

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BMF7-NX2

Company : Petrosoft LLC

EUT : POS Terminal

Model Number : NX2

Report No. : CTA26062500402

Reviewed By : Eric Wang

FCC Appendix RF Test Data for 2.4GWIFI Antenna 1

Appendix A: DTS Bandwidth

Test Result

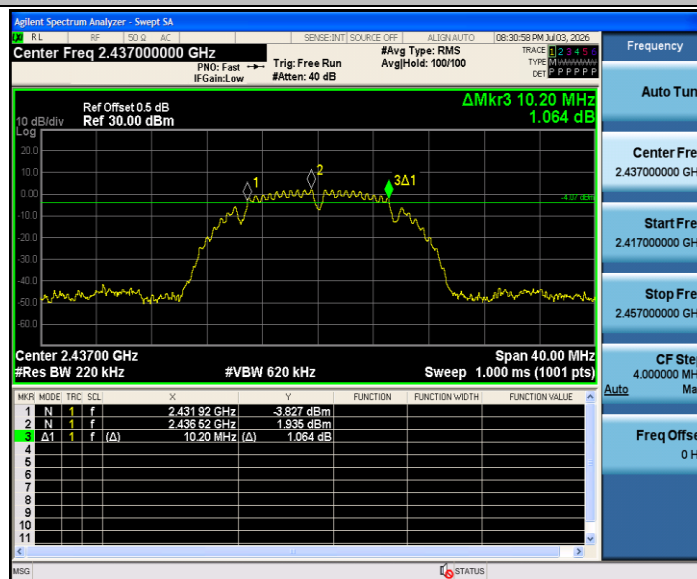
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.920	2404.040	2419.960	0.5	PASS
		2437	15.640	2429.160	2444.800	0.5	PASS
		2462	15.800	2454.240	2470.040	0.5	PASS
11N20SISO	Ant1	2412	17.000	2403.440	2420.440	0.5	PASS
		2437	17.040	2428.440	2445.480	0.5	PASS
		2462	16.520	2453.960	2470.480	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.320	2439.920	0.5	PASS
		2437	35.440	2414.520	2449.960	0.5	PASS
		2452	35.040	2435.040	2470.080	0.5	PASS

Test Graphs

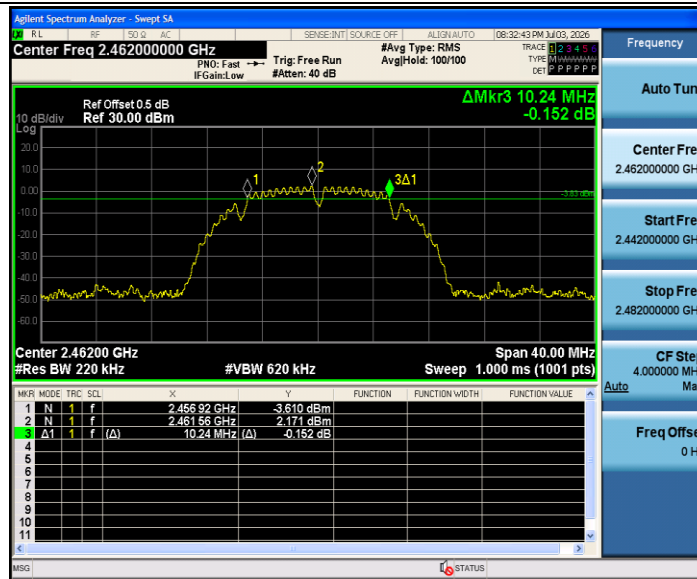
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



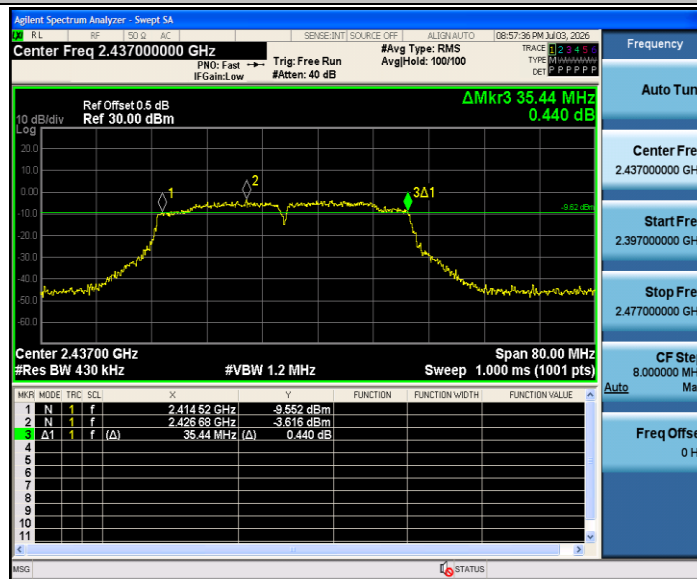
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



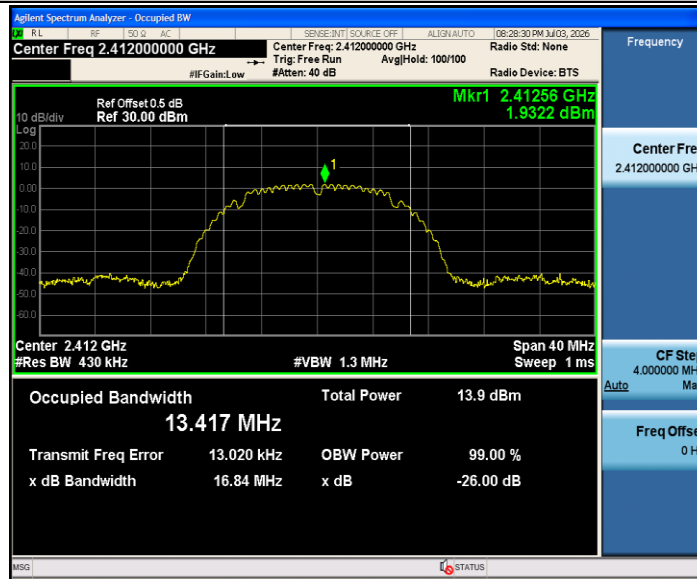
Appendix B: Occupied Channel Bandwidth

Test Result

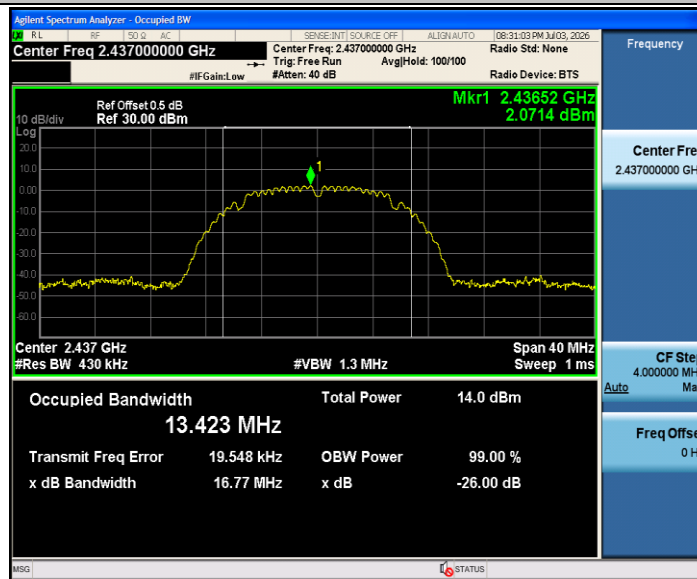
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.417	2405.3045	2418.7215	---	---
		2437	13.423	2430.3081	2443.7311	---	---
		2462	13.415	2455.3219	2468.7369	---	---
11G	Ant1	2412	16.809	2403.6446	2420.4536	---	---
		2437	16.871	2428.6277	2445.4987	---	---
		2462	16.847	2453.6480	2470.4950	---	---
11N20SISO	Ant1	2412	17.887	2403.0613	2420.9483	---	---
		2437	17.879	2428.0900	2445.9690	---	---
		2462	17.855	2453.1068	2470.9618	---	---
11N40SISO	Ant1	2422	36.062	2404.1164	2440.1784	---	---
		2437	36.059	2414.1253	2450.1843	---	---
		2452	36.055	2434.0857	2470.1407	---	---

