

Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BPZJ-ZQA-8000

Company : Ningbo Zhiqi Smart Appliance Co., Ltd.

EUT : air purifier

Model Number : ZQA-8000

Report No. : CTA25080600301

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	8.080	2408.440	2416.520	0.5	PASS
		2437	8.080	2432.960	2441.040	0.5	PASS
		2462	8.960	2457.520	2466.480	0.5	PASS
11G	Ant1	2412	15.720	2404.440	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	15.920	2454.240	2470.160	0.5	PASS
11N20SISO	Ant1	2412	16.320	2404.080	2420.400	0.5	PASS
		2437	16.880	2428.480	2445.360	0.5	PASS
		2462	16.920	2453.640	2470.560	0.5	PASS

Test Graphs

11B_Ant1_2412



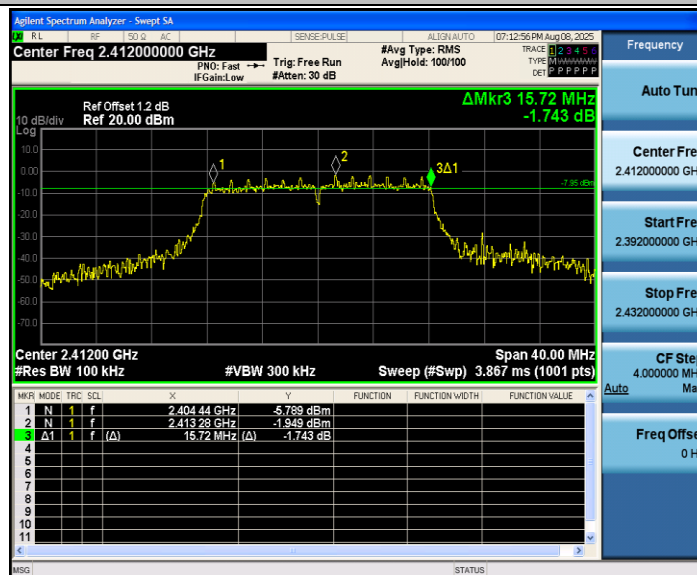
11B_Ant1_2437



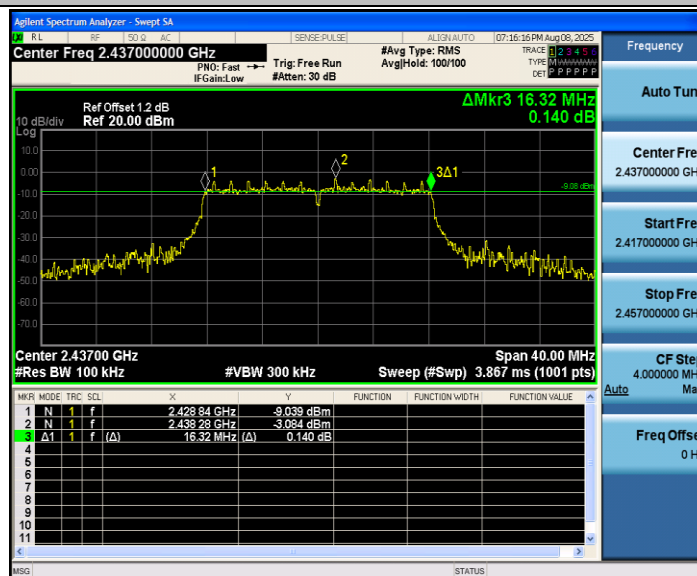
11B_Ant1_2462



11G_Ant1_2412



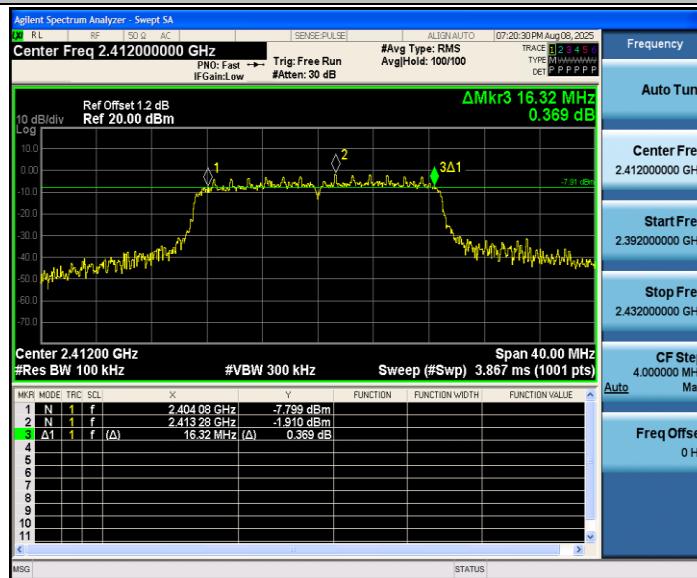
11G_Ant1_2437



11G_Ant1_2462



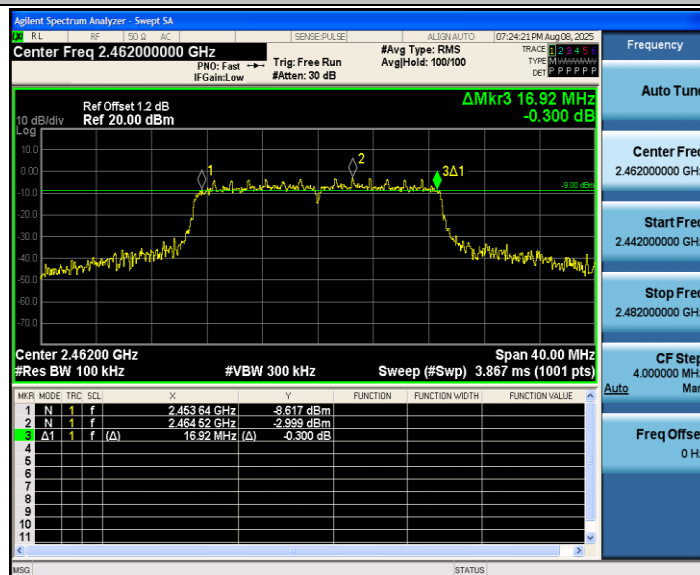
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



