

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BYMV-CVTAT-P2-5

Company : Qingdao Caixin Electronic Technology Co., Ltd.

EUT : RGB LED Display

Model Number : P2.5

Report No. : CTA26092400601

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	2406.920	2417.120	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.920	2404.040	2419.960	0.5	PASS
		2437	15.880	2429.120	2445.000	0.5	PASS
		2462	15.880	2454.080	2469.960	0.5	PASS
11N20SISO	Ant1	2412	17.320	2403.280	2420.600	0.5	PASS
		2437	16.880	2428.480	2445.360	0.5	PASS
		2462	17.320	2453.440	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.400	2440.000	0.5	PASS
		2437	35.440	2419.480	2454.920	0.5	PASS
		2452	35.280	2434.720	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



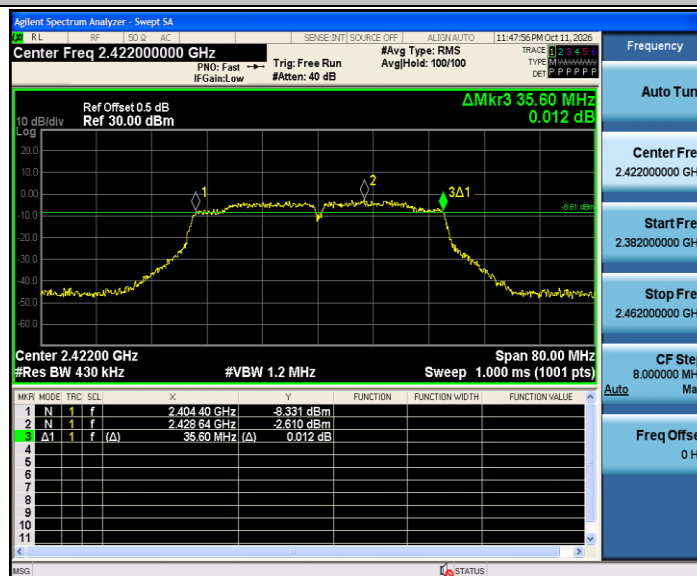
11N20SISO_Ant1_2437



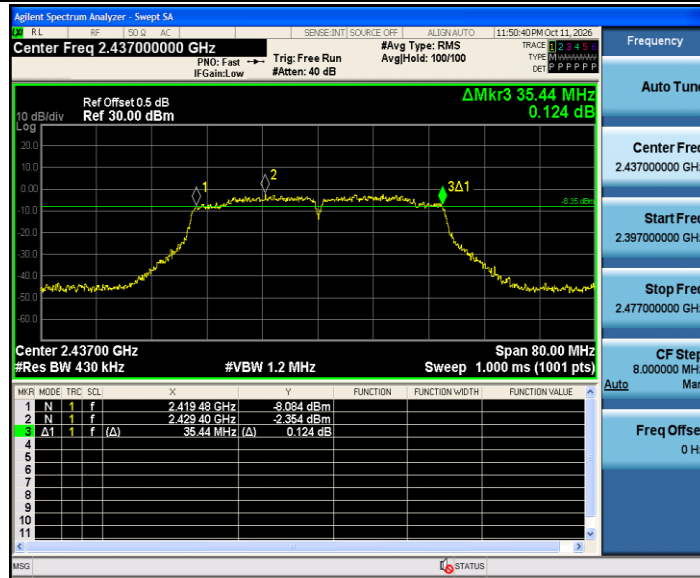
11N20SISO_Ant1_2462



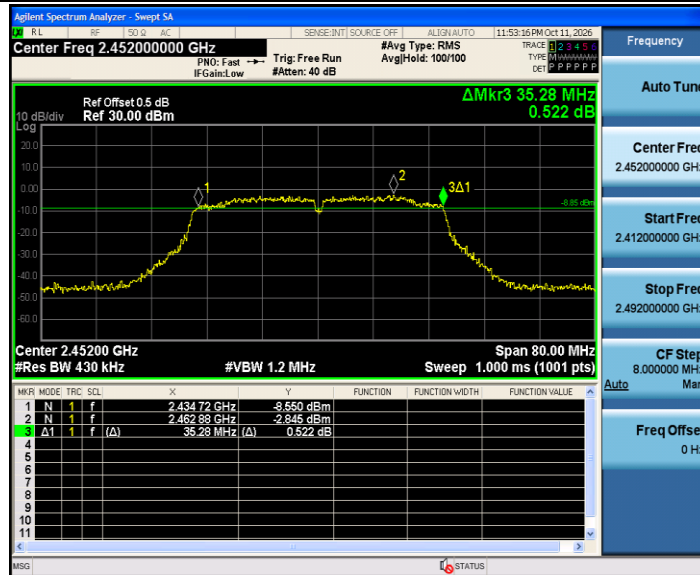
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



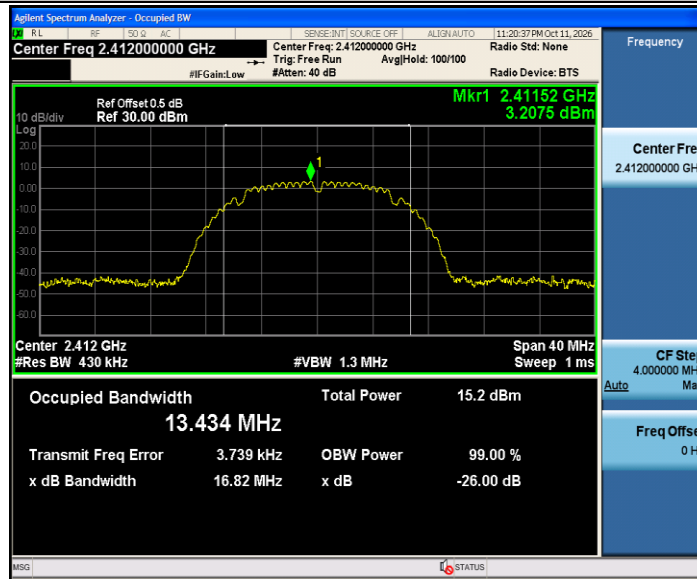
Appendix B: Occupied Channel Bandwidth

Test Result

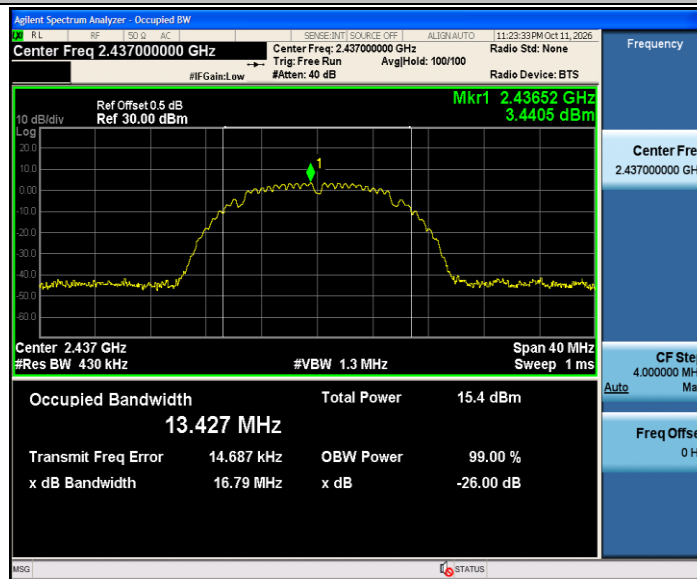
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.434	2405.2867	2418.7207	---	---
		2437	13.427	2430.3012	2443.7282	---	---
		2462	13.420	2455.3132	2468.7332	---	---
11G	Ant1	2412	16.805	2403.6011	2420.4061	---	---
		2437	16.852	2428.6056	2445.4576	---	---
		2462	16.825	2453.6023	2470.4273	---	---
11N20SISO	Ant1	2412	17.929	2403.0369	2420.9659	---	---
		2437	17.958	2428.0407	2445.9987	---	---
		2462	17.963	2453.0651	2471.0281	---	---
11N40SISO	Ant1	2422	36.132	2404.1189	2440.2509	---	---
		2437	36.019	2419.1475	2455.1665	---	---
		2452	36.052	2434.1061	2470.1581	---	---

