

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BGCX-V10X10A7

Company : Shenzhen Yufengzhixing Electronics Tech Co Ltd

EUT : Car Navigation Multimedia

Model Number : A7G2D7PKL

Report No. : CTA25112601802

Reviewed By : Eric Wang

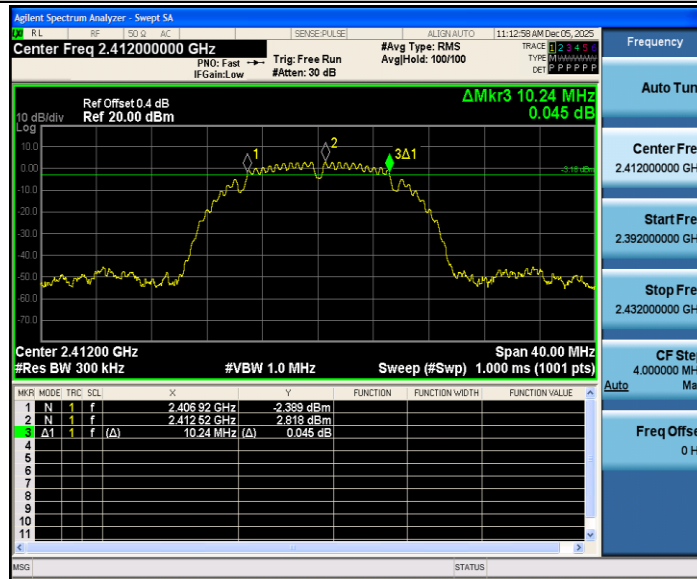
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.840	2404.080	2419.920	0.5	PASS
		2437	15.440	2429.440	2444.880	0.5	PASS
		2462	16.120	2453.960	2470.080	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.440	2420.720	0.5	PASS
		2437	17.480	2428.280	2445.760	0.5	PASS
		2462	17.120	2453.440	2470.560	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.240	2439.920	0.5	PASS
		2437	35.360	2419.480	2454.840	0.5	PASS
		2452	35.840	2434.240	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



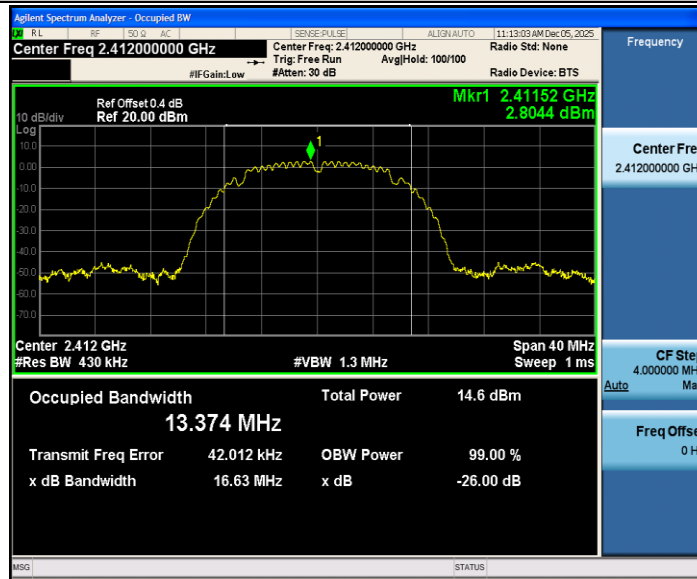
Appendix B: Occupied Channel Bandwidth

Test Result

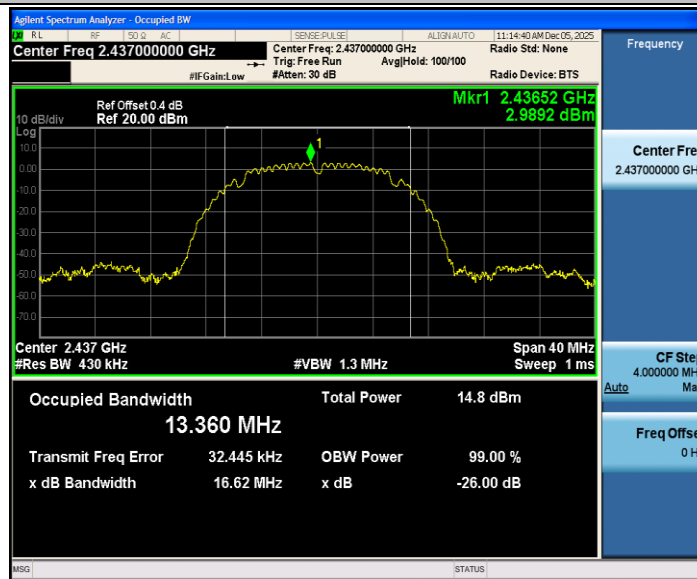
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.374	2405.3550	2418.7290	---	---
		2437	13.360	2430.3525	2443.7125	---	---
		2462	13.386	2455.3202	2468.7062	---	---
11G	Ant1	2412	16.751	2403.6998	2420.4508	---	---
		2437	16.760	2428.6757	2445.4357	---	---
		2462	16.729	2453.6686	2470.3976	---	---
11N20SISO	Ant1	2412	17.795	2403.1466	2420.9416	---	---
		2437	17.806	2428.1501	2445.9561	---	---
		2462	17.811	2453.0935	2470.9045	---	---
11N40SISO	Ant1	2422	35.978	2404.0871	2440.0651	---	---
		2437	35.964	2419.1393	2455.1033	---	---
		2452	36.002	2434.1404	2470.1424	---	---