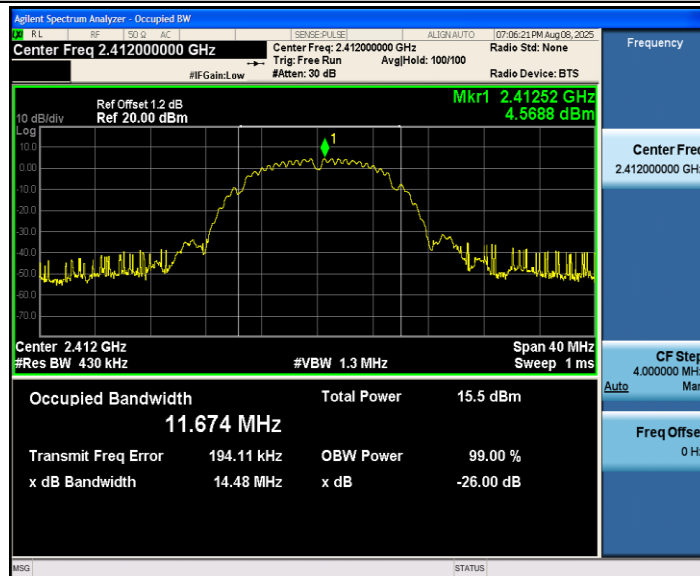
Appendix B: Occupied Channel Bandwidth

Test Result

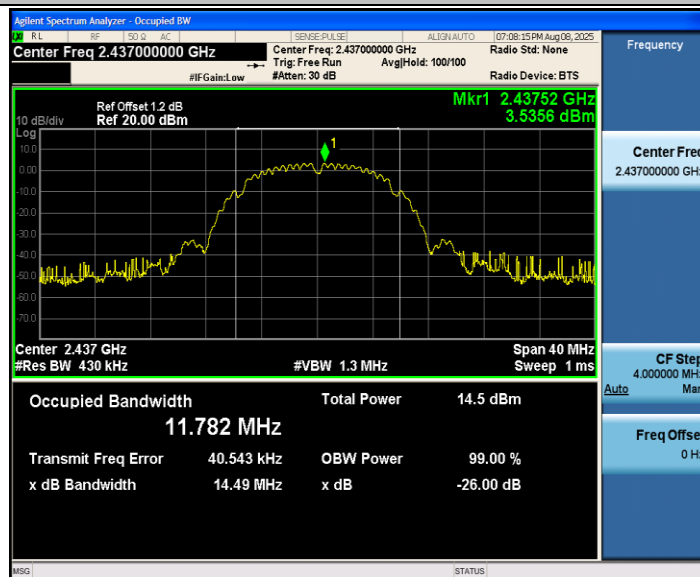
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.674	2406.3571	2418.0311	---	---
		2437	11.782	2431.1495	2442.9315	---	---
		2462	11.786	2456.1826	2467.9686	---	---
11G	Ant1	2412	16.666	2403.8096	2420.4756	---	---
		2437	16.728	2428.6432	2445.3712	---	---
		2462	16.687	2453.7265	2470.4135	---	---
11N20SISO	Ant1	2412	17.515	2403.3441	2420.8591	---	---
		2437	17.627	2428.1969	2445.8239	---	---
		2462	17.650	2453.2508	2470.9008	---	---