Test Graphs

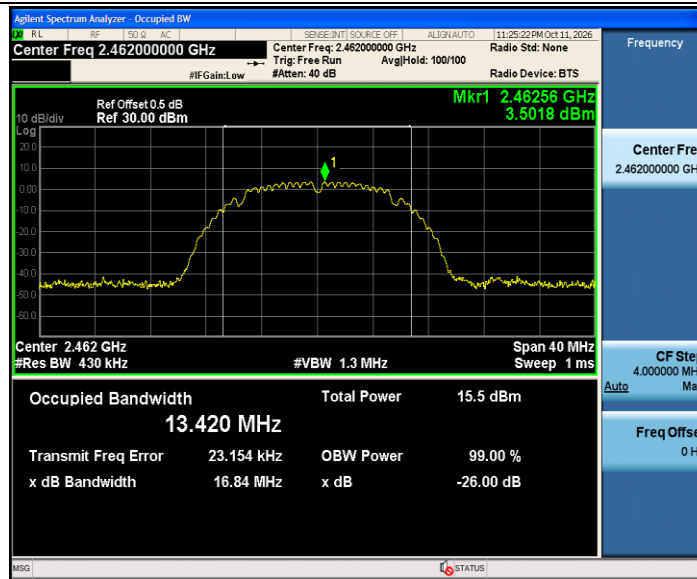
11B_Ant1_2412



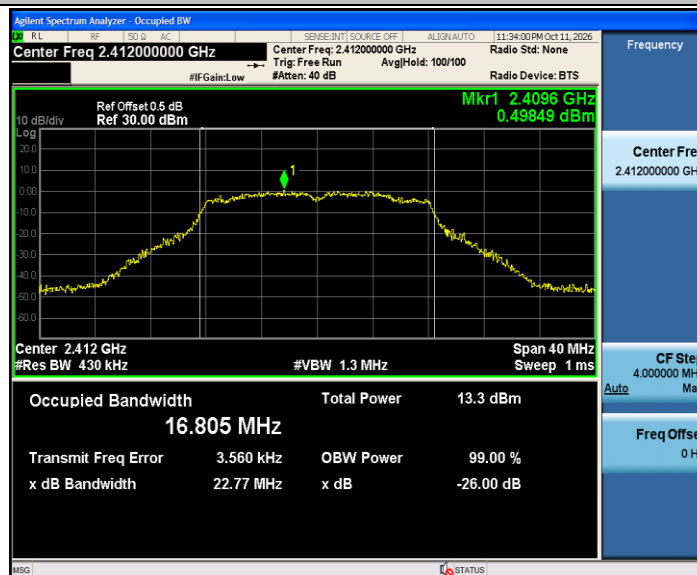
11B_Ant1_2437



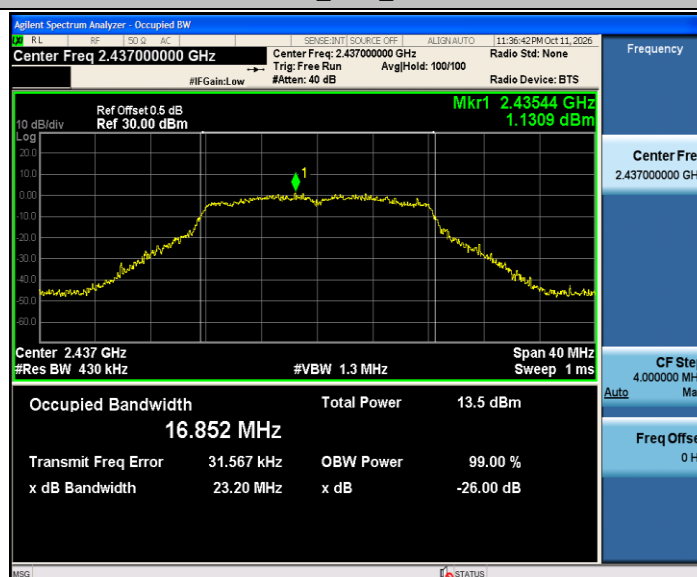
11B_Ant1_2462



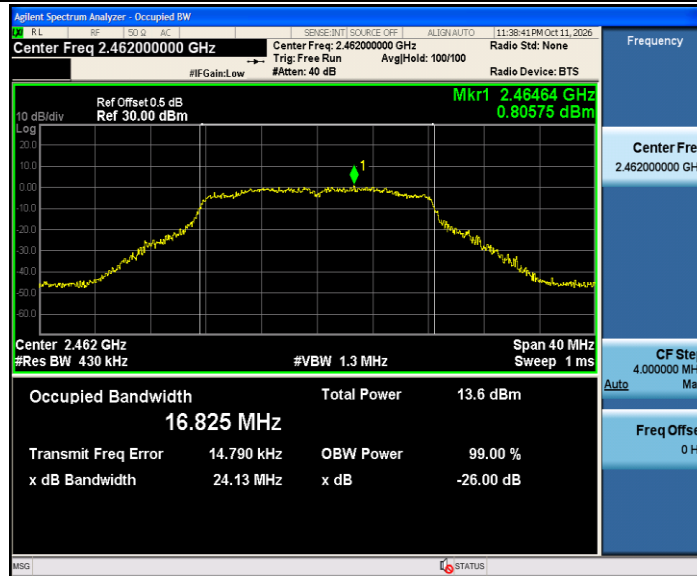
11G_Ant1_2412



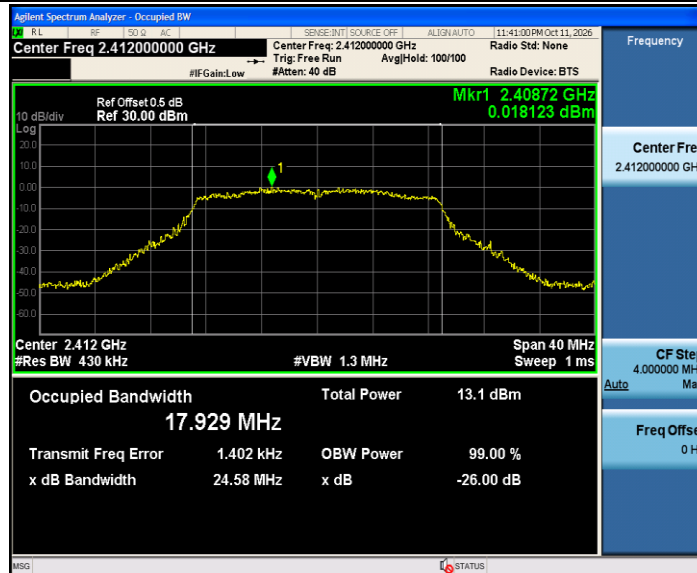
11G_Ant1_2437



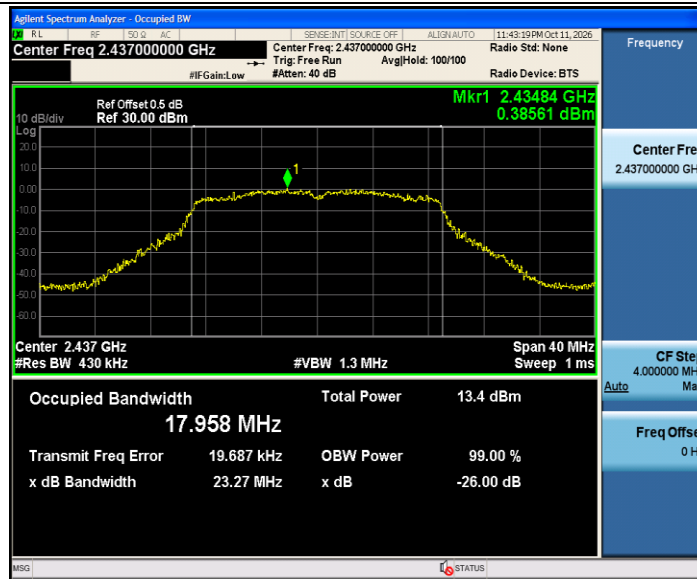
11G_Ant1_2462



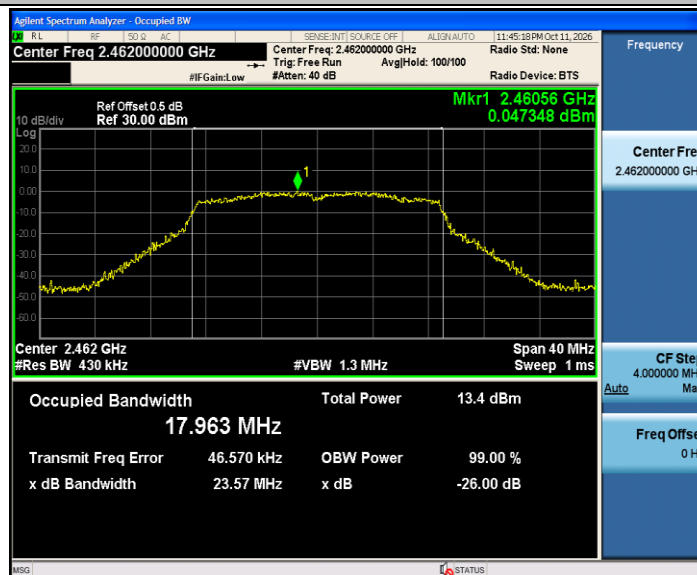
11N20SISO_Ant1_2412



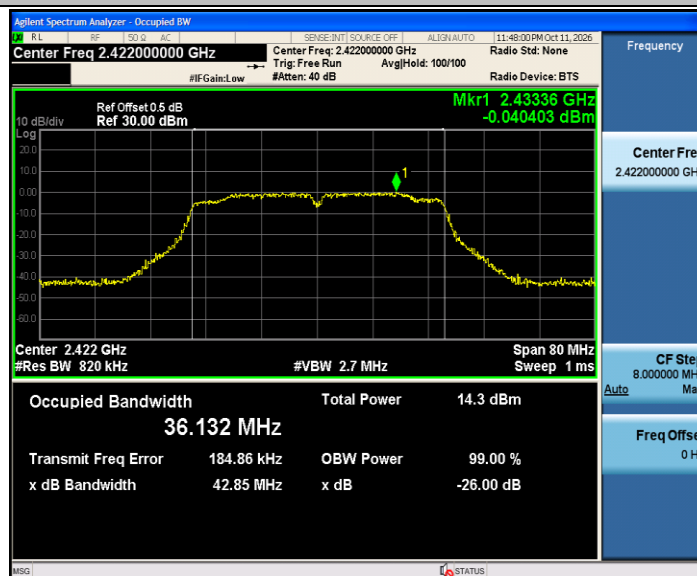
11N20SISO_Ant1_2437



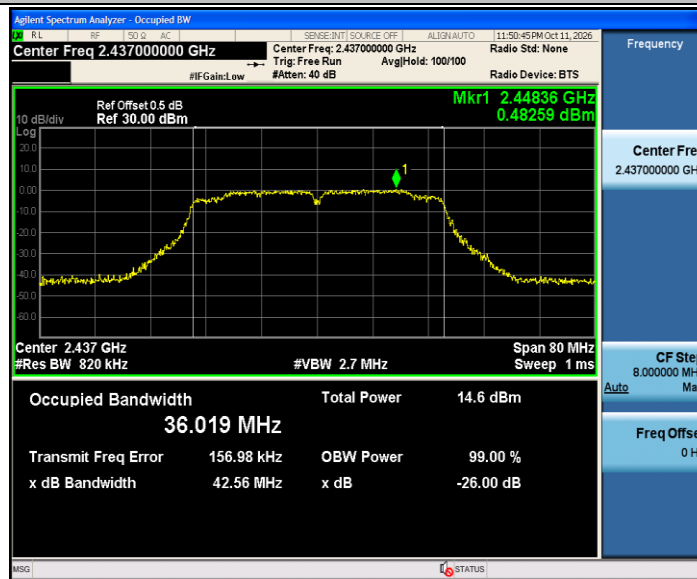
11N20SISO_Ant1_2462



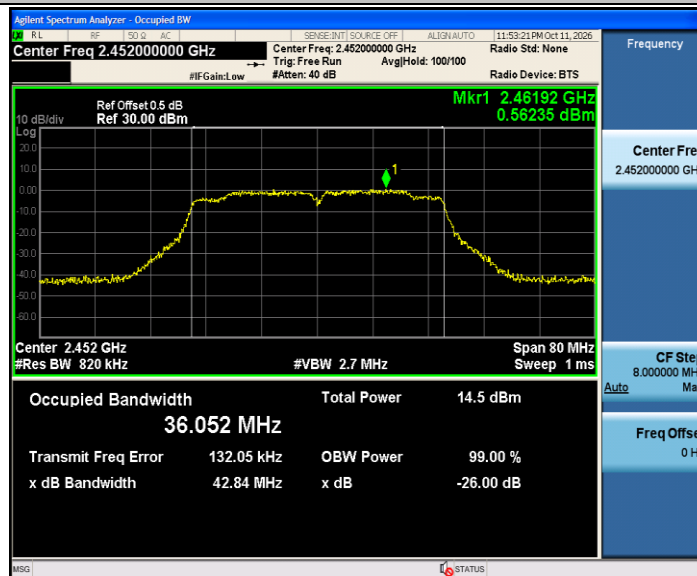
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.84	≤30.00	PASS
		2437	15.02	≤30.00	PASS
