

FCC Appendix RF Test Data for 2.4GWIFI

Company: : ShenZhen Wisdigi Digital Products Co., Ltd.

EUT : Glass Cleaning Robot

Model Number : M83

Report No. : CTA25041000401

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	9.640	2407.000	2416.640	0.5	PASS
		2437	9.080	2431.960	2441.040	0.5	PASS
		2462	8.800	2457.240	2466.040	0.5	PASS
11G	Ant1	2412	15.720	2404.440	2420.160	0.5	PASS
		2437	15.480	2429.440	2444.920	0.5	PASS
		2462	16.080	2454.080	2470.160	0.5	PASS
11N20SISO	Ant1	2412	16.160	2404.440	2420.600	0.5	PASS
		2437	15.920	2429.440	2445.360	0.5	PASS
		2462	16.840	2453.680	2470.520	0.5	PASS

Test Graphs

11B_Ant1_2412



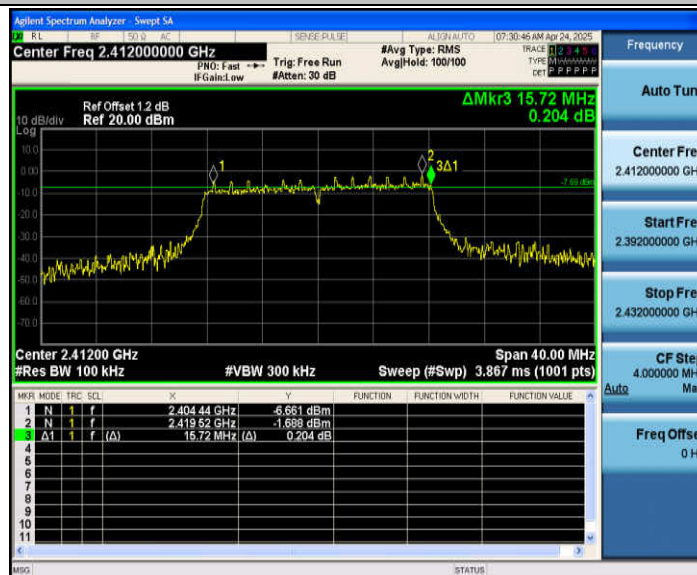
11B_Ant1_2437



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	12.220	2405.8562	2418.0762	---	---
		2437	11.568	2431.0043	2442.5723	---	---
		2462	12.547	2455.5512	2468.0982	---	---
11G	Ant1	2412	16.847	2403.7641	2420.6111	---	---
		2437	16.627	2428.8111	2445.4381	---	---
		2462	16.932	2453.6560	2470.5880	---	---
11N20SISO	Ant1	2412	18.003	2403.2572	2421.2602	---	---
		2437	17.609	2428.3053	2445.9143	---	---
		2462	18.042	2453.1406	2471.1826	---	---

