



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Formuler Z11 Pro Max

Test Model: Z11 Pro Max

Environmental Conditions

Temperature:	23.9 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	 Ling Zhu
Supervised by:	 Li Huan





C.1 DTS Bandwidth

Test Result

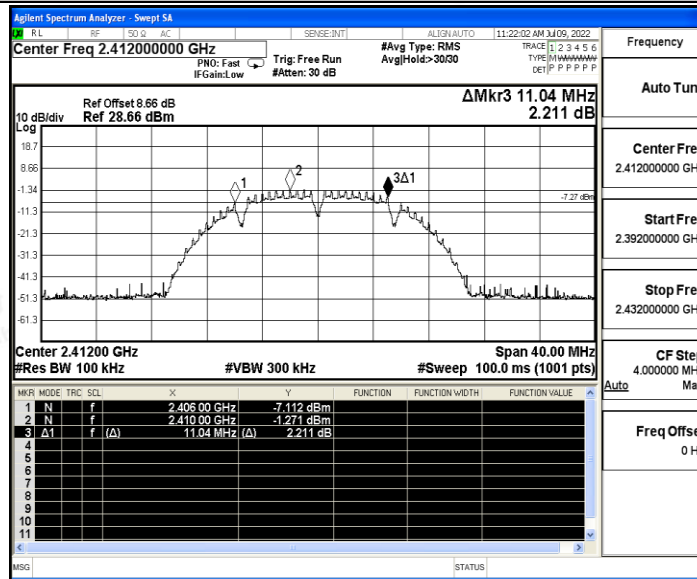
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant0	2412	11.040	2406.000	2417.040	0.5	PASS
		2437	12.000	2431.000	2443.000	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant0	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant0	2412	17.520	2403.240	2420.760	0.5	PASS
		2437	16.920	2428.480	2445.400	0.5	PASS
		2462	17.280	2453.480	2470.760	0.5	PASS
11N40SISO	Ant0	2422	35.520	2404.240	2439.760	0.5	PASS
		2437	35.680	2419.080	2454.760	0.5	PASS
		2452	35.520	2434.240	2469.760	0.5	PASS
11AX20SISO	Ant0	2412	18.000	2402.760	2420.760	0.5	PASS
		2437	18.480	2427.760	2446.240	0.5	PASS
		2462	18.160	2452.760	2470.920	0.5	PASS
11AX40SISO	Ant0	2422	37.520	2403.440	2440.960	0.5	PASS
		2437	37.520	2418.440	2455.960	0.5	PASS
		2452	37.520	2433.440	2470.960	0.5	PASS