Test Graphs

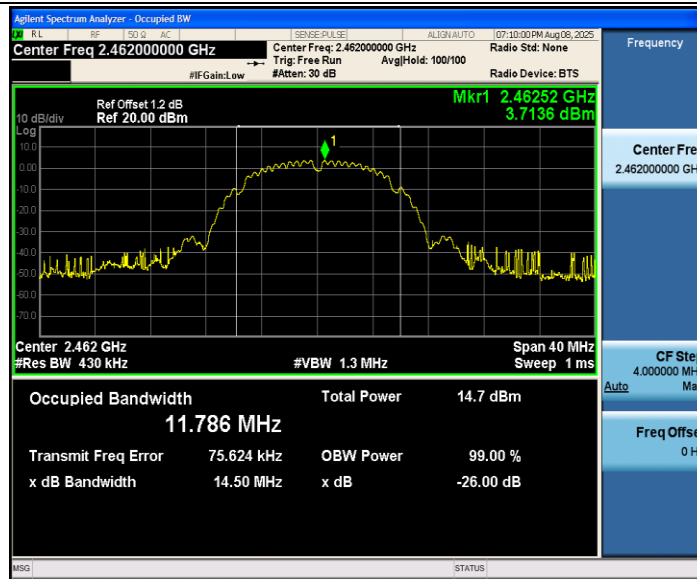
11B_Ant1_2412



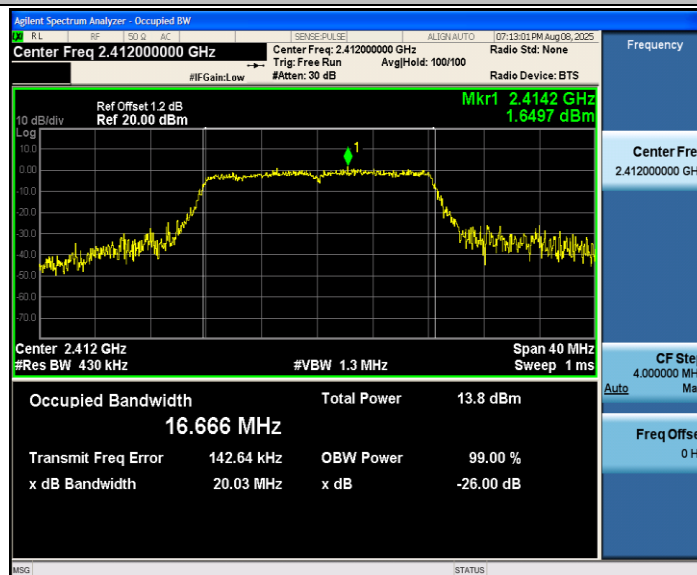
11B_Ant1_2437



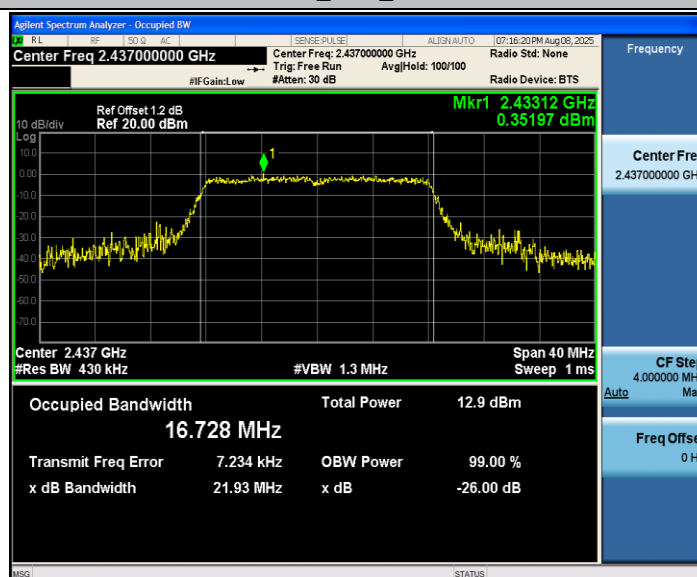
11B_Ant1_2462



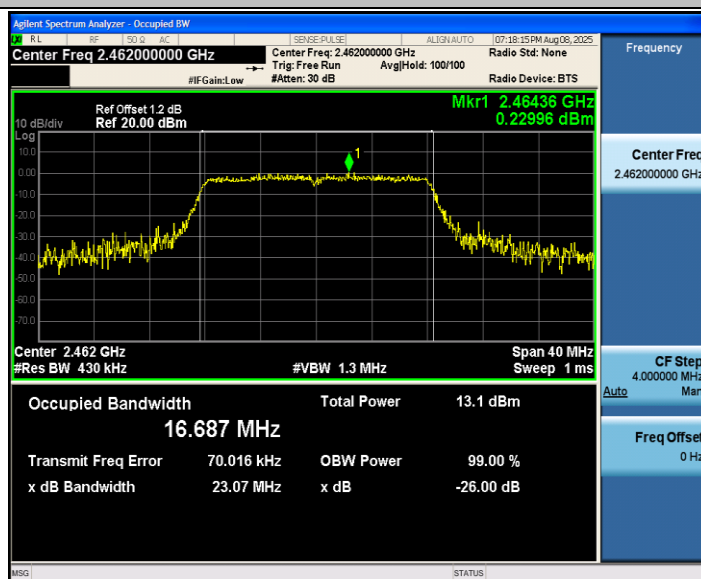
11G_Ant1_2412



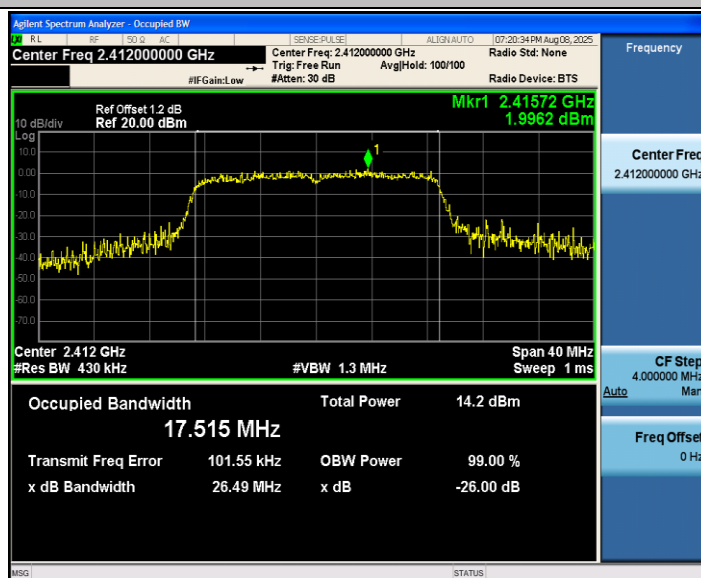
11G_Ant1_2437



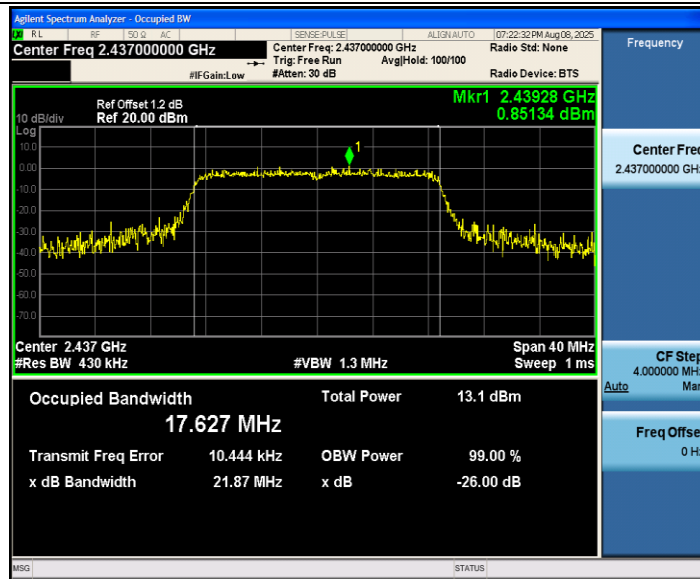
11G_Ant1_2462



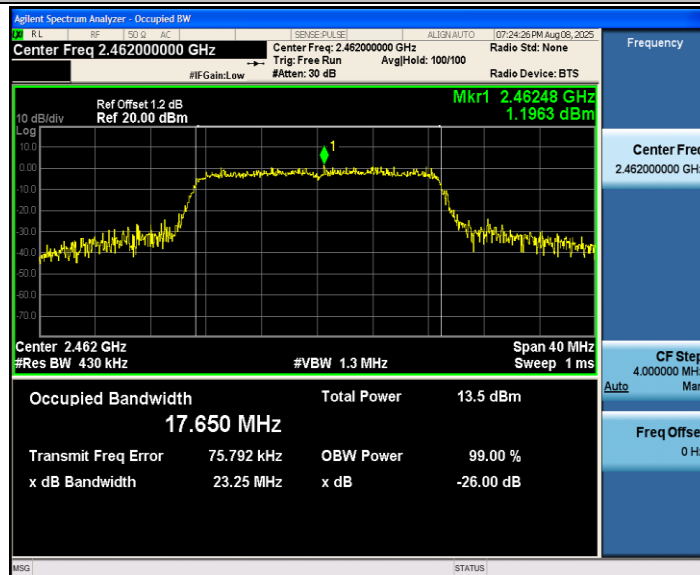
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.17	≤30.00	PASS
		2437	14.15	≤30.00	PASS
		2462	14.58	≤30.00	PASS
11G	Ant1	2412	14.47	≤30.00	PASS
		2437	13.73	≤30.00	PASS
		2462	13.90	≤30.00	PASS
11N20SISO	Ant1	2412	14.85	≤30.00	PASS
		2437	13.94	≤30.00	PASS
		2462	14.03	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

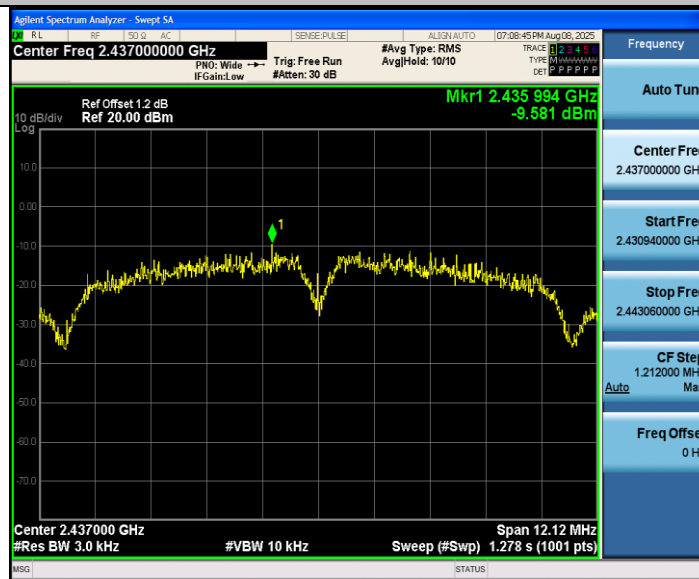
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.47	≤8.00	PASS
		2437	-9.58	≤8.00	PASS
		2462	-10.63	≤8.00	PASS
11G	Ant1	2412	-17.45	≤8.00	PASS
		2437	-18.58	≤8.00	PASS
		2462	-17.90	≤8.00	PASS
11N20SISO	Ant1	2412	-17.48	≤8.00	PASS
		2437	-18.53	≤8.00	PASS
		2462	-18.75	≤8.00	PASS