		2462	15.09	≤30.00	PASS
11G	Ant1	2412	14.22	≤30.00	PASS
		2437	14.35	≤30.00	PASS
		2462	14.48	≤30.00	PASS
11N20SISO	Ant1	2412	14.18	≤30.00	PASS
		2437	14.19	≤30.00	PASS
		2462	14.48	≤30.00	PASS
11N40SISO	Ant1	2422	14.52	≤30.00	PASS
		2437	14.77	≤30.00	PASS
		2452	14.67	≤30.00	PASS

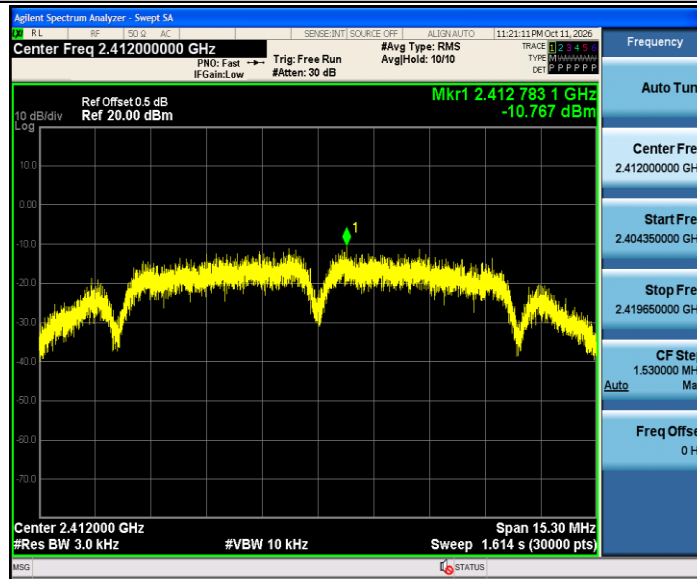
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.77	≤8.00	PASS
		2437	-10.37	≤8.00	PASS
		2462	-10.05	≤8.00	PASS
11G	Ant1	2412	-15.68	≤8.00	PASS
		2437	-15.20	≤8.00	PASS
		2462	-16.92	≤8.00	PASS
11N20SISO	Ant1	2412	-17.03	≤8.00	PASS
		2437	-16.27	≤8.00	PASS
		2462	-17.23	≤8.00	PASS
11N40SISO	Ant1	2422	-20.13	≤8.00	PASS
		2437	-19.90	≤8.00	PASS
		2452	-20.14	≤8.00	PASS