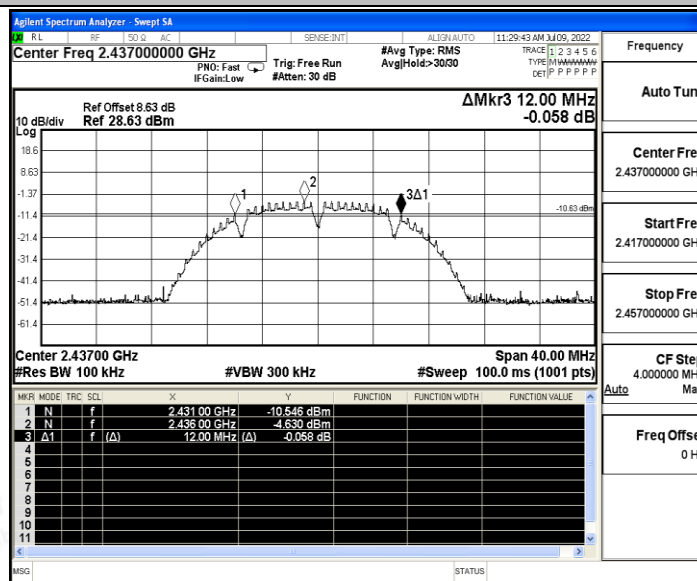


Test Graphs

11B_Ant0_2412

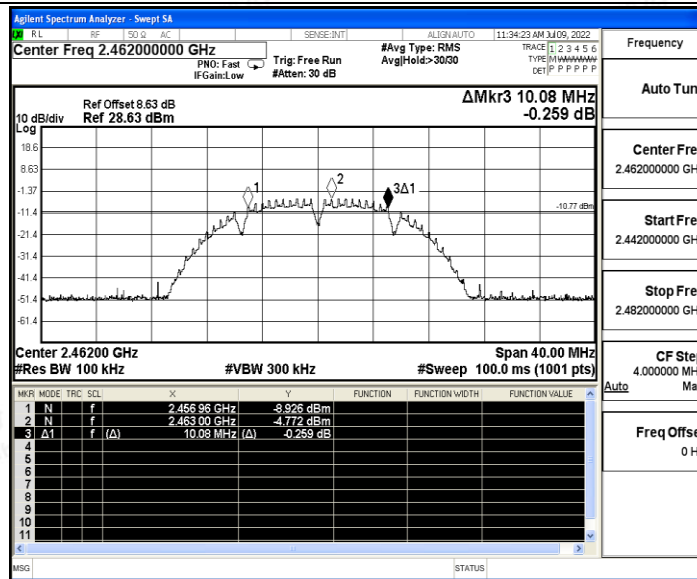


11B_Ant0_2437

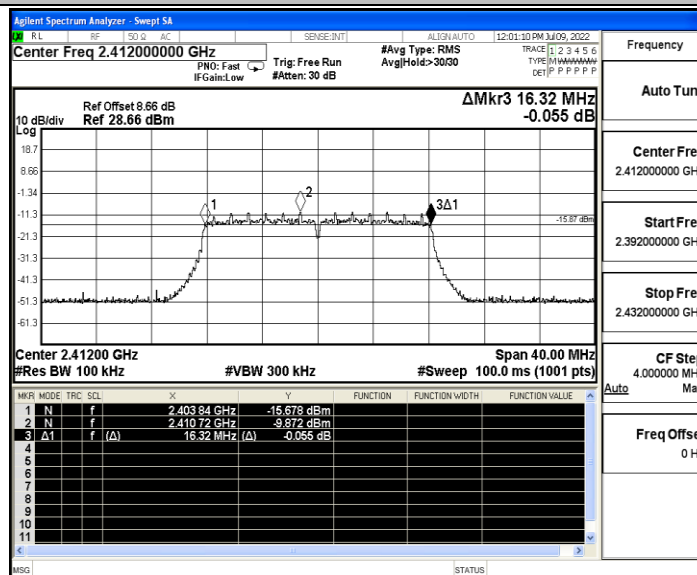


11B_Ant0_2462



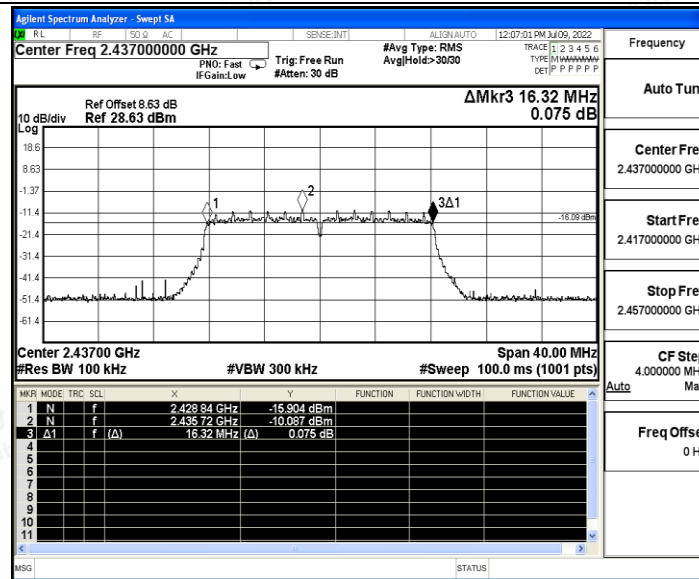


11G_Ant0_2412

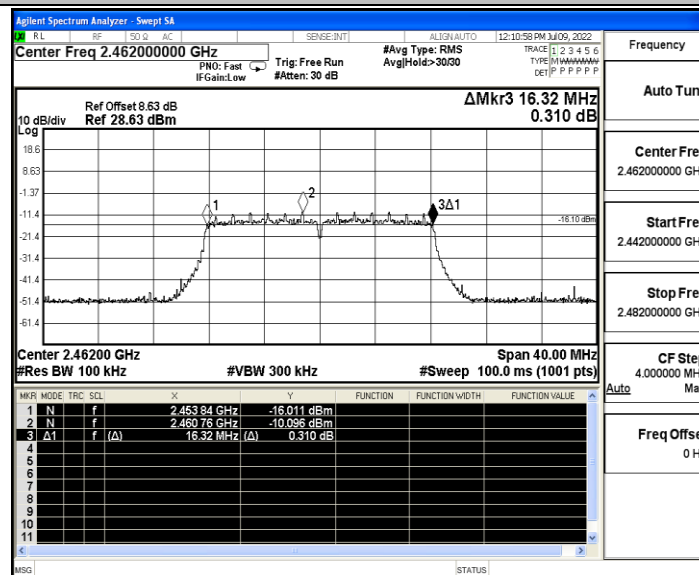


11G_Ant0_2437



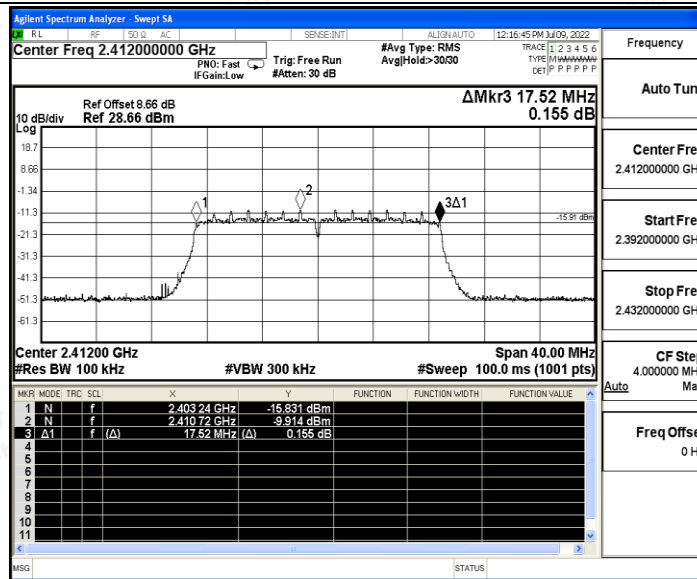


11G_Ant0_2462

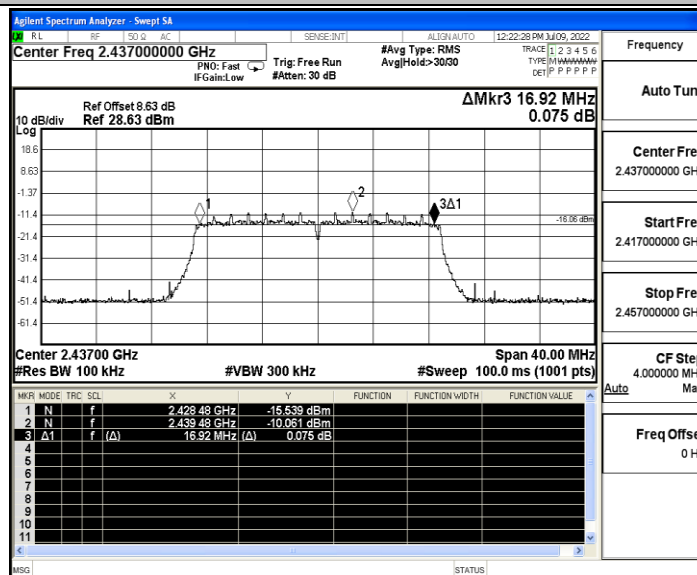


11N20SISO_Ant0_2412



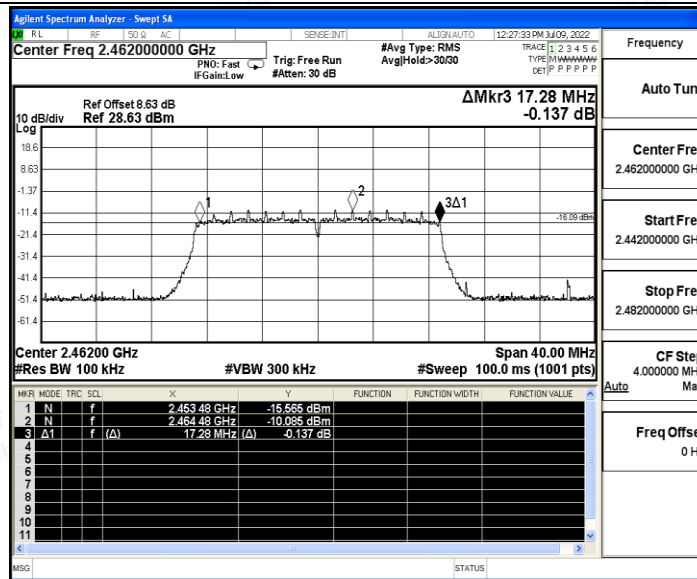


11N20SISO_Ant0_2437

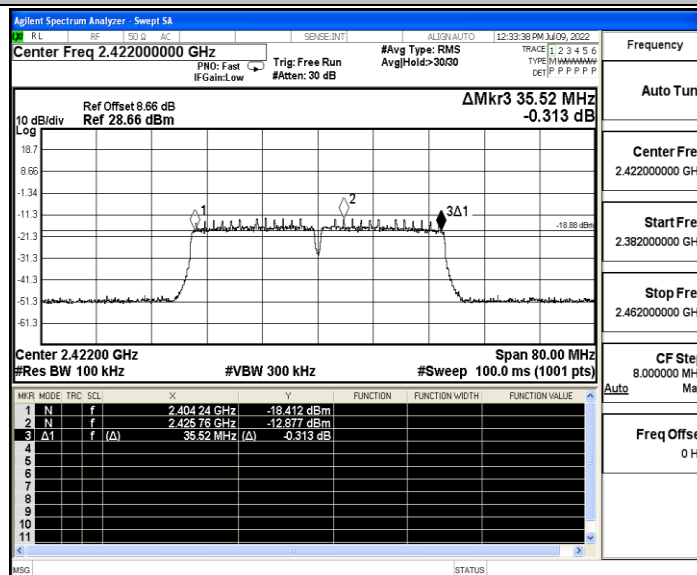


11N20SISO_Ant0_2462



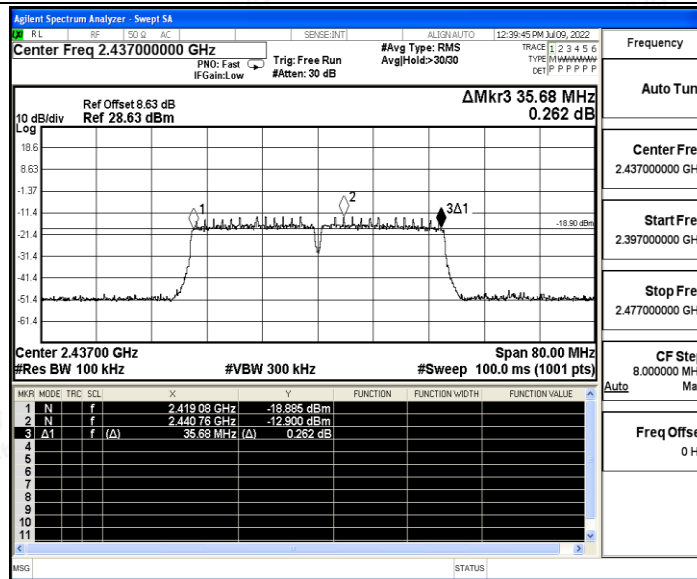


11N40SISO_Ant0_2422

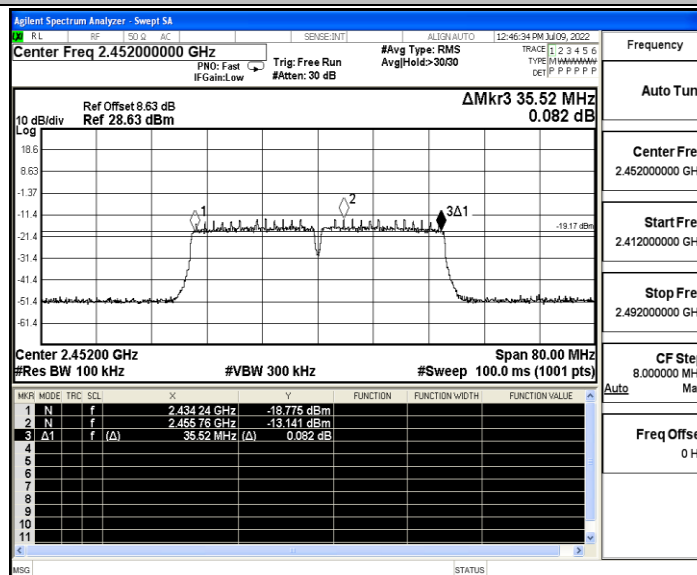


11N40SISO_Ant0_2437



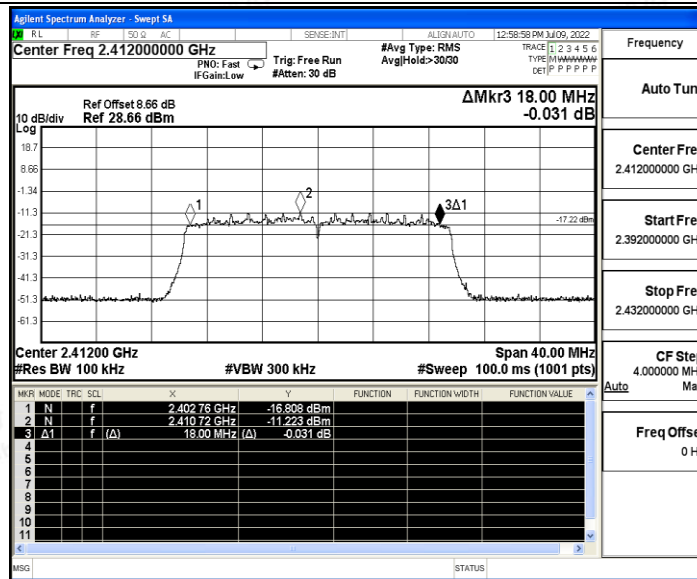


11N40SISO_Ant0_2452

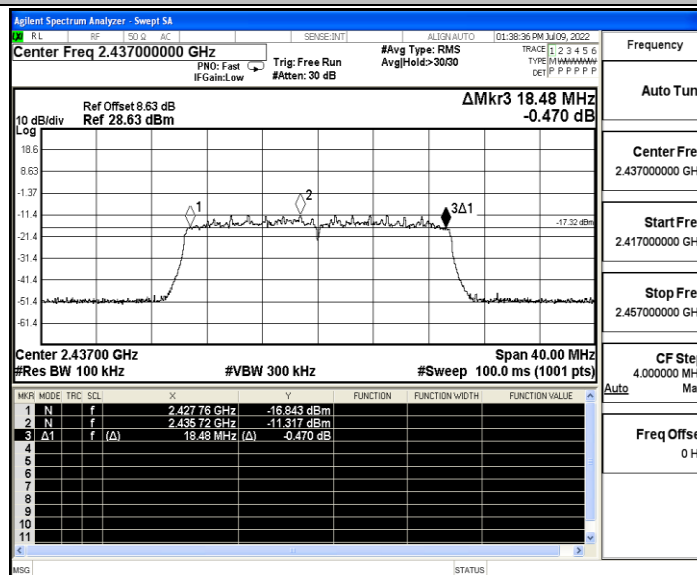


11AX20SISO_Ant0_2412



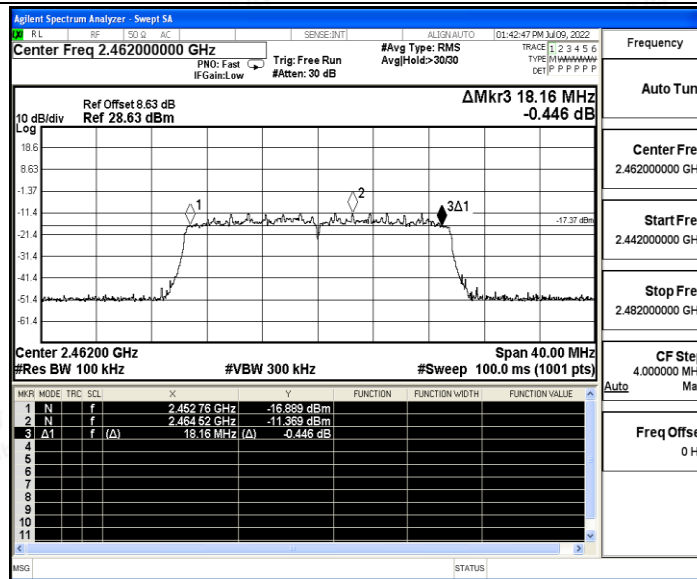


11AX20SISO_Ant0_2437

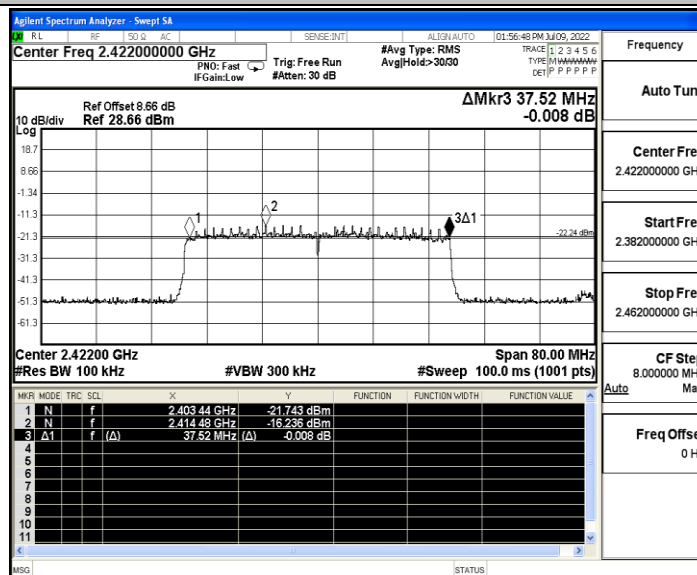


11AX20SISO_Ant0_2462



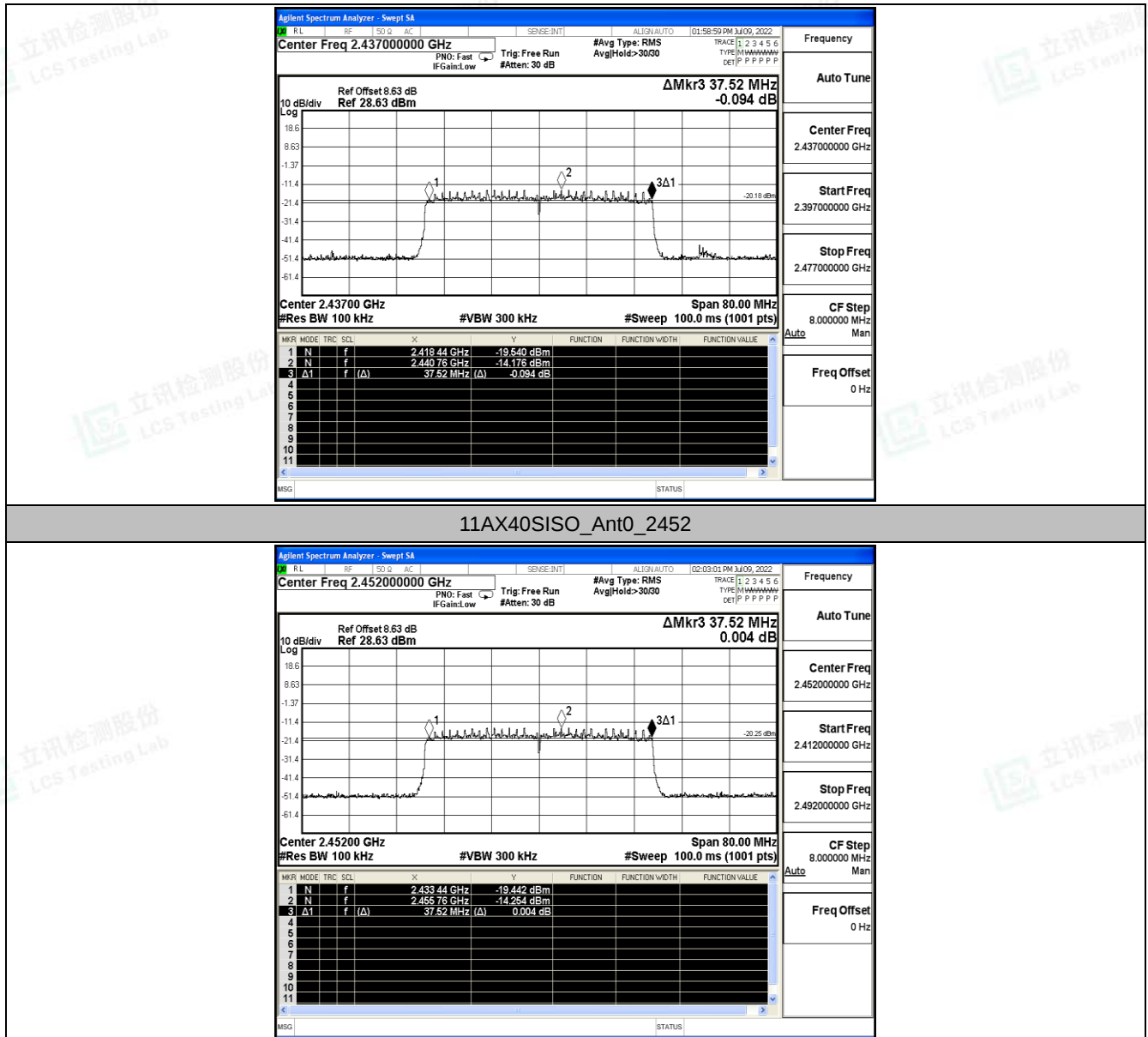


11AX40SISO_Ant0_2422



11AX40SISO_Ant0_2437





**Test Result**

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.000	2406.000	2418.000	0.5	PASS
		2437	11.040	2431.000	2442.040	0.5	PASS
		2462	11.040	2456.960	2468.000	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.280	2428.840	2445.120	0.5	PASS
		2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.240	2420.520	0.5	PASS
		2437	16.920	2428.240	2445.160	0.5	PASS
		2462	17.240	2453.240	2470.480	0.5	PASS
11N40SISO	Ant1	2422	35.520	2404.080	2439.600	0.5	PASS
		2437	35.520	2419.080	2454.600	0.5	PASS
		2452	35.680	2434.080	2469.760	0.5	PASS
11AX20SISO	Ant1	2412	18.000	2402.760	2420.760	0.5	PASS
		2437	18.000	2427.760	2445.760	0.5	PASS
		2462	18.000	2452.760	2470.760	0.5	PASS
11AX40SISO	Ant1	2422	37.200	2403.440	2440.640	0.5	PASS
		2437	37.520	2418.440	2455.960	0.5	PASS
		2452	37.520	2433.440	2470.960	0.5	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

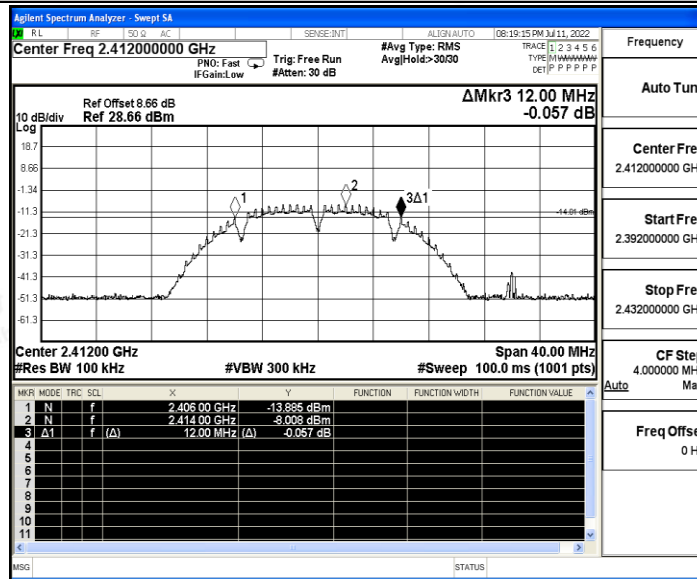
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

