

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BGCX-A7M2A01

Company : Shenzhen Yufengzhixing Electronics Tech Co Ltd

EUT : Car Navigation Multimedia

Model Number : S8LF1509ADM

Report No. : CTA26020202002

Reviewed By : Eric Wang

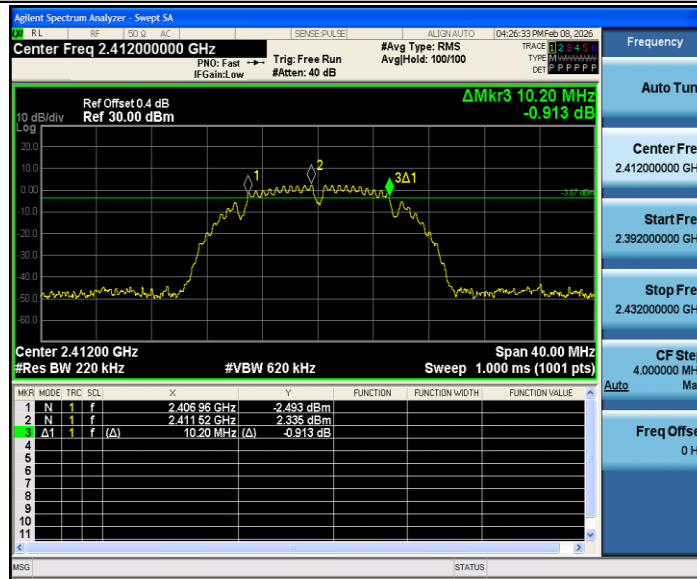
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.960	2417.160	0.5	PASS
		2437	10.200	2431.960	2442.160	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.680	2404.240	2419.920	0.5	PASS
		2437	15.720	2429.080	2444.800	0.5	PASS
		2462	15.800	2454.080	2469.880	0.5	PASS
11N20SISO	Ant1	2412	16.560	2403.720	2420.280	0.5	PASS
		2437	16.120	2429.320	2445.440	0.5	PASS
		2462	17.160	2453.480	2470.640	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.800	2439.840	0.5	PASS
		2437	35.360	2419.720	2455.080	0.5	PASS
		2452	35.920	2434.080	2470.000	0.5	PASS

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



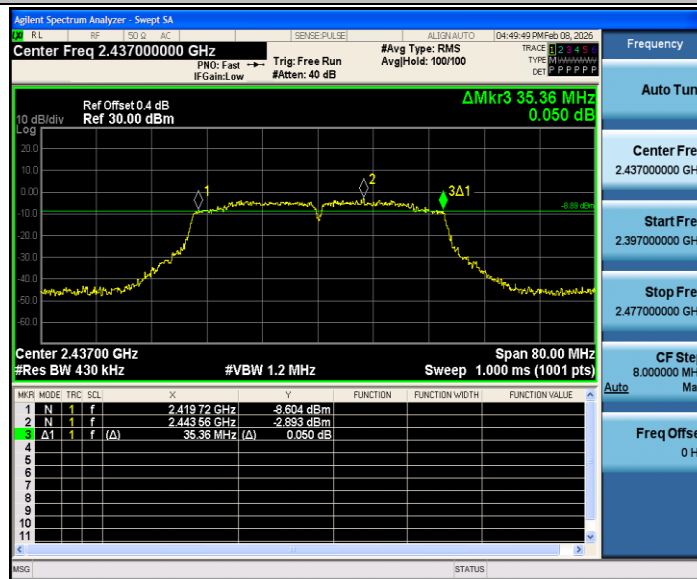
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



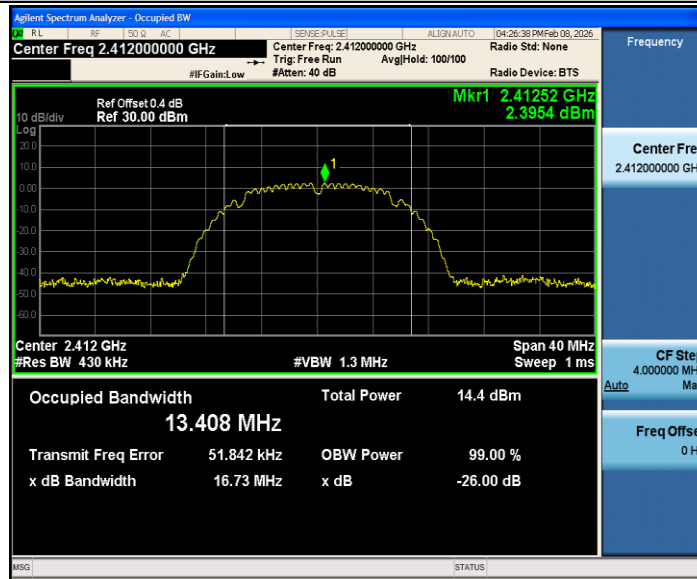
Appendix B: Occupied Channel Bandwidth

Test Result

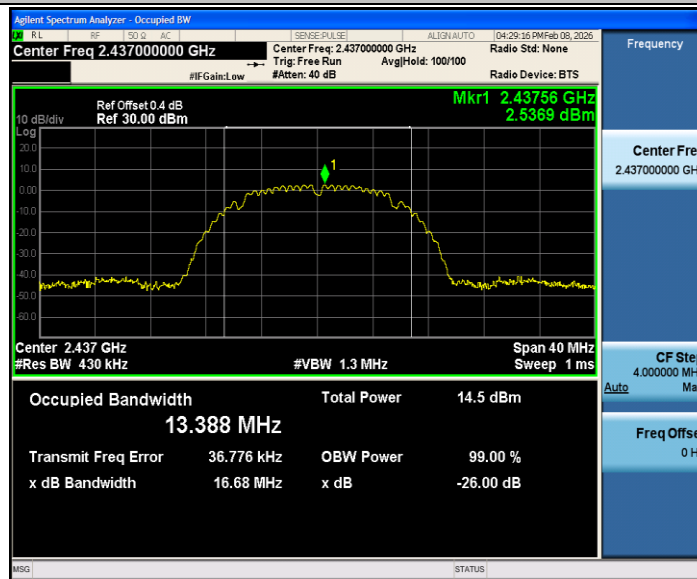
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.408	2405.3478	2418.7558	---	---
		2437	13.388	2430.3428	2443.7308	---	---
		2462	13.415	2455.3111	2468.7261	---	---
11G	Ant1	2412	16.837	2403.6899	2420.5269	---	---
		2437	16.816	2428.6666	2445.4826	---	---
		2462	16.855	2453.5716	2470.4266	---	---
11N20SISO	Ant1	2412	17.926	2403.1252	2421.0512	---	---
		2437	17.867	2428.0899	2445.9569	---	---
		2462	17.882	2453.0619	2470.9439	---	---
11N40SISO	Ant1	2422	36.137	2404.0372	2440.1742	---	---
		2437	36.018	2419.0489	2455.0669	---	---
		2452	36.013	2434.0835	2470.0965	---	---

