

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BXIS-GRIP-METER-1

Company : Lumen Bloom LLC

EUT : Lumen Bloom Grip Meter

Model Number : grip-meter-1

Report No. : CTA26072702502

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

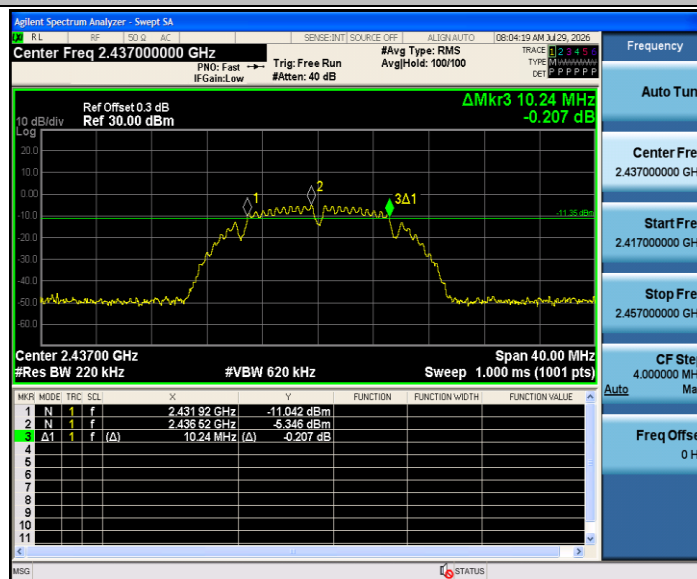
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.200	2456.960	2467.160	0.5	PASS
11G	Ant1	2412	15.440	2404.360	2419.800	0.5	PASS
		2437	15.560	2429.280	2444.840	0.5	PASS
		2462	15.320	2454.440	2469.760	0.5	PASS
11N20SISO	Ant1	2412	16.920	2403.480	2420.400	0.5	PASS
		2437	16.760	2428.520	2445.280	0.5	PASS
		2462	16.600	2453.840	2470.440	0.5	PASS
11N40SISO	Ant1	2422	35.520	2404.640	2440.160	0.5	PASS
		2437	35.440	2419.640	2455.080	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



11G_Ant1_2462



11N20SISO_Ant1_2412



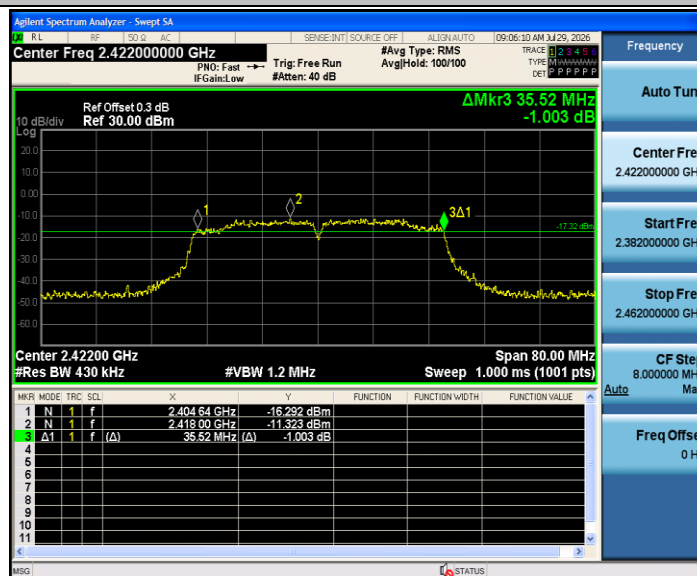
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



