

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BA4J-ZULUS

Company : Pangao Photoelectric

EUT : ZULUS 4K

Model Number : ZULUS 4K

Report No. : CTA25090200102

Reviewed By : Eric Wang

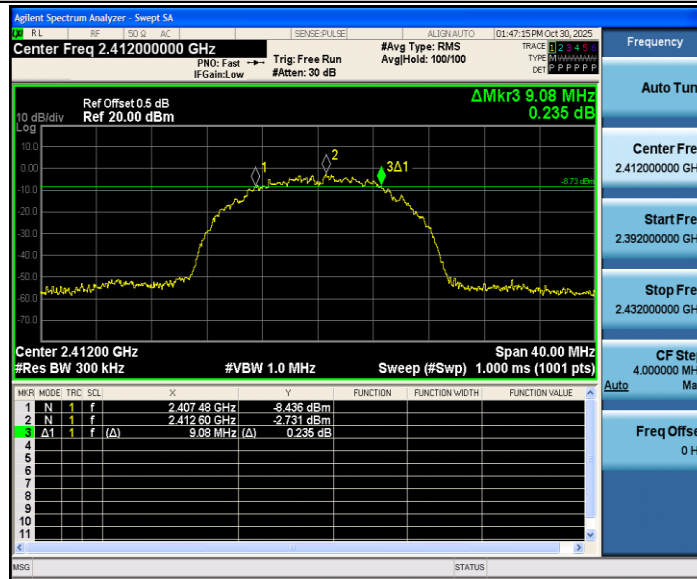
Appendix A: DTS Bandwidth

Test Result

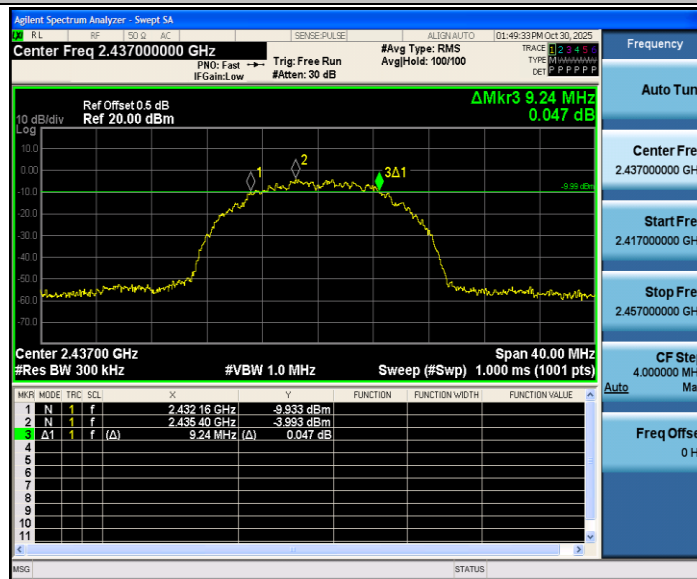
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.480	2416.560	0.5	PASS
		2437	9.240	2432.160	2441.400	0.5	PASS
		2462	8.800	2457.520	2466.320	0.5	PASS
11G	Ant1	2412	16.280	2403.920	2420.200	0.5	PASS
		2437	16.400	2428.840	2445.240	0.5	PASS
		2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.440	2420.720	0.5	PASS
		2437	17.240	2428.440	2445.680	0.5	PASS
		2462	17.400	2453.320	2470.720	0.5	PASS
11N40SISO	Ant1	2422	33.760	2405.360	2439.120	0.5	PASS
		2437	34.080	2420.200	2454.280	0.5	PASS
		2452	34.000	2435.200	2469.200	0.5	PASS
11AX20SISO	Ant1	2412	17.320	2403.360	2420.680	0.5	PASS
		2437	17.360	2428.360	2445.720	0.5	PASS
		2462	17.360	2453.360	2470.720	0.5	PASS
11AX40SISO	Ant1	2422	33.760	2405.360	2439.120	0.5	PASS
		2437	33.920	2420.280	2454.200	0.5	PASS
		2452	34.000	2435.120	2469.120	0.5	PASS

