

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2AXCX-NT809BT

Company : Shenzhen Foxwell Technology Co., Ltd

EUT : Automotive Diagnostic System

Model Number : NT809BT

Report No. : CTA25091901003

Reviewed By : Eric Wang

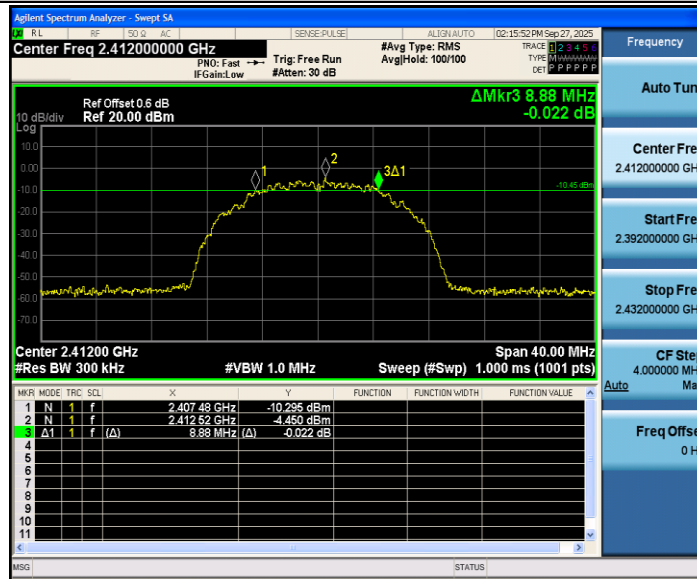
Appendix A: DTS Bandwidth

Test Result

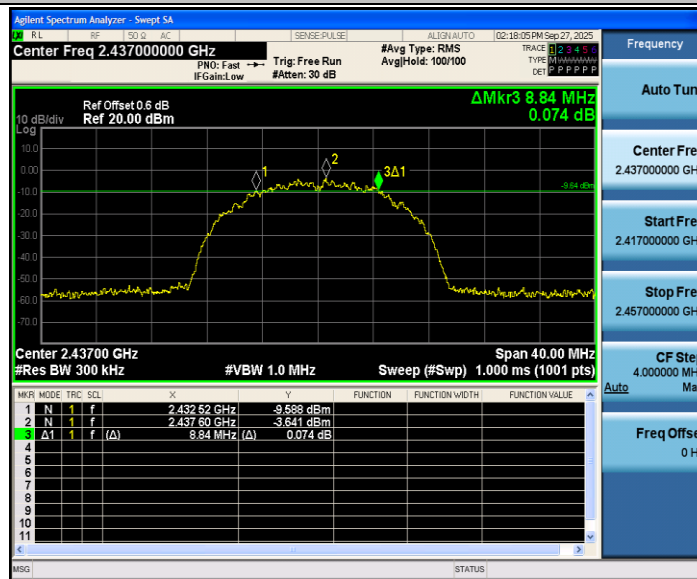
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.880	2407.480	2416.360	0.5	PASS
		2437	8.840	2432.520	2441.360	0.5	PASS
		2462	8.800	2457.560	2466.360	0.5	PASS
11G	Ant1	2412	16.280	2403.920	2420.200	0.5	PASS
		2437	16.440	2428.840	2445.280	0.5	PASS
		2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.400	2403.360	2420.760	0.5	PASS
		2437	17.440	2428.320	2445.760	0.5	PASS
		2462	17.320	2453.360	2470.680	0.5	PASS
11N40SISO	Ant1	2422	33.760	2405.360	2439.120	0.5	PASS
		2437	34.080	2420.120	2454.200	0.5	PASS
		2452	34.160	2435.040	2469.200	0.5	PASS