Test Graphs

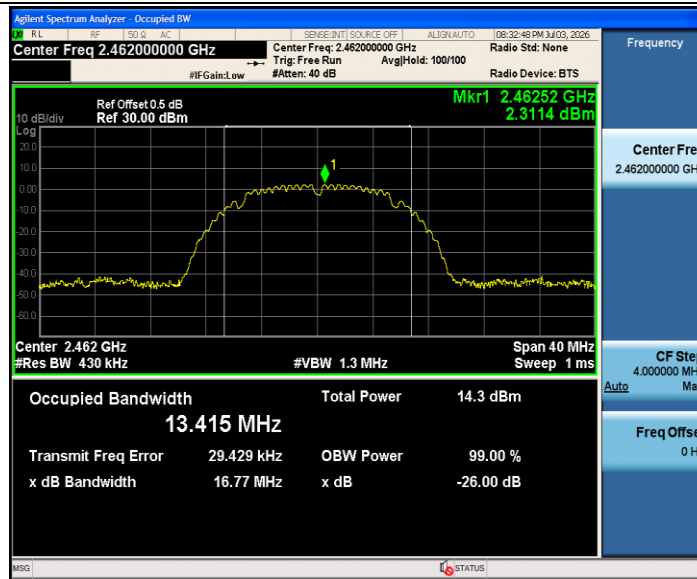
11B_Ant1_2412



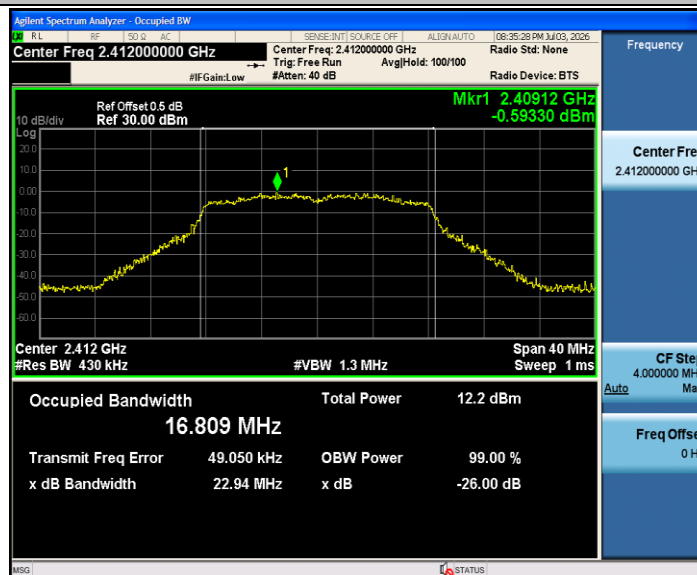
11B_Ant1_2437



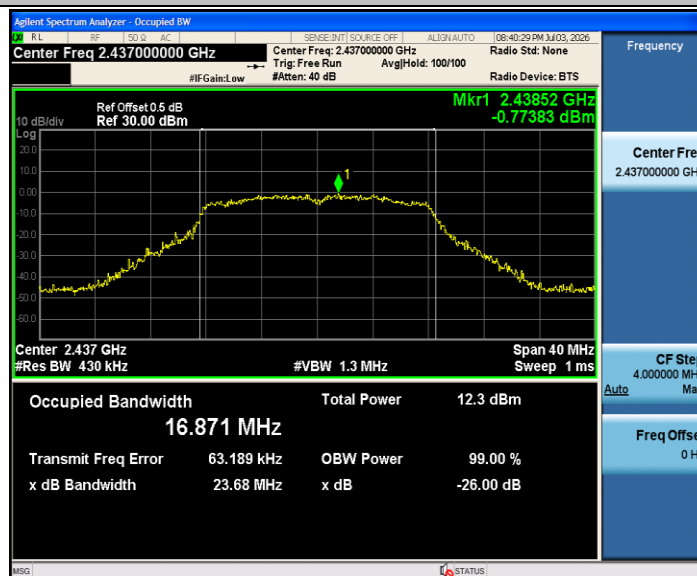
11B_Ant1_2462



11G_Ant1_2412



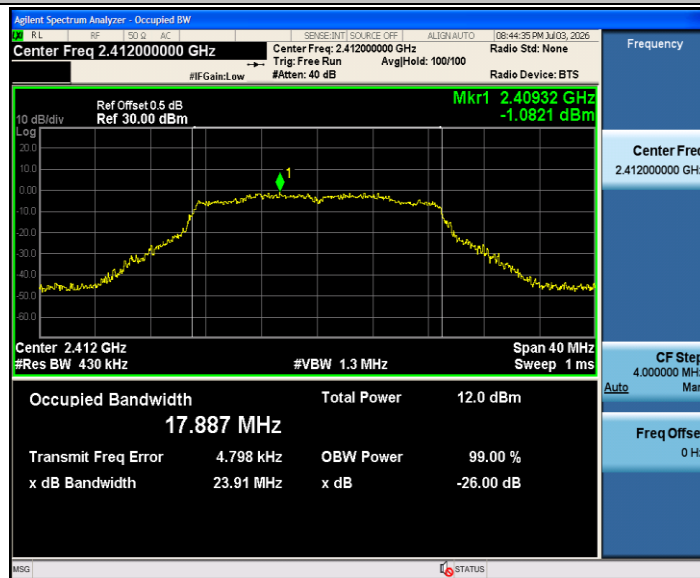
11G_Ant1_2437



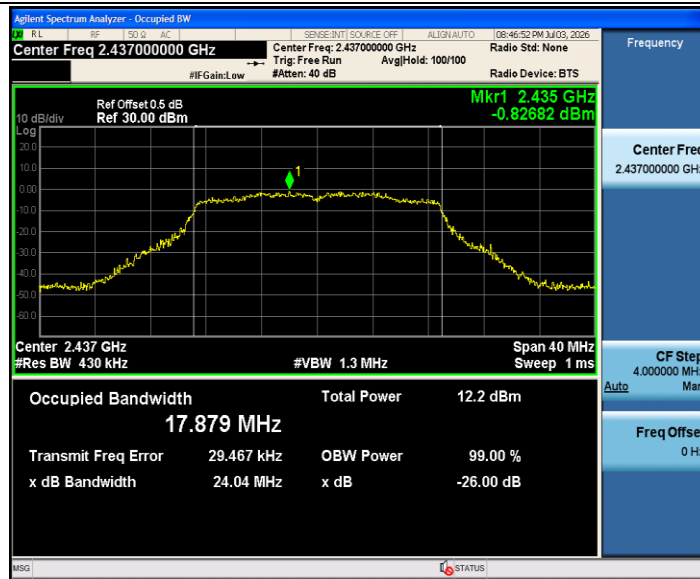
11G_Ant1_2462



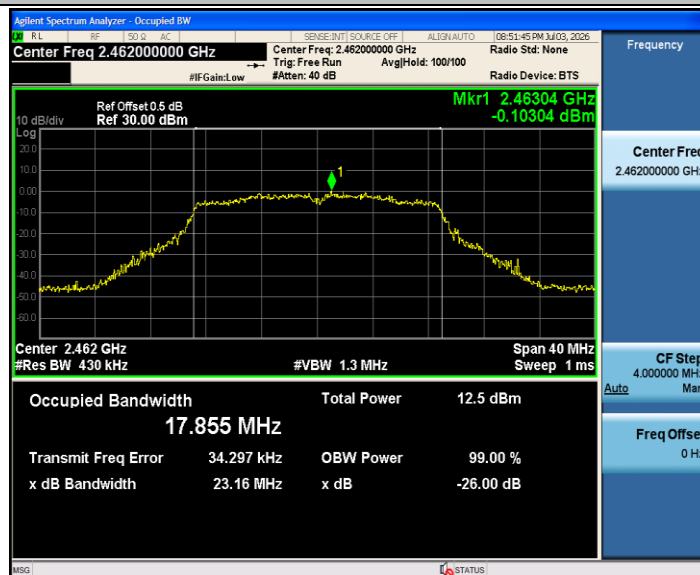
11N20SISO_Ant1_2412



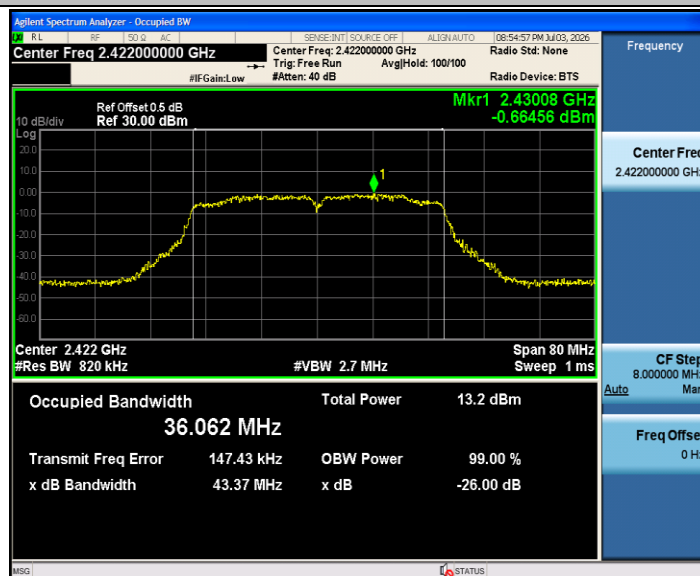
11N20SISO_Ant1_2437



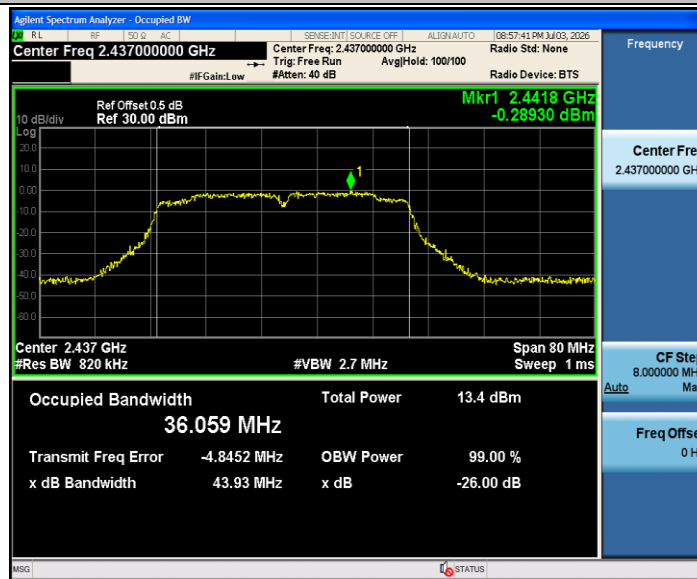
11N20SISO_Ant1_2462



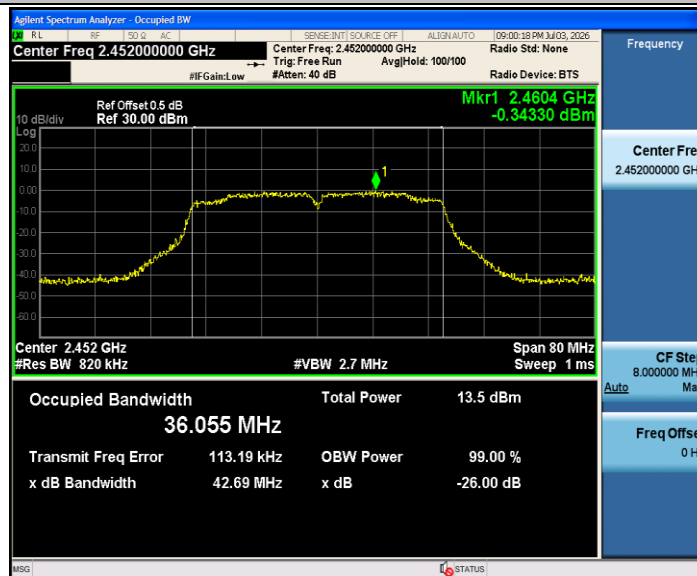
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.56	≤30.00	PASS
		2437	13.61	≤30.00	PASS
		2462	13.83	≤30.00	PASS
11G	Ant1	2412	13.14	≤30.00	PASS
		2437	13.22	≤30.00	PASS
		2462	13.48	≤30.00	PASS
11N20SISO	Ant1	2412	13.02	≤30.00	PASS
		2437	13.16	≤30.00	PASS
		2462	13.15	≤30.00	PASS
11N40SISO	Ant1	2422	13.36	≤30.00	PASS
		2437	13.55	≤30.00	PASS
		2452	13.55	≤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	-11.97	≤8.00	PASS
		2437	-11.75	≤8.00	PASS
		2462	-12.36	≤8.00	PASS
11G	Ant1	2412	-18.18	≤8.00	PASS
		2437	-17.98	≤8.00	PASS
		2462	-18.23	≤8.00	PASS
11N20SISO	Ant1	2412	-18.63	≤8.00	PASS
		2437	-19.22	≤8.00	PASS
		2462	-18.17	≤8.00	PASS
11N40SISO	Ant1	2422	-21.41	≤8.00	PASS
		2437	-21.09	≤8.00	PASS
		2452	-21.36	≤8.00	PASS

