

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2A8NQ-RE171F-FA-01

Company : Shenzhen meiweisi Technology Co., Ltd

EUT : Wireless Repeater, WiFi Expander

Model Number : RE171F-FA-01

Report No. : CTA25102900601

Reviewed By : Eric Wang

Appendix RF Test Data for 2.4GWIFI ANT1

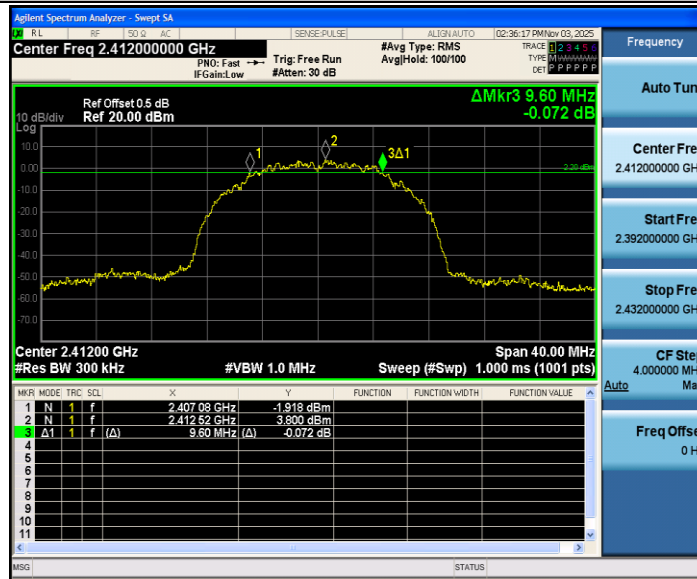
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.600	2407.080	2416.680	0.5	PASS
		2437	8.800	2432.520	2441.320	0.5	PASS
		2462	8.280	2457.920	2466.200	0.5	PASS
11G	Ant1	2412	16.280	2403.920	2420.200	0.5	PASS
		2437	16.320	2428.920	2445.240	0.5	PASS
		2462	16.280	2453.880	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.120	2403.480	2420.600	0.5	PASS
		2437	17.240	2428.360	2445.600	0.5	PASS
		2462	17.280	2453.360	2470.640	0.5	PASS
11N40SISO	Ant1	2422	34.000	2405.200	2439.200	0.5	PASS
		2437	33.440	2420.360	2453.800	0.5	PASS
		2452	34.000	2435.040	2469.040	0.5	PASS

Test Graphs

11B_Ant1_2412



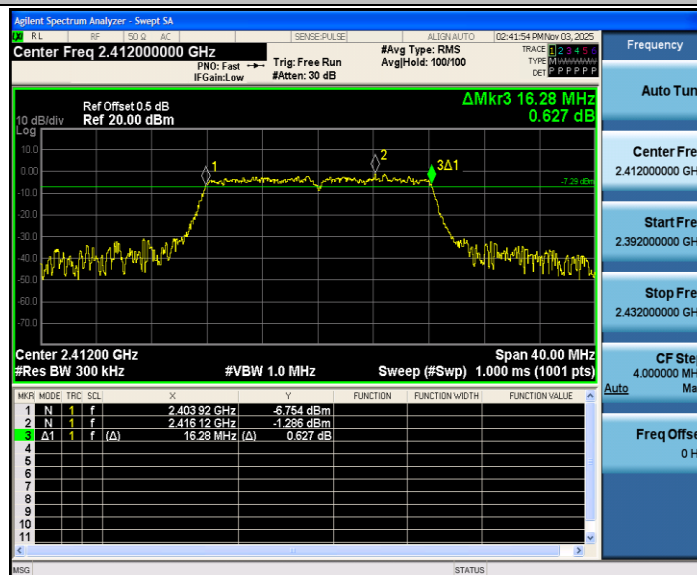
11B_Ant1_2437



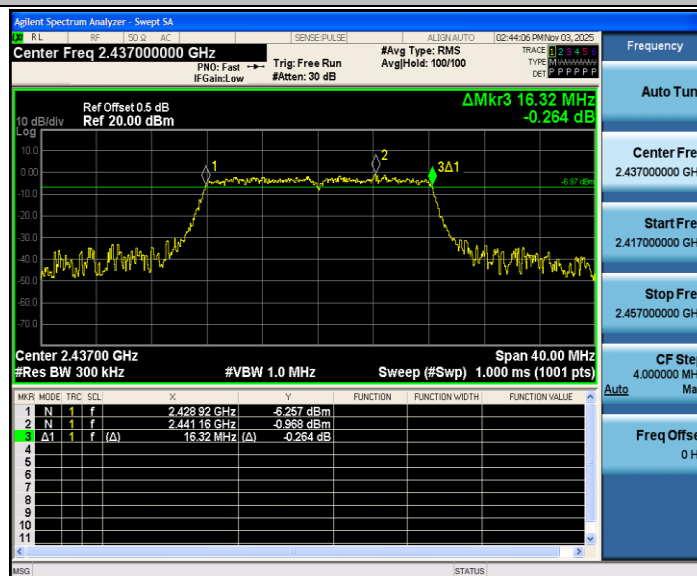
11B_Ant1_2462



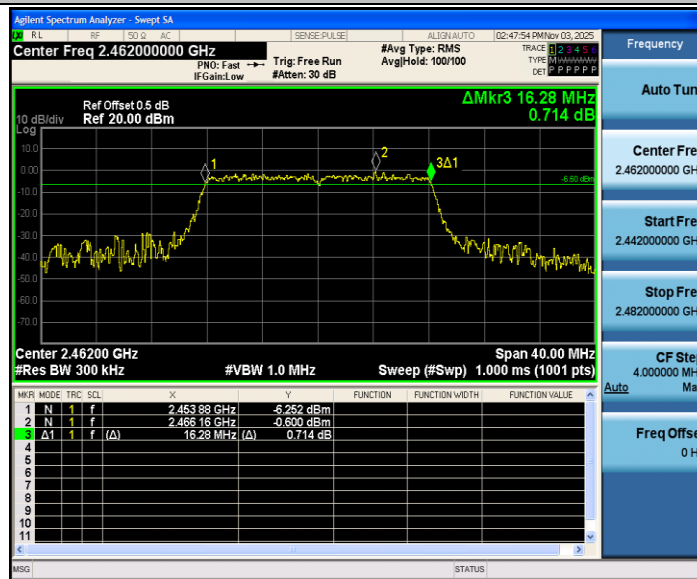
11G_Ant1_2412



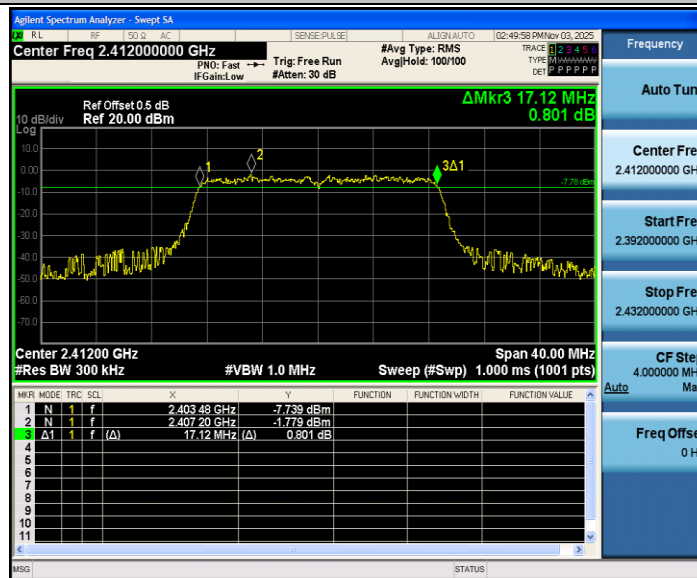
11G_Ant1_2437



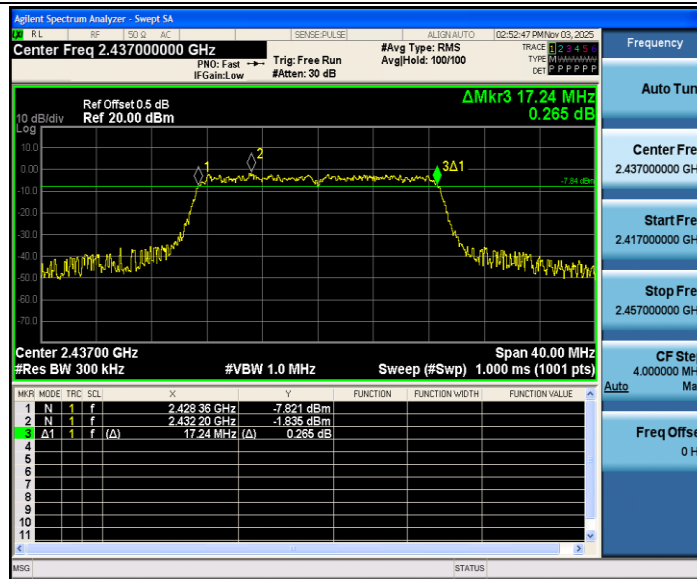
11G_Ant1_2462



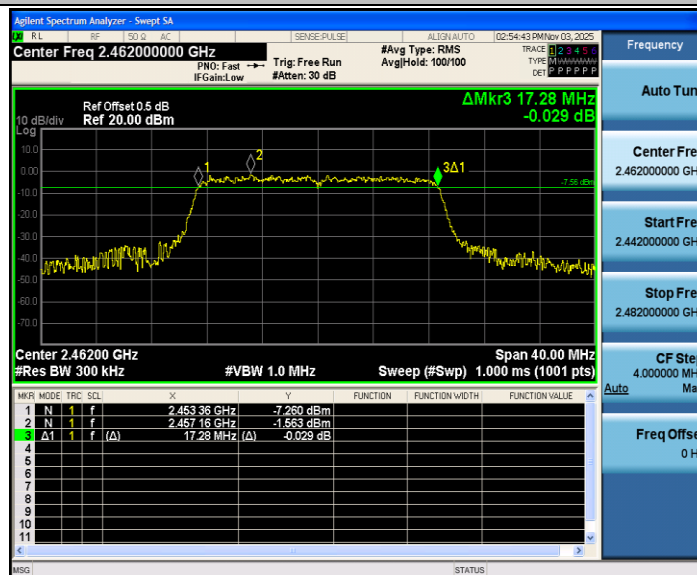
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



