



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Outdoor Security Camera

Test Model: EverView

Environmental Conditions

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





A.1 DTS Bandwidth

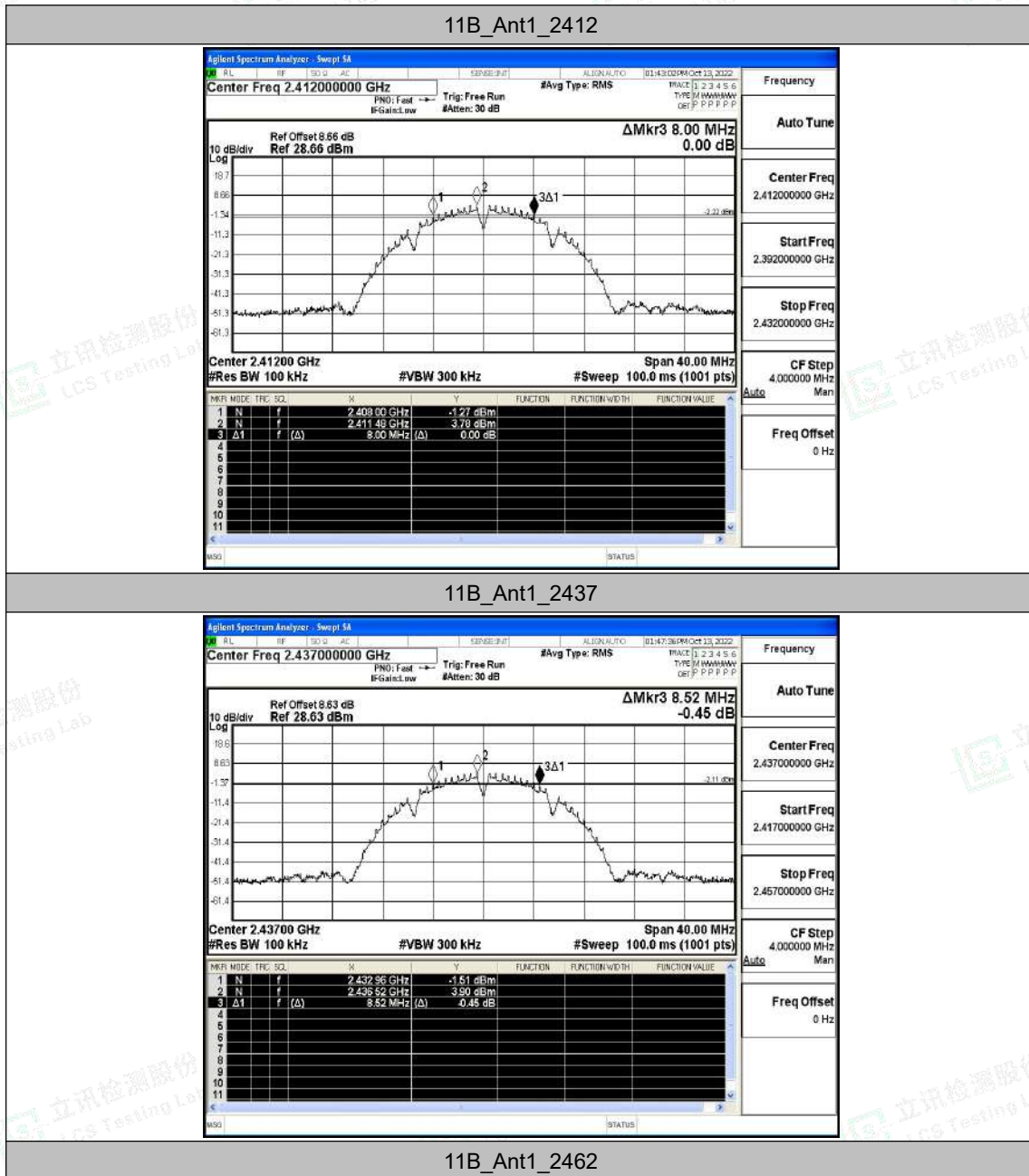
Test Result

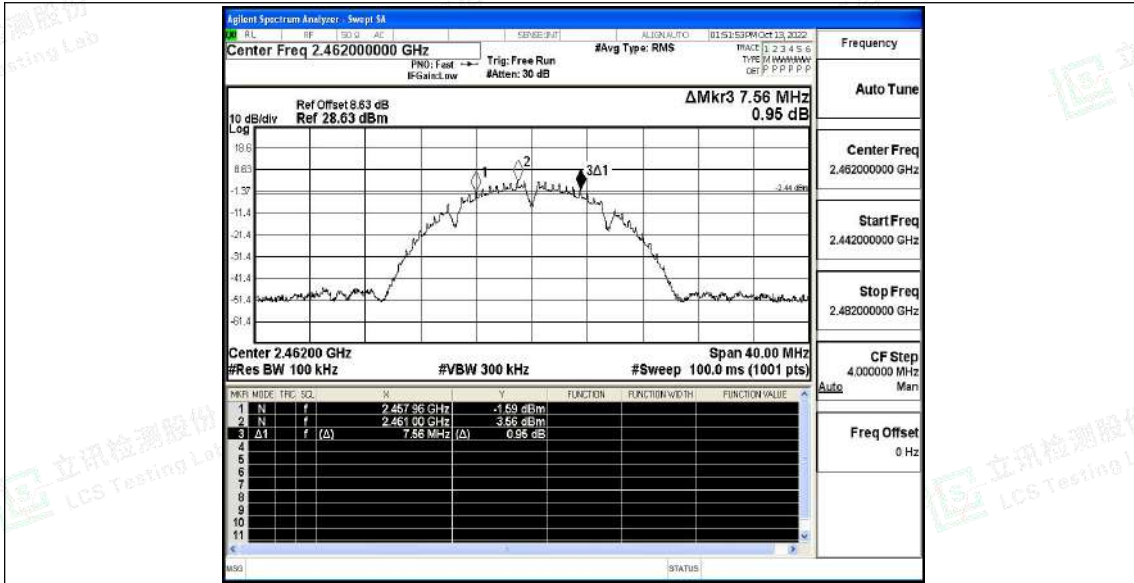
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.000	2408.000	2416.000	0.5	PASS
		2437	8.520	2432.960	2441.480	0.5	PASS
		2462	7.560	2457.960	2465.520	0.5	PASS
11G	Ant1	2412	15.360	2404.480	2419.840	0.5	PASS
		2437	15.040	2429.520	2444.560	0.5	PASS
		2462	15.440	2454.080	2469.520	0.5	PASS
11N20SISO	Ant1	2412	16.040	2404.480	2420.520	0.5	PASS
		2437	15.320	2429.440	2444.760	0.5	PASS
		2462	16.080	2453.480	2469.560	0.5	PASS



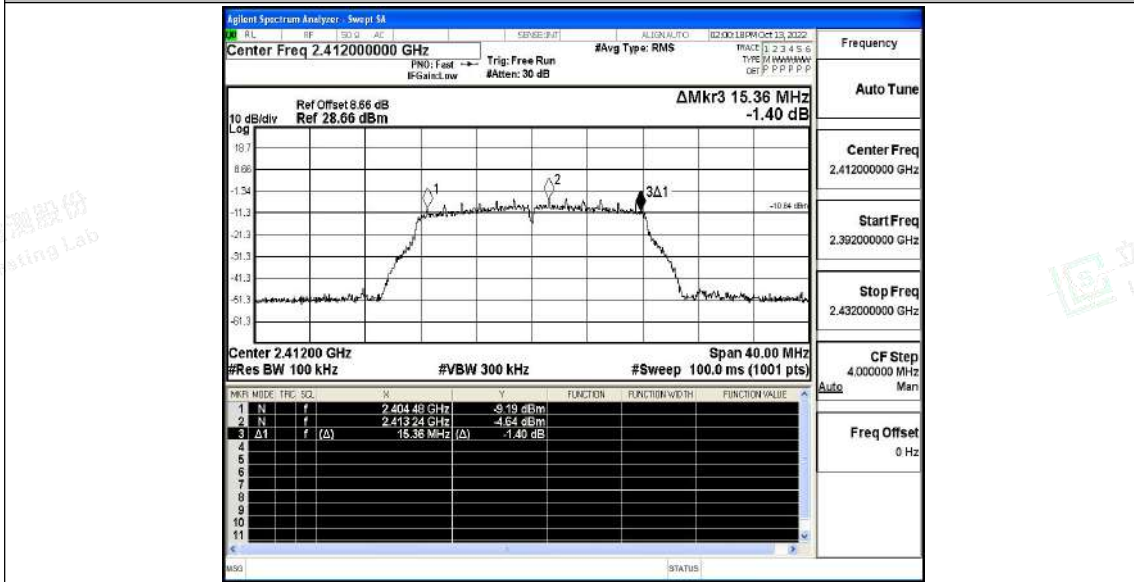


Test Graphs



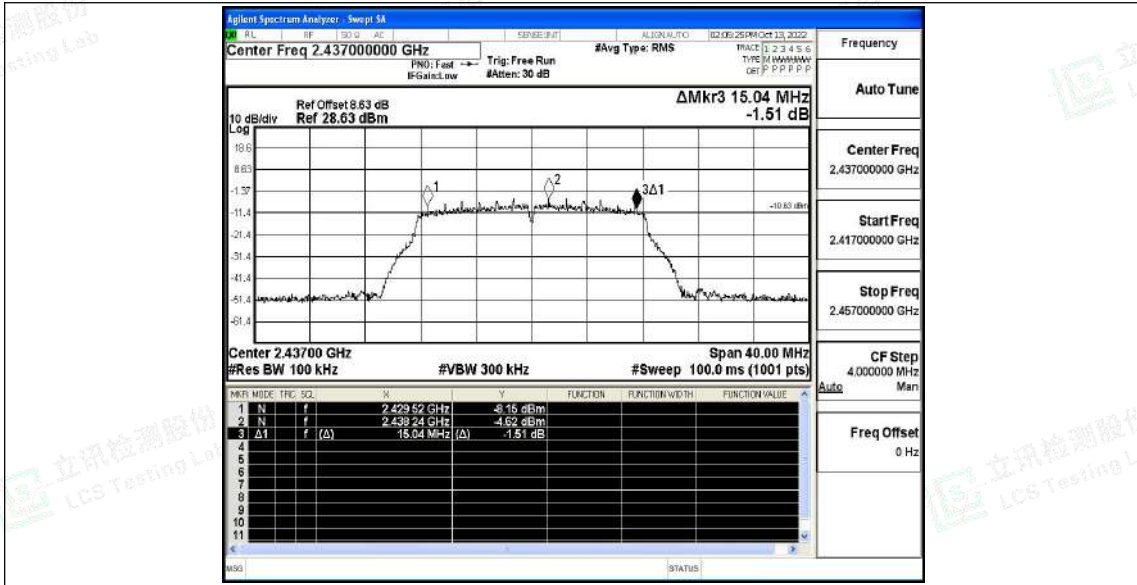


11G_Ant1_2412

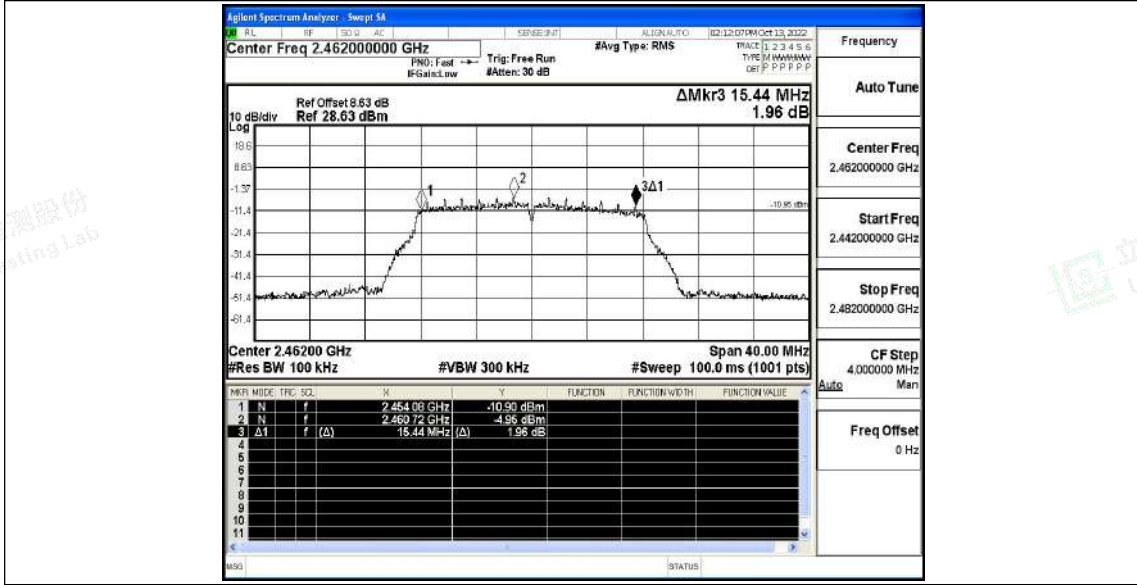


11G_Ant1_2437



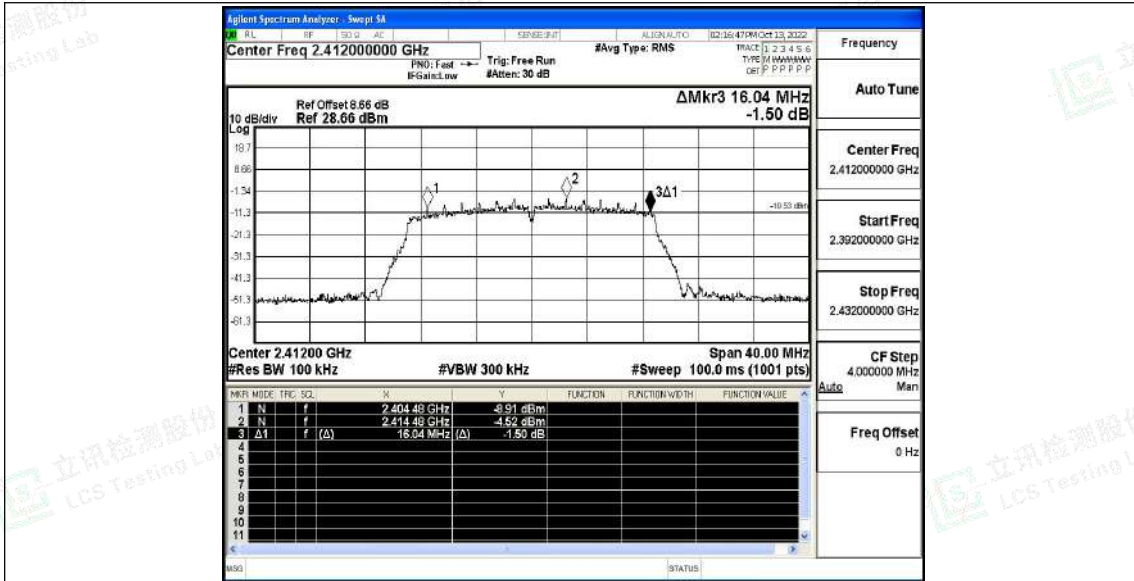


11G_Ant1_2462

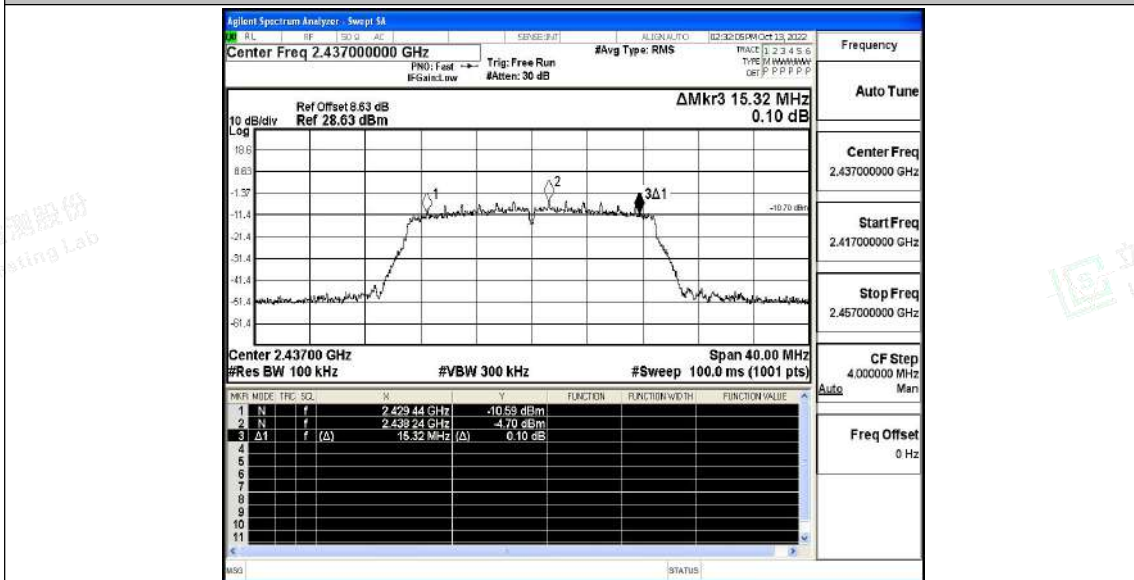


11N20SISO_Ant1_2412



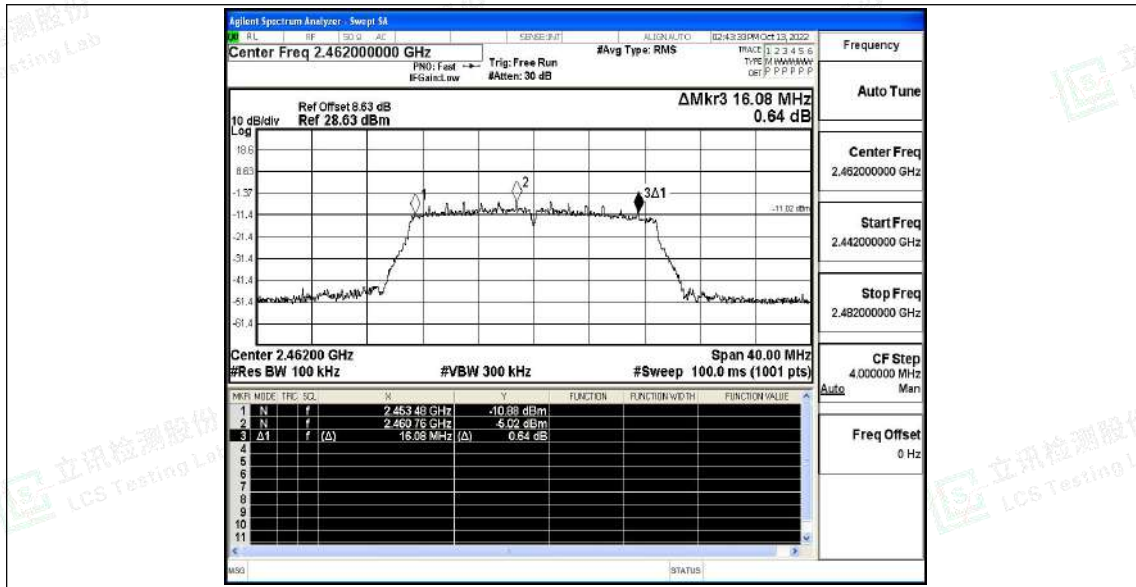


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







A.2 Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Peak Power[dBm]	Conducted power Limit[dBm]	Verdict
11B	Ant1	2412	15.20	≤30.00	PASS
		2437	15.35	≤30.00	PASS
		2462	14.68	≤30.00	PASS
11G	Ant1	2412	14.04	≤30.00	PASS
		2437	14.14	≤30.00	PASS
		2462	13.86	≤30.00	PASS
11N20SISO	Ant1	2412	13.98	≤30.00	PASS
		2437	13.95	≤30.00	PASS
		2462	13.70	≤30.00	PASS





