



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: LED PROJECTOR

Test Model: L005A

Environmental Conditions

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



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



C.1 DTS Bandwidth

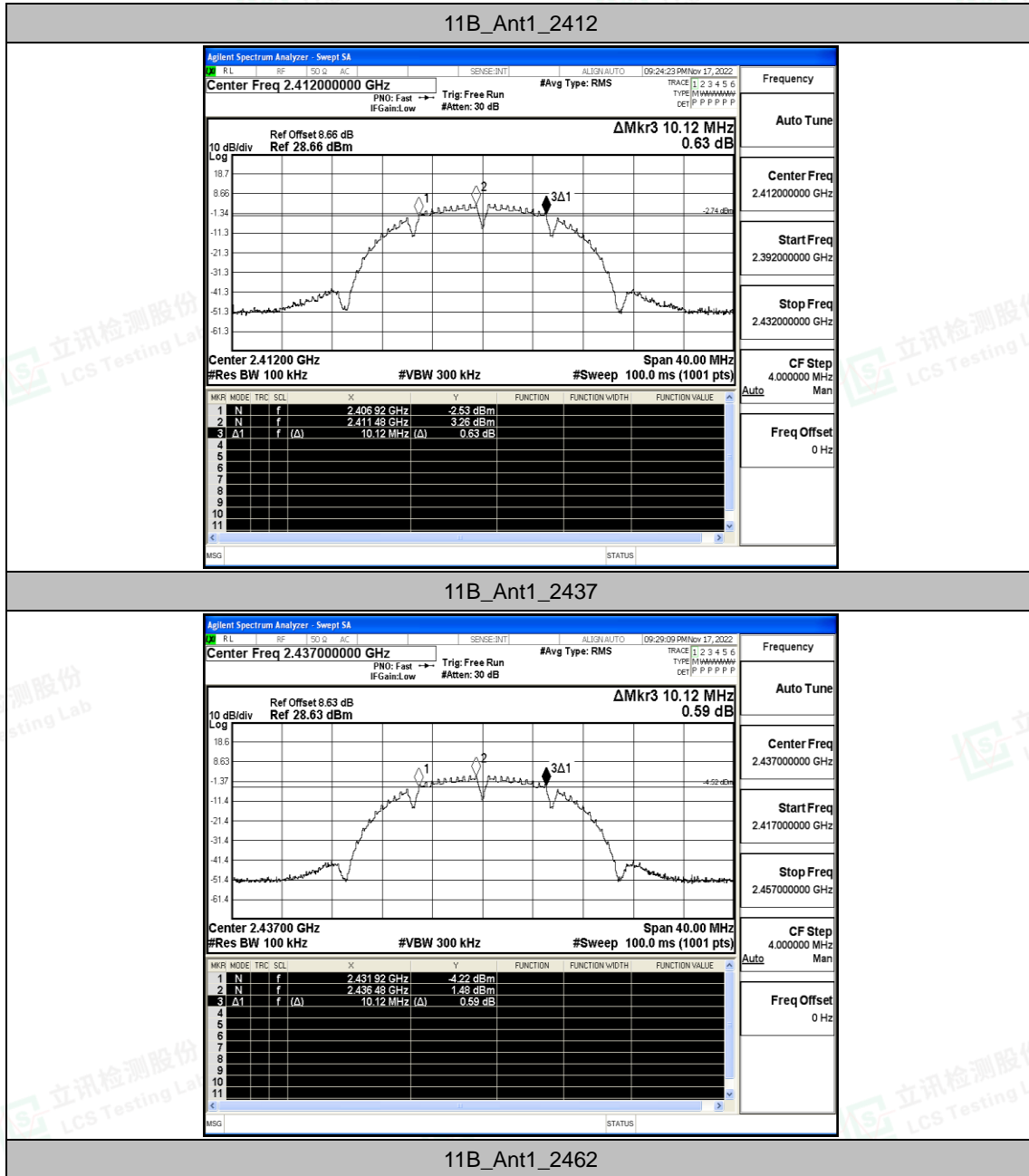
Test Result

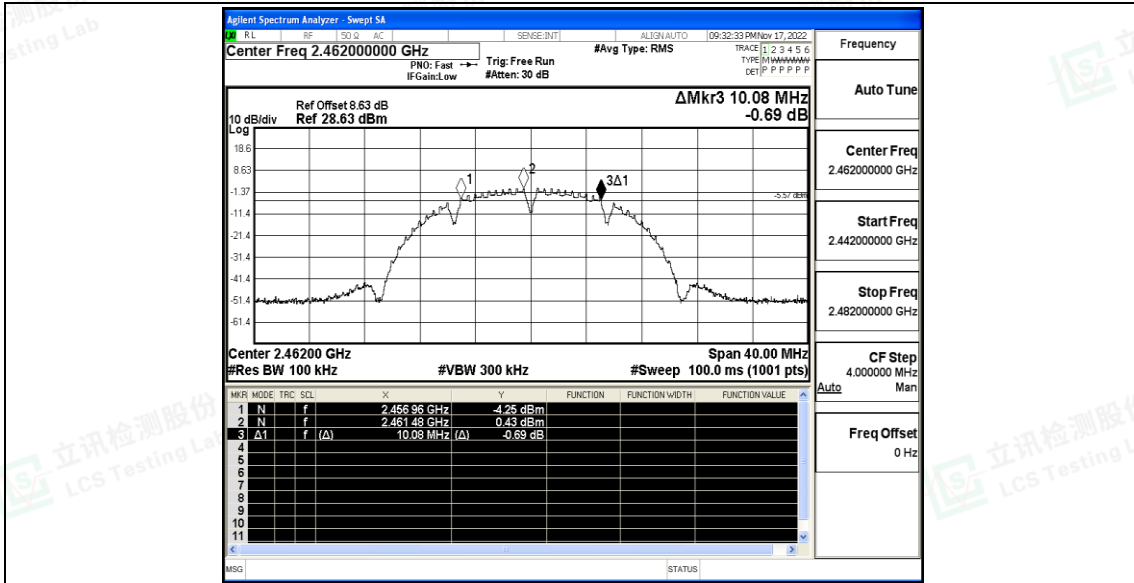
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.120	2406.920	2417.040	0.5	PASS
		2437	10.120	2431.920	2442.040	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	16.520	2403.720	2420.240	0.5	PASS
		2437	16.520	2428.720	2445.240	0.5	PASS
		2462	16.520	2453.720	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.200	2420.800	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.600	2453.200	2470.800	0.5	PASS
11N40SISO	Ant1	2422	36.400	2403.760	2440.160	0.5	PASS
		2437	36.400	2418.760	2455.160	0.5	PASS
		2452	36.400	2433.760	2470.160	0.5	PASS