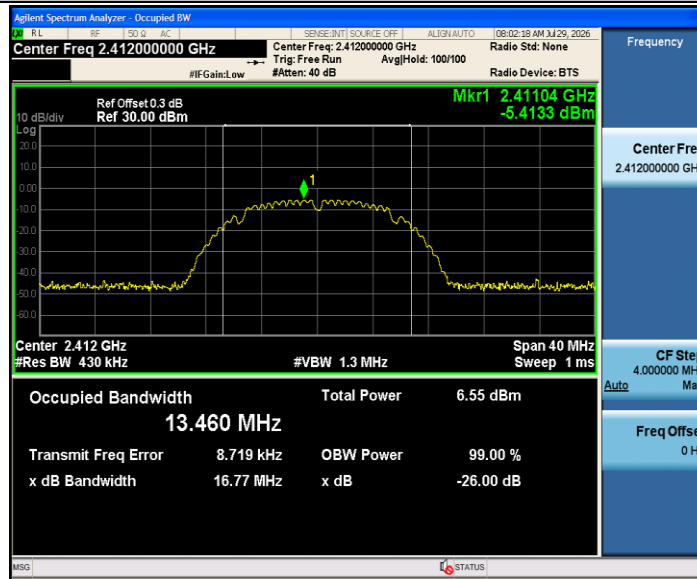
Appendix B: Occupied Channel Bandwidth

Test Result

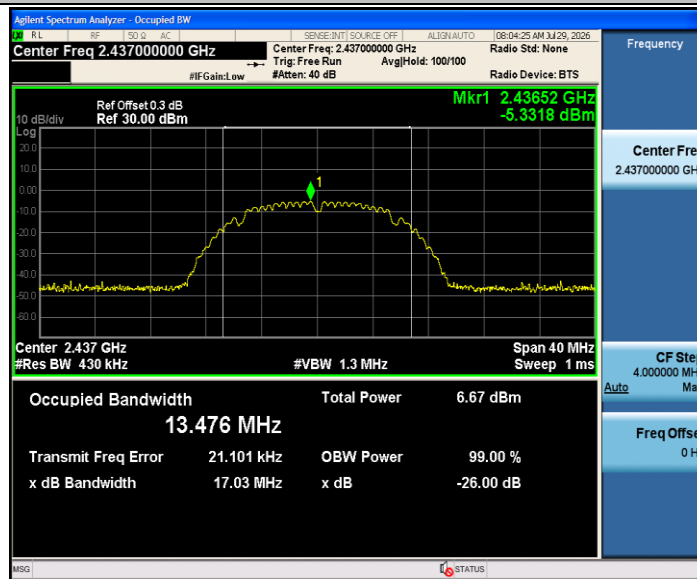
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.460	2405.2787	2418.7387	---	---
		2437	13.476	2430.2831	2443.7591	---	---
		2462	13.457	2455.3078	2468.7648	---	---
11G	Ant1	2412	16.924	2403.5467	2420.4707	---	---
		2437	16.846	2428.6045	2445.4505	---	---
		2462	16.762	2453.6531	2470.4151	---	---
11N20SISO	Ant1	2412	17.896	2403.0559	2420.9519	---	---
		2437	17.928	2428.0560	2445.9840	---	---
		2462	17.921	2453.0953	2471.0163	---	---
11N40SISO	Ant1	2422	36.140	2404.1162	2440.2562	---	---
		2437	36.050	2419.1069	2455.1569	---	---
		2452	36.128	2434.1013	2470.2293	---	---