A.3 Maximum power spectral density

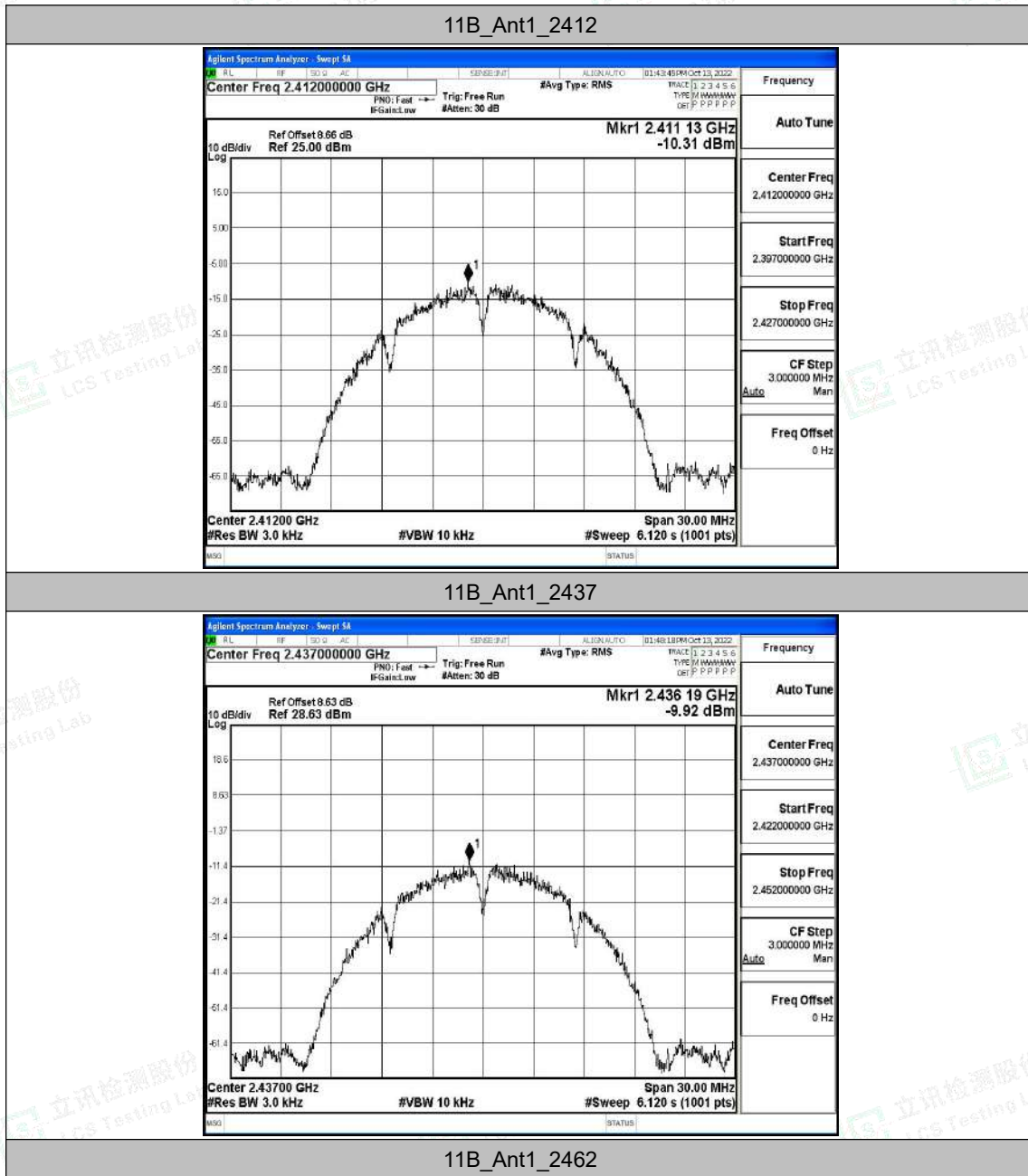
Test Result

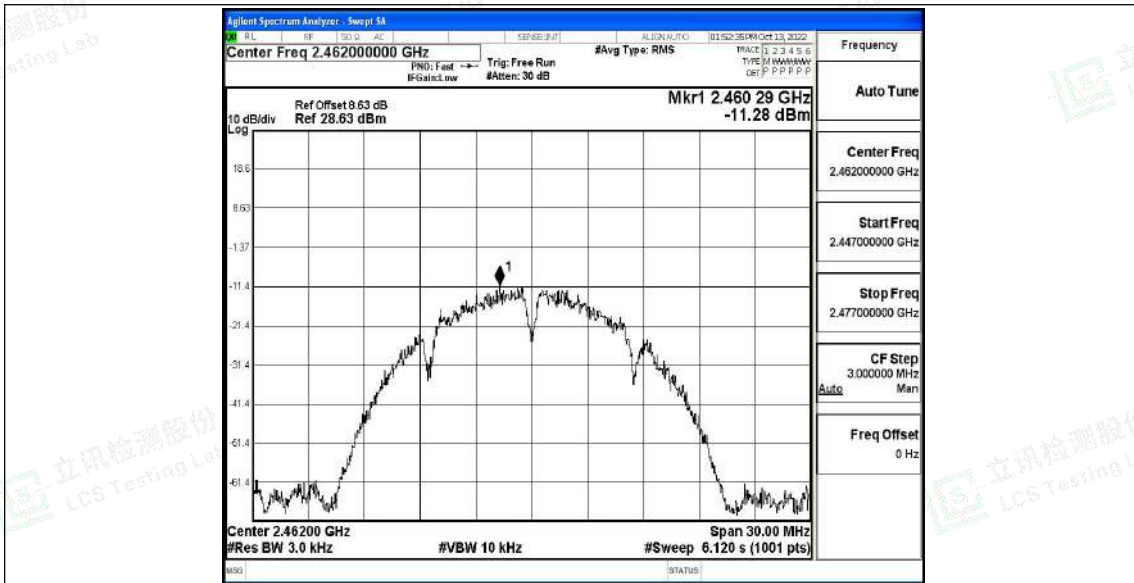
TestMode	Antenna	Freq(MHz)	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-10.31	≤8.00	PASS
		2437	-9.92	≤8.00	PASS
		2462	-11.28	≤8.00	PASS
11G	Ant1	2412	-19.71	≤8.00	PASS
		2437	-19.07	≤8.00	PASS
		2462	-19.57	≤8.00	PASS
11N20SISO	Ant1	2412	-19.16	≤8.00	PASS
		2437	-18.63	≤8.00	PASS
		2462	-19.01	≤8.00	PASS



