



Appendix A

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: 4K OPTICAL VIDEO CAMERA

Test Model: HDR-Z88

Environmental Conditions

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





A.1 DTS Bandwidth

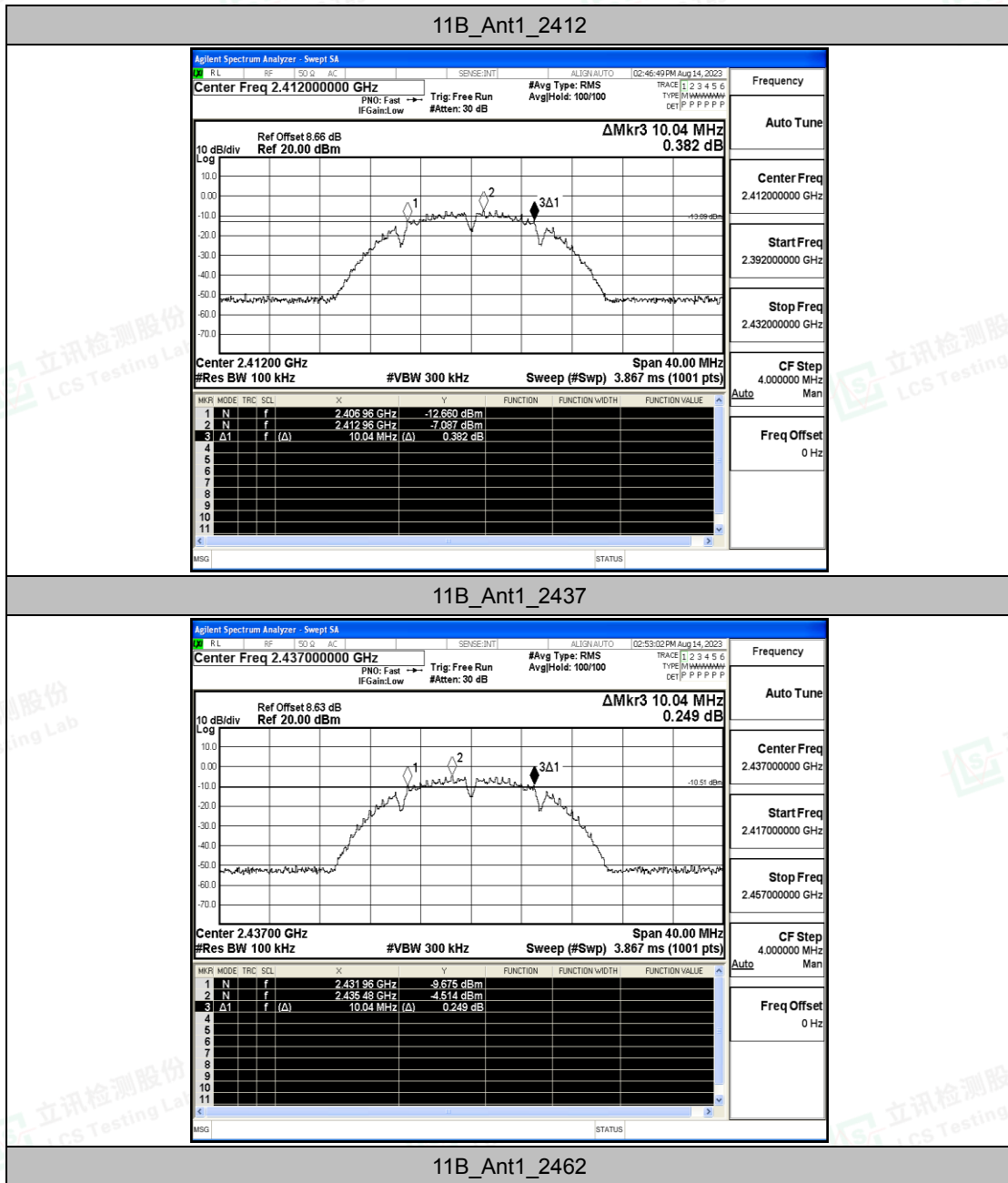
Test Result

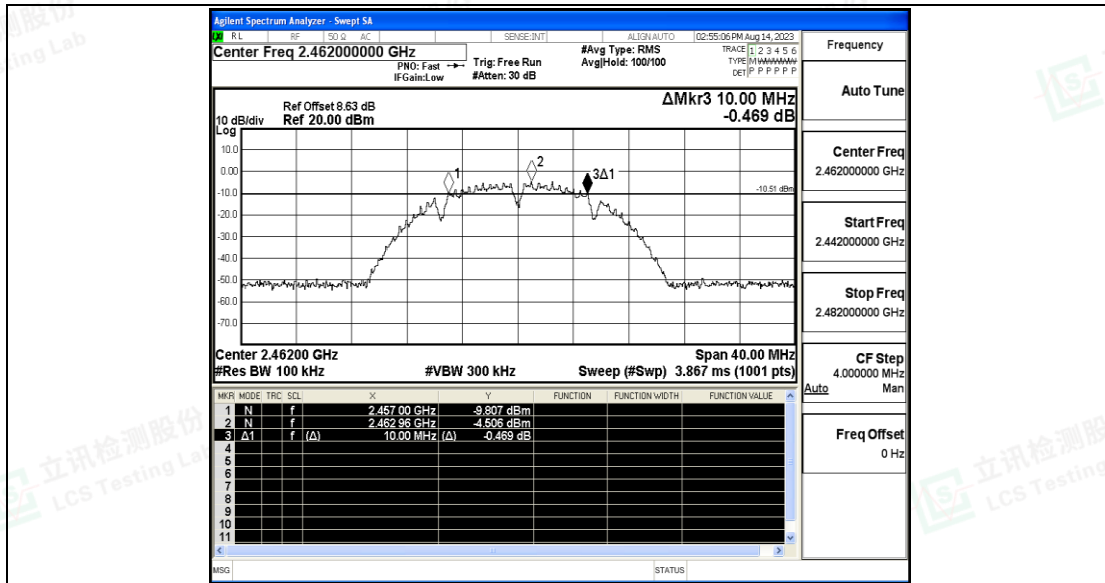
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.040	2406.960	2417.000	0.5	PASS
		2437	10.040	2431.960	2442.000	0.5	PASS
		2462	10.000	2457.000	2467.000	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	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	17.560	2453.200	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.920	2404.240	2440.160	0.5	PASS
		2437	35.600	2419.240	2454.840	0.5	PASS
		2452	35.840	2434.080	2469.920	0.5	PASS



