

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BYL5-LADU001

Company : Pingxiang Ladu Trading Co., Ltd. Tiankongli Branch

EUT : Dual Eye AI Companion Robot

Model Number : Ladu001

Report No. : CTA26081100202

Reviewed By : Eric Wang

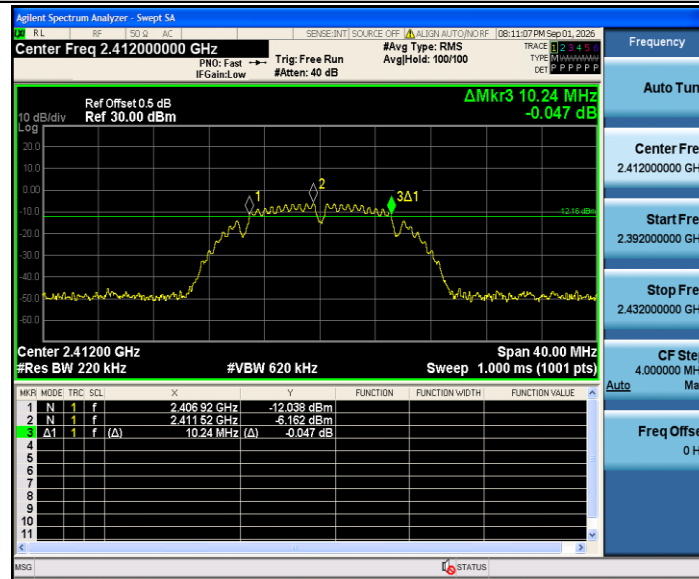
Appendix A: DTS Bandwidth

Test Result

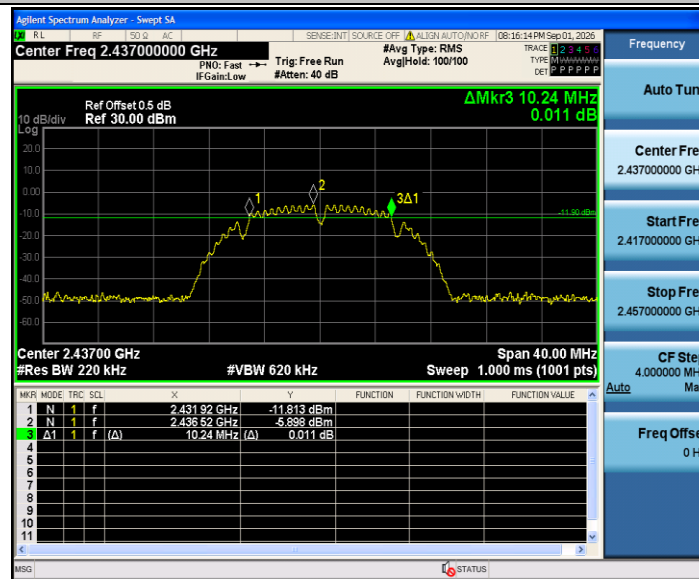
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.360	2404.320	2419.680	0.5	PASS
		2437	15.760	2429.080	2444.840	0.5	PASS
		2462	15.520	2454.120	2469.640	0.5	PASS
11N20SISO	Ant1	2412	17.040	2403.560	2420.600	0.5	PASS
		2437	17.160	2428.480	2445.640	0.5	PASS
		2462	17.080	2453.560	2470.640	0.5	PASS
11N40SISO	Ant1	2422	36.000	2404.000	2440.000	0.5	PASS
		2437	35.360	2419.560	2454.920	0.5	PASS
		2452	35.360	2434.560	2469.920	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



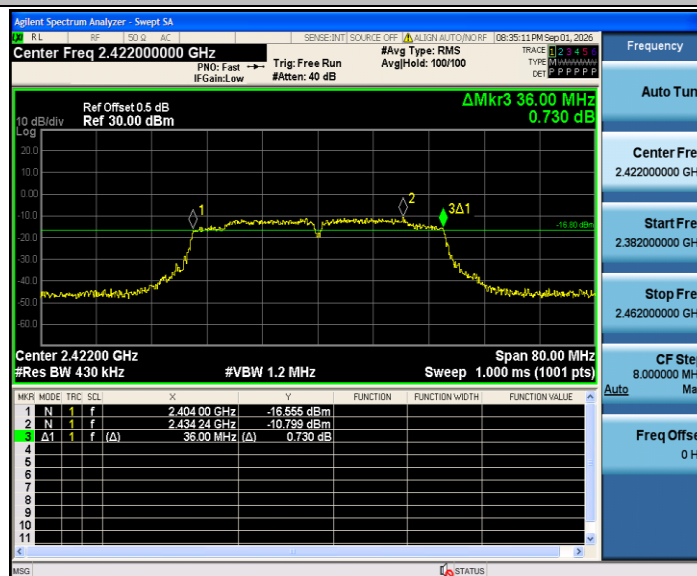
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



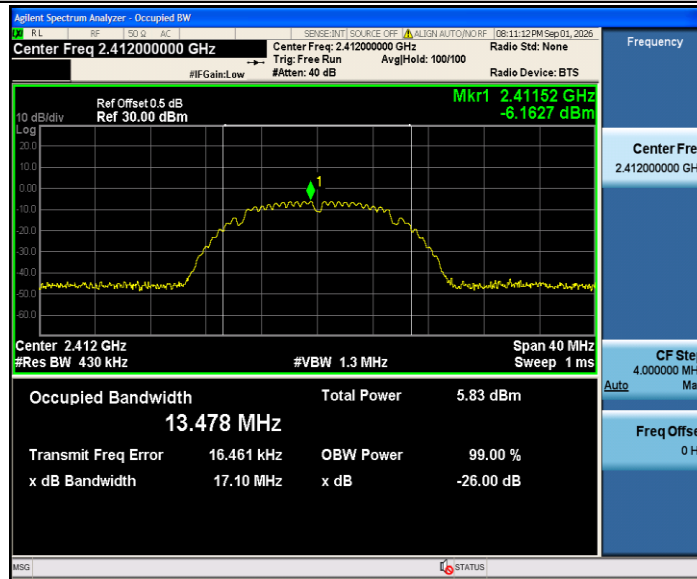
Appendix B: Occupied Channel Bandwidth

Test Result

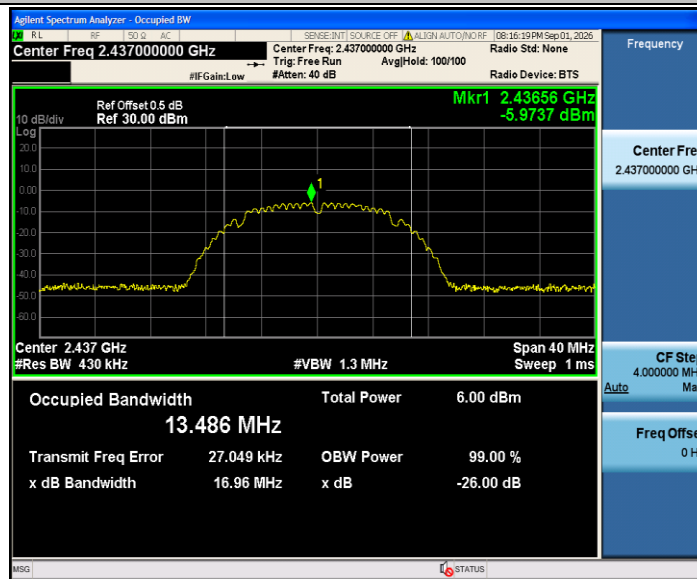
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.478	2405.2775	2418.7555	---	---
		2437	13.486	2430.2841	2443.7701	---	---
		2462	13.468	2455.3052	2468.7732	---	---
11G	Ant1	2412	16.837	2403.6500	2420.4870	---	---
		2437	16.820	2428.6506	2445.4706	---	---
		2462	16.868	2453.5979	2470.4659	---	---
11N20SISO	Ant1	2412	17.909	2403.0547	2420.9637	---	---
		2437	17.871	2428.0923	2445.9633	---	---
		2462	17.879	2453.0674	2470.9464	---	---
11N40SISO	Ant1	2422	36.052	2404.1349	2440.1869	---	---
		2437	36.101	2419.1149	2455.2159	---	---
		2452	36.101	2434.1084	2470.2094	---	---

