

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BS56-SMARTTV

Company : Shenzhen Beck Cross-Border Trade Co., Ltd.

EUT : Smart TV

Model Number : 14 INCH SMART TV

Report No. : CTA25101300402

Reviewed By : Eric Wang

Appendix RF Test Data for 2.4GWIFI ANT1

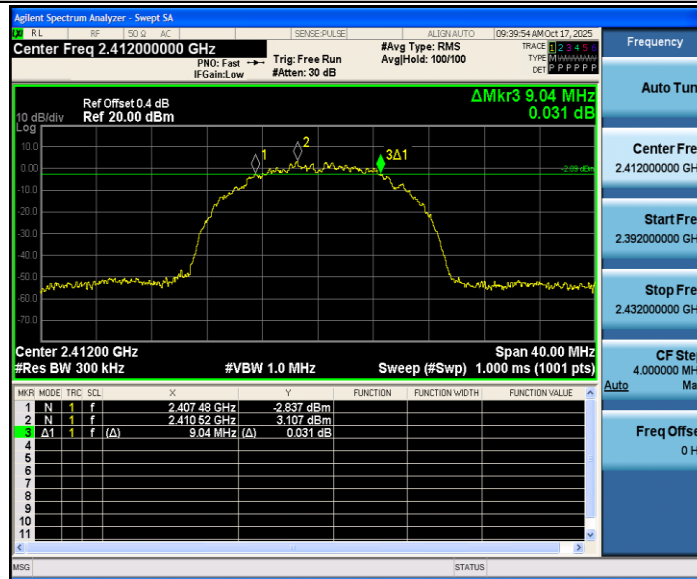
Appendix A: DTS Bandwidth

Test Result

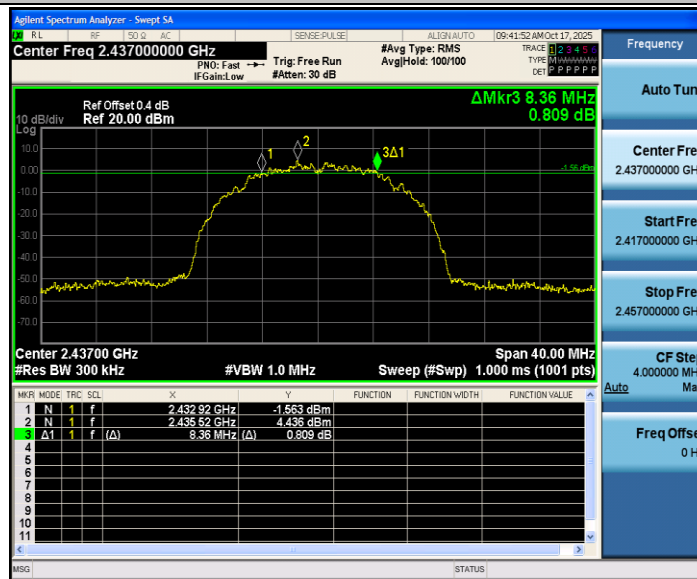
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	0.5	PASS
		2437	8.360	2432.920	2441.280	0.5	PASS
		2462	9.160	2457.480	2466.640	0.5	PASS
11G	Ant1	2412	16.360	2403.920	2420.280	0.5	PASS
		2437	16.400	2428.880	2445.280	0.5	PASS
		2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.400	2403.360	2420.760	0.5	PASS
		2437	17.360	2428.400	2445.760	0.5	PASS
		2462	17.320	2453.400	2470.720	0.5	PASS
11N40SISO	Ant1	2422	33.760	2405.440	2439.200	0.5	PASS
		2437	33.760	2420.440	2454.200	0.5	PASS
		2452	33.920	2435.280	2469.200	0.5	PASS