Test Graphs

11B_Ant1_2412



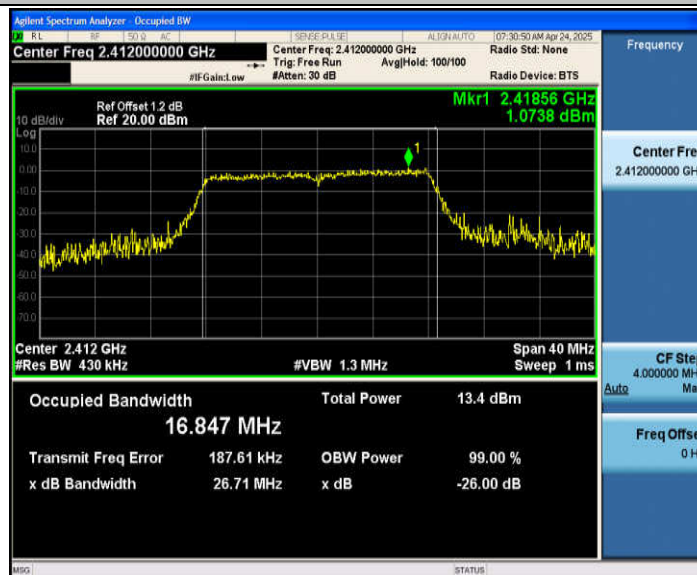
11B_Ant1_2437



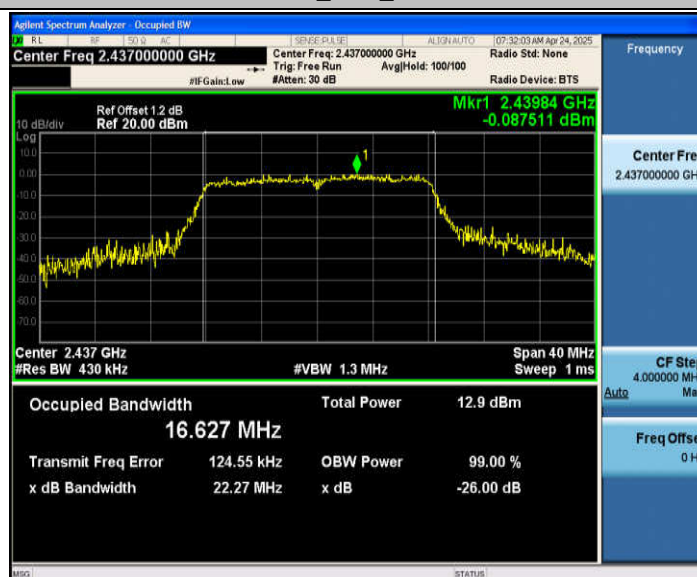
11B_Ant1_2462



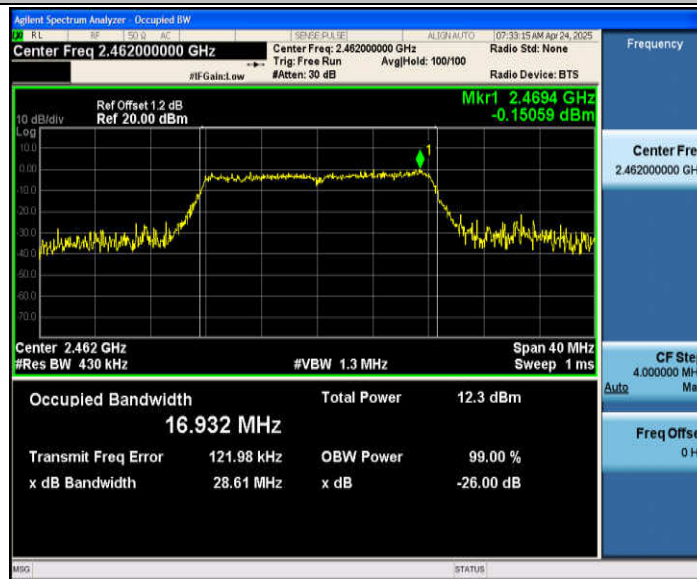
11G_Ant1_2412



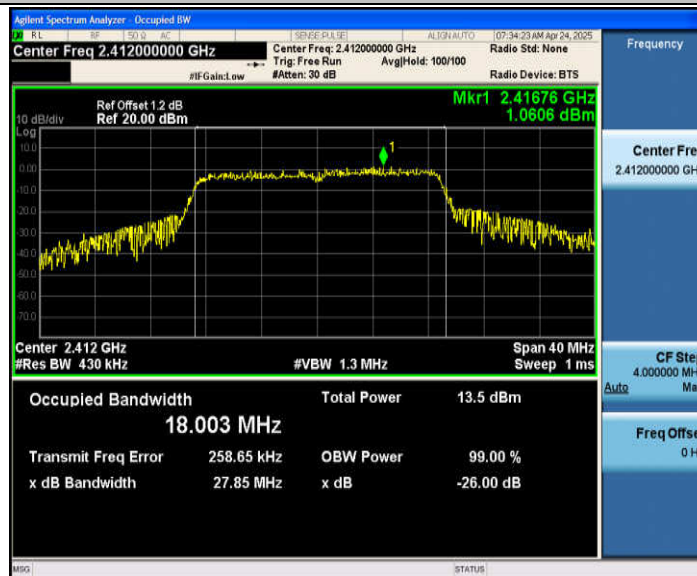
11G_Ant1_2437



11G_Ant1_2462



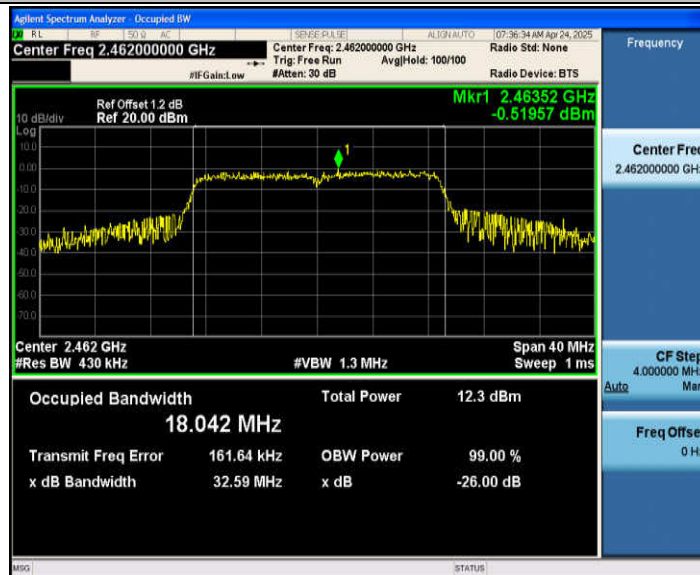
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result Average

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.55	≤30.00	PASS
		2437	14.11	≤30.00	PASS
		2462	13.59	≤30.00	PASS
11G	Ant1	2412	14.00	≤30.00	PASS
		2437	13.24	≤30.00	PASS
		2462	12.99	≤30.00	PASS
11N20SISO	Ant1	2412	13.87	≤30.00	PASS
		2437	13.40	≤30.00	PASS
		2462	12.98	≤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	-11.06	≤8.00	PASS
		2437	-10.96	≤8.00	PASS
		2462	-11.51	≤8.00	PASS
11G	Ant1	2412	-17.34	≤8.00	PASS
		2437	-17.14	≤8.00	PASS
		2462	-18.75	≤8.00	PASS
11N20SISO	Ant1	2412	-17.55	≤8.00	PASS
		2437	-18.70	≤8.00	PASS
		2462	-19.58	≤8.00	PASS

Test Graphs

11B_Ant1_2412



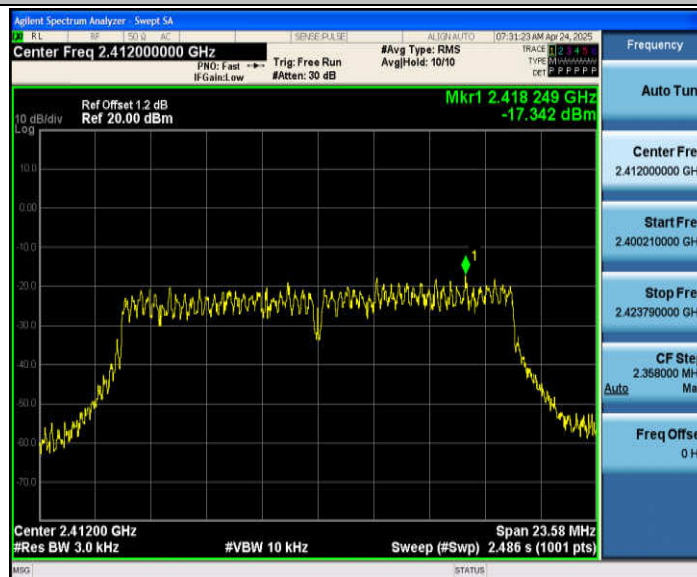
11B_Ant1_2437



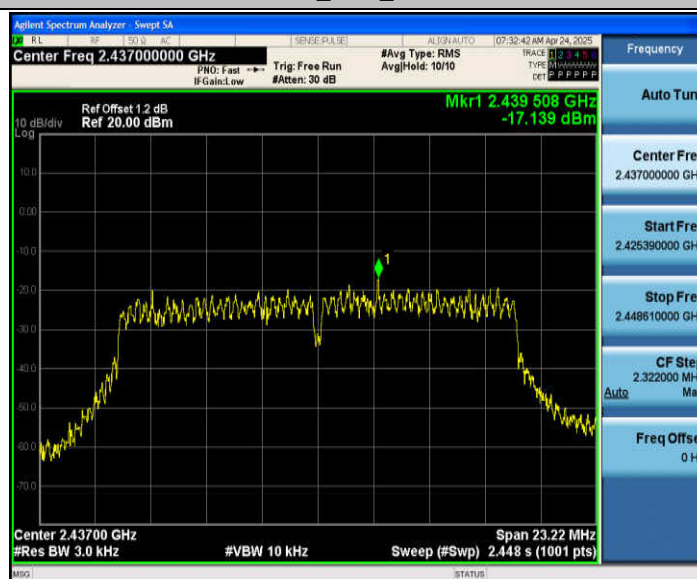
11B_Ant1_2462



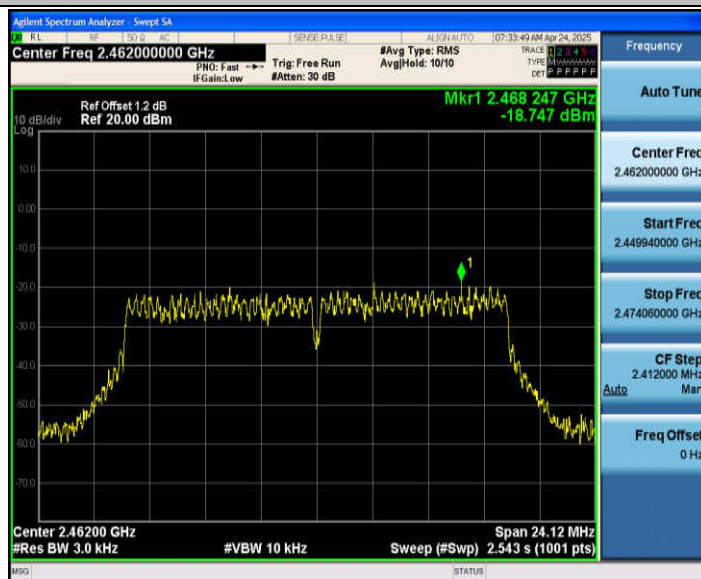
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