Test Graphs

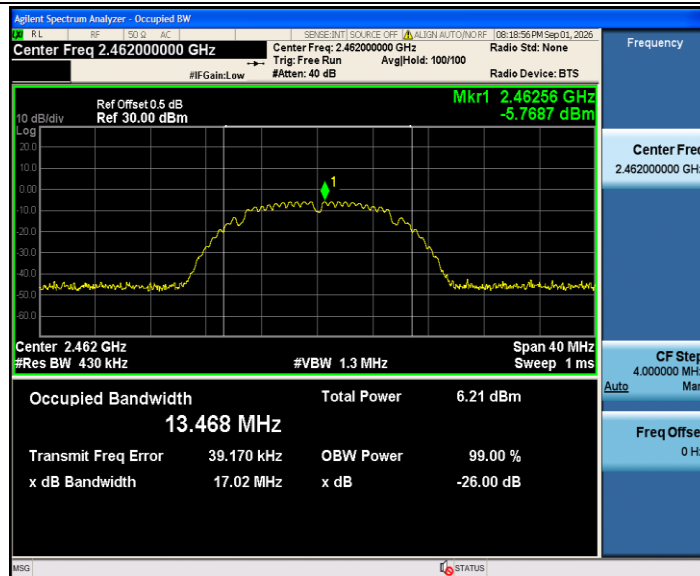
11B_Ant1_2412



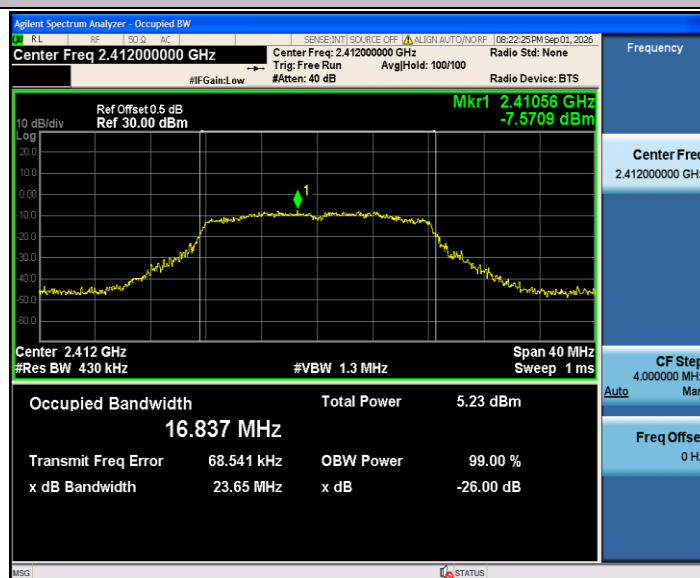
11B_Ant1_2437



11B_Ant1_2462



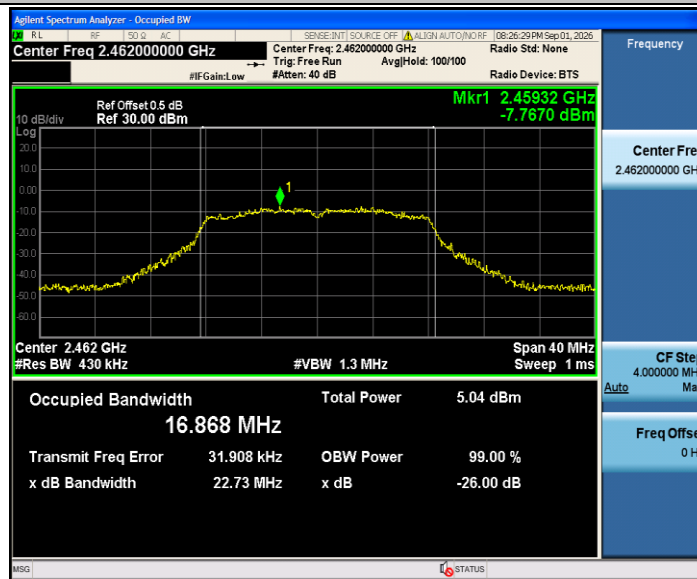
11G_Ant1_2412



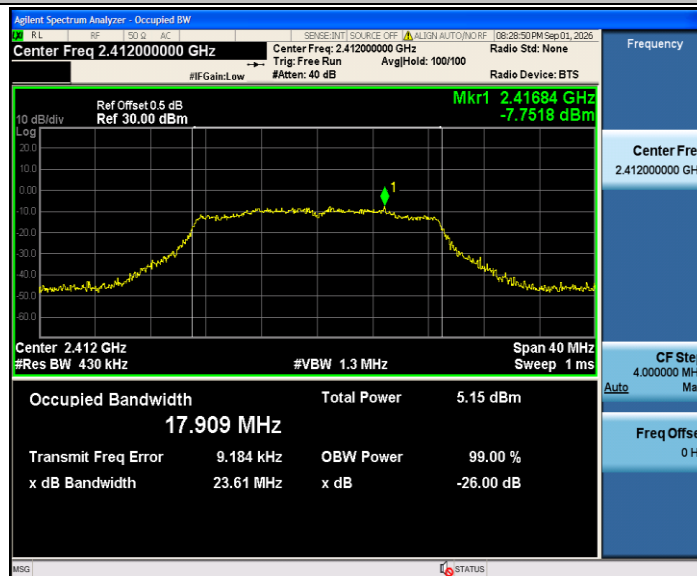
11G_Ant1_2437



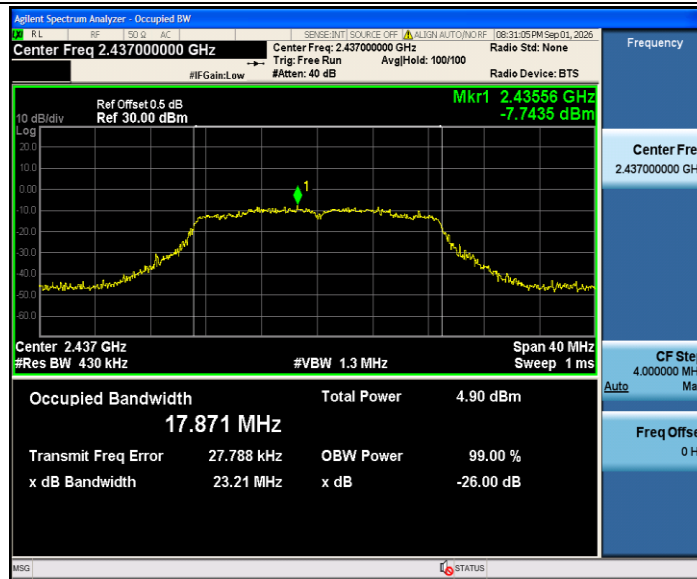
11G_Ant1_2462



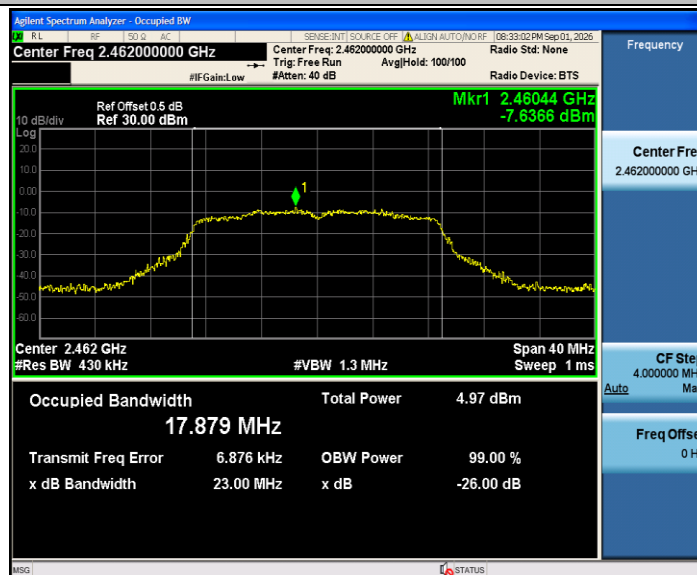
11N20SISO_Ant1_2412



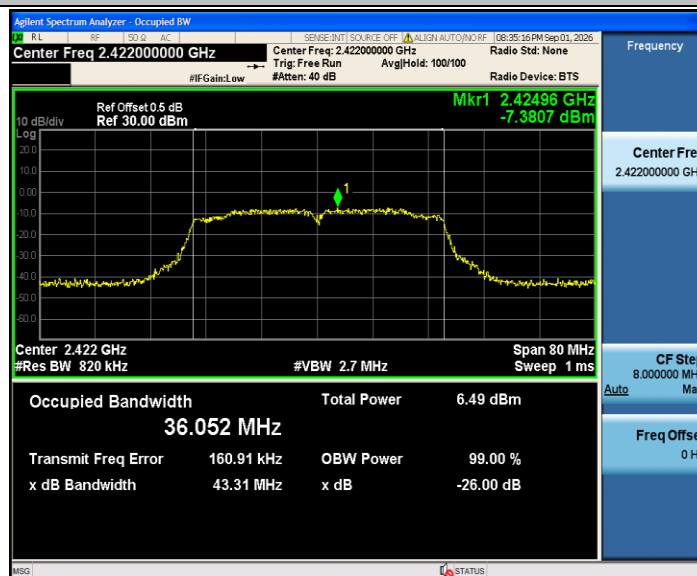
11N20SISO_Ant1_2437



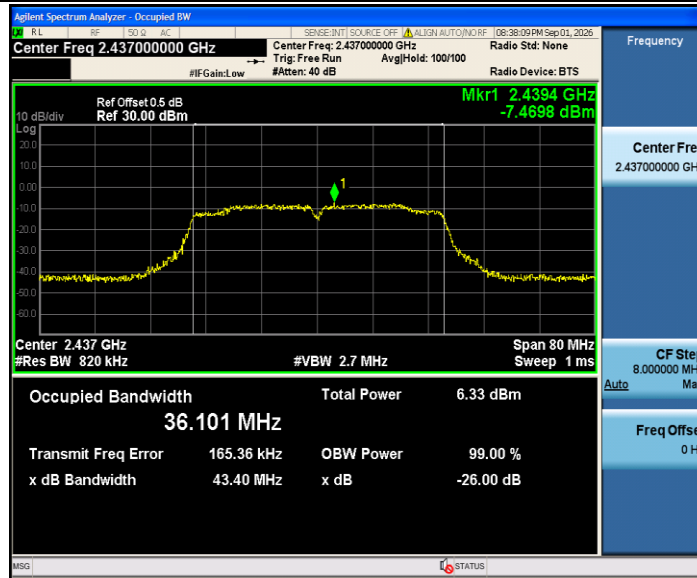
11N20SISO_Ant1_2462



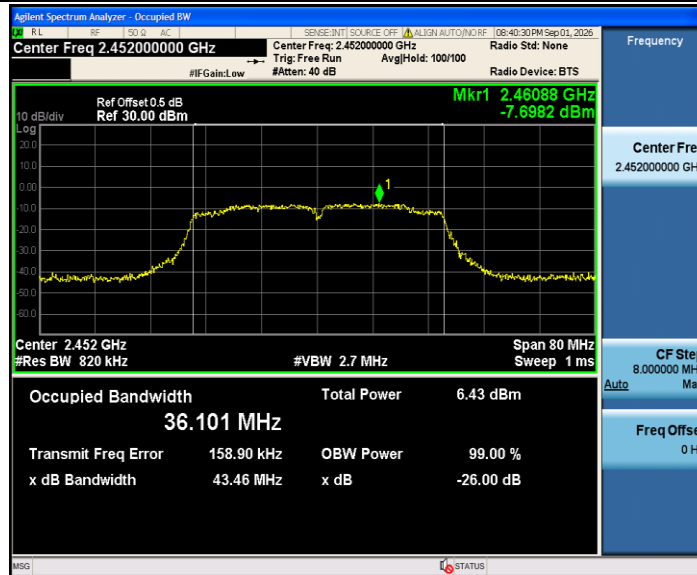
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[M Hz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	6.68	≤30.00	PASS
		2437	6.47	≤30.00	PASS
		2462	6.59	≤30.00	PASS
