

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BKV5-ST-01

Company : Shenzhen Top Smart Technology Co., Ltd

EUT : Diy camera

Model Number : ST-01

Report No. : CTA26072204501

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

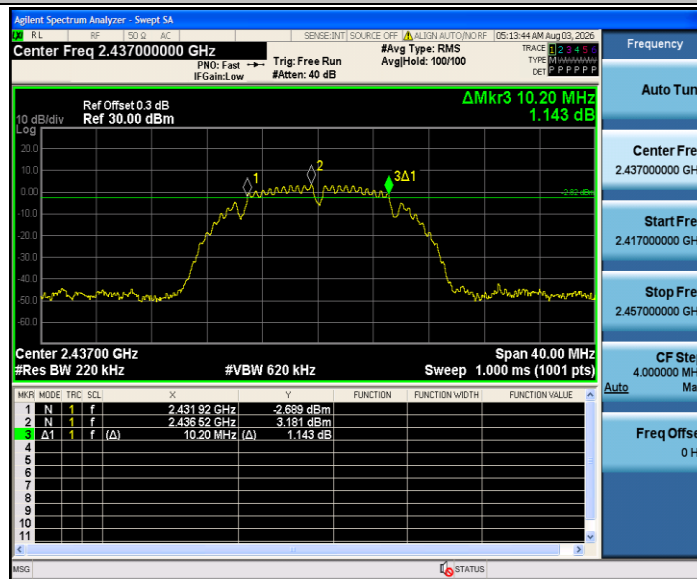
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.920	2417.120	0.5	PASS
		2437	10.200	2431.920	2442.120	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.720	2404.280	2420.000	0.5	PASS
		2437	15.600	2429.120	2444.720	0.5	PASS
		2462	15.720	2454.240	2469.960	0.5	PASS
11N20SISO	Ant1	2412	16.040	2403.960	2420.000	0.5	PASS
		2437	16.160	2429.120	2445.280	0.5	PASS
		2462	16.560	2454.040	2470.600	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.720	2439.840	0.5	PASS
		2437	35.200	2419.960	2455.160	0.5	PASS
		2452	35.520	2434.480	2470.000	0.5	PASS

Test Graphs

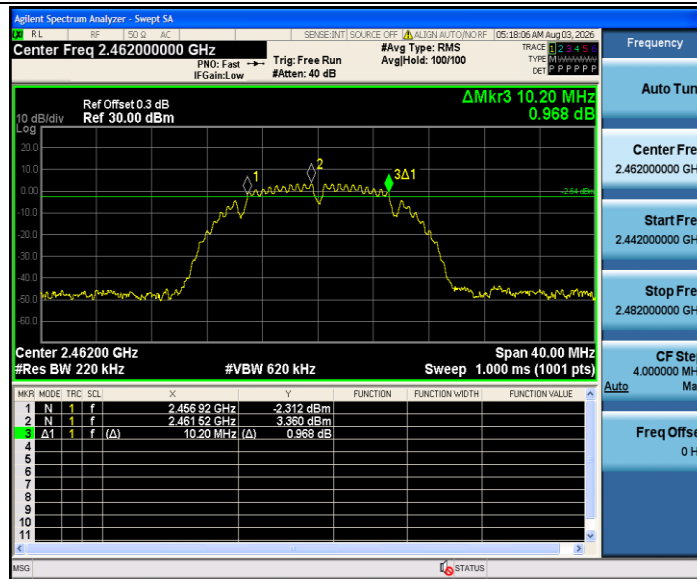
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437





11N20SISO_Ant1_2462



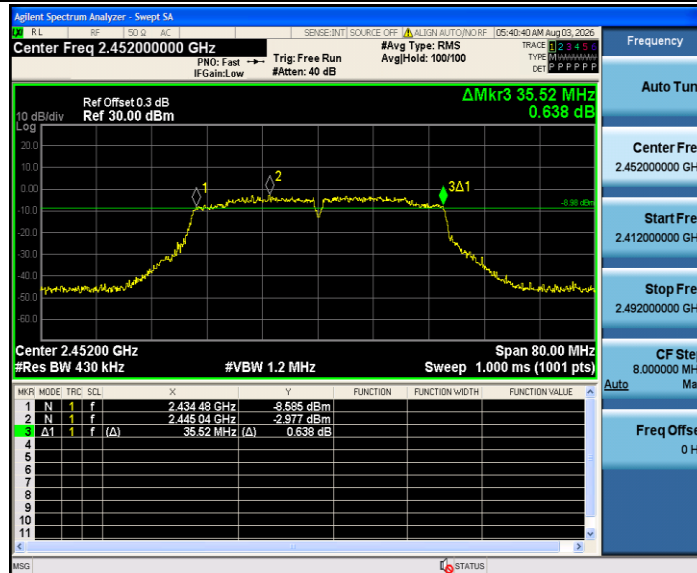
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



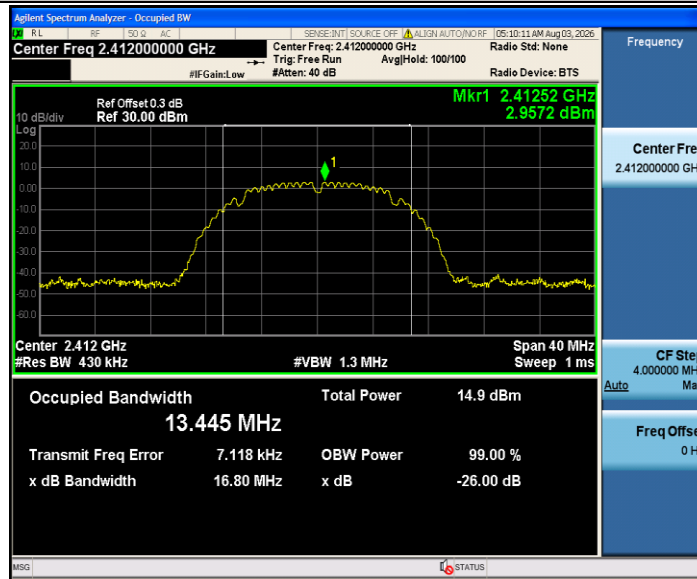
Appendix B: Occupied Channel Bandwidth

Test Result

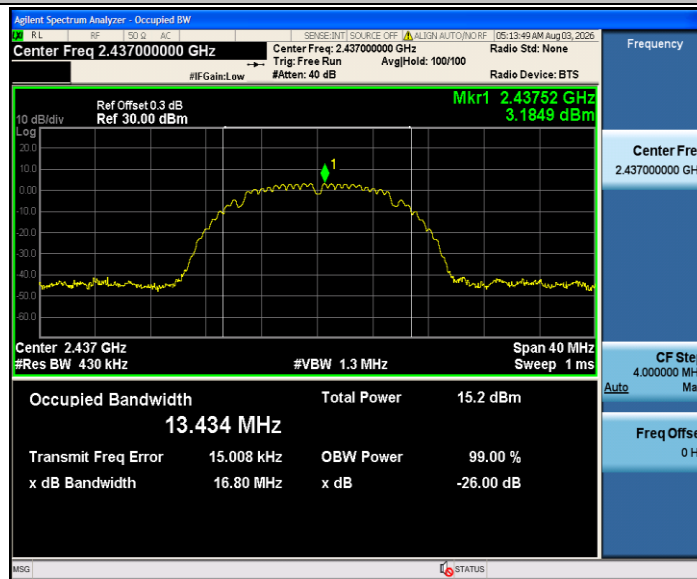
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.445	2405.2846	2418.7296	---	---
		2437	13.434	2430.2980	2443.7320	---	---
		2462	13.421	2455.3124	2468.7334	---	---
11G	Ant1	2412	16.917	2403.5853	2420.5023	---	---
		2437	16.871	2428.6139	2445.4849	---	---
		2462	16.806	2453.6611	2470.4671	---	---
11N20SISO	Ant1	2412	17.913	2403.0511	2420.9641	---	---
		2437	17.847	2428.1069	2445.9539	---	---
		2462	17.881	2453.0790	2470.9600	---	---
11N40SISO	Ant1	2422	36.054	2404.1041	2440.1581	---	---
		2437	36.053	2419.1323	2455.1853	---	---
		2452	36.034	2434.1173	2470.1513	---	---

