

Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BDQV-AK-3820S

Company : Shenzhen Tenganda Intelligent Equipment Co., Ltd

EUT : Surveillance camera

Model Number : AK-3820S

Report No. : CTA25081100401

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	9.600	2406.960	2416.560	0.5	PASS
		2437	9.520	2432.000	2441.520	0.5	PASS
		2462	9.160	2457.440	2466.600	0.5	PASS
11G	Ant1	2412	15.720	2404.440	2420.160	0.5	PASS
		2437	16.080	2428.840	2444.920	0.5	PASS
		2462	16.280	2453.880	2470.160	0.5	PASS
11N20SISO	Ant1	2412	15.960	2404.440	2420.400	0.5	PASS
		2437	16.360	2428.640	2445.000	0.5	PASS
		2462	16.840	2453.520	2470.360	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



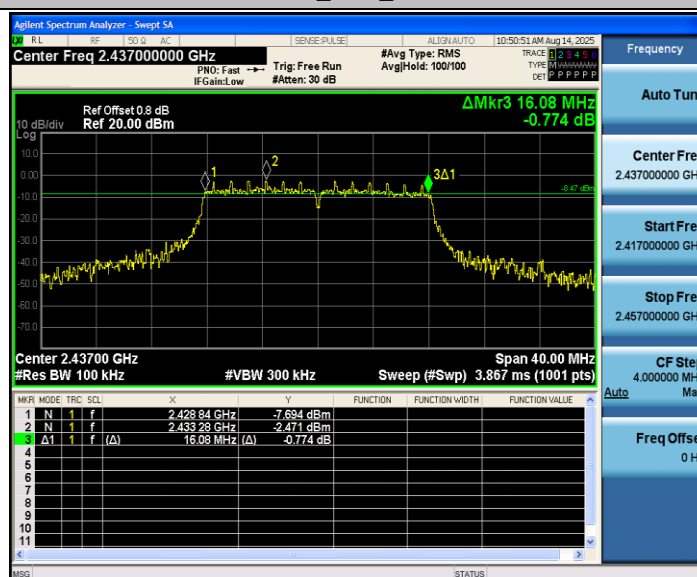
11B_Ant1_2462

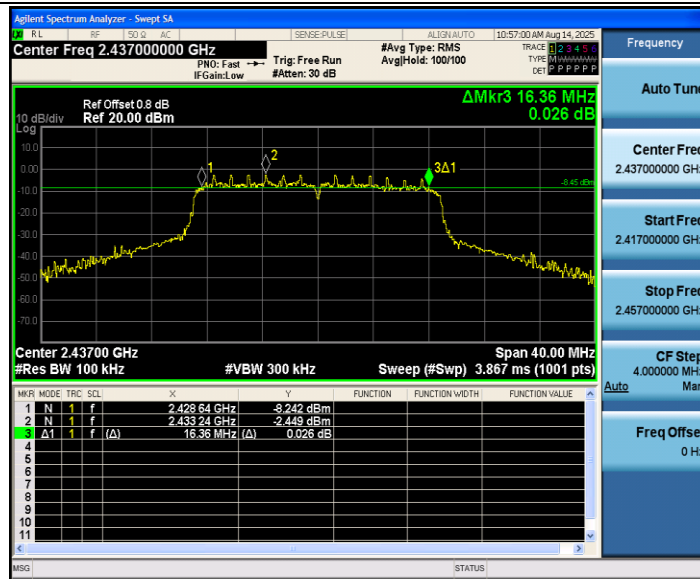


11G_Ant1_2412

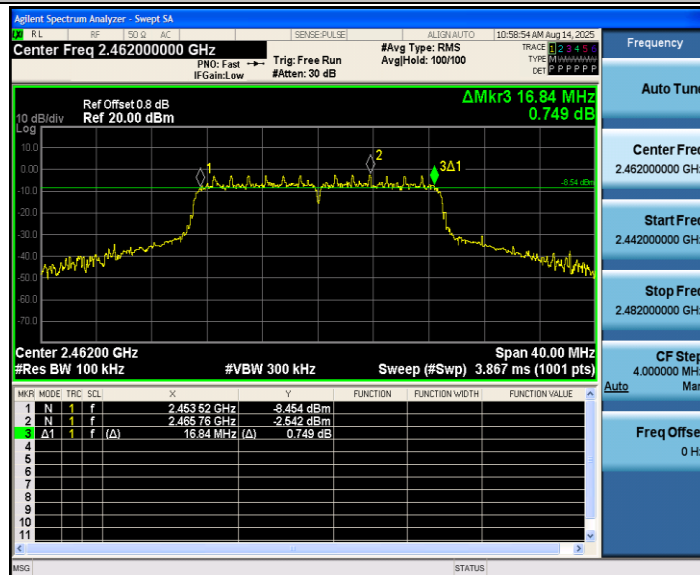


11G_Ant1_2437





11N20SISO_Ant1_2462



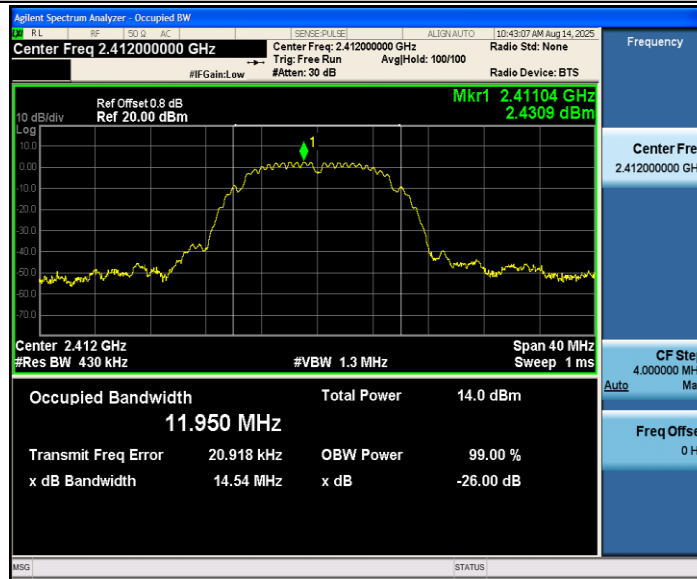
Appendix B: Occupied Channel Bandwidth

Test Result

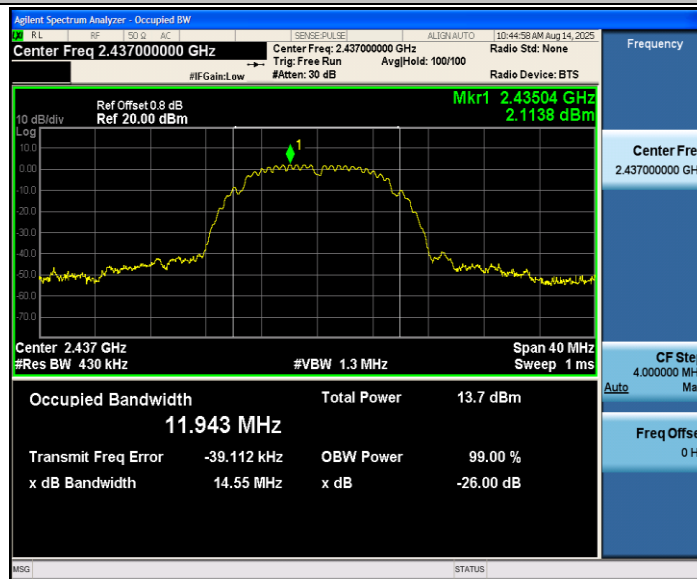
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.950	2406.0459	2417.9959	---	---
		2437	11.943	2430.9894	2442.9324	---	---
		2462	11.987	2456.0906	2468.0776	---	---
11G	Ant1	2412	16.634	2403.8781	2420.5121	---	---
		2437	16.672	2428.6009	2445.2729	---	---
		2462	16.706	2453.6937	2470.3997	---	---
11N20SISO	Ant1	2412	17.672	2403.3228	2420.9948	---	---
		2437	17.692	2428.1097	2445.8017	---	---
		2462	17.770	2453.1492	2470.9192	---	---