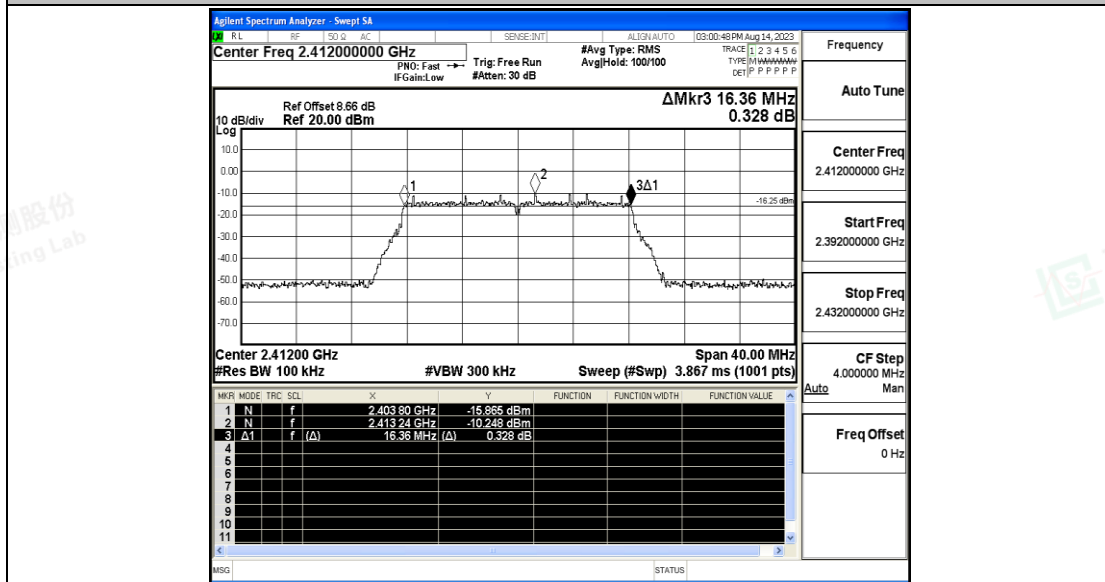


Test Graphs



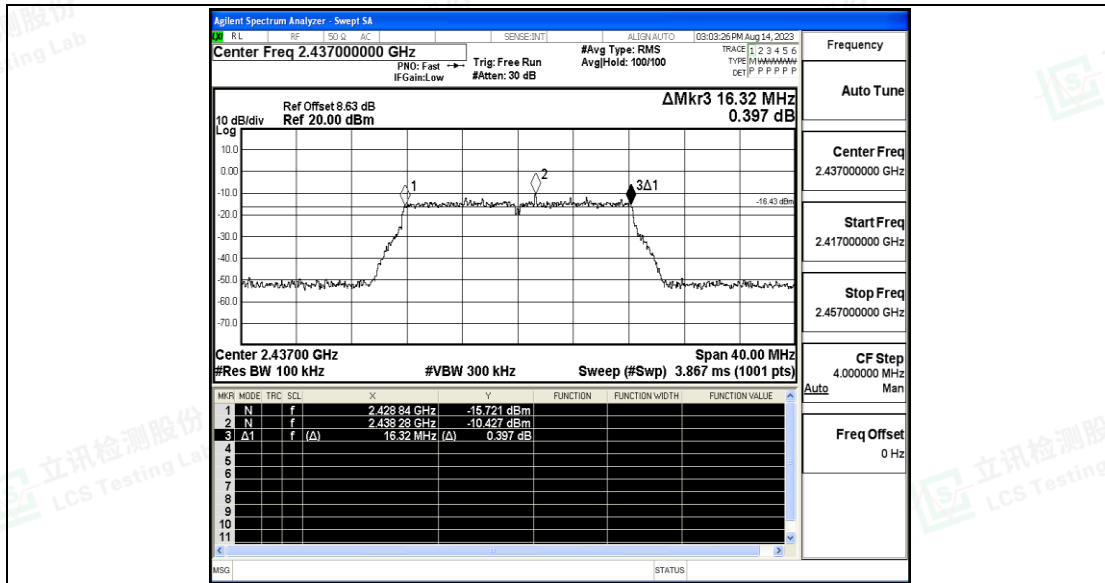


11G_Ant1_2412

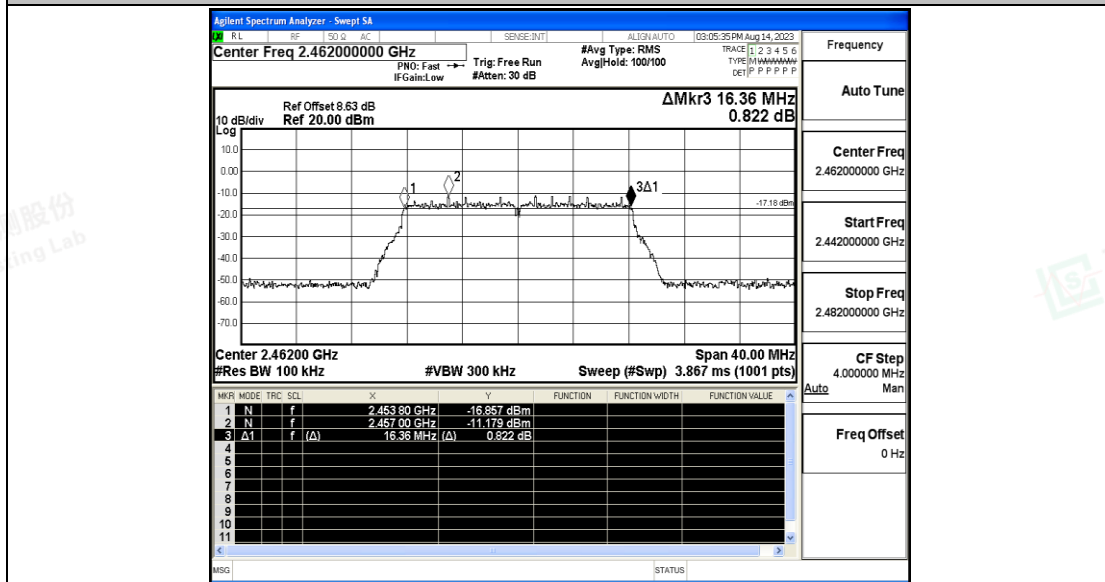


11G_Ant1_2437



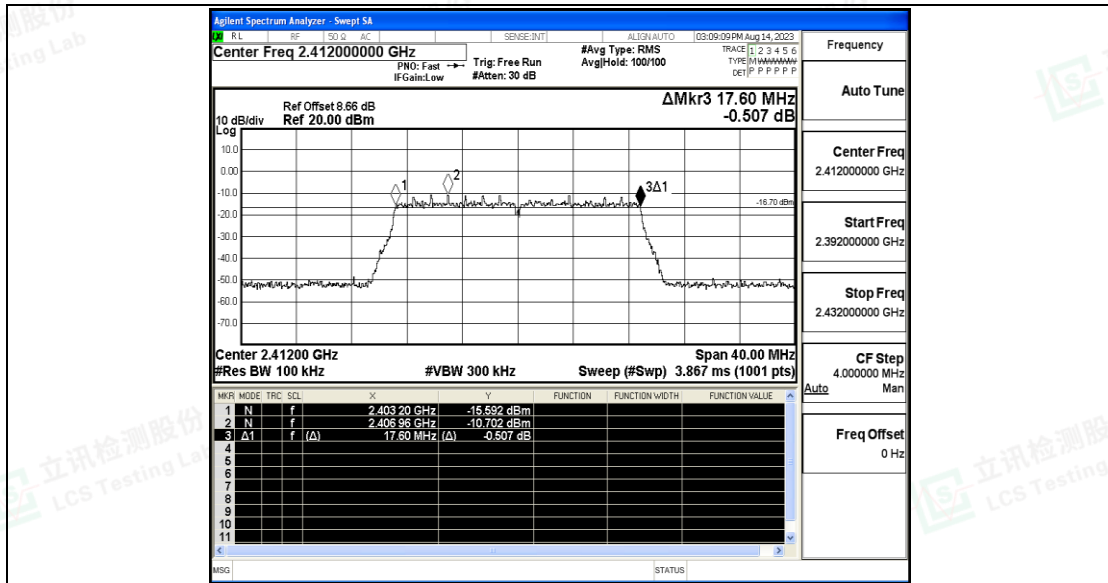


11G_Ant1_2462

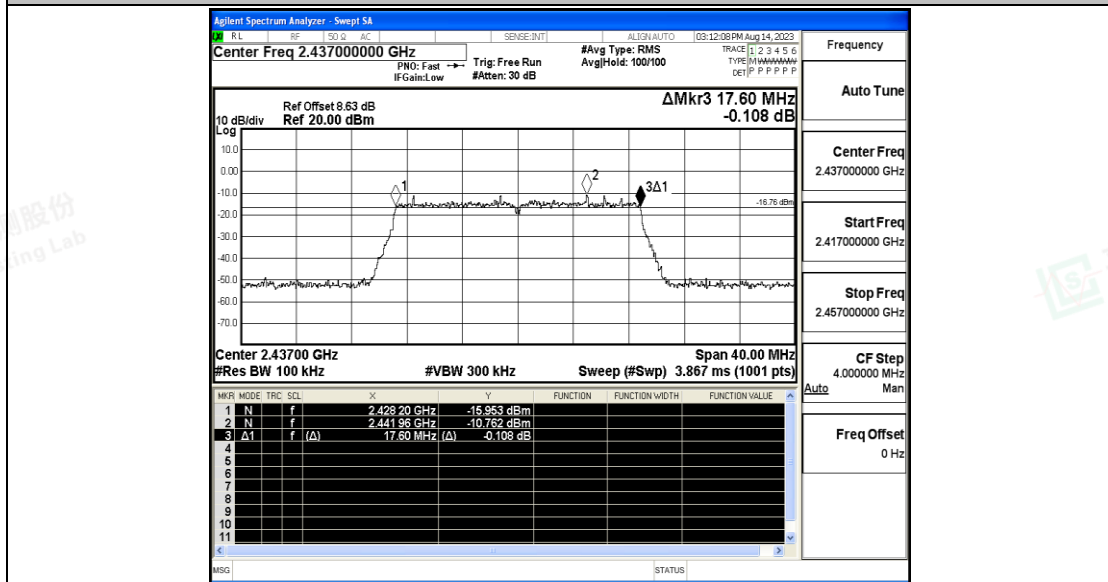


11N20SISO_Ant1_2412



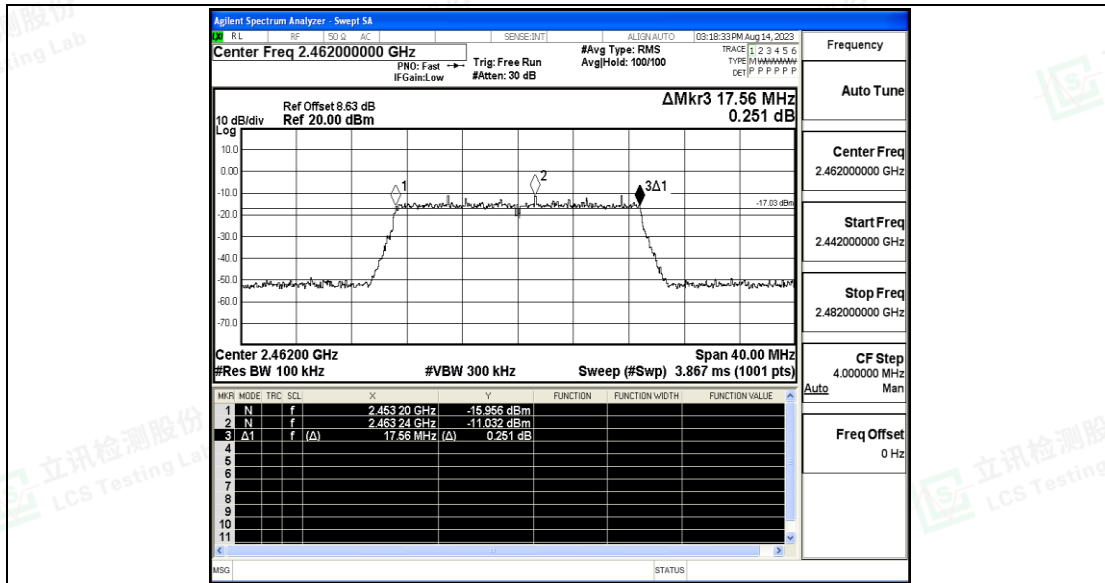


11N20SISO_Ant1_2437

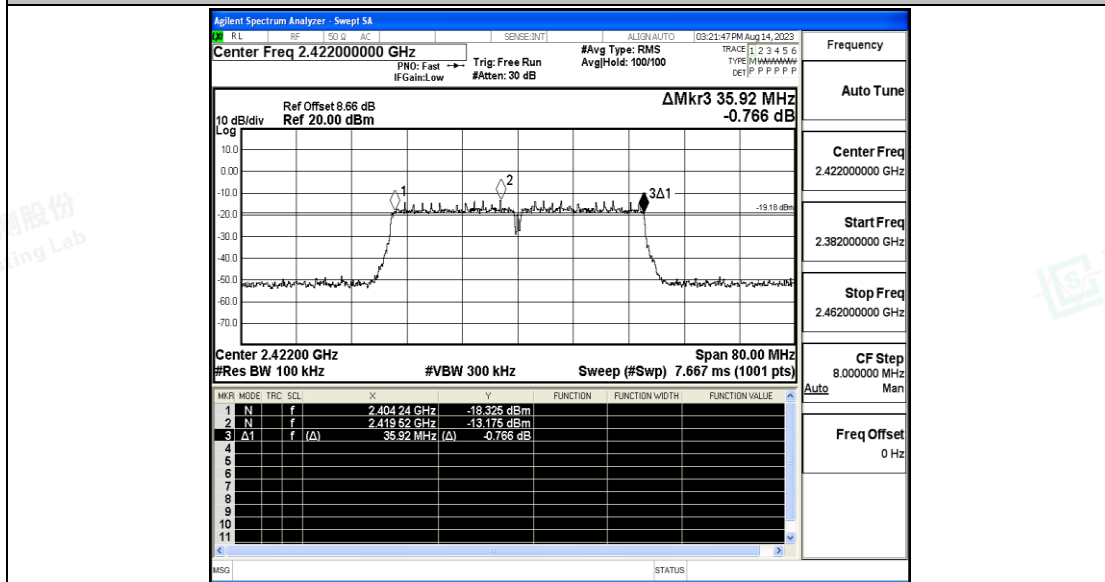


11N20SISO_Ant1_2462



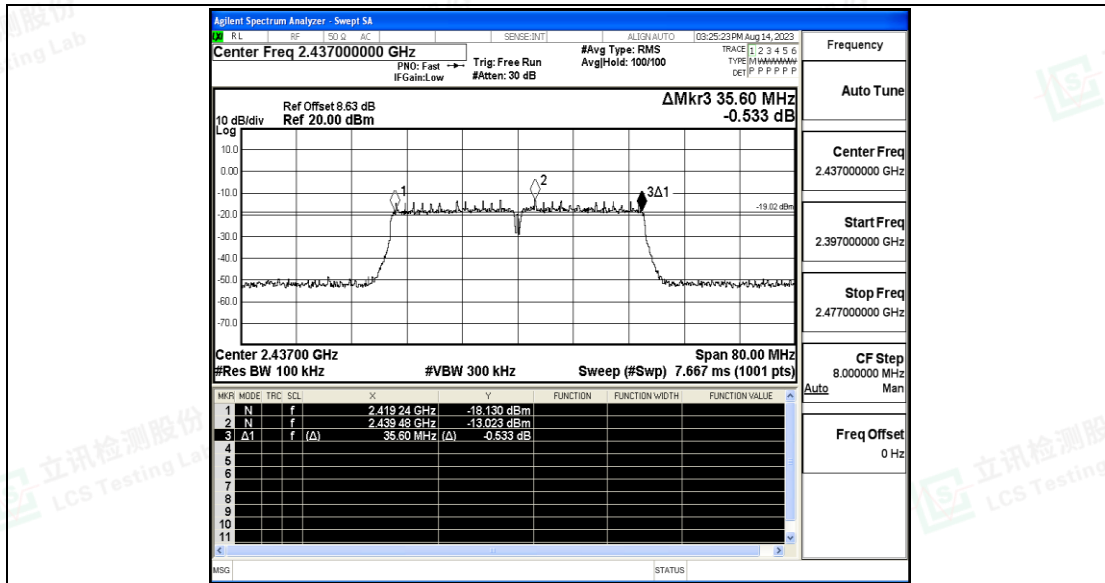


11N40SISO_Ant1_2422

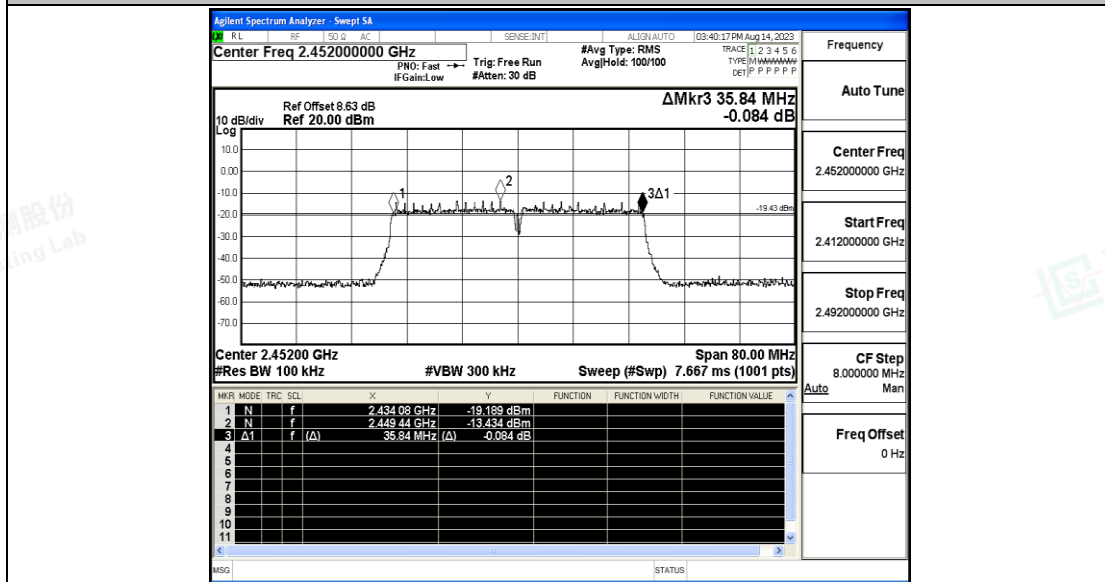


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452





A.2 Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	8.56	≤30.00	PASS
		2437	7.81	≤30.00	PASS
		2462	7.90	≤30.00	PASS