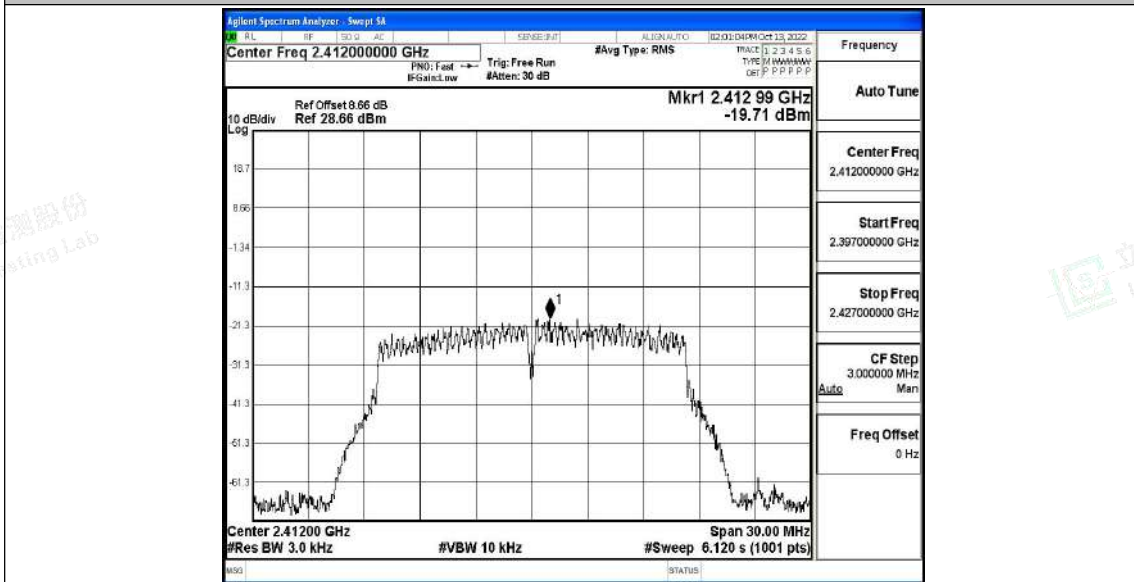


Test Graphs



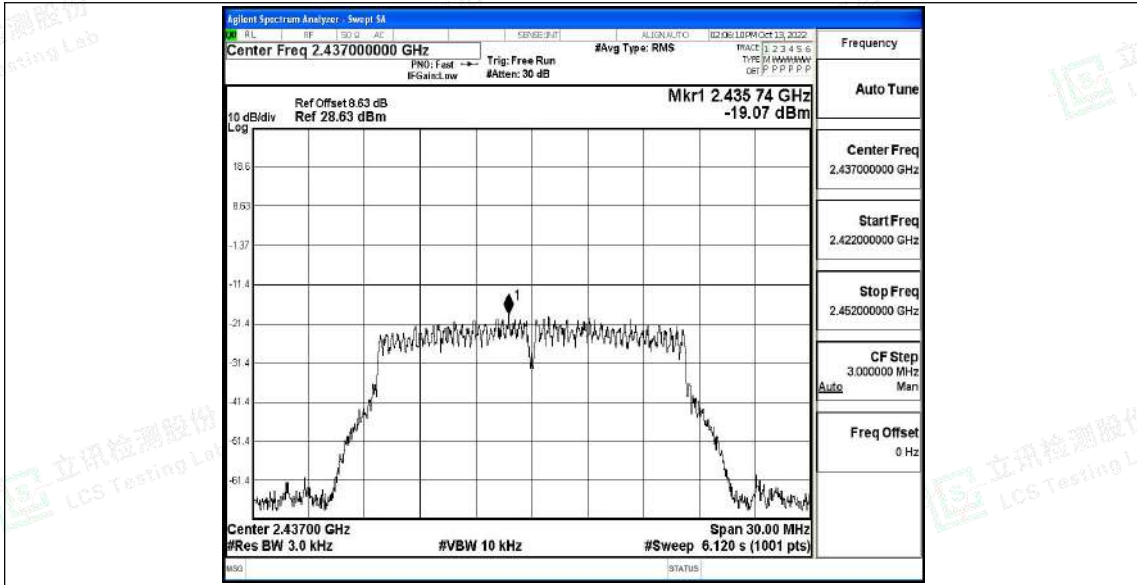


11G_Ant1_2412

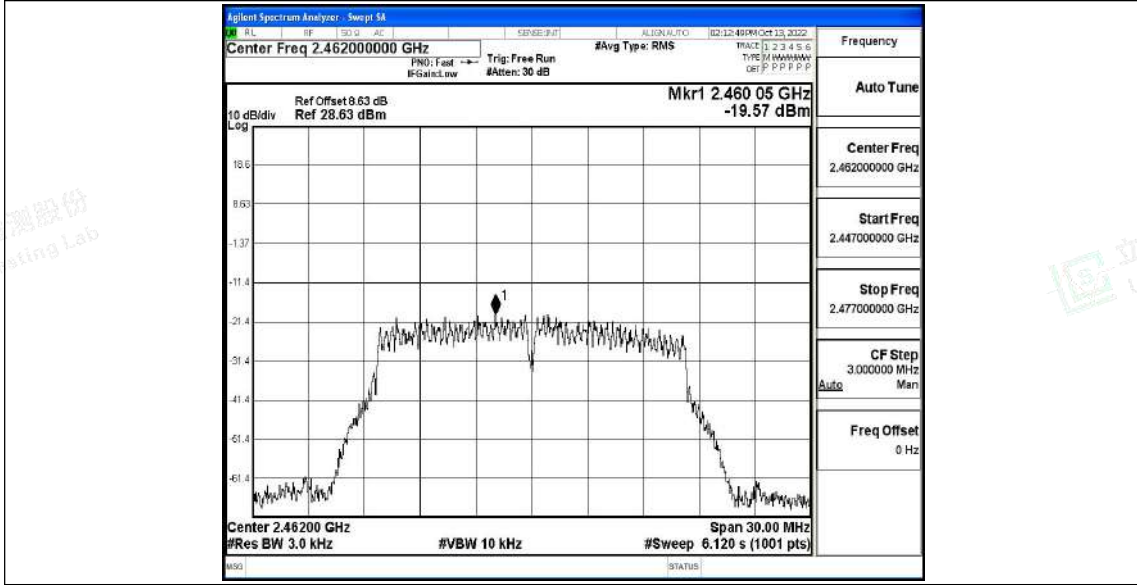


11G_Ant1_2437



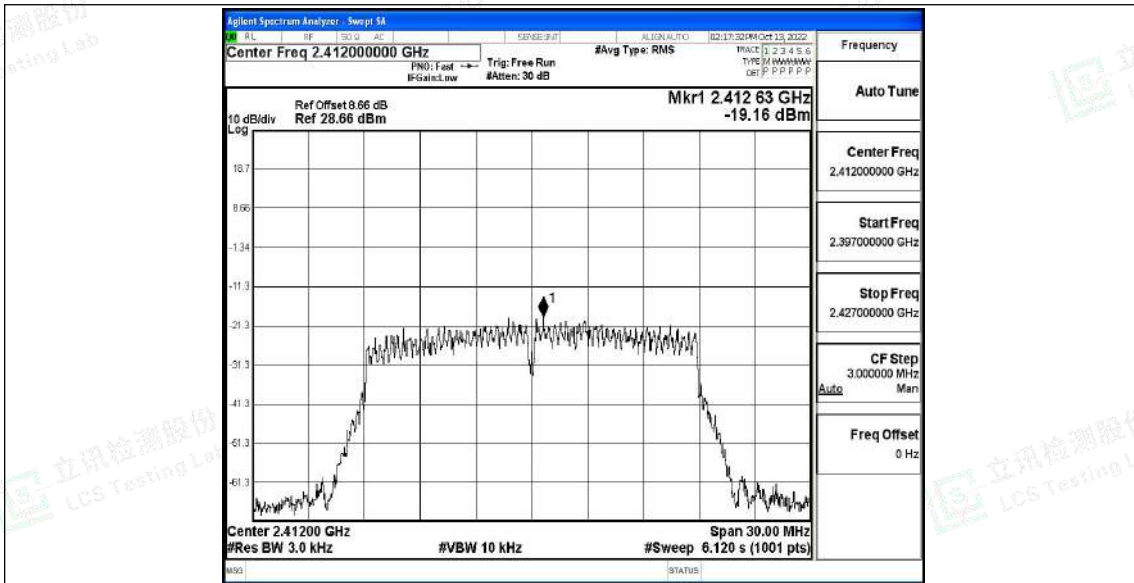


11G_Ant1_2462

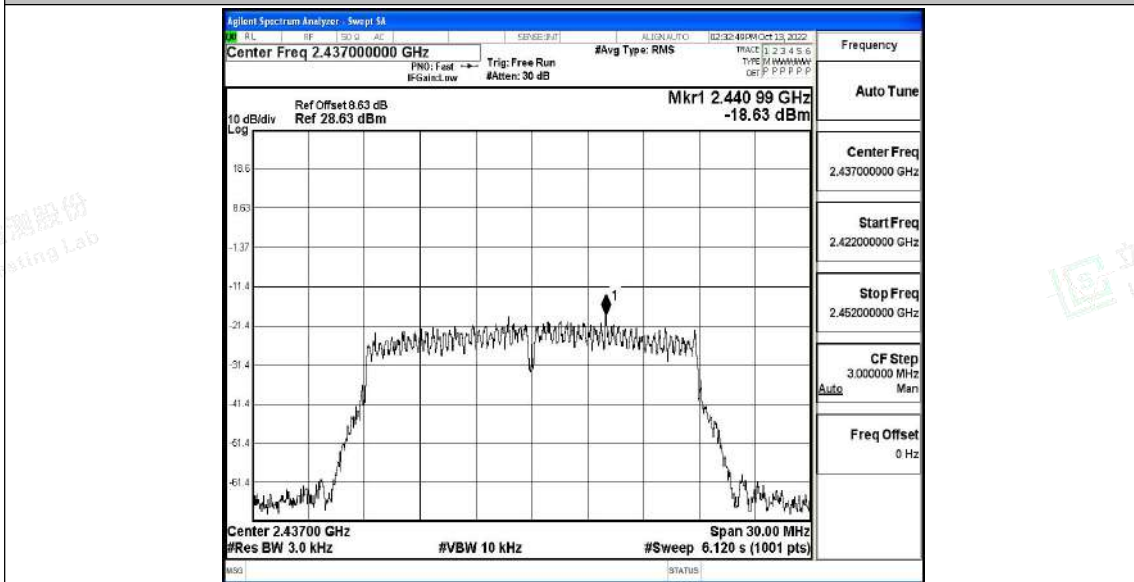


11N20SISO_Ant1_2412



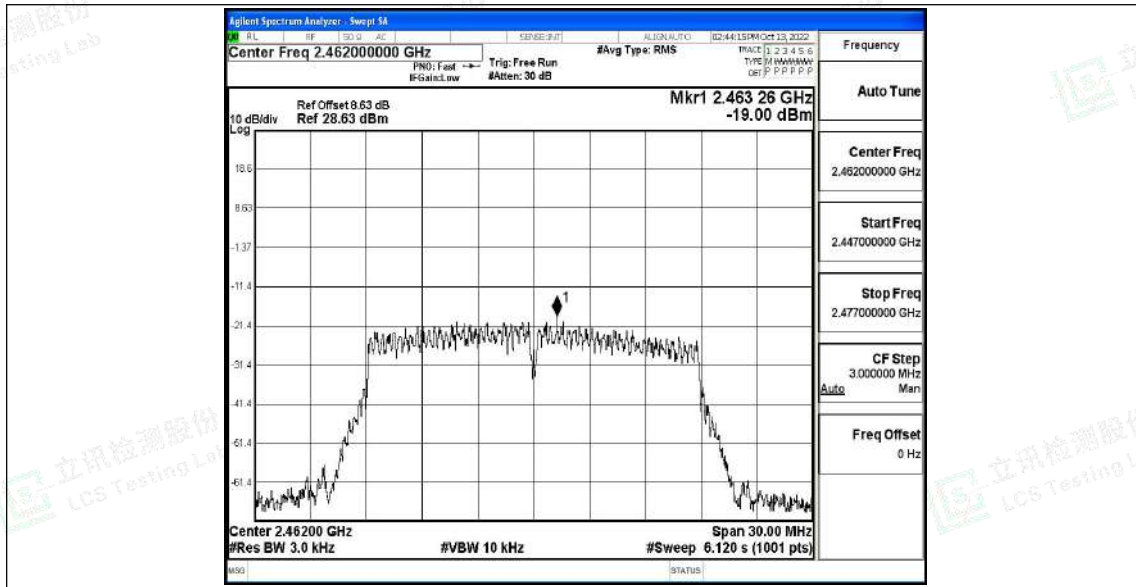


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







A.4 Band edge measurements

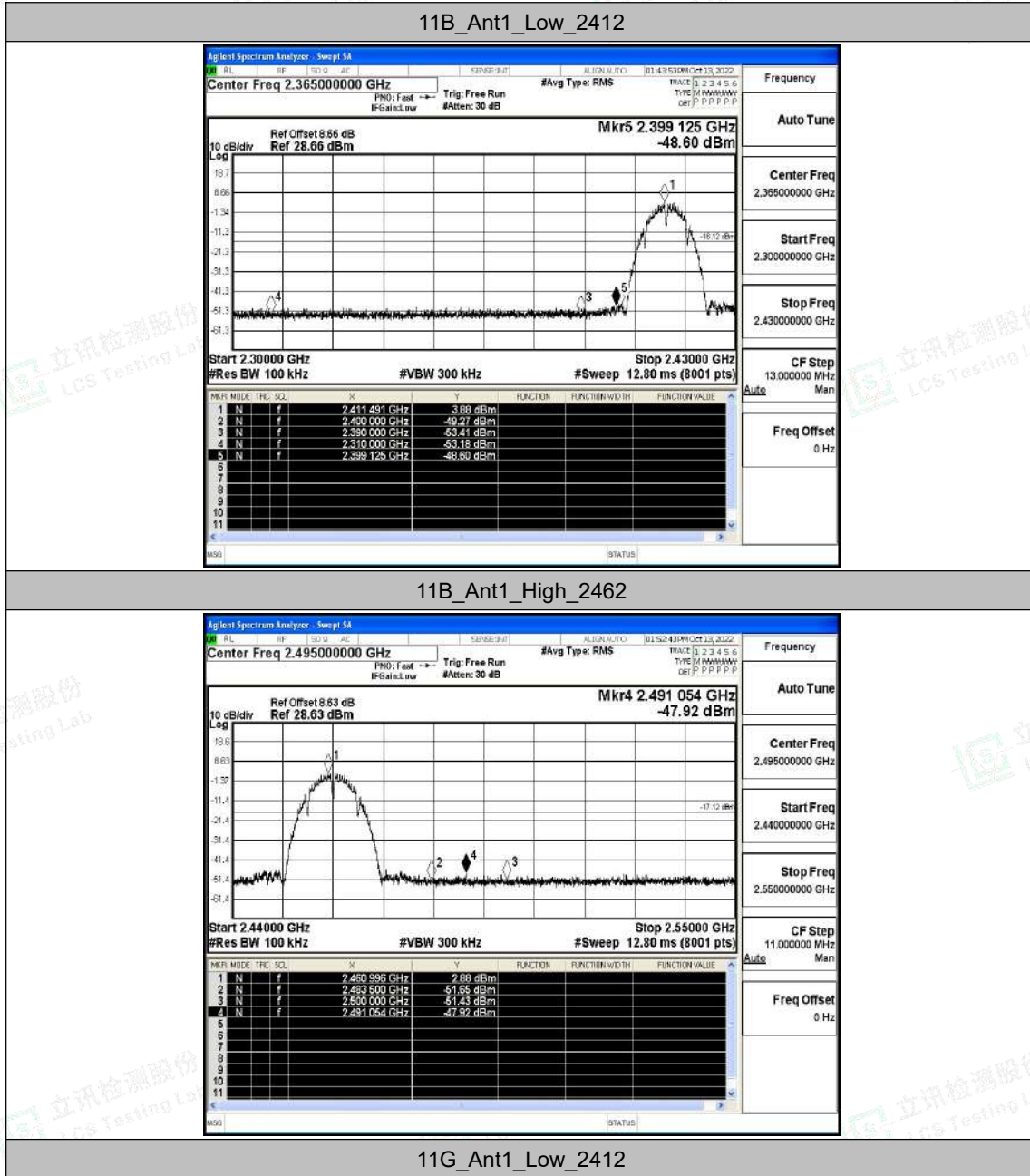
Test Result

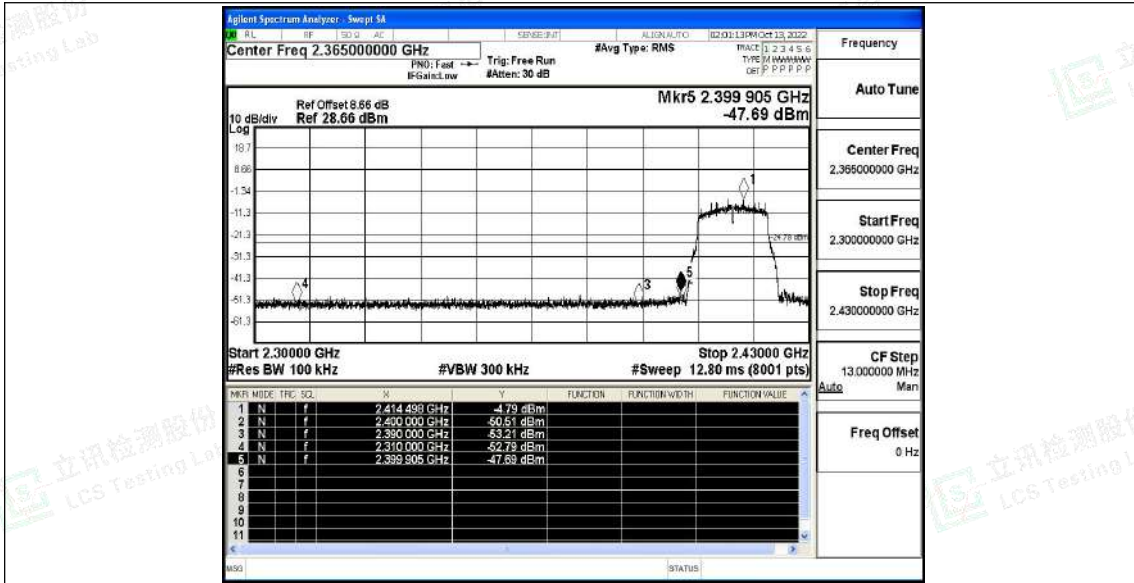
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.89	-48.6	≤-16.12	PASS
		High	2462	2.88	-47.92	≤-17.12	PASS
11G	Ant1	Low	2412	-4.79	-47.69	≤-24.79	PASS
		High	2462	-4.87	-48.41	≤-24.87	PASS
11N20SISO	Ant1	Low	2412	-4.86	-48.01	≤-24.86	PASS
		High	2462	-4.85	-48.34	≤-24.85	PASS



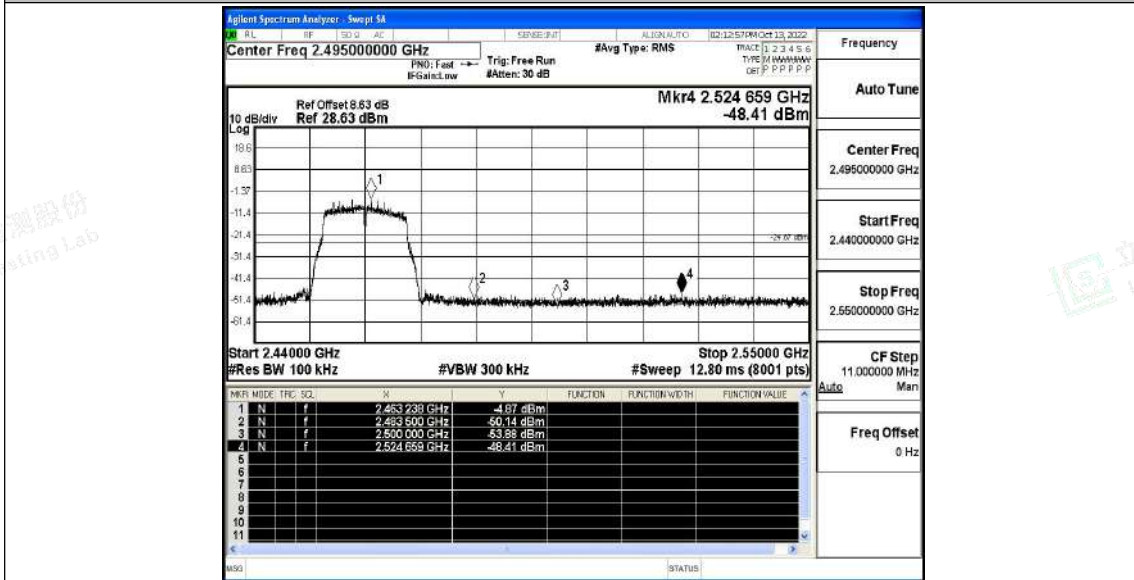


Test Graphs



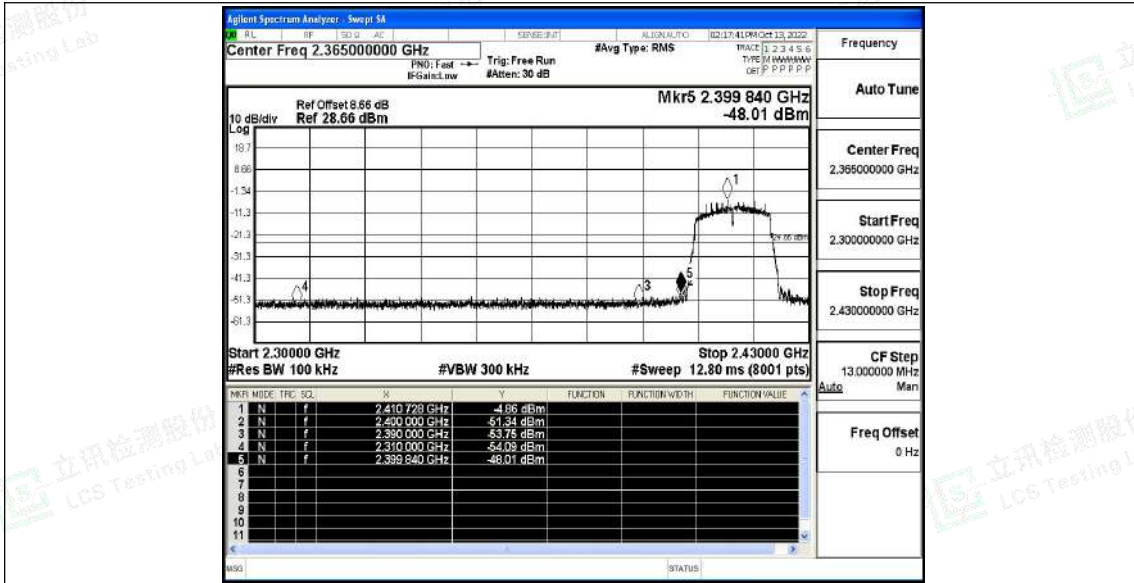


11G_Ant1_High_2462

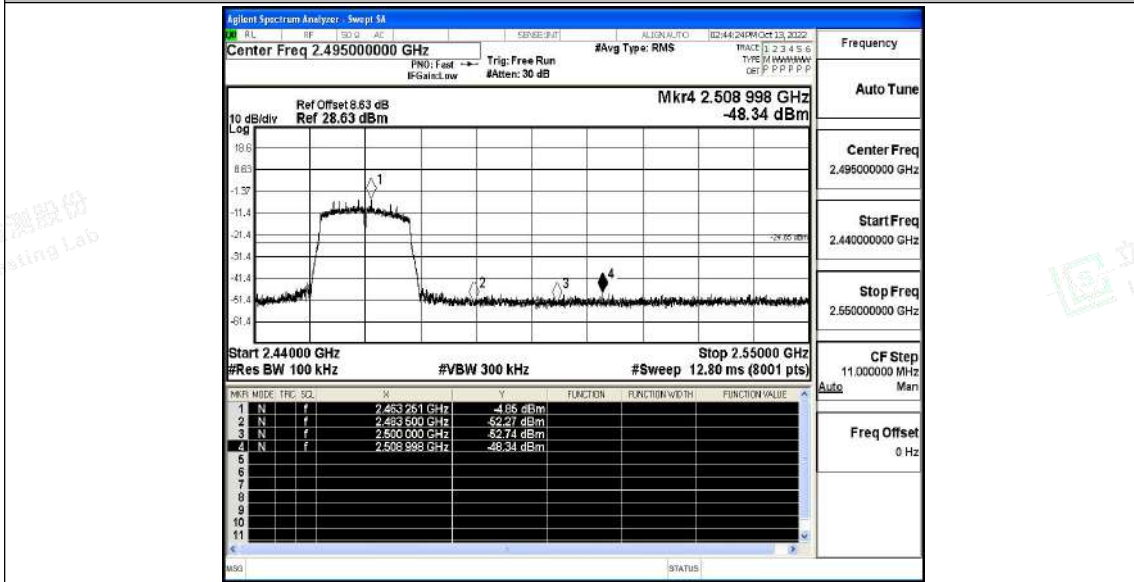


11N20SISO_Ant1_Low_2412





11N20SISO_Ant1_High_2462





A.5 Conducted Spurious Emission

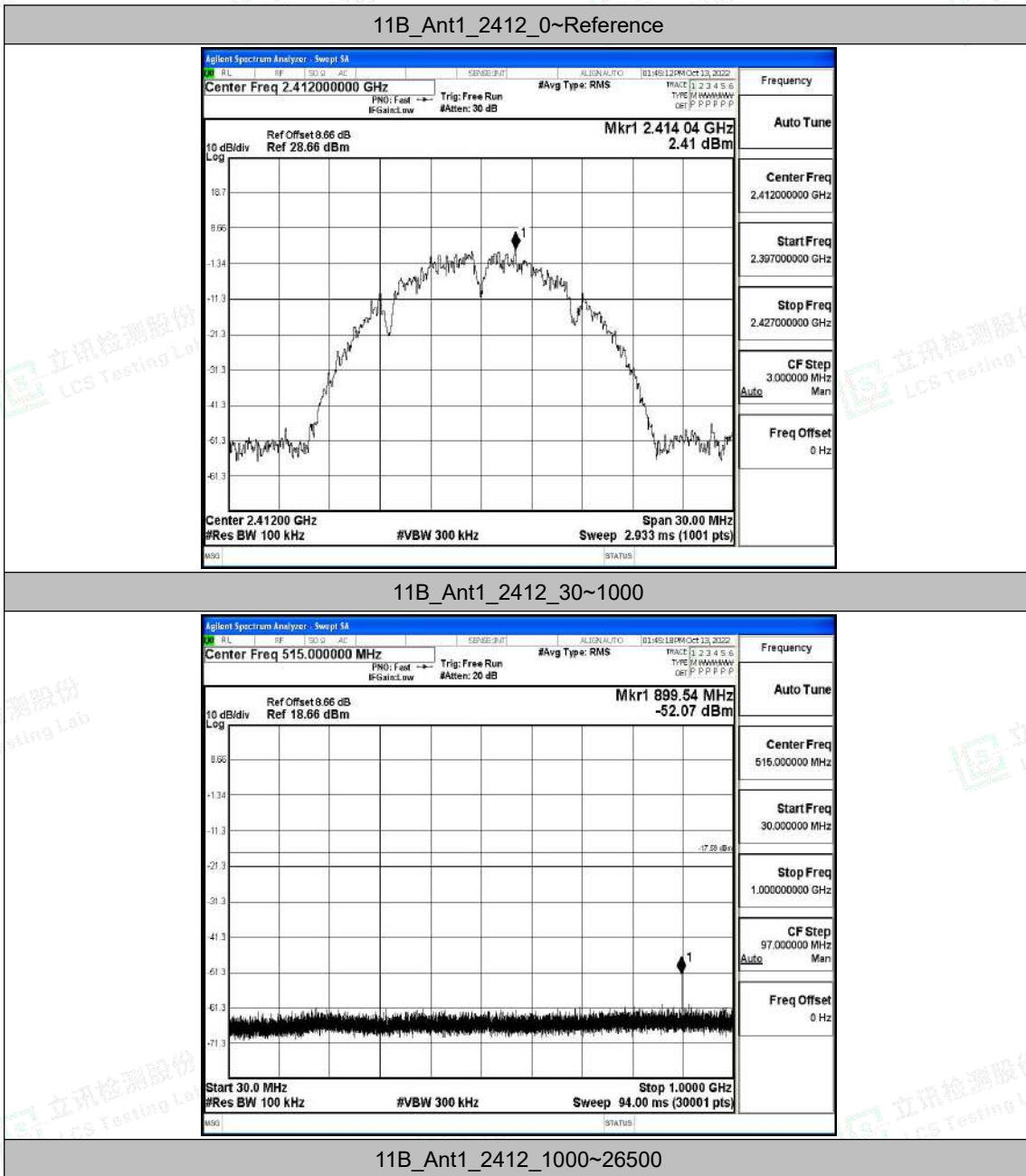
Test Result

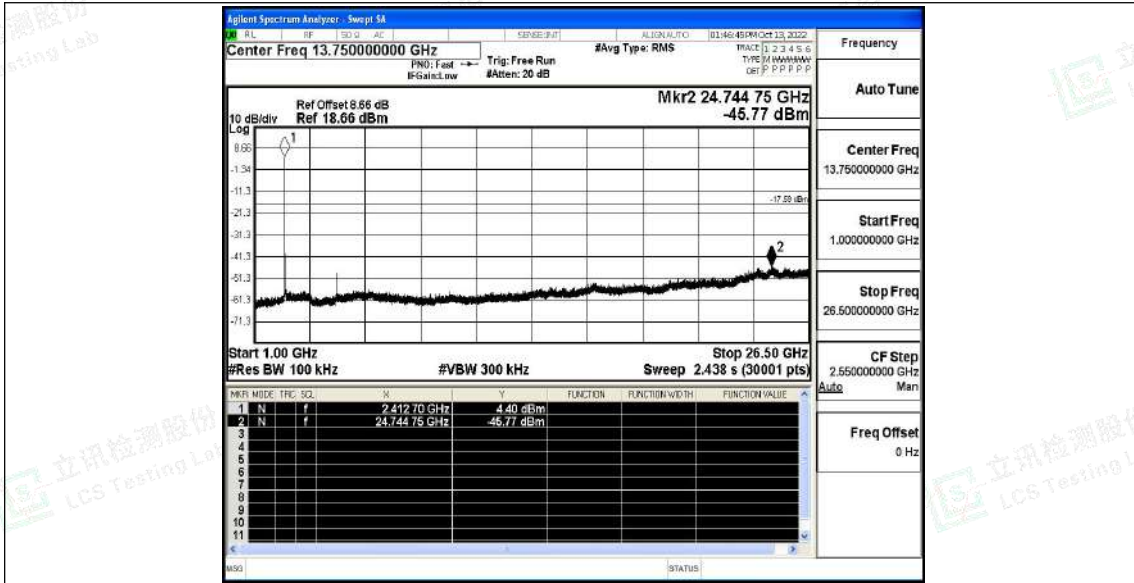
TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.41	2.41	---	PASS
			30~1000	2.41	-52.07	≤-17.59	PASS
			1000~26500	2.41	-45.77	≤-17.59	PASS
		2437	Reference	3.83	3.83	---	PASS
			30~1000	3.83	-60.45	≤-16.17	PASS
			1000~26500	3.83	-45.96	≤-16.17	PASS
		2462	Reference	2.51	2.51	---	PASS
			30~1000	2.51	-60.47	≤-17.49	PASS
			1000~26500	2.51	-46.03	≤-17.49	PASS
11G	Ant1	2412	Reference	-7.42	-7.42	---	PASS
			30~1000	-7.42	-60.91	≤-27.42	PASS
			1000~26500	-7.42	-46.21	≤-27.42	PASS
		2437	Reference	-5.93	-5.93	---	PASS
			30~1000	-5.93	-58.64	≤-25.93	PASS
			1000~26500	-5.93	-45.92	≤-25.93	PASS
		2462	Reference	-5.98	-5.98	---	PASS
			30~1000	-5.98	-60.39	≤-25.98	PASS
			1000~26500	-5.98	-46.06	≤-25.98	PASS
11N20SISO	Ant1	2412	Reference	-6.89	-6.89	---	PASS
			30~1000	-6.89	-61.02	≤-26.89	PASS
			1000~26500	-6.89	-45.91	≤-26.89	PASS
		2437	Reference	-8.17	-8.17	---	PASS
			30~1000	-8.17	-60.36	≤-28.17	PASS
			1000~26500	-8.17	-45.18	≤-28.17	PASS
		2462	Reference	-6.09	-6.09	---	PASS
			30~1000	-6.09	-60.68	≤-26.09	PASS
			1000~26500	-6.09	-46.02	≤-26.09	PASS