Test Graphs

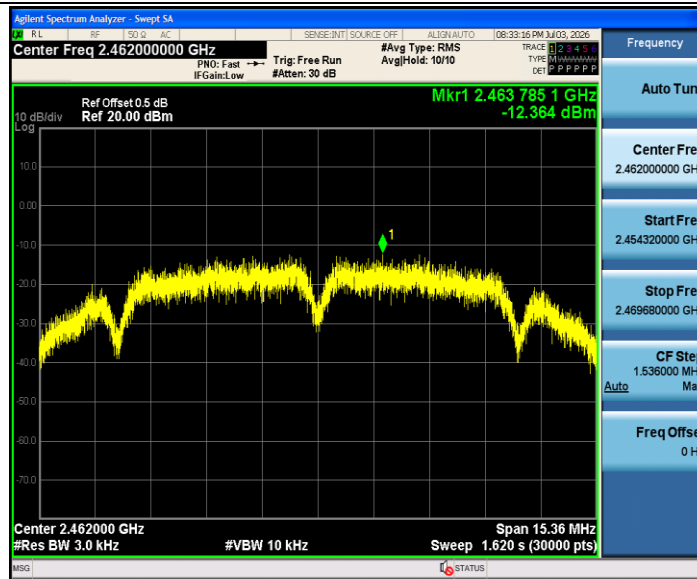
11B_Ant1_2412



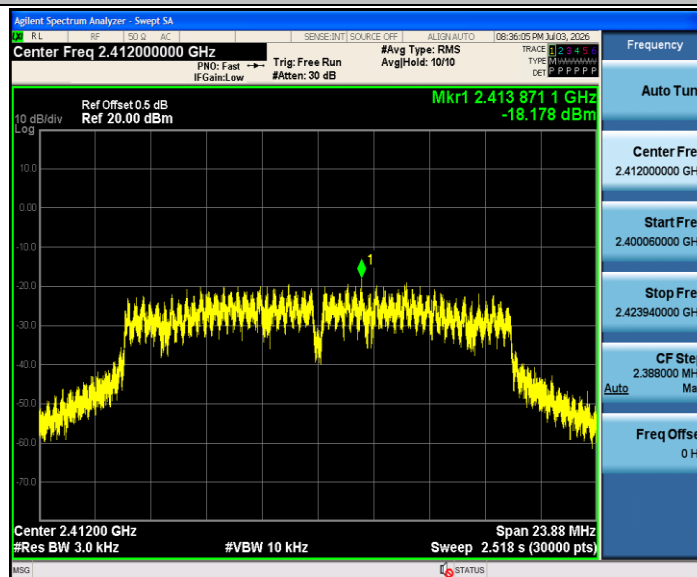
11B_Ant1_2437



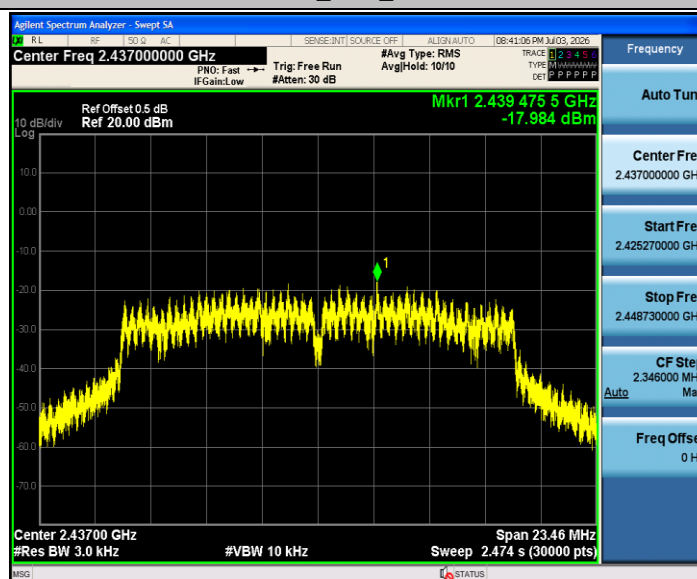
11B_Ant1_2462



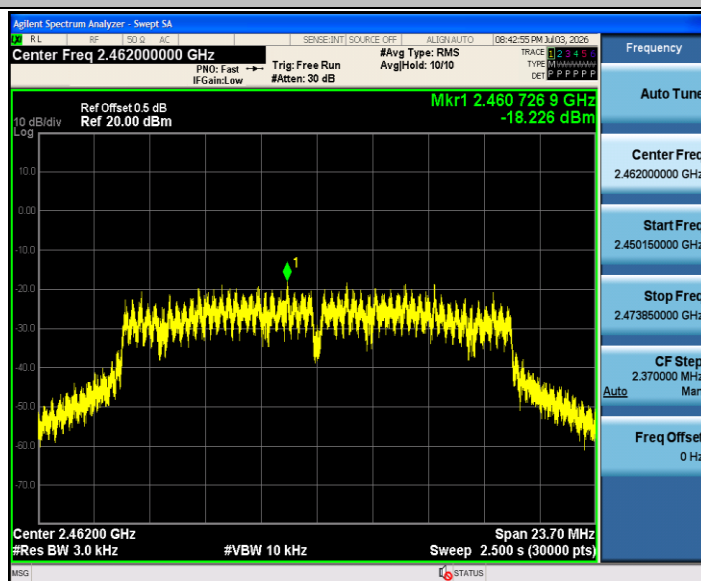
11G_Ant1_2412



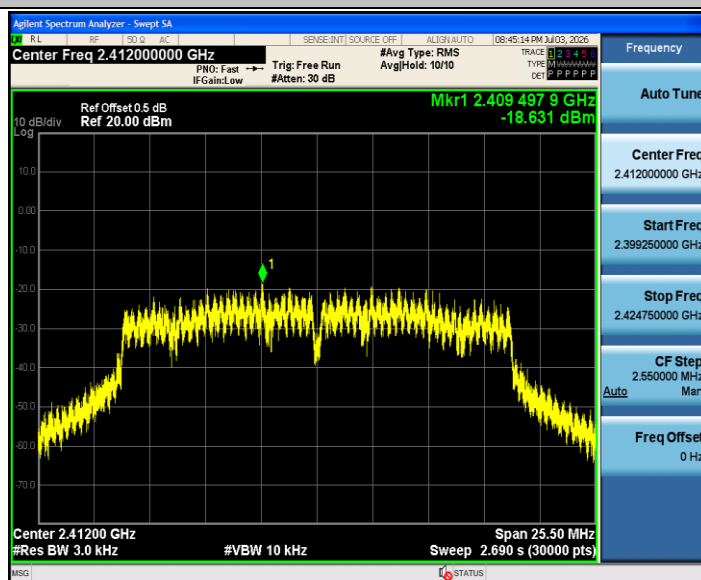
11G_Ant1_2437



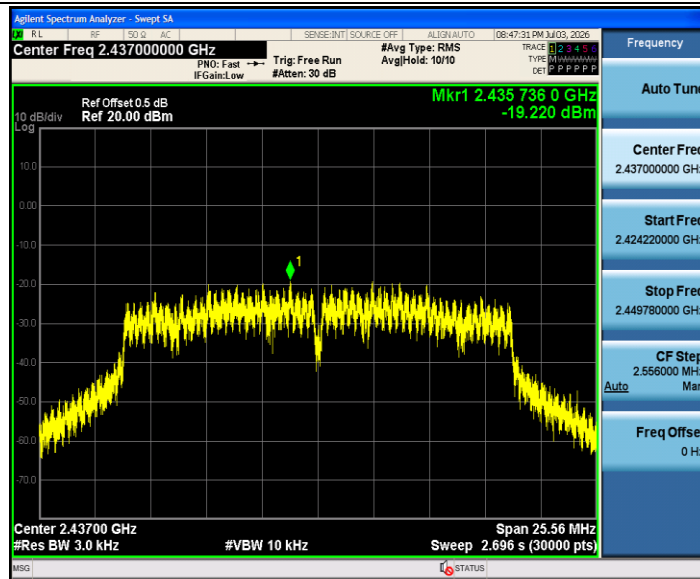