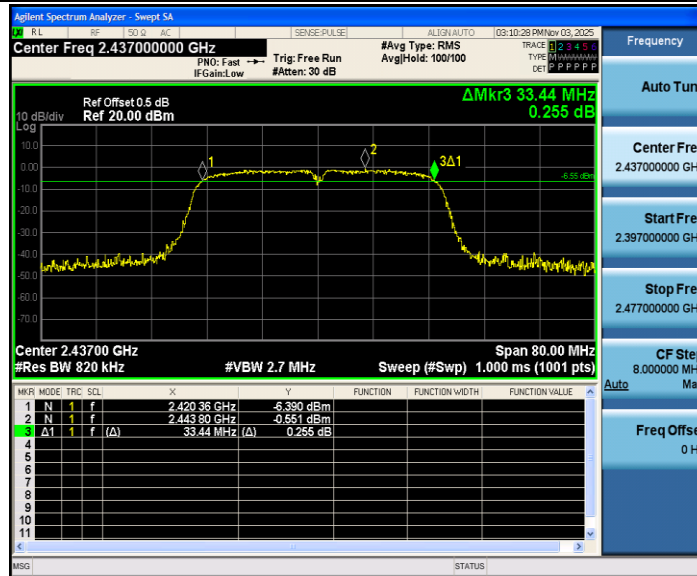
11N20SISO_Ant1_2462



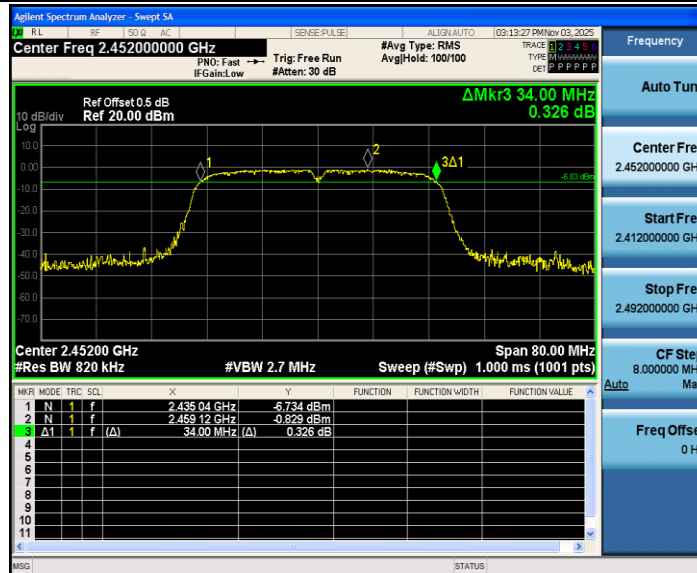
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



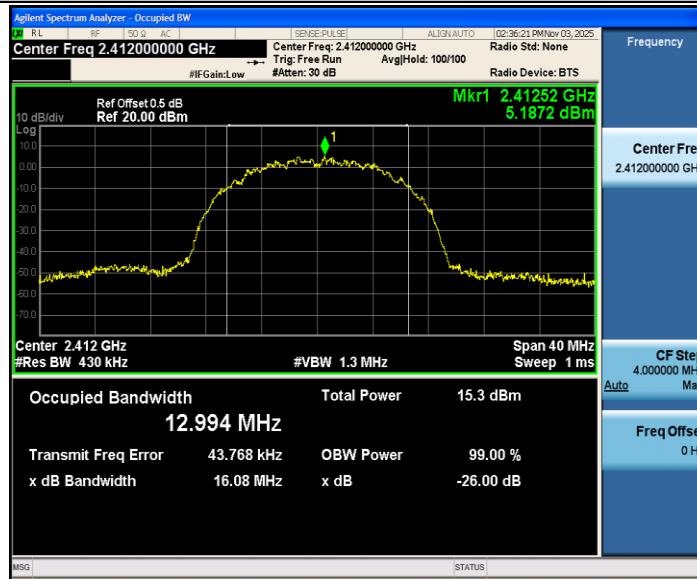
Appendix B: Occupied Channel Bandwidth

Test Result

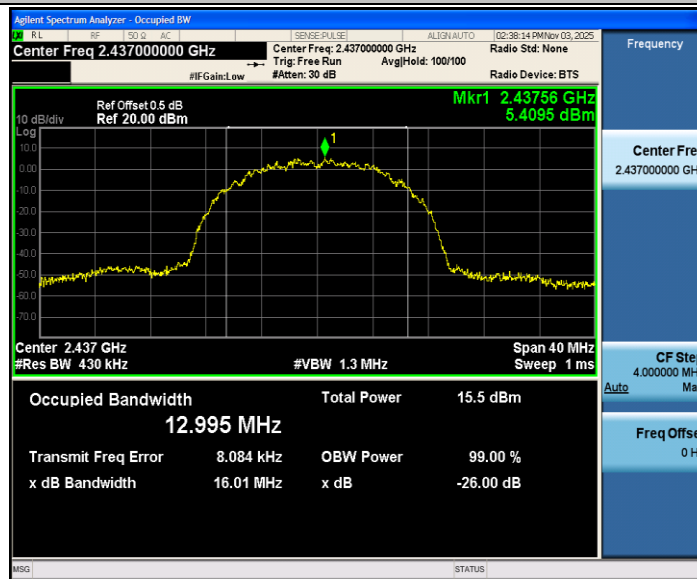
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.994	2405.5468	2418.5408	---	---
		2437	12.995	2430.5106	2443.5056	---	---
		2462	12.993	2455.5083	2468.5013	---	---
11G	Ant1	2412	16.574	2403.7583	2420.3323	---	---
		2437	16.600	2428.7326	2445.3326	---	---
		2462	16.593	2453.7158	2470.3088	---	---
11N20SISO	Ant1	2412	17.456	2403.3160	2420.7720	---	---
		2437	17.457	2428.3172	2445.7742	---	---
		2462	17.467	2453.3051	2470.7721	---	---
11N40SISO	Ant1	2422	34.811	2404.7635	2439.5745	---	---
		2437	34.809	2419.7132	2454.5222	---	---
		2452	34.738	2434.6926	2469.4306	---	---