Test Graphs

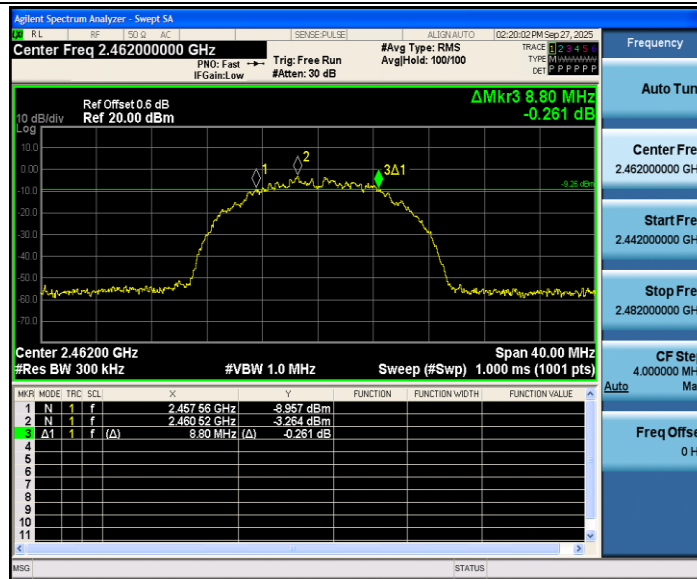
11B_Ant1_2412



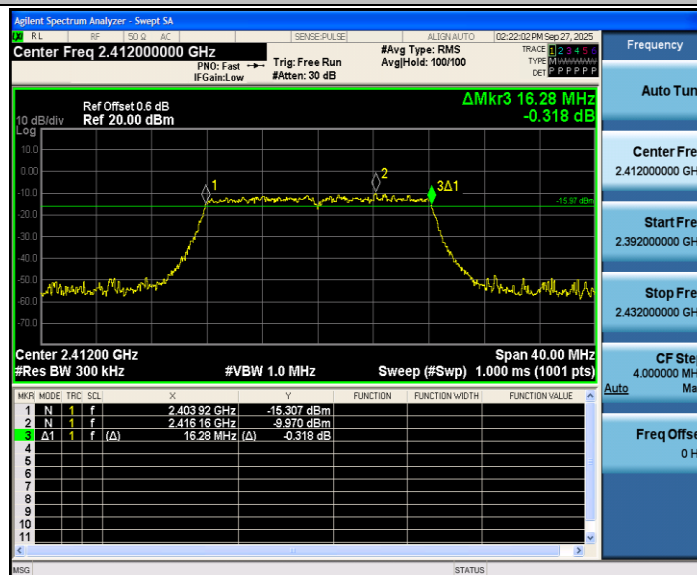
11B_Ant1_2437



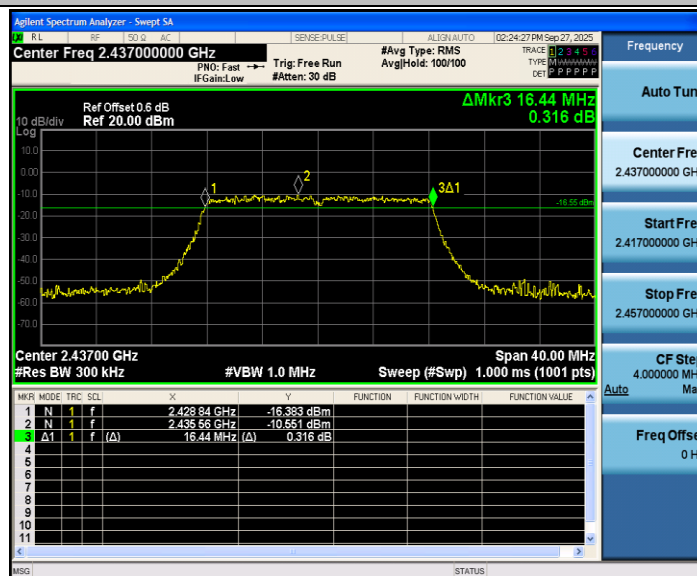
11B_Ant1_2462



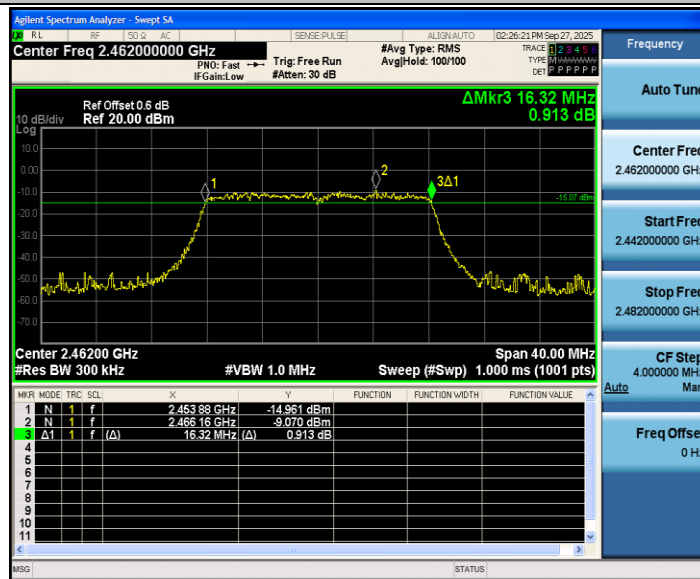
11G_Ant1_2412



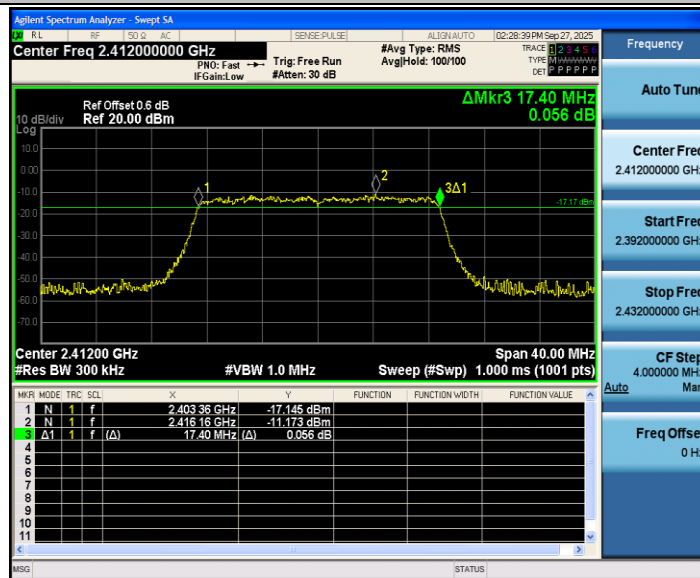
11G_Ant1_2437



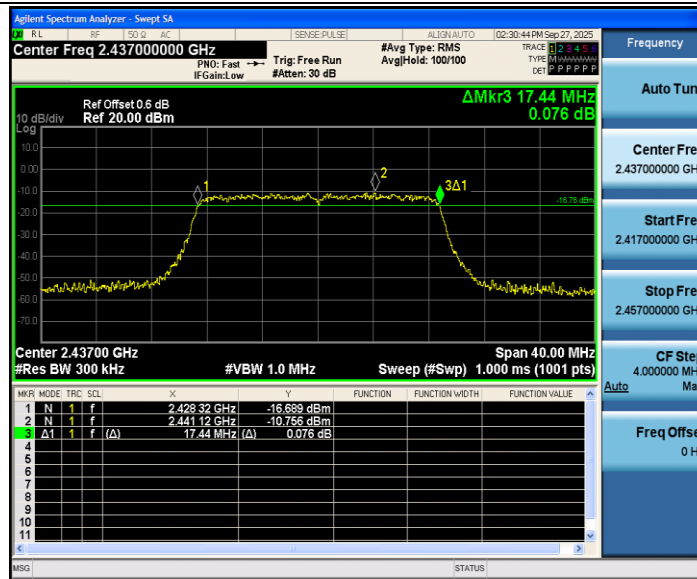
11G_Ant1_2462



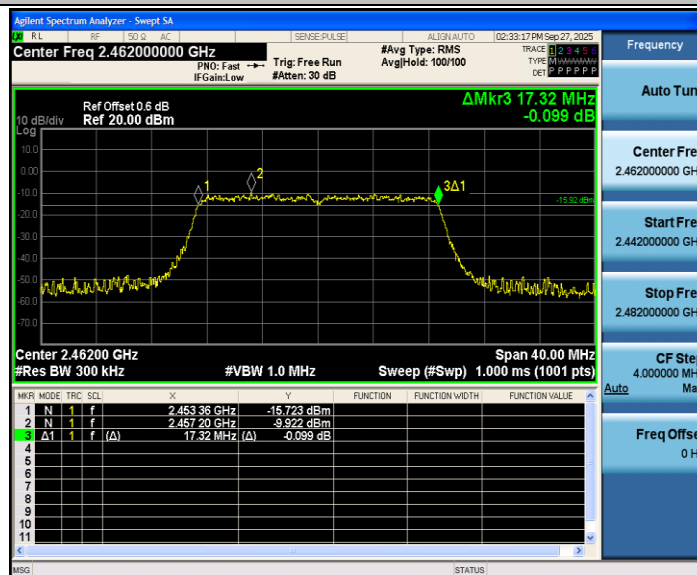
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



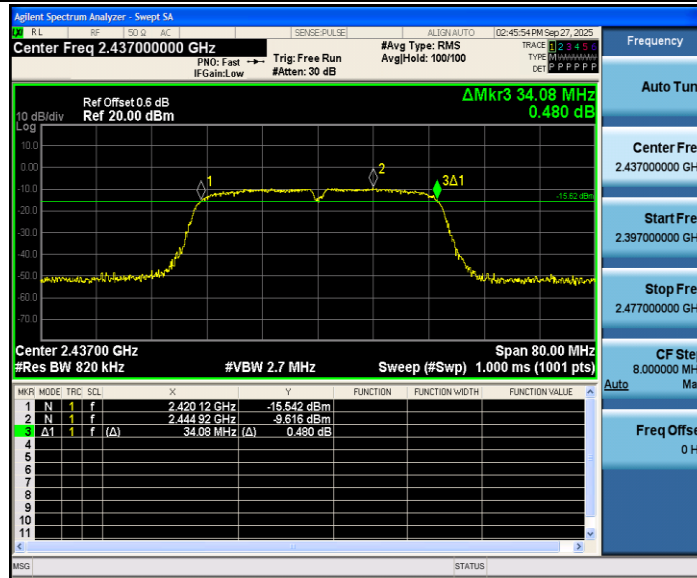
11N20SISO_Ant1_2462



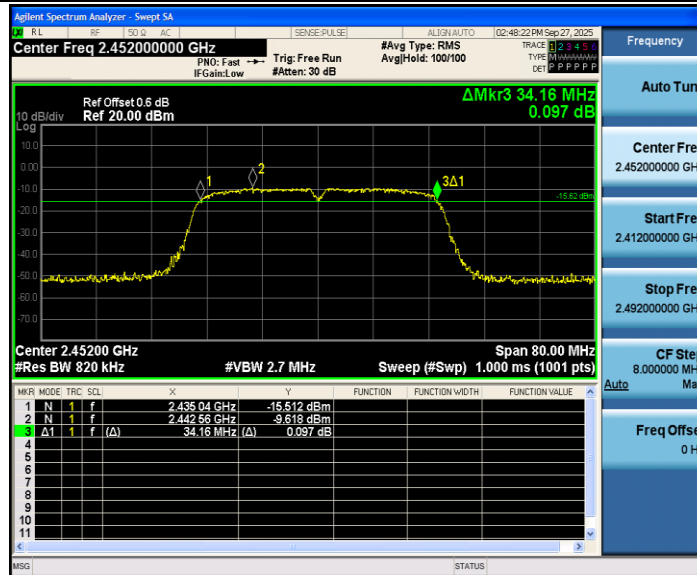
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



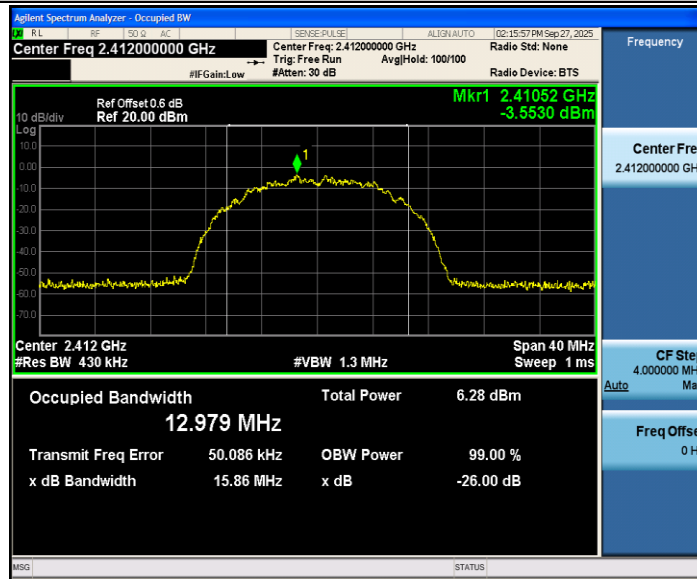