Test Graphs

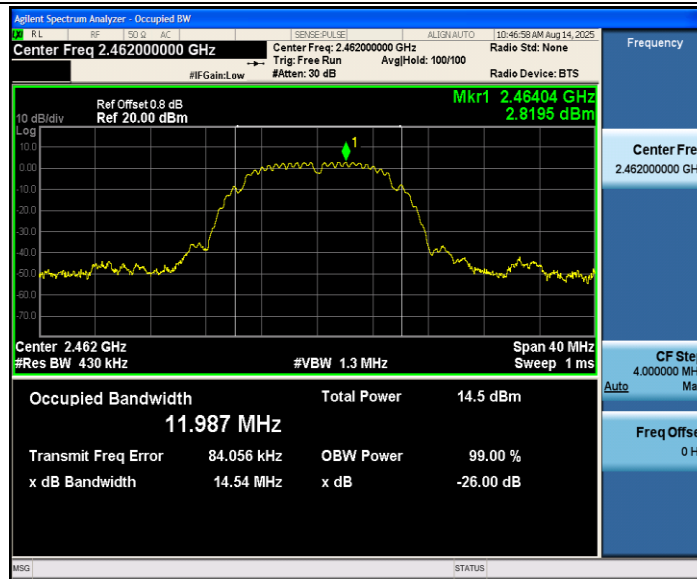
11B_Ant1_2412



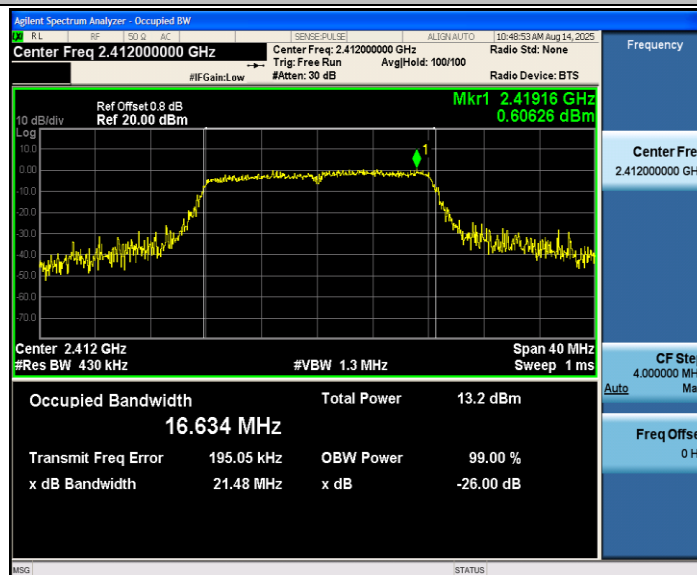
11B_Ant1_2437



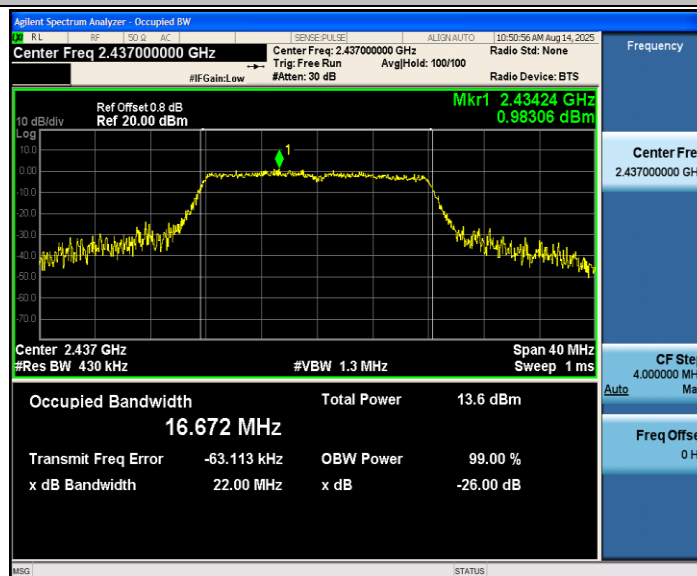
11B_Ant1_2462



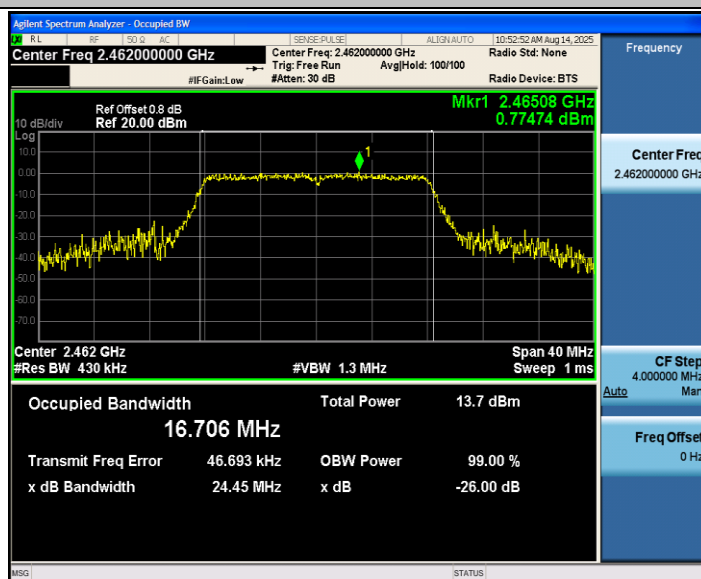
11G_Ant1_2412



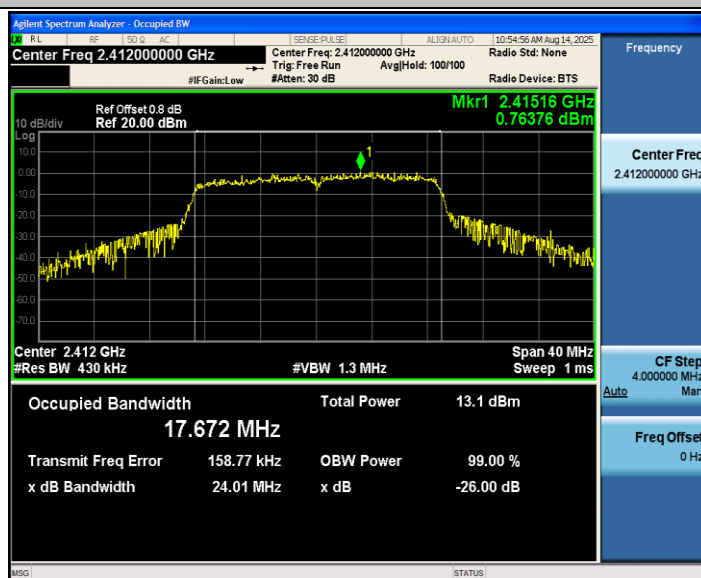
11G_Ant1_2437



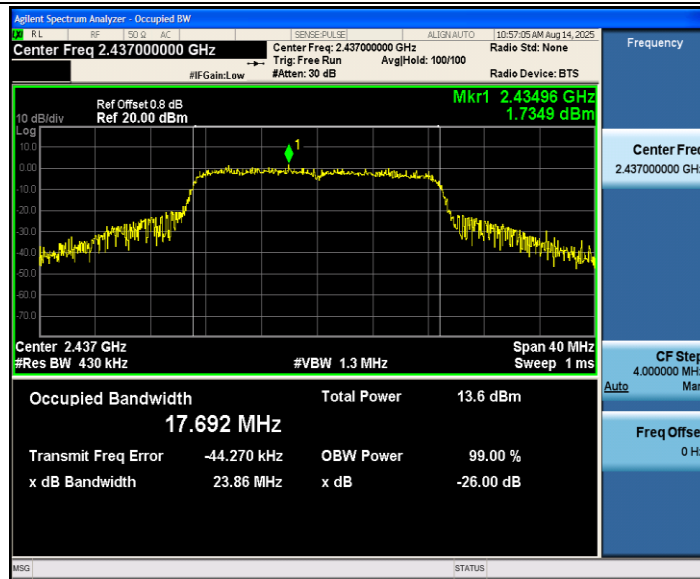
11G_Ant1_2462



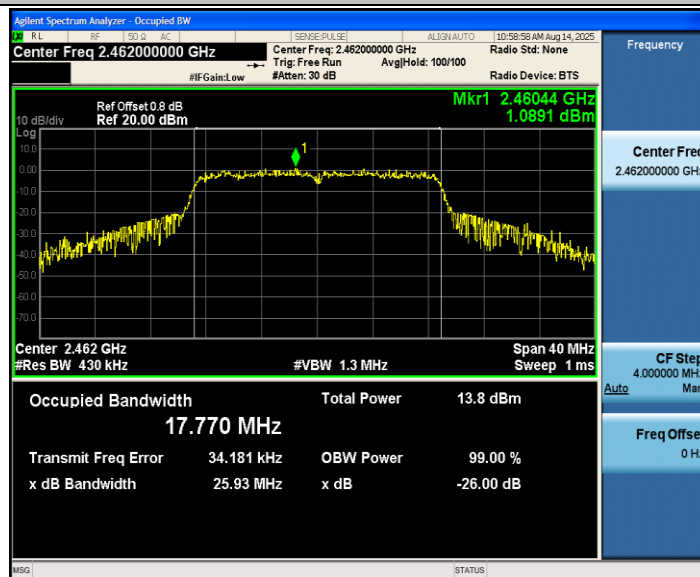
11N20SISO_Ant1_2412



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	13.97	≤30.00	PASS
		2437	13.60	≤30.00	PASS
		2462	14.33	≤30.00	PASS
11G	Ant1	2412	13.98	≤30.00	PASS
		2437	14.33	≤30.00	PASS
		2462	14.58	≤30.00	PASS
11N20SISO	Ant1	2412	13.77	≤30.00	PASS
		2437	14.30	≤30.00	PASS
		2462	14.35	≤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	-12.06	≤8.00	PASS
		2437	-11.50	≤8.00	PASS
		2462	-11.27	≤8.00	PASS
11G	Ant1	2412	-17.51	≤8.00	PASS
		2437	-17.10	≤8.00	PASS
		2462	-17.95	≤8.00	PASS
11N20SISO	Ant1	2412	-17.58	≤8.00	PASS
		2437	-17.10	≤8.00	PASS
		2462	-17.93	≤8.00	PASS