11G	Ant1	2412	6.06	≤30.00	PASS
		2437	5.86	≤30.00	PASS
		2462	5.84	≤30.00	PASS
11N20SISO	Ant1	2412	5.93	≤30.00	PASS
		2437	5.81	≤30.00	PASS
		2462	5.71	≤30.00	PASS
11N40SISO	Ant1	2422	5.5	≤30.00	PASS
		2437	5.74	≤30.00	PASS
		2452	5.87	≤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	-20.54	≤8.00	PASS
		2437	-19.58	≤8.00	PASS
		2462	-20.42	≤8.00	PASS
11G	Ant1	2412	-26.09	≤8.00	PASS
		2437	-25.64	≤8.00	PASS
		2462	-26.39	≤8.00	PASS
11N20SISO	Ant1	2412	-25.14	≤8.00	PASS
		2437	-25.81	≤8.00	PASS
		2462	-24.33	≤8.00	PASS
11N40SISO	Ant1	2422	-27.76	≤8.00	PASS
		2437	-28.26	≤8.00	PASS
		2452	-27.70	≤8.00	PASS

Test Graphs

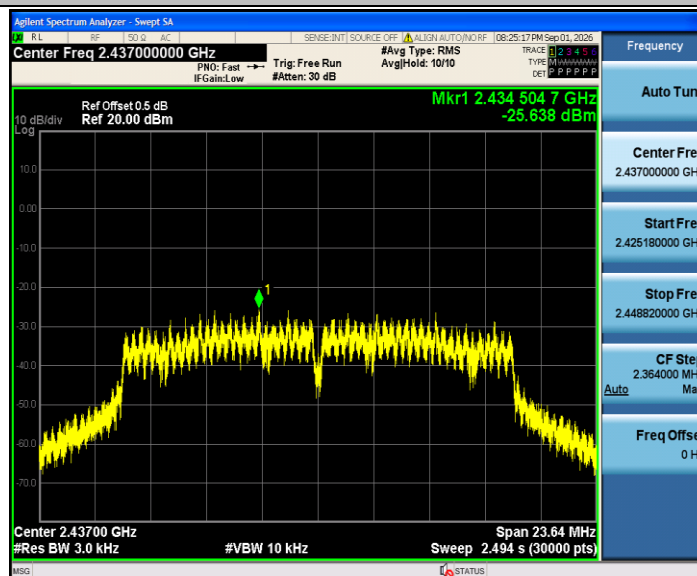
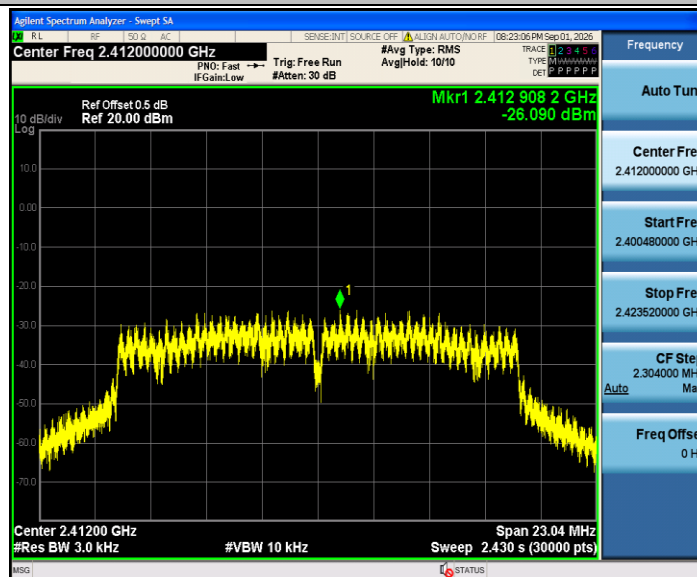
11B_Ant1_2412