11G_Ant1_2462



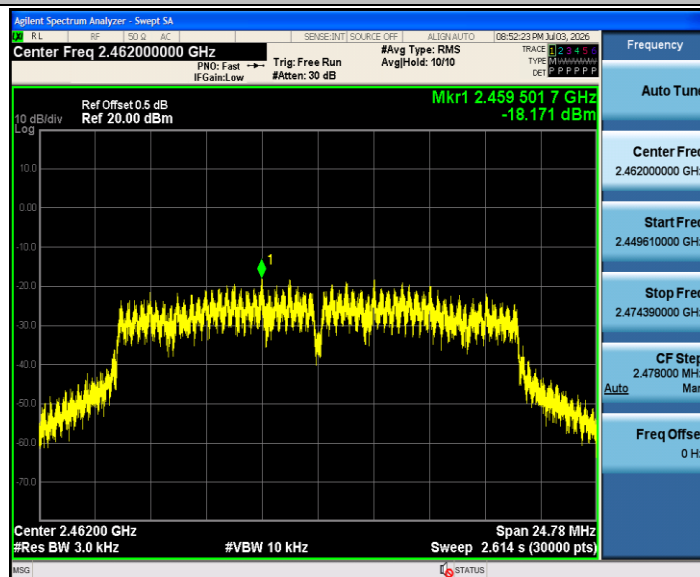
11N20SISO_Ant1_2412



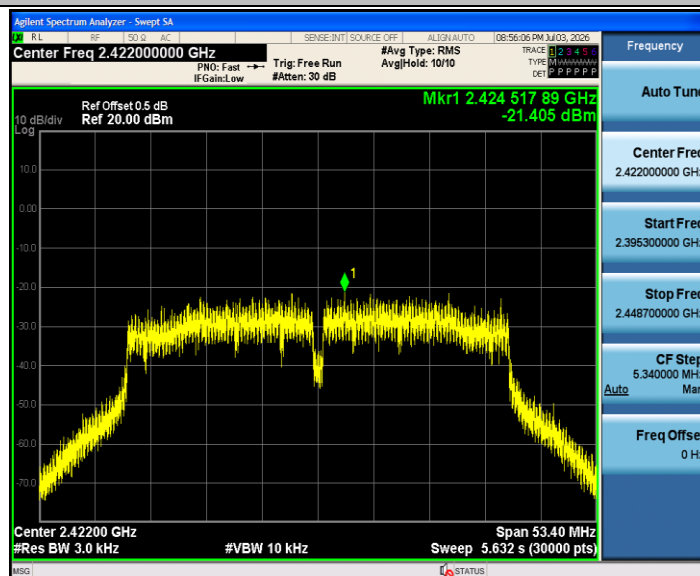
11N20SISO_Ant1_2437



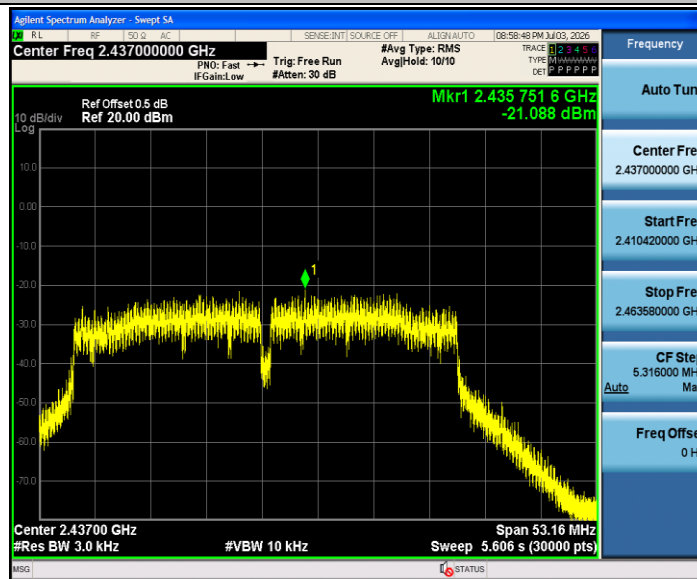
11N20SISO_Ant1_2462



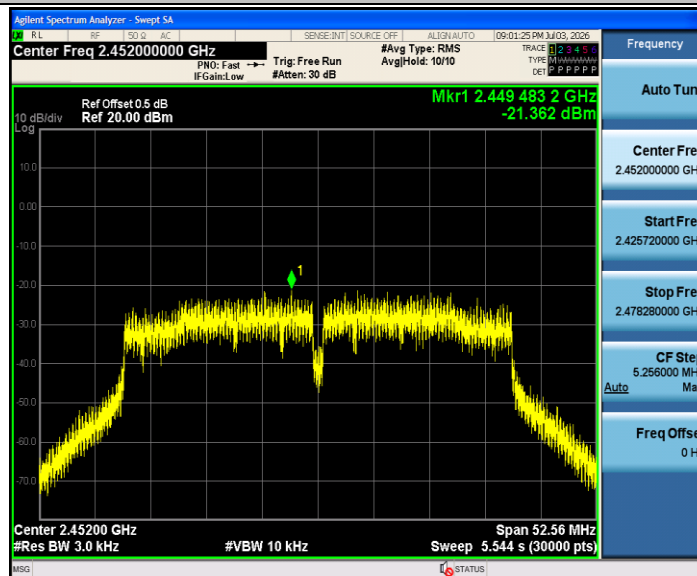
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



