

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BUGX-ZB-1

Company : Dongguan Zebao Optoelectronics Co., Ltd

EUT : kids walkie-talkie

Model Number : ZB-1

Report No. : CTA25122301001

Reviewed By : Eric Wang

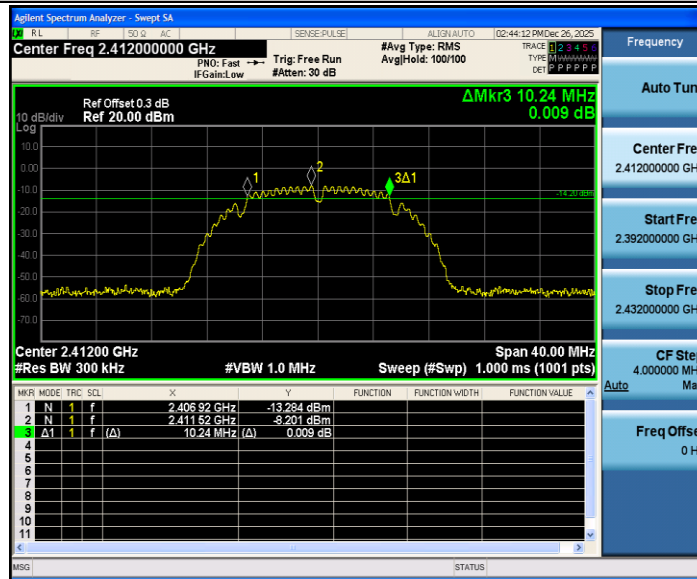
Appendix A: DTS Bandwidth

Test Result

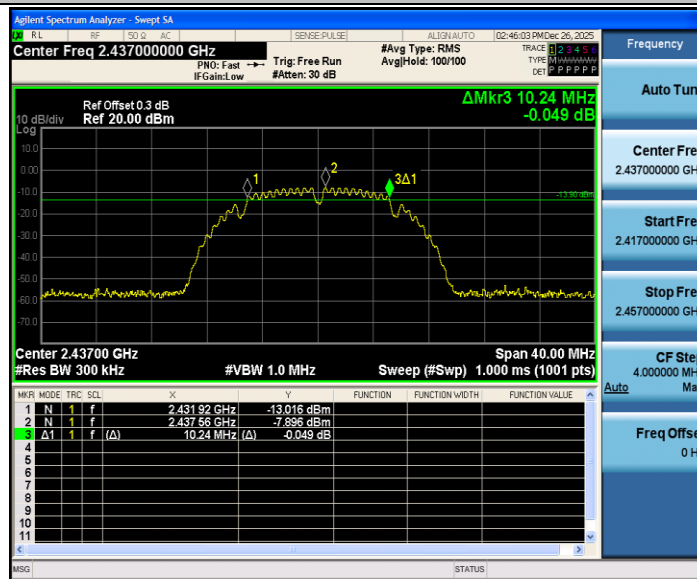
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	16.040	2404.120	2420.160	0.5	PASS
		2437	16.200	2428.960	2445.160	0.5	PASS
		2462	16.120	2453.920	2470.040	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.440	2420.720	0.5	PASS
		2437	16.920	2428.560	2445.480	0.5	PASS
		2462	17.200	2453.360	2470.560	0.5	PASS

Test Graphs

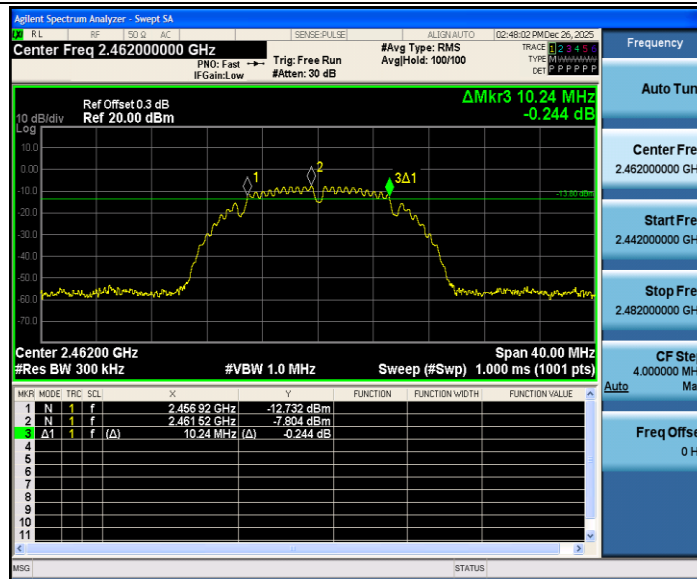
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



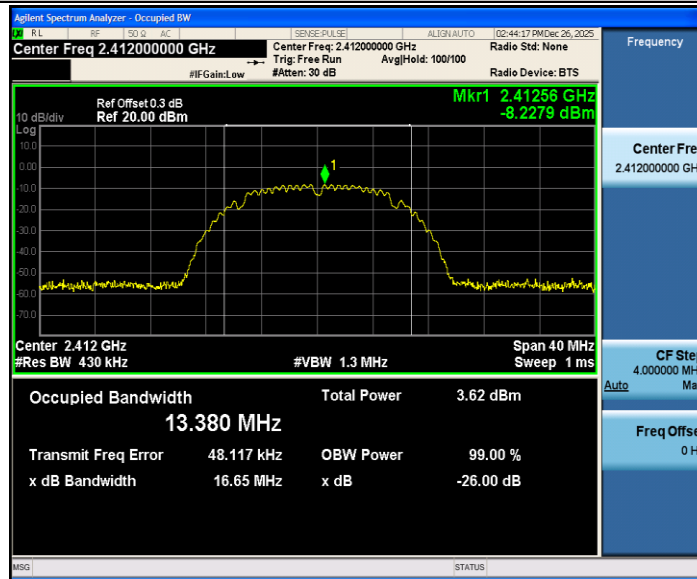
Appendix B: Occupied Channel Bandwidth

Test Result

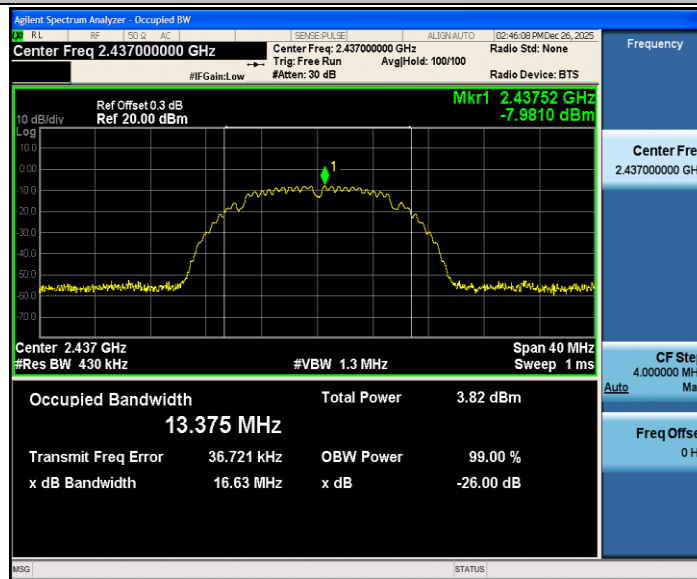
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.380	2405.3581	2418.7381	---	---
		2437	13.375	2430.3492	2443.7242	---	---
		2462	13.389	2455.3268	2468.7158	---	---
11G	Ant1	2412	16.762	2403.7259	2420.4879	---	---
		2437	16.693	2428.6920	2445.3850	---	---
		2462	16.813	2453.6535	2470.4665	---	---
11N20SISO	Ant1	2412	17.788	2403.1406	2420.9286	---	---
		2437	17.774	2428.1484	2445.9224	---	---
		2462	17.936	2453.0699	2471.0059	---	---