Test Graphs

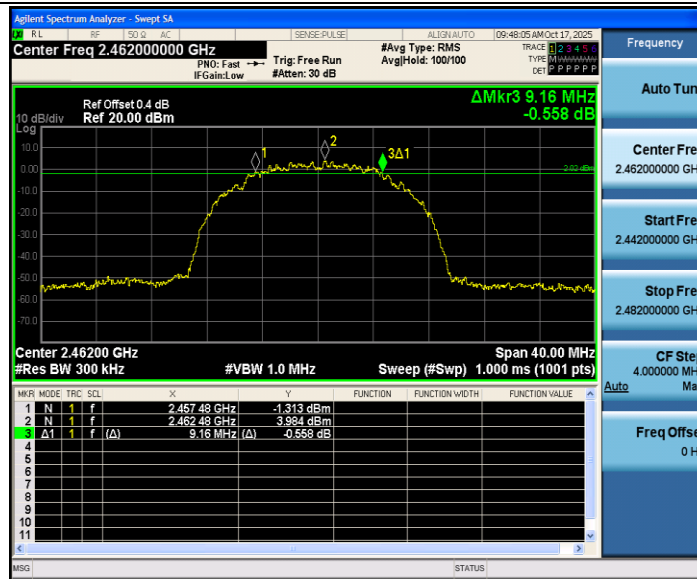
11B_Ant1_2412



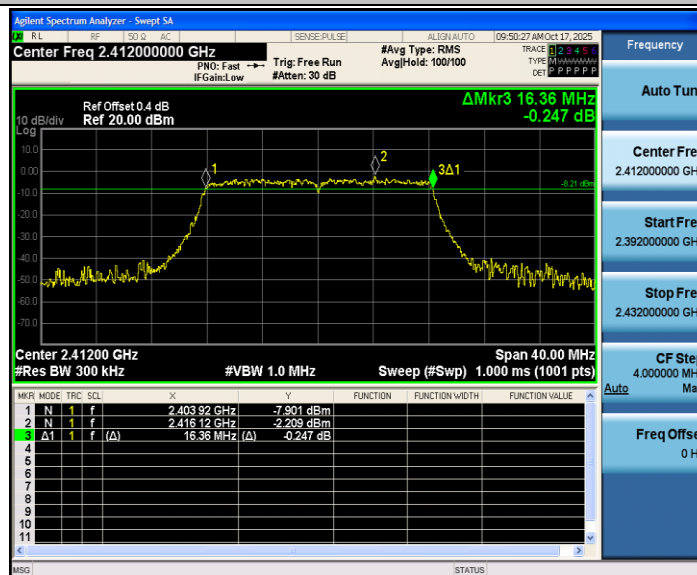
11B_Ant1_2437



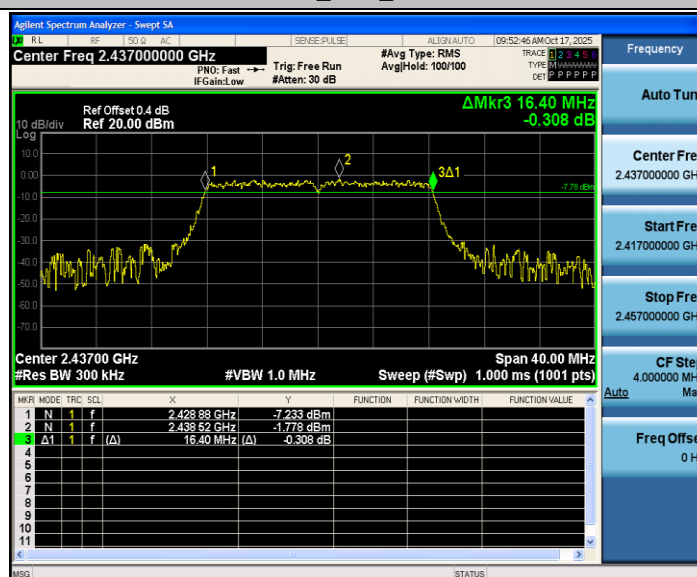
11B_Ant1_2462



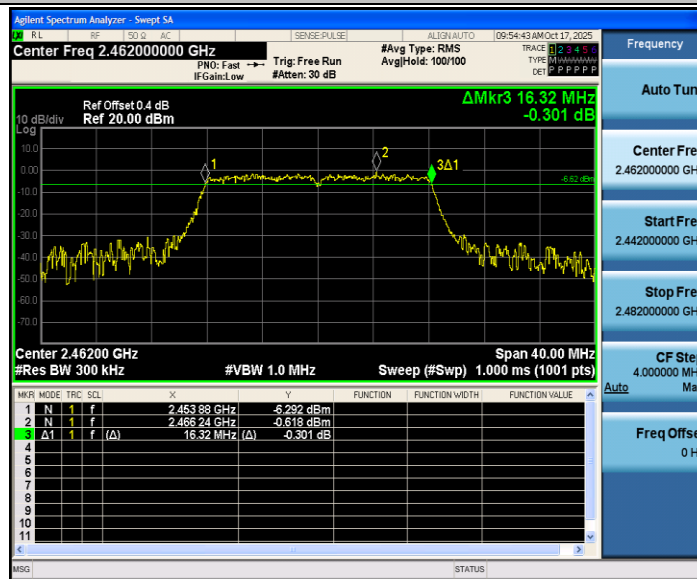
11G_Ant1_2412



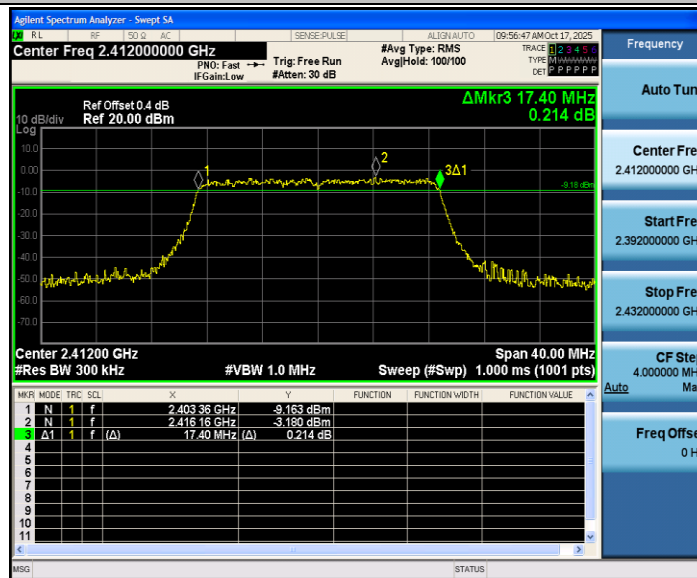
11G_Ant1_2437



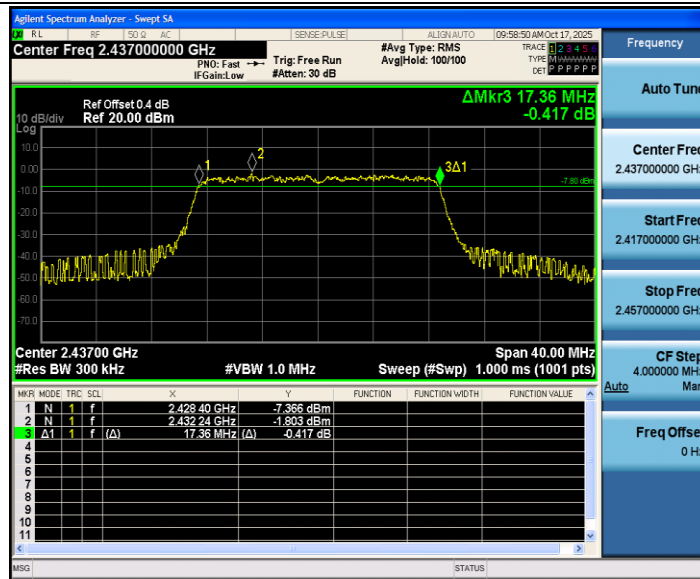
11G_Ant1_2462



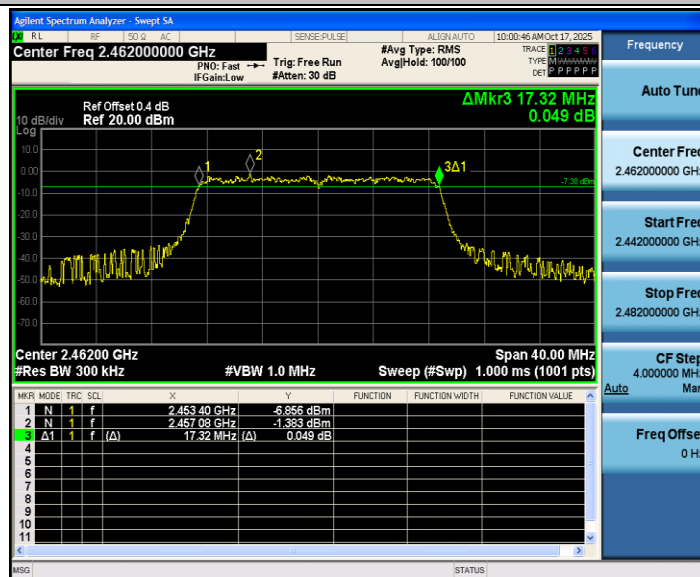
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



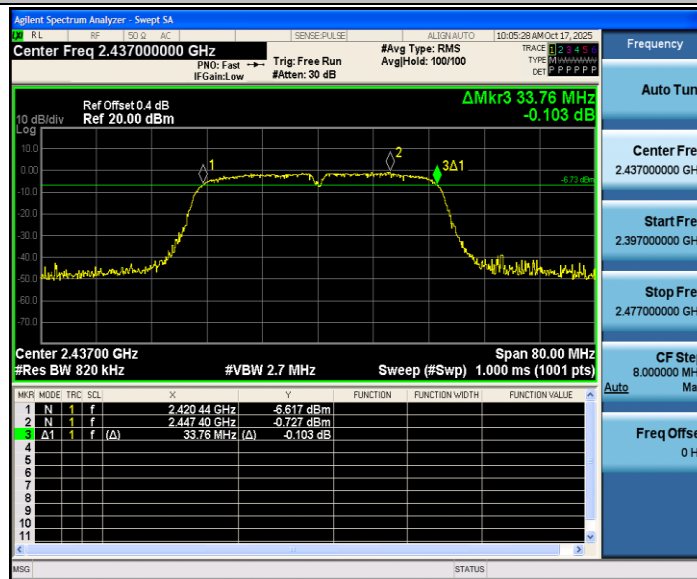
11N20SISO_Ant1_2462



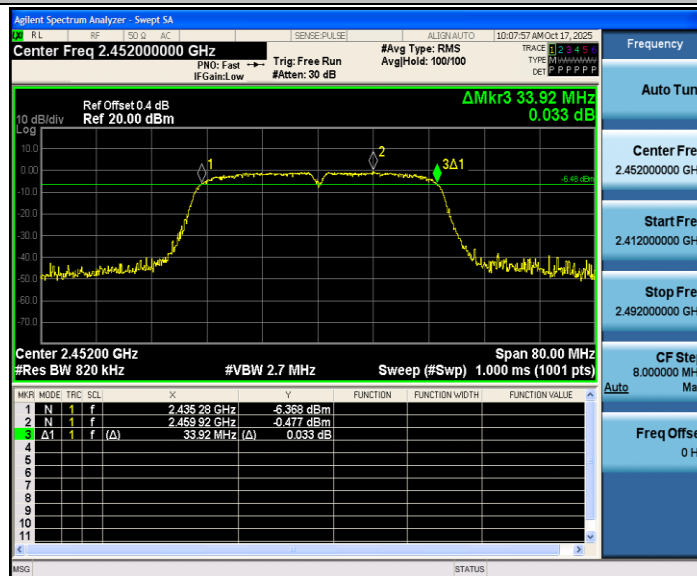
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



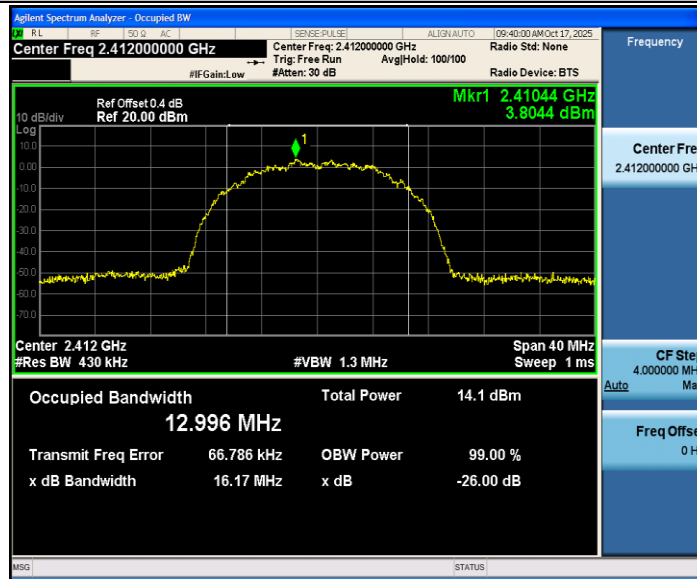