Appendix B: Occupied Channel Bandwidth

Test Result

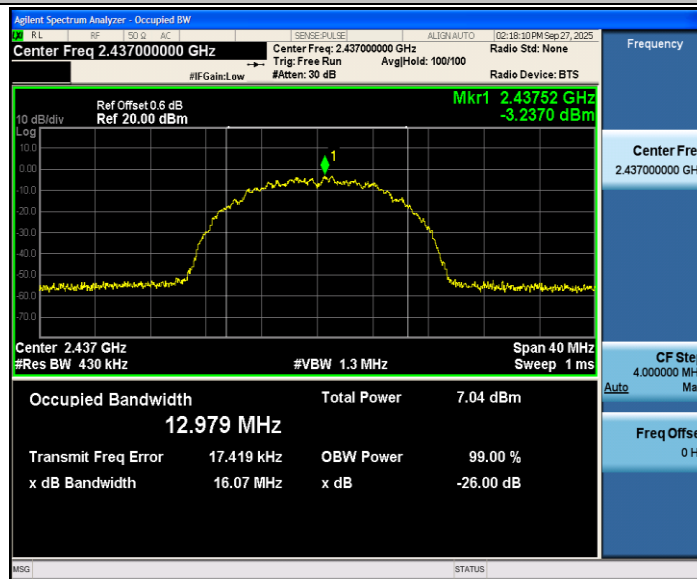
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.979	2405.5606	2418.5396	---	---
		2437	12.979	2430.5279	2443.5069	---	---
		2462	12.953	2455.5516	2468.5046	---	---
11G	Ant1	2412	16.551	2403.7871	2420.3381	---	---
		2437	16.597	2428.7423	2445.3393	---	---
		2462	16.568	2453.7592	2470.3272	---	---
11N20SISO	Ant1	2412	17.443	2403.3331	2420.7761	---	---
		2437	17.435	2428.3232	2445.7582	---	---
		2462	17.421	2453.3125	2470.7335	---	---
11N40SISO	Ant1	2422	34.759	2404.8240	2439.5830	---	---
		2437	34.834	2419.7079	2454.5419	---	---
		2452	34.843	2434.6979	2469.5409	---	---