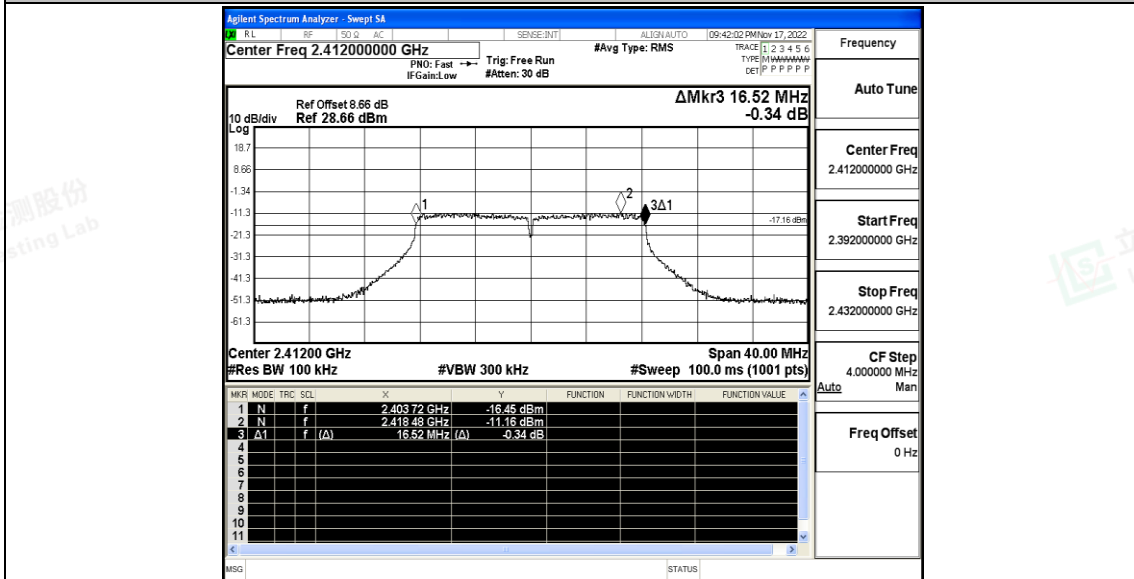


Test Graphs



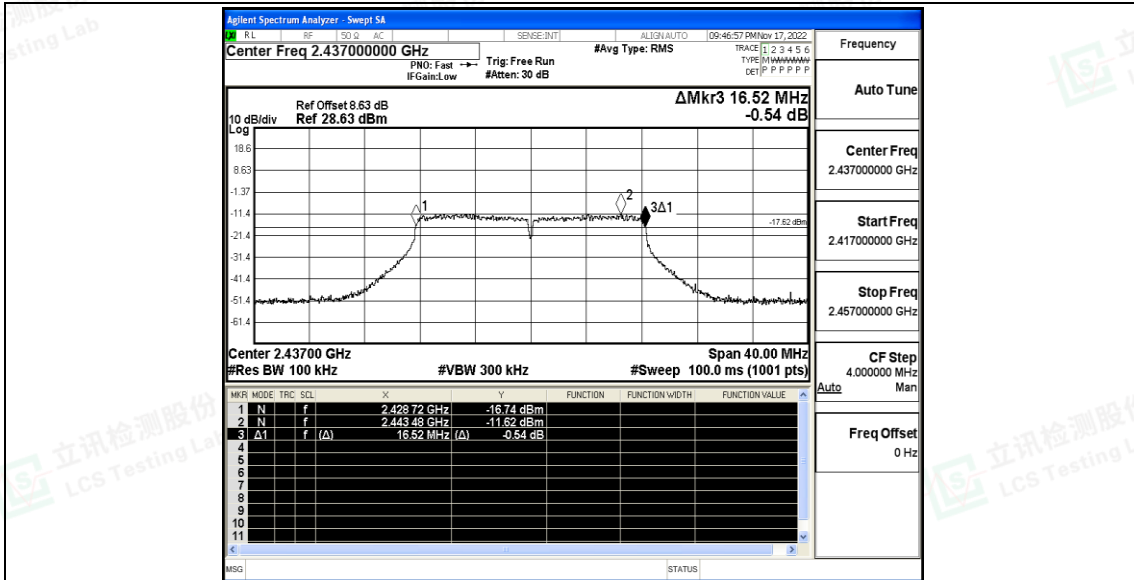


11G_Ant1_2412

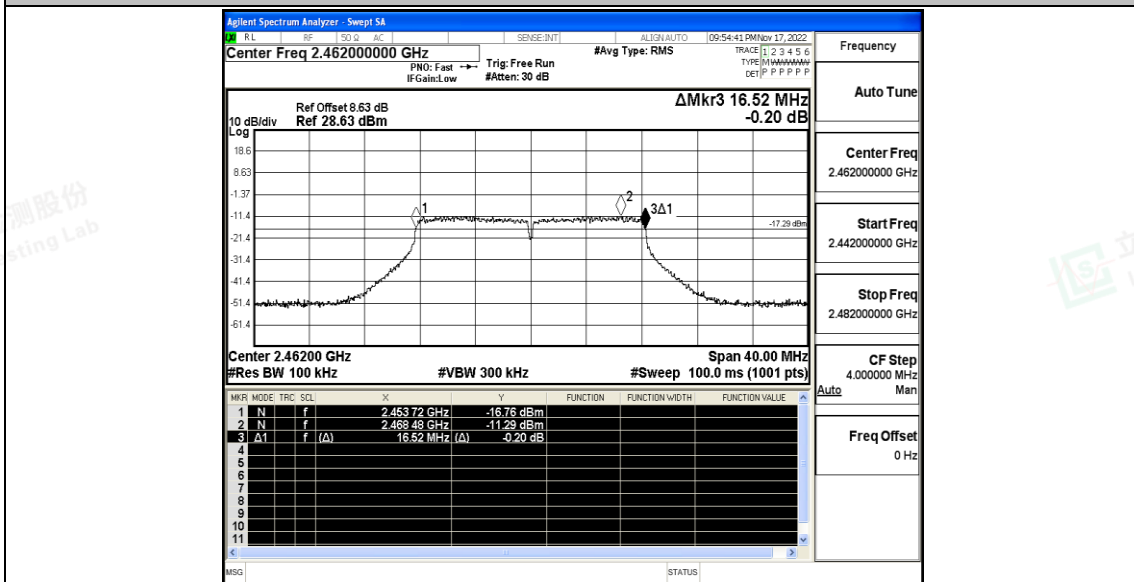


11G_Ant1_2437



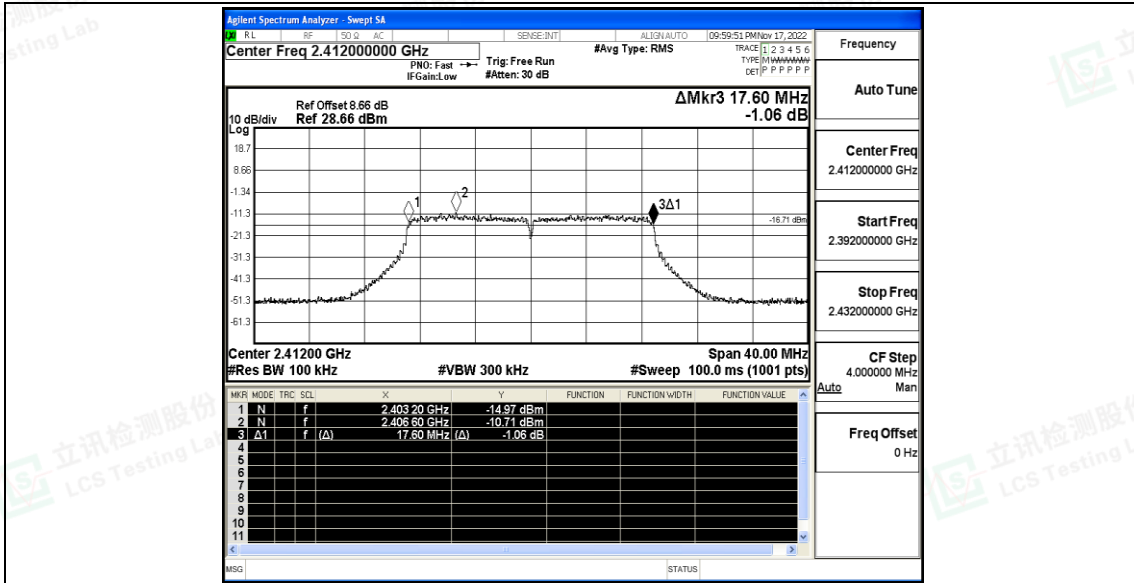


11G_Ant1_2462

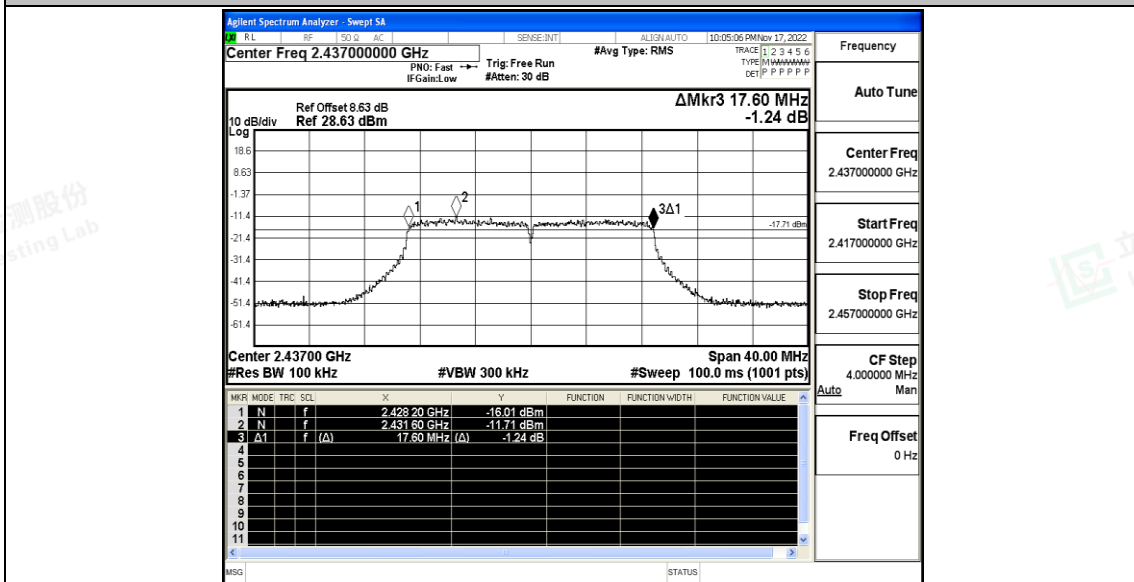


11N20SISO_Ant1_2412



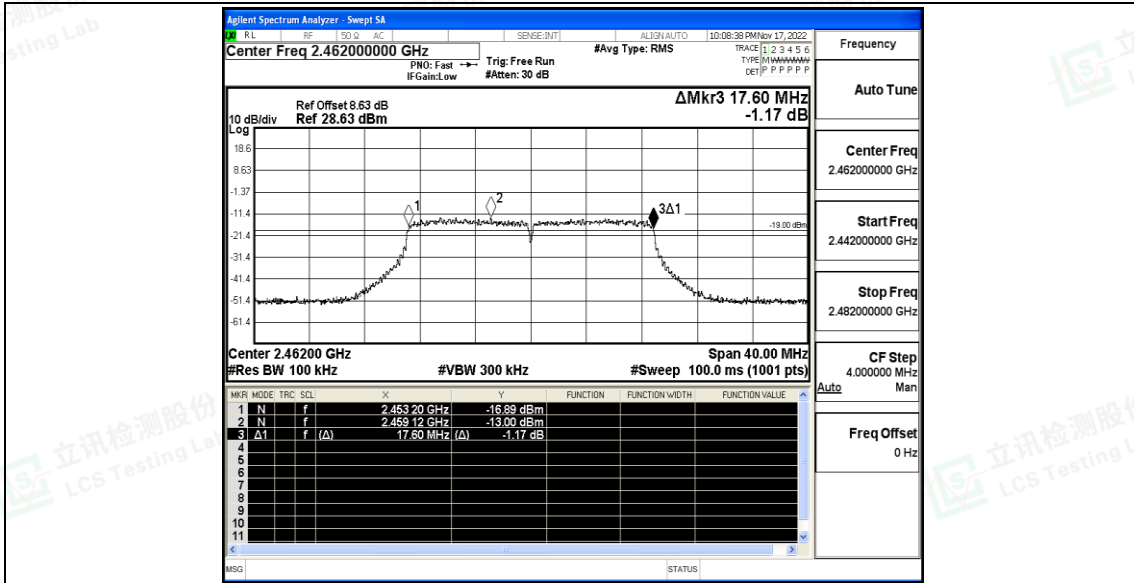


11N20SISO_Ant1_2437

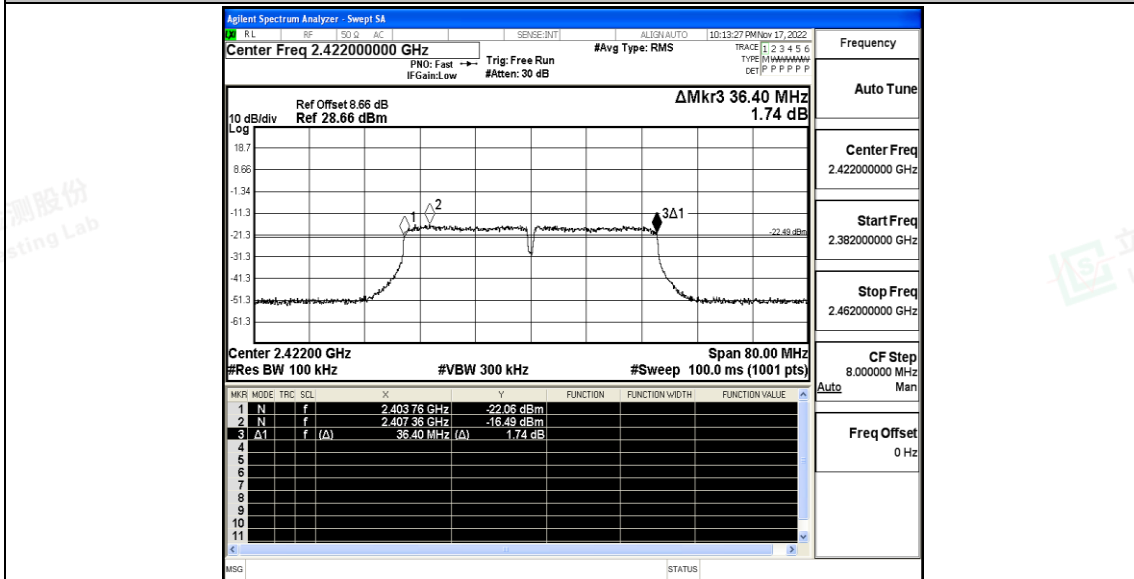


11N20SISO_Ant1_2462



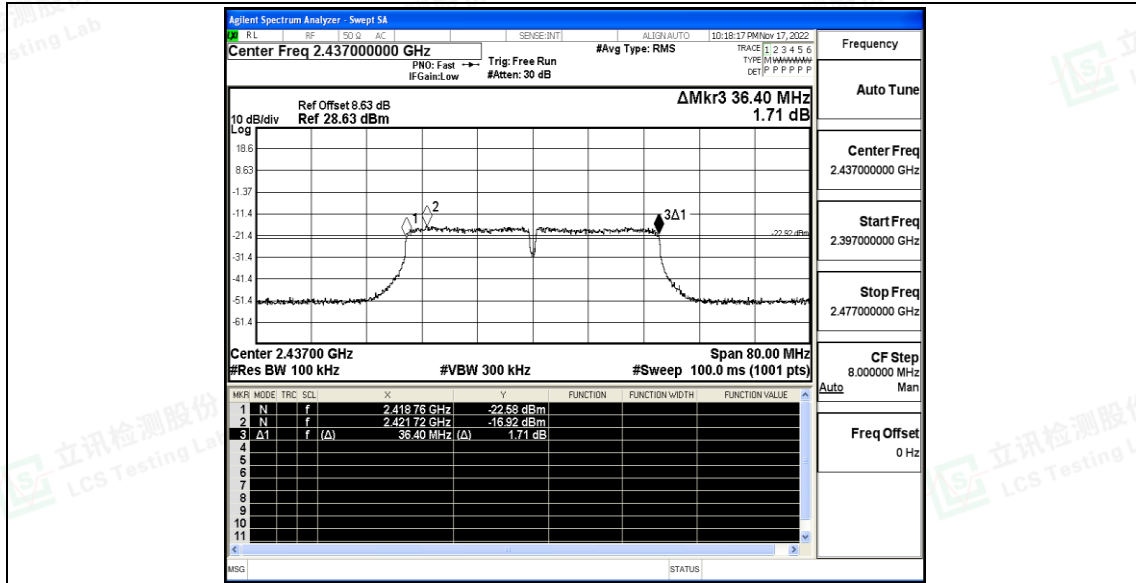


11N40SISO_Ant1_2422

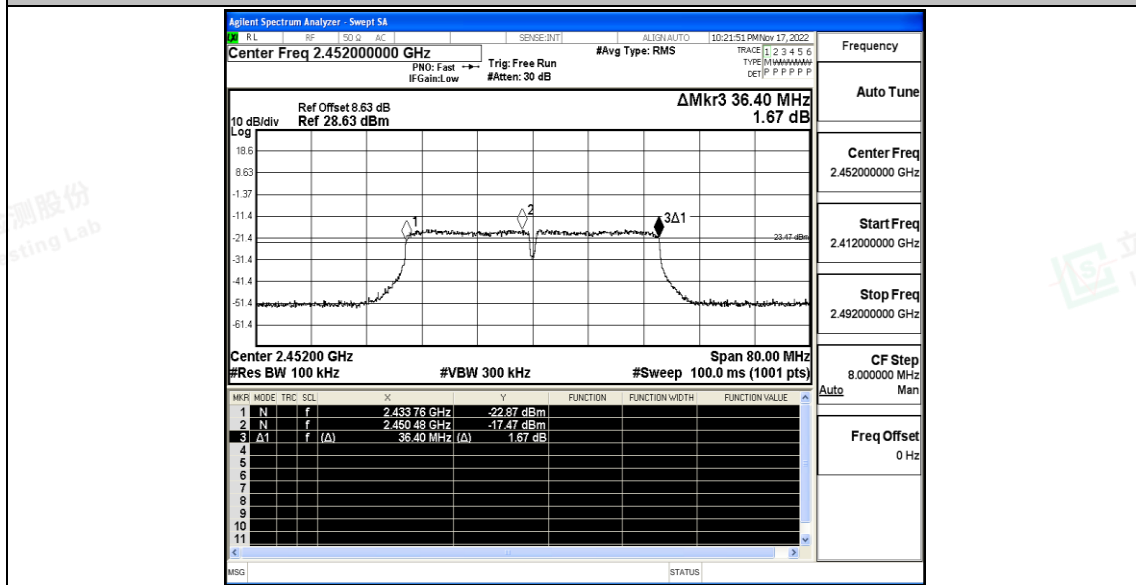


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452





C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Freq(MHz)	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	13.22	≤30.00	PASS
		2437	13.29	≤30.00	PASS
		2462	13.20	≤30.00	PASS
11G	Ant1	2412	11.01	≤30.00	PASS
		2437	10.55	≤30.00	PASS
		2462	10.77	≤30.00	PASS
11N20SISO	Ant1	2412	10.24	≤30.00	PASS
		2437	9.73	≤30.00	PASS
		2462	8.94	≤30.00	PASS
11N40SISO	Ant1	2422	8.76	≤30.00	PASS
		2437	8.45	≤30.00	PASS
		2452	8.21	≤30.00	PASS





C.3 Maximum power spectral density

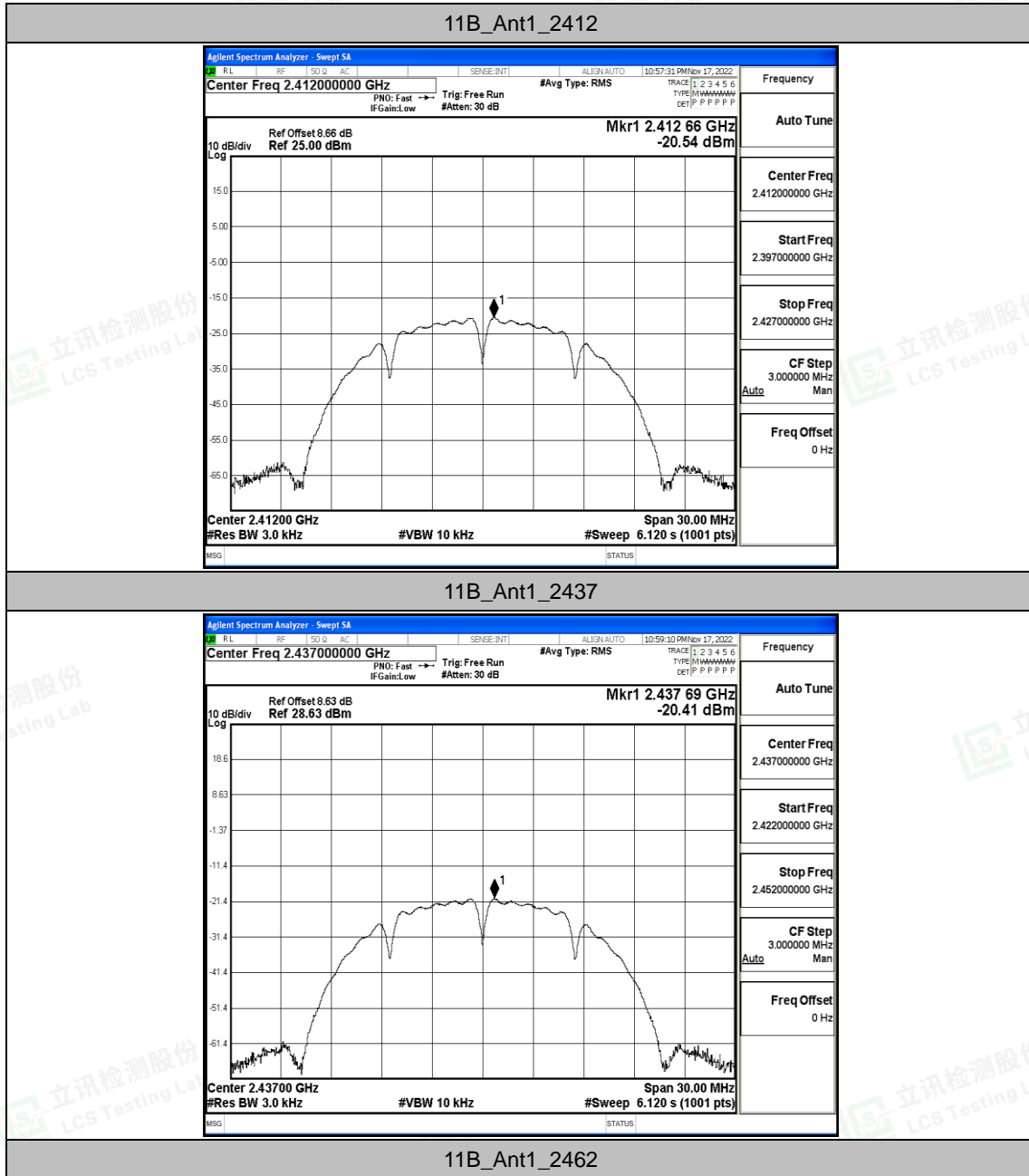
Test Result

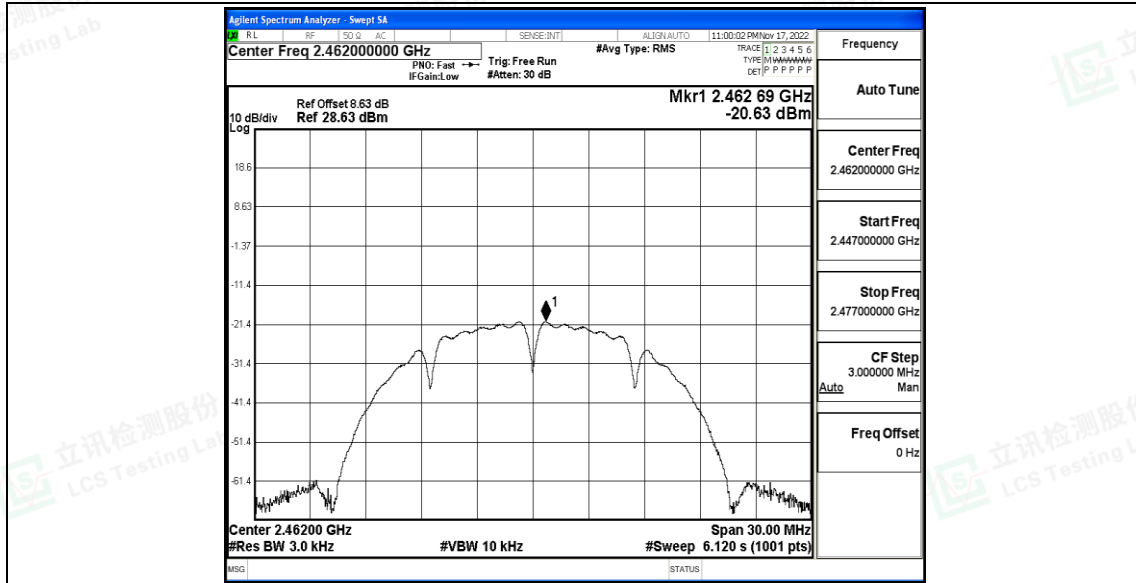
TestMode	Antenna	Freq(MHz)	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-20.54	≤8.00	PASS
		2437	-20.42	≤8.00	PASS
		2462	-20.63	≤8.00	PASS
11G	Ant1	2412	-25.47	≤8.00	PASS
		2437	-25.91	≤8.00	PASS
		2462	-25.43	≤8.00	PASS
11N20SISO	Ant1	2412	-25.14	≤8.00	PASS
		2437	-26.57	≤8.00	PASS
		2462	-26.76	≤8.00	PASS
11N40SISO	Ant1	2422	-29.48	≤8.00	PASS
		2437	-28.9	≤8.00	PASS
		2452	-30.58	≤8.00	PASS