Test Graphs

11B_Ant1_2412



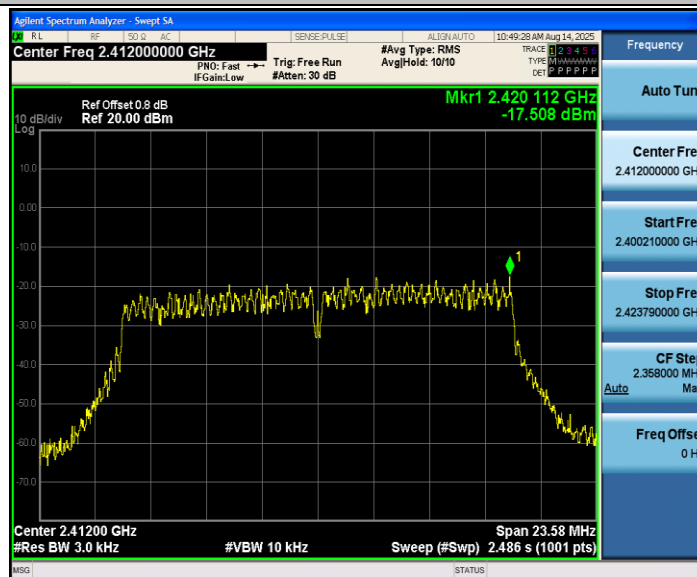
11B_Ant1_2437



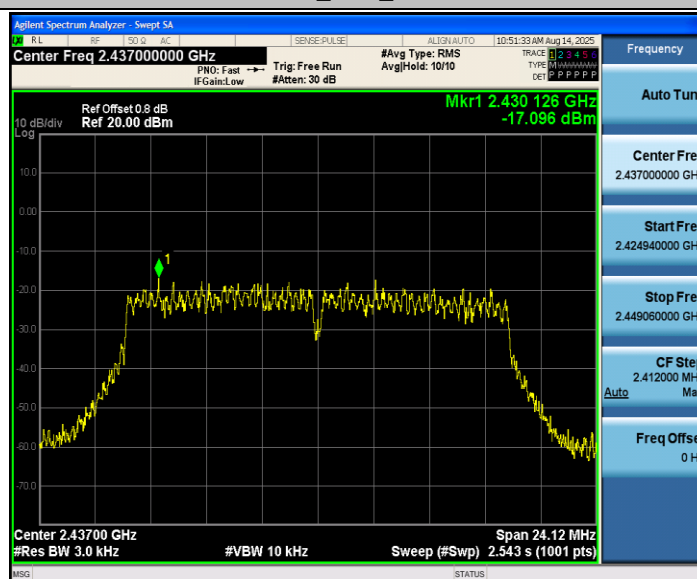
11B_Ant1_2462



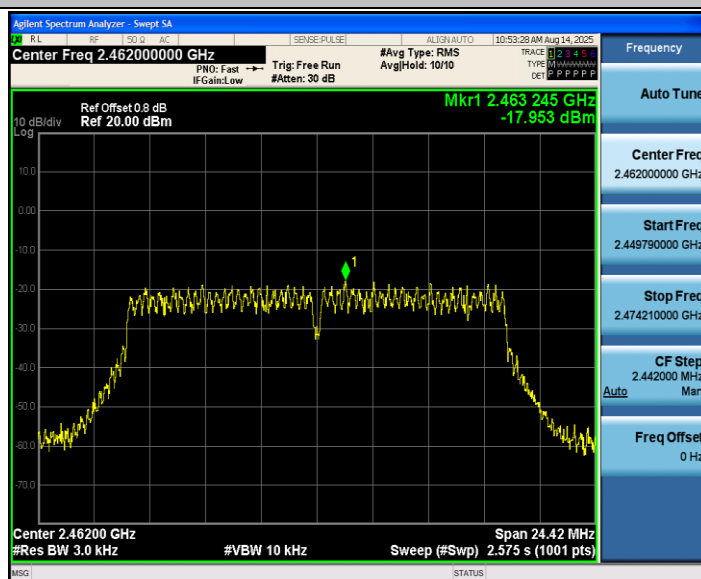
11G_Ant1_2412



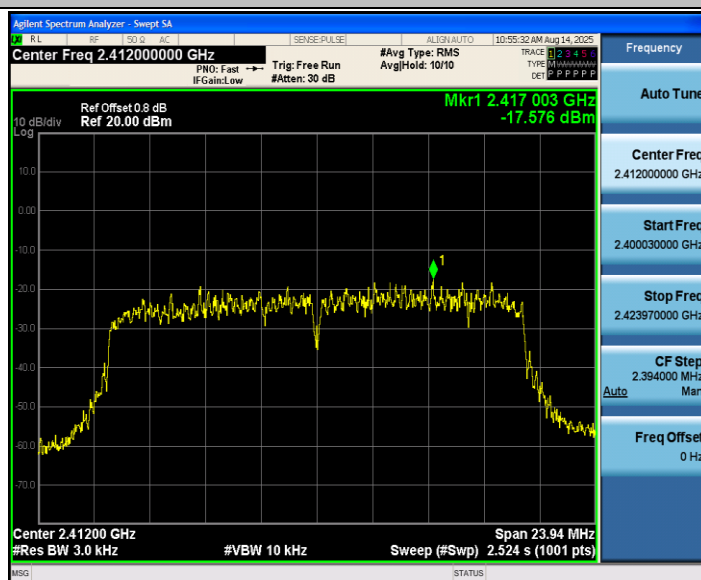
11G_Ant1_2437



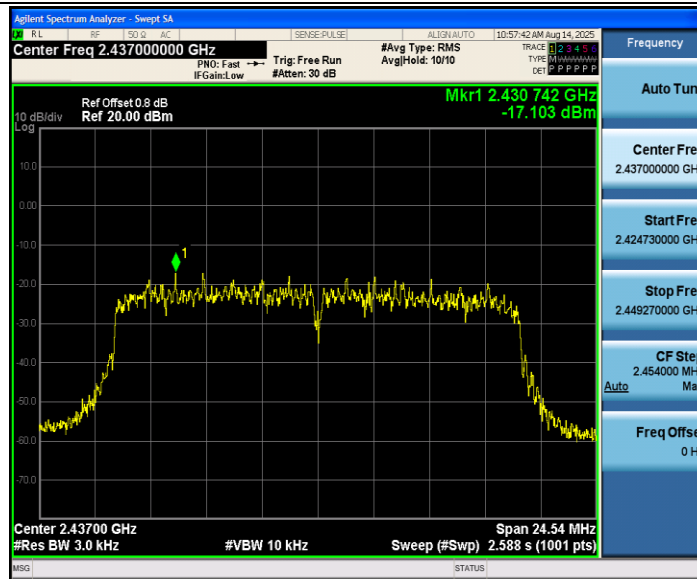
11G_Ant1_2462



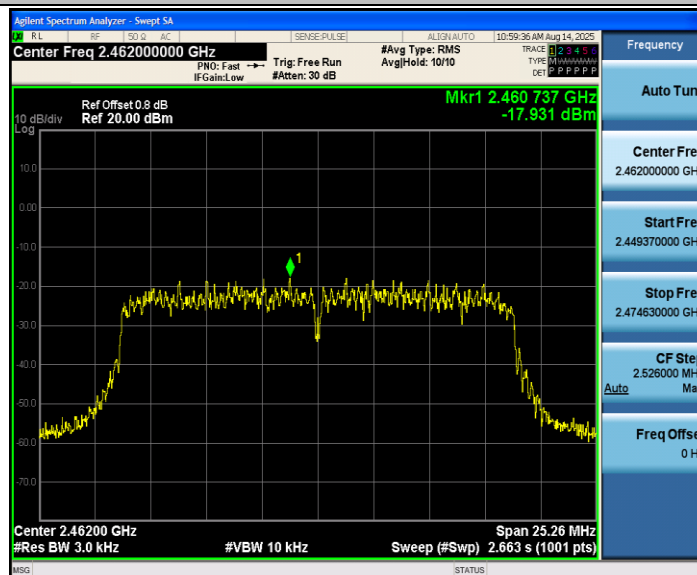
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