Test Graphs

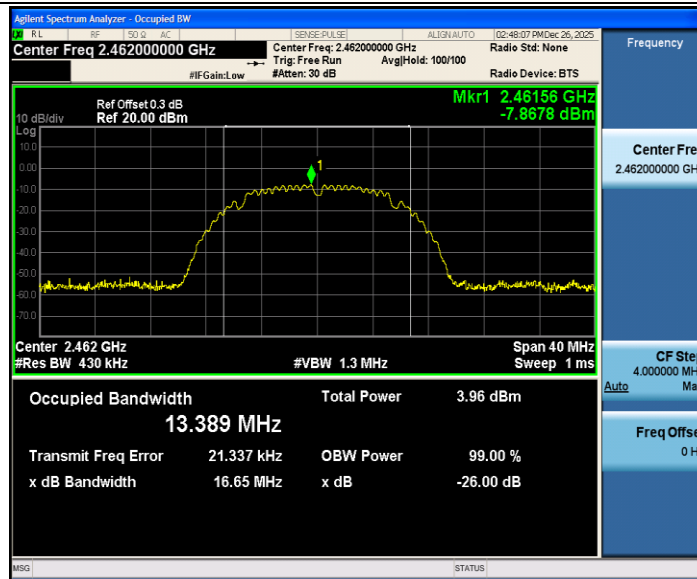
11B_Ant1_2412



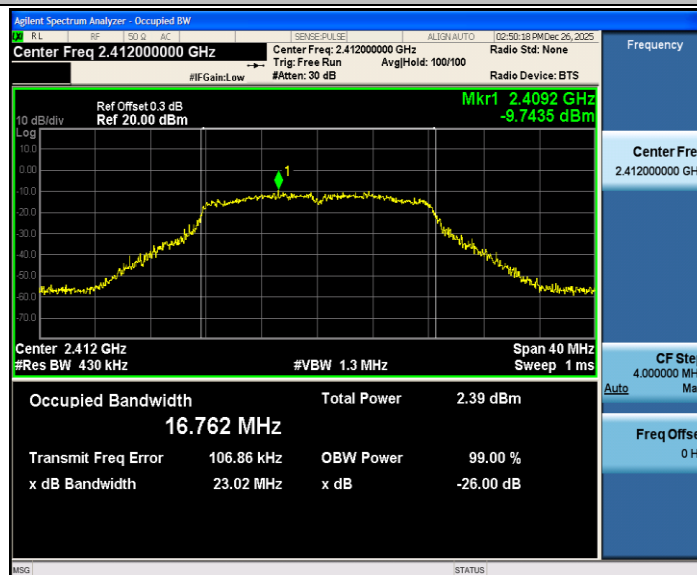
11B_Ant1_2437



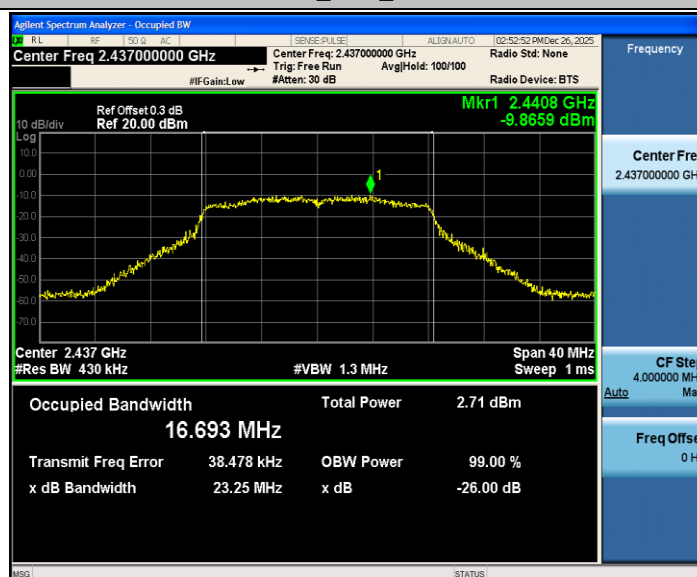
11B_Ant1_2462



11G_Ant1_2412



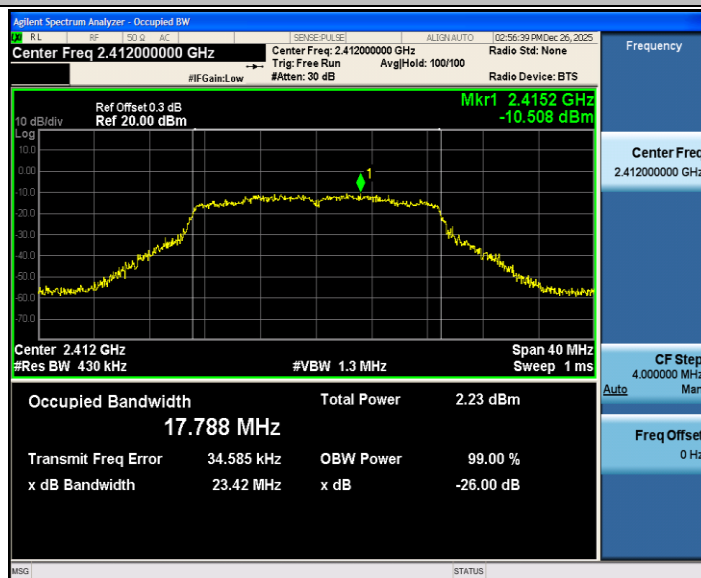
11G_Ant1_2437



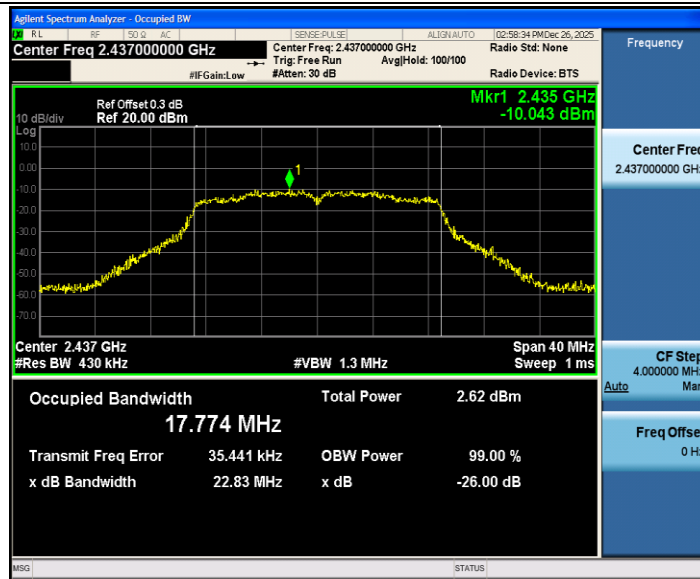
11G_Ant1_2462



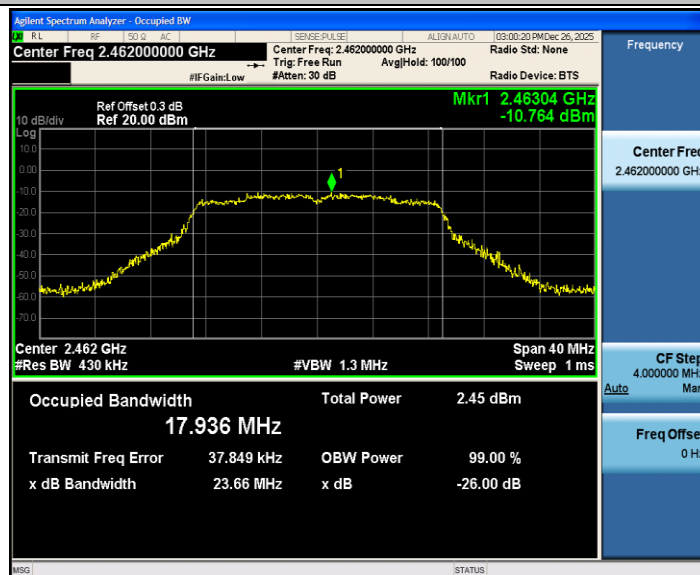
11N20SISO_Ant1_2412



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	3.45	≤30.00	PASS
		2437	3.70	≤30.00	PASS
		2462	3.82	≤30.00	PASS
11G	Ant1	2412	2.97	≤30.00	PASS
		2437	3.25	≤30.00	PASS
		2462	3.25	≤30.00	PASS
11N20SISO	Ant1	2412	2.85	≤30.00	PASS
		2437	3.20	≤30.00	PASS
		2462	3.15	≤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	-22.48	≤8.00	PASS
		2437	-22.01	≤8.00	PASS
		2462	-21.80	≤8.00	PASS
11G	Ant1	2412	-28.15	≤8.00	PASS
		2437	-26.97	≤8.00	PASS
		2462	-27.68	≤8.00	PASS
11N20SISO	Ant1	2412	-26.12	≤8.00	PASS
		2437	-26.52	≤8.00	PASS
		2462	-28.45	≤8.00	PASS