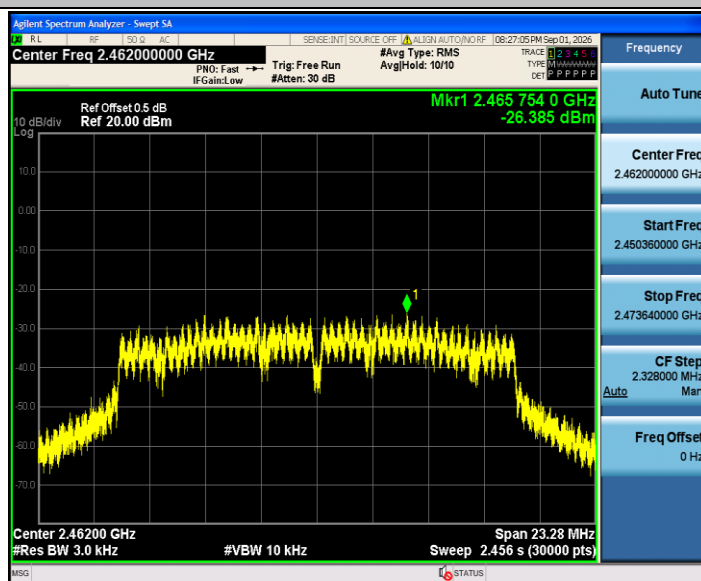
11B_Ant1_2437



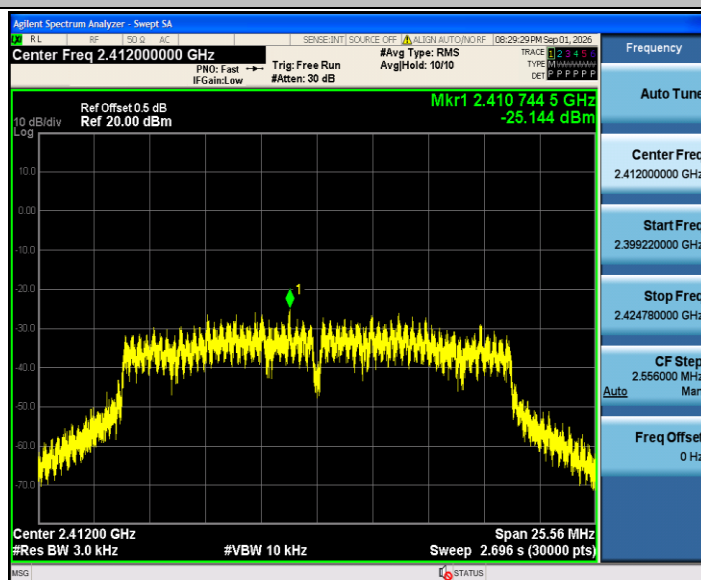
11B_Ant1_2462



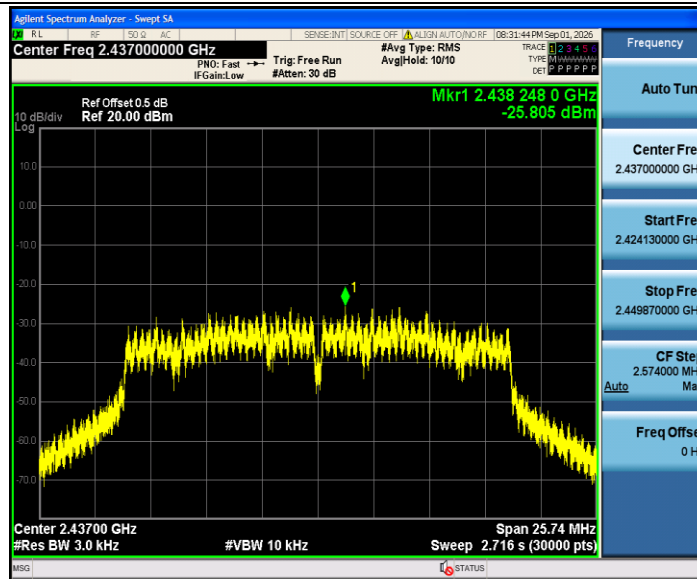
11G_Ant1_2462



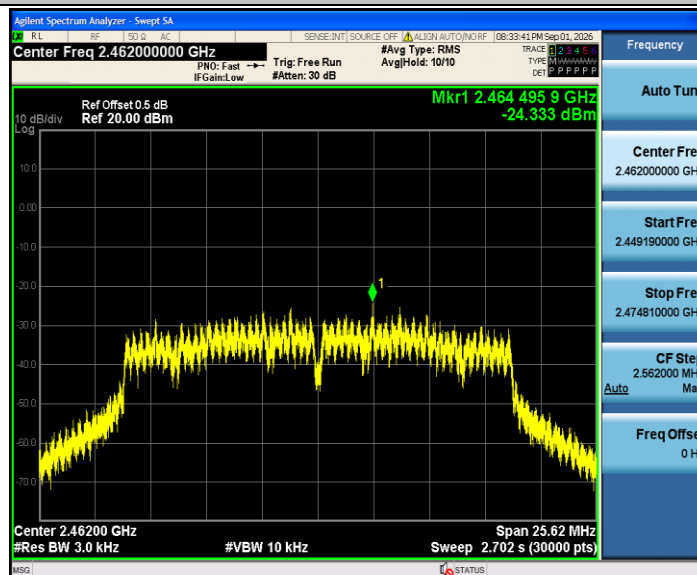
11N20SISO_Ant1_2412



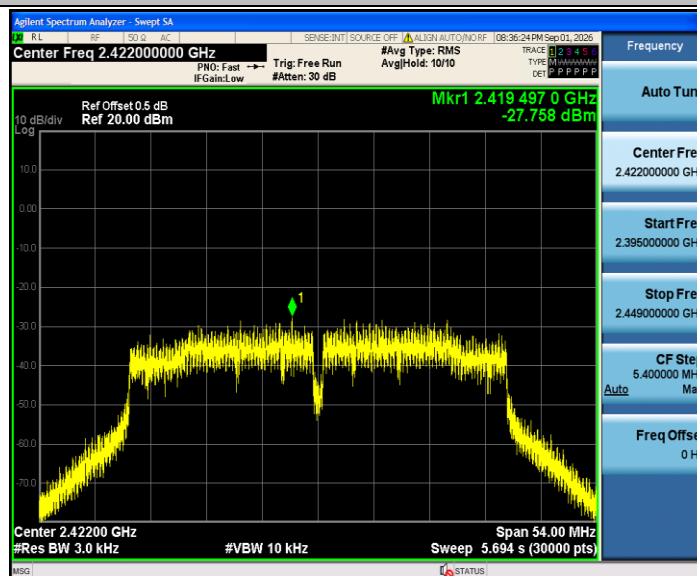
11N20SISO_Ant1_2437



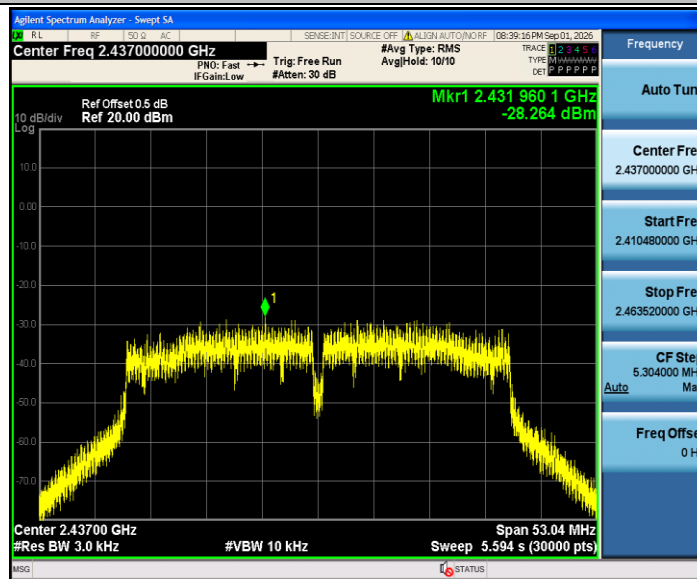
11N20SISO_Ant1_2462



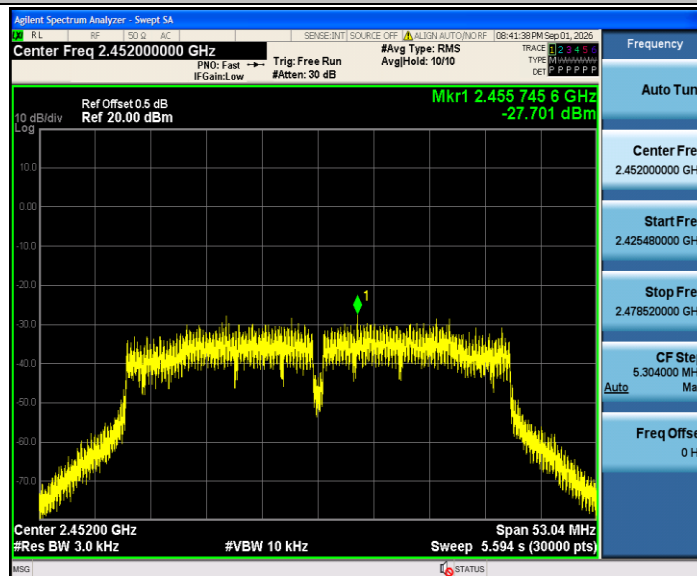
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