Test Graphs

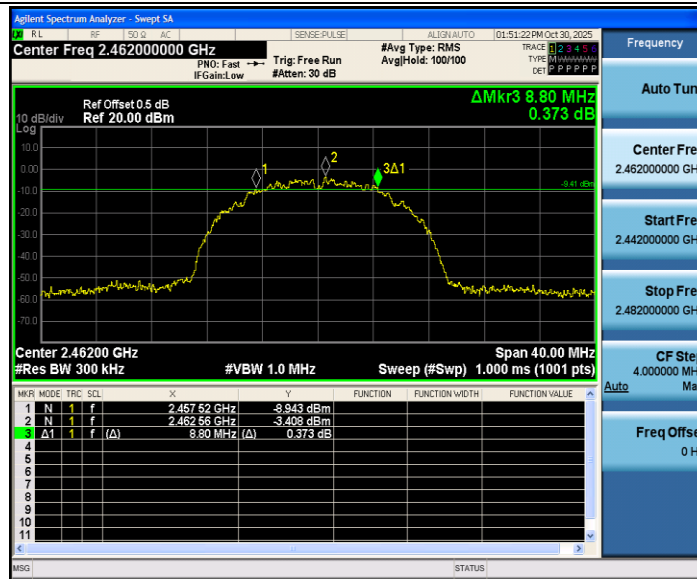
11B_Ant1_2412



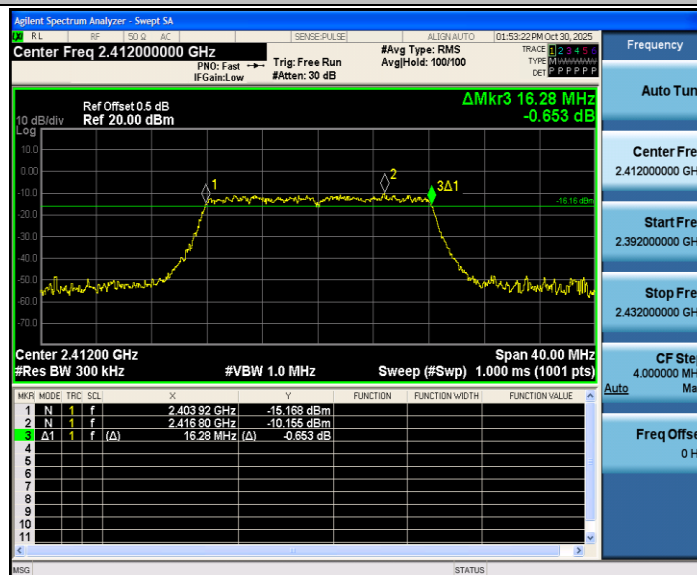
11B_Ant1_2437



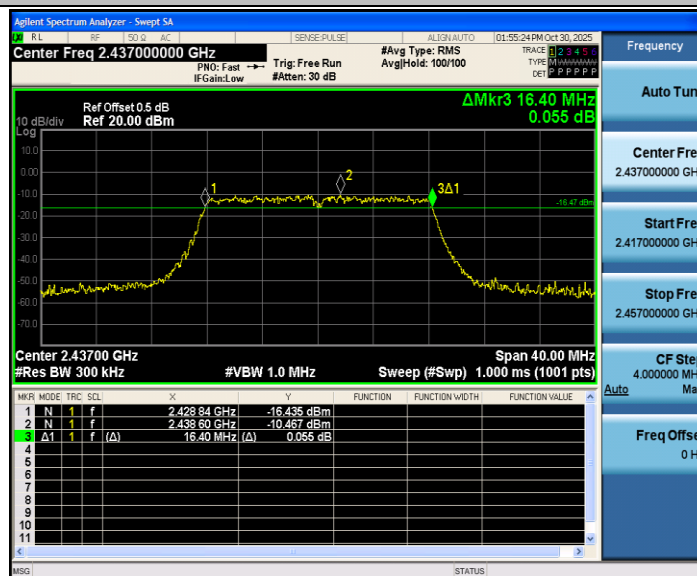
11B_Ant1_2462



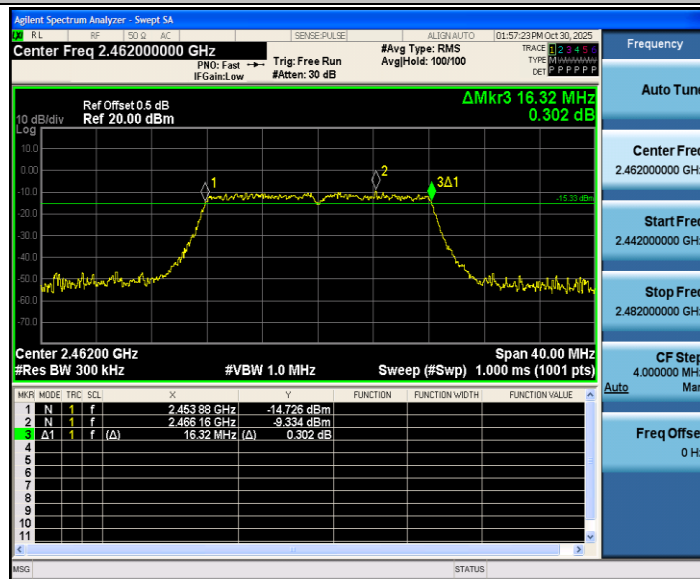
11G_Ant1_2412



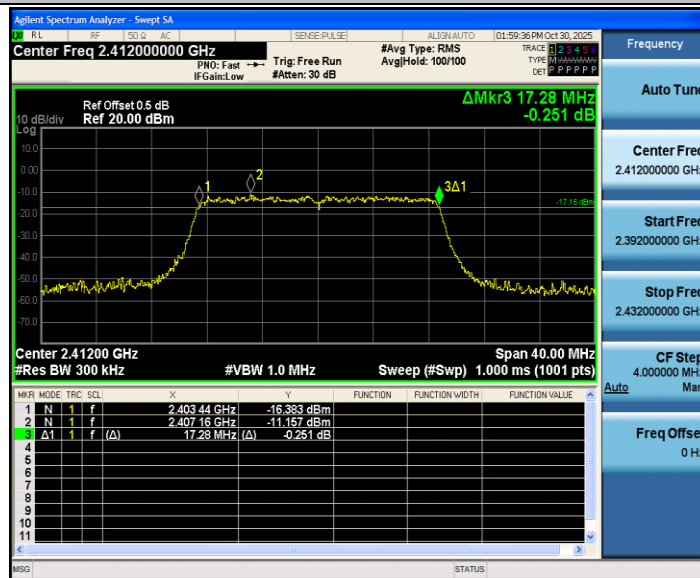
11G_Ant1_2437



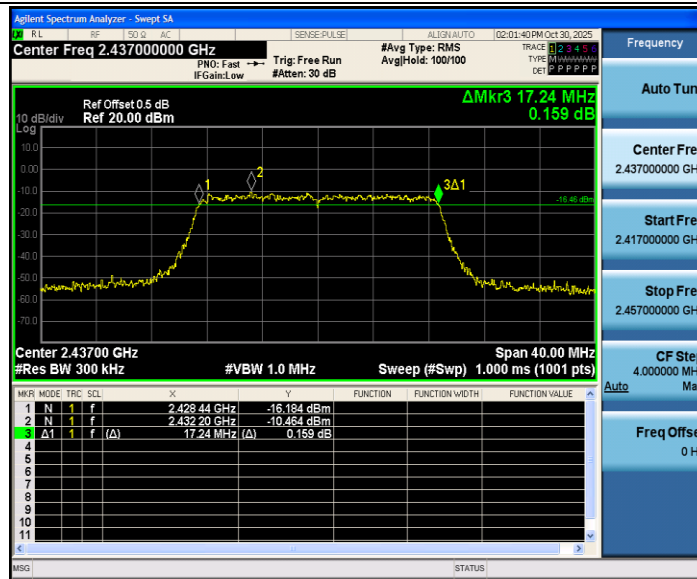
11G_Ant1_2462



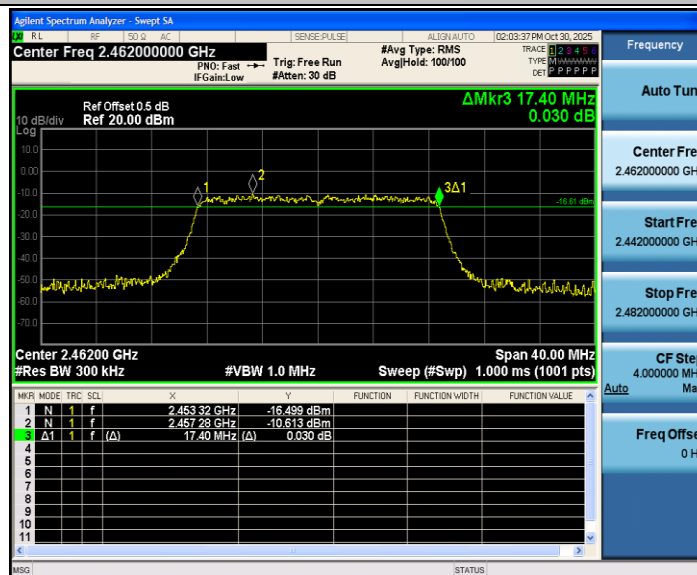
11N20SISO_Ant1_2412



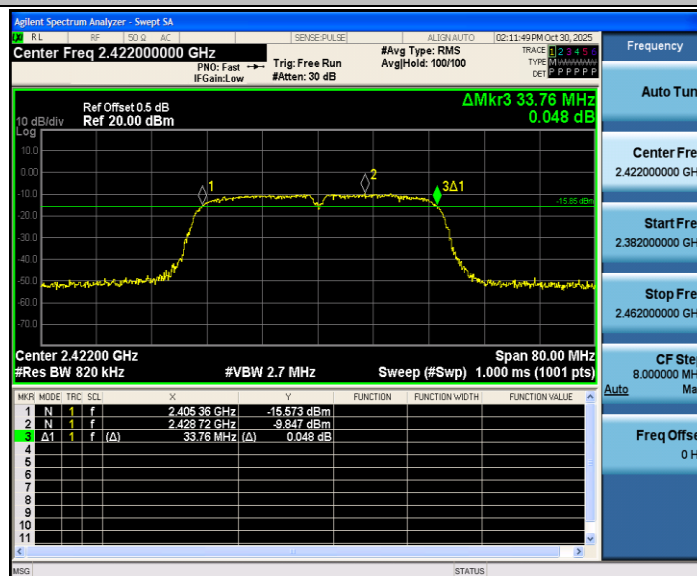
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