Test Graphs

11B_Ant1_2412



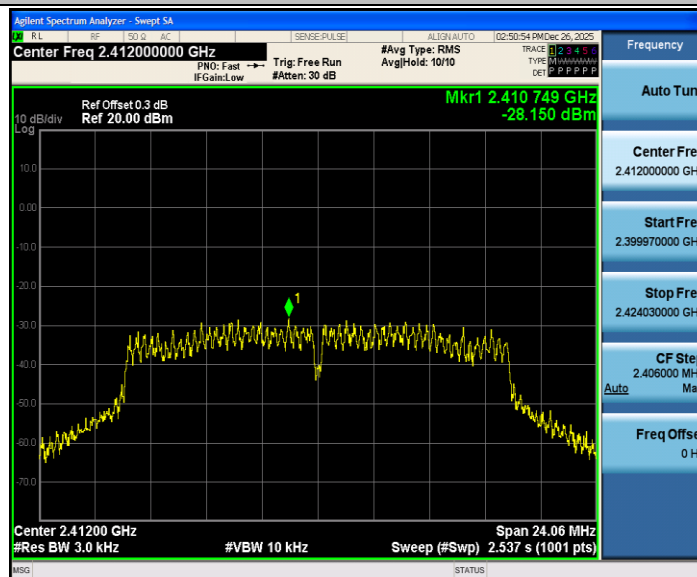
11B_Ant1_2437



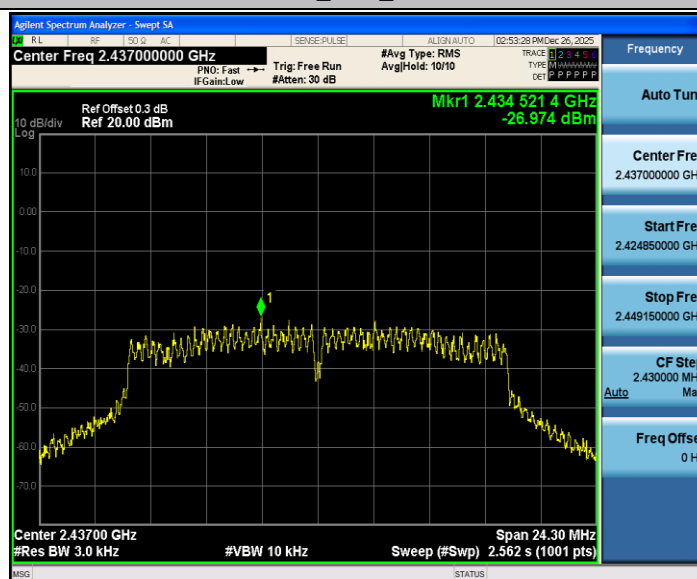
11B_Ant1_2462



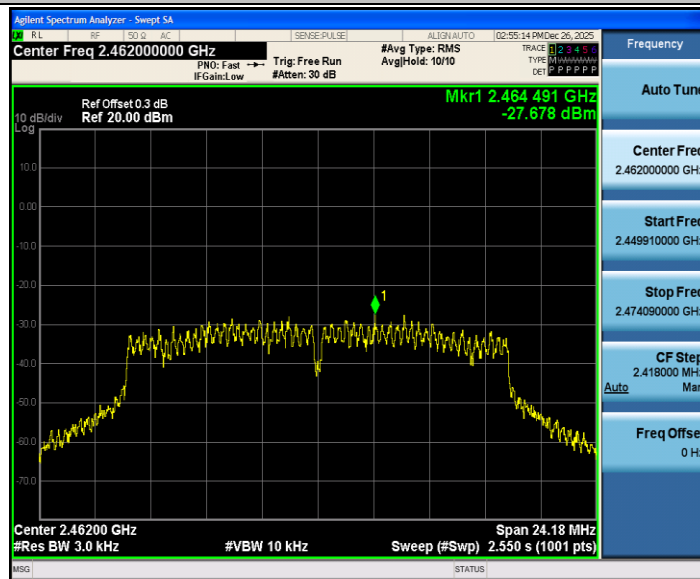
11G_Ant1_2412



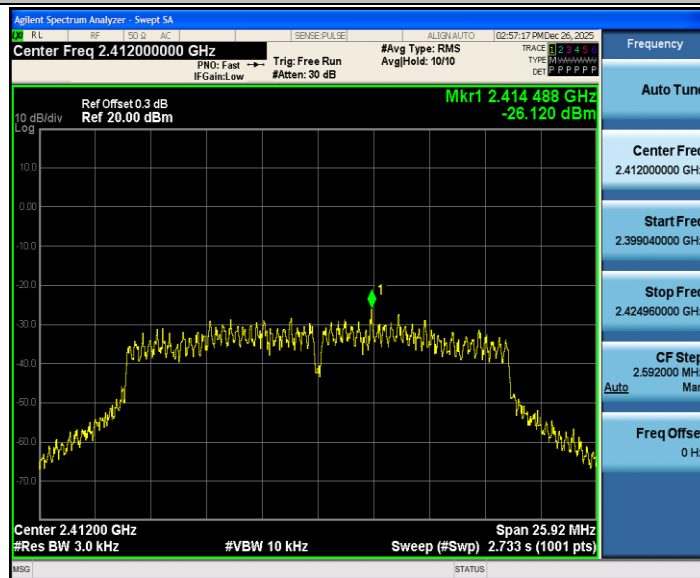
11G_Ant1_2437



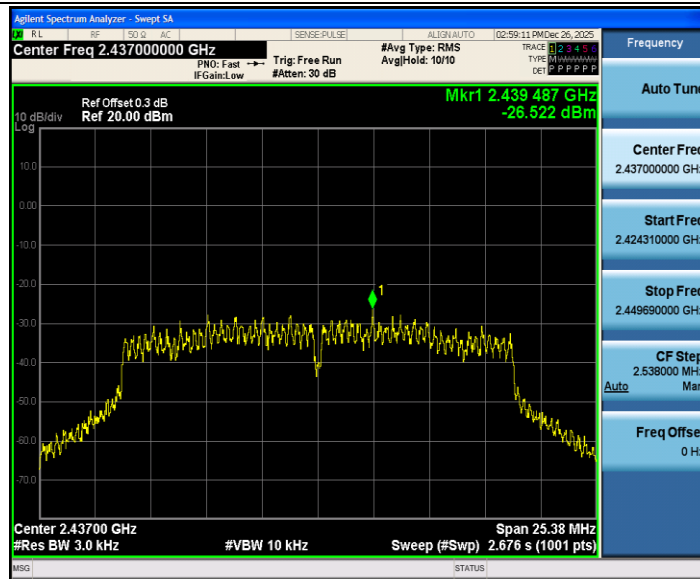
11G_Ant1_2462



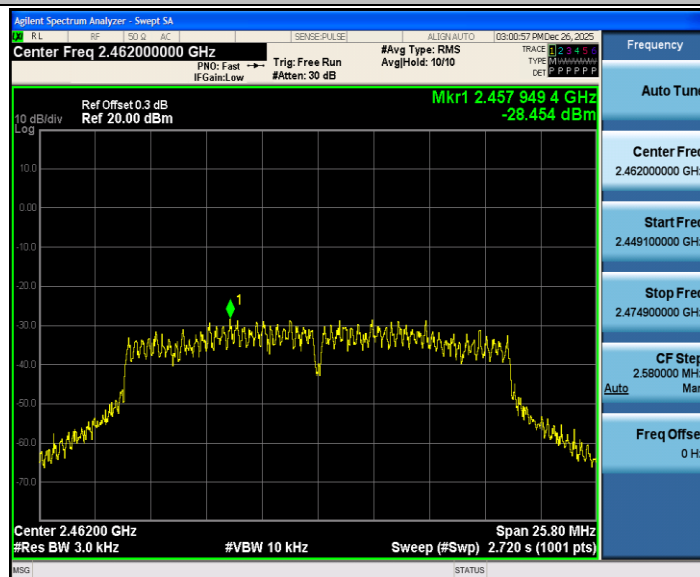
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



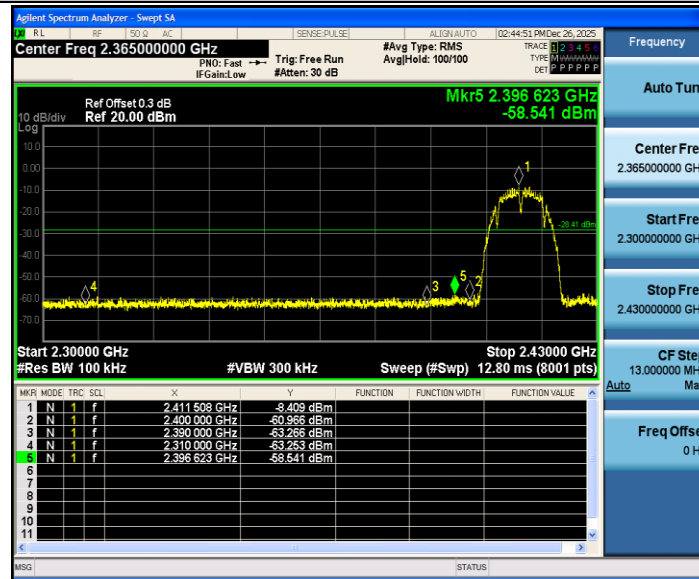
Appendix E: Band edge measurements

Test Result

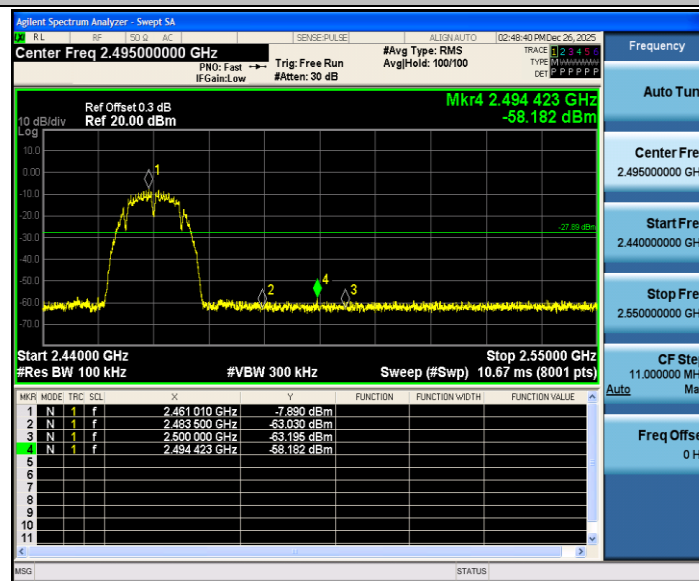
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-8.41	-58.54	≤-28.41	PASS
		High	2462	-7.89	-58.18	≤-27.89	PASS
11G	Ant1	Low	2412	-12.68	-41.97	≤-32.68	PASS
		High	2462	-12.53	-57.53	≤-32.53	PASS
11N20SISO	Ant1	Low	2412	-12.68	-43.86	≤-32.68	PASS
		High	2462	-12.49	-57.54	≤-32.49	PASS