Appendix B: Occupied Channel Bandwidth

Test Result

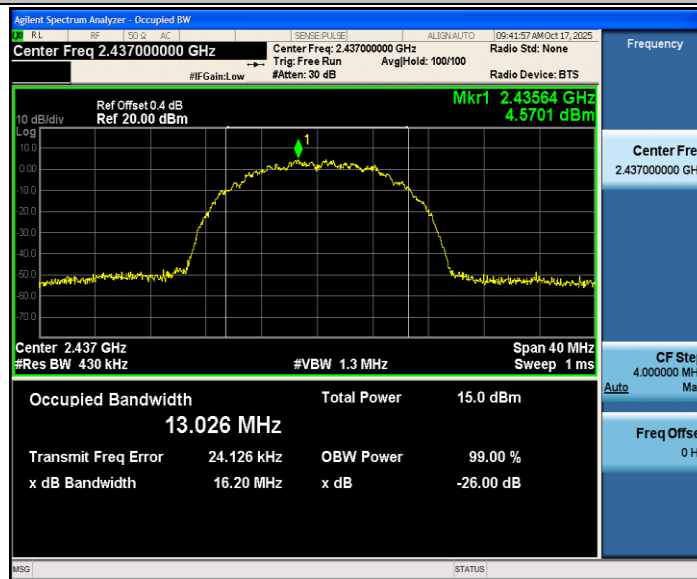
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.996	2405.5688	2418.5648	---	---
		2437	13.026	2430.5111	2443.5371	---	---
		2462	12.979	2455.5287	2468.5077	---	---
11G	Ant1	2412	16.567	2403.7841	2420.3511	---	---
		2437	16.578	2428.7480	2445.3260	---	---
		2462	16.601	2453.7245	2470.3255	---	---
11N20SISO	Ant1	2412	17.478	2403.3234	2420.8014	---	---
		2437	17.464	2428.3234	2445.7874	---	---
		2462	17.457	2453.3073	2470.7643	---	---
11N40SISO	Ant1	2422	34.780	2404.8510	2439.6310	---	---
		2437	34.821	2419.7924	2454.6134	---	---
		2452	34.828	2434.7182	2469.5462	---	---

