

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2AWOA-M121V5S93

Company : Shenzhen CLT Electronics Co., Ltd

EUT : LED Display (Full Color)

Model Number : M121V5S-93

Report No. : CTA26090200801

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	10.200	2406.920	2417.120	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.200	2456.960	2467.160	0.5	PASS
11G	Ant1	2412	15.720	2404.040	2419.760	0.5	PASS
		2437	15.520	2429.320	2444.840	0.5	PASS
		2462	15.720	2454.160	2469.880	0.5	PASS
11N20SISO	Ant1	2412	16.280	2404.040	2420.320	0.5	PASS
		2437	16.600	2428.440	2445.040	0.5	PASS
		2462	16.240	2454.080	2470.320	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.640	2439.760	0.5	PASS
		2437	35.440	2419.480	2454.920	0.5	PASS
		2452	33.280	2436.560	2469.840	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



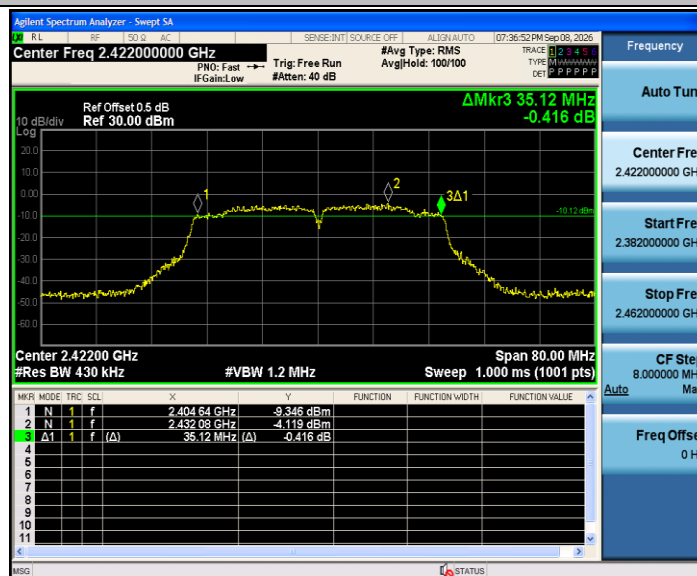
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



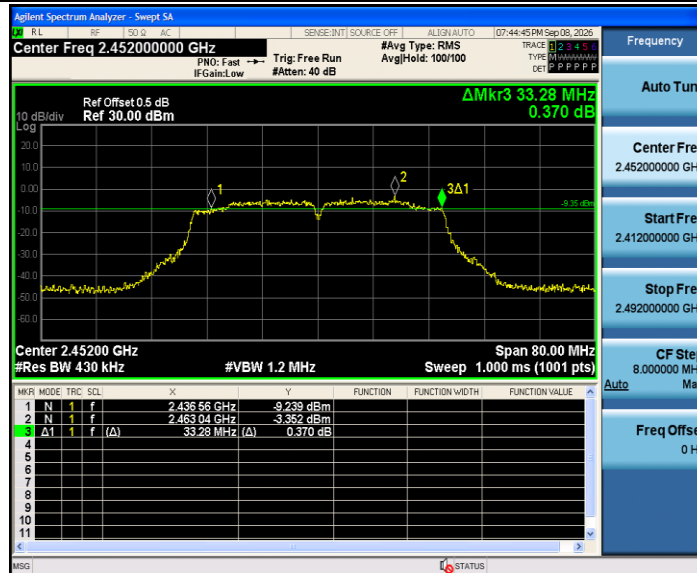
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



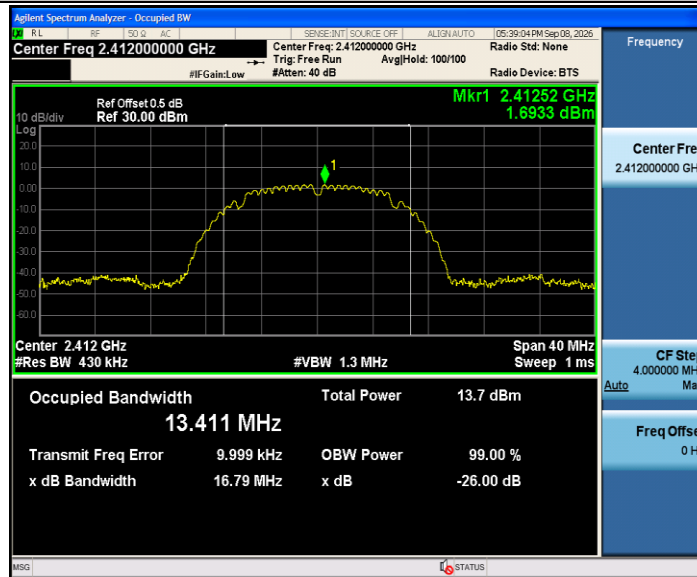
Appendix B: Occupied Channel Bandwidth

Test Result

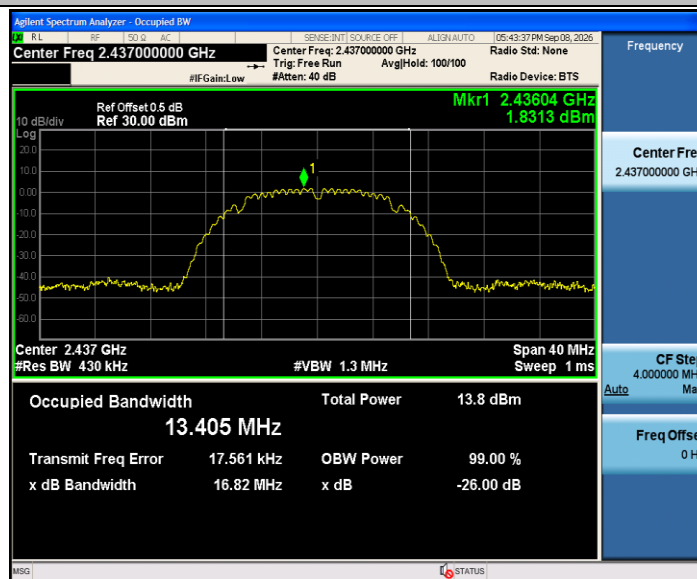
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.411	2405.3045	2418.7155	---	---
		2437	13.405	2430.3151	2443.7201	---	---
		2462	13.415	2455.3172	2468.7322	---	---
11G	Ant1	2412	16.857	2403.6041	2420.4611	---	---
		2437	16.803	2428.5947	2445.3977	---	---
		2462	16.805	2453.6424	2470.4474	---	---
11N20SISO	Ant1	2412	17.813	2403.1062	2420.9192	---	---
		2437	17.844	2428.0914	2445.9354	---	---
		2462	17.831	2453.1257	2470.9567	---	---
11N40SISO	Ant1	2422	36.126	2404.0876	2440.2136	---	---
		2437	36.054	2419.1032	2455.1572	---	---
		2452	36.063	2434.0922	2470.1552	---	---