Test Graphs

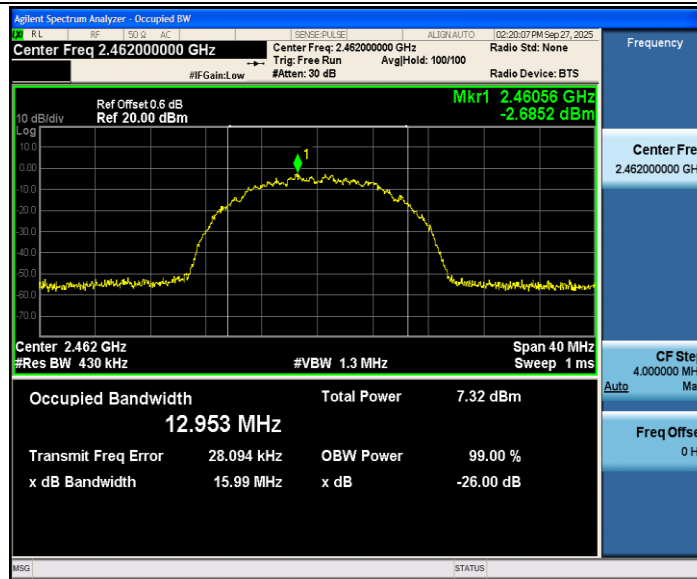
11B_Ant1_2412



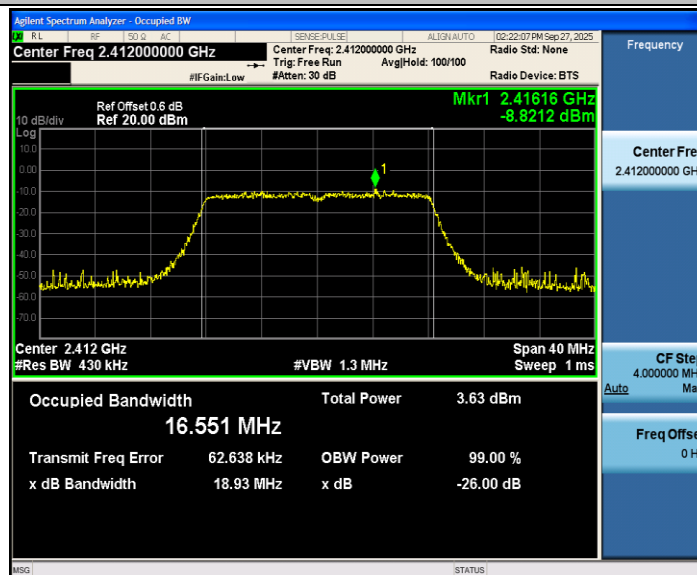
11B_Ant1_2437



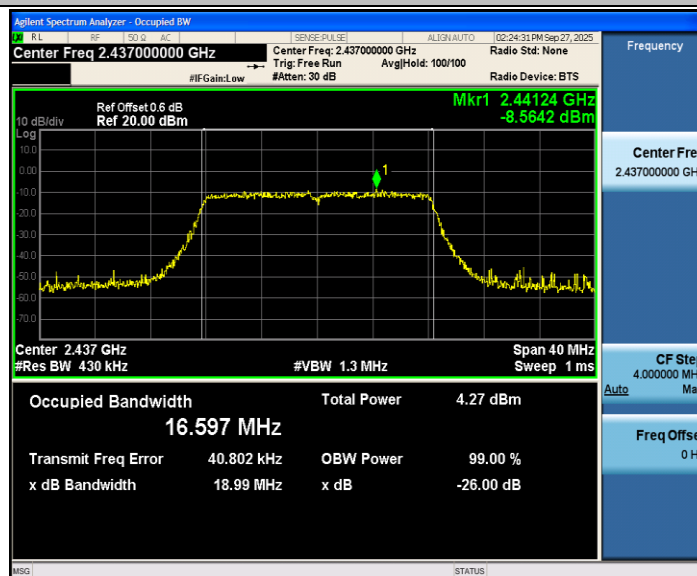
11B_Ant1_2462



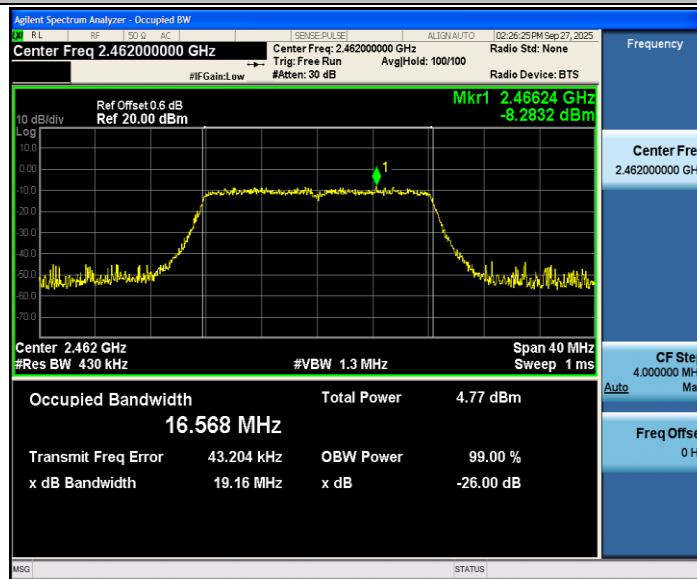
11G_Ant1_2412



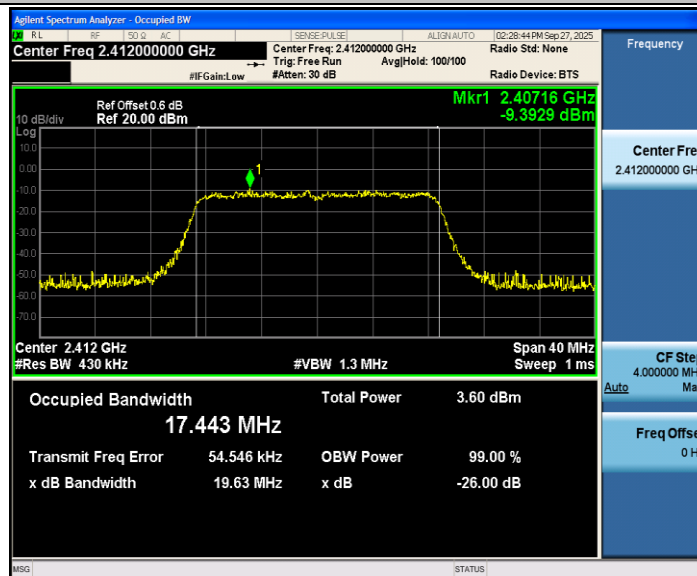
11G_Ant1_2437



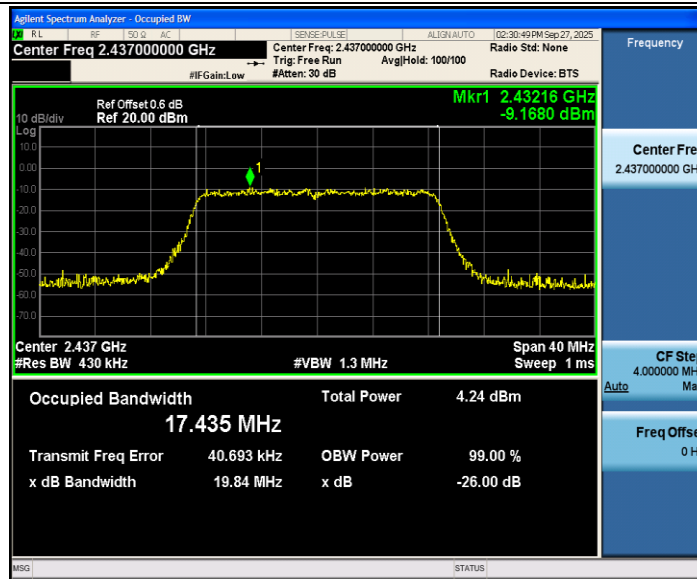
11G_Ant1_2462



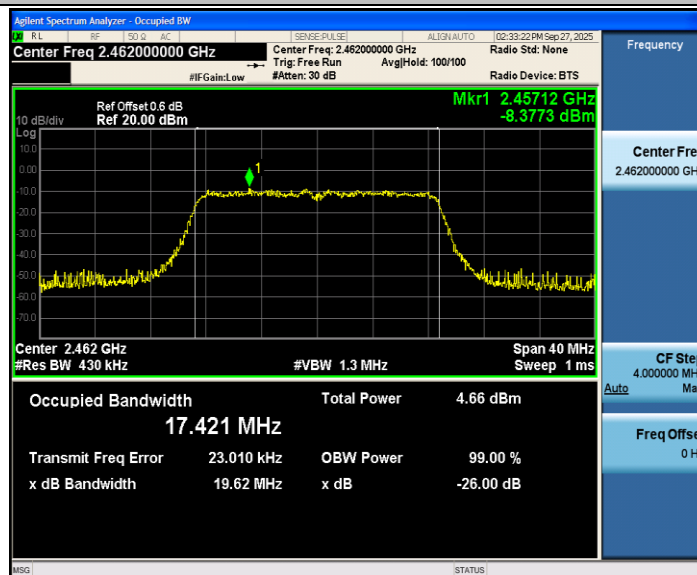
11N20SISO_Ant1_2412



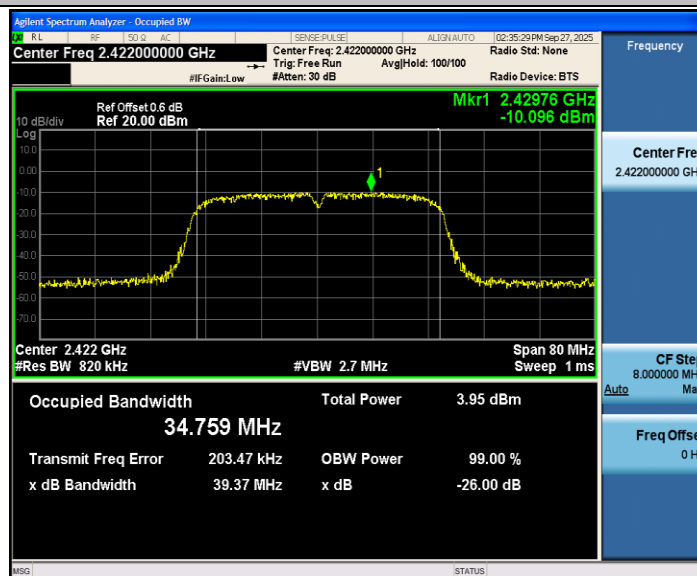
11N20SISO_Ant1_2437



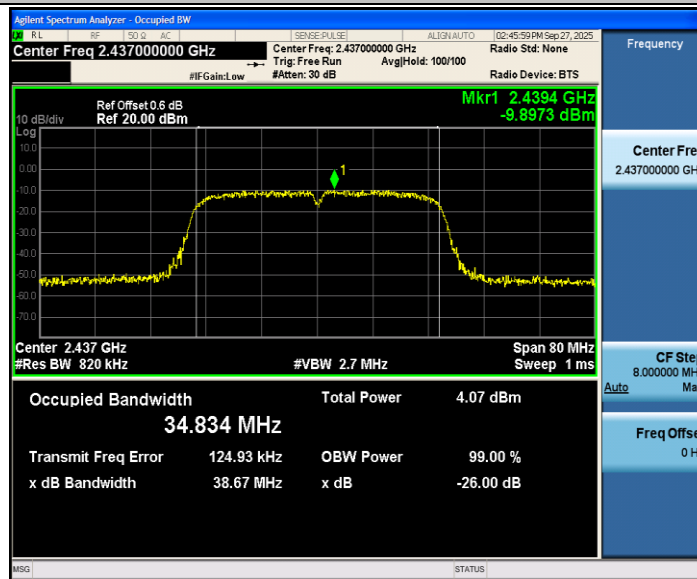
11N20SISO_Ant1_2462



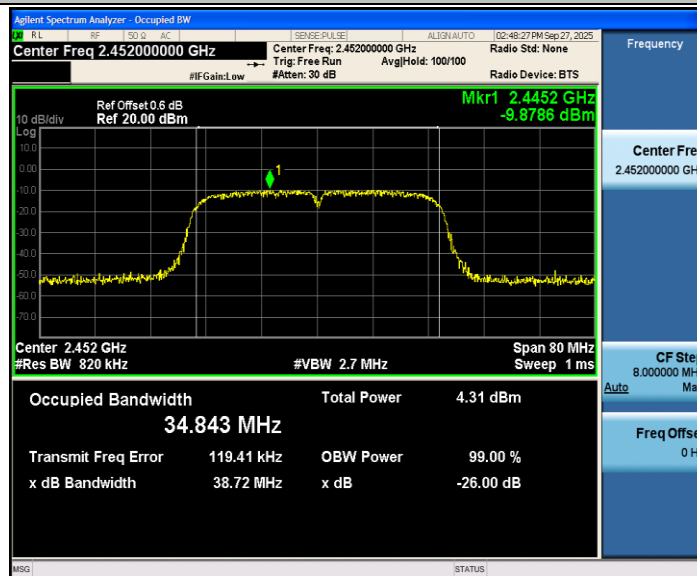
11N40SISO_Ant1_2422



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	5.73	≤30.00	PASS
		2437	6.61	≤30.00	PASS
		2462	6.75	≤30.00	PASS
11G	Ant1	2412	4.52	≤30.00	PASS
		2437	5.10	≤30.00	PASS
		2462	5.64	≤30.00	PASS
11N20SISO	Ant1	2412	4.80	≤30.00	PASS
		2437	5.44	≤30.00	PASS
		2462	5.84	≤30.00	PASS
11N40SISO	Ant1	2422	4.20	≤30.00	PASS
		2437	4.39	≤30.00	PASS
		2452	4.56	≤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	-23.66	≤8.00	PASS
		2437	-22.75	≤8.00	PASS
		2462	-22.79	≤8.00	PASS
11G	Ant1	2412	-29.89	≤8.00	PASS
		2437	-29.36	≤8.00	PASS
		2462	-28.91	≤8.00	PASS
11N20SISO	Ant1	2412	-29.69	≤8.00	PASS
		2437	-29.26	≤8.00	PASS
		2462	-28.58	≤8.00	PASS
11N40SISO	Ant1	2422	-31.65	≤8.00	PASS
		2437	-30.54	≤8.00	PASS
		2452	-30.35	≤8.00	PASS