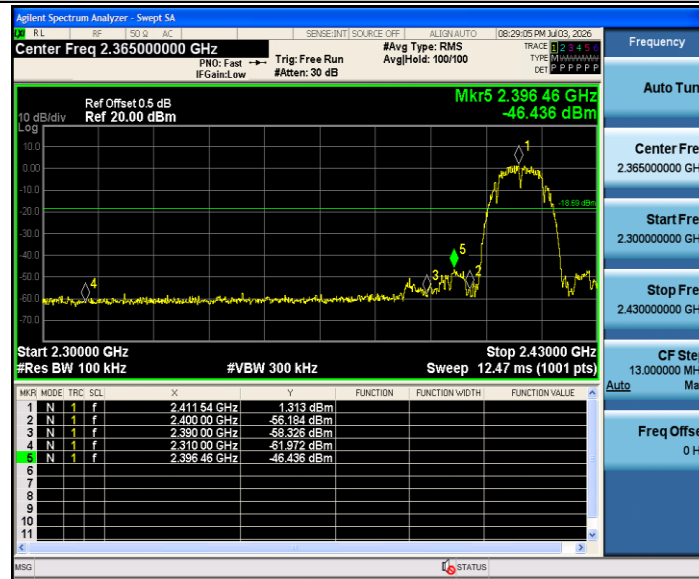
Appendix E: Band edge measurements

Test Result

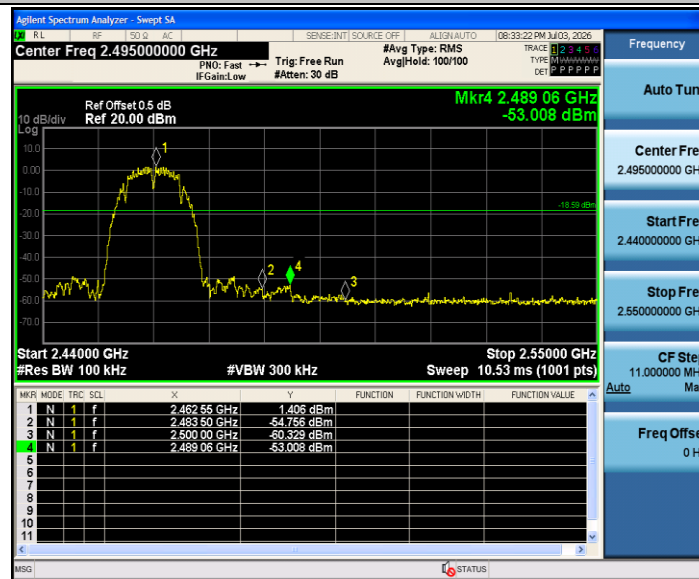
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.31	-46.44	≤-18.69	PASS
		High	2462	1.41	-53.01	≤-18.59	PASS
11G	Ant1	Low	2412	-3.32	-35.34	≤-23.32	PASS
		High	2462	-3.09	-57.7	≤-23.09	PASS
11N20SISO	Ant1	Low	2412	-3.67	-36.01	≤-23.67	PASS
		High	2462	-2.98	-57.47	≤-22.98	PASS
11N40SISO	Ant1	Low	2422	-6.44	-35.2	≤-26.44	PASS
		High	2452	-6.19	-57.81	≤-26.19	PASS