Test Graphs

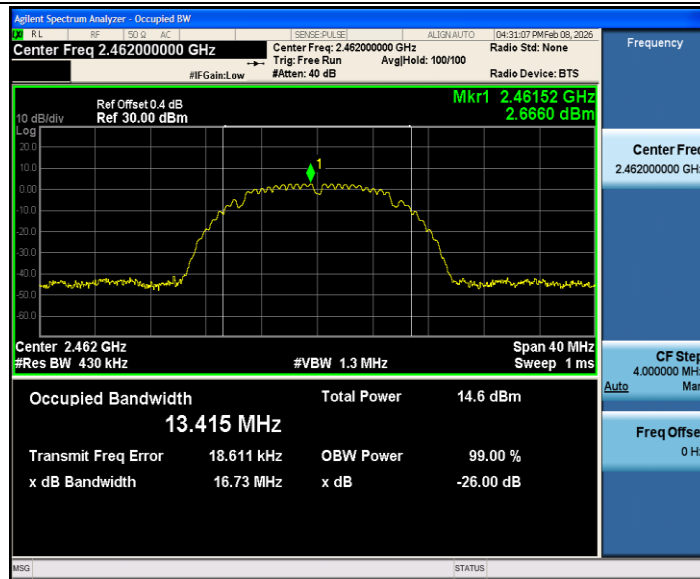
11B_Ant1_2412



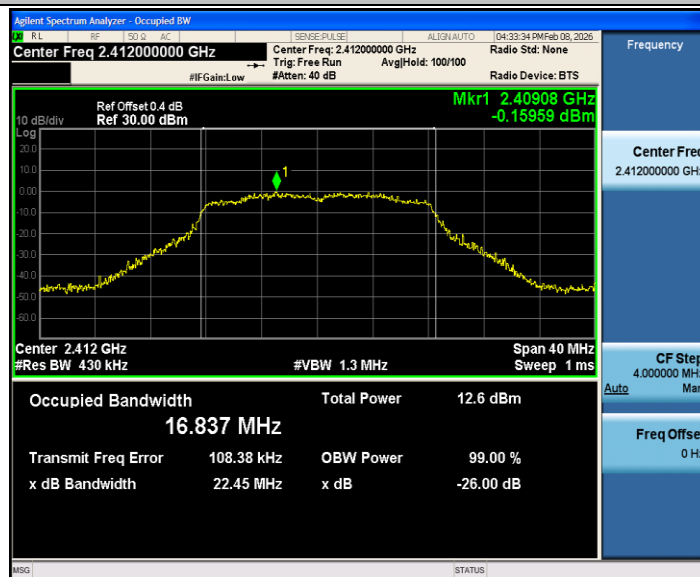
11B_Ant1_2437



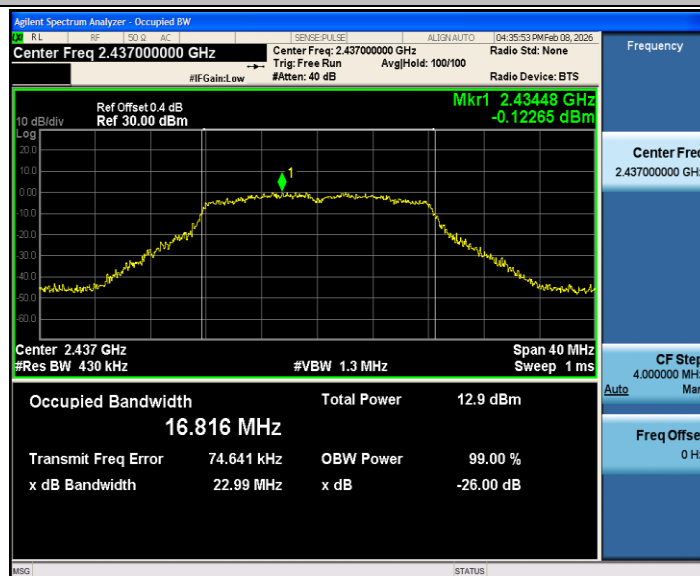
11B_Ant1_2462



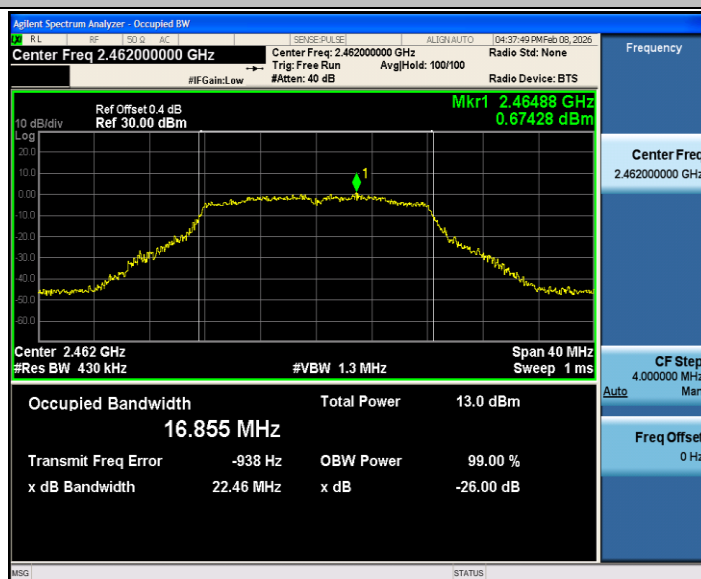
11G_Ant1_2412



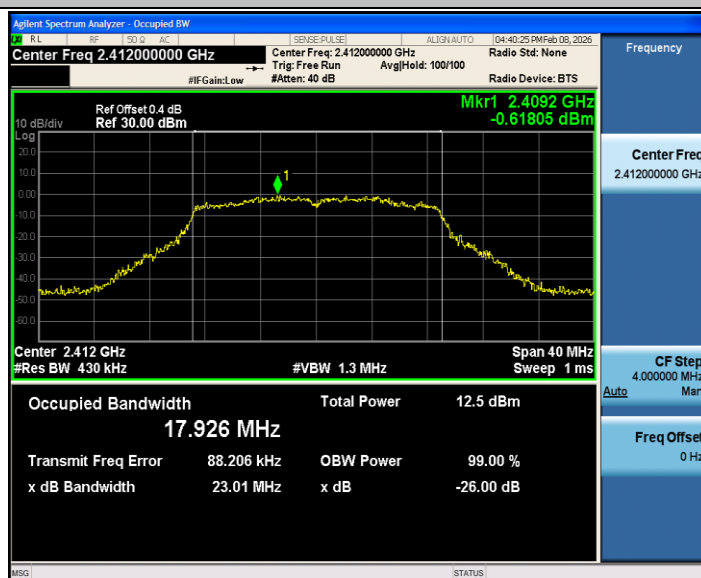
11G_Ant1_2437



11G_Ant1_2462



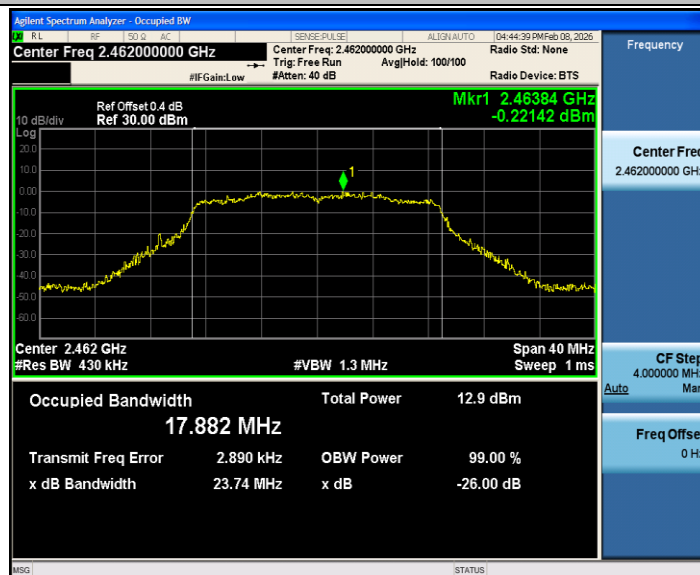
11N20SISO_Ant1_2412



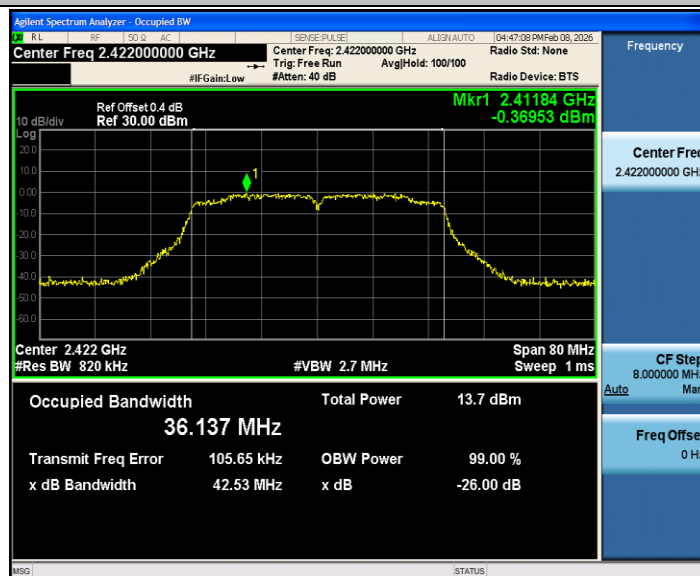
11N20SISO_Ant1_2437



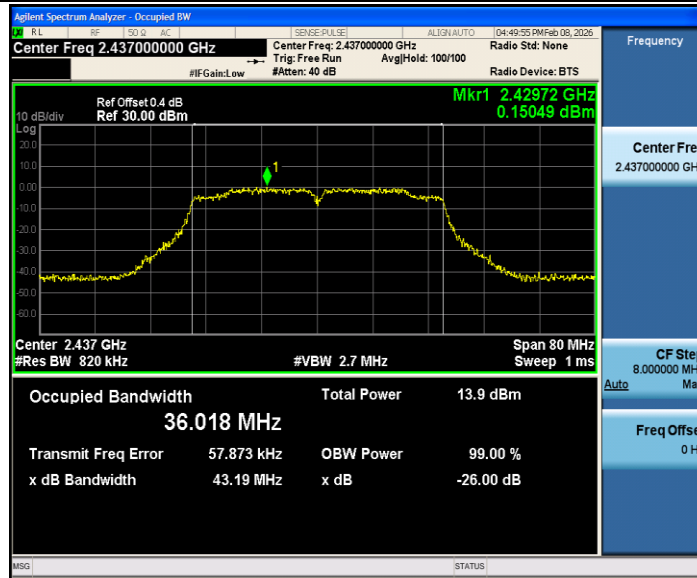
11N20SISO_Ant1_2462



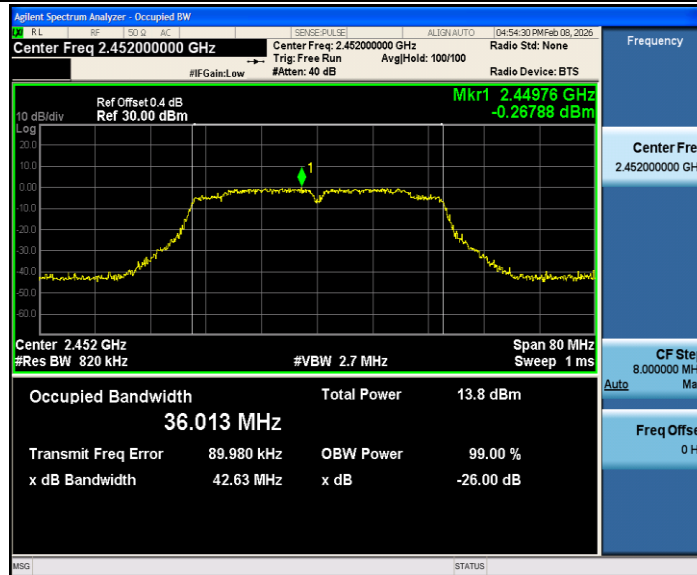
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.99	≤30.00	PASS
		2437	14.16	≤30.00	PASS
		2462	14.31	≤30.00	PASS
11G	Ant1	2412	13.48	≤30.00	PASS
		2437	13.69	≤30.00	PASS
		2462	13.88	≤30.00	PASS
11N20SISO	Ant1	2412	13.31	≤30.00	PASS
		2437	13.40	≤30.00	PASS
		2462	13.71	≤30.00	PASS
11N40SISO	Ant1	2422	13.62	≤30.00	PASS
		2437	13.94	≤30.00	PASS
		2452	13.97	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.09	≤8.00	PASS
		2437	-11.35	≤8.00	PASS
		2462	-12.03	≤8.00	PASS
11G	Ant1	2412	-18.09	≤8.00	PASS
		2437	-17.71	≤8.00	PASS
		2462	-17.86	≤8.00	PASS
11N20SISO	Ant1	2412	-17.96	≤8.00	PASS
		2437	-16.55	≤8.00	PASS
		2462	-17.94	≤8.00	PASS
11N40SISO	Ant1	2422	-21.05	≤8.00	PASS
		2437	-20.94	≤8.00	PASS
		2452	-19.20	≤8.00	PASS