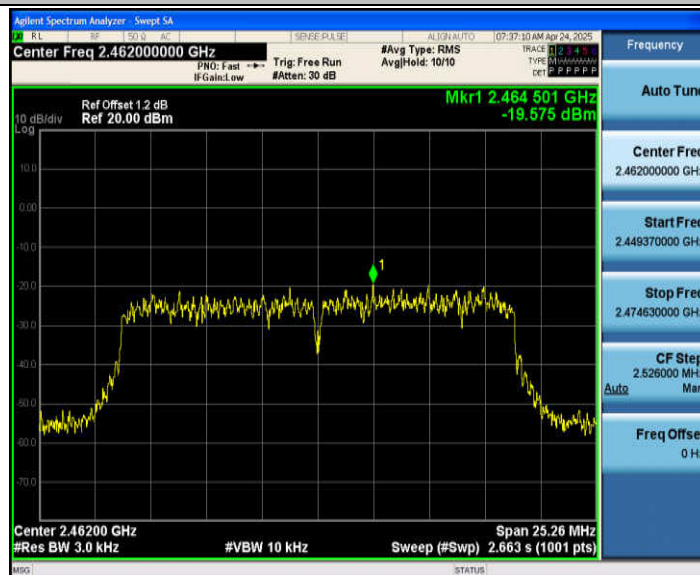
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



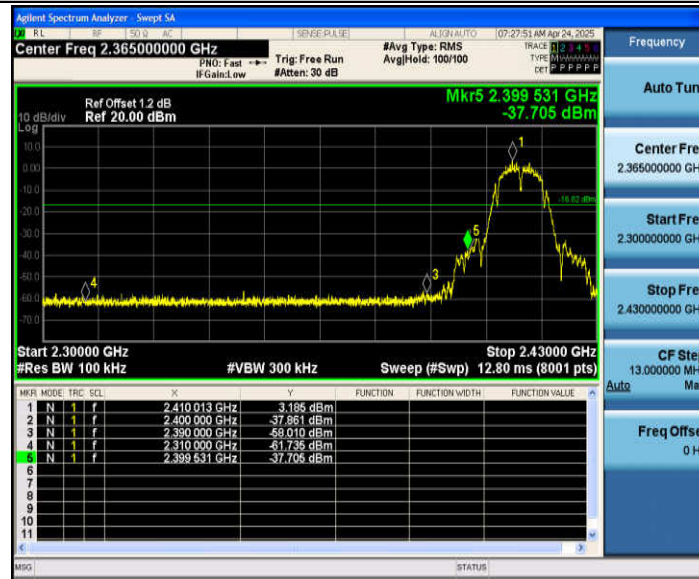
Appendix E: Band edge measurements

Test Result

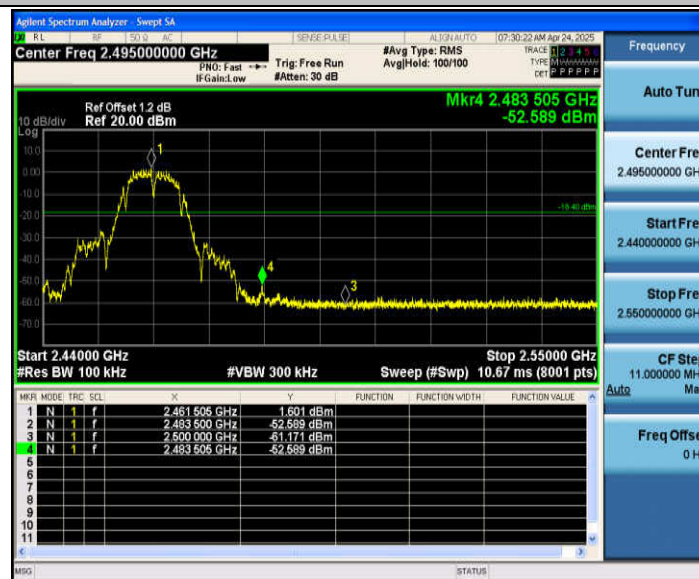
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.19	-37.71	≤-16.82	PASS
		High	2462	1.60	-52.59	≤-18.4	PASS
11G	Ant1	Low	2412	-1.66	-36.48	≤-21.66	PASS
		High	2462	-2.86	-39.99	≤-22.86	PASS
11N20SISO	Ant1	Low	2412	-1.60	-35.36	≤-21.6	PASS
		High	2462	-2.88	-39.38	≤-22.88	PASS