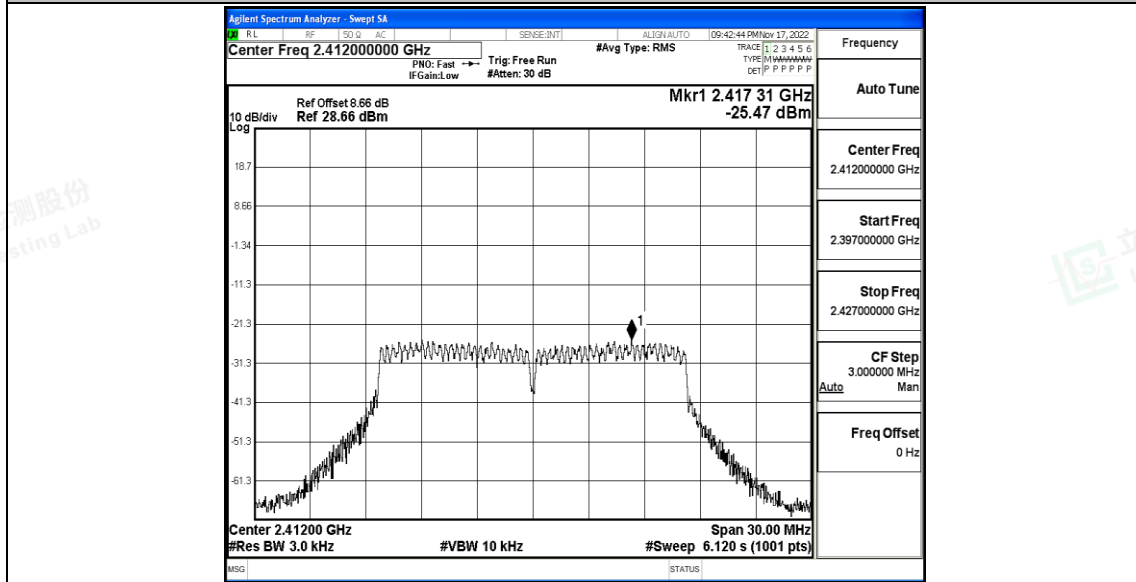


Test Graphs



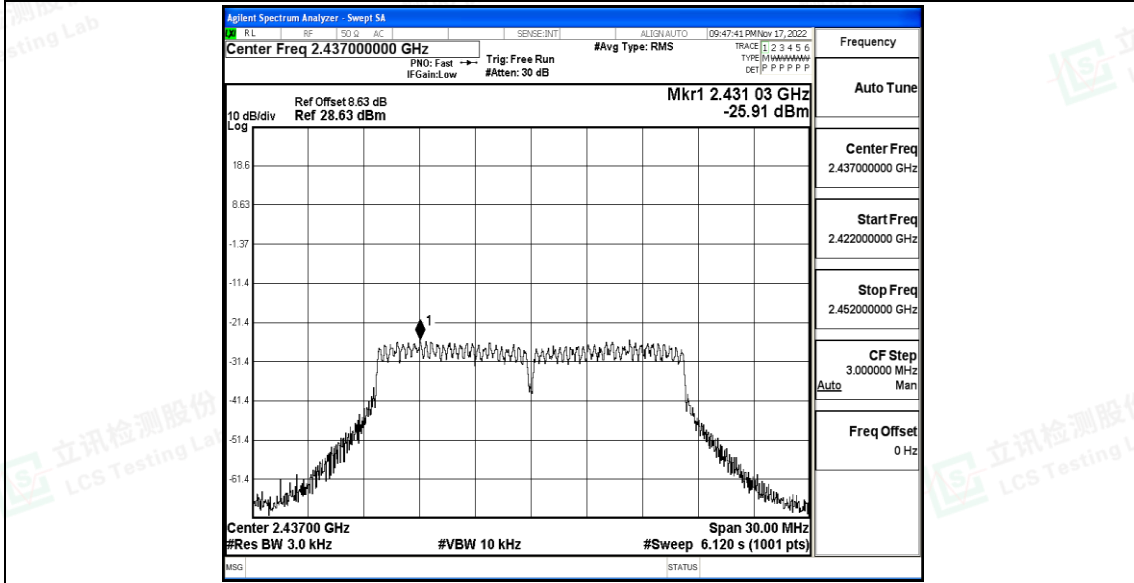


11G_Ant1_2412

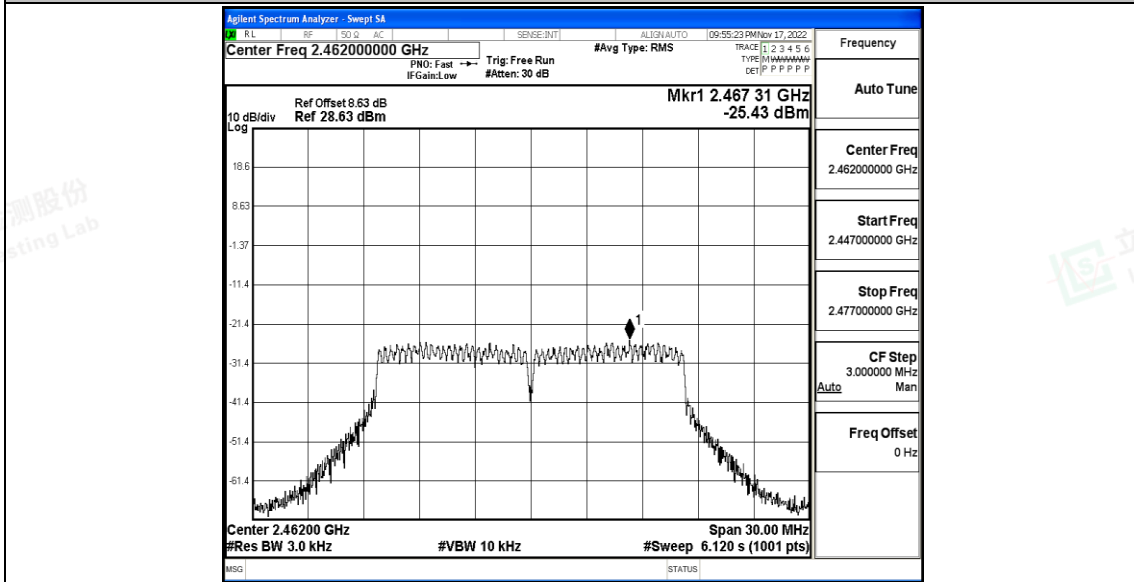


11G_Ant1_2437



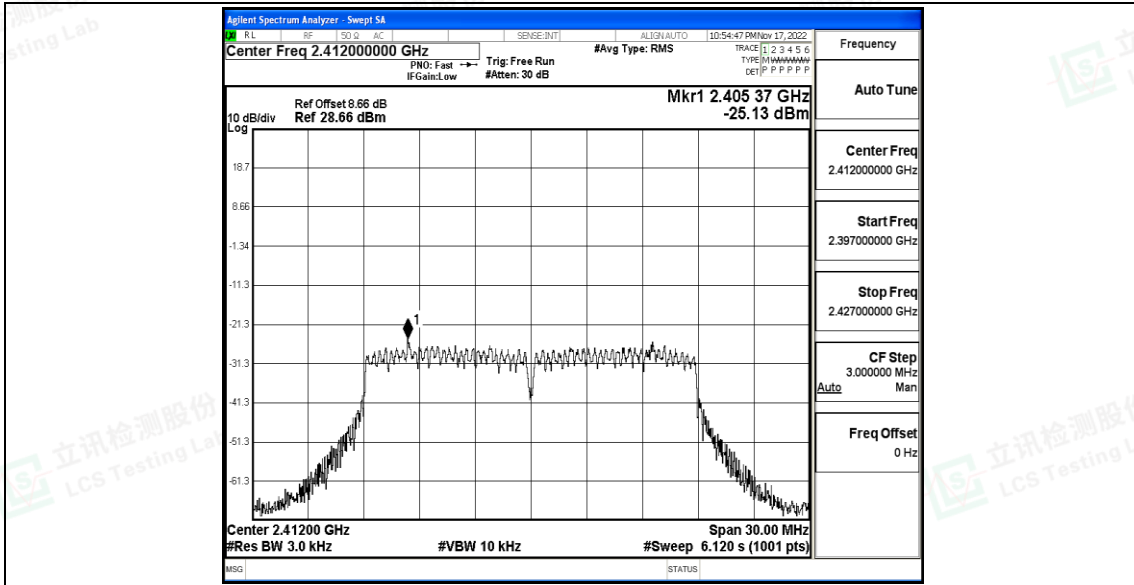


11G_Ant1_2462

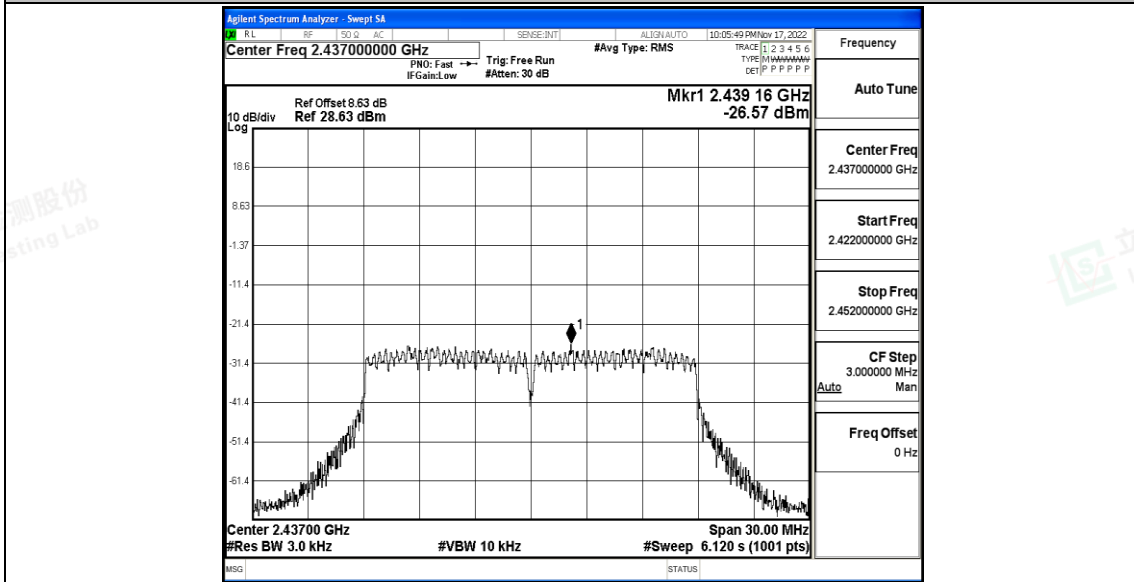


11N20SISO_Ant1_2412



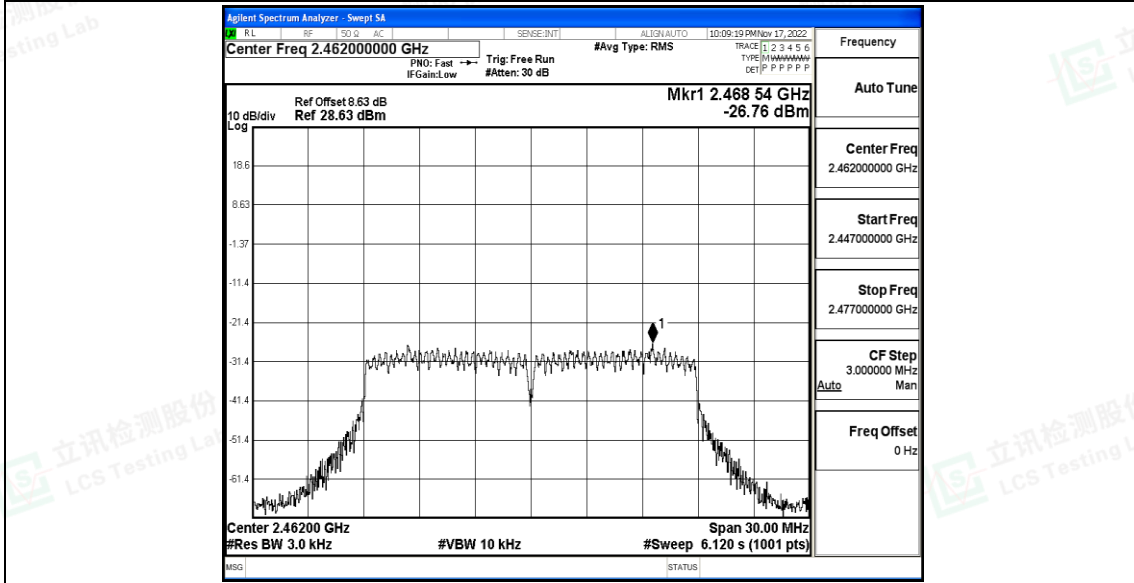


11N20SISO_Ant1_2437

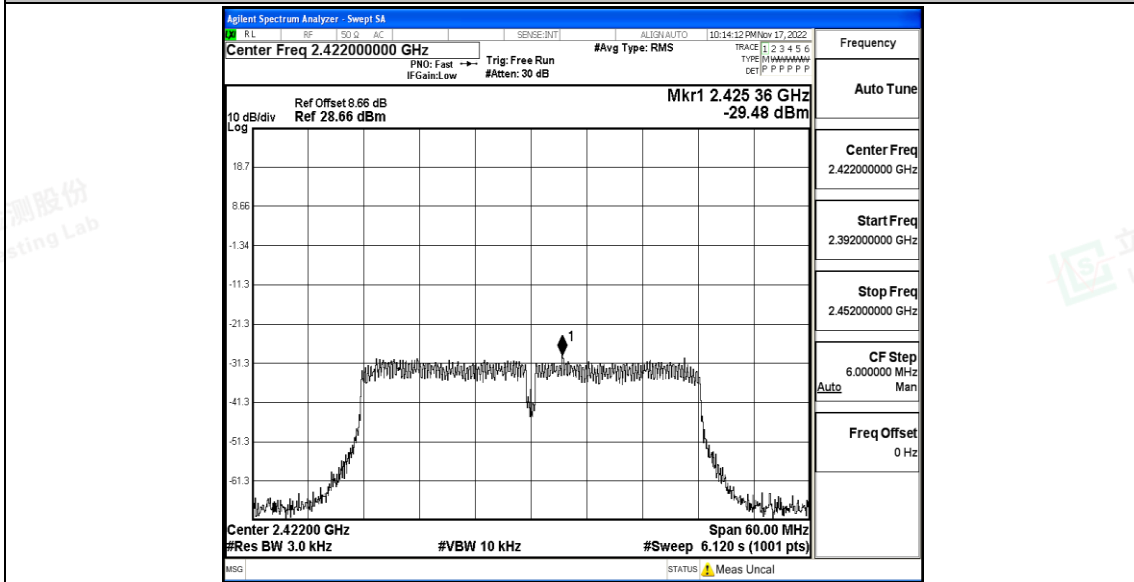


11N20SISO_Ant1_2462



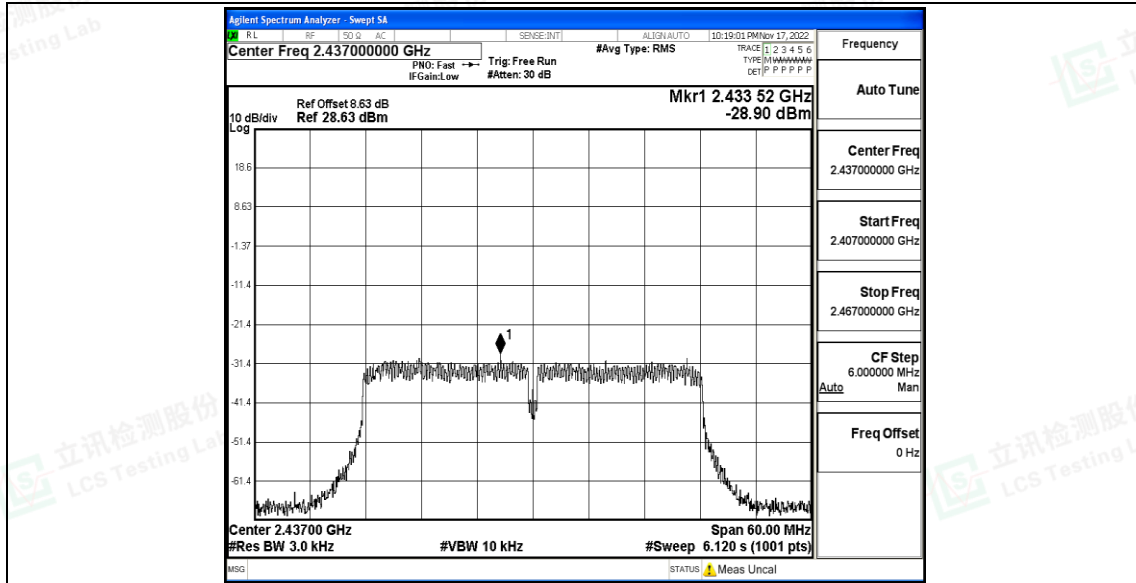


11N40SISO_Ant1_2422

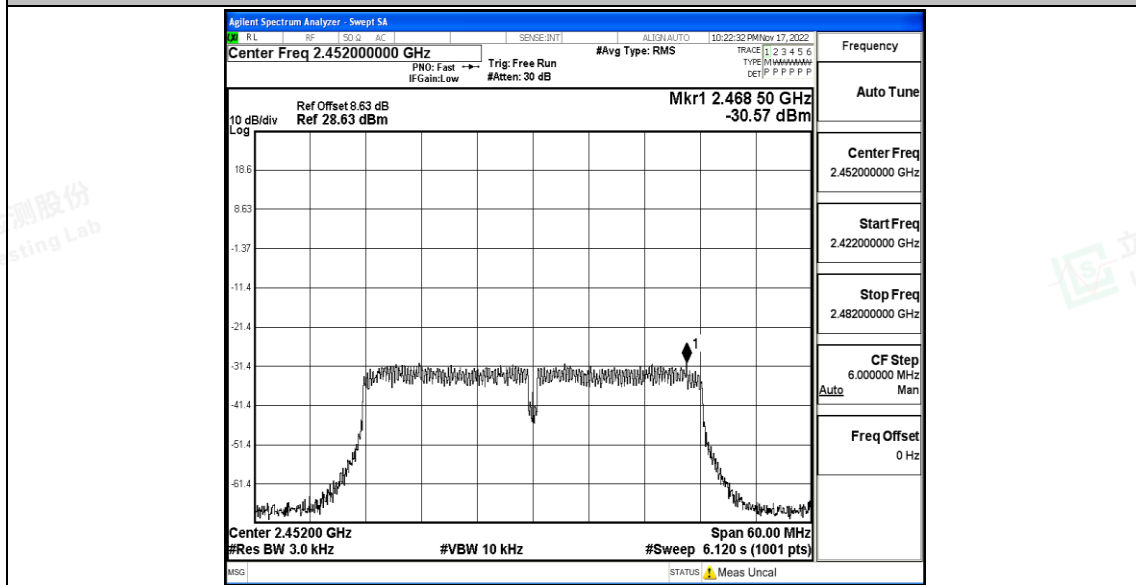


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452





C.4 Band edge measurements

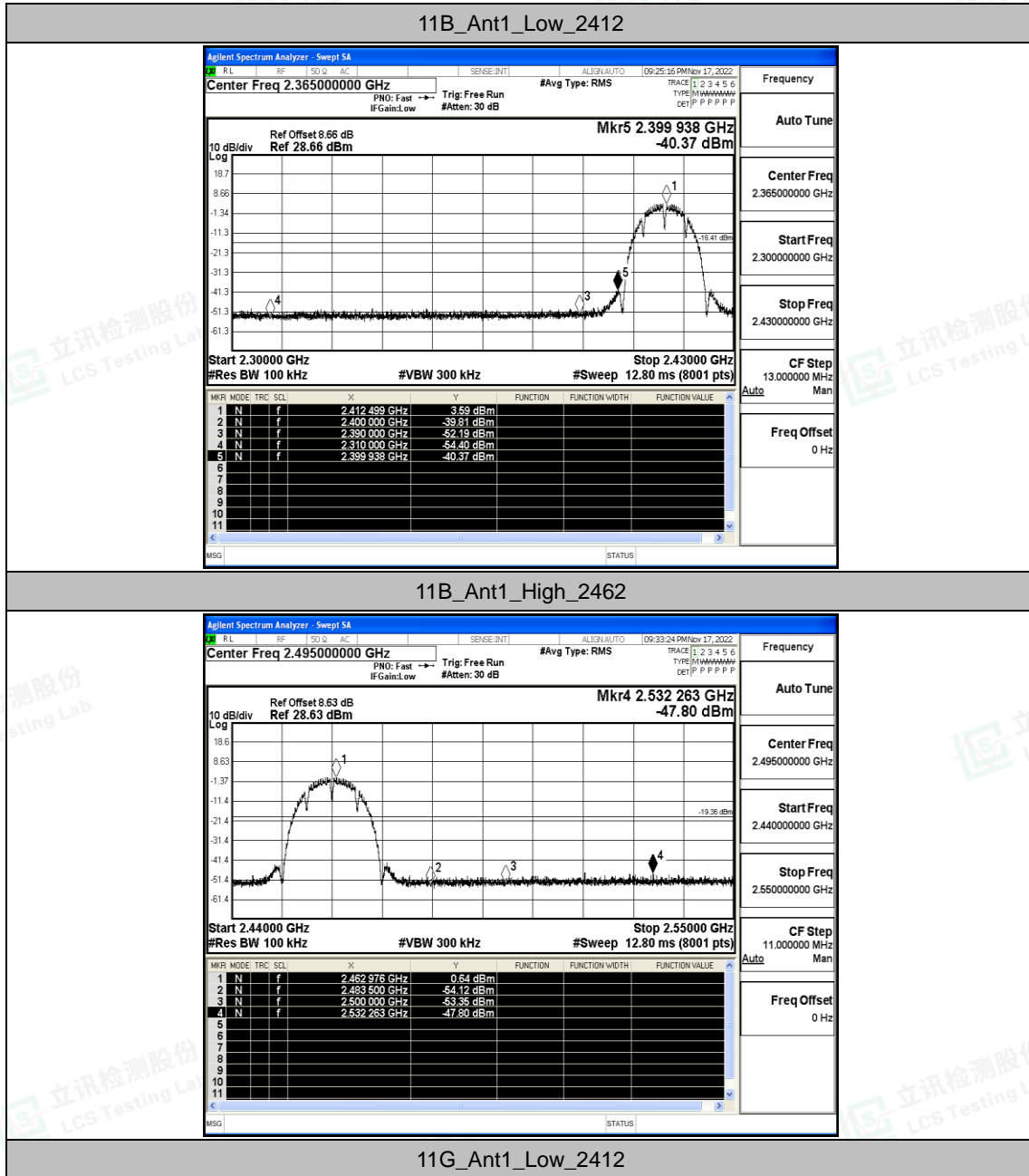
Test Result

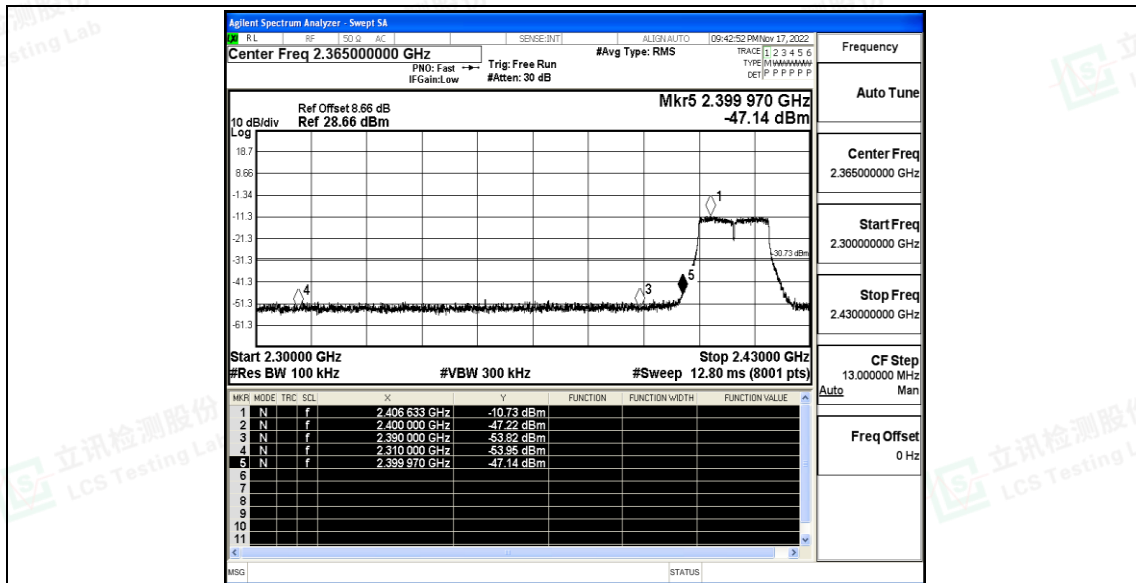
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.59	-40.37	≤-16.41	PASS
		High	2462	0.64	-47.8	≤-19.36	PASS
11G	Ant1	Low	2412	-10.73	-47.14	≤-30.73	PASS
		High	2462	-11.30	-47.19	≤-31.3	PASS
11N20SISO	Ant1	Low	2412	-11.04	-46.01	≤-31.04	PASS
		High	2462	-13.04	-48.19	≤-33.04	PASS
11N40SISO	Ant1	Low	2422	-16.40	-48.67	≤-36.4	PASS
		High	2452	-17.21	-48.7	≤-37.21	PASS