Test Graphs

11B_Ant1_2412



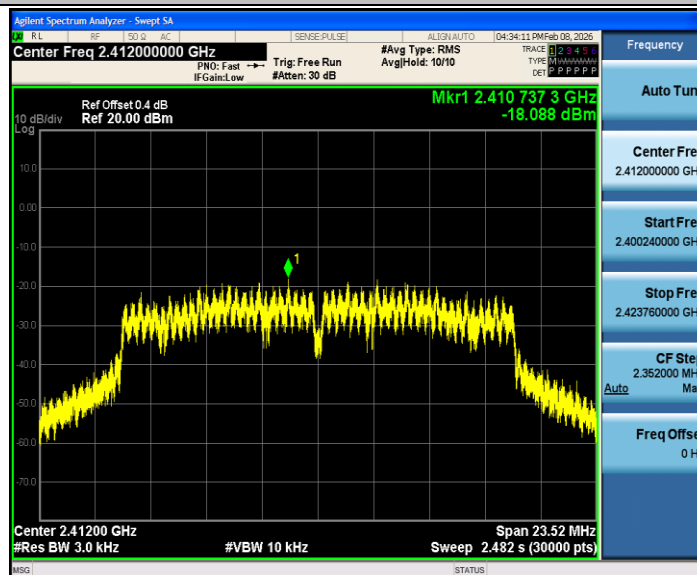
11B_Ant1_2437



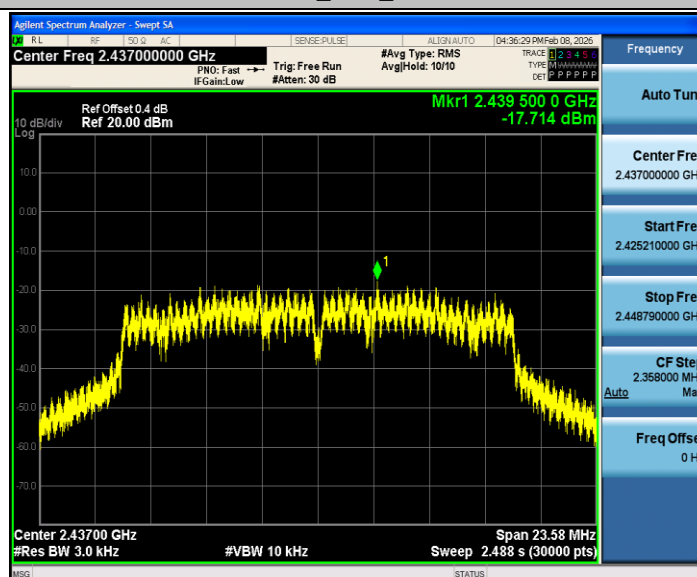
11B_Ant1_2462



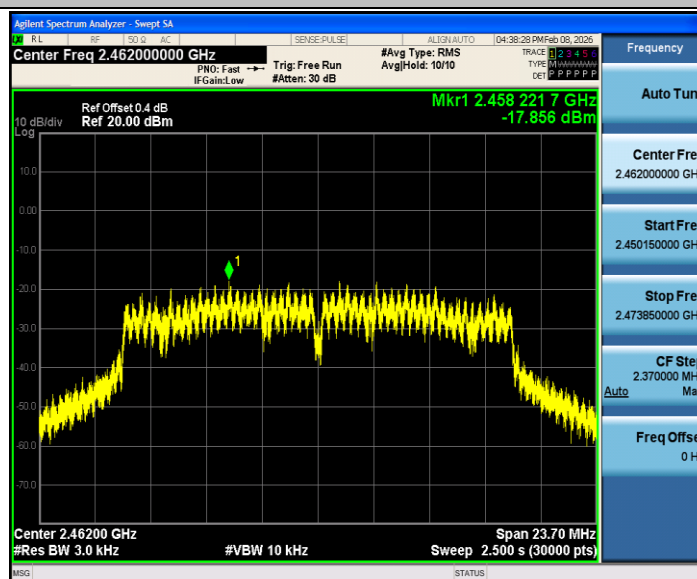
11G_Ant1_2412



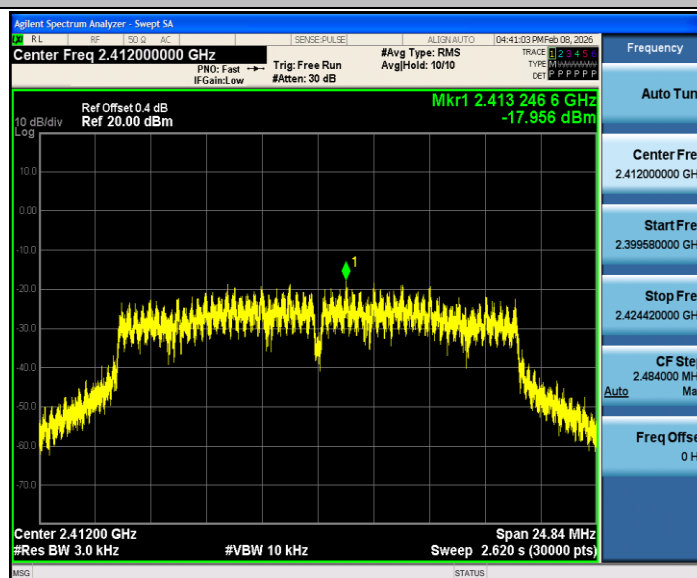
11G_Ant1_2437



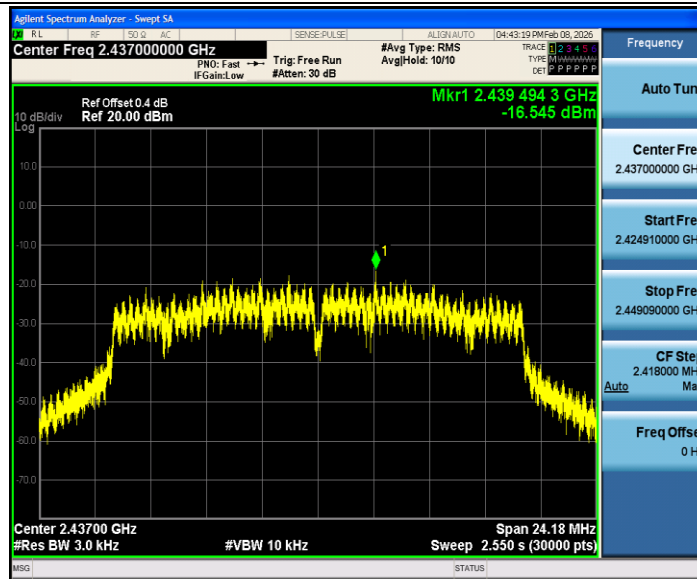
11G_Ant1_2462



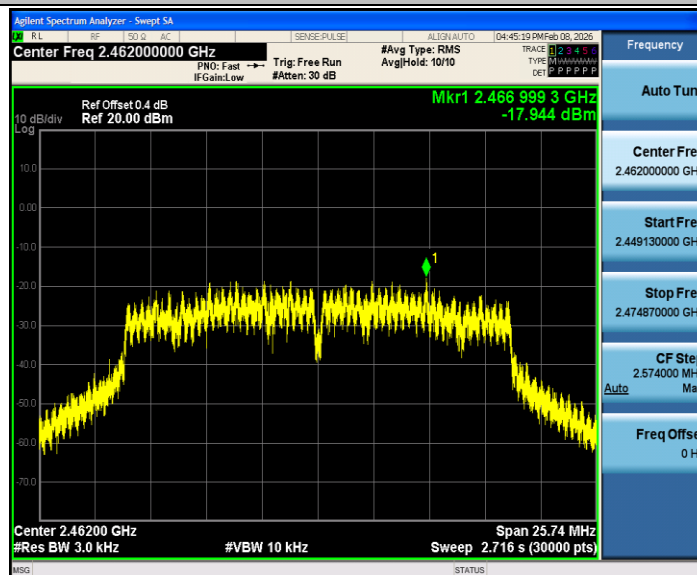
11N20SISO_Ant1_2412



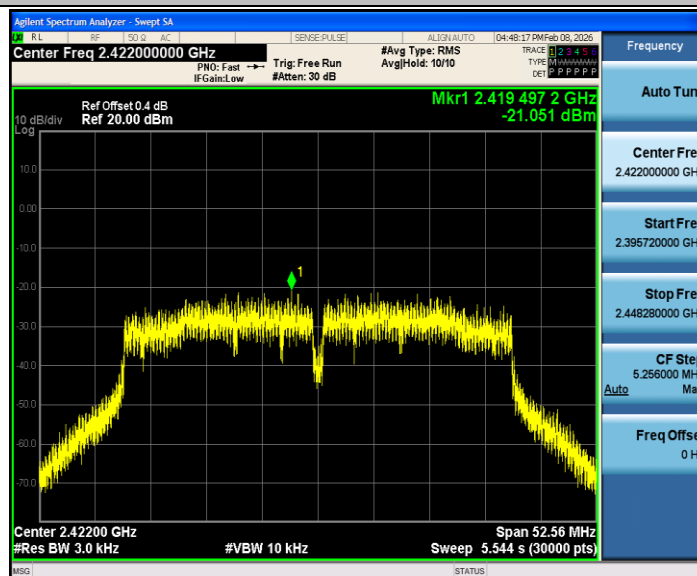
11N20SISO_Ant1_2437



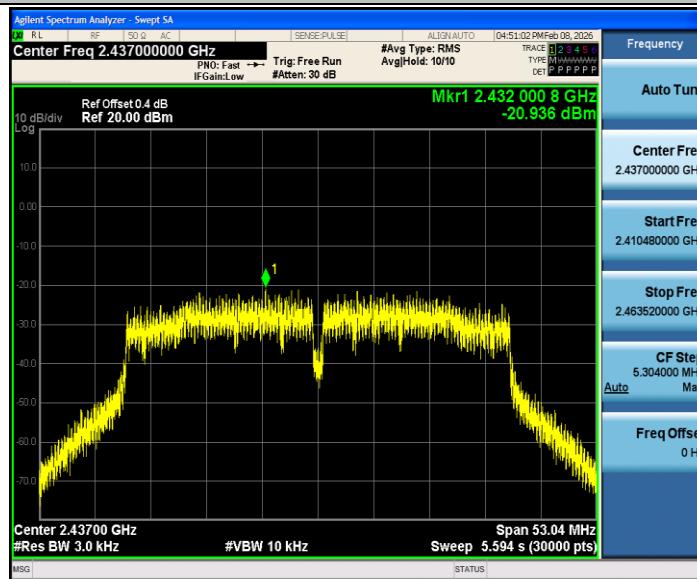
11N20SISO_Ant1_2462



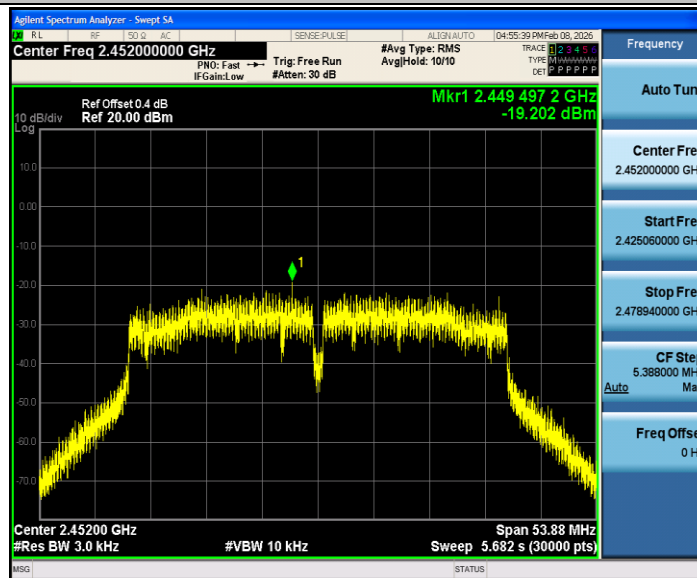
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