Test Graphs

11B_Ant1_2412



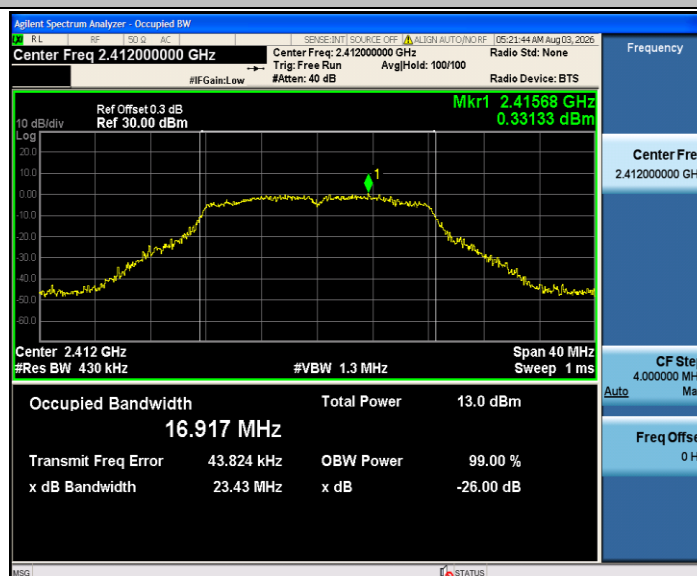
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