Test Graphs

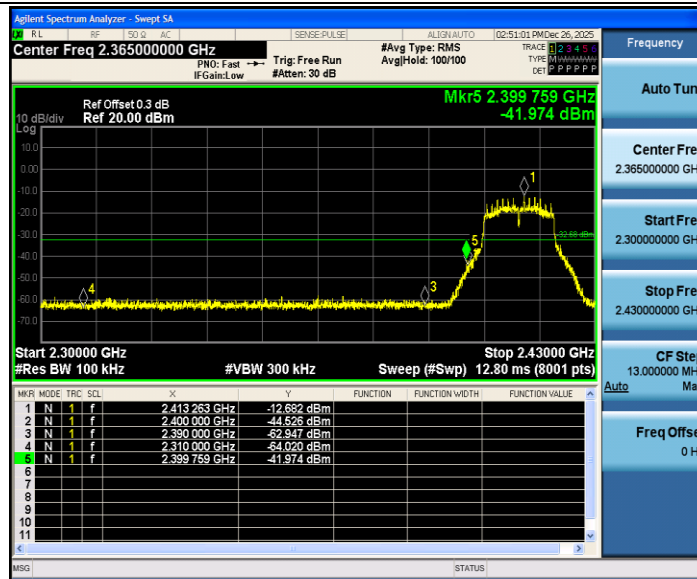
11B_Ant1_Low_2412



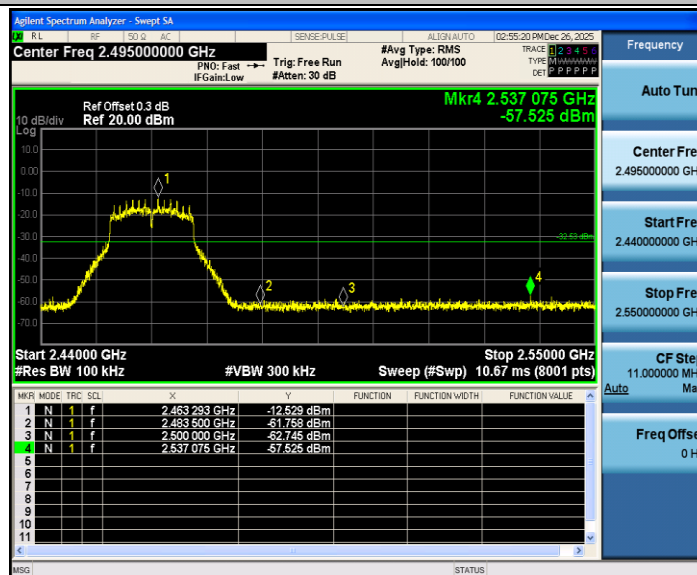
11B_Ant1_High_2462



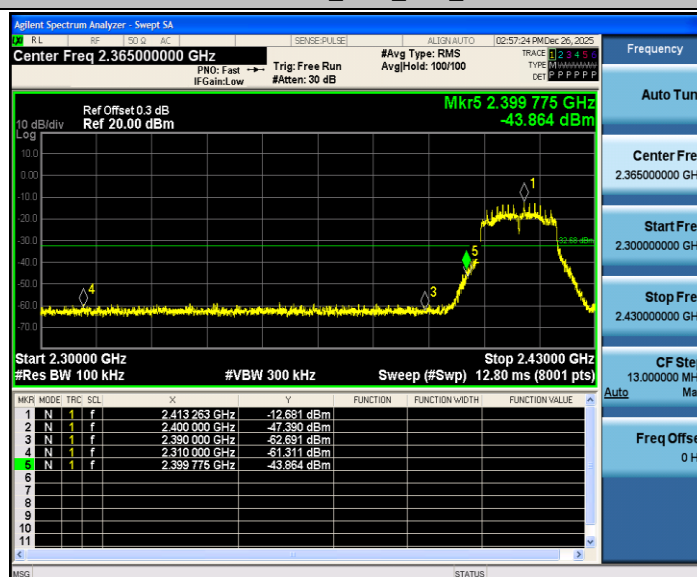
11G_Ant1_Low_2412



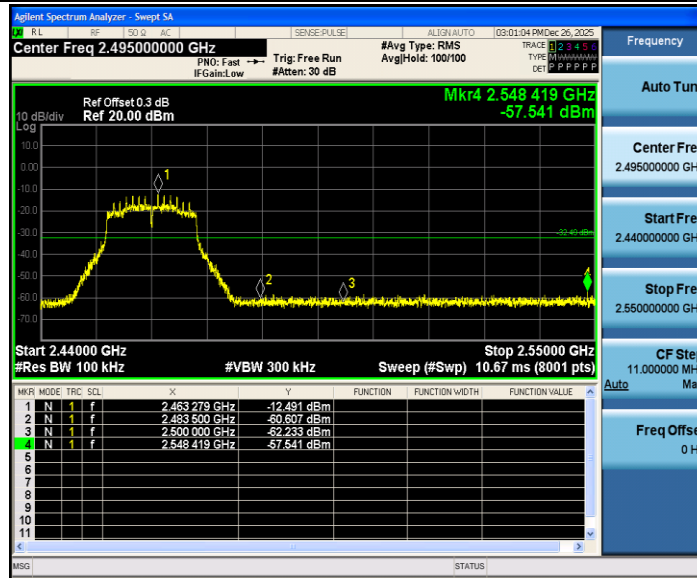
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



