

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2A6P9-WCASQ1

Company : Promaster Electronic LLC

EUT : Wireless CP&AA adaptor

Model Number : WCA-SQ1

Report No. : CTA25092701303

Reviewed By : Eric Wang

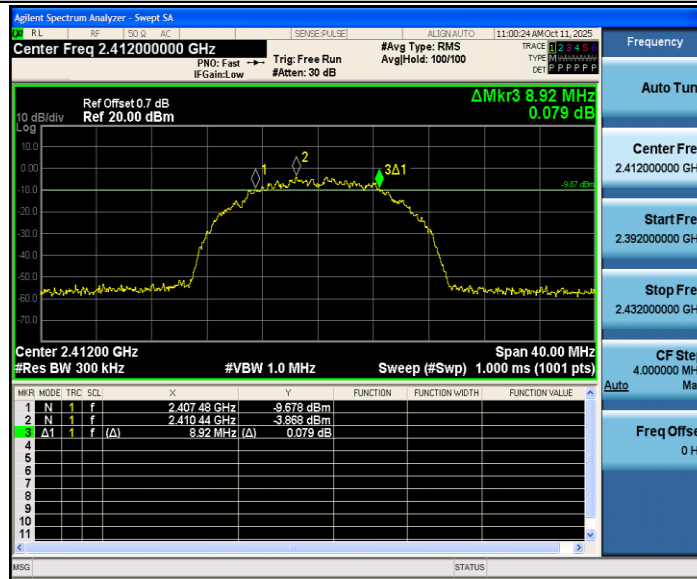
Appendix A: DTS Bandwidth

Test Result

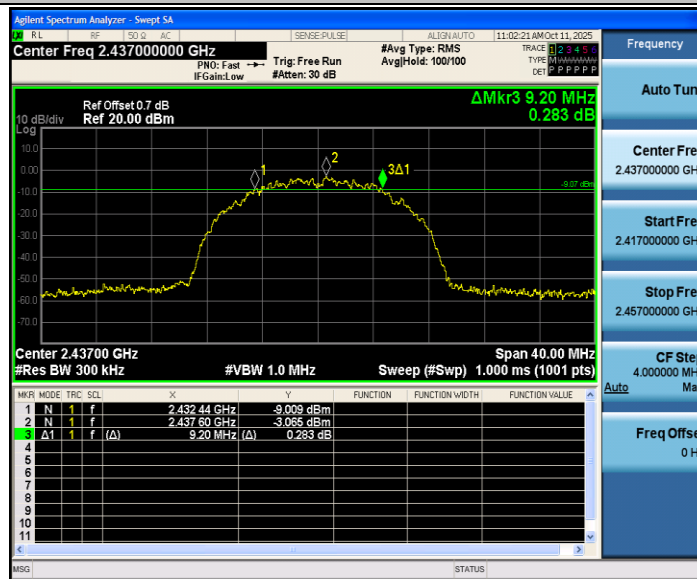
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.920	2407.480	2416.400	0.5	PASS
		2437	9.200	2432.440	2441.640	0.5	PASS
		2462	9.480	2457.080	2466.560	0.5	PASS
11G	Ant1	2412	16.240	2403.920	2420.160	0.5	PASS
		2437	16.440	2428.840	2445.280	0.5	PASS
		2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.320	2403.400	2420.720	0.5	PASS
		2437	17.440	2428.320	2445.760	0.5	PASS
		2462	17.040	2453.480	2470.520	0.5	PASS
11N40SISO	Ant1	2422	34.160	2405.120	2439.280	0.5	PASS
		2437	33.520	2420.360	2453.880	0.5	PASS
		2452	33.920	2435.040	2468.960	0.5	PASS
11AX20SISO	Ant1	2412	17.240	2403.400	2420.640	0.5	PASS
		2437	17.280	2428.400	2445.680	0.5	PASS
		2462	17.280	2453.440	2470.720	0.5	PASS
11AX40SISO	Ant1	2422	34.080	2405.200	2439.280	0.5	PASS
		2437	33.920	2420.120	2454.040	0.5	PASS
		2452	34.160	2435.040	2469.200	0.5	PASS