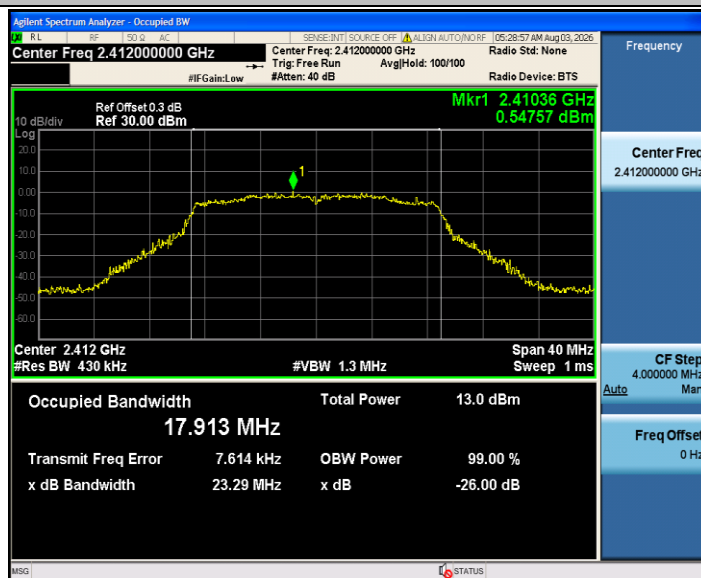
11G_Ant1_2437



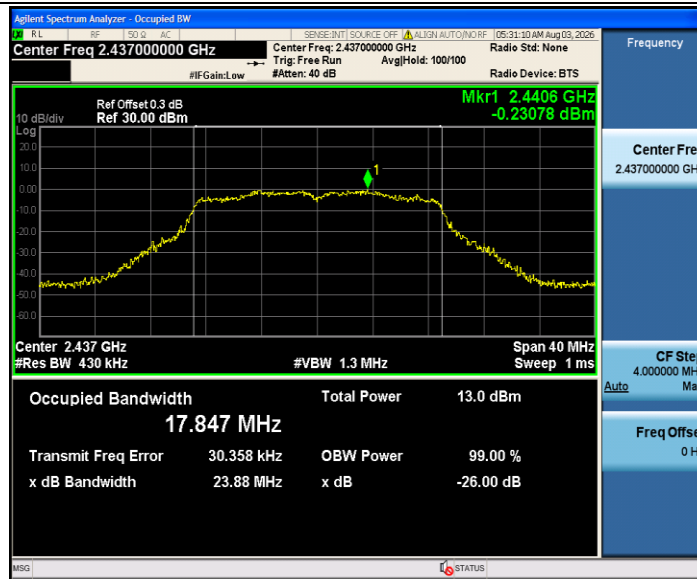
11G_Ant1_2462



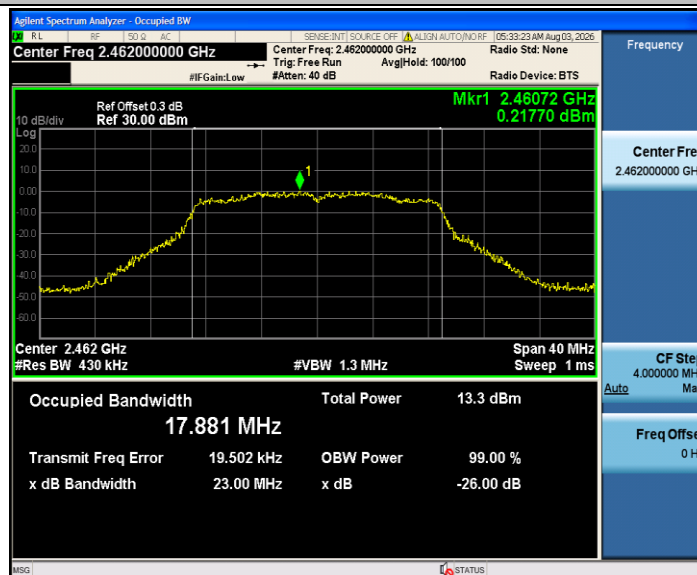
11N20SISO_Ant1_2412



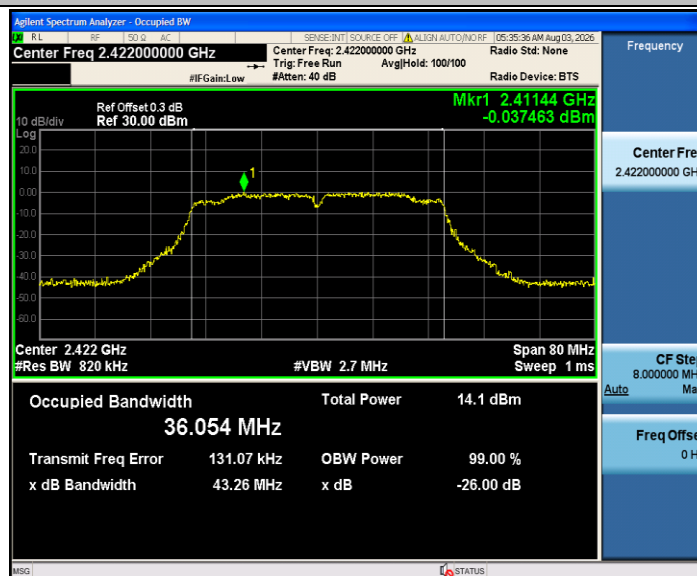
11N20SISO_Ant1_2437



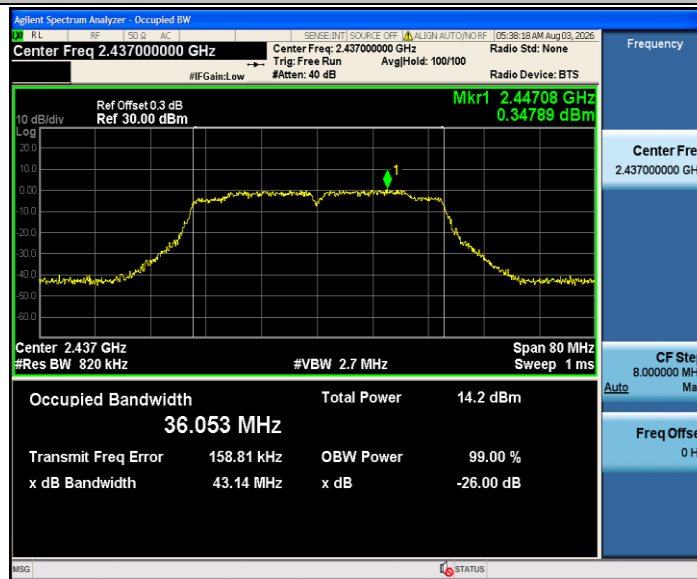
11N20SISO_Ant1_2462



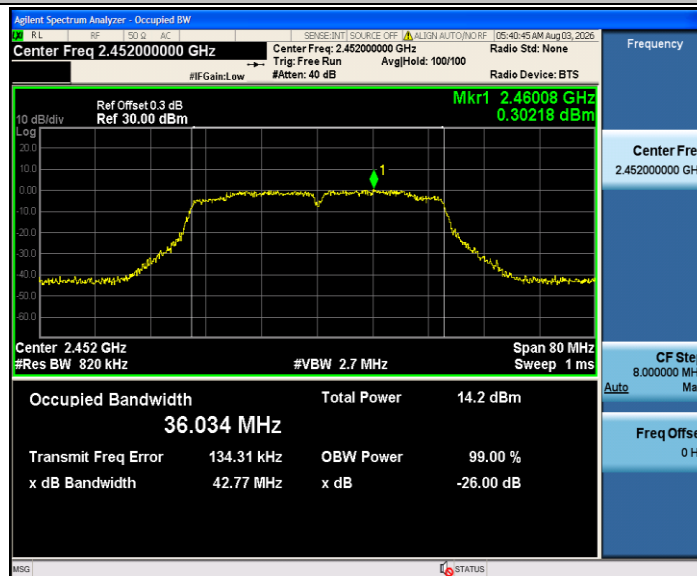
11N40SISO_Ant1_2422



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	14.60	≤30.00	PASS
		2437	14.85	≤30.00	PASS
		2462	15.08	≤30.00	PASS
11G	Ant1	2412	14.02	≤30.00	PASS
		2437	14.01	≤30.00	PASS
		2462	14.25	≤30.00	PASS
11N20SISO	Ant1	2412	13.74	≤30.00	PASS
		2437	13.87	≤30.00	PASS
		2462	14.13	≤30.00	PASS
11N40SISO	Ant1	2422	14.25	≤30.00	PASS
		2437	14.40	≤30.00	PASS
		2452	14.33	≤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	-11.04	≤8.00	PASS
		2437	-11.95	≤8.00	PASS
		2462	-10.48	≤8.00	PASS
11G	Ant1	2412	-18.38	≤8.00	PASS
		2437	-17.39	≤8.00	PASS
		2462	-16.46	≤8.00	PASS
11N20SISO	Ant1	2412	-18.13	≤8.00	PASS
		2437	-15.54	≤8.00	PASS
		2462	-17.24	≤8.00	PASS
11N40SISO	Ant1	2422	-19.39	≤8.00	PASS
		2437	-20.17	≤8.00	PASS
		2452	-20.64	≤8.00	PASS