Test Graphs

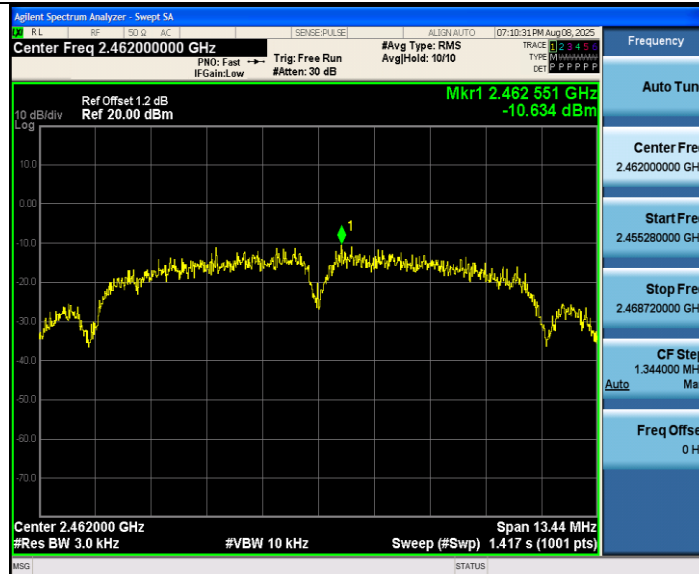
11B_Ant1_2412



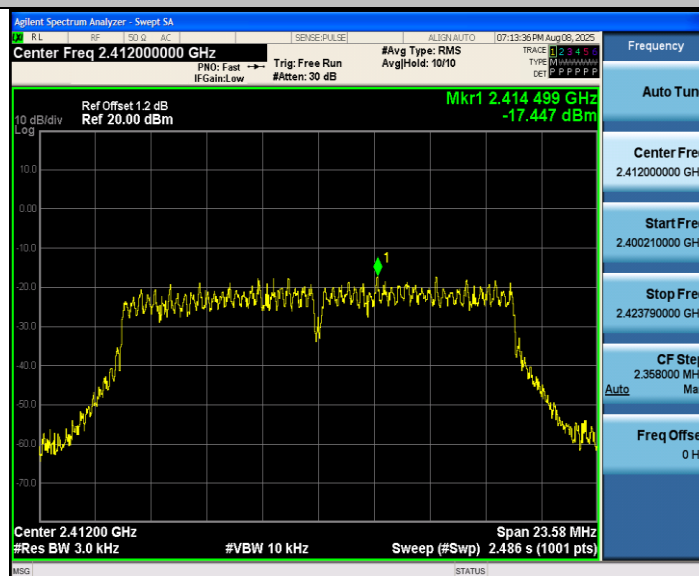
11B_Ant1_2437



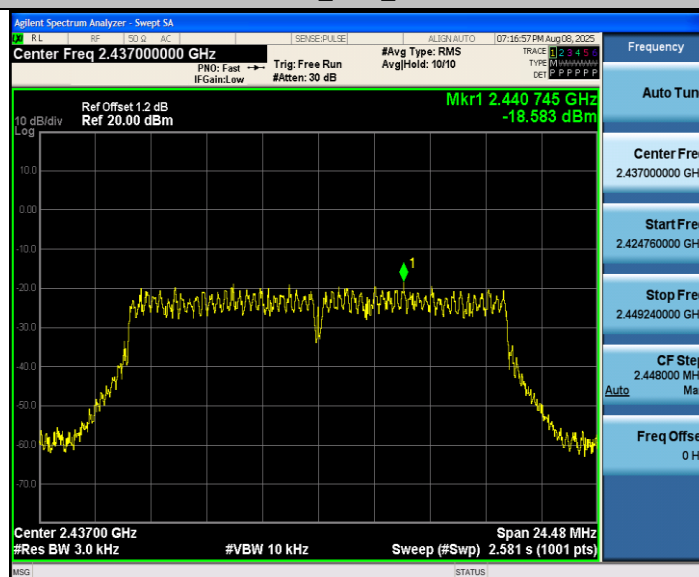
11B_Ant1_2462



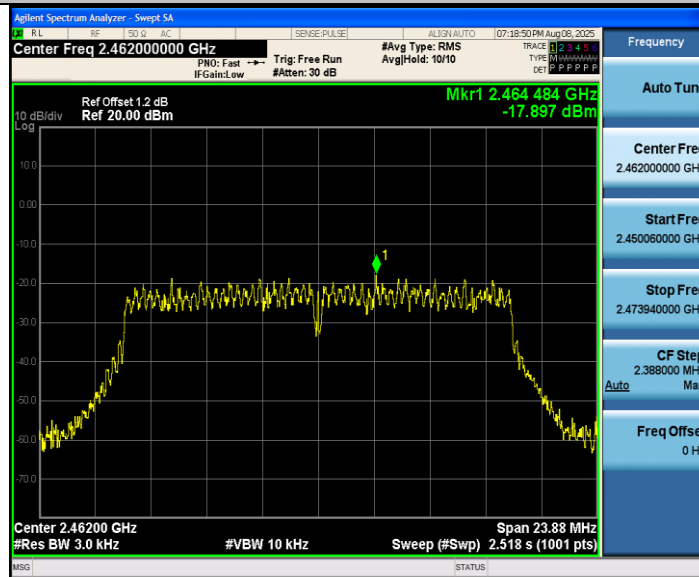
11G_Ant1_2412



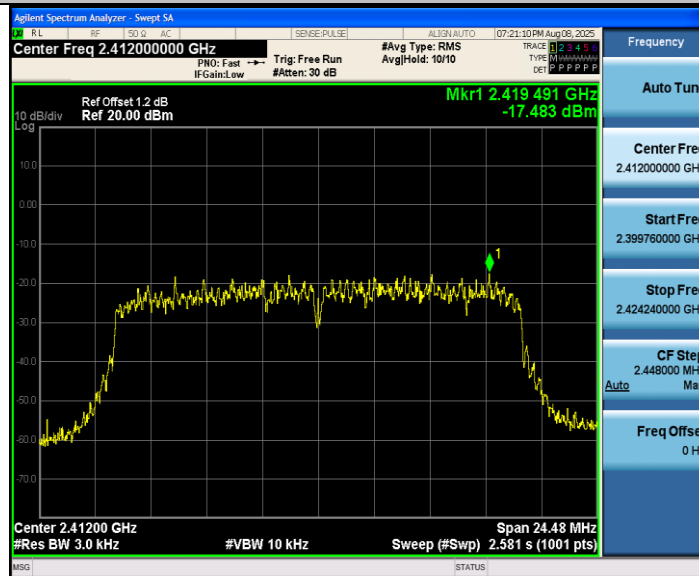
11G_Ant1_2437



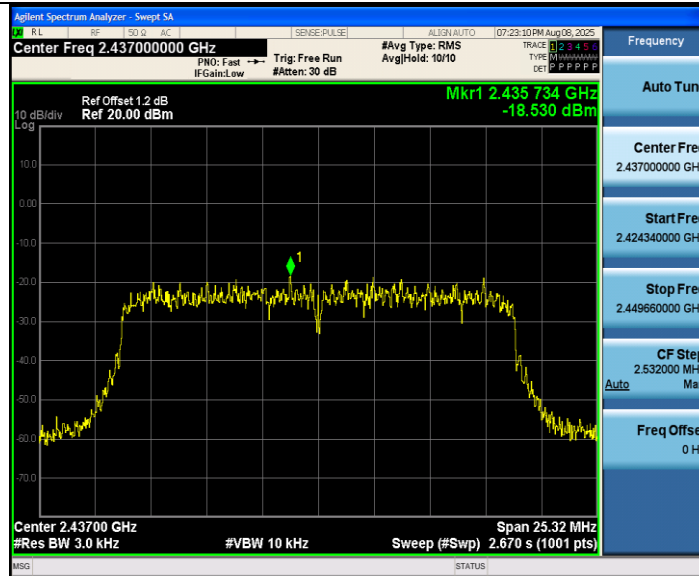
11G_Ant1_2462



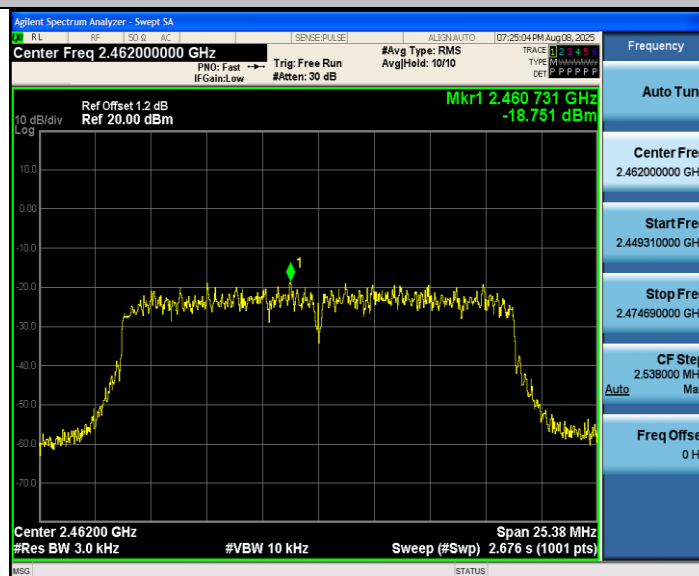
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