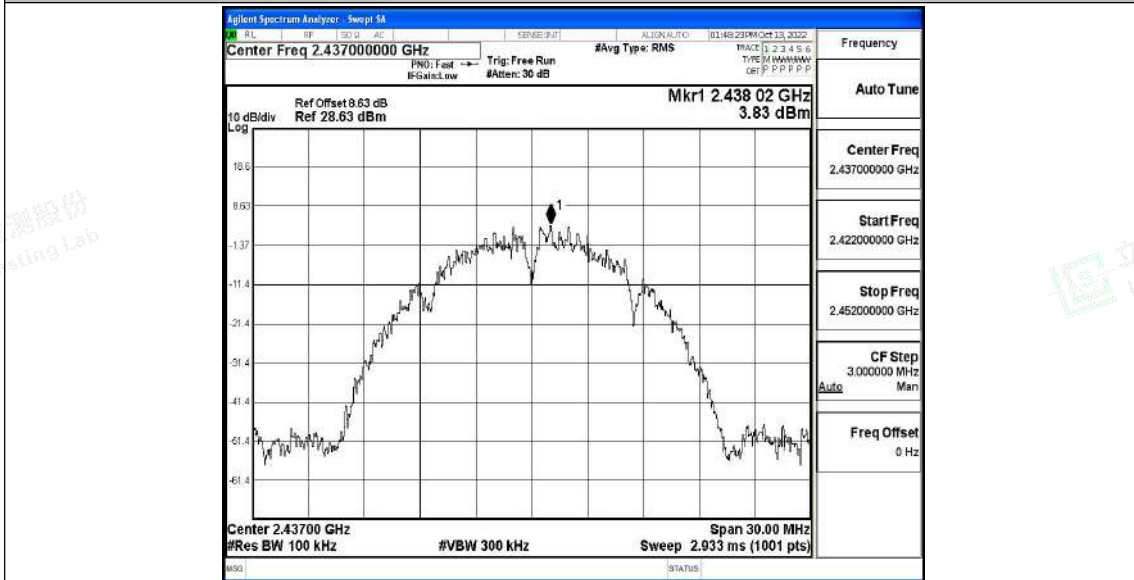


Test Graphs



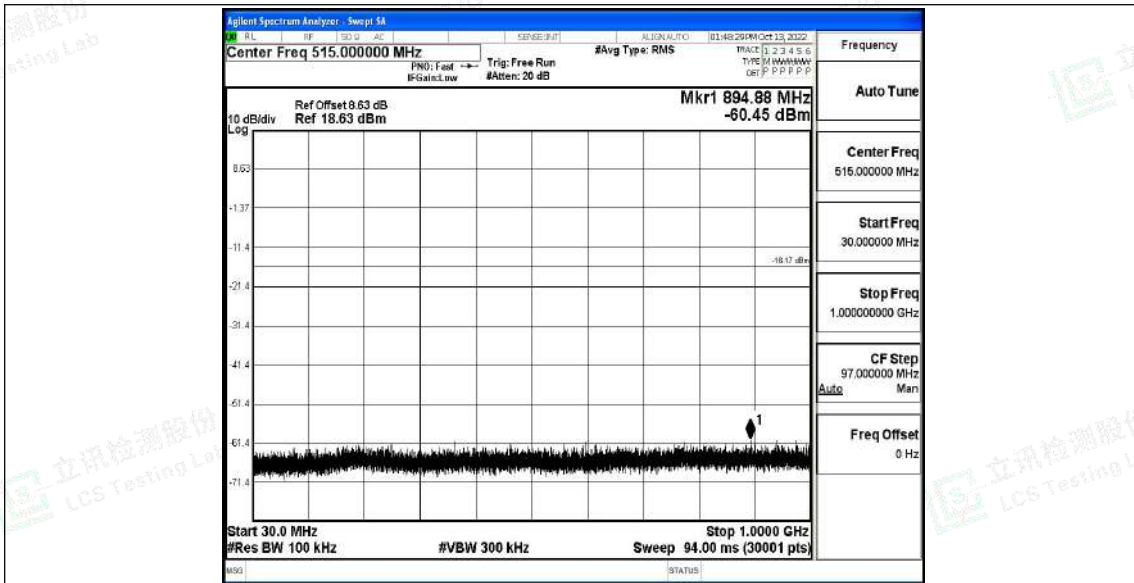


11B_Ant1_2437_0~Reference

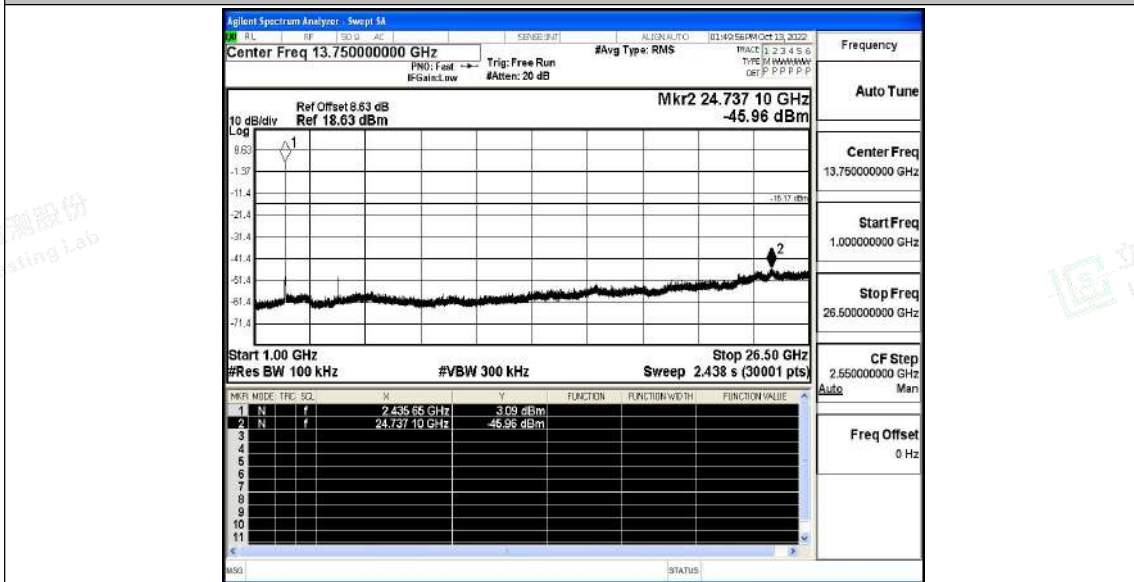


11B_Ant1_2437_30~1000



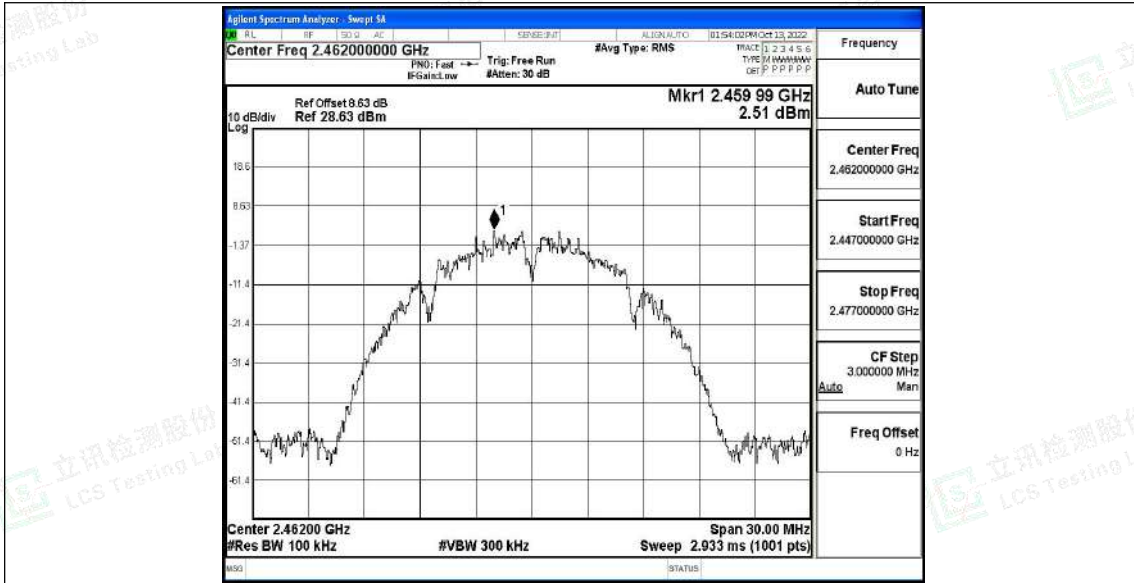


11B_Ant1_2437_1000~26500

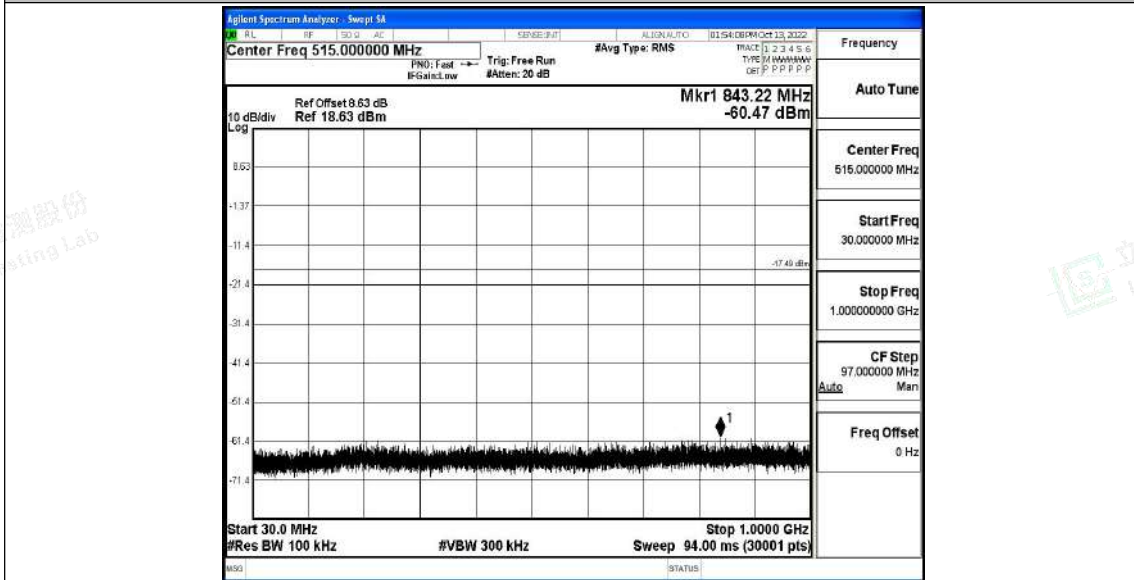


11B_Ant1_2462_0~Reference



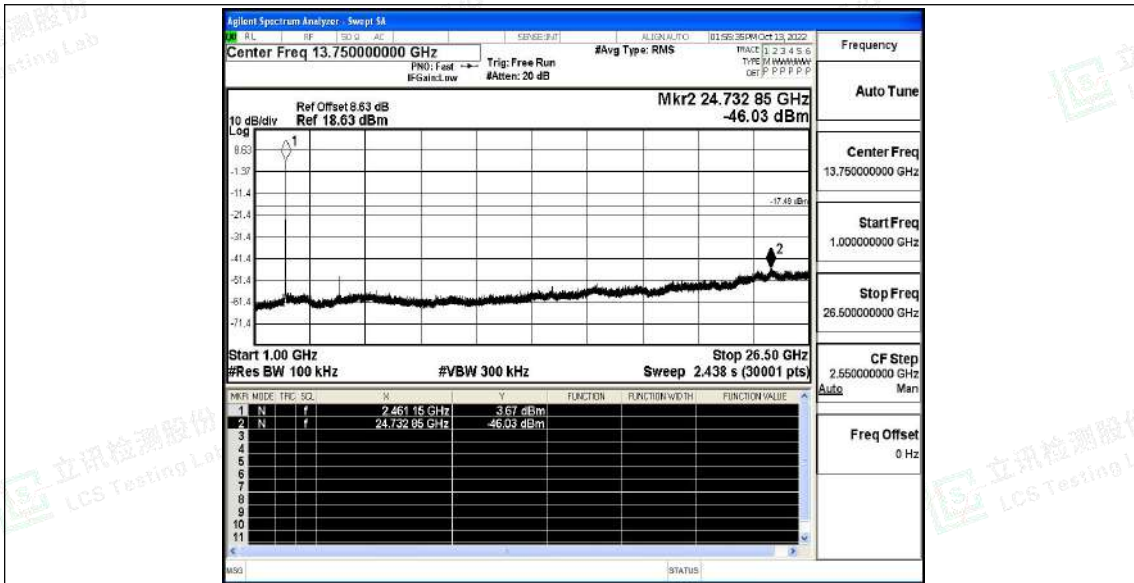


11B_Ant1_2462_30~1000

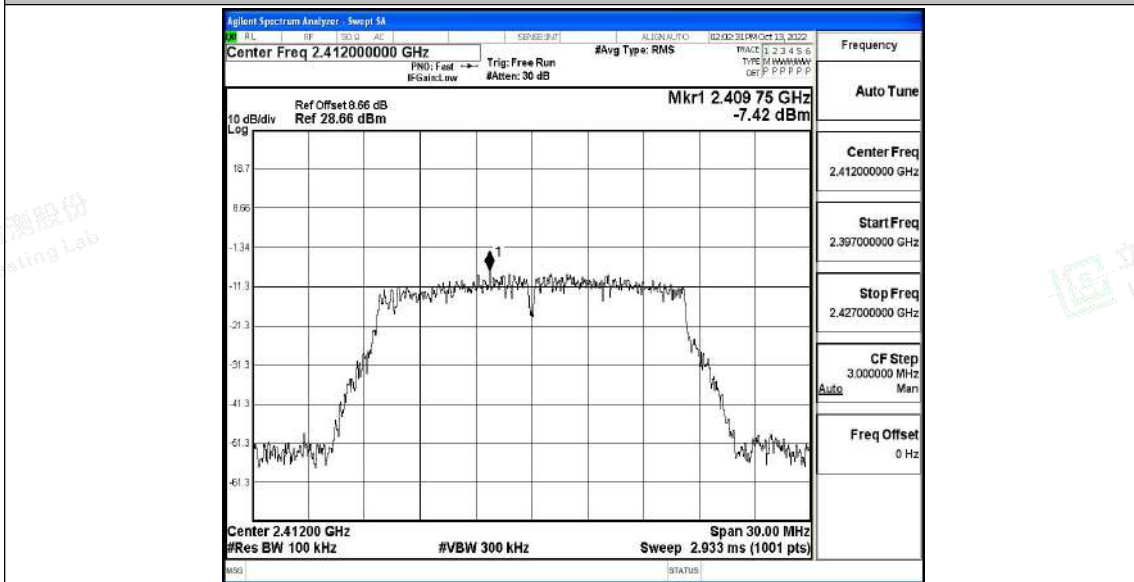


11B_Ant1_2462_1000~26500



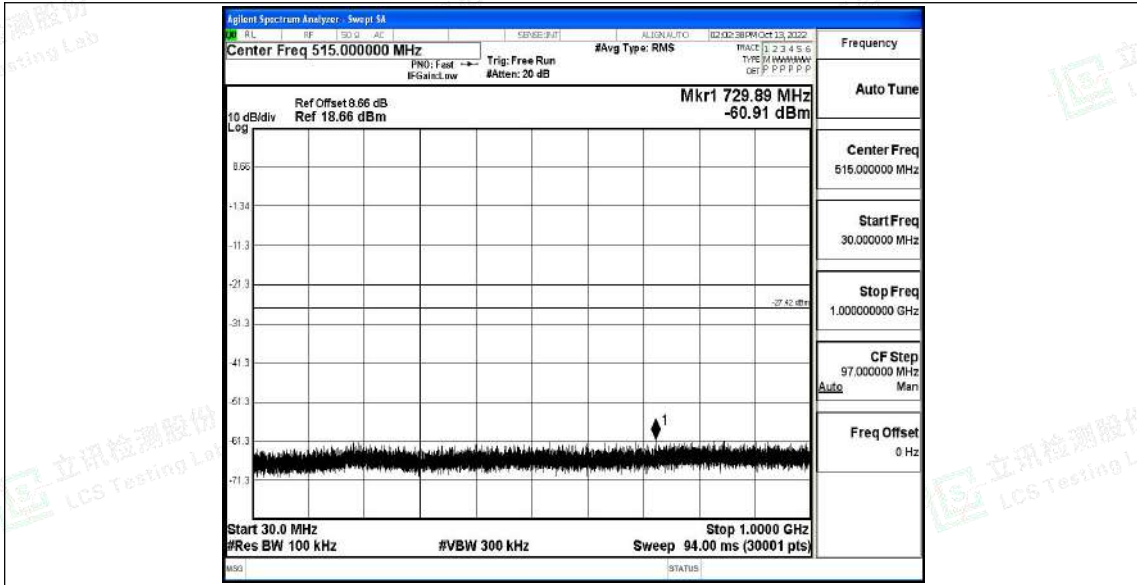


11G_Ant1_2412_0~Reference

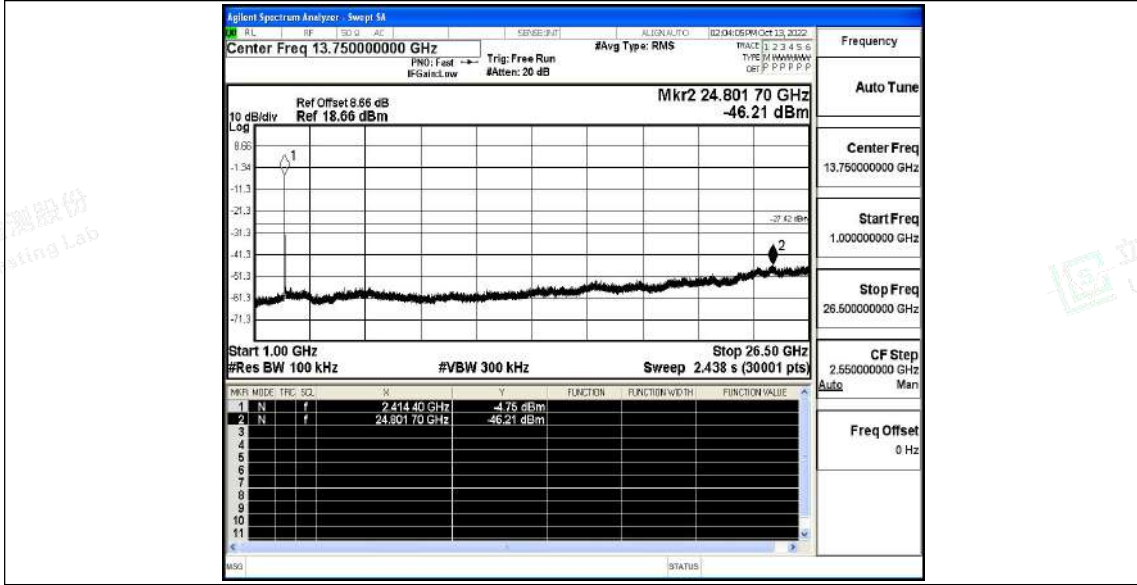


11G_Ant1_2412_30~1000



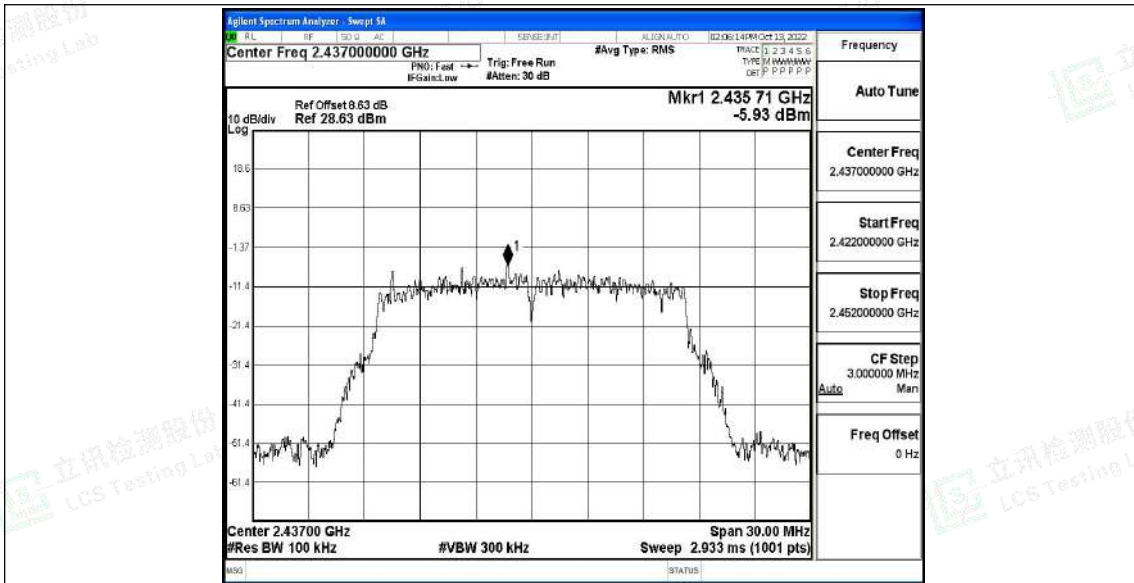


11G_Ant1_2412_1000~26500

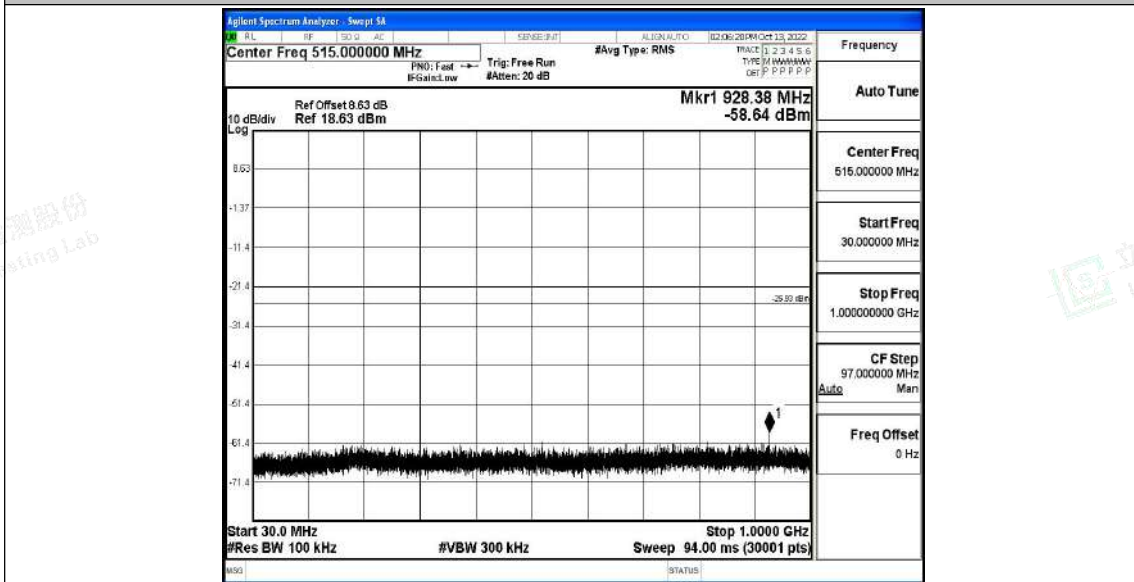


11G_Ant1_2437_0~Reference



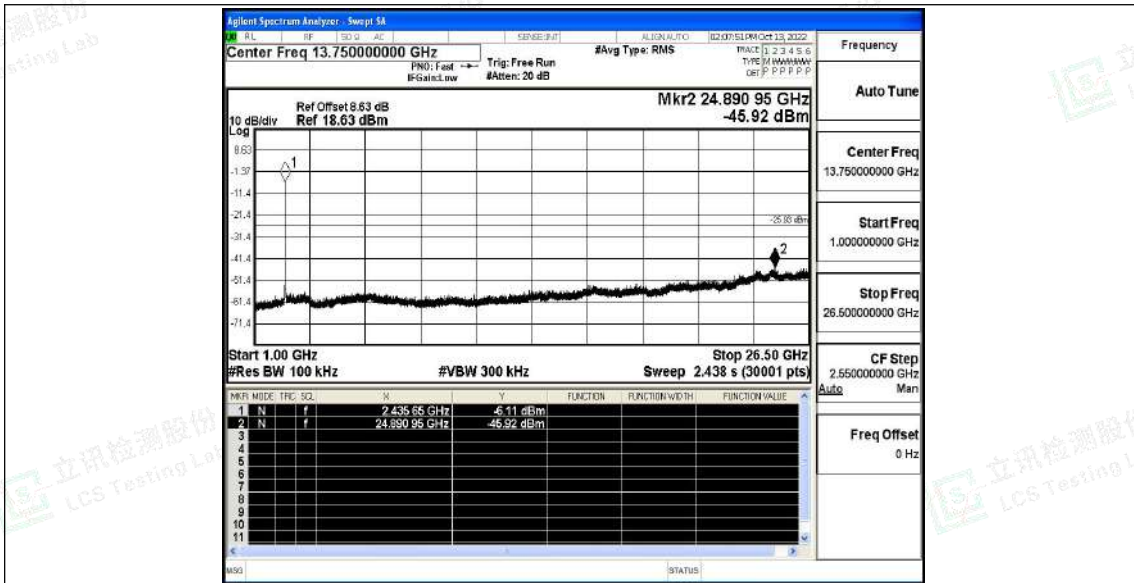


11G_Ant1_2437_30~1000

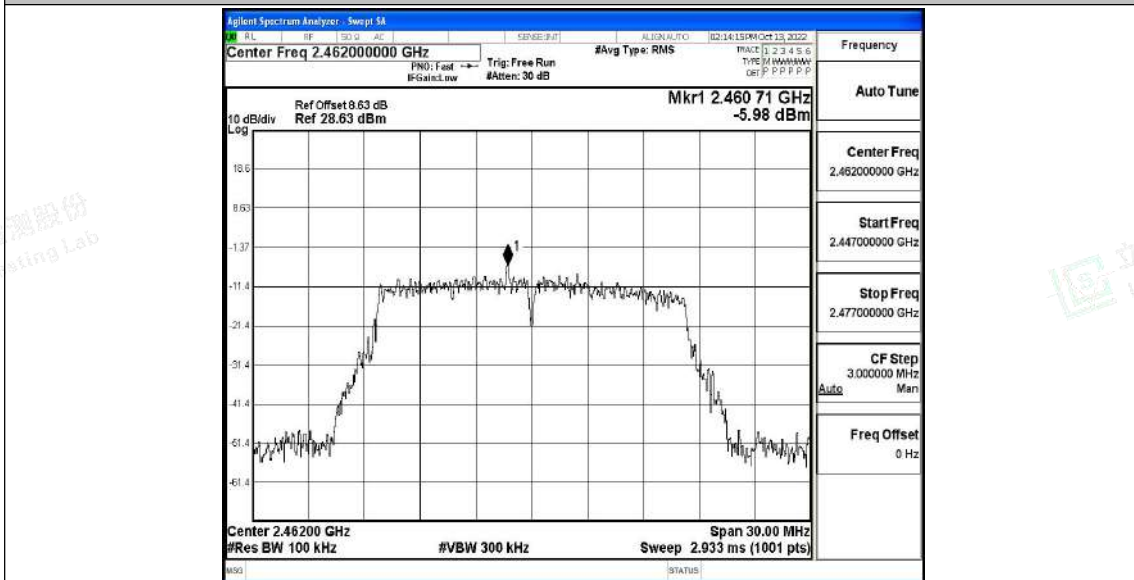


11G_Ant1_2437_1000~26500



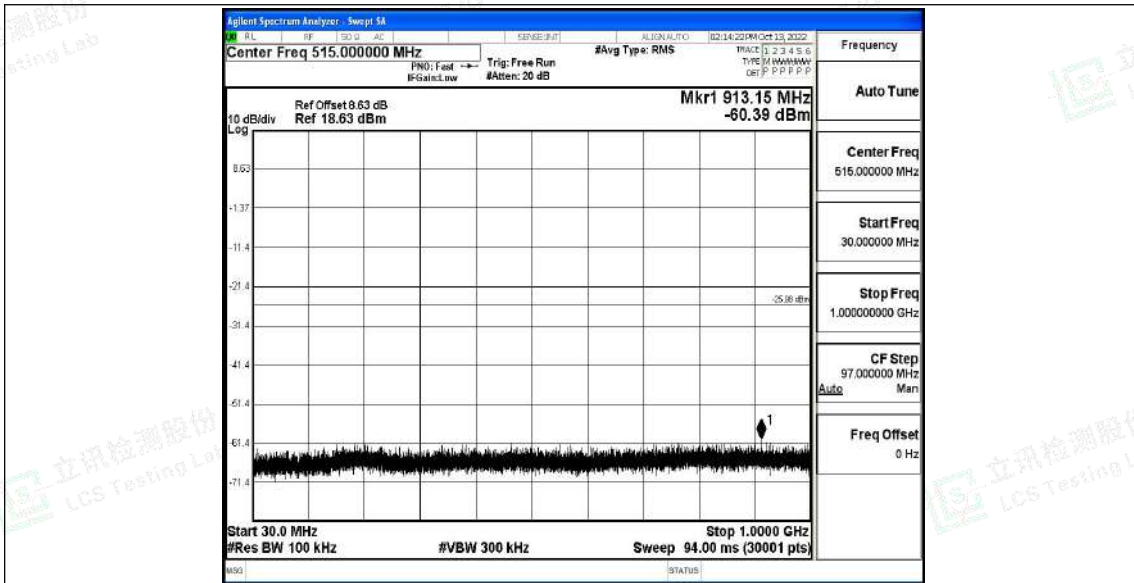


11G_Ant1_2462_0~Reference

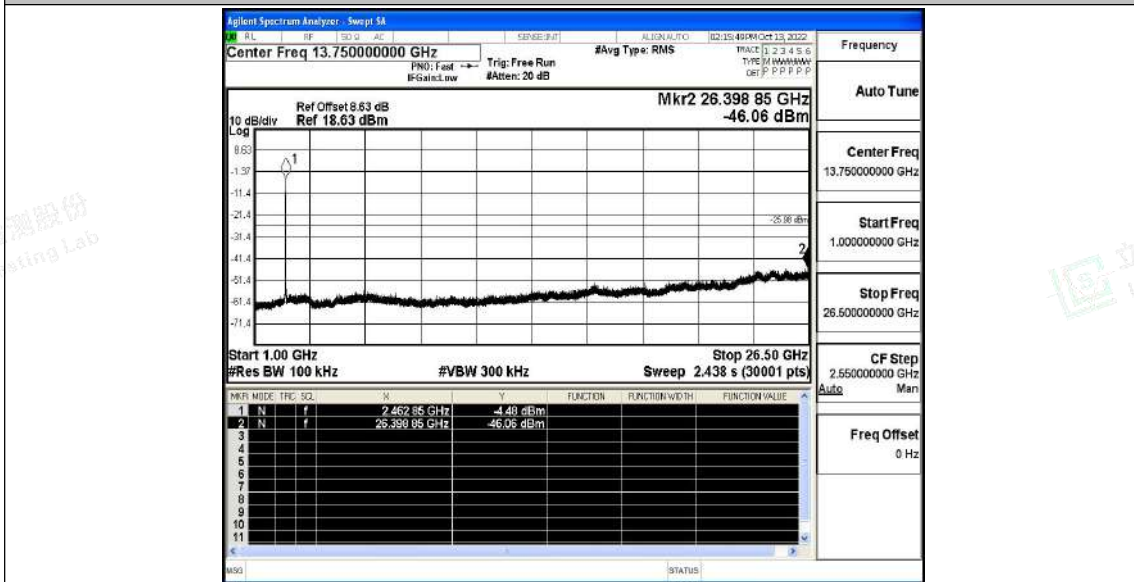


11G_Ant1_2462_30~1000



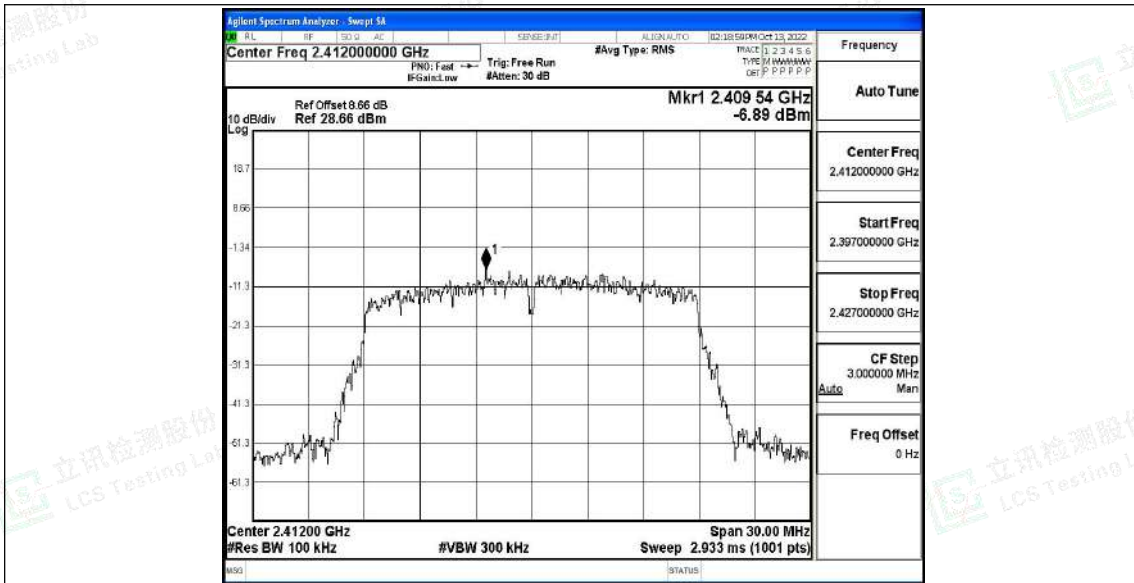


11G_Ant1_2462_1000~26500

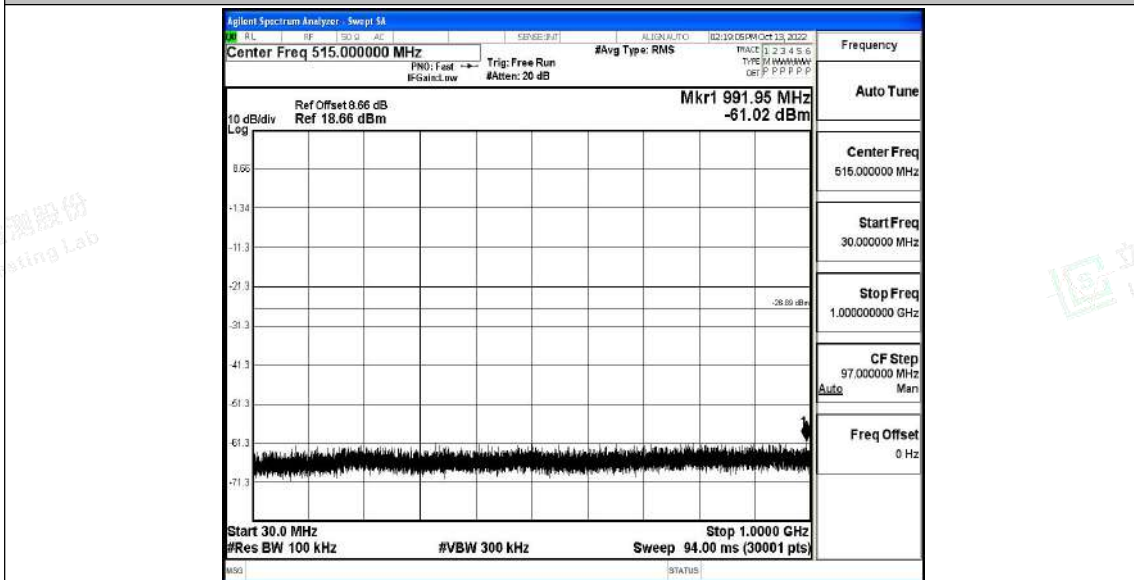