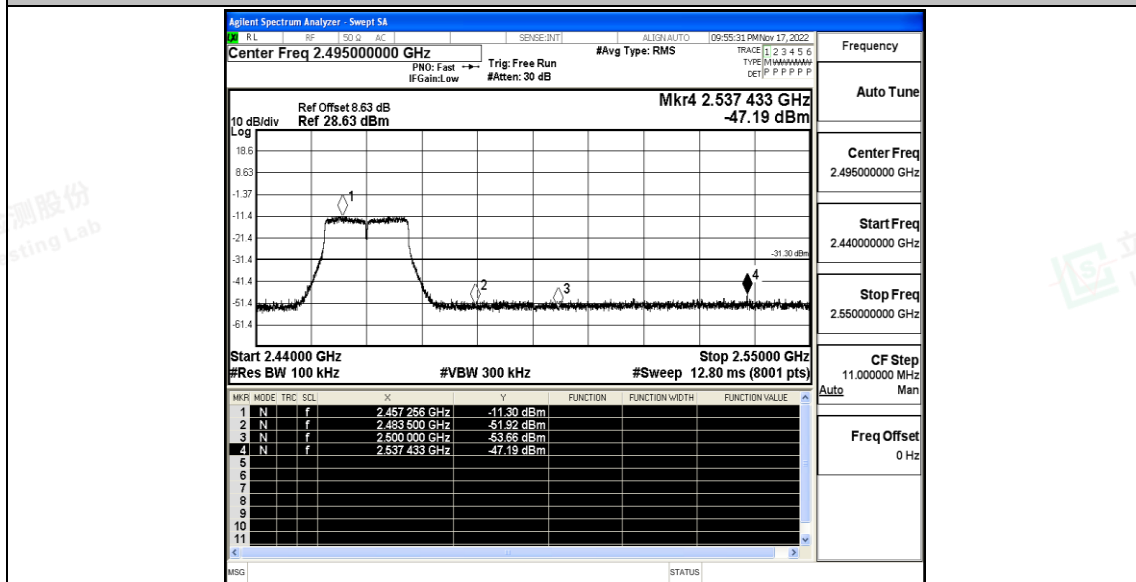


Test Graphs



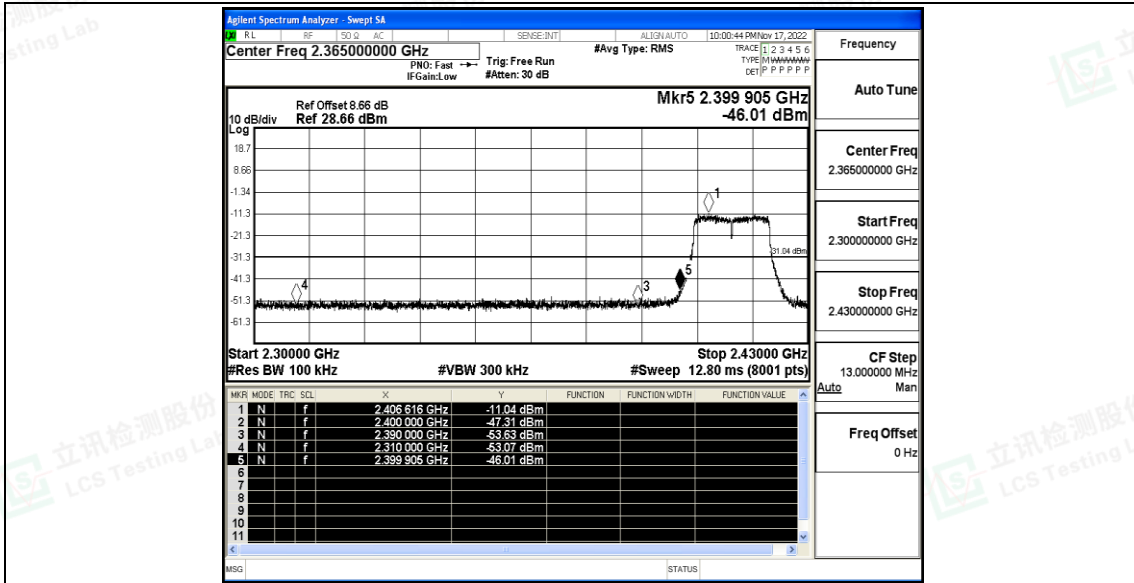


11G_Ant1_High_2462

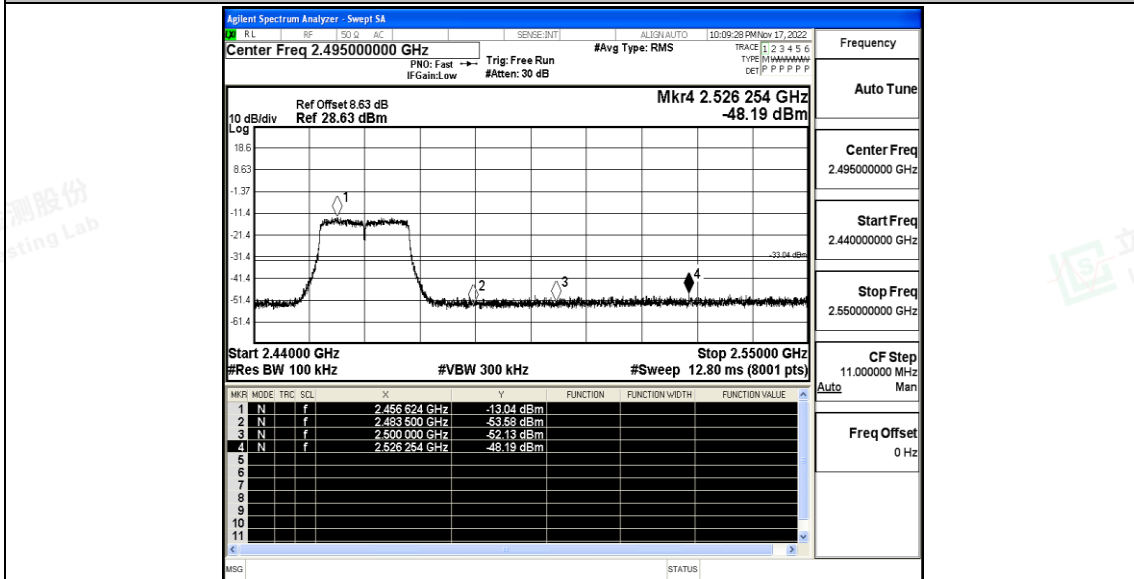


11N20SISO_Ant1_Low_2412



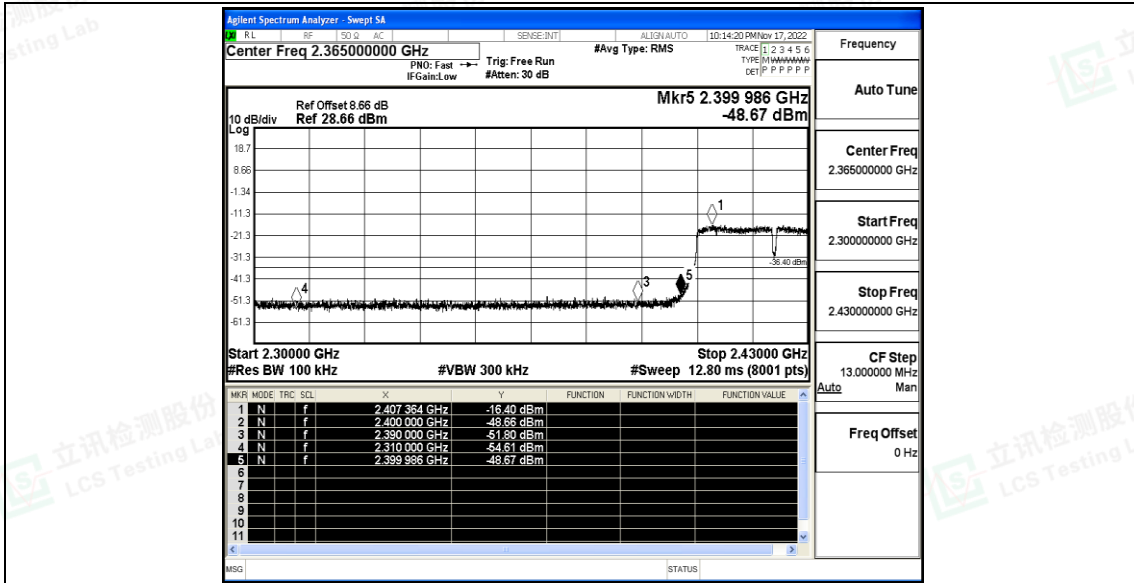


11N20SISO_Ant1_High_2462

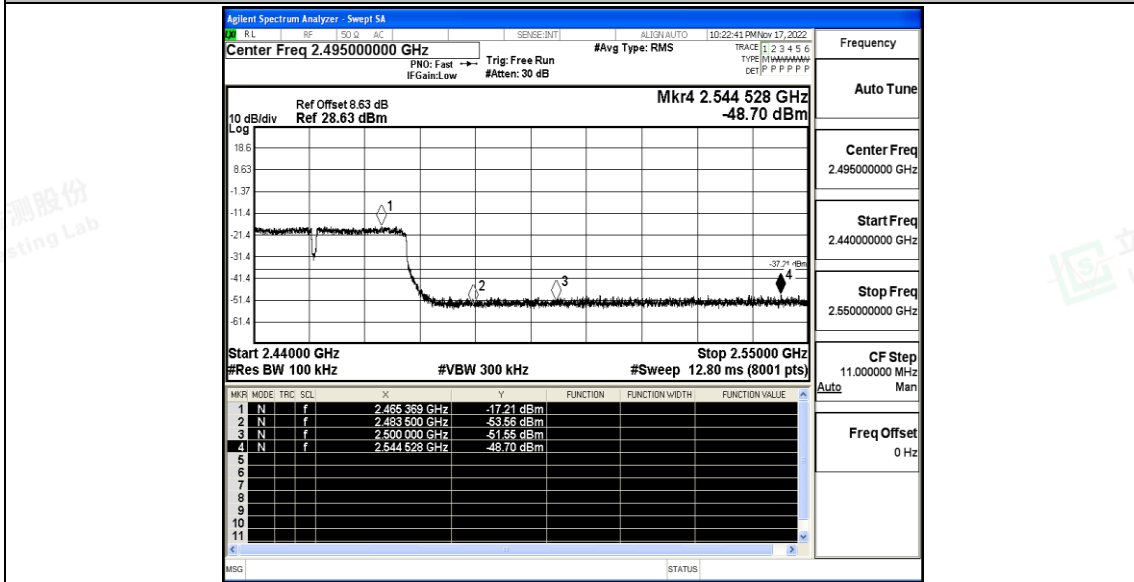


11N40SISO_Ant1_Low_2422





11N40SISO_Ant1_High_2452





C.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.51	3.51	---	PASS
			30~1000	3.51	-60.46	≤-16.49	PASS
			1000~26500	3.51	-45.88	≤-16.49	PASS
		2437	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-60.65	≤-18.13	PASS
			1000~26500	1.87	-46.29	≤-18.13	PASS
		2462	Reference	0.59	0.59	---	PASS
			30~1000	0.59	-61.01	≤-19.41	PASS
			1000~26500	0.59	-45.24	≤-19.41	PASS
11G	Ant1	2412	Reference	-11.00	-11.00	---	PASS
			30~1000	-11.00	-60.41	≤-31	PASS
			1000~26500	-11.00	-46.64	≤-31	PASS
		2437	Reference	-11.97	-11.97	---	PASS
			30~1000	-11.97	-60.76	≤-31.97	PASS
			1000~26500	-11.97	-46.48	≤-31.97	PASS
		2462	Reference	-11.68	-11.68	---	PASS
			30~1000	-11.68	-60.65	≤-31.68	PASS
			1000~26500	-11.68	-46.45	≤-31.68	PASS
11N20SISO	Ant1	2412	Reference	-12.00	-12.00	---	PASS
			30~1000	-12.00	-60.62	≤-32	PASS
			1000~26500	-12.00	-46.09	≤-32	PASS
		2437	Reference	-12.85	-12.85	---	PASS
			30~1000	-12.85	-60.53	≤-32.85	PASS
			1000~26500	-12.85	-45.93	≤-32.85	PASS
		2462	Reference	-14.36	-14.36	---	PASS
			30~1000	-14.36	-60.71	≤-34.36	PASS
			1000~26500	-14.36	-46.49	≤-34.36	PASS
11N40SISO	Ant1	2422	Reference	-16.69	-16.69	---	PASS
			30~1000	-16.69	-60.51	≤-36.69	PASS
			1000~26500	-16.69	-46.1	≤-36.69	PASS
		2437	Reference	-17.13	-17.13	---	PASS
			30~1000	-17.13	-60.52	≤-37.13	PASS
			1000~26500	-17.13	-46.33	≤-37.13	PASS
		2452	Reference	-24.21	-24.21	---	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

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

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

Scan code to check authenticity



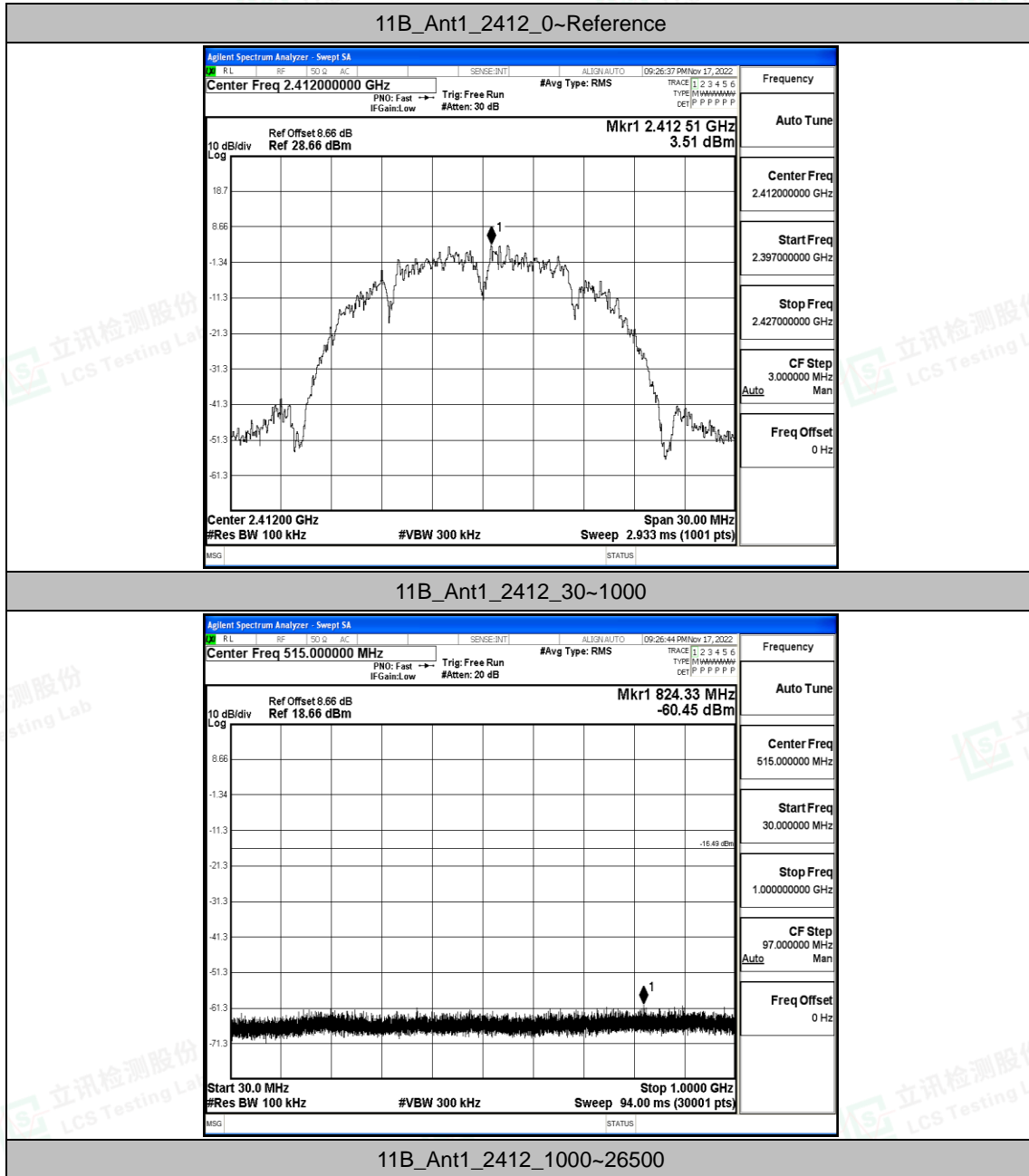
		30~1000	-24.21	-61.17	≤-44.21	PASS
		1000~26500	-24.21	-46.24	≤-44.21	PASS