Test Graphs

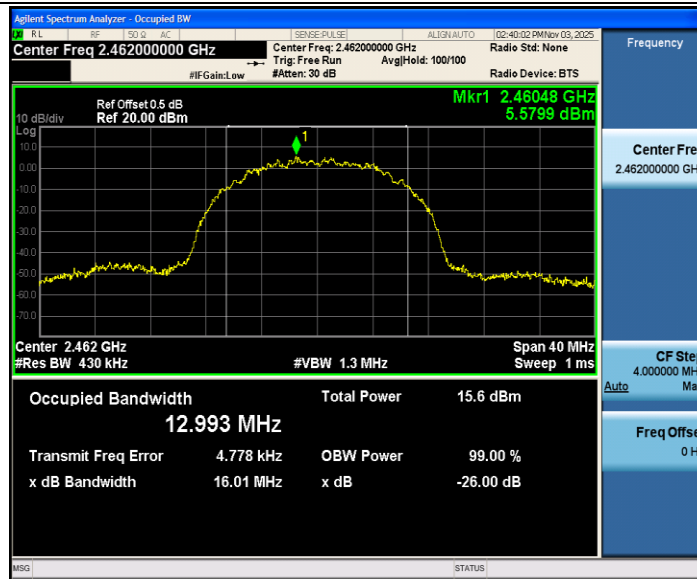
11B_Ant1_2412



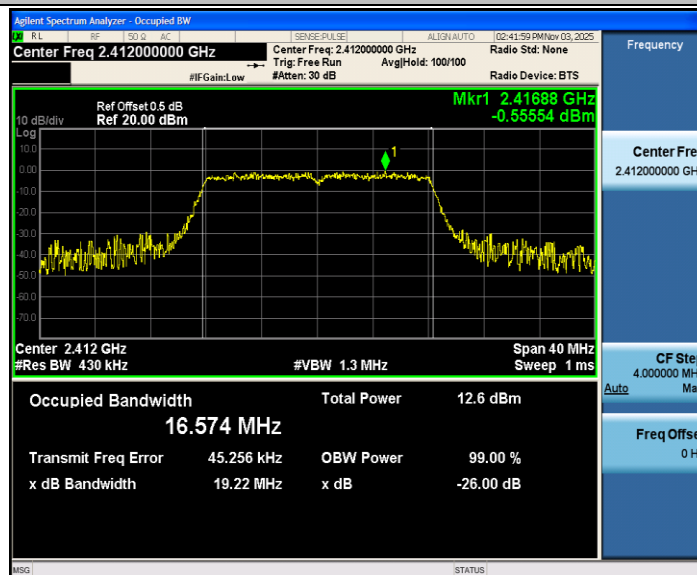
11B_Ant1_2437



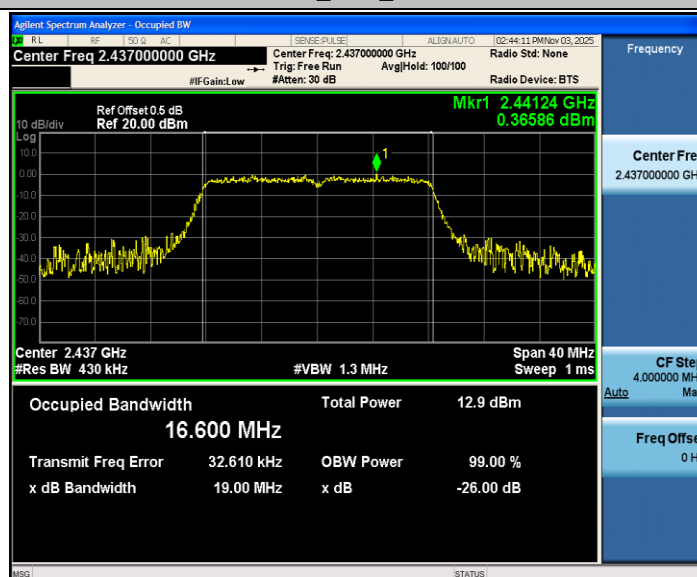
11B_Ant1_2462



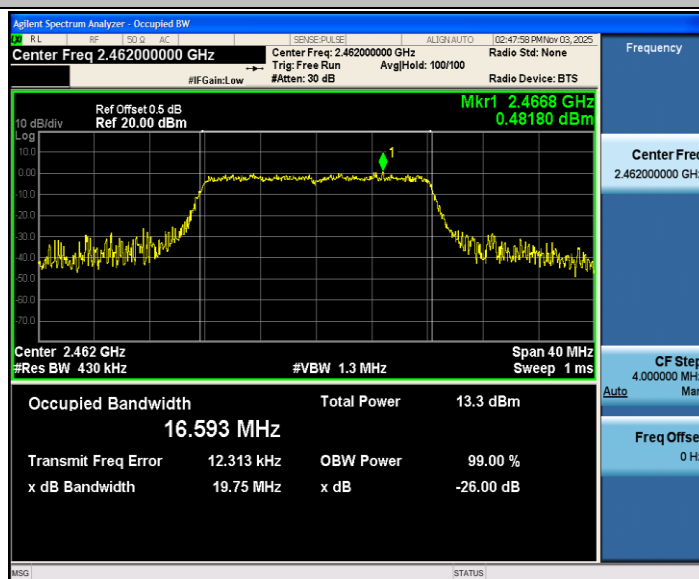
11G_Ant1_2412



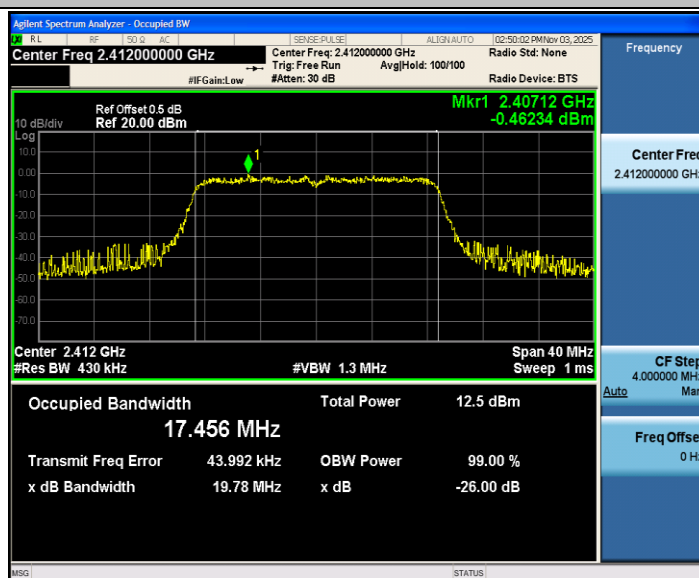
11G_Ant1_2437



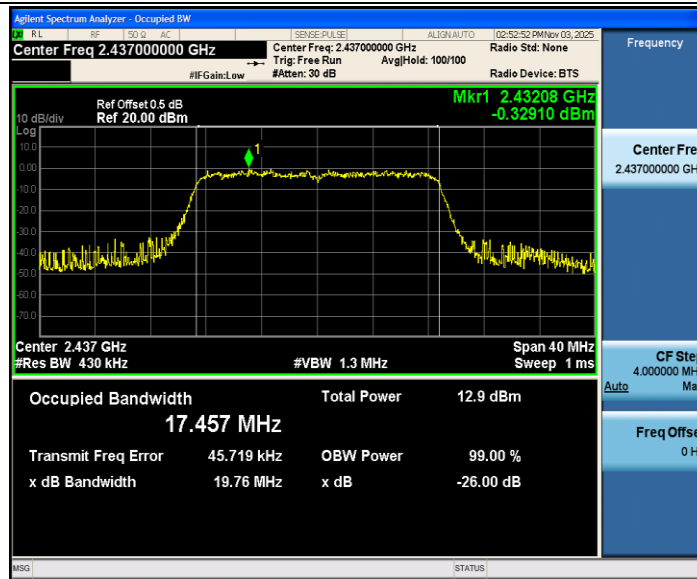
11G_Ant1_2462



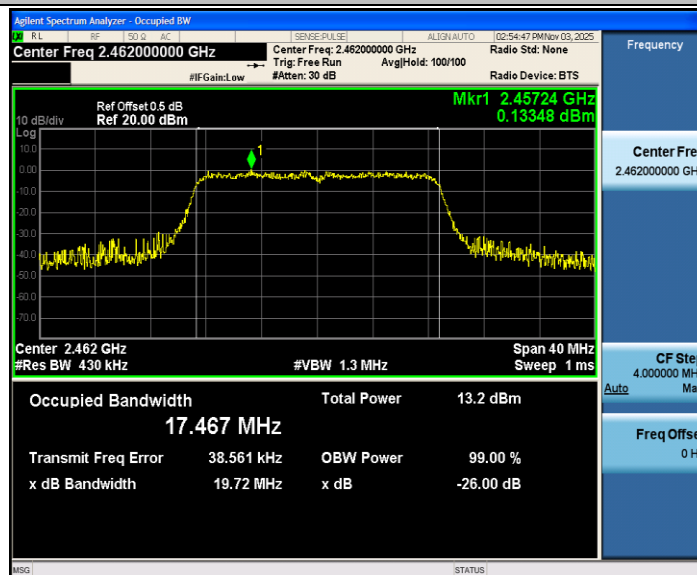
11N20SISO_Ant1_2412



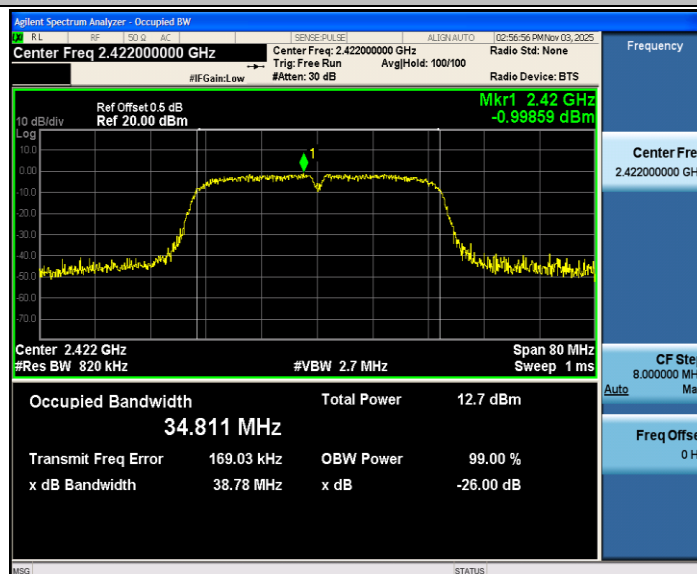
11N20SISO_Ant1_2437



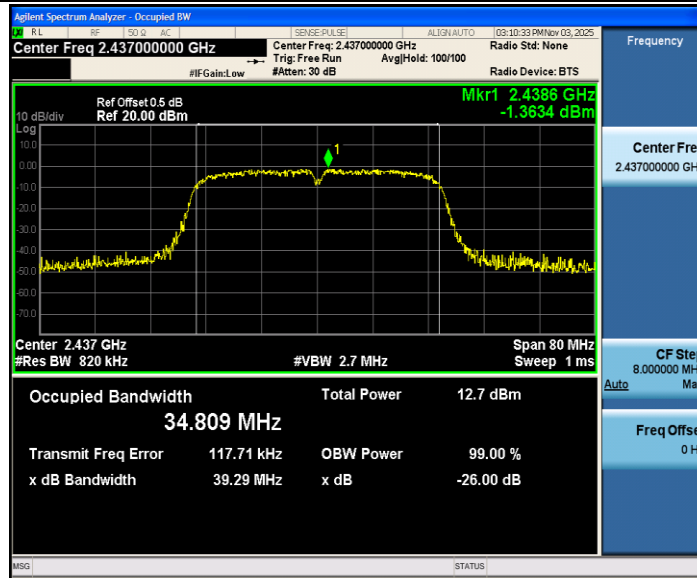
11N20SISO_Ant1_2462



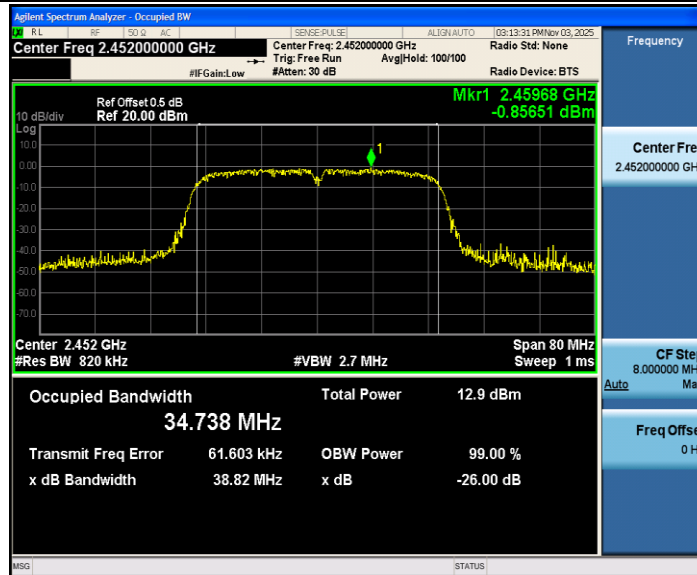
11N40SISO_Ant1_2422



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	15.01	≤30.00	PASS
		2437	15.00	≤30.00	PASS
		2462	14.89	≤30.00	PASS
11G	Ant1	2412	13.32	≤30.00	PASS
		2437	13.73	≤30.00	PASS
		2462	14.11	≤30.00	PASS
11N20SISO	Ant1	2412	13.72	≤30.00	PASS
		2437	14.06	≤30.00	PASS
		2462	14.37	≤30.00	PASS
11N40SISO	Ant1	2422	13.05	≤30.00	PASS
		2437	12.98	≤30.00	PASS
		2452	13.24	≤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	-14.10	≤8.00	PASS
		2437	-13.93	≤8.00	PASS
		2462	-13.67	≤8.00	PASS
11G	Ant1	2412	-21.12	≤8.00	PASS
		2437	-20.63	≤8.00	PASS
		2462	-20.38	≤8.00	PASS
11N20SISO	Ant1	2412	-20.45	≤8.00	PASS
		2437	-20.40	≤8.00	PASS
		2462	-20.06	≤8.00	PASS
11N40SISO	Ant1	2422	-22.34	≤8.00	PASS
		2437	-21.93	≤8.00	PASS
		2452	-21.77	≤8.00	PASS