Test Graphs

11B_Ant1_Low_2412



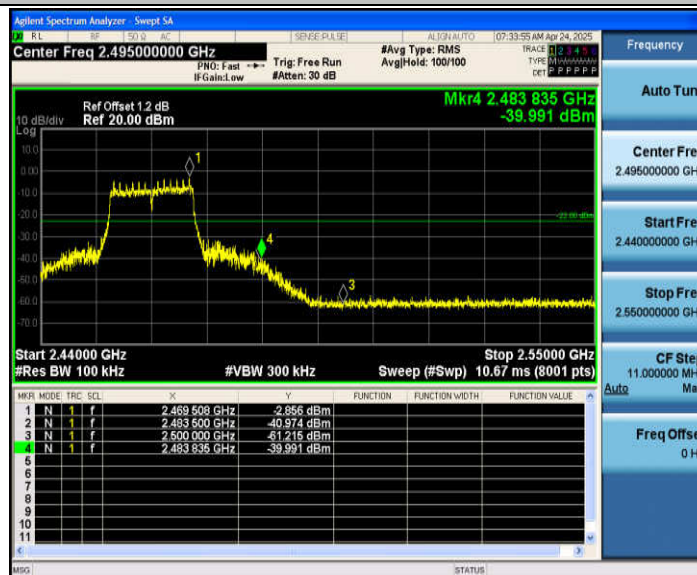
11B_Ant1_High_2462



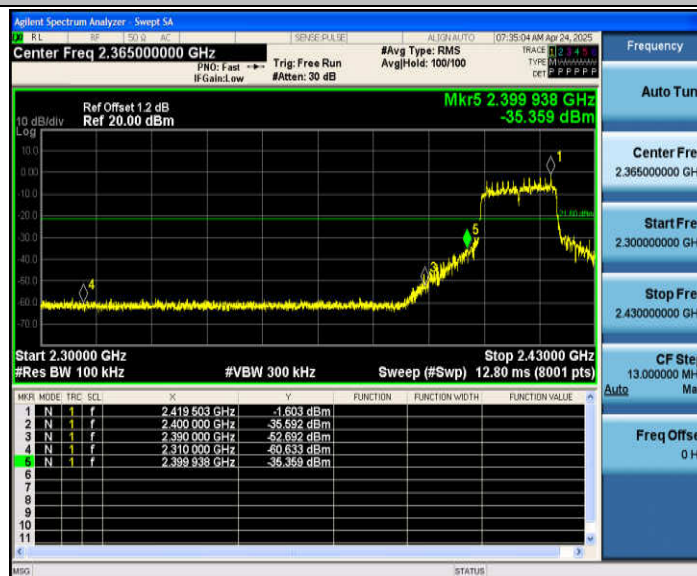
11G_Ant1_Low_2412



11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

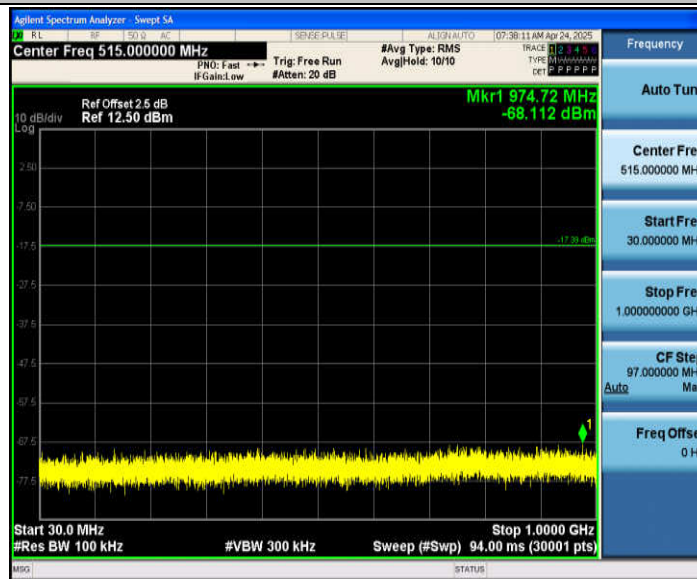
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.61	2.61	---	PASS
			30~1000	2.61	-68.11	≤-17.39	PASS
			1000~26500	2.61	-39.17	≤-17.39	PASS
		2437	Reference	3.88	3.88	---	PASS
			30~1000	3.88	-68.18	≤-16.12	PASS
			1000~26500	3.88	-36.24	≤-16.12	PASS
		2462	Reference	2.41	2.41	---	PASS
			30~1000	2.41	-67.95	≤-17.59	PASS
			1000~26500	2.41	-31.48	≤-17.59	PASS
11G	Ant1	2412	Reference	-1.45	-1.45	---	PASS
			30~1000	-1.45	-68.1	≤-21.45	PASS
			1000~26500	-1.45	-52.66	≤-21.45	PASS
		2437	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-67.28	≤-21.19	PASS
			1000~26500	-1.19	-50.61	≤-21.19	PASS
		2462	Reference	-2.48	-2.48	---	PASS
			30~1000	-2.48	-67.6	≤-22.48	PASS
			1000~26500	-2.48	-47.55	≤-22.48	PASS
11N20SISO	Ant1	2412	Reference	-0.29	-0.29	---	PASS
			30~1000	-0.29	-67.06	≤-20.29	PASS
			1000~26500	-0.29	-51.97	≤-20.29	PASS
		2437	Reference	-2.07	-2.07	---	PASS
			30~1000	-2.07	-67.76	≤-22.07	PASS
			1000~26500	-2.07	-49.29	≤-22.07	PASS
		2462	Reference	-2.21	-2.21	---	PASS
			30~1000	-2.21	-68.5	≤-22.21	PASS
			1000~26500	-2.21	-44.85	≤-22.21	PASS

Test Graphs

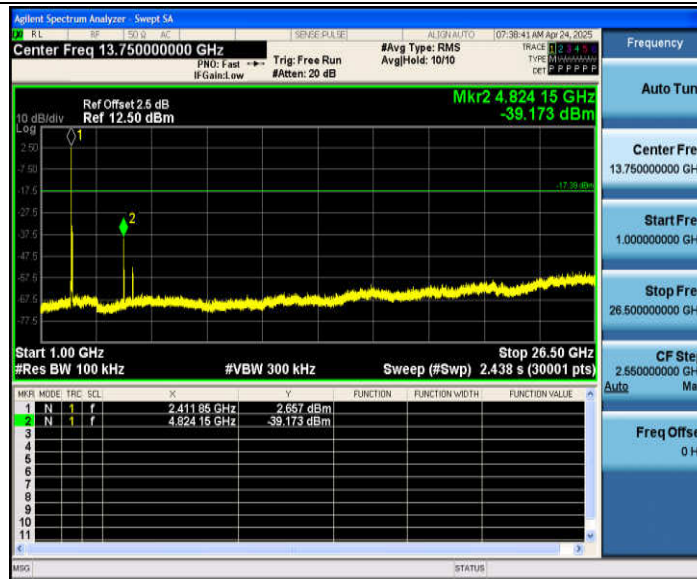
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



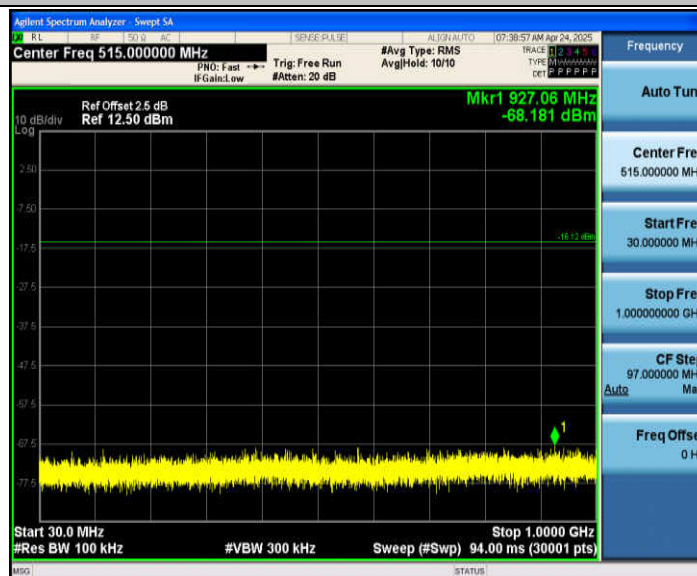
11B_Ant1_2412_1000~26500



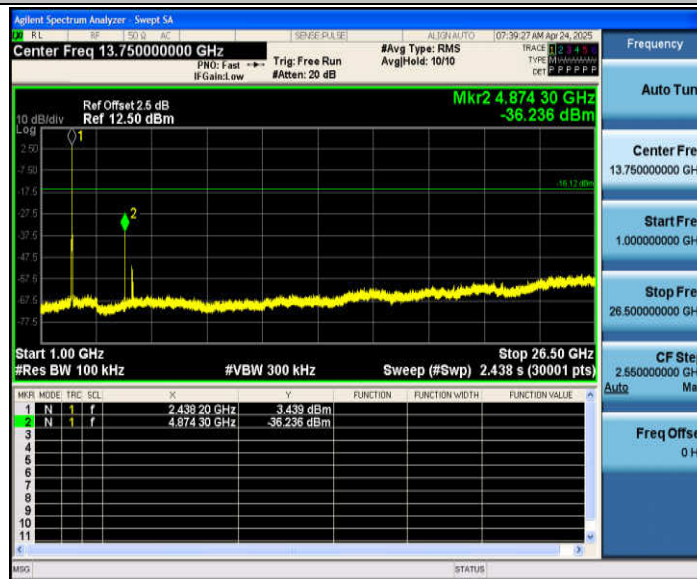
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



