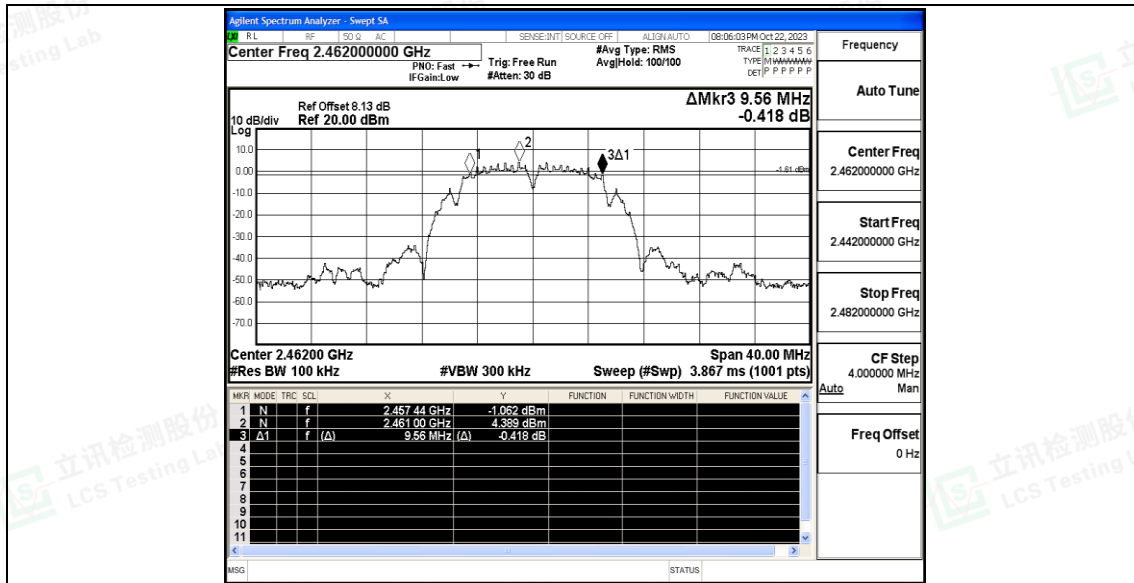


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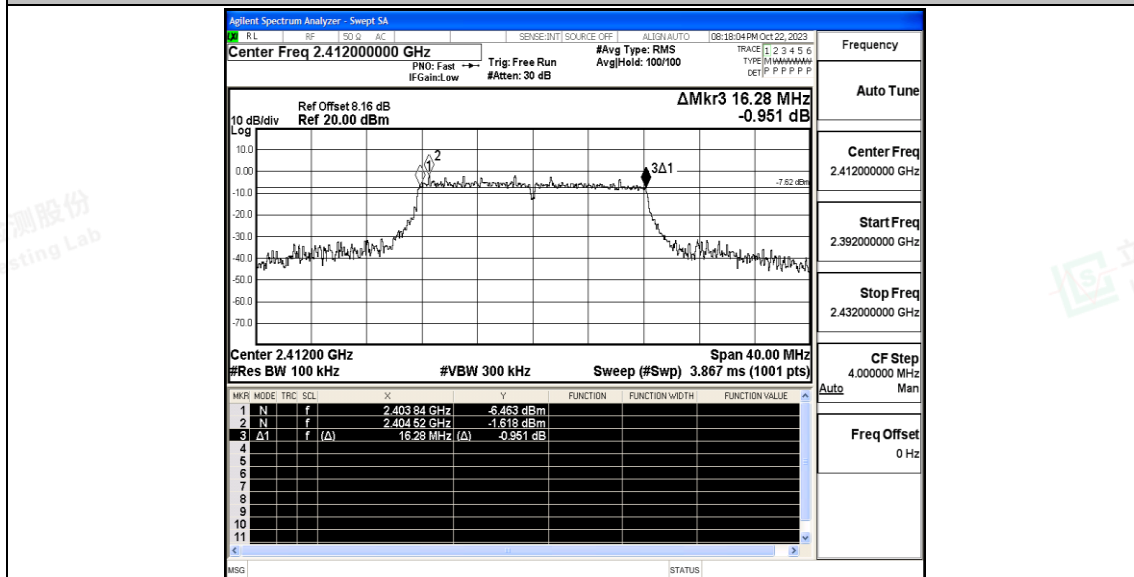
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11G_Ant_2412



11G_Ant_2437

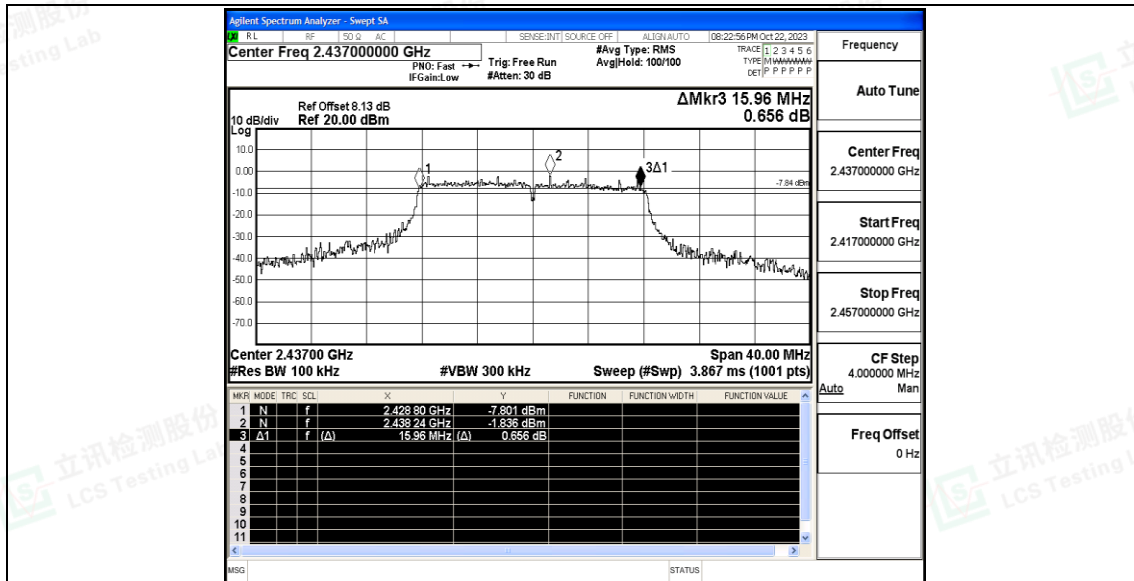


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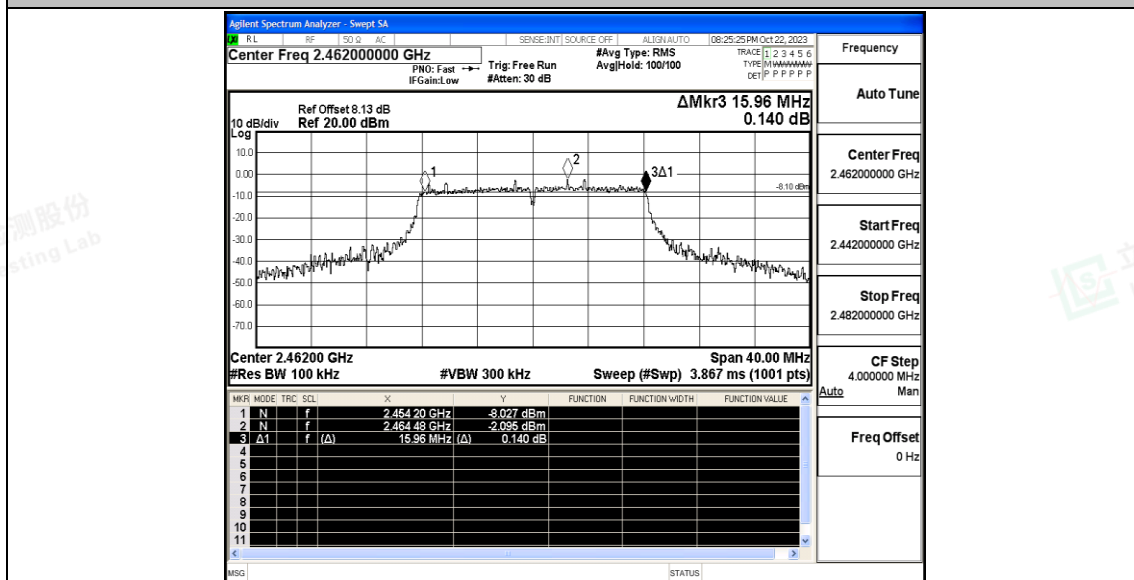
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11G_Ant_2462



11N20SISO_Ant_2412

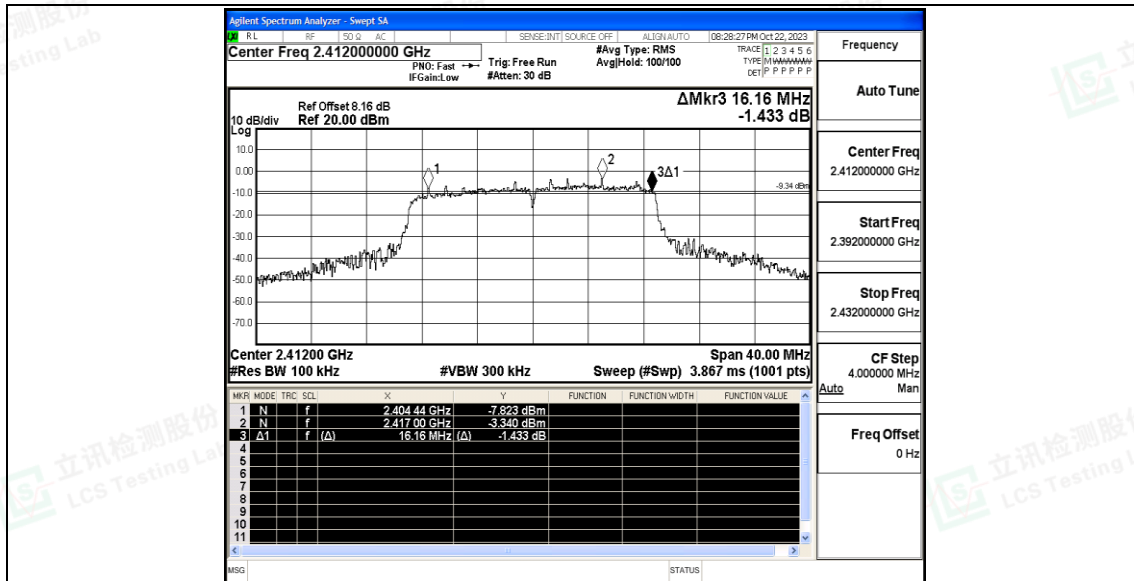


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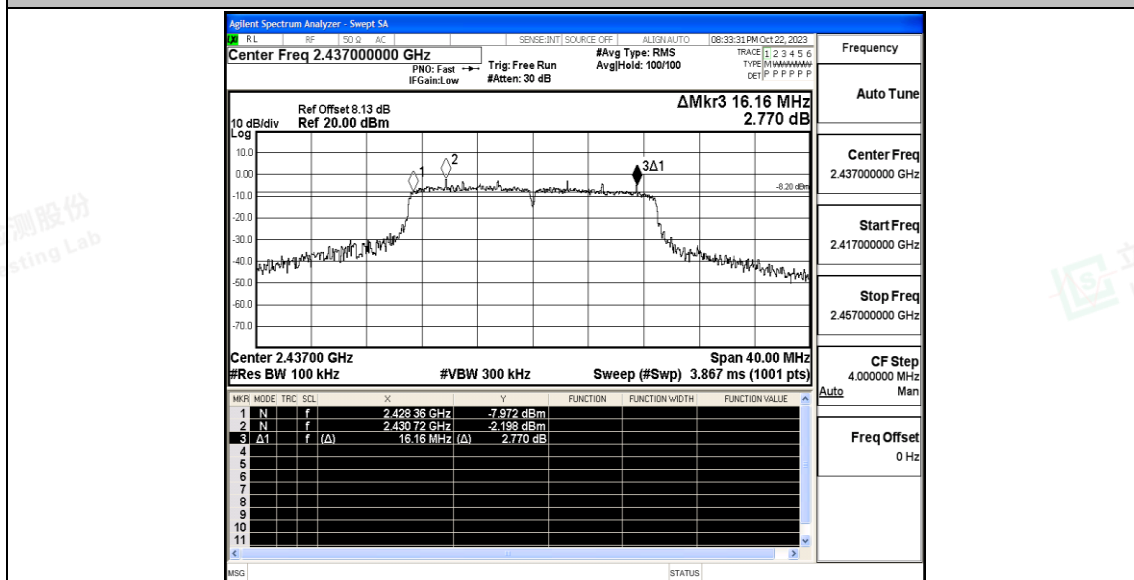
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11N20SISO_Ant_2437



11N20SISO_Ant_2462

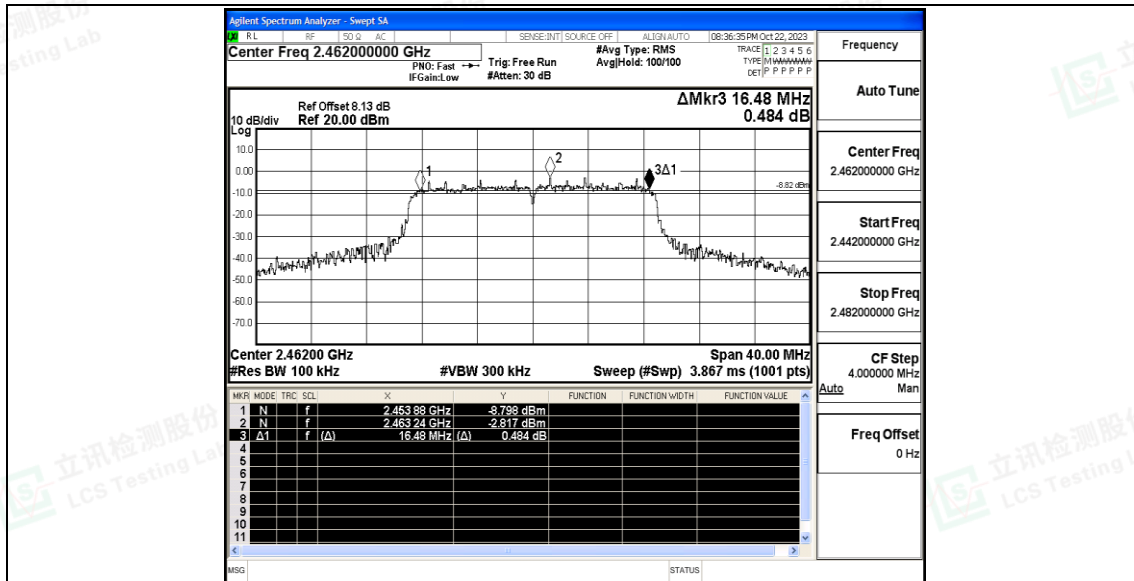


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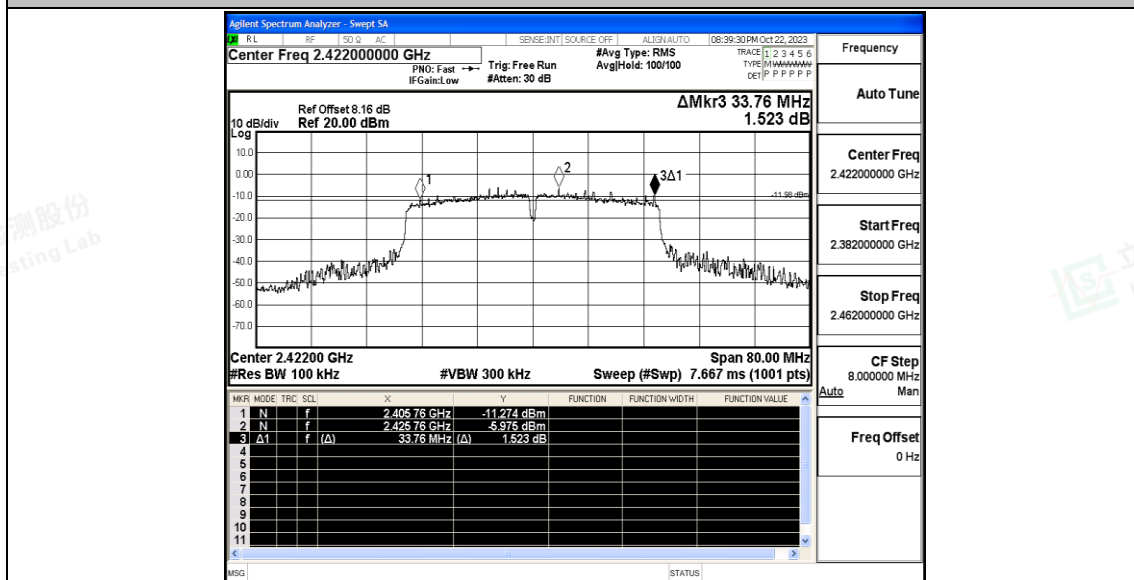
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11N40SISO_Ant_2422