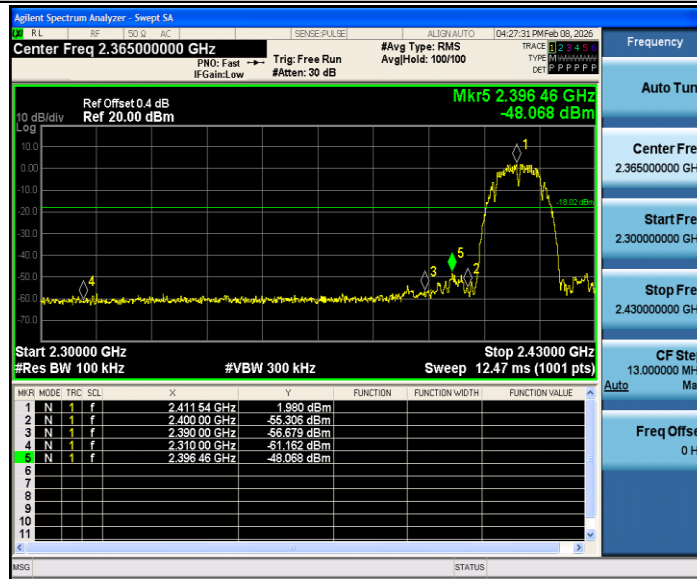
Appendix E: Band edge measurements

Test Result

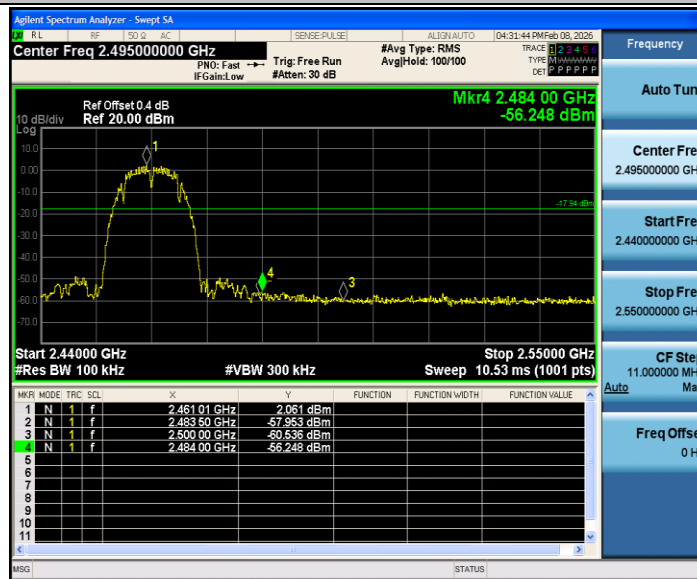
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.98	-48.07	≤-18.02	PASS
		High	2462	2.06	-56.25	≤-17.94	PASS
11G	Ant1	Low	2412	-3.01	-33.79	≤-23.01	PASS
		High	2462	-2.56	-57.48	≤-22.56	PASS
11N20SISO	Ant1	Low	2412	-3.29	-33.93	≤-23.29	PASS
		High	2462	-2.60	-57.69	≤-22.6	PASS
11N40SISO	Ant1	Low	2422	-6.28	-33.98	≤-26.28	PASS
		High	2452	-5.96	-56.32	≤-25.96	PASS