11G	Ant1	2412	7.33	≤30.00	PASS
		2437	7.20	≤30.00	PASS
		2462	6.72	≤30.00	PASS
11N20SISO	Ant1	2412	7.41	≤30.00	PASS
		2437	7.35	≤30.00	PASS
		2462	6.86	≤30.00	PASS
11N40SISO	Ant1	2422	7.34	≤30.00	PASS
		2437	7.36	≤30.00	PASS
		2452	7.15	≤30.00	PASS





A.3 Maximum power spectral density

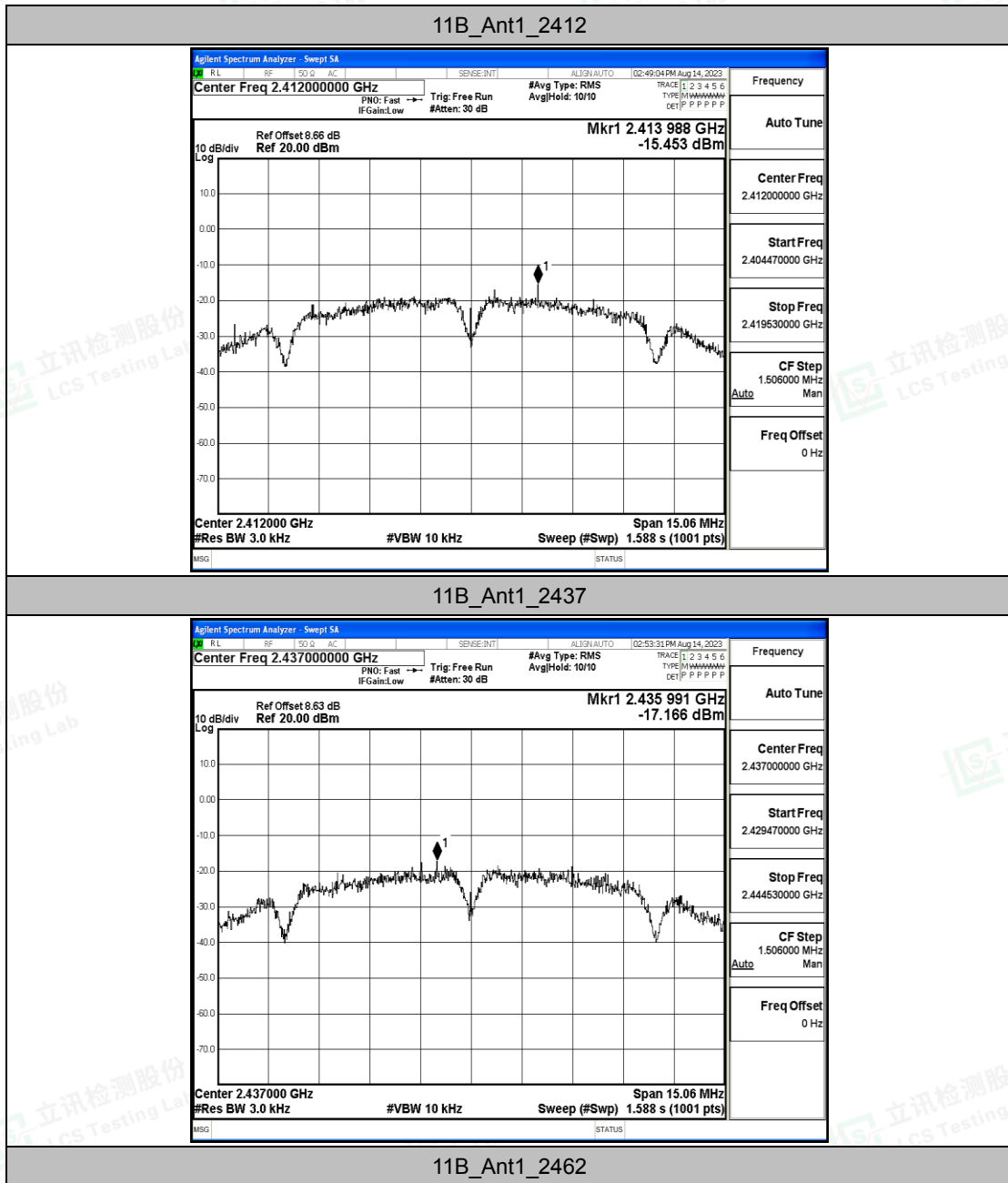
Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-15.45	≤8.00	PASS
		2437	-17.17	≤8.00	PASS
		2462	-17.43	≤8.00	PASS
11G	Ant1	2412	-22.01	≤8.00	PASS
		2437	-21.2	≤8.00	PASS
		2462	-20.92	≤8.00	PASS
11N20SISO	Ant1	2412	-21.83	≤8.00	PASS
		2437	-22.1	≤8.00	PASS
		2462	-21.45	≤8.00	PASS
11N40SISO	Ant1	2422	-22.33	≤8.00	PASS
		2437	-22.24	≤8.00	PASS
		2452	-21.55	≤8.00	PASS