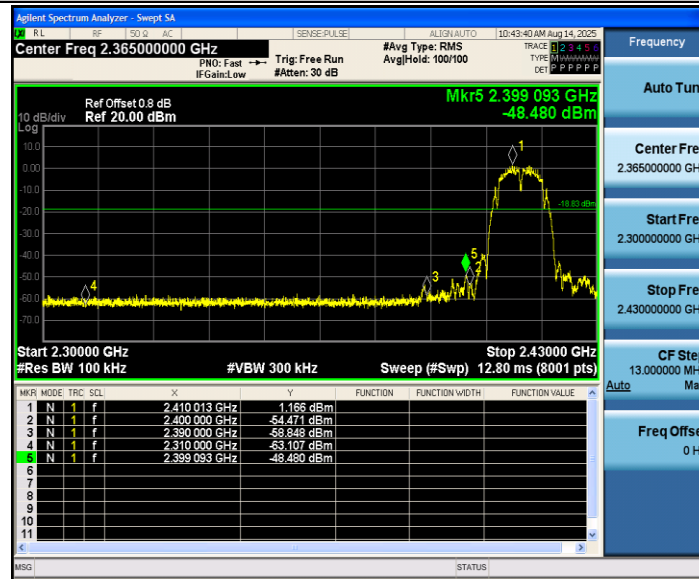
Appendix E: Band edge measurements

Test Result

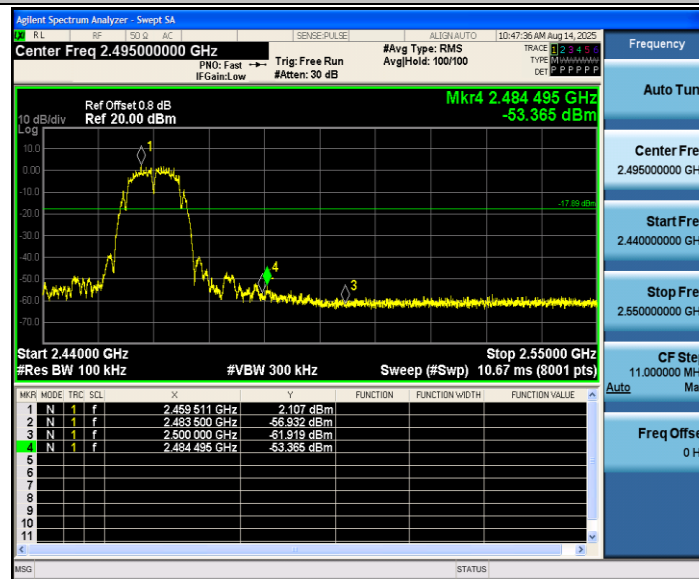
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.17	-48.48	≤-18.83	PASS
		High	2462	2.11	-53.37	≤-17.89	PASS
11G	Ant1	Low	2412	-2.39	-37.98	≤-22.39	PASS
		High	2462	-2.18	-47.01	≤-22.18	PASS
11N20SISO	Ant1	Low	2412	-2.34	-36.06	≤-22.34	PASS
		High	2462	-2.17	-47.84	≤-22.17	PASS

Test Graphs

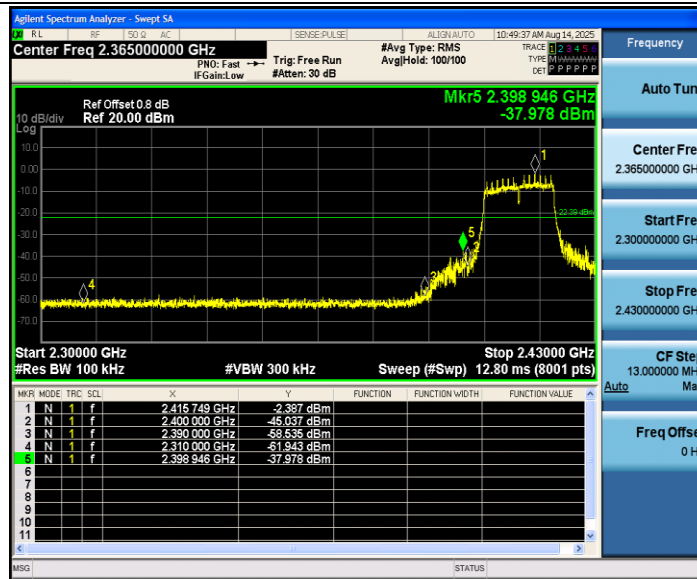
11B_Ant1_Low_2412



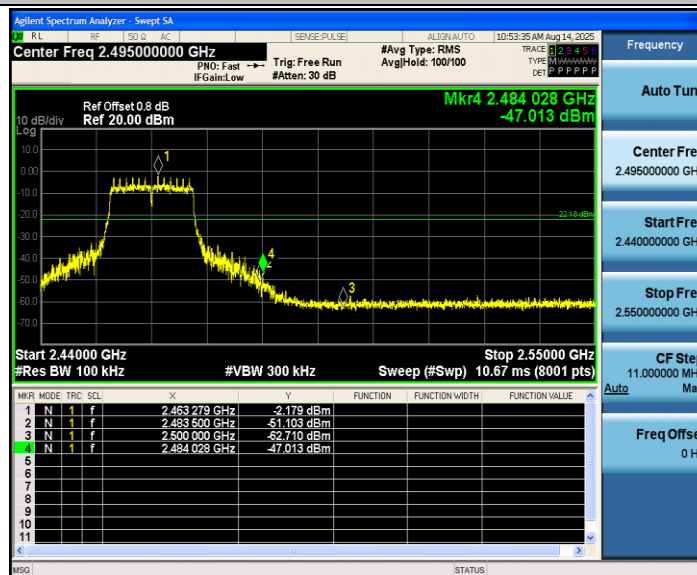
11B_Ant1_High_2462



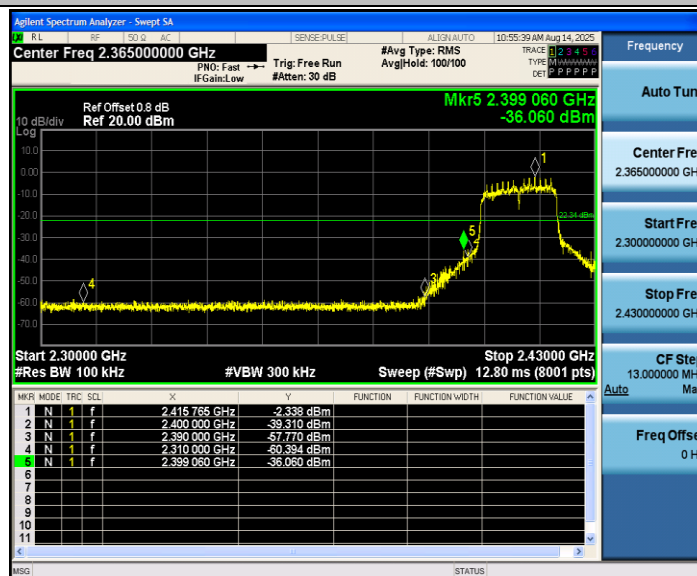
11G_Ant1_Low_2412



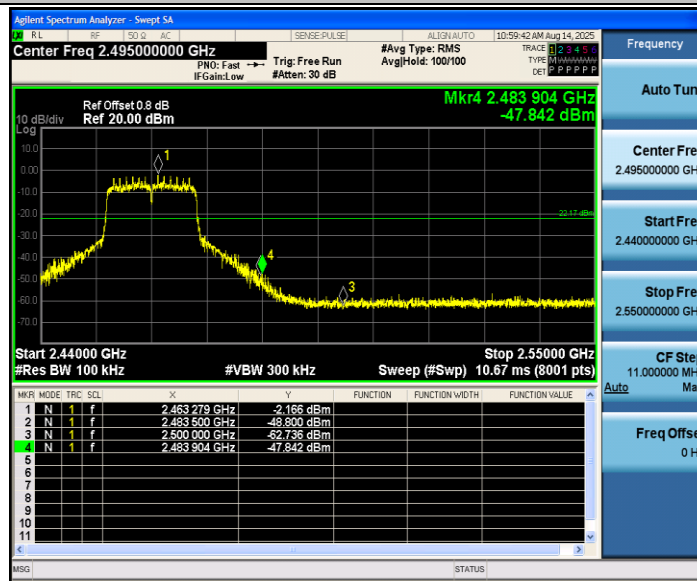
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