Test Graphs

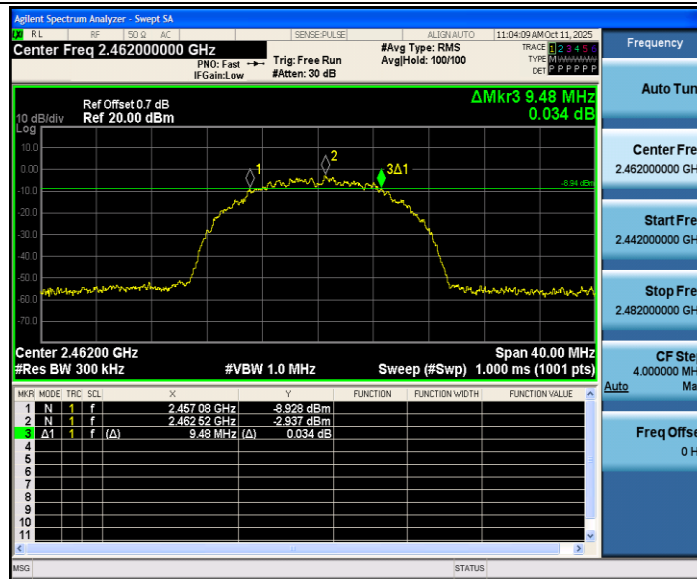
11B_Ant1_2412



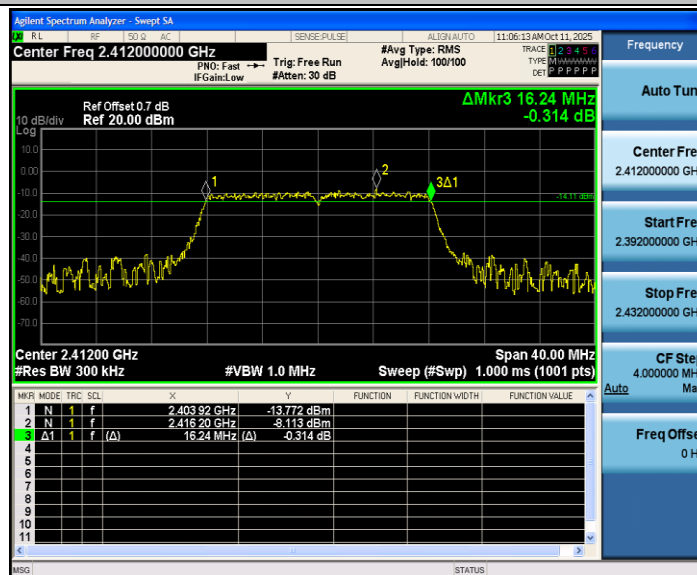
11B_Ant1_2437



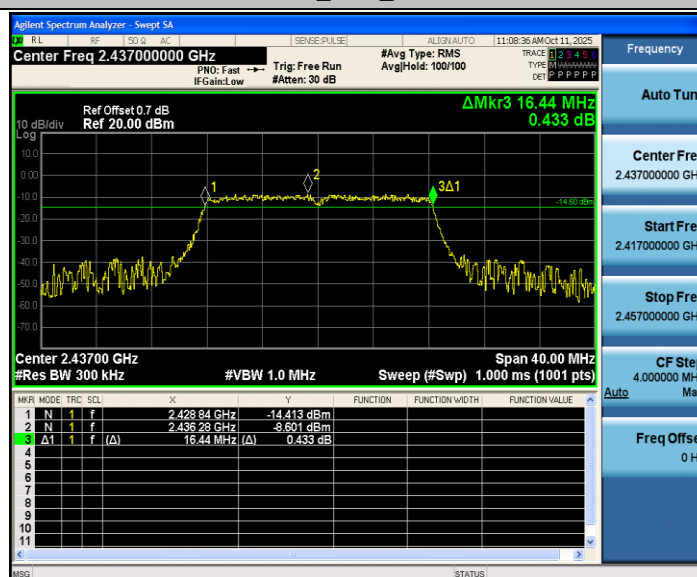
11B_Ant1_2462



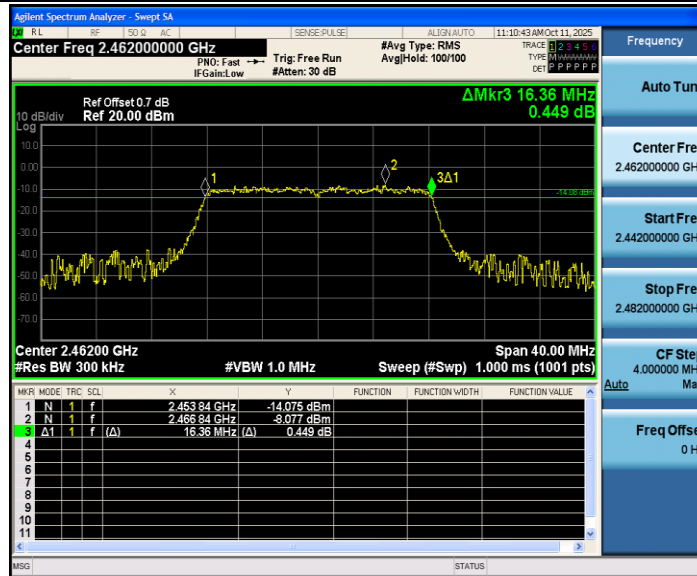
11G_Ant1_2412



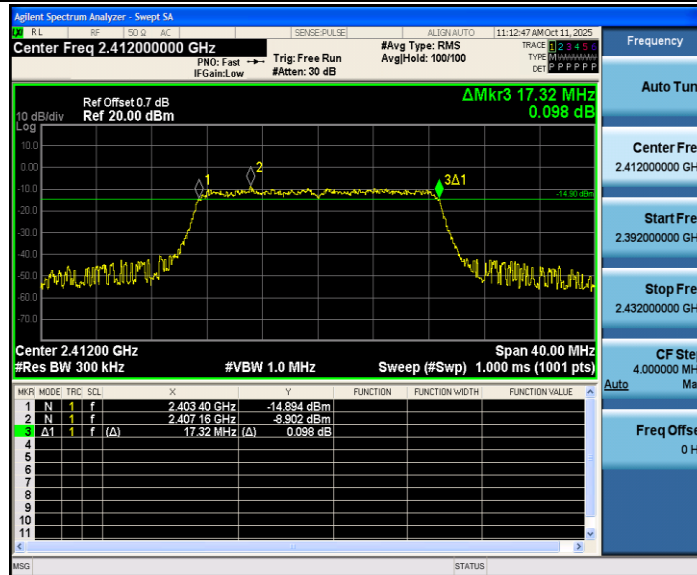
11G_Ant1_2437



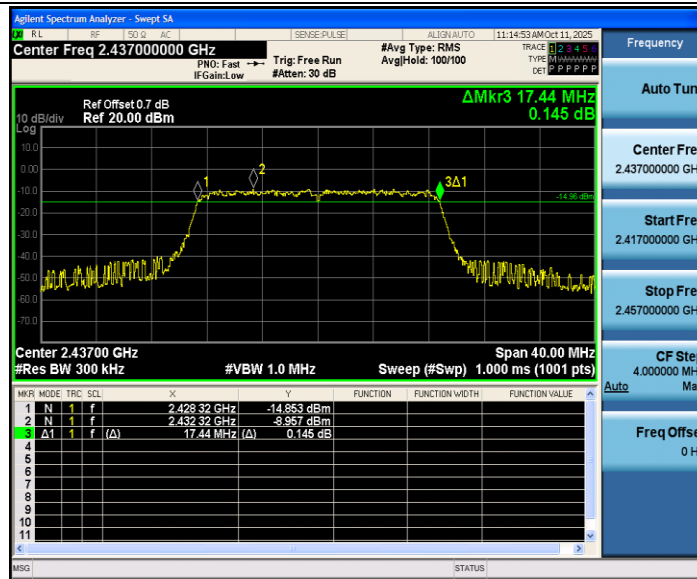
11G_Ant1_2462



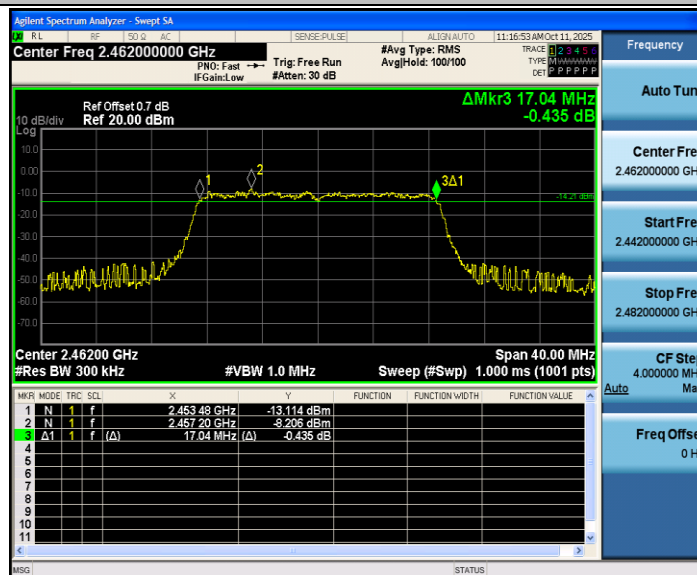
11N20SISO_Ant1_2412



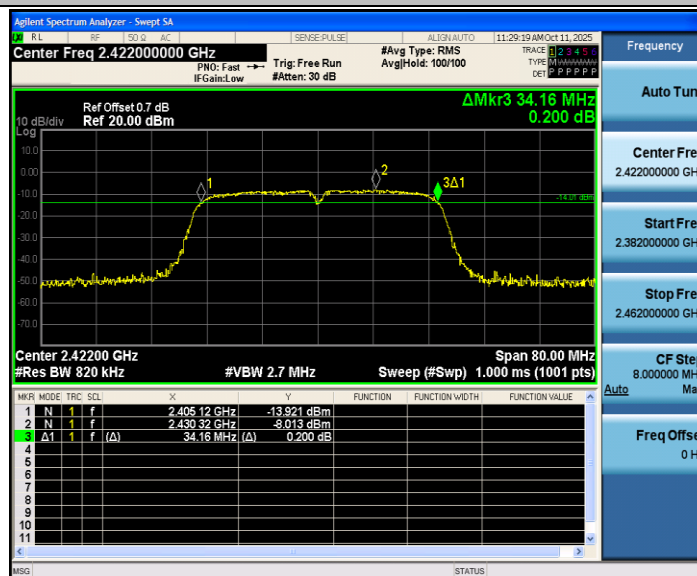
11N20SISO_Ant1_2437



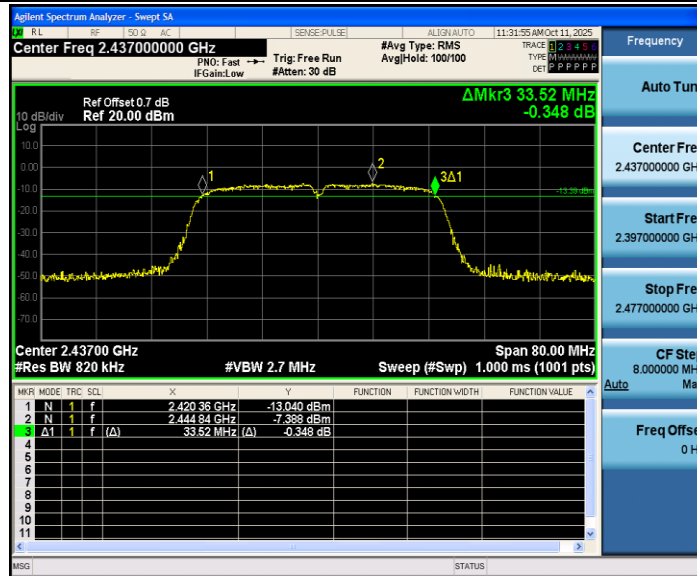
11N20SISO_Ant1_2462



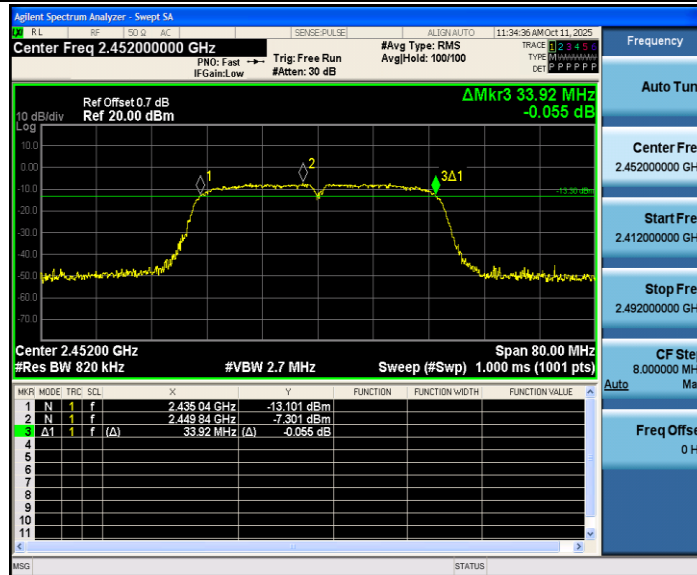
11N40SISO_Ant1_2422



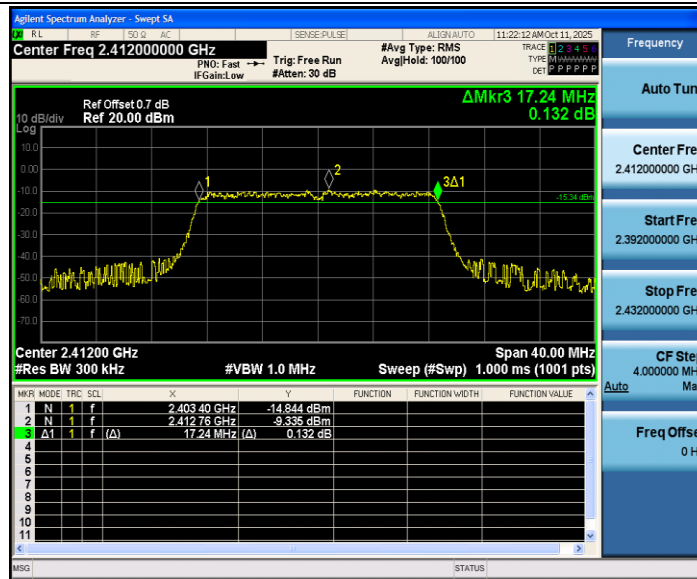
11N40SISO_Ant1_2437



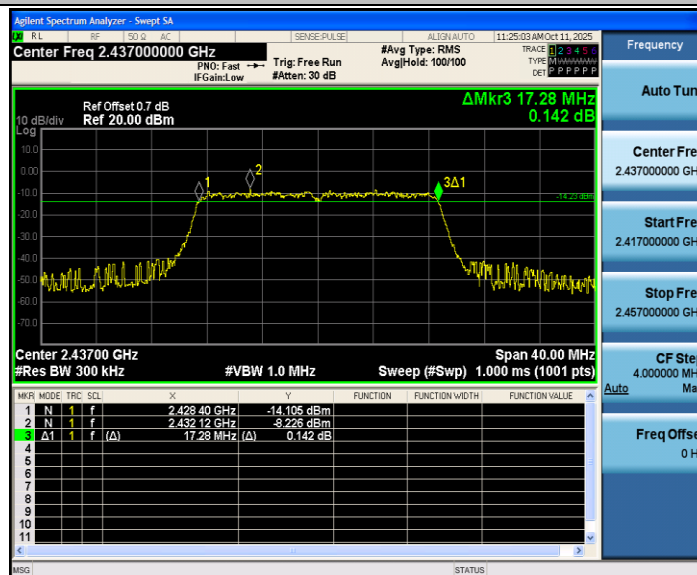
11N40SISO_Ant1_2452



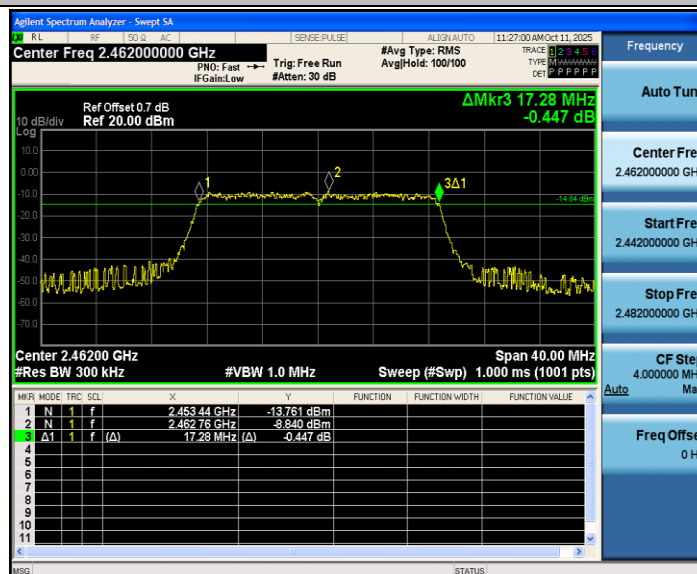
11AX20SISO_Ant1_2412



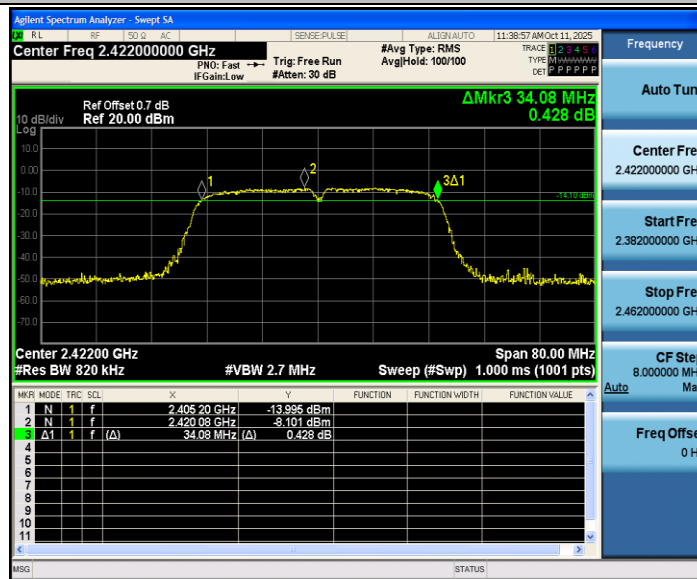
11AX20SISO_Ant1_2437



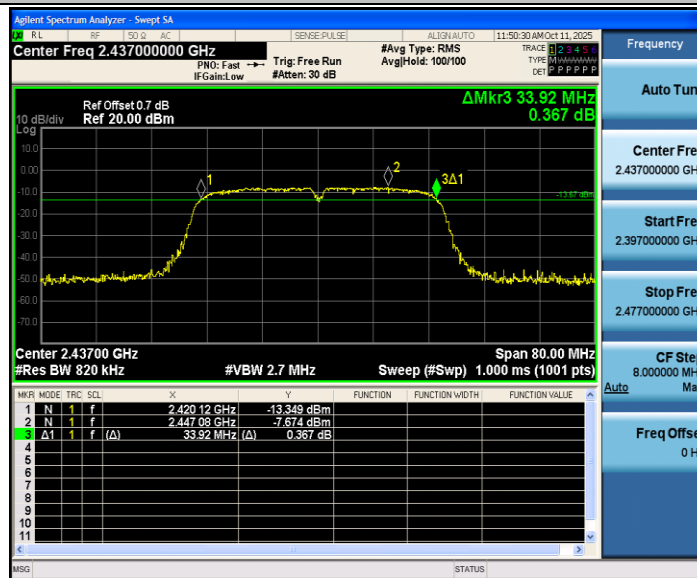
11AX20SISO_Ant1_2462



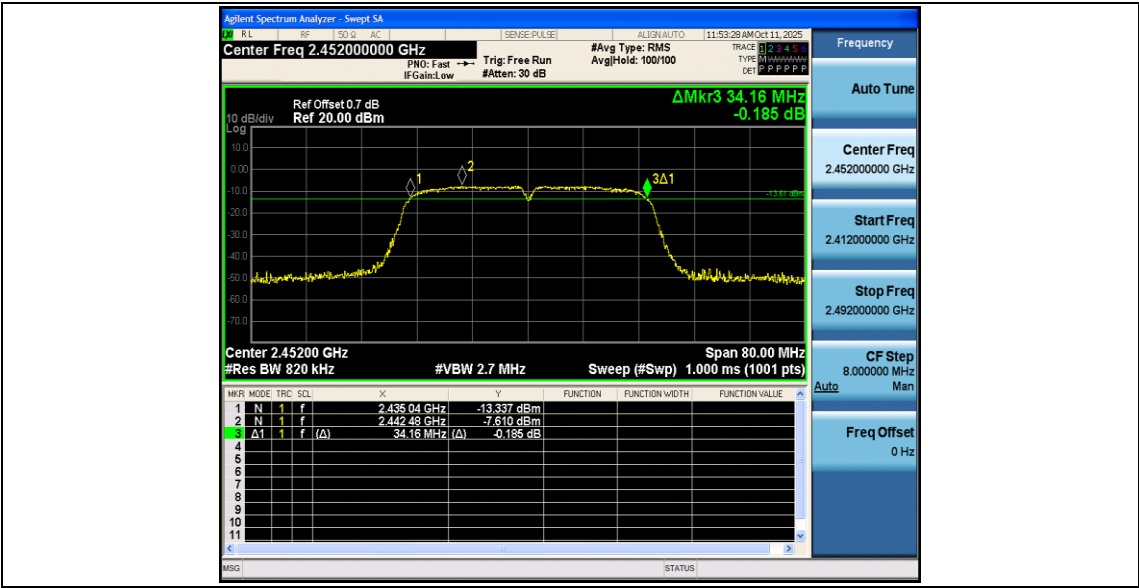
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