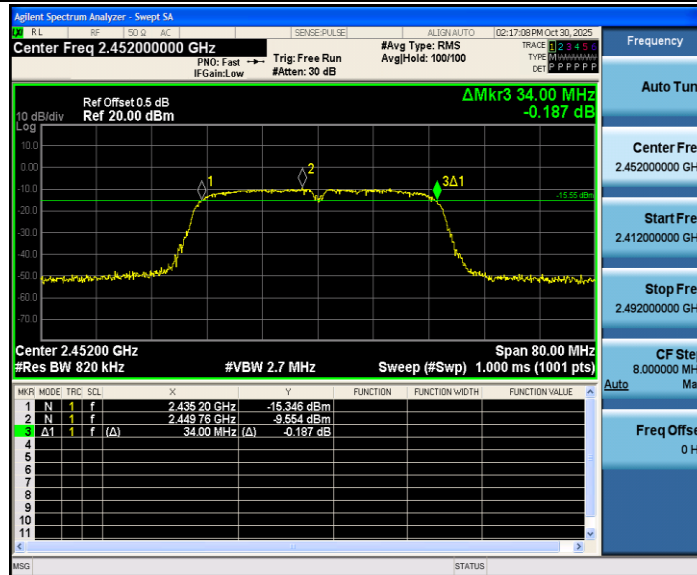
11N40SISO_Ant1_2422



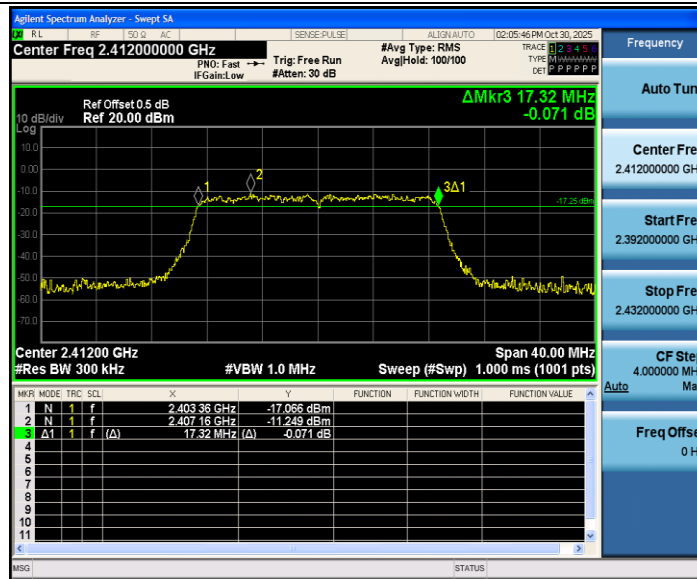
11N40SISO_Ant1_2437



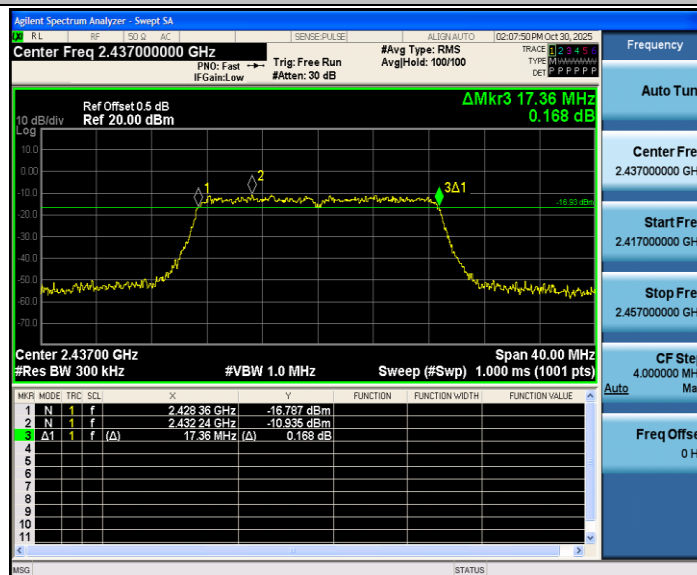
11N40SISO_Ant1_2452



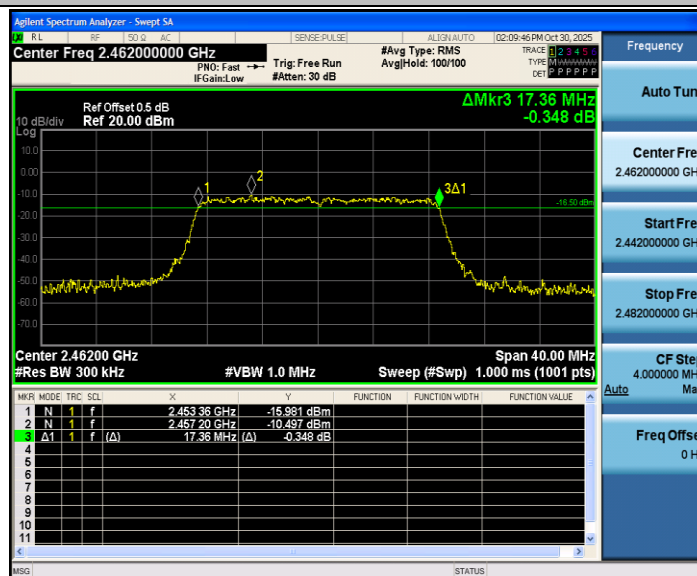
11AX20SISO_Ant1_2412



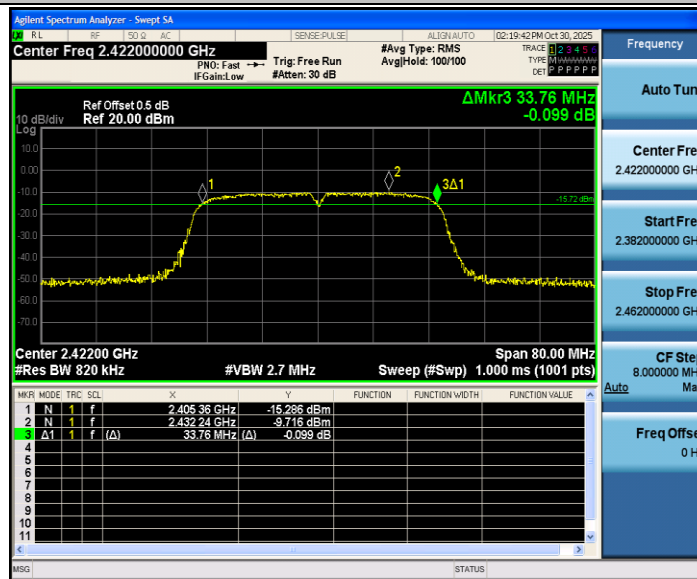
11AX20SISO_Ant1_2437



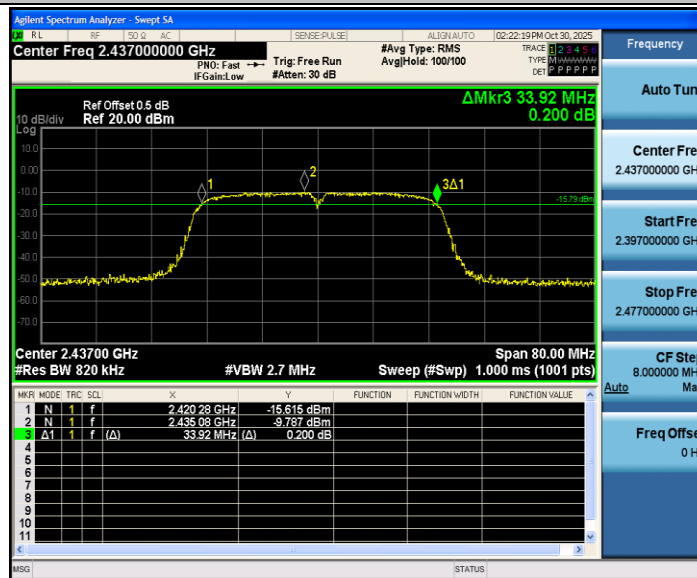
11AX20SISO_Ant1_2462



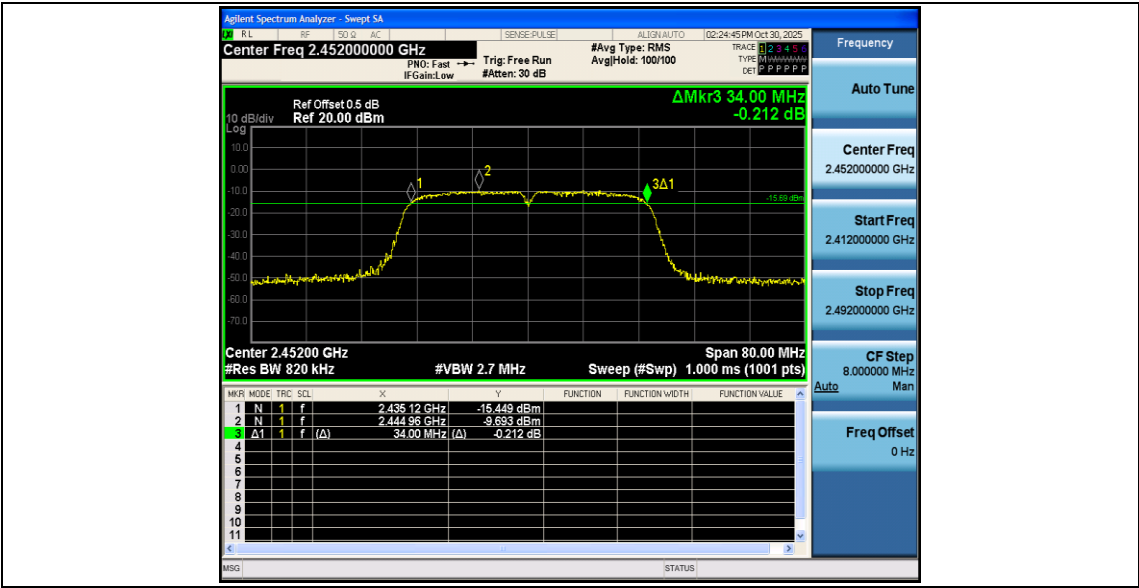
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



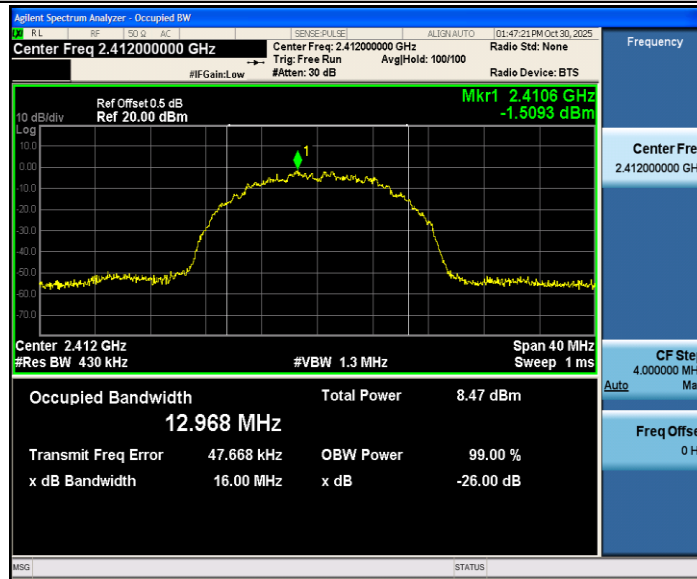
Appendix B: Occupied Channel Bandwidth

Test Result

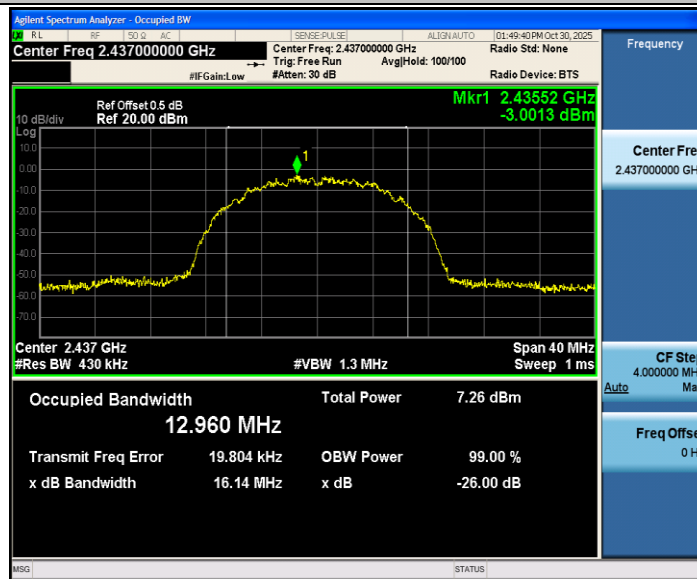
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.968	2405.5637	2418.5317	---	---
		2437	12.960	2430.5398	2443.4998	---	---
		2462	12.975	2455.5101	2468.4851	---	---
11G	Ant1	2412	16.604	2403.7325	2420.3365	---	---
		2437	16.593	2428.7437	2445.3367	---	---
		2462	16.567	2453.7391	2470.3061	---	---
11N20SISO	Ant1	2412	17.481	2403.2988	2420.7798	---	---
		2437	17.425	2428.3257	2445.7507	---	---
		2462	17.463	2453.2921	2470.7551	---	---
11N40SISO	Ant1	2422	34.832	2404.7347	2439.5667	---	---
		2437	34.822	2419.6924	2454.5144	---	---
		2452	34.839	2434.7181	2469.5571	---	---
11AX20SISO	Ant1	2412	17.430	2403.3319	2420.7619	---	---
		2437	17.440	2428.3253	2445.7653	---	---
		2462	17.453	2453.3033	2470.7563	---	---
11AX40SISO	Ant1	2422	34.768	2404.7999	2439.5679	---	---
		2437	34.839	2419.7025	2454.5415	---	---
		2452	34.816	2434.6957	2469.5117	---	---