Test Graphs

11B_Ant1_2412



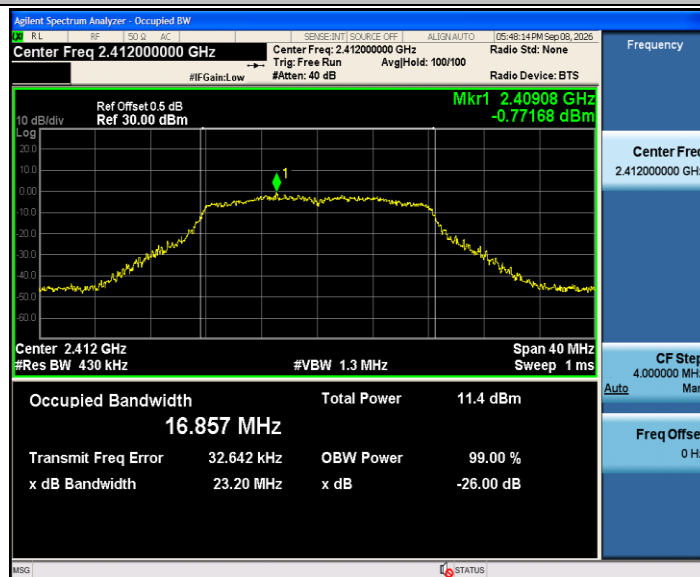
11B_Ant1_2437



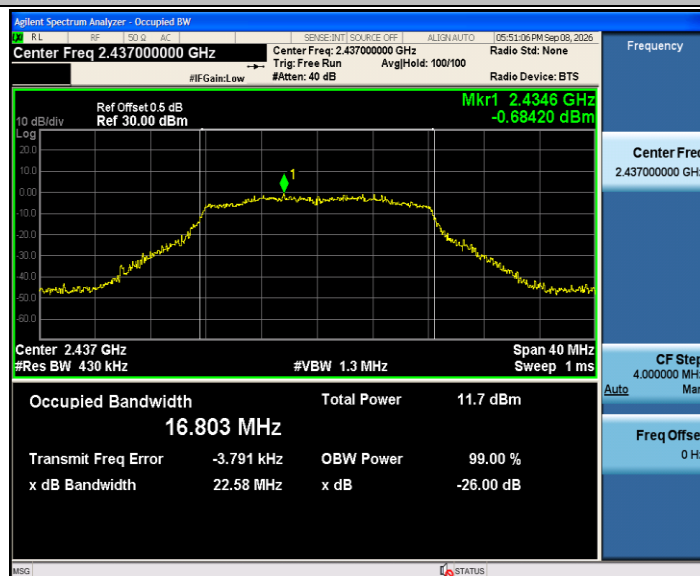
11B_Ant1_2462



11G_Ant1_2412



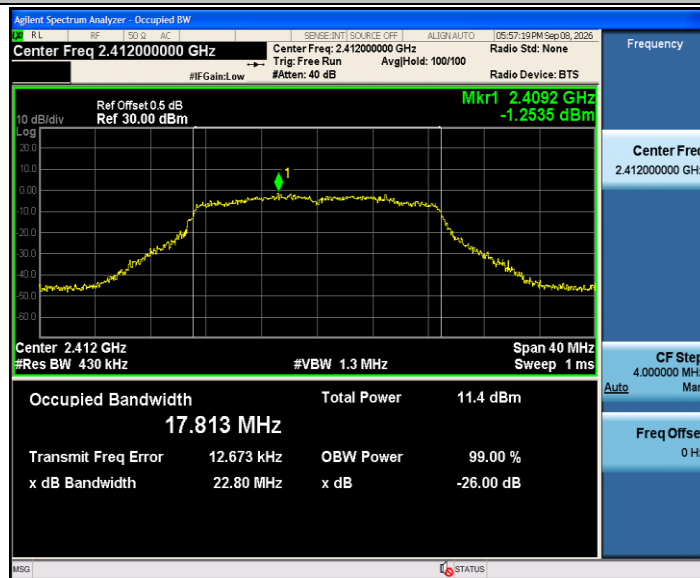
11G_Ant1_2437



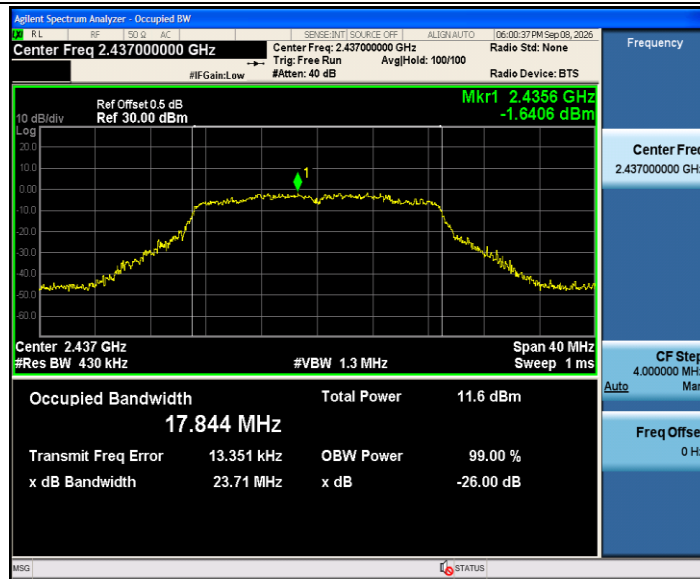
11G_Ant1_2462



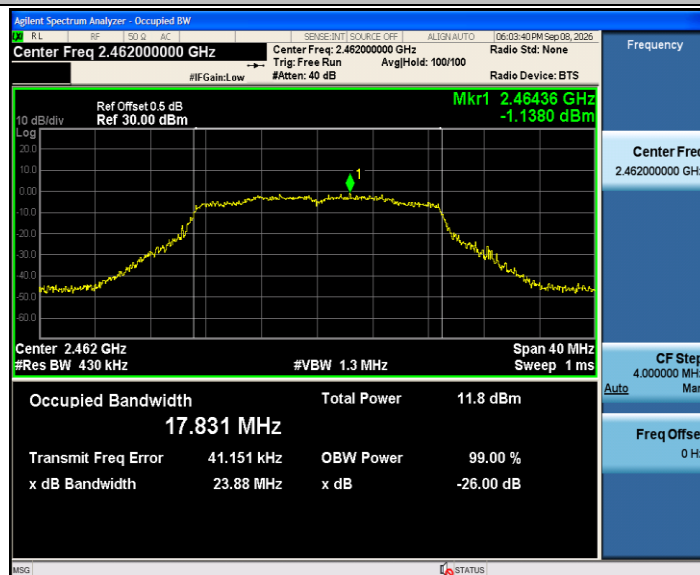
11N20SISO_Ant1_2412



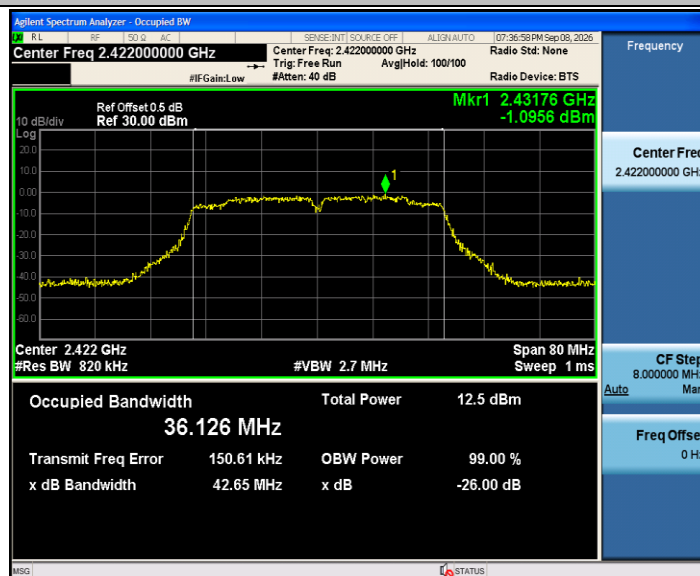
11N20SISO_Ant1_2437



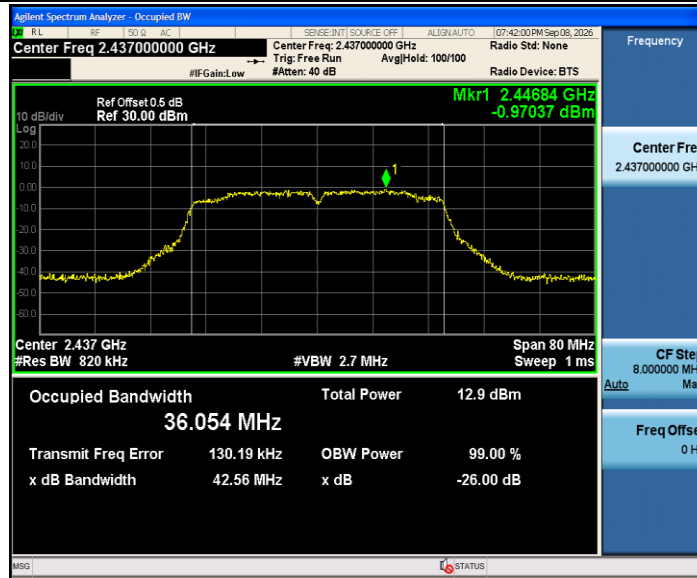
11N20SISO_Ant1_2462



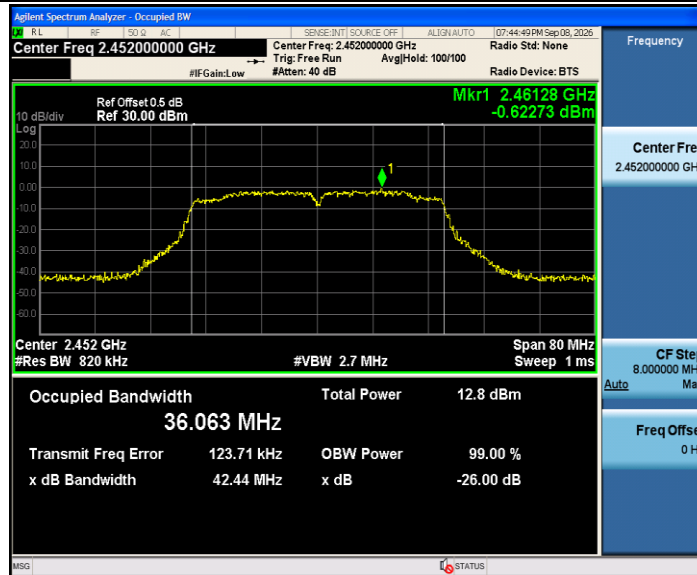
11N40SISO_Ant1_2422



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	13.30	≤30.00	PASS
		2437	13.51	≤30.00	PASS
		2462	13.67	≤30.00	PASS
11G	Ant1	2412	12.36	≤30.00	PASS
		2437	12.42	≤30.00	PASS
		2462	12.74	≤30.00	PASS
11N20SISO	Ant1	2412	12.15	≤30.00	PASS
		2437	12.28	≤30.00	PASS
		2462	12.43	≤30.00	PASS
11N40SISO	Ant1	2422	12.60	≤30.00	PASS
		2437	12.92	≤30.00	PASS
		2452	12.78	≤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	-11.87	≤8.00	PASS
		2437	-12.19	≤8.00	PASS
		2462	-11.62	≤8.00	PASS
11G	Ant1	2412	-18.96	≤8.00	PASS
		2437	-18.97	≤8.00	PASS
		2462	-19.03	≤8.00	PASS
11N20SISO	Ant1	2412	-18.17	≤8.00	PASS
		2437	-17.47	≤8.00	PASS
		2462	-19.24	≤8.00	PASS
11N40SISO	Ant1	2422	-21.17	≤8.00	PASS
		2437	-21.07	≤8.00	PASS
		2452	-21.56	≤8.00	PASS