Test Graphs

11B_Ant1_2412



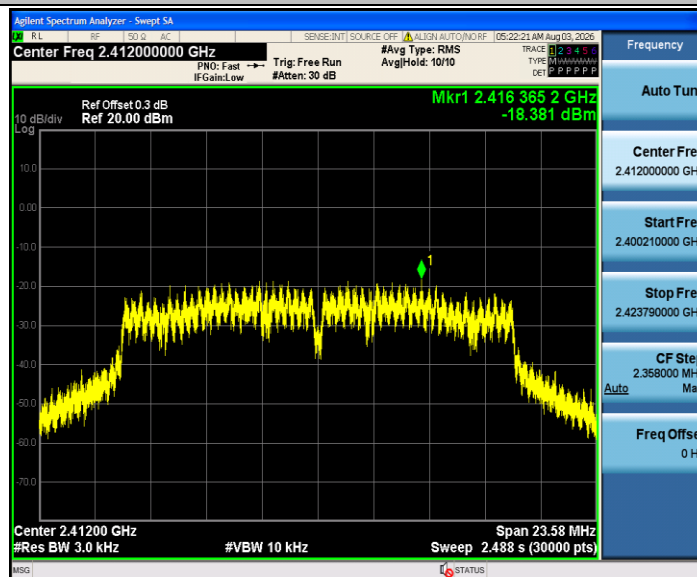
11B_Ant1_2437



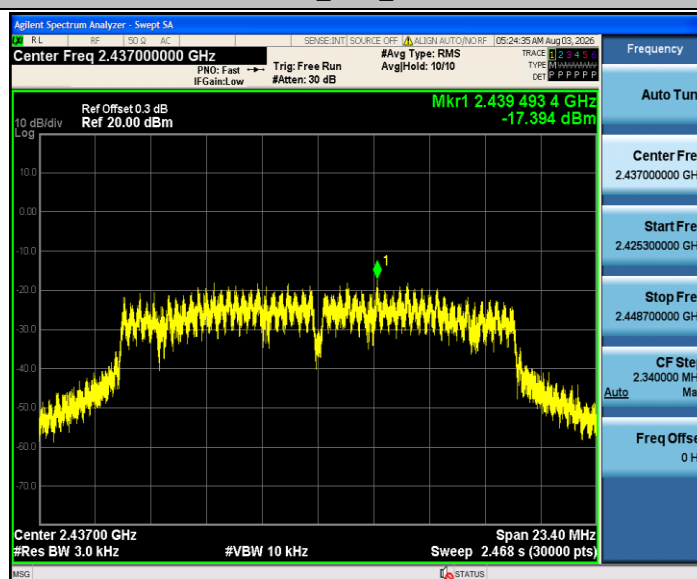
11B_Ant1_2462



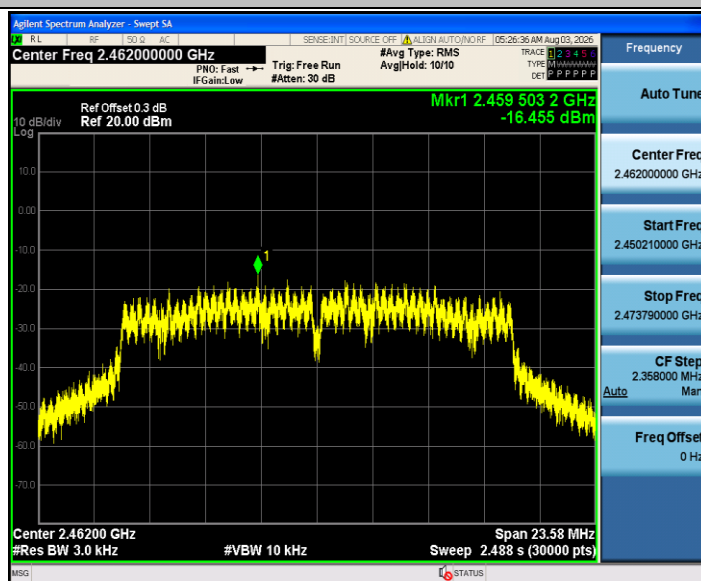
11G_Ant1_2412



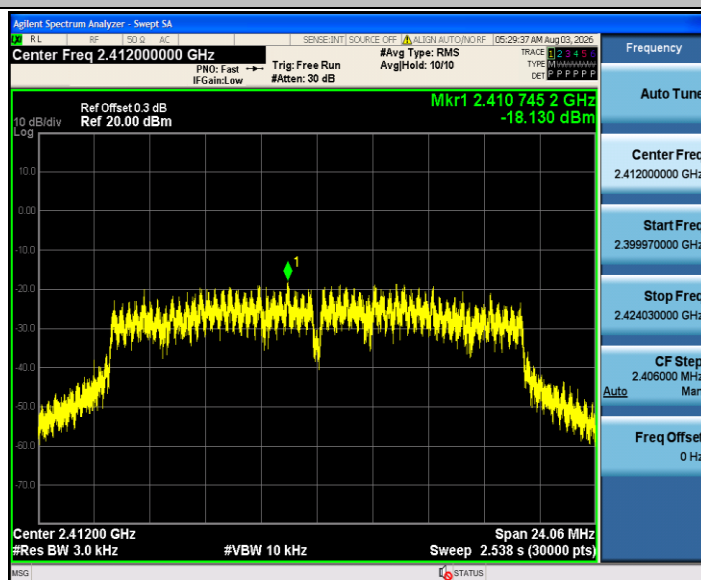
11G_Ant1_2437



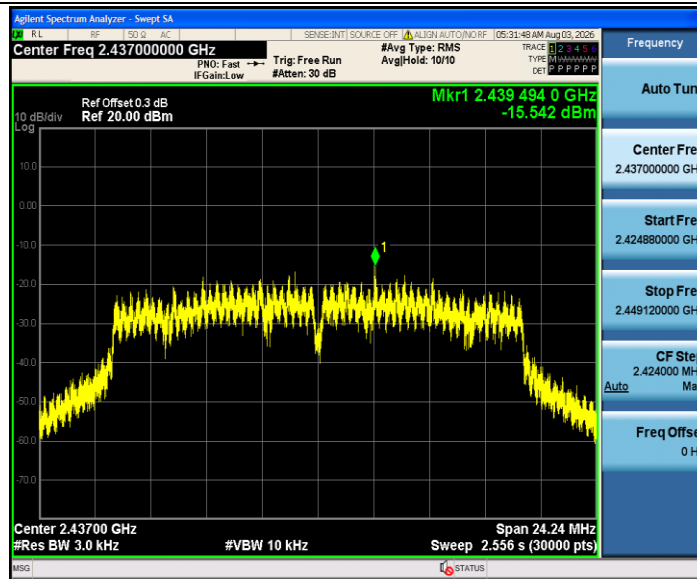
11G_Ant1_2462



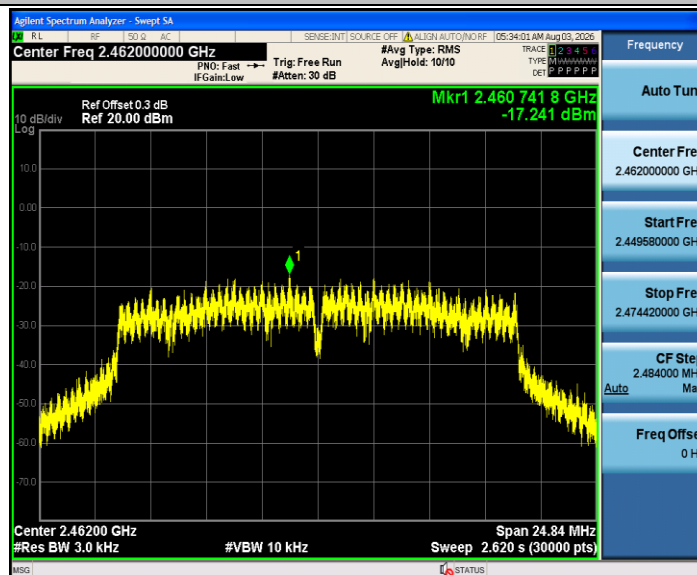
11N20SISO_Ant1_2412



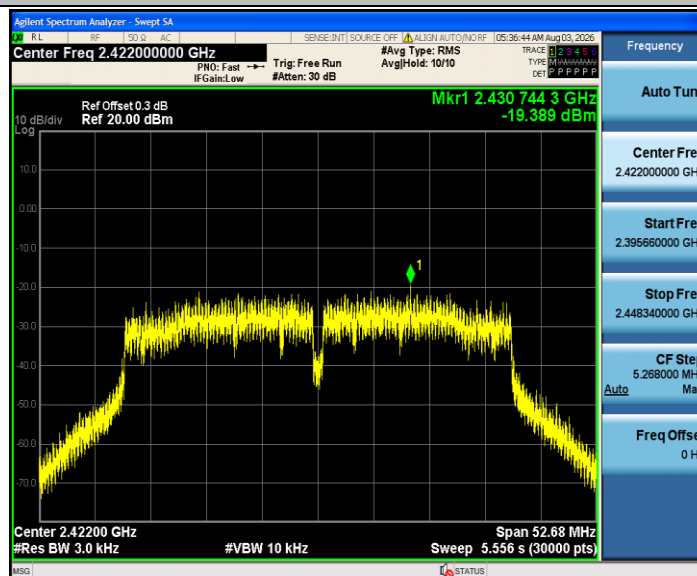
11N20SISO_Ant1_2437



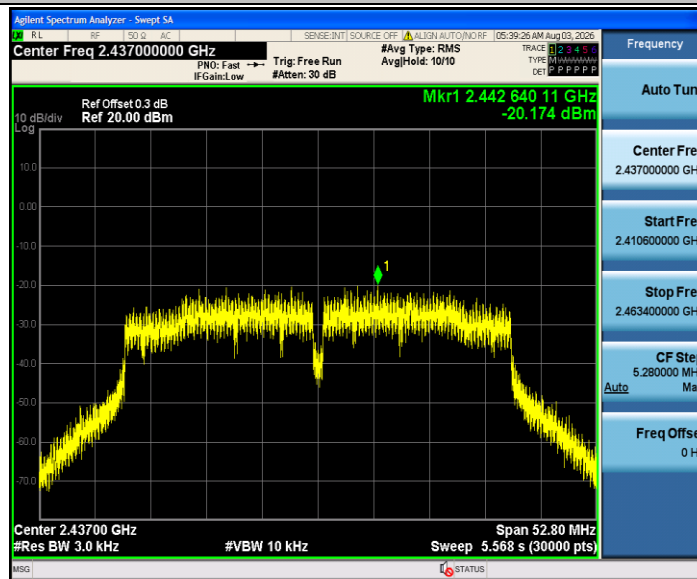
11N20SISO_Ant1_2462



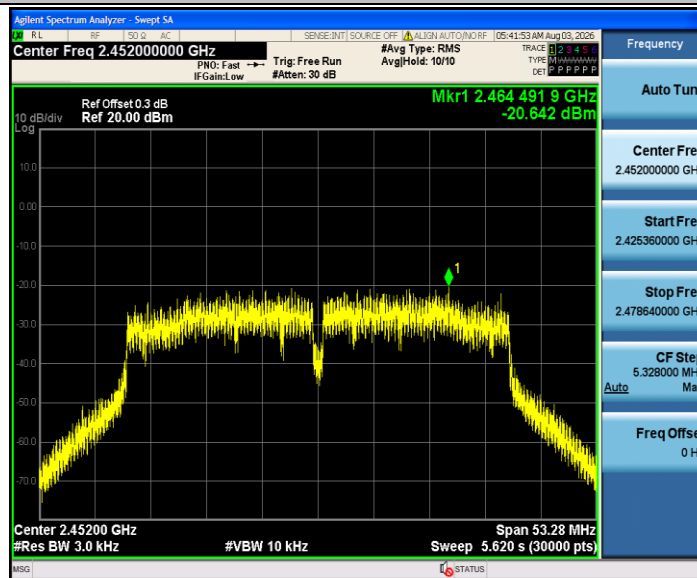
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