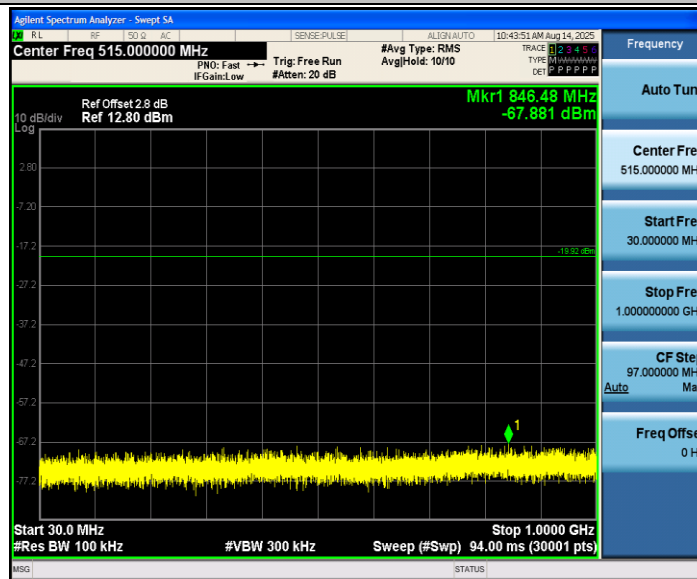
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.08	0.08	---	PASS
			30~1000	0.08	-67.88	≤-19.92	PASS
			1000~26500	0.08	-40.93	≤-19.92	PASS
		2437	Reference	0.63	0.63	---	PASS
			30~1000	0.63	-66.94	≤-19.37	PASS
			1000~26500	0.63	-44.07	≤-19.37	PASS
		2462	Reference	1.40	1.40	---	PASS
			30~1000	1.40	-65.74	≤-18.6	PASS
			1000~26500	1.40	-37.33	≤-18.6	PASS
11G	Ant1	2412	Reference	-2.66	-2.66	---	PASS
			30~1000	-2.66	-65.73	≤-22.66	PASS
			1000~26500	-2.66	-54.39	≤-22.66	PASS
		2437	Reference	-2.37	-2.37	---	PASS
			30~1000	-2.37	-68.01	≤-22.37	PASS
			1000~26500	-2.37	-53.43	≤-22.37	PASS
		2462	Reference	-2.19	-2.19	---	PASS
			30~1000	-2.19	-63.33	≤-22.19	PASS
			1000~26500	-2.19	-51.02	≤-22.19	PASS
11N20SISO	Ant1	2412	Reference	-2.73	-2.73	---	PASS
			30~1000	-2.73	-67.29	≤-22.73	PASS
			1000~26500	-2.73	-53.57	≤-22.73	PASS
		2437	Reference	-2.55	-2.55	---	PASS
			30~1000	-2.55	-67.88	≤-22.55	PASS
			1000~26500	-2.55	-53.55	≤-22.55	PASS
		2462	Reference	-3.08	-3.08	---	PASS
			30~1000	-3.08	-66.24	≤-23.08	PASS
			1000~26500	-3.08	-49.98	≤-23.08	PASS

Test Graphs

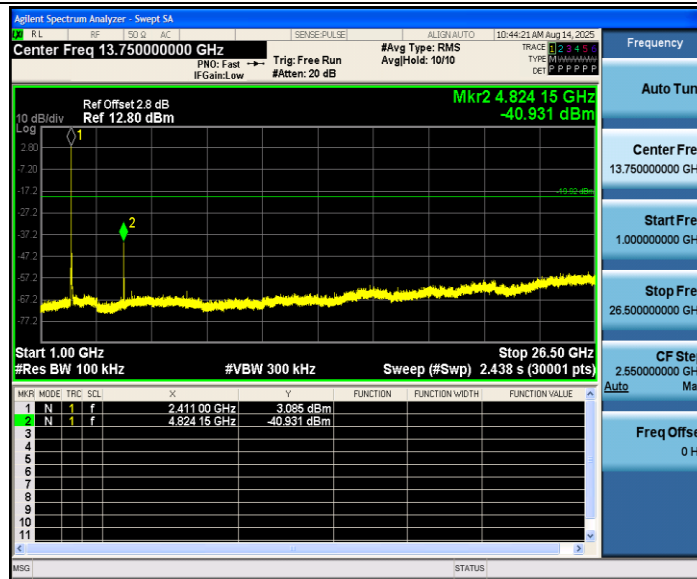
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



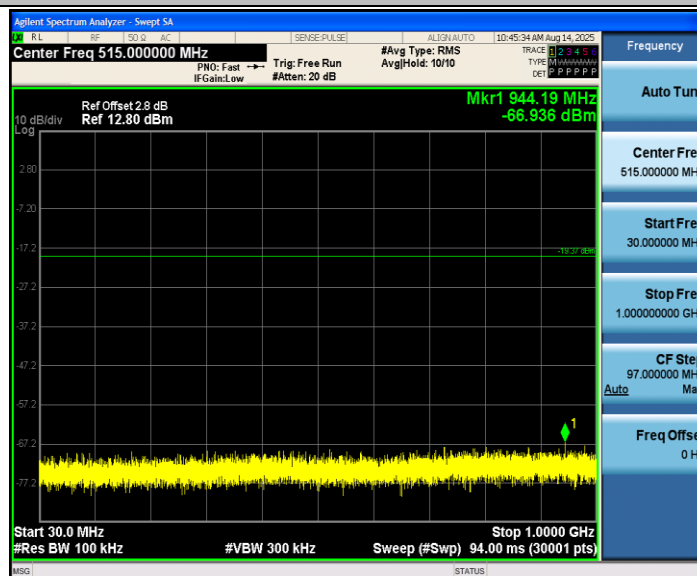
11B_Ant1_2412_1000~26500



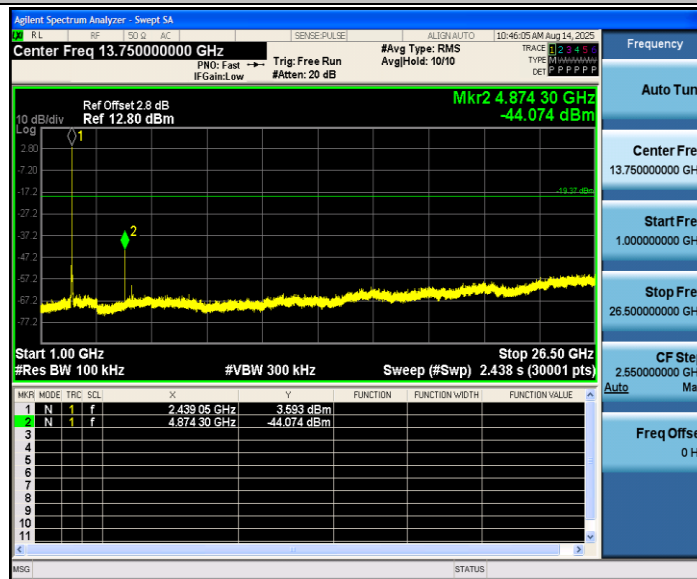
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