Test Graphs

11B_Ant1_2412



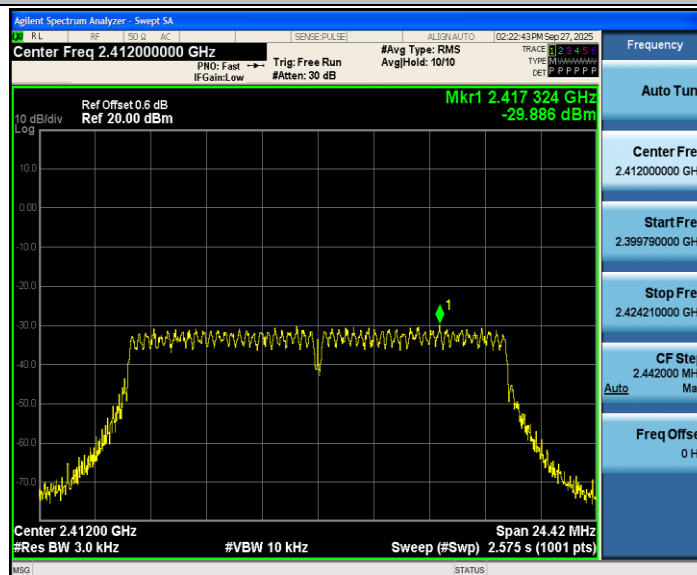
11B_Ant1_2437



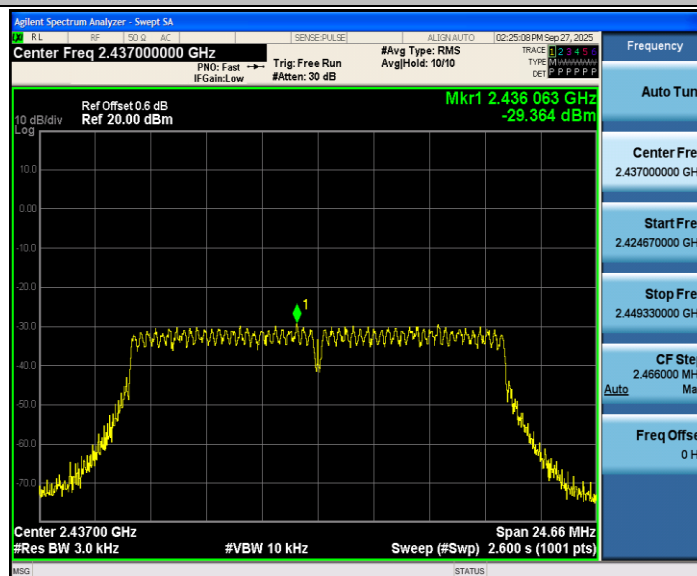
11B_Ant1_2462



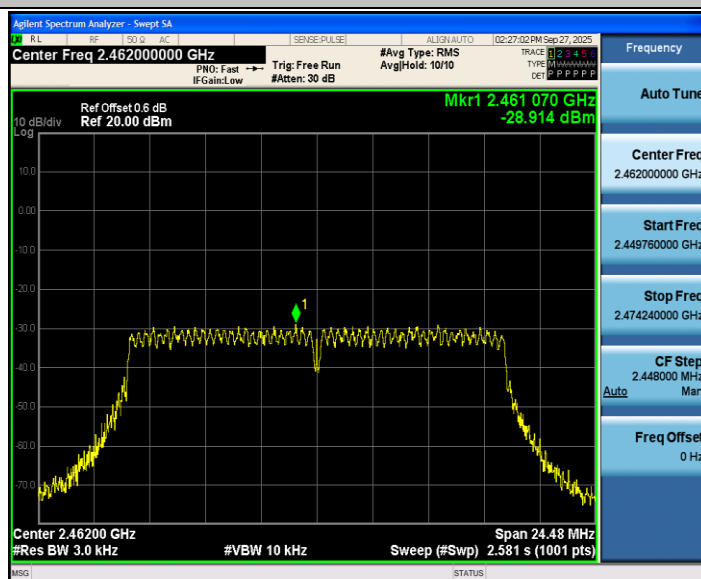
11G_Ant1_2412



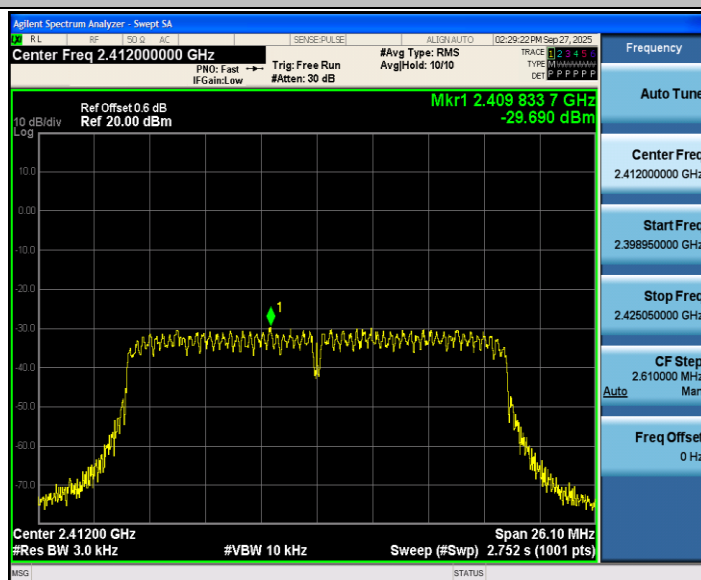
11G_Ant1_2437



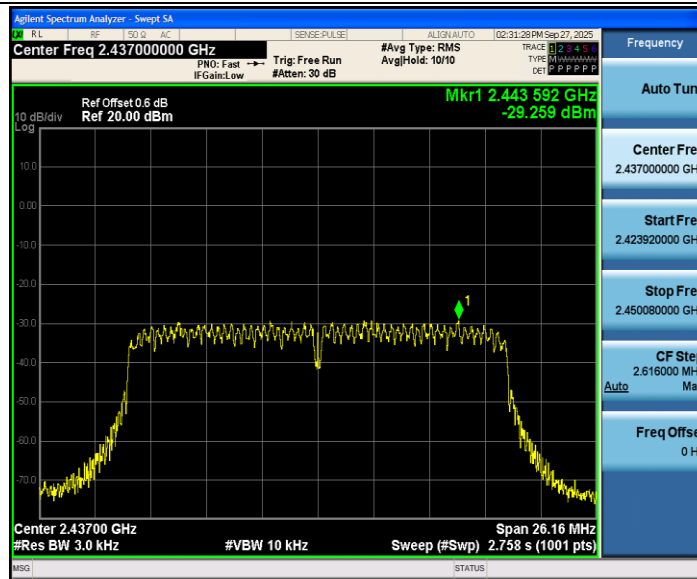
11G_Ant1_2462



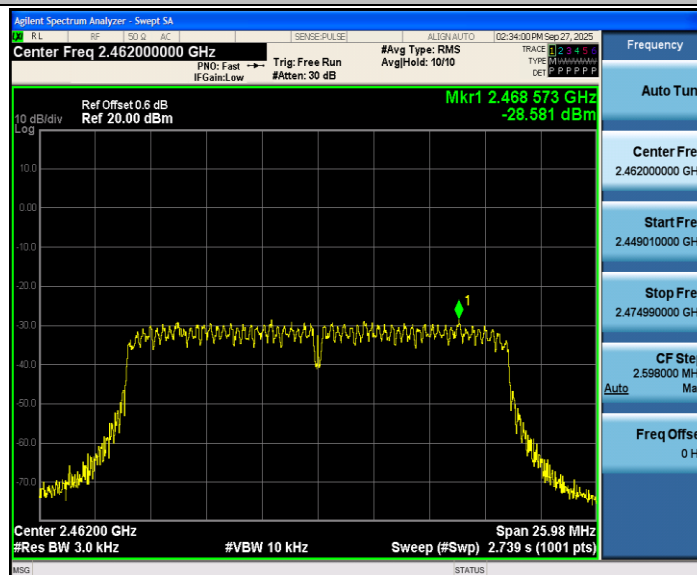
11N20SISO_Ant1_2412



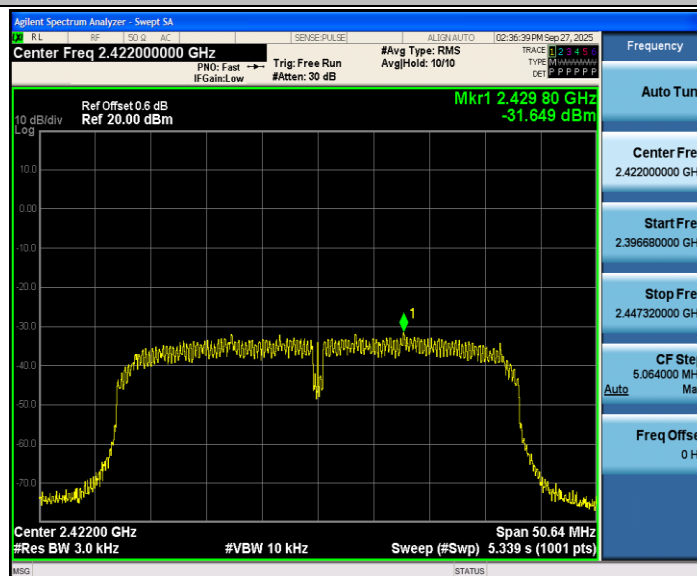
11N20SISO_Ant1_2437



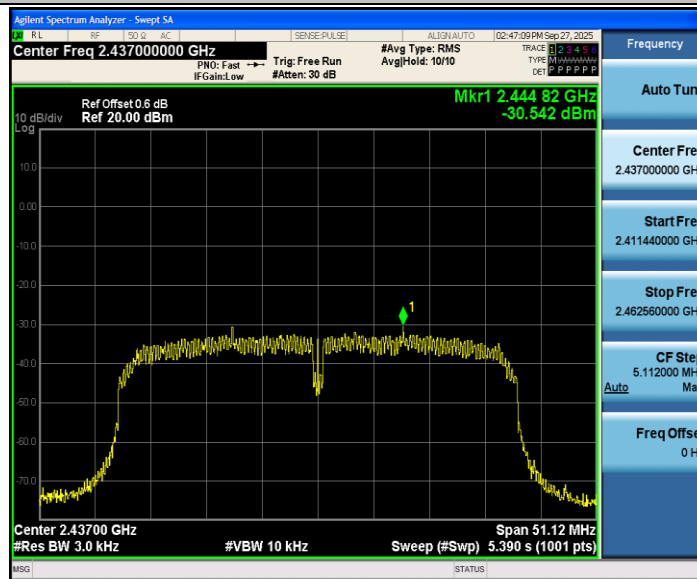
11N20SISO_Ant1_2462



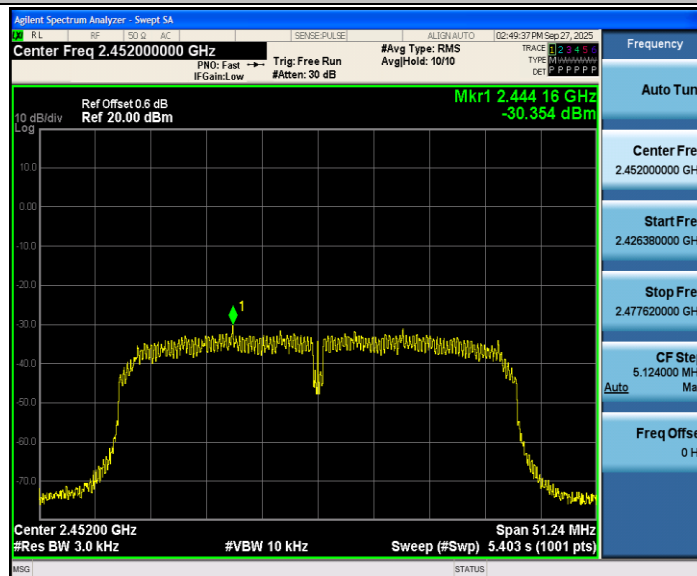
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