Test Graphs

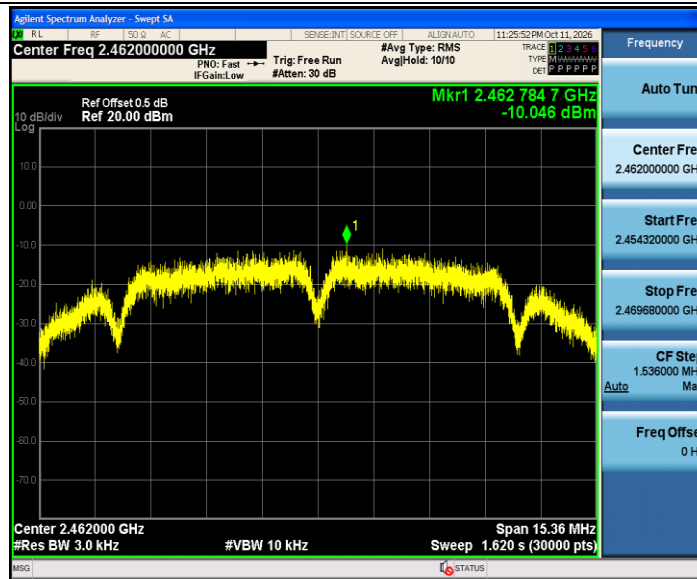
11B_Ant1_2412



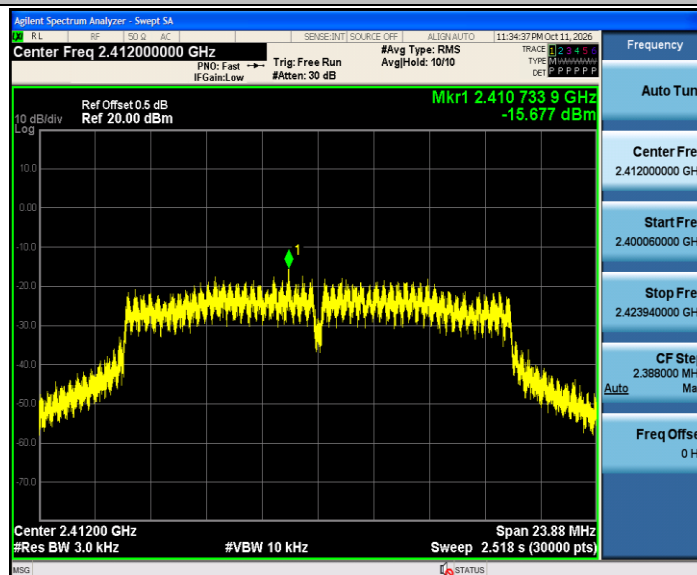
11B_Ant1_2437



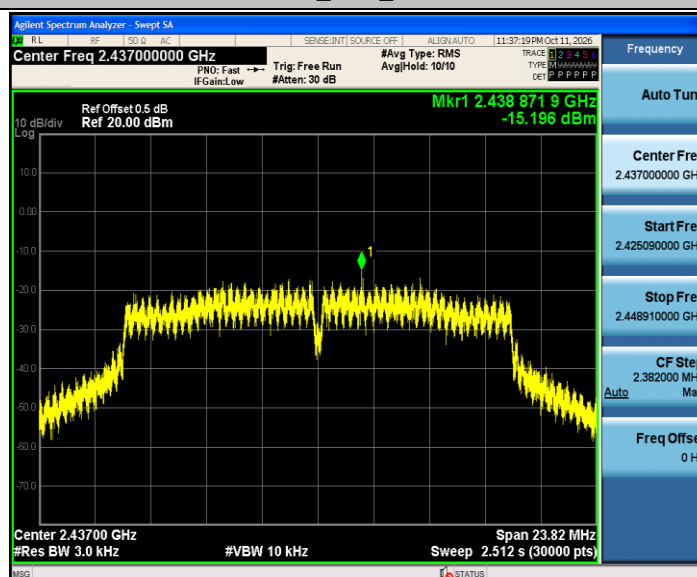
11B_Ant1_2462



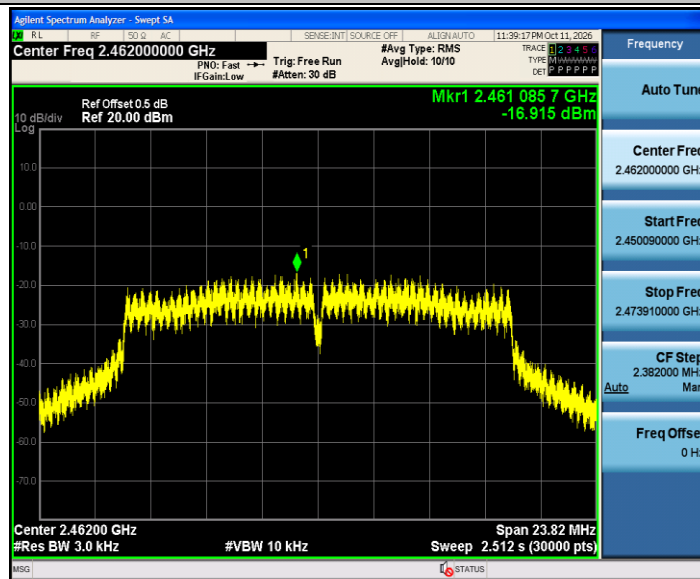
11G_Ant1_2412



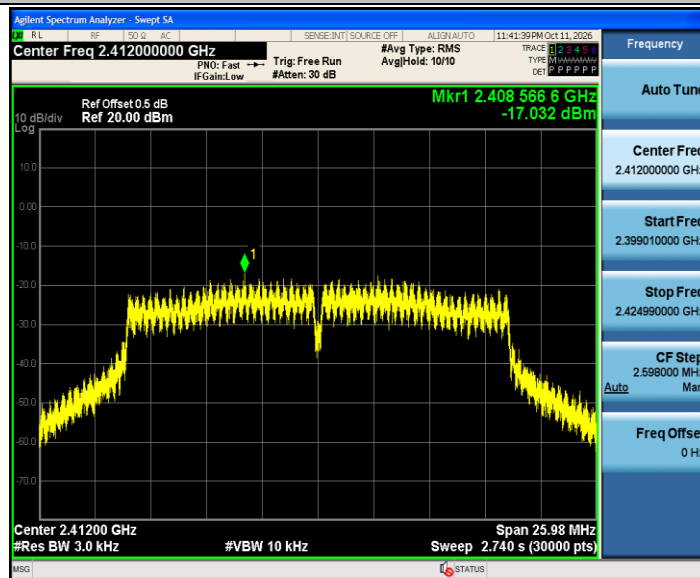
11G_Ant1_2437



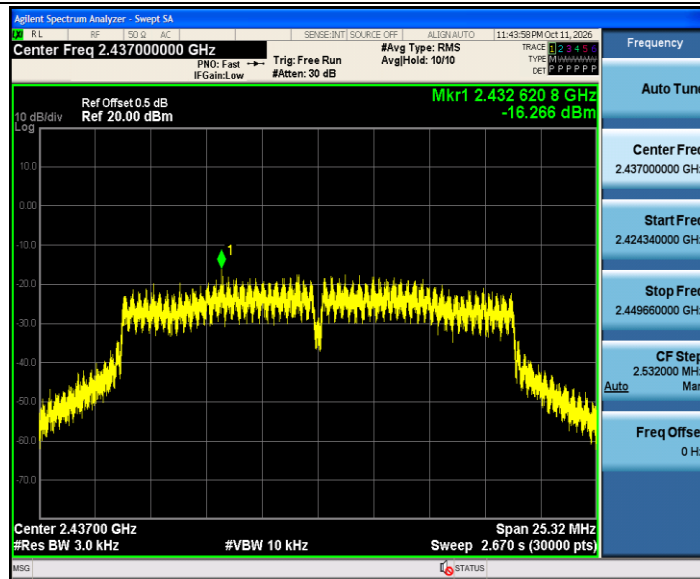
11G_Ant1_2462



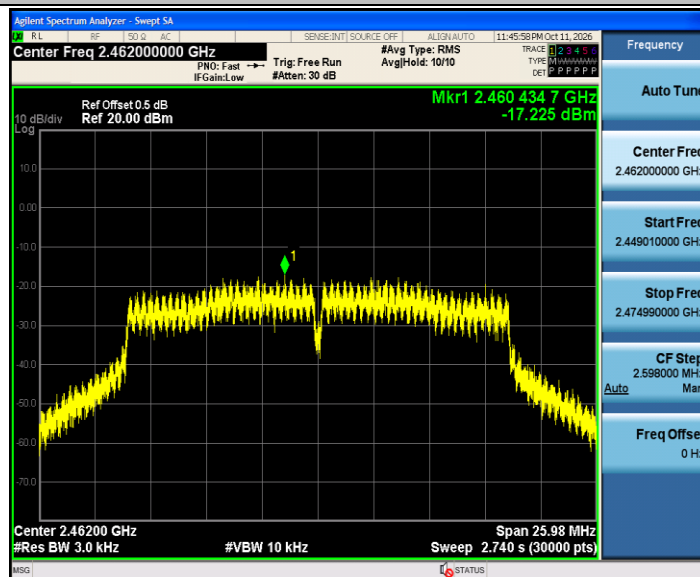
11N20SISO_Ant1_2412



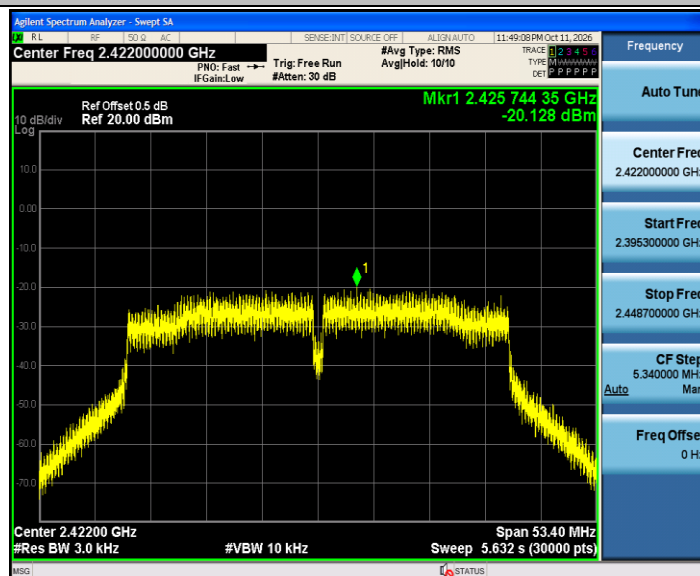
11N20SISO_Ant1_2437



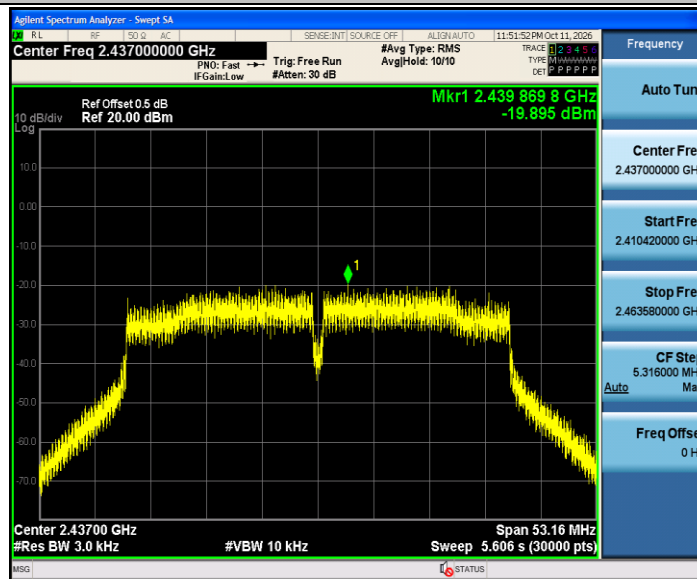
11N20SISO_Ant1_2462



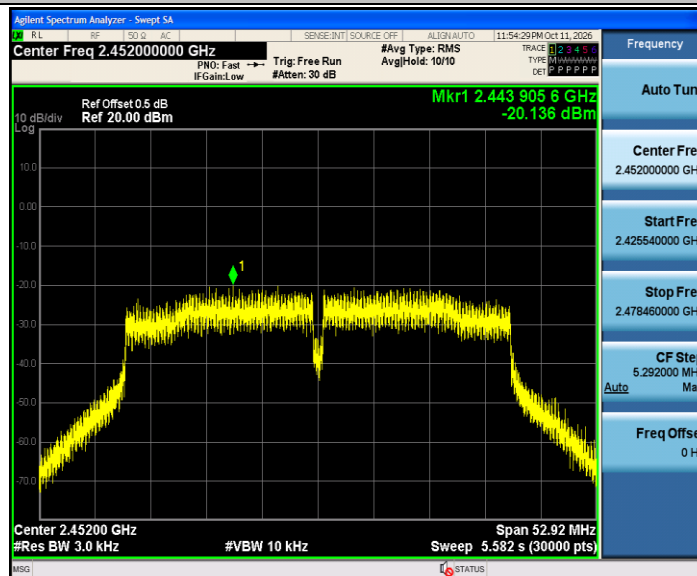