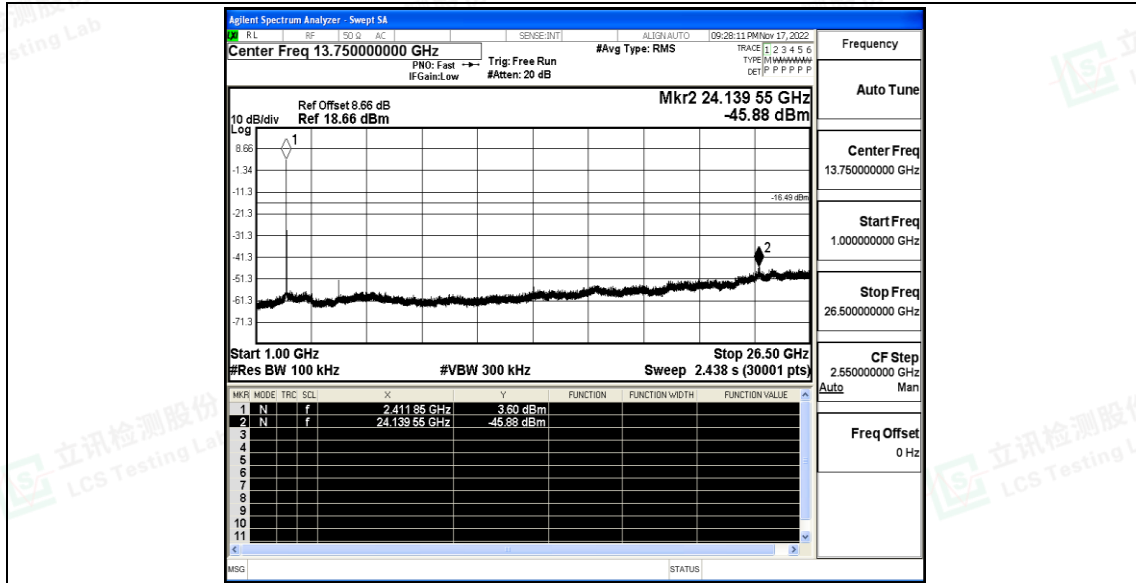


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

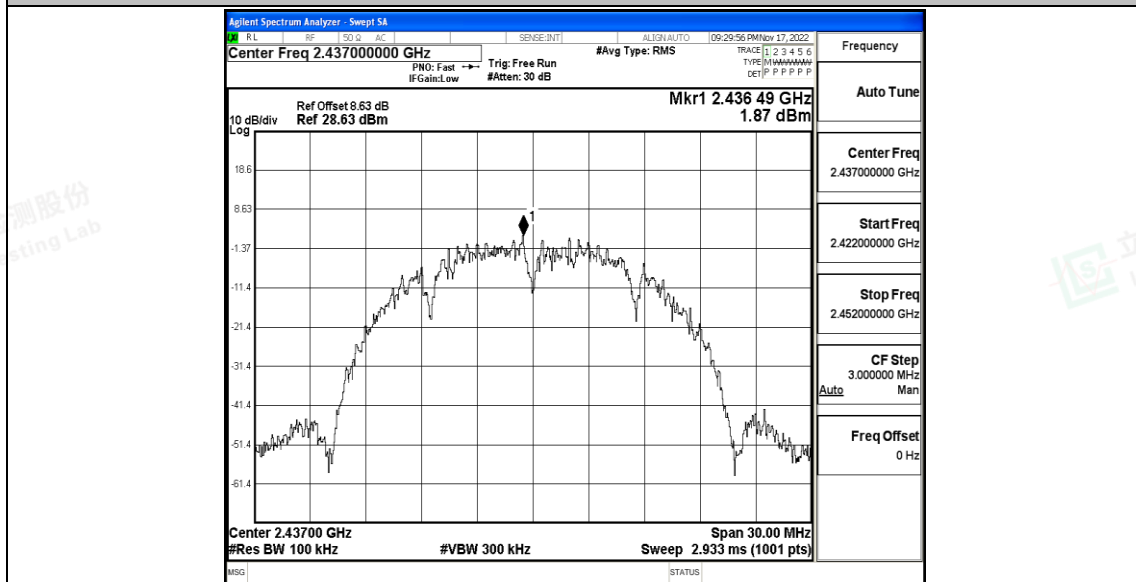


Test Graphs



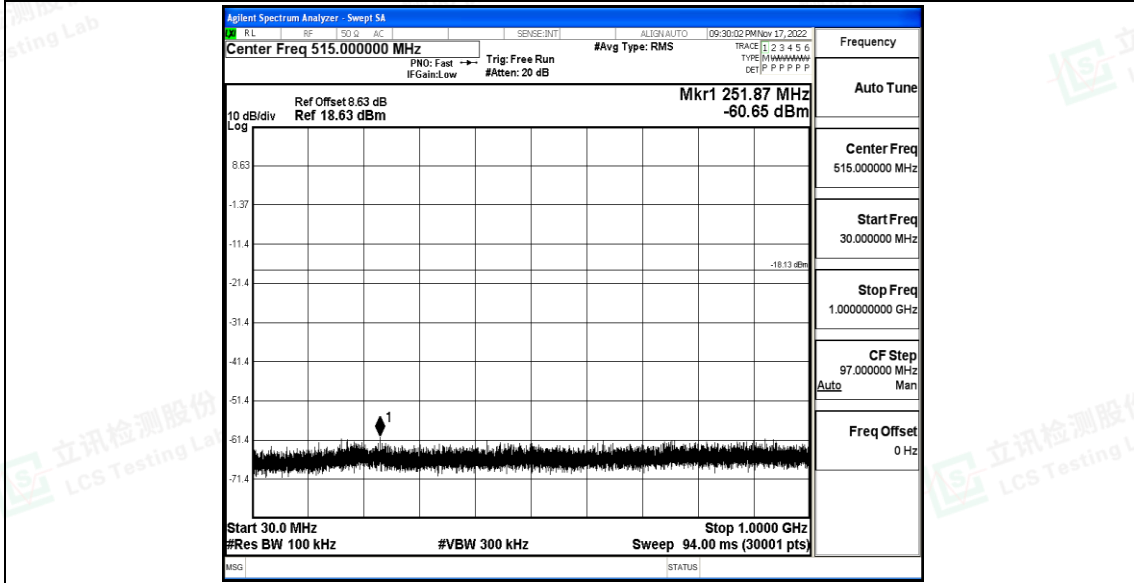


11B_Ant1_2437_0~Reference

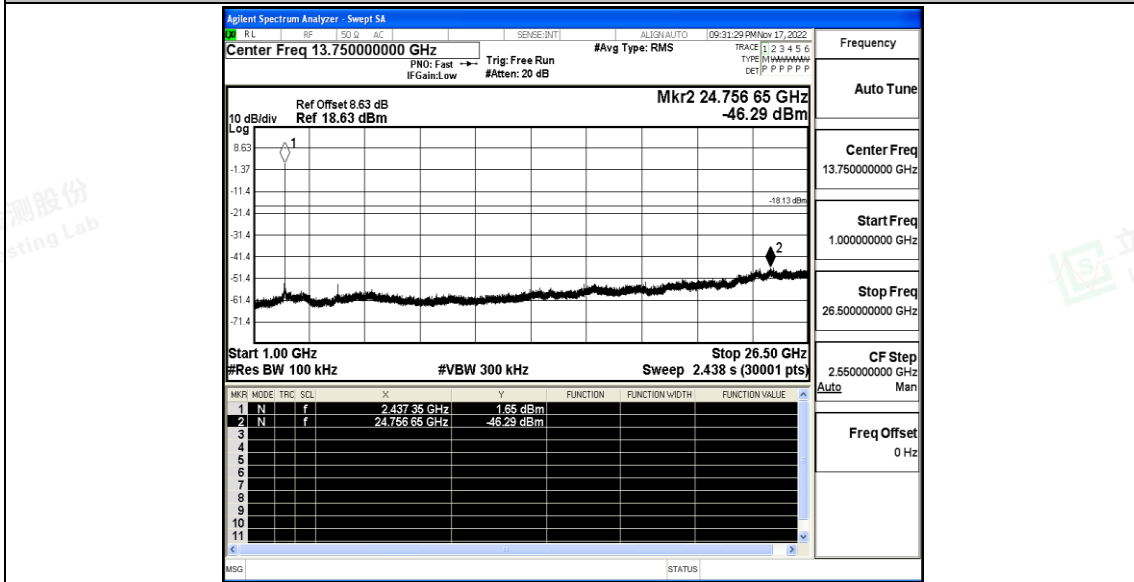


11B_Ant1_2437_30~1000



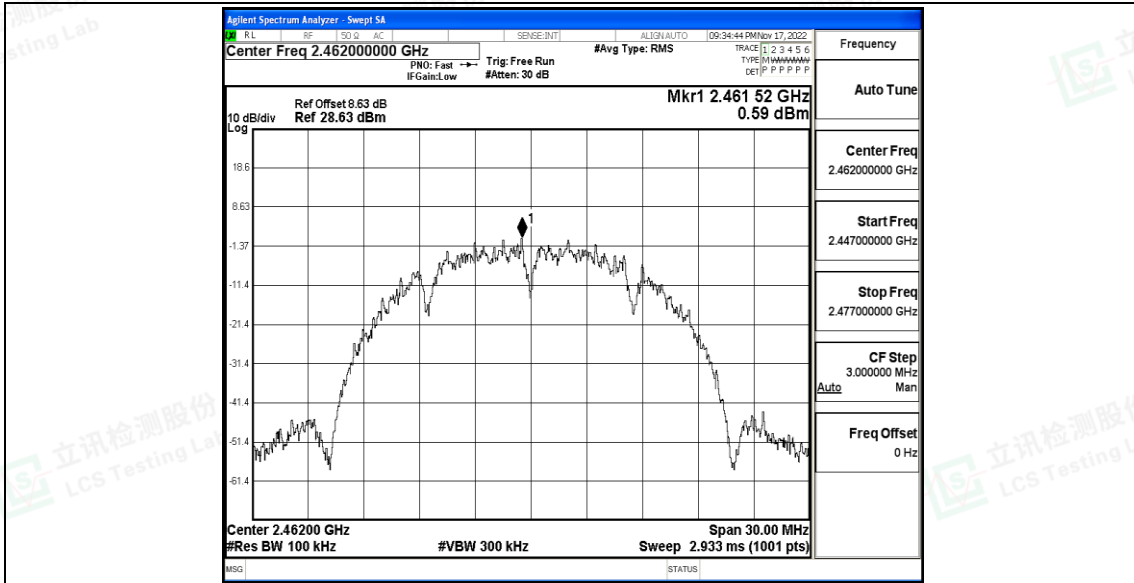


11B_Ant1_2437_1000~26500

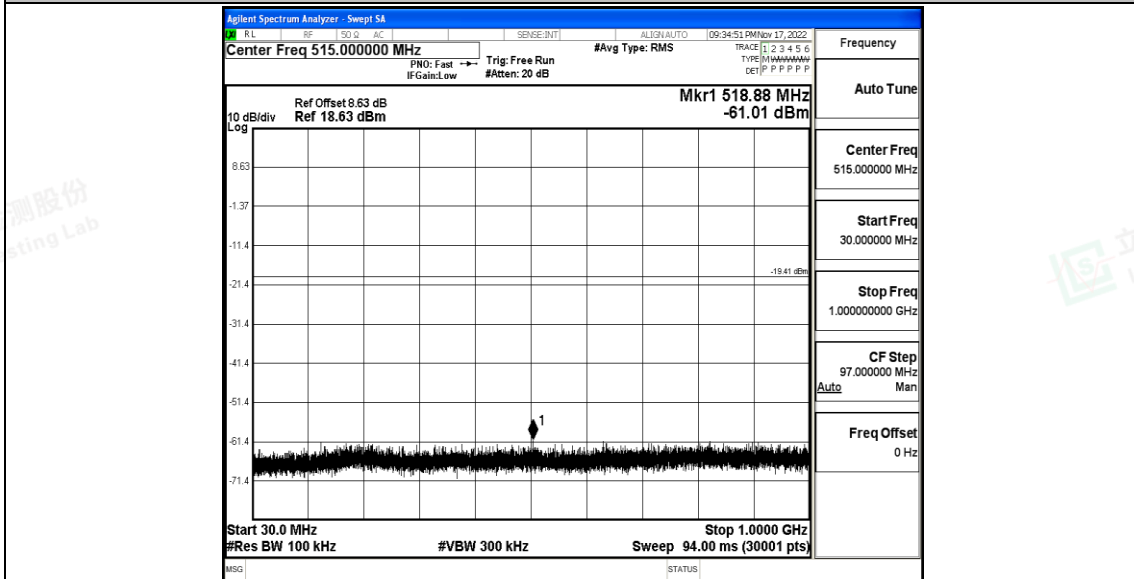


11B_Ant1_2462_0~Reference



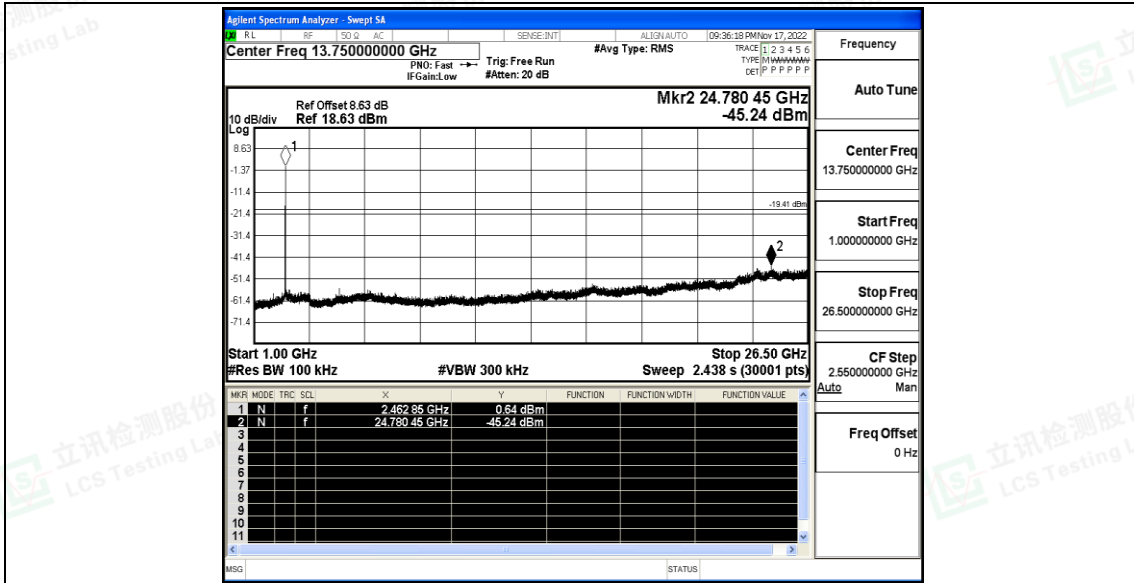


11B_Ant1_2462_30~1000

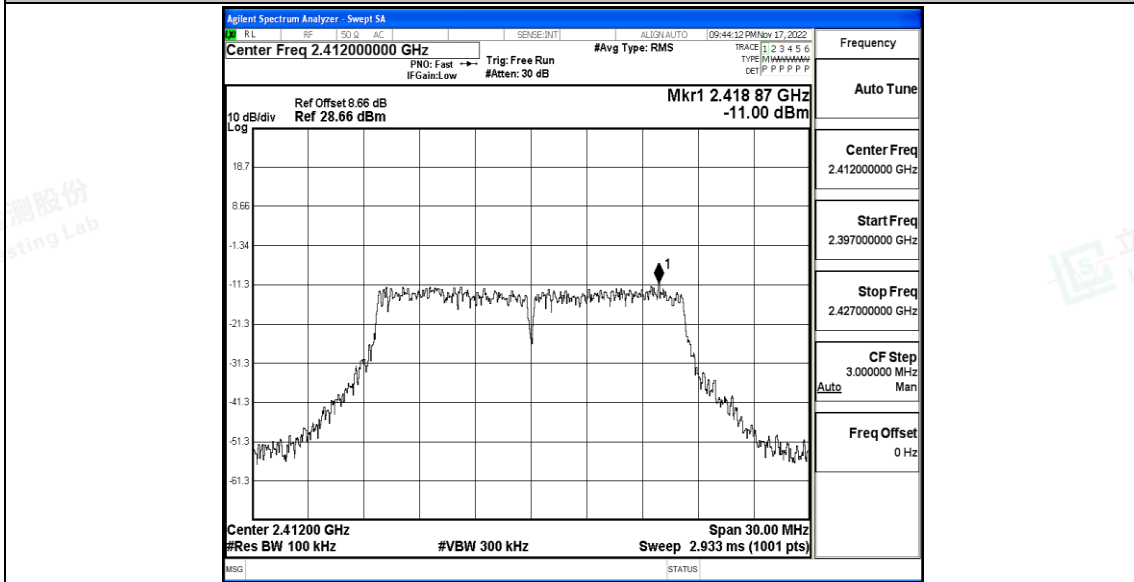


11B_Ant1_2462_1000~26500



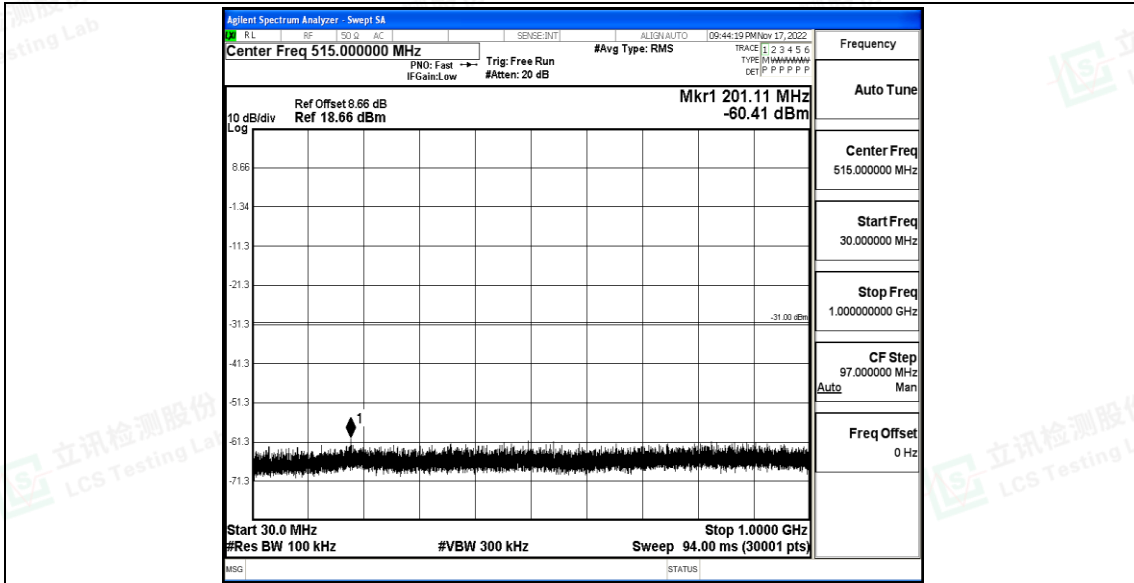


11G_Ant1_2412_0~Reference

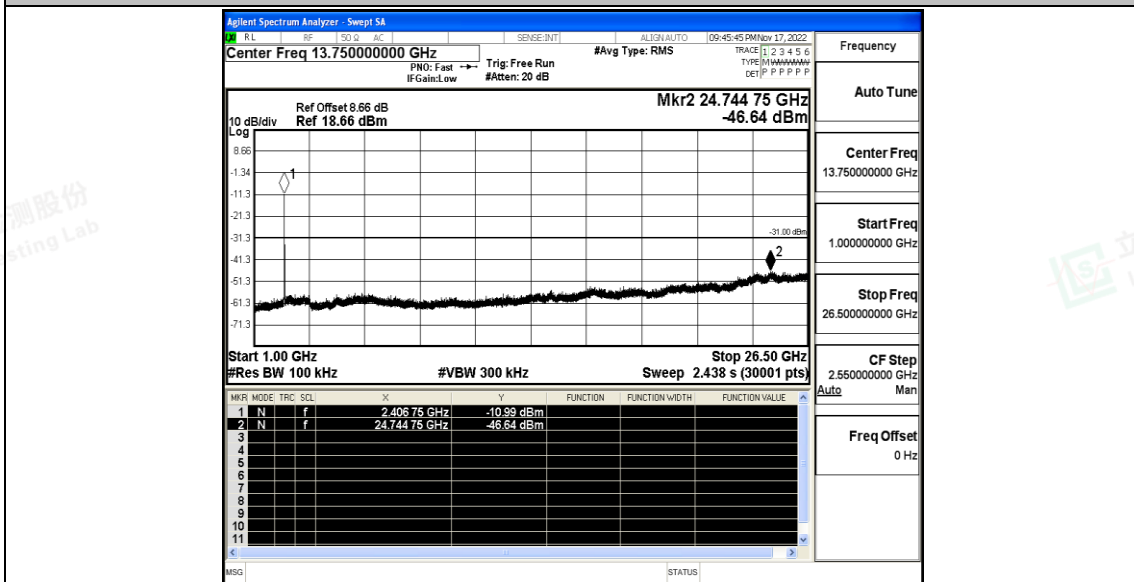


11G_Ant1_2412_30~1000



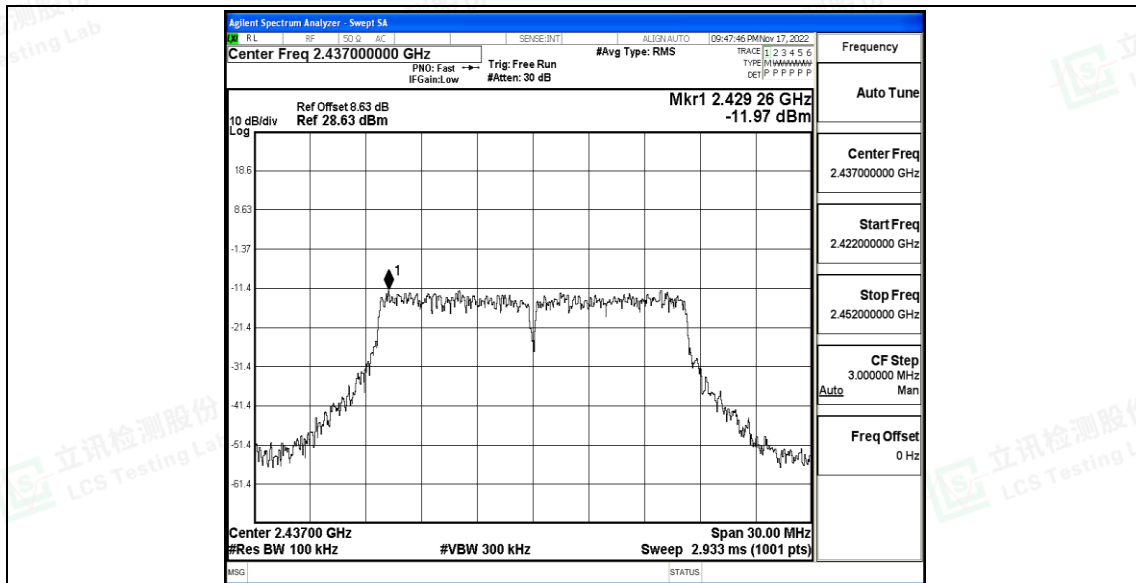


11G_Ant1_2412_1000~26500