11N40SISO_Ant_2437

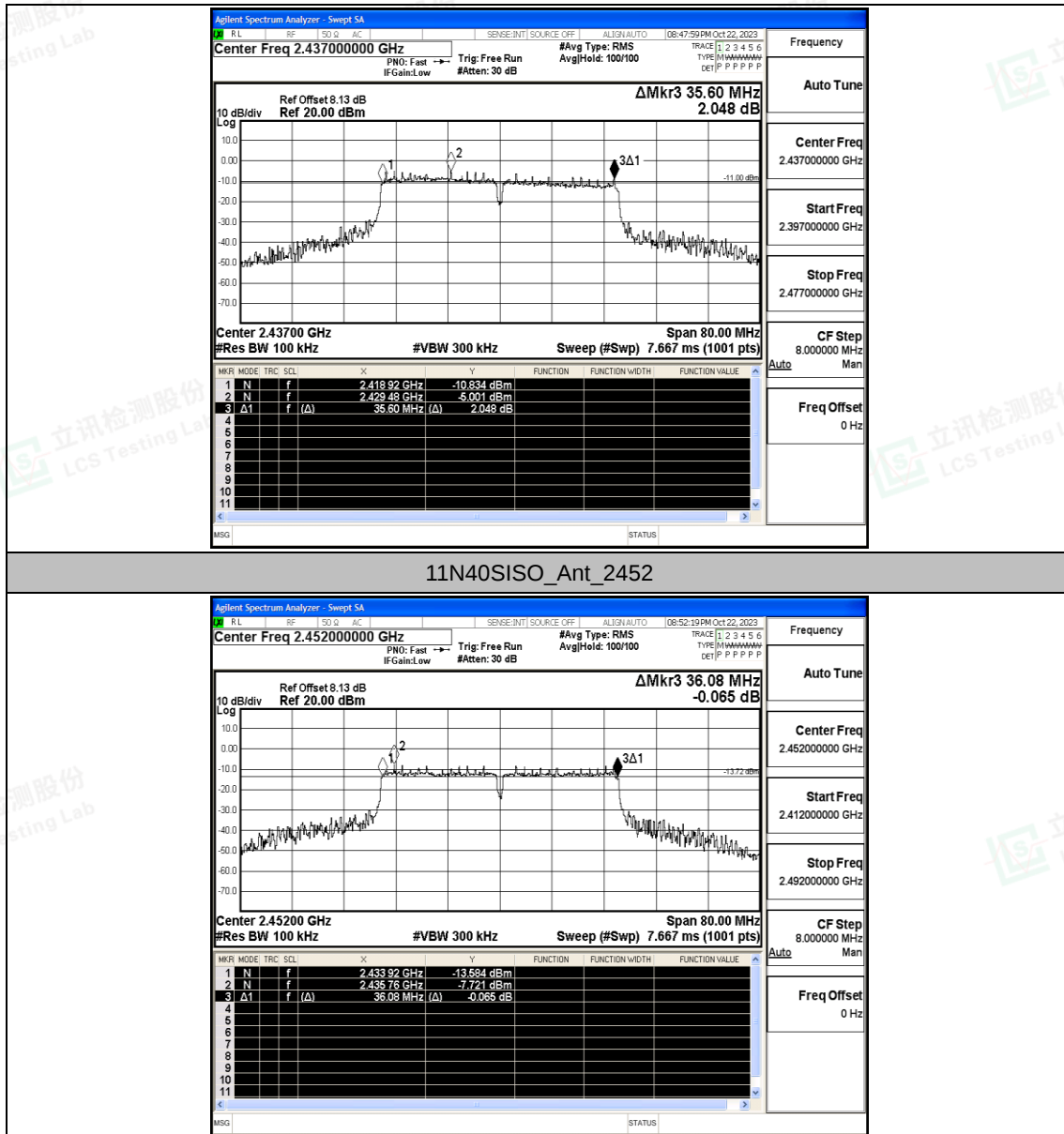


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C.2 Occupied Channel Bandwidth

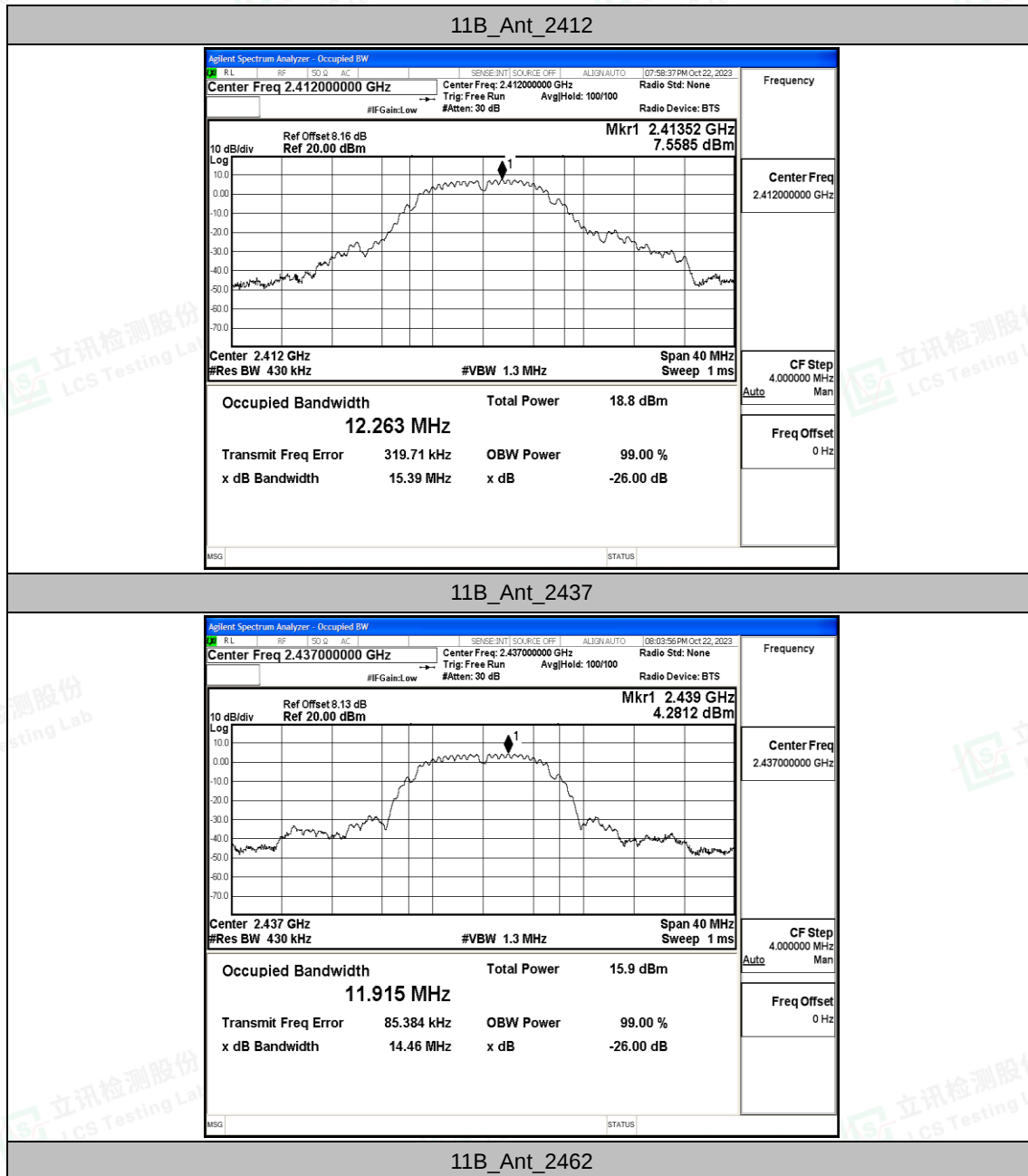
Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant	2412	12.263	2406.1882	2418.4512	---	---
		2437	11.915	2431.1279	2443.0429	---	---
		2462	11.889	2456.0377	2467.9267	---	---
11G	Ant	2412	16.767	2403.5654	2420.3324	---	---
		2437	16.761	2428.4926	2445.2536	---	---
		2462	16.767	2453.6768	2470.4438	---	---
11N20SISO	Ant	2412	17.591	2403.3232	2420.9142	---	---
		2437	17.733	2428.0198	2445.7528	---	---
		2462	17.681	2453.1975	2470.8785	---	---
11N40SISO	Ant	2422	35.727	2404.2332	2439.9602	---	---
		2437	36.276	2418.6968	2454.9728	---	---
		2452	36.433	2433.7404	2470.1734	---	---





Test Graphs

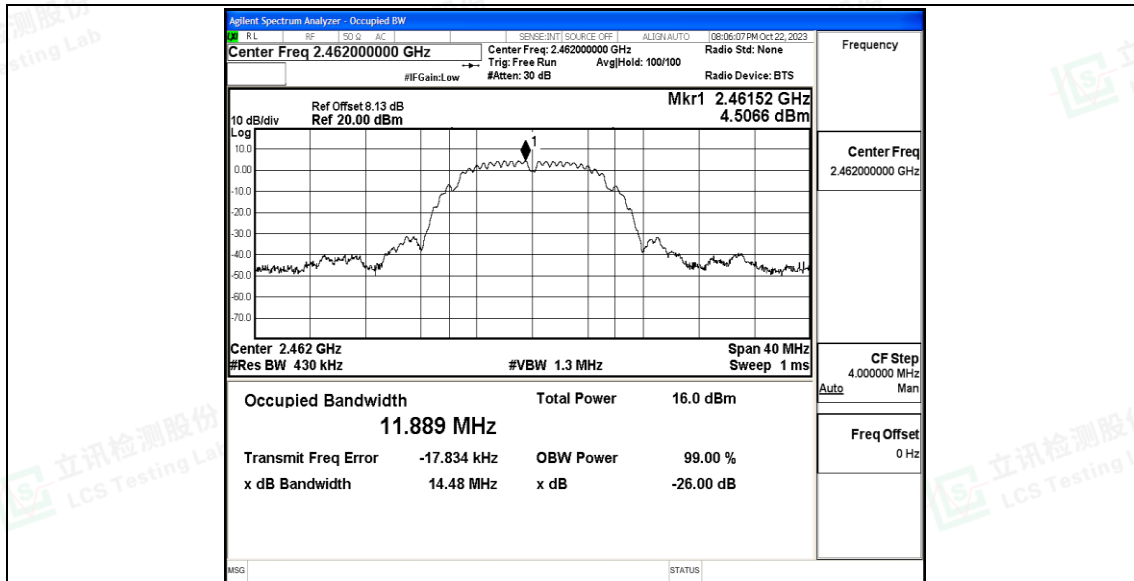


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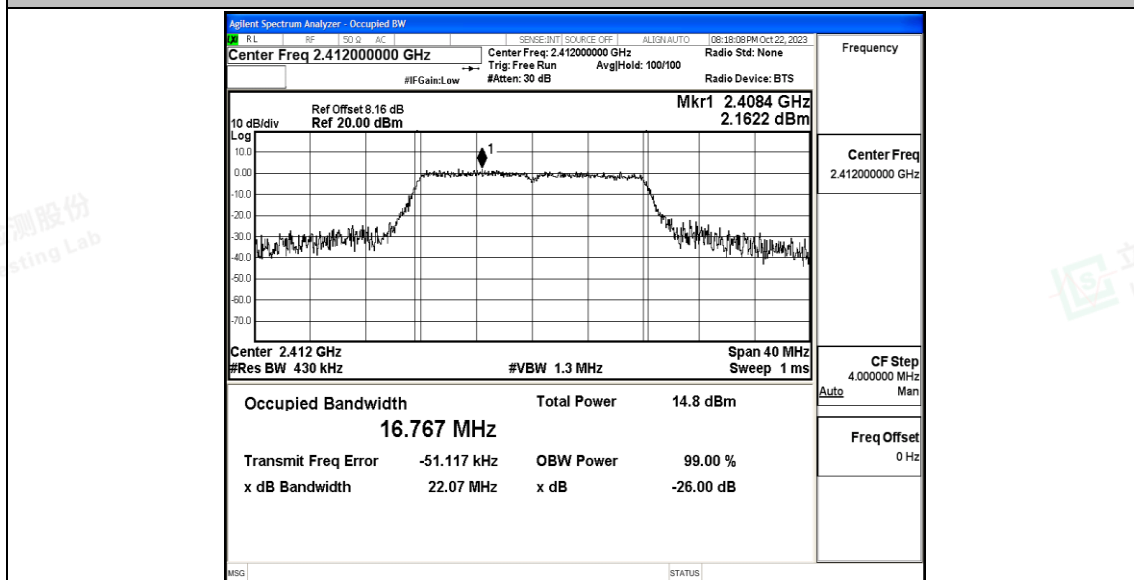
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11G_Ant_2412



11G_Ant_2437

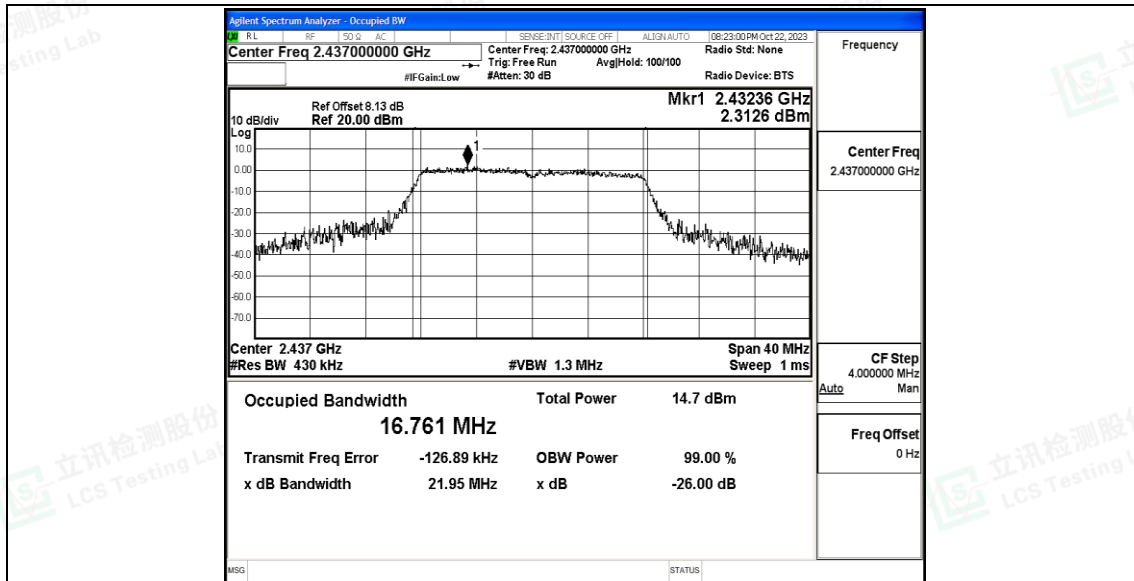


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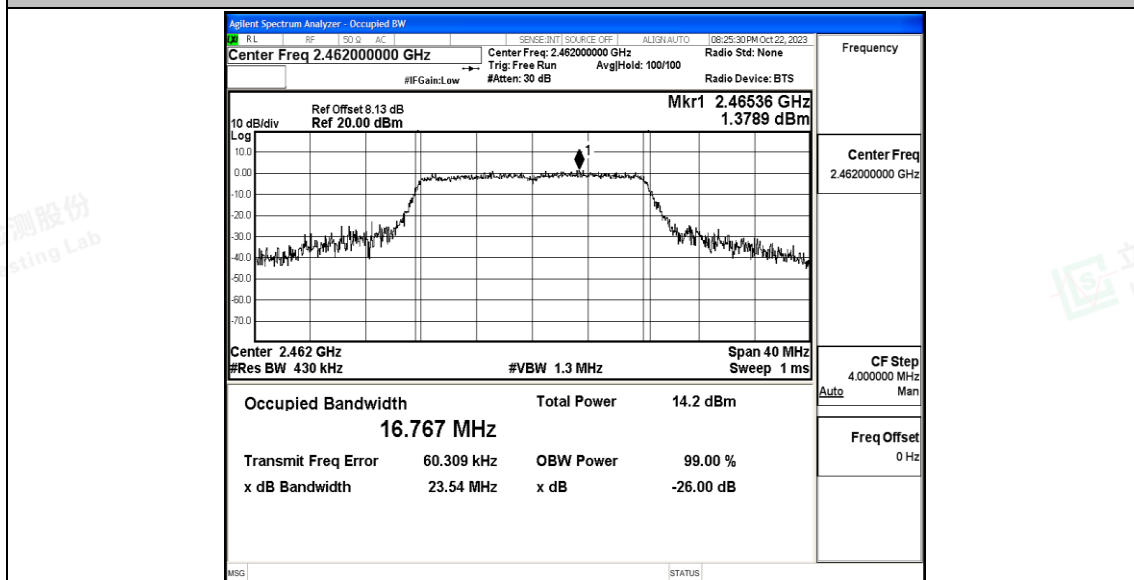
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11G_Ant_2462