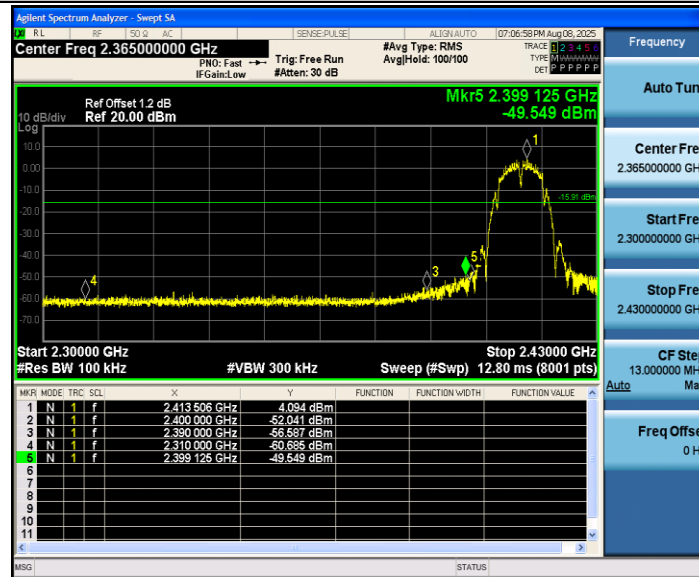
Appendix E: Band edge measurements

Test Result

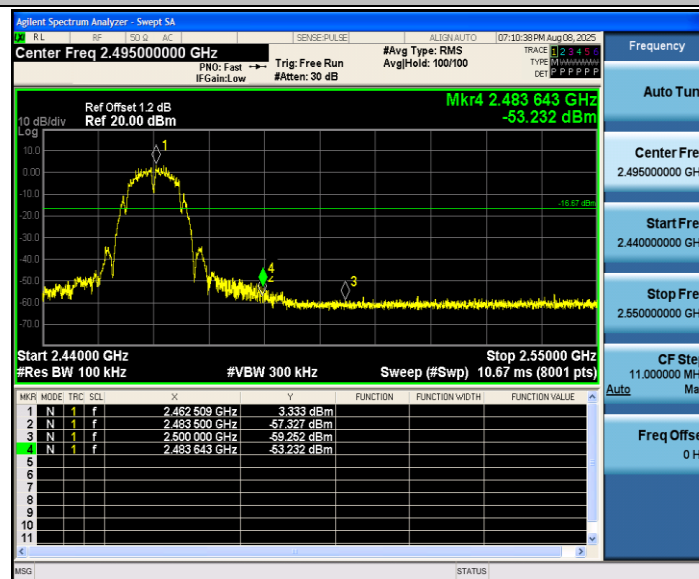
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.09	-49.55	≤-15.91	PASS
		High	2462	3.33	-53.23	≤-16.67	PASS
11G	Ant1	Low	2412	-1.99	-36.6	≤-21.99	PASS
		High	2462	-3.04	-46.03	≤-23.04	PASS
11N20SISO	Ant1	Low	2412	-1.94	-36.84	≤-21.94	PASS
		High	2462	-2.78	-46.32	≤-22.78	PASS

Test Graphs

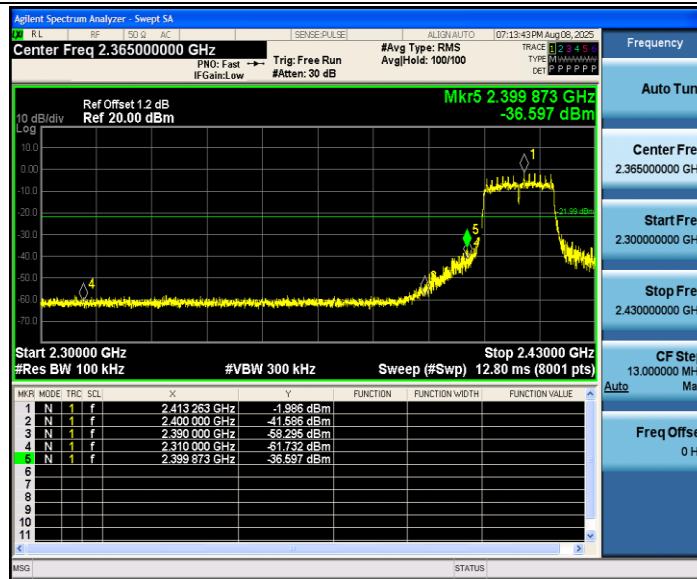
11B_Ant1_Low_2412



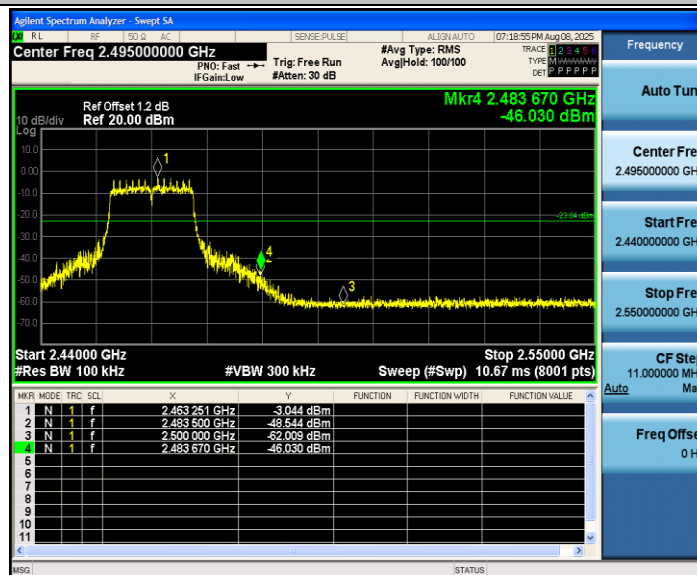
11B_Ant1_High_2462



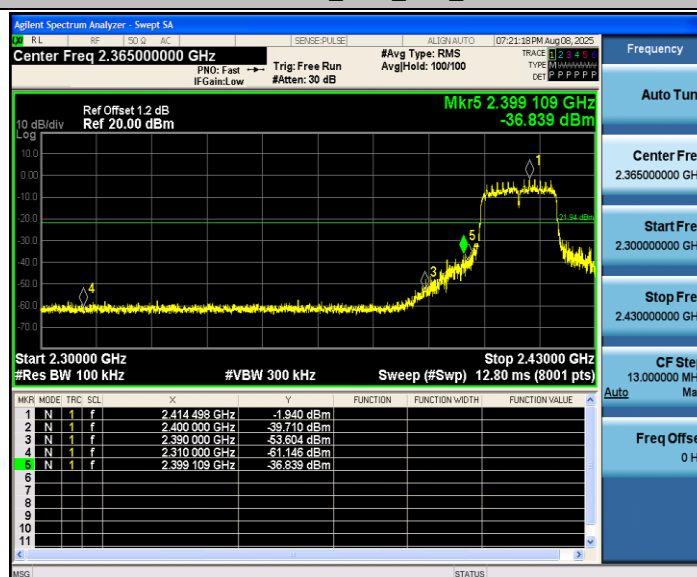
11G_Ant1_Low_2412



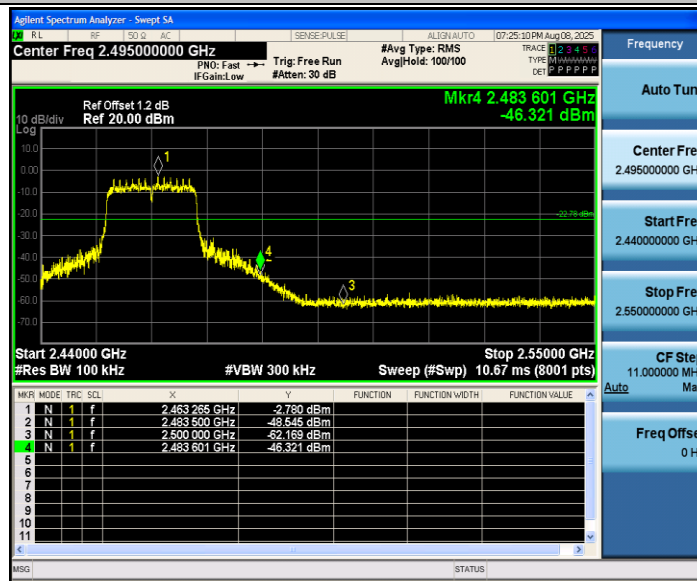
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