Test Graphs

11B_Ant1_2412



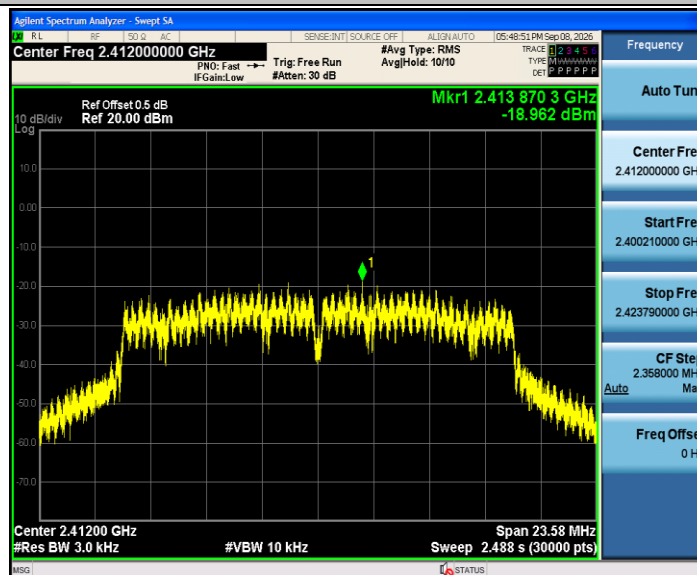
11B_Ant1_2437



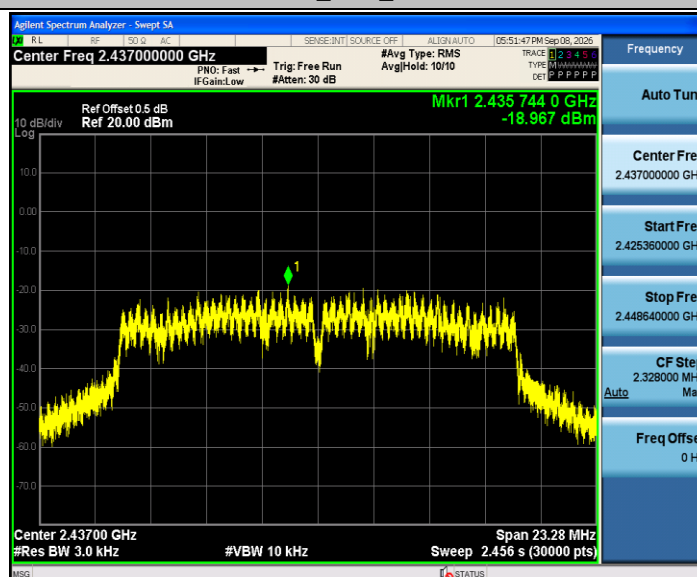
11B_Ant1_2462



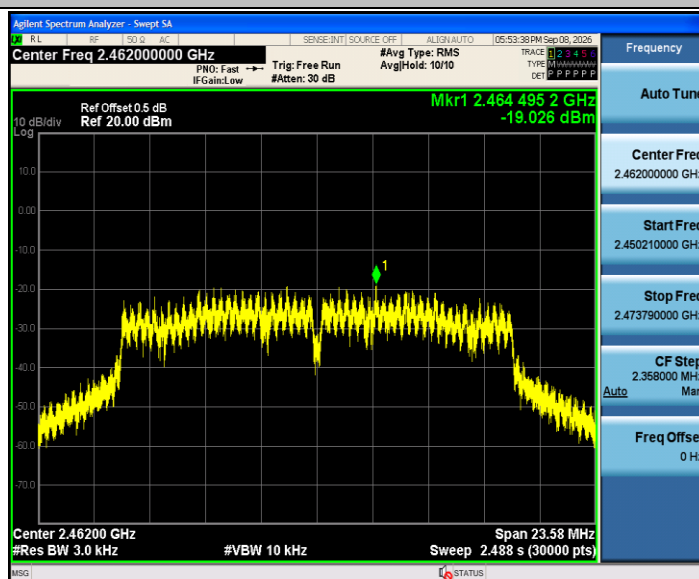
11G_Ant1_2412



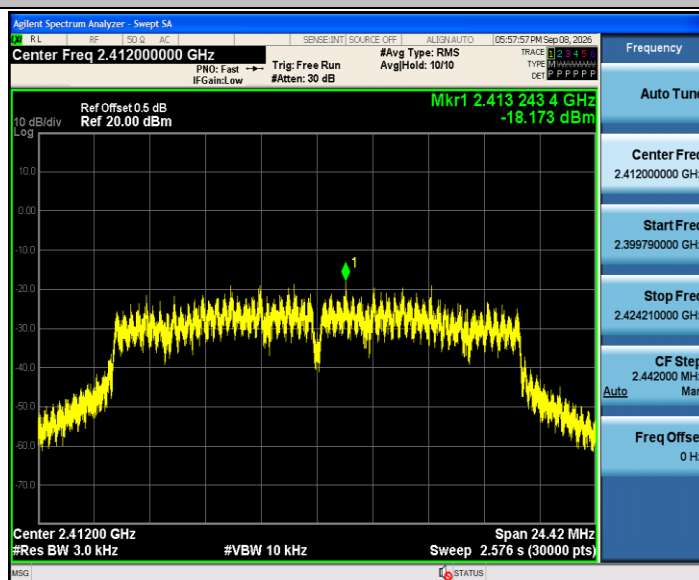
11G_Ant1_2437



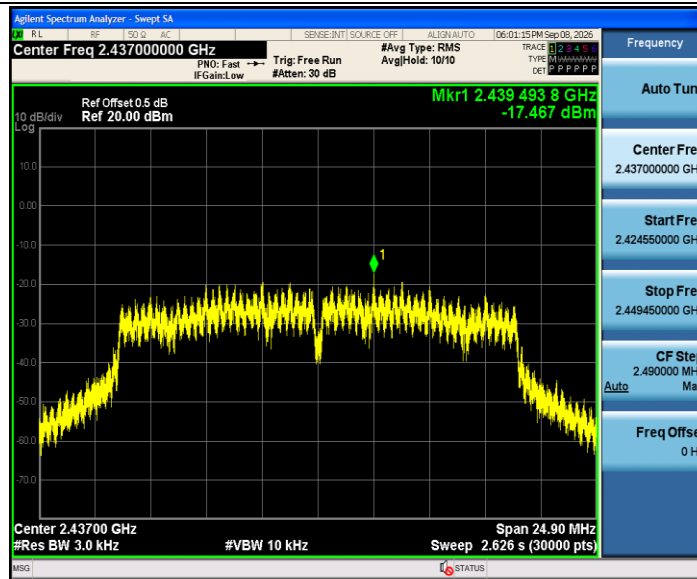
11G_Ant1_2462



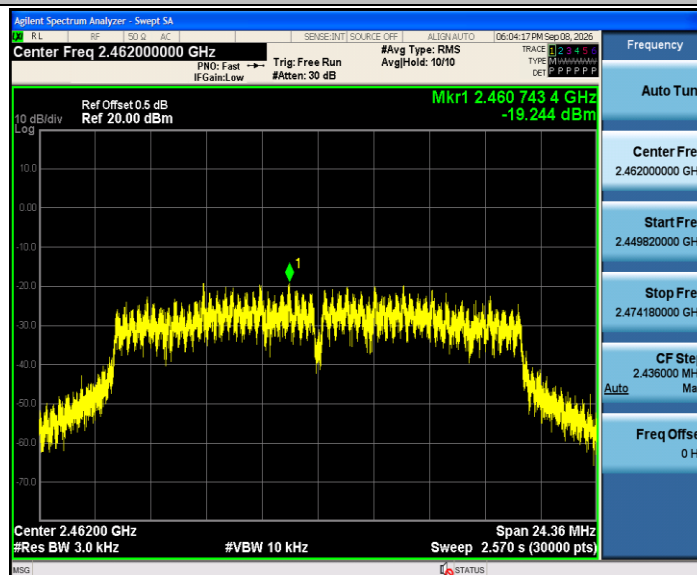
11N20SISO_Ant1_2412



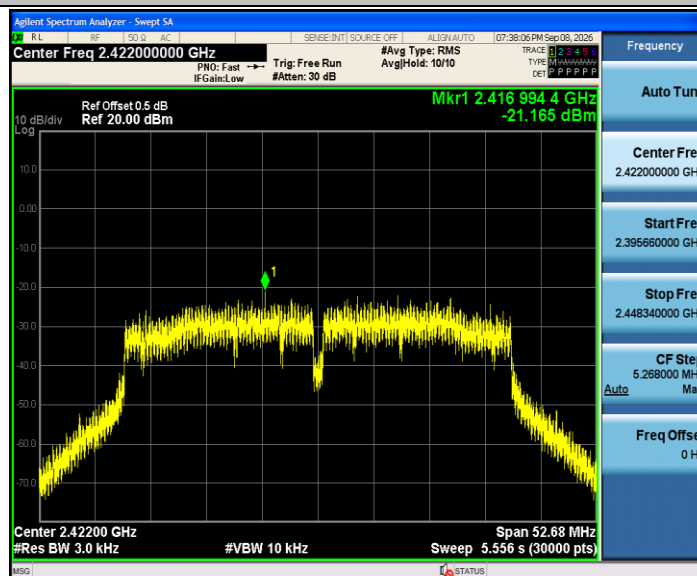
11N20SISO_Ant1_2437



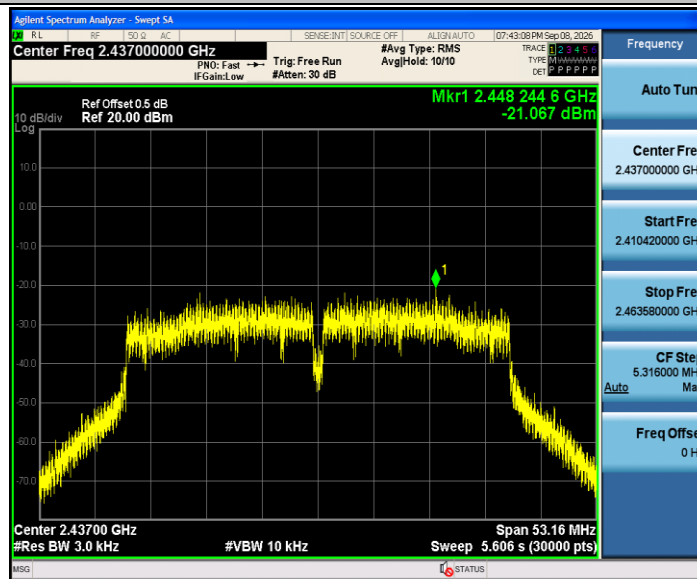
11N20SISO_Ant1_2462



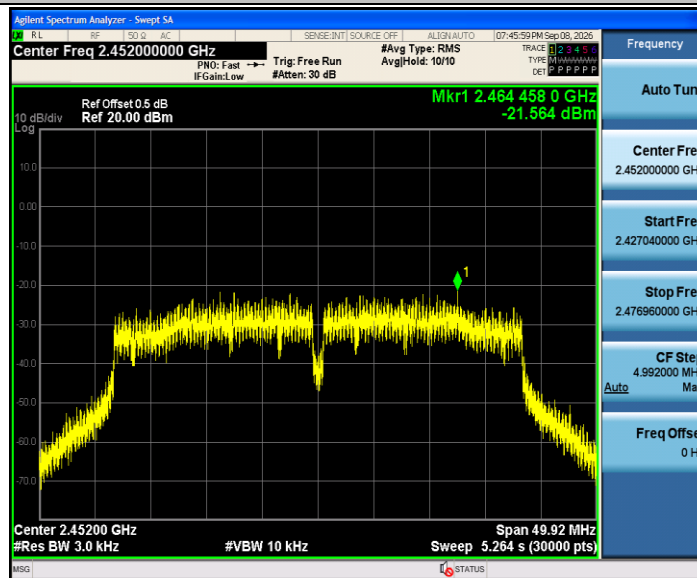
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