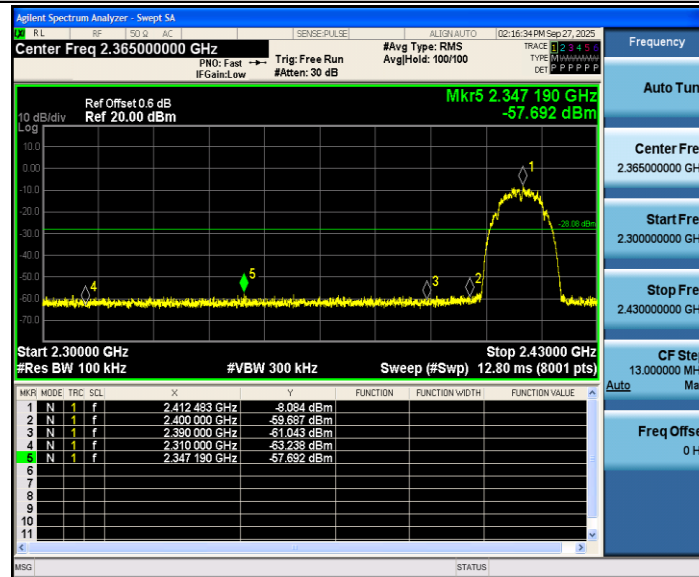
Appendix E: Band edge measurements

Test Result

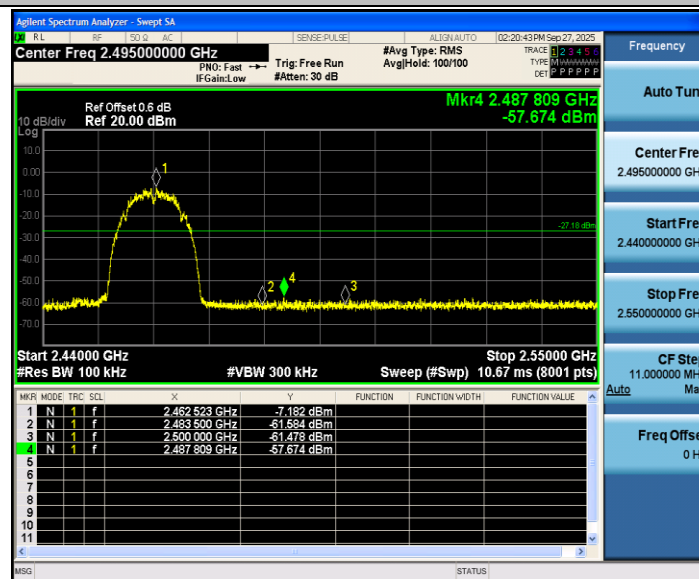
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-8.08	-57.69	≤-28.08	PASS
		High	2462	-7.18	-57.67	≤-27.18	PASS
11G	Ant1	Low	2412	-15.73	-55.3	≤-35.73	PASS
		High	2462	-14.87	-56.02	≤-34.87	PASS
11N20SISO	Ant1	Low	2412	-16.31	-55.74	≤-36.31	PASS
		High	2462	-14.48	-57.12	≤-34.48	PASS
11N40SISO	Ant1	Low	2422	-19.13	-56.51	≤-39.13	PASS
		High	2452	-18.84	-56.84	≤-38.84	PASS