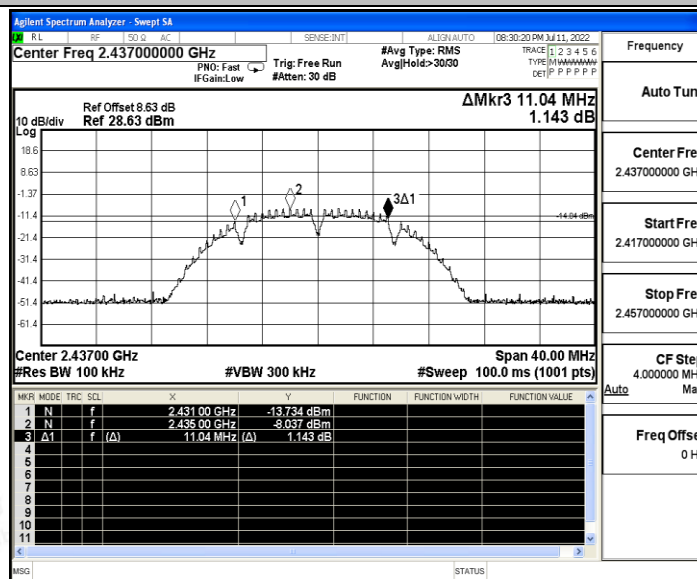


Test Graphs

11B_Ant1_2412

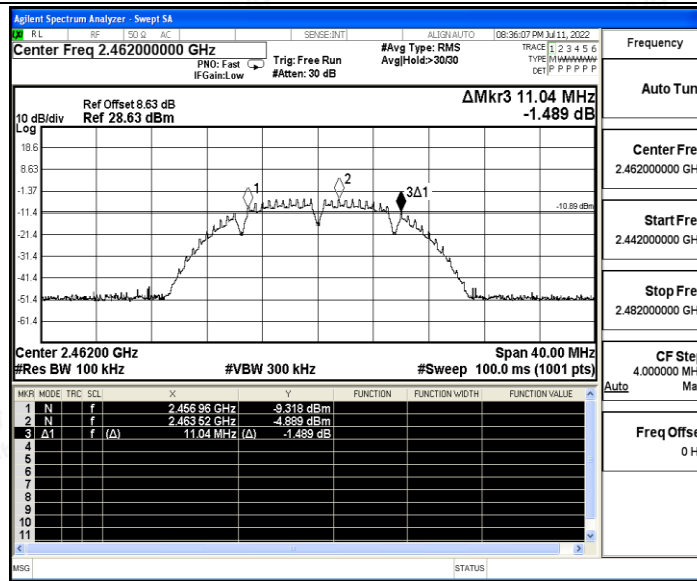


11B_Ant1_2437

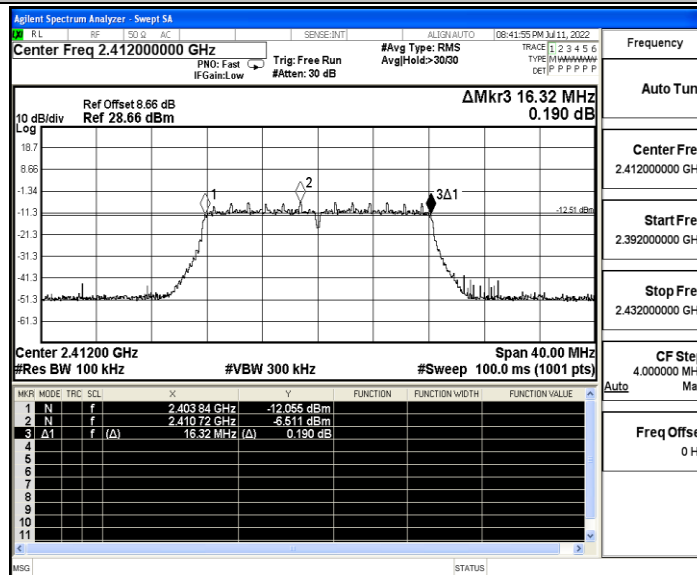


11B_Ant1_2462



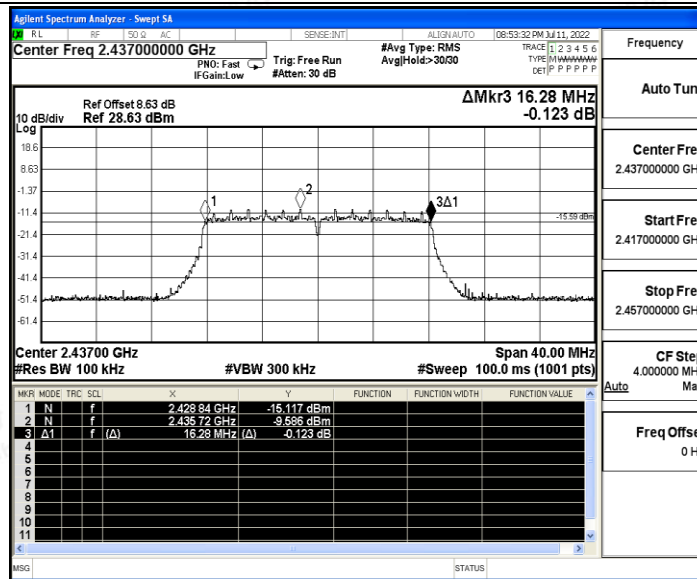


11G_Ant1_2412

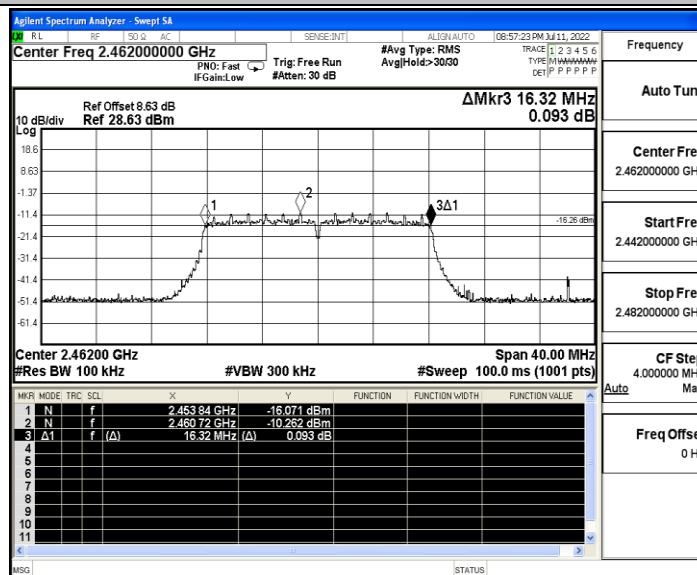


11G_Ant1_2437



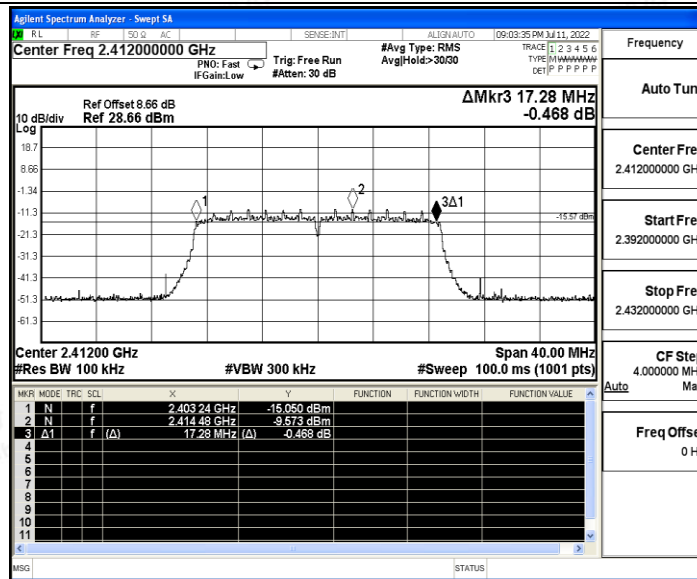


11G_Ant1_2462

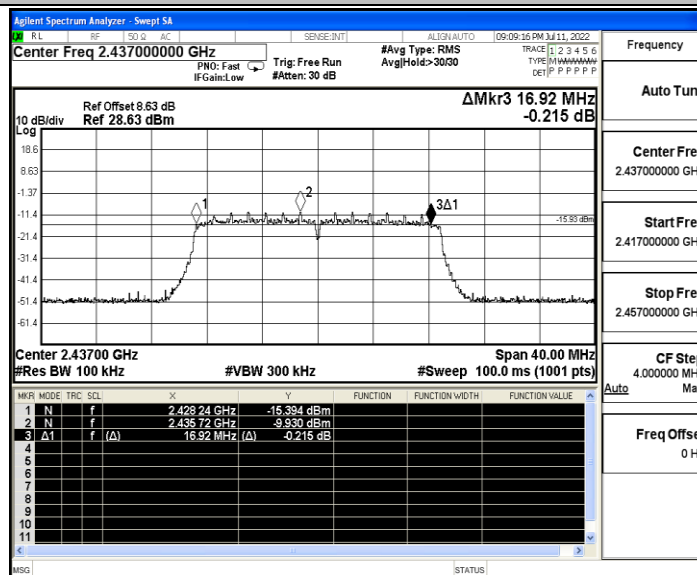


11N20SISO_Ant1_2412



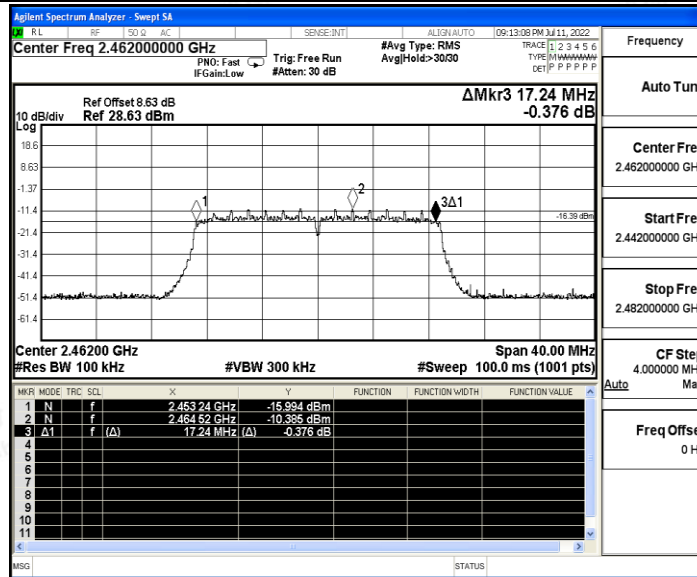


11N20SISO_Ant1_2437

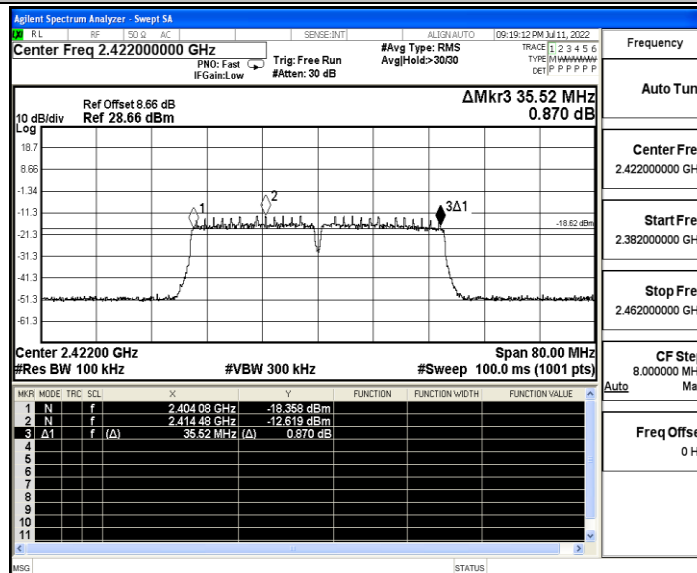


11N20SISO_Ant1_2462



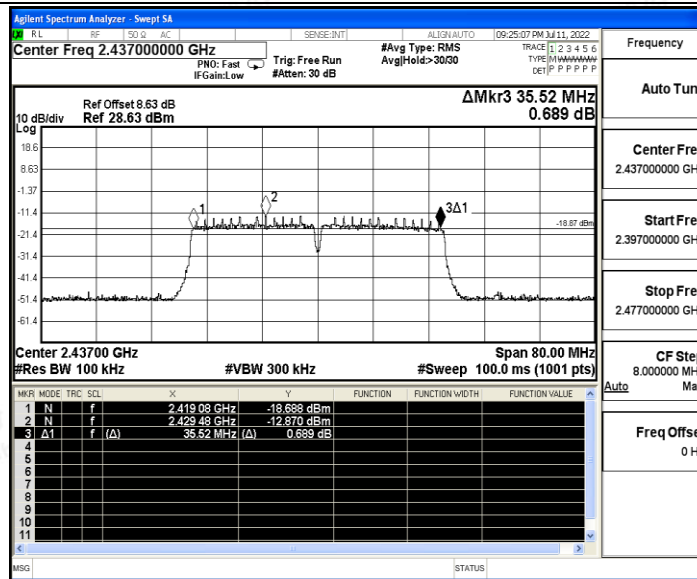


11N40SISO_Ant1_2422

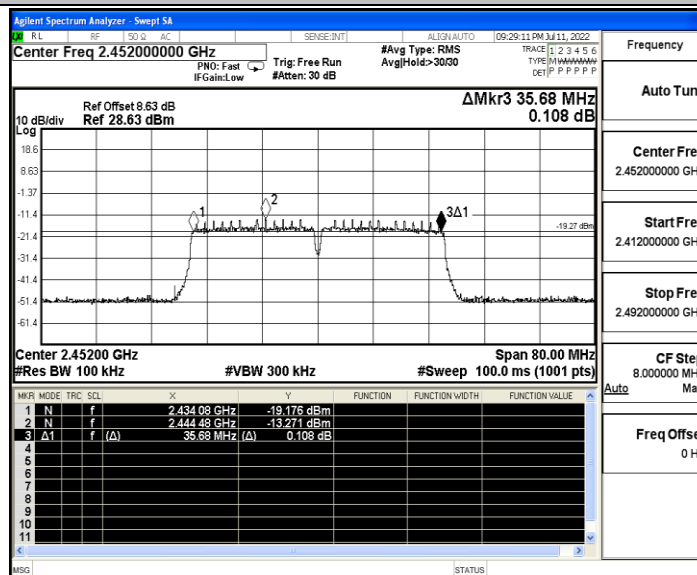


11N40SISO_Ant1_2437



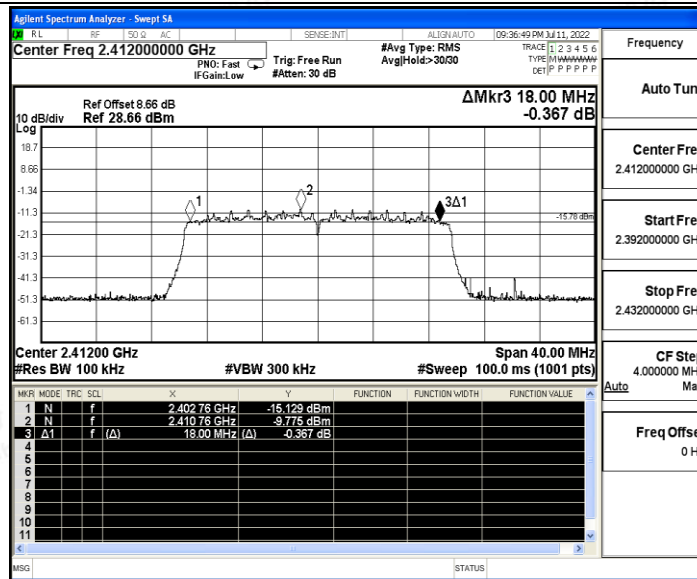


11N40SISO_Ant1_2452

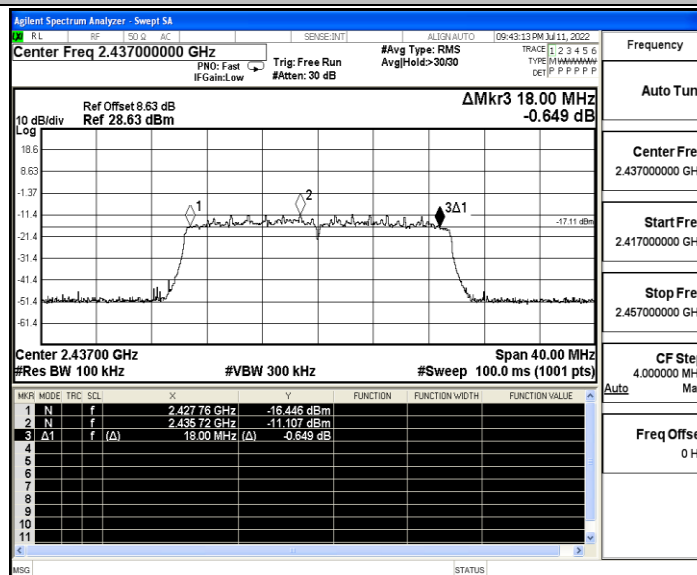


11AX20SISO_Ant1_2412



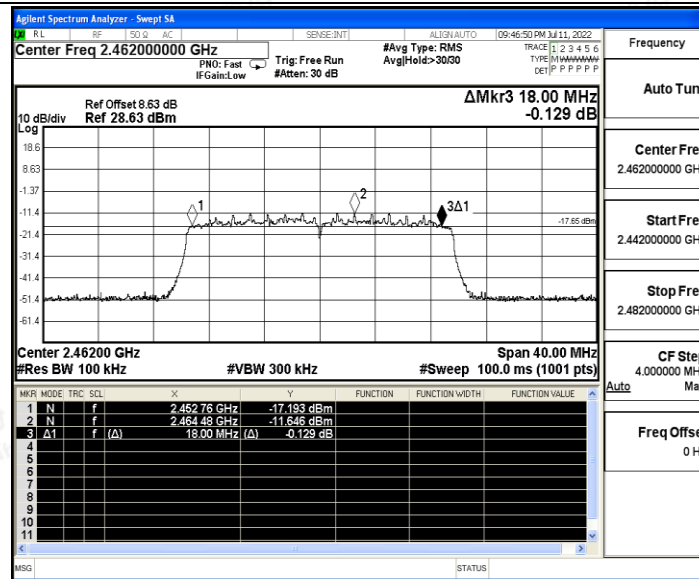


11AX20SISO_Ant1_2437

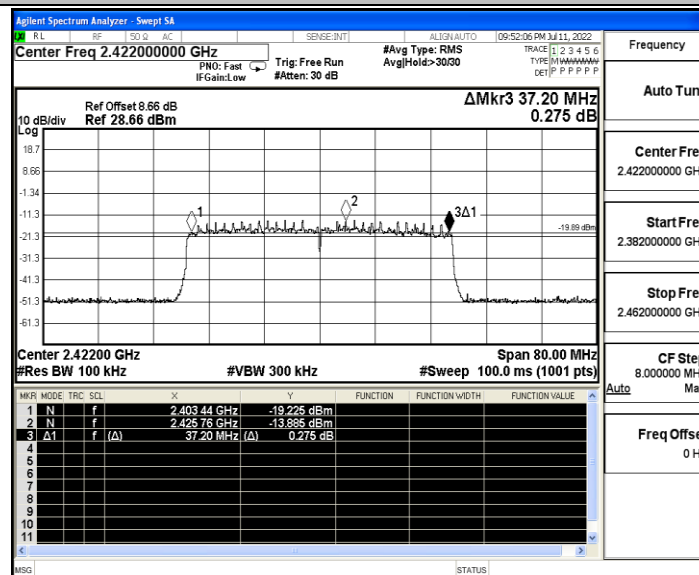


11AX20SISO_Ant1_2462



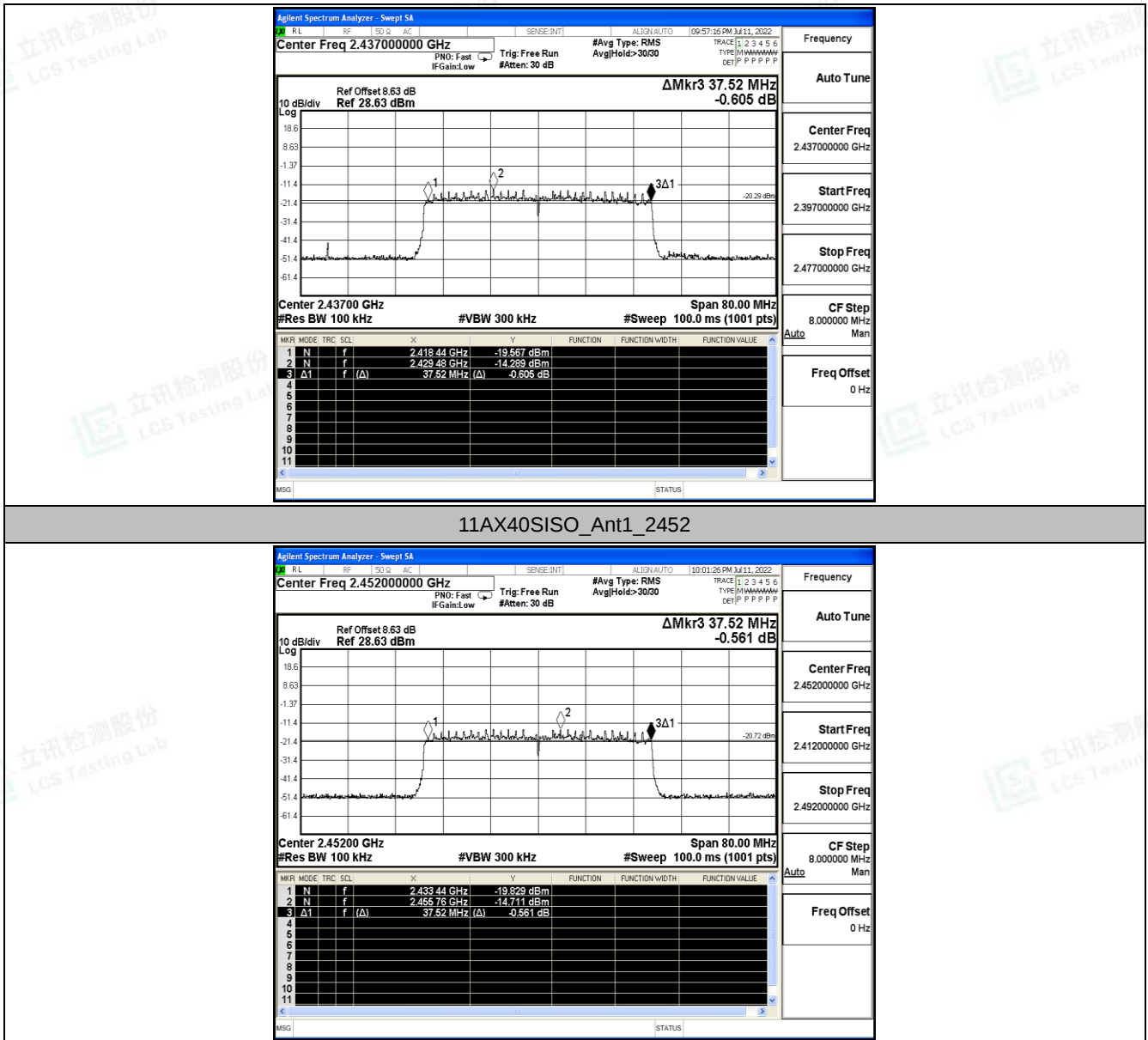


11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437







C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	2412	8.61	≤30.00	PASS
		2437	8.11	≤30.00	PASS
		2462	8.09	≤30.00	PASS
11G	Ant0	2412	9.29	≤30.00	PASS
		2437	9.20	≤30.00	PASS
		2462	9.24	≤30.00	PASS
11N20SISO	Ant0	2412	9.32	≤30.00	PASS
		2437	9.09	≤30.00	PASS
		2462	9.25	≤30.00	PASS
11N40SISO	Ant0	2422	9.30	≤30.00	PASS
		2437	9.21	≤30.00	PASS
		2452	9.09	≤30.00	PASS
11AX20SISO	Ant0	2412	9.10	≤30.00	PASS
		2437	9.09	≤30.00	PASS
		2462	8.99	≤30.00	PASS
11AX40SISO	Ant0	2422	8.87	≤30.00	PASS
		2437	8.87	≤30.00	PASS
		2452	8.87	≤30.00	PASS





TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	8.66	≤30.00	PASS
		2437	8.49	≤30.00	PASS
		2462	8.04	≤30.00	PASS
11G	Ant1	2412	9.57	≤30.00	PASS
		2437	9.55	≤30.00	PASS
		2462	9.00	≤30.00	PASS
11N20SISO	Ant1	2412	9.78	≤30.00	PASS
		2437	9.36	≤30.00	PASS
		2462	8.96	≤30.00	PASS
11N40SISO	Ant1	2422	9.53	≤30.00	PASS
		2437	9.24	≤30.00	PASS
		2452	8.90	≤30.00	PASS
11AX20SISO	Ant1	2412	9.48	≤30.00	PASS
		2437	9.20	≤30.00	PASS
		2462	8.70	≤30.00	PASS
11AX40SISO	Ant1	2422	9.16	≤30.00	PASS
		2437	8.77	≤30.00	PASS
		2452	8.45	≤30.00	PASS



**MIMO**

TestMode	Channel	Result[dBm]			Limit[dBm]	Verdict
		ANT0	ANT1	MIMO		
11N20SISO	2412	9.32	9.78	12.57	≤30.00	PASS
	2437	9.09	9.36	12.24	≤30.00	PASS
	2462	9.25	8.96	12.12	≤30.00	PASS
11N40SISO	2422	9.30	9.53	12.43	≤30.00	PASS
	2437	9.21	9.24	12.24	≤30.00	PASS
	2452	9.09	8.90	12.01	≤30.00	PASS
11AX20SISO	2412	9.10	9.48	12.30	≤30.00	PASS
	2437	9.09	9.20	12.16	≤30.00	PASS
	2462	8.99	8.70	11.86	≤30.00	PASS
11AX40SISO	2422	8.87	9.16	12.03	≤30.00	PASS
	2437	8.87	8.77	11.83	≤30.00	PASS
	2452	8.87	8.45	11.68	≤30.00	PASS