11N20SISO_Ant1_2412_0~Reference



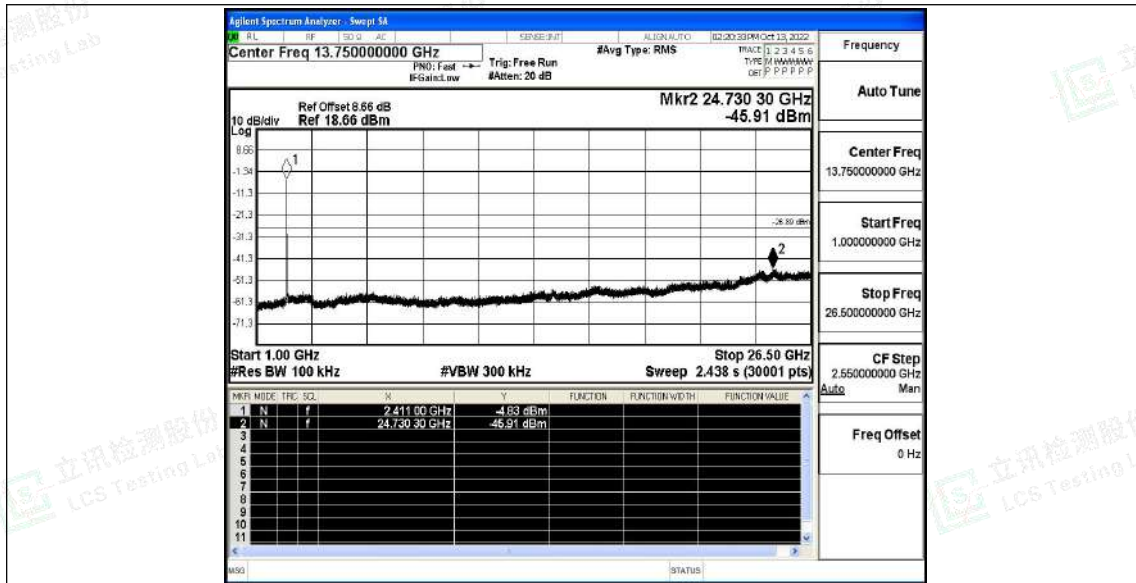


11N20SISO_Ant1_2412_30~1000

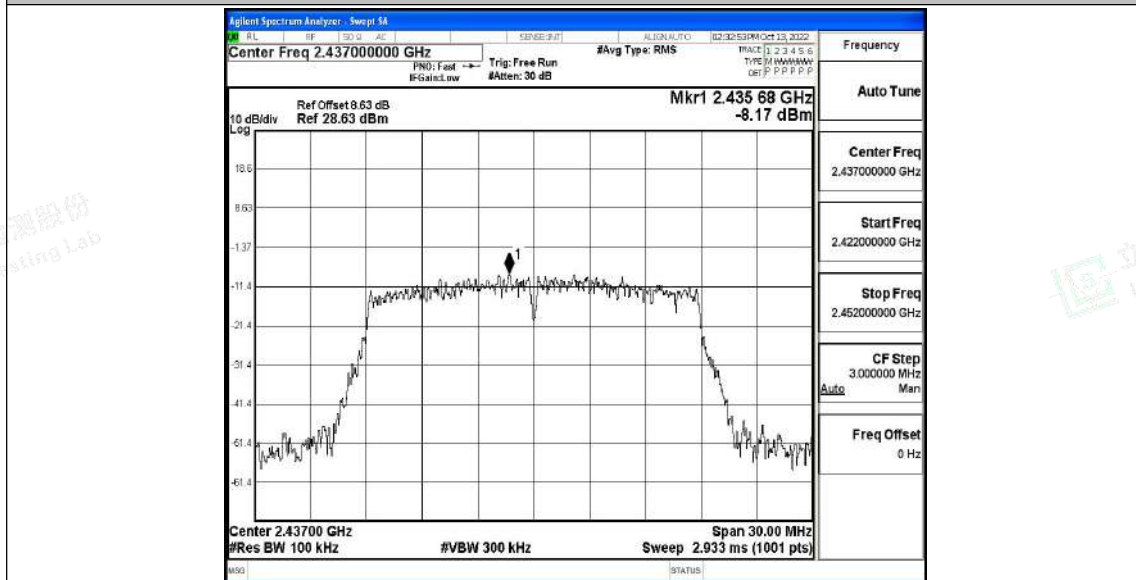


11N20SISO_Ant1_2412_1000~26500



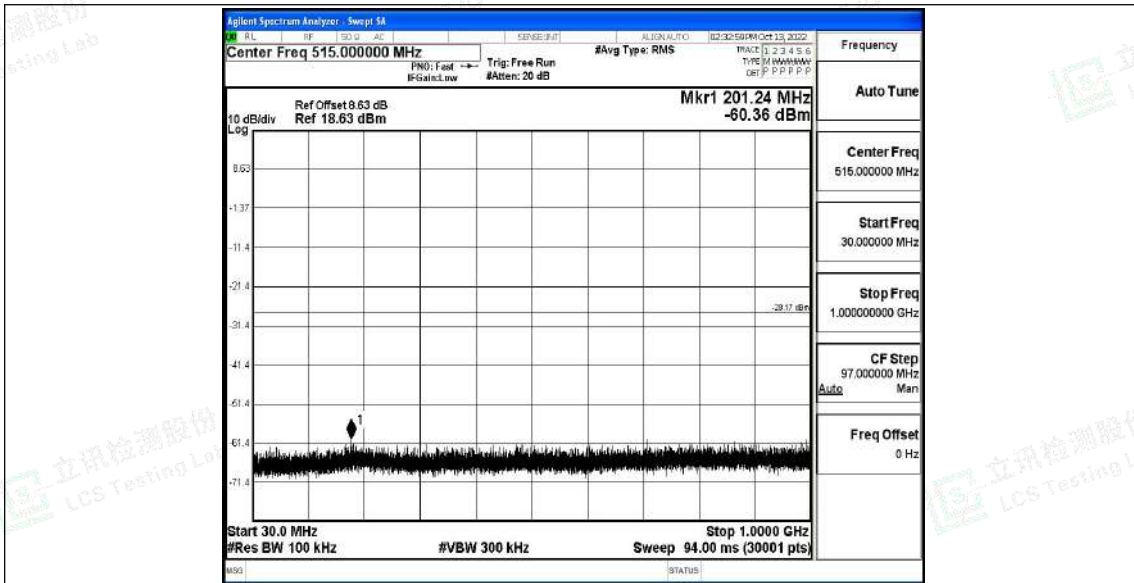


11N20SISO_Ant1_2437_0~Reference

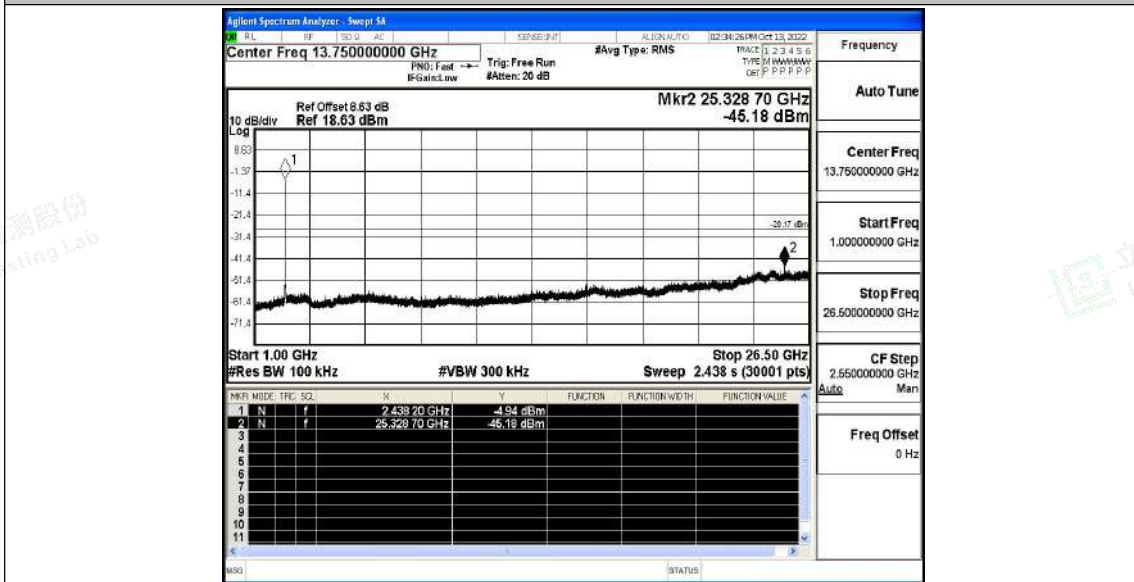


11N20SISO_Ant1_2437_30~1000



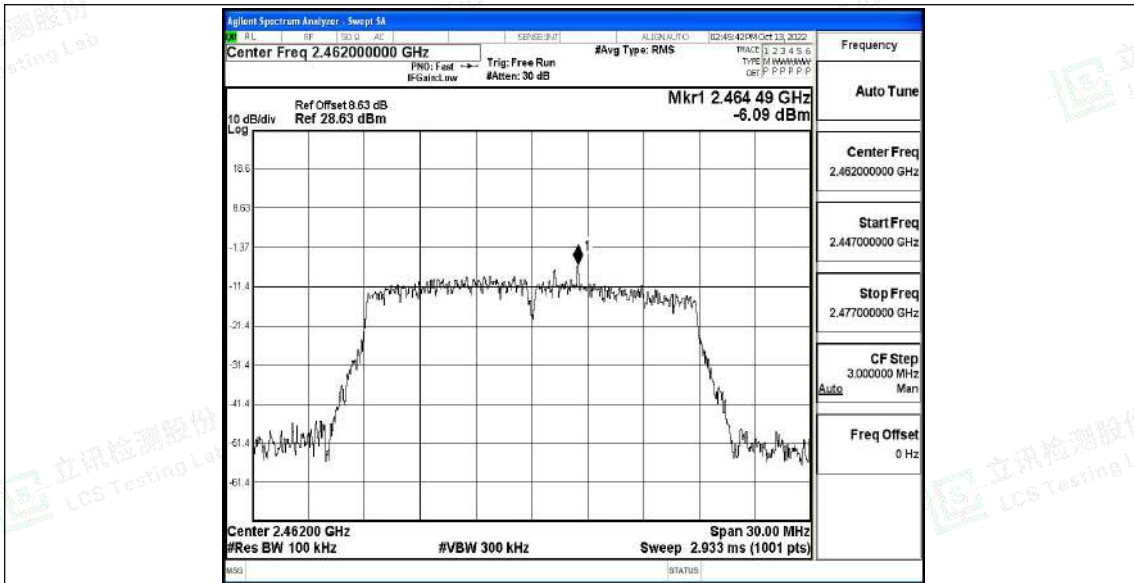


11N20SISO_Ant1_2437_1000~26500

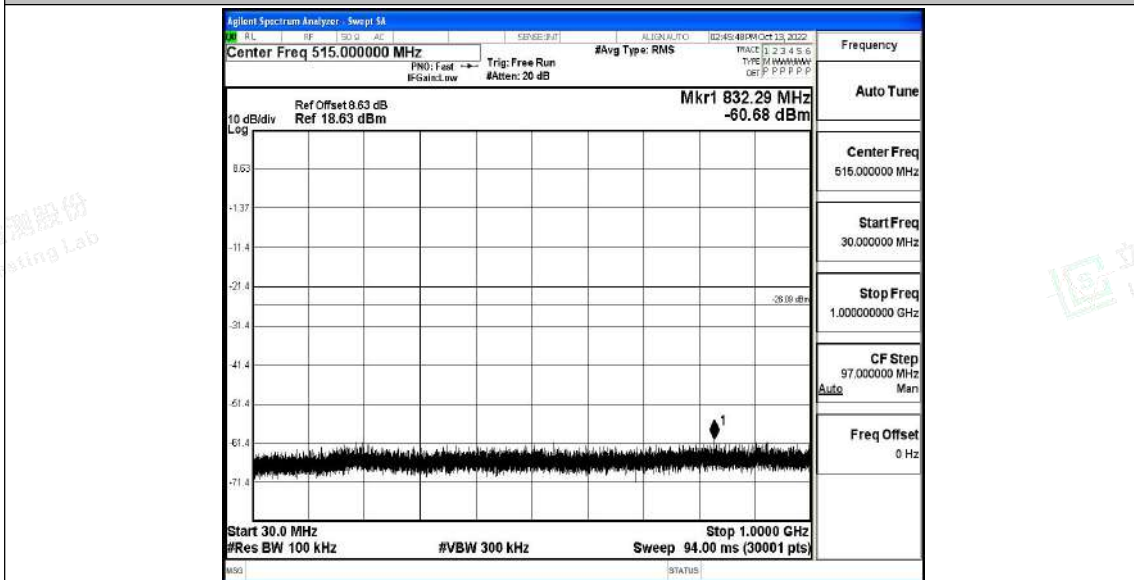


11N20SISO_Ant1_2462_0~Reference



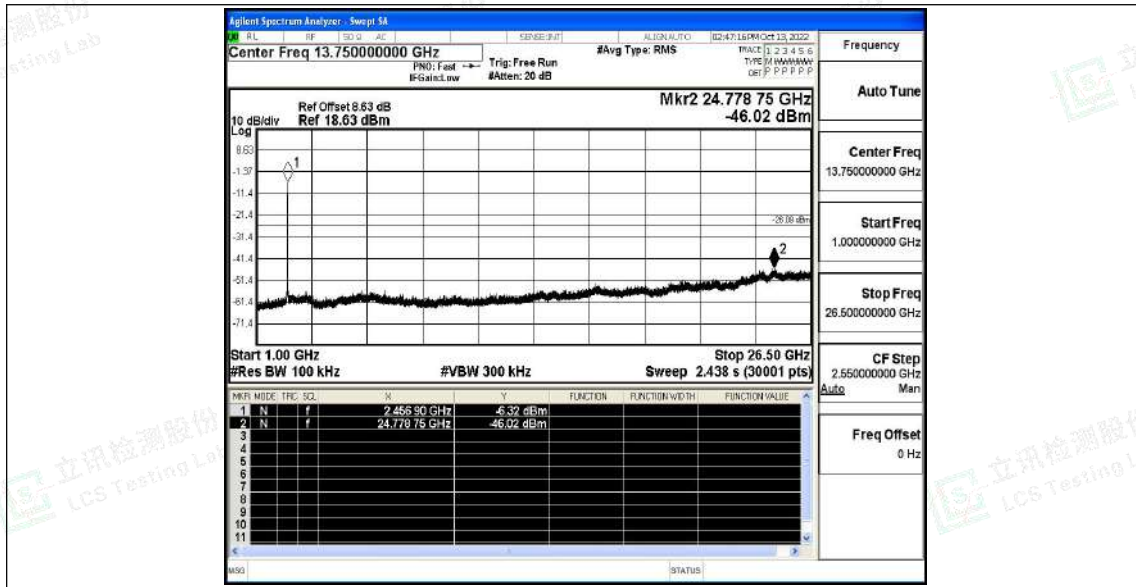


11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500







A.6 Duty Cycle

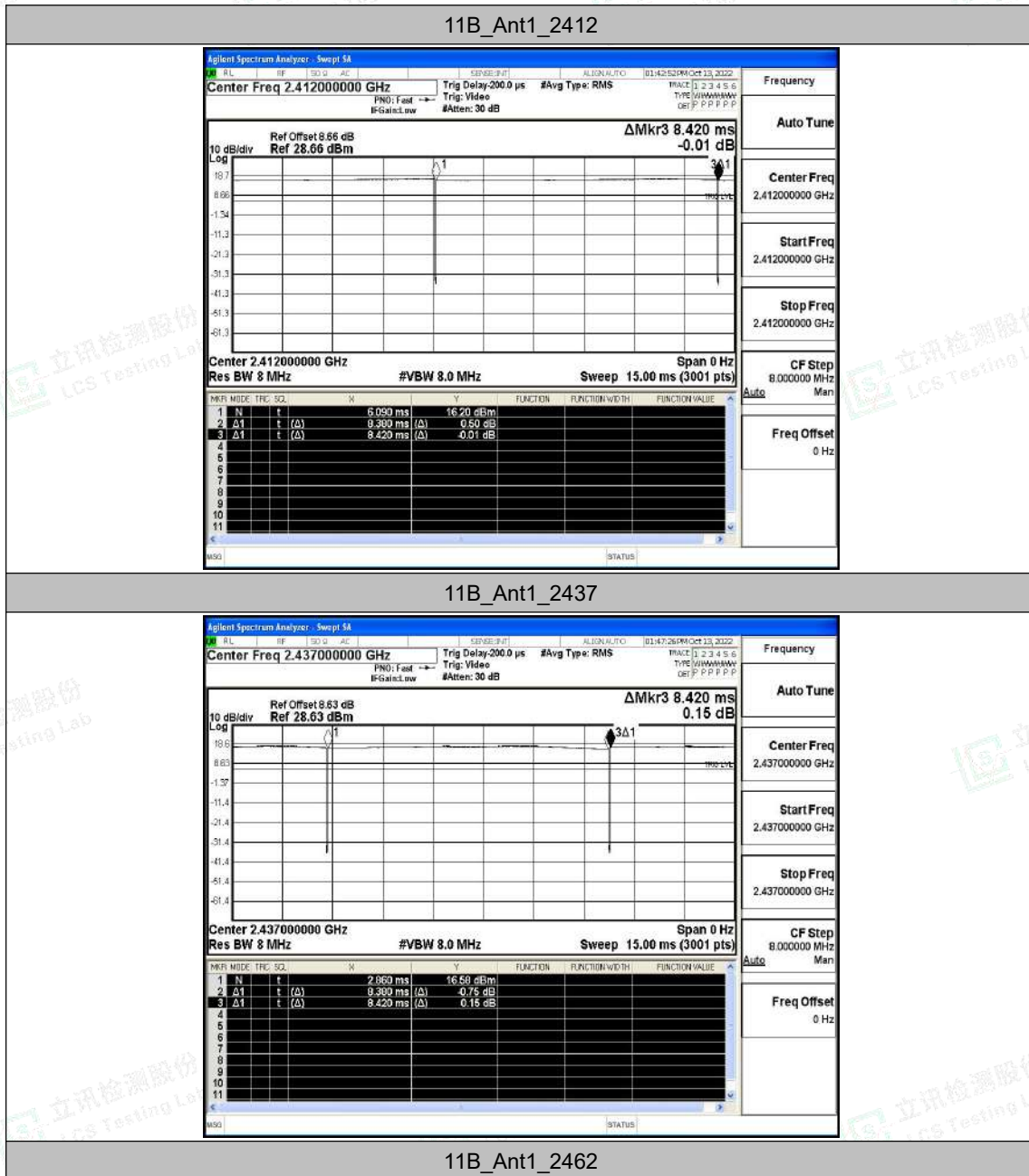
Test Result

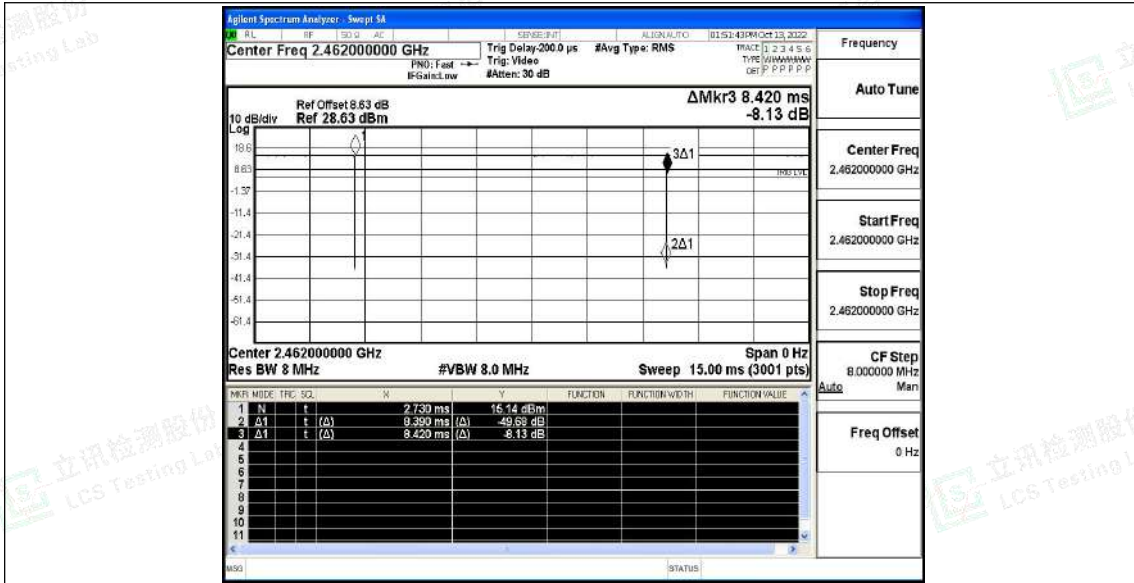
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T(kHz)
11B	Ant1	2412	8.38	8.42	99.52	0.12
		2437	8.38	8.42	99.52	0.12
		2462	8.39	8.42	99.64	0.12
11G	Ant1	2412	1.39	1.44	96.53	0.72
		2437	1.39	1.44	96.53	0.72
		2462	1.39	1.43	97.20	0.72
11N20SISO	Ant1	2412	1.30	1.34	97.01	0.77
		2437	1.30	1.34	97.01	0.77
		2462	1.30	1.35	96.30	0.77



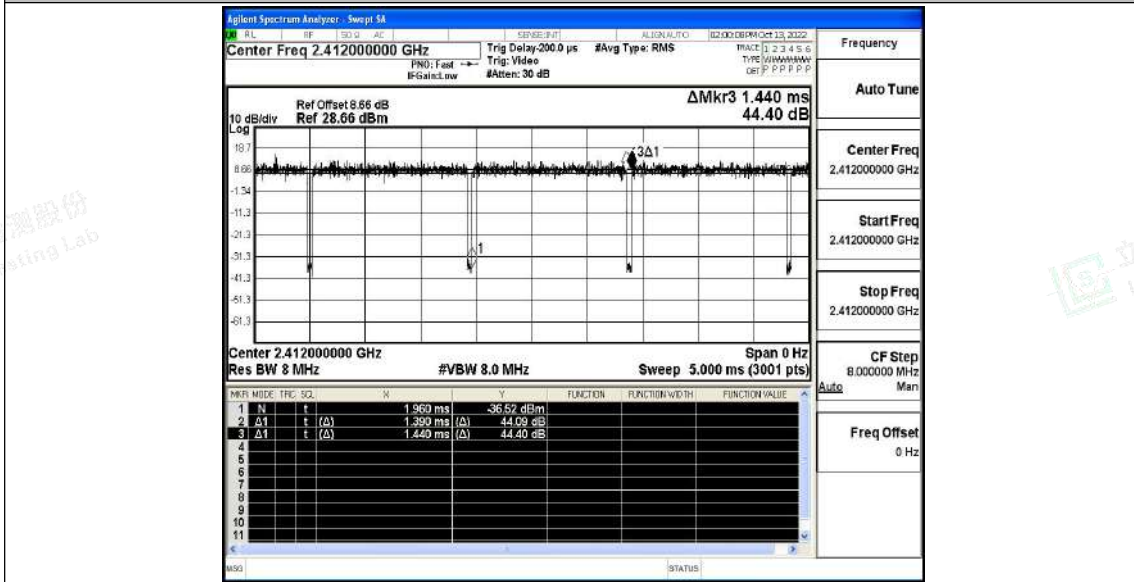


Test Graphs