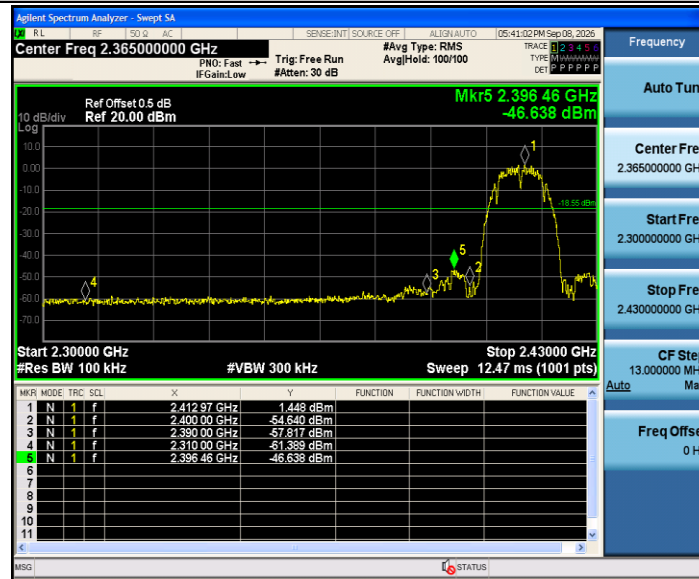
Appendix E: Band edge measurements

Test Result

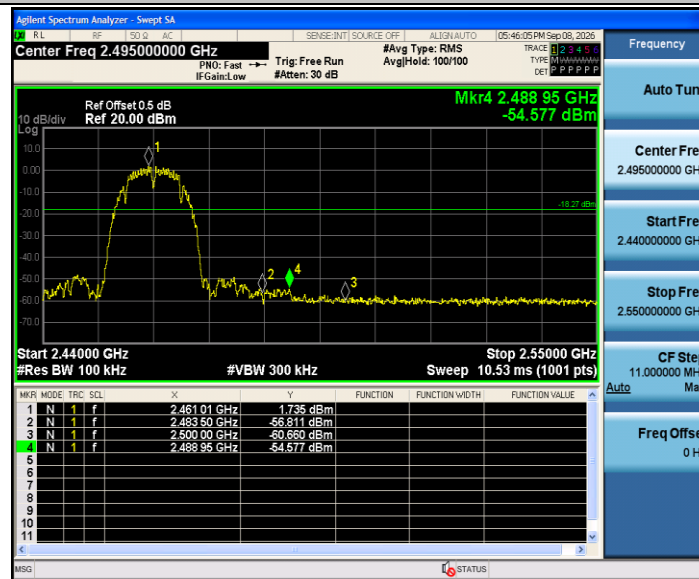
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.45	-46.64	≤-18.55	PASS
		High	2462	1.74	-54.58	≤-18.27	PASS
11G	Ant1	Low	2412	-4.18	-35.19	≤-24.18	PASS
		High	2462	-4.04	-57.64	≤-24.04	PASS
11N20SISO	Ant1	Low	2412	-4.22	-34.68	≤-24.22	PASS
		High	2462	-3.66	-58.39	≤-23.66	PASS
11N40SISO	Ant1	Low	2422	-7.23	-35.64	≤-27.23	PASS
		High	2452	-6.86	-57.05	≤-26.86	PASS