Test Graphs

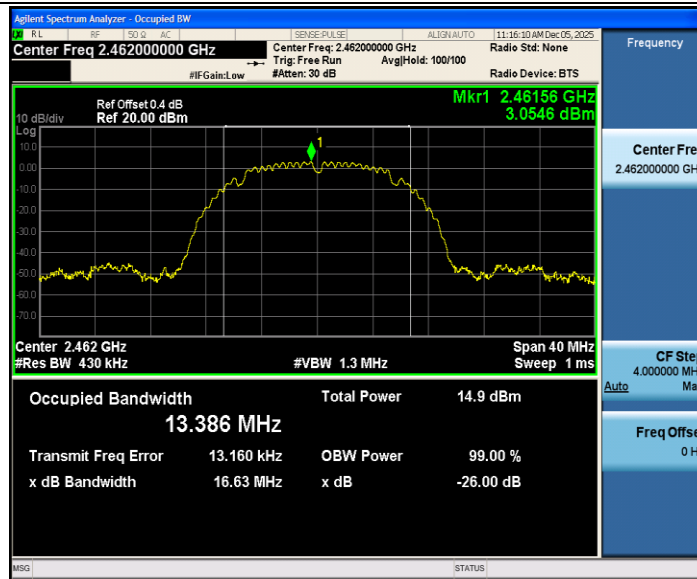
11B_Ant1_2412



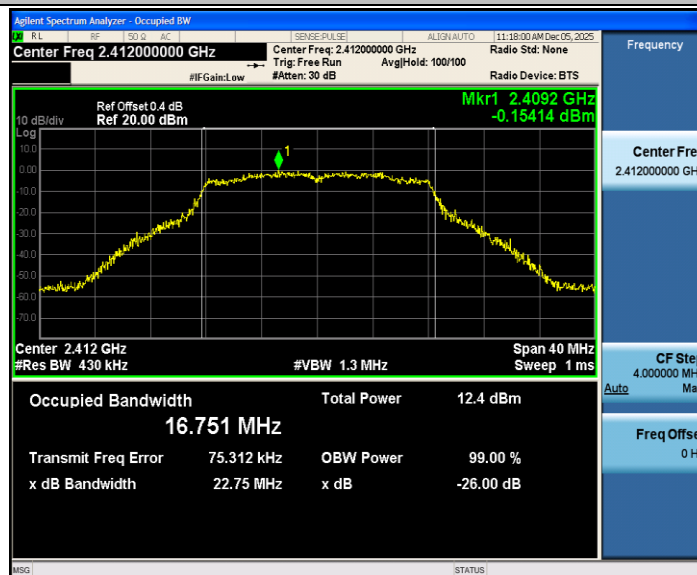
11B_Ant1_2437



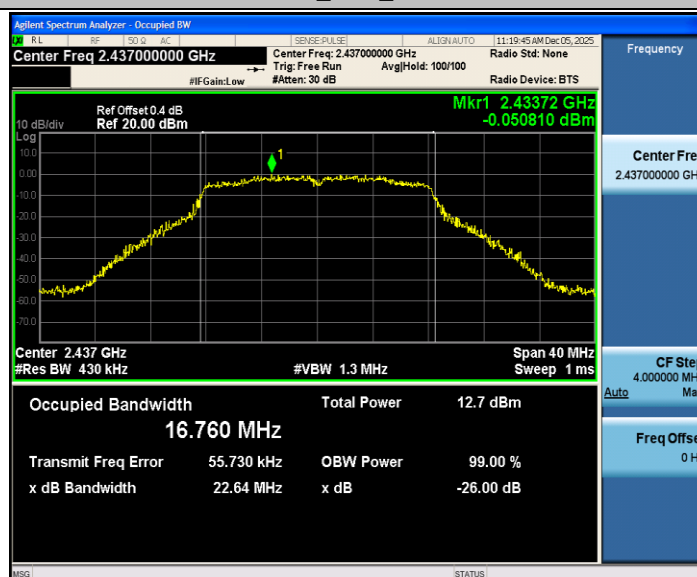
11B_Ant1_2462



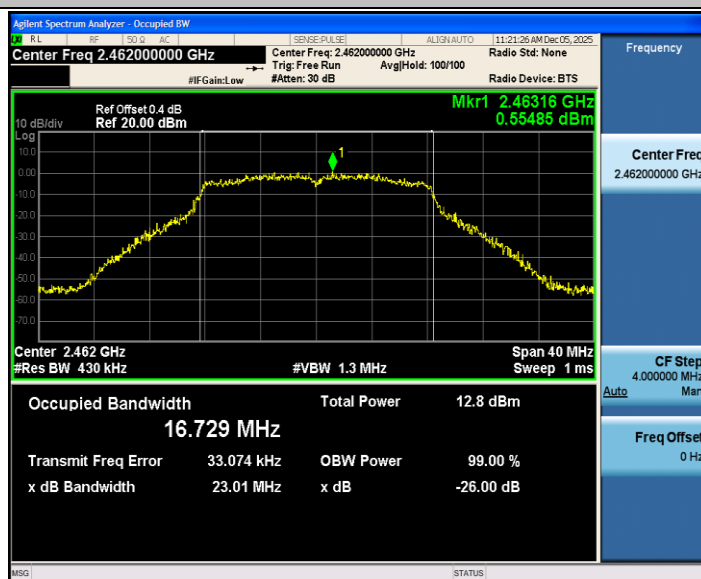
11G_Ant1_2412



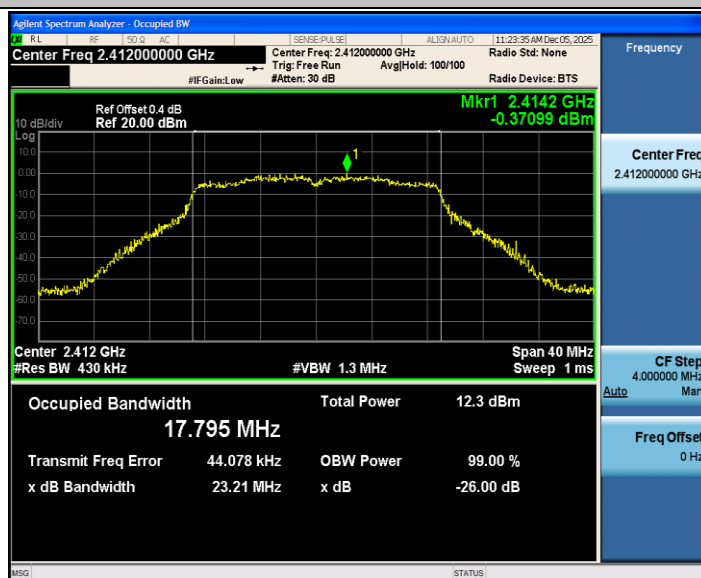
11G_Ant1_2437



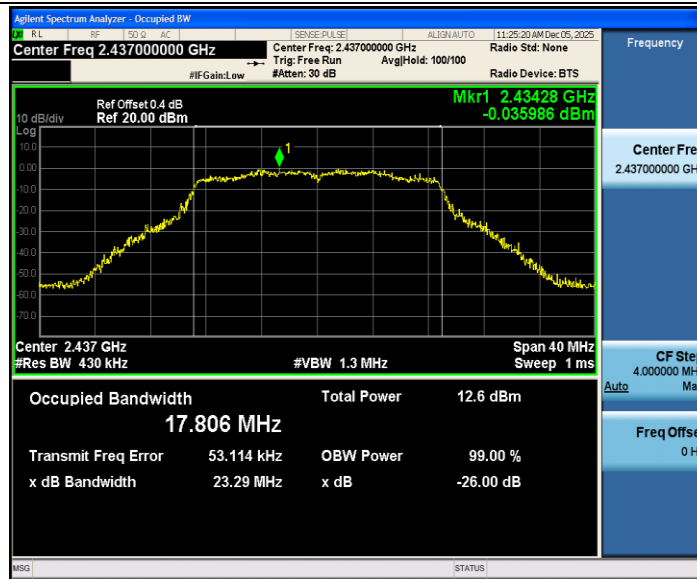
11G_Ant1_2462



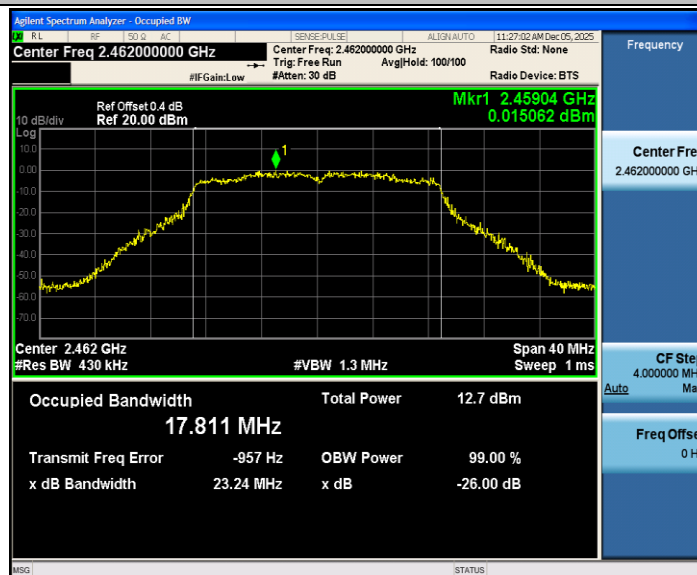
11N20SISO_Ant1_2412



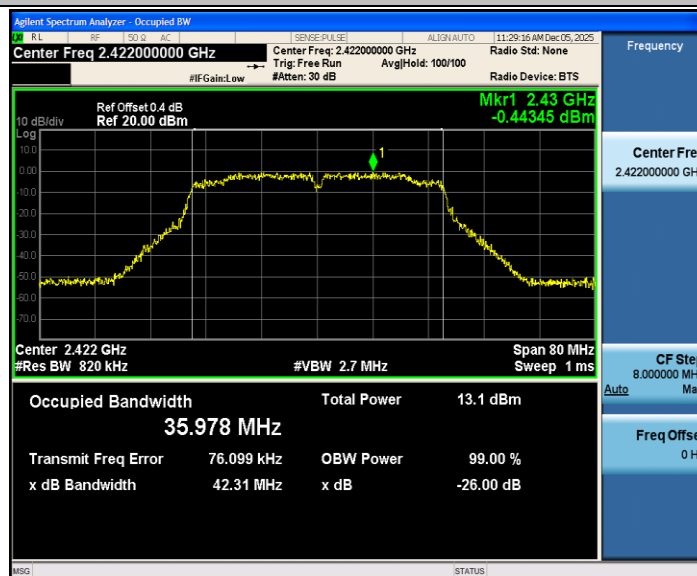
11N20SISO_Ant1_2437



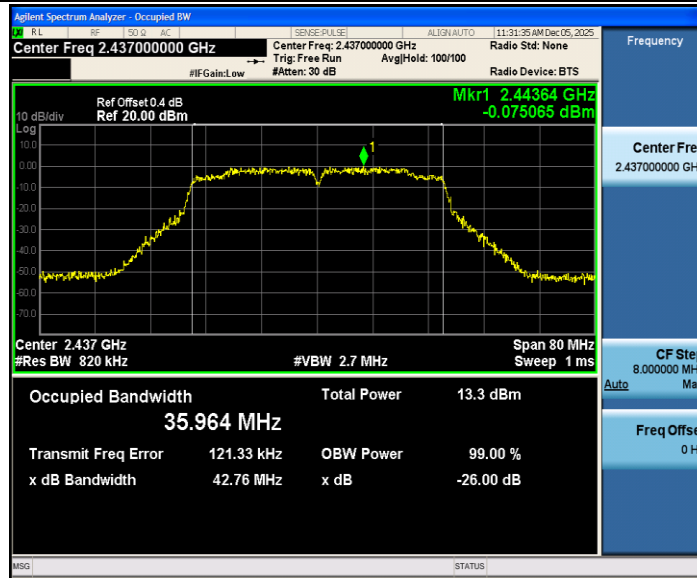
11N20SISO_Ant1_2462



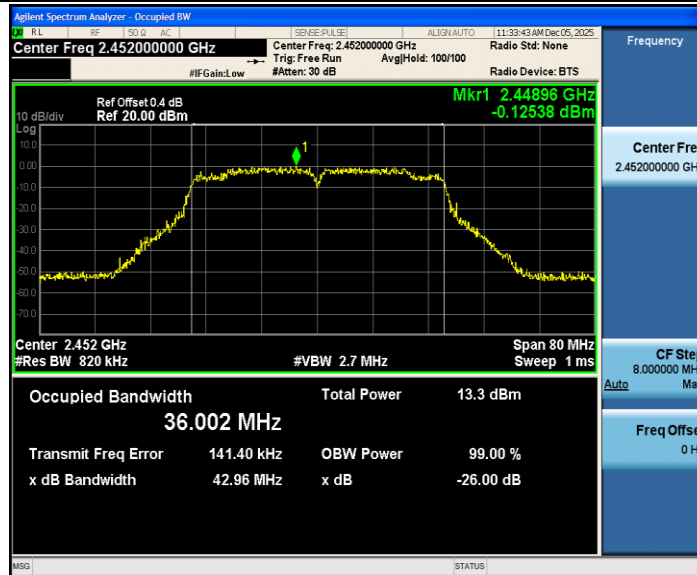
11N40SISO_Ant1_2422



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	14.41	≤30.00	PASS
		2437	14.59	≤30.00	PASS
		2462	14.73	≤30.00	PASS
11G	Ant1	2412	13.08	≤30.00	PASS
		2437	13.11	≤30.00	PASS
		2462	13.50	≤30.00	PASS
11N20SISO	Ant1	2412	12.98	≤30.00	PASS
		2437	13.20	≤30.00	PASS
		2462	13.42	≤30.00	PASS
11N40SISO	Ant1	2422	13.32	≤30.00	PASS
		2437	13.64	≤30.00	PASS
		2452	13.49	≤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	-10.71	≤8.00	PASS
		2437	-11.45	≤8.00	PASS
		2462	-11.15	≤8.00	PASS
11G	Ant1	2412	-17.44	≤8.00	PASS
		2437	-17.81	≤8.00	PASS
		2462	-17.88	≤8.00	PASS
11N20SISO	Ant1	2412	-17.01	≤8.00	PASS
		2437	-17.27	≤8.00	PASS
		2462	-17.28	≤8.00	PASS
11N40SISO	Ant1	2422	-20.71	≤8.00	PASS
		2437	-19.69	≤8.00	PASS
		2452	-20.20	≤8.00	PASS