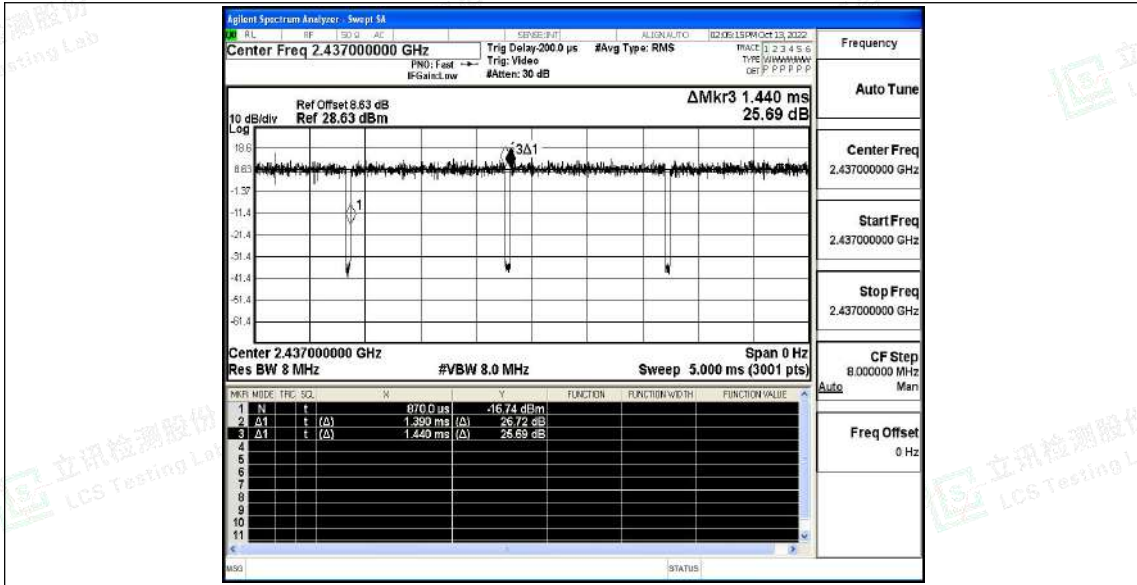


11G_Ant1_2412

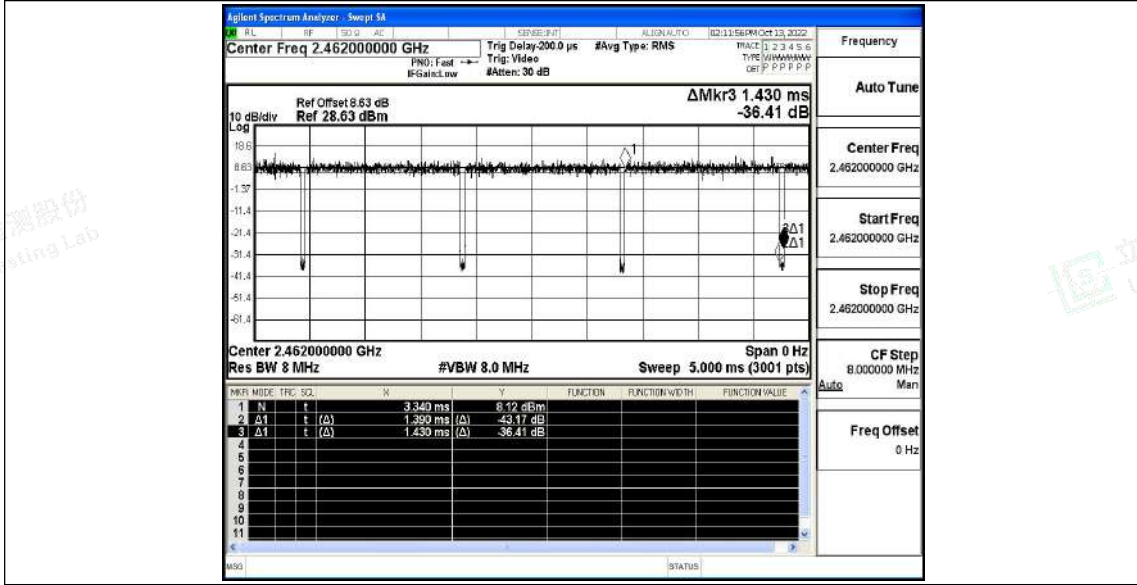


11G_Ant1_2437



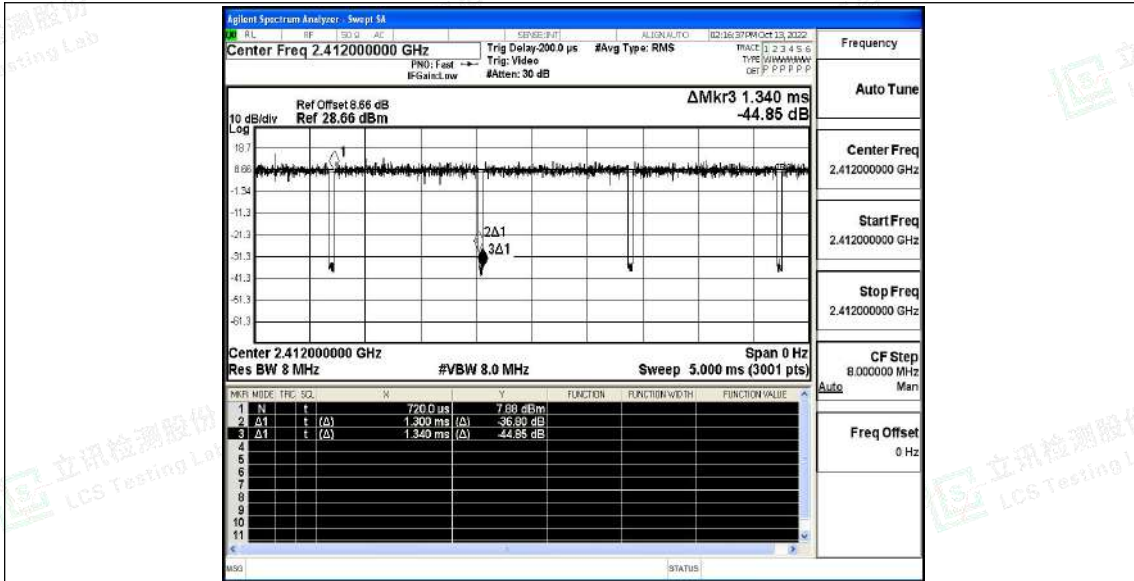


11G_Ant1_2462

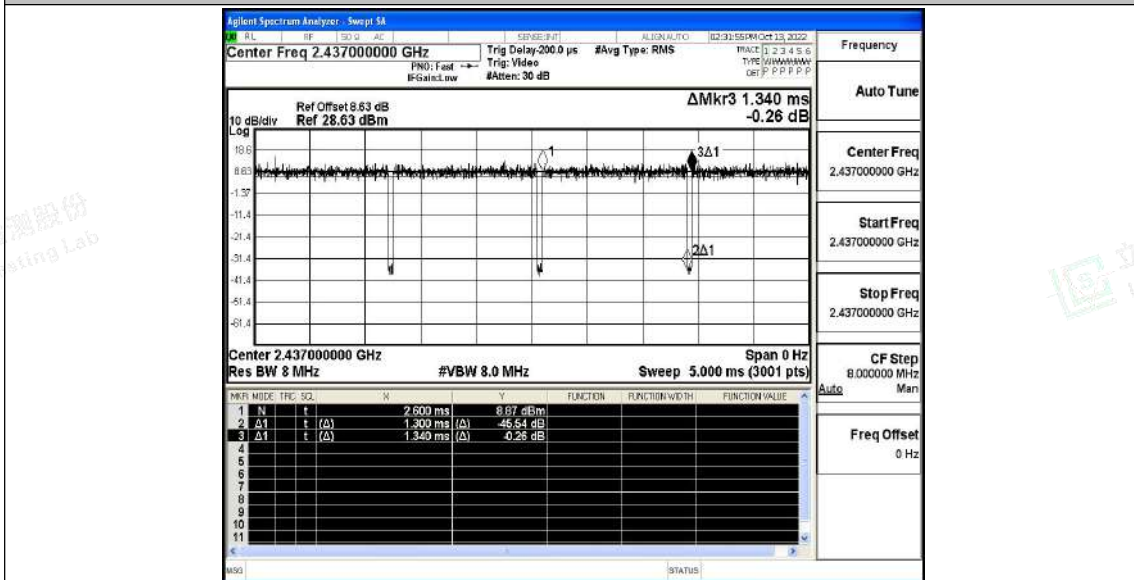


11N20SISO_Ant1_2412



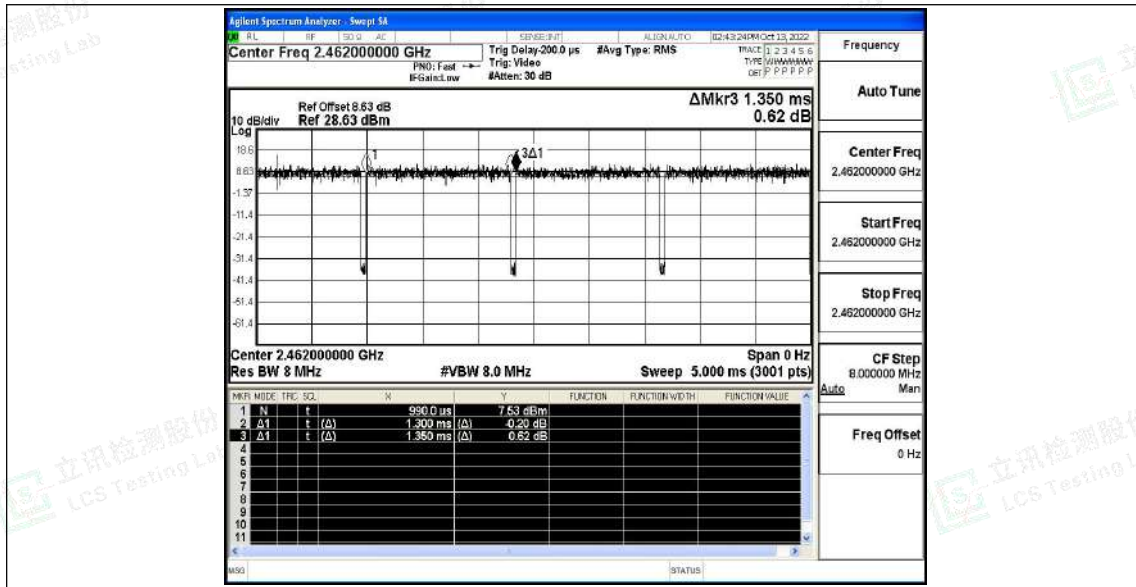


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







A.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-58.55	≤-41.20	36.65	≤54	PASS
				AV	2389.960	-57.02	≤-41.20	38.18	≤54	PASS
				AV	2390.000	-57.02	≤-41.20	38.18	≤54	PASS
				Peak	2310.000	-48.45	≤-21.20	46.75	≤74	PASS
				Peak	2387.100	-45.84	≤-21.20	49.36	≤74	PASS
				Peak	2390.000	-45.93	≤-21.20	49.27	≤74	PASS
		High	2462	AV	2483.500	-55.38	≤-41.20	39.82	≤54	PASS
				AV	2485.650	-54.66	≤-41.20	40.54	≤54	PASS
				AV	2500.000	-57.72	≤-41.20	37.48	≤54	PASS
				Peak	2483.500	-44.81	≤-21.20	50.39	≤74	PASS
				Peak	2485.870	-43.66	≤-21.20	51.54	≤74	PASS
				Peak	2500.000	-47.02	≤-21.20	48.18	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-58.24	≤-41.20	36.96	≤54	PASS
				AV	2389.960	-56.74	≤-41.20	38.46	≤54	PASS
				AV	2390.000	-56.74	≤-41.20	38.46	≤54	PASS