Test Graphs

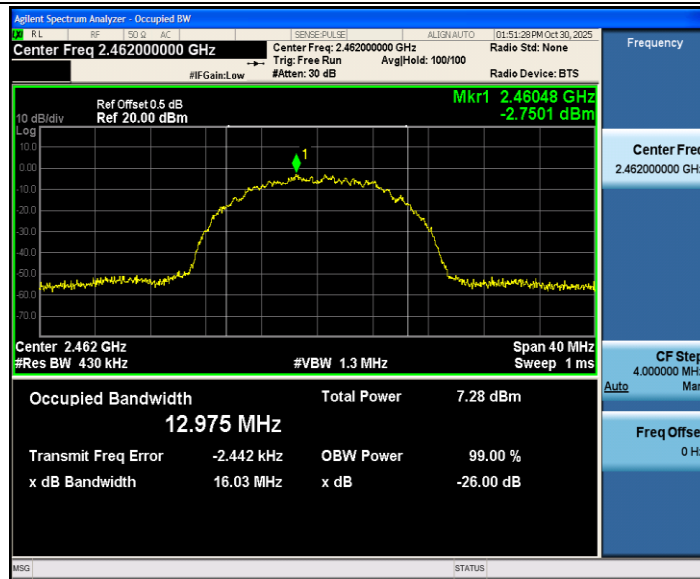
11B_Ant1_2412



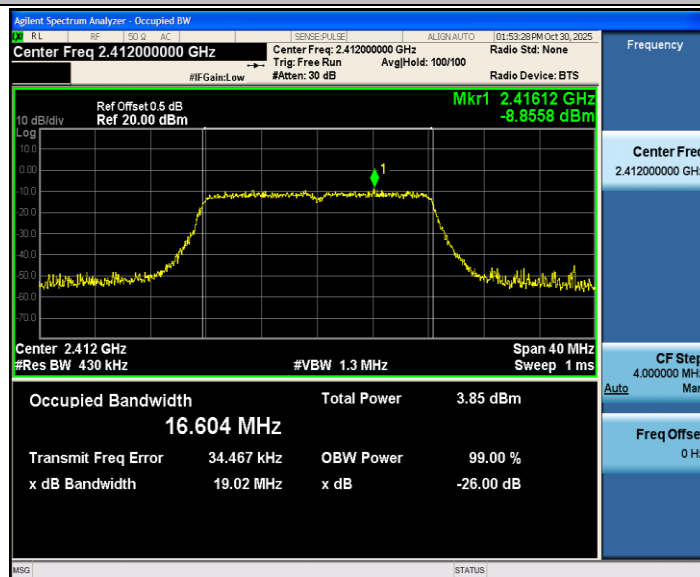
11B_Ant1_2437



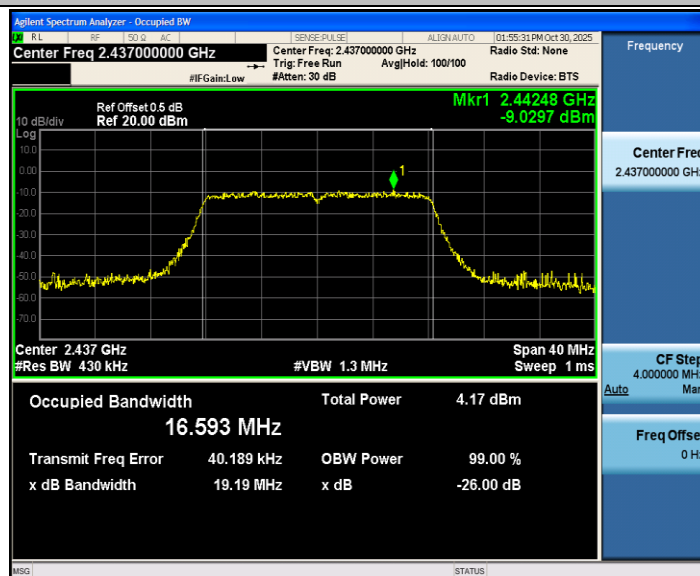
11B_Ant1_2462



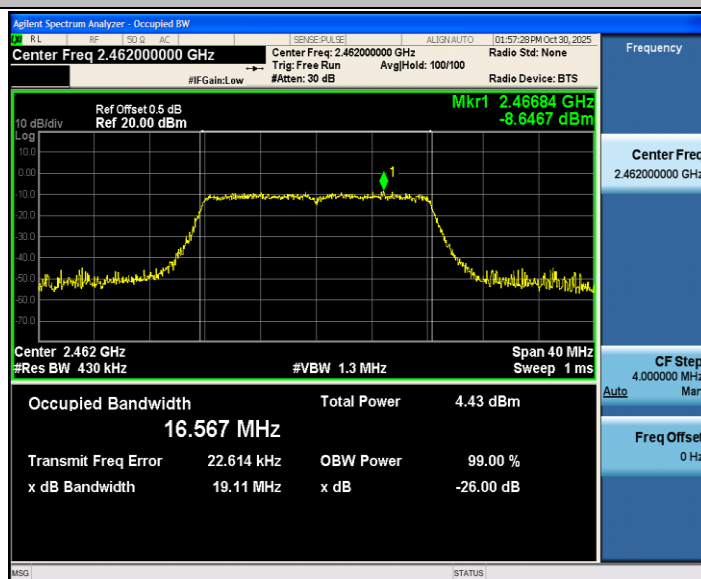
11G_Ant1_2412



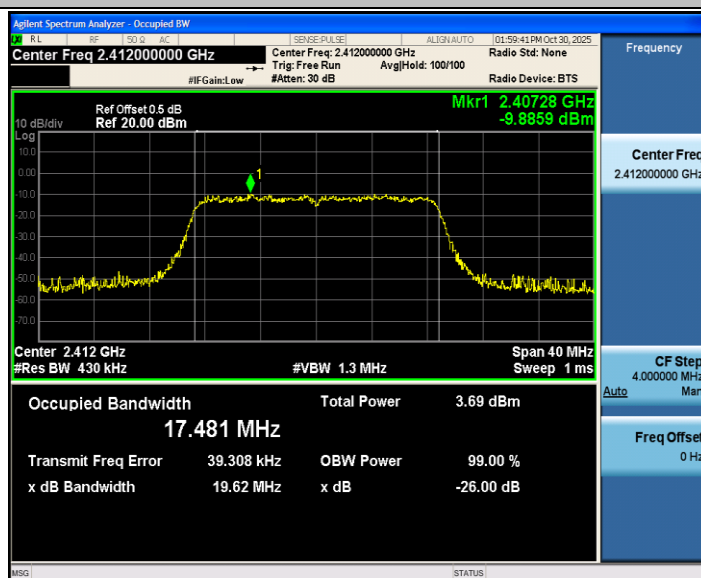
11G_Ant1_2437



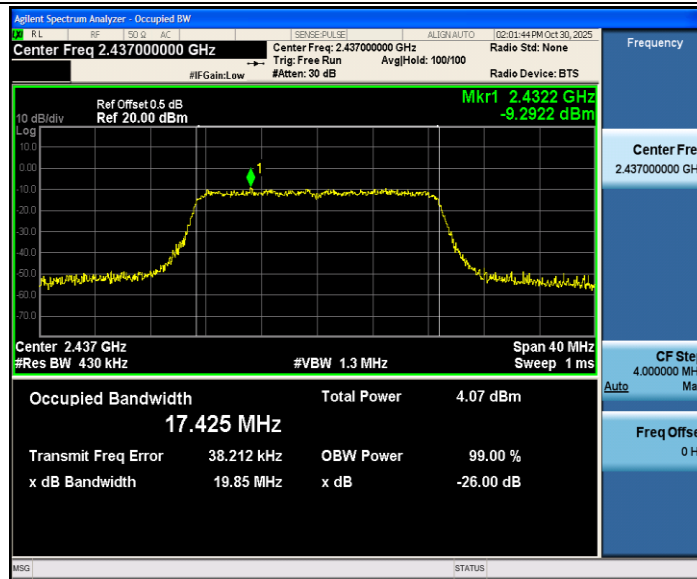
11G_Ant1_2462



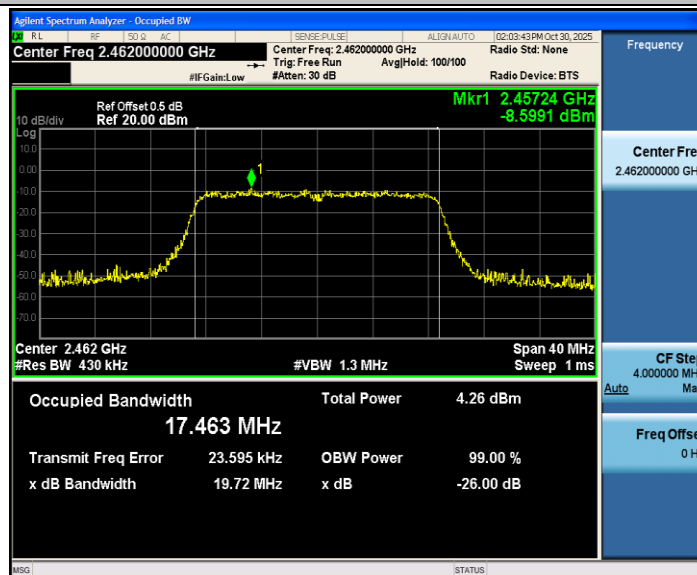
11N20SISO_Ant1_2412



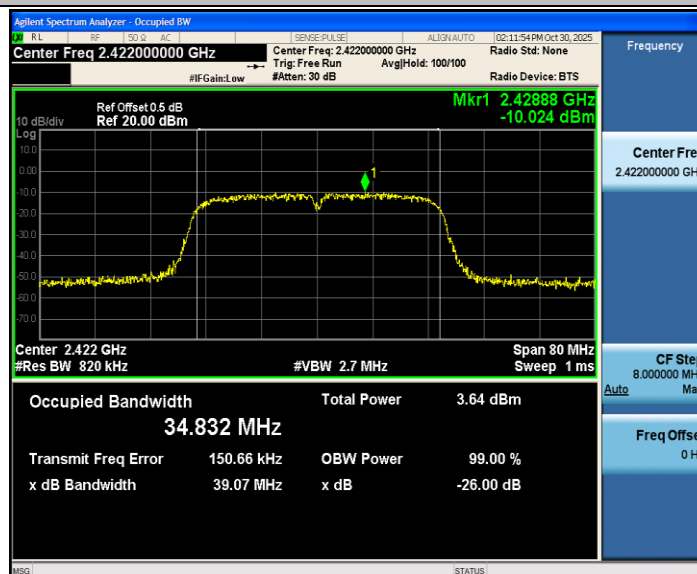
11N20SISO_Ant1_2437

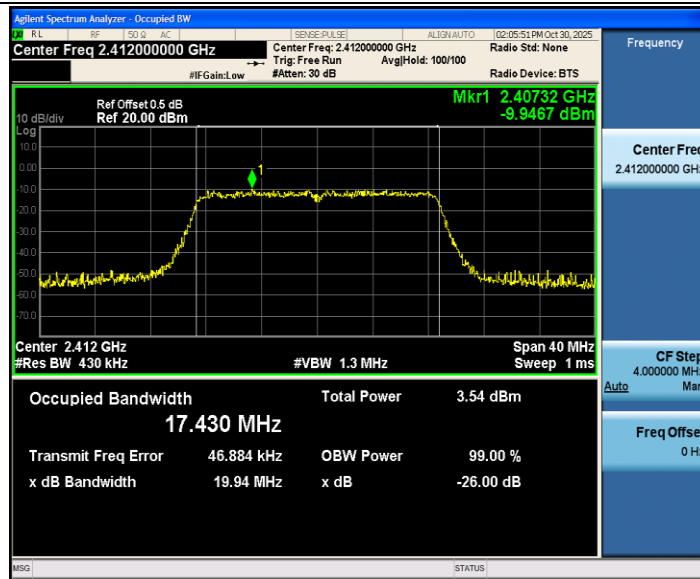


11N20SISO_Ant1_2462

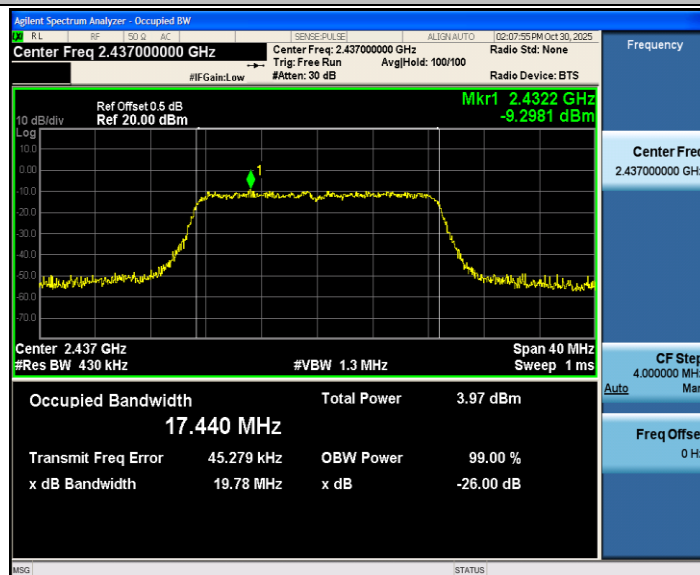


11N40SISO_Ant1_2422

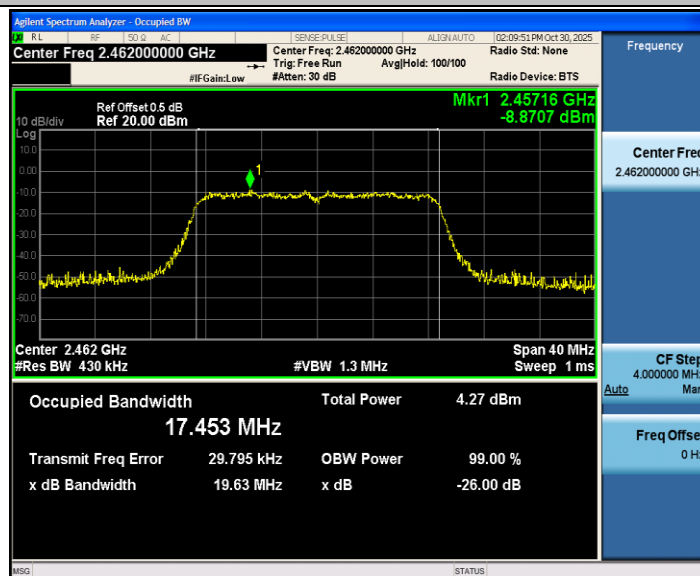




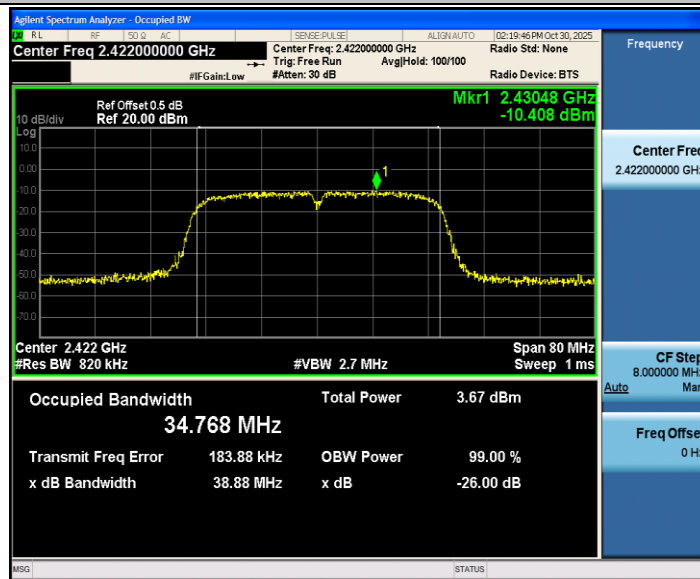
11AX20SISO_Ant1_2437



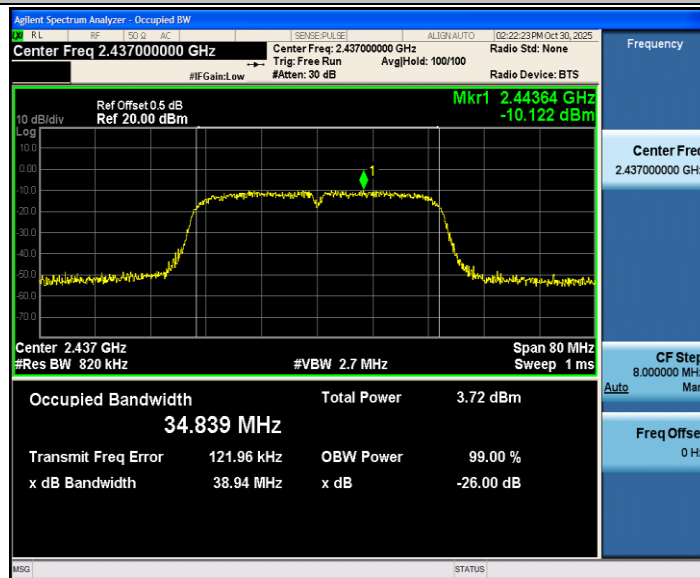
11AX20SISO_Ant1_2462



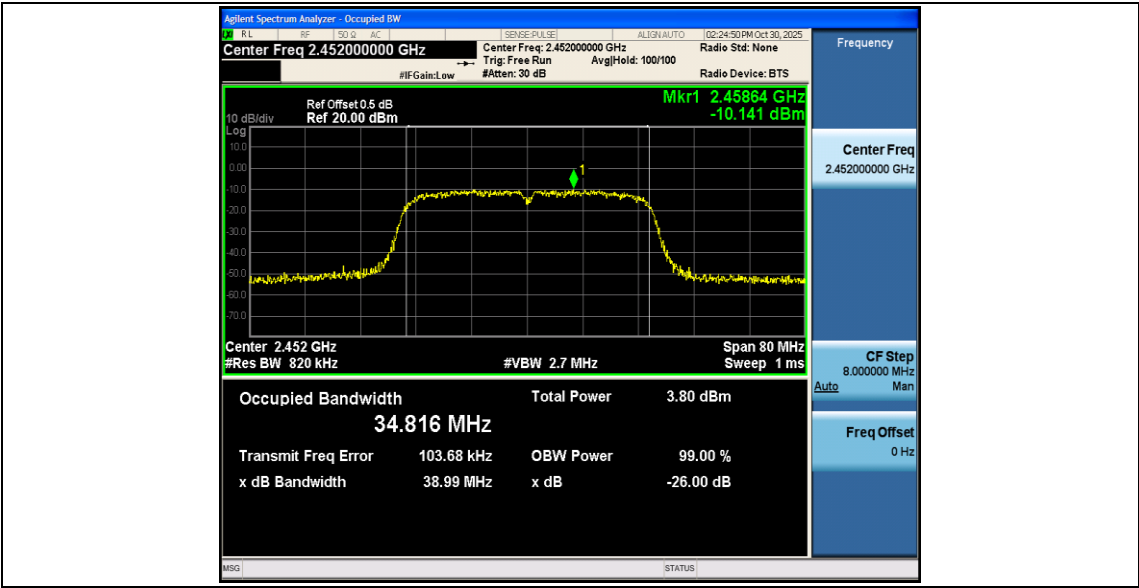
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_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	6.96	≤30.00	PASS
		2437	7.00	≤30.00	PASS