Test Graphs

11B_Ant1_2412



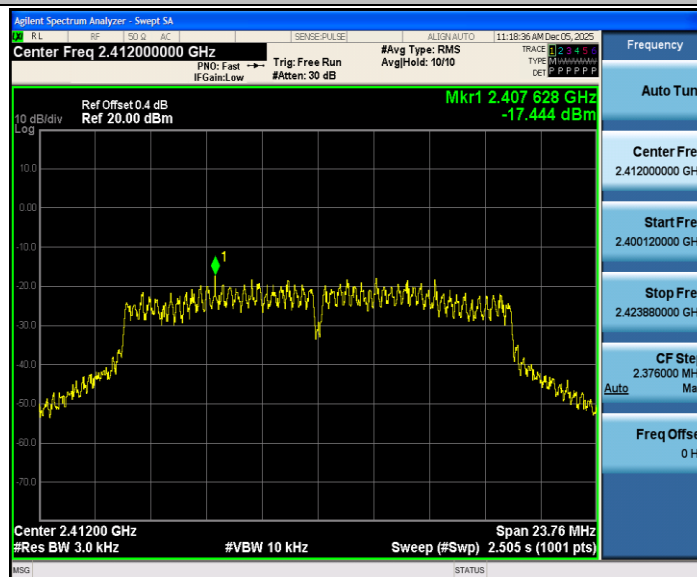
11B_Ant1_2437



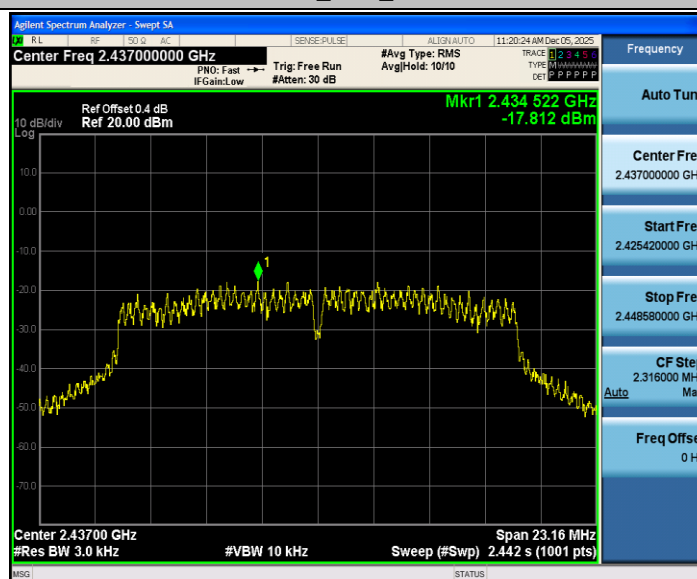
11B_Ant1_2462



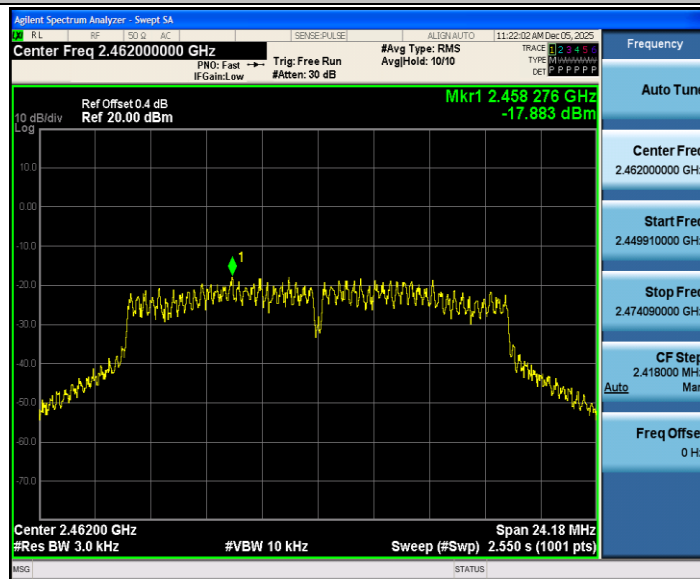
11G_Ant1_2412



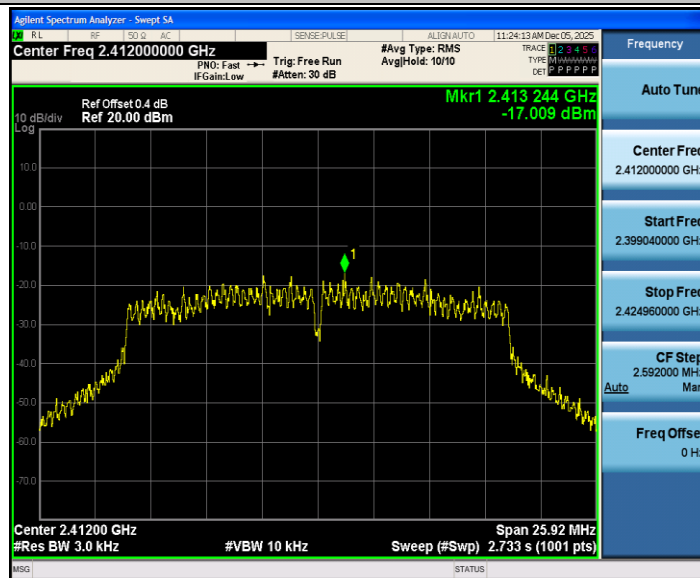
11G_Ant1_2437



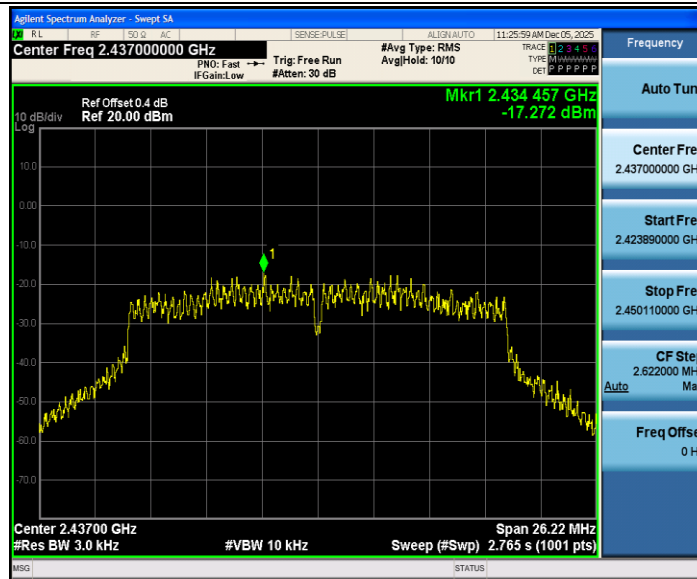
11G_Ant1_2462



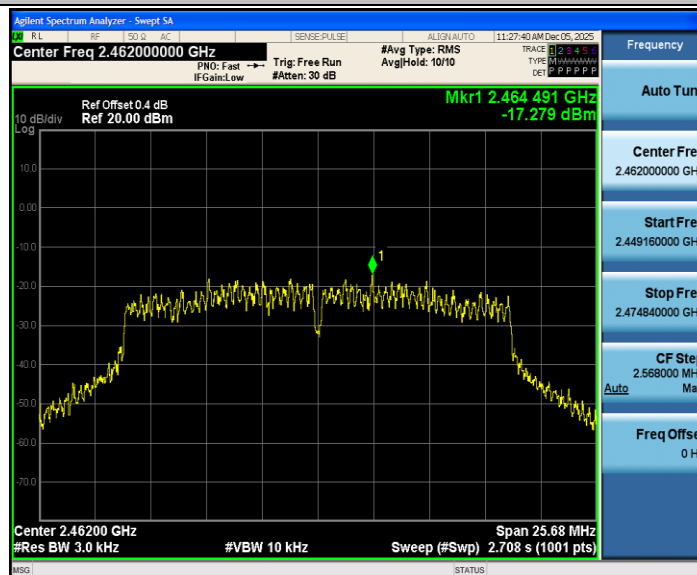
11N20SISO_Ant1_2412



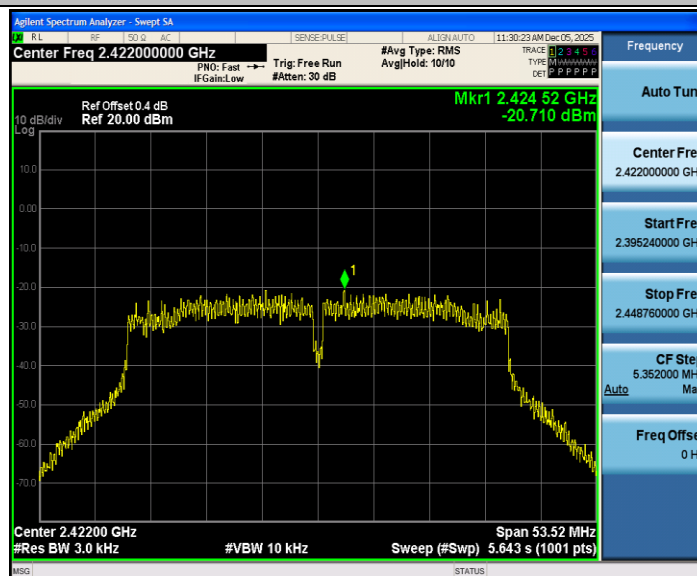
11N20SISO_Ant1_2437



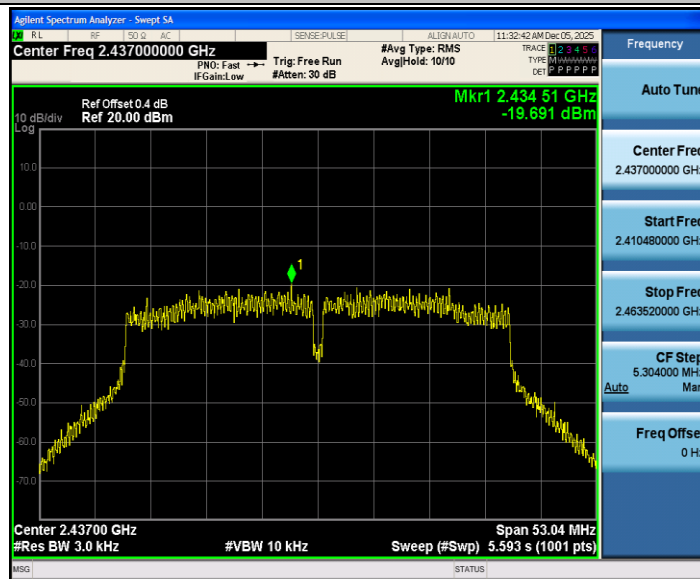
11N20SISO_Ant1_2462



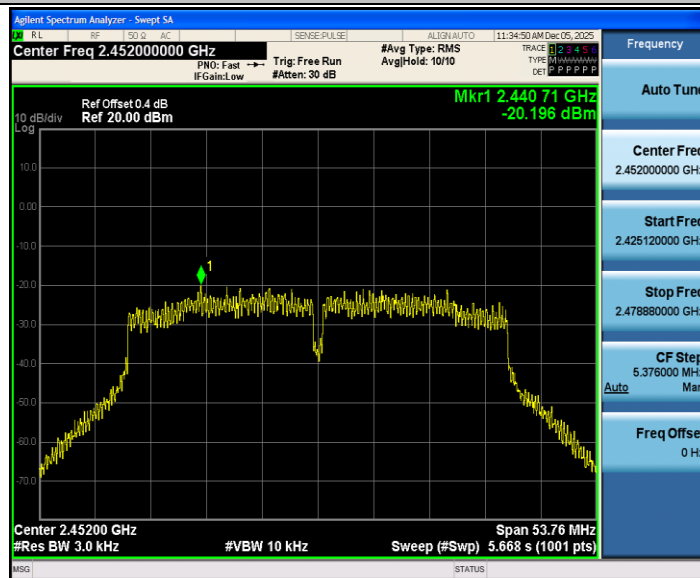