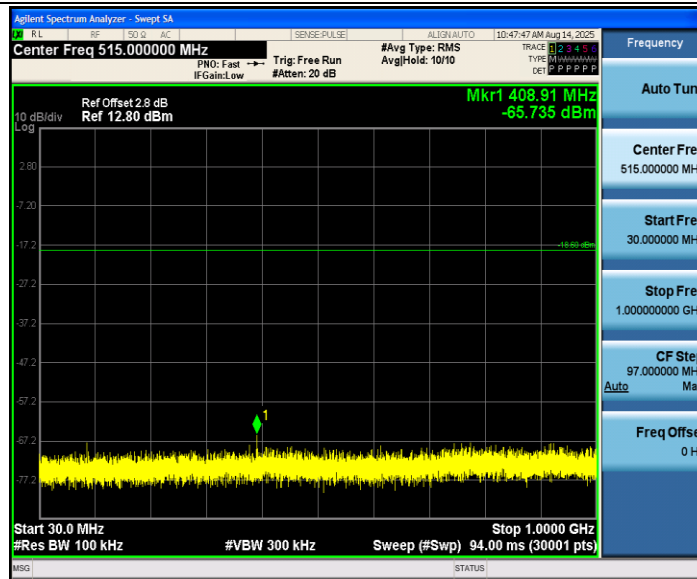
11B_Ant1_2437_1000~26500



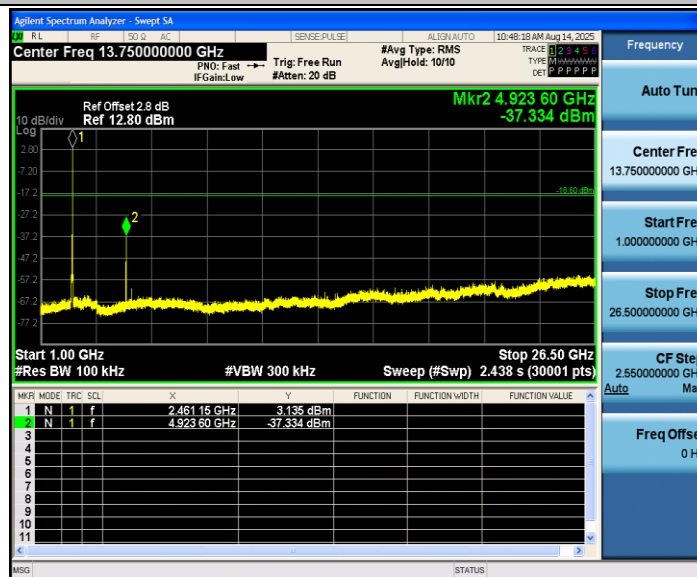
11B_Ant1_2462_0~Reference



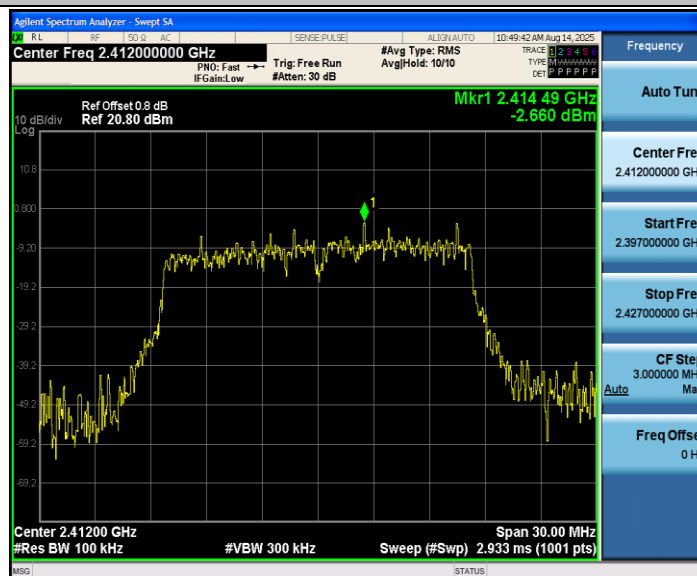
11B_Ant1_2462_30~1000



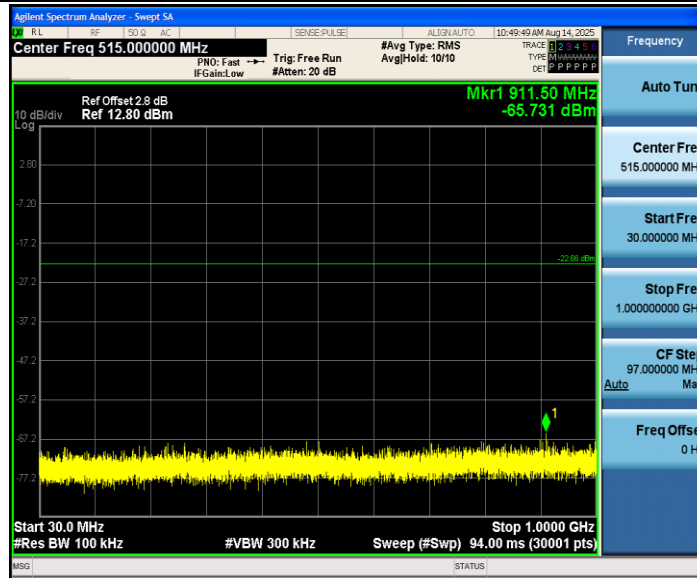
11B_Ant1_2462_1000~26500



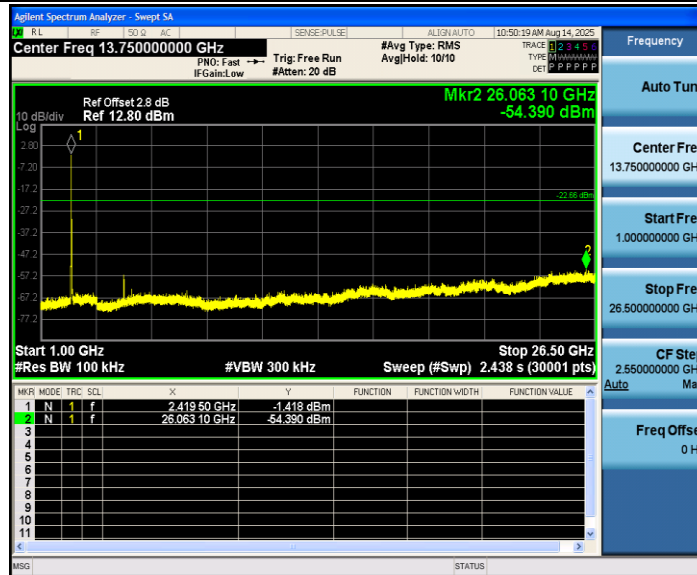
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