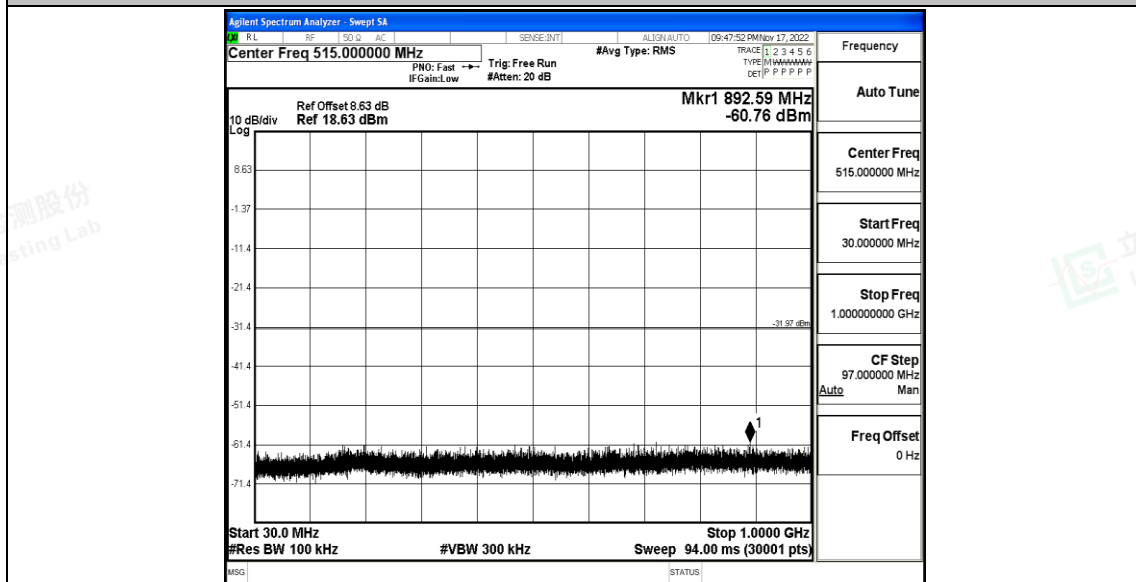


11G_Ant1_2437_0~Reference



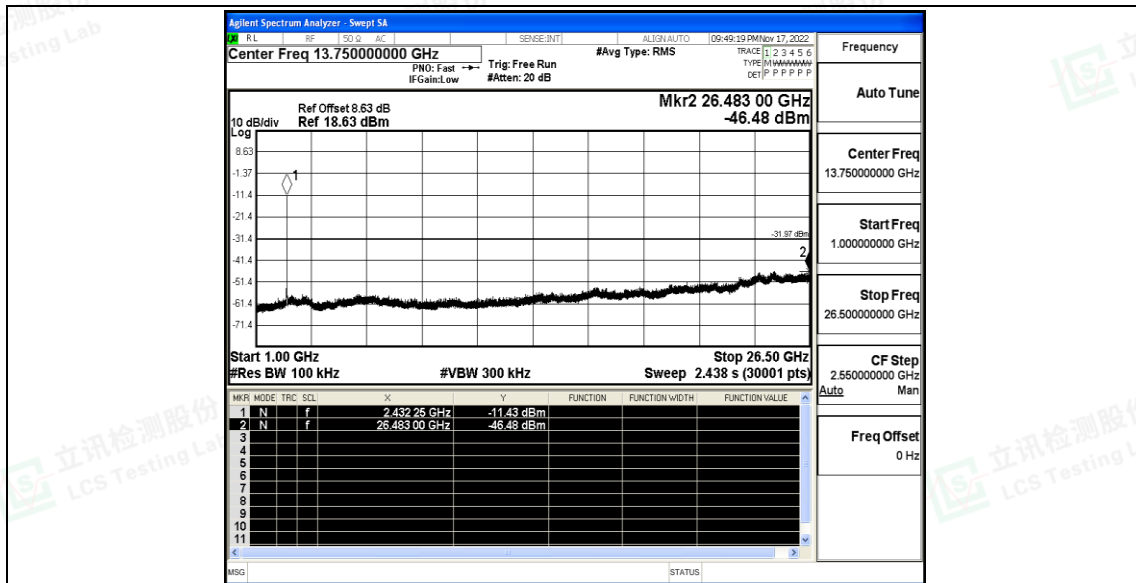


11G_Ant1_2437_30~1000

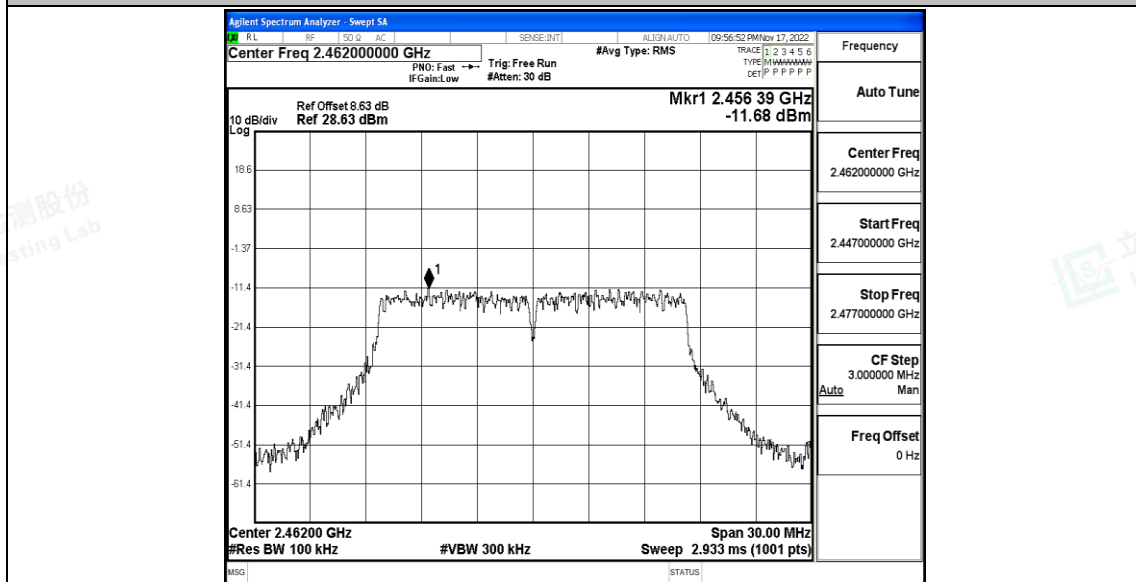


11G_Ant1_2437_1000~26500



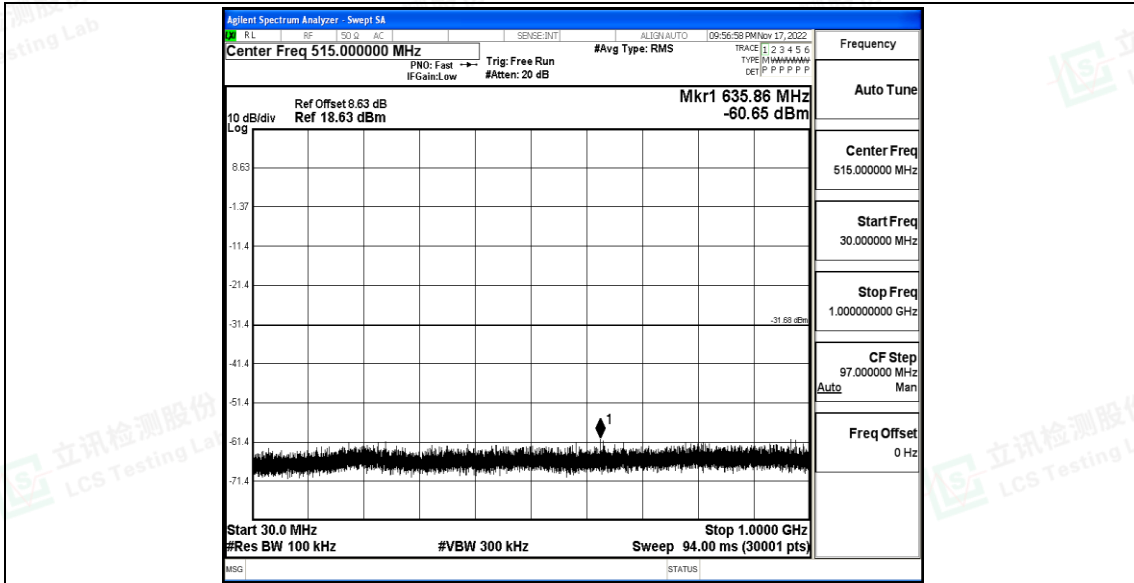


11G_Ant1_2462_0~Reference

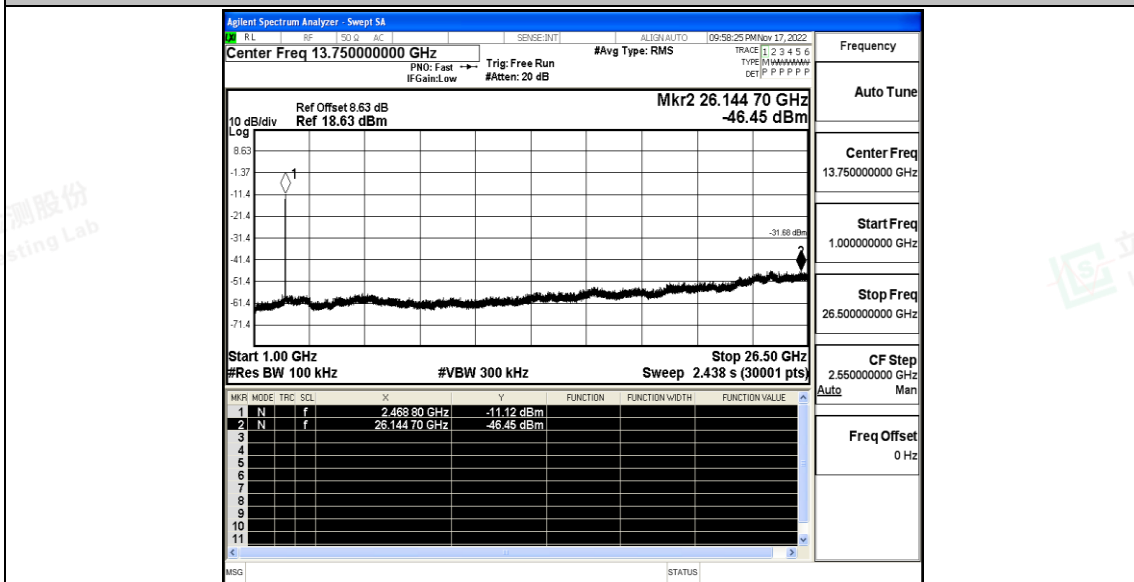


11G_Ant1_2462_30~1000



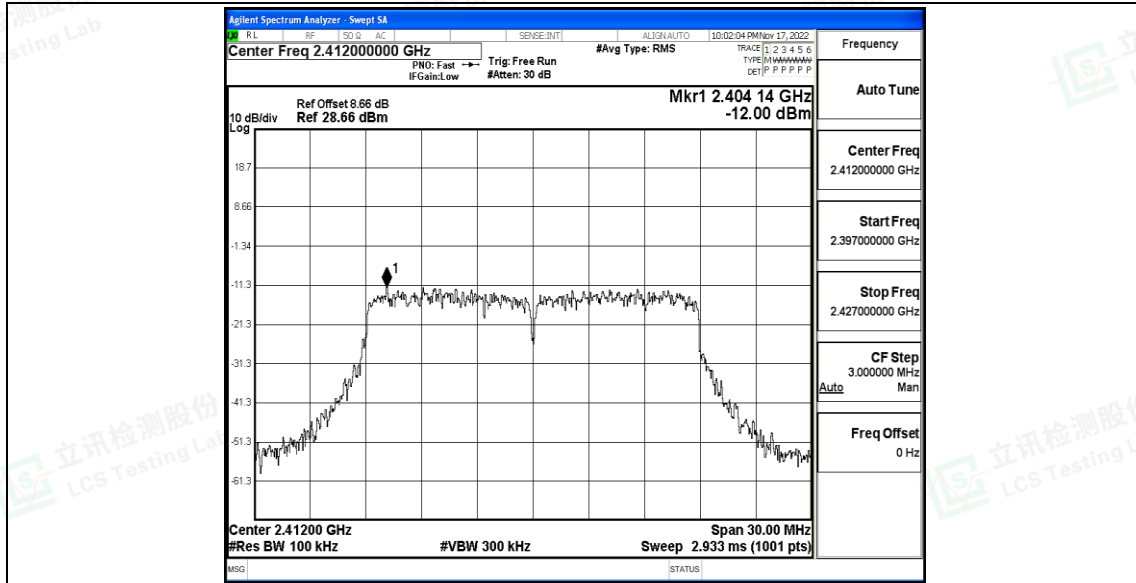


11G_Ant1_2462_1000~26500

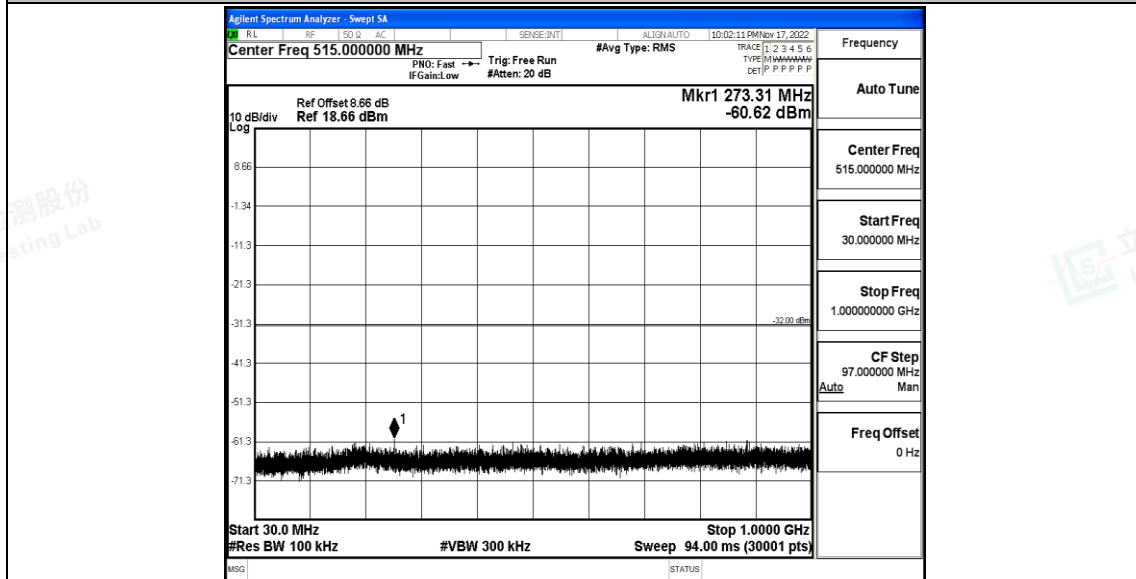


11N20SISO_Ant1_2412_0~Reference



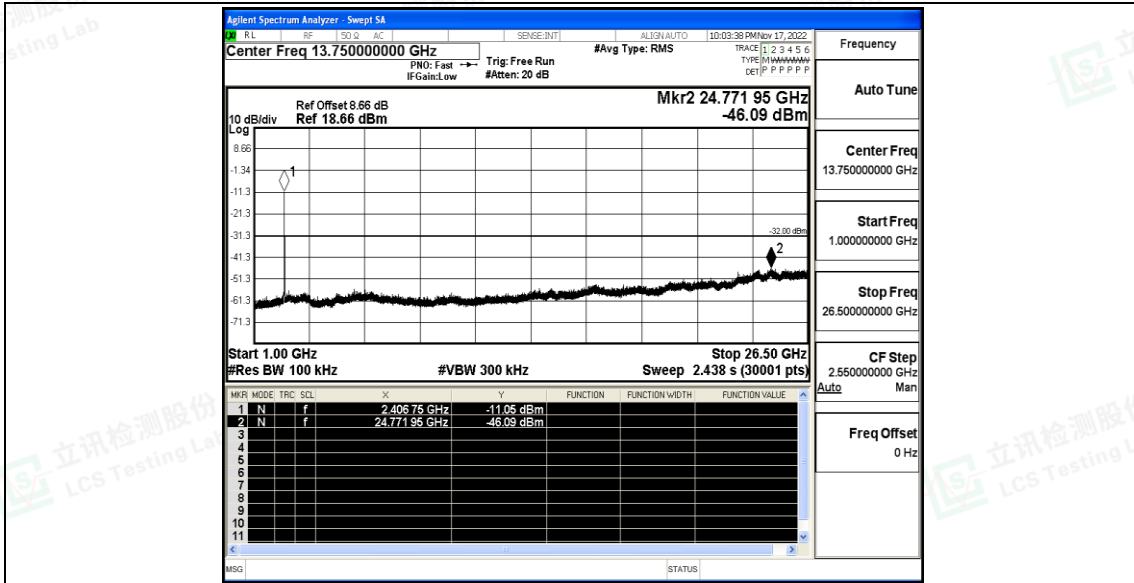


11N20SISO_Ant1_2412_30~1000

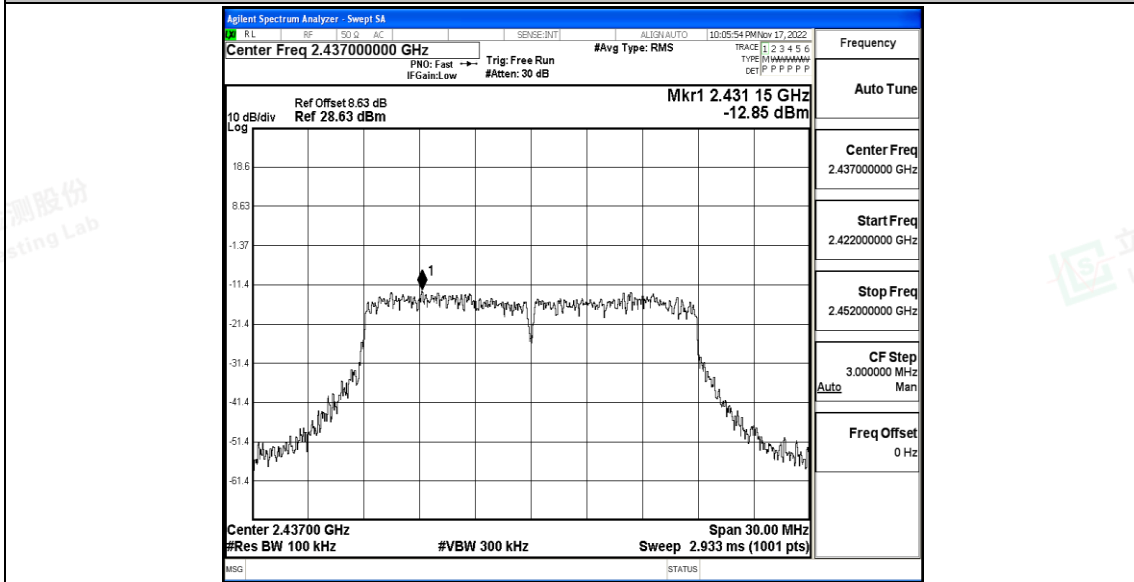


11N20SISO_Ant1_2412_1000~26500



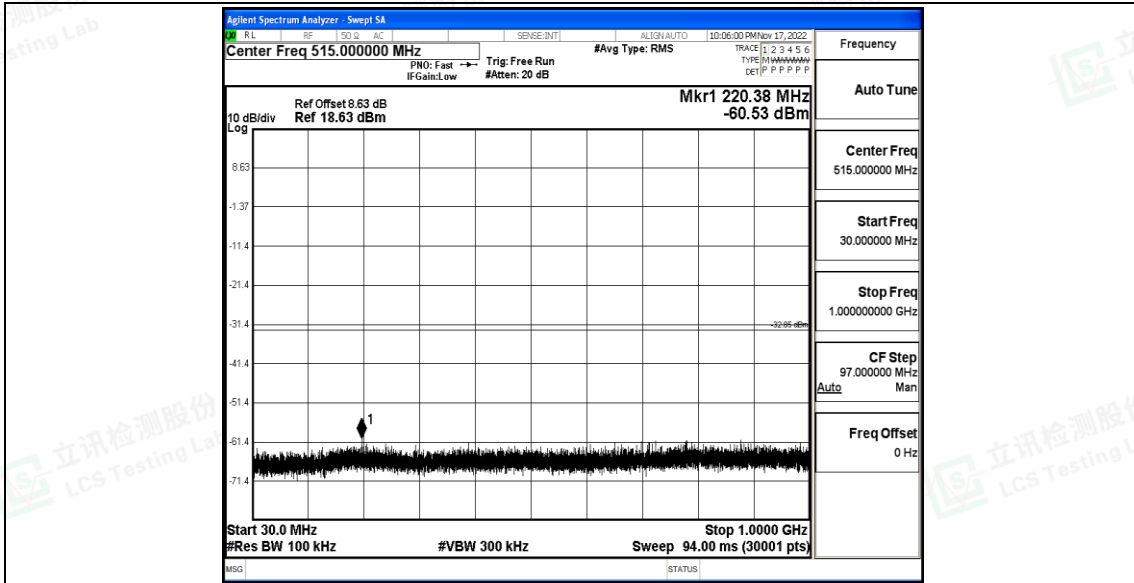


11N20SISO_Ant1_2437_0~Reference

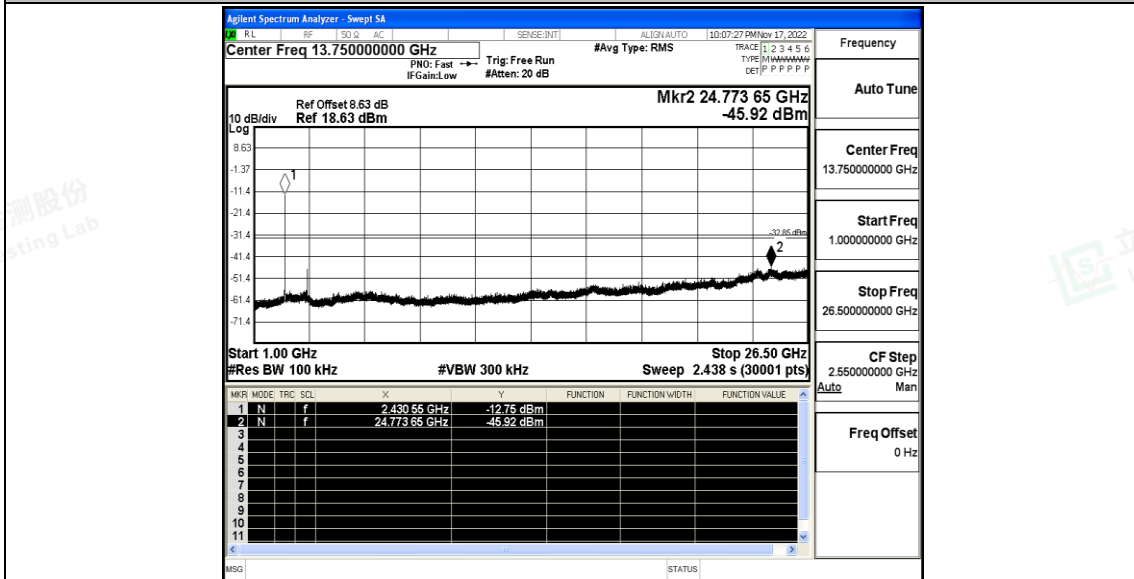