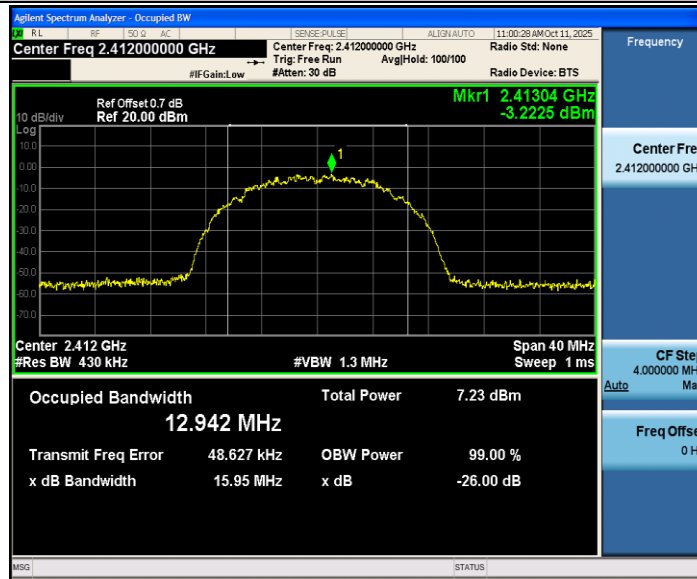
Appendix B: Occupied Channel Bandwidth

Test Result

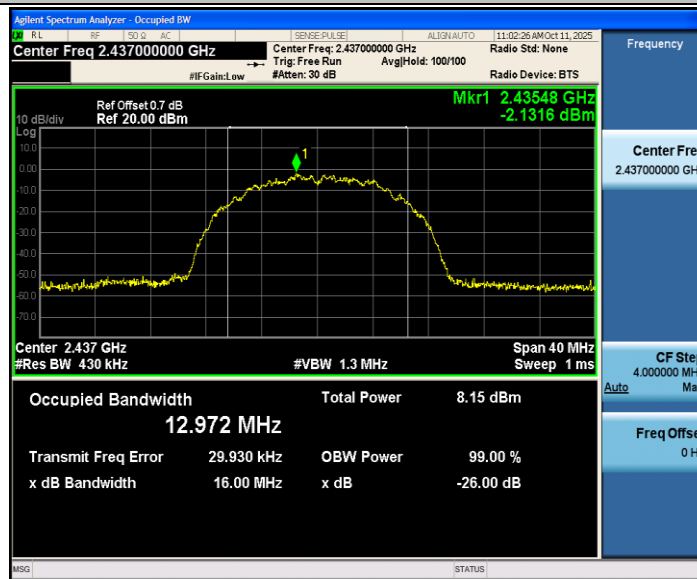
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.942	2405.5776	2418.5196	---	---
		2437	12.972	2430.5439	2443.5159	---	---
		2462	13.014	2455.4940	2468.5080	---	---
11G	Ant1	2412	16.589	2403.7580	2420.3470	---	---
		2437	16.612	2428.7303	2445.3423	---	---
		2462	16.664	2453.6725	2470.3365	---	---
11N20SISO	Ant1	2412	17.462	2403.3221	2420.7841	---	---
		2437	17.451	2428.3105	2445.7615	---	---
		2462	17.473	2453.2891	2470.7621	---	---
11N40SISO	Ant1	2422	34.862	2404.7396	2439.6016	---	---
		2437	34.839	2419.7237	2454.5627	---	---
		2452	34.841	2434.6451	2469.4861	---	---
11AX20SISO	Ant1	2412	17.449	2403.3217	2420.7707	---	---
		2437	17.444	2428.3158	2445.7598	---	---
		2462	17.463	2453.2915	2470.7545	---	---
11AX40SISO	Ant1	2422	34.813	2404.7240	2439.5370	---	---
		2437	34.759	2419.7588	2454.5178	---	---
		2452	34.862	2434.6713	2469.5333	---	---