Test Graphs

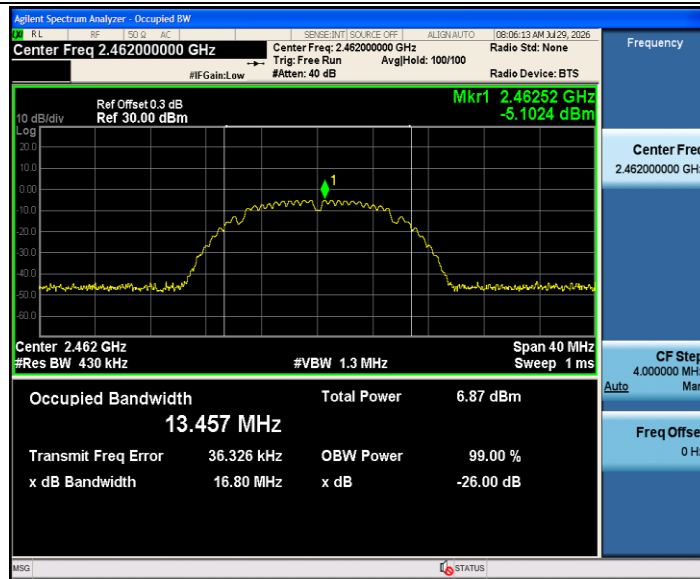
11B_Ant1_2412



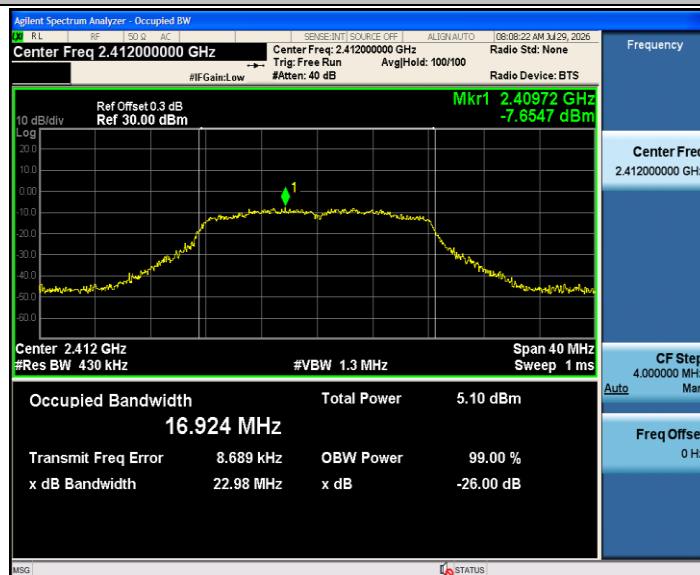
11B_Ant1_2437



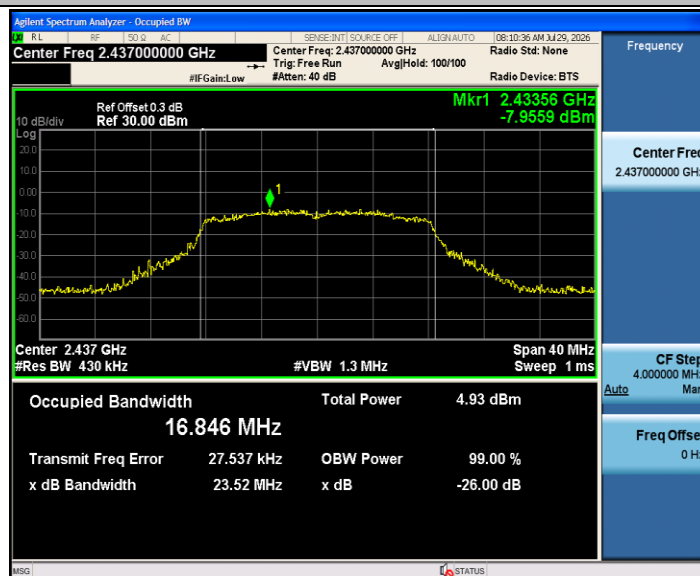
11B_Ant1_2462



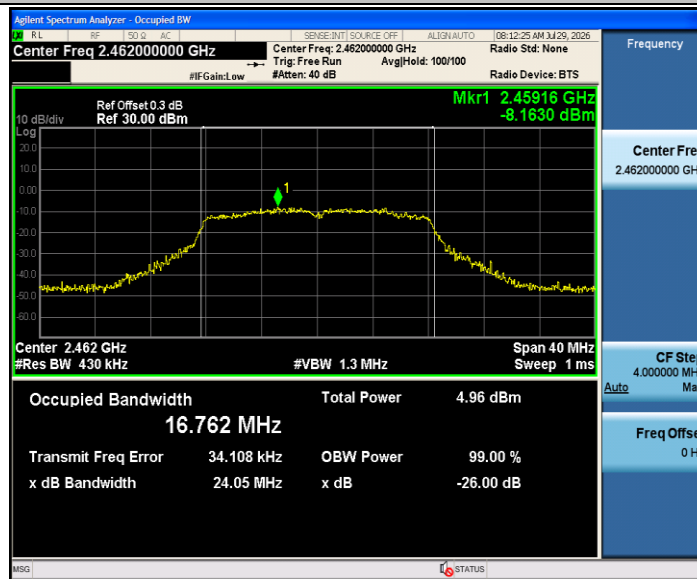
11G_Ant1_2412



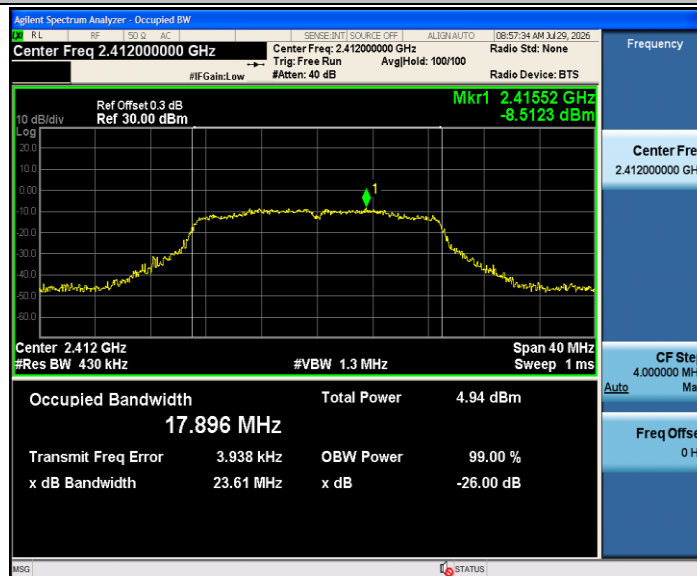
11G_Ant1_2437