Test Graphs

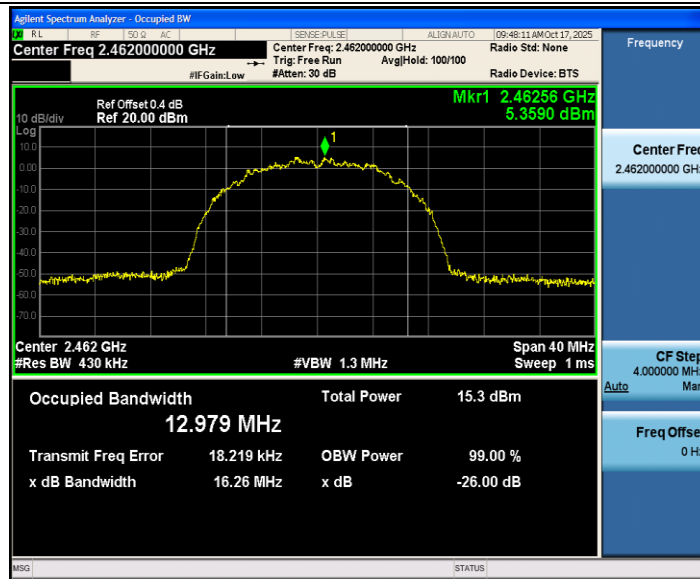
11B_Ant1_2412



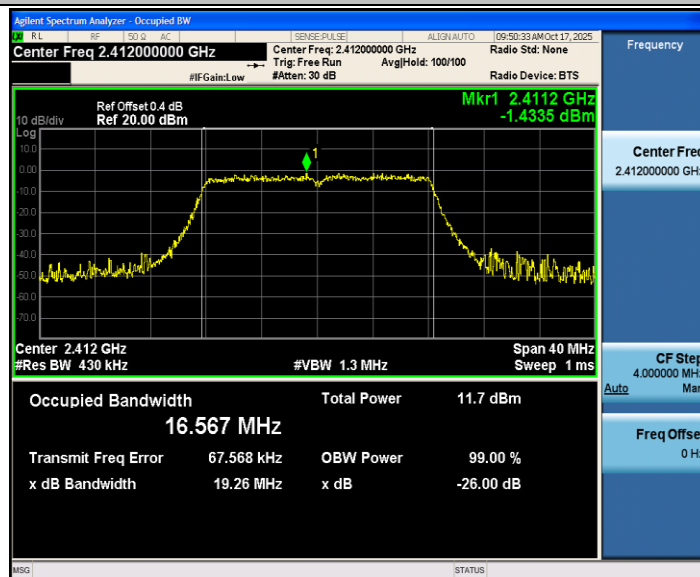
11B_Ant1_2437



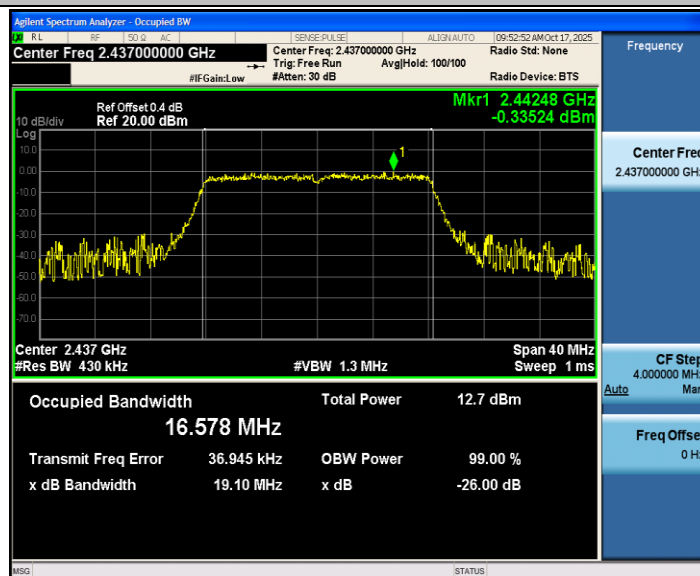
11B_Ant1_2462



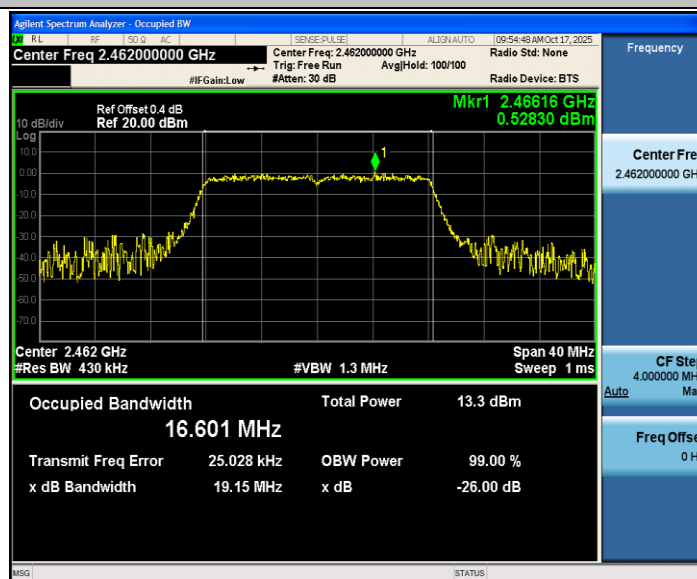
11G_Ant1_2412



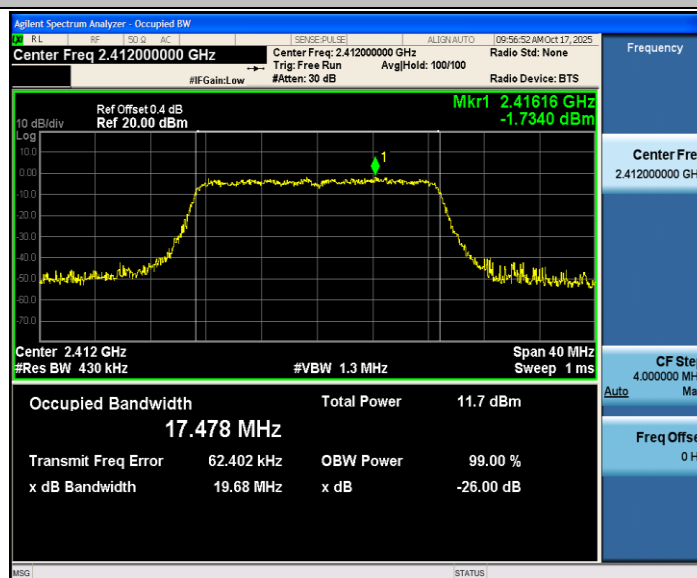
11G_Ant1_2437



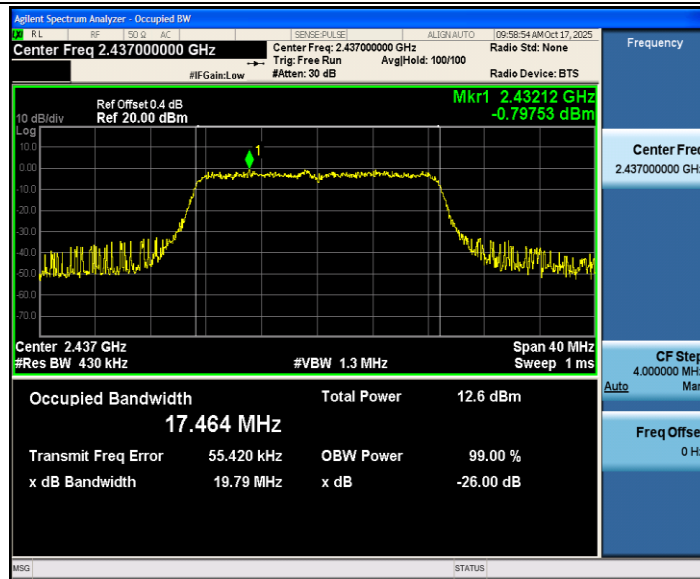
11G_Ant1_2462



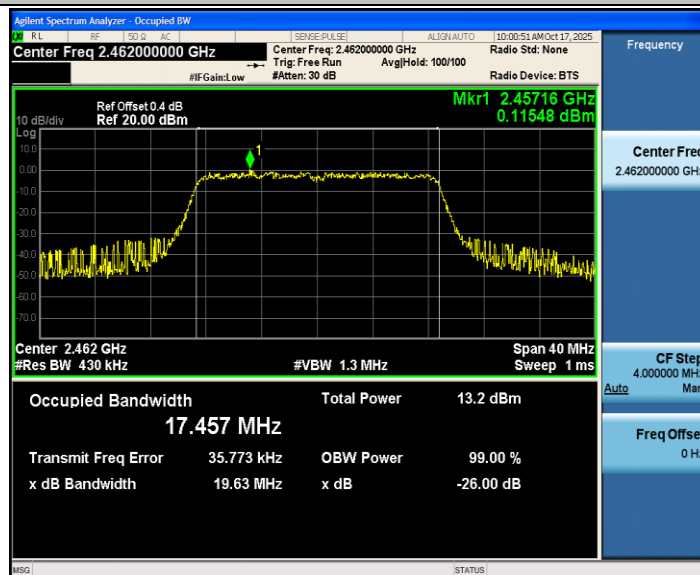
11N20SISO_Ant1_2412



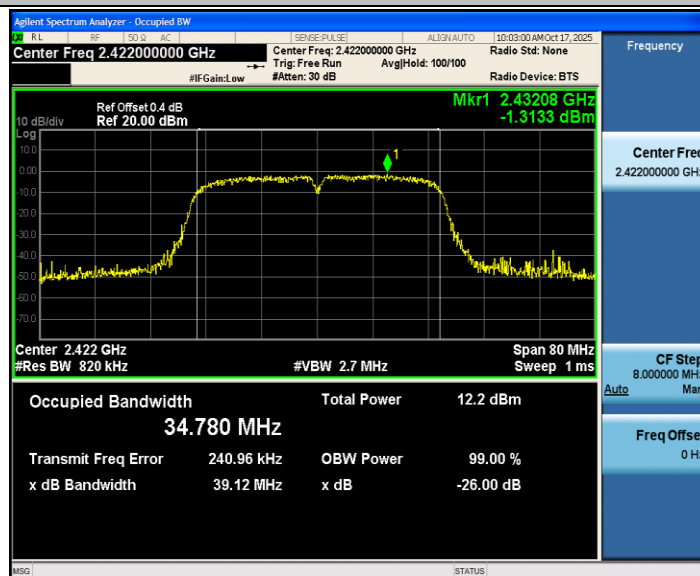
11N20SISO_Ant1_2437



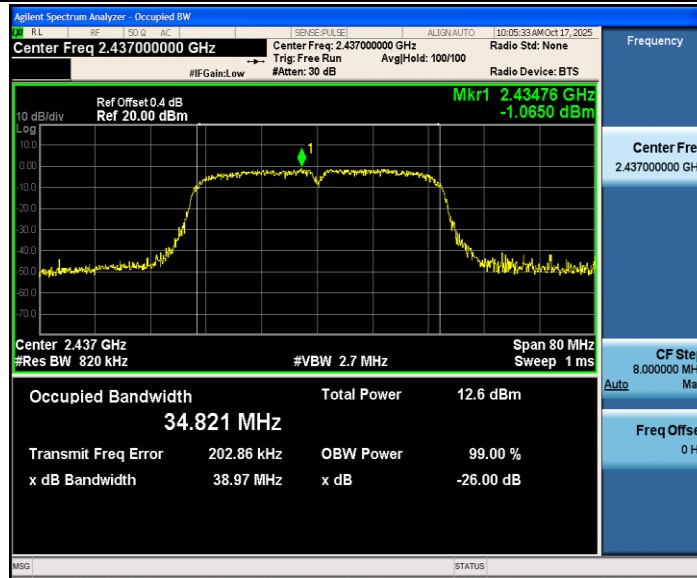
11N20SISO_Ant1_2462



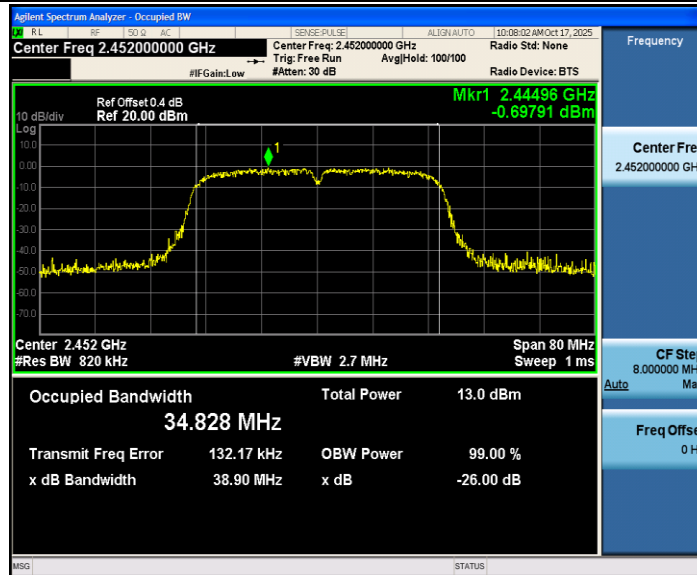
11N40SISO_Ant1_2422



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	13.60	≤30.00	PASS
		2437	14.18	≤30.00	PASS
		2462	14.99	≤30.00	PASS
11G	Ant1	2412	12.57	≤30.00	PASS
		2437	13.52	≤30.00	PASS
		2462	14.09	≤30.00	PASS
11N20SISO	Ant1	2412	12.96	≤30.00	PASS
		2437	13.82	≤30.00	PASS
		2462	14.48	≤30.00	PASS
11N40SISO	Ant1	2422	12.50	≤30.00	PASS
		2437	12.80	≤30.00	PASS
		2452	13.18	≤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	-15.17	≤8.00	PASS
		2437	-14.45	≤8.00	PASS
		2462	-14.70	≤8.00	PASS
11G	Ant1	2412	-21.84	≤8.00	PASS
		2437	-20.87	≤8.00	PASS
		2462	-20.42	≤8.00	PASS
11N20SISO	Ant1	2412	-21.44	≤8.00	PASS
		2437	-20.60	≤8.00	PASS
		2462	-20.02	≤8.00	PASS
11N40SISO	Ant1	2422	-22.65	≤8.00	PASS
		2437	-22.52	≤8.00	PASS
		2452	-22.19	≤8.00	PASS