Test Graphs

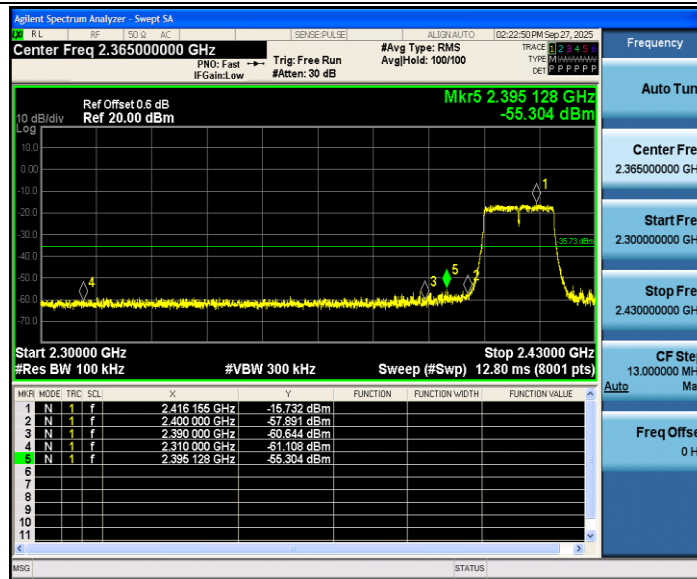
11B_Ant1_Low_2412



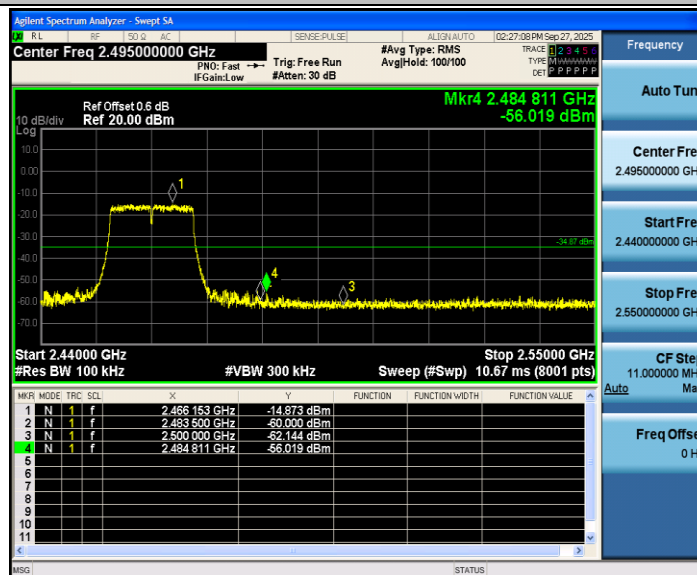
11B_Ant1_High_2462



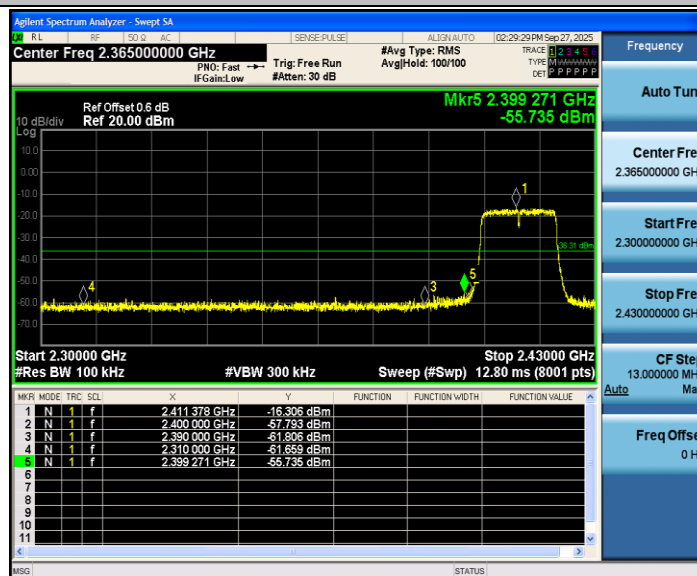
11G_Ant1_Low_2412



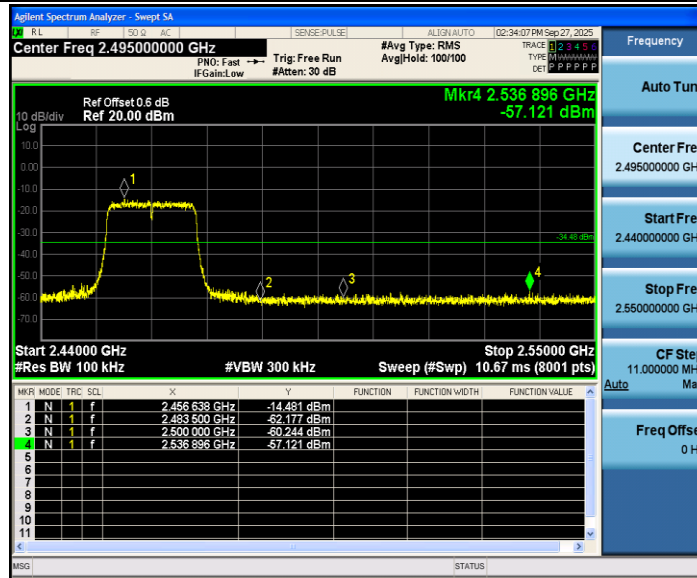
11G_Ant1_High_2462



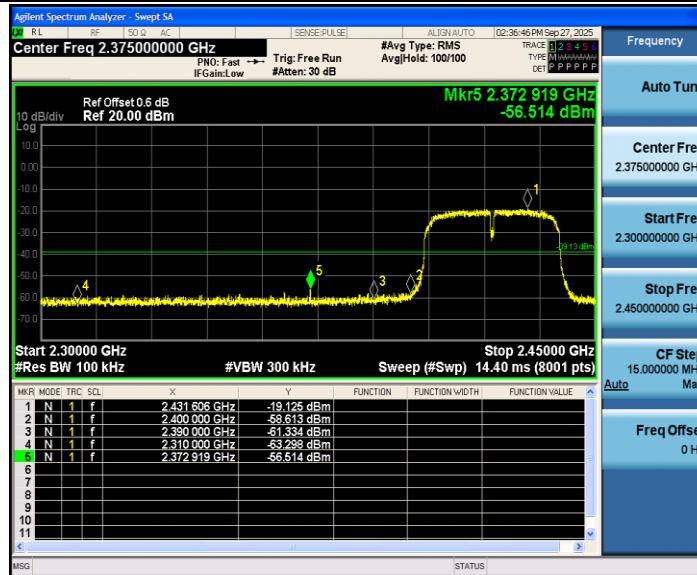
11N20SISO_Ant1_Low_2412



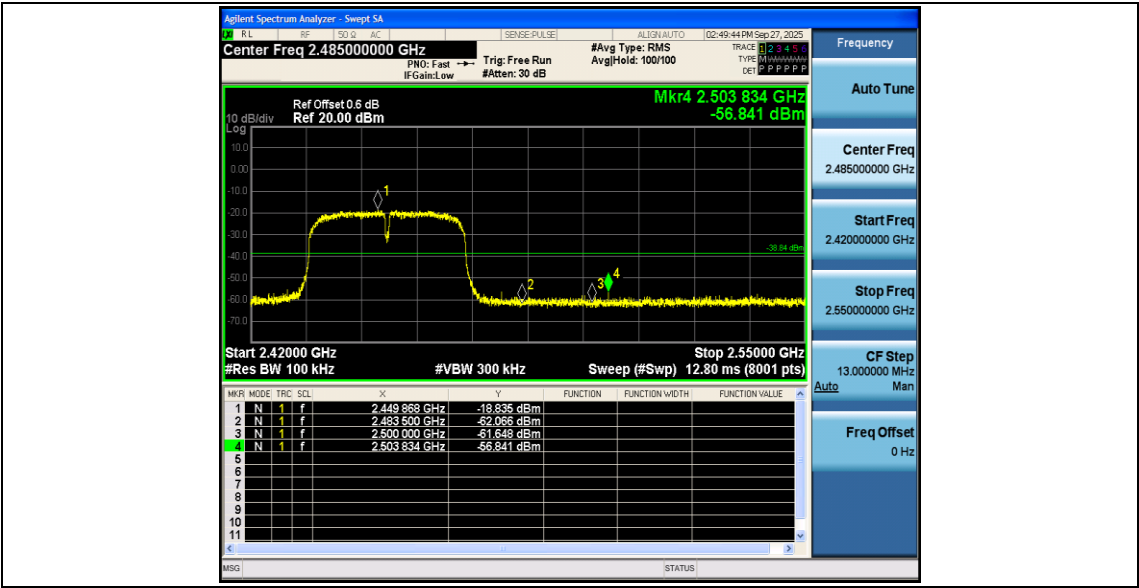
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



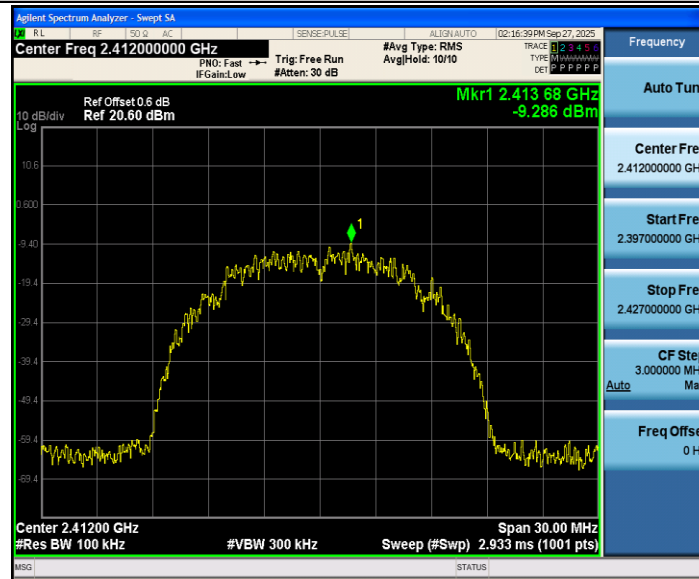
Appendix F: Conducted Spurious Emission

Test Result

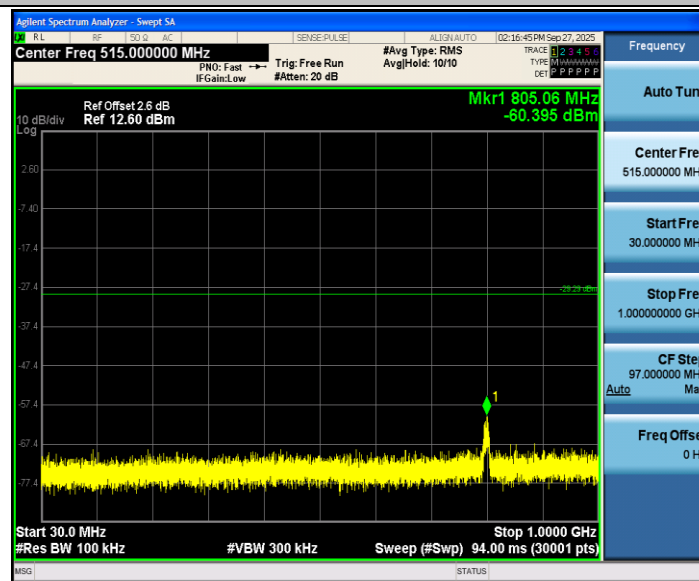
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-9.29	-9.29	---	PASS
			30~1000	-9.29	-60.4	≤-29.29	PASS
			1000~26500	-9.29	-44.53	≤-29.29	PASS
		2437	Reference	-7.87	-7.87	---	PASS
			30~1000	-7.87	-61.15	≤-27.87	PASS
			1000~26500	-7.87	-45.15	≤-27.87	PASS
		2462	Reference	-7.04	-7.04	---	PASS
			30~1000	-7.04	-61.34	≤-27.04	PASS
			1000~26500	-7.04	-45.9	≤-27.04	PASS
11G	Ant1	2412	Reference	-16.18	-16.18	---	PASS
			30~1000	-16.18	-65.36	≤-36.18	PASS
			1000~26500	-16.18	-44.48	≤-36.18	PASS
		2437	Reference	-15.83	-15.83	---	PASS
			30~1000	-15.83	-65.14	≤-35.83	PASS
			1000~26500	-15.83	-45.07	≤-35.83	PASS
		2462	Reference	-15.30	-15.30	---	PASS
			30~1000	-15.30	-64.68	≤-35.3	PASS
			1000~26500	-15.30	-45.77	≤-35.3	PASS
11N20SISO	Ant1	2412	Reference	-16.04	-16.04	---	PASS
			30~1000	-16.04	-64.5	≤-36.04	PASS
			1000~26500	-16.04	-44.43	≤-36.04	PASS
		2437	Reference	-16.38	-16.38	---	PASS
			30~1000	-16.38	-64.52	≤-36.38	PASS
			1000~26500	-16.38	-45.16	≤-36.38	PASS
		2462	Reference	-15.60	-15.60	---	PASS
			30~1000	-15.60	-64.94	≤-35.6	PASS
			1000~26500	-15.60	-45.91	≤-35.6	PASS
11N40SISO	Ant1	2422	Reference	-19.27	-19.27	---	PASS
			30~1000	-19.27	-66.16	≤-39.27	PASS
			1000~26500	-19.27	-44.66	≤-39.27	PASS
		2437	Reference	-18.41	-18.41	---	PASS
			30~1000	-18.41	-66.04	≤-38.41	PASS
			1000~26500	-18.41	-45.22	≤-38.41	PASS
		2452	Reference	-18.85	-18.85	---	PASS
			30~1000	-18.85	-66.05	≤-38.85	PASS
			1000~26500	-18.85	-45.57	≤-38.85	PASS