		2462	6.60	≤30.00	PASS
11G	Ant1	2412	4.84	≤30.00	PASS
		2437	5.08	≤30.00	PASS
		2462	5.33	≤30.00	PASS
11N20SISO	Ant1	2412	4.89	≤30.00	PASS
		2437	5.24	≤30.00	PASS
		2462	5.60	≤30.00	PASS
11N40SISO	Ant1	2422	3.90	≤30.00	PASS
		2437	3.95	≤30.00	PASS
		2452	4.22	≤30.00	PASS
11AX20SISO	Ant1	2412	4.78	≤30.00	PASS
		2437	5.11	≤30.00	PASS
		2462	5.41	≤30.00	PASS
11AX40SISO	Ant1	2422	3.96	≤30.00	PASS
		2437	3.99	≤30.00	PASS
		2452	4.21	≤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	-22.00	≤8.00	PASS
		2437	-21.98	≤8.00	PASS
		2462	-21.98	≤8.00	PASS
11G	Ant1	2412	-29.69	≤8.00	PASS
		2437	-29.37	≤8.00	PASS
		2462	-28.97	≤8.00	PASS
11N20SISO	Ant1	2412	-29.49	≤8.00	PASS
		2437	-29.24	≤8.00	PASS
		2462	-28.88	≤8.00	PASS
11N40SISO	Ant1	2422	-31.53	≤8.00	PASS
		2437	-30.91	≤8.00	PASS
		2452	-31.51	≤8.00	PASS
11AX20SISO	Ant1	2412	-29.77	≤8.00	PASS
		2437	-29.64	≤8.00	PASS
		2462	-29.39	≤8.00	PASS
11AX40SISO	Ant1	2422	-31.16	≤8.00	PASS
		2437	-30.76	≤8.00	PASS
		2452	-30.88	≤8.00	PASS