				Peak	2310.000	-48.24	≤-21.20	46.96	≤74	PASS
				Peak	2387.880	-45.6	≤-21.20	49.60	≤74	PASS
				Peak	2390.000	-46.83	≤-21.20	48.37	≤74	PASS
		High	2462	AV	2483.500	-54.06	≤-41.20	41.14	≤54	PASS
				AV	2484.330	-53.79	≤-41.20	41.41	≤54	PASS
				AV	2500.000	-57.34	≤-41.20	37.86	≤54	PASS
				Peak	2483.500	-43.8	≤-21.20	51.40	≤74	PASS
				Peak	2483.890	-42.08	≤-21.20	53.12	≤74	PASS
				Peak	2500.000	-46.03	≤-21.20	49.17	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-58.26	≤-41.20	36.94	≤54	PASS
				AV	2389.440	-56.89	≤-41.20	38.31	≤54	PASS
				AV	2390.000	-56.89	≤-41.20	38.31	≤54	PASS
				Peak	2310.000	-48.42	≤-21.20	46.78	≤74	PASS
				Peak	2388.530	-45.5	≤-21.20	49.70	≤74	PASS
				Peak	2390.000	-45.77	≤-21.20	49.43	≤74	PASS
		High	2462	AV	2483.500	-53.68	≤-41.20	41.52	≤54	PASS
				AV	2485.100	-53.54	≤-41.20	41.66	≤54	PASS
				AV	2500.000	-57.33	≤-41.20	37.87	≤54	PASS
				Peak	2483.500	-41.6	≤-21.20	53.60	≤74	PASS
				Peak	2484.330	-41.43	≤-21.20	53.77	≤74	PASS
				Peak	2500.000	-47.02	≤-21.20	48.18	≤74	PASS





				Peak	2500.000	-46.74	≤-21.20	48.46	≤74	PASS
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Note:

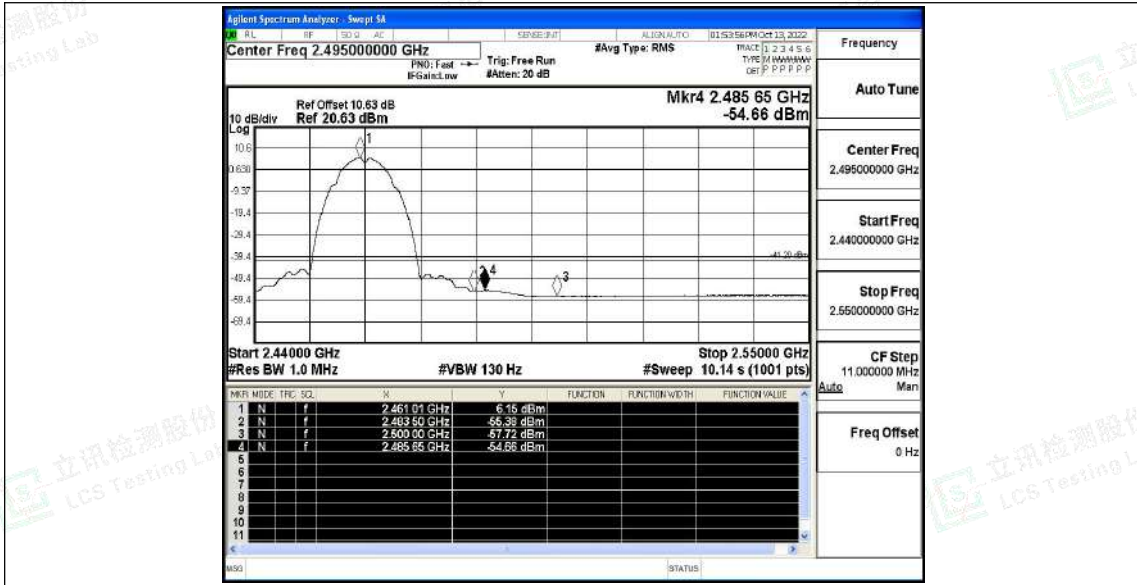
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



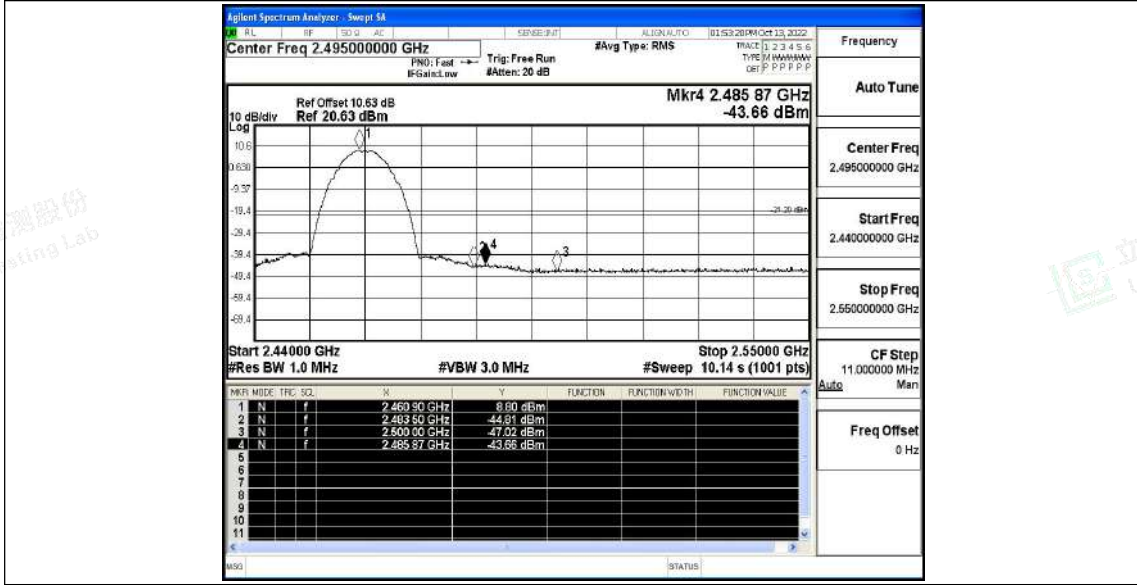


Test Graphs



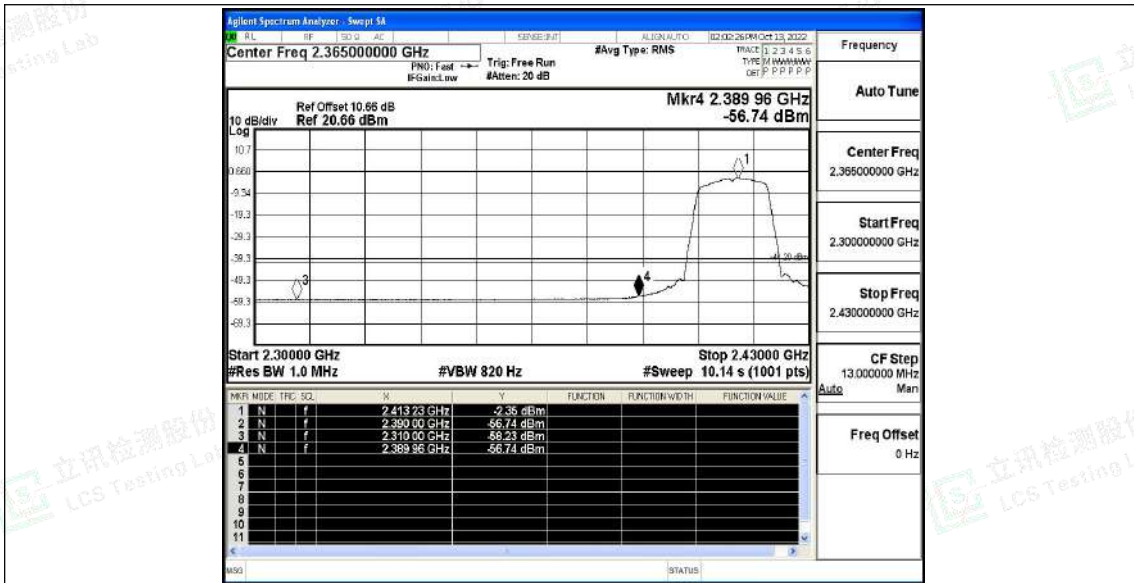


11B_Ant1_High_2462_Peak

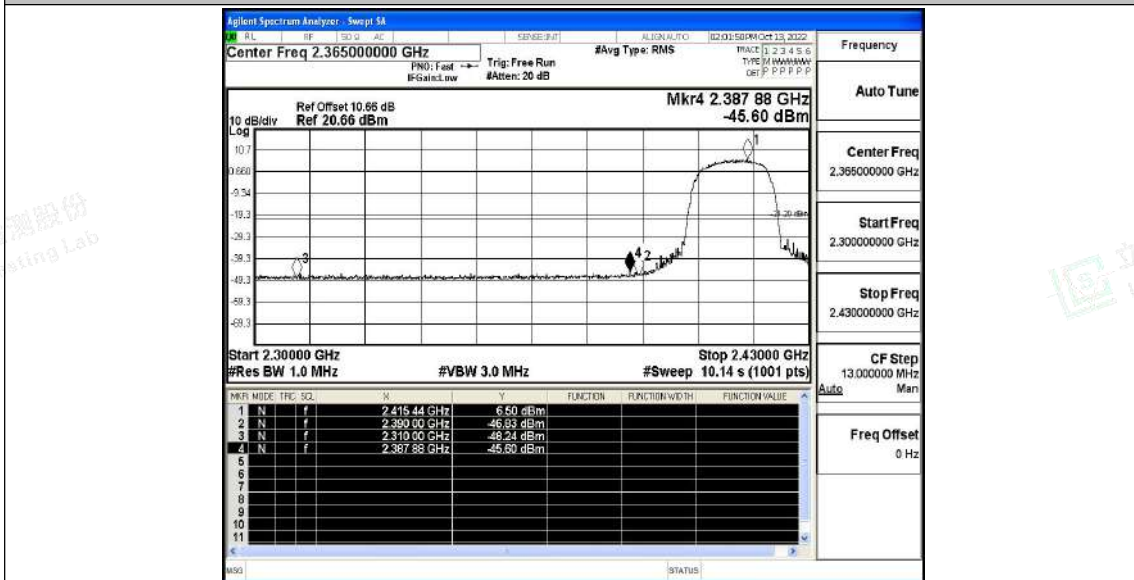


11G_Ant1_Low_2412_AV



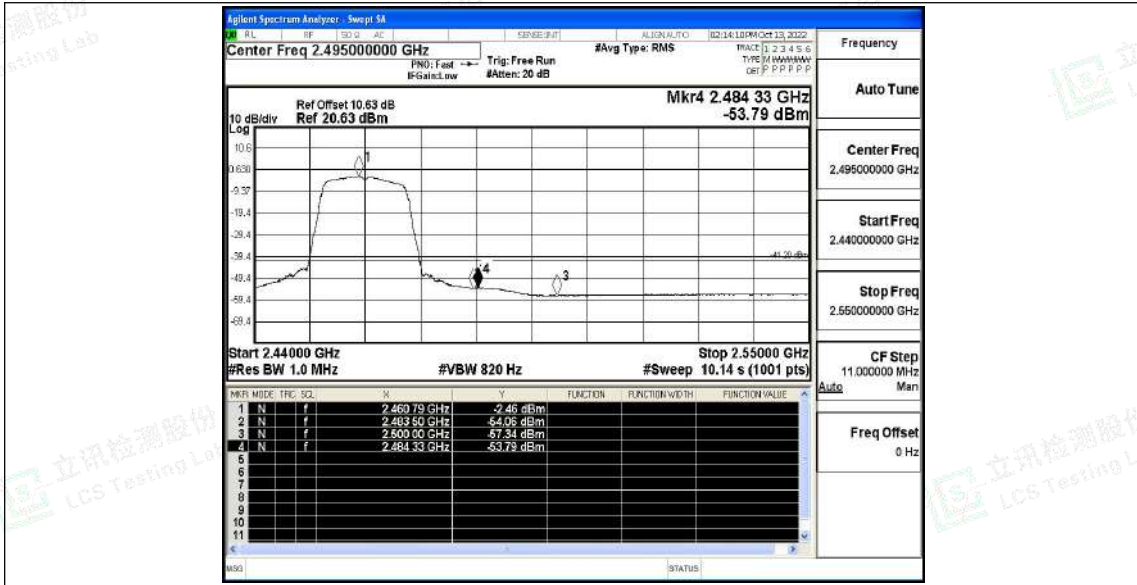


11G_Ant1_Low_2412_Peak

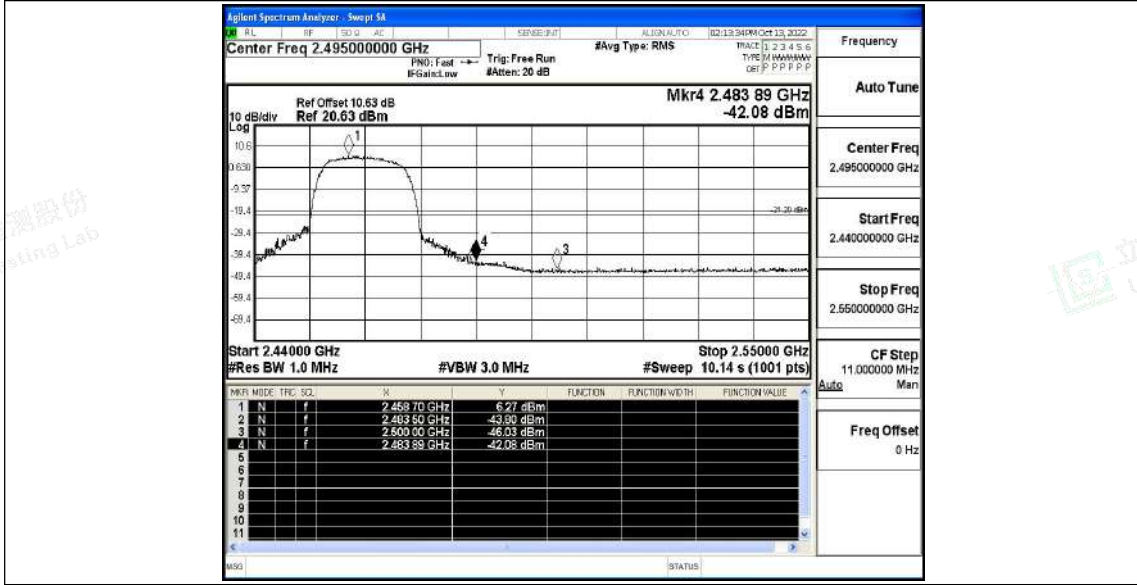


11G_Ant1_High_2462_AV



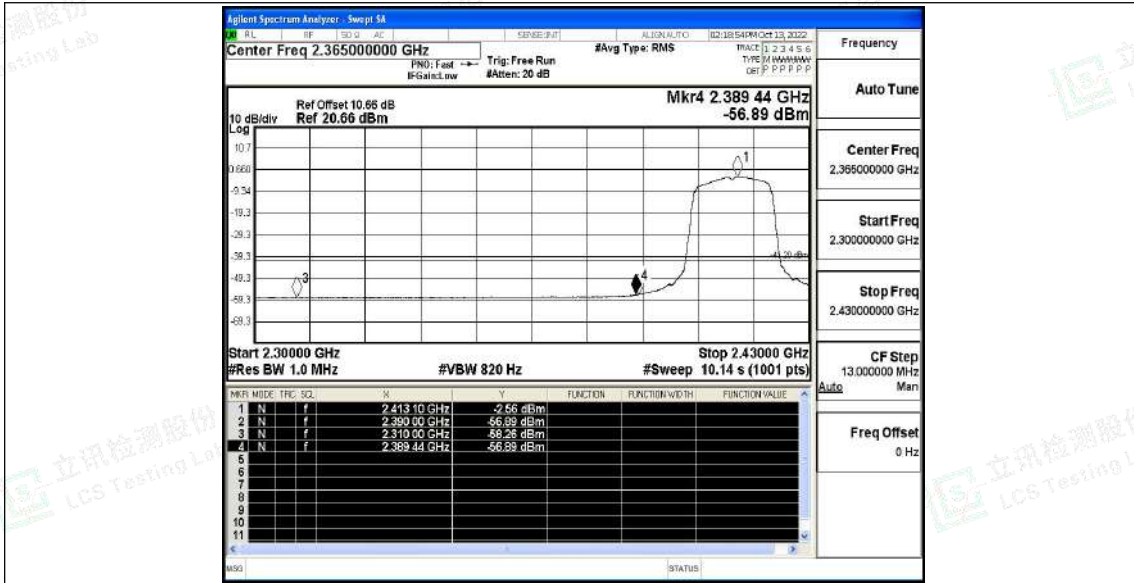


11G_Ant1_High_2462_Peak

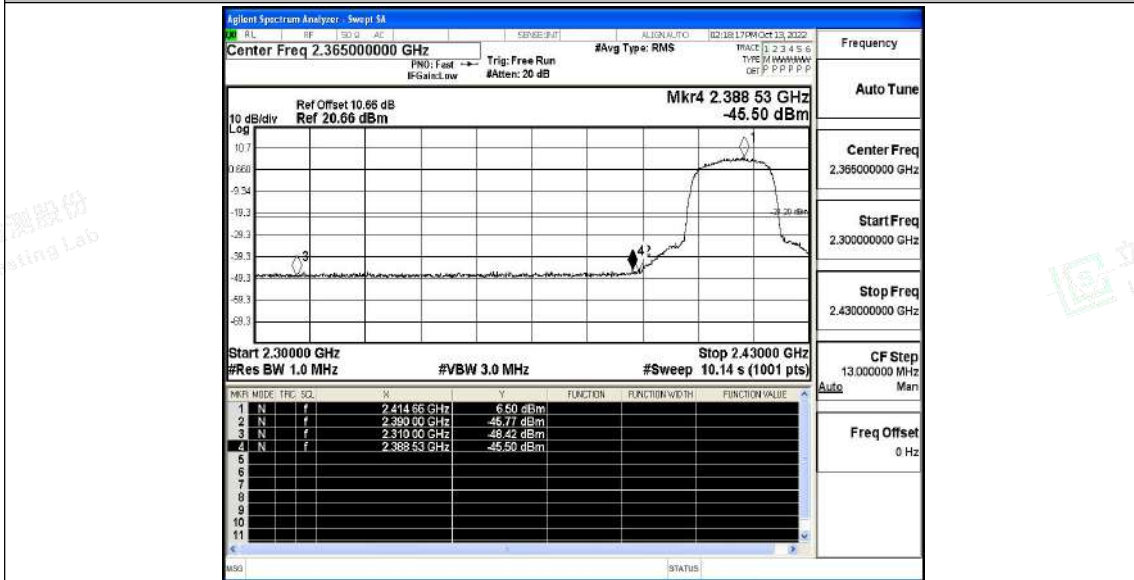


11N20SISO_Ant1_Low_2412_AV



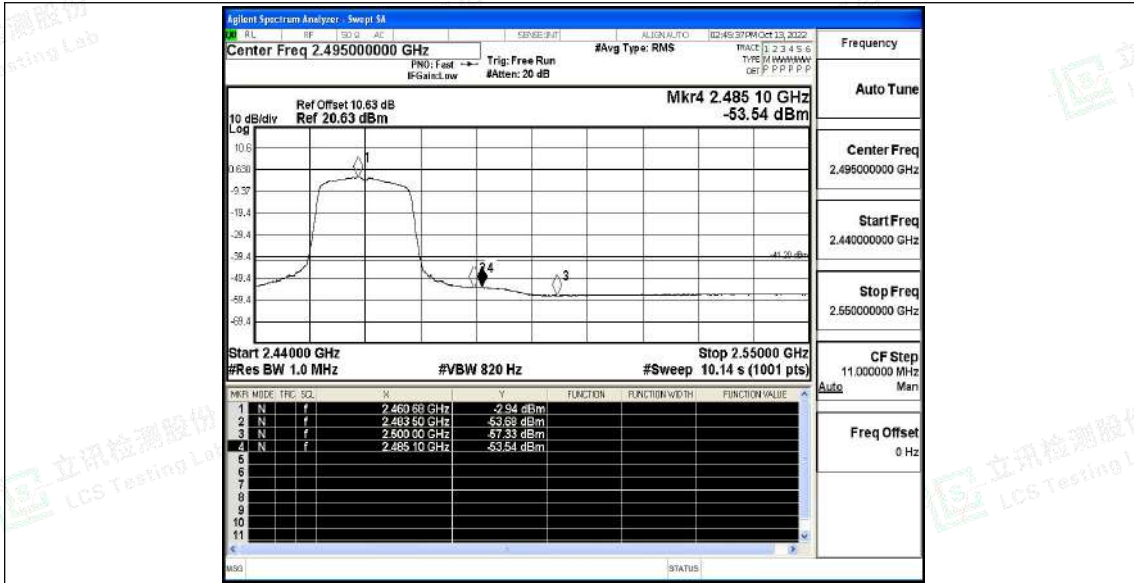


11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV





11N20SISO_Ant1_High_2462_Peak