Test Graphs

11B_Ant1_2412



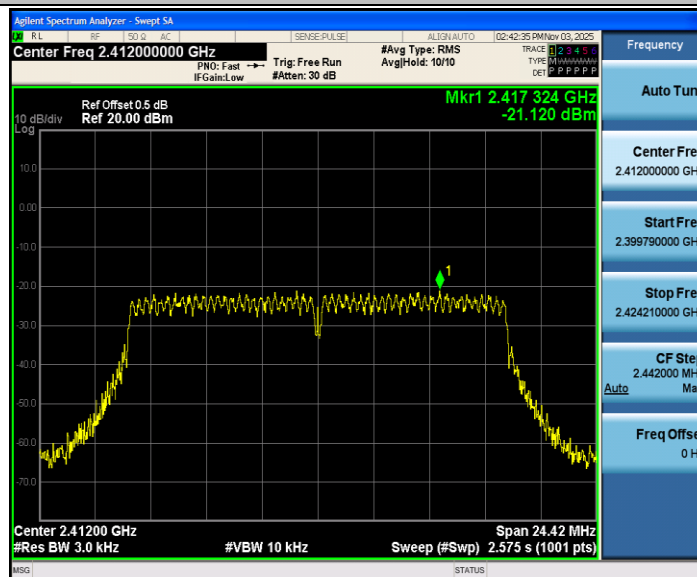
11B_Ant1_2437



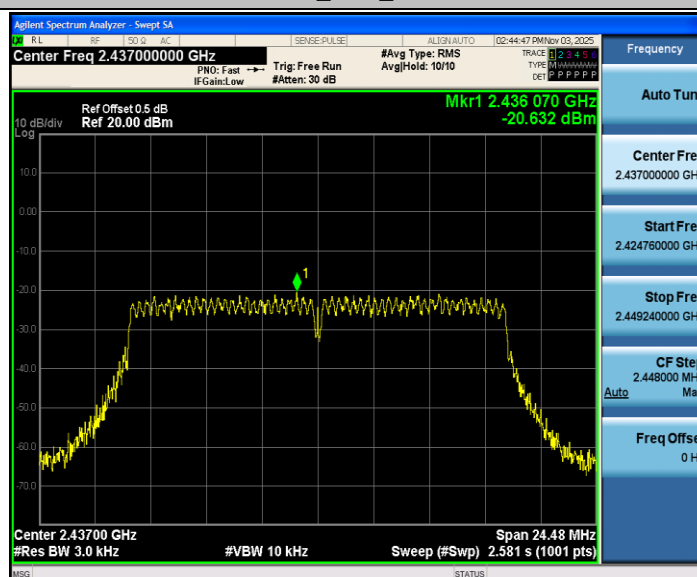
11B_Ant1_2462



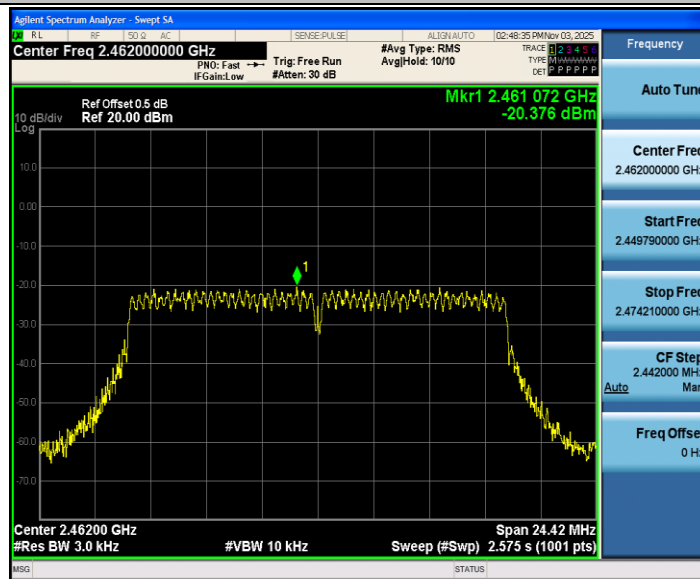
11G_Ant1_2412



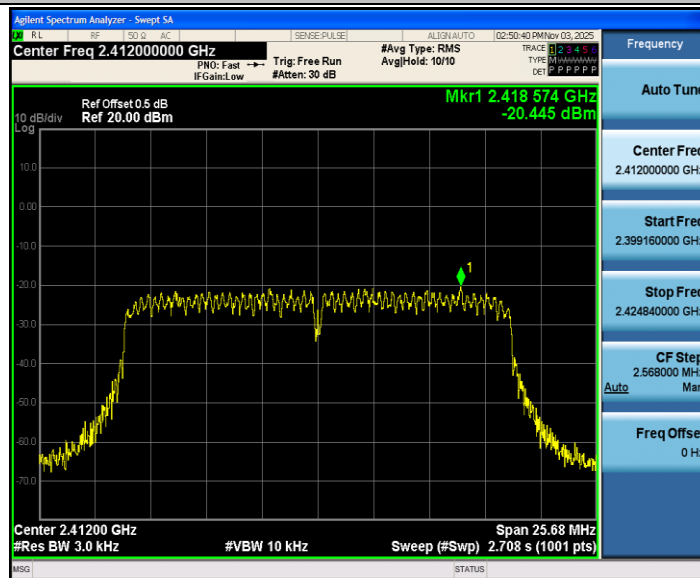
11G_Ant1_2437



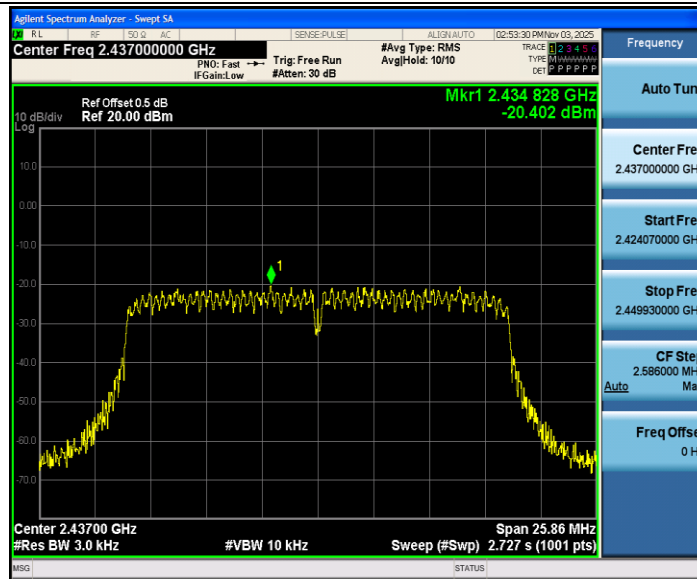
11G_Ant1_2462



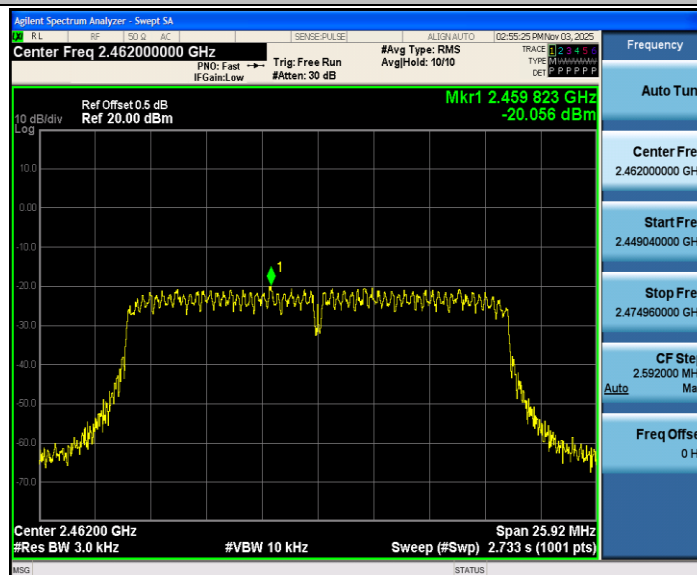
11N20SISO_Ant1_2412



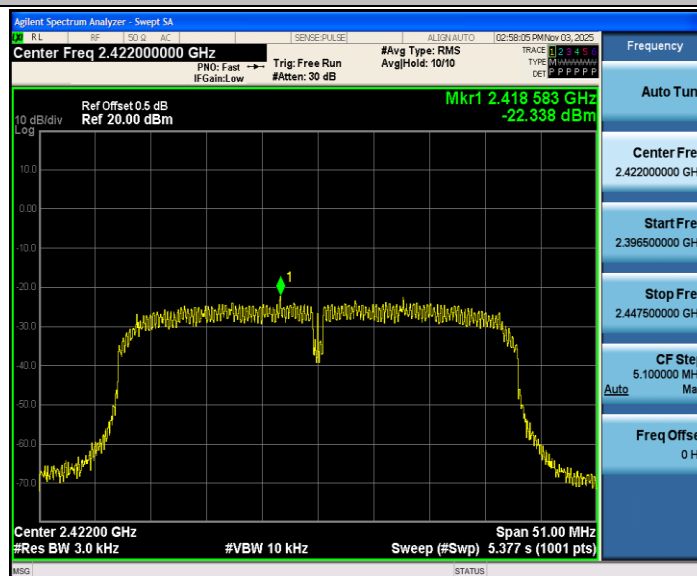
11N20SISO_Ant1_2437



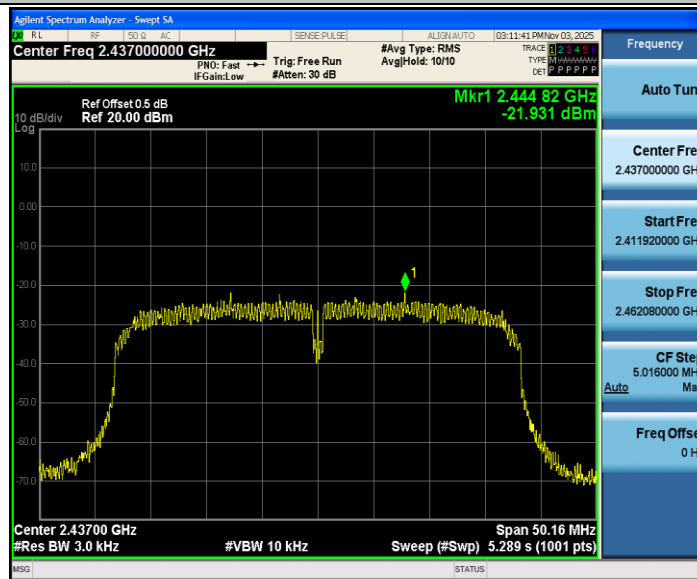
11N20SISO_Ant1_2462



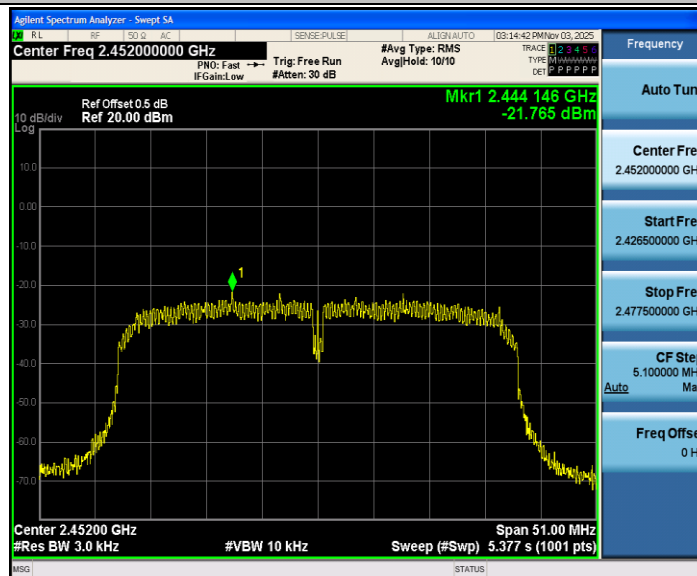
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