C.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-19.26	≤8.00	PASS
		2437	-19.87	≤8.00	PASS
		2462	-19.58	≤8.00	PASS
11G	Ant0	2412	-25.64	≤8.00	PASS
		2437	-25.96	≤8.00	PASS
		2462	-26.18	≤8.00	PASS
11N20SISO	Ant0	2412	-25.19	≤8.00	PASS
		2437	-25.24	≤8.00	PASS
		2462	-24.7	≤8.00	PASS
11N40SISO	Ant0	2422	-27.49	≤8.00	PASS
		2437	-25.86	≤8.00	PASS
		2452	-26.72	≤8.00	PASS
11AX20SISO	Ant0	2412	-22.52	≤8.00	PASS
		2437	-24.34	≤8.00	PASS
		2462	-23.19	≤8.00	PASS
11AX40SISO	Ant0	2422	-27.62	≤8.00	PASS
		2437	-27.69	≤8.00	PASS
		2452	-27.85	≤8.00	PASS





TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-22.86	≤8.00	PASS
		2437	-19.42	≤8.00	PASS
		2462	-19.91	≤8.00	PASS
11G	Ant1	2412	-25.43	≤8.00	PASS
		2437	-24.97	≤8.00	PASS
		2462	-26.36	≤8.00	PASS
11N20SISO	Ant1	2412	-23.59	≤8.00	PASS
		2437	-23.78	≤8.00	PASS
		2462	-24.67	≤8.00	PASS
11N40SISO	Ant1	2422	-25.4	≤8.00	PASS
		2437	-25.64	≤8.00	PASS
		2452	-26.01	≤8.00	PASS
11AX20SISO	Ant1	2412	-23.88	≤8.00	PASS
		2437	-23.64	≤8.00	PASS
		2462	-25.67	≤8.00	PASS
11AX40SISO	Ant1	2422	-28.17	≤8.00	PASS
		2437	-28.45	≤8.00	PASS
		2452	-28.81	≤8.00	PASS



**MIMO**

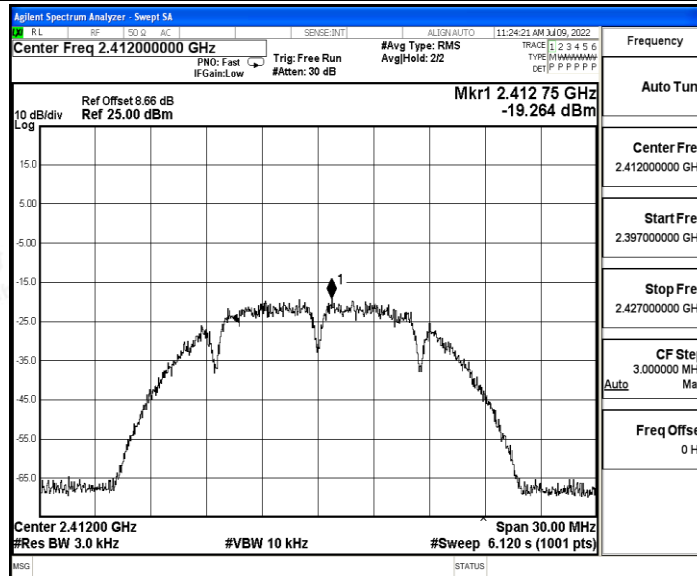
TestMode	Channel	Result[dBm/3kHz]			Limit[dBm/3kHz]	Verdict
		ANT0	ANT1	MIMO		
11N20SISO	2412	-25.19	-23.59	-21.31	≤8.00	PASS
	2437	-25.24	-23.78	-21.44	≤8.00	PASS
	2462	-24.7	-24.67	-21.67	≤8.00	PASS
11N40SISO	2422	-27.49	-25.4	-23.31	≤8.00	PASS
	2437	-25.86	-25.64	-22.74	≤8.00	PASS
	2452	-26.72	-26.01	-23.34	≤8.00	PASS
11AX20SISO	2412	-22.52	-23.88	-20.14	≤8.00	PASS
	2437	-24.34	-23.64	-20.97	≤8.00	PASS
	2462	-23.19	-25.67	-21.25	≤8.00	PASS
11AX40SISO	2422	-27.62	-28.17	-24.88	≤8.00	PASS
	2437	-27.69	-28.45	-25.04	≤8.00	PASS
	2452	-27.85	-28.81	-25.29	≤8.00	PASS