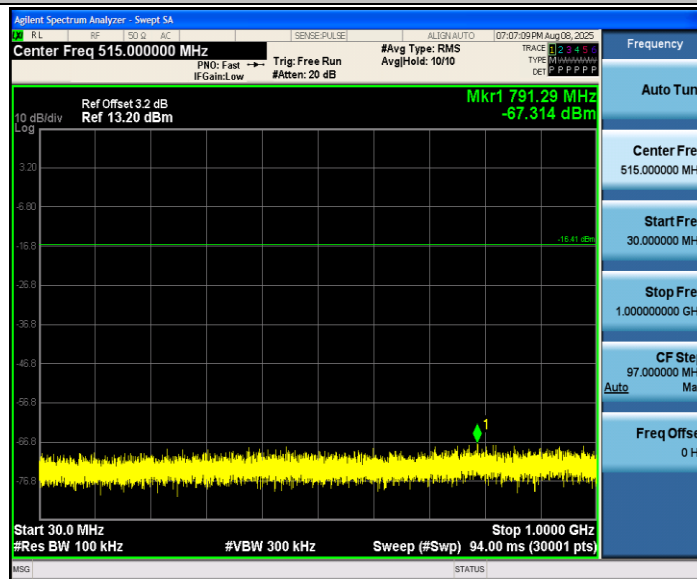
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.59	3.59	---	PASS
			30~1000	3.59	-67.31	≤-16.41	PASS
			1000~26500	3.59	-52.91	≤-16.41	PASS
		2437	Reference	3.01	3.01	---	PASS
			30~1000	3.01	-67.23	≤-16.99	PASS
			1000~26500	3.01	-54.24	≤-16.99	PASS
		2462	Reference	2.62	2.62	---	PASS
			30~1000	2.62	-64.98	≤-17.38	PASS
			1000~26500	2.62	-51.75	≤-17.38	PASS
11G	Ant1	2412	Reference	-1.97	-1.97	---	PASS
			30~1000	-1.97	-67.5	≤-21.97	PASS
			1000~26500	-1.97	-54.7	≤-21.97	PASS
		2437	Reference	-3.86	-3.86	---	PASS
			30~1000	-3.86	-67	≤-23.86	PASS
			1000~26500	-3.86	-54.39	≤-23.86	PASS
		2462	Reference	-4.12	-4.12	---	PASS
			30~1000	-4.12	-67.49	≤-24.12	PASS
			1000~26500	-4.12	-53	≤-24.12	PASS
11N20SISO	Ant1	2412	Reference	-2.02	-2.02	---	PASS
			30~1000	-2.02	-66.6	≤-22.02	PASS
			1000~26500	-2.02	-54.2	≤-22.02	PASS
		2437	Reference	-3.04	-3.04	---	PASS
			30~1000	-3.04	-67.42	≤-23.04	PASS
			1000~26500	-3.04	-54.13	≤-23.04	PASS
		2462	Reference	-3.48	-3.48	---	PASS
			30~1000	-3.48	-67.18	≤-23.48	PASS
			1000~26500	-3.48	-53.9	≤-23.48	PASS

Test Graphs

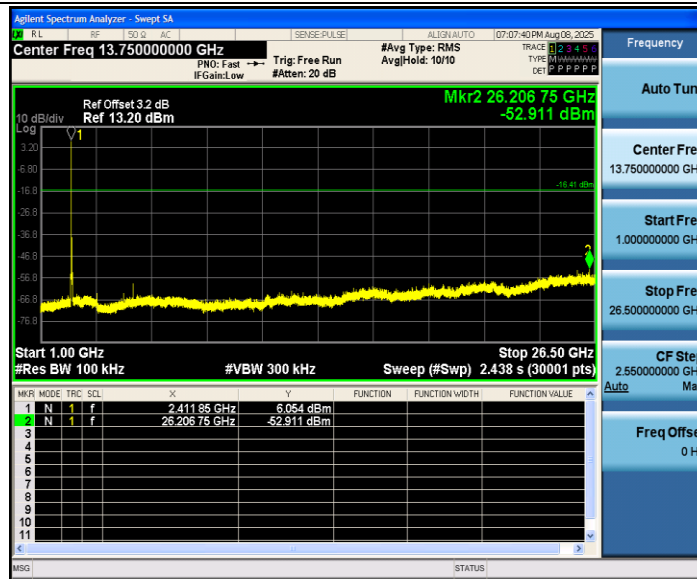
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



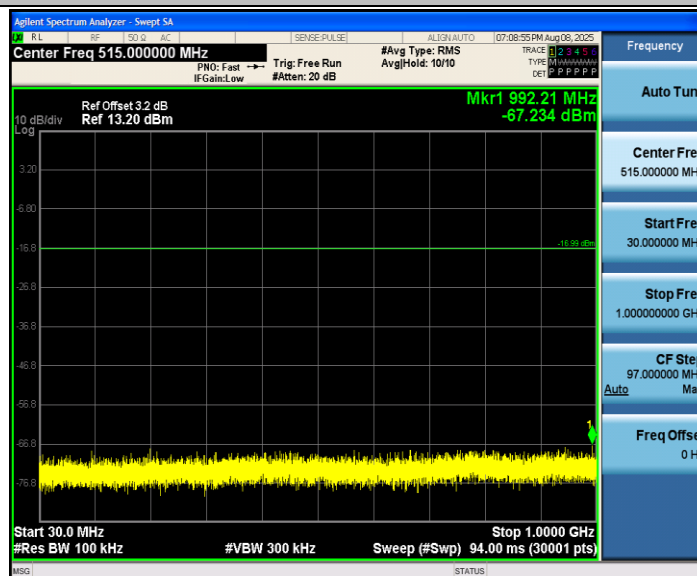
11B_Ant1_2412_1000~26500



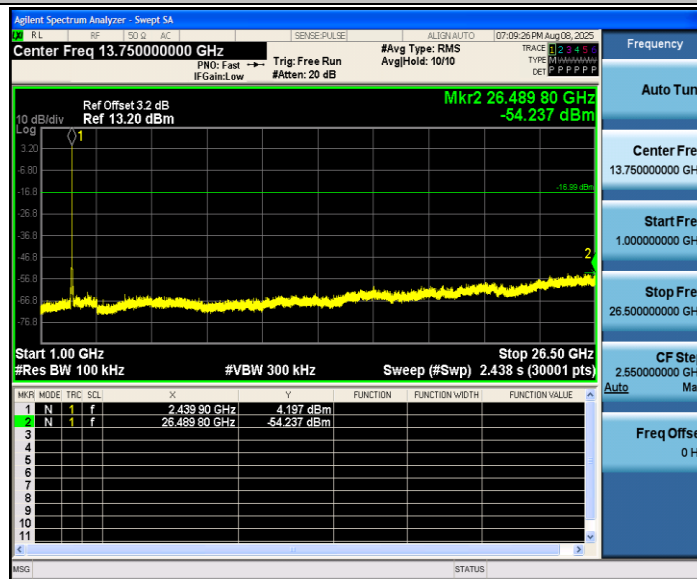
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