11N20SISO_Ant_2412

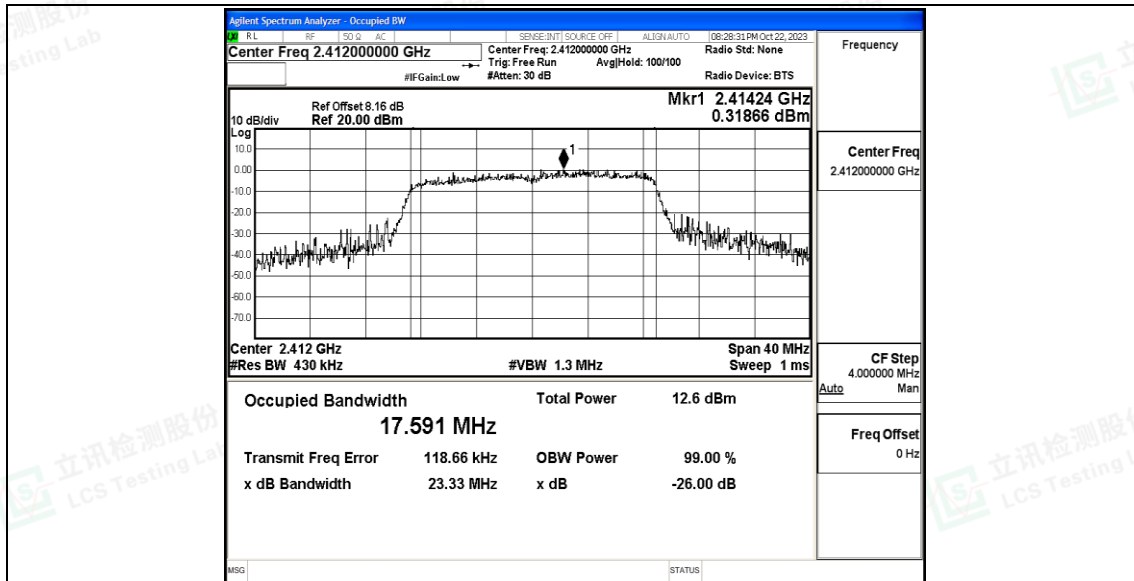


Shenzhen LCS Compliance Testing Laboratory Ltd.

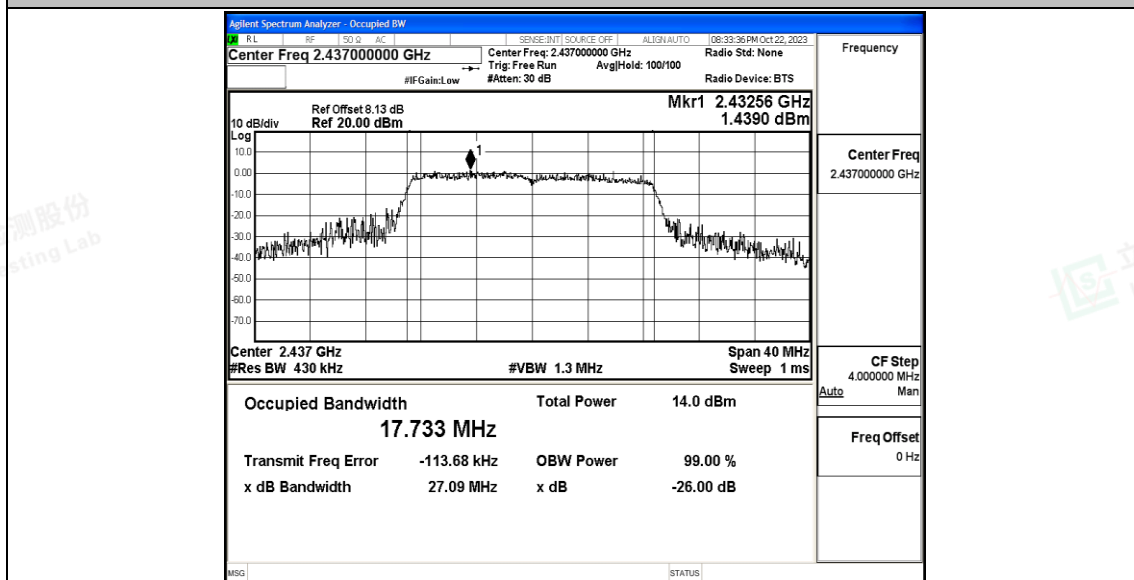
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11N20SISO_Ant_2437



11N20SISO_Ant_2462

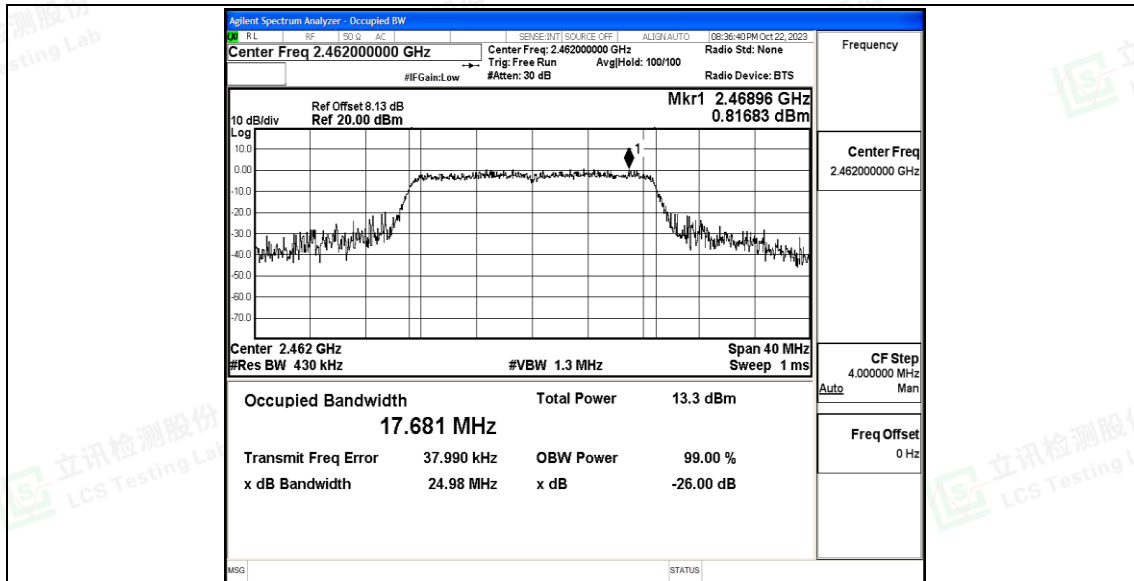


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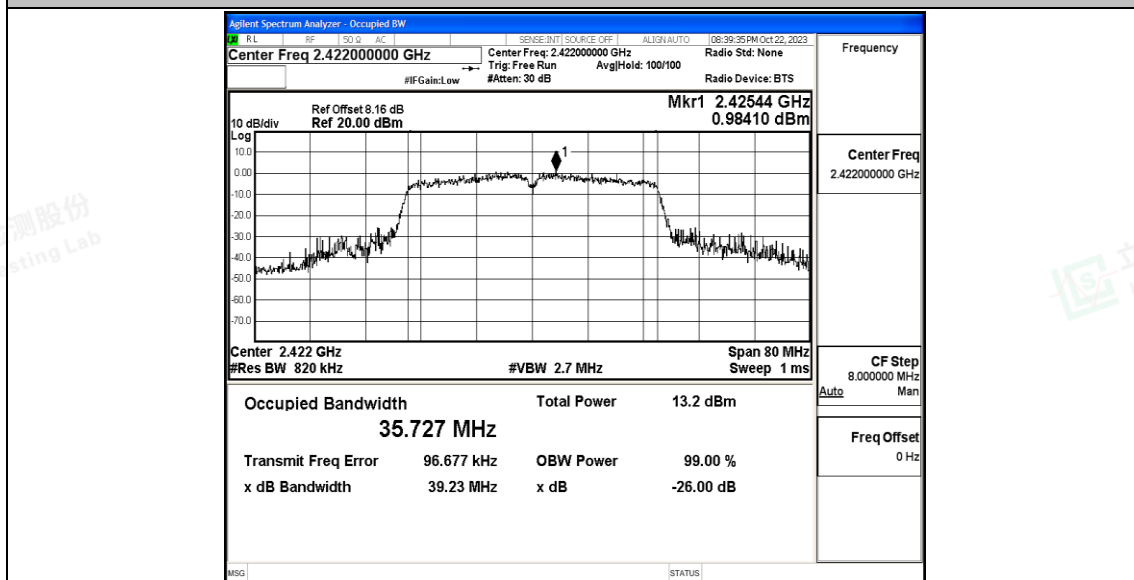
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11N40SISO_Ant_2422



11N40SISO_Ant_2437

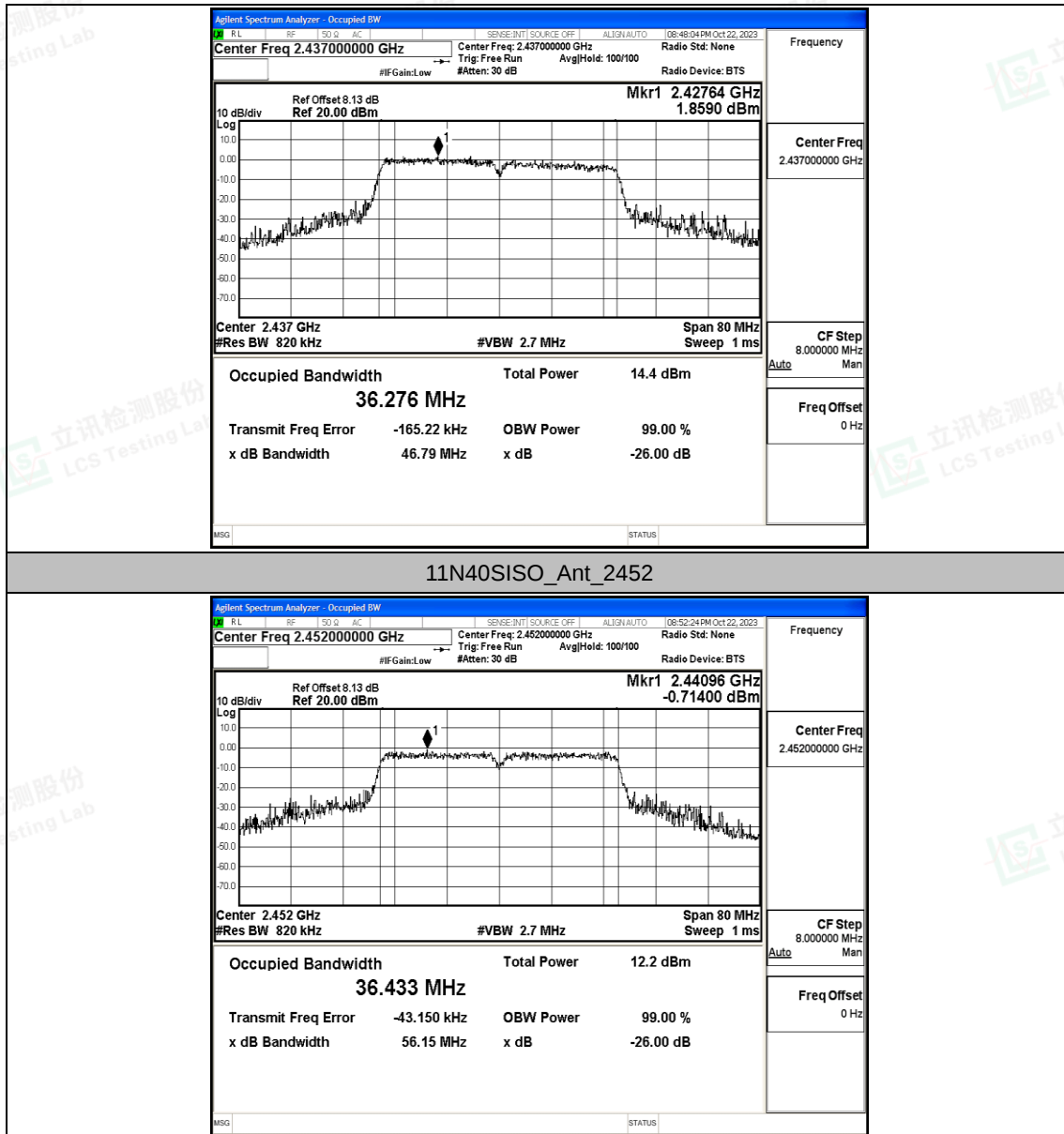


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C.3 Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Peak Power[dBm]	Conducted Limit[dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	Ant	2412	15.60	≤30.00	0.77	16.37	≤36.00	PASS
		2437	16.06	≤30.00	0.77	16.83	≤36.00	PASS
		2462	15.28	≤30.00	0.77	16.05	≤36.00	PASS
11G	Ant	2412	14.67	≤30.00	0.77	15.44	≤36.00	PASS
		2437	15.47	≤30.00	0.77	16.24	≤36.00	PASS
		2462	15.30	≤30.00	0.77	16.07	≤36.00	PASS
11N20SISO	Ant	2412	13.53	≤30.00	0.77	14.3	≤36.00	PASS
		2437	14.77	≤30.00	0.77	15.54	≤36.00	PASS
		2462	14.23	≤30.00	0.77	15	≤36.00	PASS
11N40SISO	Ant	2422	13.29	≤30.00	0.77	14.06	≤36.00	PASS
		2437	14.38	≤30.00	0.77	15.15	≤36.00	PASS
		2452	12.61	≤30.00	0.77	13.38	≤36.00	PASS