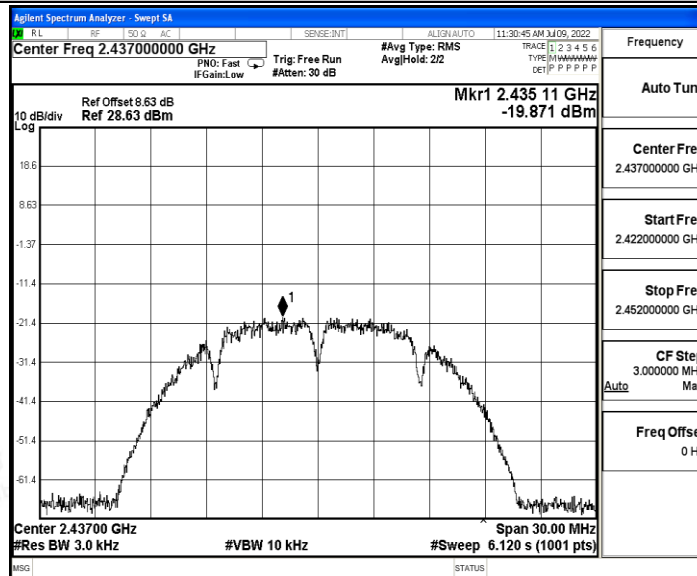


Test Graphs

11B_Ant0_2412

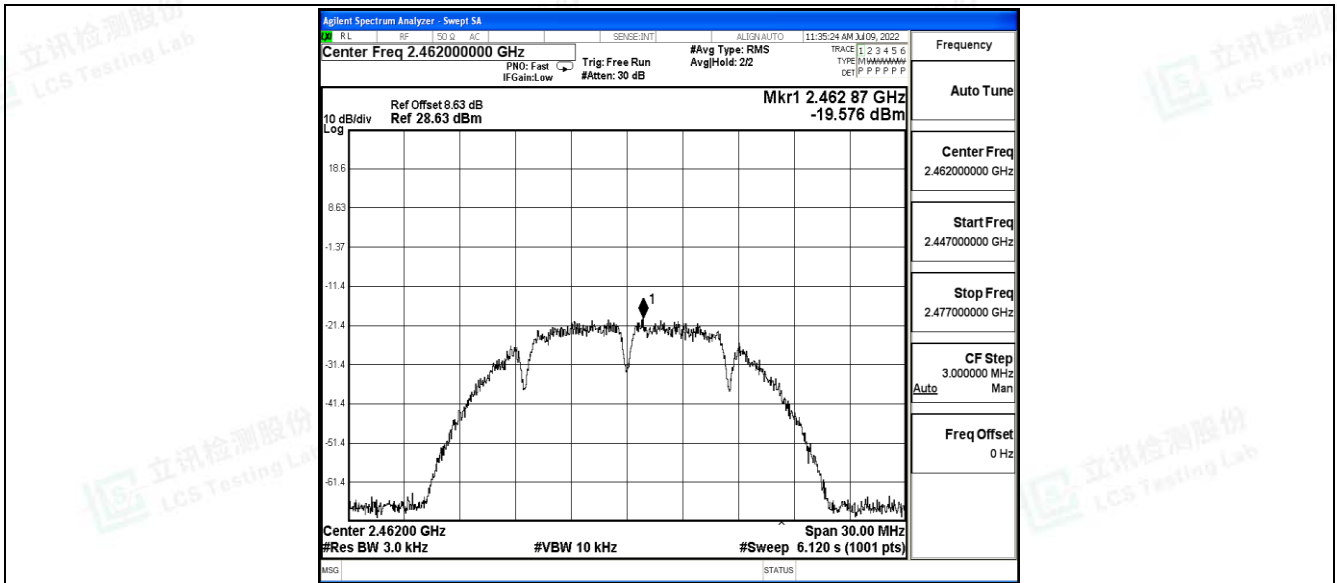


11B_Ant0_2437

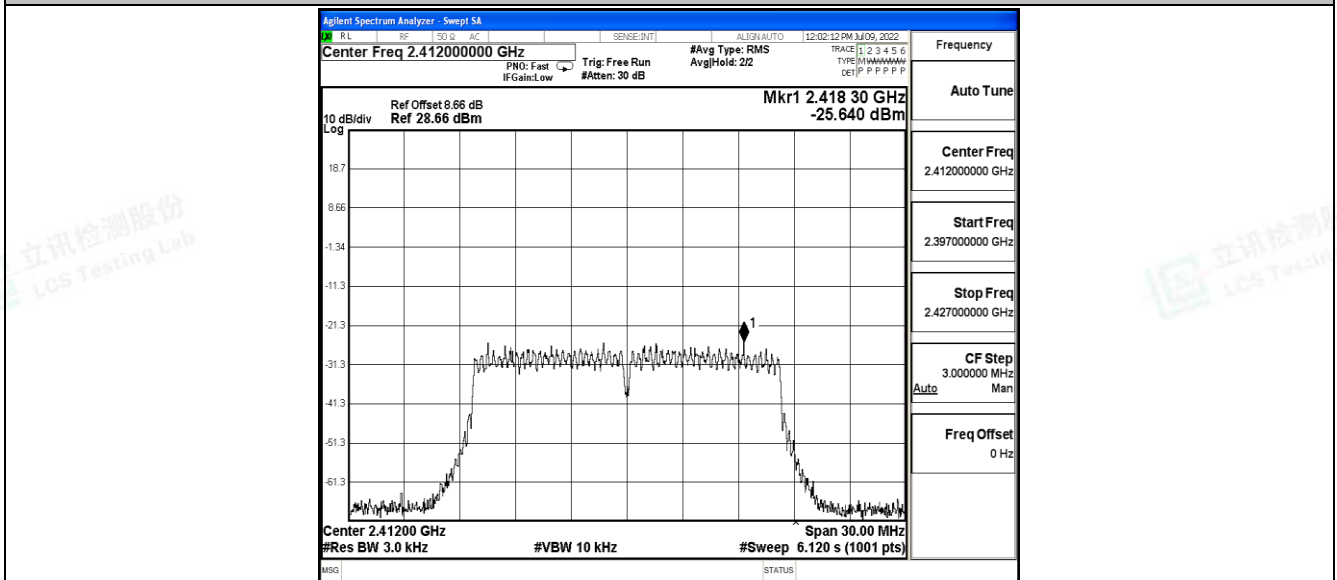


11B_Ant0_2462



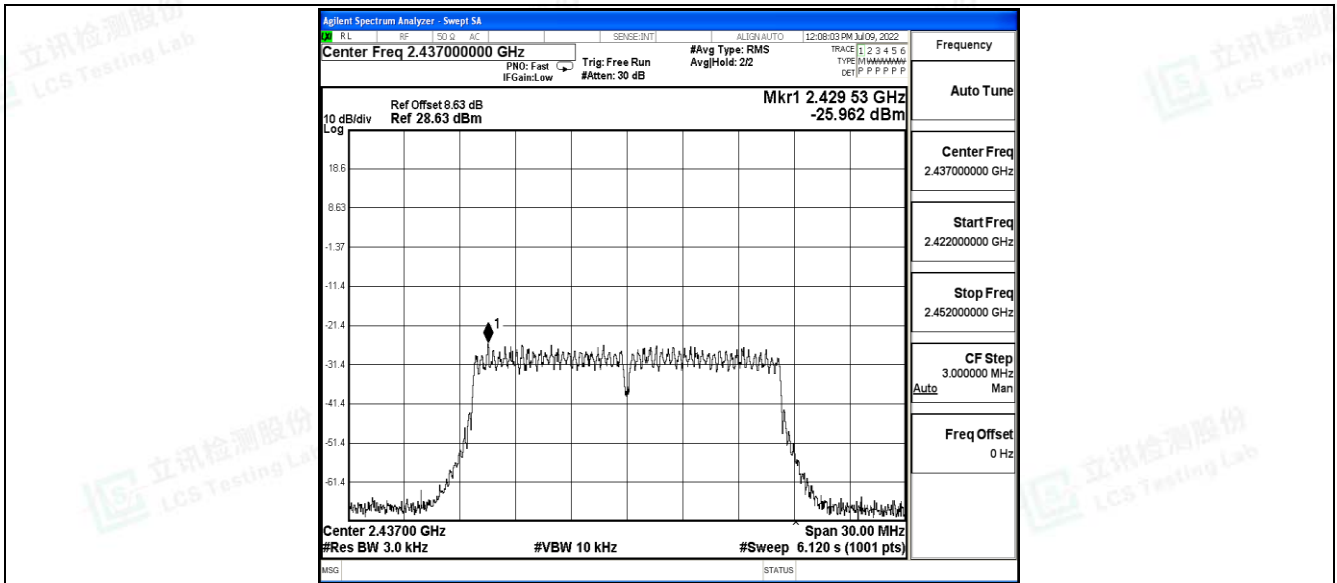


11G_Ant0_2412

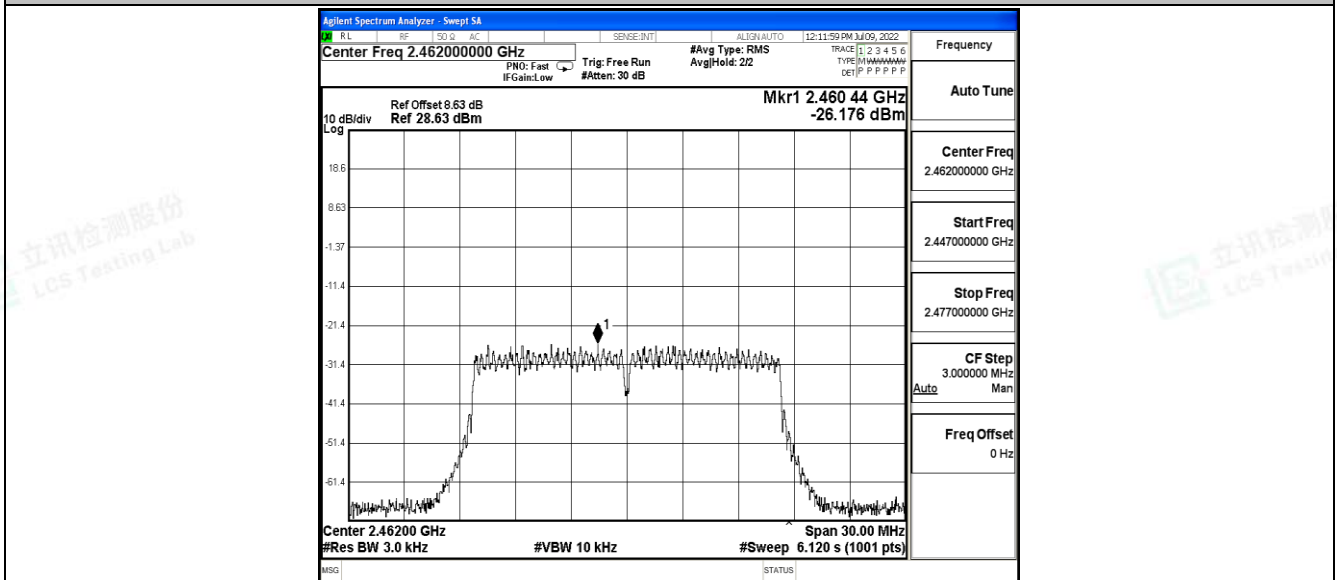


11G_Ant0_2437



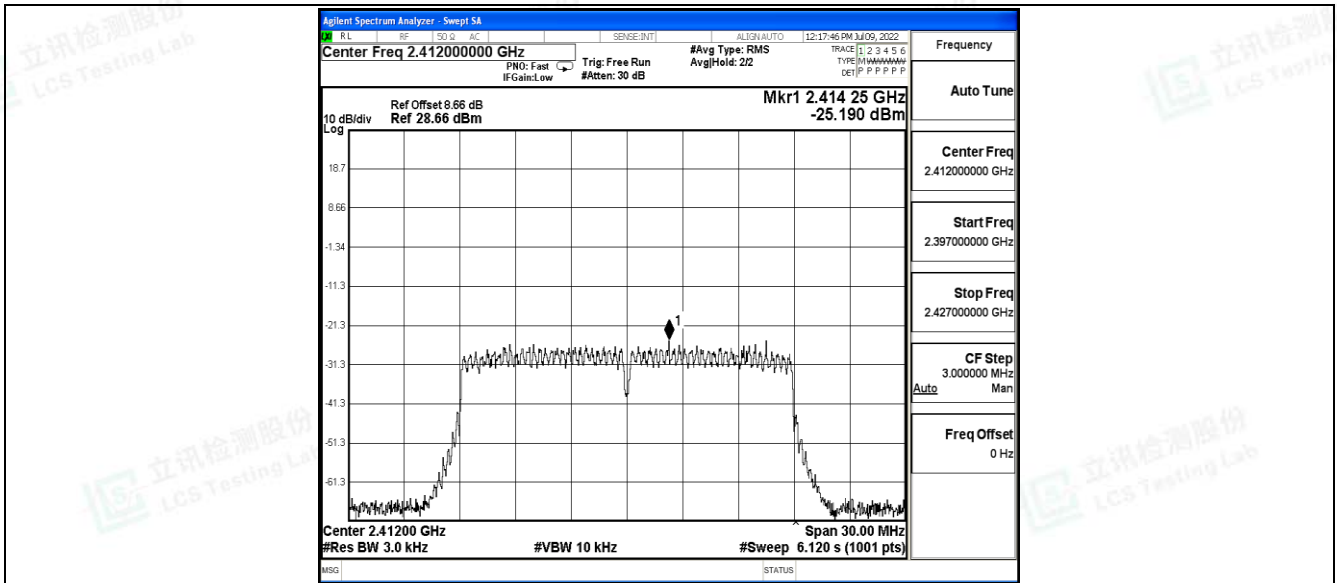


11G_Ant0_2462

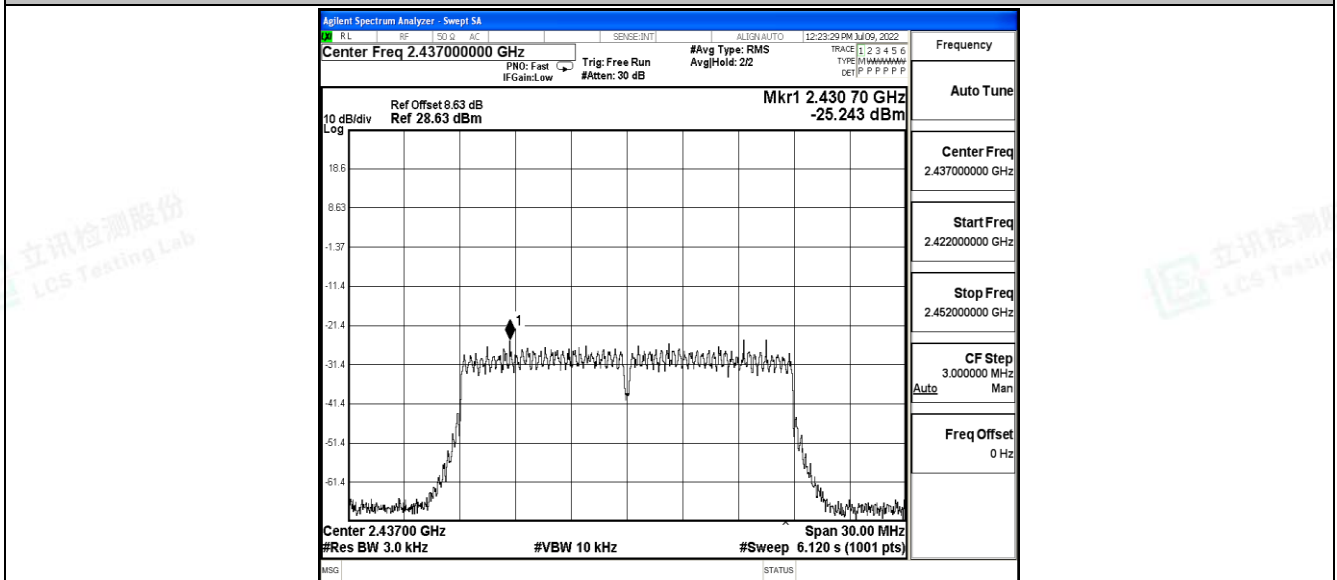


11N20SISO_Ant0_2412



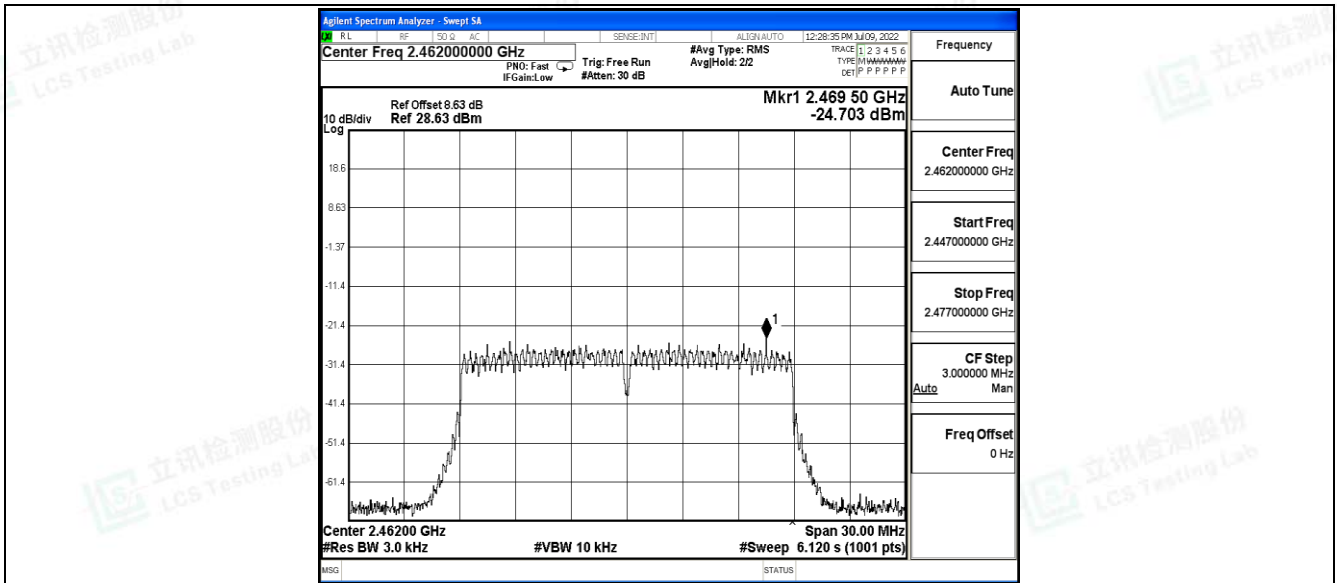


11N20SISO_Ant0_2437

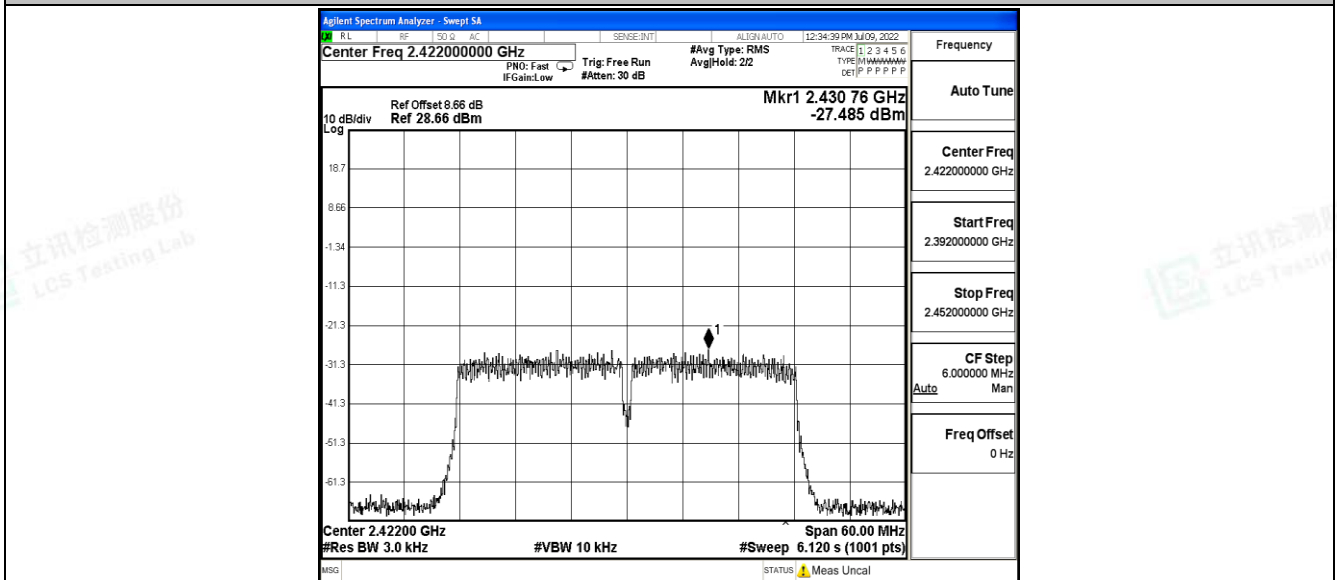


11N20SISO_Ant0_2462



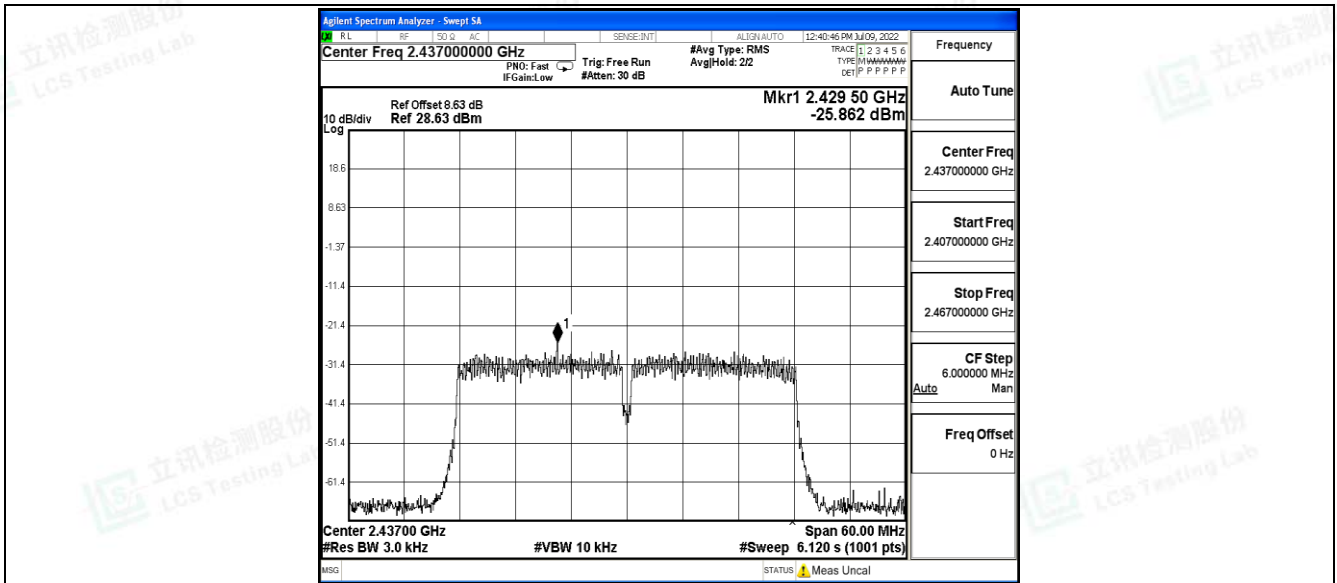