Test Graphs

11B_Ant1_2412



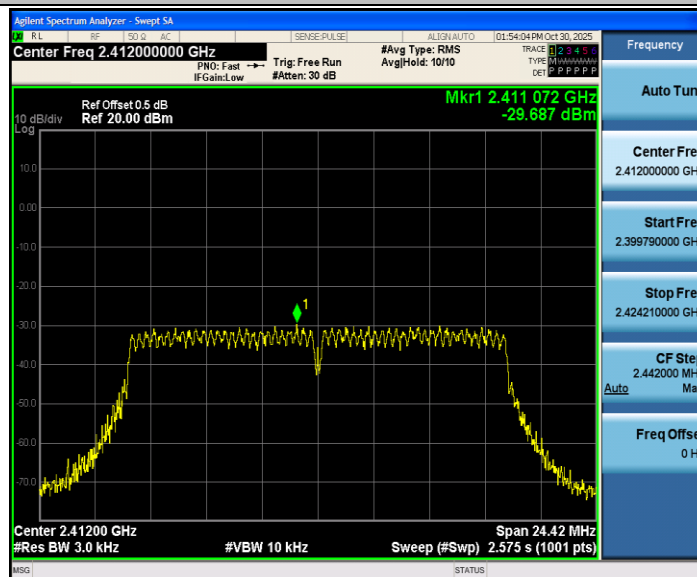
11B_Ant1_2437



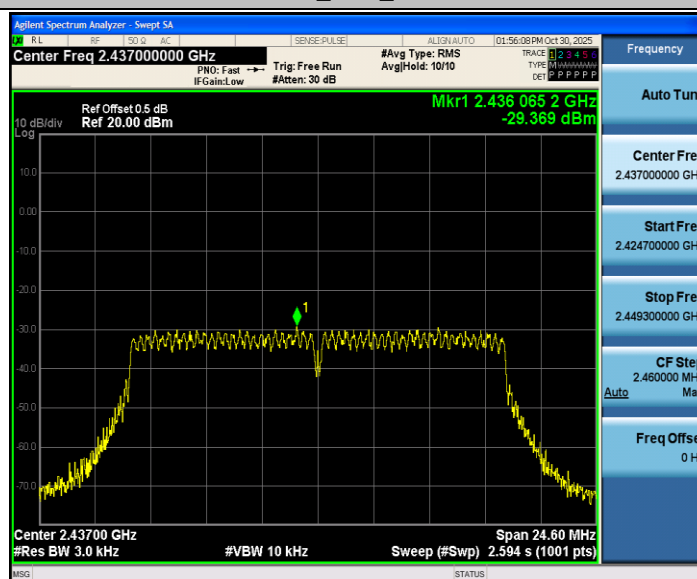
11B_Ant1_2462



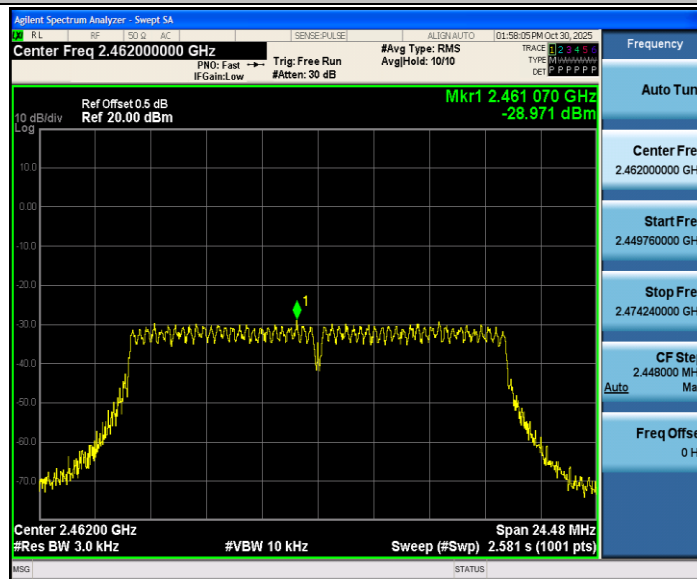
11G_Ant1_2412



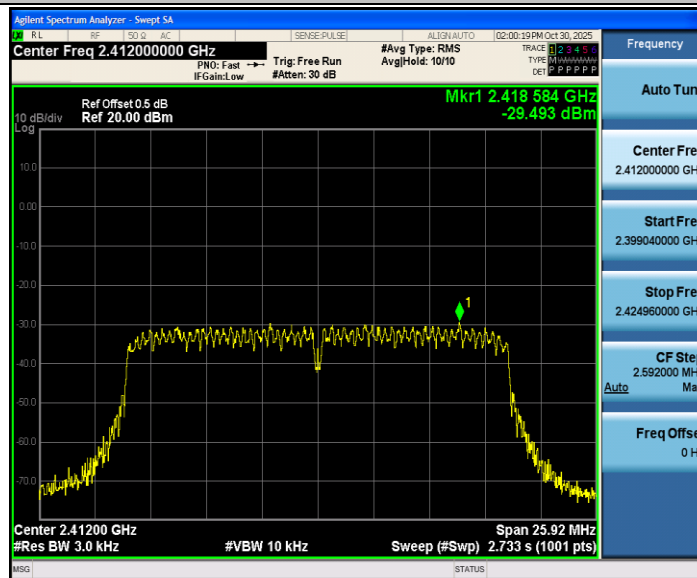
11G_Ant1_2437



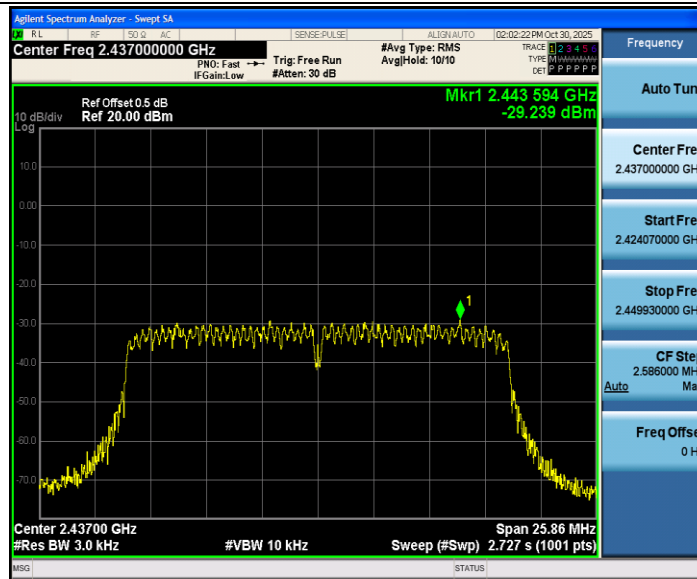
11G_Ant1_2462



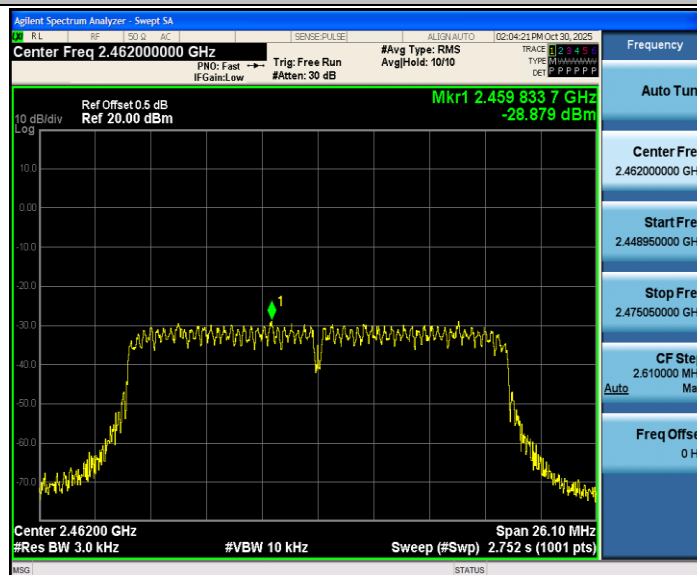
11N20SISO_Ant1_2412



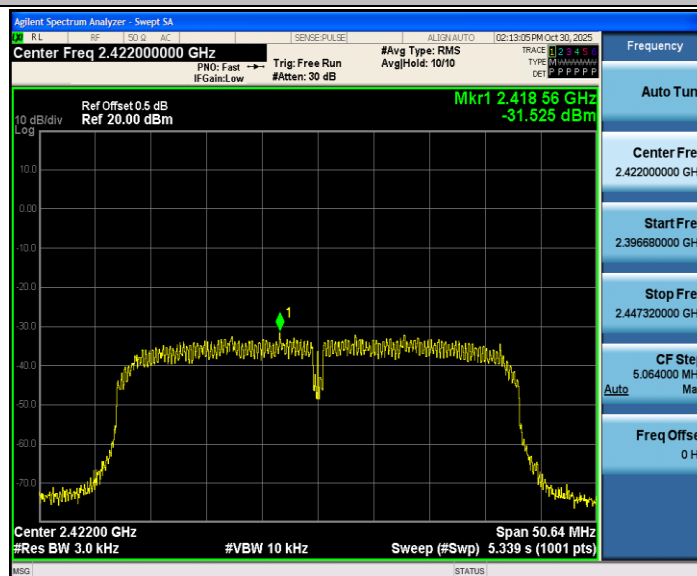
11N20SISO_Ant1_2437



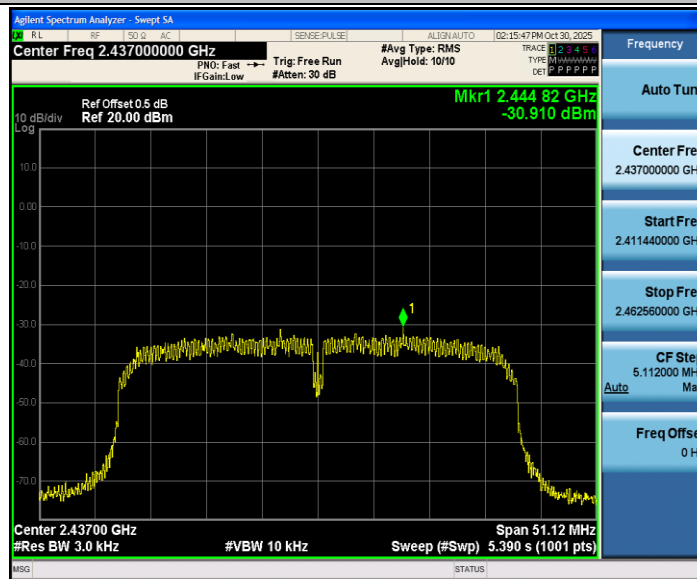