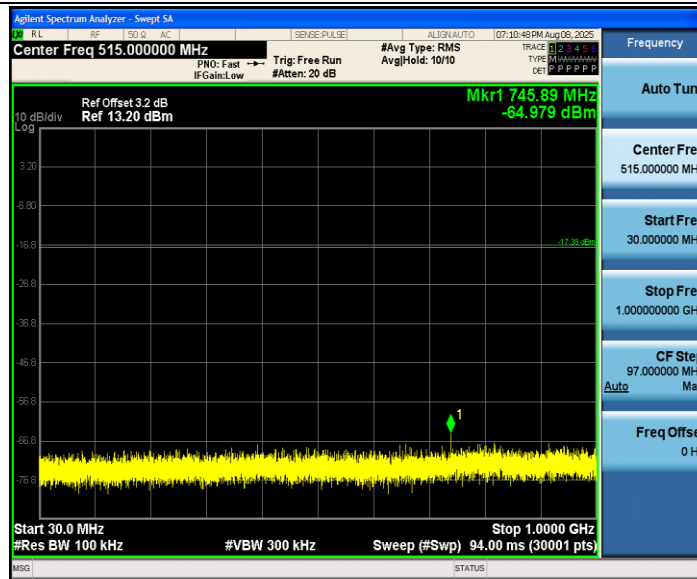
11B_Ant1_2437_1000~26500



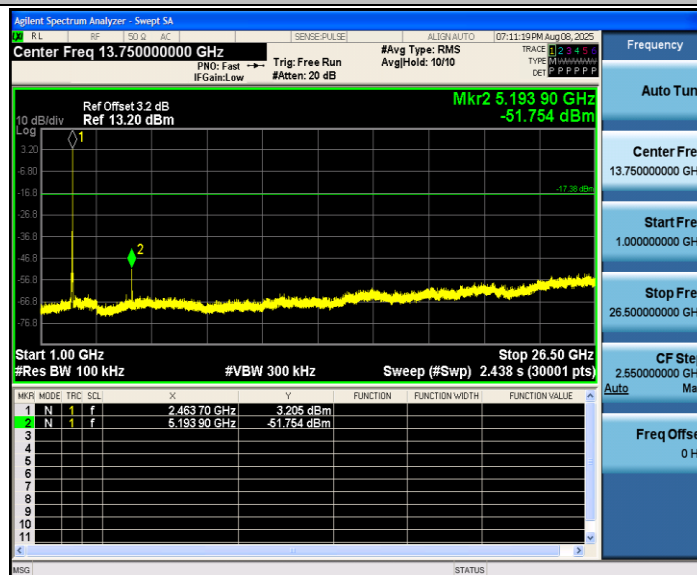
11B_Ant1_2462_0~Reference



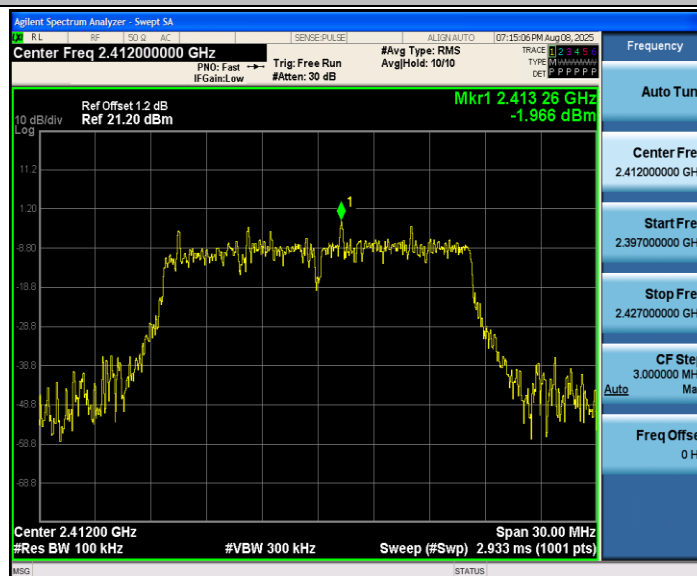
11B_Ant1_2462_30~1000



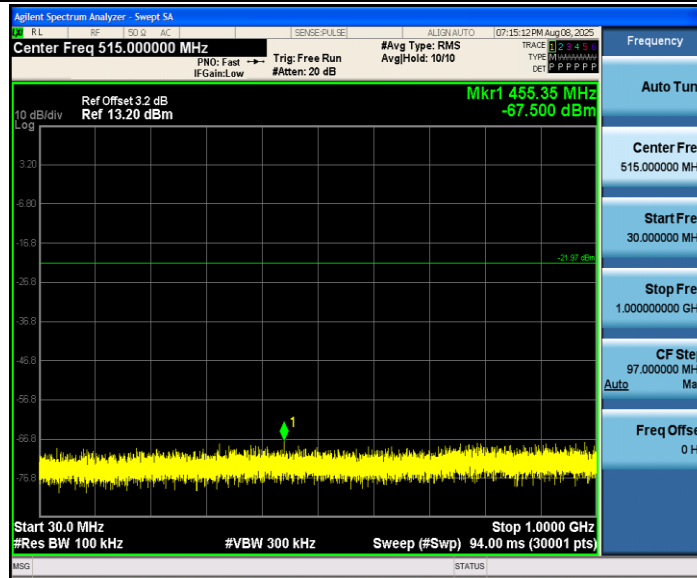
11B_Ant1_2462_1000~26500



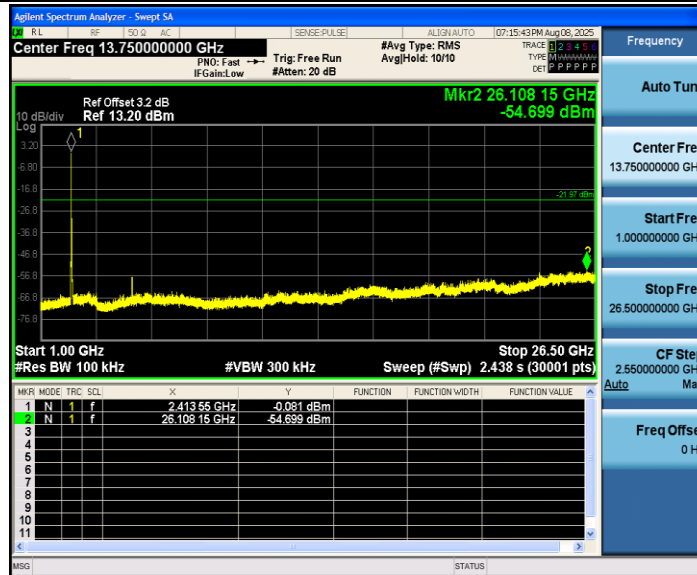
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