Test Graphs

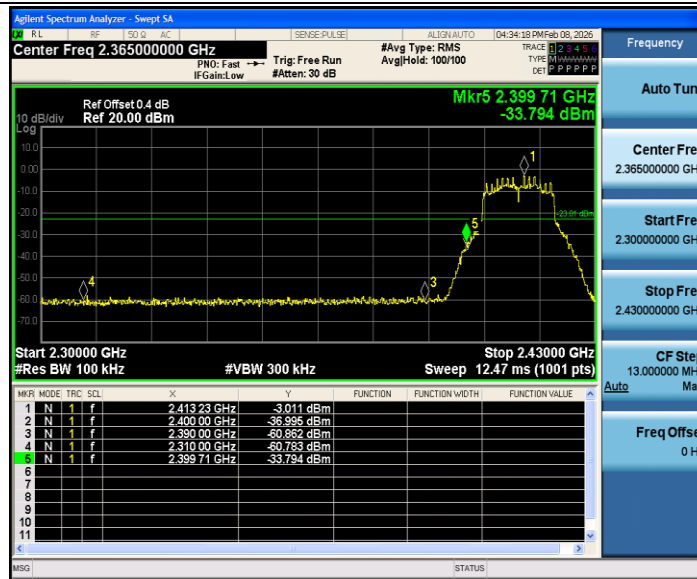
11B_Ant1_Low_2412



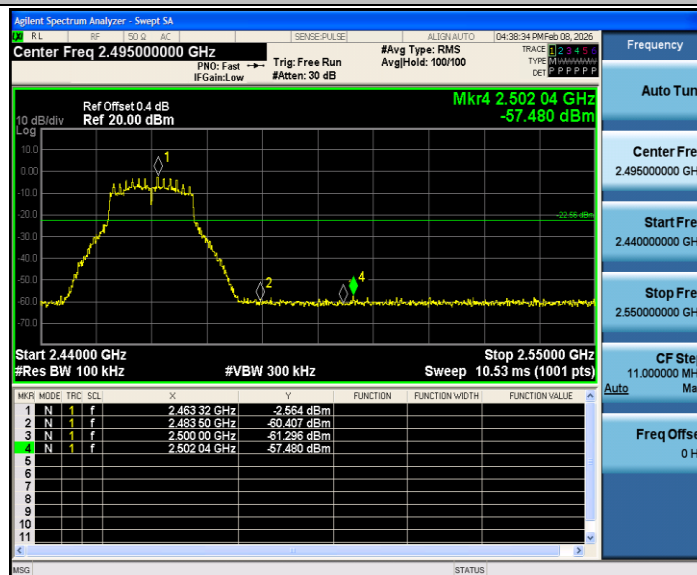
11B_Ant1_High_2462



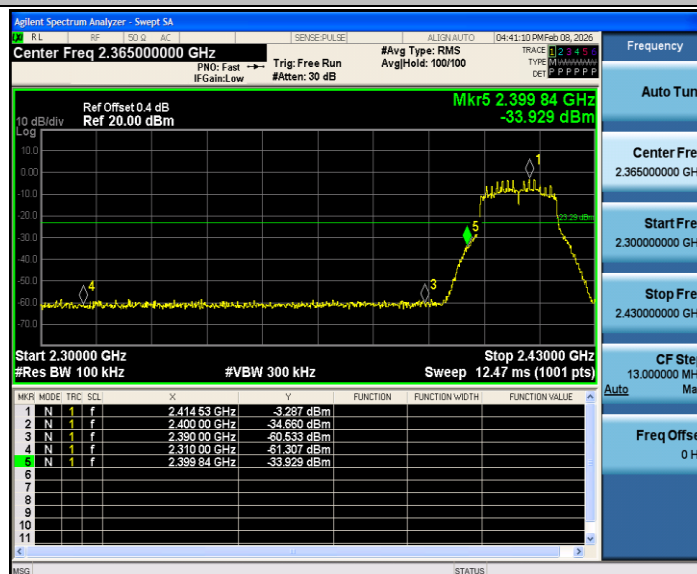
11G_Ant1_Low_2412

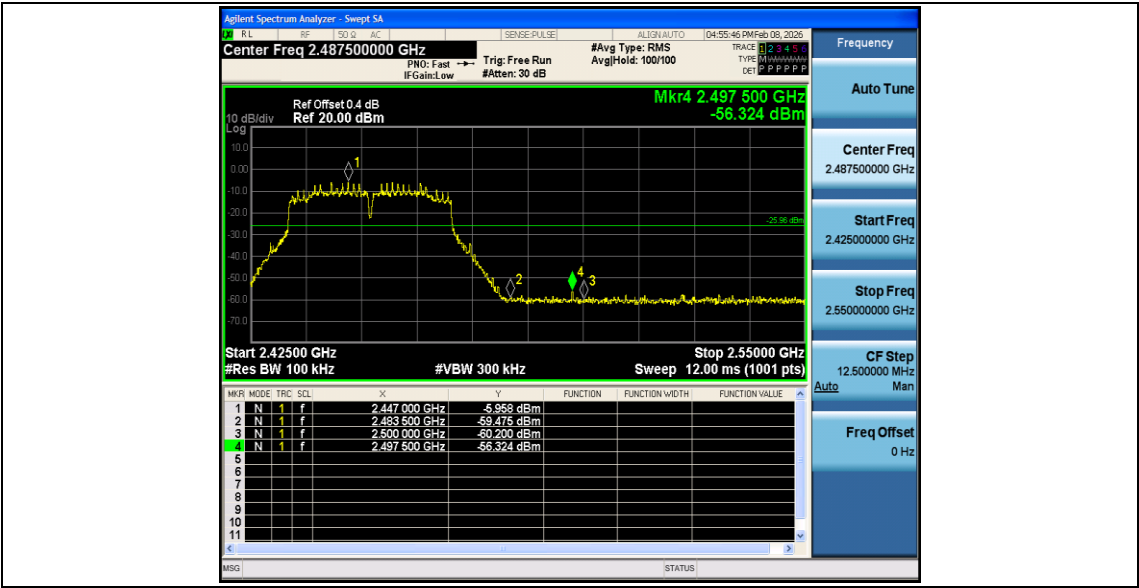


11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412





Appendix F: Conducted Spurious Emission

Test Result

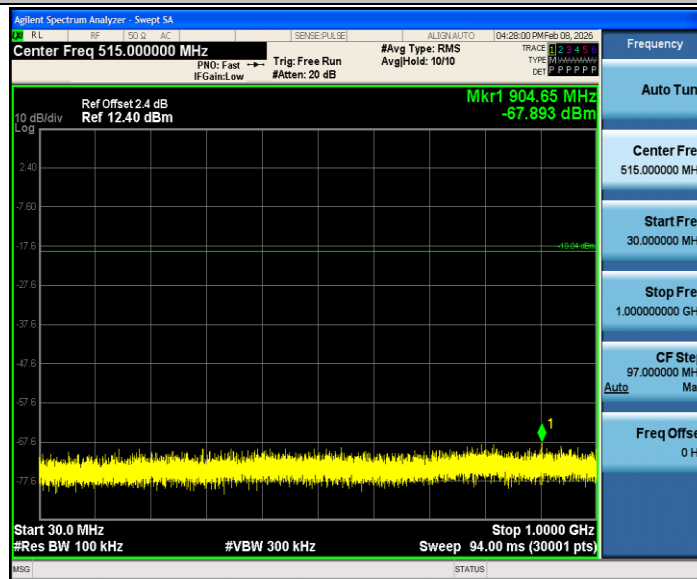
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.96	0.96	---	PASS
			30~1000	0.96	-67.89	≤-19.04	PASS
			1000~26500	0.96	-54.96	≤-19.04	PASS
		2437	Reference	1.59	1.59	---	PASS
			30~1000	1.59	-67.32	≤-18.41	PASS
			1000~26500	1.59	-54.58	≤-18.41	PASS
		2462	Reference	1.16	1.16	---	PASS
			30~1000	1.16	-66.98	≤-18.84	PASS
			1000~26500	1.16	-55.57	≤-18.84	PASS
11G	Ant1	2412	Reference	-3.47	-3.47	---	PASS
			30~1000	-3.47	-67.6	≤-23.47	PASS
			1000~26500	-3.47	-55.19	≤-23.47	PASS
		2437	Reference	-2.73	-2.73	---	PASS
			30~1000	-2.73	-67.54	≤-22.73	PASS
			1000~26500	-2.73	-54.43	≤-22.73	PASS
		2462	Reference	-3.00	-3.00	---	PASS
			30~1000	-3.00	-68.51	≤-23	PASS
			1000~26500	-3.00	-55.12	≤-23	PASS
11N20SISO	Ant1	2412	Reference	-4.09	-4.09	---	PASS
			30~1000	-4.09	-68.22	≤-24.09	PASS
			1000~26500	-4.09	-55.38	≤-24.09	PASS
		2437	Reference	-3.79	-3.79	---	PASS
			30~1000	-3.79	-67.34	≤-23.79	PASS
			1000~26500	-3.79	-55.37	≤-23.79	PASS
		2462	Reference	-2.63	-2.63	---	PASS
			30~1000	-2.63	-67.8	≤-22.63	PASS
			1000~26500	-2.63	-54.8	≤-22.63	PASS
11N40SISO	Ant1	2422	Reference	-6.98	-6.98	---	PASS
			30~1000	-6.98	-67.5	≤-26.98	PASS
			1000~26500	-6.98	-54.85	≤-26.98	PASS
		2437	Reference	-6.61	-6.61	---	PASS
			30~1000	-6.61	-67.64	≤-26.61	PASS
			1000~26500	-6.61	-55.29	≤-26.61	PASS
		2452	Reference	-6.69	-6.69	---	PASS
			30~1000	-6.69	-68.2	≤-26.69	PASS
			1000~26500	-6.69	-54.79	≤-26.69	PASS

Test Graphs

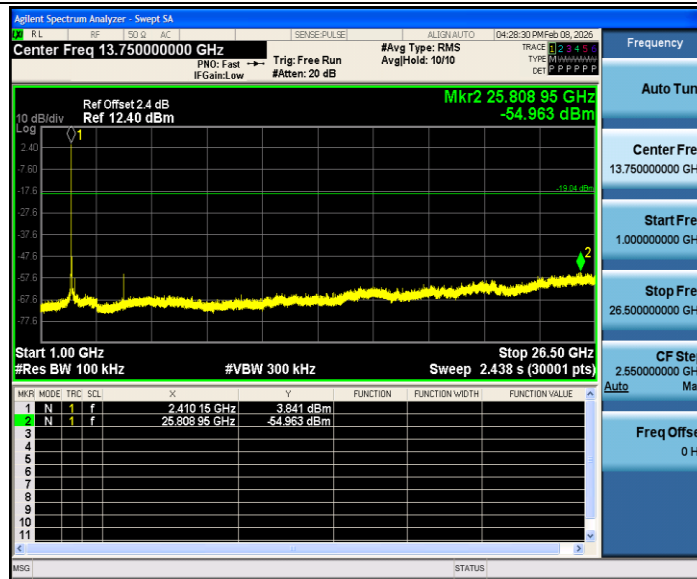
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