Test Graphs

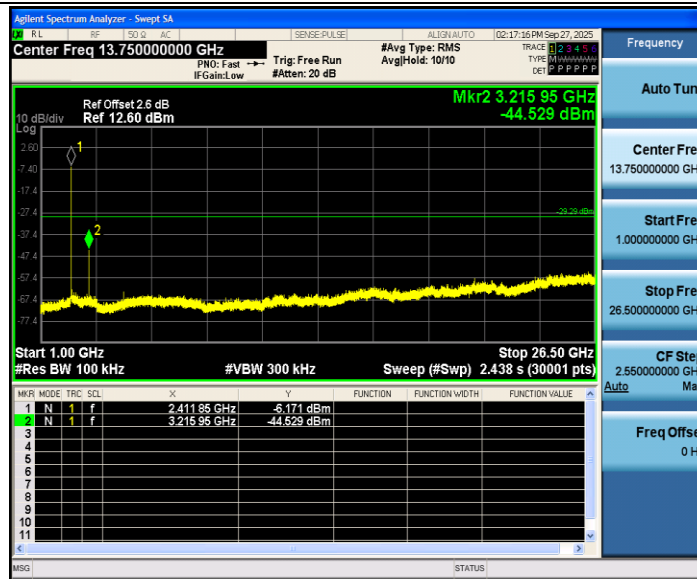
11B_Ant1_2412_0~Reference



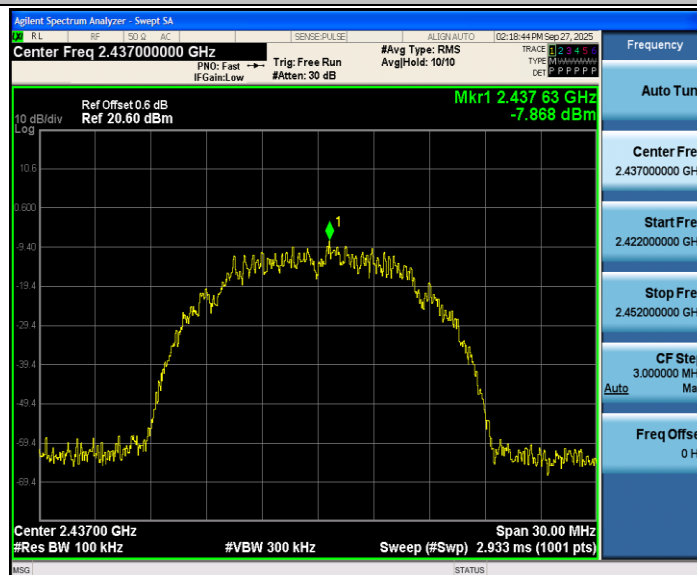
11B_Ant1_2412_30~1000



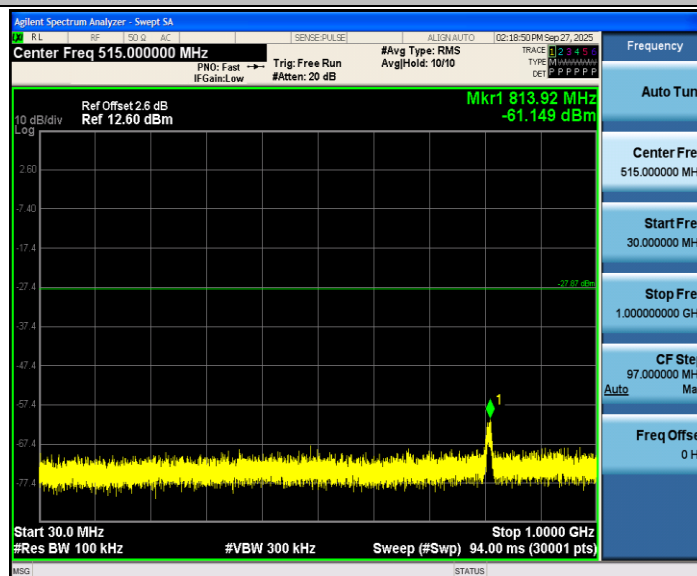
11B_Ant1_2412_1000~26500



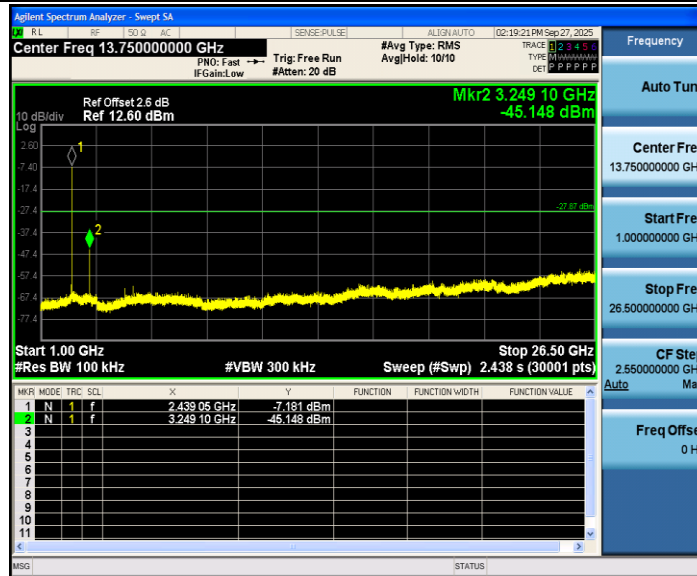
11B_Ant1_2437_0~Reference



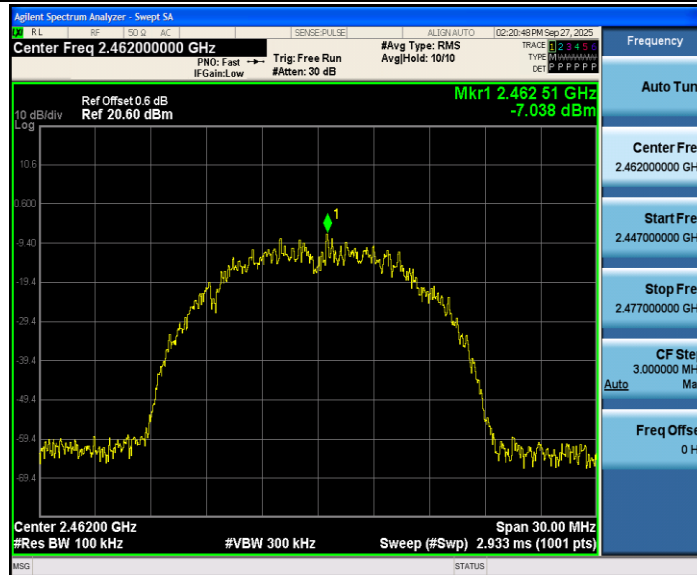
11B_Ant1_2437_30~1000



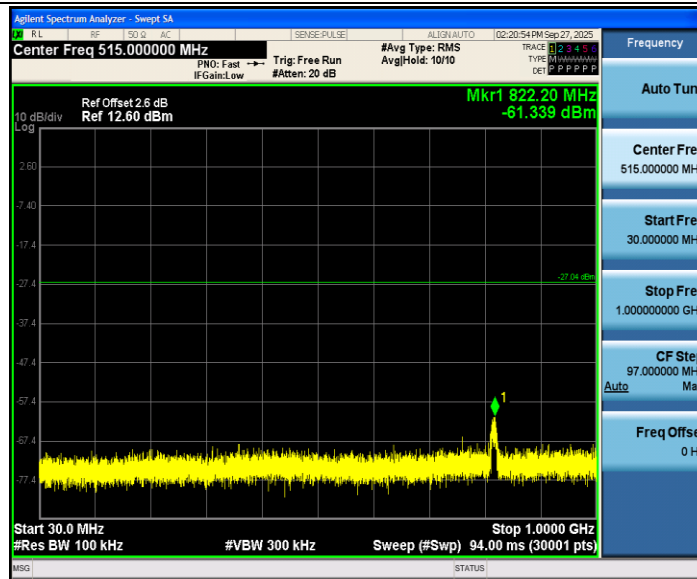
11B_Ant1_2437_1000~26500



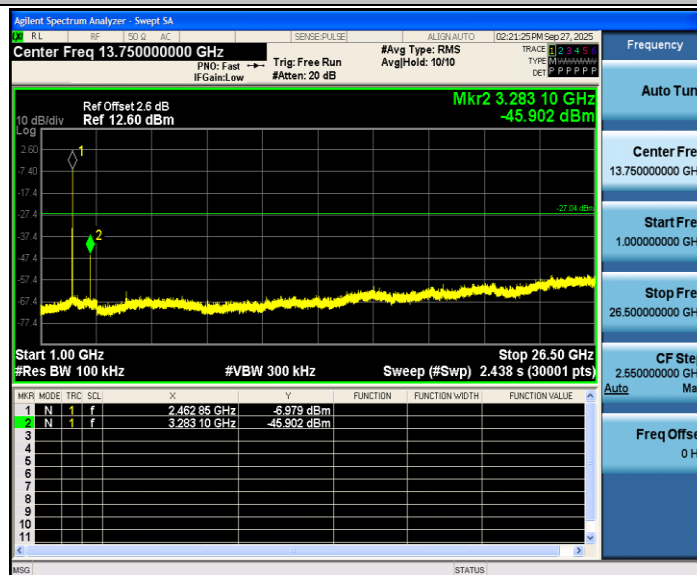
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference