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



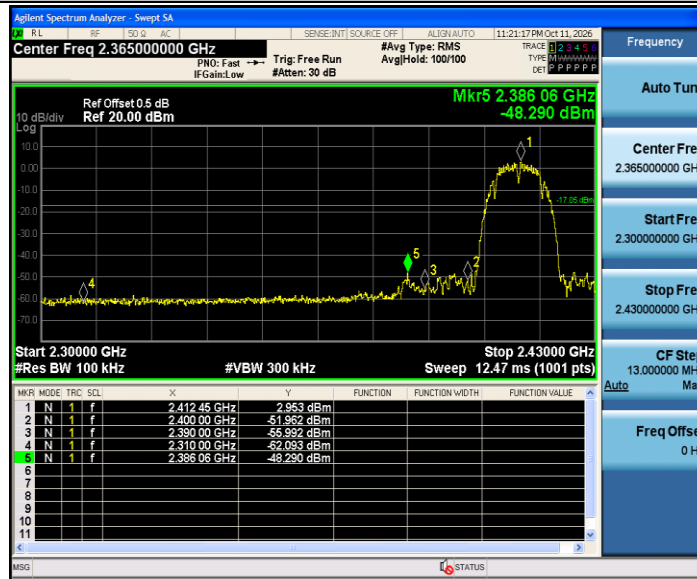
Appendix E: Band edge measurements

Test Result

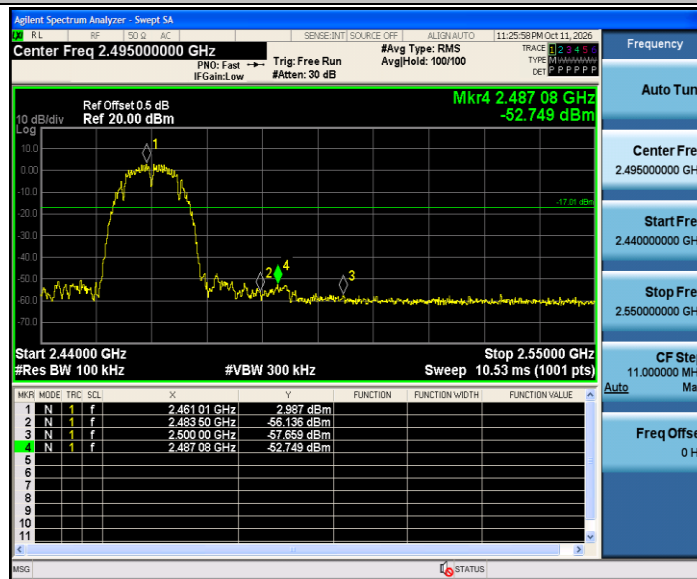
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.95	-48.29	≤-17.05	PASS
		High	2462	2.99	-52.75	≤-17.01	PASS
11G	Ant1	Low	2412	-2.53	-31.94	≤-22.53	PASS
		High	2462	-2.62	-57.78	≤-22.62	PASS
11N20SISO	Ant1	Low	2412	-2.85	-32.8	≤-22.85	PASS
		High	2462	-2.46	-58.17	≤-22.46	PASS
11N40SISO	Ant1	Low	2422	-5.83	-37.88	≤-25.83	PASS
		High	2452	-5.60	-55.2	≤-25.6	PASS