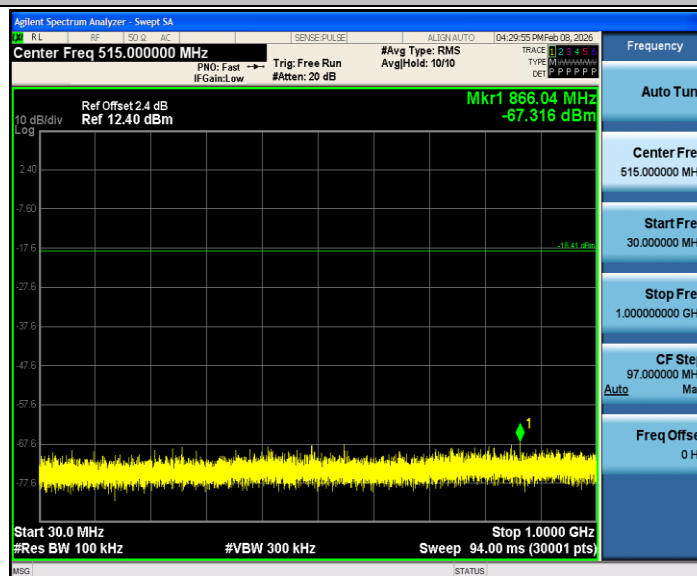
11B_Ant1_2412_1000~26500



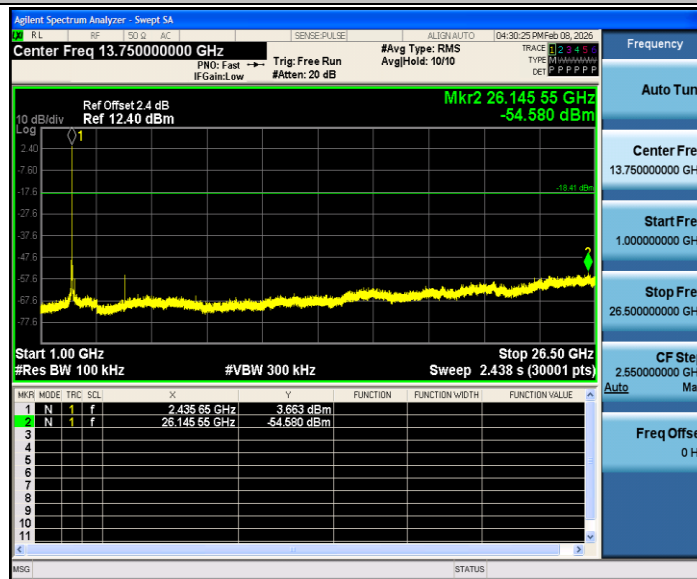
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