C.4 Maximum power spectral density

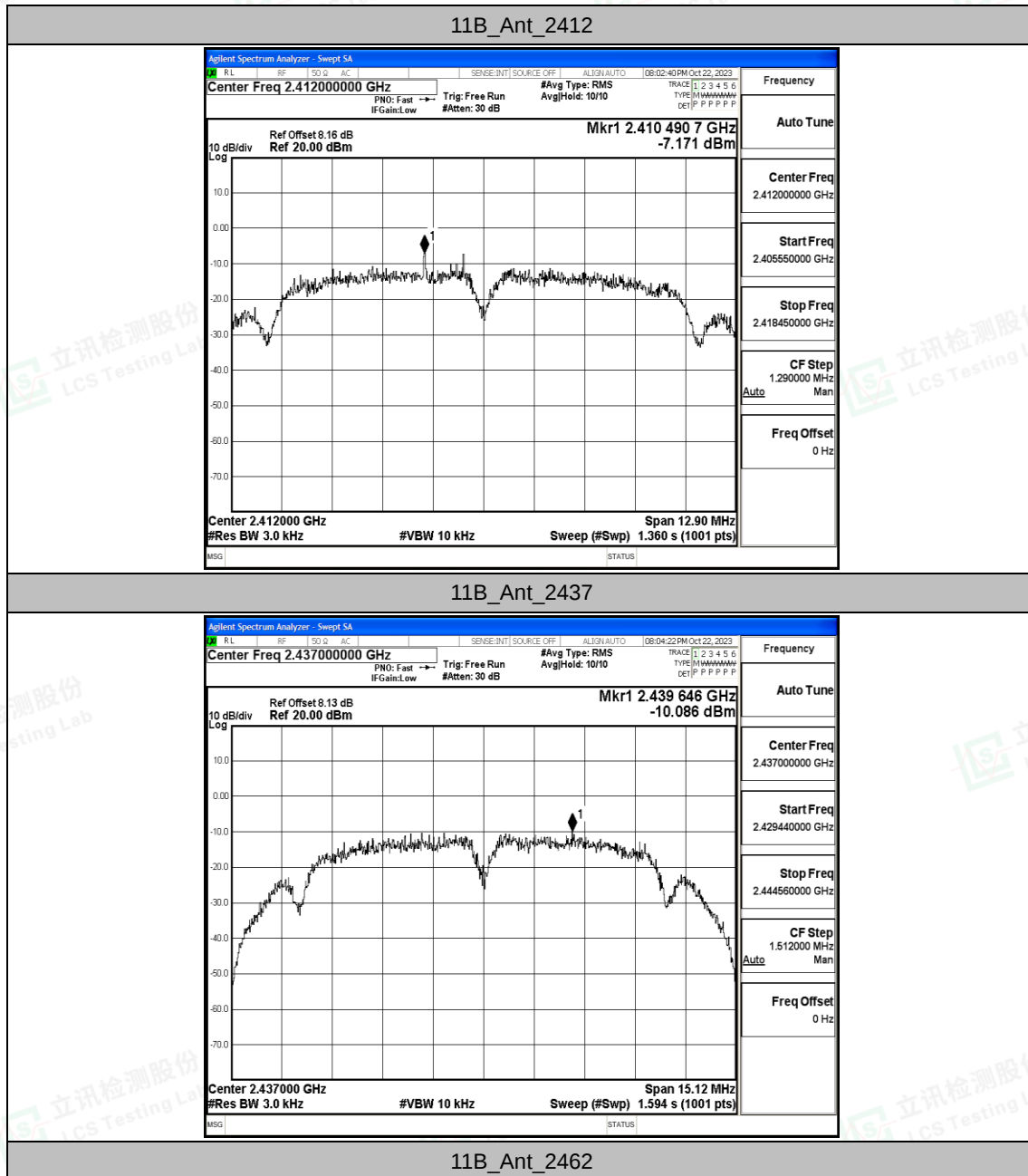
Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Gain [dBi]	EIRP [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant	2412	-7.17	≤8.00	0.00	-7.17	---	PASS
		2437	-10.09	≤8.00	0.00	-10.09	---	PASS
		2462	-7.81	≤8.00	0.00	-7.81	---	PASS
11G	Ant	2412	-17.26	≤8.00	0.00	-17.26	---	PASS
		2437	-16.02	≤8.00	0.00	-16.02	---	PASS
		2462	-16.68	≤8.00	0.00	-16.68	---	PASS
11N20SISO	Ant	2412	-17.65	≤8.00	0.00	-17.65	---	PASS
		2437	-16.83	≤8.00	0.00	-16.83	---	PASS
		2462	-17.07	≤8.00	0.00	-17.07	---	PASS
11N40SISO	Ant	2422	-21.05	≤8.00	0.00	-21.05	---	PASS
		2437	-19.9	≤8.00	0.00	-19.90	---	PASS
		2452	-22.78	≤8.00	0.00	-22.78	---	PASS





Test Graphs

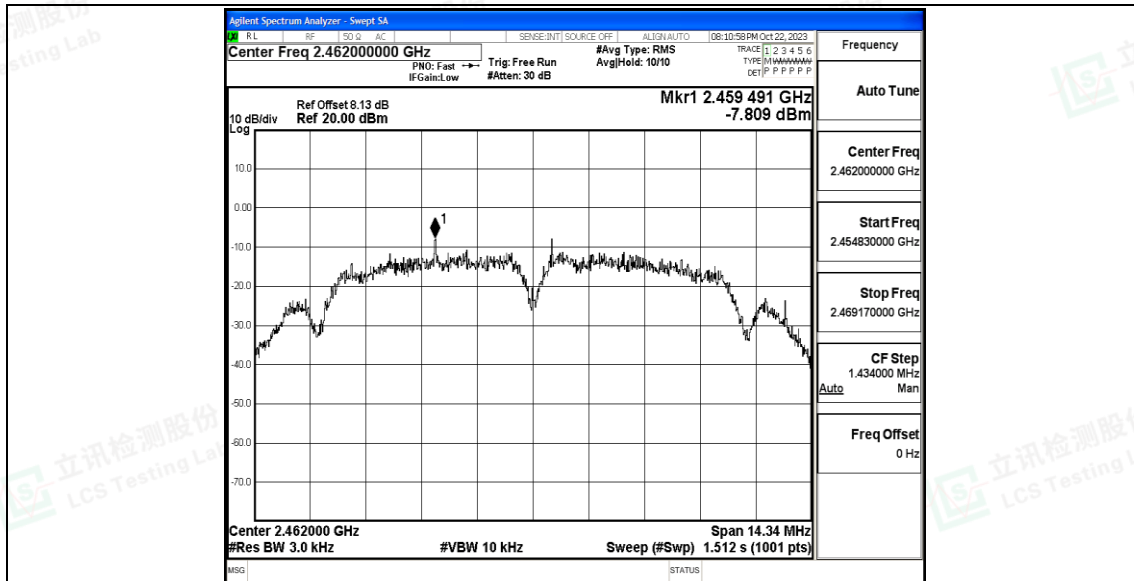


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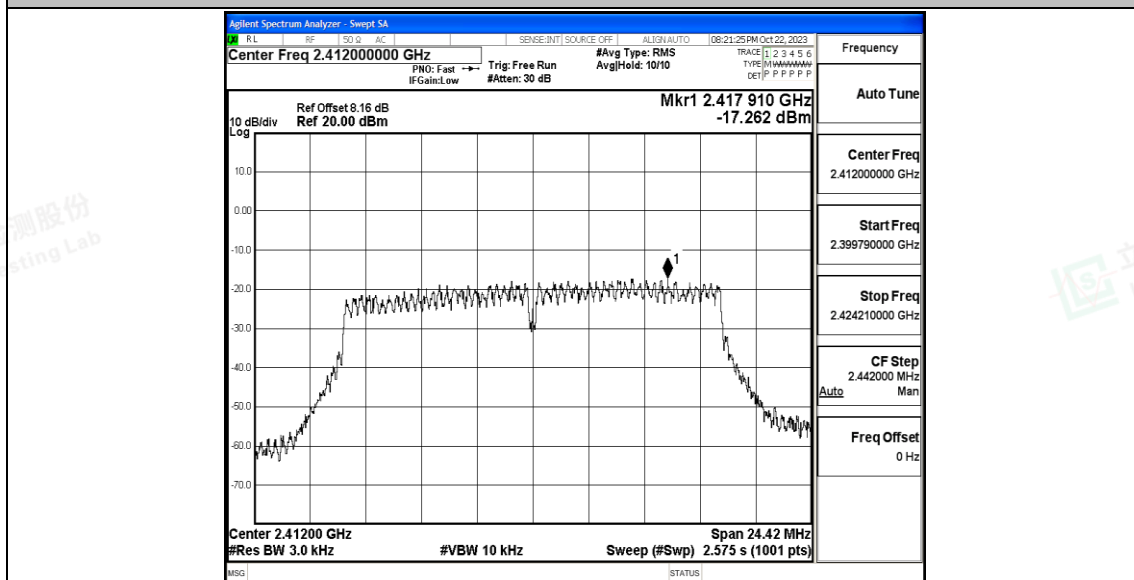
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11G_Ant_2412



11G_Ant_2437

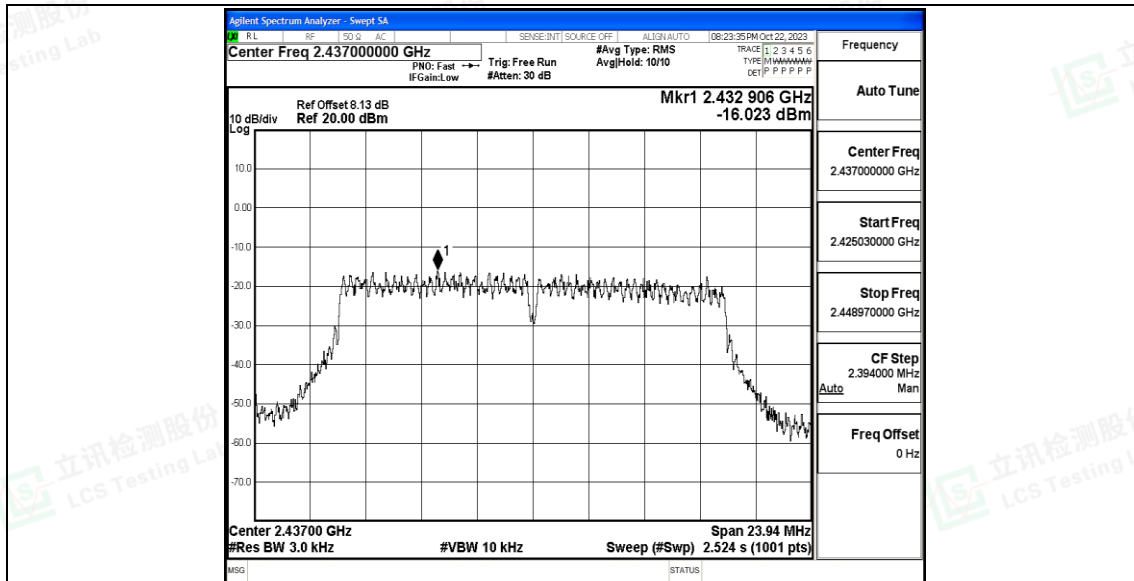


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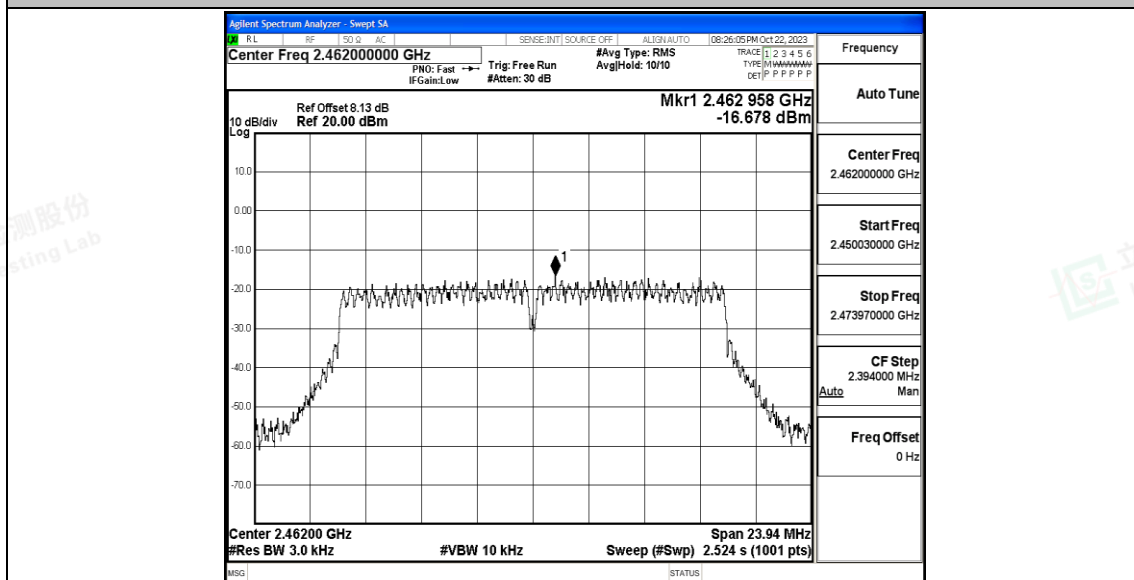
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11G_Ant_2462



11N20SISO_Ant_2412

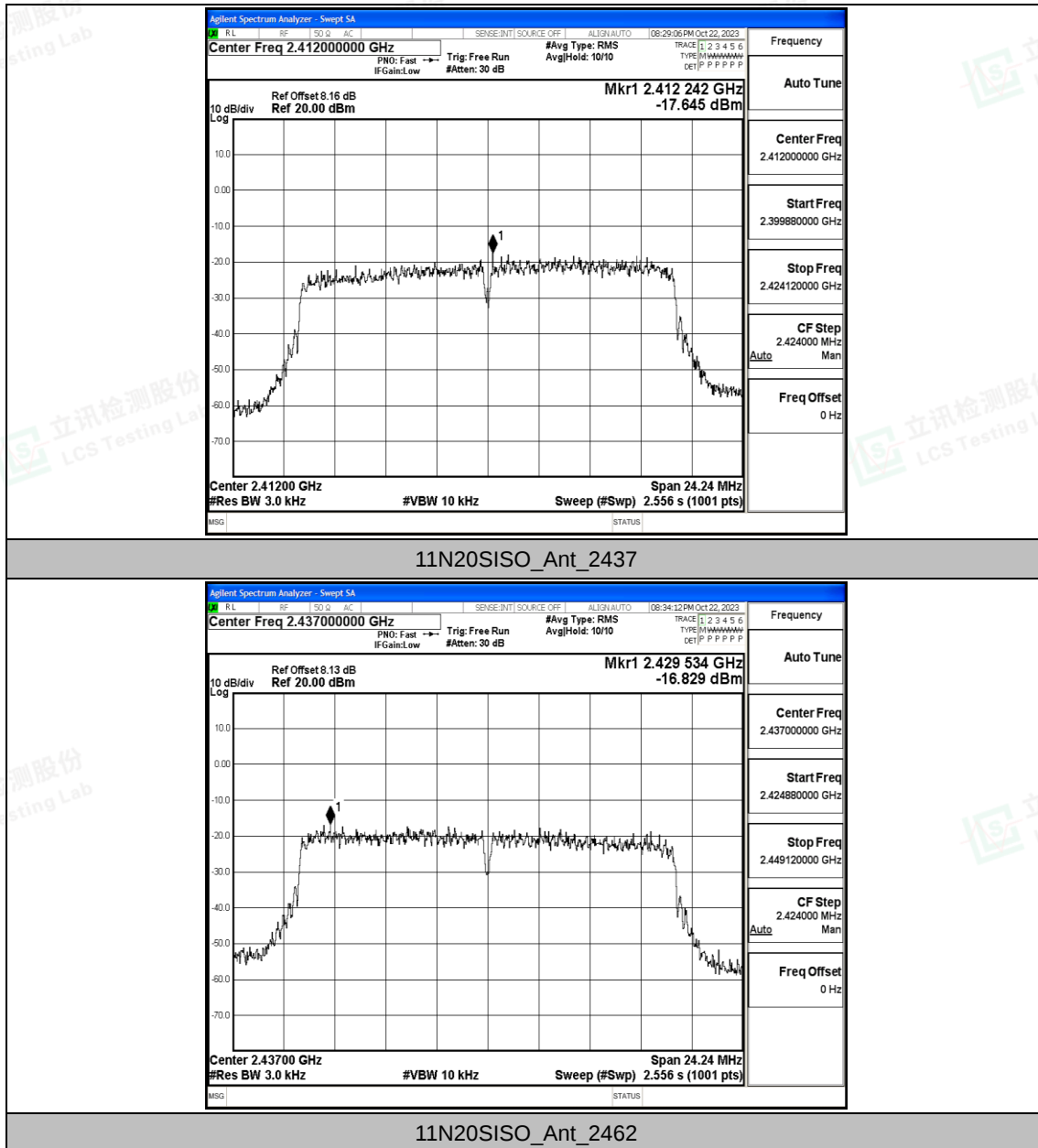


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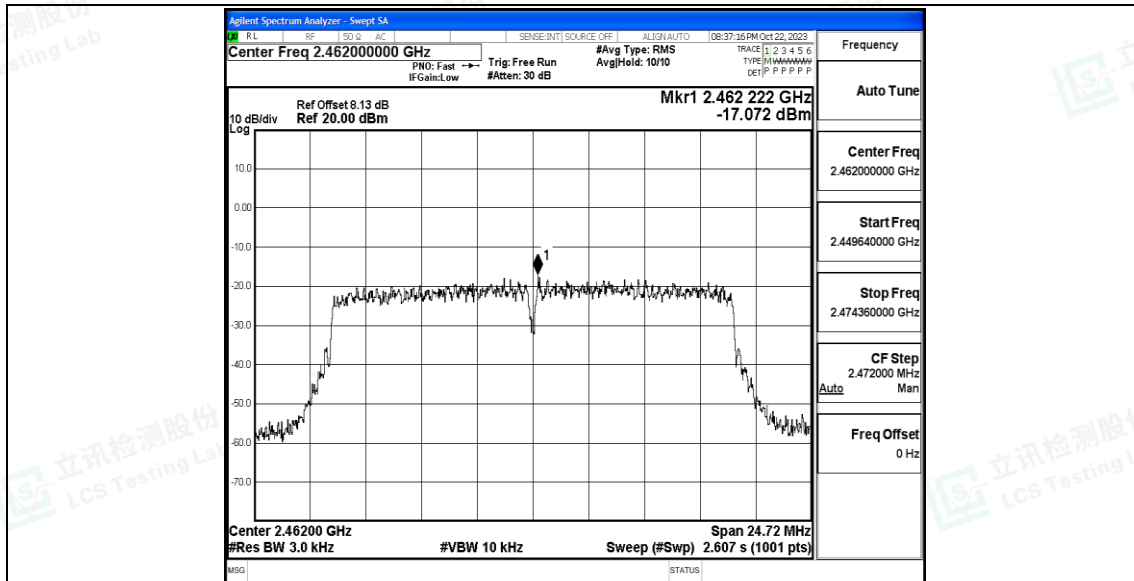