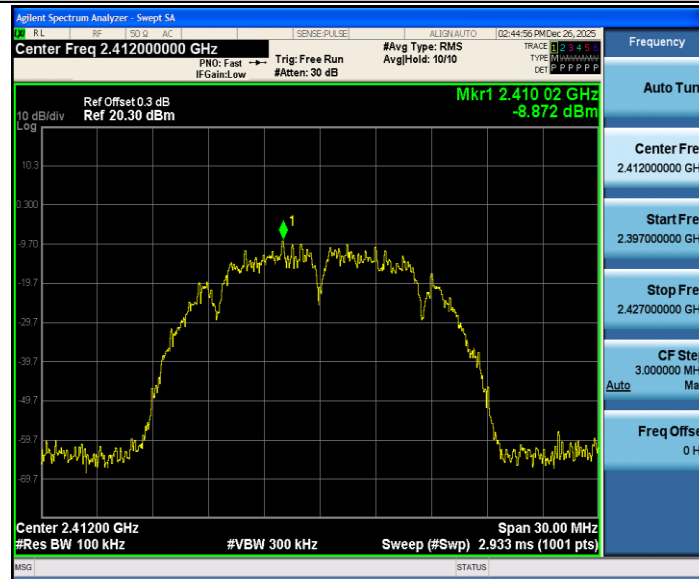
Appendix F: Conducted Spurious Emission

Test Result

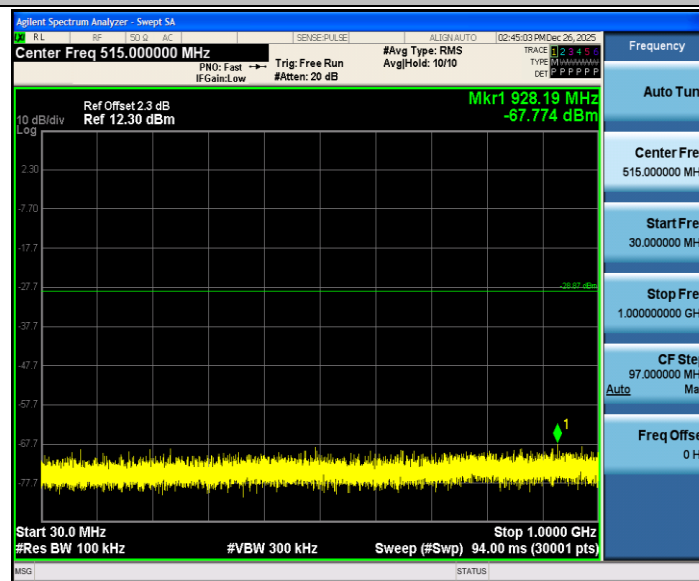
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-8.87	-8.87	---	PASS
			30~1000	-8.87	-67.77	≤-28.87	PASS
			1000~26500	-8.87	-55.51	≤-28.87	PASS
		2437	Reference	-9.45	-9.45	---	PASS
			30~1000	-9.45	-67.9	≤-29.45	PASS
			1000~26500	-9.45	-55.77	≤-29.45	PASS
		2462	Reference	-8.66	-8.66	---	PASS
			30~1000	-8.66	-68.13	≤-28.66	PASS
			1000~26500	-8.66	-55.61	≤-28.66	PASS
11G	Ant1	2412	Reference	-14.02	-14.02	---	PASS
			30~1000	-14.02	-68.32	≤-34.02	PASS
			1000~26500	-14.02	-55.16	≤-34.02	PASS
		2437	Reference	-12.55	-12.55	---	PASS
			30~1000	-12.55	-67.24	≤-32.55	PASS
			1000~26500	-12.55	-55.52	≤-32.55	PASS
		2462	Reference	-13.07	-13.07	---	PASS
			30~1000	-13.07	-67.61	≤-33.07	PASS
			1000~26500	-13.07	-54.62	≤-33.07	PASS
11N20SISO	Ant1	2412	Reference	-13.62	-13.62	---	PASS
			30~1000	-13.62	-68.71	≤-33.62	PASS
			1000~26500	-13.62	-55.76	≤-33.62	PASS
		2437	Reference	-12.78	-12.78	---	PASS
			30~1000	-12.78	-67.86	≤-32.78	PASS
			1000~26500	-12.78	-55.51	≤-32.78	PASS
		2462	Reference	-13.01	-13.01	---	PASS
			30~1000	-13.01	-67.67	≤-33.01	PASS
			1000~26500	-13.01	-55.66	≤-33.01	PASS