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



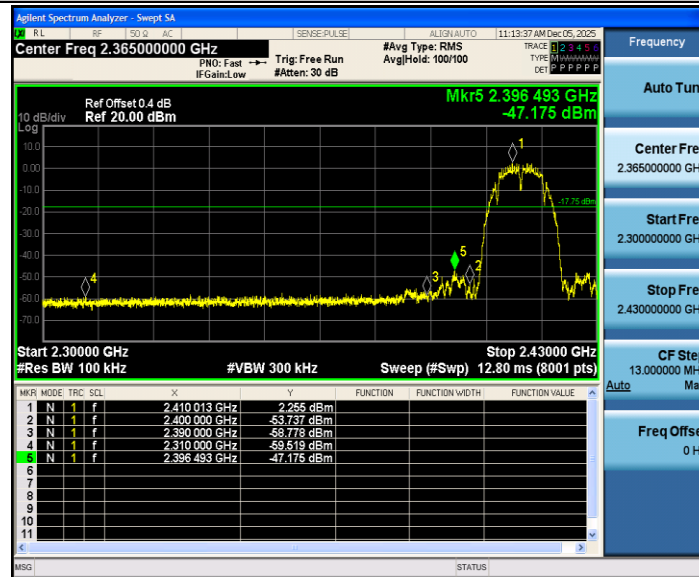
Appendix E: Band edge measurements

Test Result

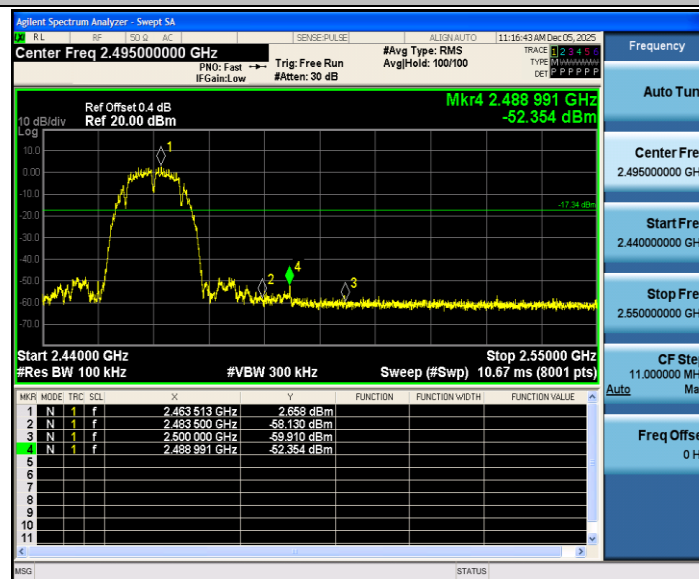
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.26	-47.18	≤-17.75	PASS
		High	2462	2.66	-52.35	≤-17.34	PASS
11G	Ant1	Low	2412	-2.75	-34.42	≤-22.75	PASS
		High	2462	-2.22	-57.42	≤-22.22	PASS
11N20SISO	Ant1	Low	2412	-2.80	-34.58	≤-22.8	PASS
		High	2462	-2.17	-56.96	≤-22.17	PASS
11N40SISO	Ant1	Low	2422	-5.93	-33.85	≤-25.93	PASS
		High	2452	-5.57	-56.85	≤-25.57	PASS