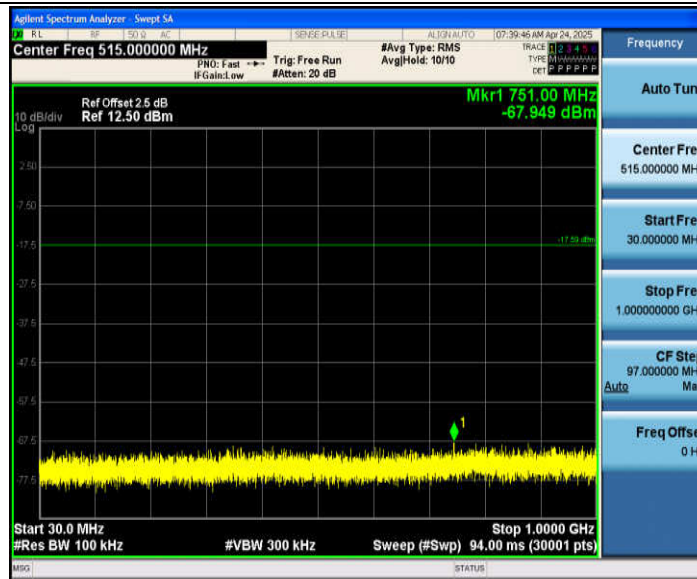
11B_Ant1_2437_1000~26500



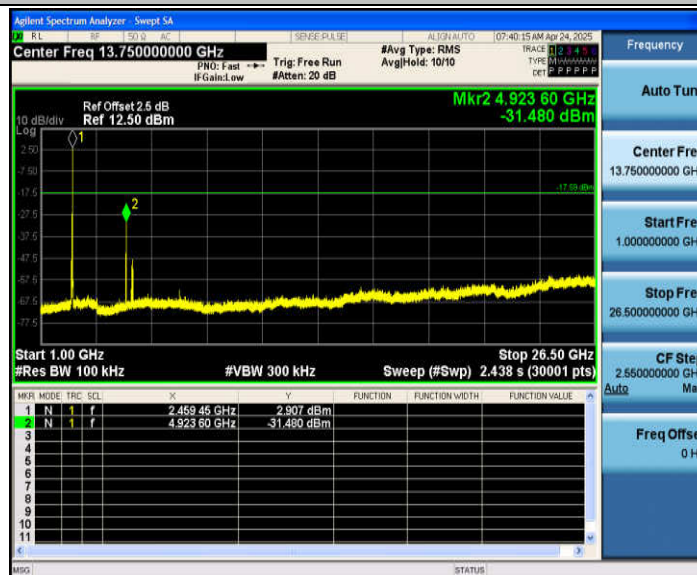
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



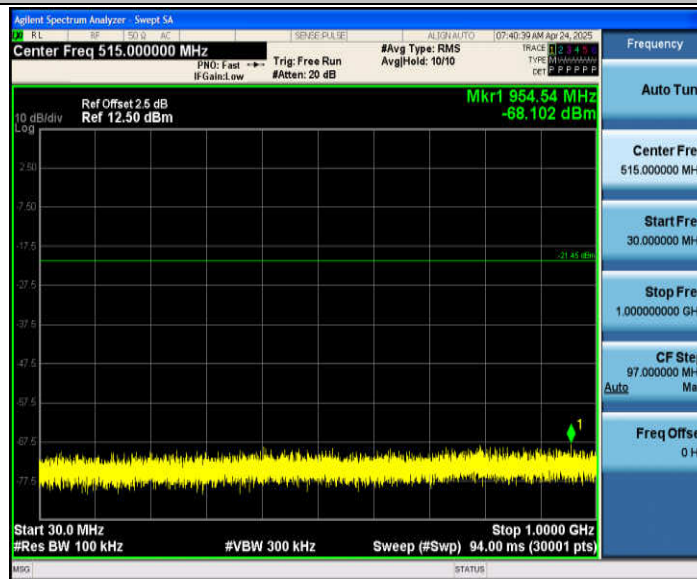
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



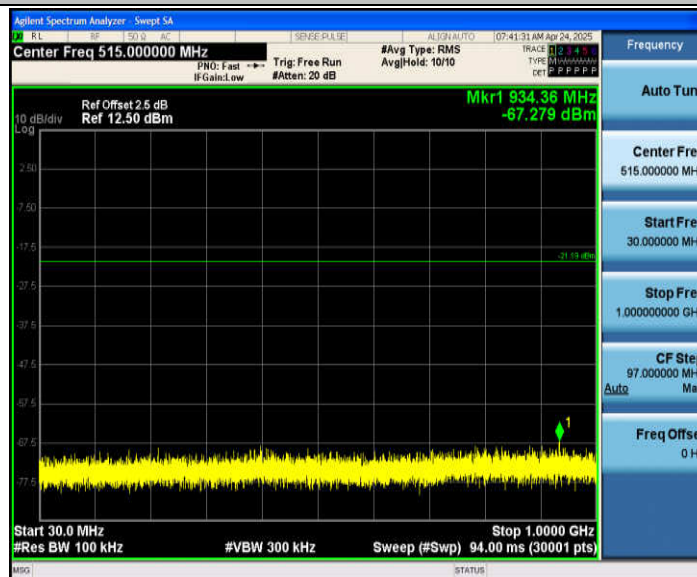
11G_Ant1_2412_1000~26500



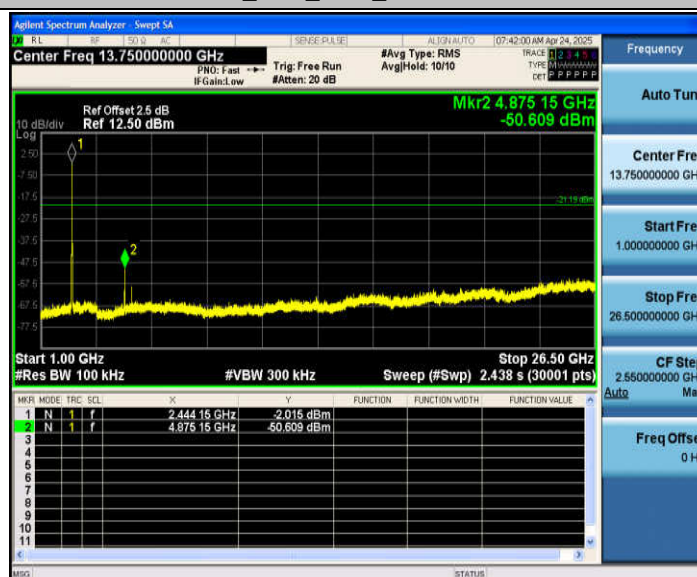
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