11G_Ant1_2462



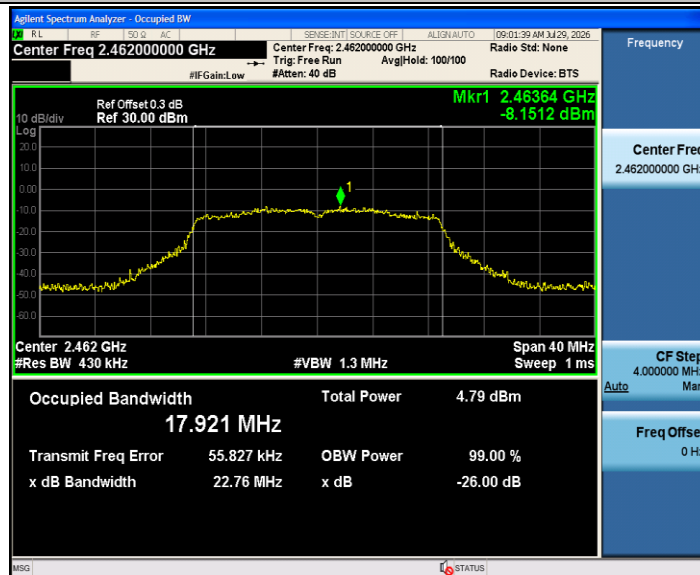
11N20SISO_Ant1_2412



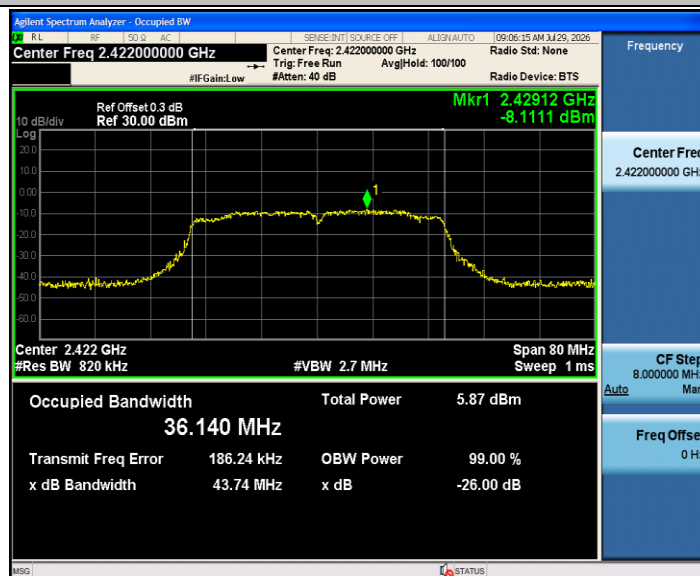
11N20SISO_Ant1_2437



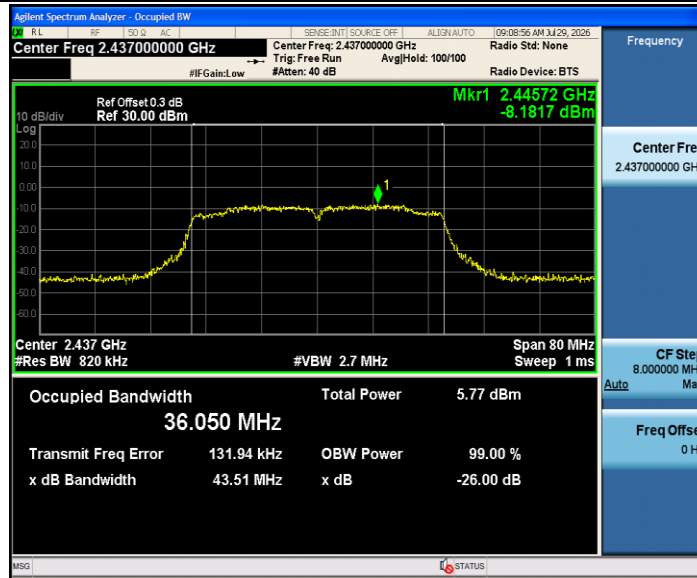
11N20SISO_Ant1_2462



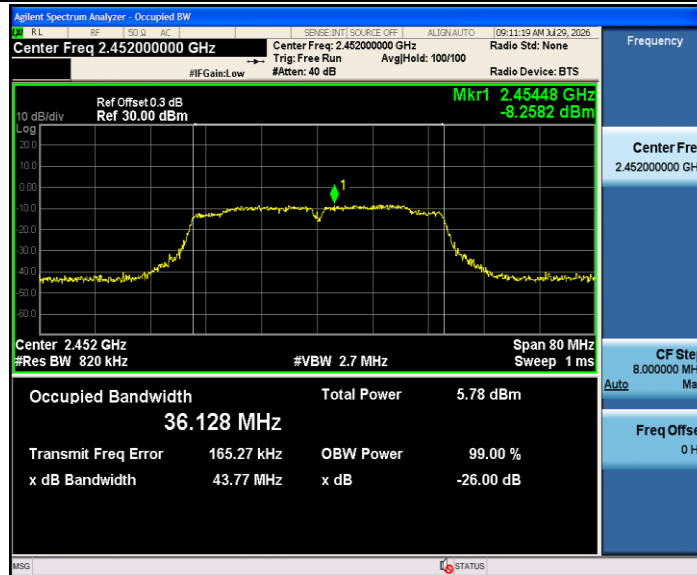
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Average