Test Graphs

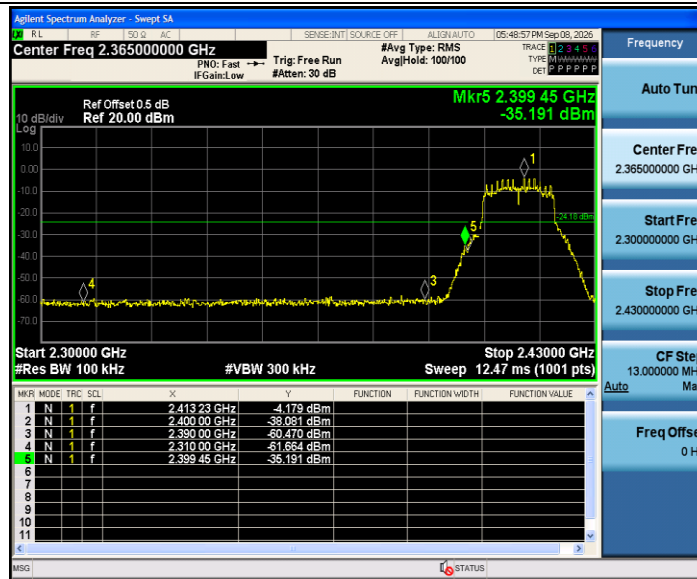
11B_Ant1_Low_2412



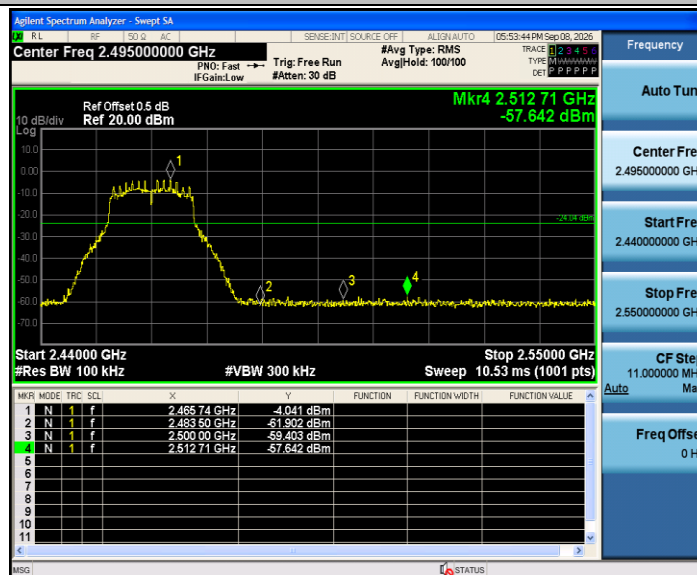
11B_Ant1_High_2462



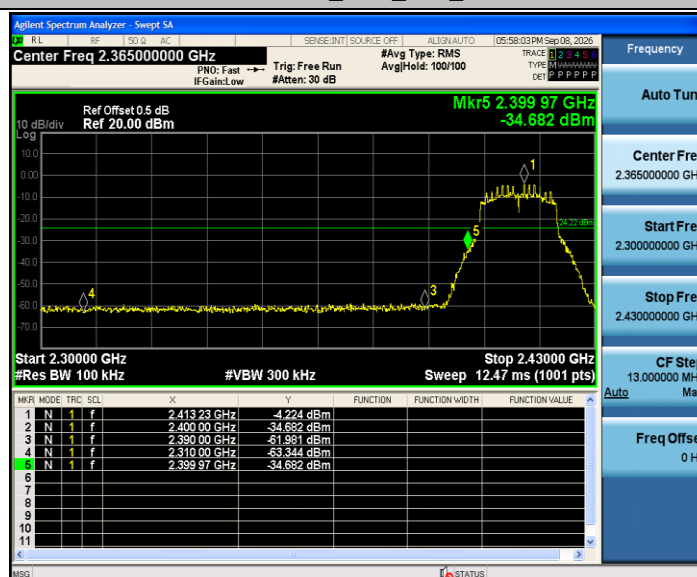
11G_Ant1_Low_2412



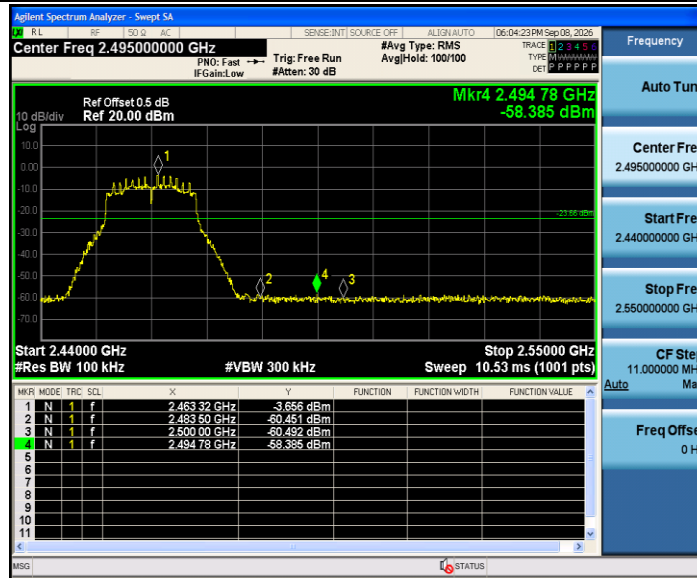
11G_Ant1_High_2462



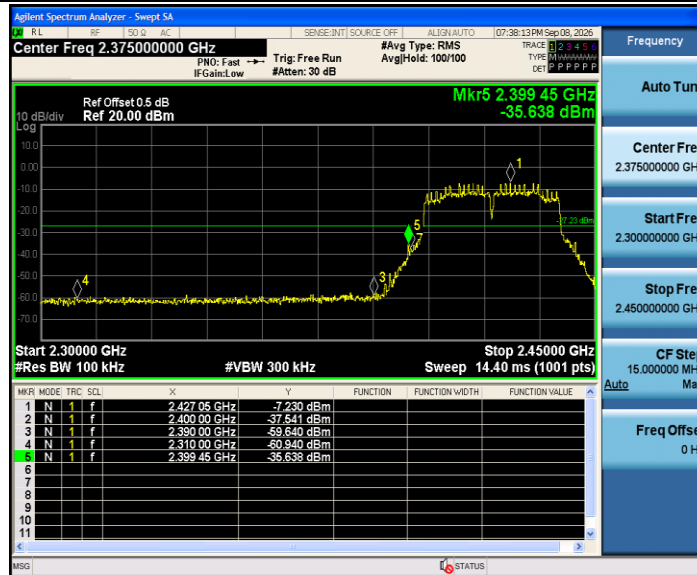
11N20SISO_Ant1_Low_2412



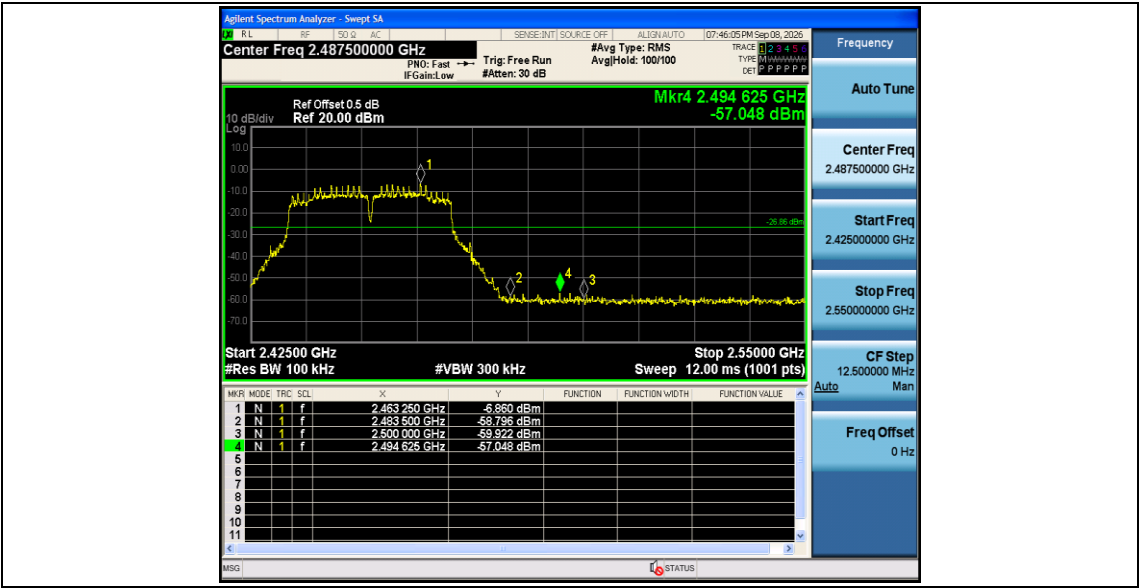
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

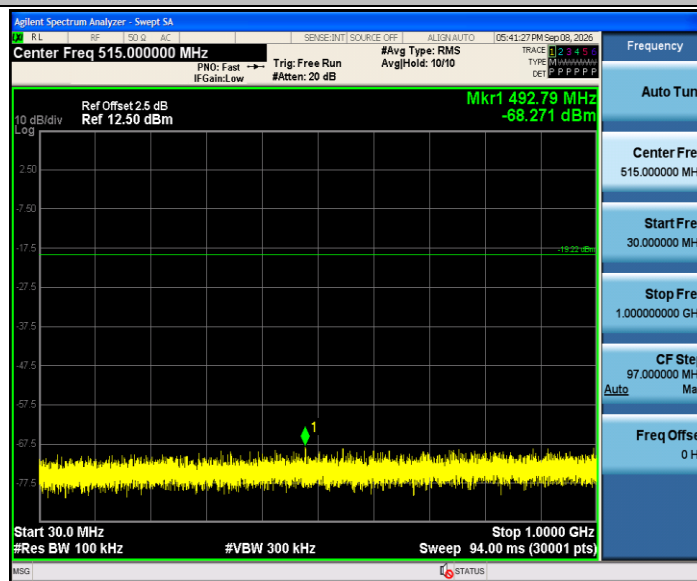
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.78	0.78	---	PASS
			30~1000	0.78	-68.27	≤-19.22	PASS
			1000~26500	0.78	-46.4	≤-19.22	PASS
		2437	Reference	0.80	0.80	---	PASS
			30~1000	0.80	-68.06	≤-19.2	PASS
			1000~26500	0.80	-46.61	≤-19.2	PASS
		2462	Reference	0.46	0.46	---	PASS
			30~1000	0.46	-68.08	≤-19.54	PASS
			1000~26500	0.46	-46.09	≤-19.54	PASS
11G	Ant1	2412	Reference	-4.22	-4.22	---	PASS
			30~1000	-4.22	-68.44	≤-24.22	PASS
			1000~26500	-4.22	-46.19	≤-24.22	PASS
		2437	Reference	-5.49	-5.49	---	PASS