Test Graphs

11B_Ant1_2412



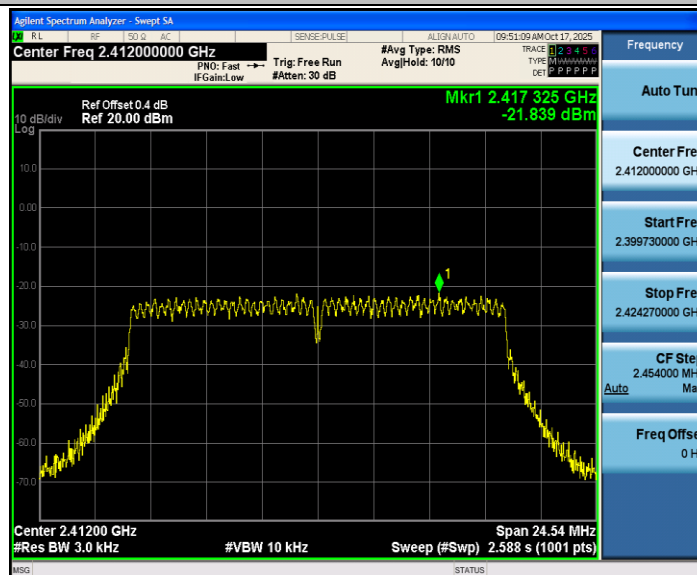
11B_Ant1_2437



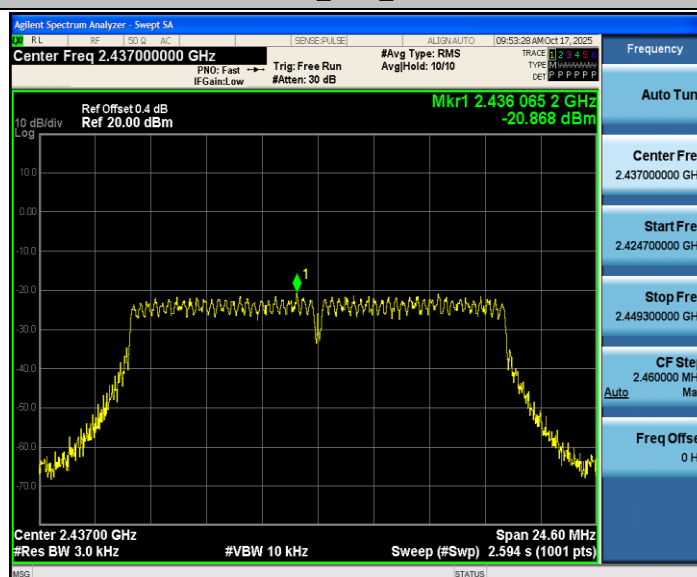
11B_Ant1_2462



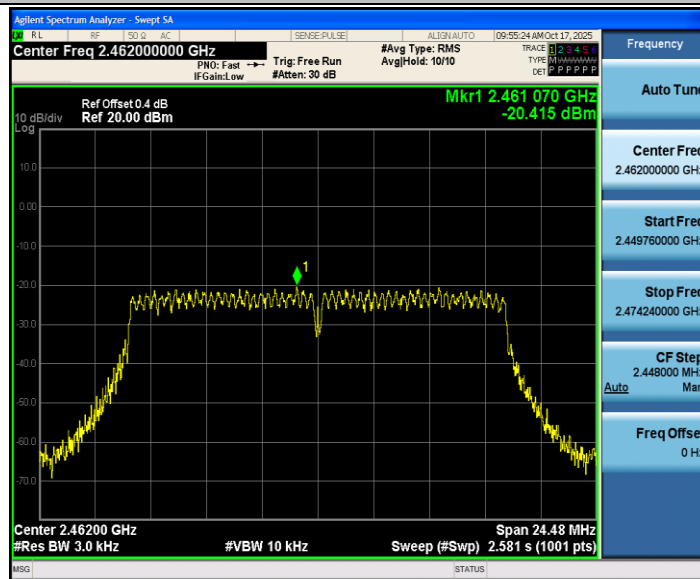
11G_Ant1_2412



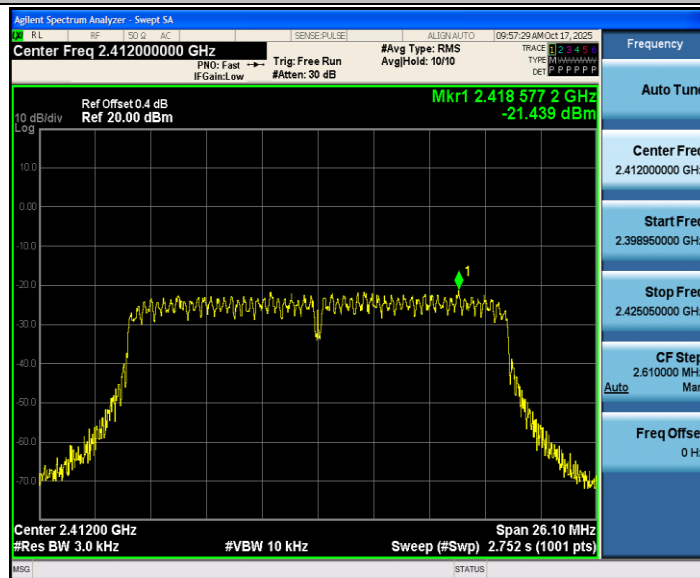
11G_Ant1_2437



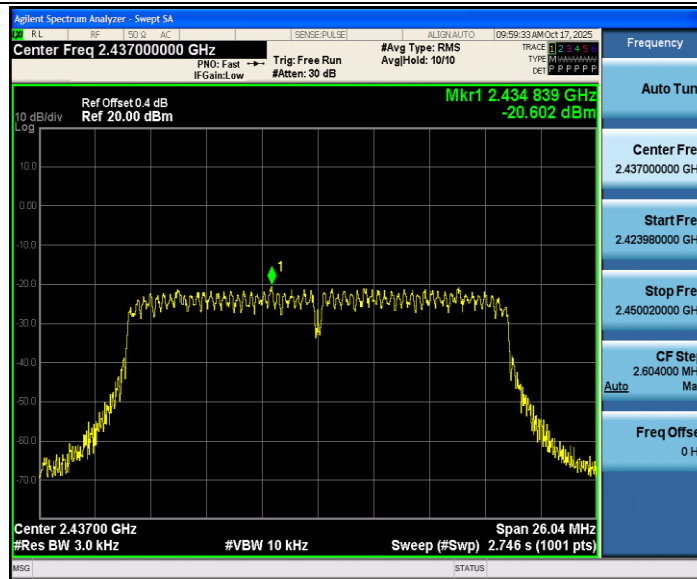
11G_Ant1_2462



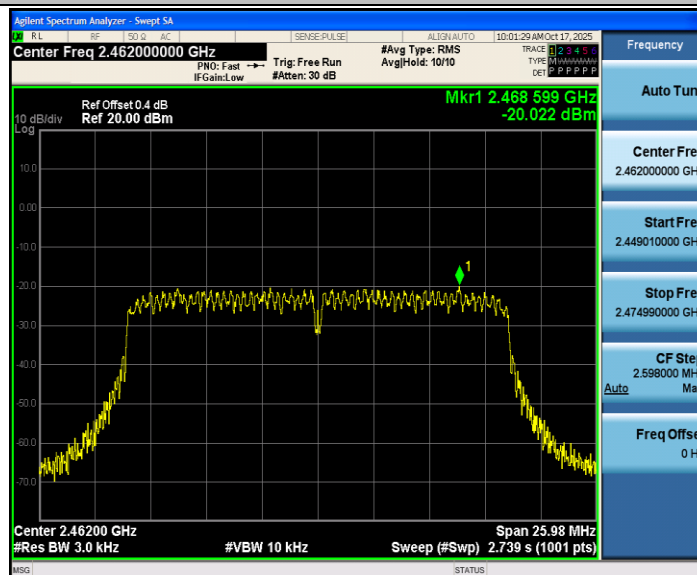
11N20SISO_Ant1_2412



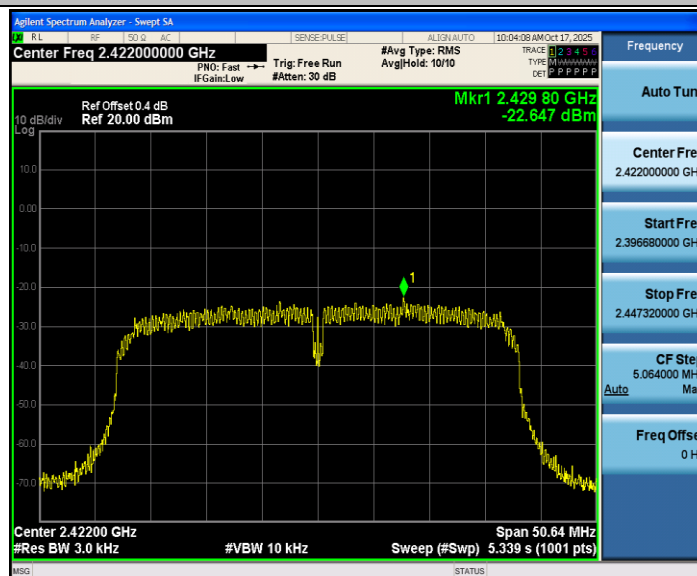
11N20SISO_Ant1_2437



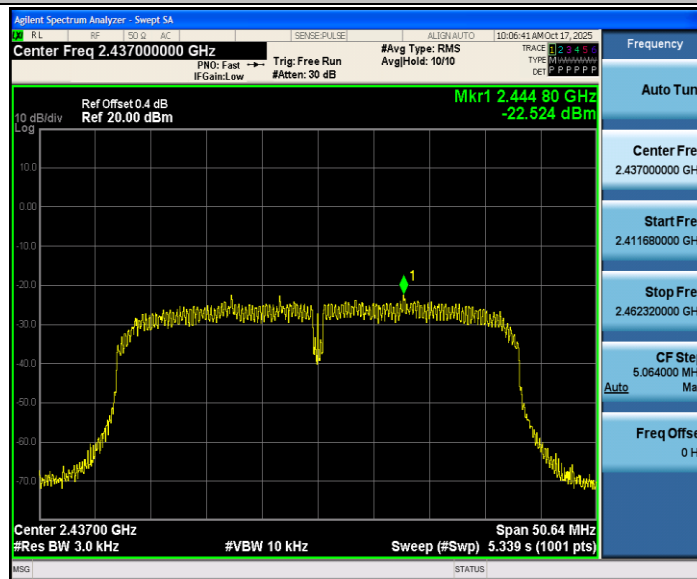
11N20SISO_Ant1_2462



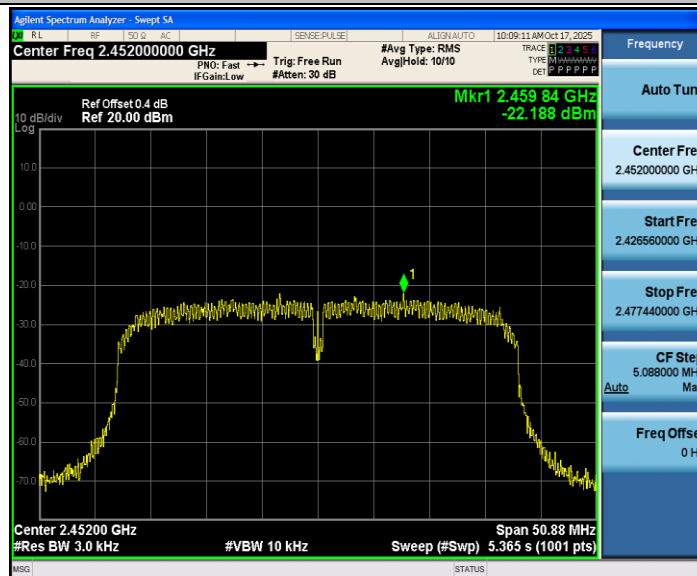
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



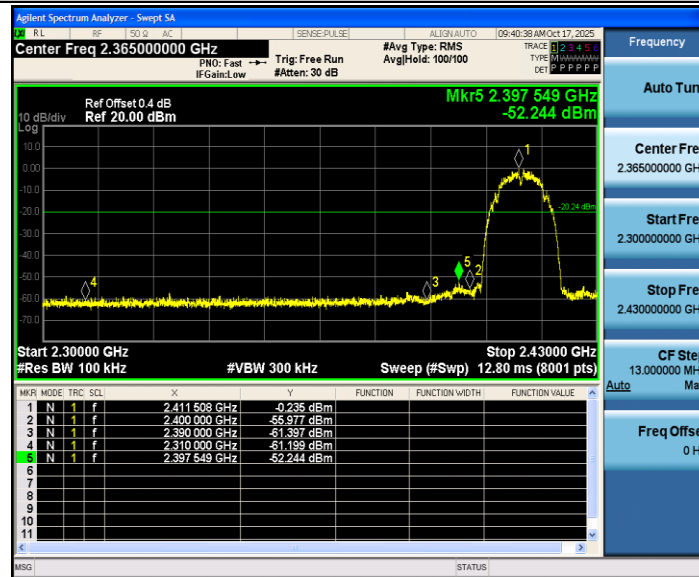
Appendix E: Band edge measurements

Test Result

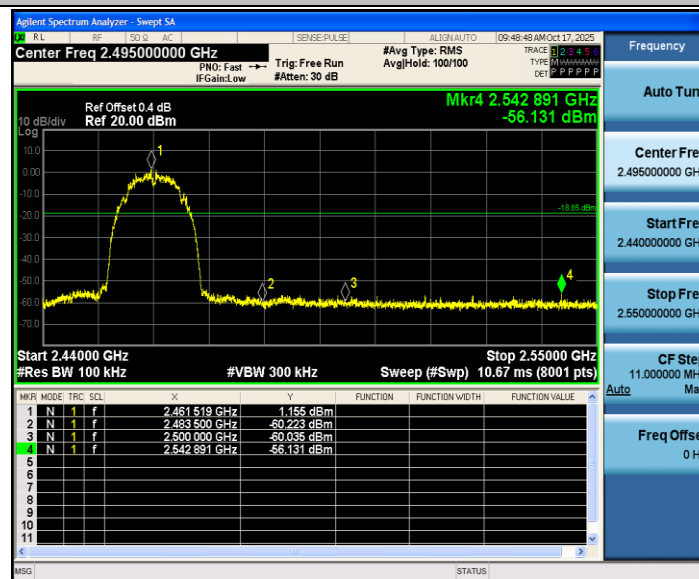
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-0.24	-52.24	≤-20.24	PASS
		High	2462	1.16	-56.13	≤-18.85	PASS
11G	Ant1	Low	2412	-8.25	-48.92	≤-28.25	PASS
		High	2462	-6.46	-48.94	≤-26.46	PASS
11N20SISO	Ant1	Low	2412	-7.81	-49.45	≤-27.81	PASS
		High	2462	-6.69	-53.19	≤-26.69	PASS
11N40SISO	Ant1	Low	2422	-10.33	-51.27	≤-30.33	PASS
		High	2452	-10.19	-52.96	≤-30.19	PASS