Test Mode	Antenna	Frequency[M Hz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	6.26	≤30.00	PASS
		2437	6.33	≤30.00	PASS
		2462	6.45	≤30.00	PASS
11G	Ant1	2412	5.98	≤30.00	PASS
		2437	5.81	≤30.00	PASS
		2462	5.73	≤30.00	PASS
11N20SISO	Ant1	2412	5.77	≤30.00	PASS
		2437	5.63	≤30.00	PASS
		2462	5.70	≤30.00	PASS
11N40SISO	Ant1	2422	5.93	≤30.00	PASS
		2437	5.82	≤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	-19.59	≤8.00	PASS
		2437	-19.45	≤8.00	PASS
		2462	-18.97	≤8.00	PASS
11G	Ant1	2412	-25.40	≤8.00	PASS
		2437	-26.40	≤8.00	PASS
		2462	-25.90	≤8.00	PASS
11N20SISO	Ant1	2412	-24.12	≤8.00	PASS
		2437	-25.38	≤8.00	PASS
		2462	-25.34	≤8.00	PASS
11N40SISO	Ant1	2422	-28.54	≤8.00	PASS
		2437	-28.84	≤8.00	PASS
		2452	-28.93	≤8.00	PASS

Test Graphs

11B_Ant1_2412



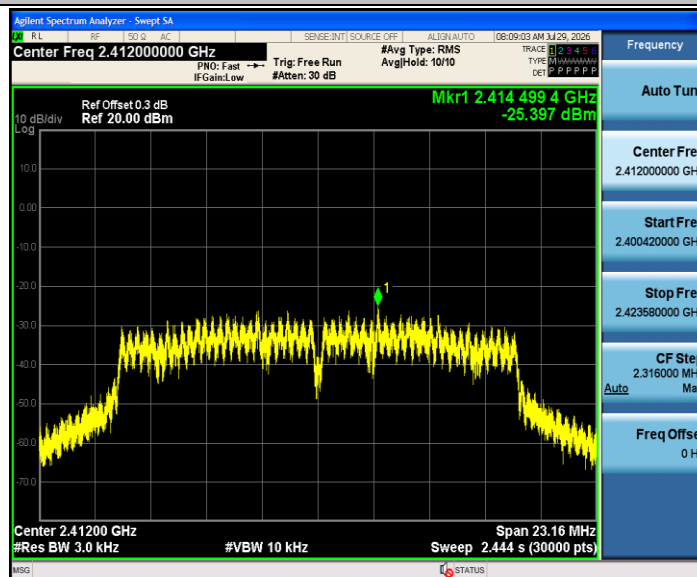
11B_Ant1_2437



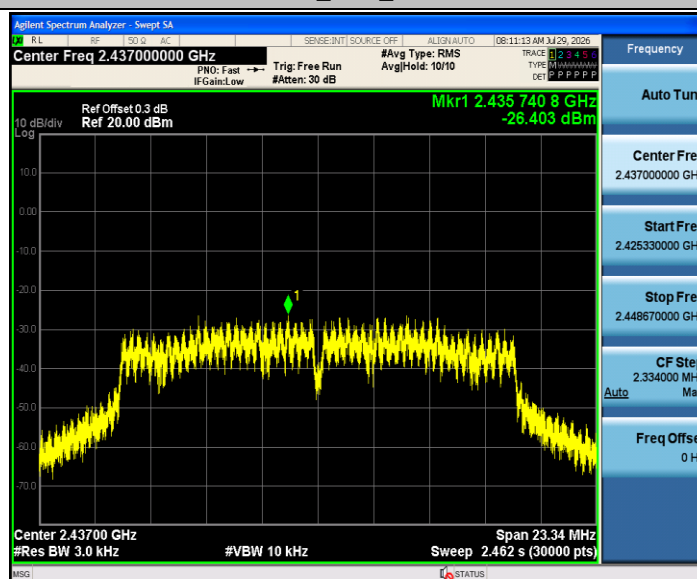
11B_Ant1_2462