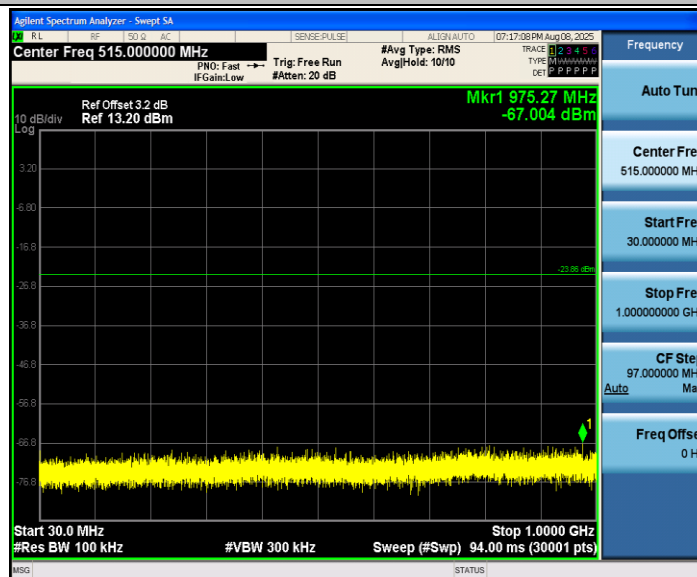
11G_Ant1_2412_1000~26500



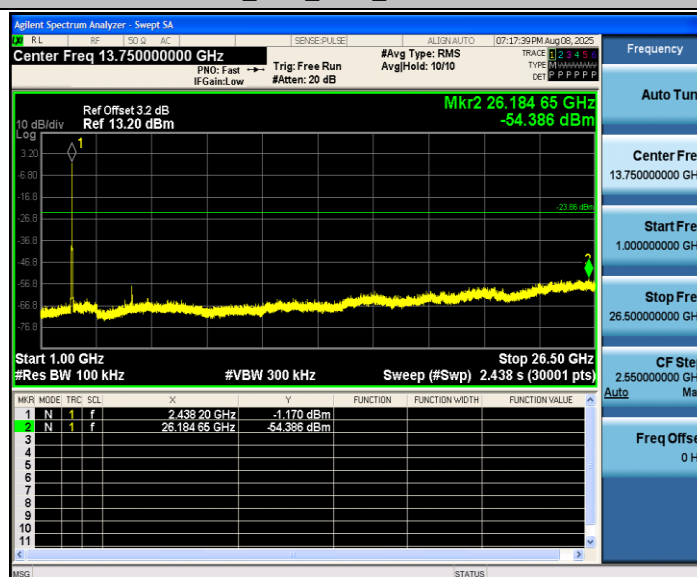
11G_Ant1_2437_0~Reference



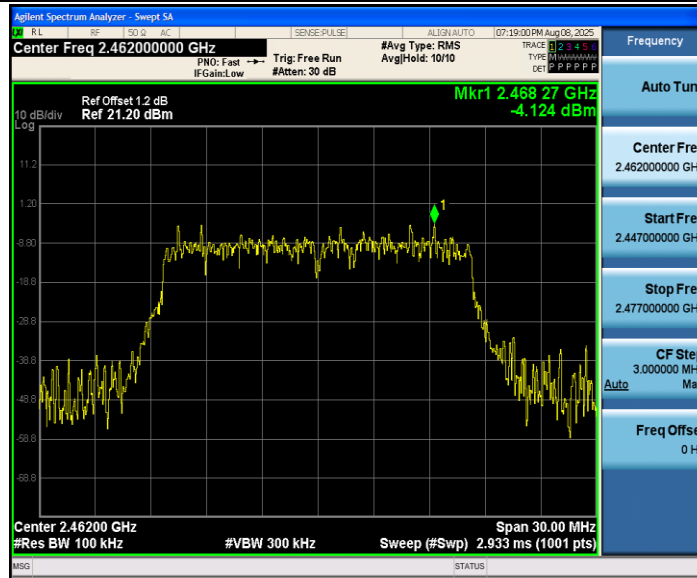
11G_Ant1_2437_30~1000



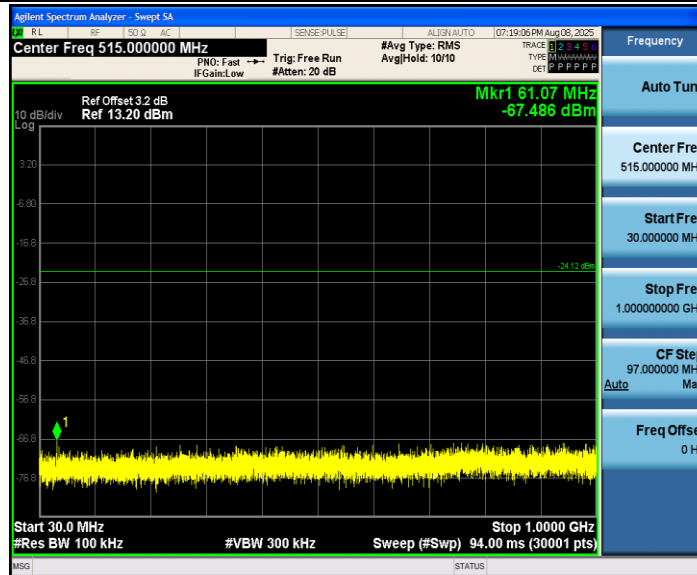
11G_Ant1_2437_1000~26500



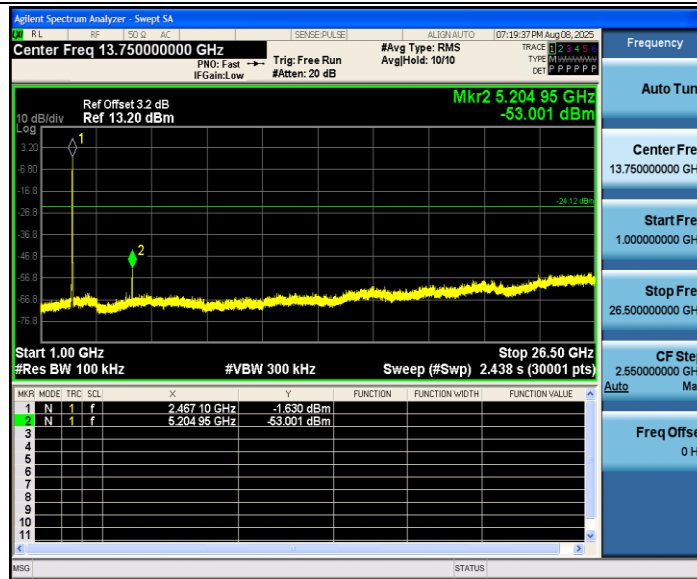
11G_Ant1_2462_0~Reference



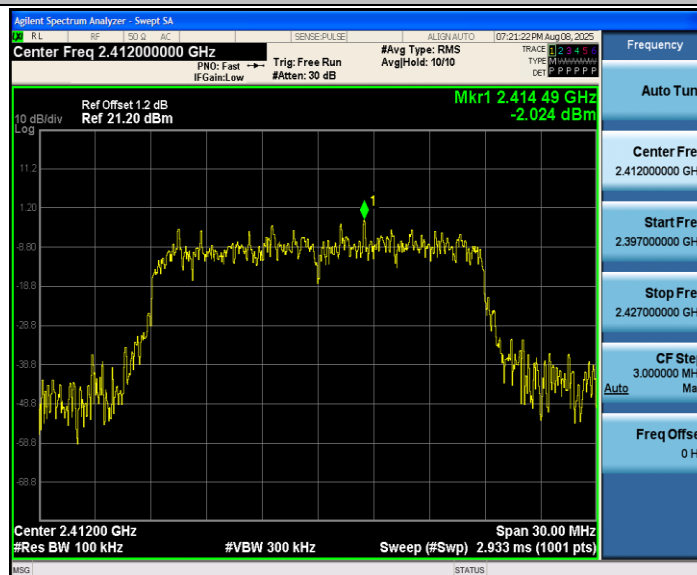
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