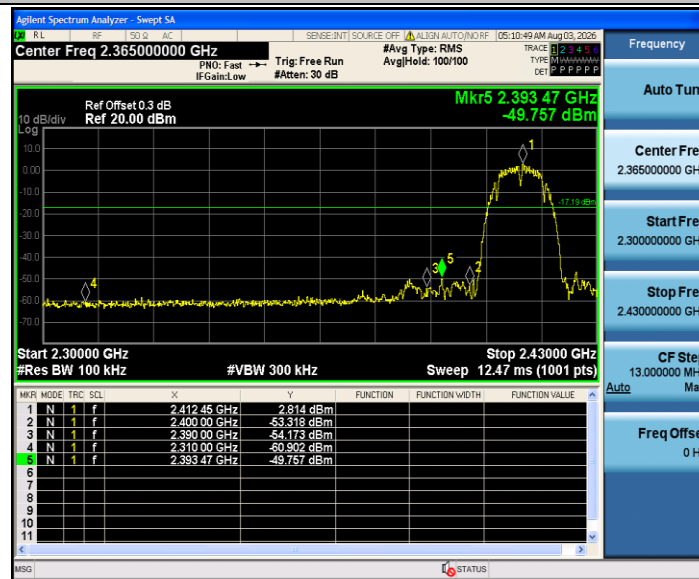
Appendix E: Band edge measurements

Test Result

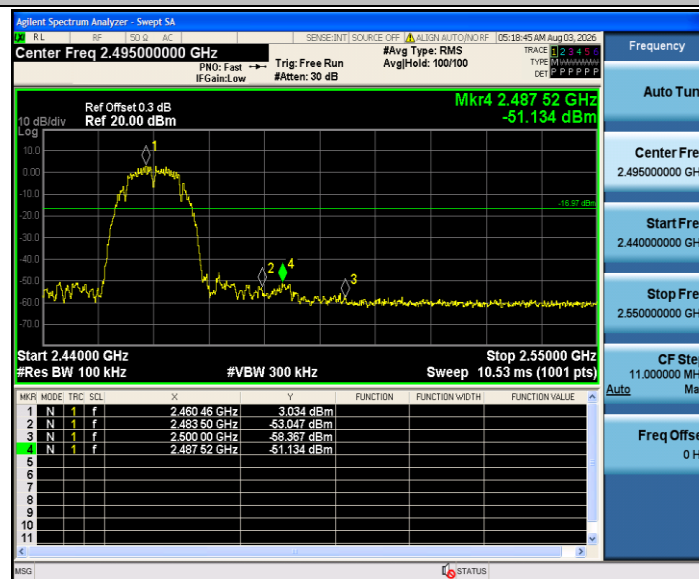
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.81	-49.76	≤-17.19	PASS
		High	2462	3.03	-51.13	≤-16.97	PASS
11G	Ant1	Low	2412	-2.46	-33.23	≤-22.46	PASS
		High	2462	-2.37	-57.73	≤-22.37	PASS
11N20SISO	Ant1	Low	2412	-2.55	-33.14	≤-22.55	PASS
		High	2462	-2.09	-57.79	≤-22.09	PASS
11N40SISO	Ant1	Low	2422	-5.56	-33.82	≤-25.56	PASS
		High	2452	-5.63	-56.71	≤-25.63	PASS