Test Graphs

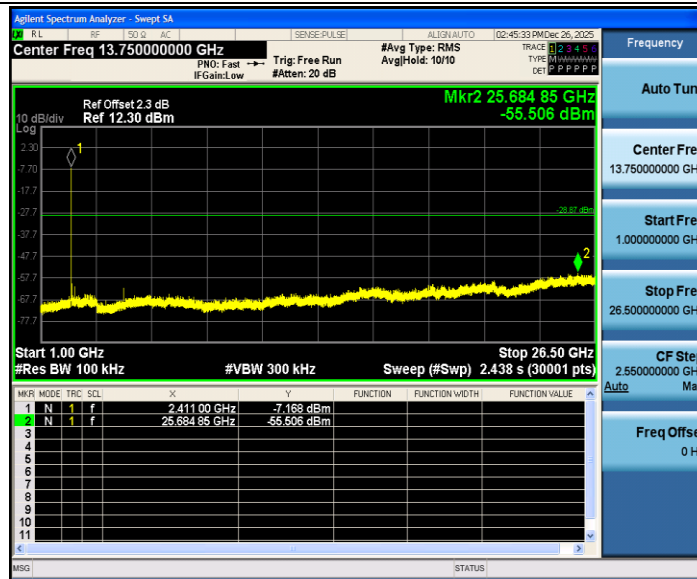
11B_Ant1_2412_0~Reference



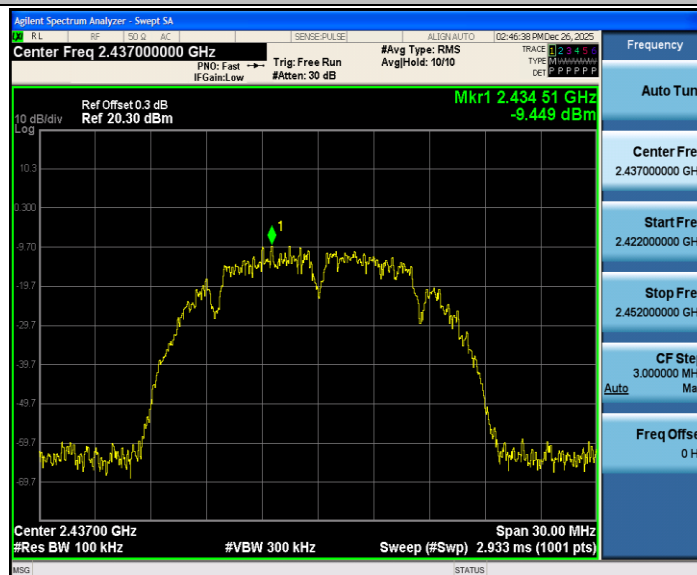
11B_Ant1_2412_30~1000



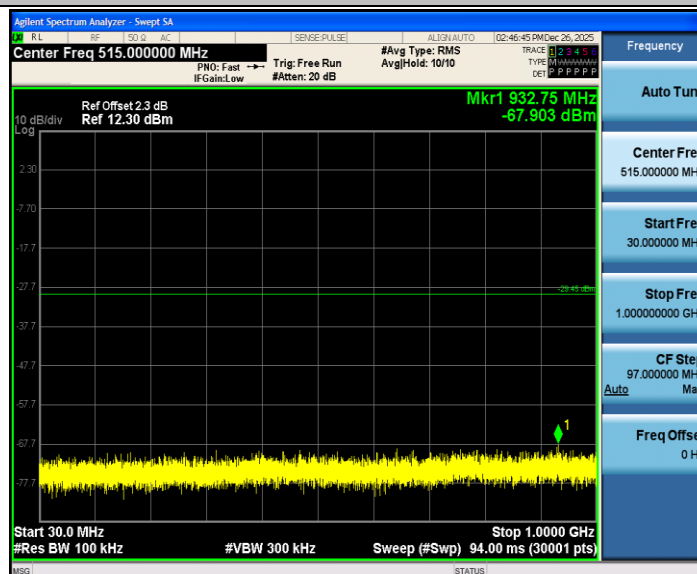
11B_Ant1_2412_1000~26500



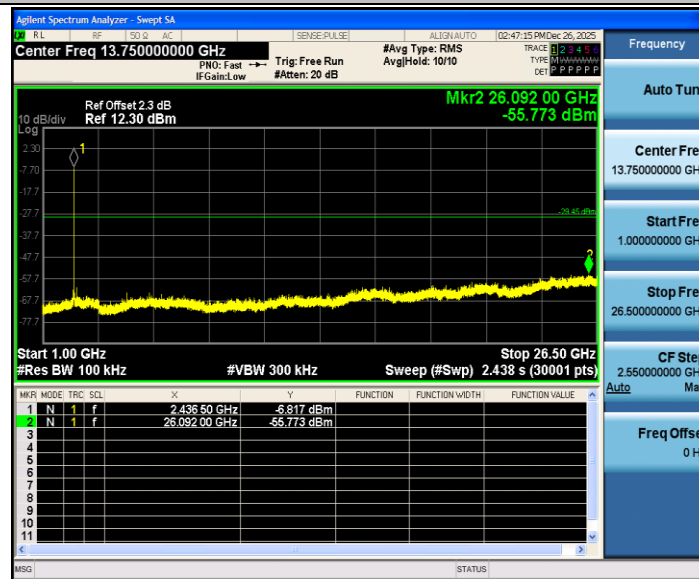
11B_Ant1_2437_0~Reference



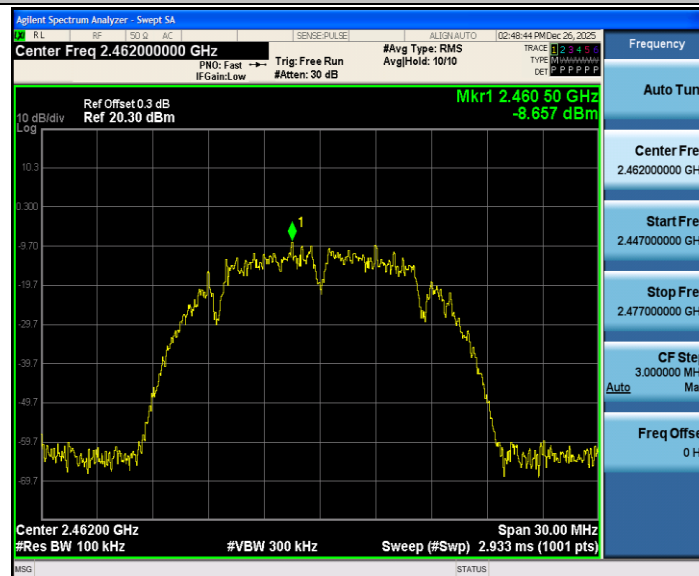
11B_Ant1_2437_30~1000