Test Graphs

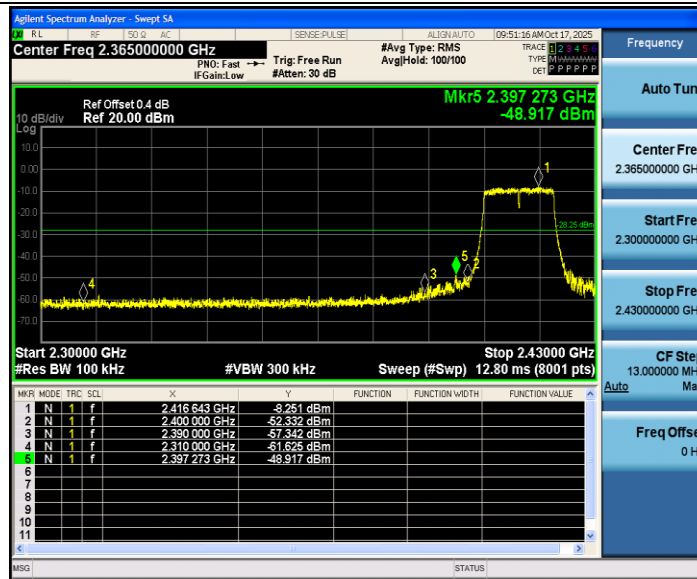
11B_Ant1_Low_2412



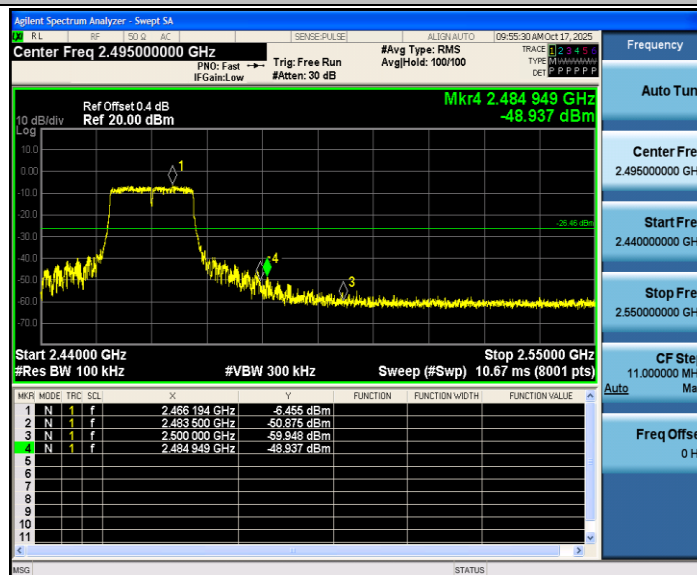
11B_Ant1_High_2462



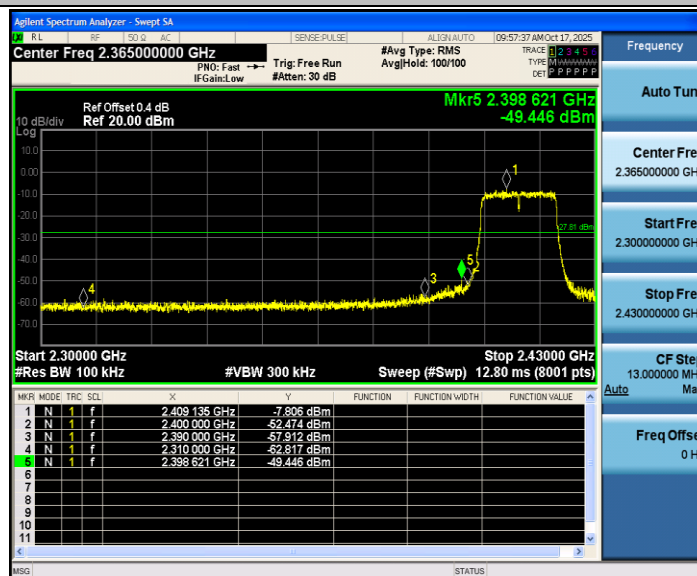
11G_Ant1_Low_2412



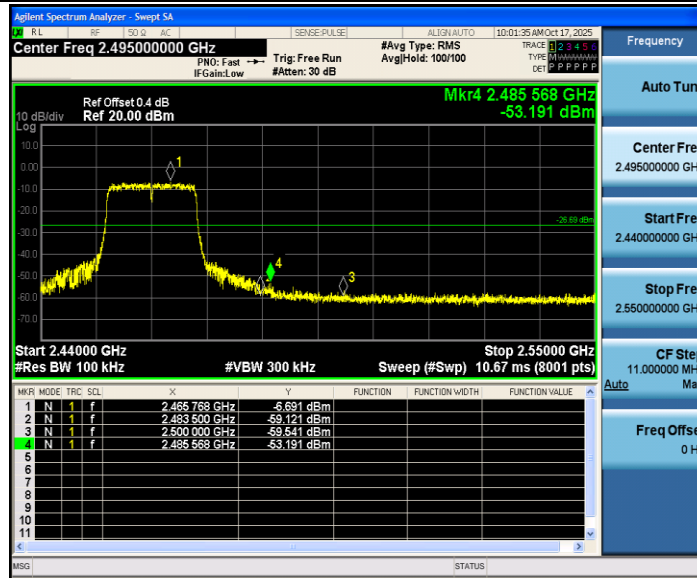
11G_Ant1_High_2462



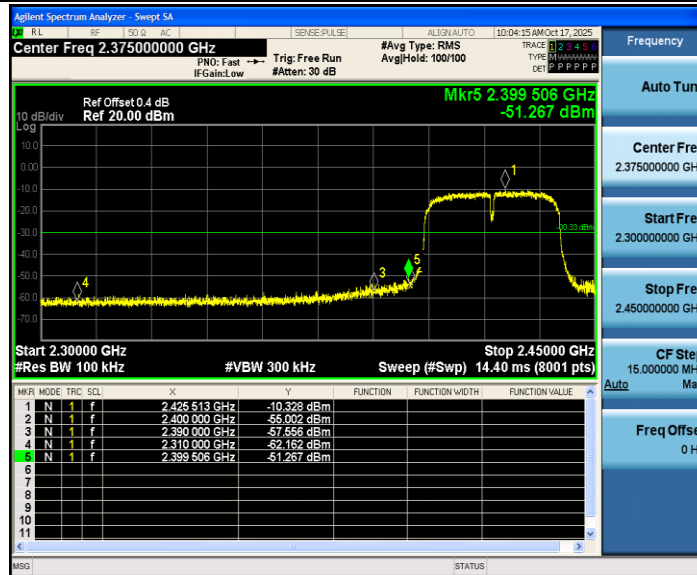
11N20SISO_Ant1_Low_2412



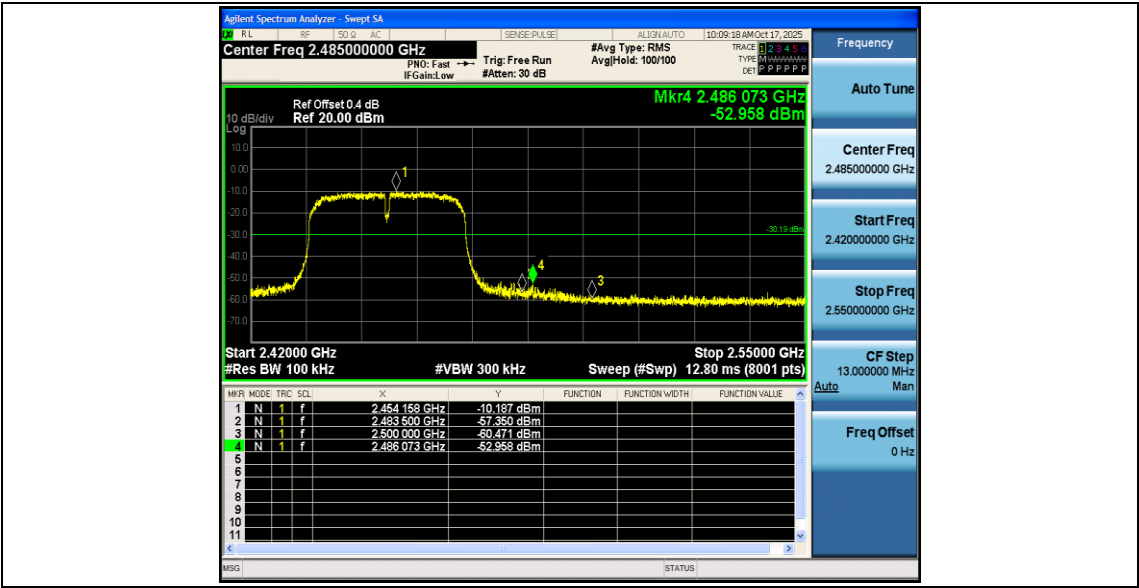
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



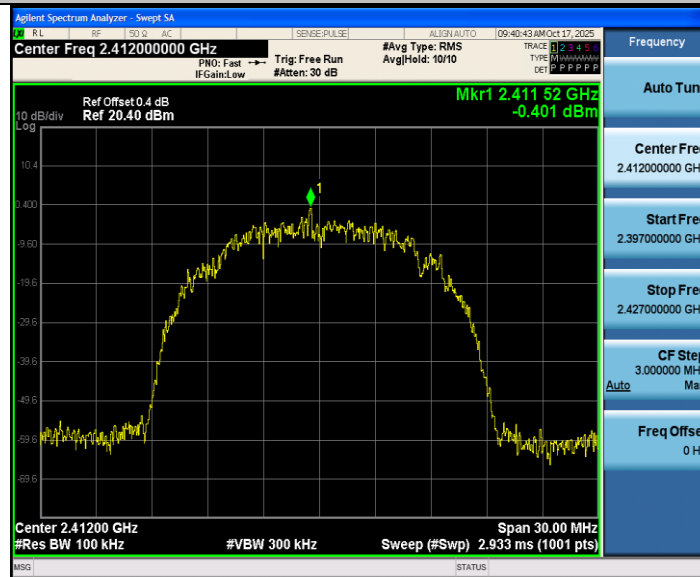
Appendix F: Conducted Spurious Emission

Test Result

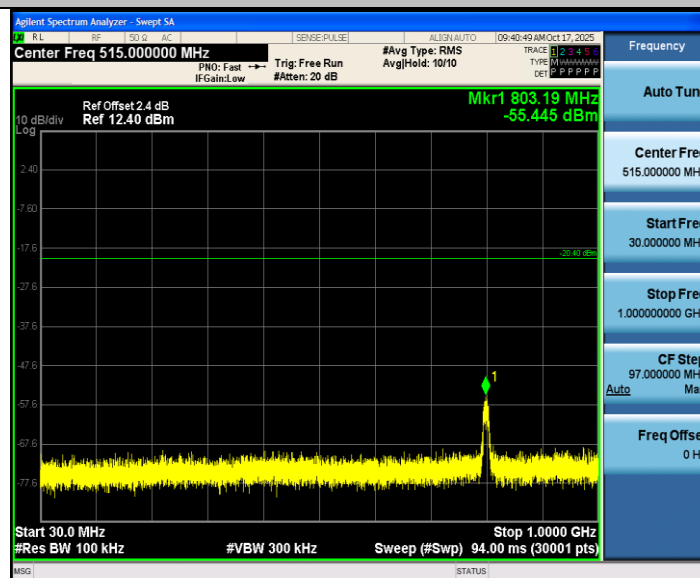
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-0.40	-0.40	---	PASS
			30~1000	-0.40	-55.45	≤-20.4	PASS
			1000~26500	-0.40	-43.98	≤-20.4	PASS
		2437	Reference	0.76	0.76	---	PASS
			30~1000	0.76	-54.65	≤-19.24	PASS
			1000~26500	0.76	-44.39	≤-19.24	PASS
		2462	Reference	-0.25	-0.25	---	PASS
			30~1000	-0.25	-53.84	≤-20.25	PASS
			1000~26500	-0.25	-44.74	≤-20.25	PASS
11G	Ant1	2412	Reference	-8.51	-8.51	---	PASS
			30~1000	-8.51	-59.61	≤-28.51	PASS
			1000~26500	-8.51	-43.44	≤-28.51	PASS
		2437	Reference	-7.09	-7.09	---	PASS
			30~1000	-7.09	-59.03	≤-27.09	PASS
			1000~26500	-7.09	-44.15	≤-27.09	PASS
		2462	Reference	-7.16	-7.16	---	PASS
			30~1000	-7.16	-59.24	≤-27.16	PASS
			1000~26500	-7.16	-44.69	≤-27.16	PASS
11N20SISO	Ant1	2412	Reference	-8.85	-8.85	---	PASS
			30~1000	-8.85	-58.93	≤-28.85	PASS
			1000~26500	-8.85	-43.12	≤-28.85	PASS
		2437	Reference	-8.00	-8.00	---	PASS
			30~1000	-8.00	-59.27	≤-28	PASS
			1000~26500	-8.00	-44.13	≤-28	PASS
		2462	Reference	-7.10	-7.10	---	PASS
			30~1000	-7.10	-59.47	≤-27.1	PASS
			1000~26500	-7.10	-44.62	≤-27.1	PASS
11N40SISO	Ant1	2422	Reference	-11.07	-11.07	---	PASS
			30~1000	-11.07	-61.95	≤-31.07	PASS
			1000~26500	-11.07	-43.94	≤-31.07	PASS
		2437	Reference	-9.96	-9.96	---	PASS
			30~1000	-9.96	-62.11	≤-29.96	PASS
			1000~26500	-9.96	-44.03	≤-29.96	PASS
		2452	Reference	-10.58	-10.58	---	PASS
			30~1000	-10.58	-61.6	≤-30.58	PASS
			1000~26500	-10.58	-44.32	≤-30.58	PASS