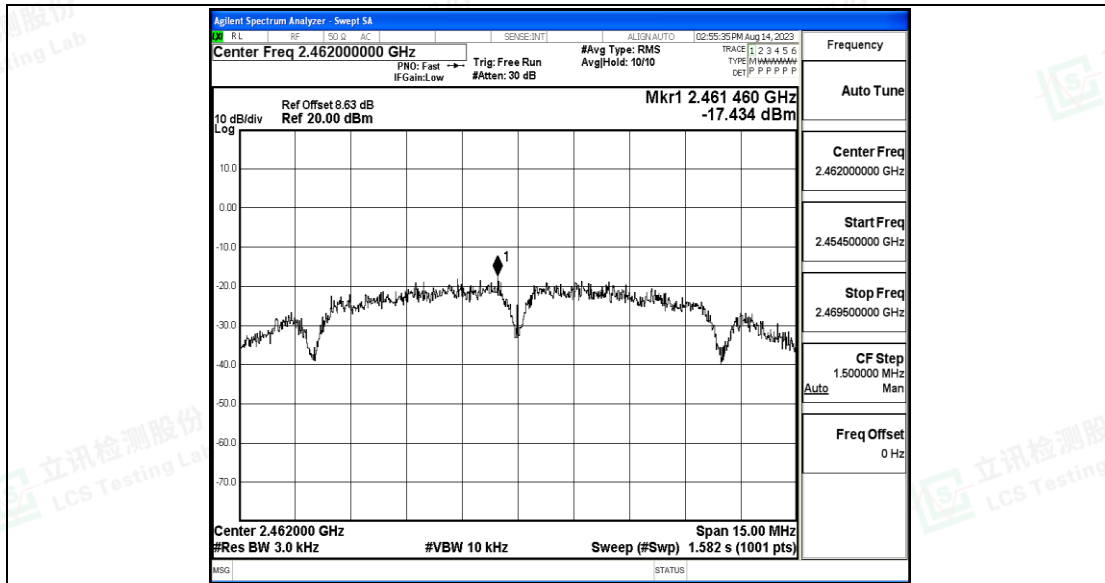


Test Graphs

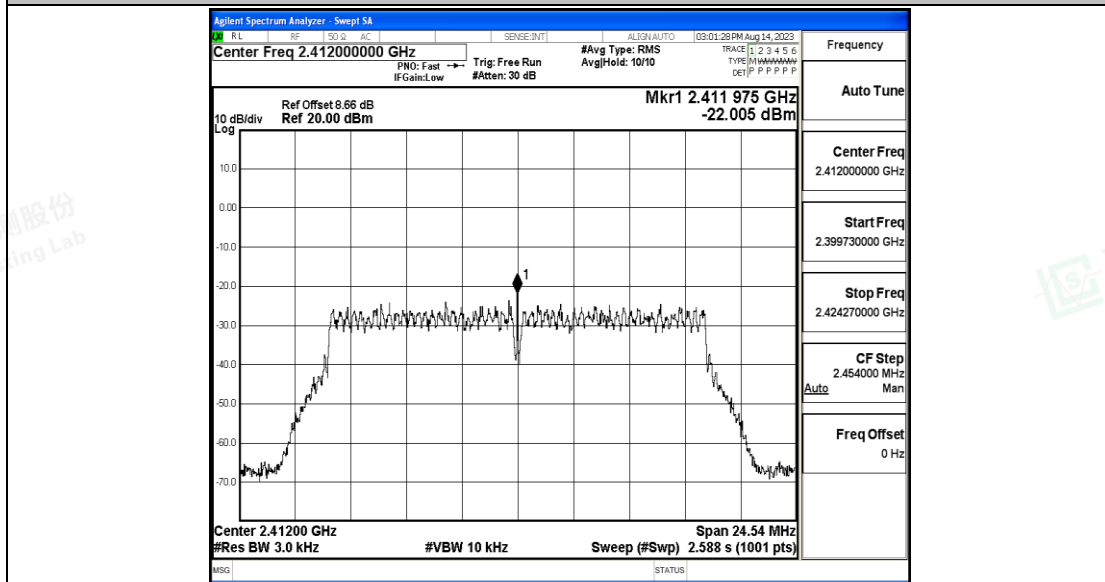




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11G_Ant1_2412

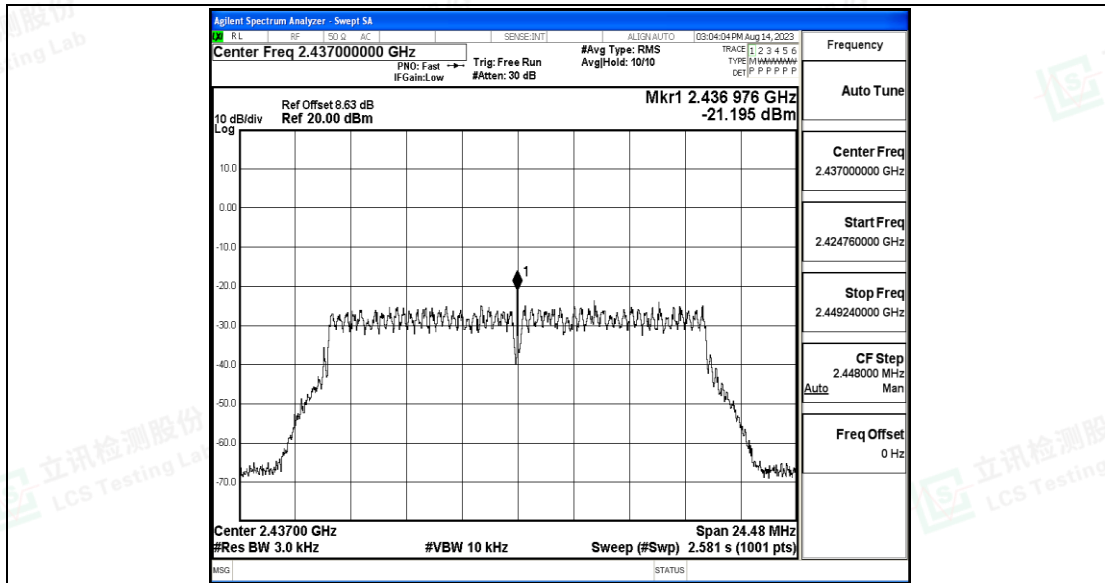


11G_Ant1_2437

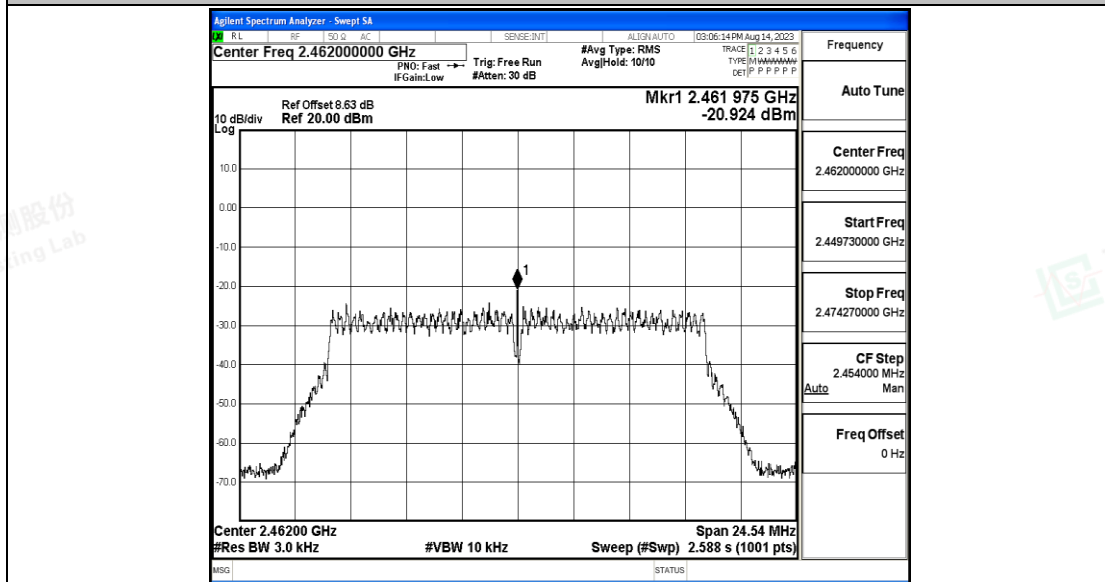




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11G_Ant1_2462

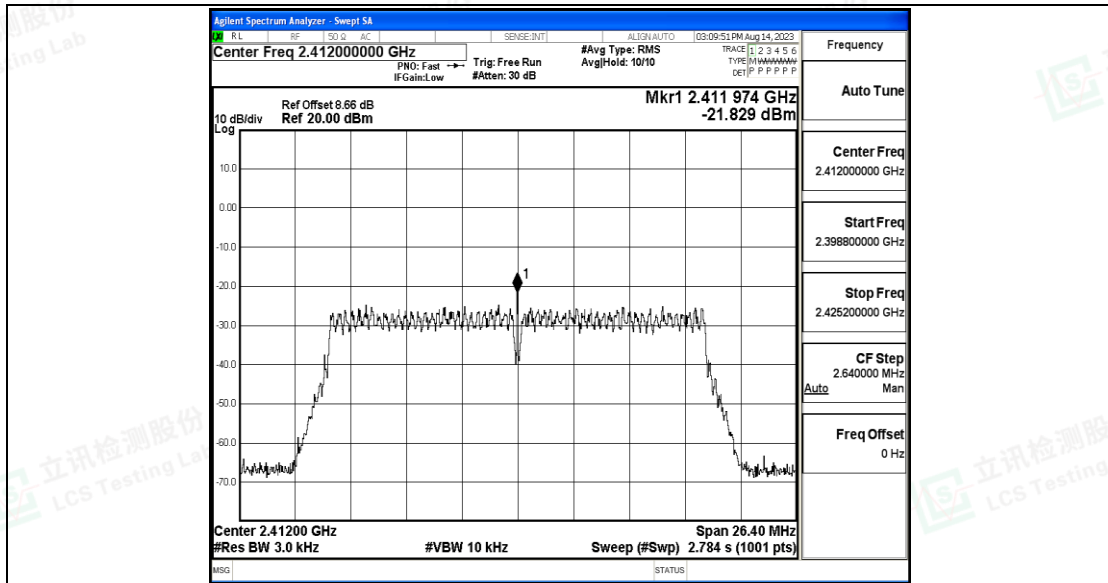


11N20SISO_Ant1_2412

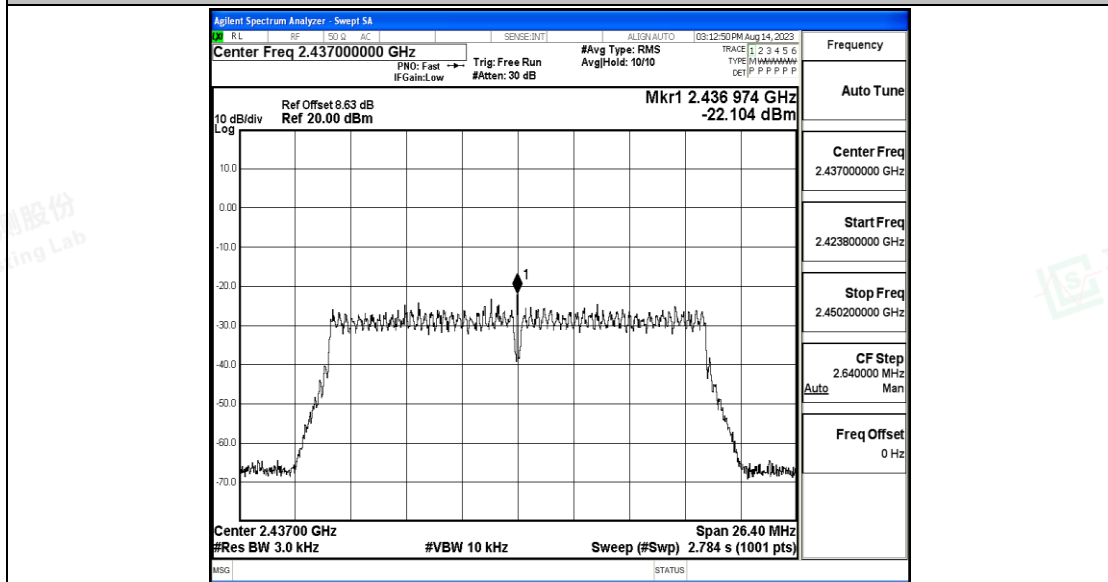




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11N20SISO_Ant1_2437

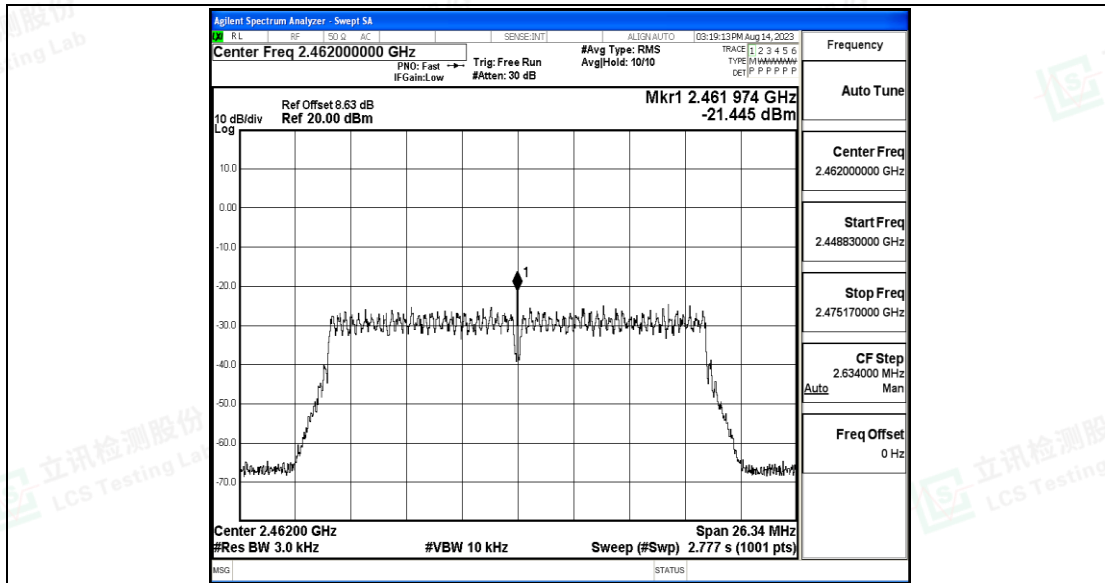


11N20SISO_Ant1_2462

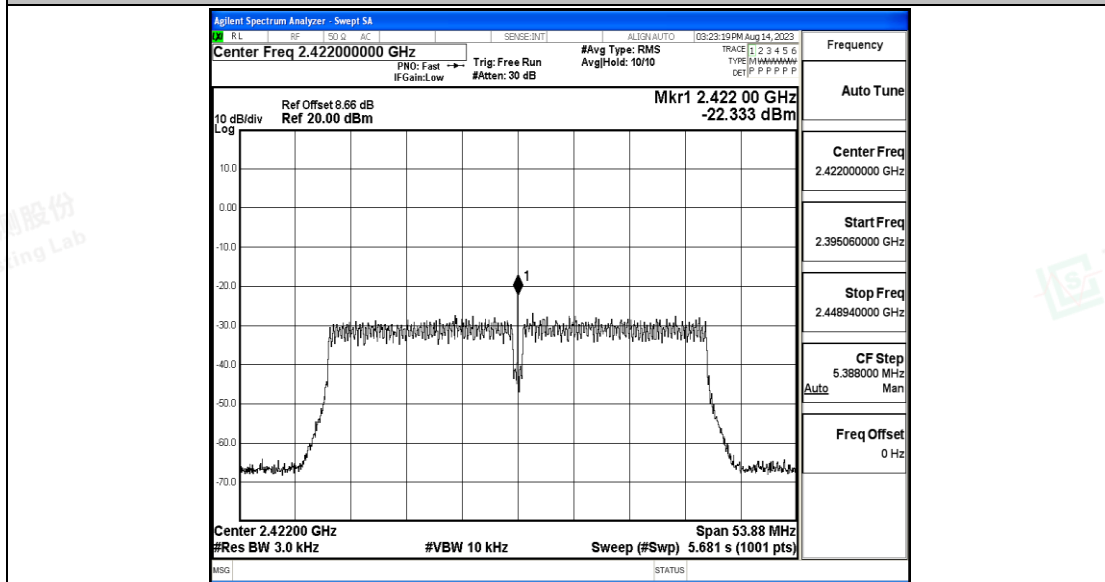




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11N40SISO_Ant1_2422