Test Graphs

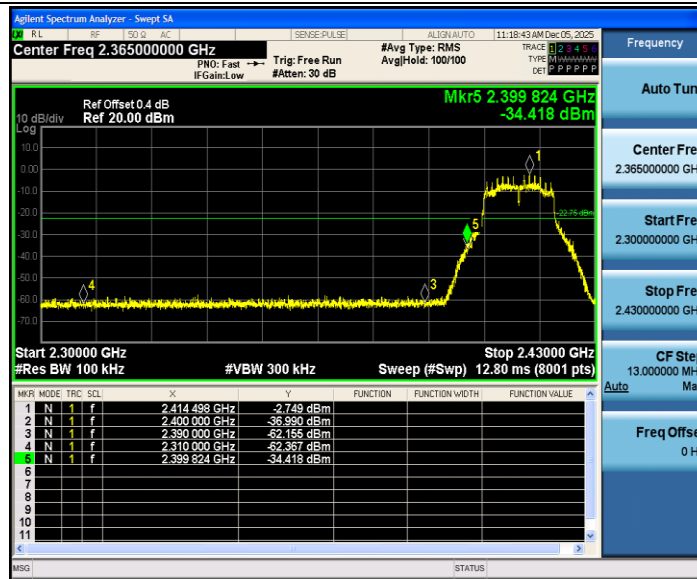
11B_Ant1_Low_2412



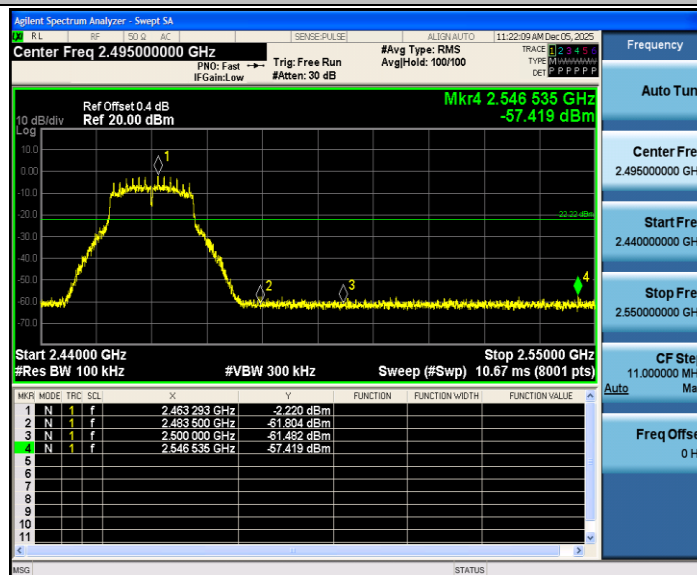
11B_Ant1_High_2462



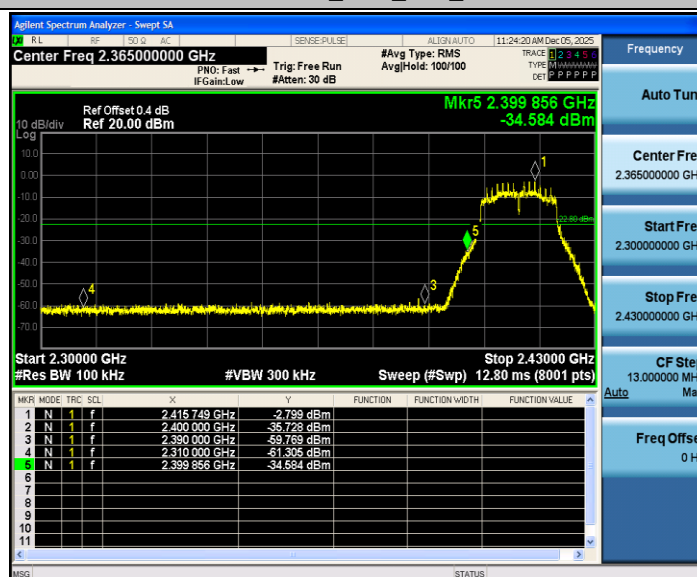
11G_Ant1_Low_2412



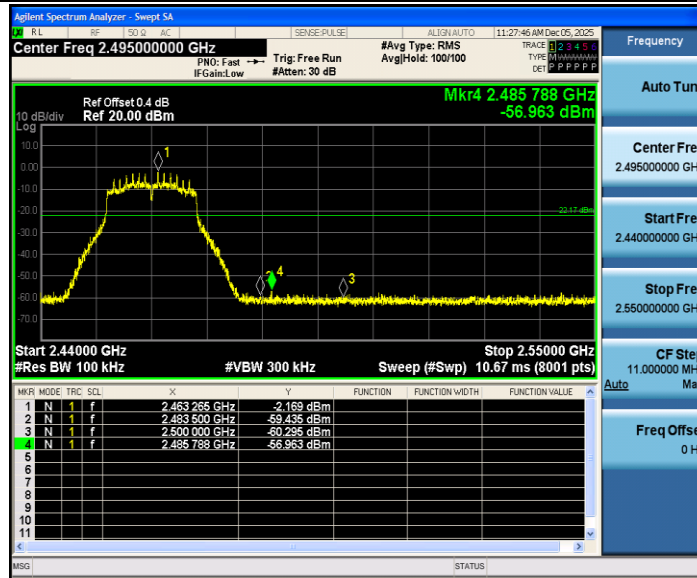
11G_Ant1_High_2462



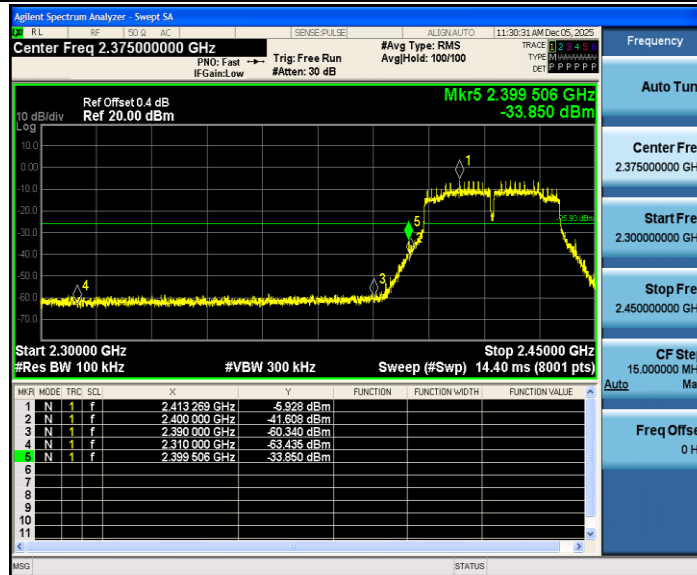
11N20SISO_Ant1_Low_2412



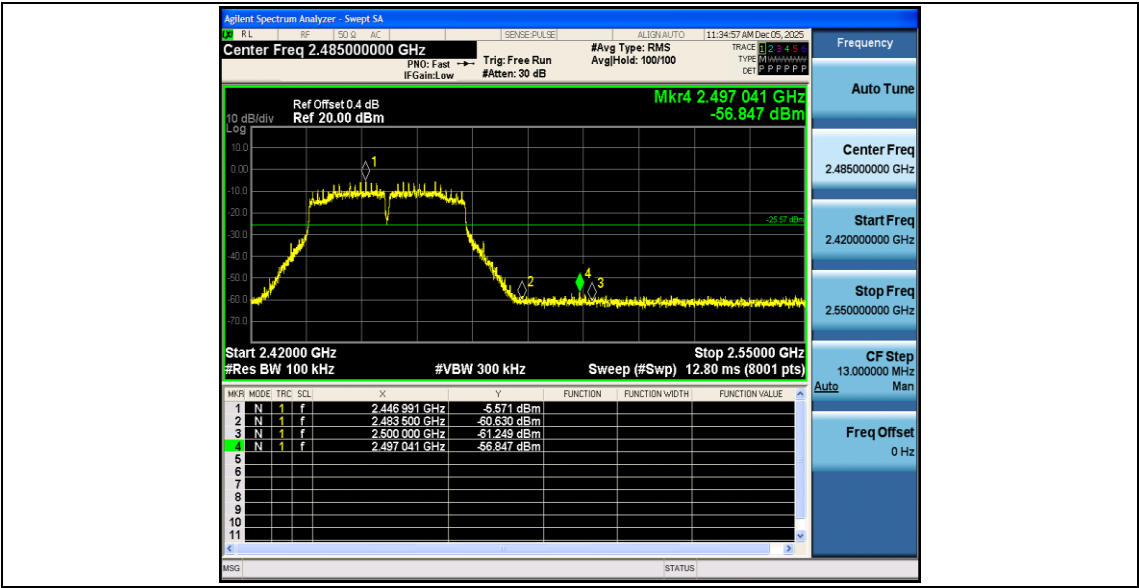
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