Test Graphs

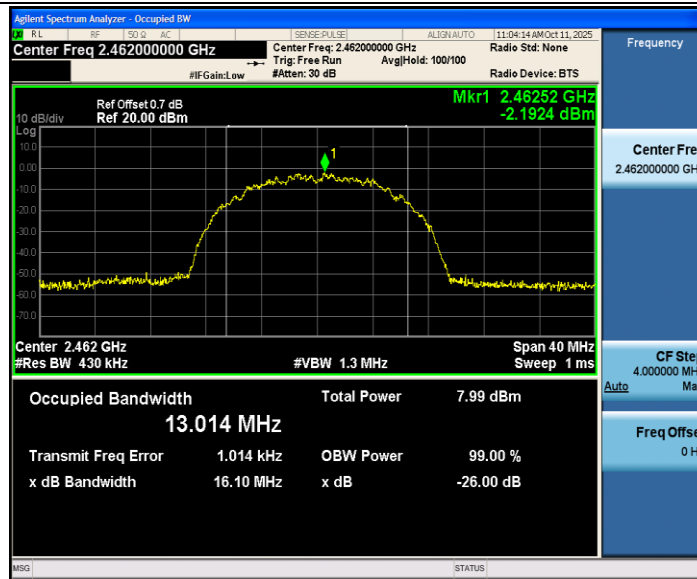
11B_Ant1_2412



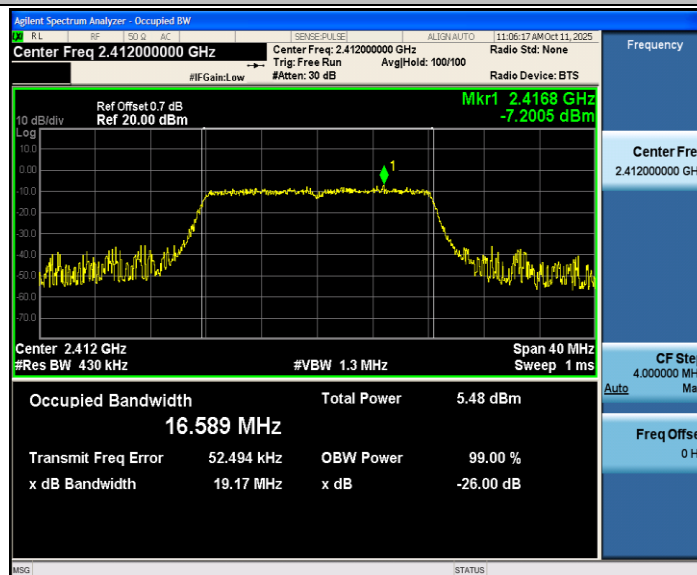
11B_Ant1_2437



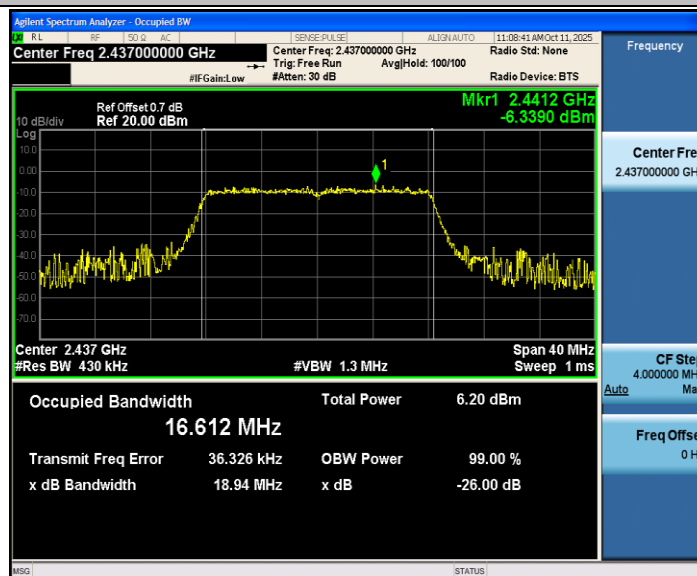
11B_Ant1_2462



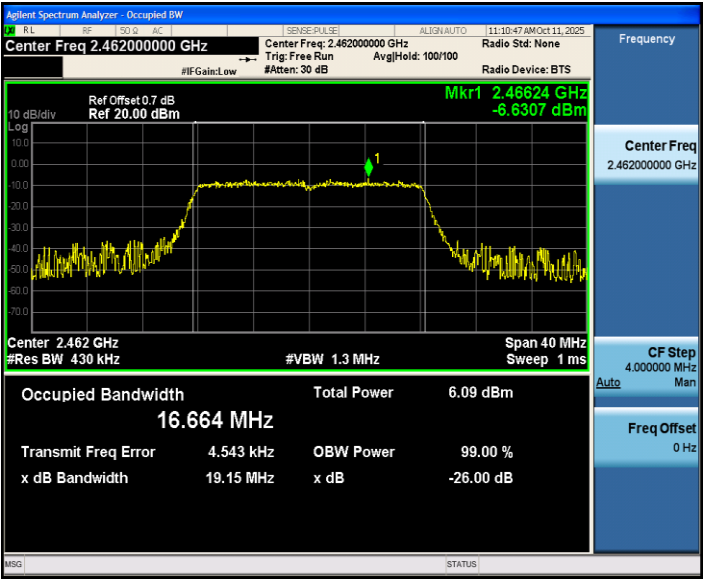
11G_Ant1_2412



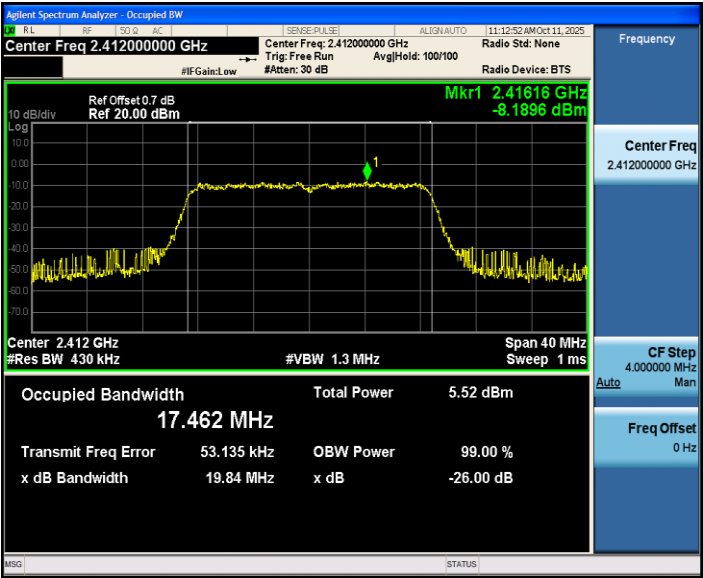
11G_Ant1_2437



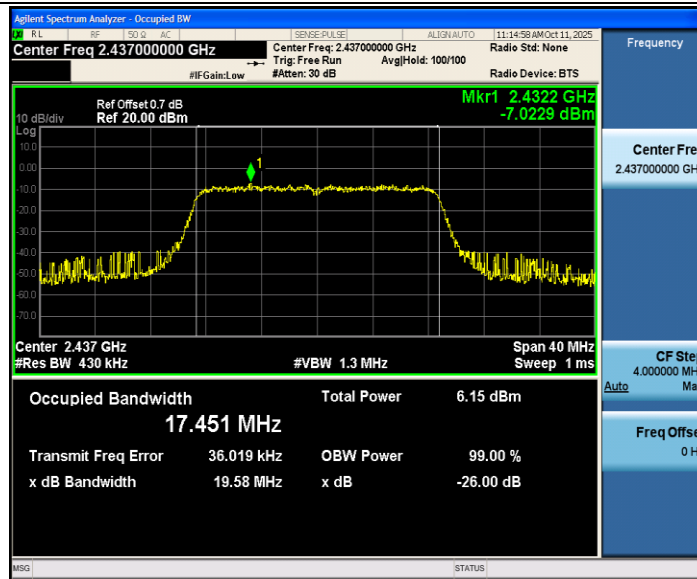
11G_Ant1_2462



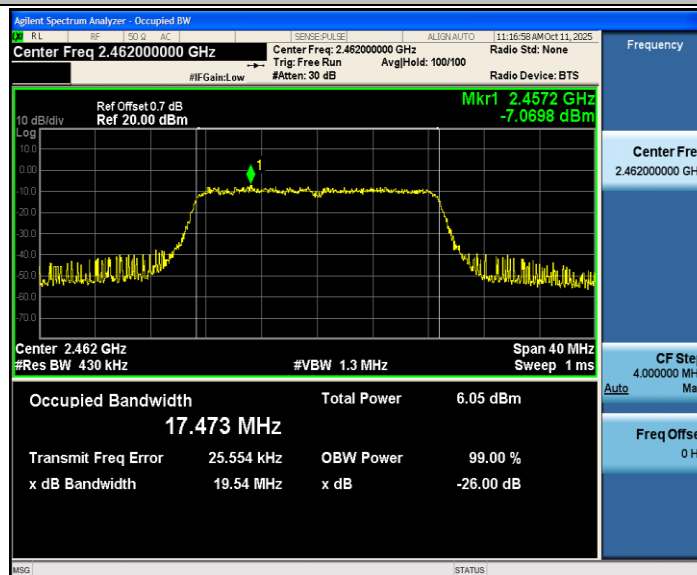
11N20SISO_Ant1_2412



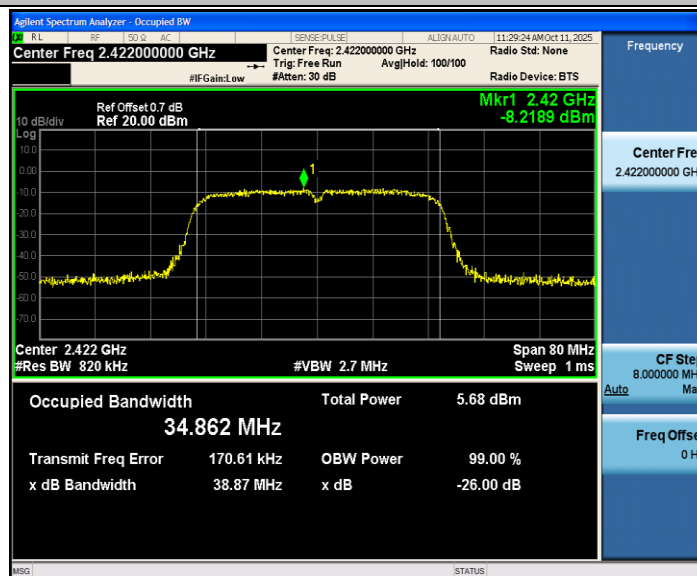
11N20SISO_Ant1_2437



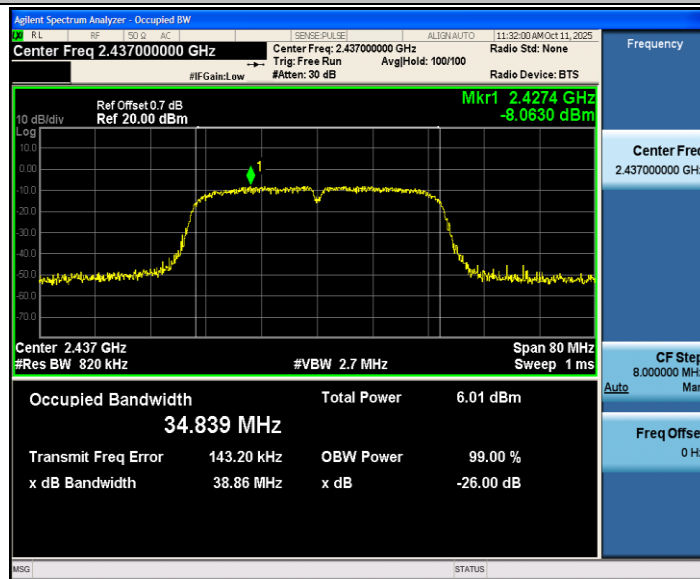
11N20SISO_Ant1_2462



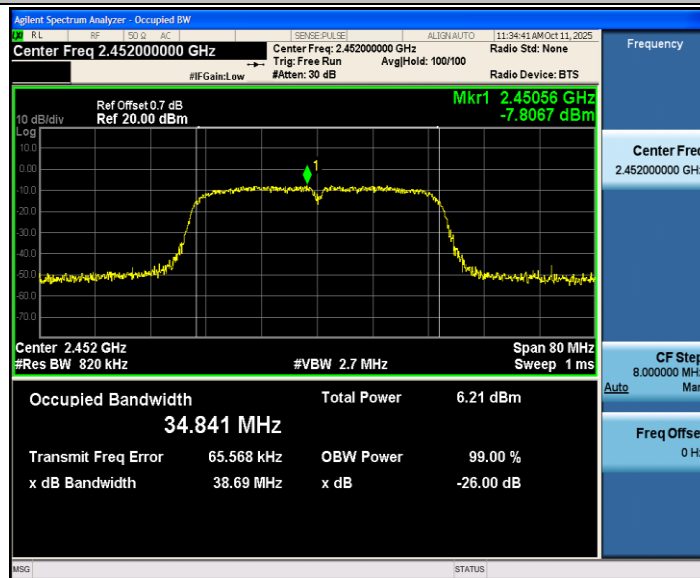
11N40SISO_Ant1_2422



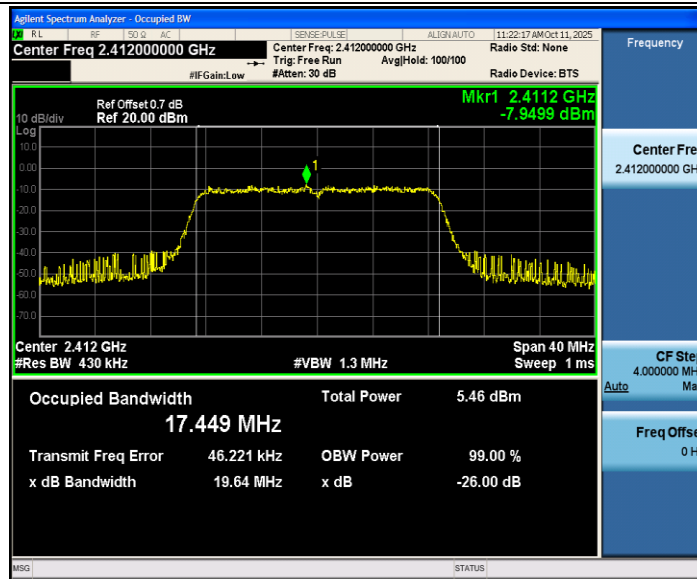
11N40SISO_Ant1_2437



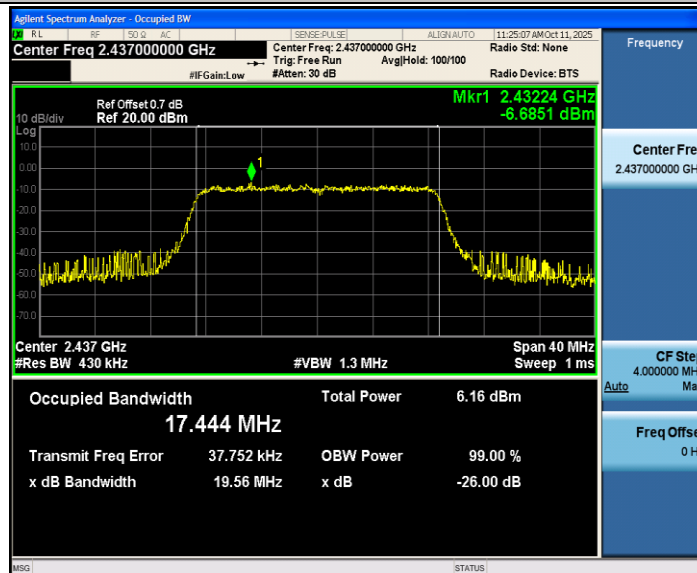
11N40SISO_Ant1_2452



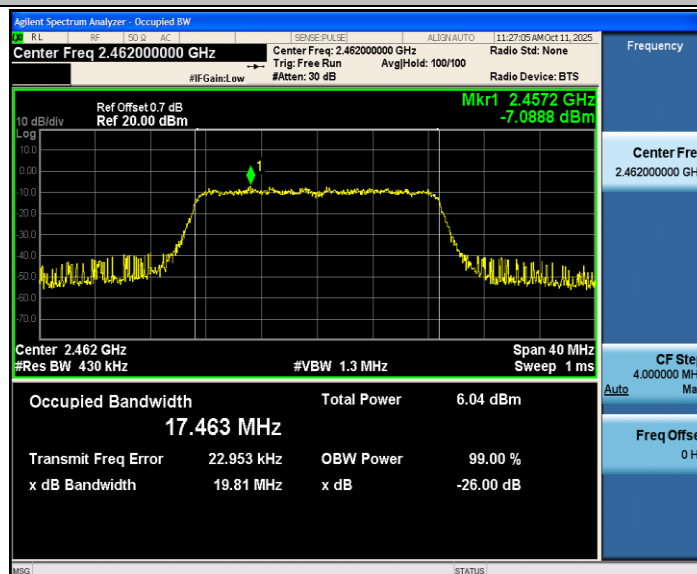
11AX20SISO_Ant1_2412



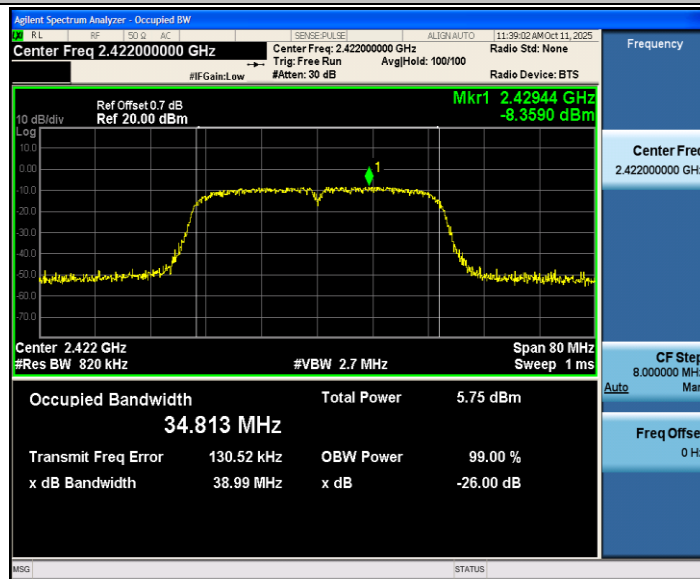
11AX20SISO_Ant1_2437



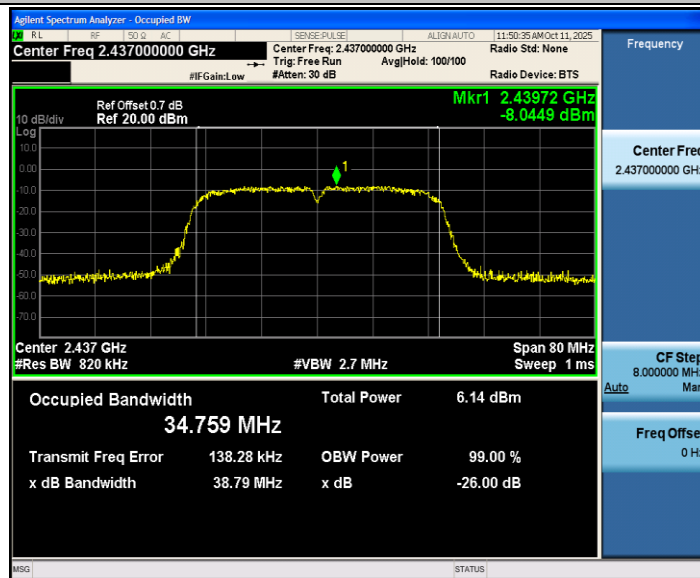
11AX20SISO_Ant1_2462



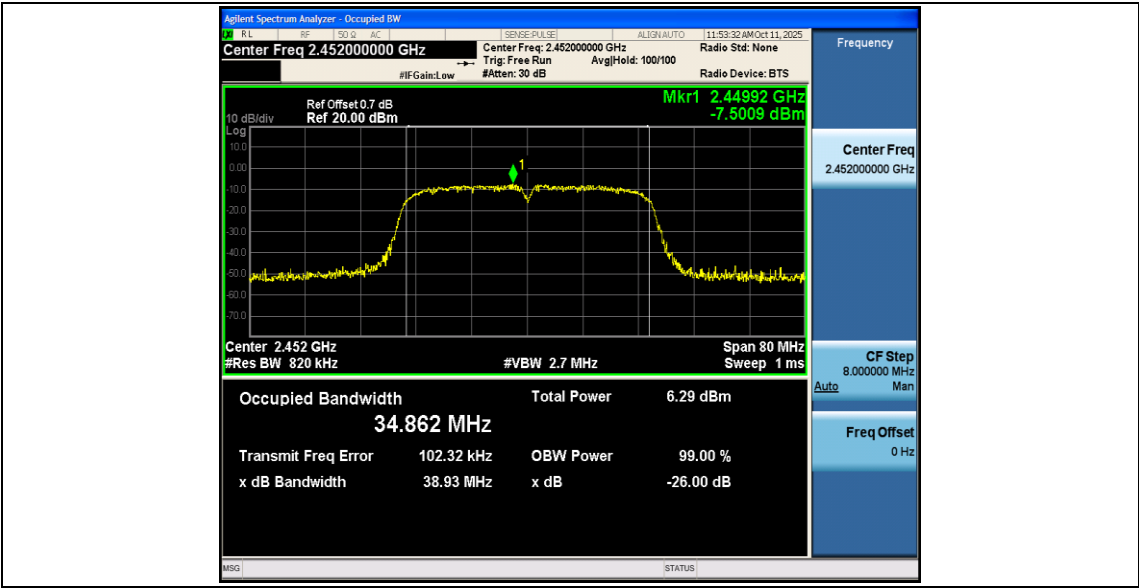
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	6.67	≤30.00	PASS