Test Graphs

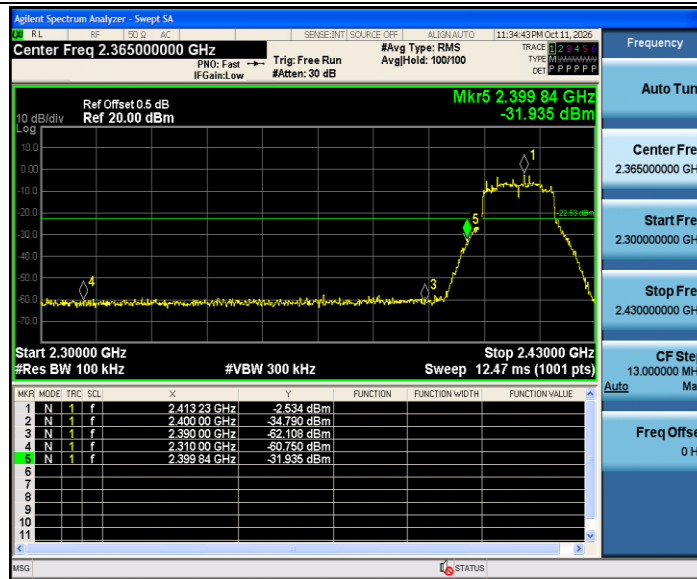
11B_Ant1_Low_2412



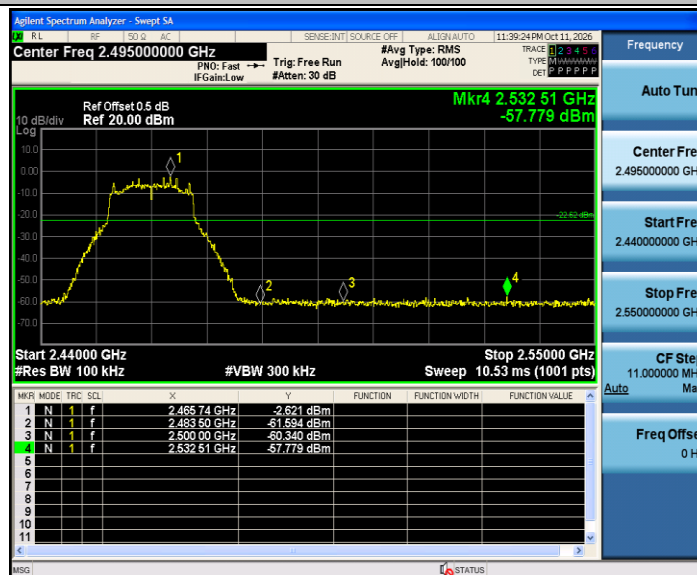
11B_Ant1_High_2462



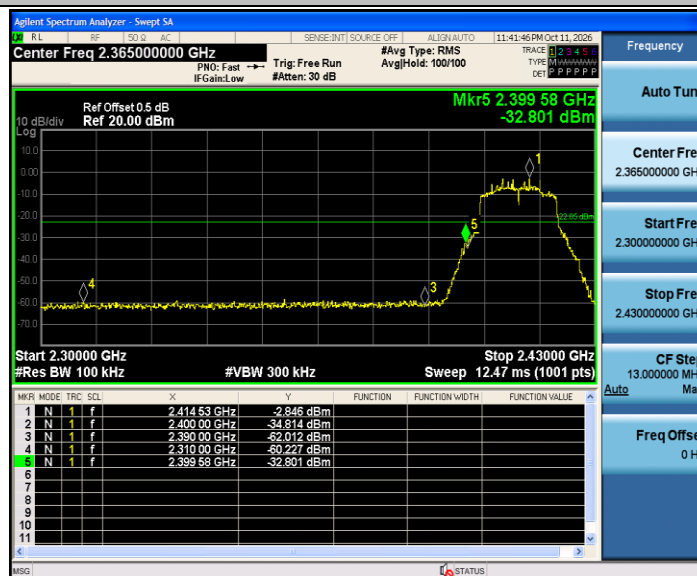
11G_Ant1_Low_2412



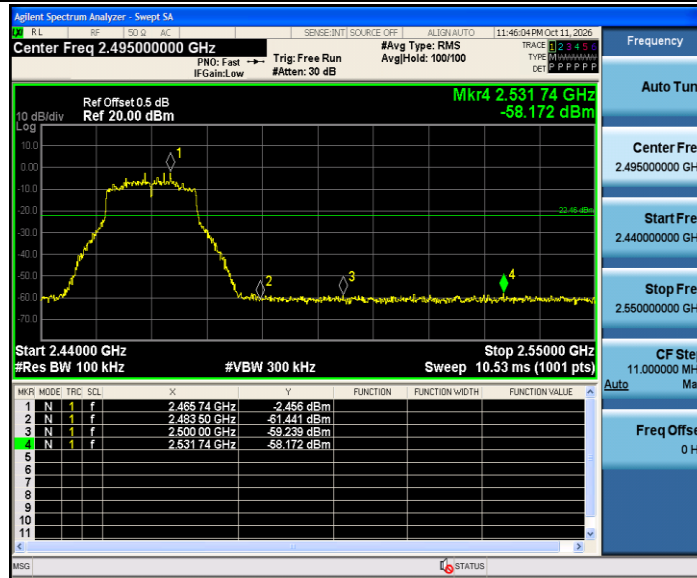
11G_Ant1_High_2462



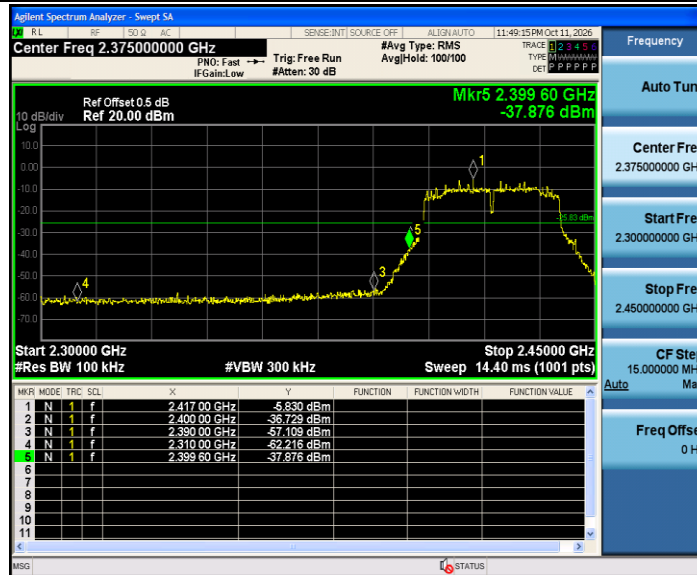
11N20SISO_Ant1_Low_2412



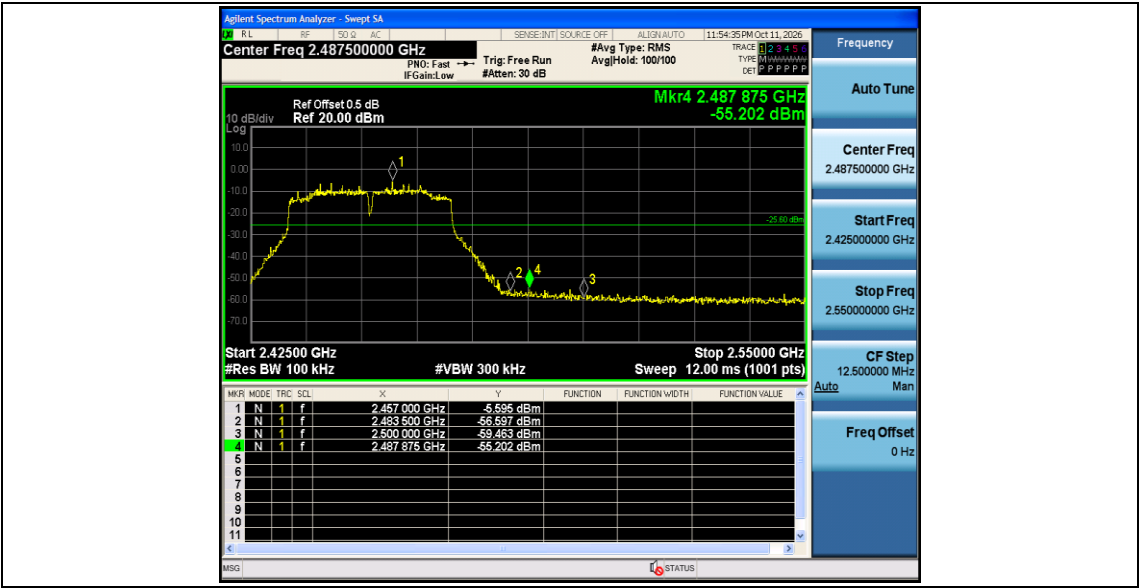
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