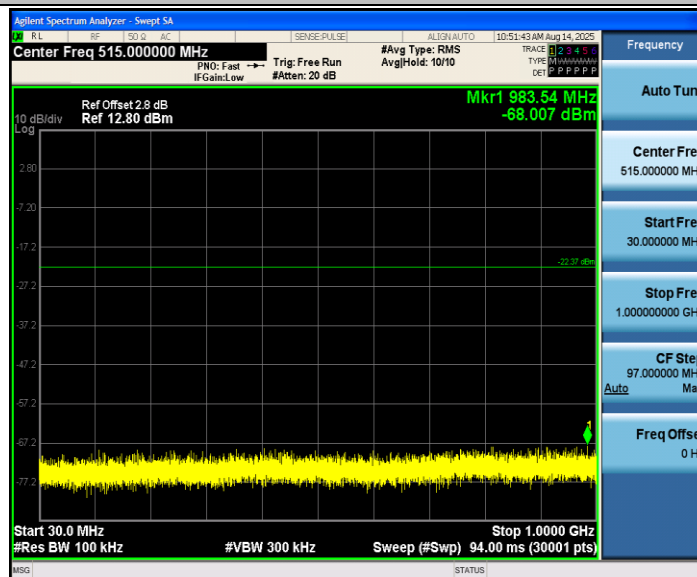
11G_Ant1_2412_1000~26500



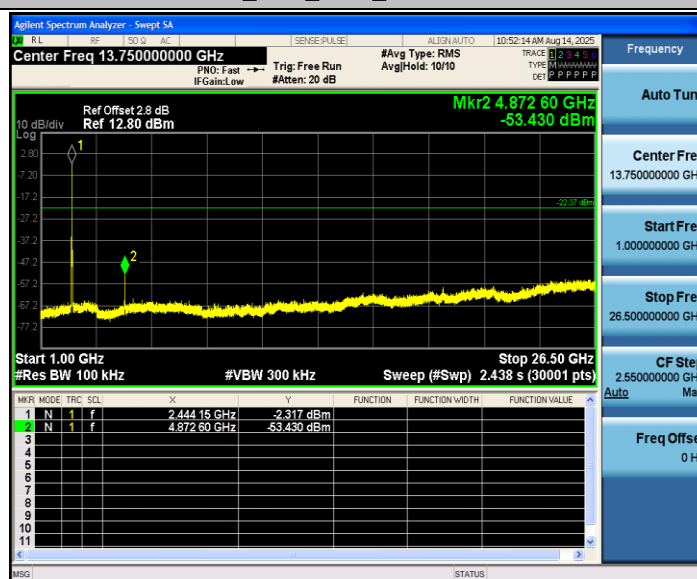
11G_Ant1_2437_0~Reference



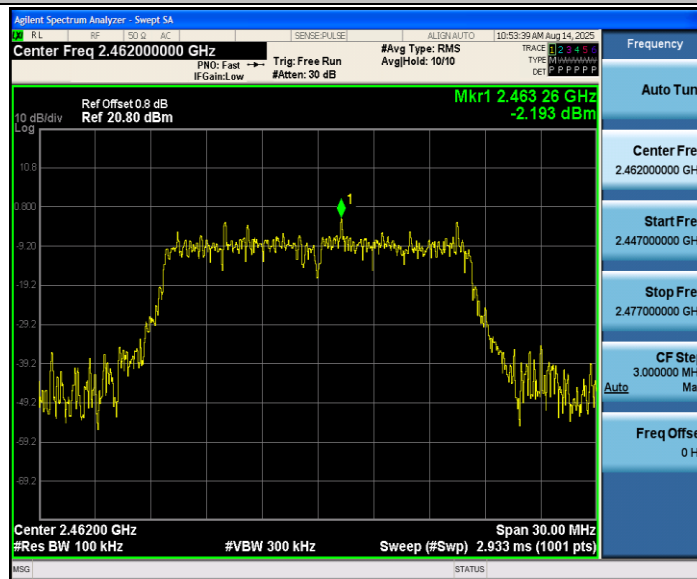
11G_Ant1_2437_30~1000



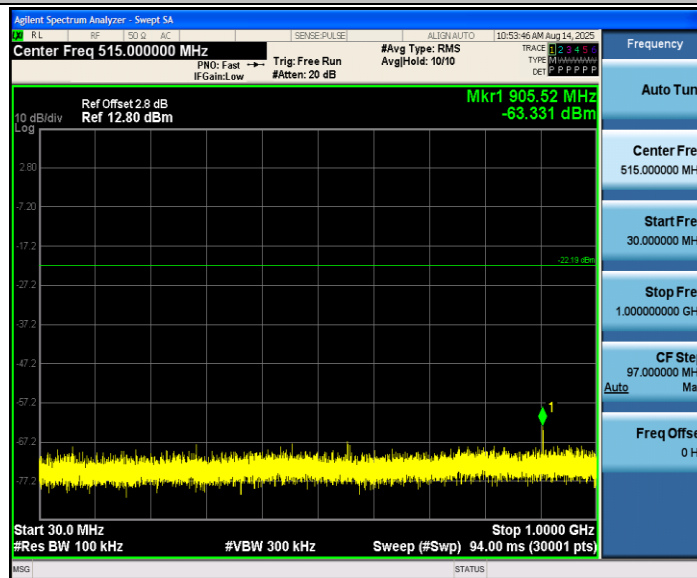
11G_Ant1_2437_1000~26500



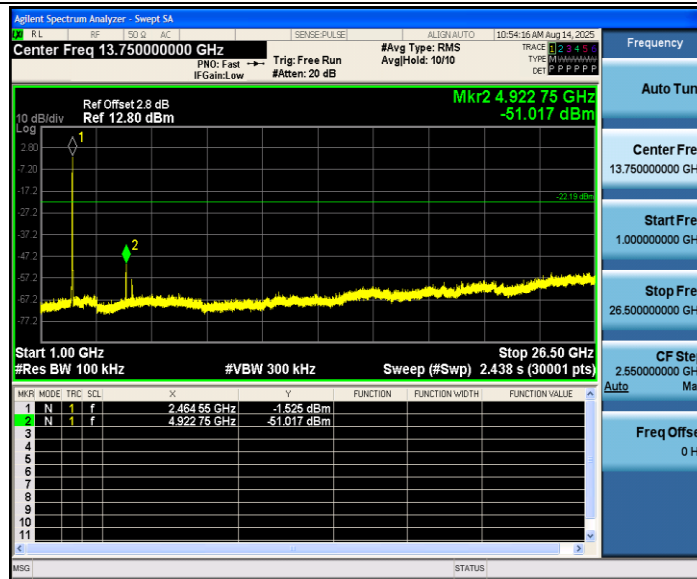
11G_Ant1_2462_0~Reference



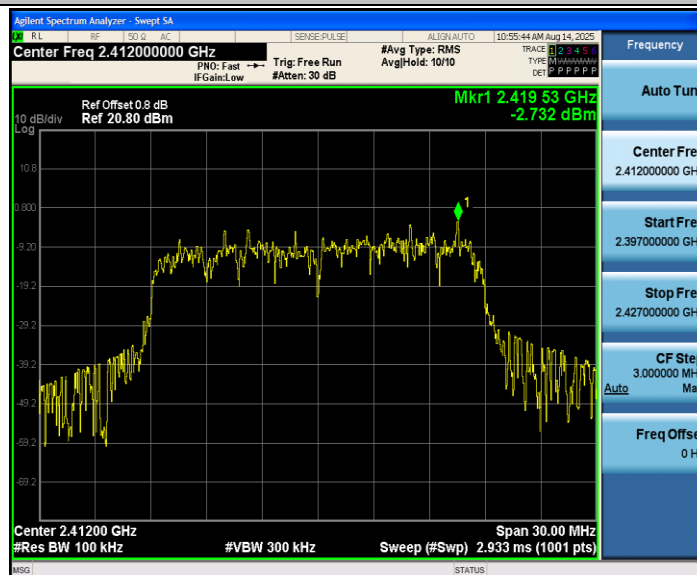
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