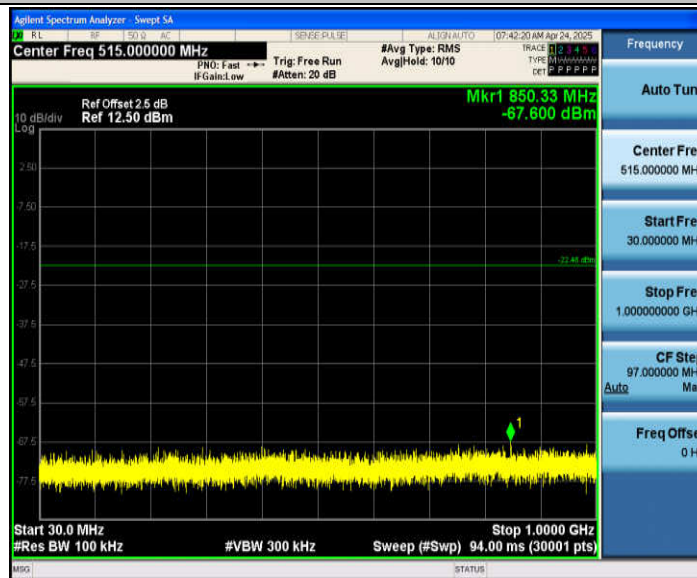
11G_Ant1_2437_1000~26500



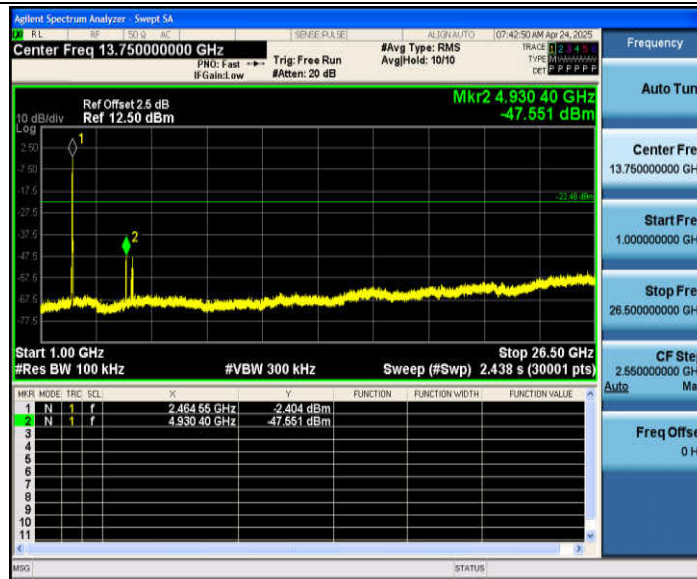
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



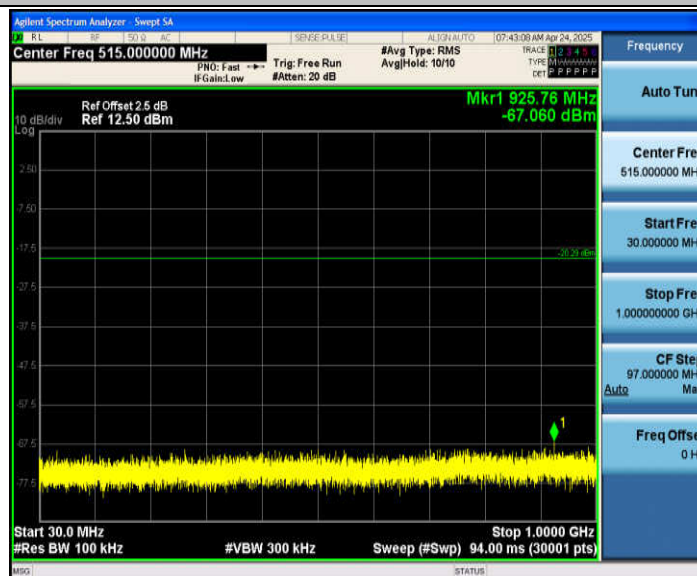
11G_Ant1_2462_1000~26500



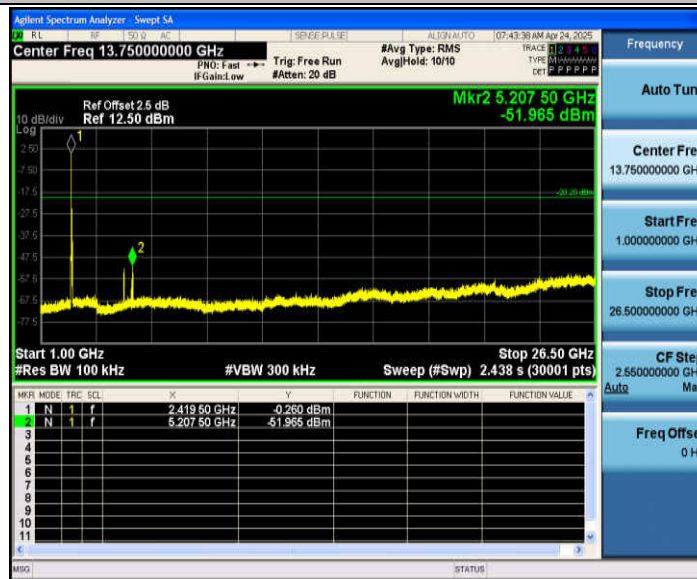
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



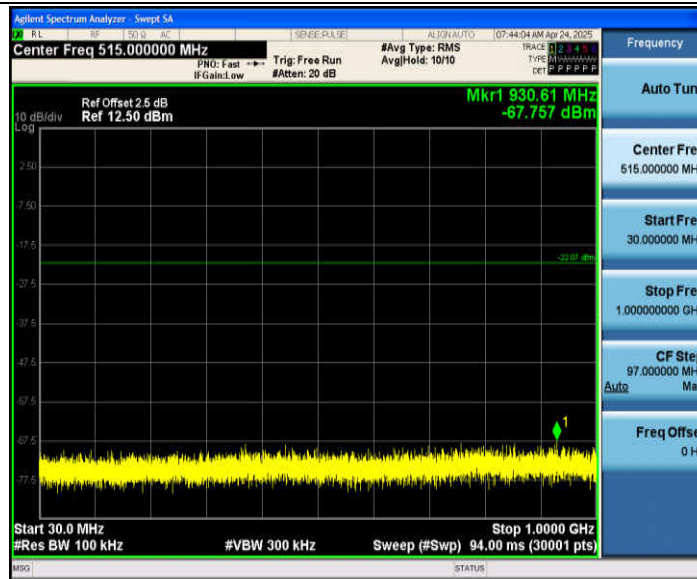
11N20SISO_Ant1_2412_1000~26500



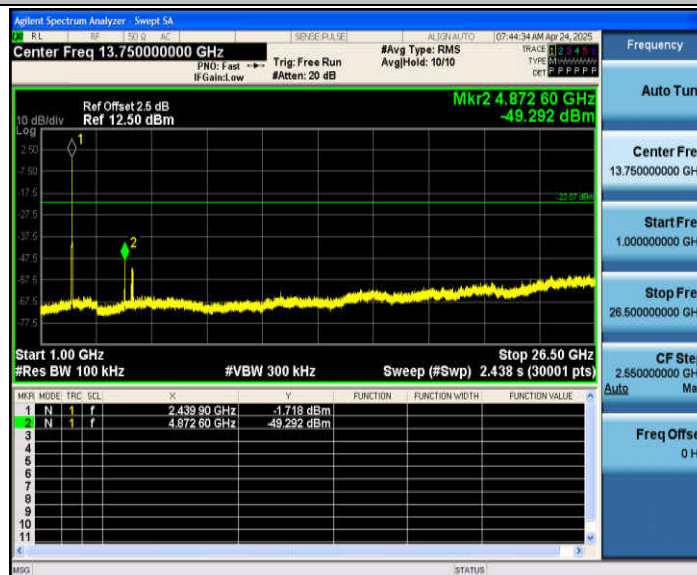
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