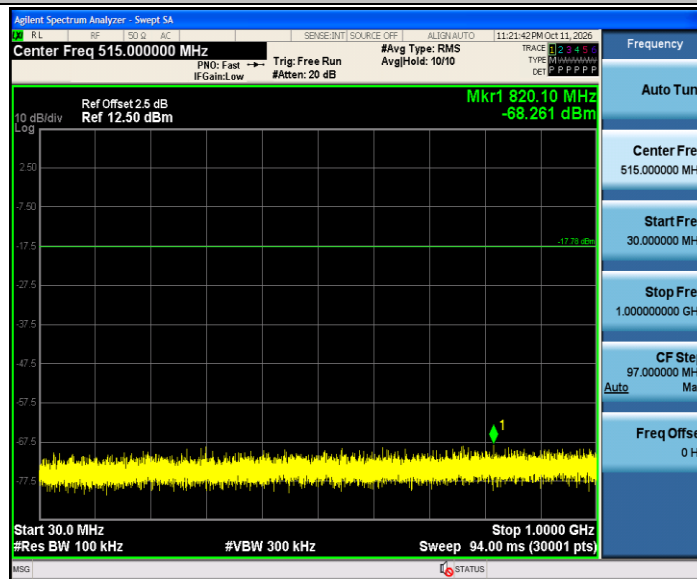
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.22	2.22	---	PASS
			30~1000	2.22	-68.26	≤-17.78	PASS
			1000~26500	2.22	-46.31	≤-17.78	PASS
		2437	Reference	1.82	1.82	---	PASS
			30~1000	1.82	-68.39	≤-18.18	PASS
			1000~26500	1.82	-46.69	≤-18.18	PASS
		2462	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-68.55	≤-16.85	PASS
			1000~26500	3.15	-46.68	≤-16.85	PASS
11G	Ant1	2412	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-69.45	≤-24.16	PASS
			1000~26500	-4.16	-46.37	≤-24.16	PASS
		2437	Reference	-5.98	-5.98	---	PASS
			30~1000	-5.98	-69.23	≤-25.98	PASS
			1000~26500	-5.98	-46.93	≤-25.98	PASS
		2462	Reference	-6.21	-6.21	---	PASS
			30~1000	-6.21	-68.29	≤-26.21	PASS
			1000~26500	-6.21	-46.93	≤-26.21	PASS
11N20SISO	Ant1	2412	Reference	-3.02	-3.02	---	PASS
			30~1000	-3.02	-68.87	≤-23.02	PASS
			1000~26500	-3.02	-46.16	≤-23.02	PASS
		2437	Reference	-4.65	-4.65	---	PASS
			30~1000	-4.65	-69.27	≤-24.65	PASS
			1000~26500	-4.65	-46.58	≤-24.65	PASS
		2462	Reference	-5.98	-5.98	---	PASS
			30~1000	-5.98	-69.01	≤-25.98	PASS
			1000~26500	-5.98	-45.96	≤-25.98	PASS
11N40SISO	Ant1	2422	Reference	-9.45	-9.45	---	PASS
			30~1000	-9.45	-68.84	≤-29.45	PASS
			1000~26500	-9.45	-46.46	≤-29.45	PASS
		2437	Reference	-7.93	-7.93	---	PASS
			30~1000	-7.93	-69.14	≤-27.93	PASS
			1000~26500	-7.93	-47.2	≤-27.93	PASS
		2452	Reference	-9.04	-9.04	---	PASS
			30~1000	-9.04	-68.9	≤-29.04	PASS
			1000~26500	-9.04	-46.58	≤-29.04	PASS

Test Graphs

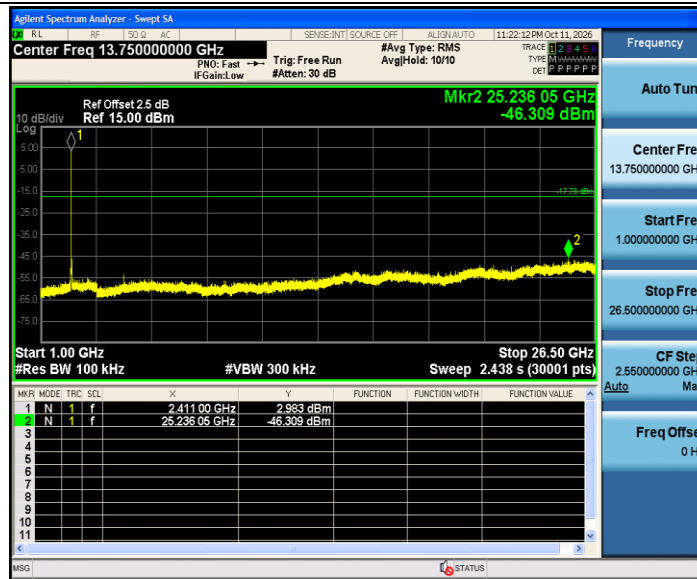
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



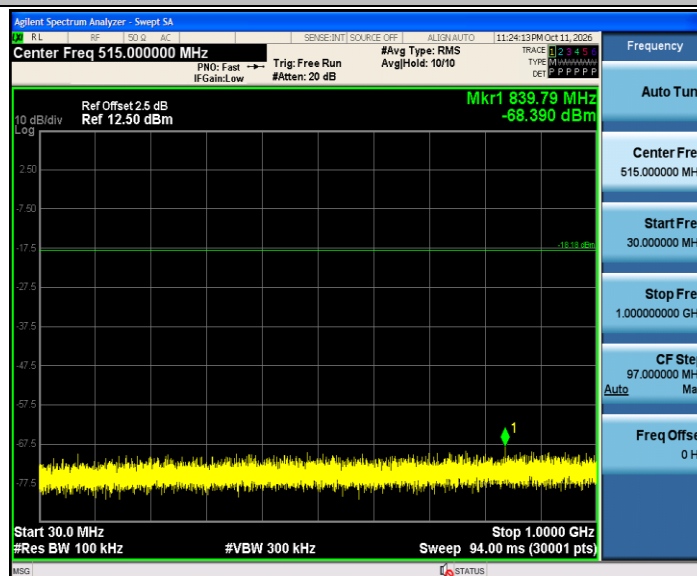
11B_Ant1_2412_1000~26500



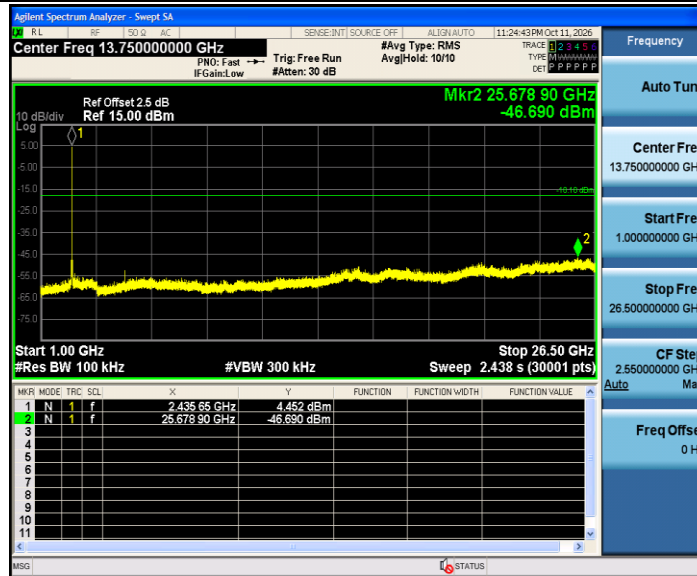
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