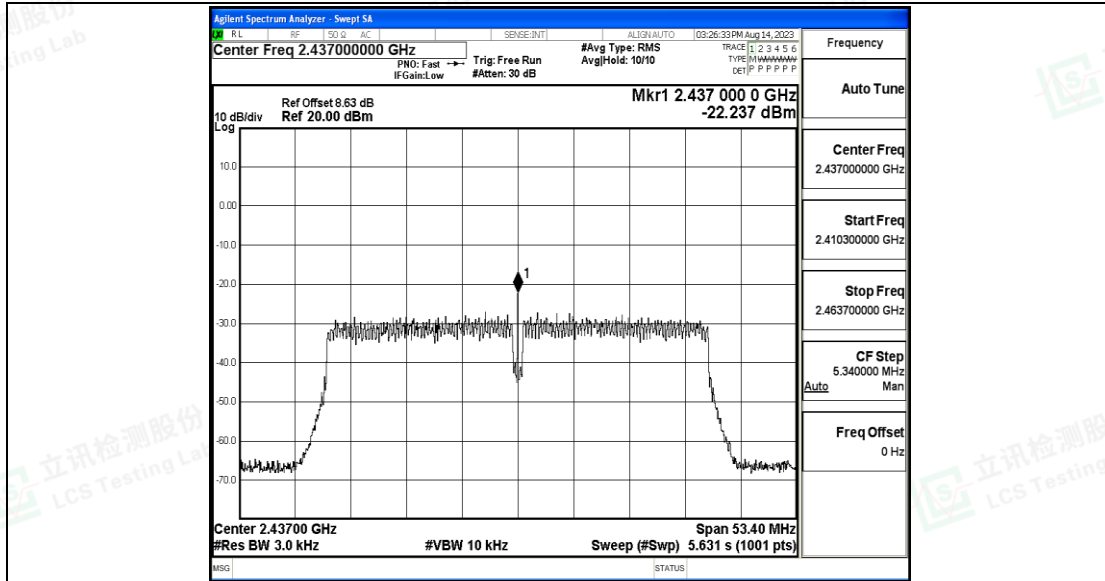


11N40SISO_Ant1_2437

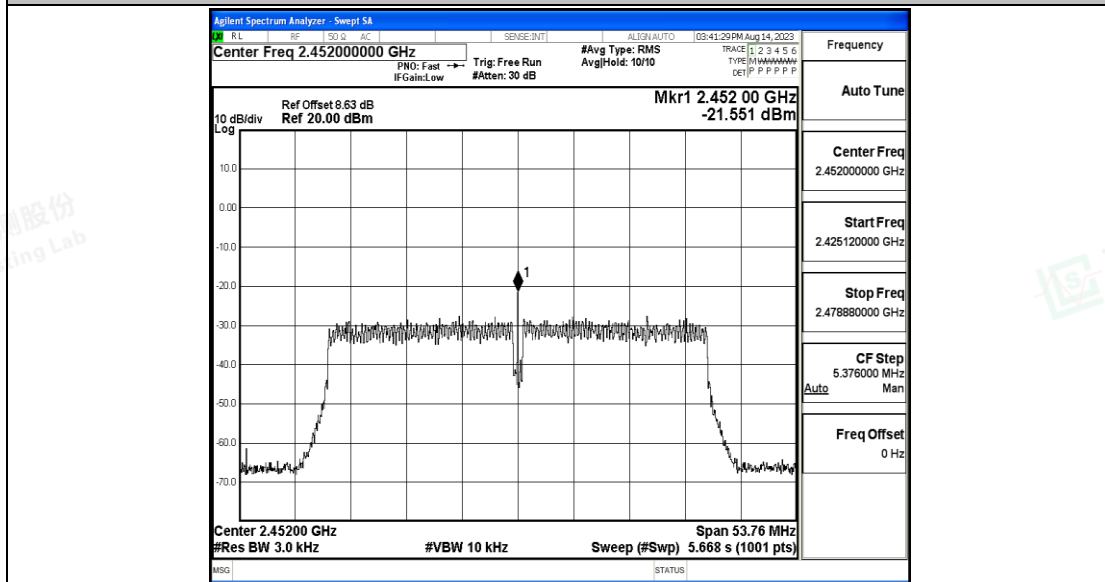




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11N40SISO_Ant1_2452





Appendix E: Reference level measurement

Test Result

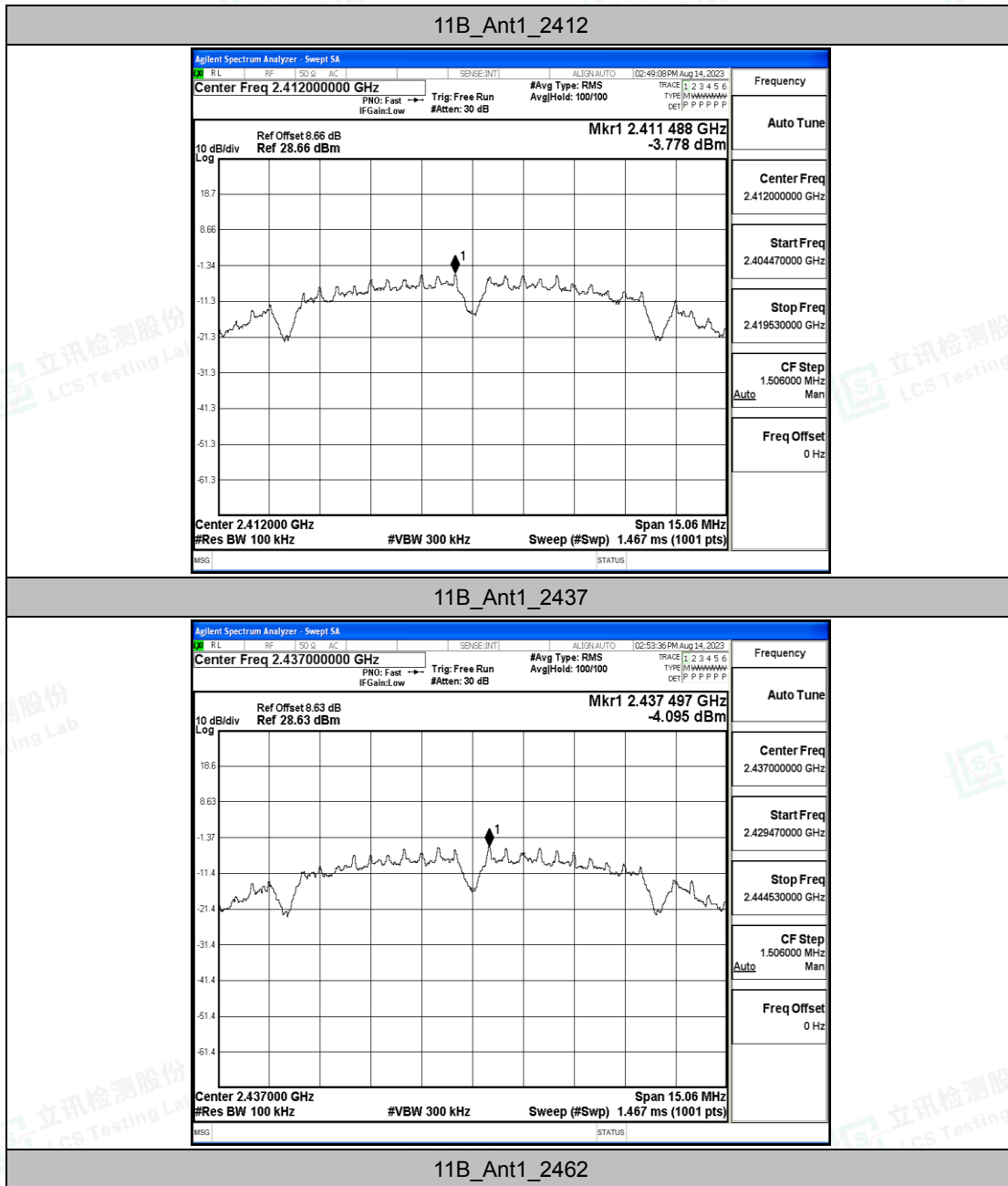
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2411.49	-3.78
		2437	2437.50	-4.10
		2462	2461.00	-4.04
11G	Ant1	2412	2404.52	-10.70
		2437	2438.25	-10.13
		2462	2463.25	-10.70
11N20SISO	Ant1	2412	2414.46	-10.82
		2437	2438.21	-10.67
		2462	2463.26	-10.46
11N40SISO	Ant1	2422	2419.47	-13.22
		2437	2439.51	-13.05
		2452	2449.47	-13.19





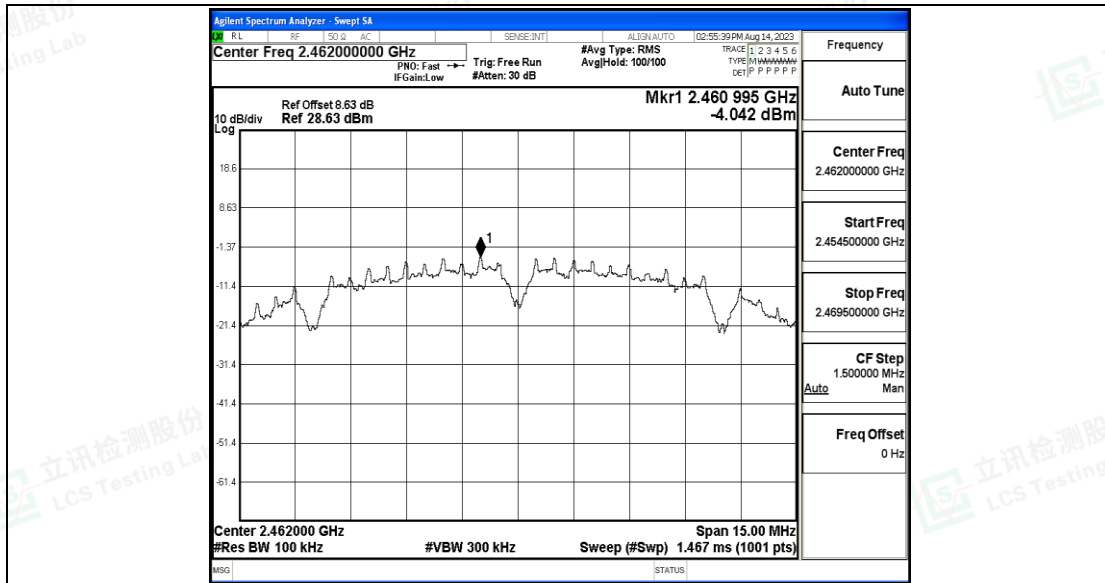
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Test Graphs