Test Graphs

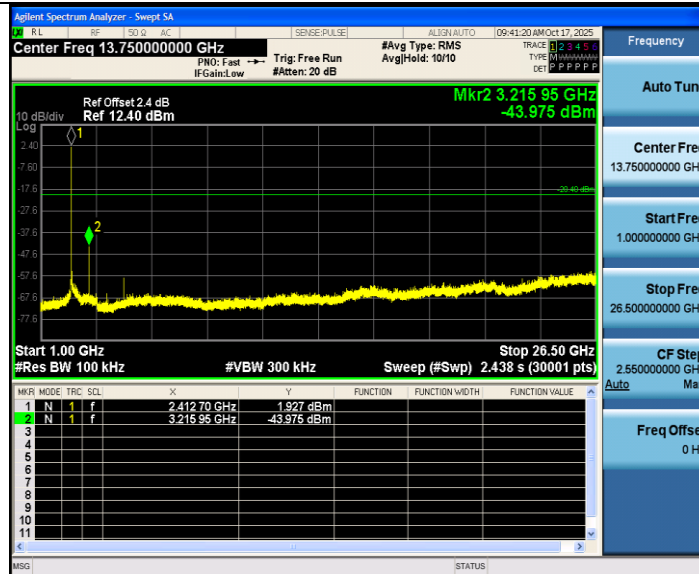
11B_Ant1_2412_0~Reference



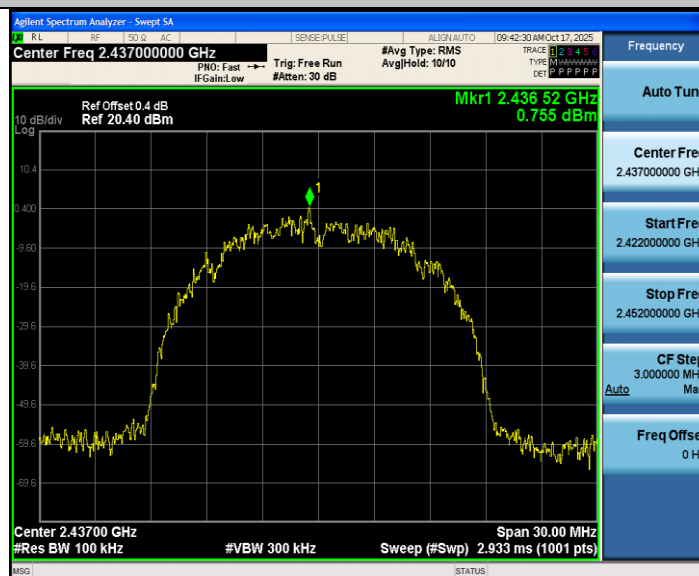
11B_Ant1_2412_30~1000



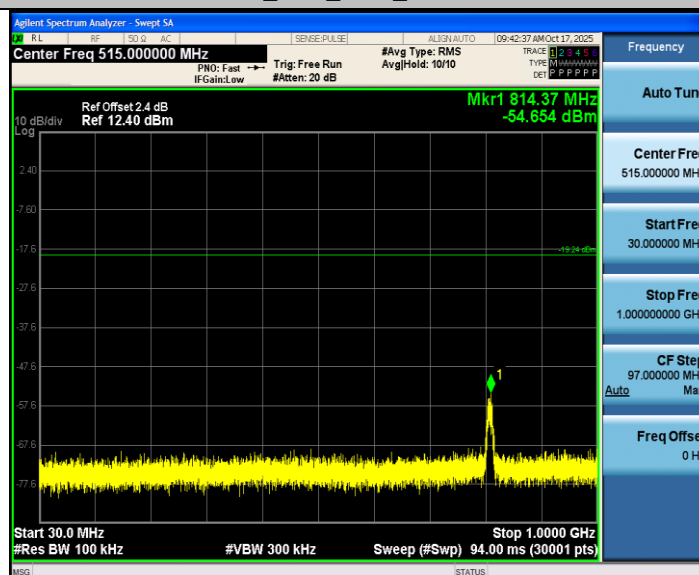
11B_Ant1_2412_1000~26500



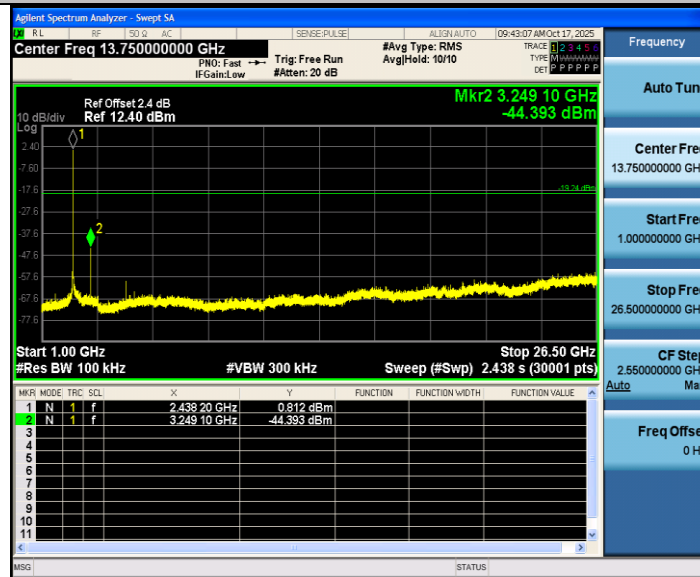
11B_Ant1_2437_0~Reference



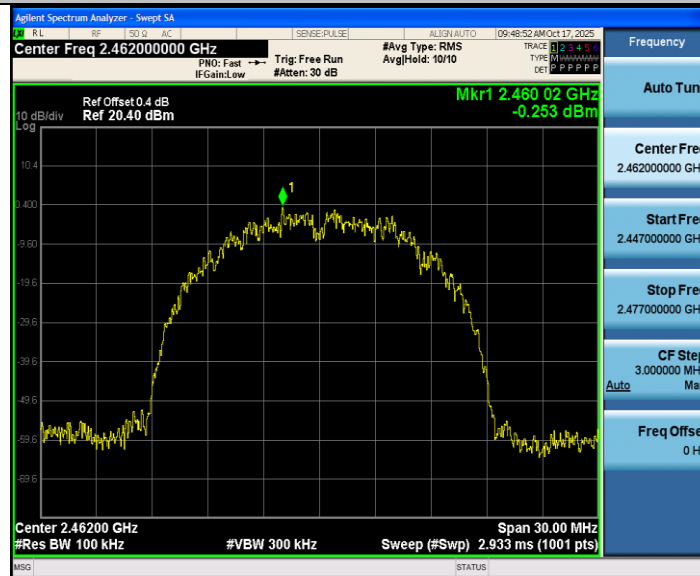
11B_Ant1_2437_30~1000



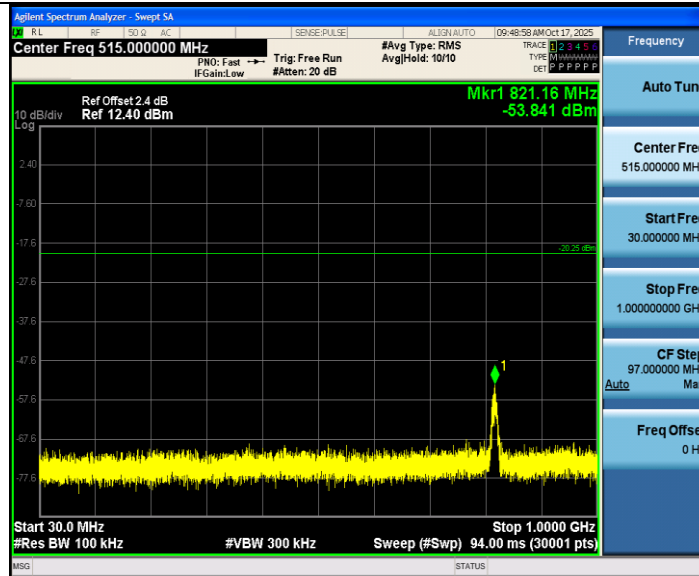
11B_Ant1_2437_1000~26500



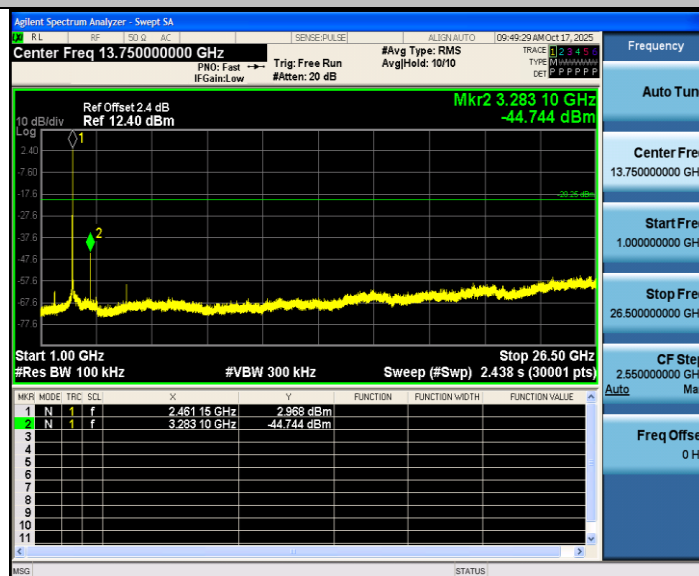
11B_Ant1_2462_0~Reference



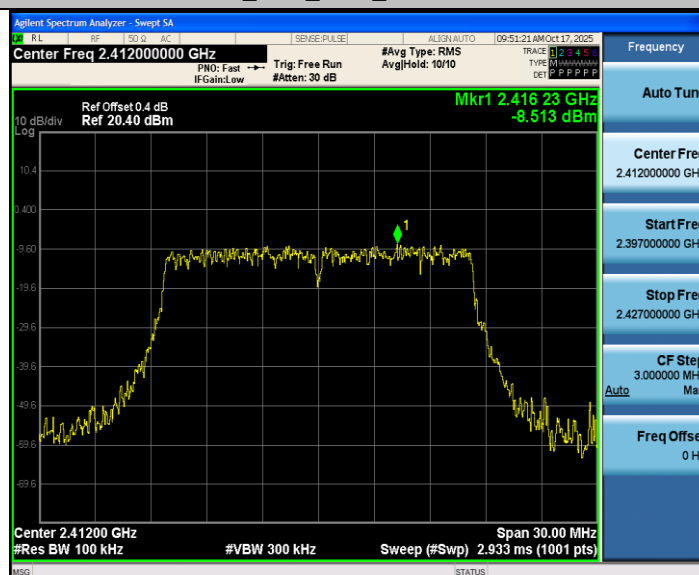
11B_Ant1_2462_30~1000



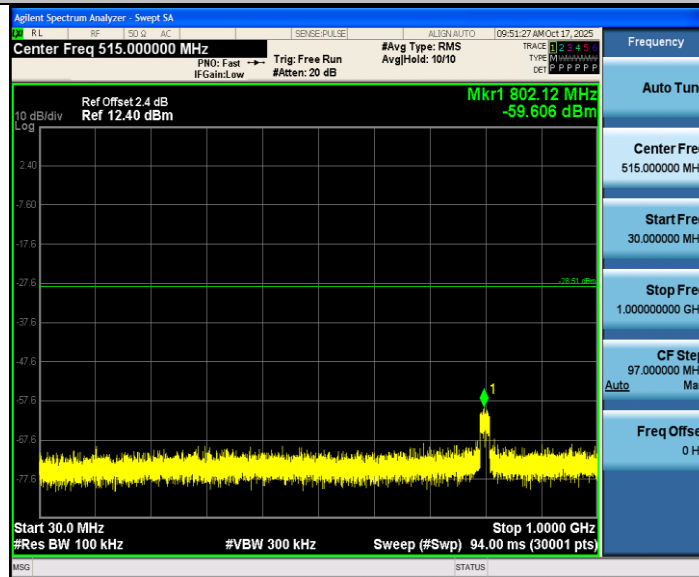