		2437	7.76	≤30.00	PASS
		2462	7.67	≤30.00	PASS
11G	Ant1	2412	6.34	≤30.00	PASS
		2437	7.02	≤30.00	PASS
		2462	6.95	≤30.00	PASS
11N20SISO	Ant1	2412	6.70	≤30.00	PASS
		2437	7.45	≤30.00	PASS
		2462	7.23	≤30.00	PASS
11N40SISO	Ant1	2422	5.83	≤30.00	PASS
		2437	6.33	≤30.00	PASS
		2452	6.54	≤30.00	PASS
11AX20SISO	Ant1	2412	6.69	≤30.00	PASS
		2437	7.34	≤30.00	PASS
		2462	7.17	≤30.00	PASS
11AX40SISO	Ant1	2422	5.91	≤30.00	PASS
		2437	6.25	≤30.00	PASS
		2452	6.54	≤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	-22.62	≤8.00	PASS
		2437	-21.15	≤8.00	PASS
		2462	-21.34	≤8.00	PASS
11G	Ant1	2412	-28.07	≤8.00	PASS
		2437	-27.21	≤8.00	PASS
		2462	-27.51	≤8.00	PASS
11N20SISO	Ant1	2412	-27.95	≤8.00	PASS
		2437	-27.22	≤8.00	PASS
		2462	-27.34	≤8.00	PASS
11N40SISO	Ant1	2422	-29.18	≤8.00	PASS
		2437	-28.33	≤8.00	PASS
		2452	-29.01	≤8.00	PASS
11AX20SISO	Ant1	2412	-27.77	≤8.00	PASS
		2437	-27.08	≤8.00	PASS
		2462	-27.36	≤8.00	PASS
11AX40SISO	Ant1	2422	-28.71	≤8.00	PASS
		2437	-29.04	≤8.00	PASS
		2452	-28.27	≤8.00	PASS