Test Graphs

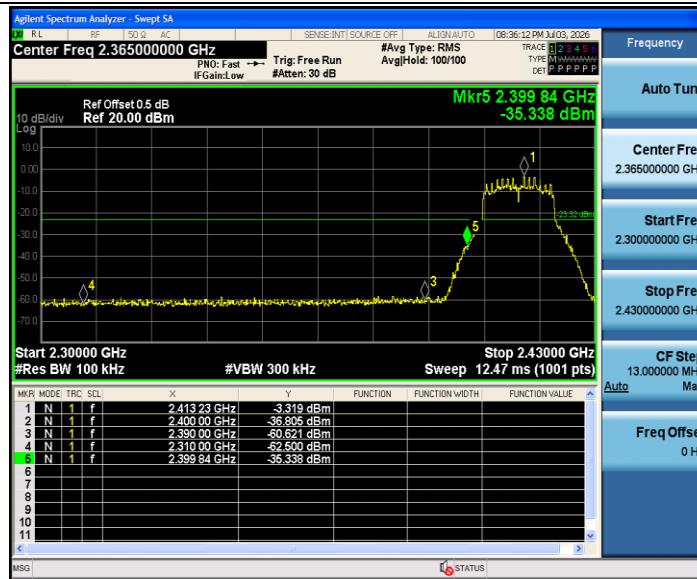
11B_Ant1_Low_2412



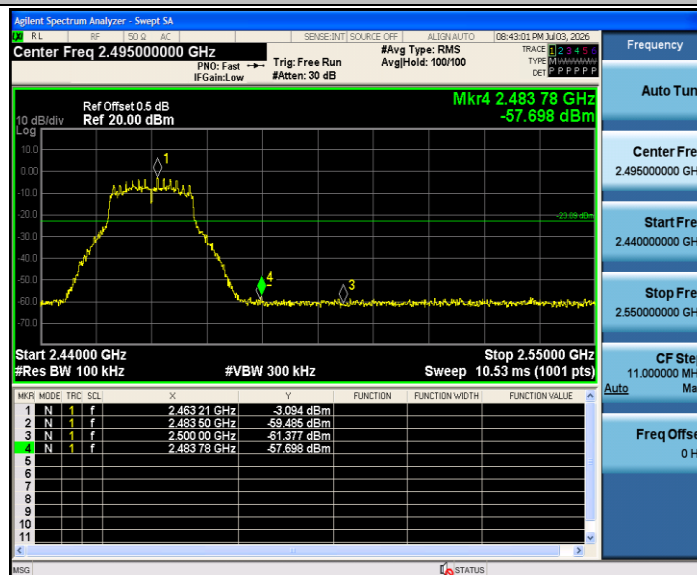
11B_Ant1_High_2462



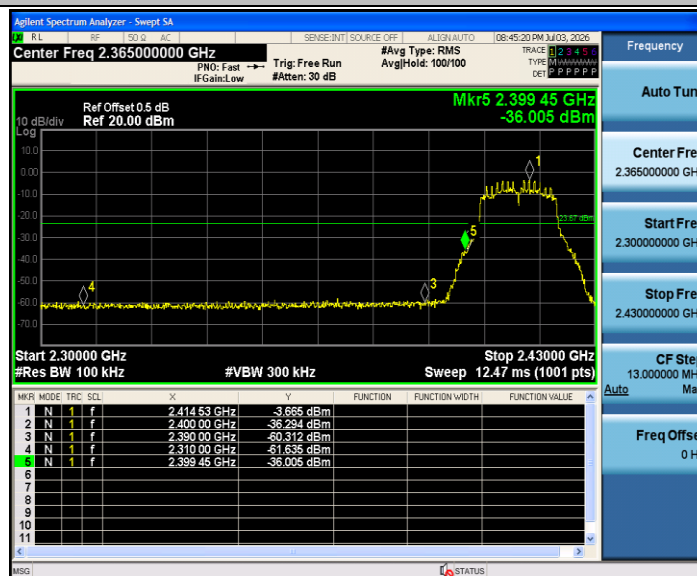
11G_Ant1_Low_2412



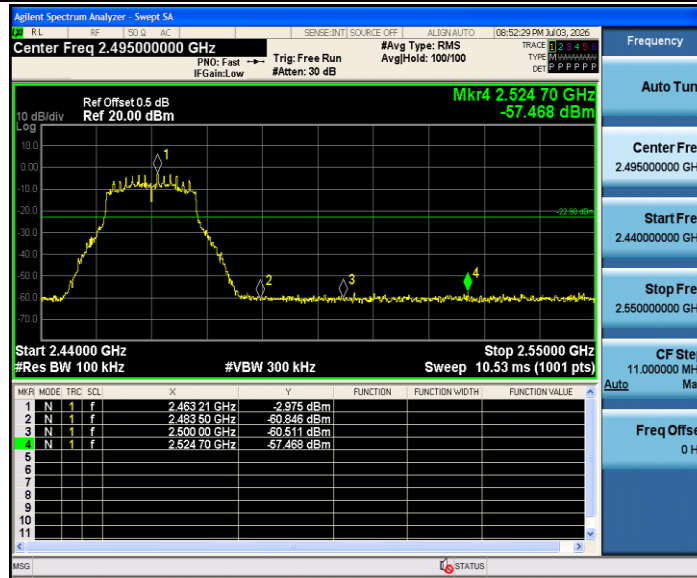
11G_Ant1_High_2462



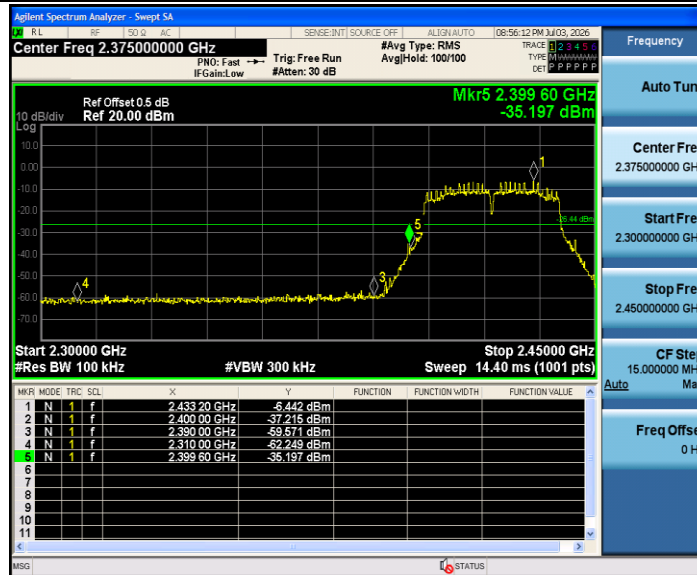
11N20SISO_Ant1_Low_2412



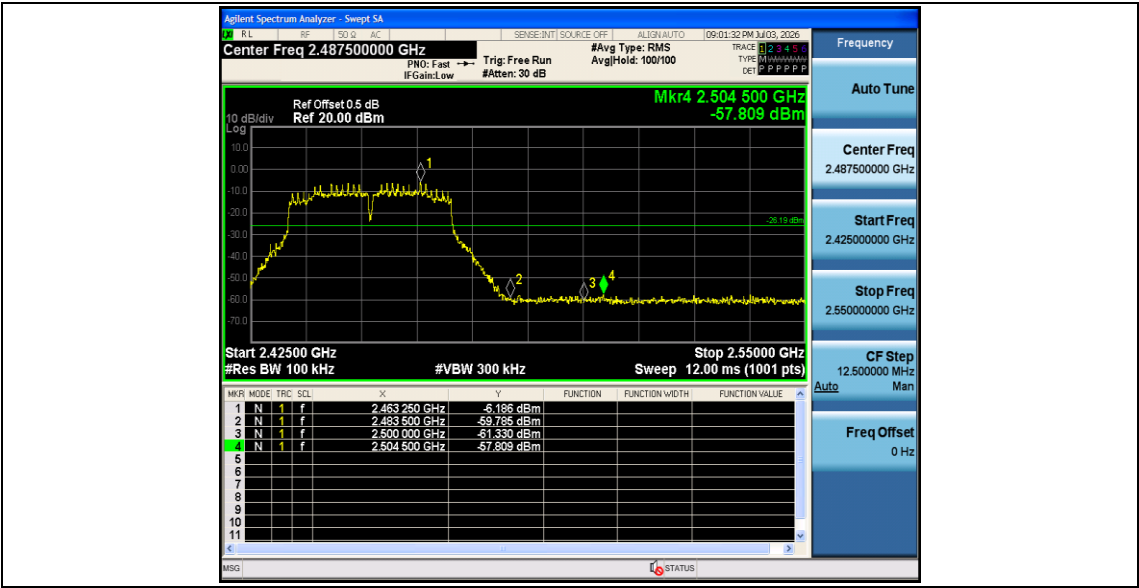
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

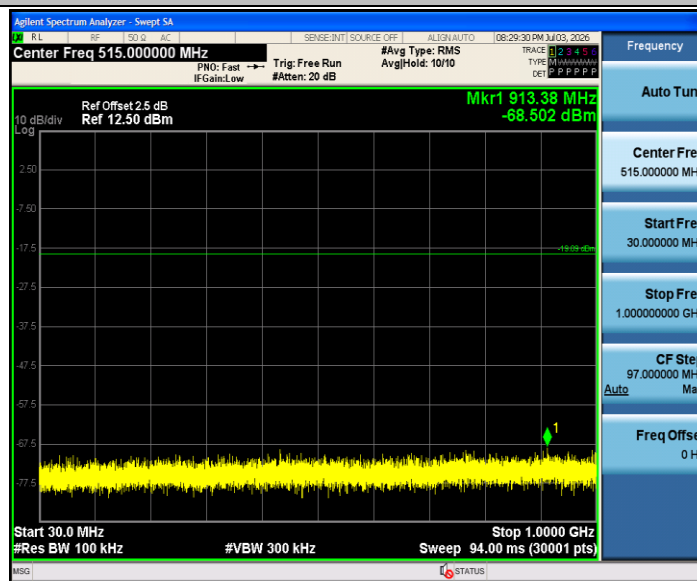
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.91	0.91	---	PASS
			30~1000	0.91	-68.5	≤-19.09	PASS
			1000~26500	0.91	-45.03	≤-19.09	PASS
		2437	Reference	0.68	0.68	---	PASS
			30~1000	0.68	-68.28	≤-19.32	PASS
			1000~26500	0.68	-47.04	≤-19.32	PASS
		2462	Reference	1.40	1.40	---	PASS
			30~1000	1.40	-69.02	≤-18.6	PASS
			1000~26500	1.40	-46.38	≤-18.6	PASS
11G	Ant1	2412	Reference	-4.46	-4.46	---	PASS
			30~1000	-4.46	-68.28	≤-24.46	PASS
			1000~26500	-4.46	-46.74	≤-24.46	PASS
		2437	Reference	-4.07	-4.07	---	PASS
			30~1000	-4.07	-68.97	≤-24.07	PASS
			1000~26500	-4.07	-46.41	≤-24.07	PASS
		2462	Reference	-3.78	-3.78	---	PASS
			30~1000	-3.78	-69.32	≤-23.78	PASS
			1000~26500	-3.78	-45.4	≤-23.78	PASS
11N20SISO	Ant1	2412	Reference	-3.78	-3.78	---	PASS
			30~1000	-3.78	-68.86	≤-23.78	PASS
			1000~26500	-3.78	-46.47	≤-23.78	PASS
		2437	Reference	-3.91	-3.91	---	PASS
			30~1000	-3.91	-59.51	≤-23.91	PASS
			1000~26500	-3.91	-46.61	≤-23.91	PASS
		2462	Reference	-3.29	-3.29	---	PASS
			30~1000	-3.29	-68.84	≤-23.29	PASS
			1000~26500	-3.29	-46.32	≤-23.29	PASS
11N40SISO	Ant1	2422	Reference	-6.44	-6.44	---	PASS
			30~1000	-6.44	-68.33	≤-26.44	PASS
			1000~26500	-6.44	-46.64	≤-26.44	PASS
		2437	Reference	-6.87	-6.87	---	PASS
			30~1000	-6.87	-68.63	≤-26.87	PASS
			1000~26500	-6.87	-47	≤-26.87	PASS
		2452	Reference	-6.98	-6.98	---	PASS
			30~1000	-6.98	-68.37	≤-26.98	PASS
			1000~26500	-6.98	-46.37	≤-26.98	PASS