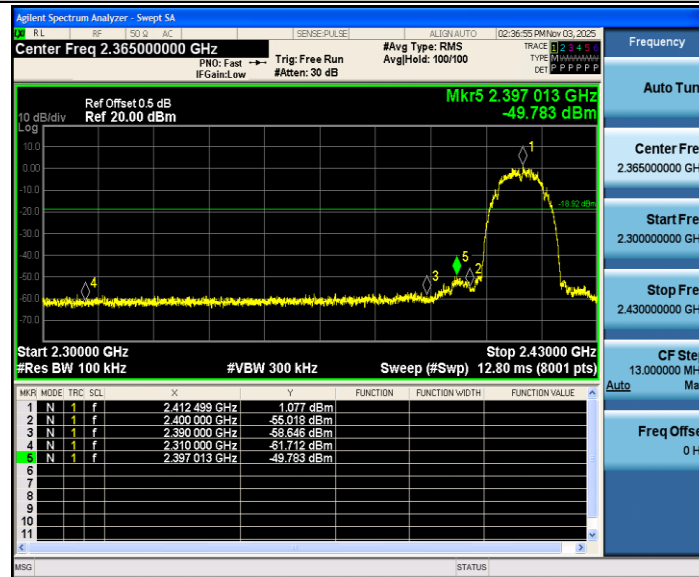
Appendix E: Band edge measurements

Test Result

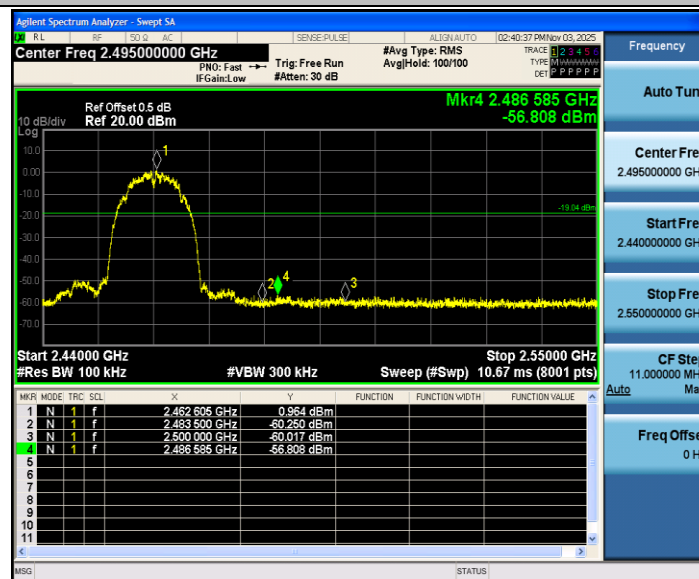
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.08	-49.78	≤-18.92	PASS
		High	2462	0.96	-56.81	≤-19.04	PASS
11G	Ant1	Low	2412	-7.24	-39.54	≤-27.24	PASS
		High	2462	-6.28	-49.76	≤-26.28	PASS
11N20SISO	Ant1	Low	2412	-6.69	-42.85	≤-26.69	PASS
		High	2462	-6.52	-49.52	≤-26.52	PASS
11N40SISO	Ant1	Low	2422	-10.19	-49.76	≤-30.19	PASS
		High	2452	-10.13	-52.58	≤-30.13	PASS

Test Graphs

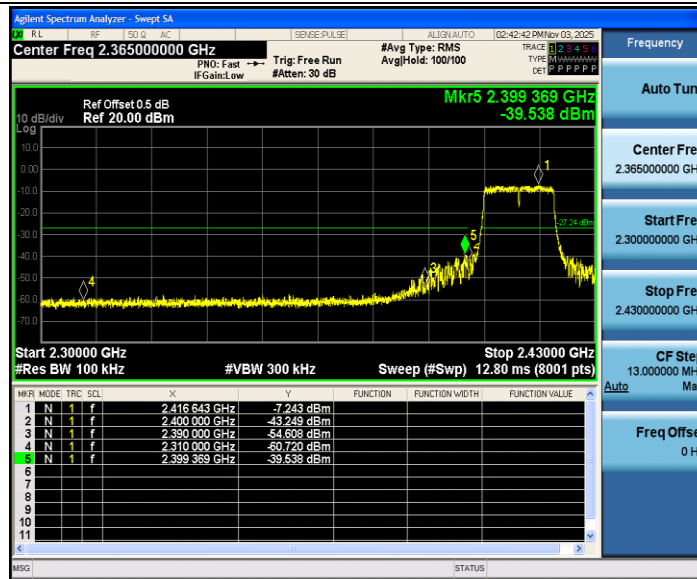
11B_Ant1_Low_2412



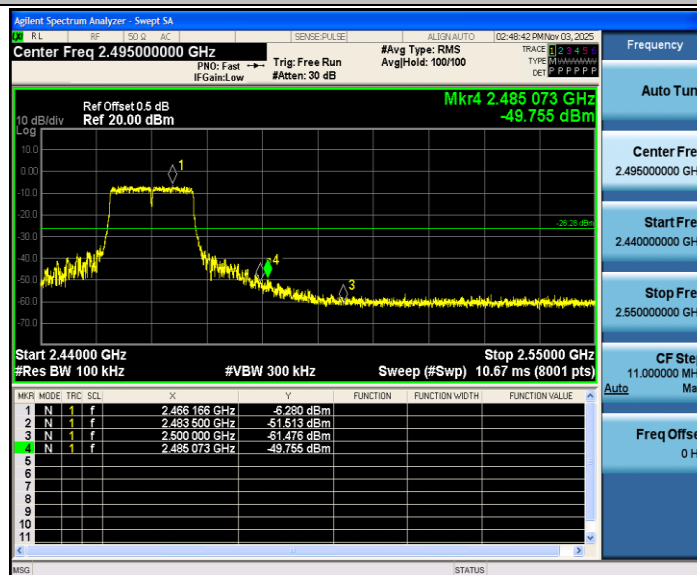
11B_Ant1_High_2462



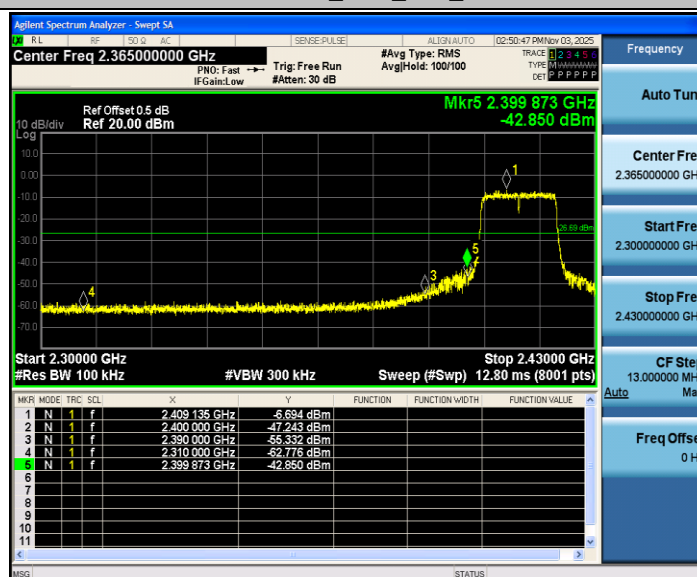
11G_Ant1_Low_2412



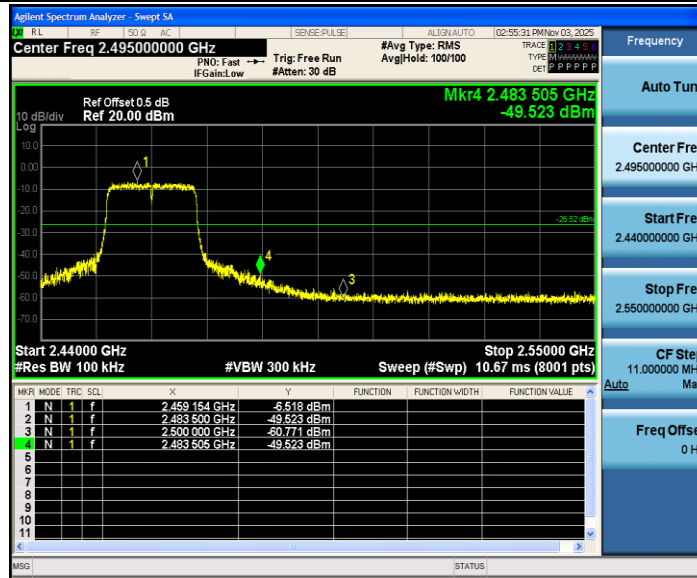
11G_Ant1_High_2462



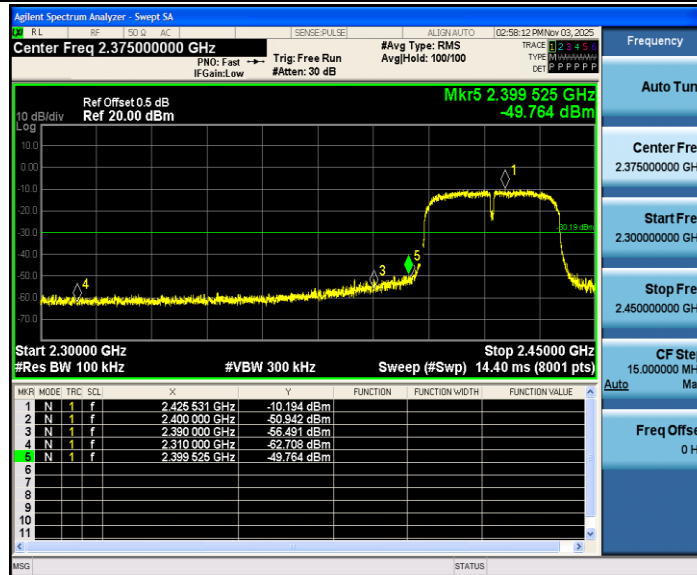
11N20SISO_Ant1_Low_2412



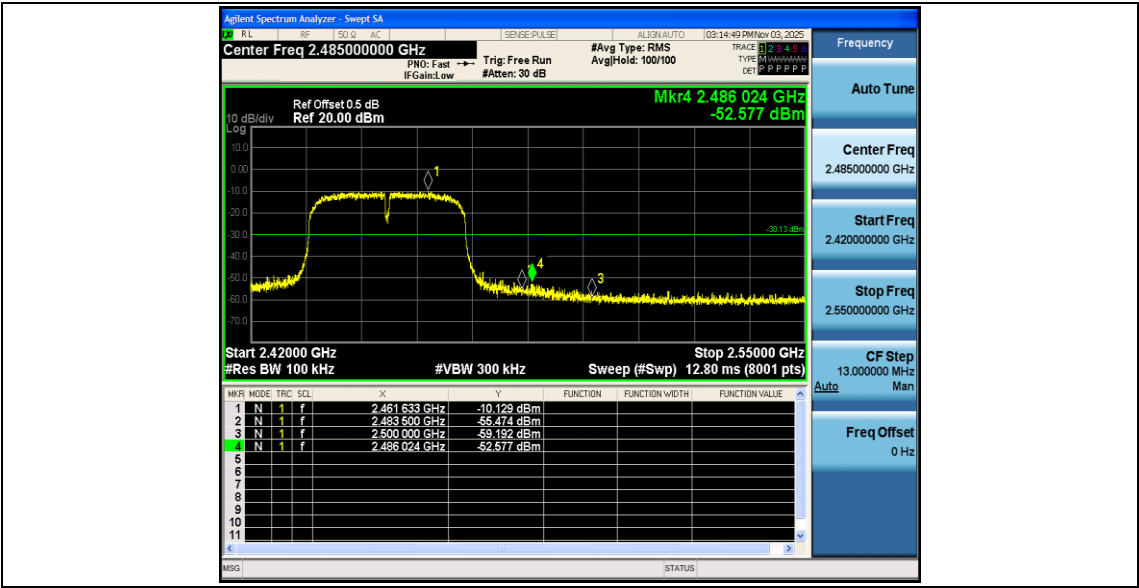
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

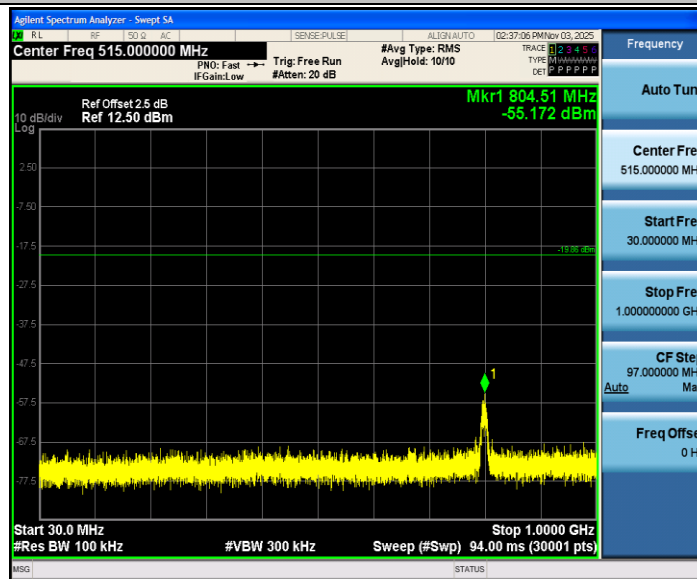
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.14	0.14	---	PASS
			30~1000	0.14	-55.17	≤-19.86	PASS
			1000~26500	0.14	-45.27	≤-19.86	PASS
		2437	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-54.68	≤-20.17	PASS
			1000~26500	-0.17	-45.63	≤-20.17	PASS
		2462	Reference	-0.68	-0.68	---	PASS
			30~1000	-0.68	-56.31	≤-20.68	PASS
			1000~26500	-0.68	-45.97	≤-20.68	PASS
11G	Ant1	2412	Reference	-7.52	-7.52	---	PASS
			30~1000	-7.52	-59.41	≤-27.52	PASS
			1000~26500	-7.52	-44.78	≤-27.52	PASS
		2437	Reference	-7.48	-7.48	---	PASS
			30~1000	-7.48	-49.68	≤-27.48	PASS
			1000~26500	-7.48	-45.17	≤-27.48	PASS
		2462	Reference	-7.04	-7.04	---	PASS
			30~1000	-7.04	-59.85	≤-27.04	PASS
			1000~26500	-7.04	-45.41	≤-27.04	PASS
11N20SISO	Ant1	2412	Reference	-7.66	-7.66	---	PASS
			30~1000	-7.66	-59.85	≤-27.66	PASS
			1000~26500	-7.66	-44.46	≤-27.66	PASS
		2437	Reference	-8.07	-8.07	---	PASS
			30~1000	-8.07	-59.61	≤-28.07	PASS
			1000~26500	-8.07	-44.99	≤-28.07	PASS
		2462	Reference	-7.14	-7.14	---	PASS
			30~1000	-7.14	-60.28	≤-27.14	PASS
			1000~26500	-7.14	-45.48	≤-27.14	PASS
11N40SISO	Ant1	2422	Reference	-9.90	-9.90	---	PASS
			30~1000	-9.90	-62.55	≤-29.9	PASS
			1000~26500	-9.90	-44.78	≤-29.9	PASS
		2437	Reference	-9.77	-9.77	---	PASS
			30~1000	-9.77	-57.41	≤-29.77	PASS
			1000~26500	-9.77	-44.81	≤-29.77	PASS
		2452	Reference	-10.12	-10.12	---	PASS
			30~1000	-10.12	-61.54	≤-30.12	PASS
			1000~26500	-10.12	-45.45	≤-30.12	PASS

Test Graphs

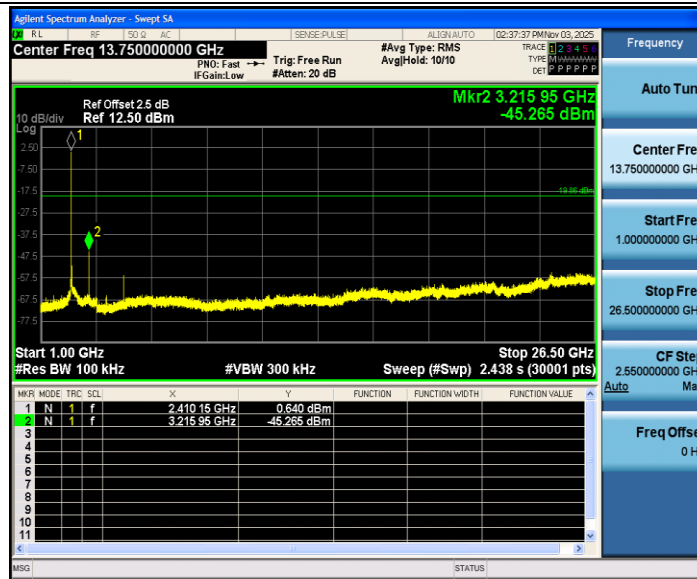
11B_Ant1_2412_0~Reference



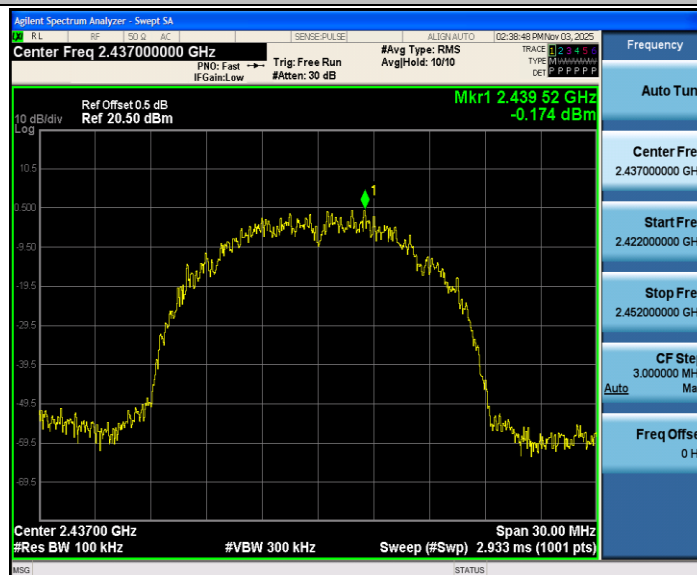
11B_Ant1_2412_30~1000



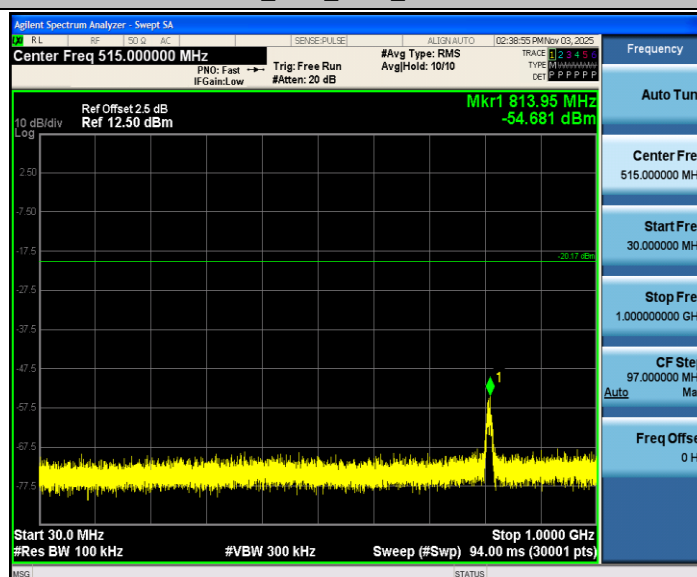
11B_Ant1_2412_1000~26500



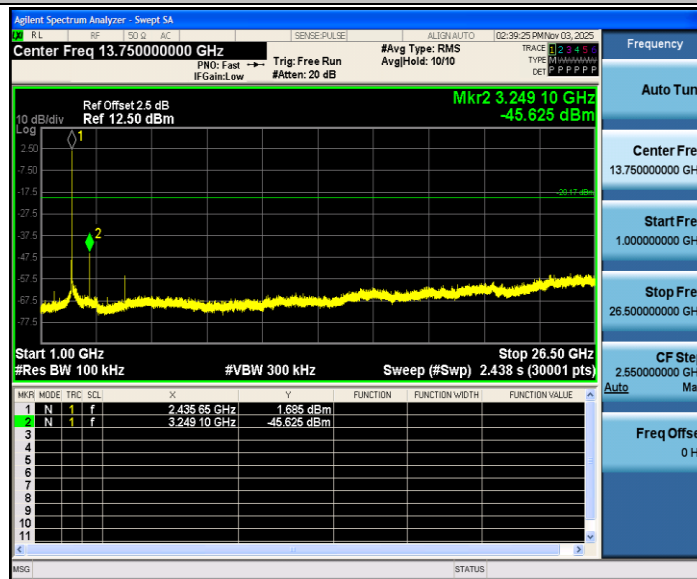
11B_Ant1_2437_0~Reference



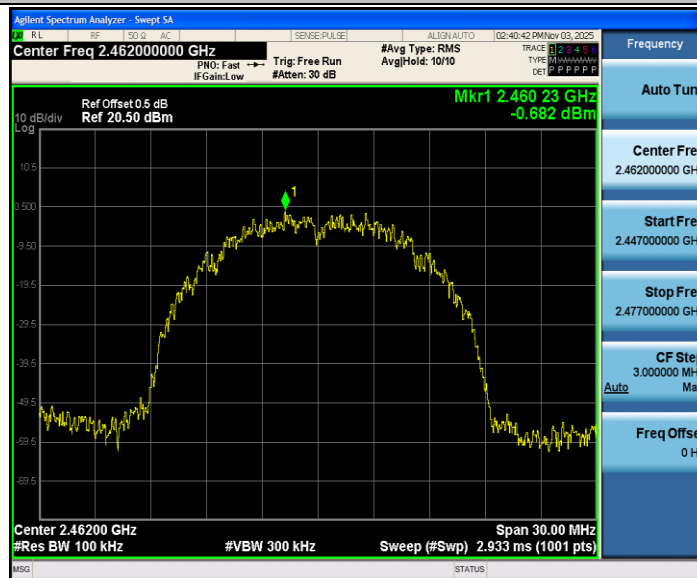
11B_Ant1_2437_30~1000



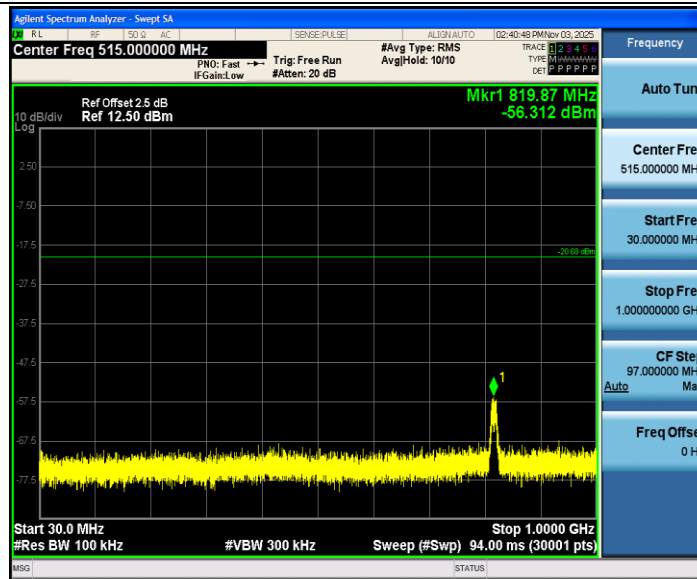
11B_Ant1_2437_1000~26500



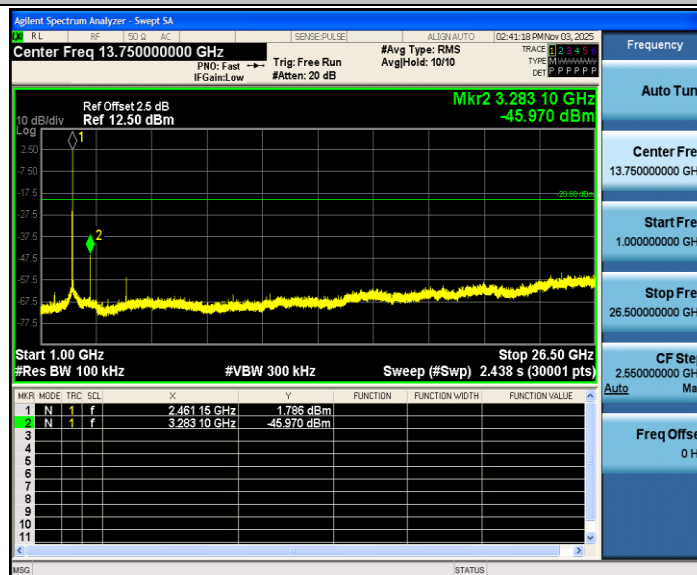
11B_Ant1_2462_0~Reference



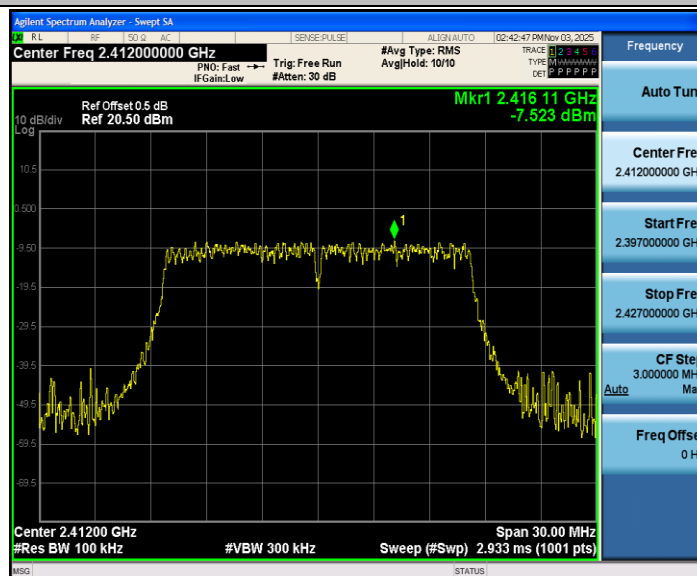
11B_Ant1_2462_30~1000



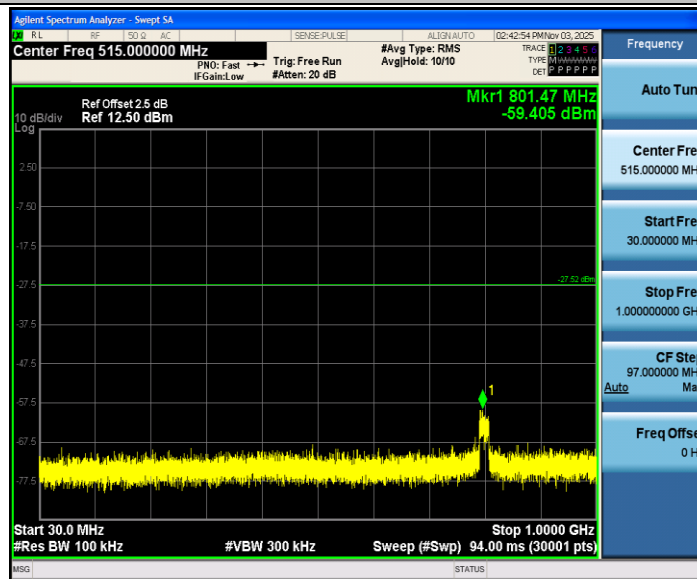
11B_Ant1_2462_1000~26500



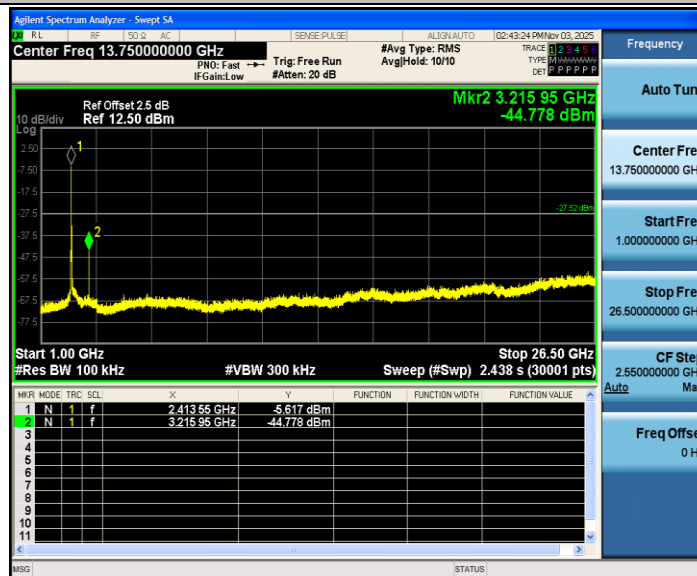
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