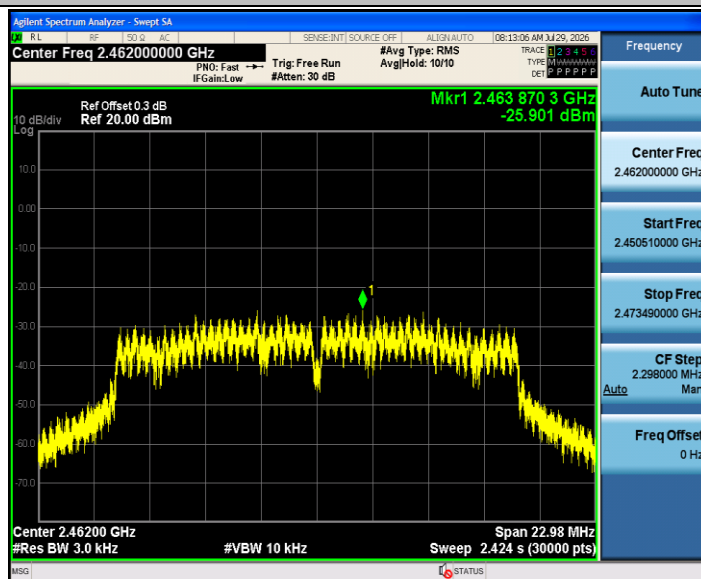
11G_Ant1_2412



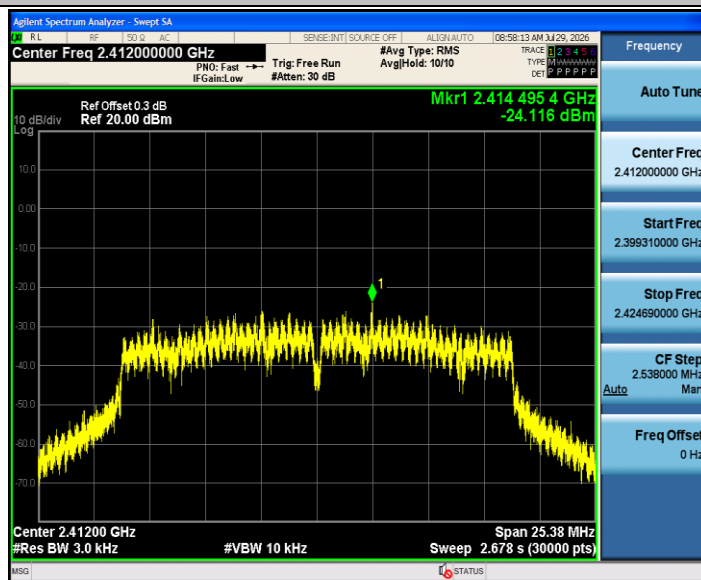
11G_Ant1_2437



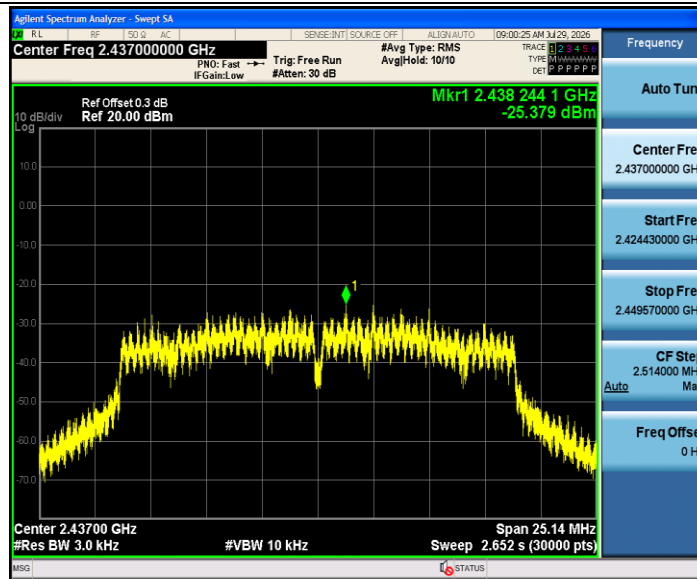
11G_Ant1_2462



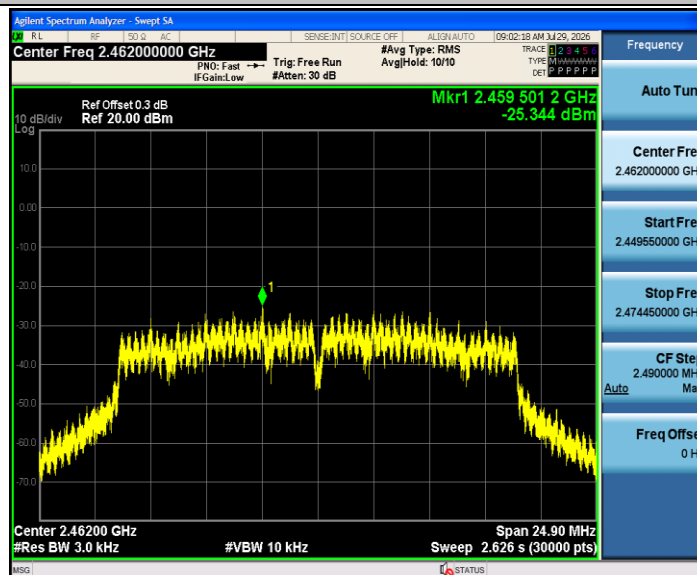
11N20SISO_Ant1_2412



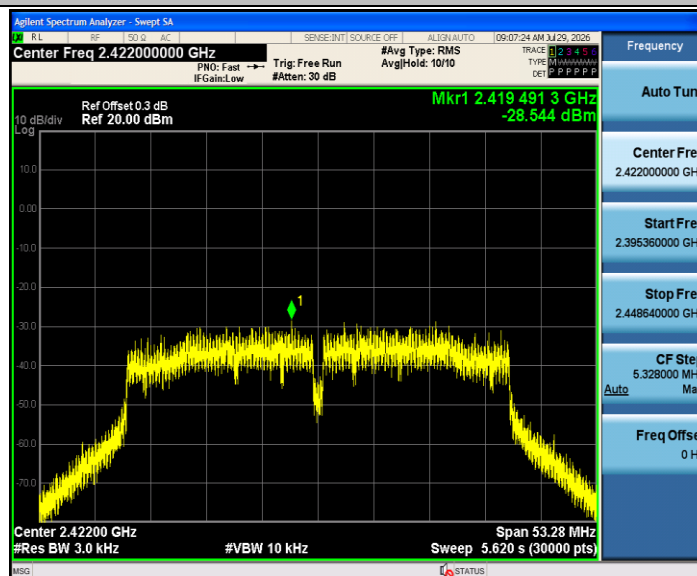
11N20SISO_Ant1_2437



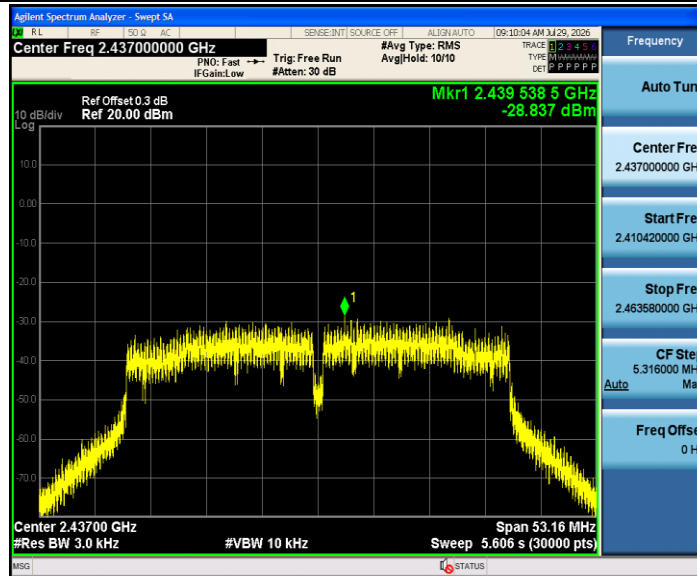
11N20SISO_Ant1_2462



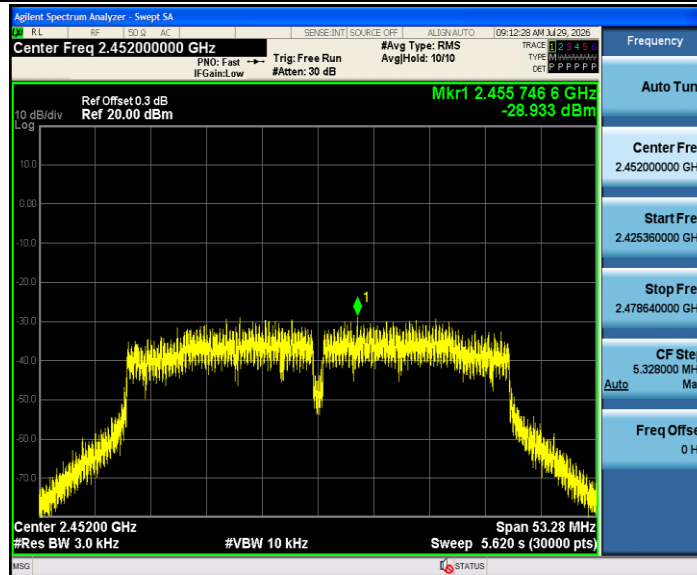
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