			30~1000	-5.49	-68.99	≤-25.49	PASS
			1000~26500	-5.49	-45.72	≤-25.49	PASS
		2462	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-68.53	≤-24.01	PASS
			1000~26500	-4.01	-46.25	≤-24.01	PASS
11N20SISO	Ant1	2412	Reference	-4.74	-4.74	---	PASS
			30~1000	-4.74	-67.64	≤-24.74	PASS
			1000~26500	-4.74	-46.72	≤-24.74	PASS
		2437	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-68.46	≤-24.63	PASS
			1000~26500	-4.63	-47.07	≤-24.63	PASS
		2462	Reference	-4.43	-4.43	---	PASS
			30~1000	-4.43	-67.8	≤-24.43	PASS
			1000~26500	-4.43	-45.99	≤-24.43	PASS
11N40SISO	Ant1	2422	Reference	-7.46	-7.46	---	PASS
			30~1000	-7.46	-68.12	≤-27.46	PASS
			1000~26500	-7.46	-45.91	≤-27.46	PASS
		2437	Reference	-7.29	-7.29	---	PASS
			30~1000	-7.29	-68.48	≤-27.29	PASS
			1000~26500	-7.29	-47	≤-27.29	PASS
		2452	Reference	-7.06	-7.06	---	PASS
			30~1000	-7.06	-68.46	≤-27.06	PASS
			1000~26500	-7.06	-46.7	≤-27.06	PASS

Test Graphs

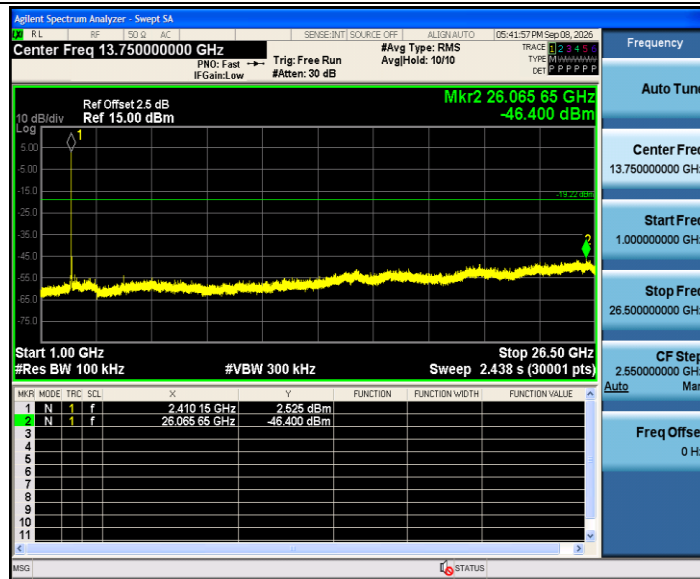
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