11N40SISO_Ant0_2422

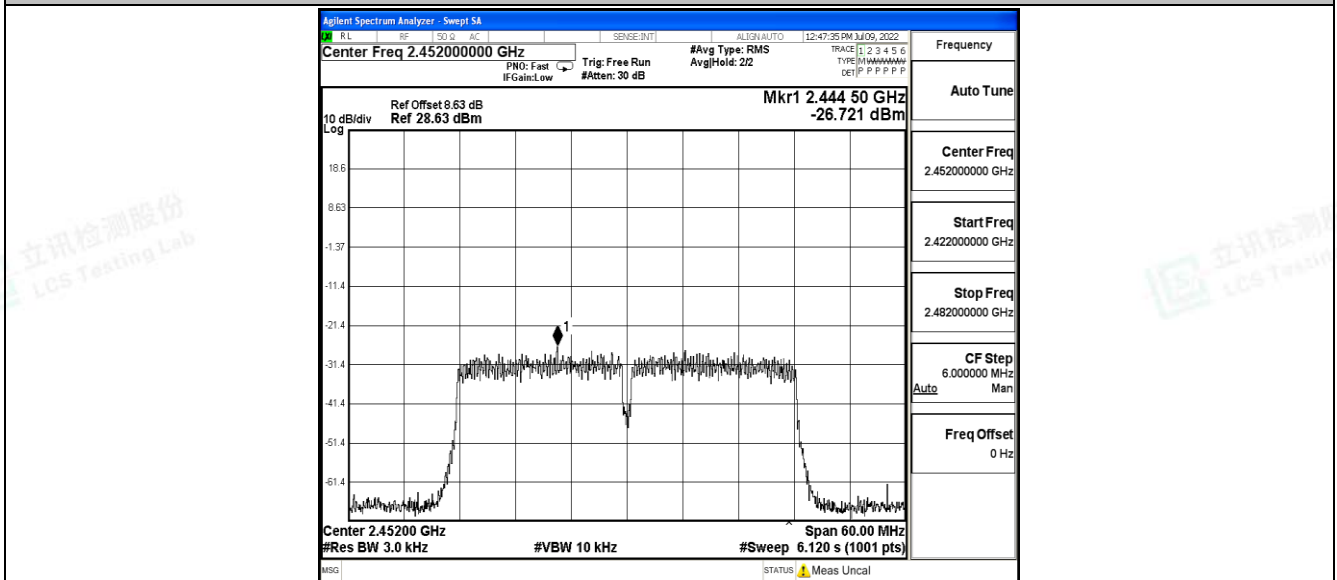


11N40SISO_Ant0_2437



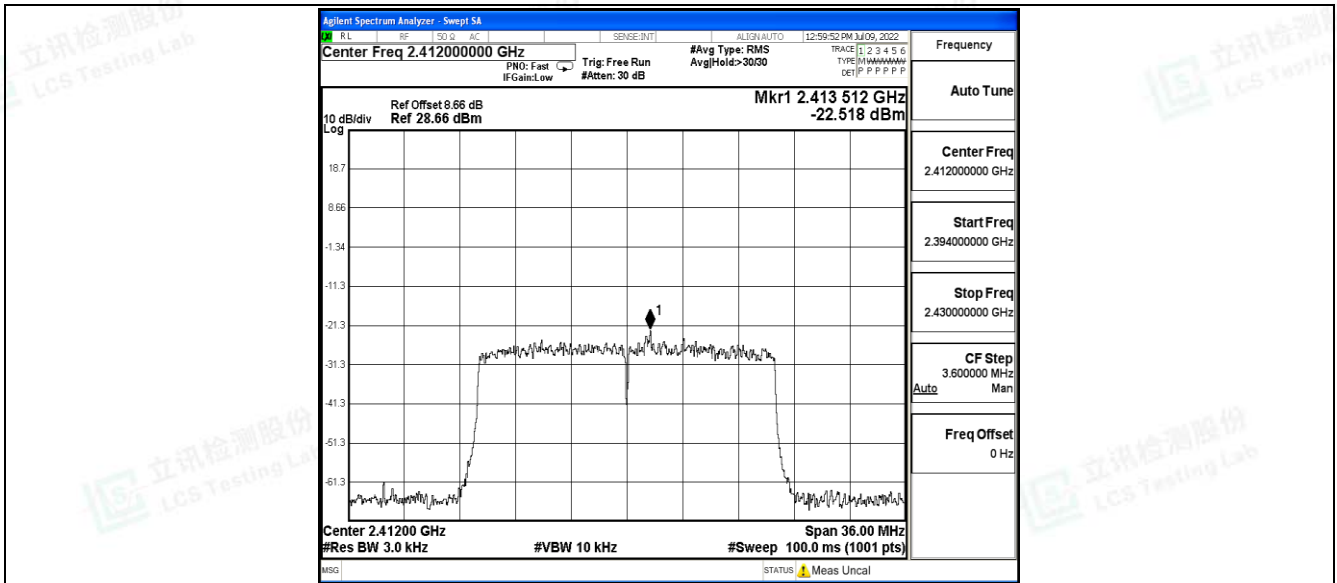


11N40SISO_Ant0_2452

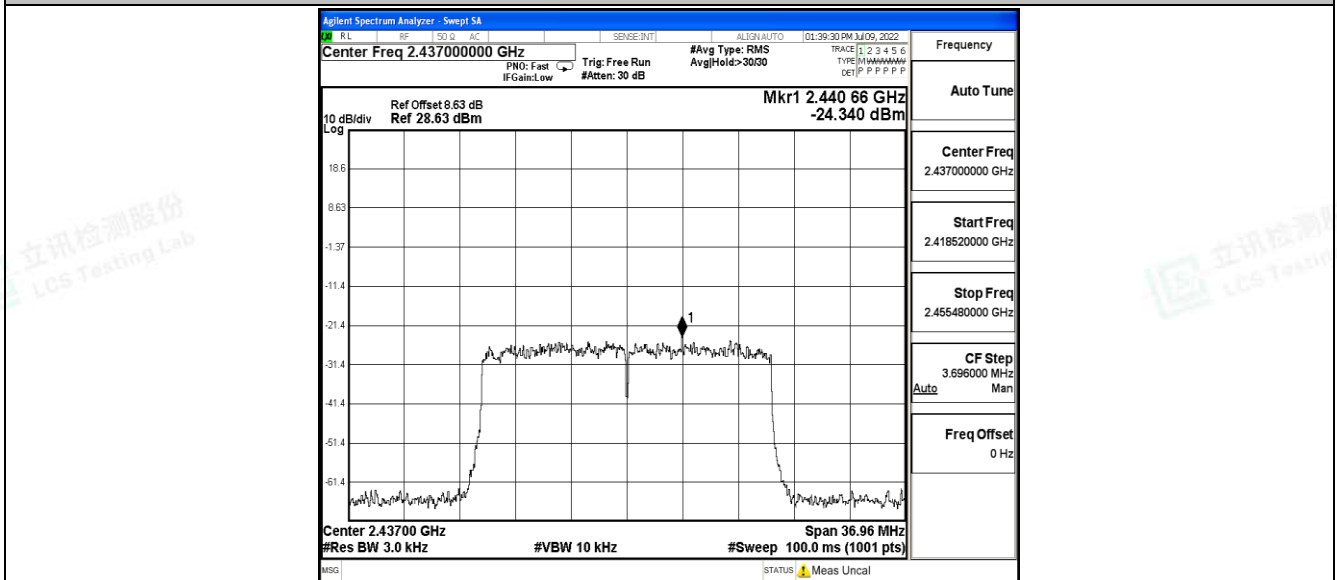


11AX20SISO_Ant0_2412



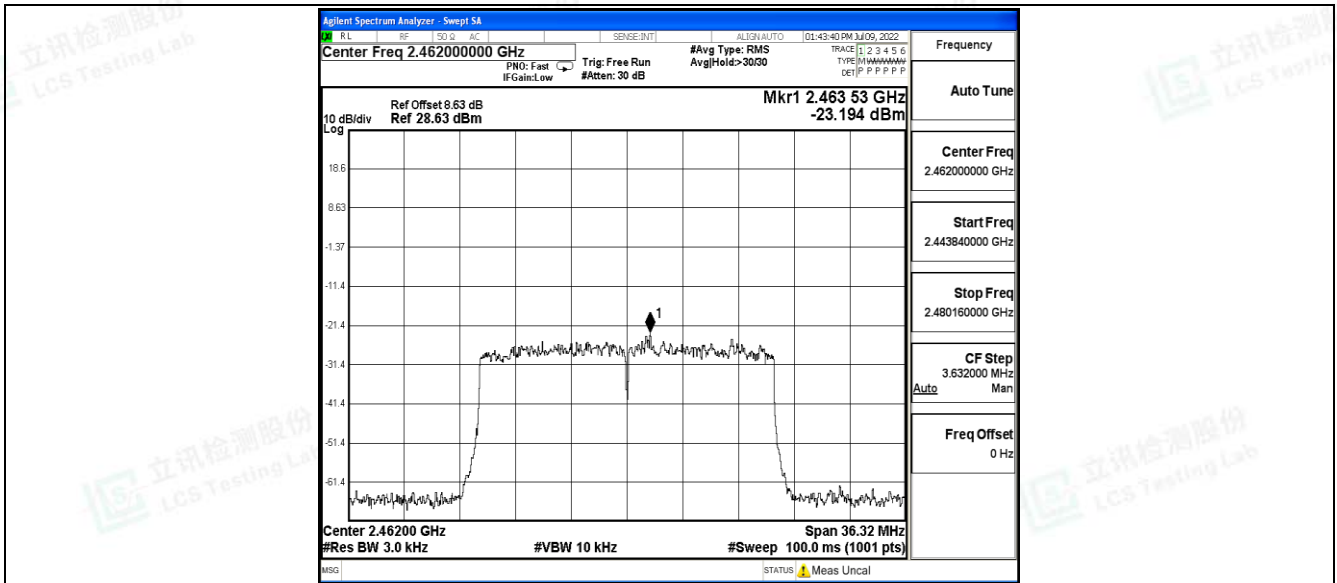


11AX20SISO_Ant0_2437

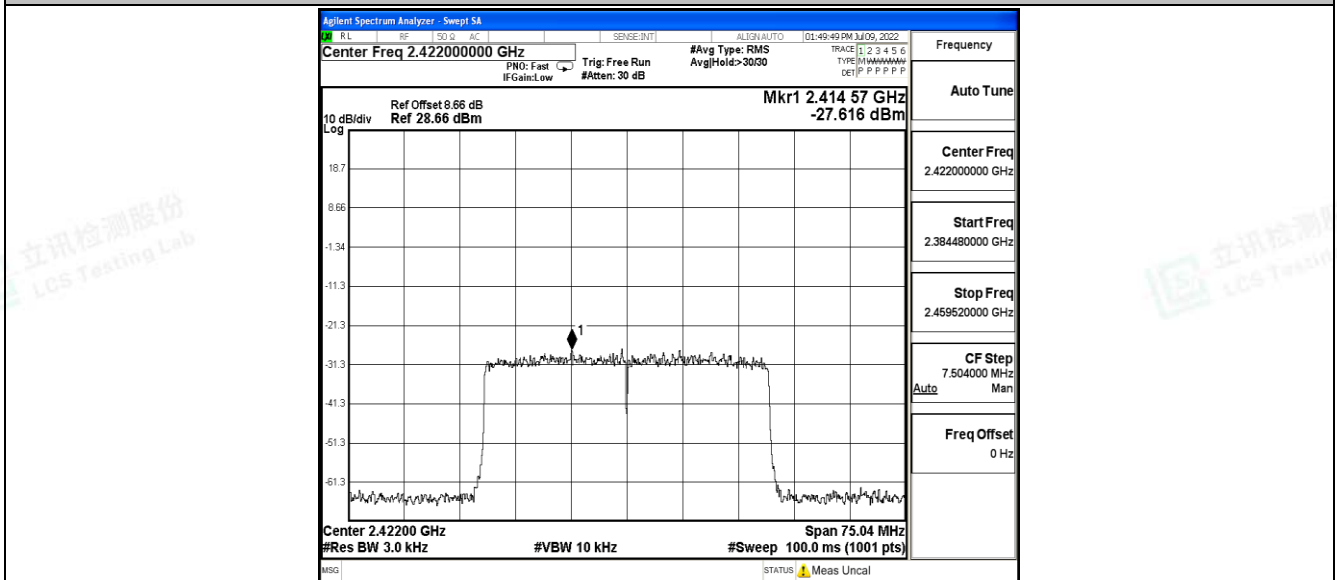


11AX20SISO_Ant0_2462



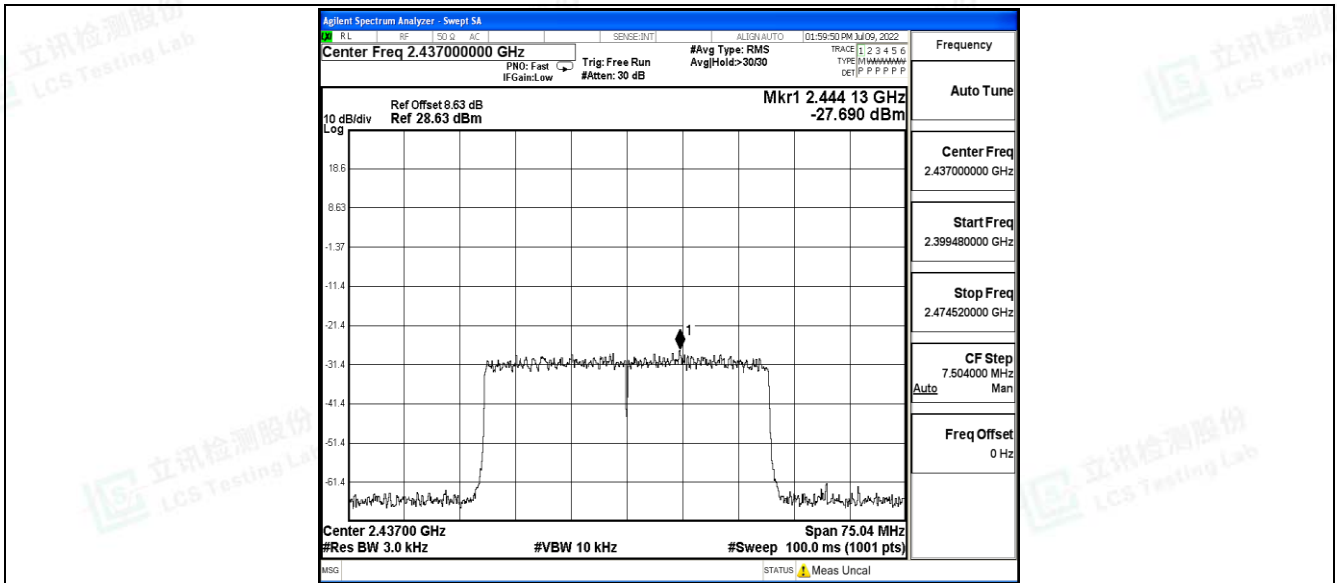


11AX40SISO_Ant0_2422

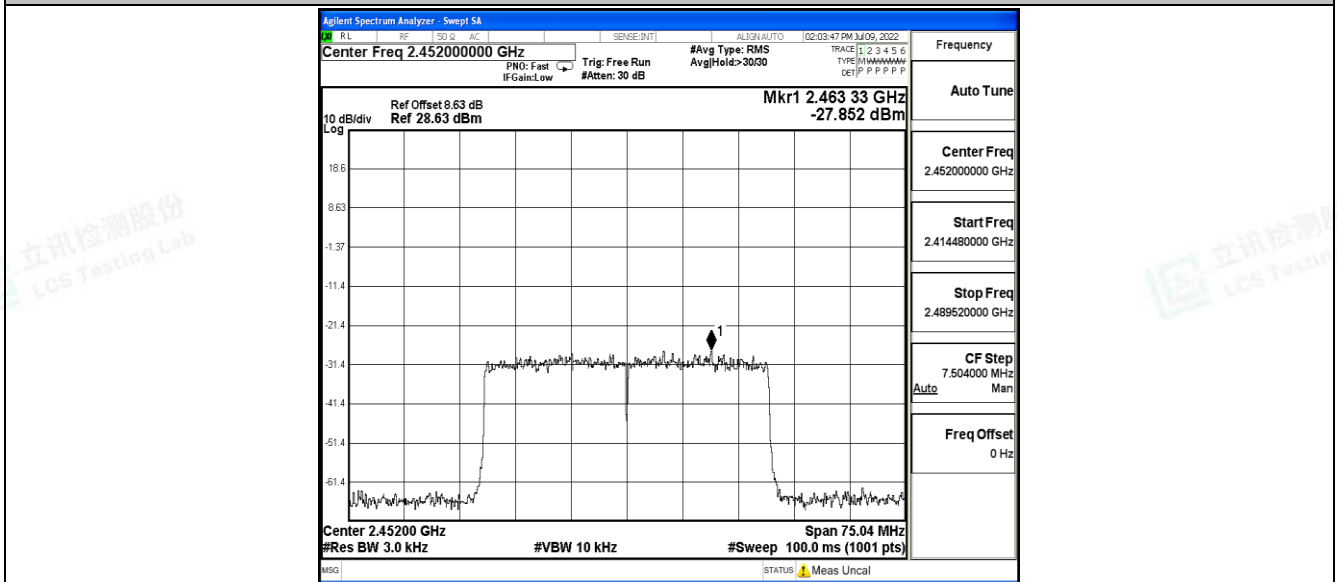


11AX40SISO_Ant0_2437



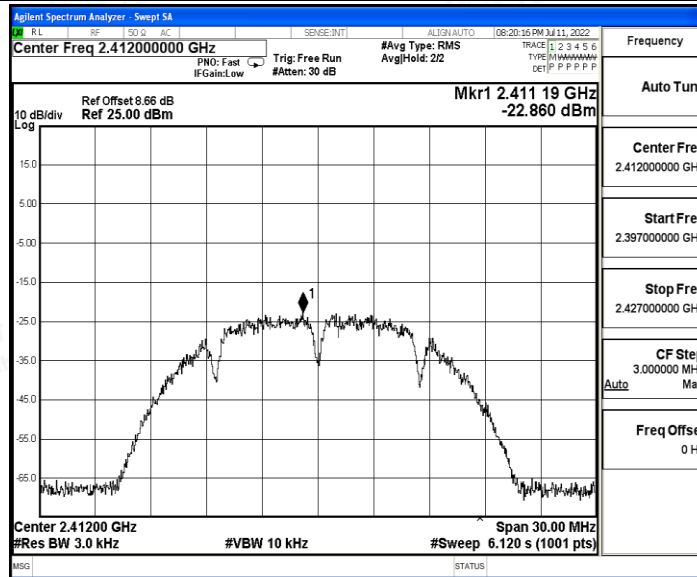


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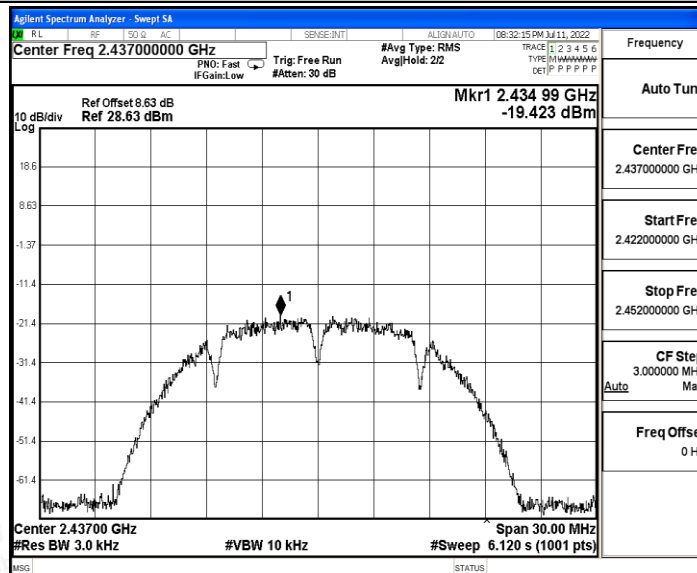