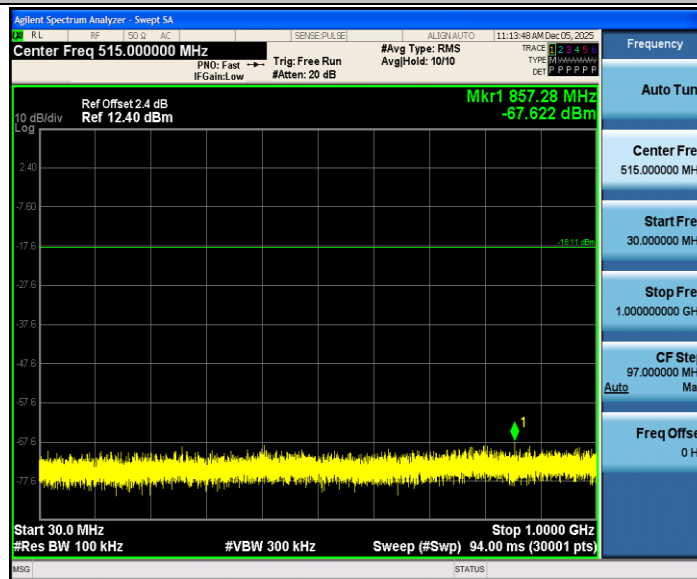
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.89	1.89	---	PASS
			30~1000	1.89	-67.62	≤-18.11	PASS
			1000~26500	1.89	-54.88	≤-18.11	PASS
		2437	Reference	2.16	2.16	---	PASS
			30~1000	2.16	-67.66	≤-17.84	PASS
			1000~26500	2.16	-54.54	≤-17.84	PASS
		2462	Reference	0.83	0.83	---	PASS
			30~1000	0.83	-67.94	≤-19.17	PASS
			1000~26500	0.83	-55.37	≤-19.17	PASS
11G	Ant1	2412	Reference	-2.65	-2.65	---	PASS
			30~1000	-2.65	-67.55	≤-22.65	PASS
			1000~26500	-2.65	-55.27	≤-22.65	PASS
		2437	Reference	-2.82	-2.82	---	PASS
			30~1000	-2.82	-68.18	≤-22.82	PASS
			1000~26500	-2.82	-54.56	≤-22.82	PASS
		2462	Reference	-2.22	-2.22	---	PASS
			30~1000	-2.22	-67	≤-22.22	PASS
			1000~26500	-2.22	-55.09	≤-22.22	PASS
11N20SISO	Ant1	2412	Reference	-3.21	-3.21	---	PASS
			30~1000	-3.21	-67.78	≤-23.21	PASS
			1000~26500	-3.21	-55.43	≤-23.21	PASS
		2437	Reference	-3.03	-3.03	---	PASS
			30~1000	-3.03	-68.14	≤-23.03	PASS
			1000~26500	-3.03	-55.18	≤-23.03	PASS
		2462	Reference	-2.29	-2.29	---	PASS
			30~1000	-2.29	-67.8	≤-22.29	PASS
			1000~26500	-2.29	-55.06	≤-22.29	PASS
11N40SISO	Ant1	2422	Reference	-6.45	-6.45	---	PASS
			30~1000	-6.45	-67.99	≤-26.45	PASS
			1000~26500	-6.45	-55.24	≤-26.45	PASS
		2437	Reference	-5.67	-5.67	---	PASS
			30~1000	-5.67	-67.88	≤-25.67	PASS
			1000~26500	-5.67	-55.1	≤-25.67	PASS
		2452	Reference	-5.81	-5.81	---	PASS
			30~1000	-5.81	-67.54	≤-25.81	PASS
			1000~26500	-5.81	-54.95	≤-25.81	PASS

Test Graphs

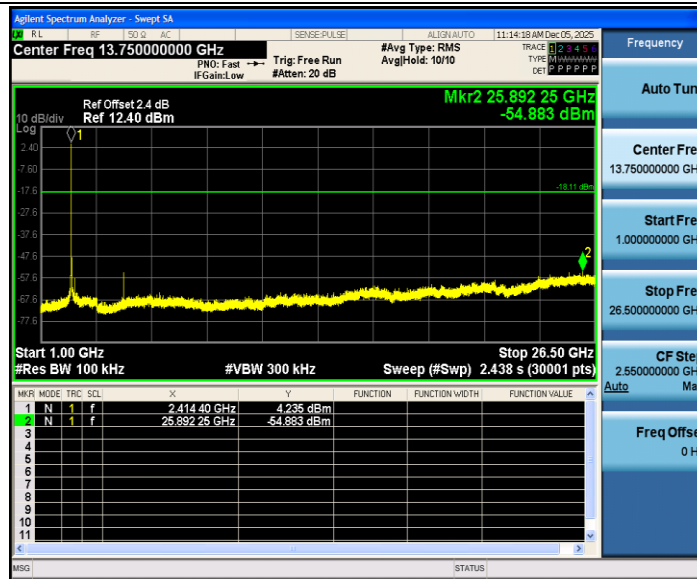
11B_Ant1_2412_0~Reference



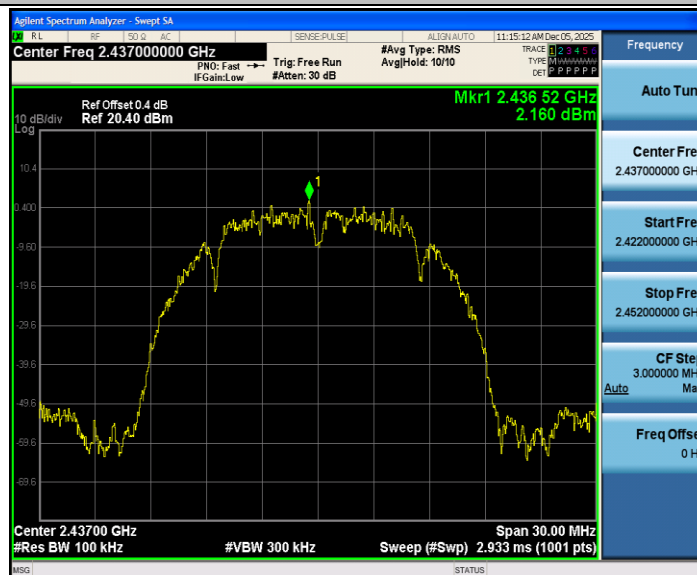
11B_Ant1_2412_30~1000



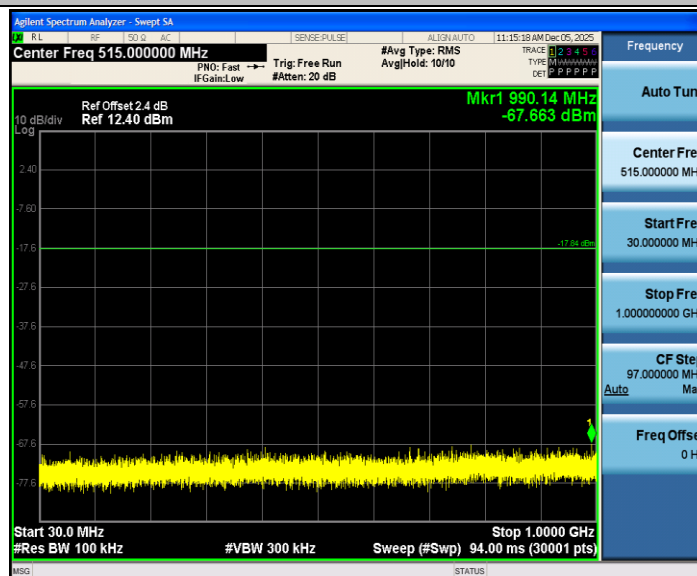
11B_Ant1_2412_1000~26500



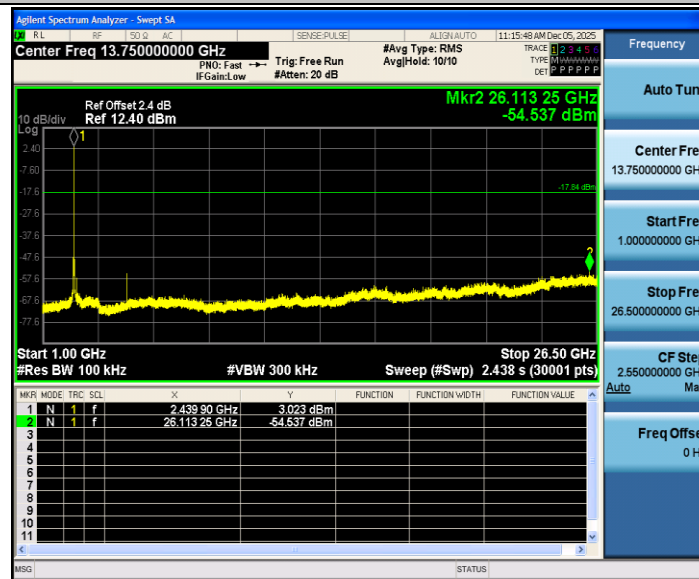
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