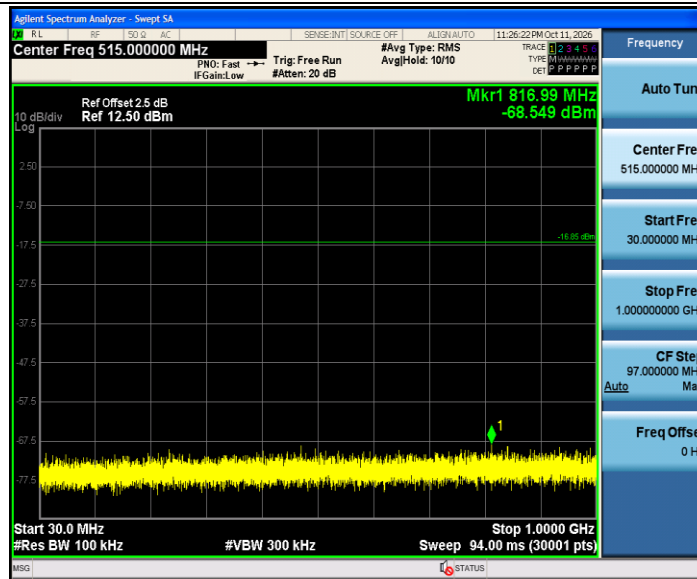
11B_Ant1_2437_1000~26500



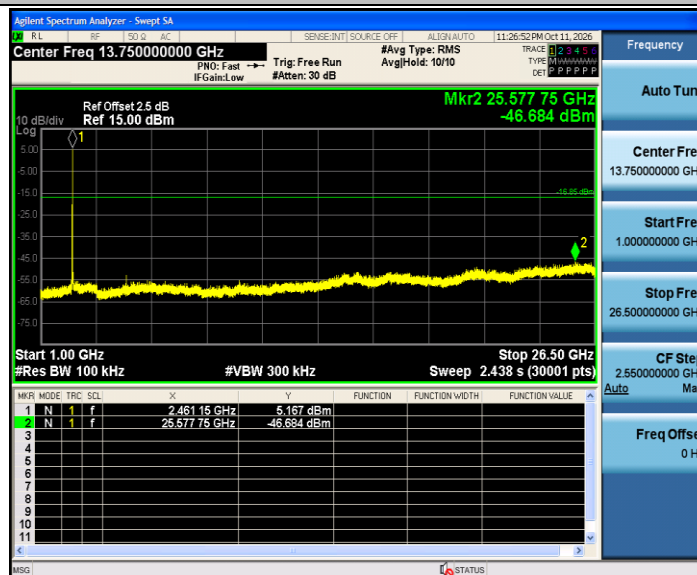
11B_Ant1_2462_0~Reference



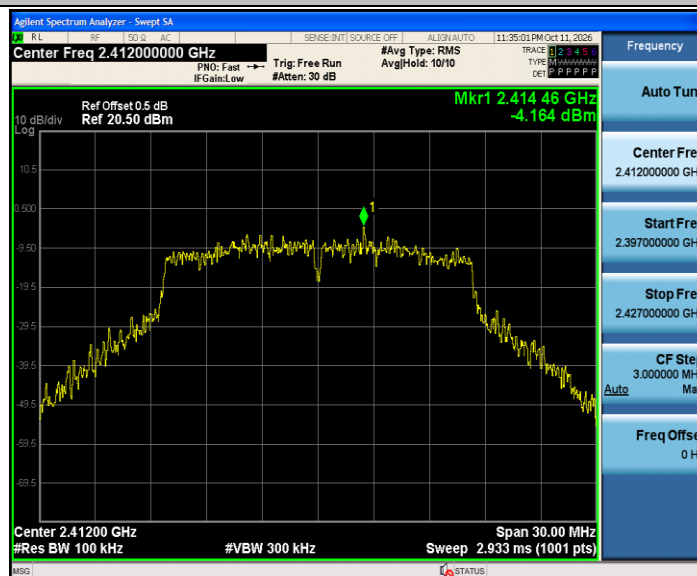
11B_Ant1_2462_30~1000



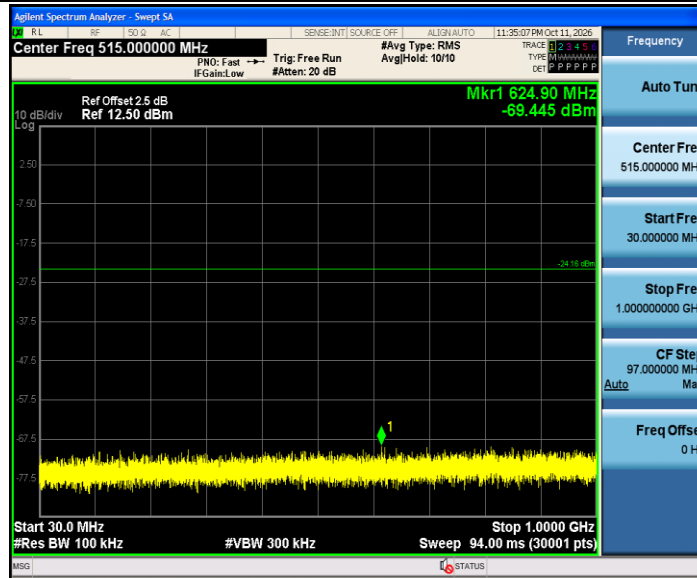
11B_Ant1_2462_1000~26500



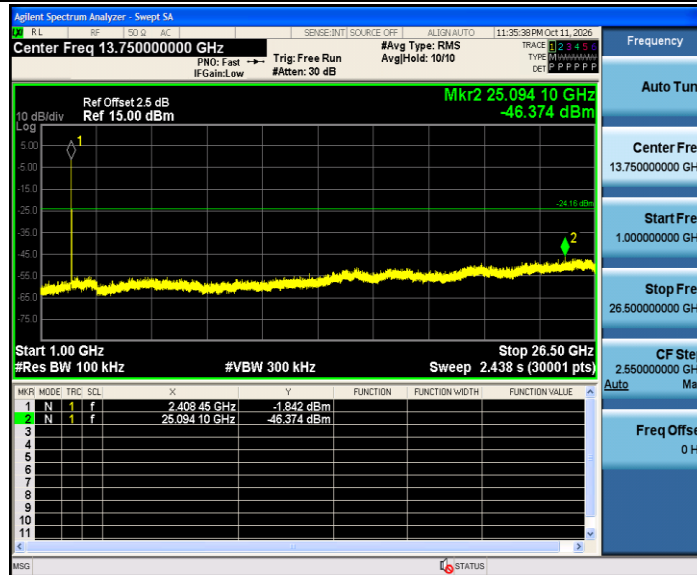
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



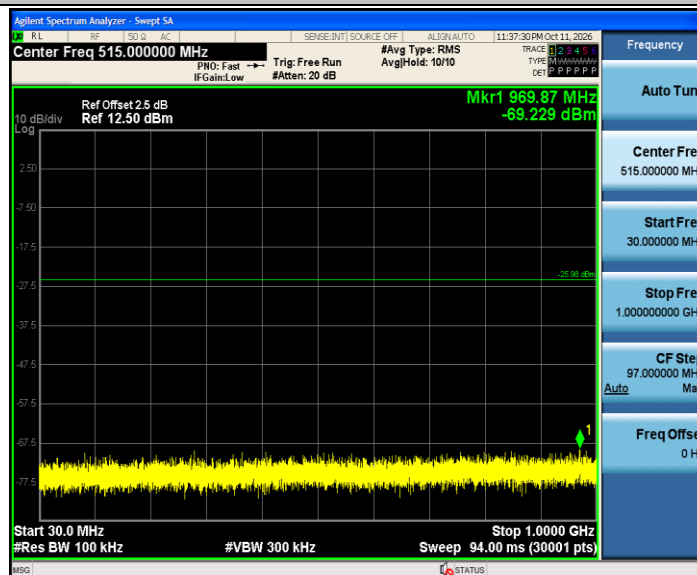
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