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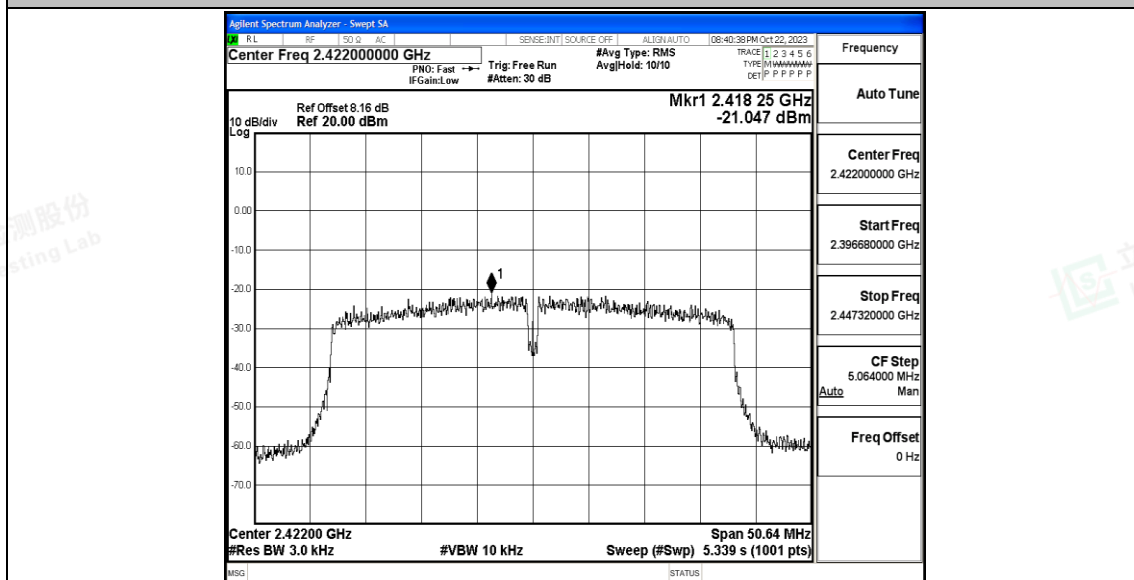
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11N40SISO_Ant_2422



11N40SISO_Ant_2437

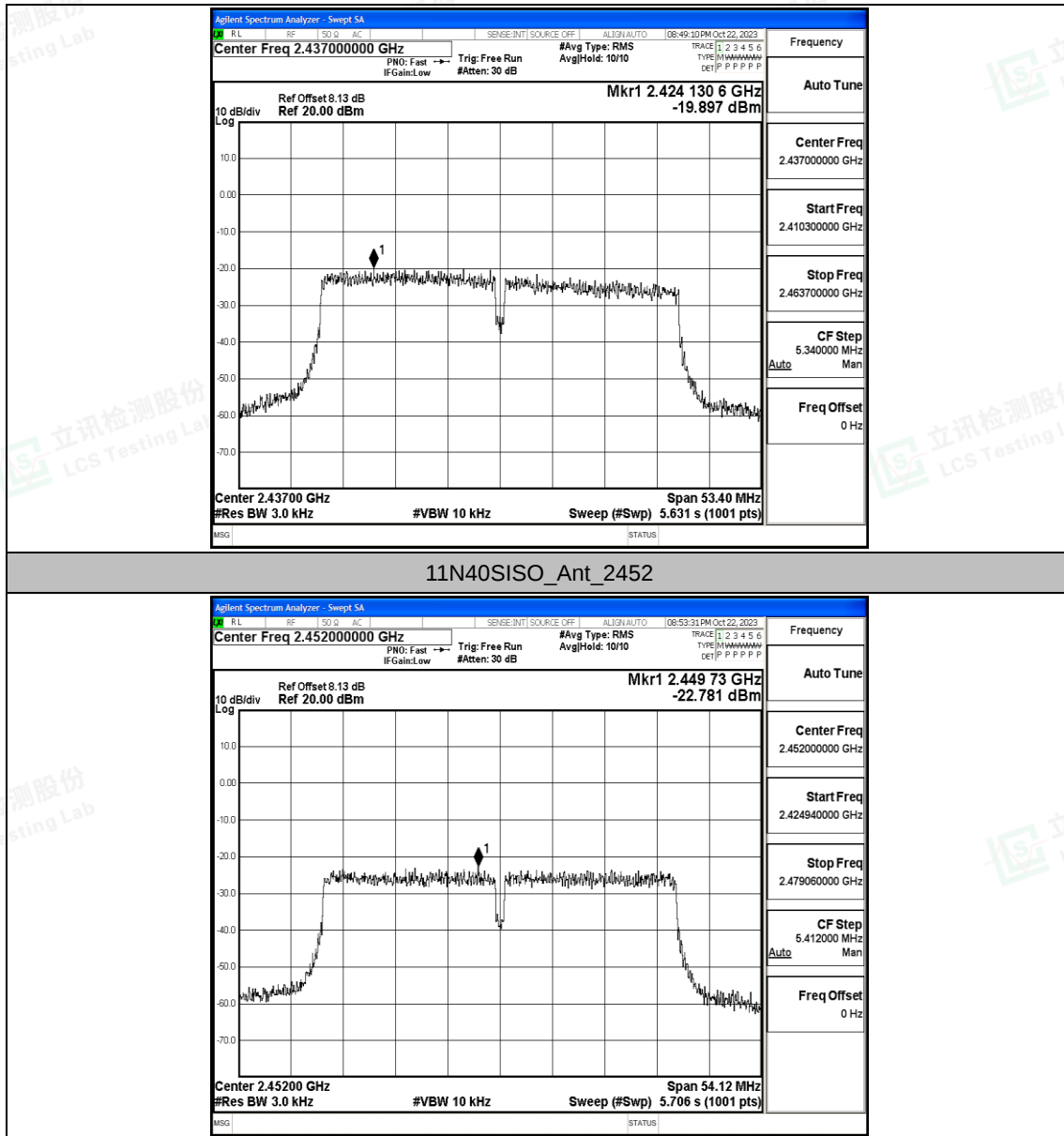


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C.5 Band edge measurements

Test Result

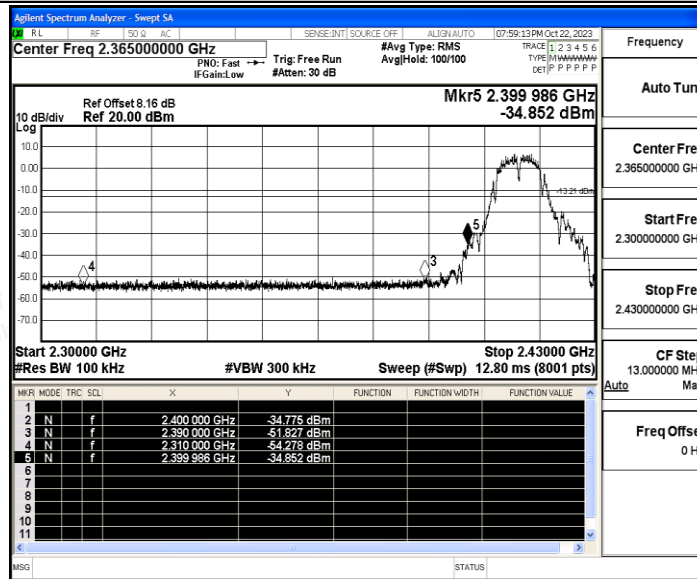
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant	Low	2412	6.79	-34.85	≤ -13.21	PASS
		High	2462	4.19	-49.77	≤ -15.81	PASS
11G	Ant	Low	2412	-1.41	-30.98	≤ -21.41	PASS
		High	2462	-2.64	-47.22	≤ -22.64	PASS
11N20SISO	Ant	Low	2412	-3.25	-36.8	≤ -23.25	PASS
		High	2462	-2.95	-46.85	≤ -22.95	PASS
11N40SISO	Ant	Low	2422	-5.56	-37.25	≤ -25.56	PASS
		High	2452	-8.10	-41.4	≤ -28.1	PASS



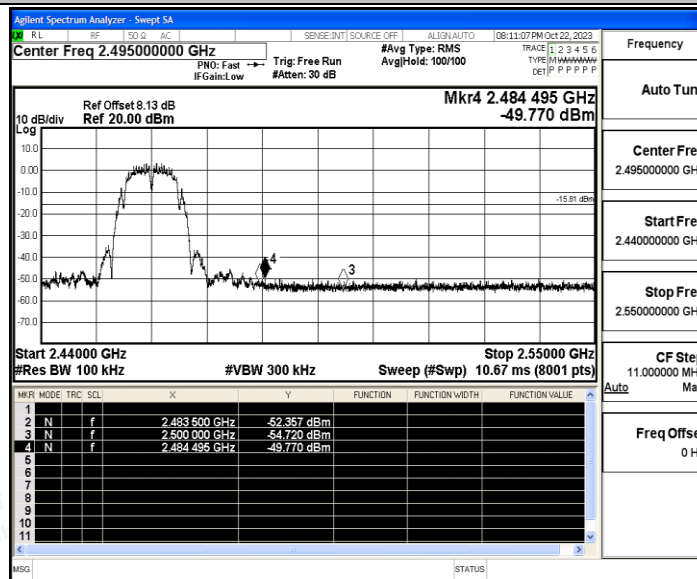


Test Graphs

11B_Ant_Low_2412



11B_Ant_High_2462



11G_Ant_Low_2412

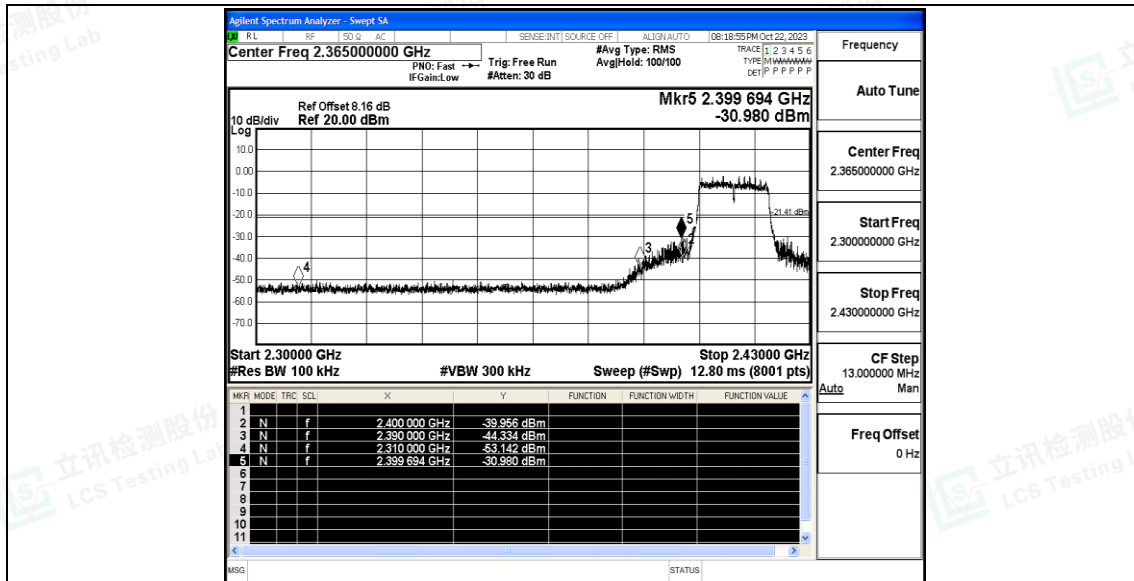


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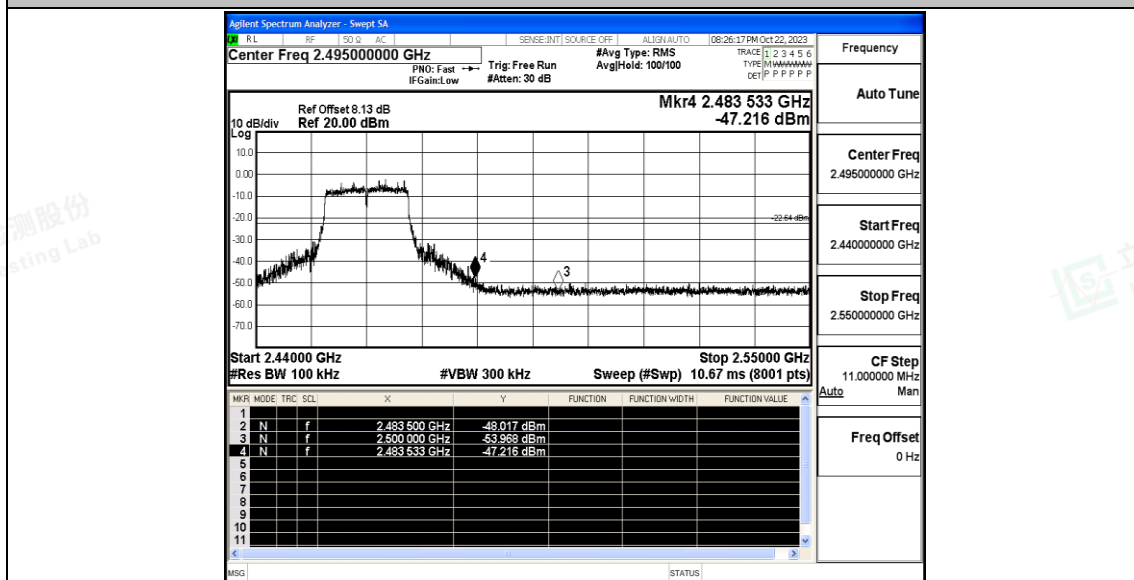
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11G_Ant_High_2462



11N20SISO_Ant_Low_2412

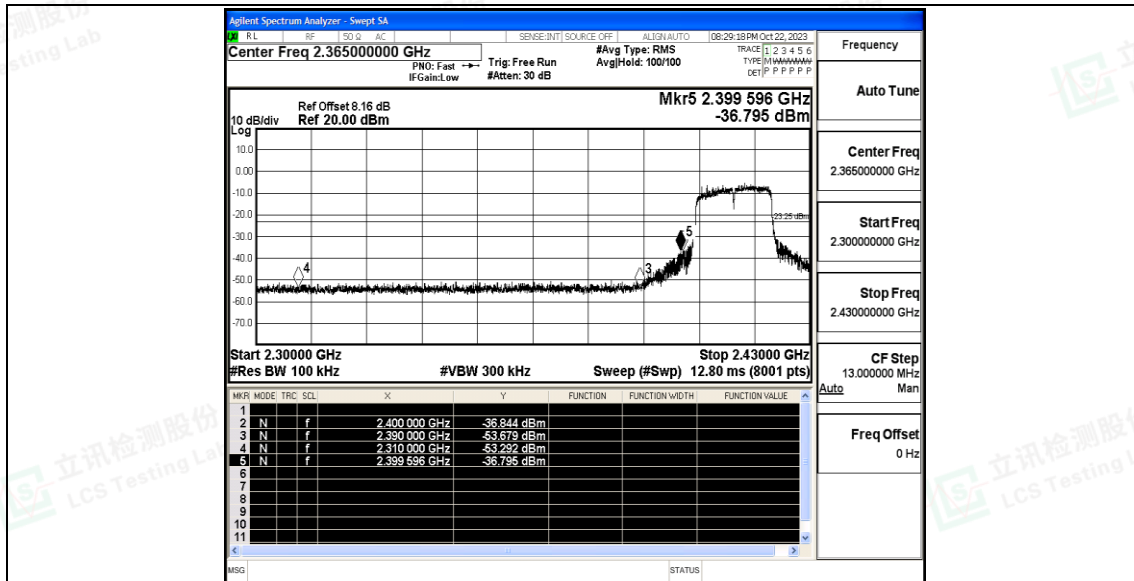


Shenzhen LCS Compliance Testing Laboratory Ltd.