Test Graphs

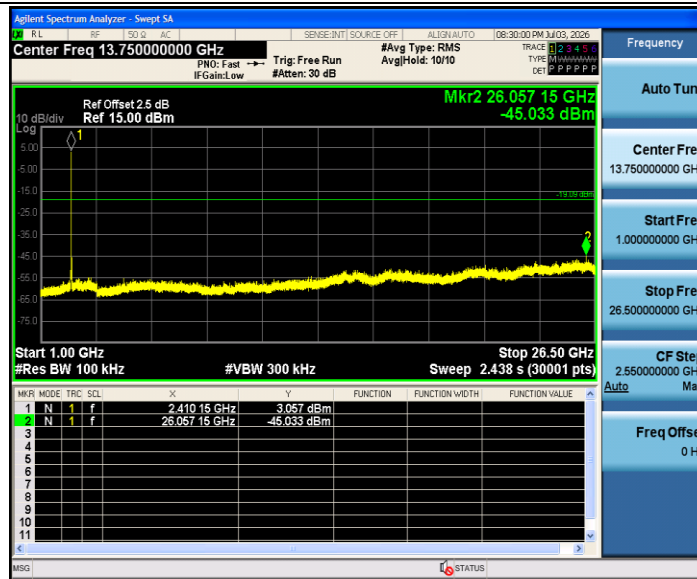
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



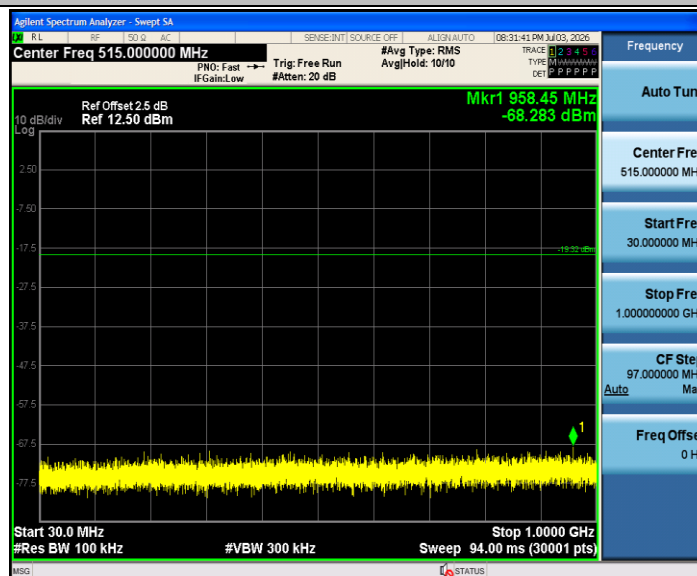
11B_Ant1_2412_1000~26500



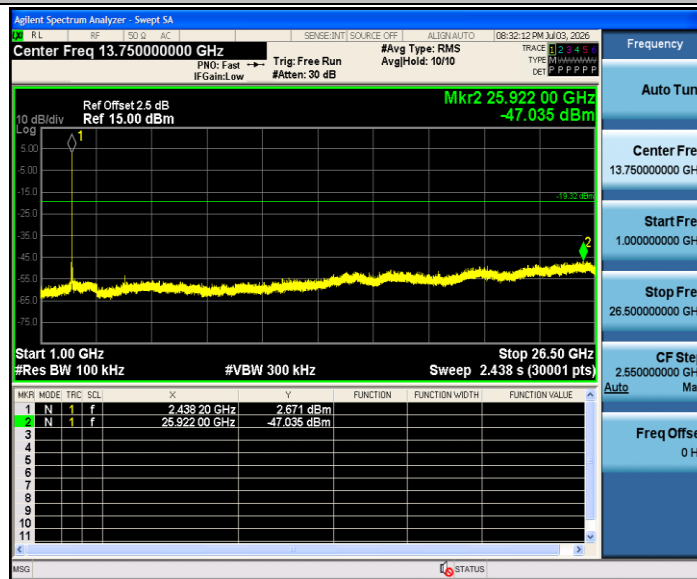
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