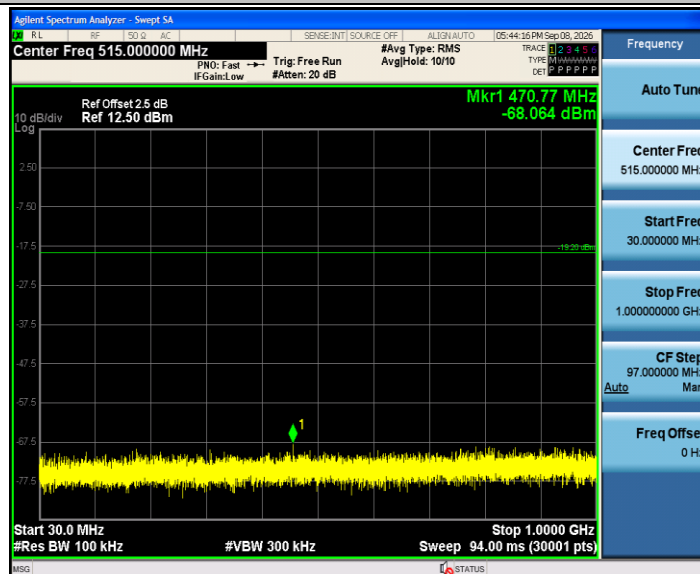
11B_Ant1_2412_1000~26500



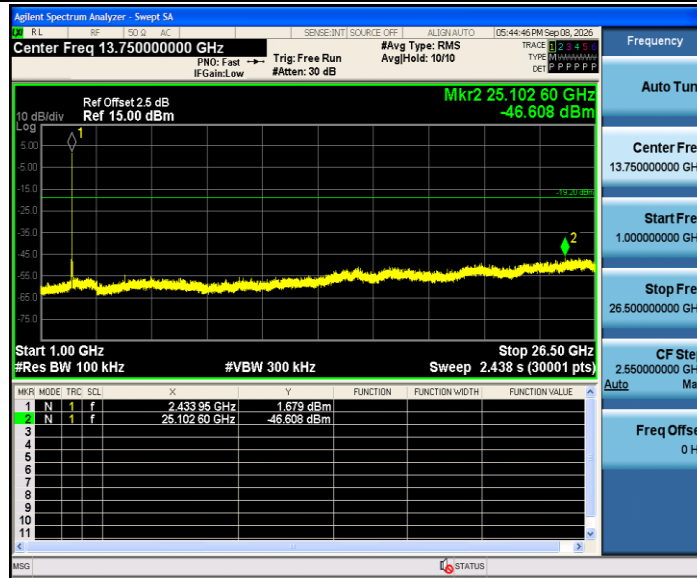
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