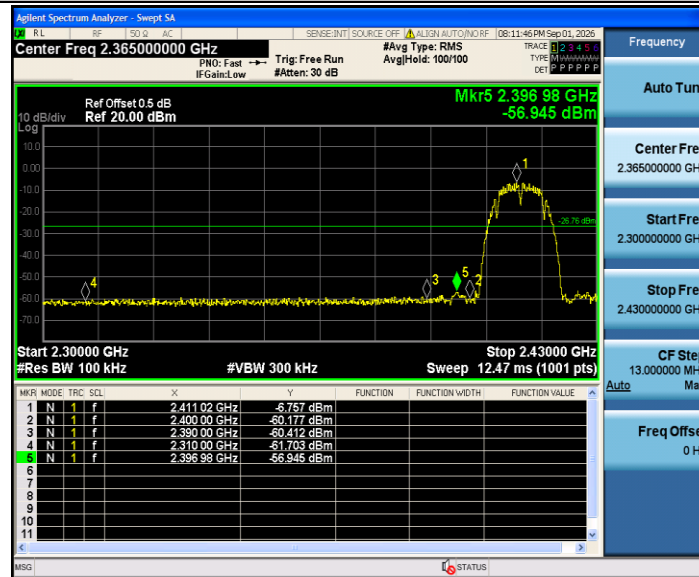
Appendix E: Band edge measurements

Test Result

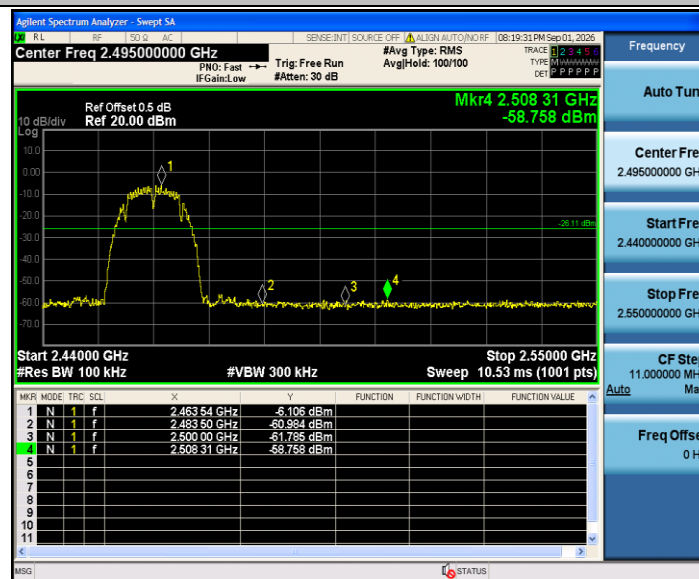
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-6.76	-56.95	≤-26.76	PASS
		High	2462	-6.11	-58.76	≤-26.11	PASS
11G	Ant1	Low	2412	-10.32	-42.34	≤-30.32	PASS
		High	2462	-10.56	-57.55	≤-30.56	PASS
11N20SISO	Ant1	Low	2412	-10.35	-41.73	≤-30.35	PASS
		High	2462	-10.76	-57.49	≤-30.76	PASS
11N40SISO	Ant1	Low	2422	-13.18	-41.35	≤-33.18	PASS
		High	2452	-13.45	-57.76	≤-33.45	PASS