Test Graphs

11B_Ant1_2412



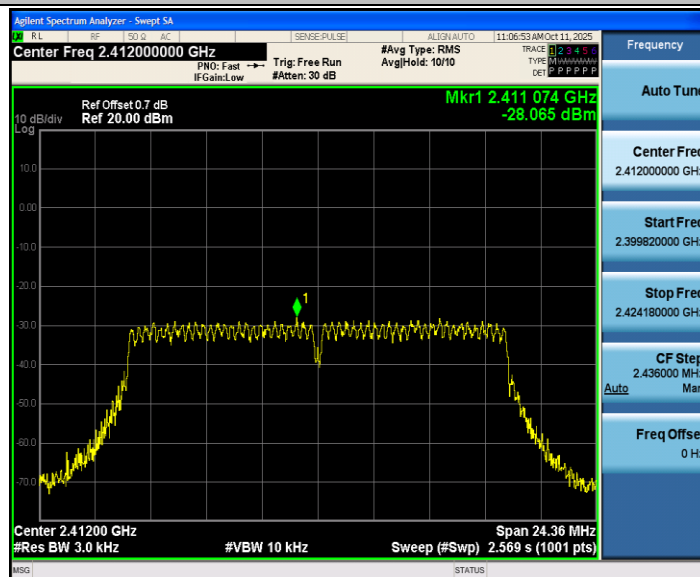
11B_Ant1_2437



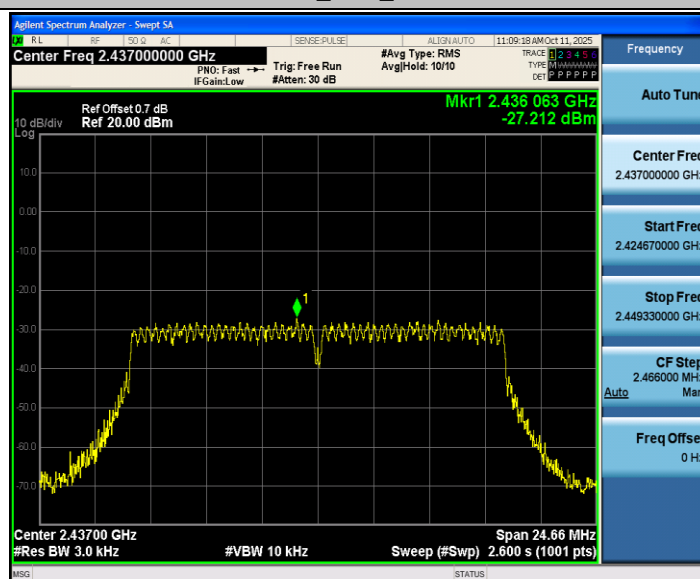
11B_Ant1_2462



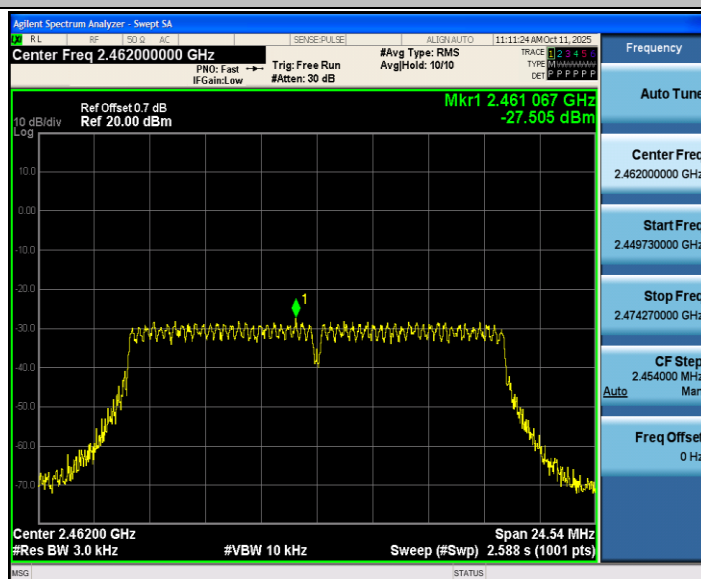
11G_Ant1_2412



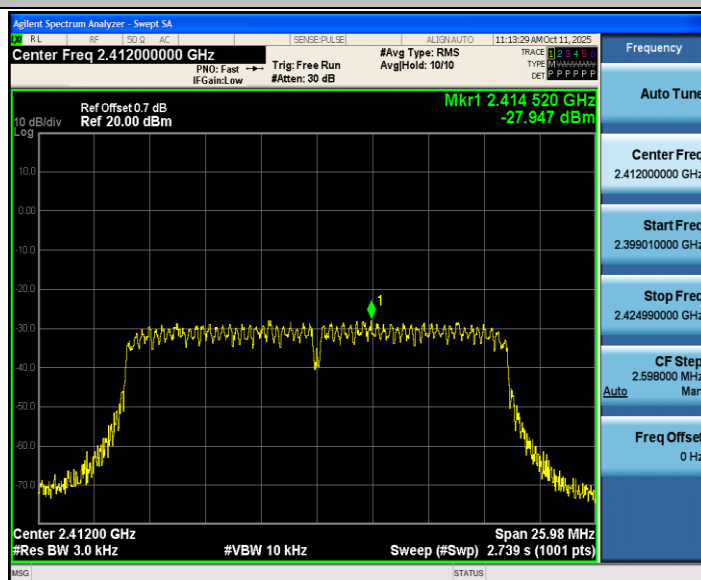
11G_Ant1_2437



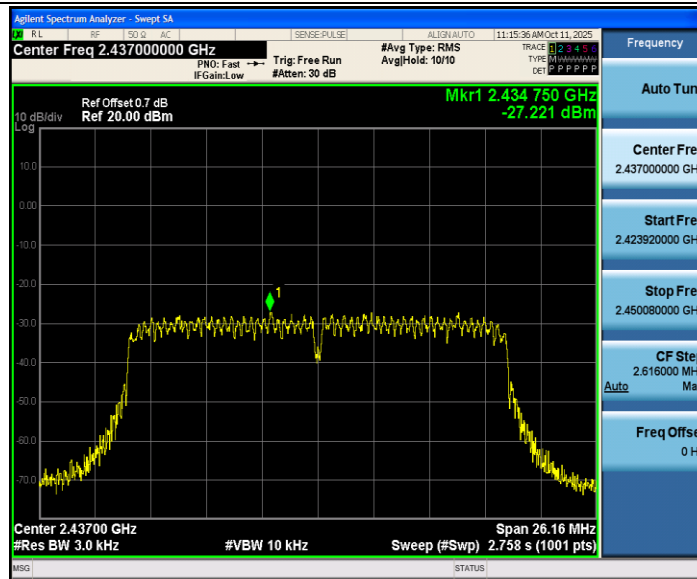
11G_Ant1_2462



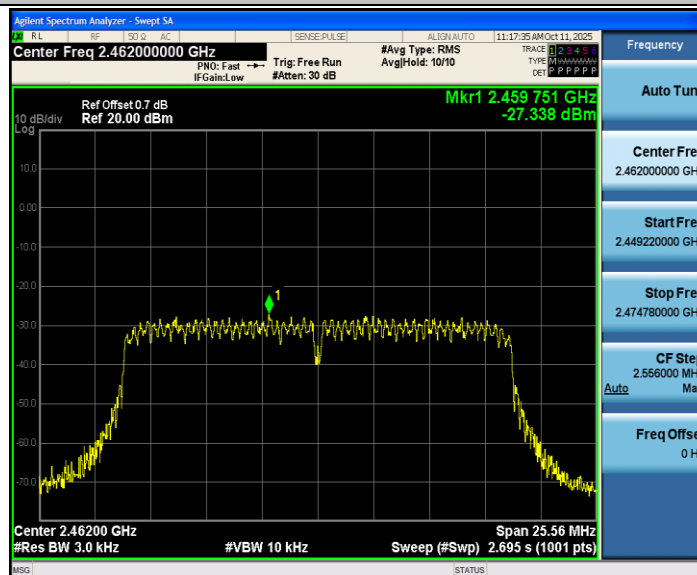
11N20SISO_Ant1_2412



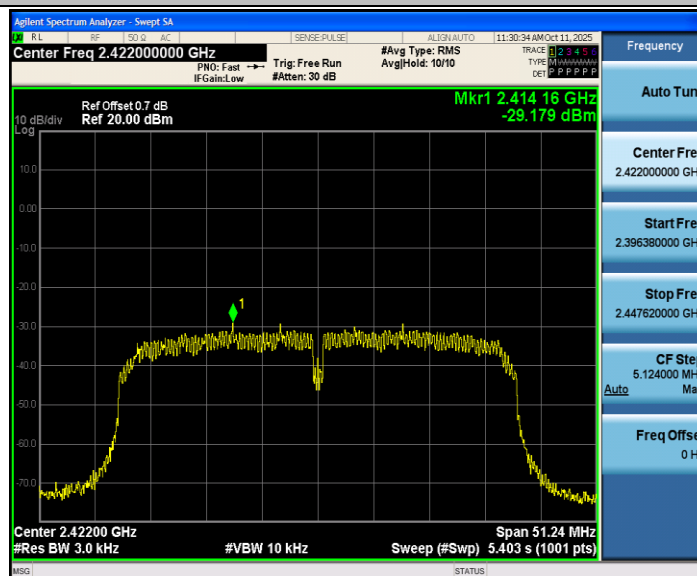
11N20SISO_Ant1_2437



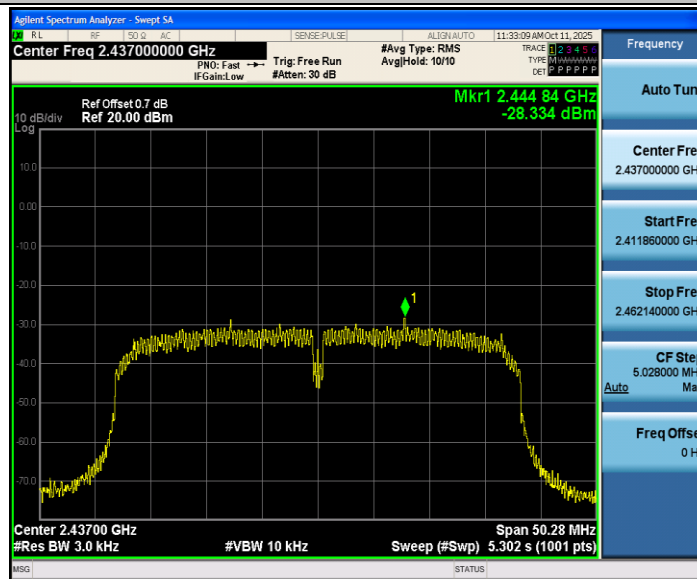