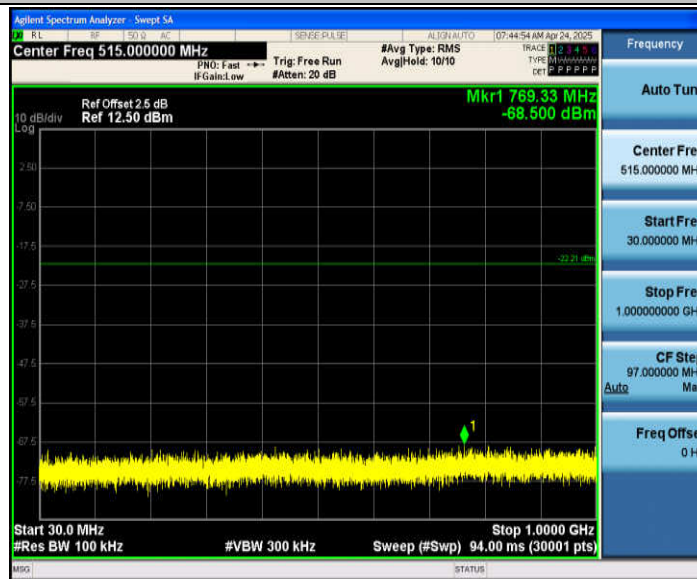
11N20SISO_Ant1_2437_1000~26500



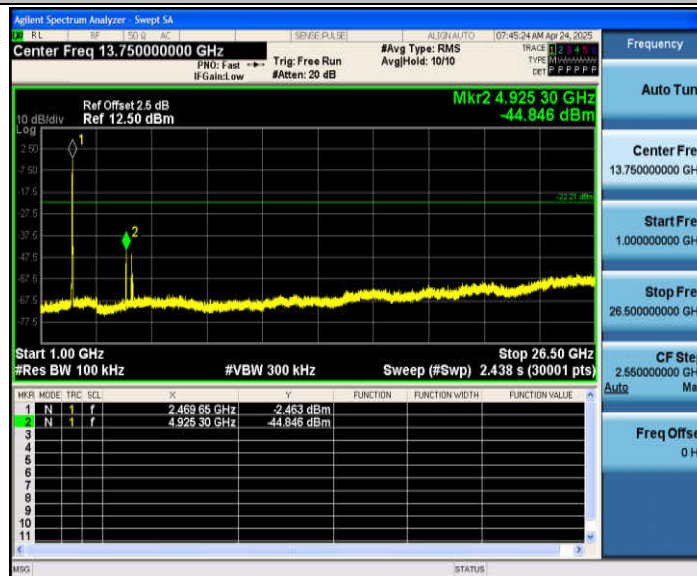
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



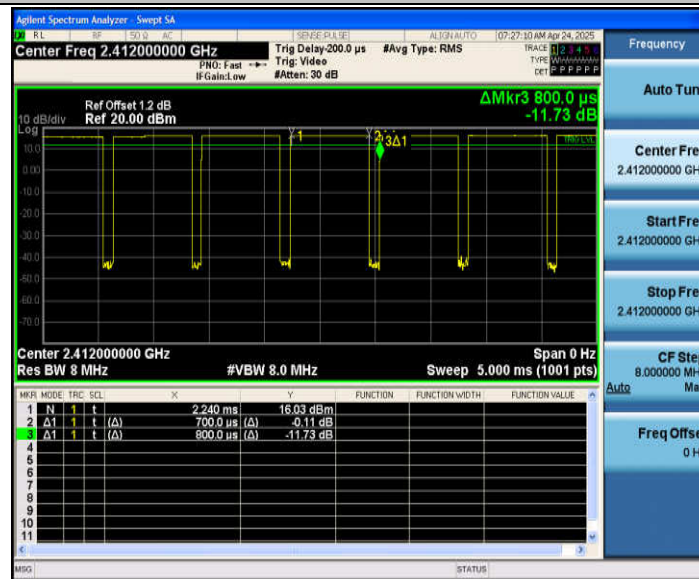
Appendix G: Duty Cycle

Test Result

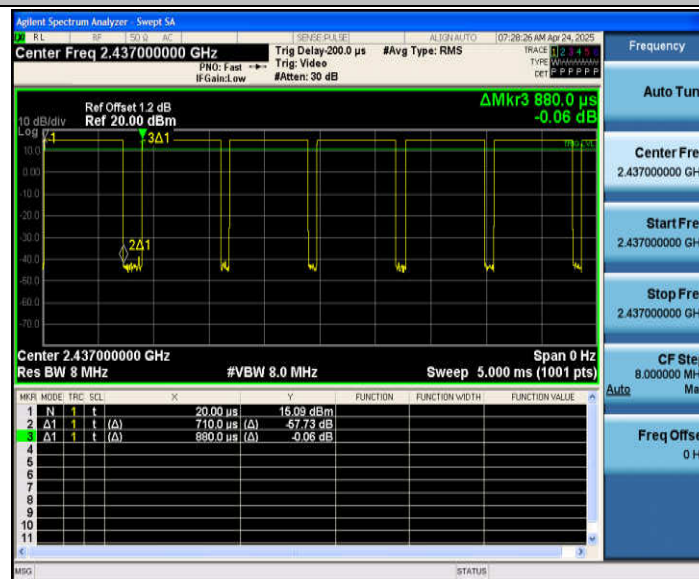
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	0.70	0.80	87.50
		2437	0.71	0.88	80.68
		2462	0.70	0.87	80.46
11G	Ant1	2412	0.11	0.27	40.74
		2437	0.11	0.31	35.48
		2462	0.11	0.30	36.67
11N20SISO	Ant1	2412	0.11	0.31	35.48
		2437	0.11	0.29	37.93
		2462	0.11	0.31	35.48