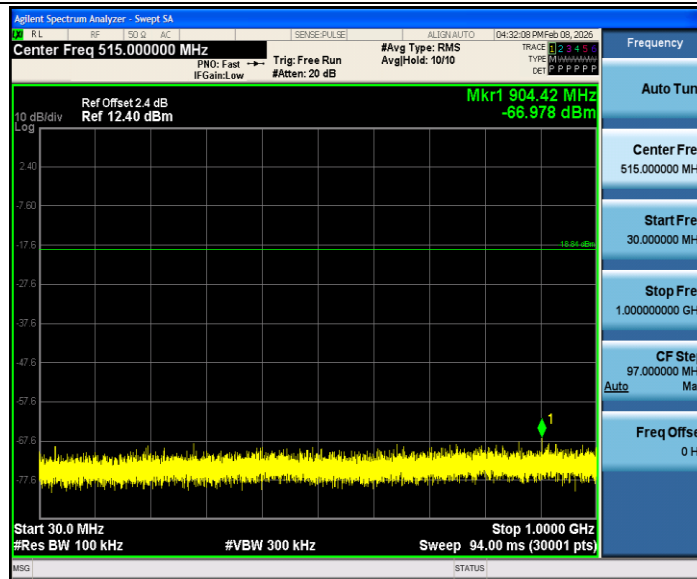
11B_Ant1_2437_1000~26500



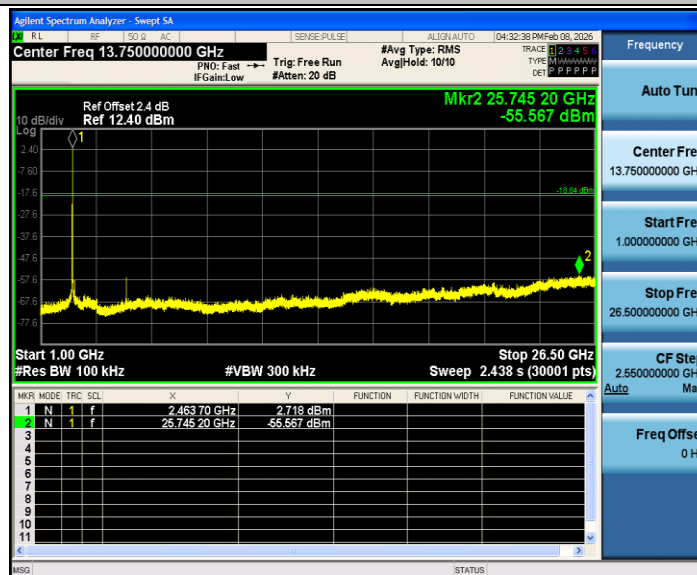
11B_Ant1_2462_0~Reference



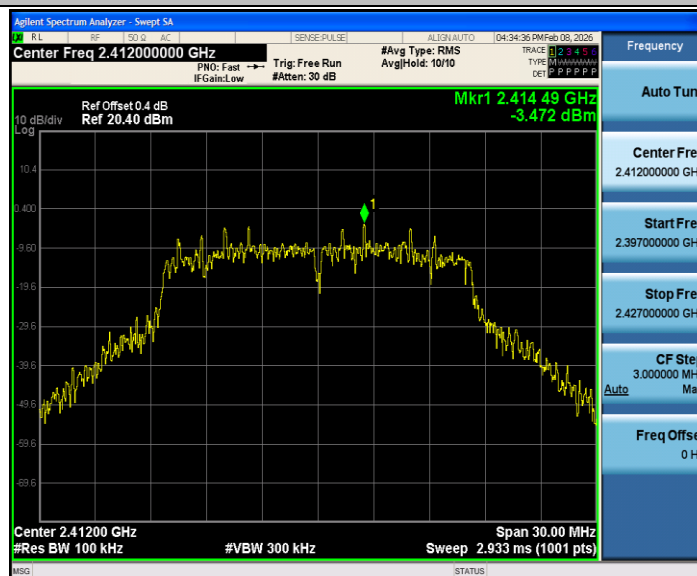
11B_Ant1_2462_30~1000



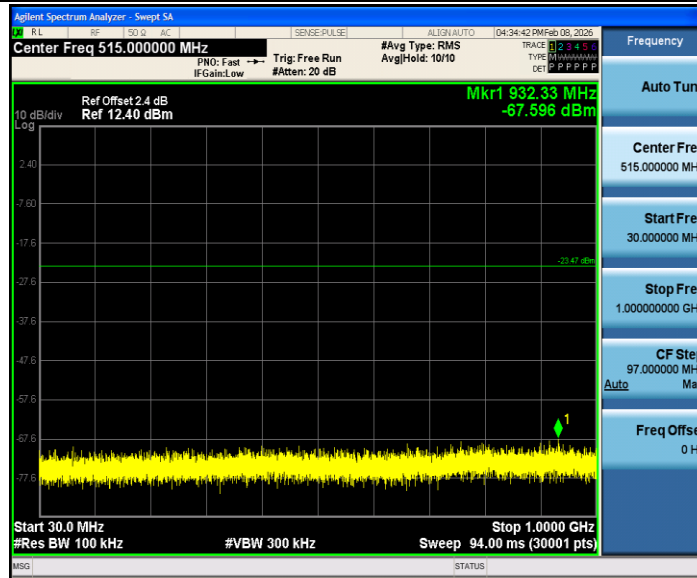
11B_Ant1_2462_1000~26500



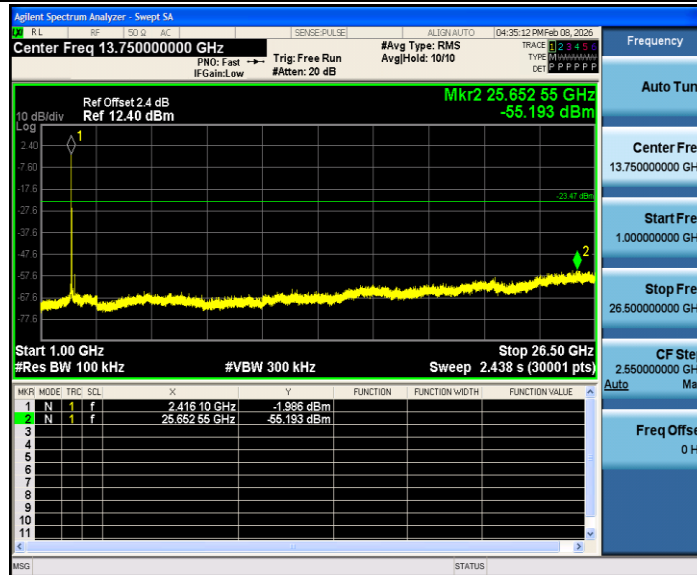
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