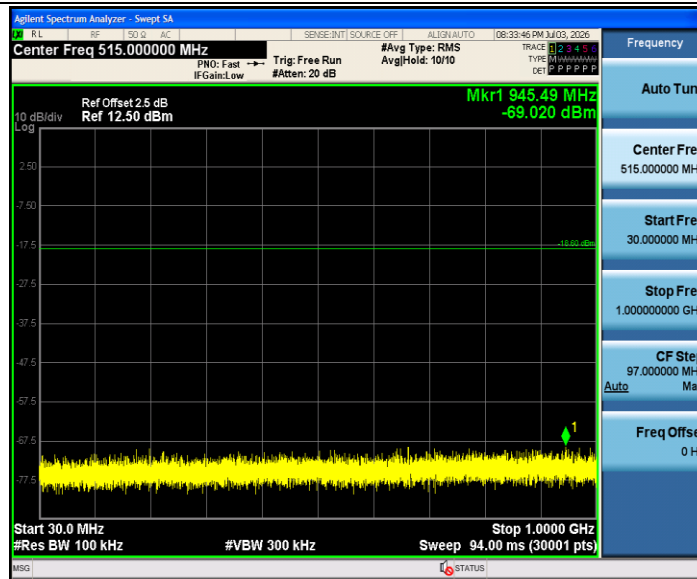
11B_Ant1_2437_1000~26500



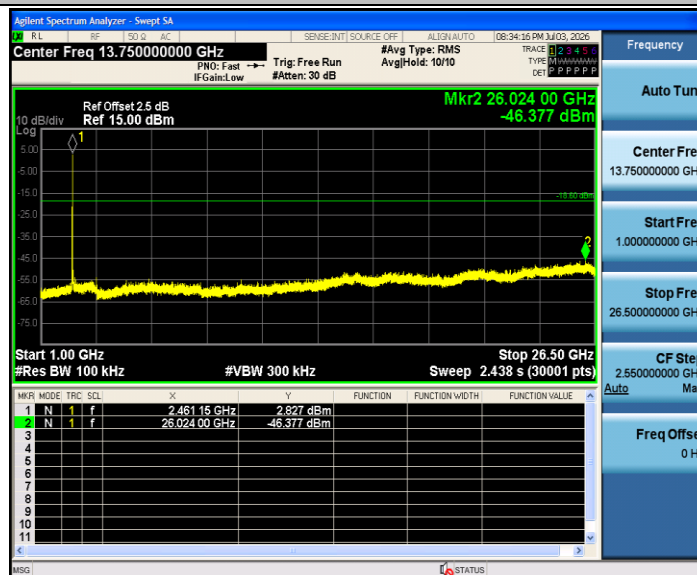
11B_Ant1_2462_0~Reference



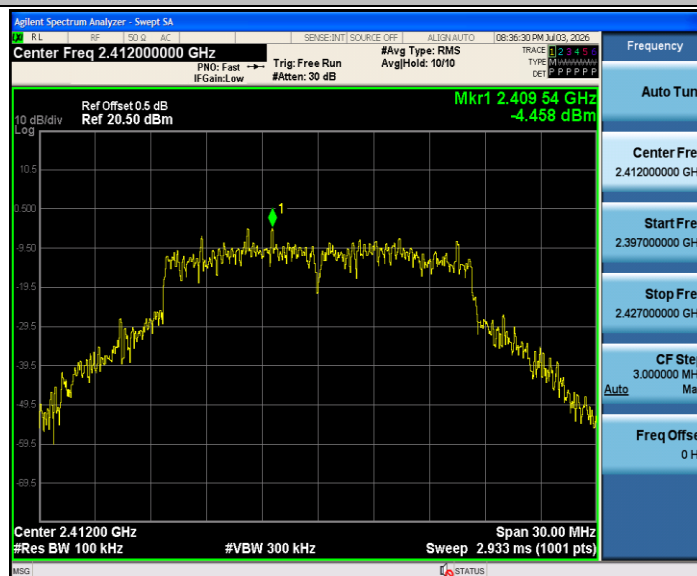
11B_Ant1_2462_30~1000



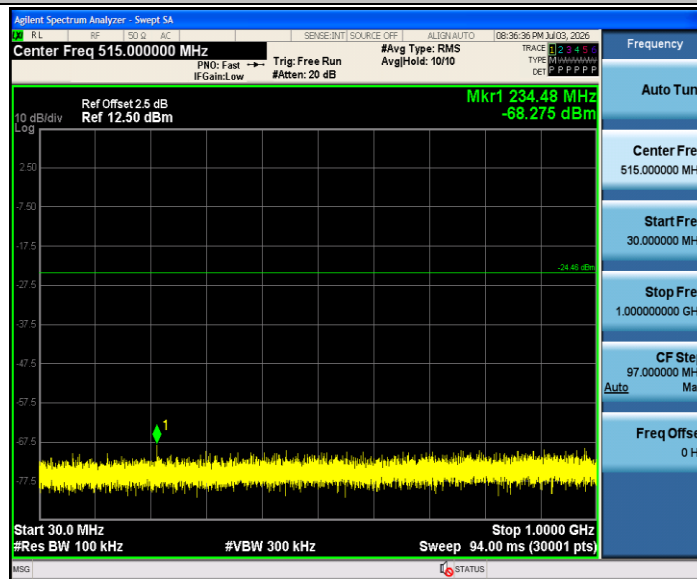
11B_Ant1_2462_1000~26500



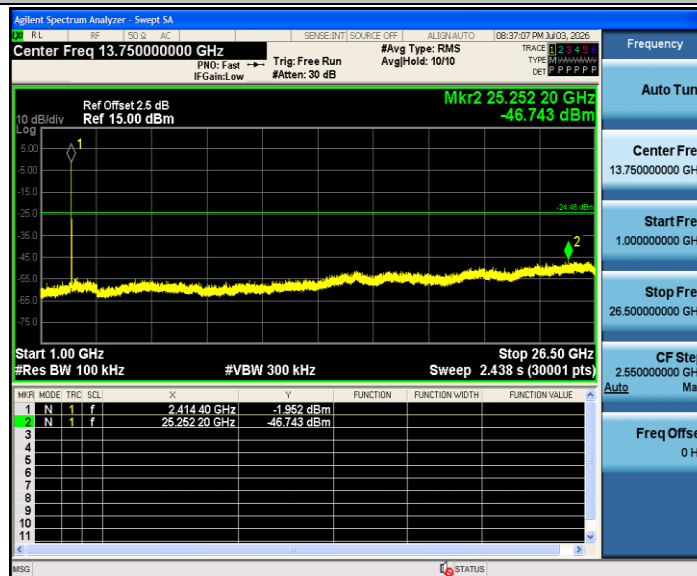
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



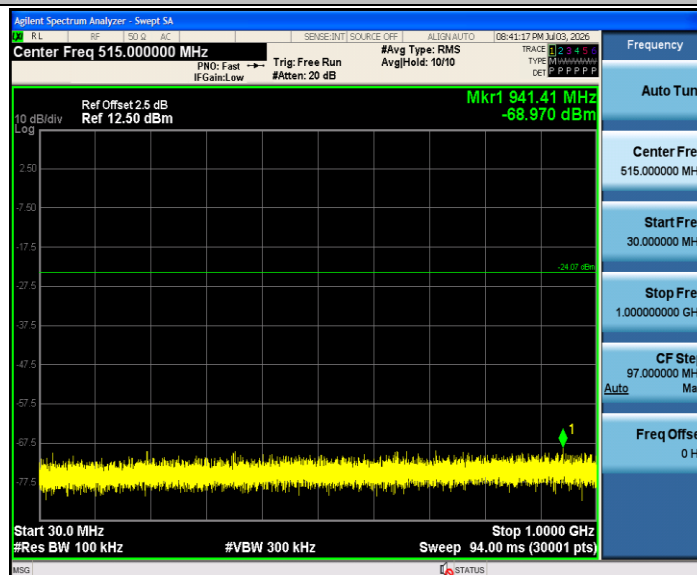
11G_Ant1_2412_1000~26500



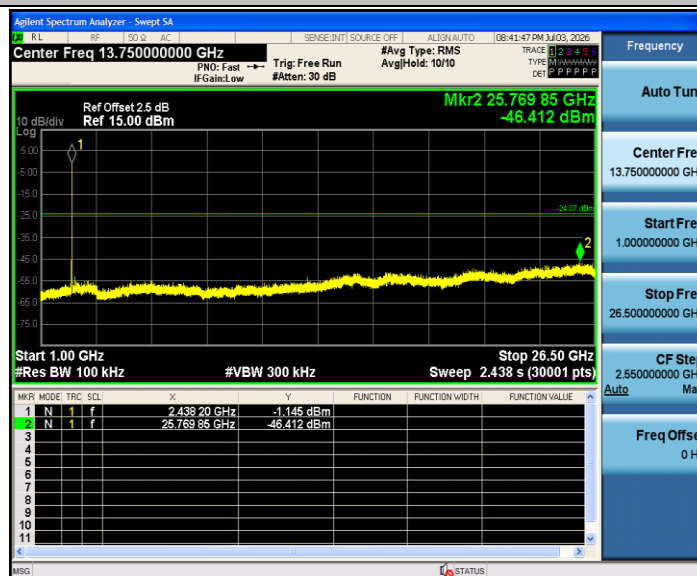
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



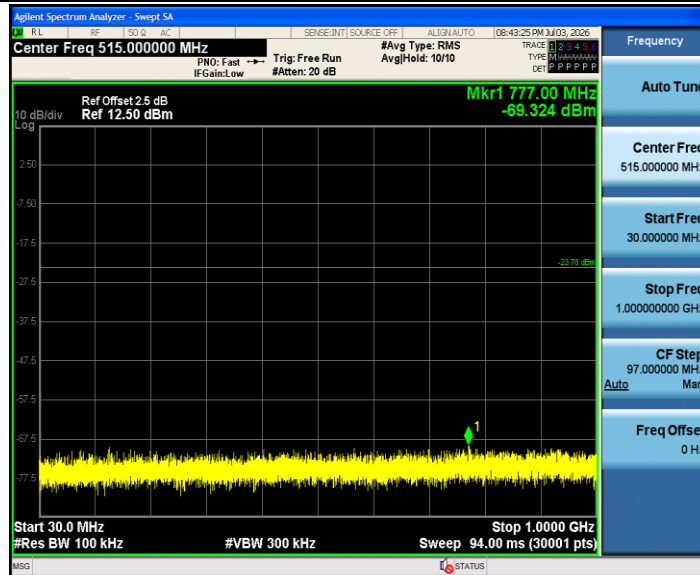
11G_Ant1_2437_1000~26500



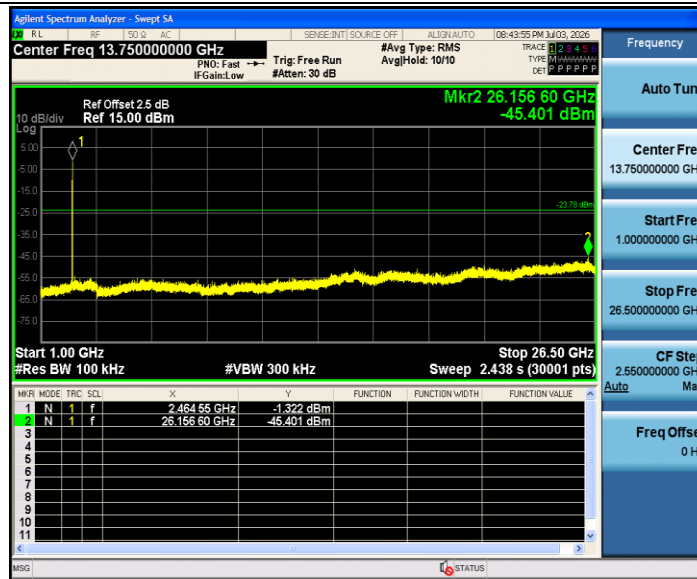
11G_Ant1_2462_0~Reference



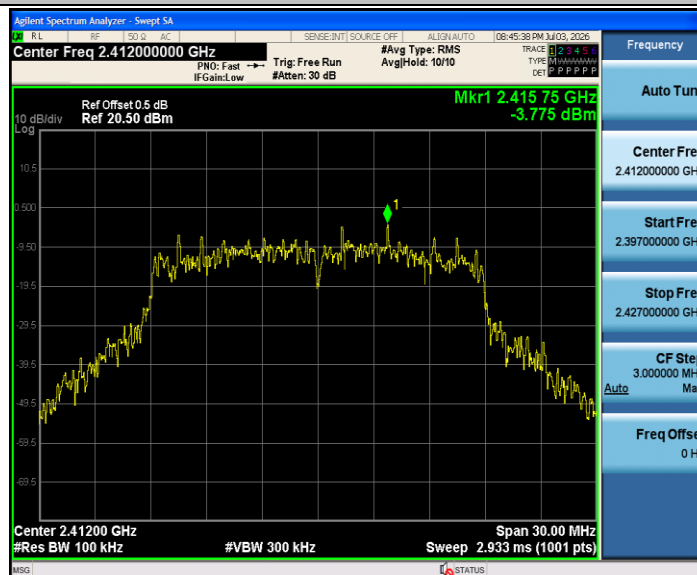
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