11B_Ant1_2412

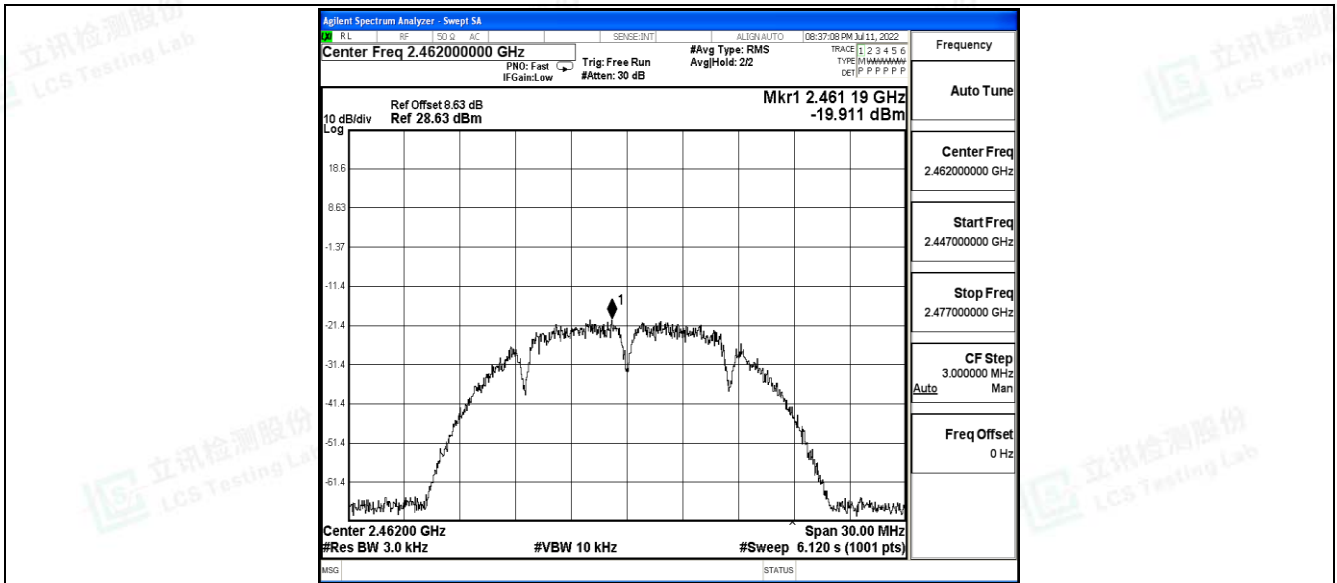


11B_Ant1_2437

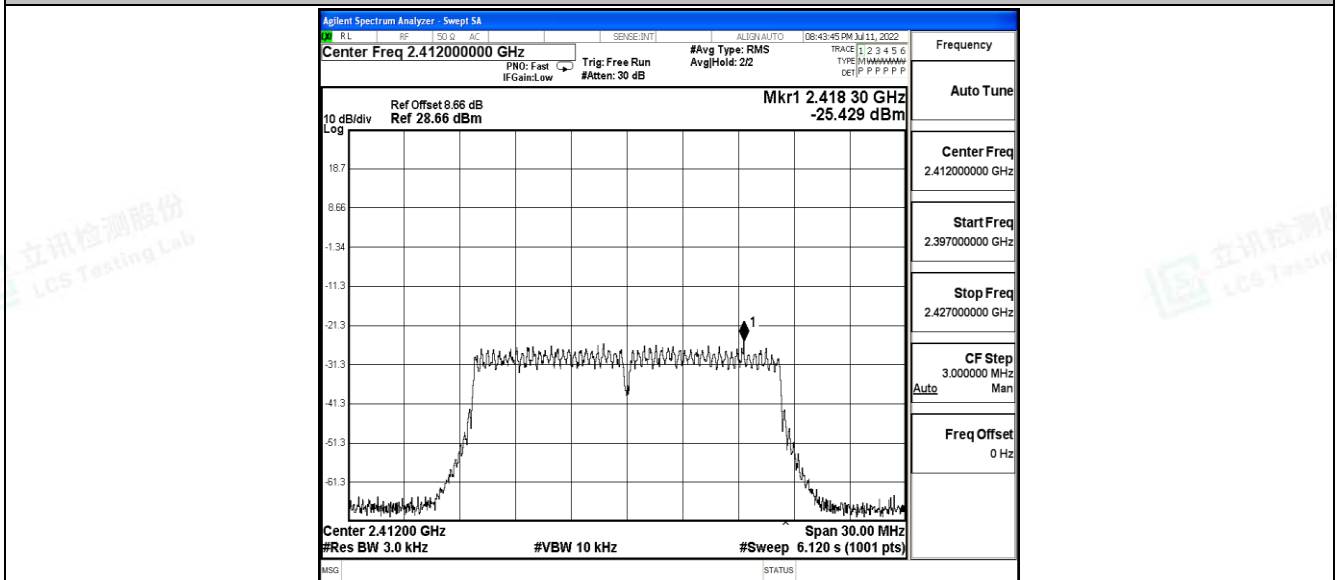


11B_Ant1_2462



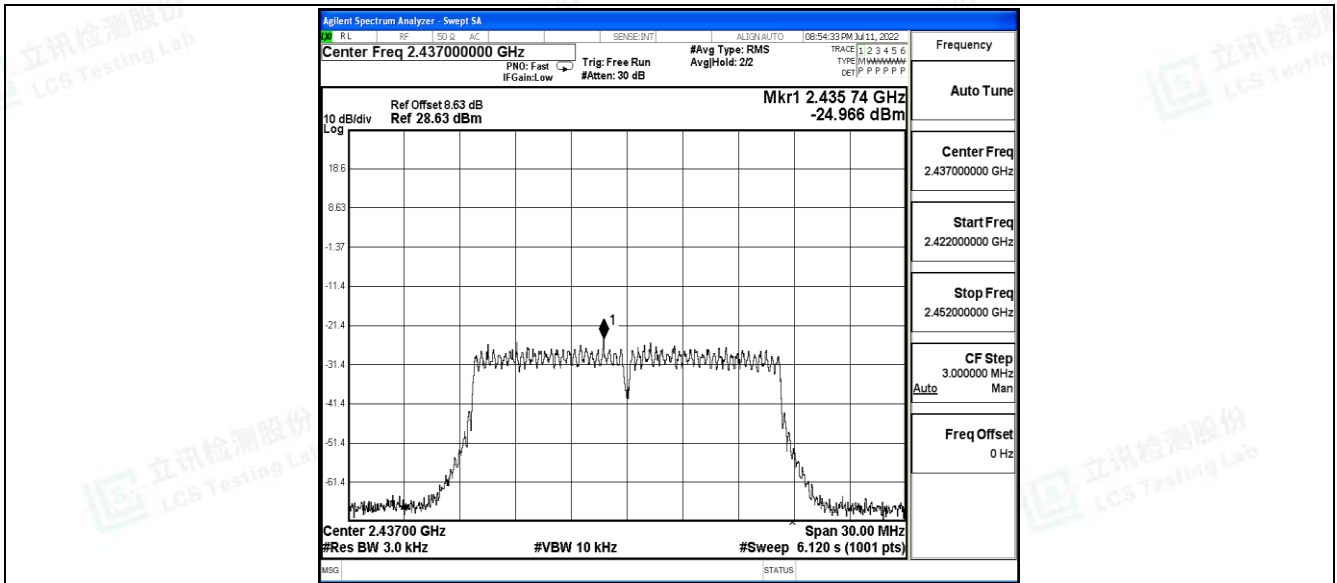


11G_Ant1_2412

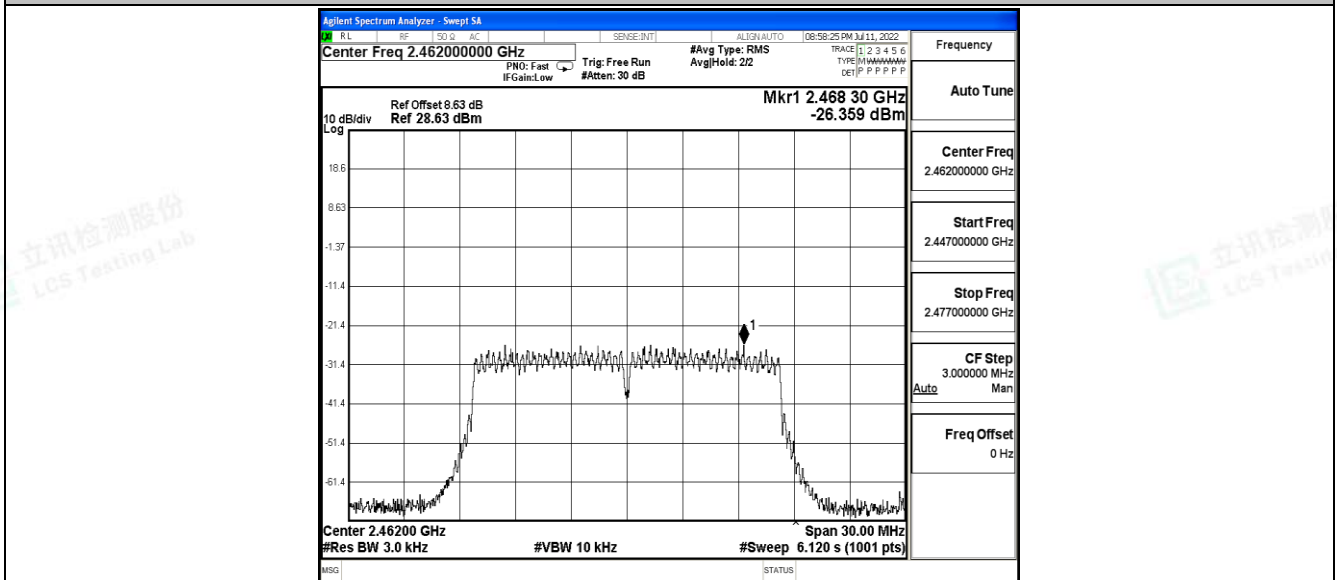


11G_Ant1_2437



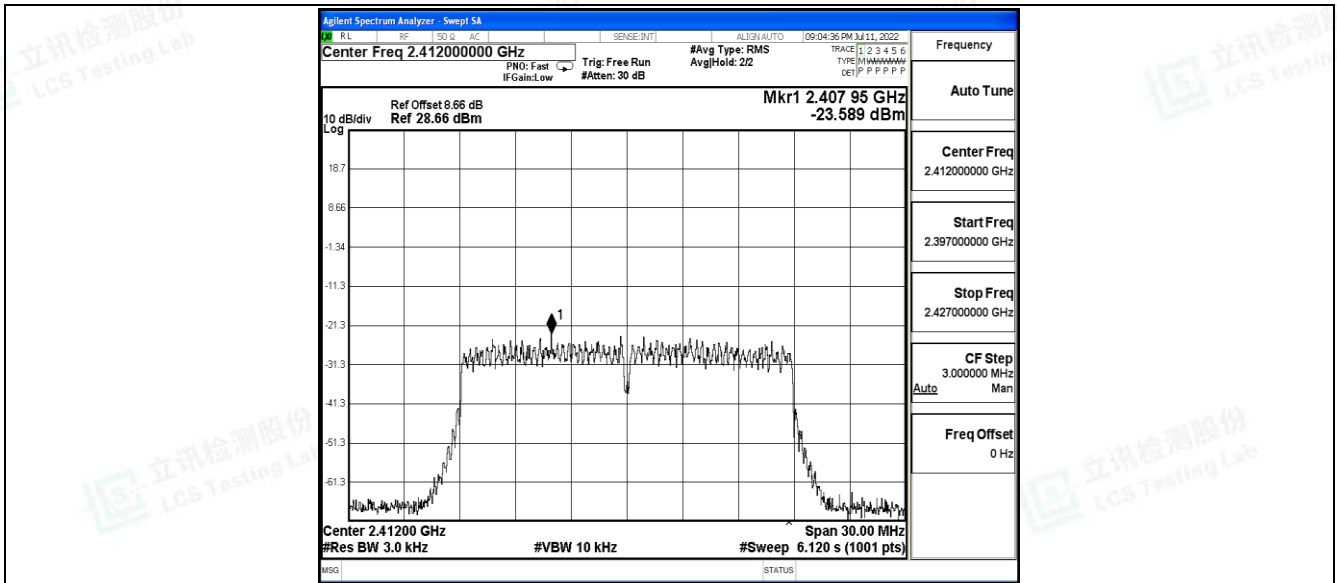


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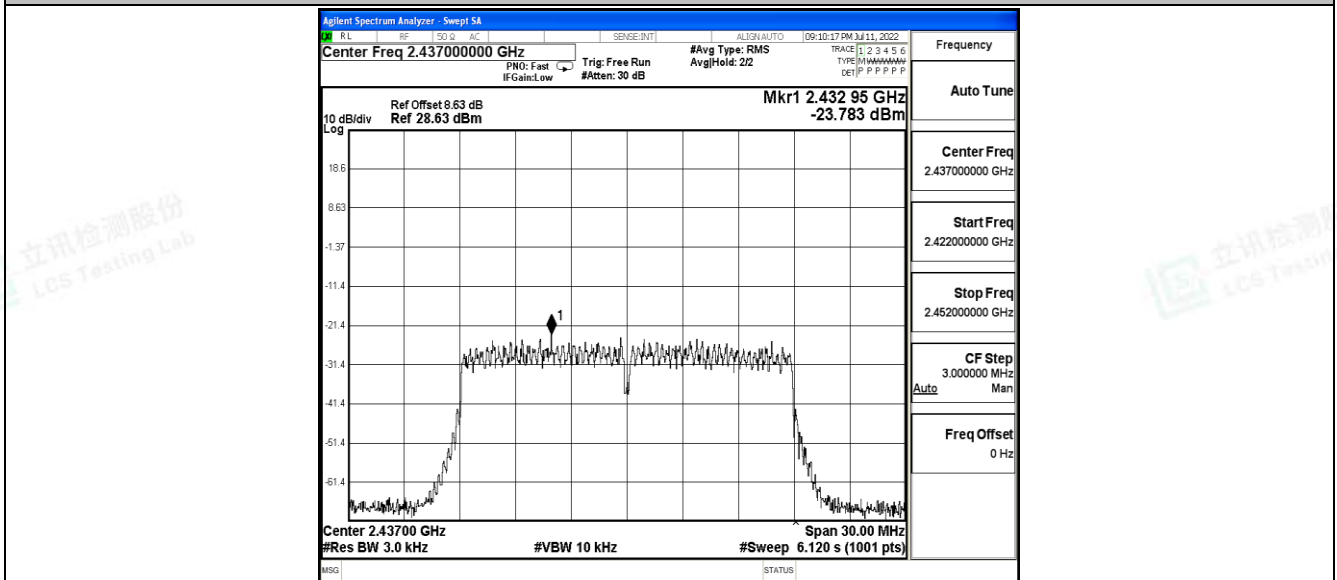


11N20SISO_Ant1_2412



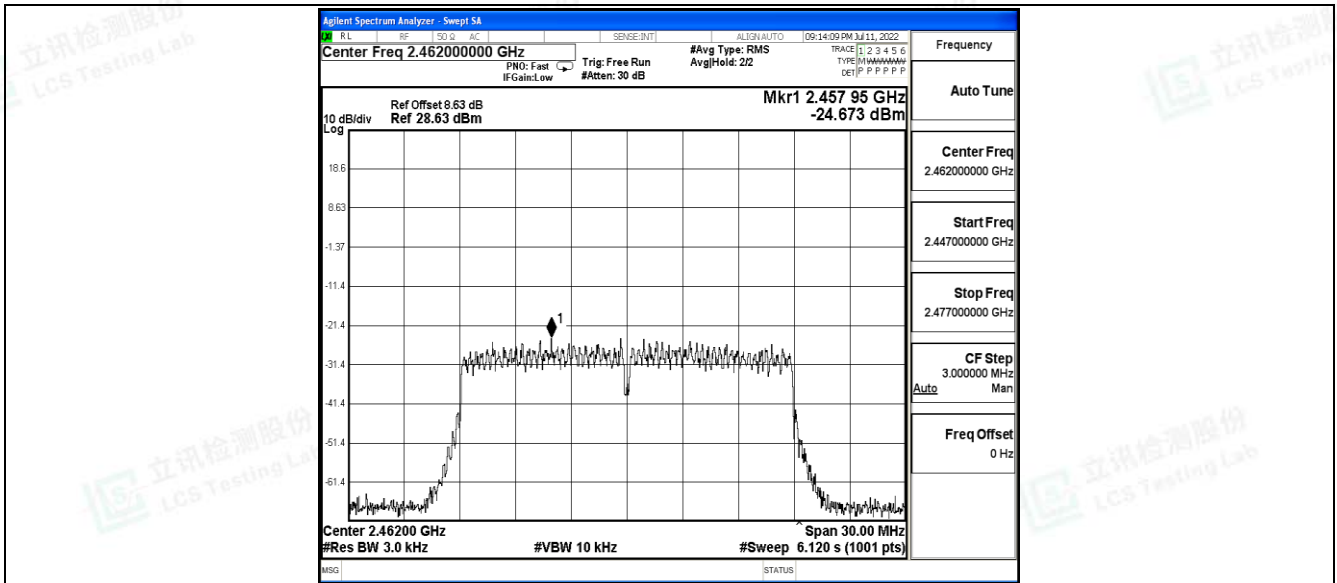


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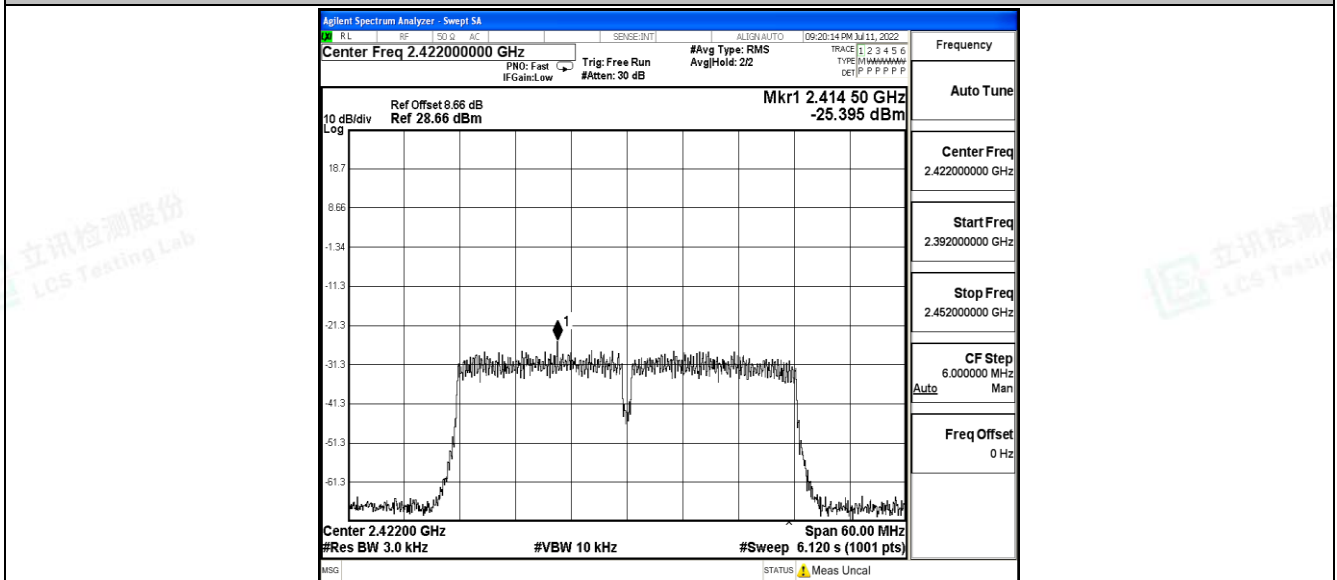


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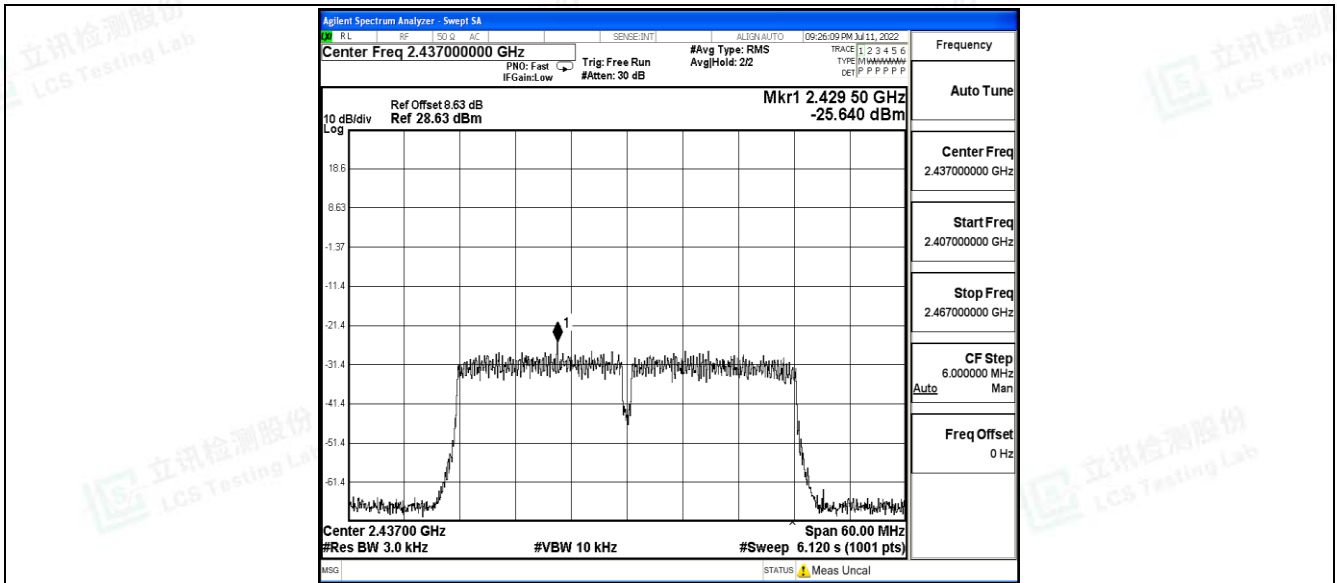


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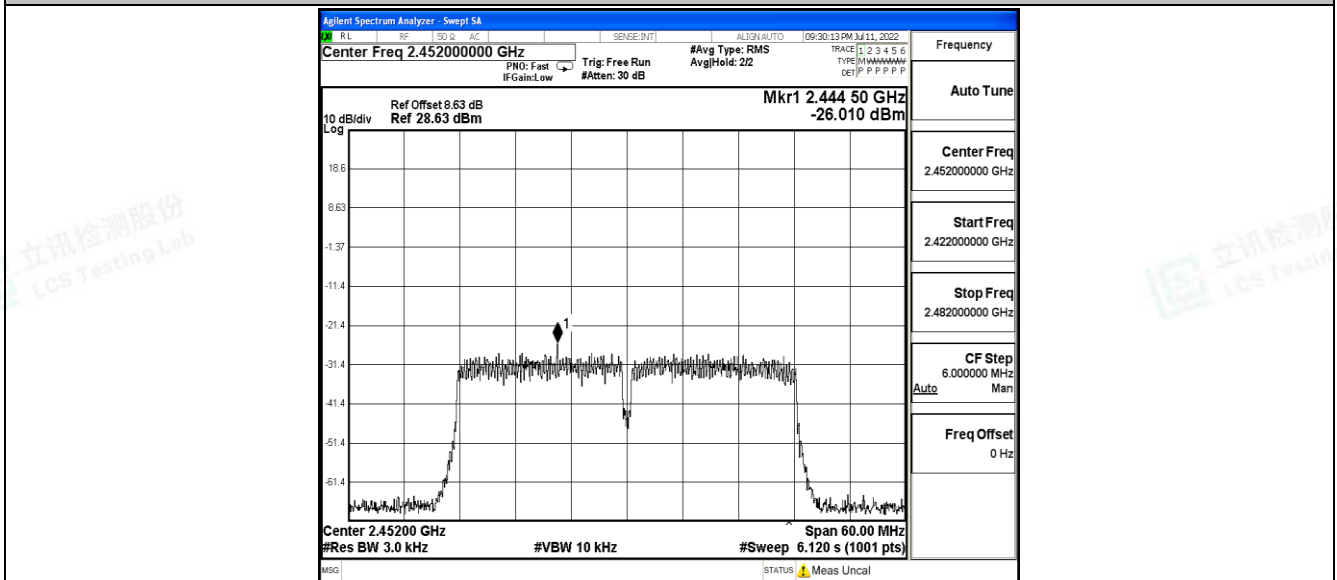