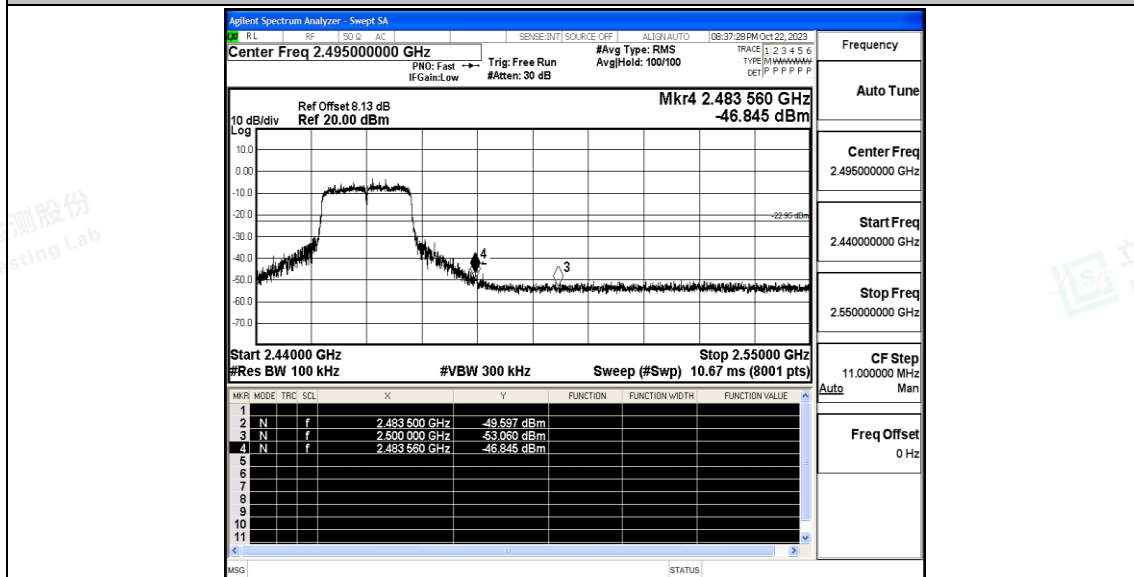
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11N20SISO_Ant_High_2462



11N40SISO_Ant_Low_2422

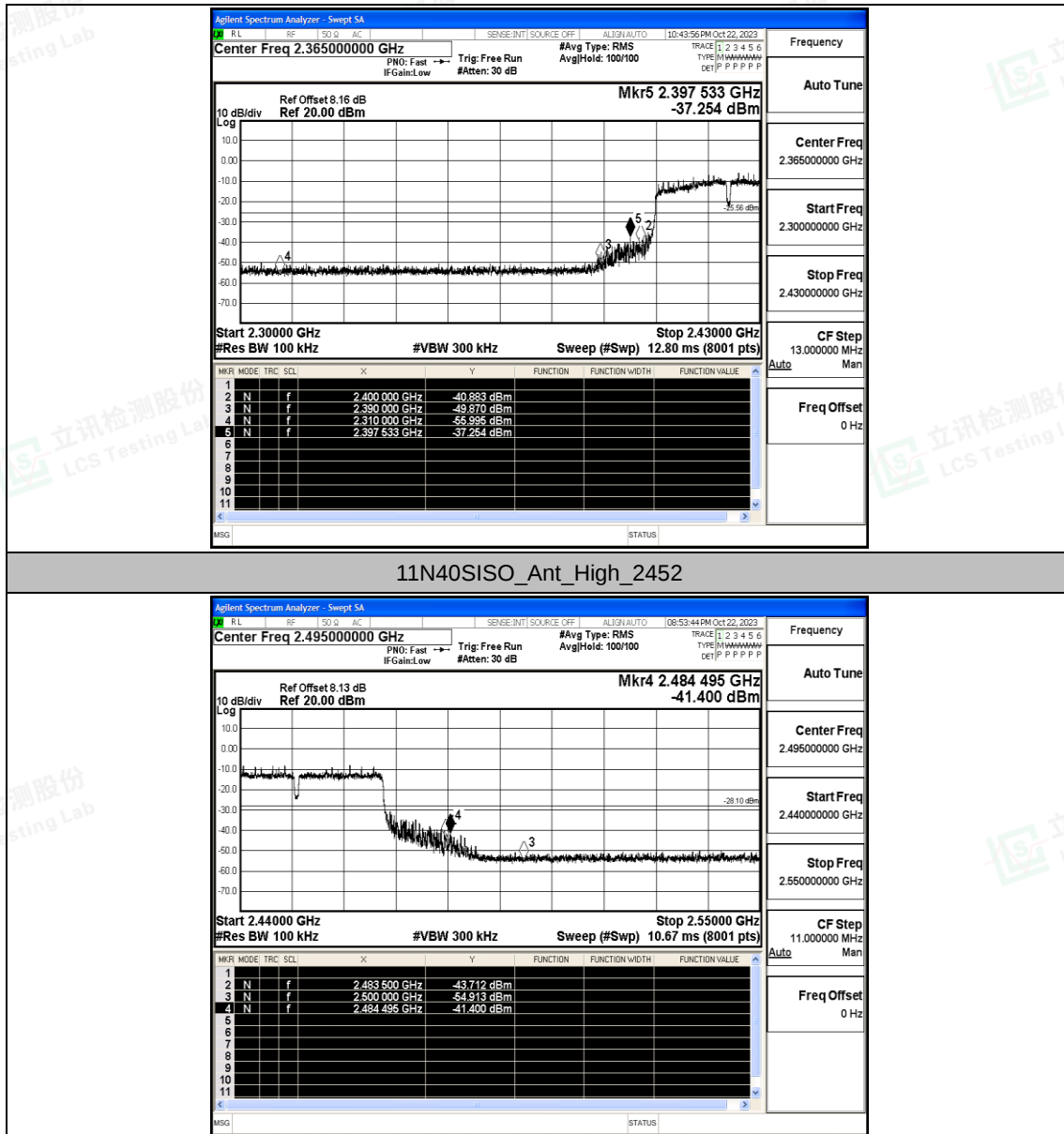


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C.6 Conducted Spurious Emission

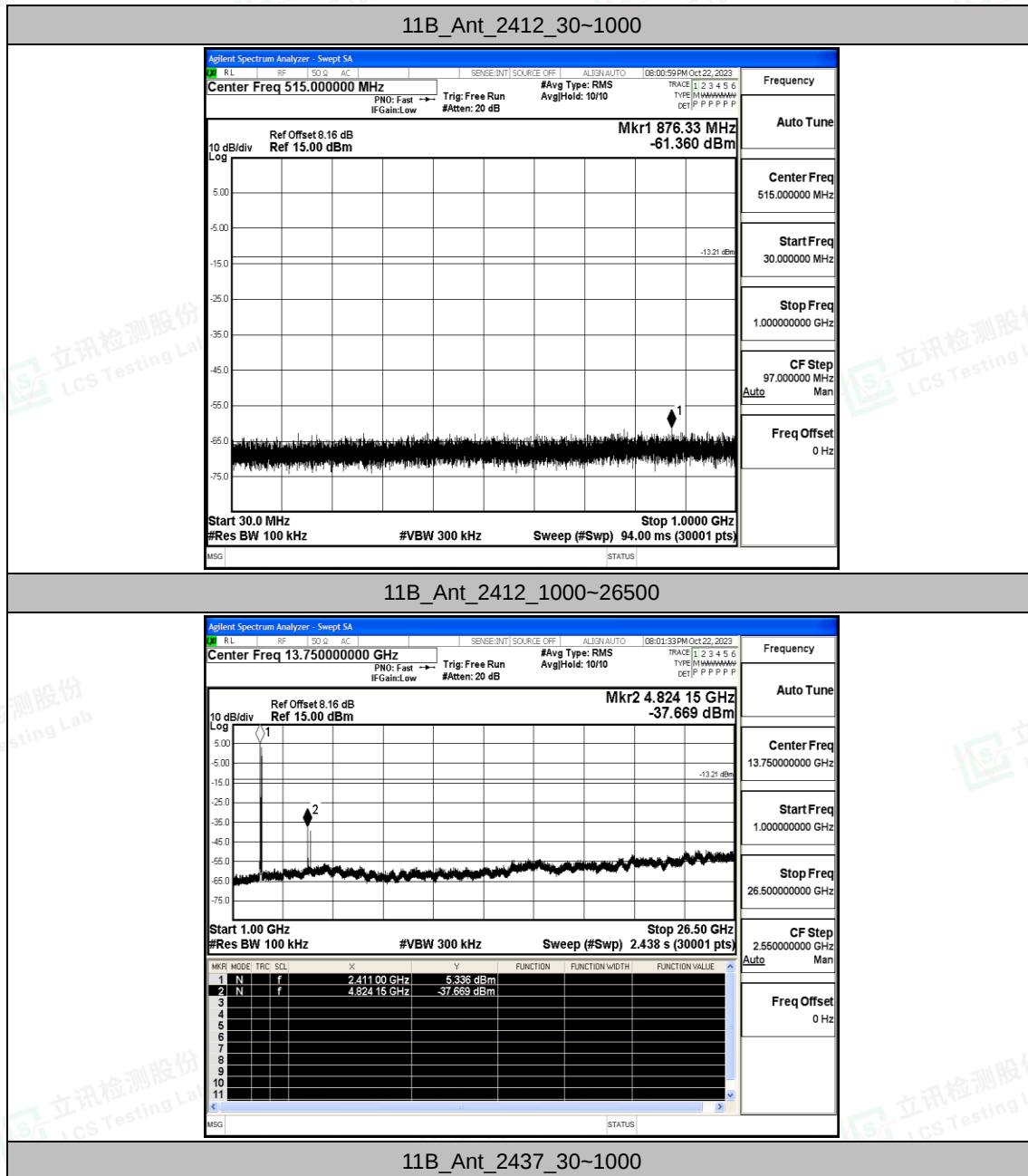
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant	2412	30~1000	6.79	-61.36	≤-13.21	PASS
			1000~26500	6.79	-37.67	≤-13.21	PASS
		2437	30~1000	3.71	-61.66	≤-16.29	PASS
			1000~26500	3.71	-40.64	≤-16.29	PASS
		2462	30~1000	4.19	-61.56	≤-15.81	PASS
			1000~26500	4.19	-43.11	≤-15.81	PASS
11G	Ant	2412	30~1000	-1.41	-61.4	≤-21.41	PASS
			1000~26500	-1.41	-48.82	≤-21.41	PASS
		2437	30~1000	-1.25	-61.36	≤-21.25	PASS
			1000~26500	-1.25	-49.3	≤-21.25	PASS
		2462	30~1000	-2.64	-60.52	≤-22.64	PASS
			1000~26500	-2.64	-49	≤-22.64	PASS
11N20SISO	Ant	2412	30~1000	-3.25	-61.66	≤-23.25	PASS
			1000~26500	-3.25	-49.26	≤-23.25	PASS
		2437	30~1000	-2.09	-61.42	≤-22.09	PASS
			1000~26500	-2.09	-48.94	≤-22.09	PASS
		2462	30~1000	-2.95	-61.78	≤-22.95	PASS
			1000~26500	-2.95	-49.72	≤-22.95	PASS
11N40SISO	Ant	2422	30~1000	-5.56	-60.83	≤-25.56	PASS
			1000~26500	-5.56	-49.11	≤-25.56	PASS
		2437	30~1000	-5.34	-61.37	≤-25.34	PASS
			1000~26500	-5.34	-48.76	≤-25.34	PASS
		2452	30~1000	-8.10	-61.1	≤-28.1	PASS
			1000~26500	-8.10	-47.75	≤-28.1	PASS





Test Graphs

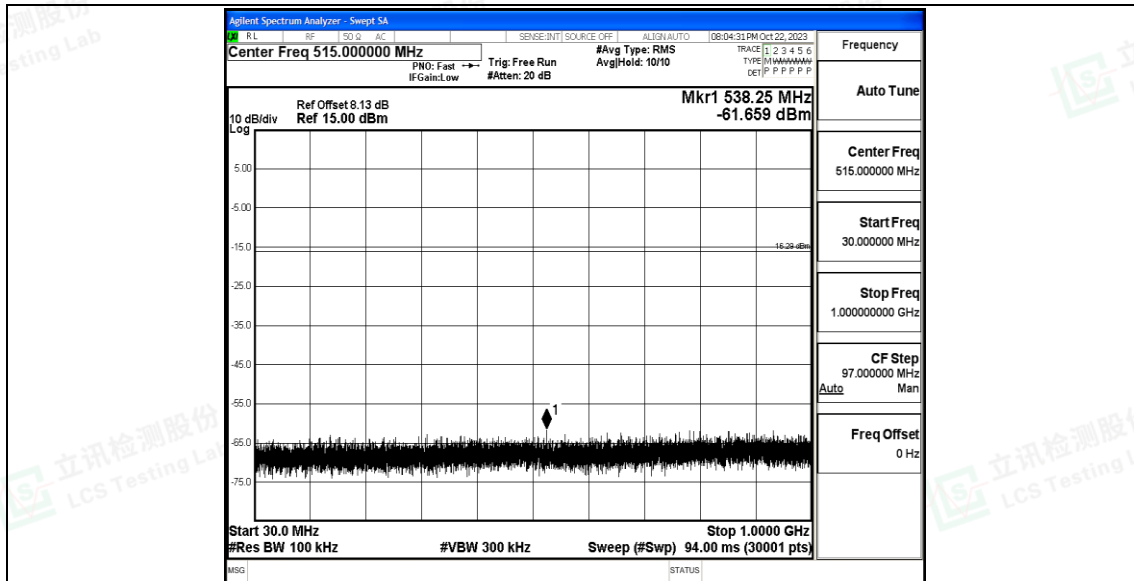


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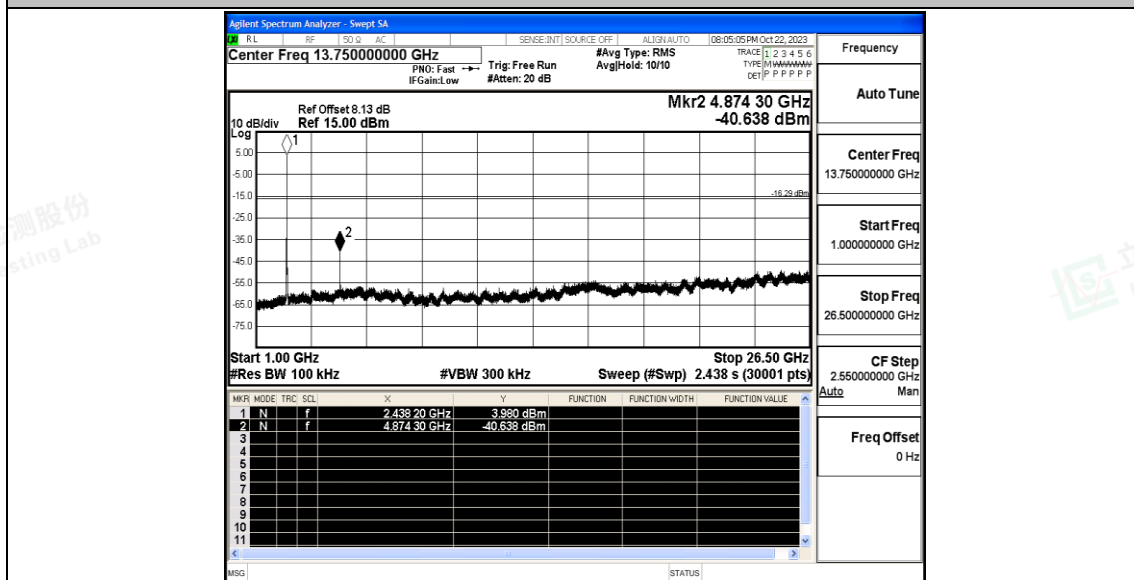
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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11B_Ant_2437_1000~26500



11B_Ant_2462_30~1000

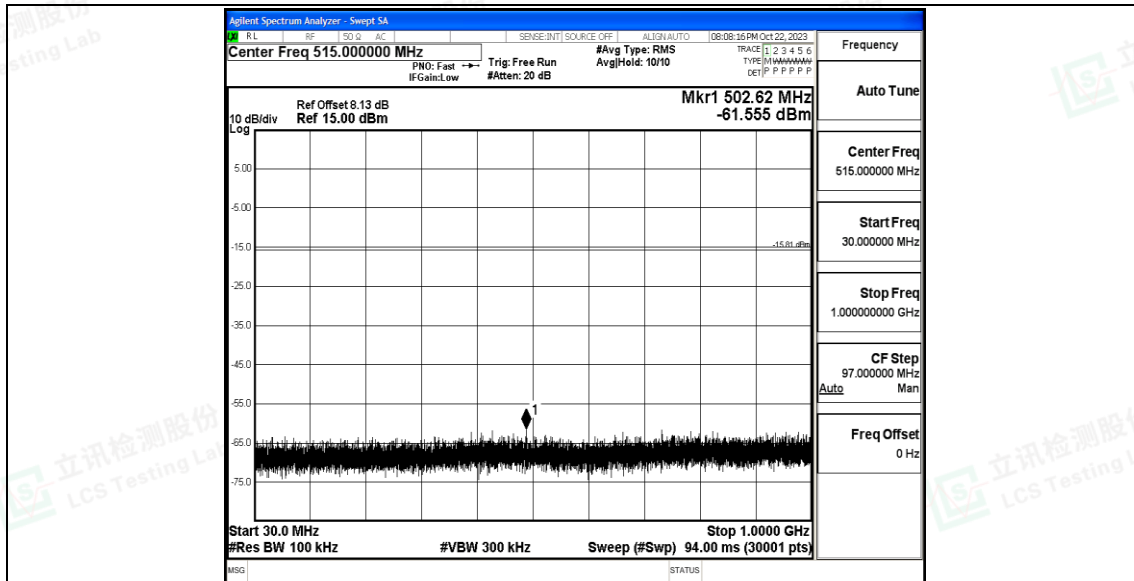


Shenzhen LCS Compliance Testing Laboratory Ltd.