Test Graphs

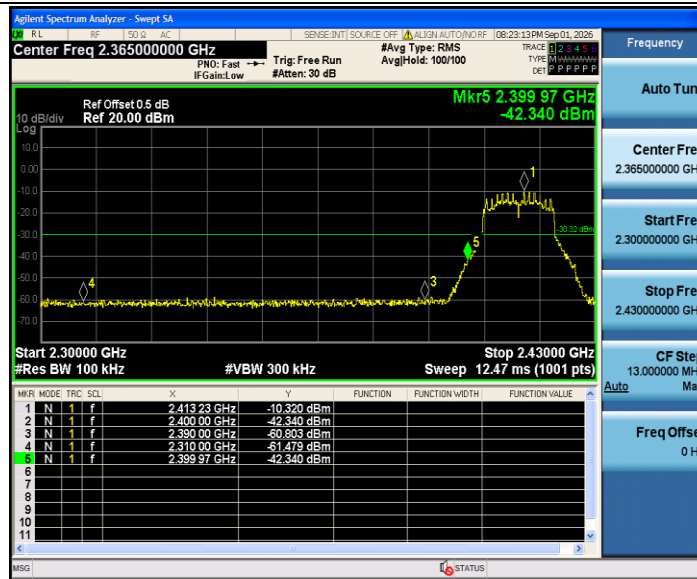
11B_Ant1_Low_2412



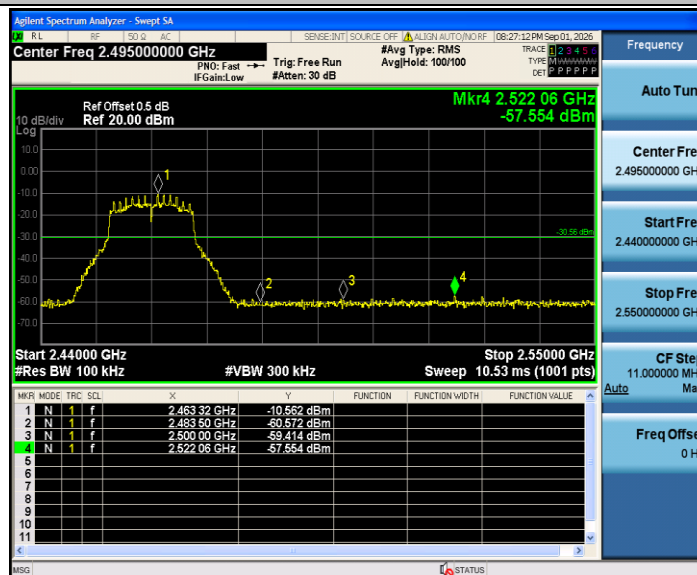
11B_Ant1_High_2462



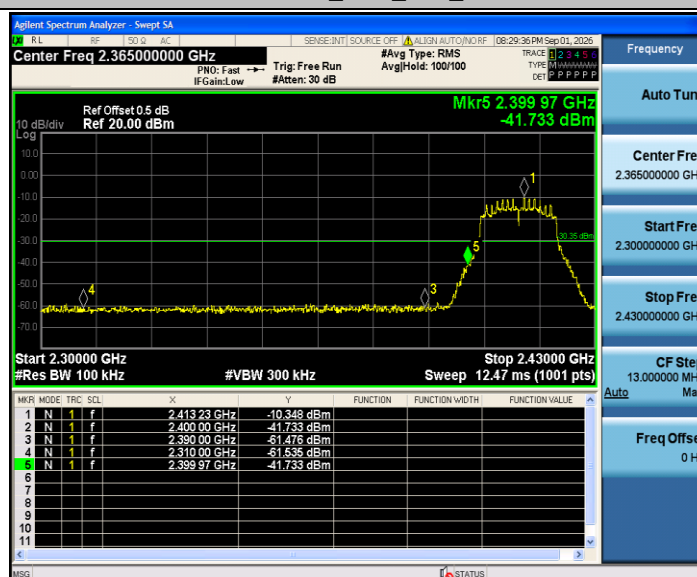
11G_Ant1_Low_2412



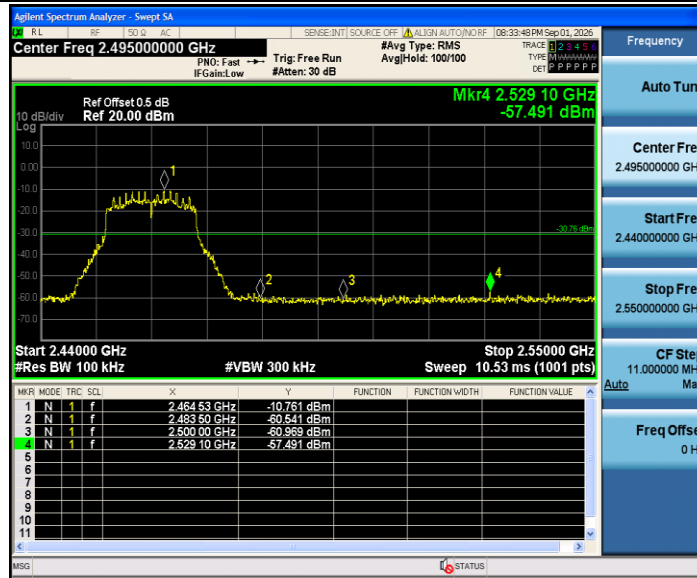
11G_Ant1_High_2462



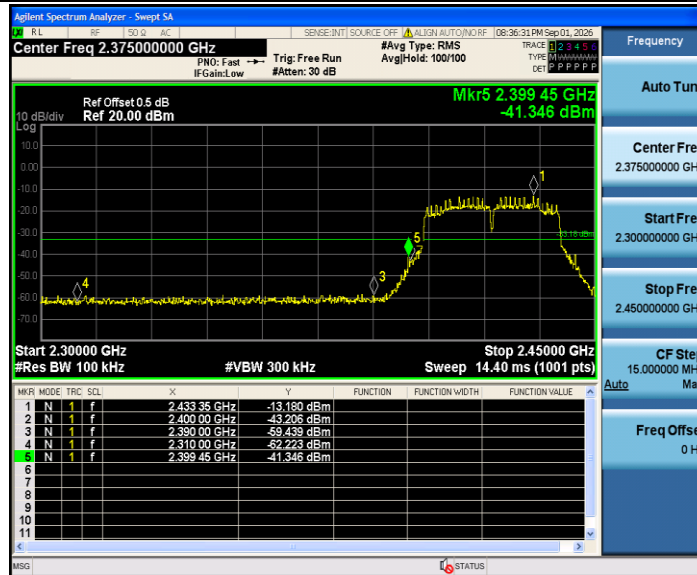
11N20SISO_Ant1_Low_2412



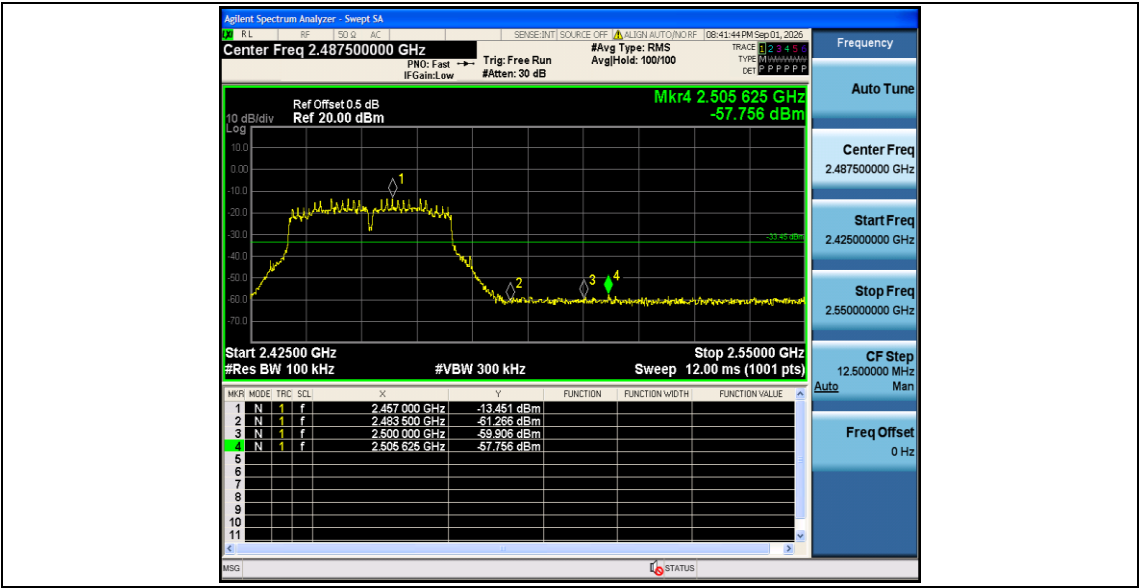
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

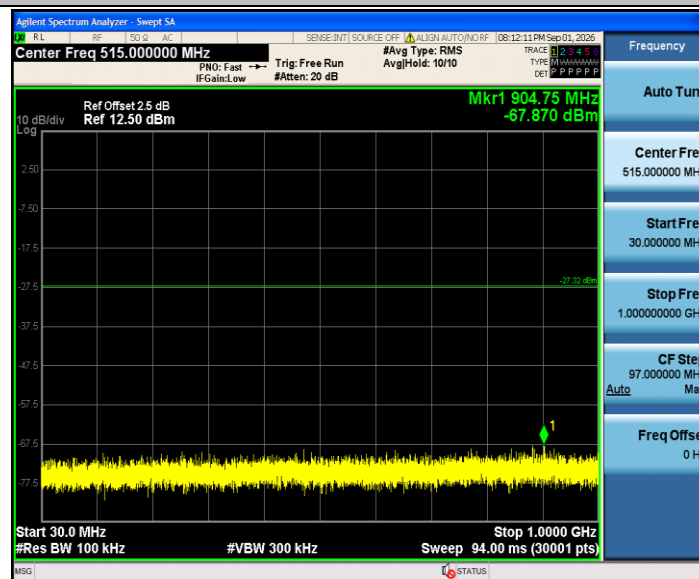
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-7.32	-7.32	---	PASS
			30~1000	-7.32	-67.87	≤-27.32	PASS
			1000~26500	-7.32	-46.69	≤-27.32	PASS
		2437	Reference	-7.48	-7.48	---	PASS
			30~1000	-7.48	-68.77	≤-27.48	PASS
			1000~26500	-7.48	-46.76	≤-27.48	PASS
		2462	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-68.11	≤-26.37	PASS
			1000~26500	-6.37	-46.76	≤-26.37	PASS
11G	Ant1	2412	Reference	-10.31	-10.31	---	PASS
			30~1000	-10.31	-68.36	≤-30.31	PASS
			1000~26500	-10.31	-46.52	≤-30.31	PASS
		2437	Reference	-11.11	-11.11	---	PASS
			30~1000	-11.11	-68.07	≤-31.11	PASS
			1000~26500	-11.11	-46.46	≤-31.11	PASS
		2462	Reference	-11.26	-11.26	---	PASS
			30~1000	-11.26	-68.23	≤-31.26	PASS
			1000~26500	-11.26	-46.9	≤-31.26	PASS
11N20SISO	Ant1	2412	Reference	-10.34	-10.34	---	PASS
			30~1000	-10.34	-67.97	≤-30.34	PASS
			1000~26500	-10.34	-46.65	≤-30.34	PASS
		2437	Reference	-11.10	-11.10	---	PASS
			30~1000	-11.10	-67.81	≤-31.1	PASS
			1000~26500	-11.10	-46.44	≤-31.1	PASS
		2462	Reference	-11.78	-11.78	---	PASS
			30~1000	-11.78	-68.11	≤-31.78	PASS
			1000~26500	-11.78	-45.94	≤-31.78	PASS
11N40SISO	Ant1	2422	Reference	-13.57	-13.57	---	PASS
			30~1000	-13.57	-68.36	≤-33.57	PASS
			1000~26500	-13.57	-45.89	≤-33.57	PASS
		2437	Reference	-14.07	-14.07	---	PASS
			30~1000	-14.07	-67.94	≤-34.07	PASS
			1000~26500	-14.07	-46.59	≤-34.07	PASS
		2452	Reference	-14.46	-14.46	---	PASS
			30~1000	-14.46	-68.43	≤-34.46	PASS
			1000~26500	-14.46	-46.48	≤-34.46	PASS