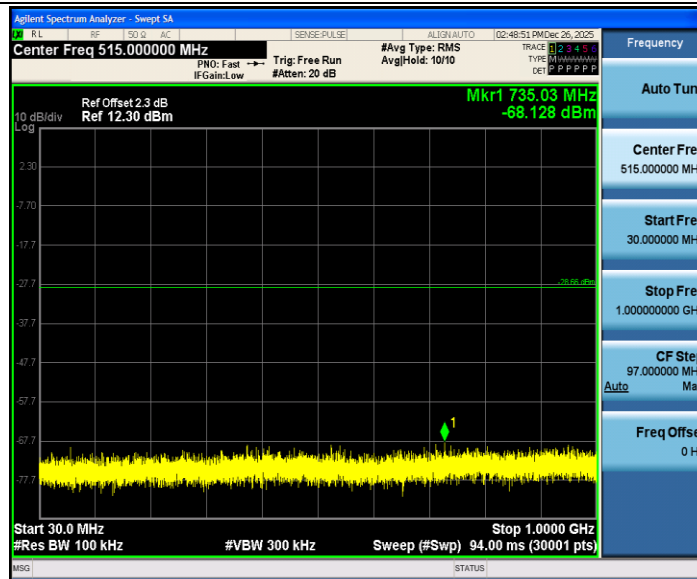
11B_Ant1_2437_1000~26500



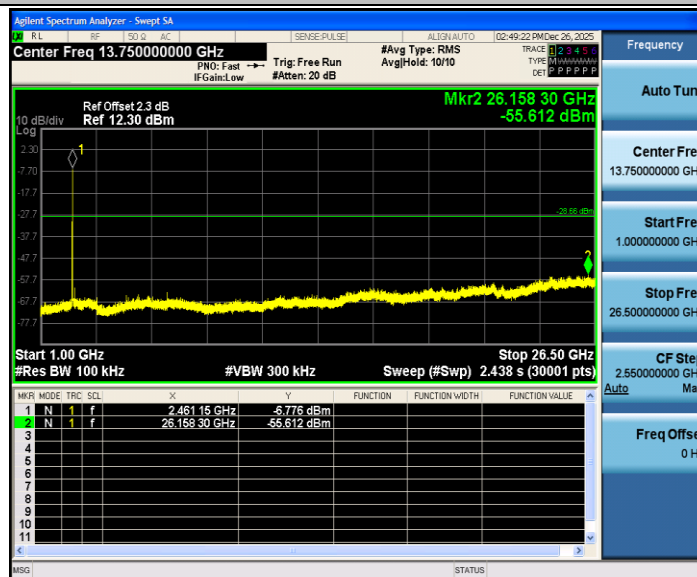
11B_Ant1_2462_0~Reference



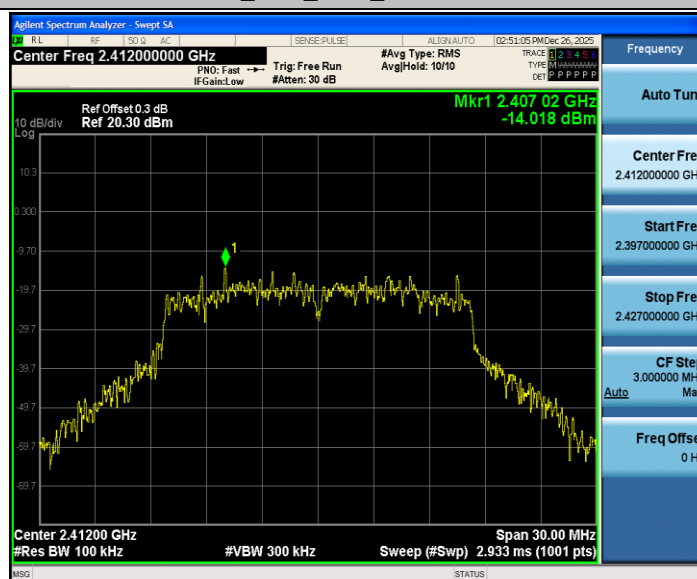
11B_Ant1_2462_30~1000



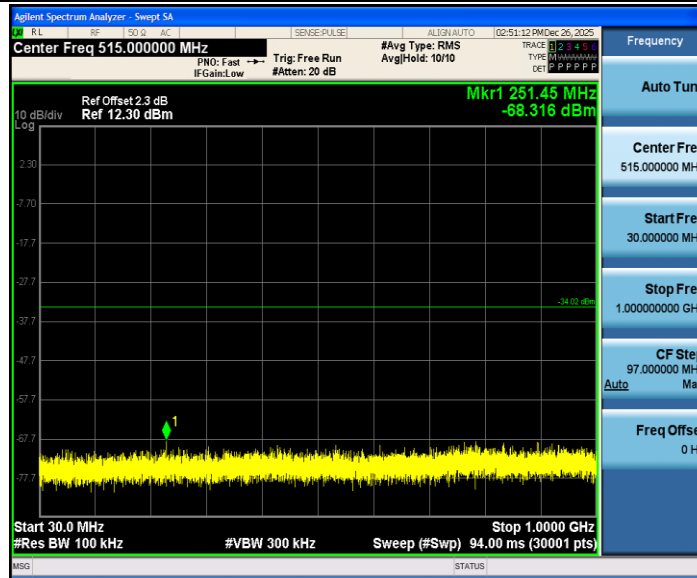
11B_Ant1_2462_1000~26500



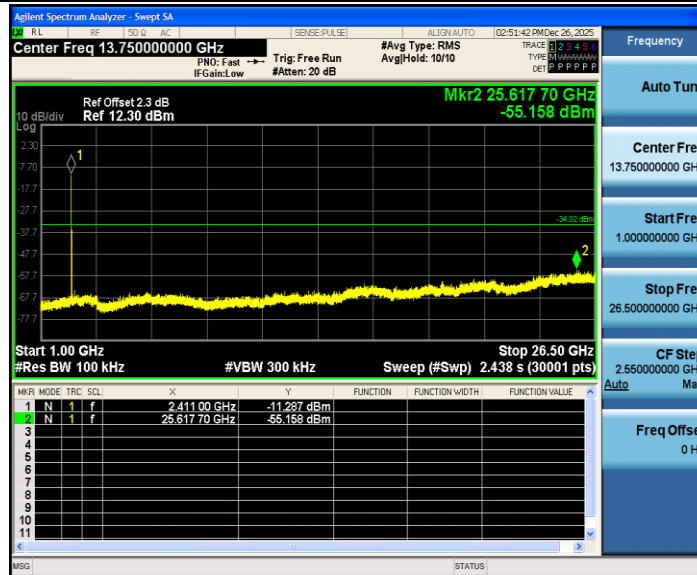
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