Test Graphs

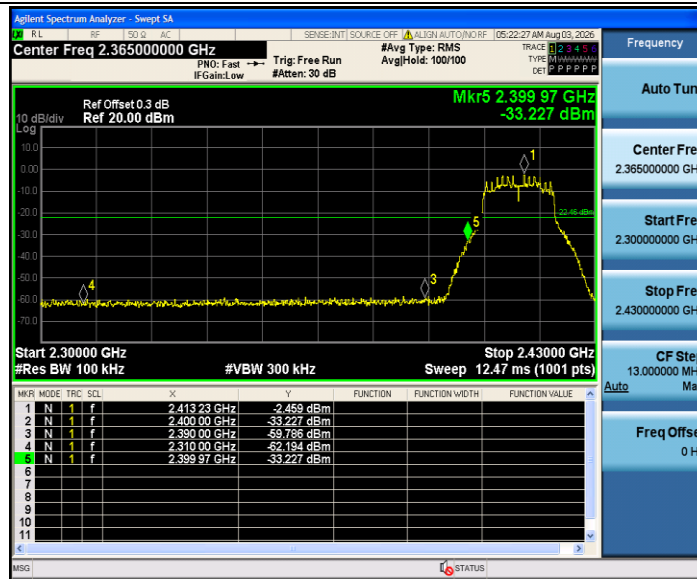
11B_Ant1_Low_2412



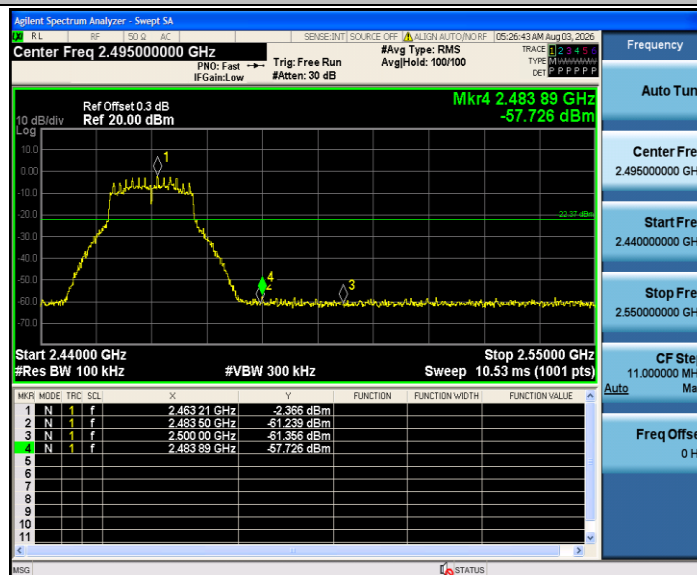
11B_Ant1_High_2462



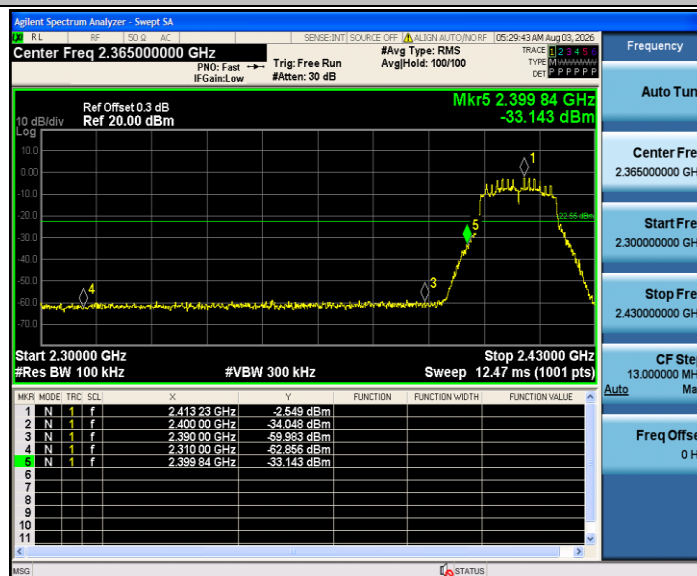
11G_Ant1_Low_2412



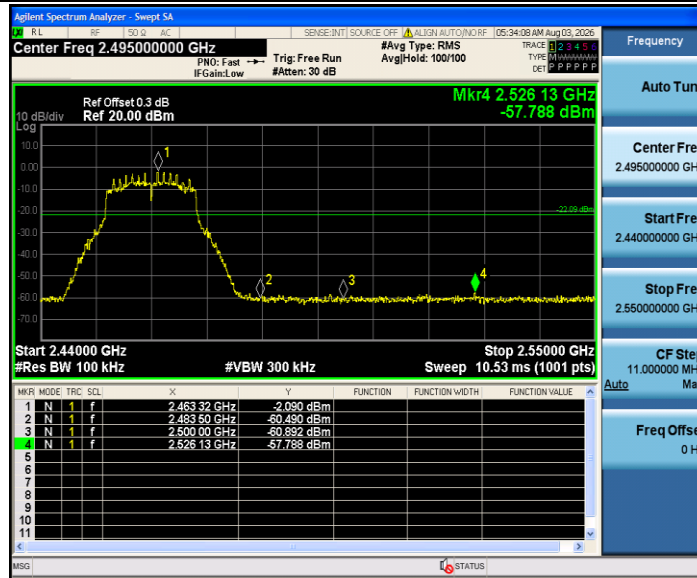
11G_Ant1_High_2462



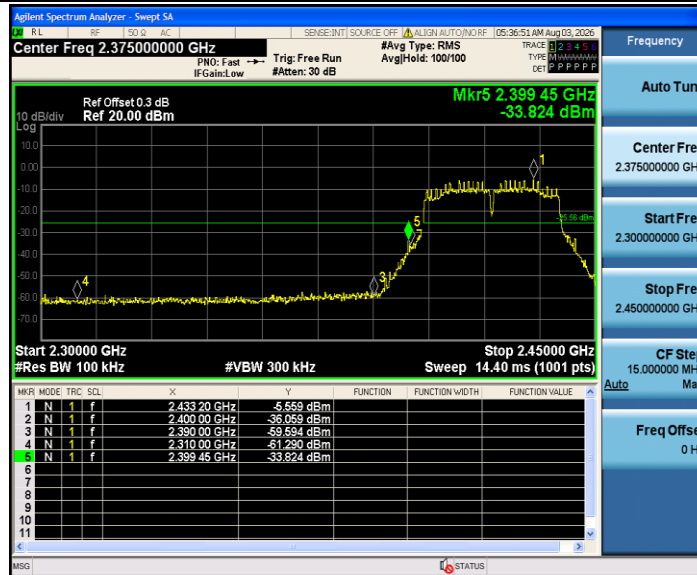
11N20SISO_Ant1_Low_2412



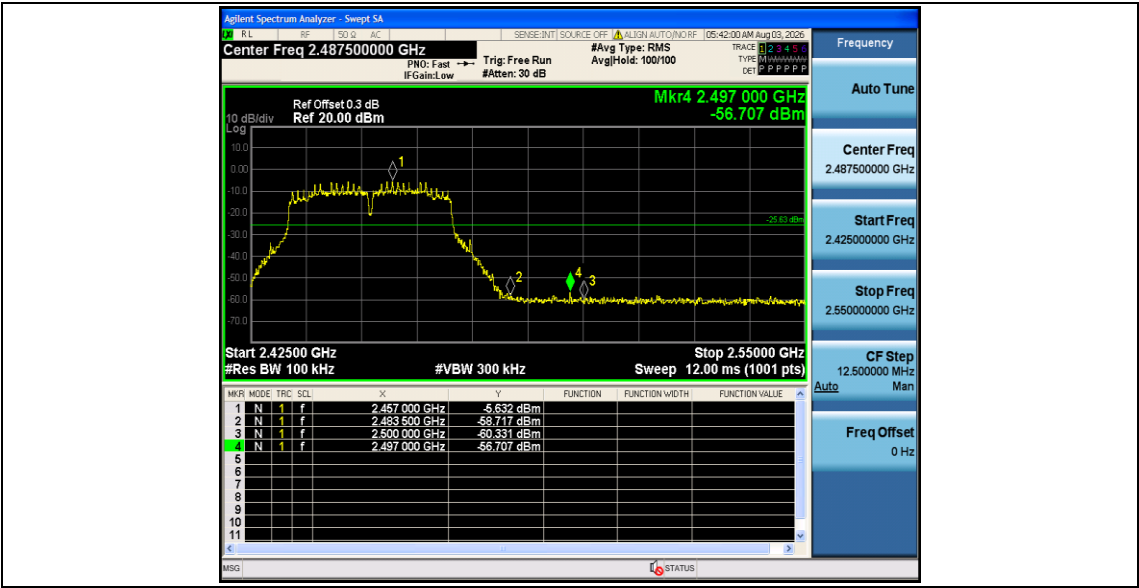
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

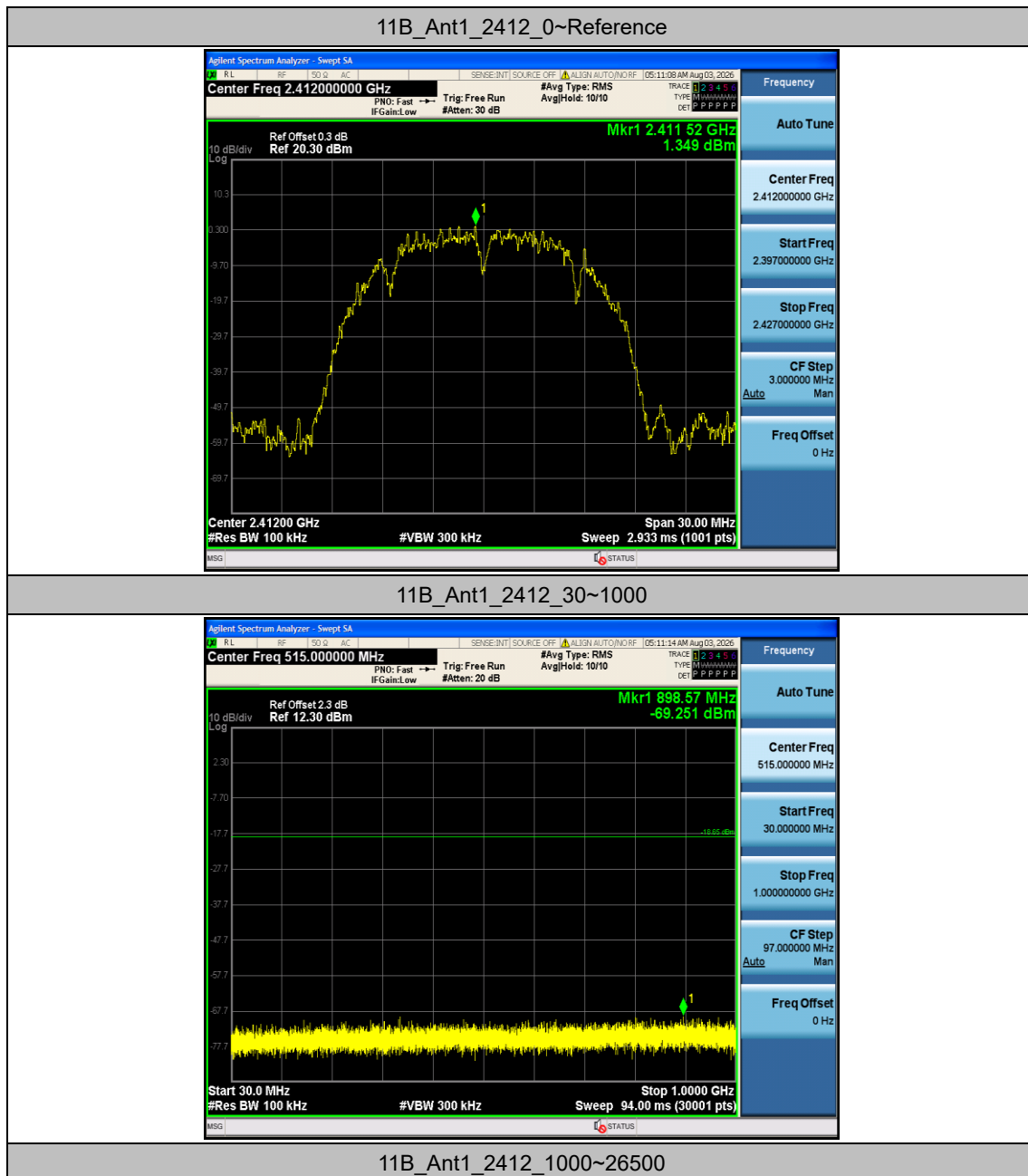


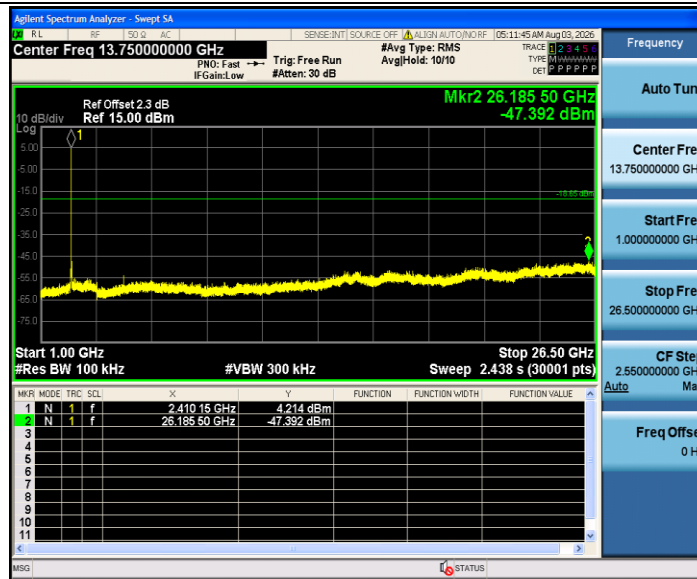
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.35	1.35	---	PASS
			30~1000	1.35	-69.25	≤-18.65	PASS
			1000~26500	1.35	-47.39	≤-18.65	PASS
		2437	Reference	1.59	1.59	---	PASS
			30~1000	1.59	-69.1	≤-18.41	PASS
			1000~26500	1.59	-47.06	≤-18.41	PASS
		2462	Reference	2.56	2.56	---	PASS
			30~1000	2.56	-68.71	≤-17.44	PASS
			1000~26500	2.56	-46.86	≤-17.44	PASS
11G	Ant1	2412	Reference	-2.96	-2.96	---	PASS
			30~1000	-2.96	-69.23	≤-22.96	PASS
			1000~26500	-2.96	-46.93	≤-22.96	PASS
		2437	Reference	-2.26	-2.26	---	PASS
			30~1000	-2.26	-68.28	≤-22.26	PASS
			1000~26500	-2.26	-47.05	≤-22.26	PASS
		2462	Reference	-2.22	-2.22	---	PASS
			30~1000	-2.22	-68.92	≤-22.22	PASS
			1000~26500	-2.22	-46.79	≤-22.22	PASS
11N20SISO	Ant1	2412	Reference	-2.73	-2.73	---	PASS
			30~1000	-2.73	-68.67	≤-22.73	PASS
			1000~26500	-2.73	-46.57	≤-22.73	PASS
		2437	Reference	-2.92	-2.92	---	PASS
			30~1000	-2.92	-68.52	≤-22.92	PASS
			1000~26500	-2.92	-47.19	≤-22.92	PASS
		2462	Reference	-2.43	-2.43	---	PASS
			30~1000	-2.43	-68.83	≤-22.43	PASS
			1000~26500	-2.43	-45.49	≤-22.43	PASS
11N40SISO	Ant1	2422	Reference	-6.06	-6.06	---	PASS
			30~1000	-6.06	-69.2	≤-26.06	PASS
			1000~26500	-6.06	-46.15	≤-26.06	PASS
		2437	Reference	-5.32	-5.32	---	PASS
			30~1000	-5.32	-68.08	≤-25.32	PASS
			1000~26500	-5.32	-46.52	≤-25.32	PASS
		2452	Reference	-5.93	-5.93	---	PASS
			30~1000	-5.93	-69.31	≤-25.93	PASS
			1000~26500	-5.93	-46.04	≤-25.93	PASS