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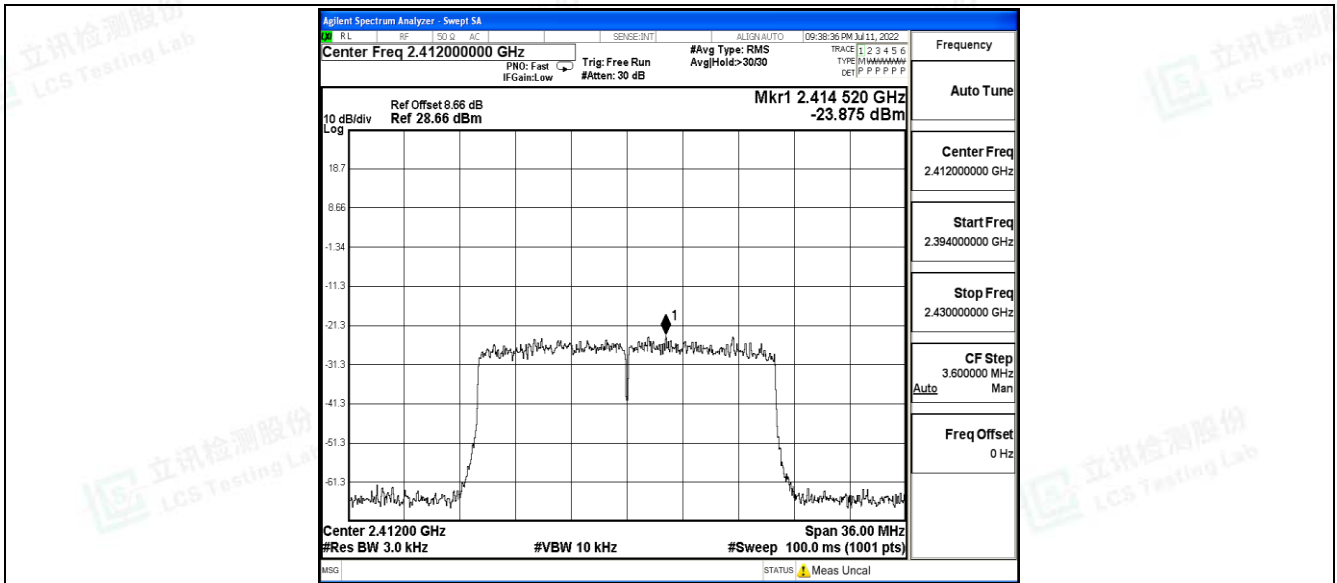


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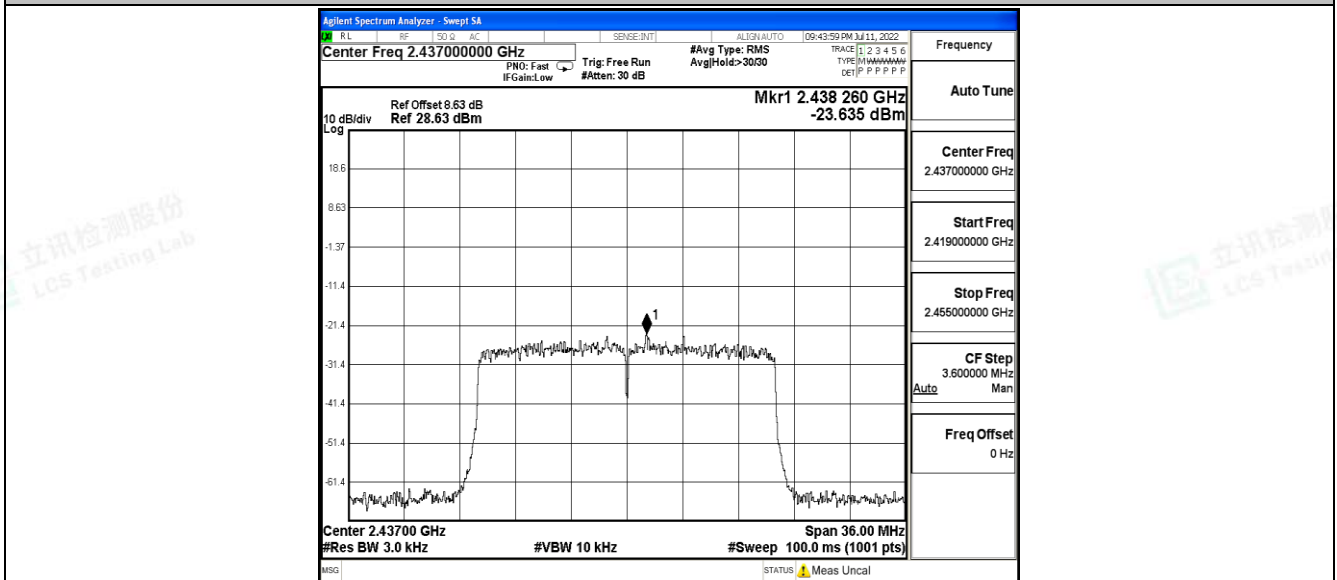


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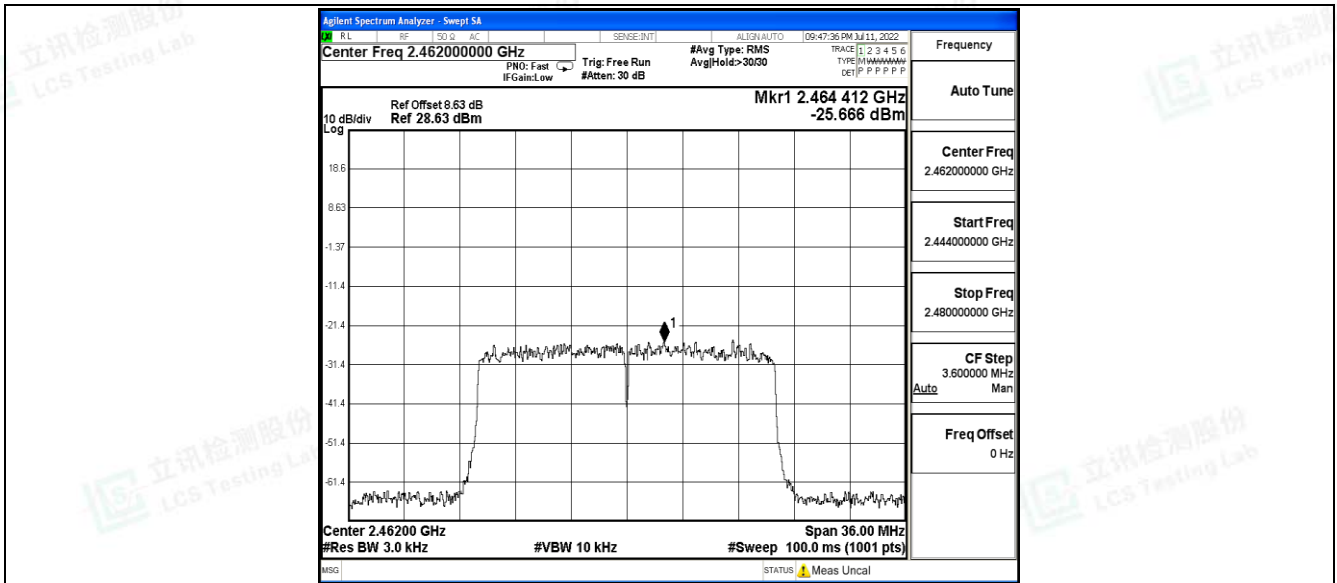


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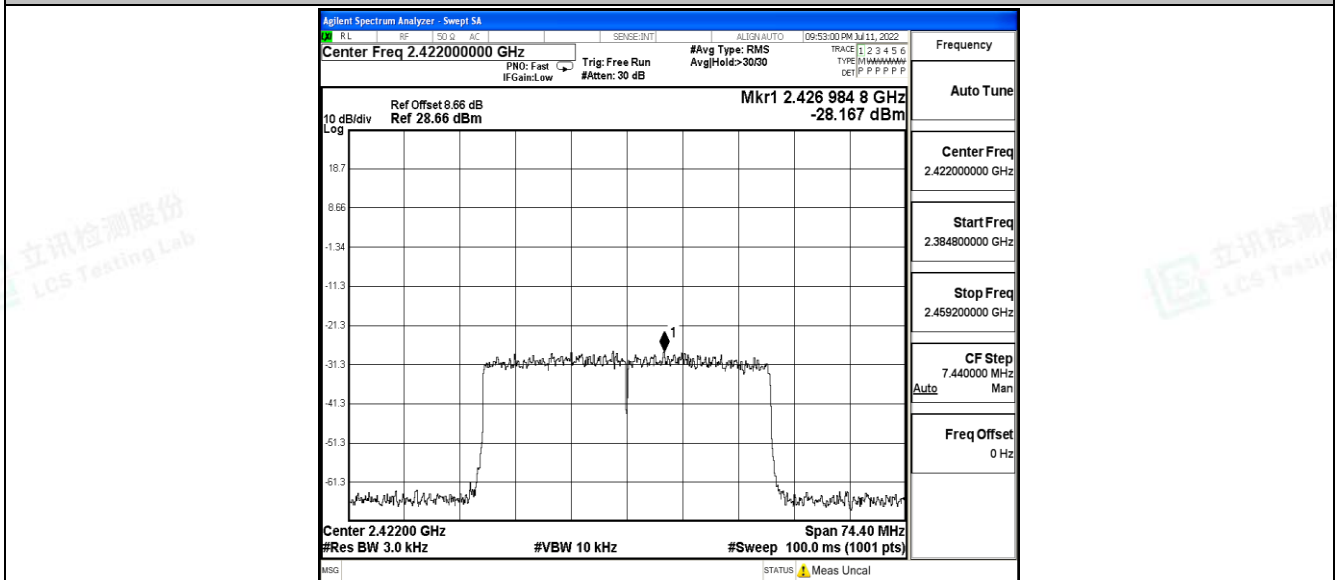


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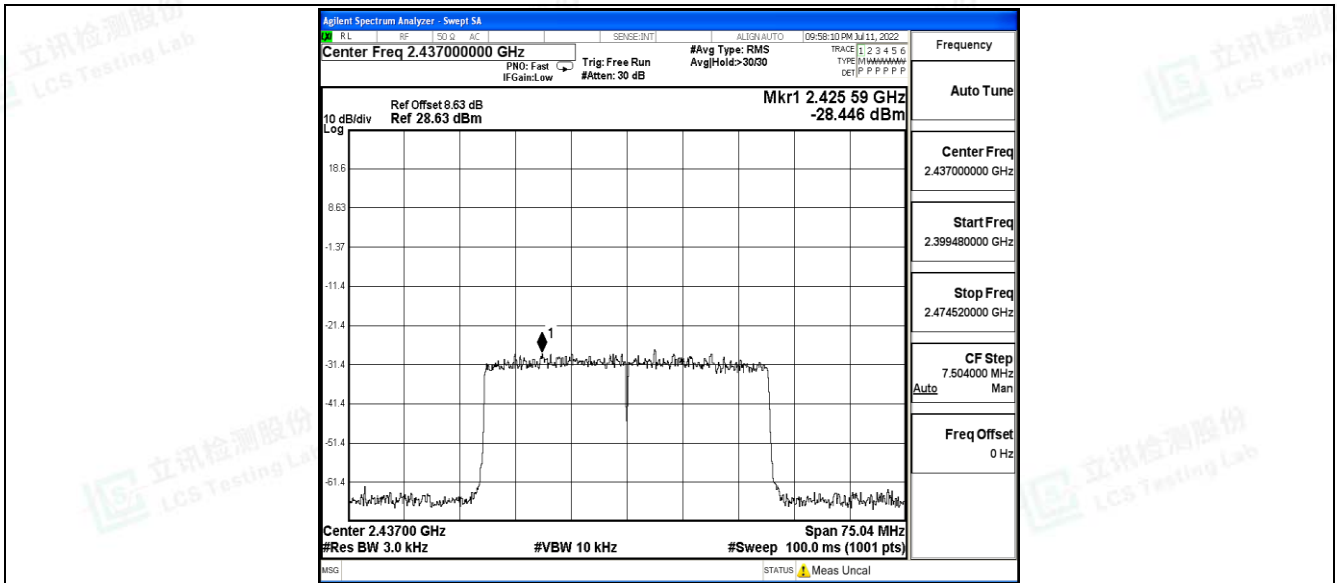


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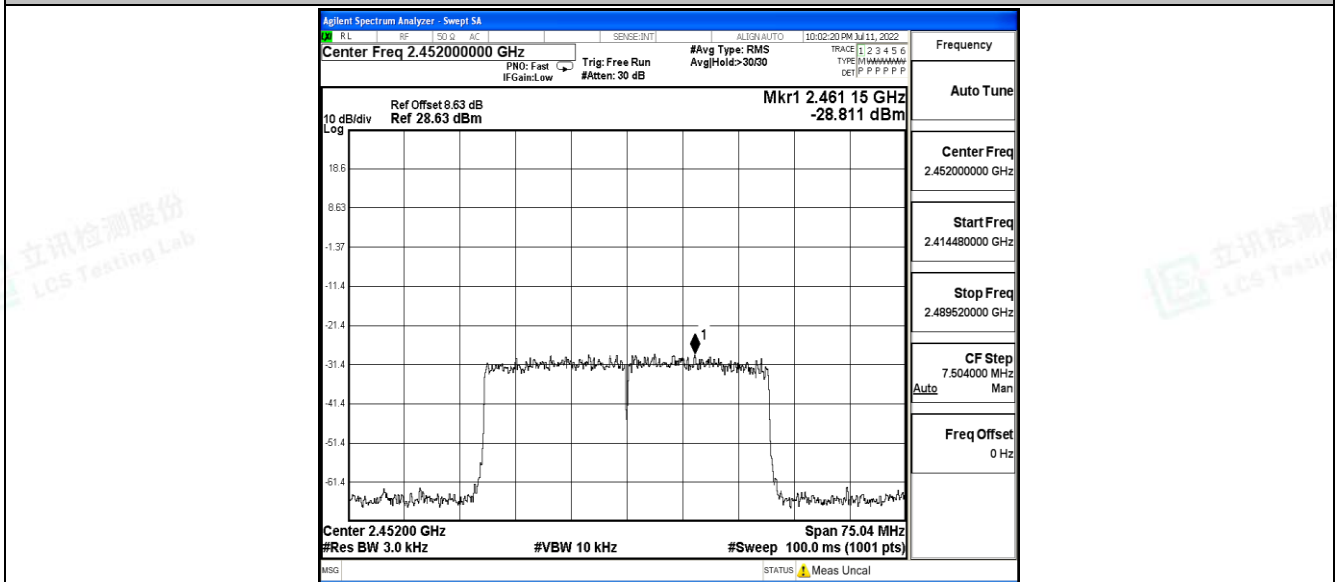


11AX40SISO_Ant1_2437





11AX40SISO_Ant1_2452





C.4 Band edge measurements

Test Result

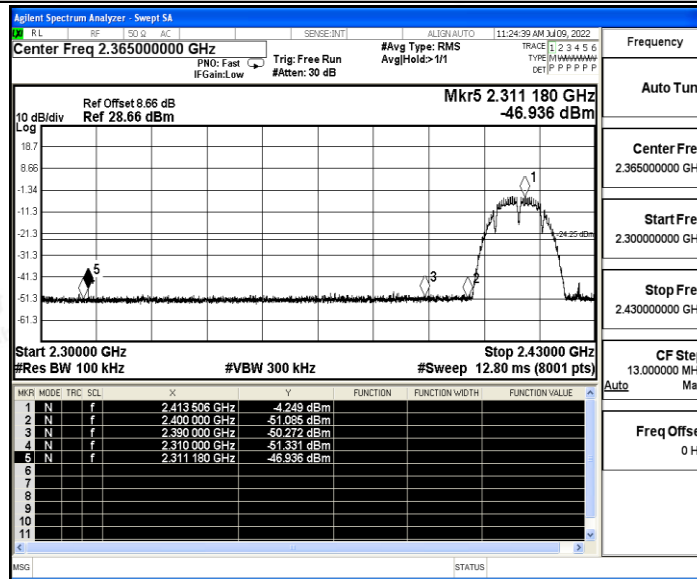
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant0	Low	2412	-4.25	-46.94	≤ -24.25	PASS
		High	2462	-4.75	-47.49	≤ -24.75	PASS
11G	Ant0	Low	2412	-9.69	-48.36	≤ -29.69	PASS
		High	2462	-9.86	-47.94	≤ -29.86	PASS
11N20SISO	Ant0	Low	2412	-9.55	-48.37	≤ -29.55	PASS
		High	2462	-9.72	-47.38	≤ -29.72	PASS
11N40SISO	Ant0	Low	2422	-12.54	-48.51	≤ -32.54	PASS
		High	2452	-12.96	-47.13	≤ -32.96	PASS
11AX20SISO	Ant0	Low	2412	-10.66	-48.19	≤ -30.66	PASS
		High	2462	-11.00	-47.87	≤ -31	PASS
11AX40SISO	Ant0	Low	2422	-13.67	-48.61	≤ -33.67	PASS
		High	2452	-14.00	-47.85	≤ -34	PASS



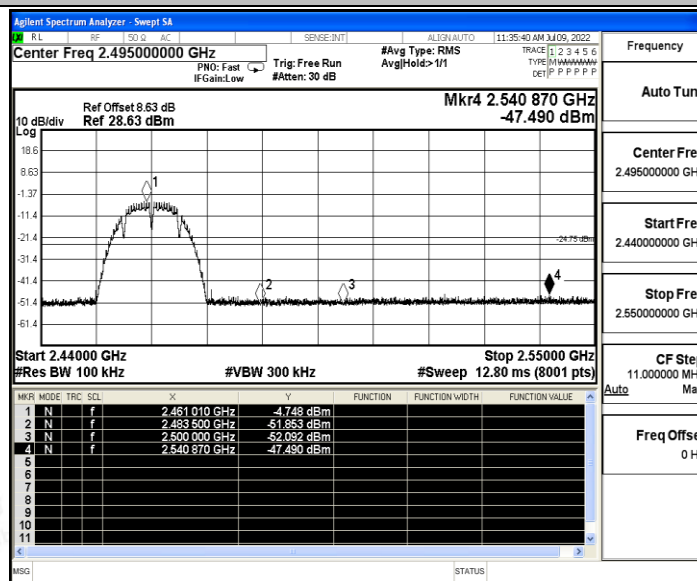


Test Graphs

11B_Ant0_Low_2412



11B_Ant0_High_2462



11G_Ant0_Low_2412