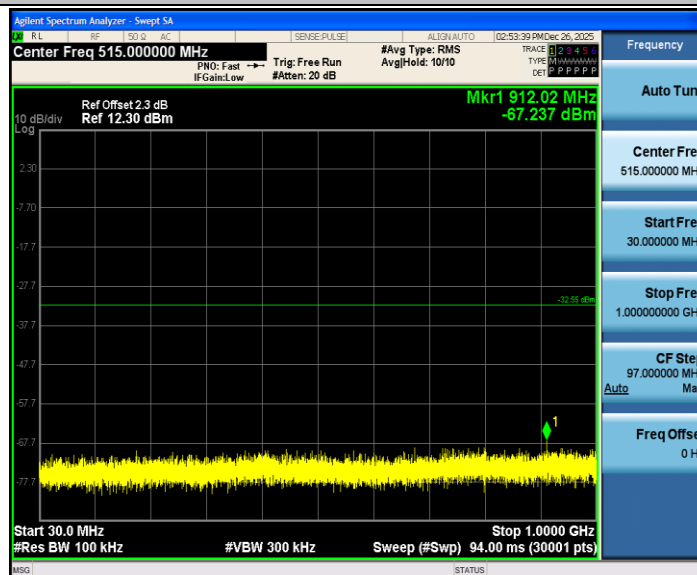
11G_Ant1_2412_1000~26500



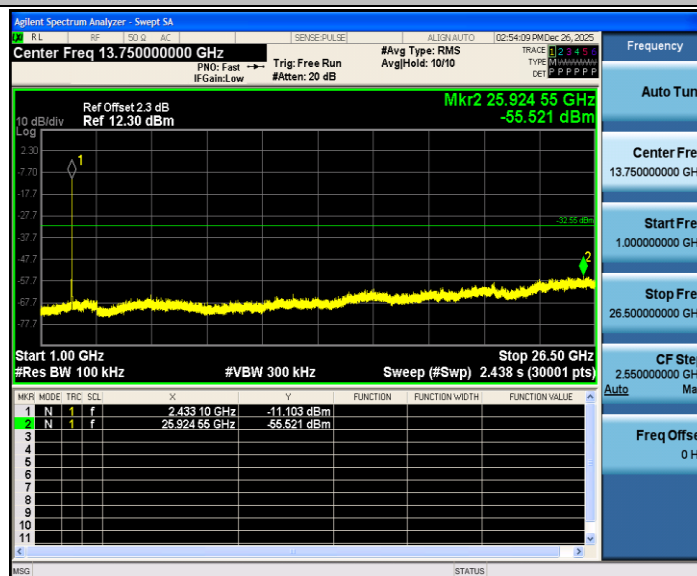
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



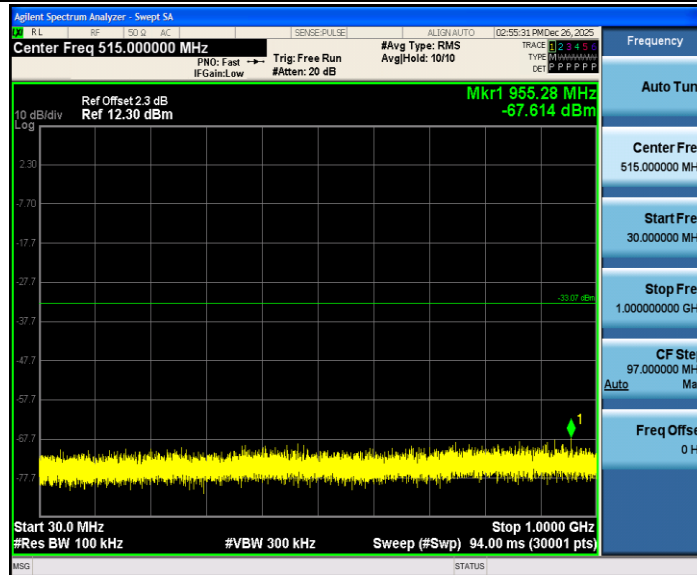
11G_Ant1_2437_1000~26500



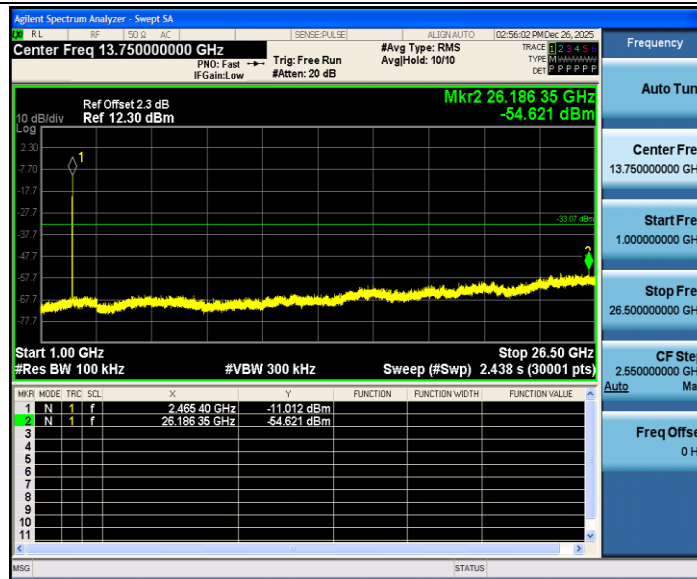
11G_Ant1_2462_0~Reference



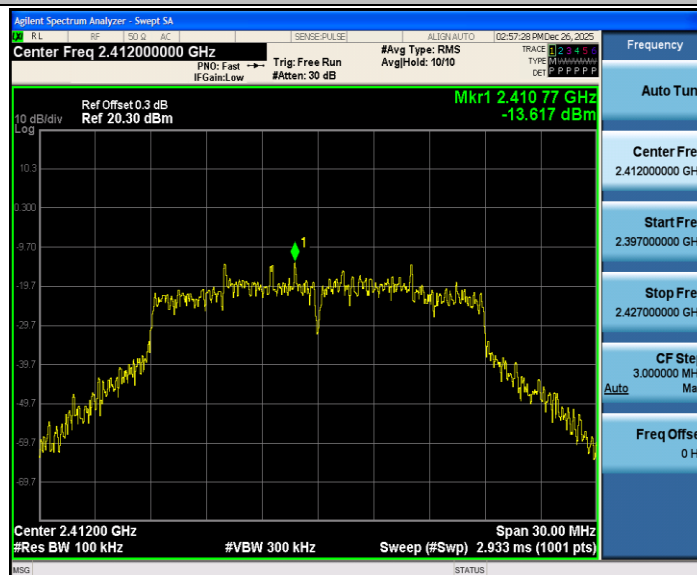
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