Test Graphs

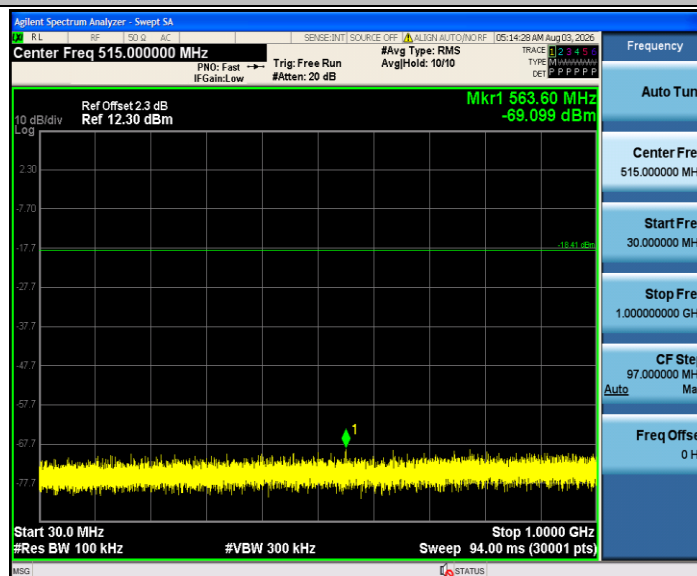




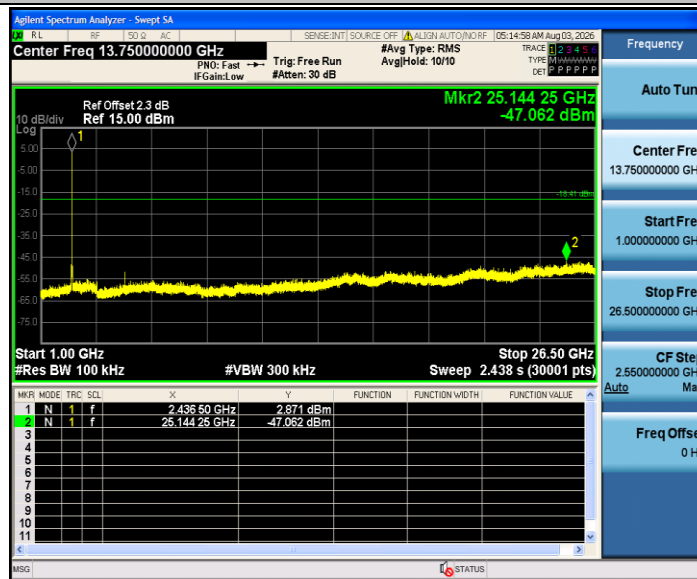
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



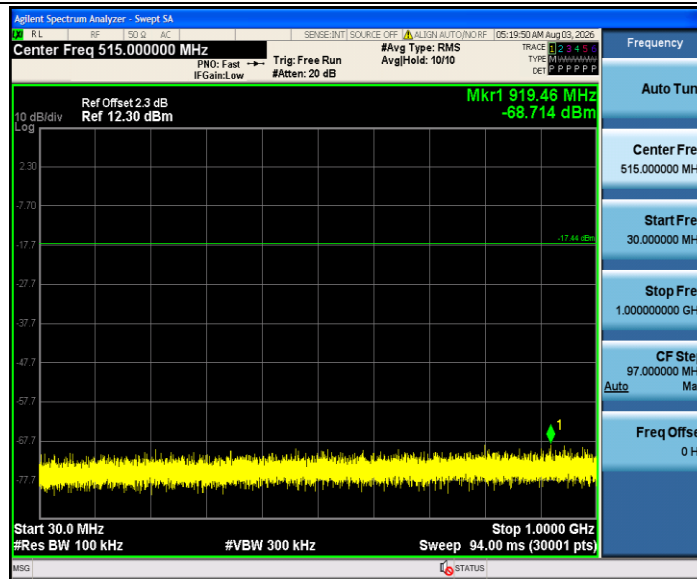
11B_Ant1_2437_1000~26500



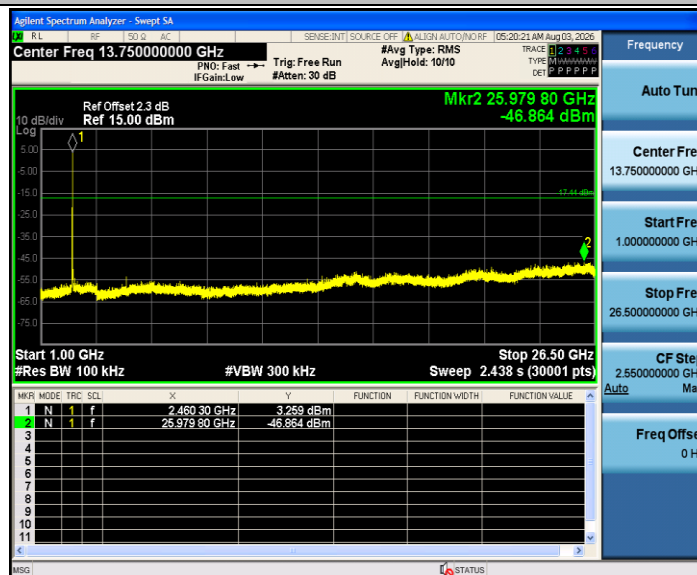
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