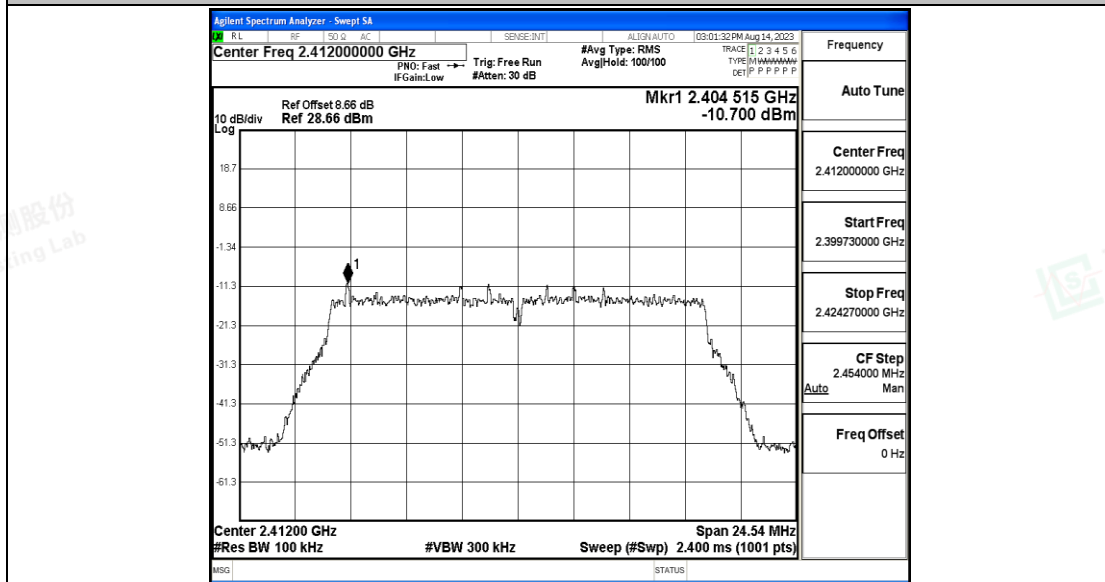




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11G_Ant1_2412

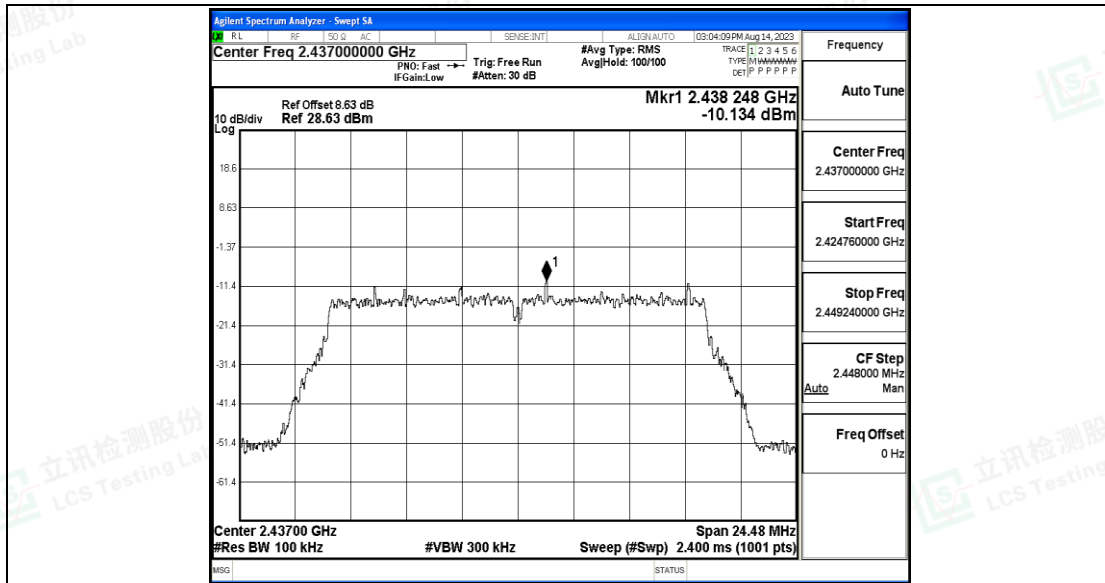


11G_Ant1_2437

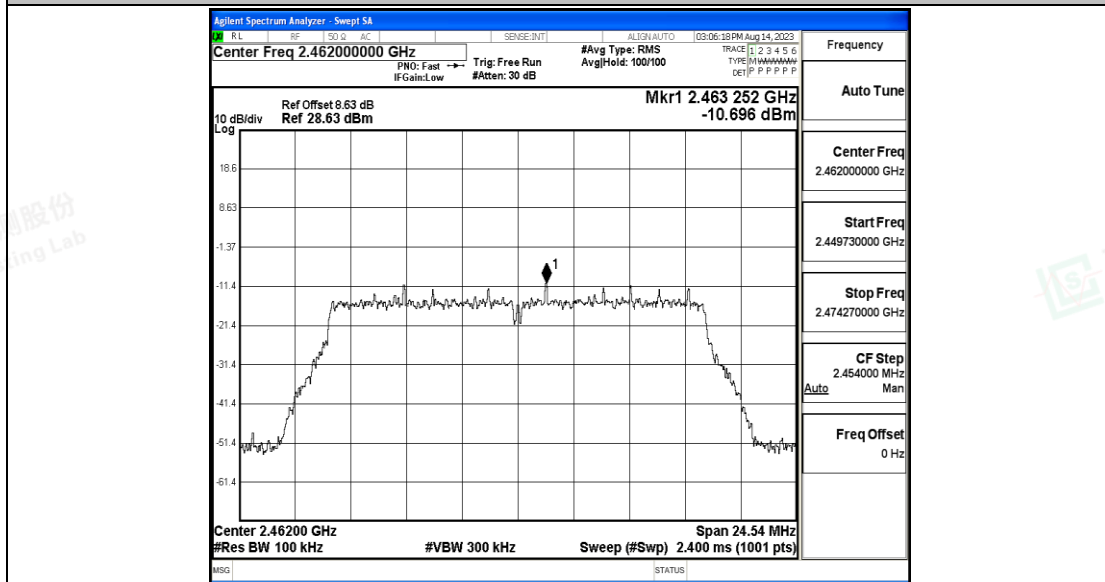




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11G_Ant1_2462

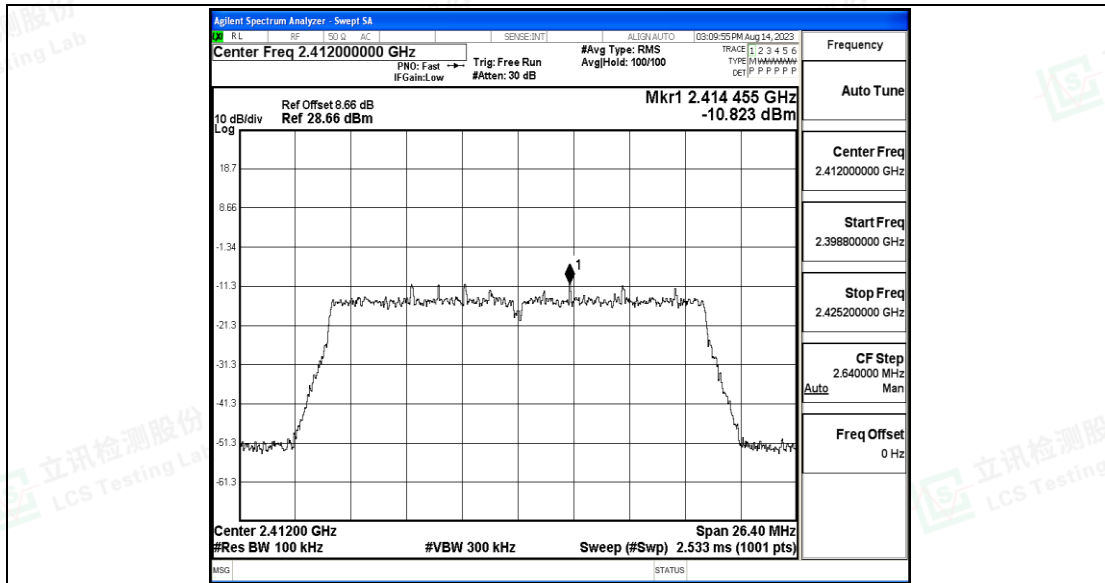


11N20SISO_Ant1_2412

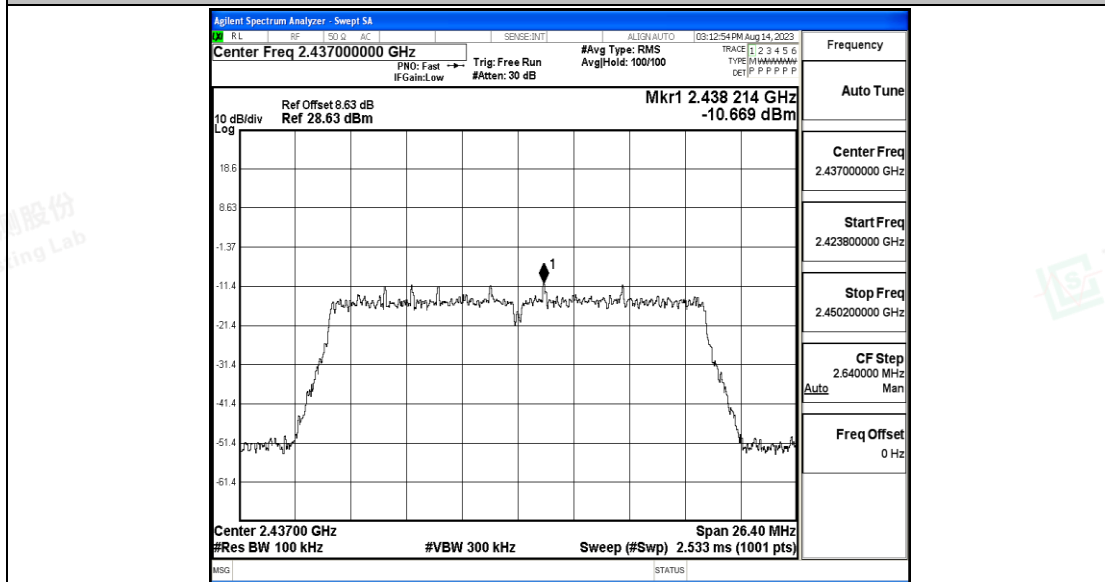




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11N20SISO_Ant1_2437

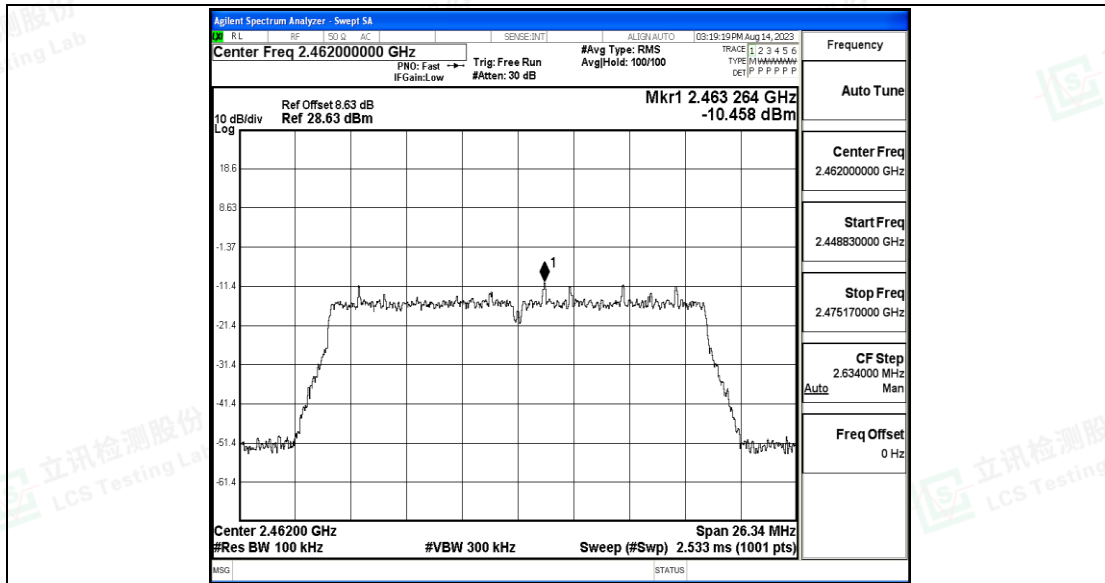


11N20SISO_Ant1_2462

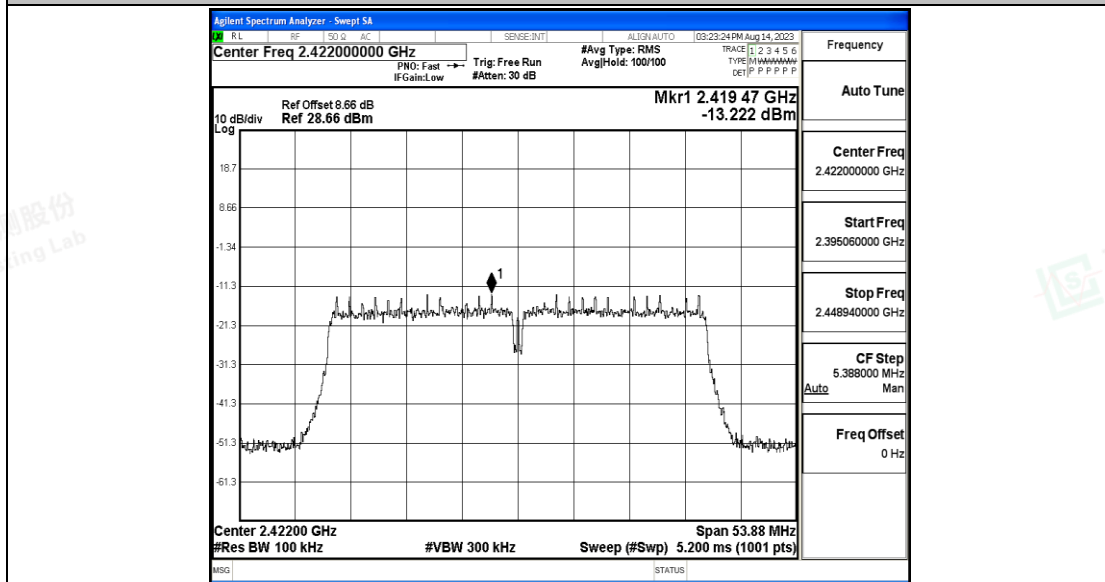




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11N40SISO_Ant1_2422

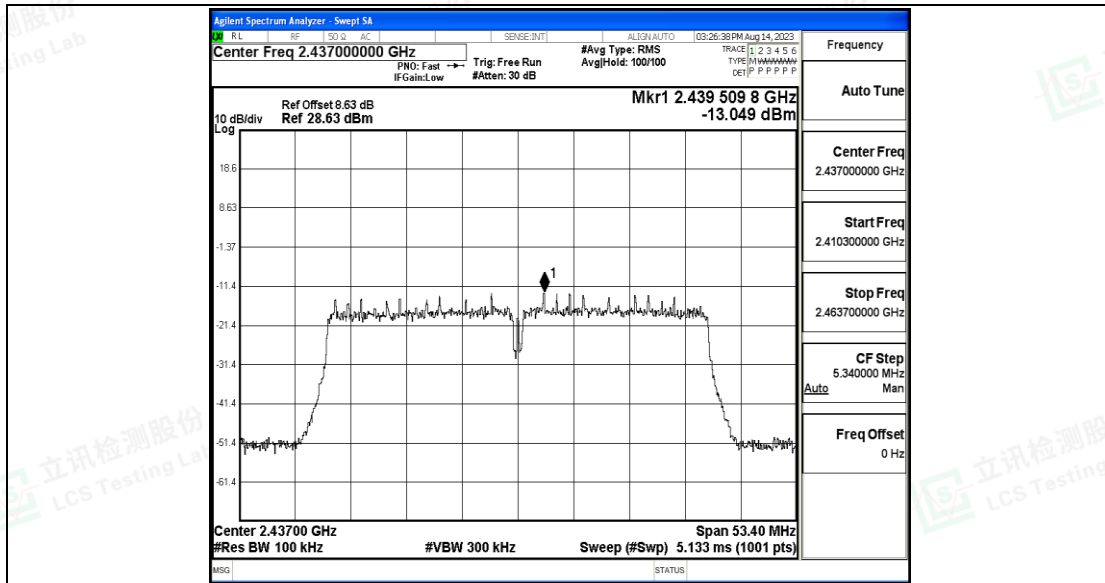


11N40SISO_Ant1_2437