11N20SISO_Ant1_2437_30~1000



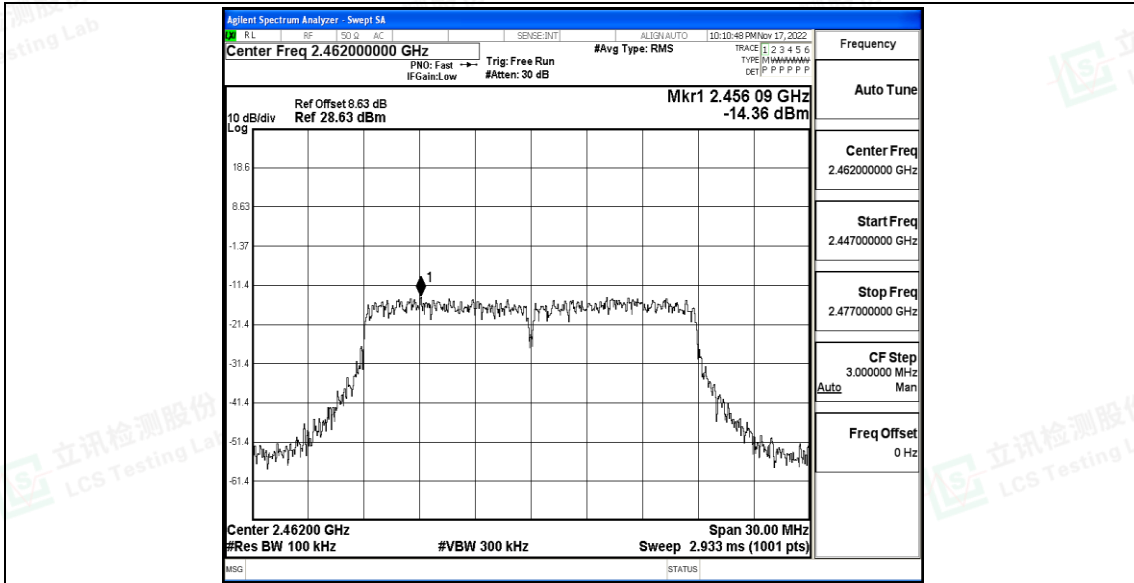


11N20SISO_Ant1_2437_1000~26500

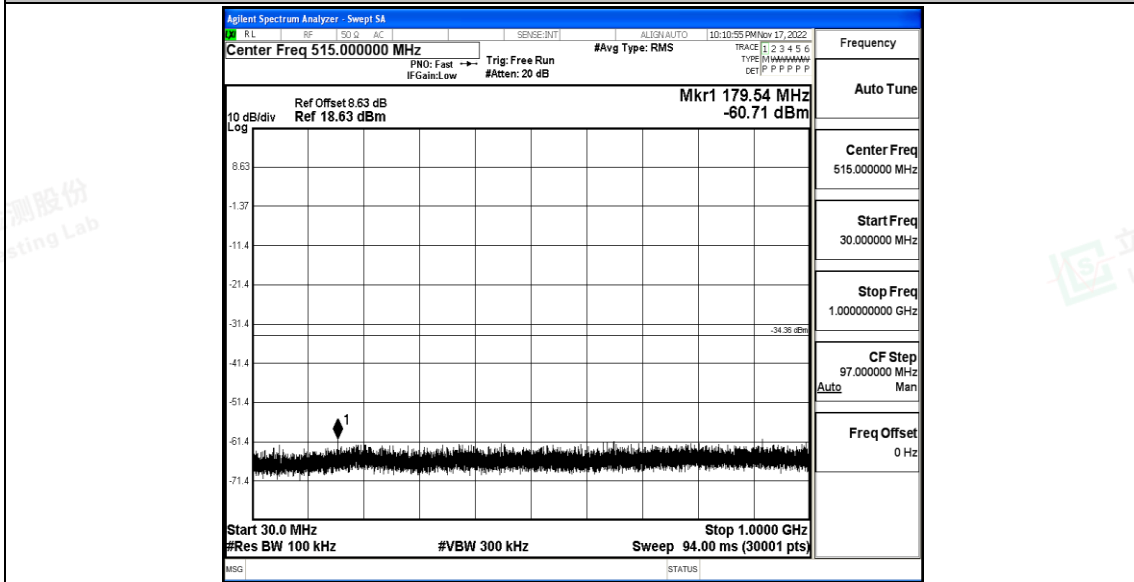


11N20SISO_Ant1_2462_0~Reference



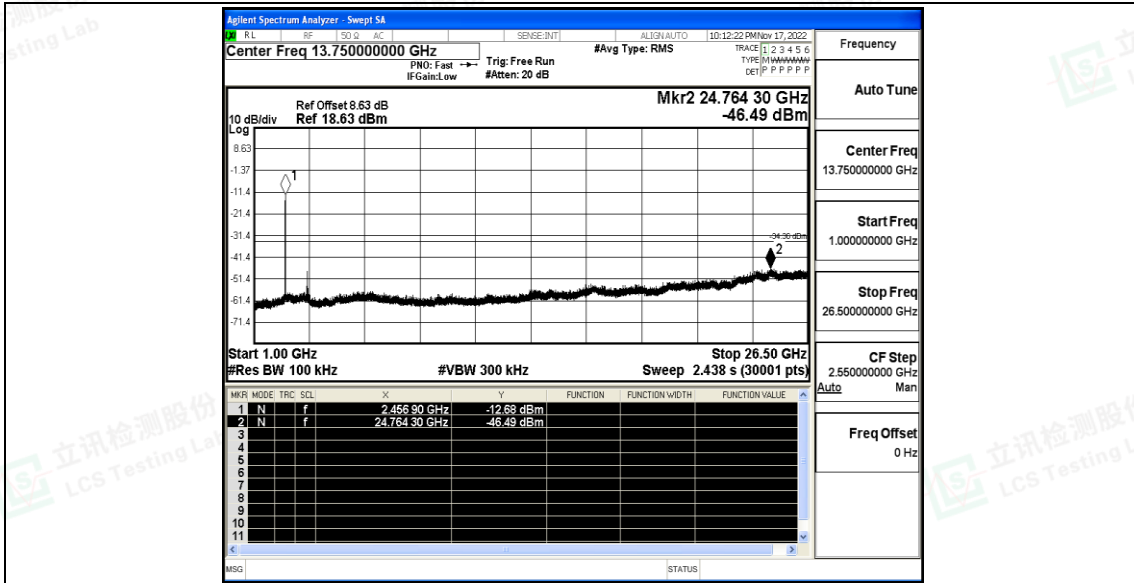


11N20SISO_Ant1_2462_30~1000

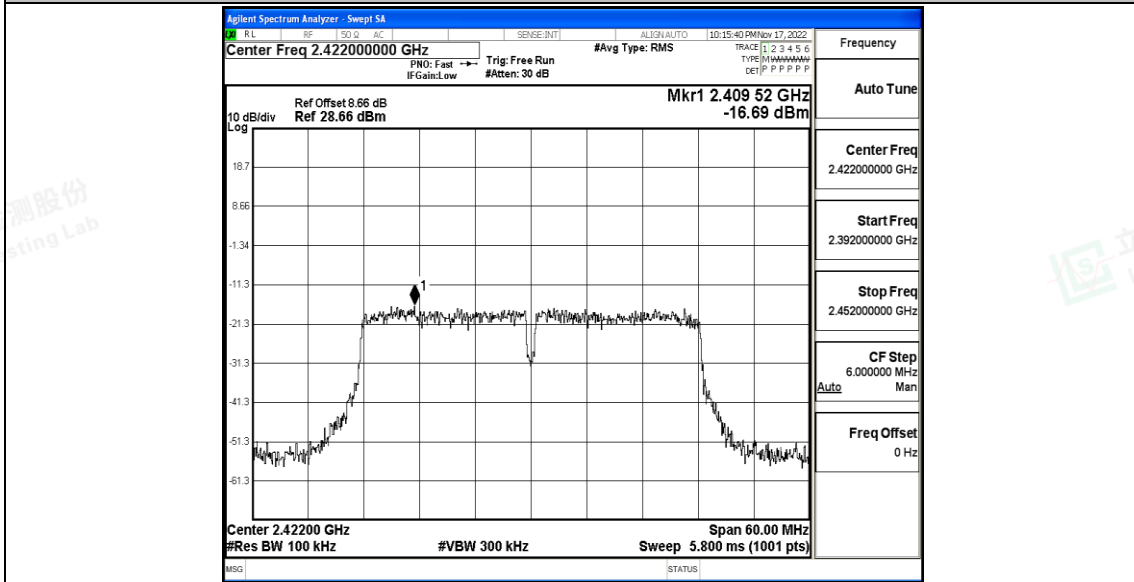


11N20SISO_Ant1_2462_1000~26500



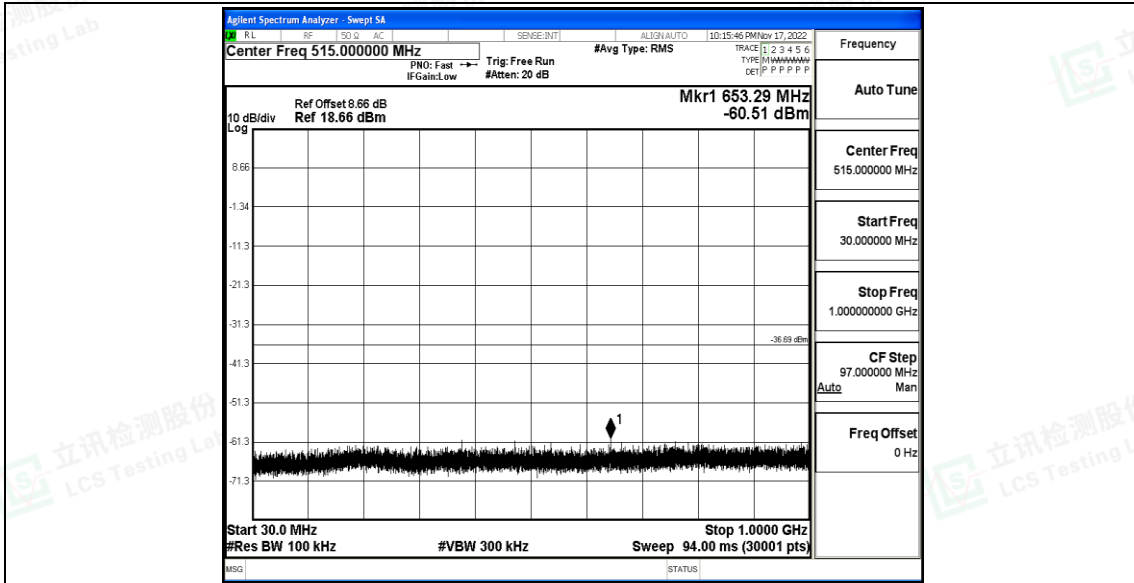


11N40SISO_Ant1_2422_0~Reference

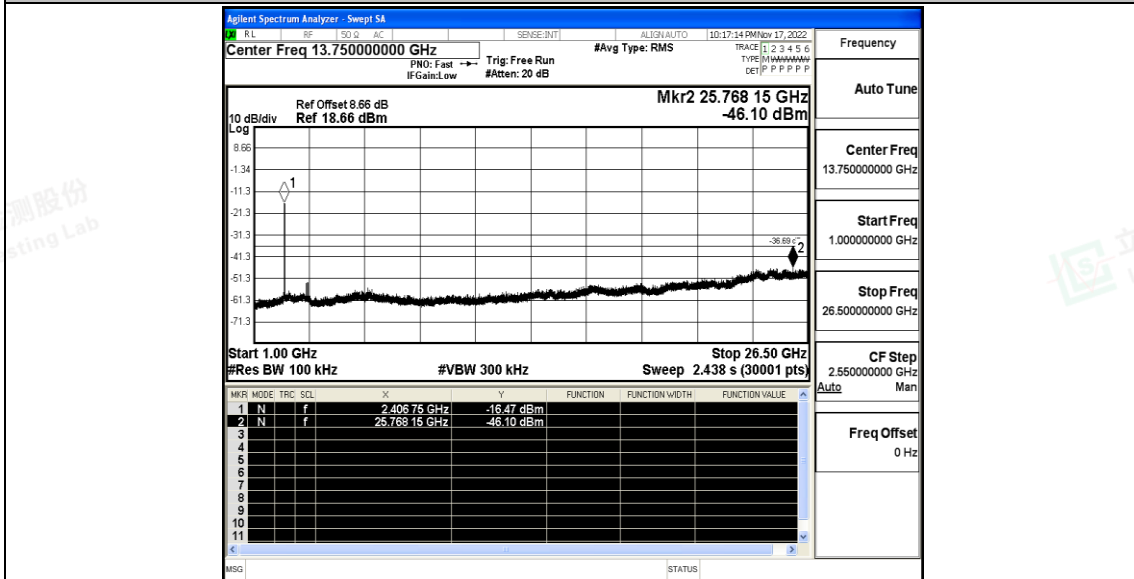


11N40SISO_Ant1_2422_30~1000



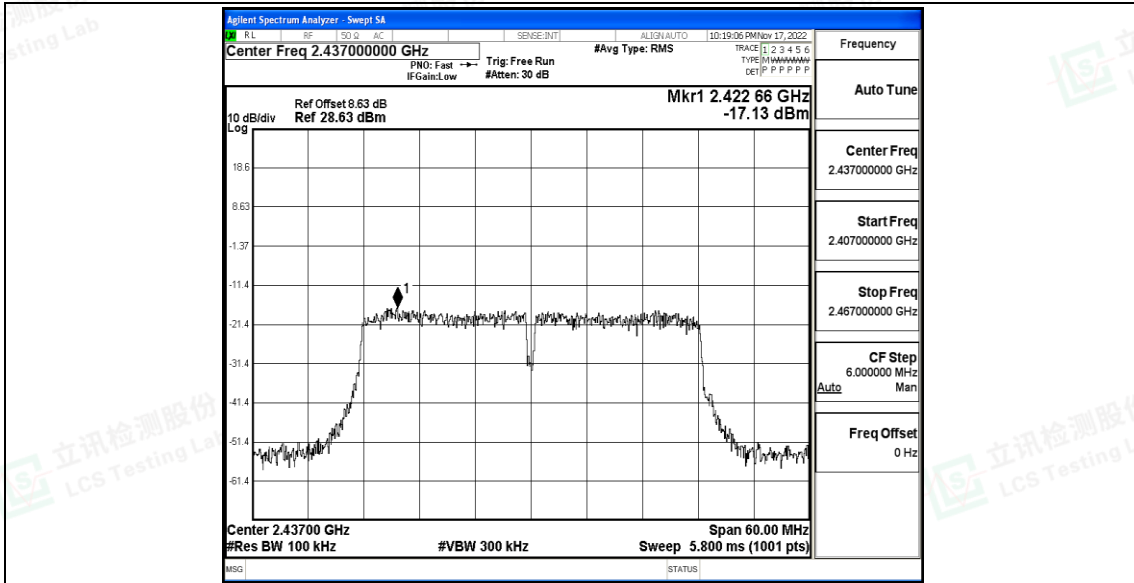


11N40SISO_Ant1_2422_1000~26500

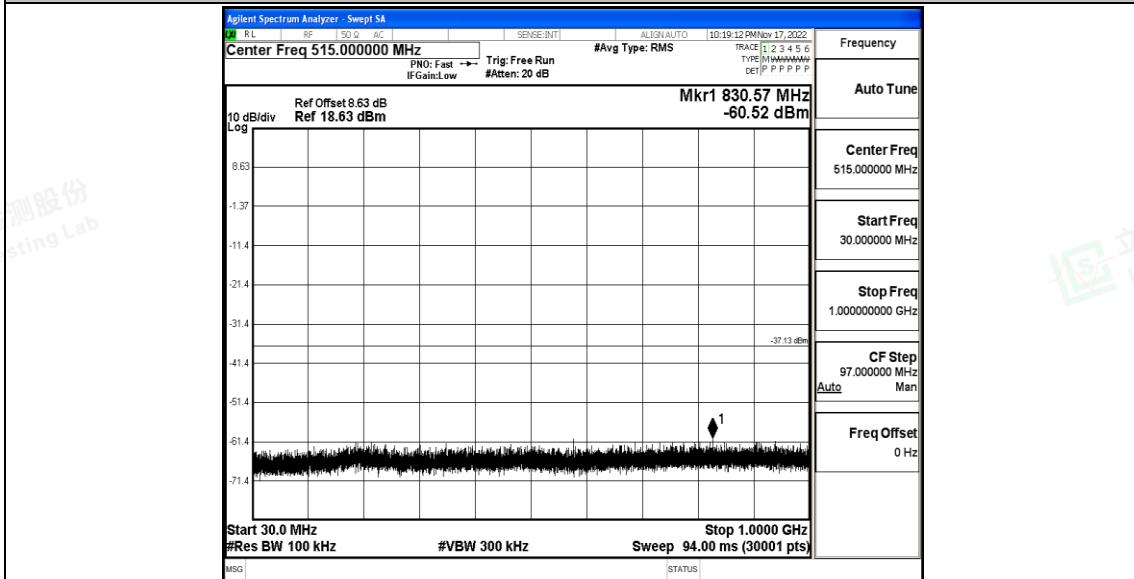


11N40SISO_Ant1_2437_0~Reference



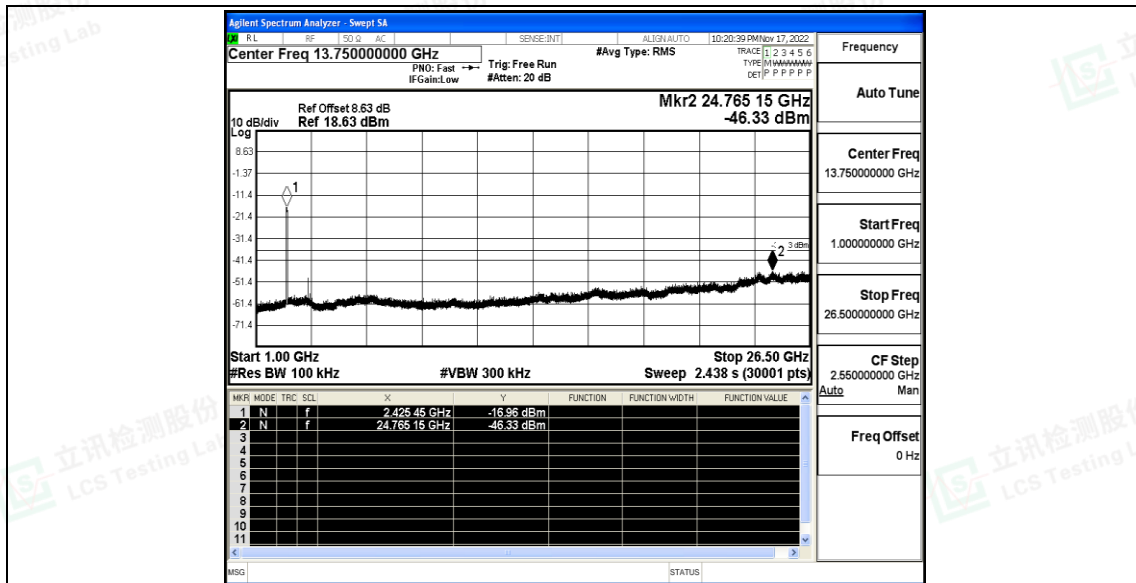


11N40SISO_Ant1_2437_30~1000

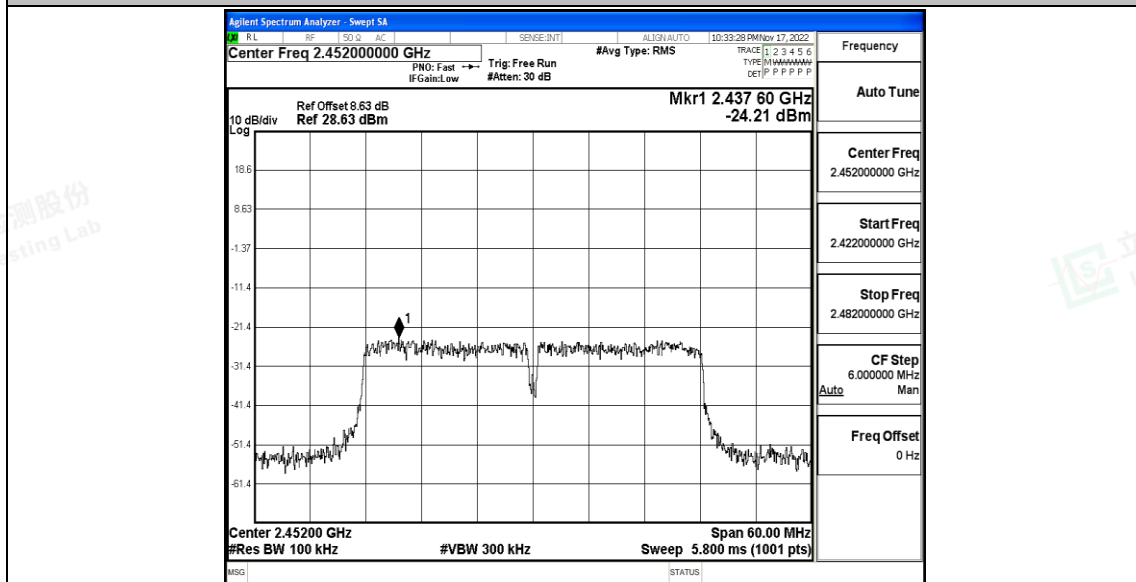