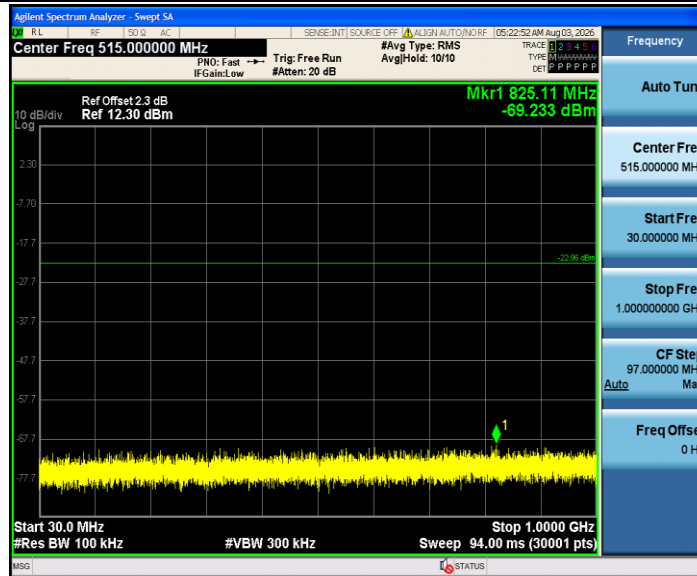
11B_Ant1_2462_1000~26500



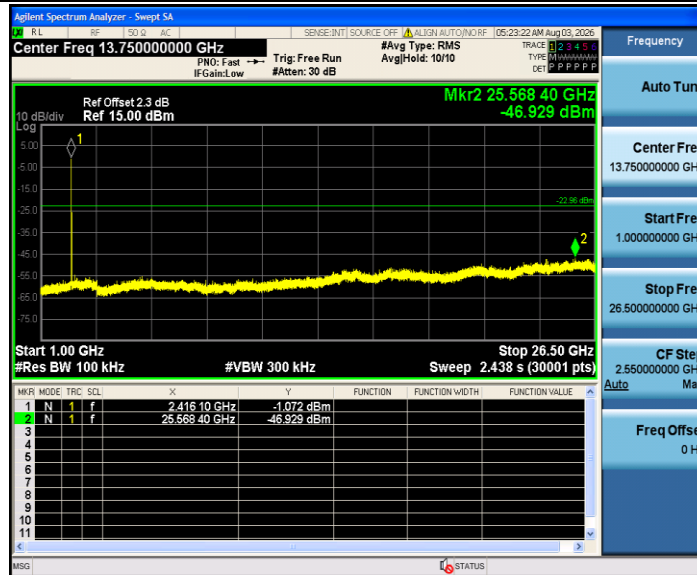
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



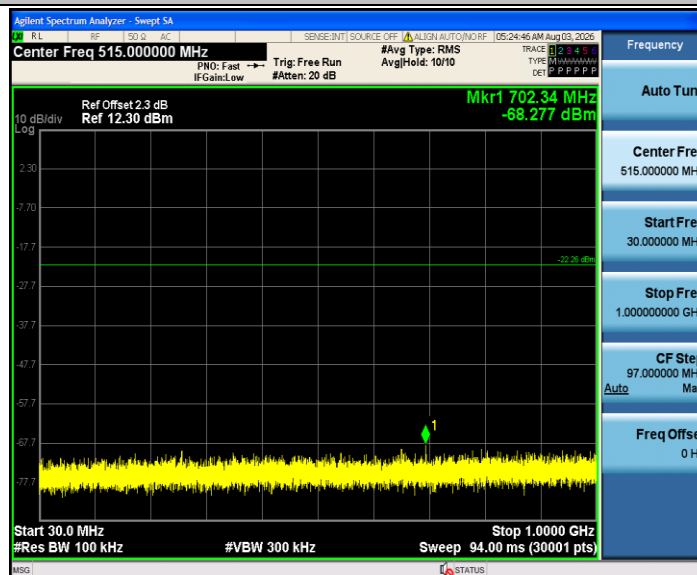
11G_Ant1_2412_1000~26500



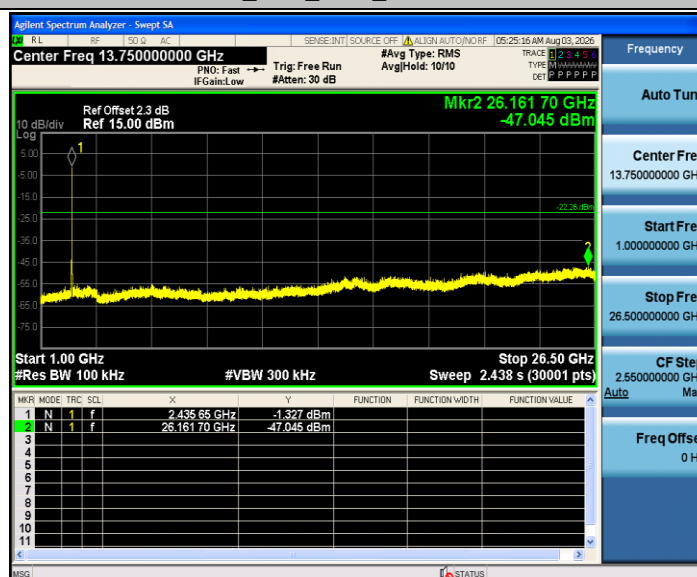
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



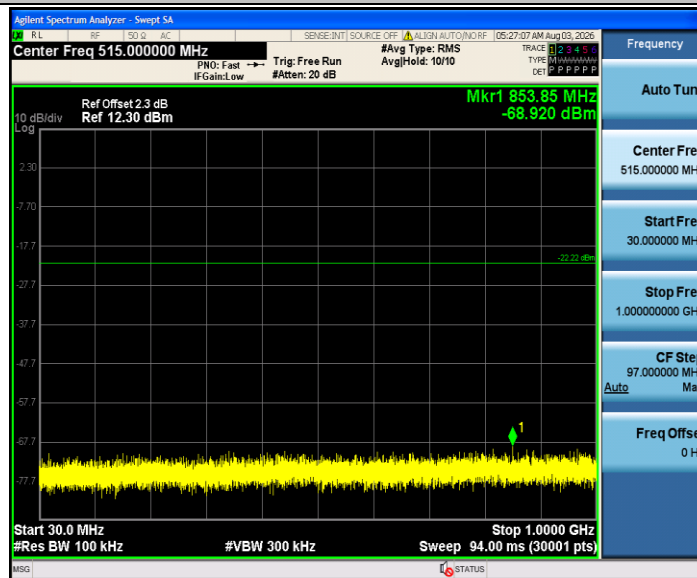
11G_Ant1_2437_1000~26500



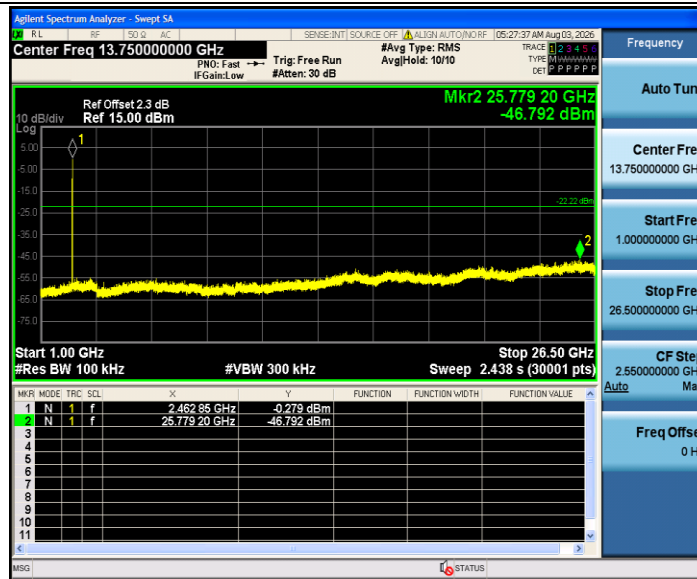
11G_Ant1_2462_0~Reference



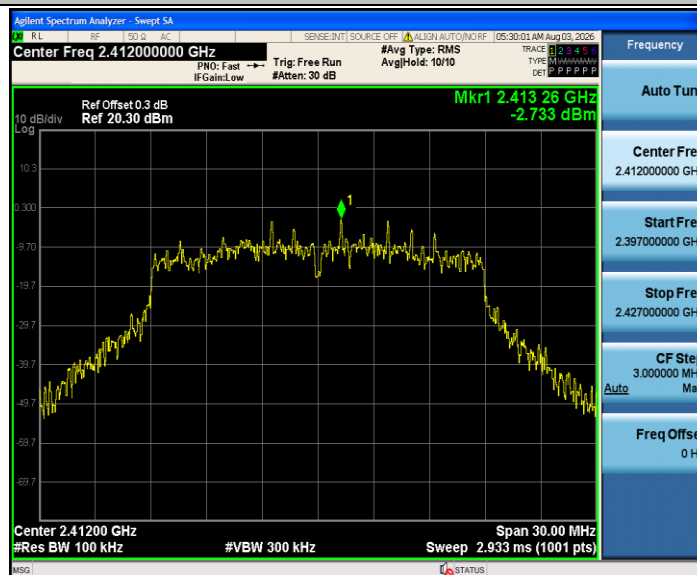
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