11N20SISO_Ant1_2462



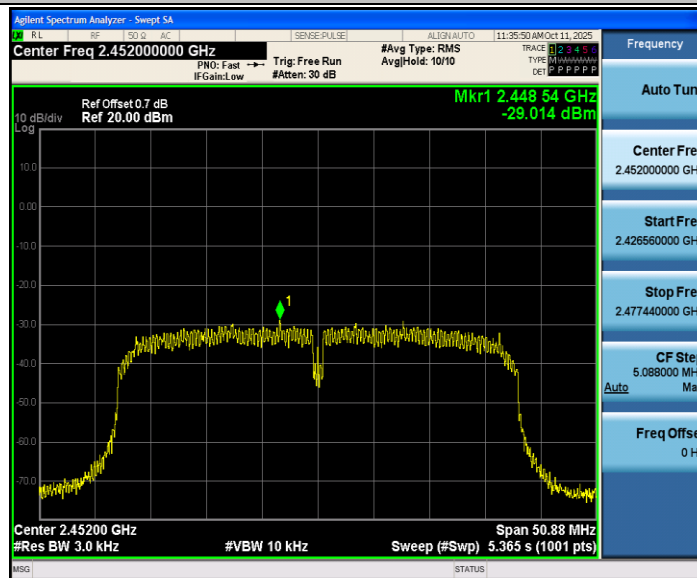
11N40SISO_Ant1_2422



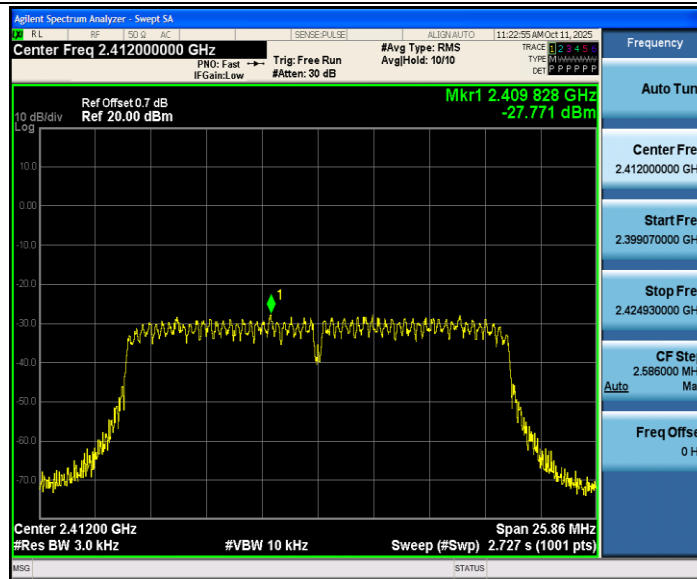
11N40SISO_Ant1_2437



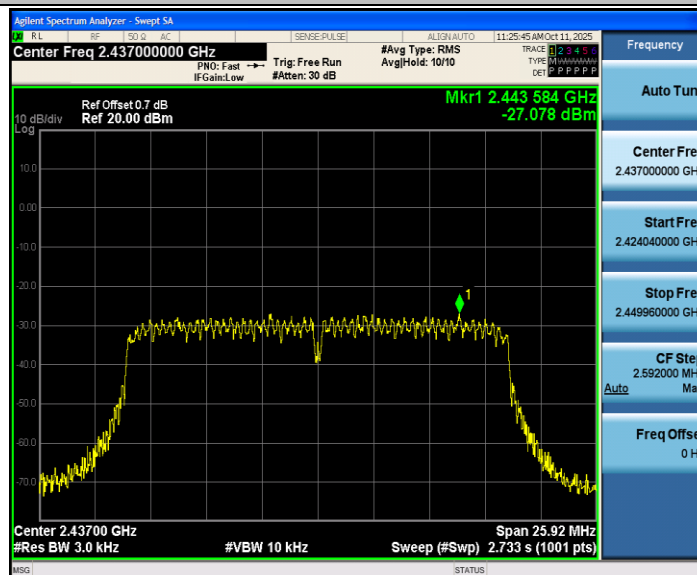
11N40SISO_Ant1_2452



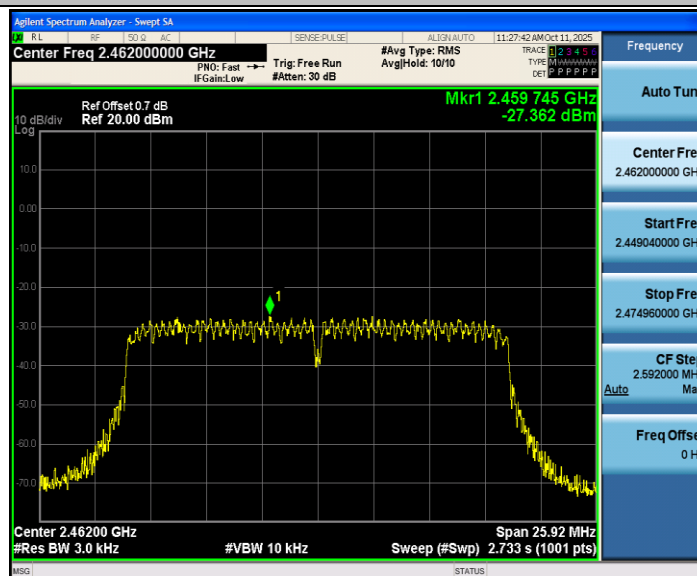
11AX20SISO_Ant1_2412



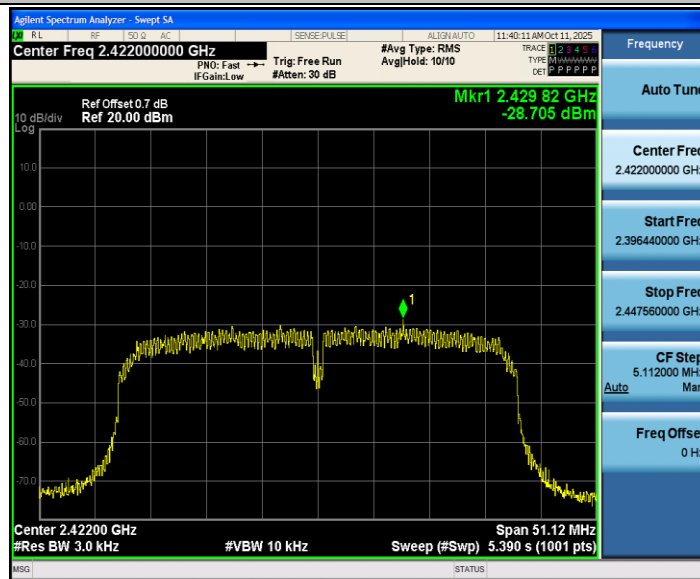
11AX20SISO_Ant1_2437



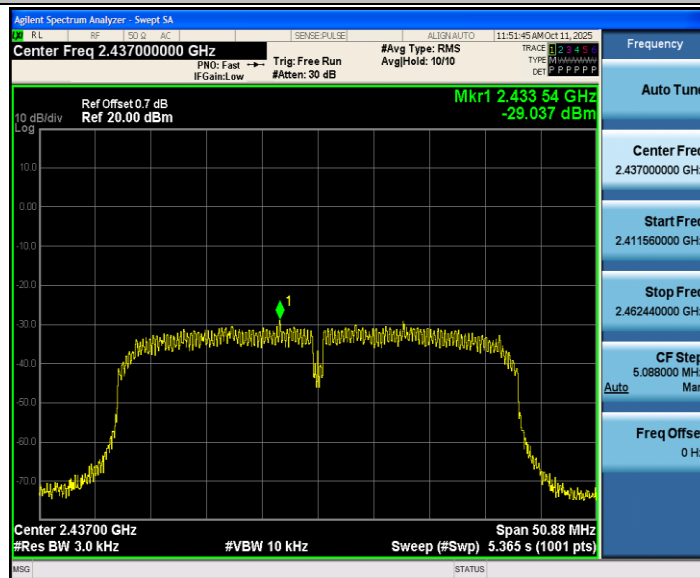
11AX20SISO_Ant1_2462



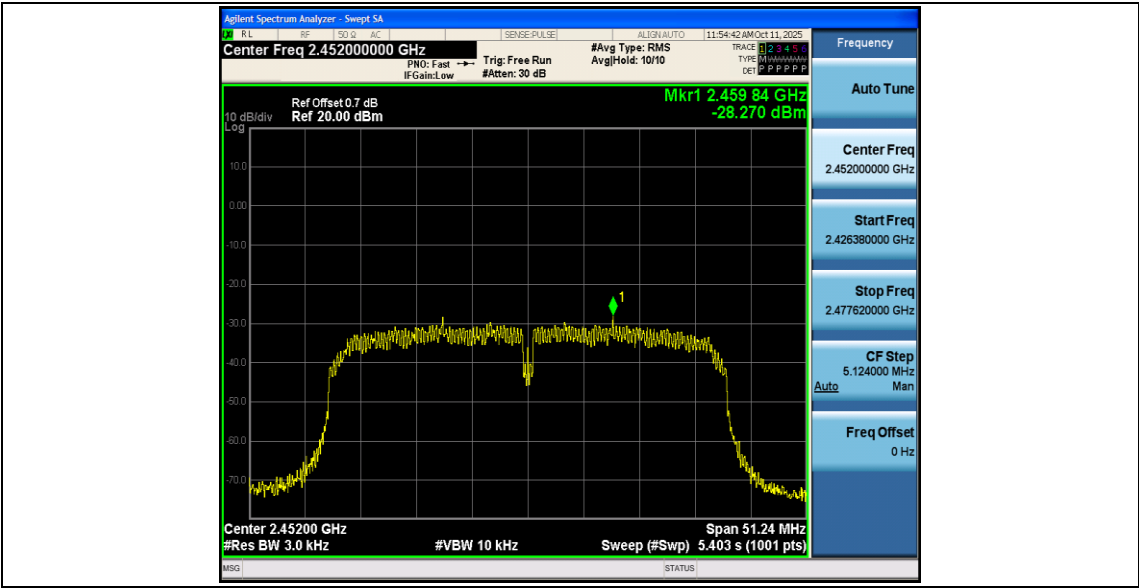
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