11N20SISO_Ant1_2462



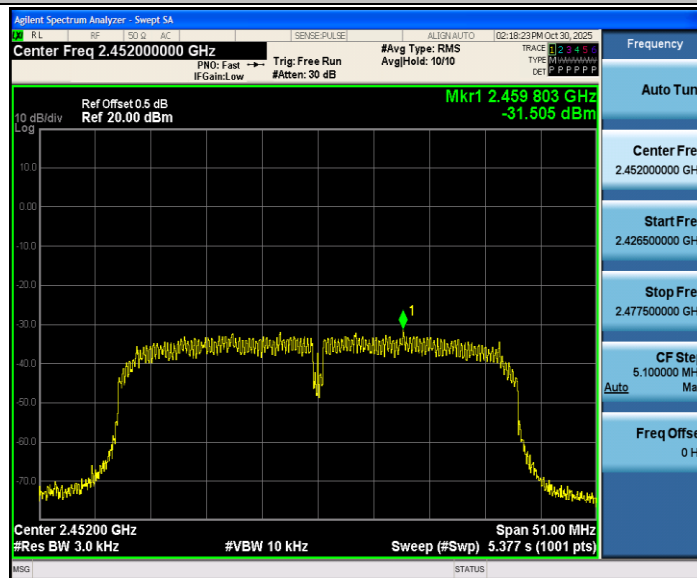
11N40SISO_Ant1_2422



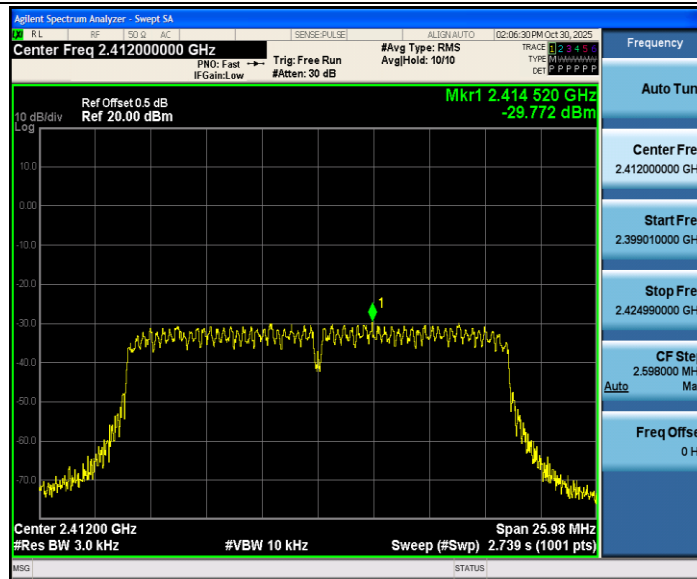
11N40SISO_Ant1_2437



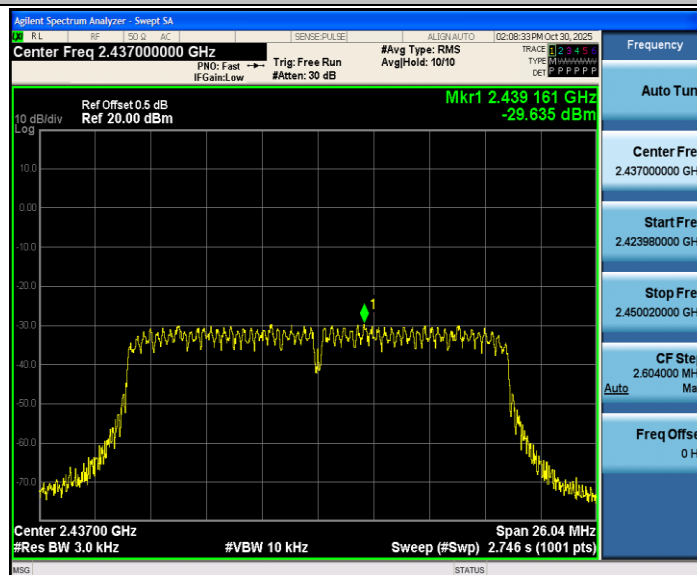
11N40SISO_Ant1_2452



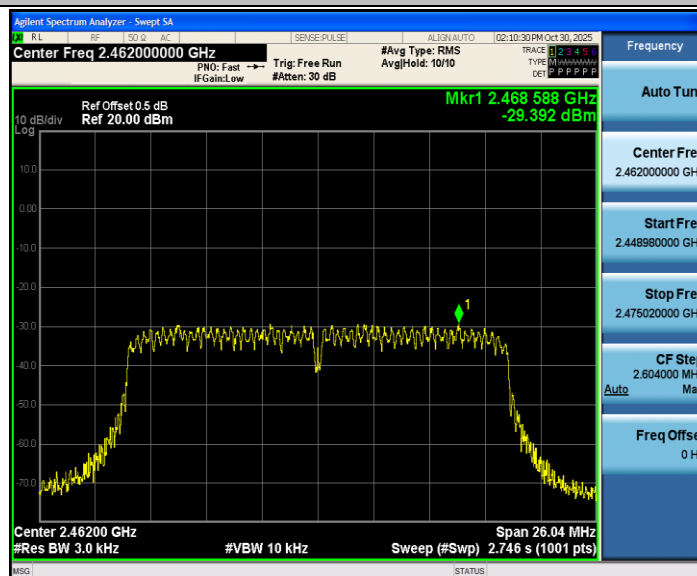
11AX20SISO_Ant1_2412



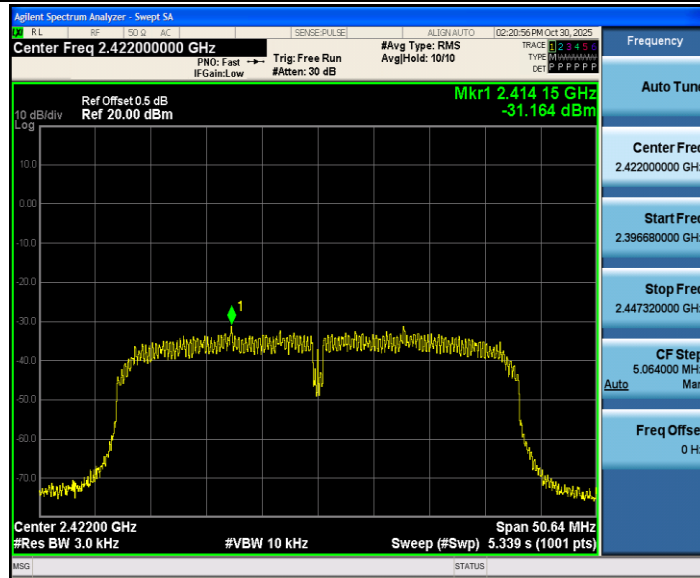
11AX20SISO_Ant1_2437



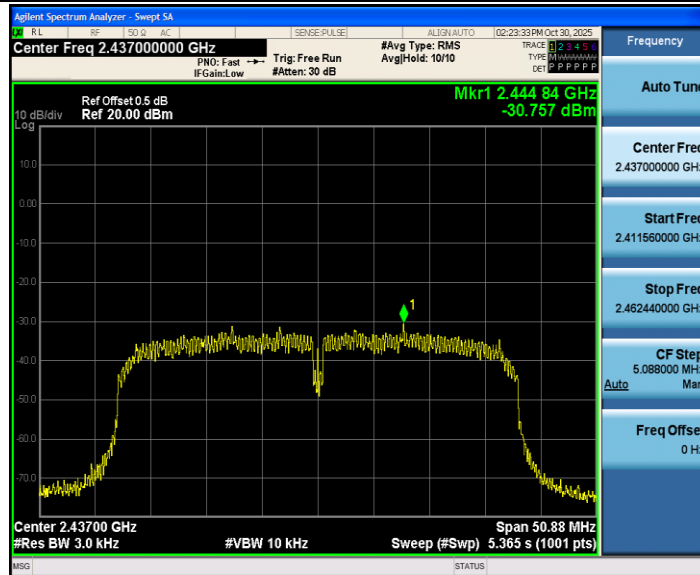
11AX20SISO_Ant1_2462



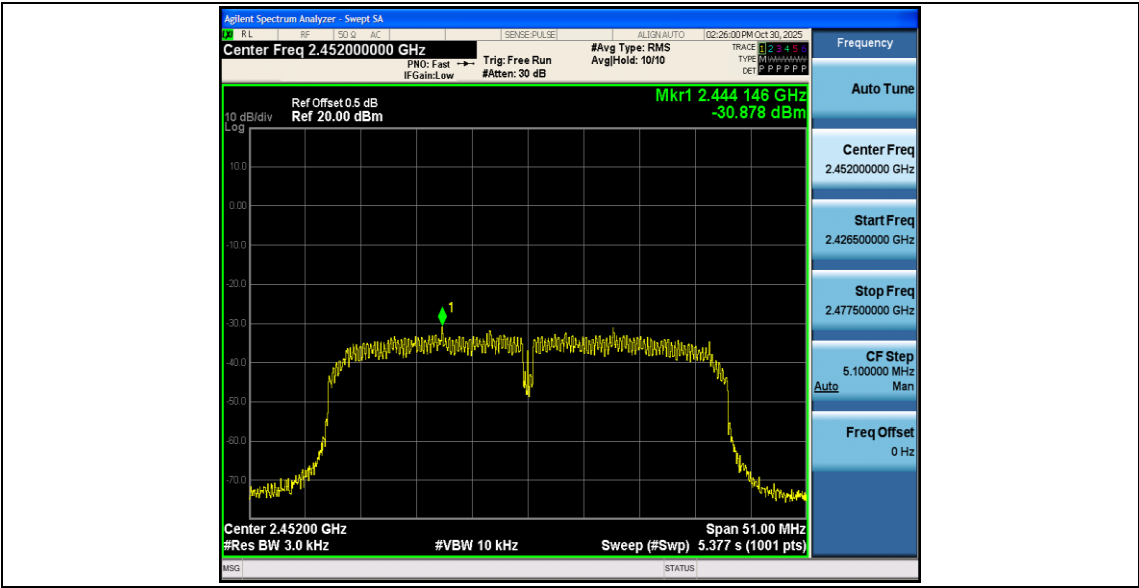
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