11N40SISO_Ant1_2437_1000~26500



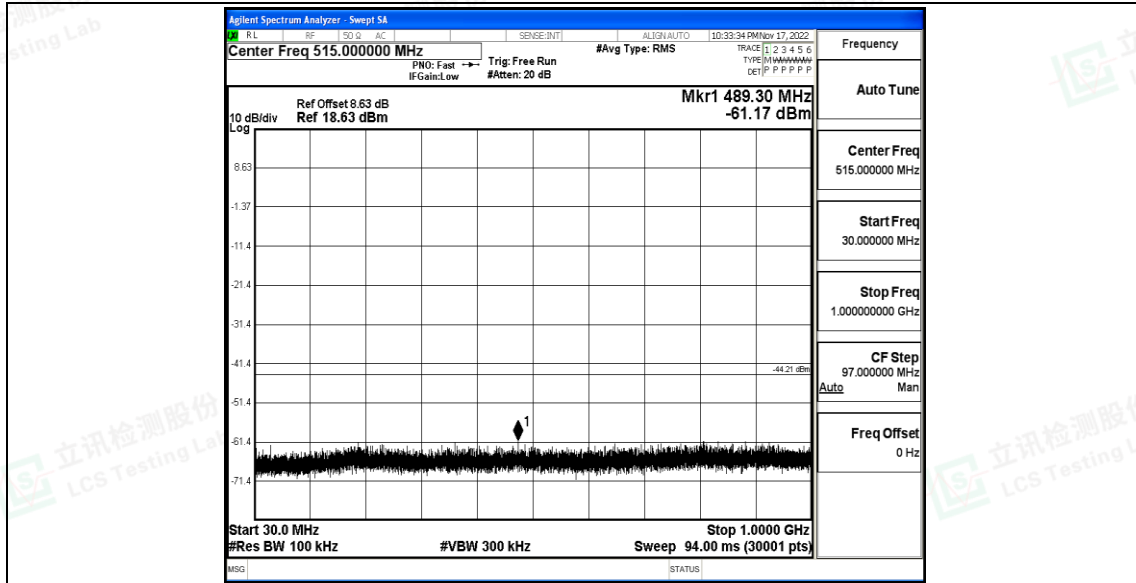


11N40SISO_Ant1_2452_0~Reference

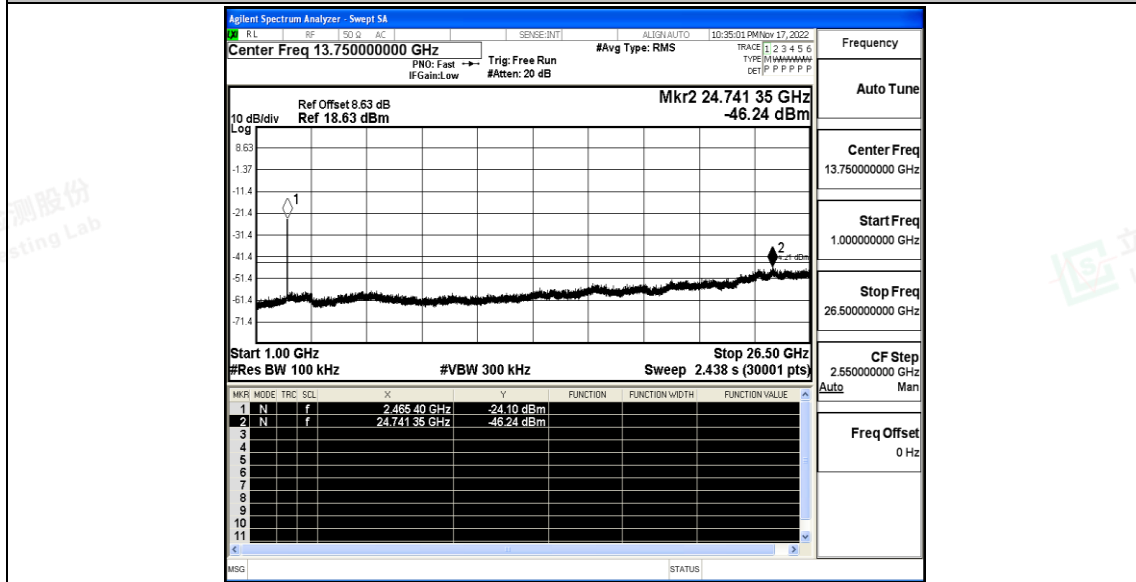


11N40SISO_Ant1_2452_30~1000





11N40SISO_Ant1_2452_1000~26500





C.6 Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor	1/T(kHz)
11B	Ant1	2412	20.00	20.00	100.00	0.00	0.01
		2437	20.00	20.00	100.00	0.00	0.01
		2462	20.00	20.00	100.00	0.00	0.01
11G	Ant1	2412	20.00	20.00	100.00	0.00	0.01
		2437	20.00	20.00	100.00	0.00	0.01
		2462	20.00	20.00	100.00	0.00	0.01
11N20SISO	Ant1	2412	20.00	20.00	100.00	0.00	0.01
		2437	20.00	20.00	100.00	0.00	0.01
		2462	20.00	20.00	100.00	0.00	0.01
11N40SISO	Ant1	2422	20.00	20.00	100.00	0.00	0.01
		2437	20.00	20.00	100.00	0.00	0.01
		2452	20.00	20.00	100.00	0.00	0.01





Test Graphs