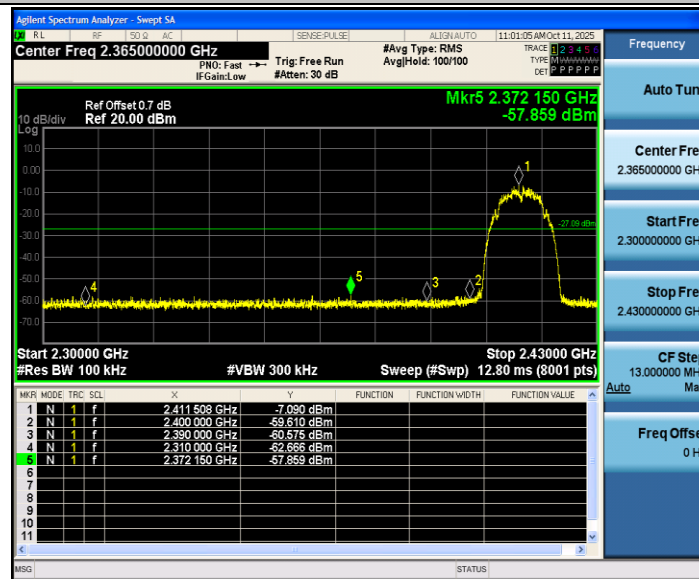
Appendix E: Band edge measurements

Test Result

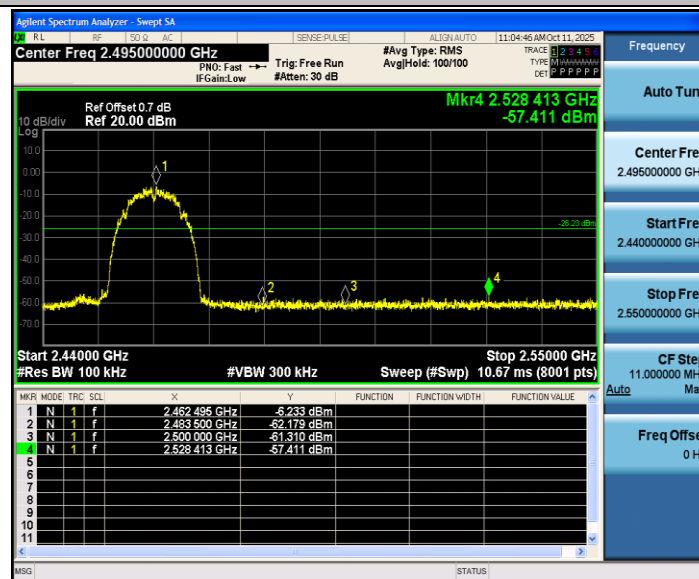
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-7.09	-57.86	≤-27.09	PASS
		High	2462	-6.23	-57.41	≤-26.23	PASS
11G	Ant1	Low	2412	-13.86	-46.17	≤-33.86	PASS
		High	2462	-13.49	-53.11	≤-33.49	PASS
11N20SISO	Ant1	Low	2412	-13.94	-50.04	≤-33.94	PASS
		High	2462	-13.13	-56.64	≤-33.13	PASS
11N40SISO	Ant1	Low	2422	-16.78	-55.54	≤-36.78	PASS
		High	2452	-16.37	-57.1	≤-36.37	PASS
11AX20SISO	Ant1	Low	2412	-13.91	-49.04	≤-33.91	PASS
		High	2462	-13.49	-56.95	≤-33.49	PASS
11AX40SISO	Ant1	Low	2422	-16.87	-55.42	≤-36.87	PASS
		High	2452	-16.46	-56.27	≤-36.46	PASS

Test Graphs

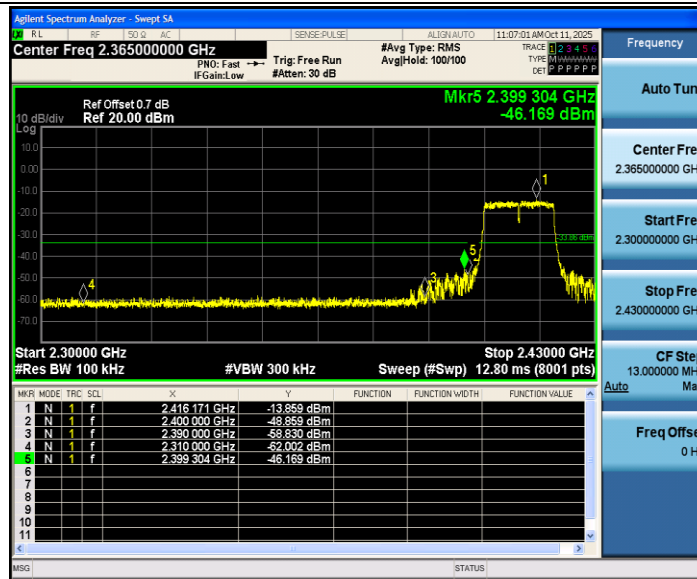
11B_Ant1_Low_2412



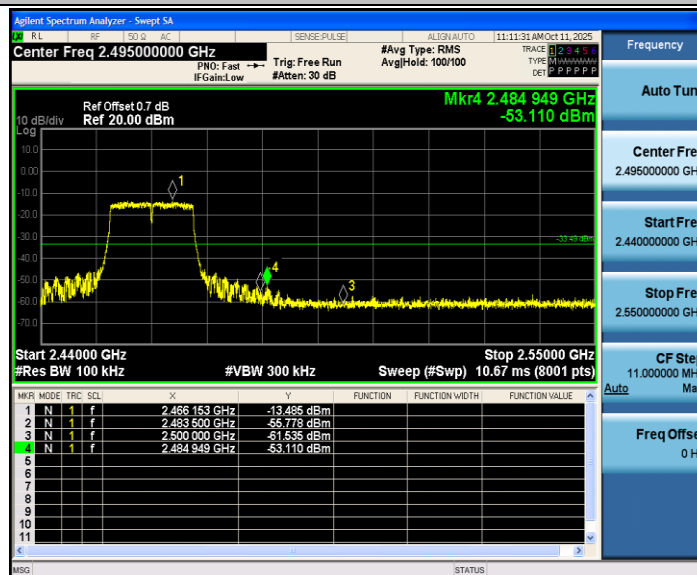
11B_Ant1_High_2462



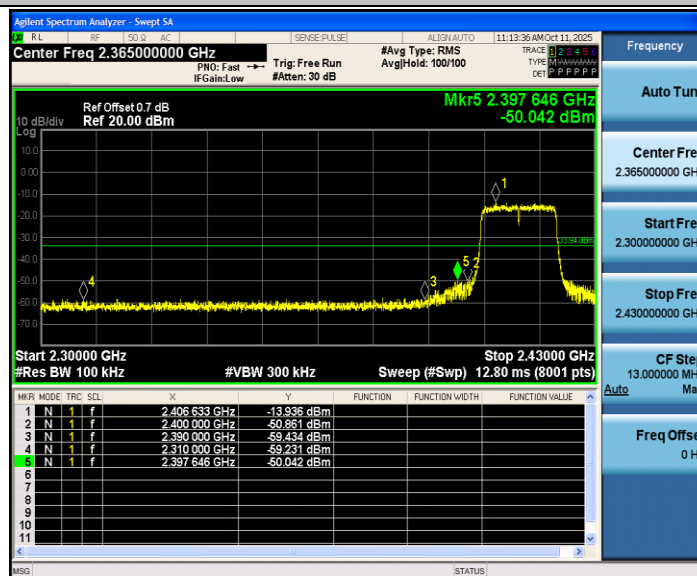
11G_Ant1_Low_2412



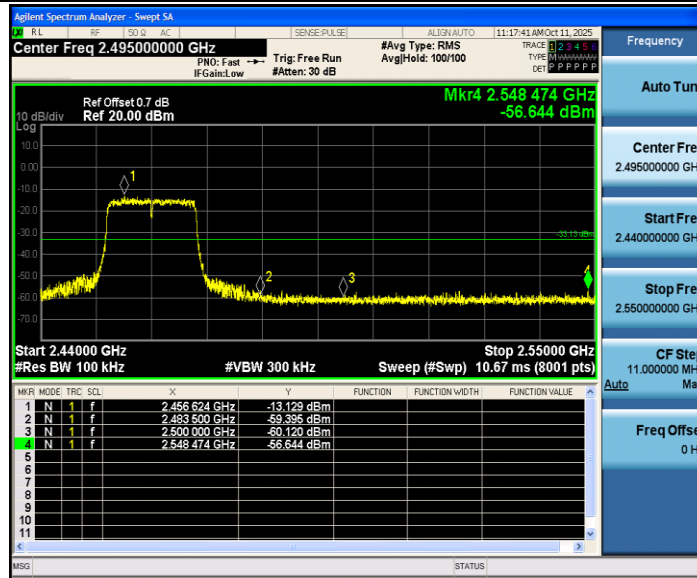
11G_Ant1_High_2462



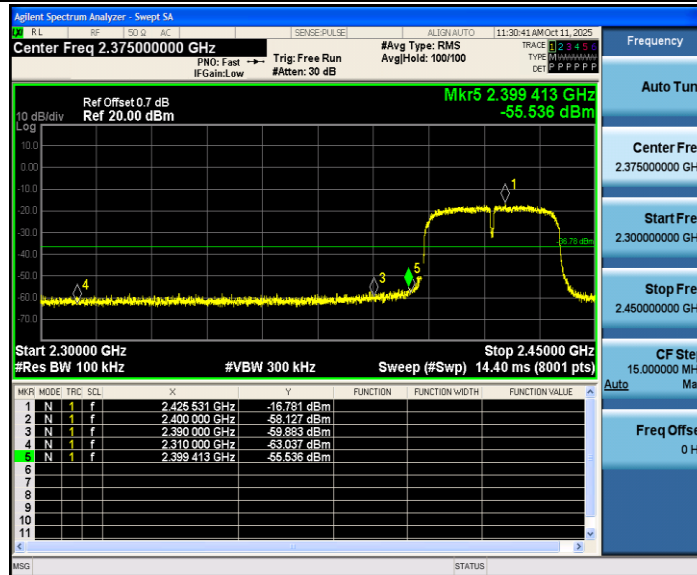
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452