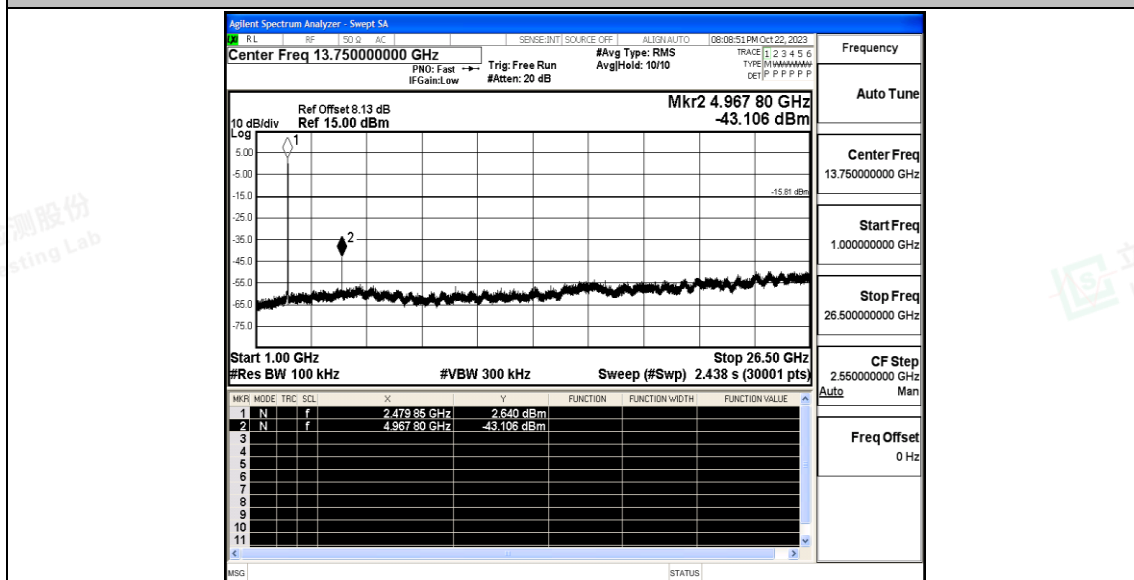
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11B_Ant_2462_1000~26500



11G_Ant_2412_30~1000

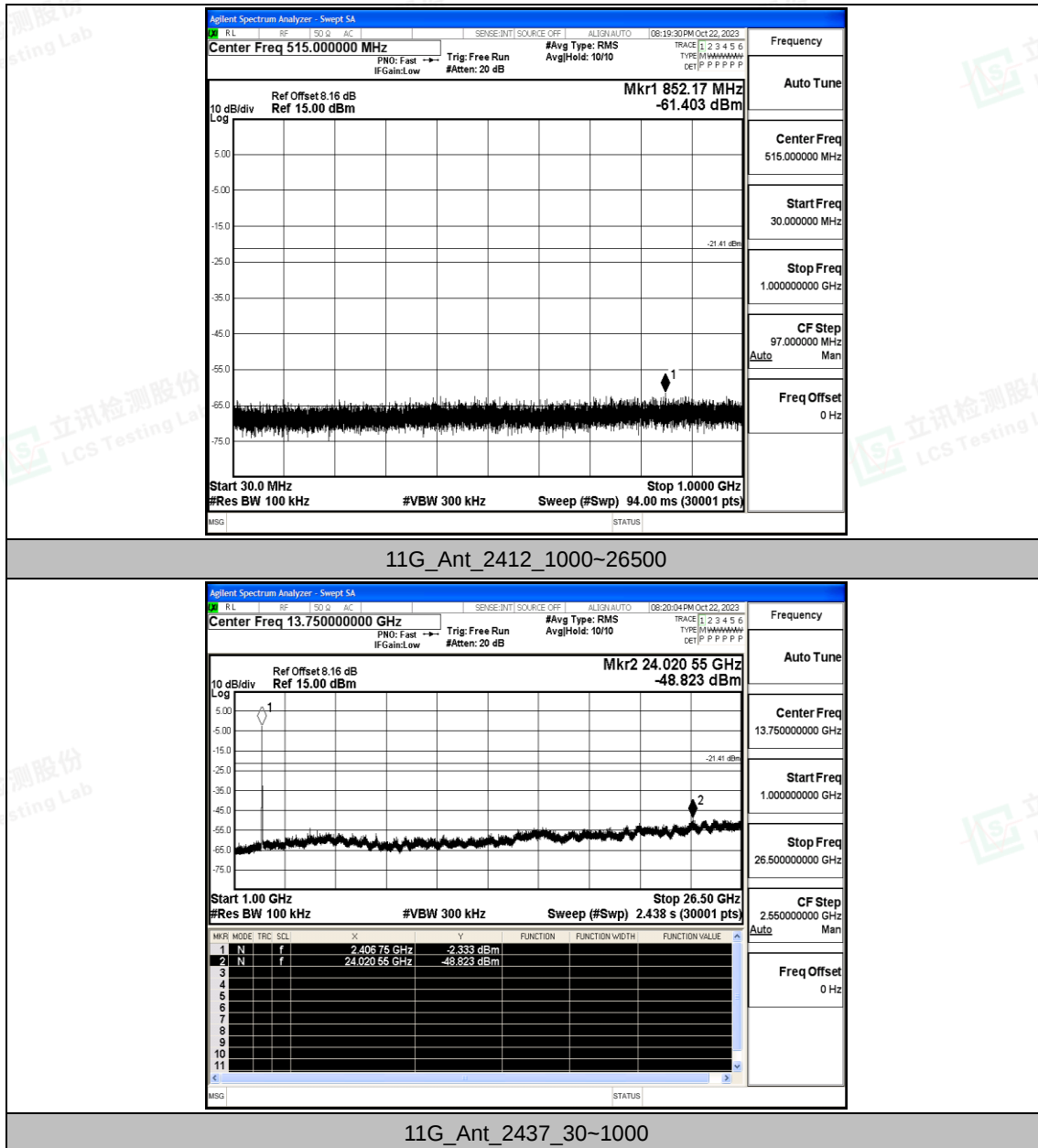


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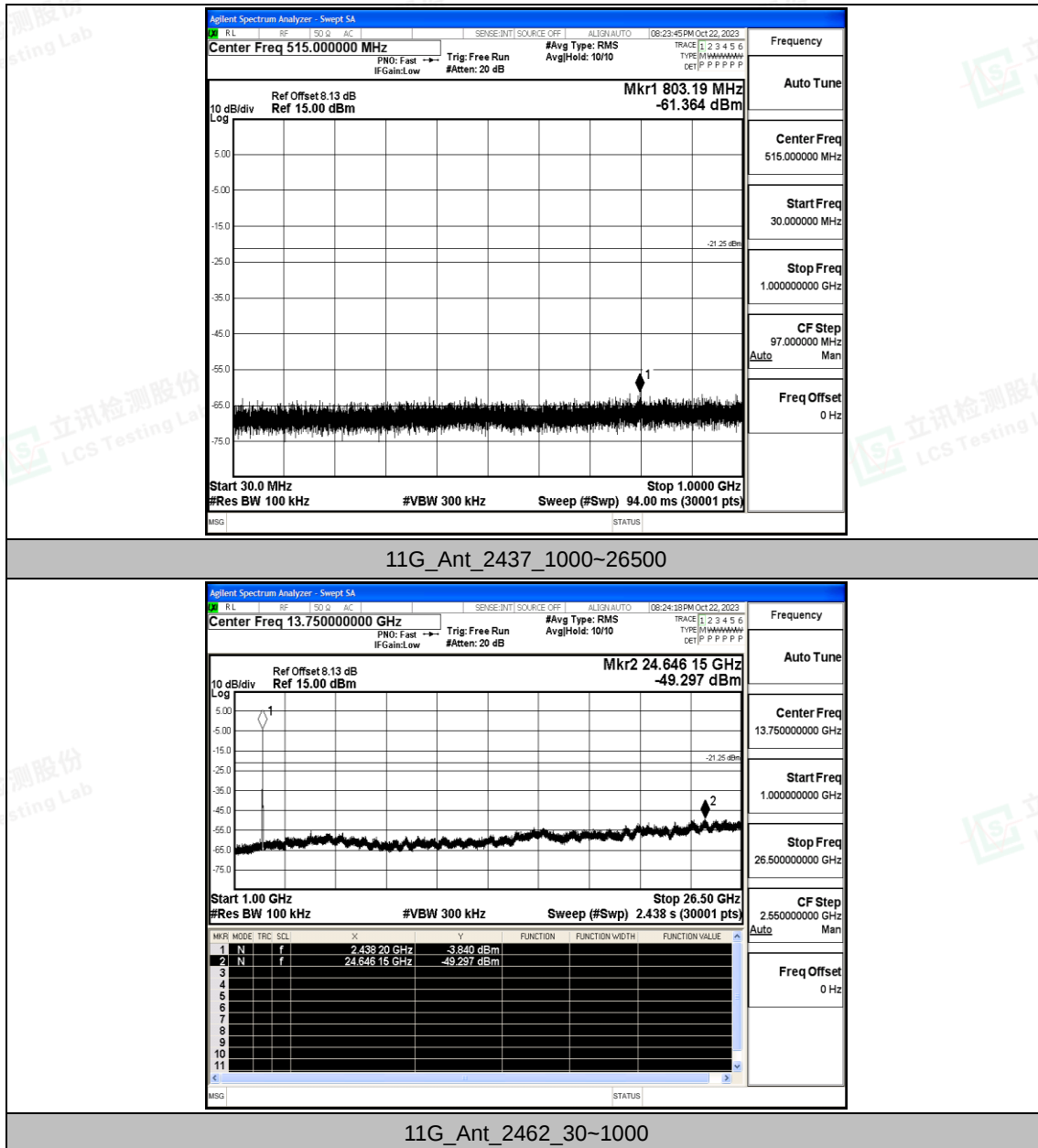


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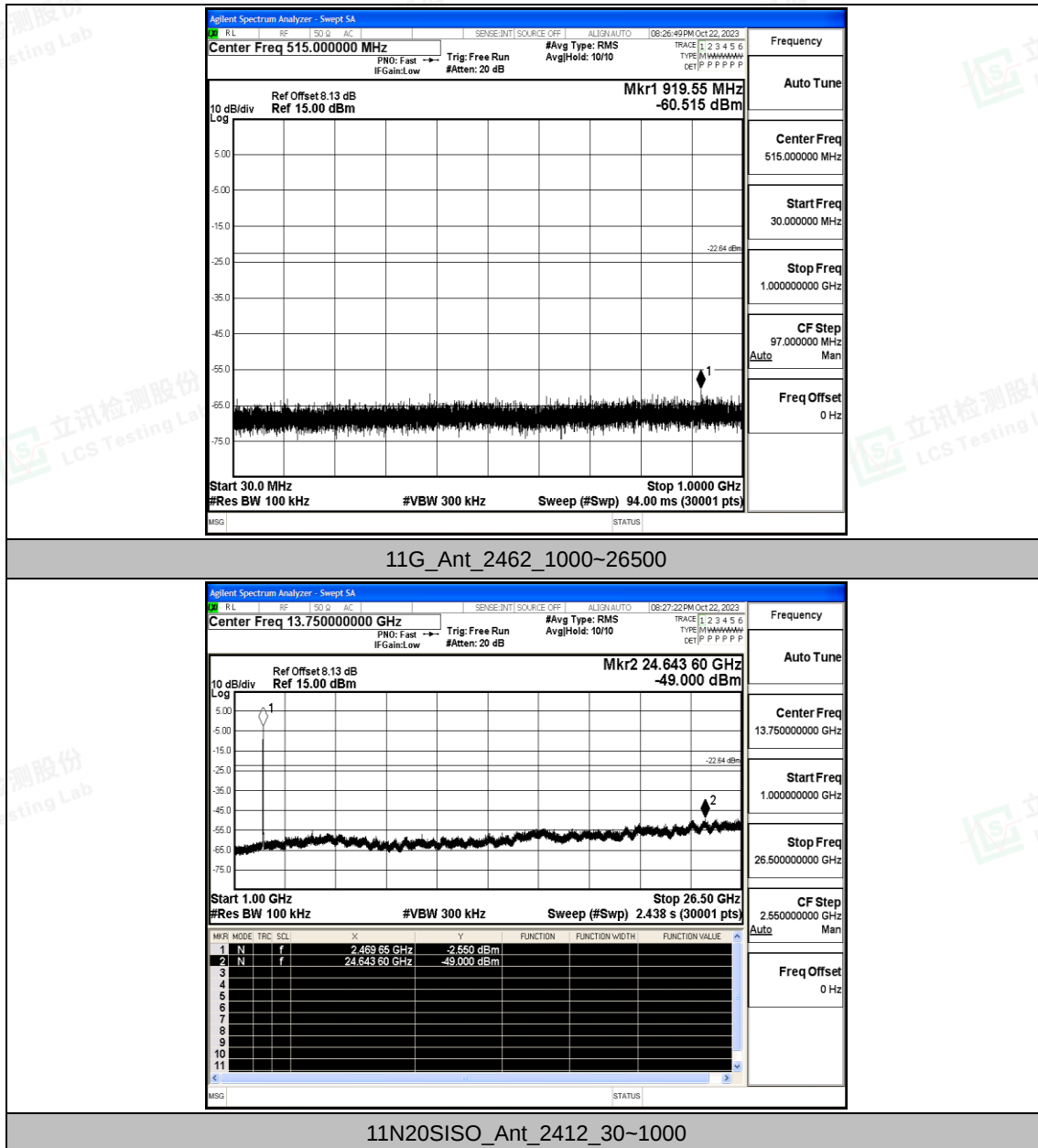