11B_Ant1_2462_1000~26500



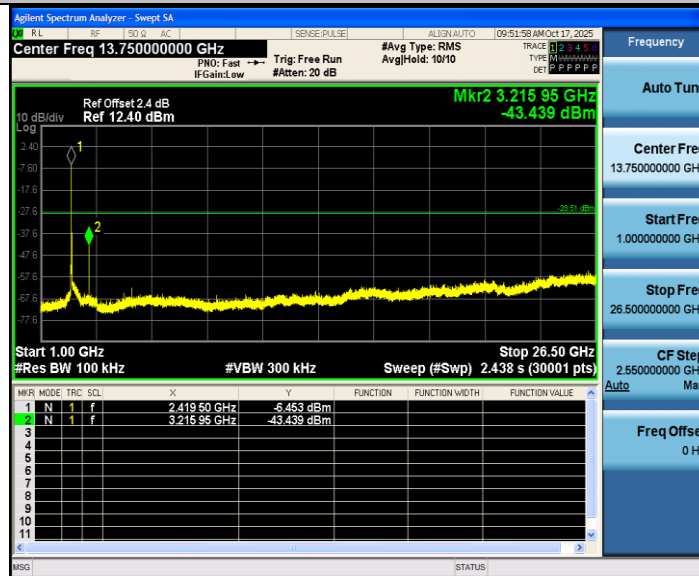
11G_Ant1_2412_0~Reference



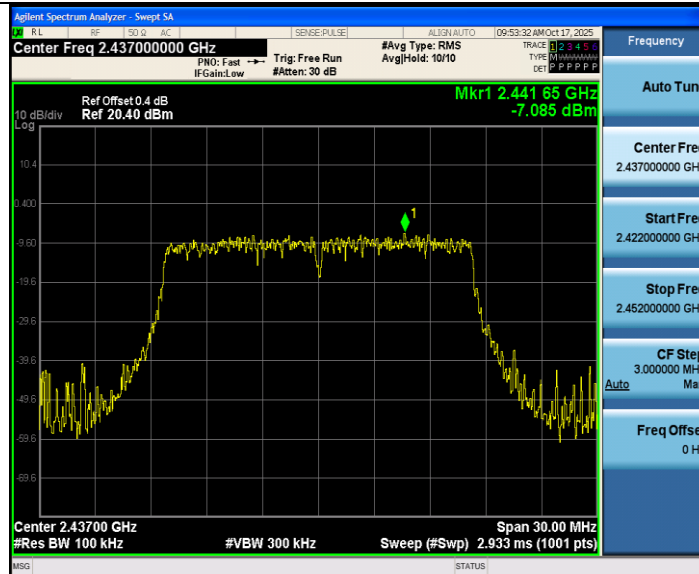
11G_Ant1_2412_30~1000



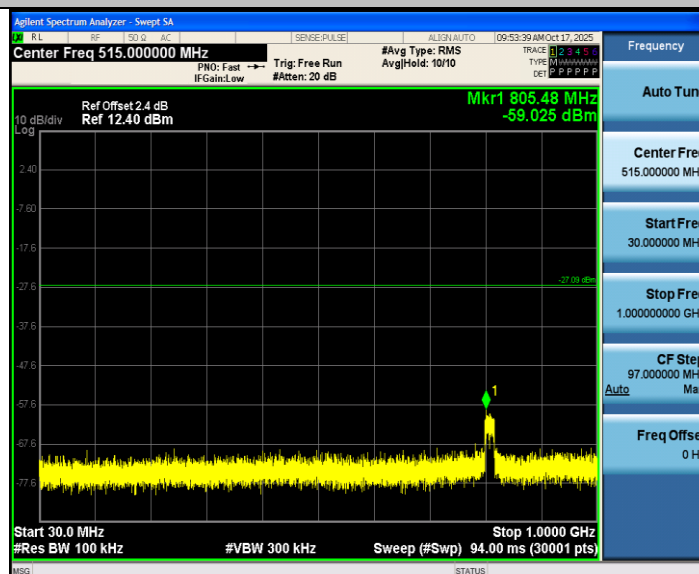
11G_Ant1_2412_1000~26500



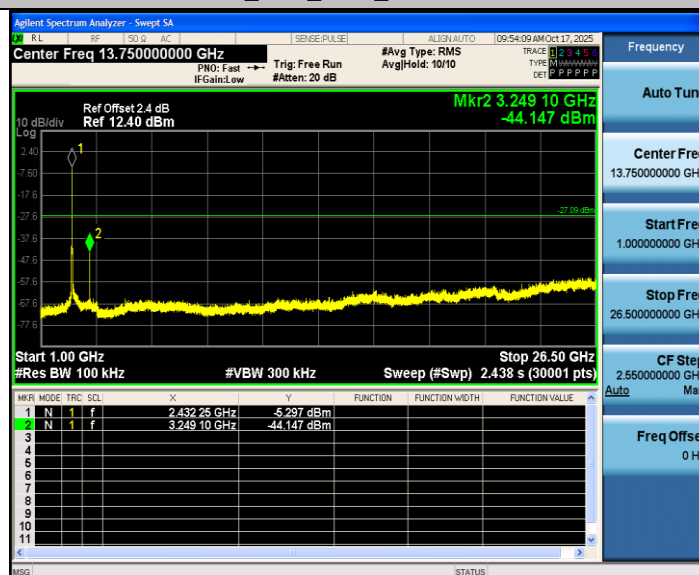
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



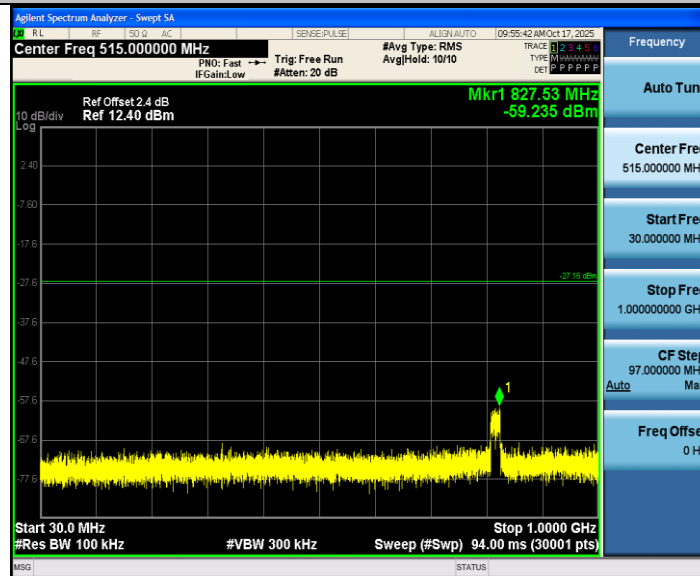
11G_Ant1_2437_1000~26500



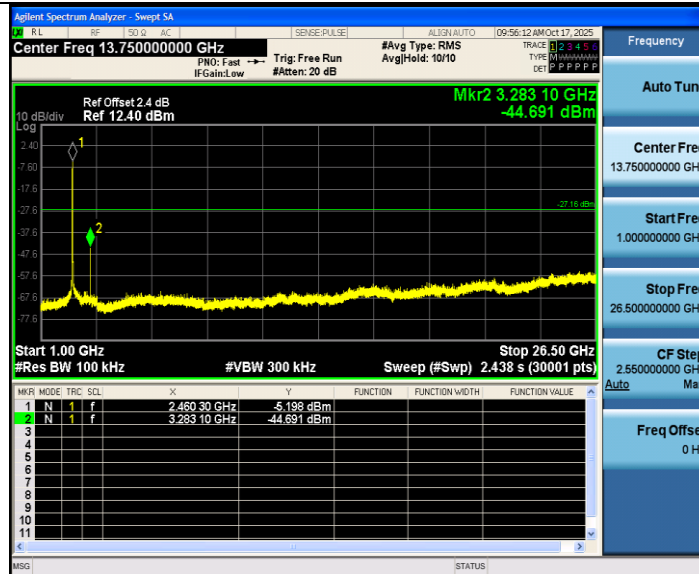
11G_Ant1_2462_0~Reference



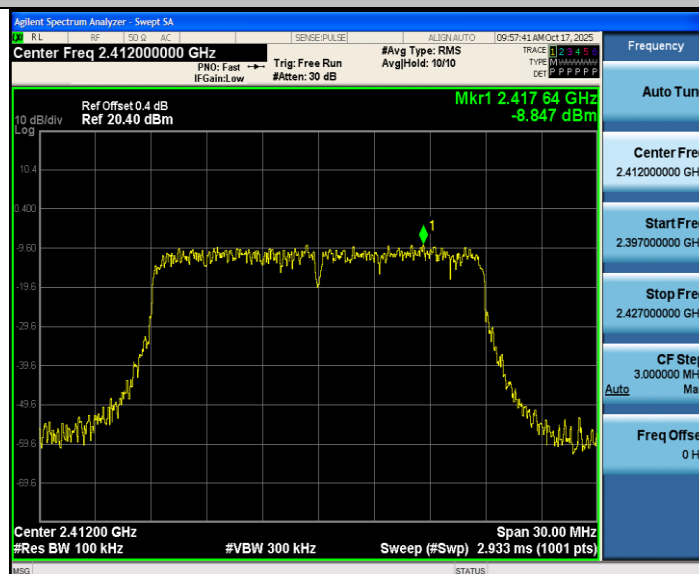
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