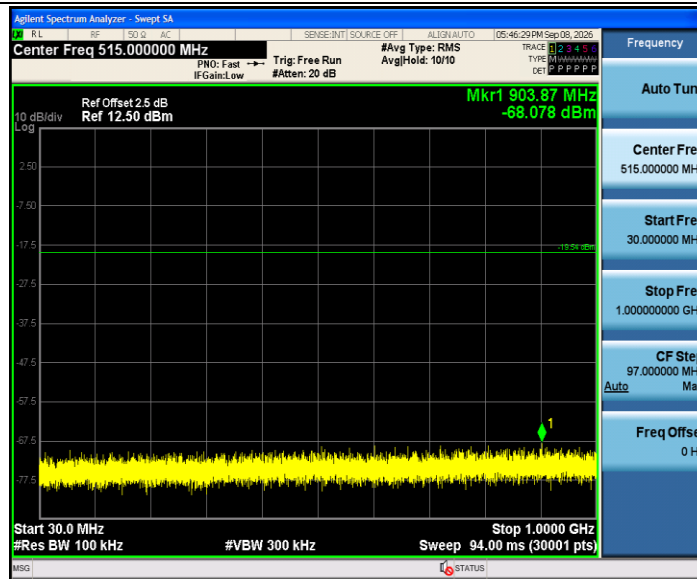
11B_Ant1_2437_1000~26500



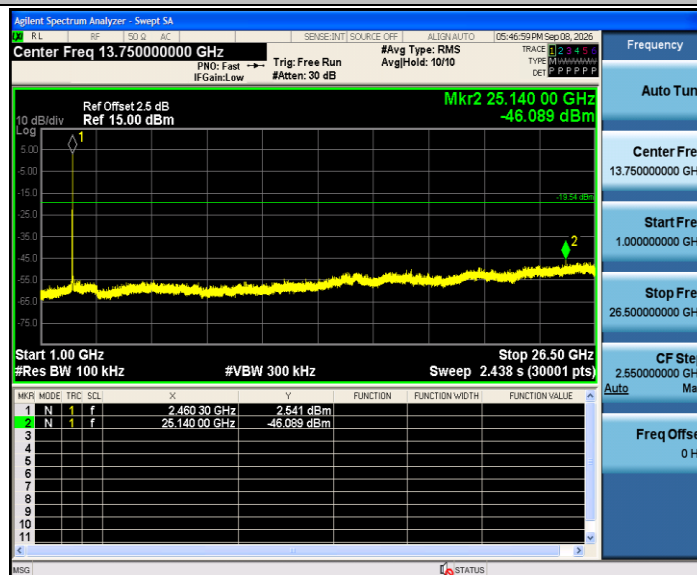
11B_Ant1_2462_0~Reference



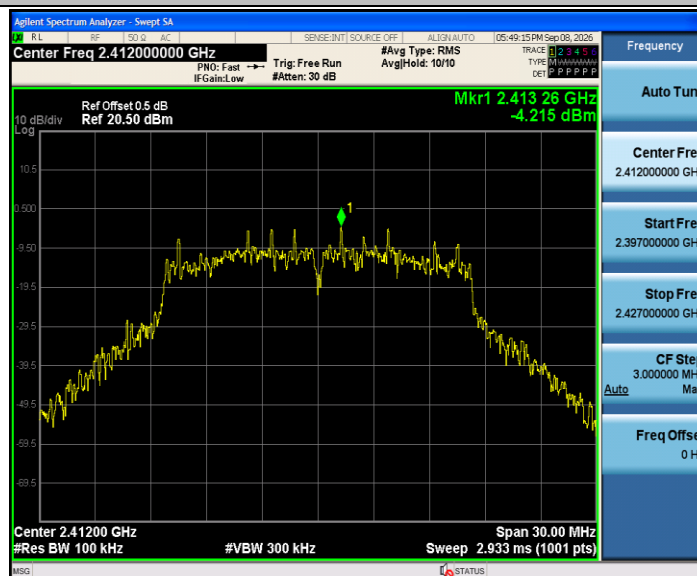
11B_Ant1_2462_30~1000



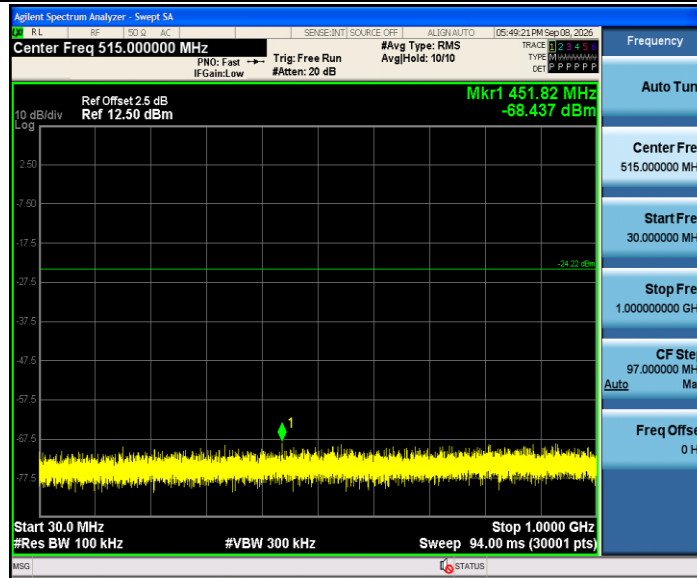
11B_Ant1_2462_1000~26500



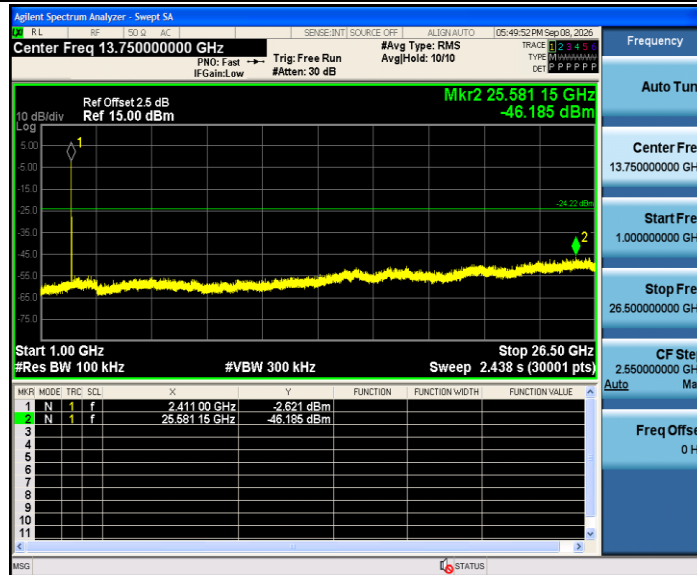
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



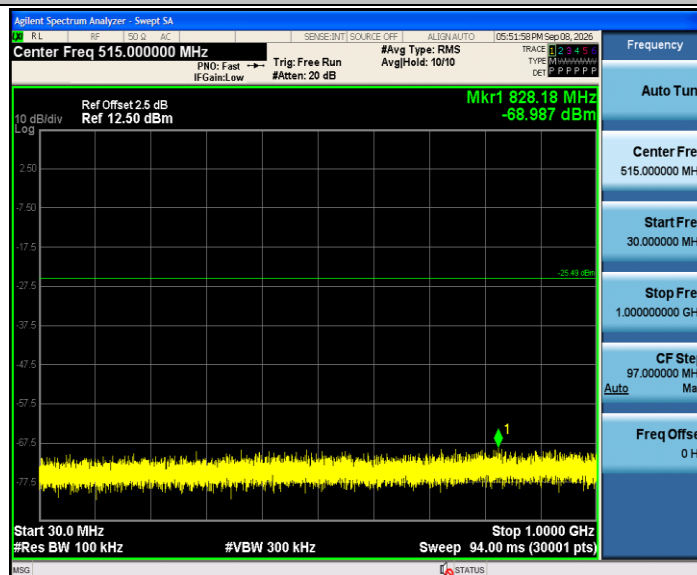
11G_Ant1_2412_1000~26500



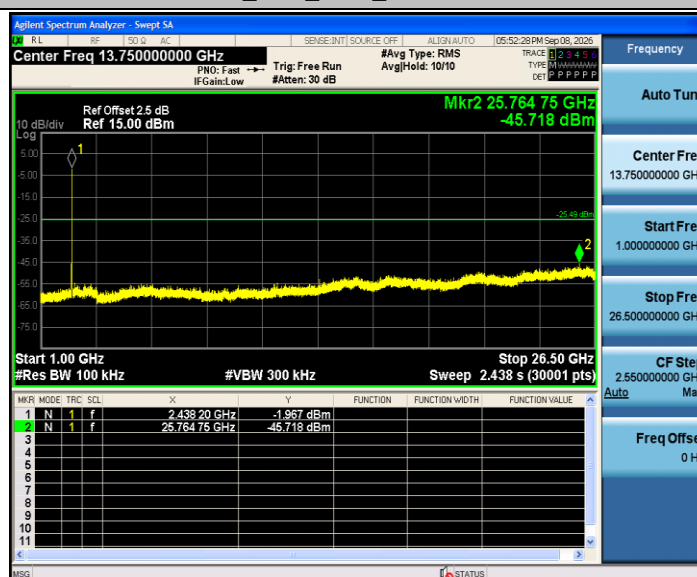
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



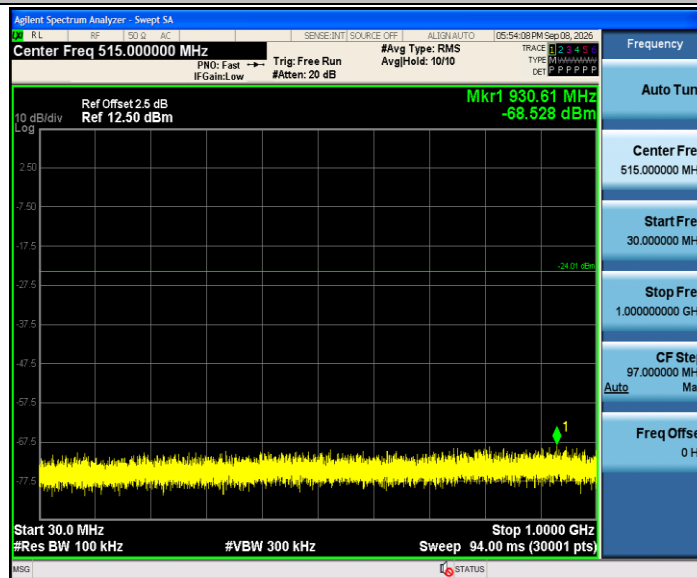
11G_Ant1_2437_1000~26500



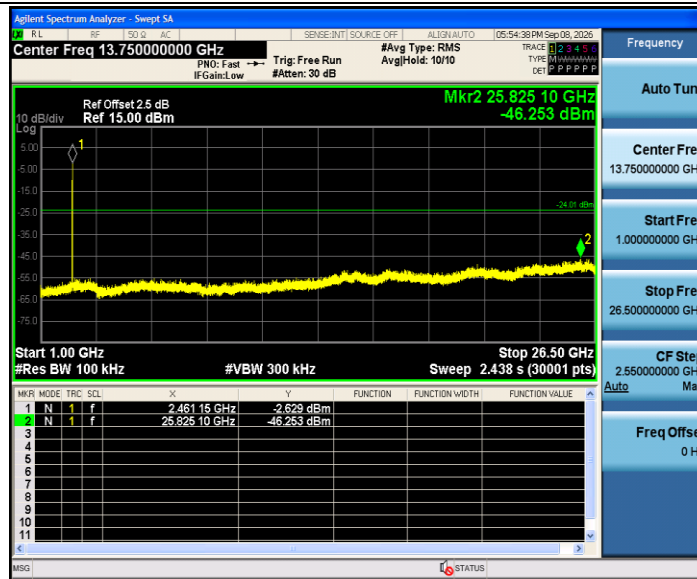
11G_Ant1_2462_0~Reference



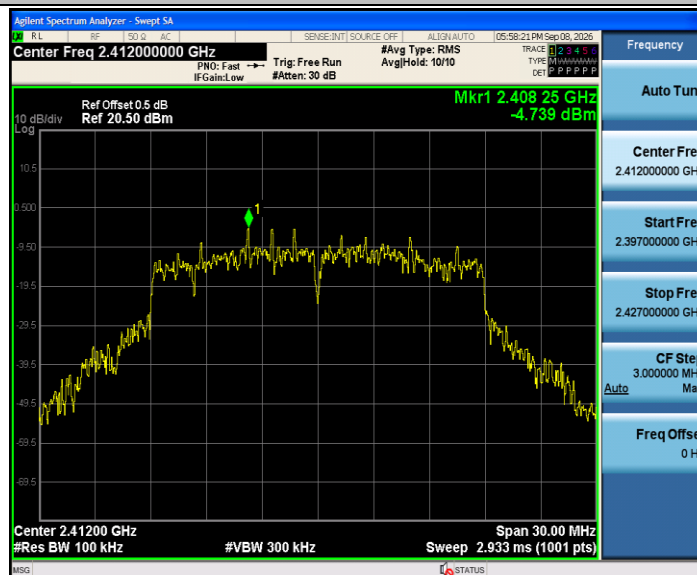
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