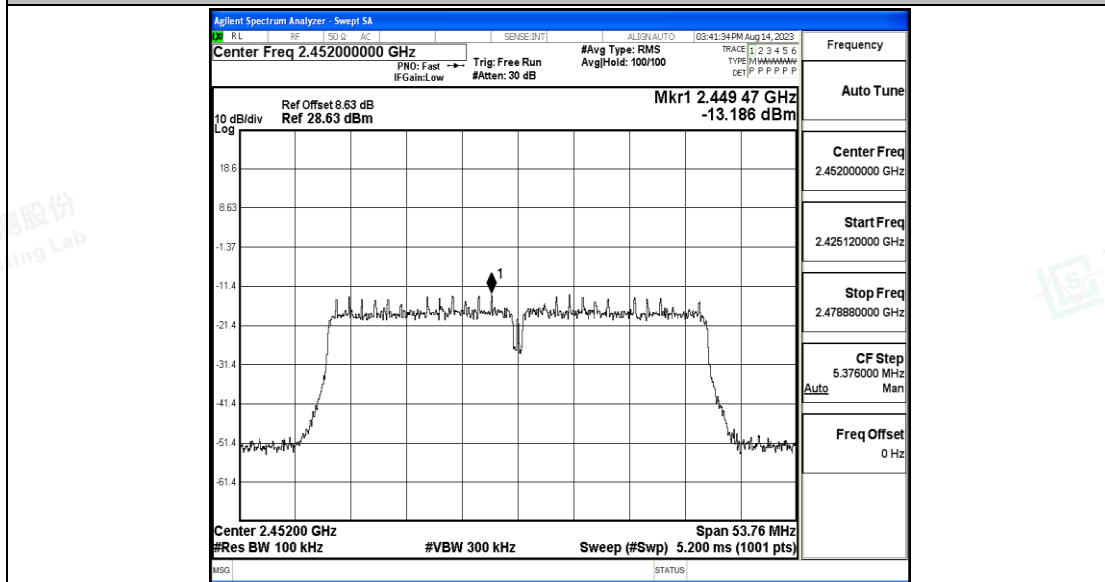




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11N40SISO_Ant1_2452





A.4 Band edge measurements

Test Result

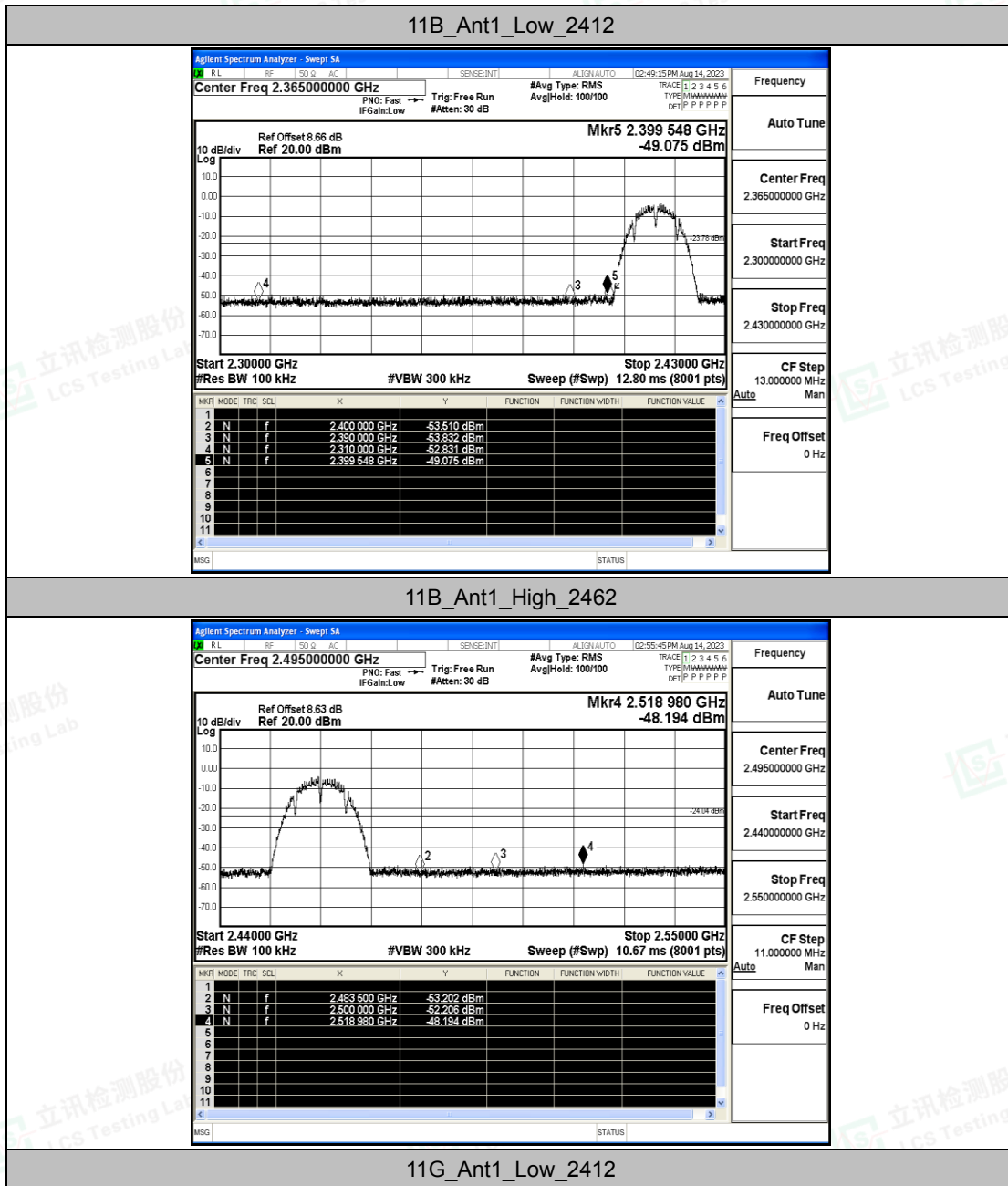
TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-3.78	-49.08	≤-23.78	PASS
		High	2462	-4.04	-48.19	≤-24.04	PASS
11G	Ant1	Low	2412	-10.70	-49.34	≤-30.7	PASS
		High	2462	-10.70	-48.01	≤-30.7	PASS
11N20SISO	Ant1	Low	2412	-10.82	-49.41	≤-30.82	PASS
		High	2462	-10.46	-48.88	≤-30.46	PASS
11N40SISO	Ant1	Low	2422	-13.22	-48.19	≤-33.22	PASS
		High	2452	-13.19	-48.88	≤-33.19	PASS





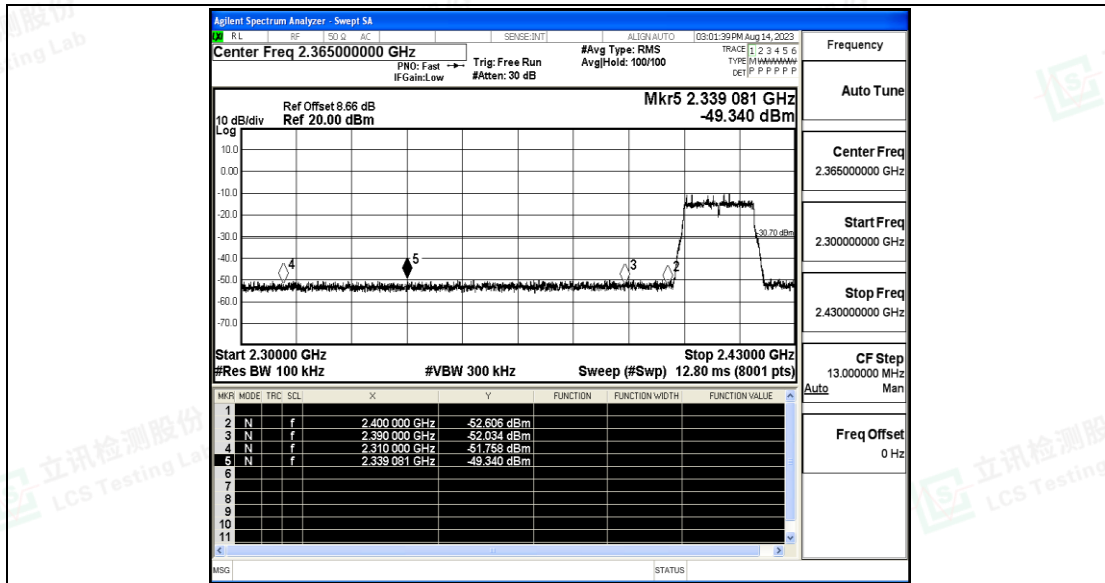
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Test Graphs