Test Graphs

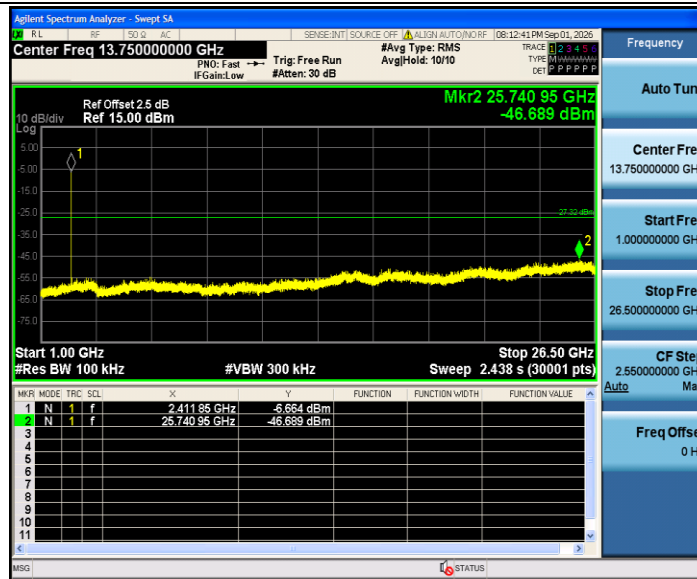
11B_Ant1_2412_0~Reference



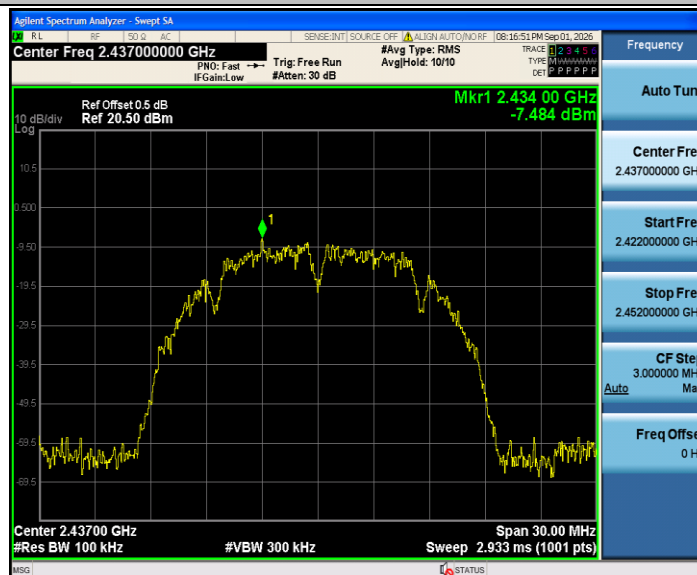
11B_Ant1_2412_30~1000



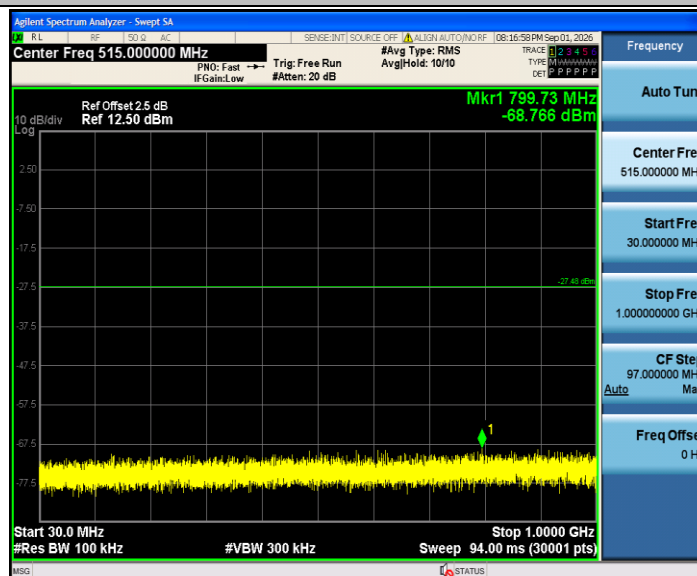
11B_Ant1_2412_1000~26500



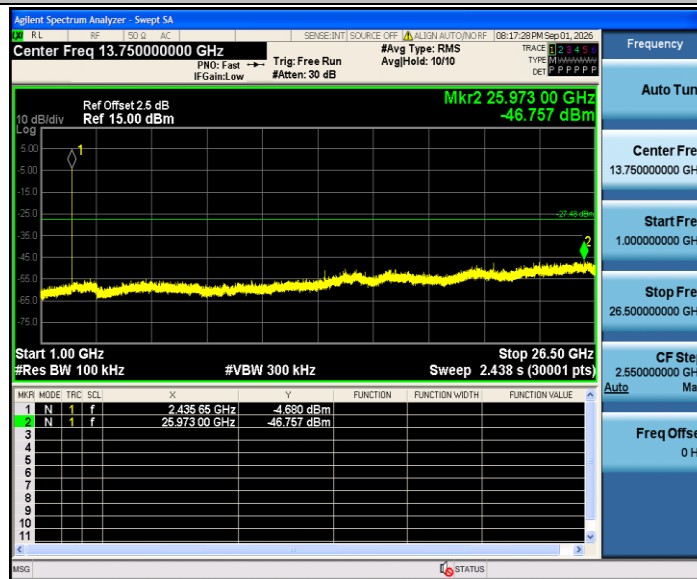
11B_Ant1_2437_0~Reference



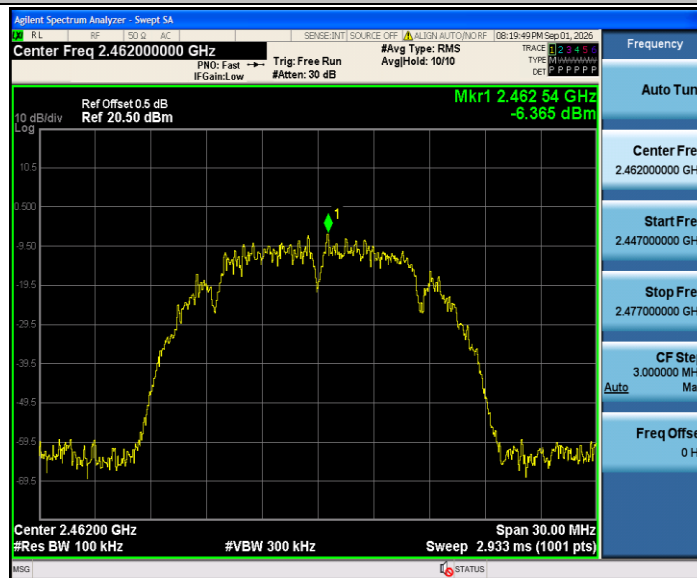
11B_Ant1_2437_30~1000



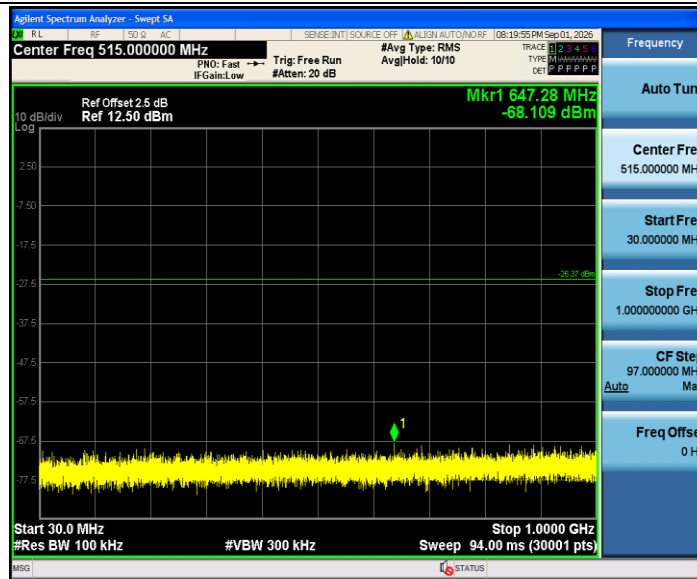
11B_Ant1_2437_1000~26500



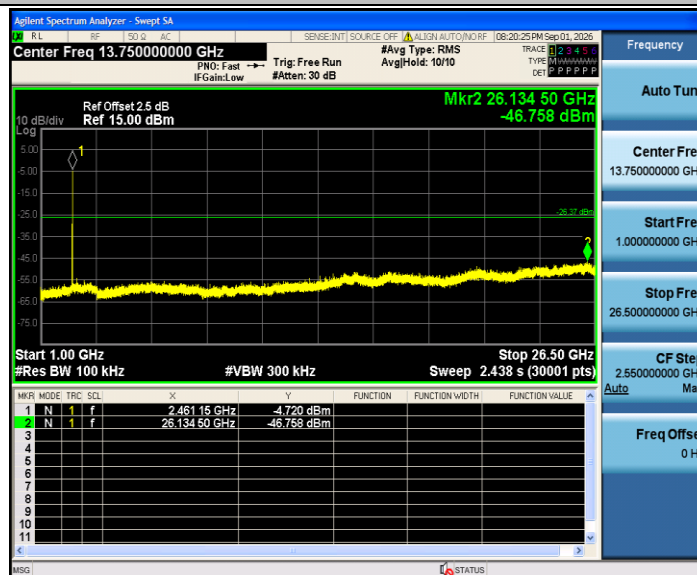
11B_Ant1_2462_0~Reference



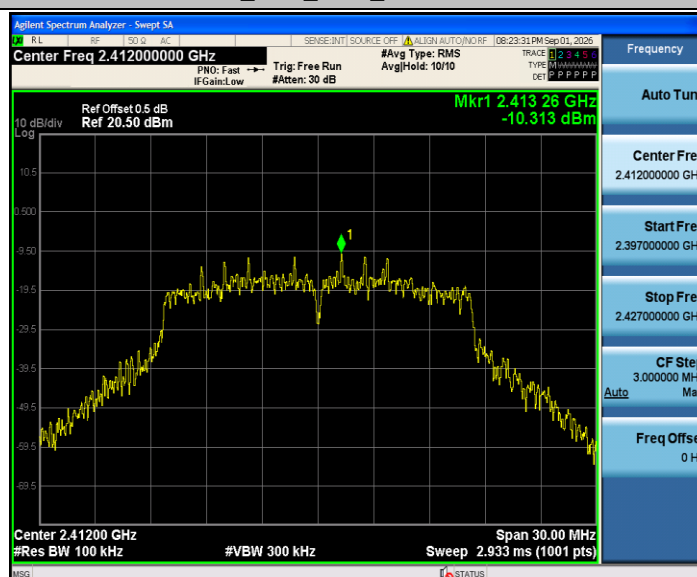
11B_Ant1_2462_30~1000