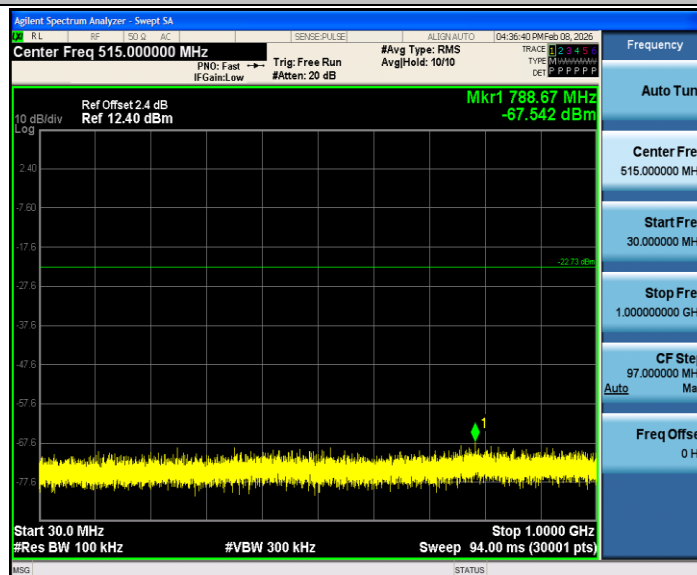
11G_Ant1_2412_1000~26500



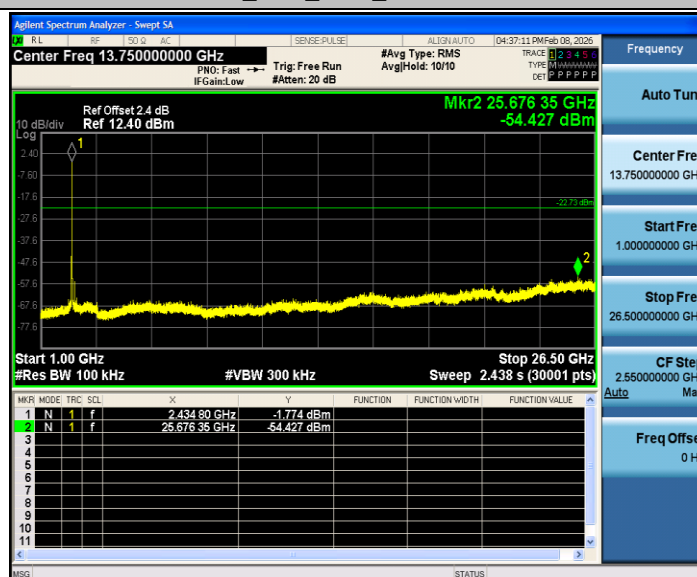
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



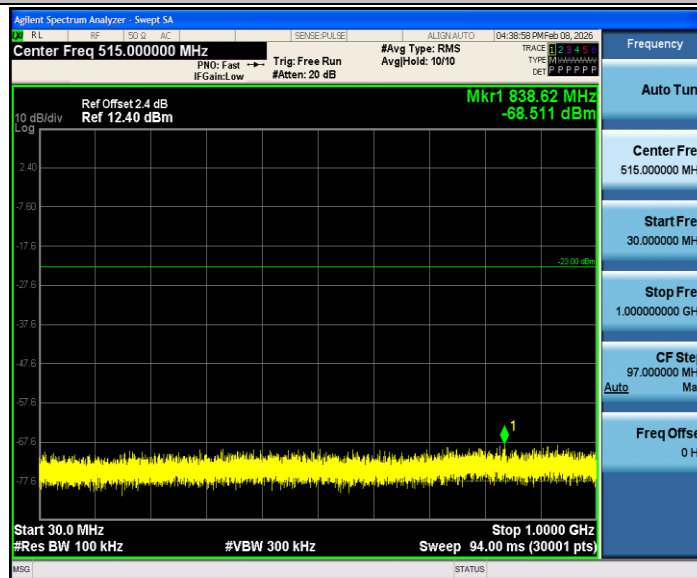
11G_Ant1_2437_1000~26500



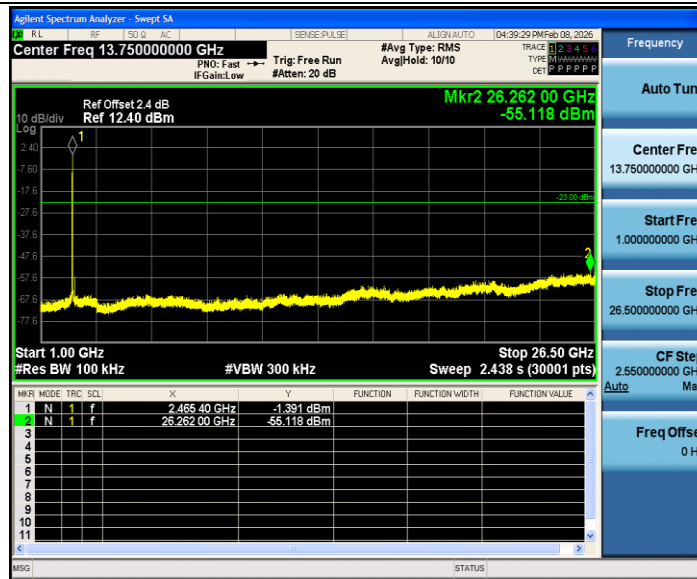
11G_Ant1_2462_0~Reference



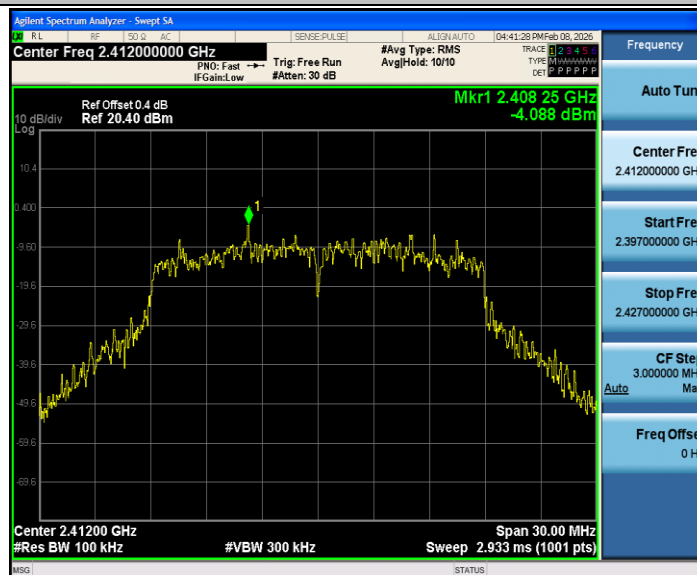
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