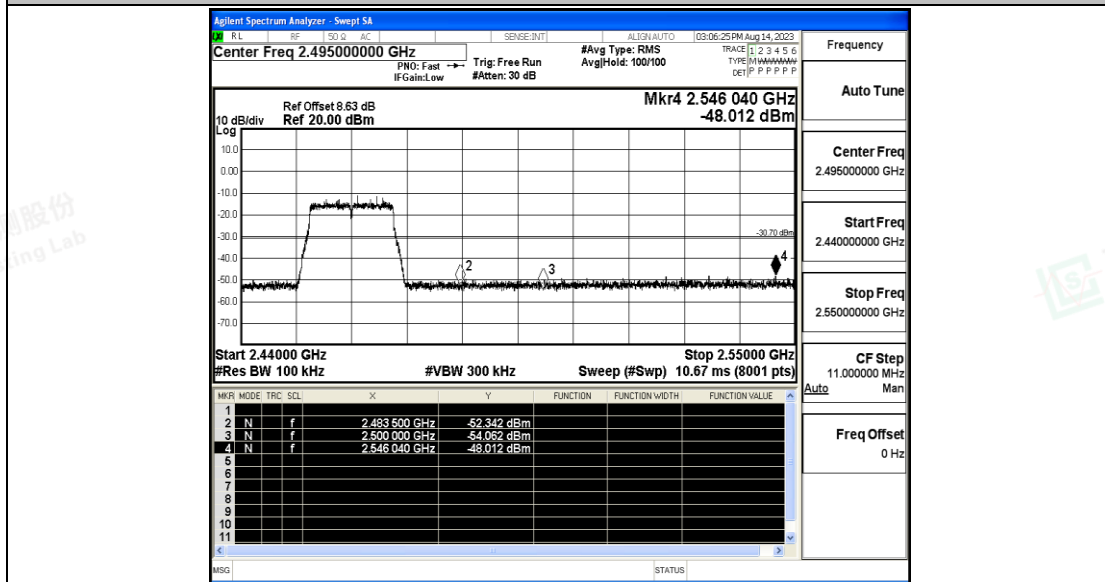




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11G_Ant1_High_2462

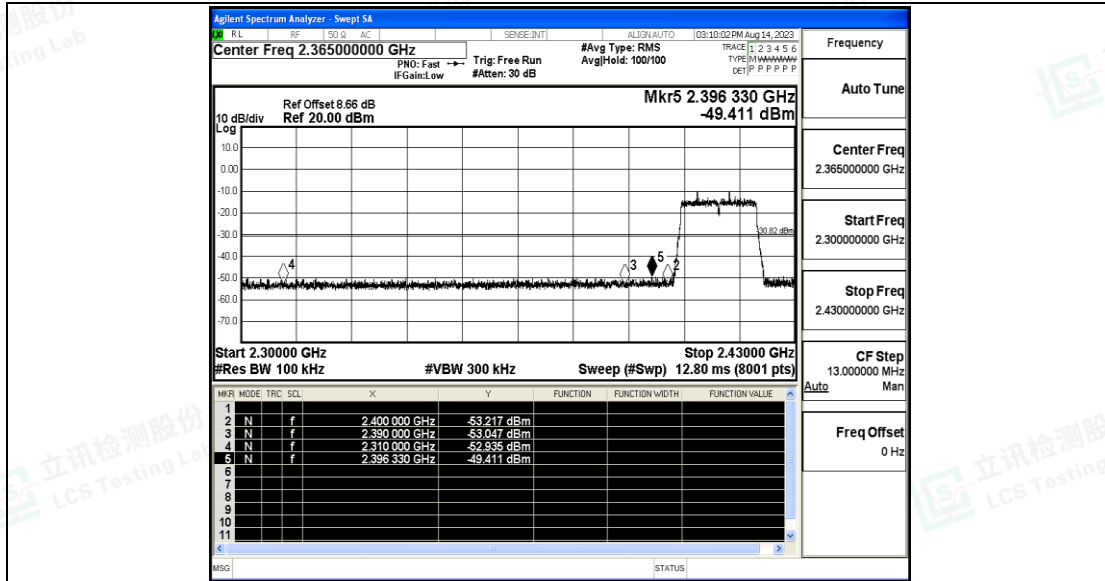


11N20SISO_Ant1_Low_2412

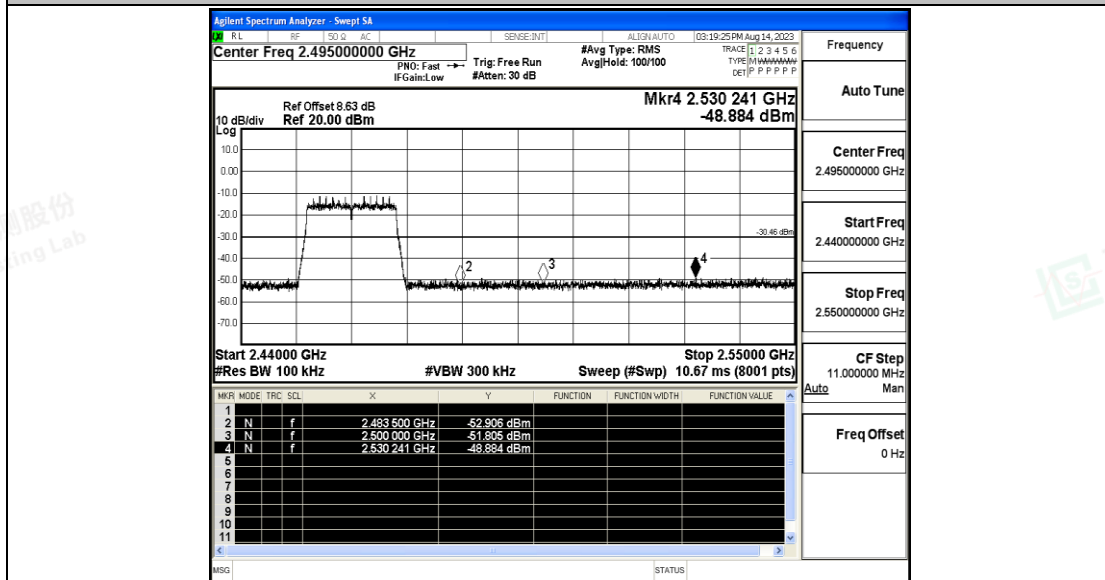




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11N20SISO_Ant1_High_2462

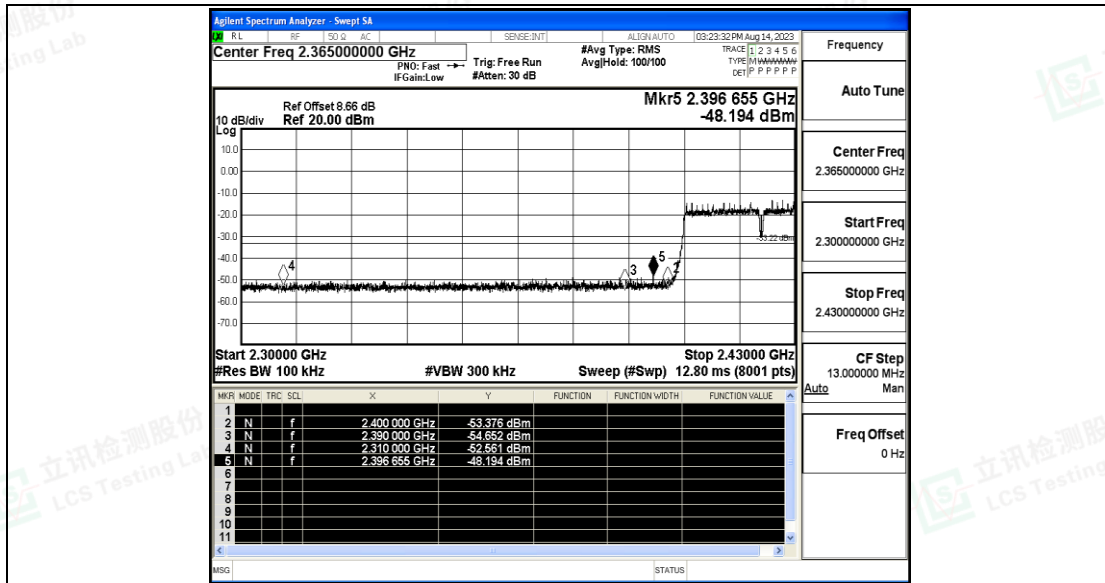


11N40SISO_Ant1_Low_2422

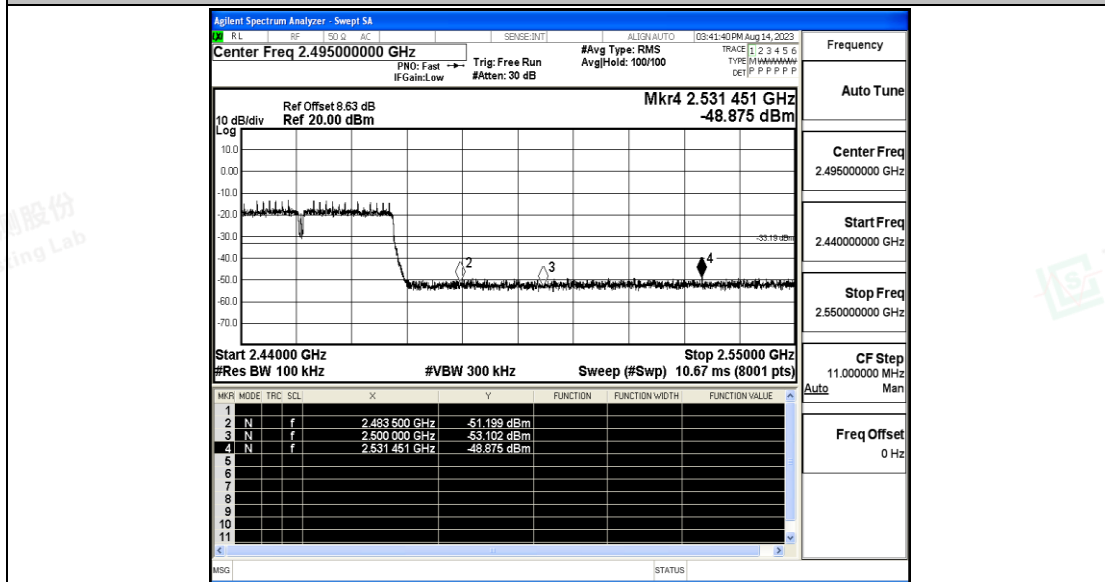




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11N40SISO_Ant1_High_2452





A.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	-3.78	-61.69	≤-23.78	PASS
			1000~26500	-3.78	-46.47	≤-23.78	PASS
		2437	30~1000	-4.10	-61.44	≤-24.1	PASS
			1000~26500	-4.10	-46.95	≤-24.1	PASS
		2462	30~1000	-4.04	-60.67	≤-24.04	PASS
			1000~26500	-4.04	-46.72	≤-24.04	PASS
11G	Ant1	2412	30~1000	-10.70	-60.67	≤-30.7	PASS
			1000~26500	-10.70	-47.04	≤-30.7	PASS
		2437	30~1000	-10.13	-60.59	≤-30.13	PASS
			1000~26500	-10.13	-47.11	≤-30.13	PASS
		2462	30~1000	-10.70	-61.22	≤-30.7	PASS
			1000~26500	-10.70	-47.01	≤-30.7	PASS
11N20SISO	Ant1	2412	30~1000	-10.82	-61.41	≤-30.82	PASS
			1000~26500	-10.82	-46.64	≤-30.82	PASS
		2437	30~1000	-10.67	-60.61	≤-30.67	PASS
			1000~26500	-10.67	-45.93	≤-30.67	PASS
		2462	30~1000	-10.46	-61.28	≤-30.46	PASS
			1000~26500	-10.46	-46.98	≤-30.46	PASS
11N40SISO	Ant1	2422	30~1000	-13.22	-61.2	≤-33.22	PASS
			1000~26500	-13.22	-46.58	≤-33.22	PASS
		2437	30~1000	-13.05	-61.27	≤-33.05	PASS
			1000~26500	-13.05	-47.33	≤-33.05	PASS
		2452	30~1000	-13.19	-61.36	≤-33.19	PASS
			1000~26500	-13.19	-47.01	≤-33.19	PASS





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Test Graphs