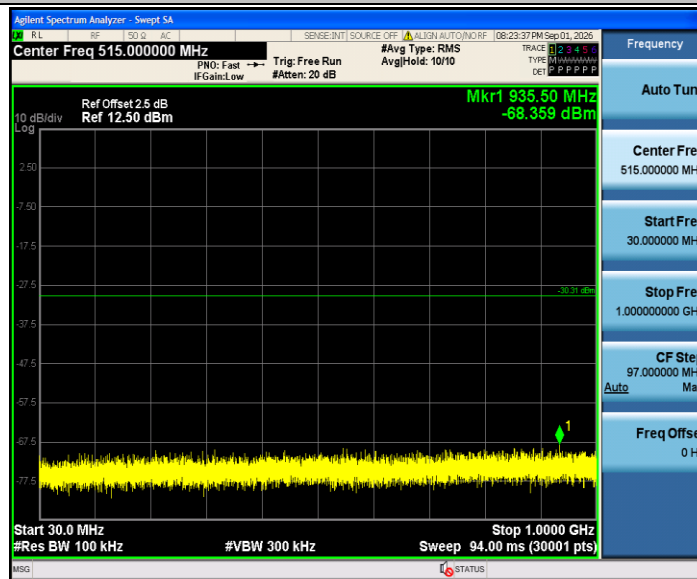
11B_Ant1_2462_1000~26500



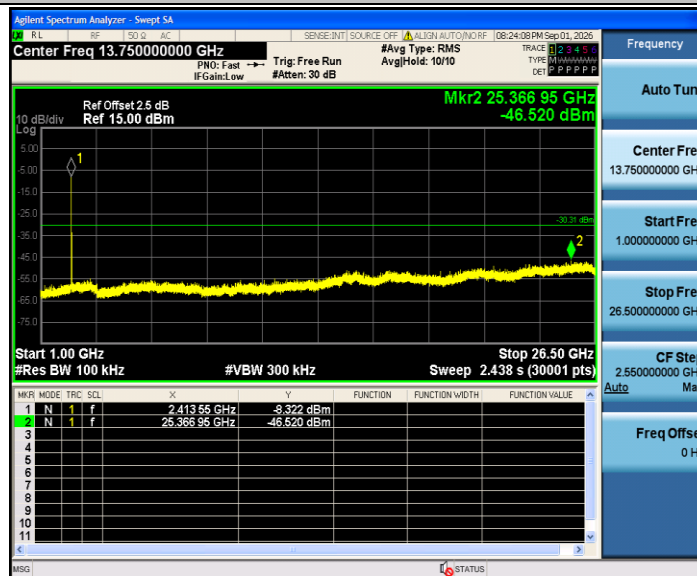
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



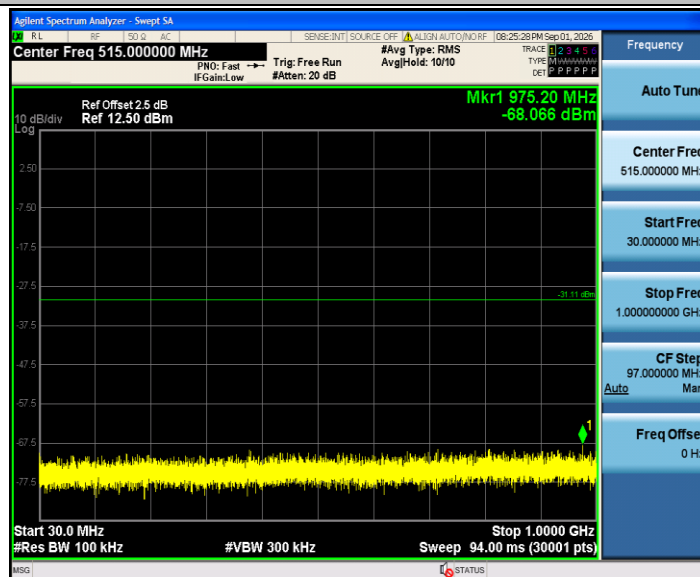
11G_Ant1_2412_1000~26500



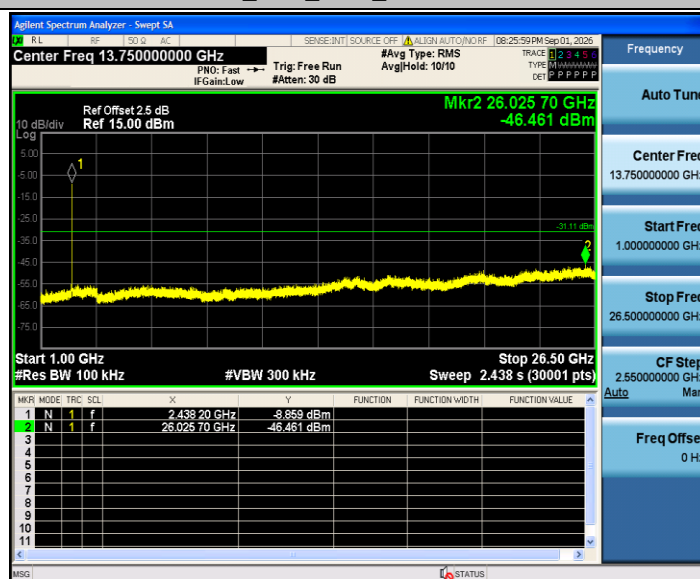
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



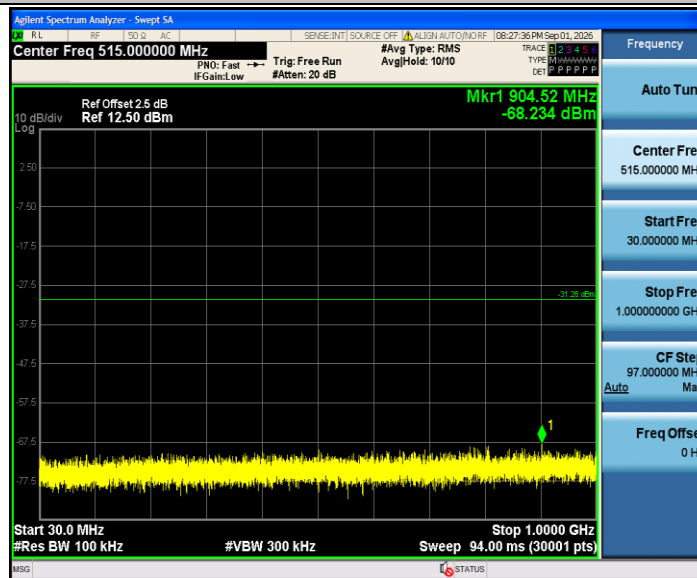
11G_Ant1_2437_1000~26500



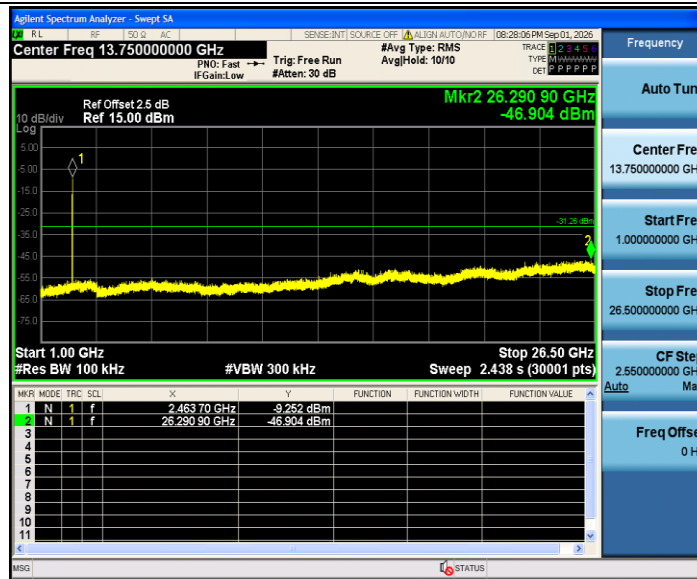
11G_Ant1_2462_0~Reference



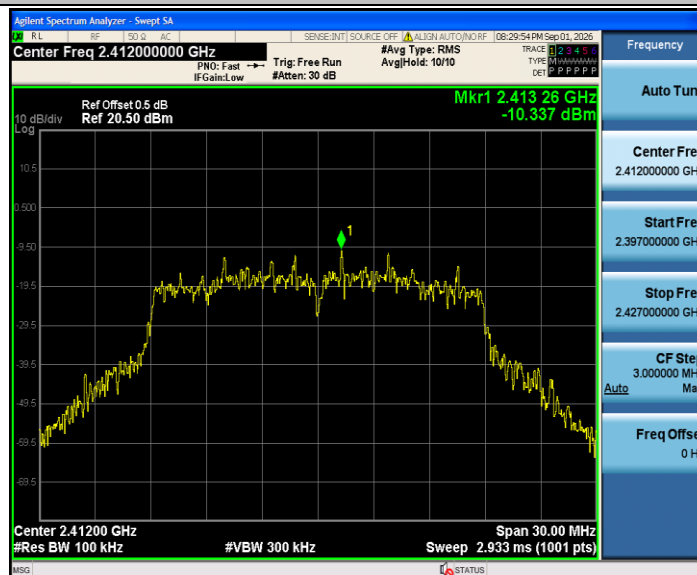
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