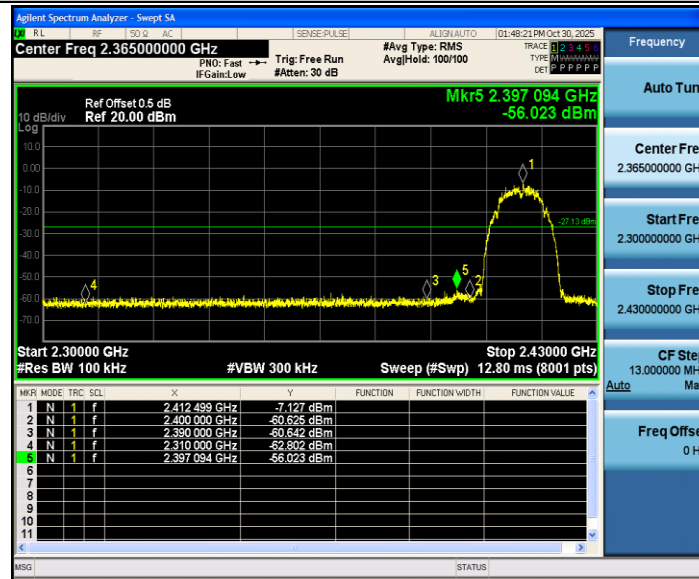
Appendix E: Band edge measurements

Test Result

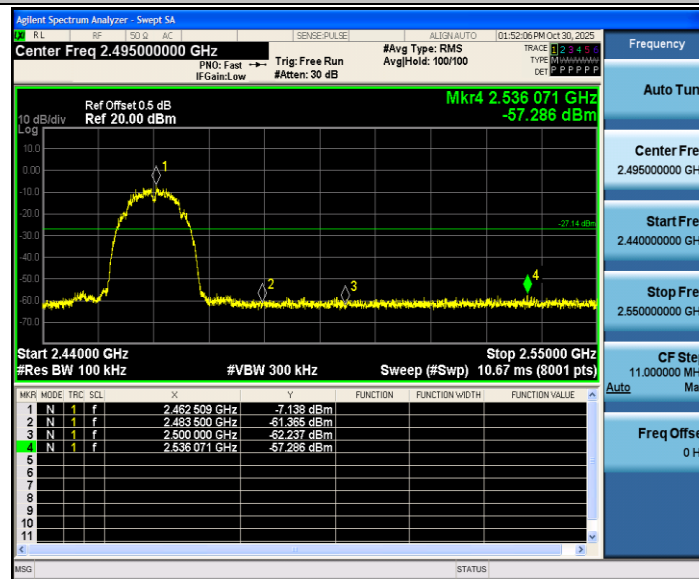
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-7.13	-56.02	≤-27.13	PASS
		High	2462	-7.14	-57.29	≤-27.14	PASS
11G	Ant1	Low	2412	-16.16	-54.24	≤-36.16	PASS
		High	2462	-15.30	-57.11	≤-35.3	PASS
11N20SISO	Ant1	Low	2412	-16.18	-54.48	≤-36.18	PASS
		High	2462	-14.86	-57.52	≤-34.86	PASS
11N40SISO	Ant1	Low	2422	-18.84	-56.48	≤-38.84	PASS
		High	2452	-19.13	-57.13	≤-39.13	PASS
11AX20SISO	Ant1	Low	2412	-15.79	-54.58	≤-35.79	PASS
		High	2462	-15.08	-57.9	≤-35.08	PASS
11AX40SISO	Ant1	Low	2422	-18.75	-55.93	≤-38.75	PASS
		High	2452	-19.18	-56.47	≤-39.18	PASS

Test Graphs

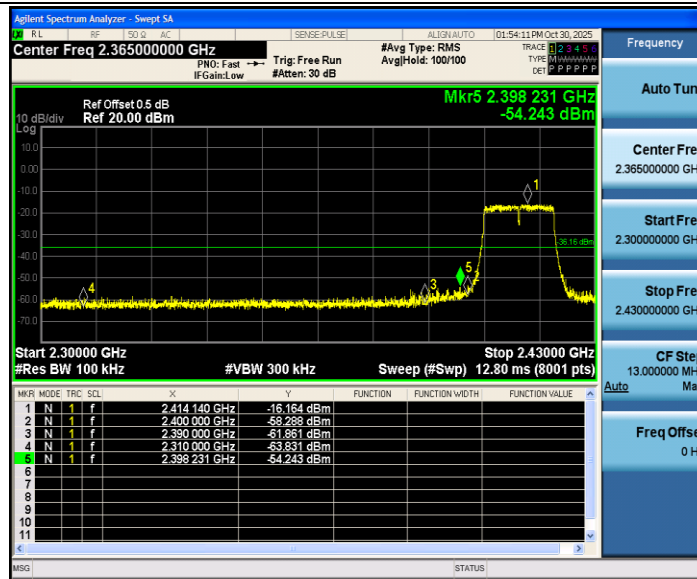
11B_Ant1_Low_2412



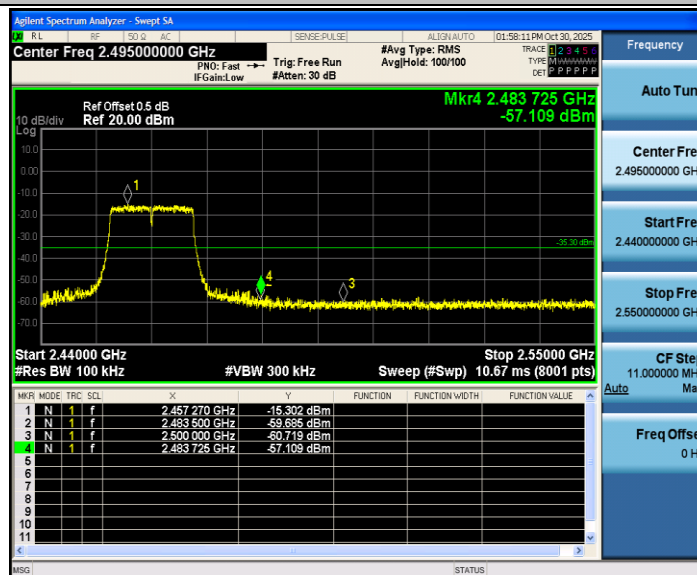
11B_Ant1_High_2462



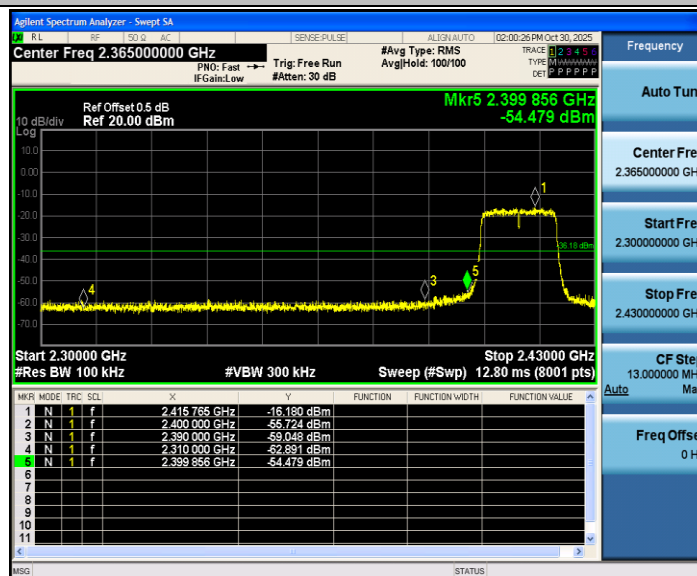
11G_Ant1_Low_2412



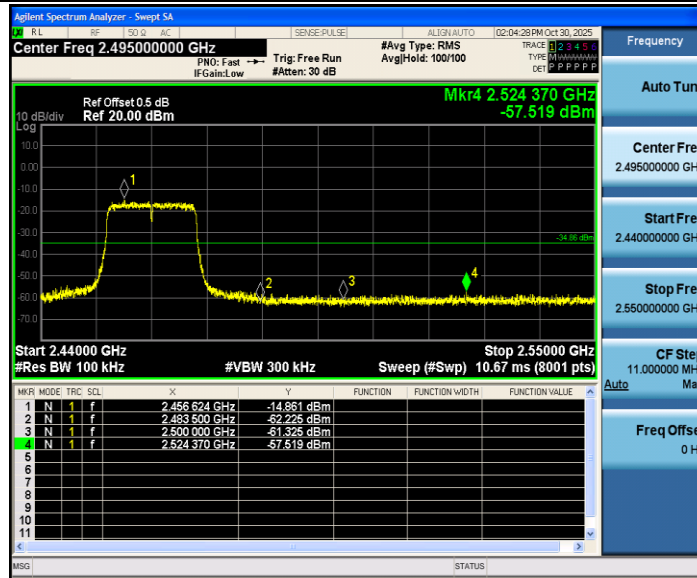
11G_Ant1_High_2462



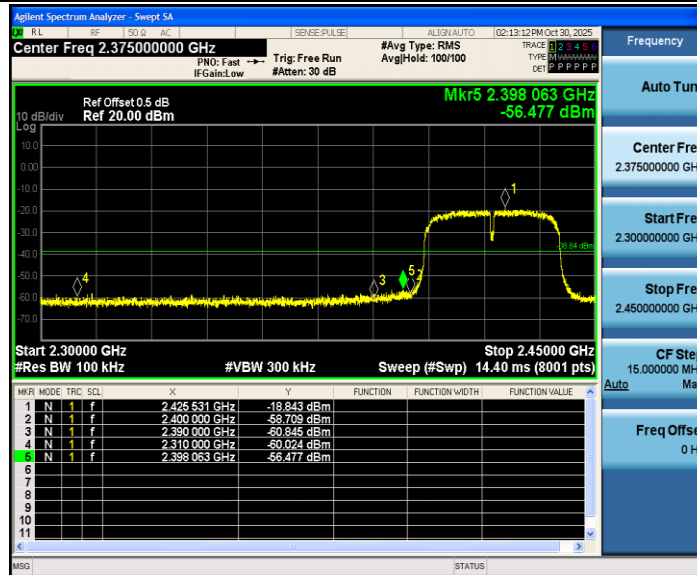
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452