Test Graphs

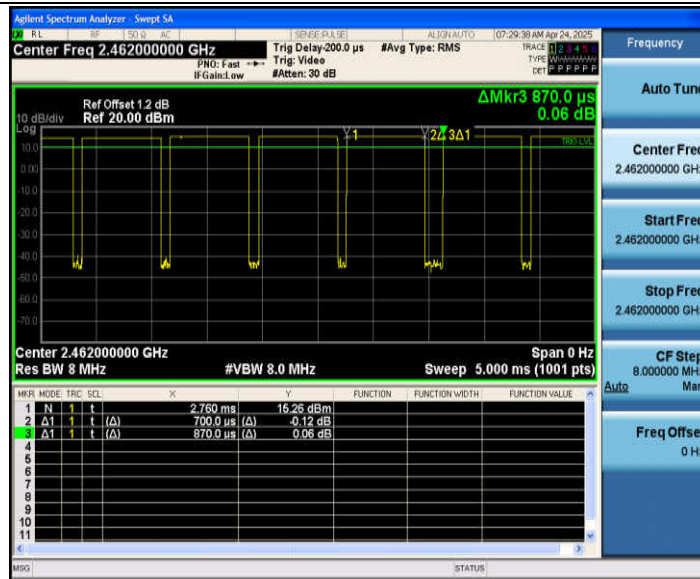
11B_Ant1_2412



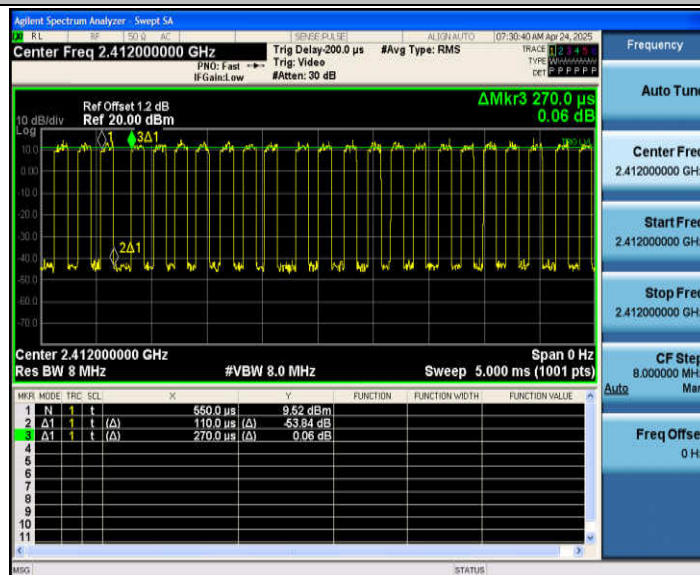
11B_Ant1_2437



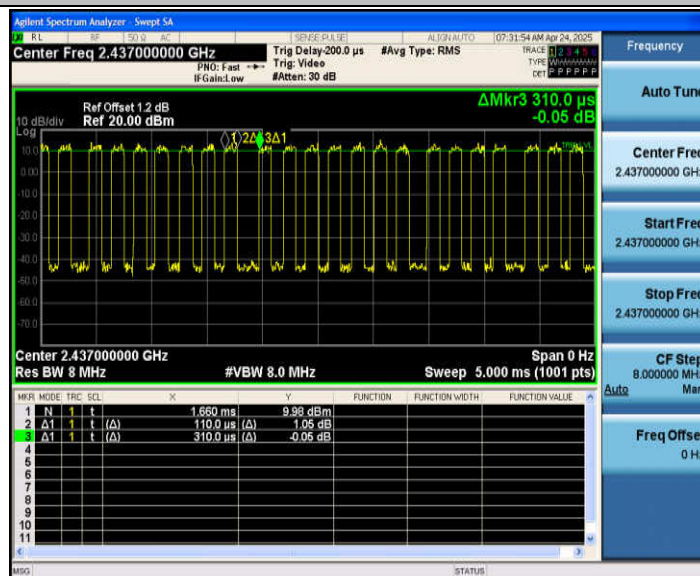
11B_Ant1_2462



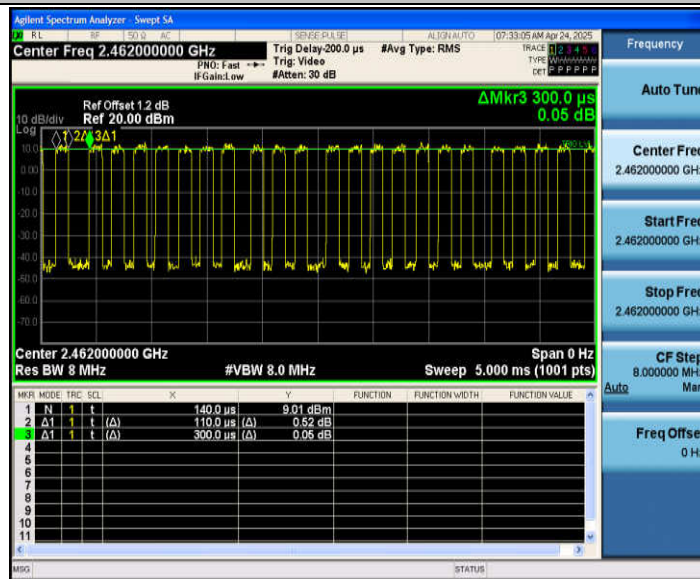
11G_Ant1_2412



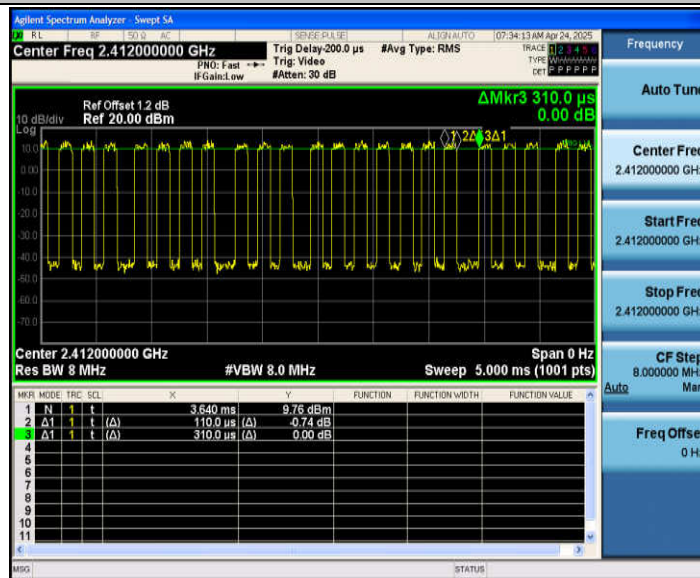
11G_Ant1_2437



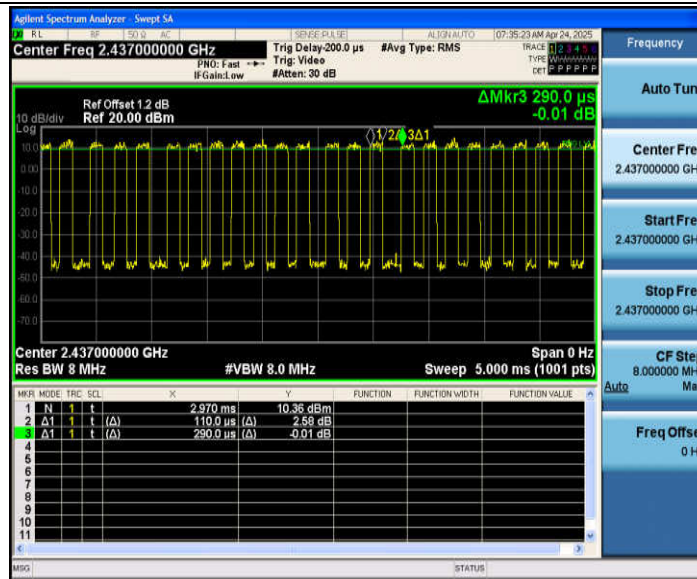
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