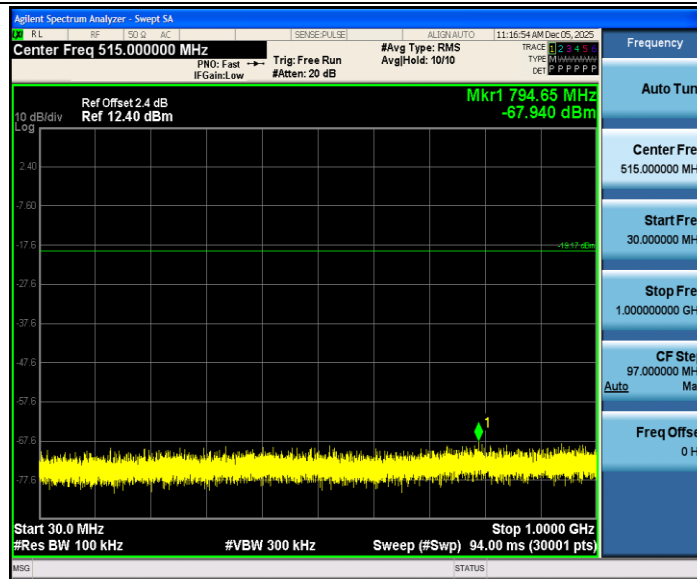
11B_Ant1_2437_1000~26500



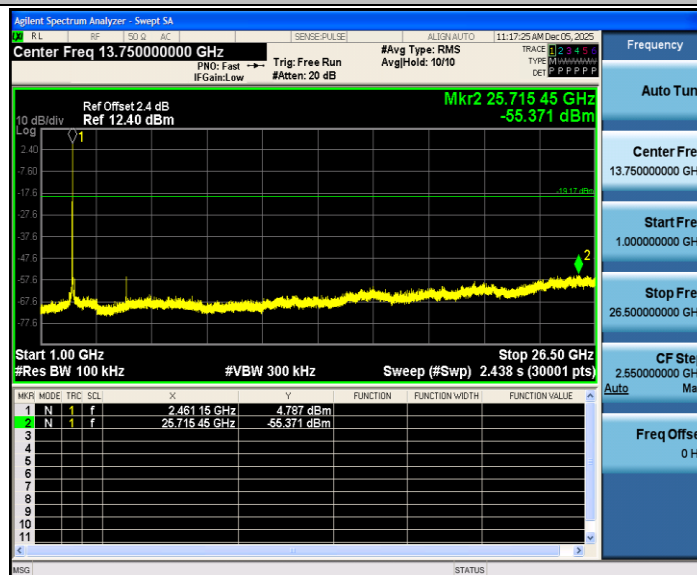
11B_Ant1_2462_0~Reference



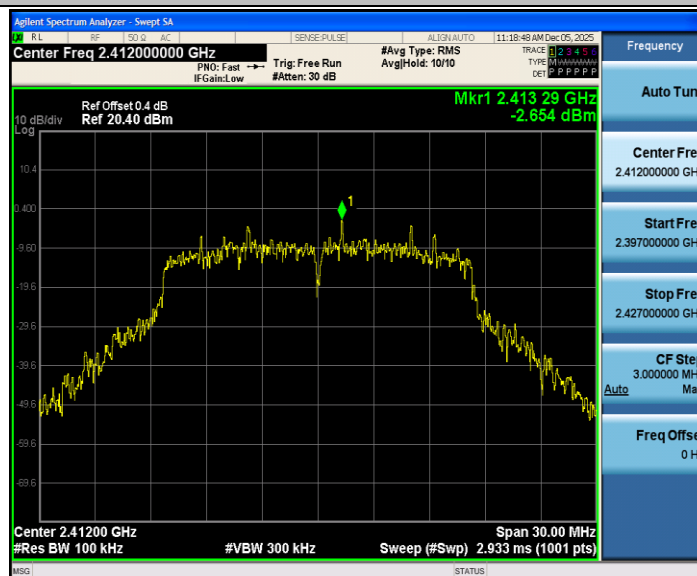
11B_Ant1_2462_30~1000



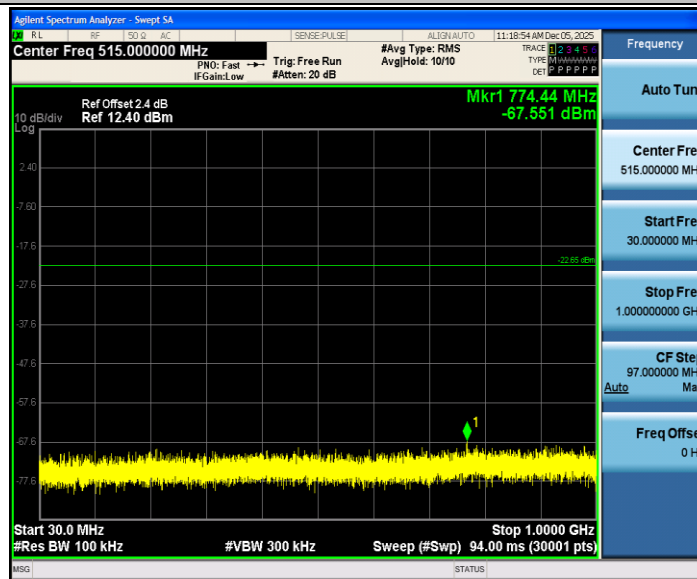
11B_Ant1_2462_1000~26500



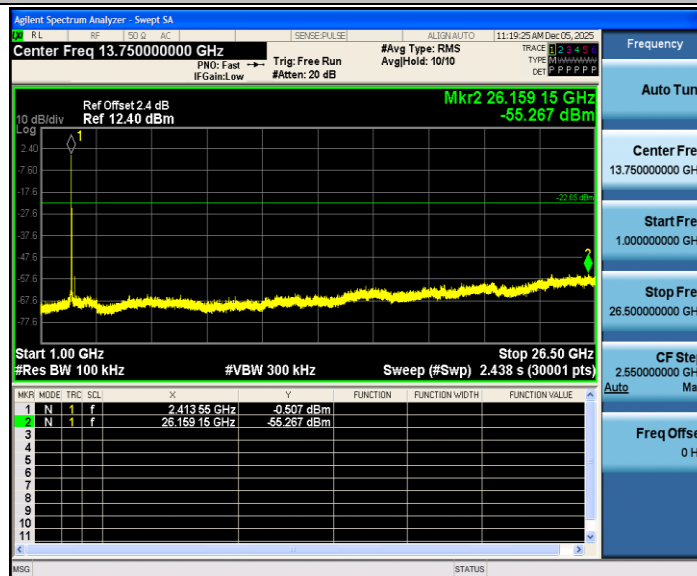
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



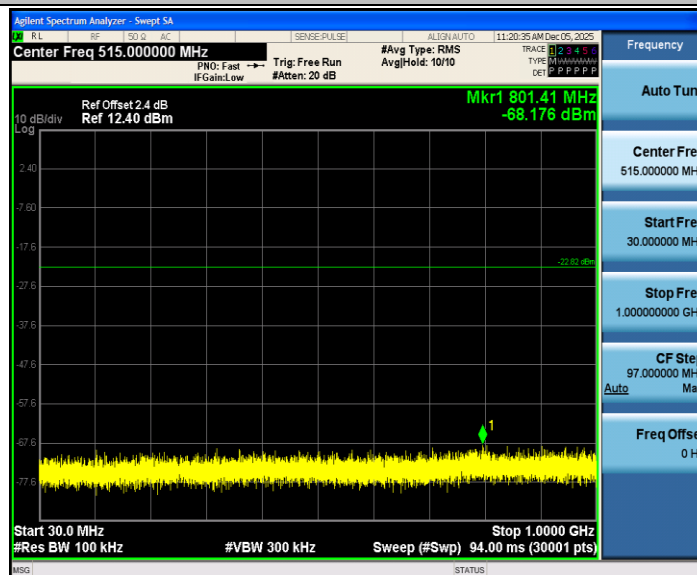
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