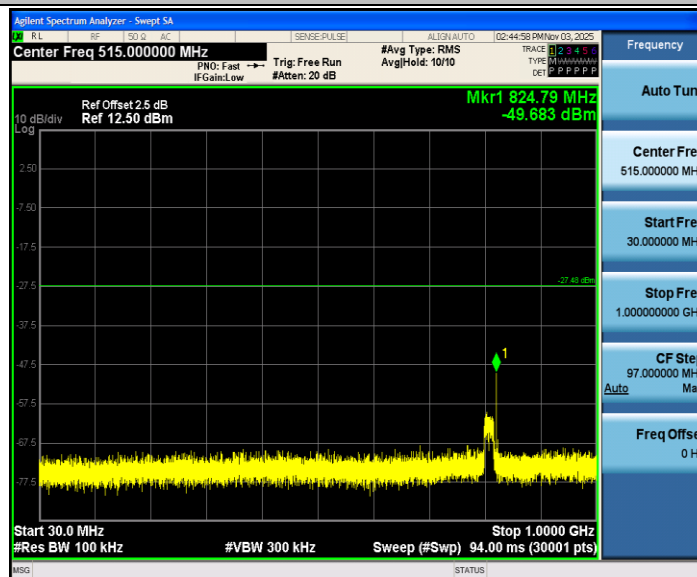
11G_Ant1_2412_1000~26500



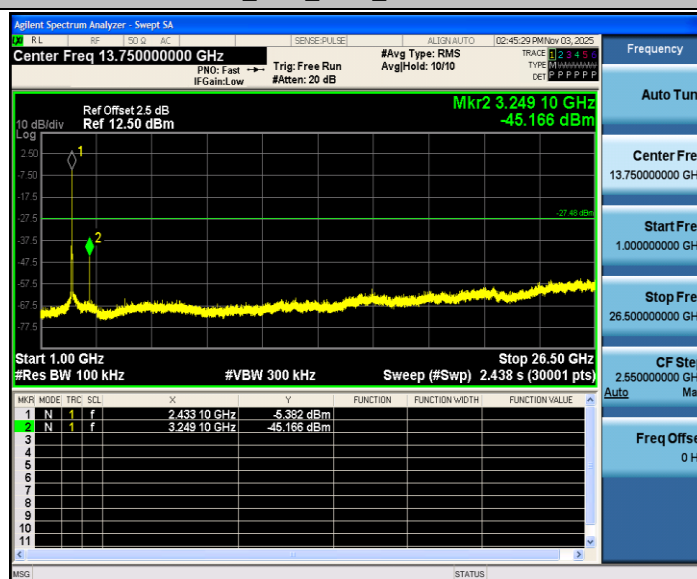
11G_Ant1_2437_0~Reference



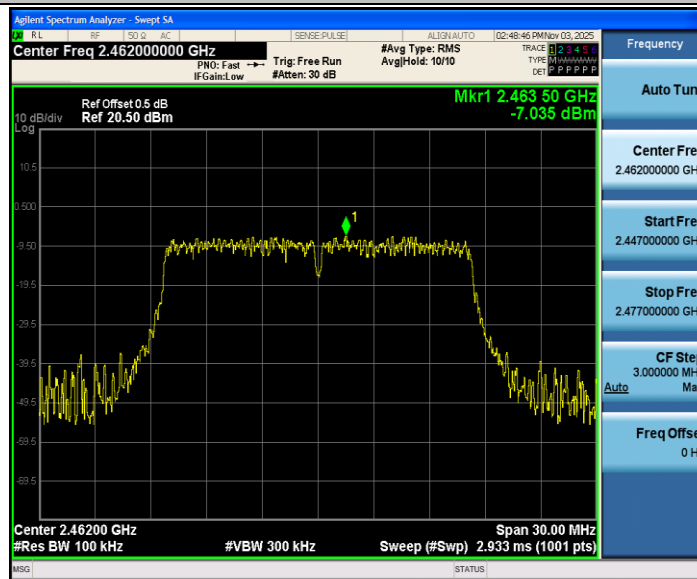
11G_Ant1_2437_30~1000



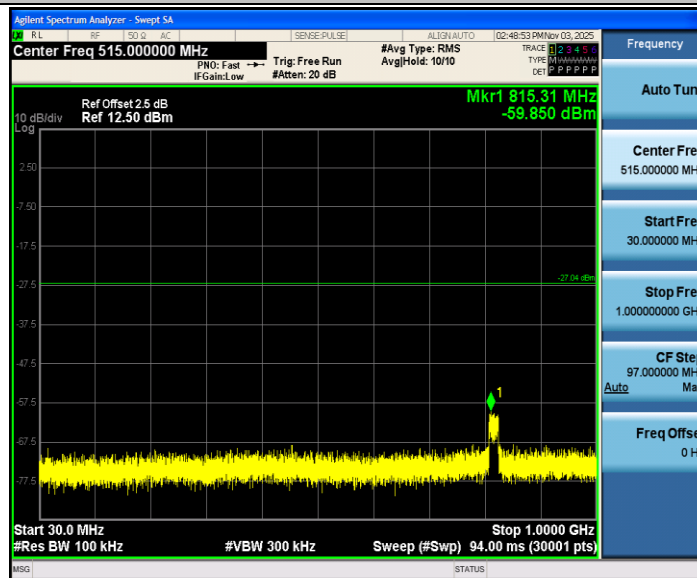
11G_Ant1_2437_1000~26500



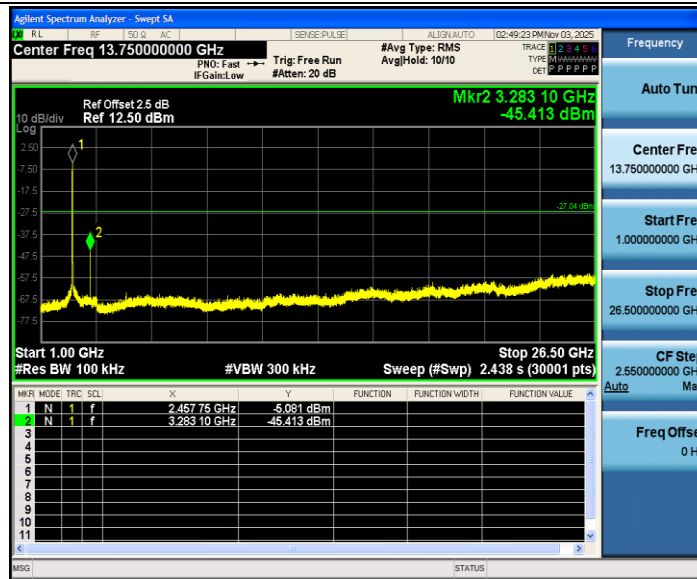
11G_Ant1_2462_0~Reference



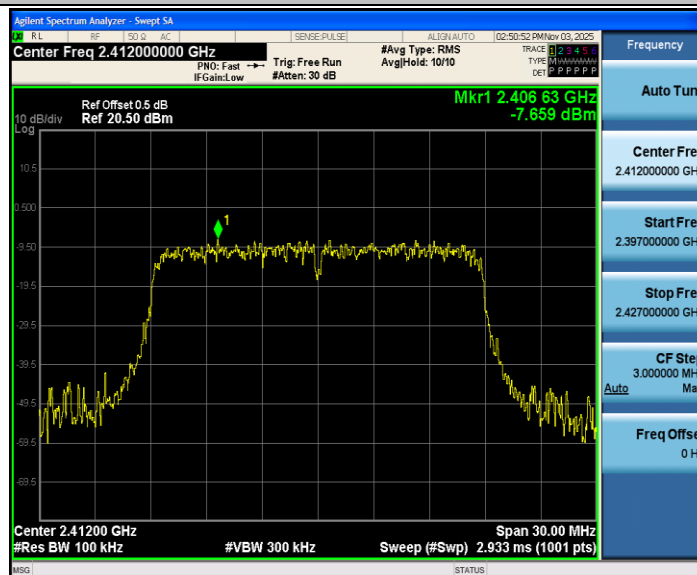
11G_Ant1_2462_30~1000



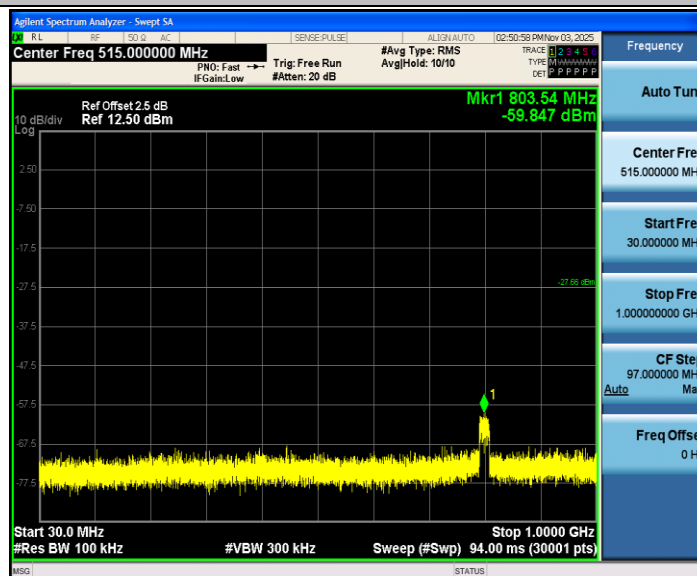
11G_Ant1_2462_1000~26500



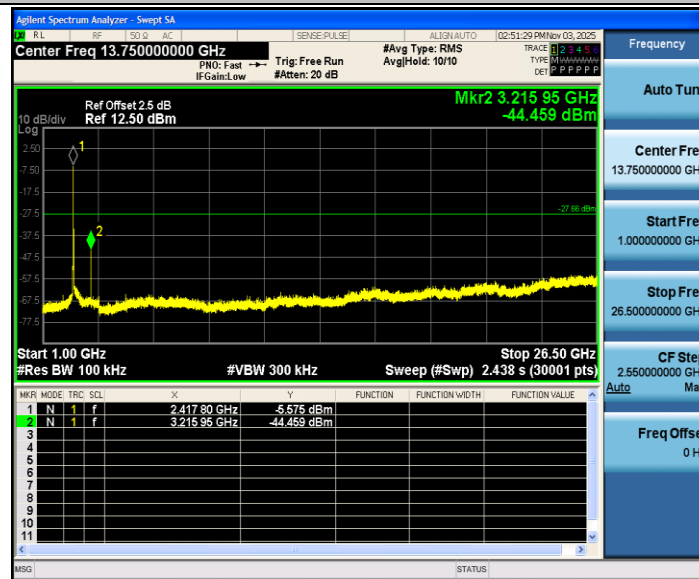
11N20SISO_Ant1_2412_0~Reference



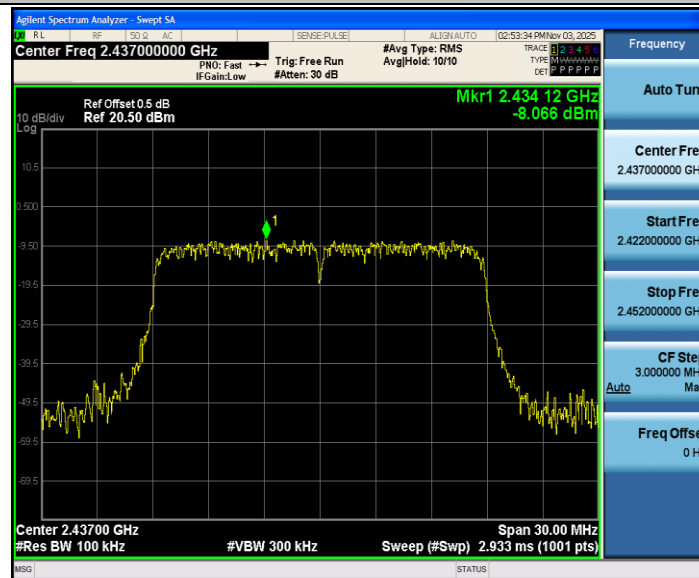
11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000