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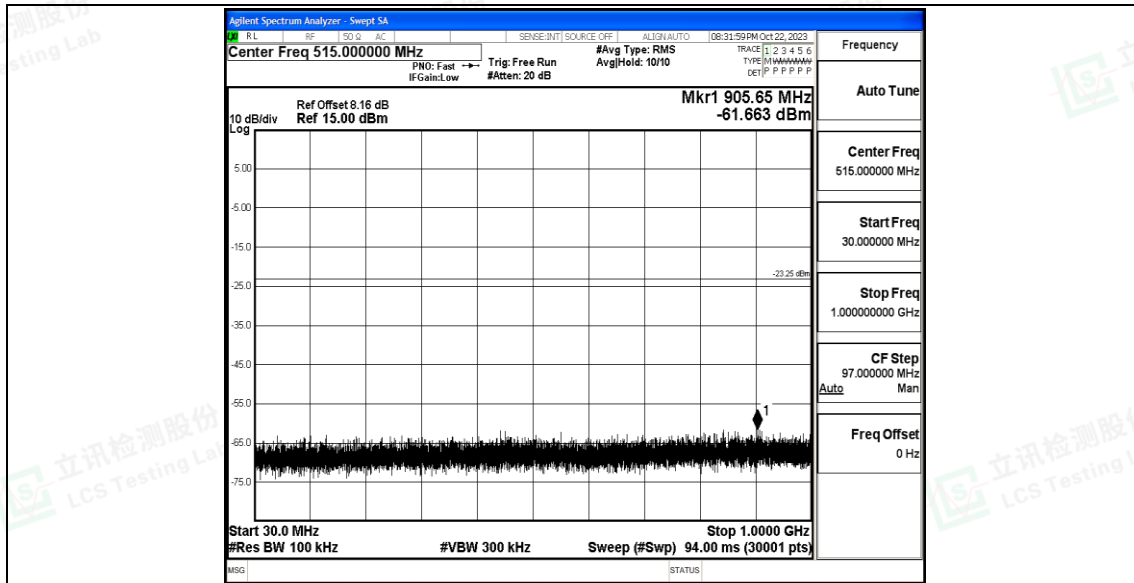


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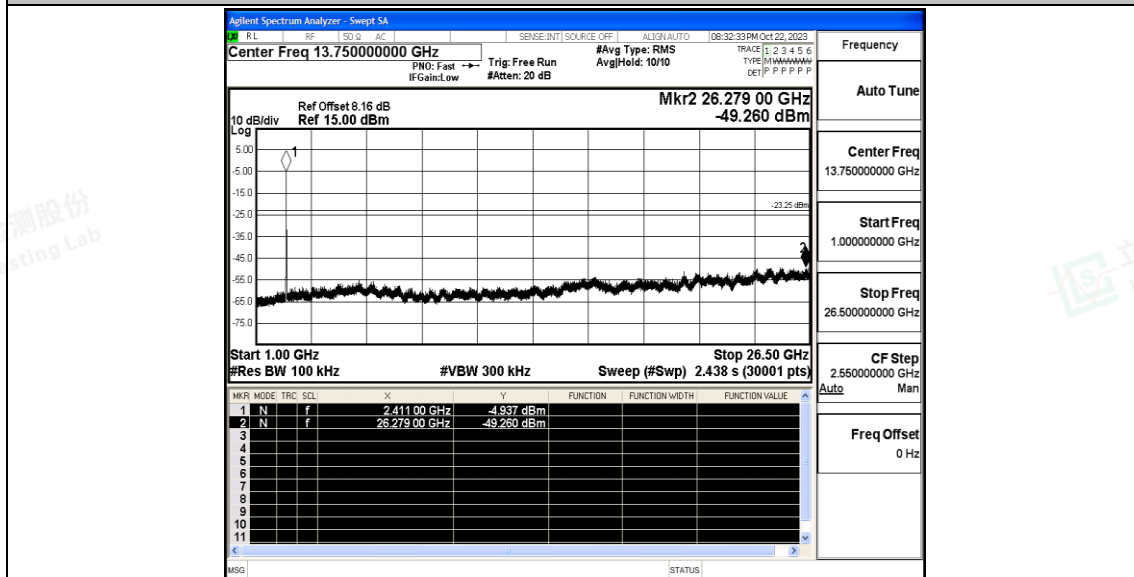
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11N20SISO_Ant_2412_1000~26500



11N20SISO_Ant_2437_30~1000

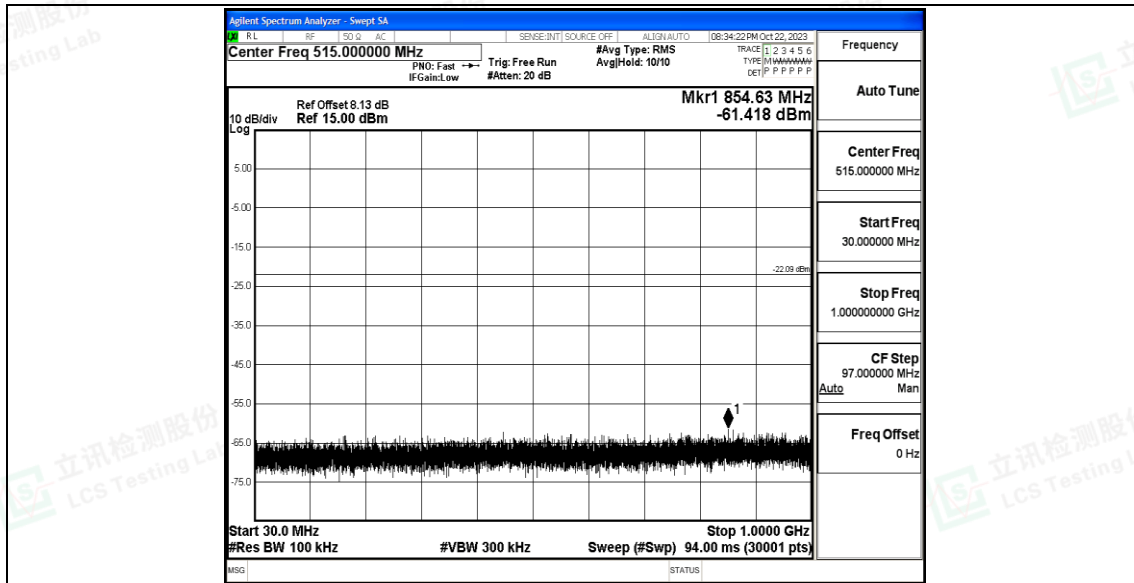


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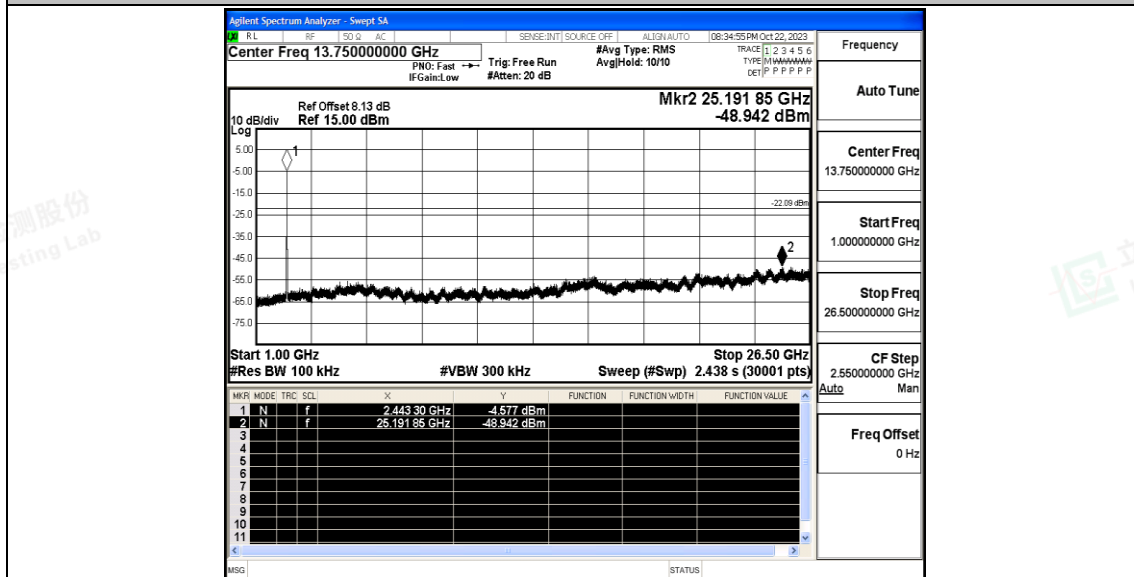
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11N20SISO_Ant_2437_1000~26500



11N20SISO_Ant_2462_30~1000

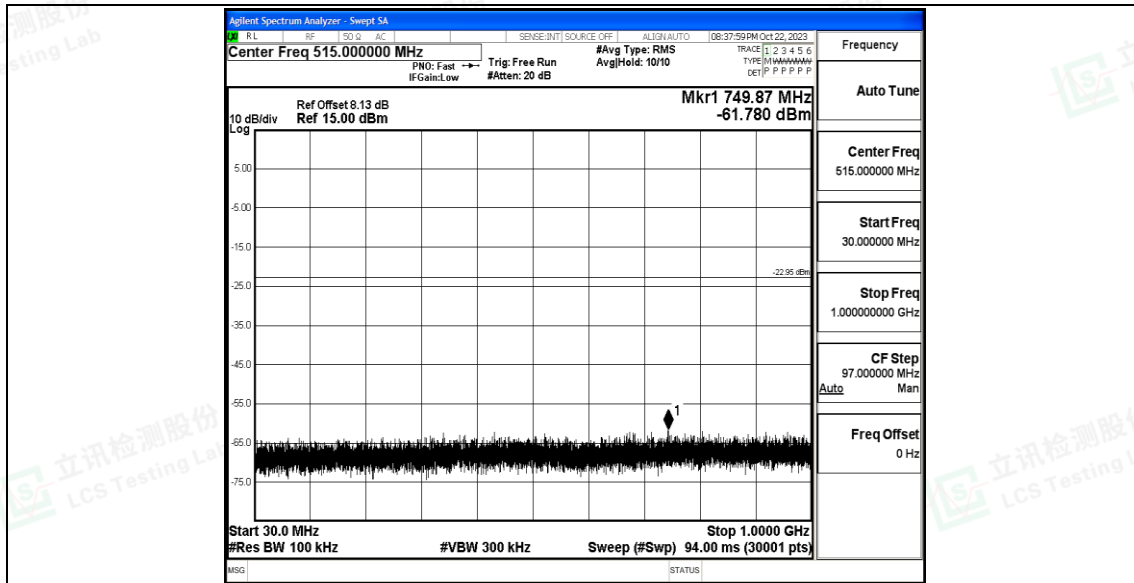


Shenzhen LCS Compliance Testing Laboratory Ltd.

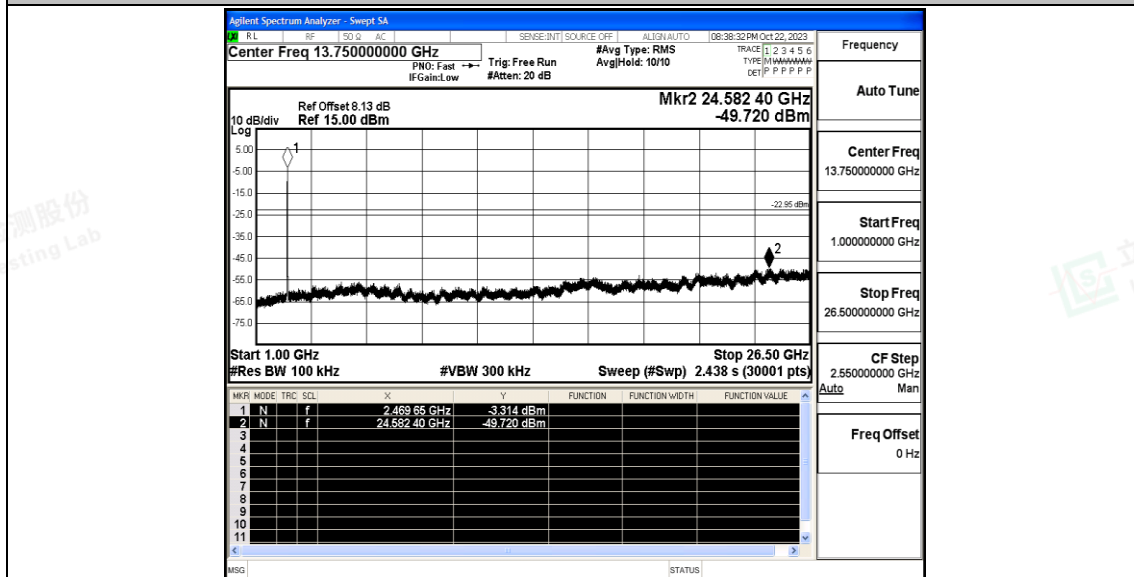
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11N20SISO_Ant_2462_1000~26500



11N40SISO_Ant_2422_30~1000

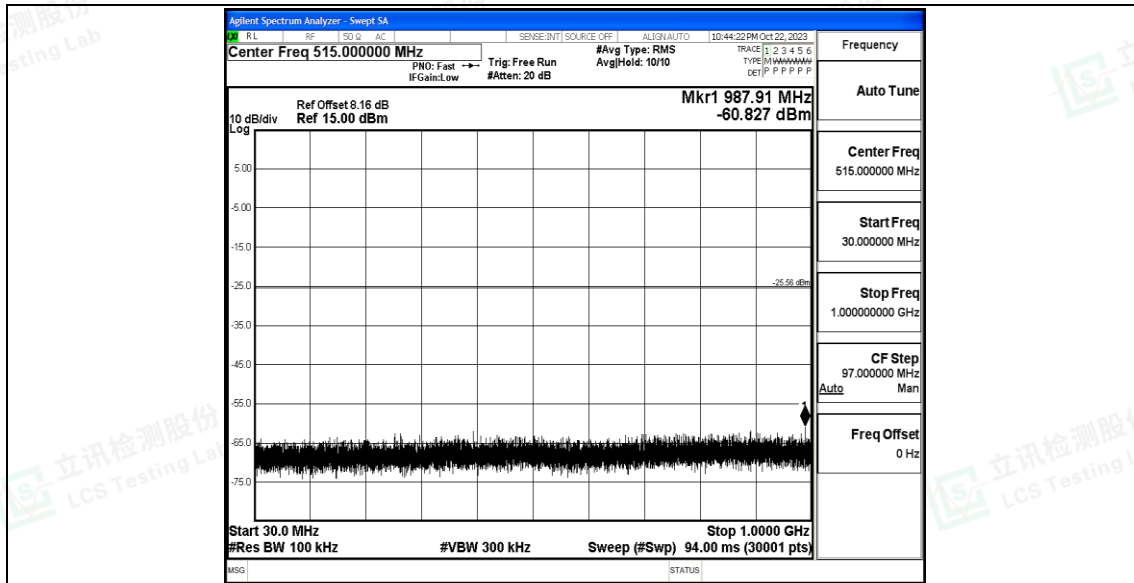


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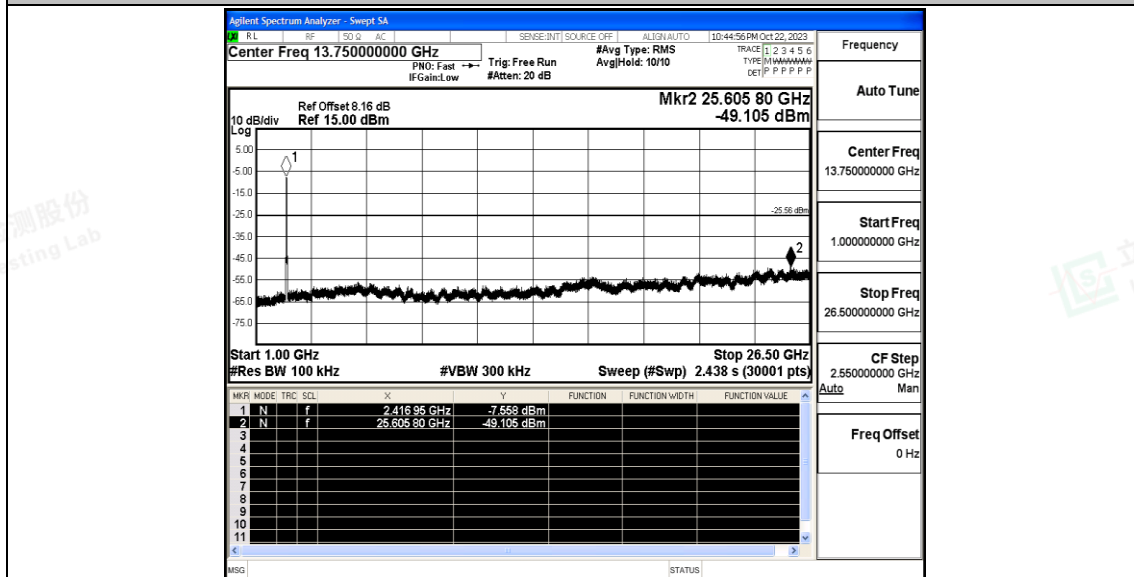
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11N40SISO_Ant_2422_1000~26500



11N40SISO_Ant_2437_30~1000



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