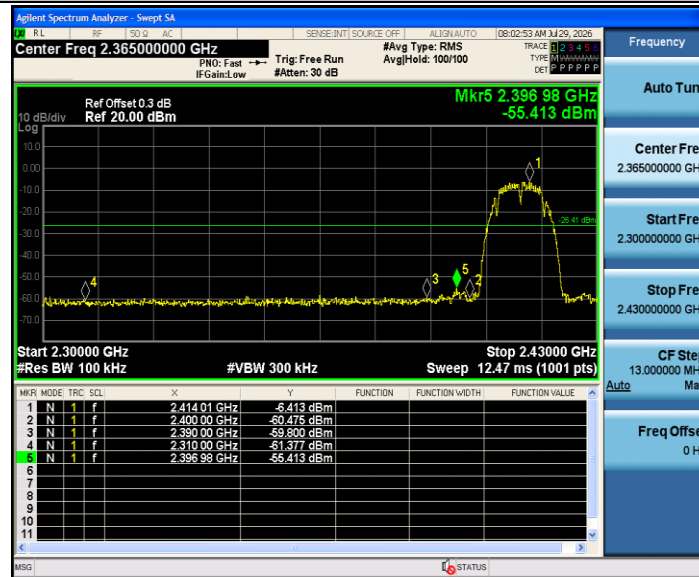
Appendix E: Band edge measurements

Test Result

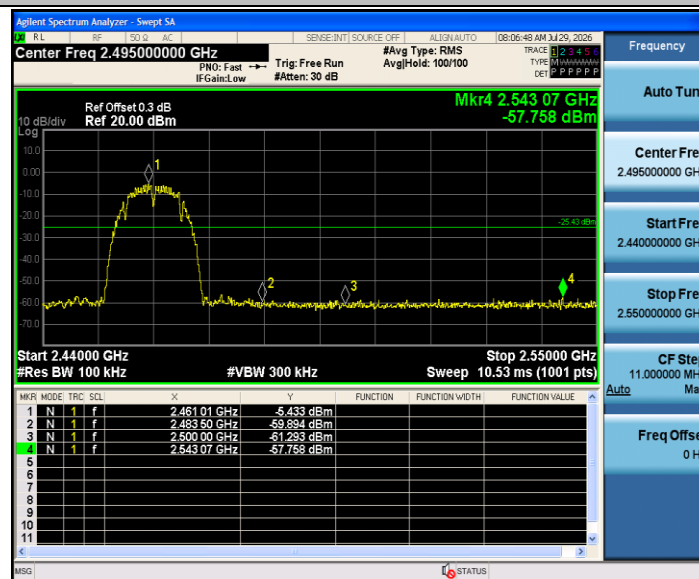
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-6.41	-55.41	≤-26.41	PASS
		High	2462	-5.43	-57.76	≤-25.43	PASS
11G	Ant1	Low	2412	-10.49	-40.09	≤-30.49	PASS
		High	2462	-10.58	-57.47	≤-30.58	PASS
11N20SISO	Ant1	Low	2412	-10.68	-42.8	≤-30.68	PASS
		High	2462	-10.65	-58.4	≤-30.65	PASS
11N40SISO	Ant1	Low	2422	-13.84	-42.68	≤-33.84	PASS
		High	2452	-13.86	-58.04	≤-33.86	PASS

Test Graphs

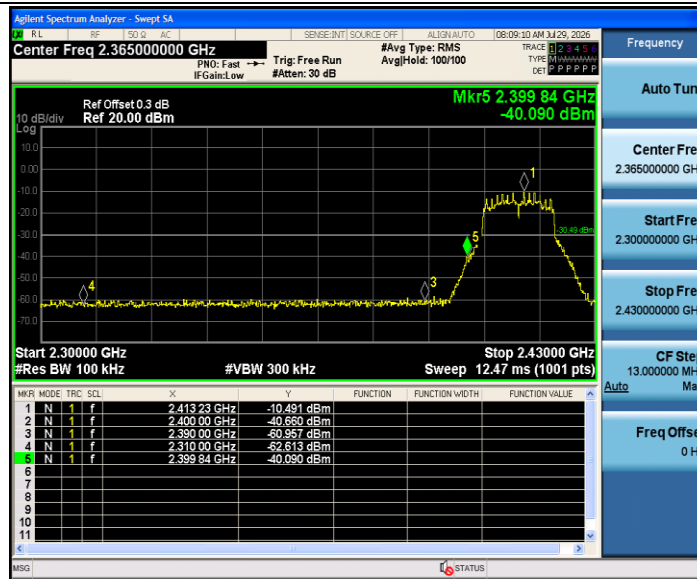
11B_Ant1_Low_2412



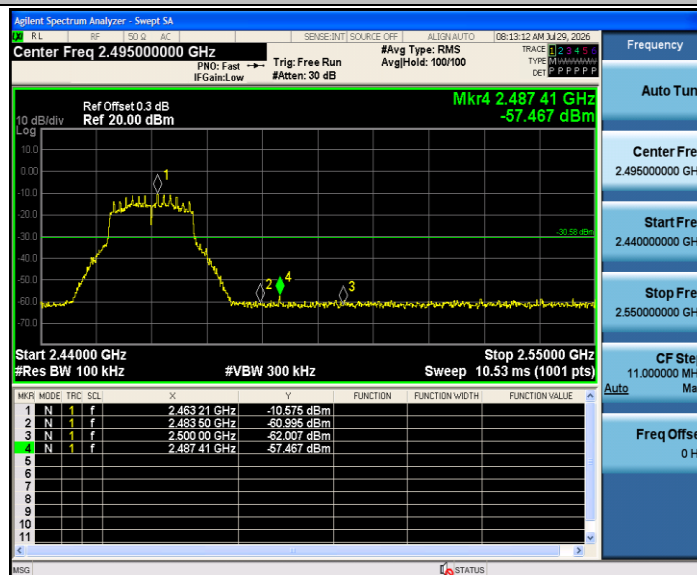
11B_Ant1_High_2462



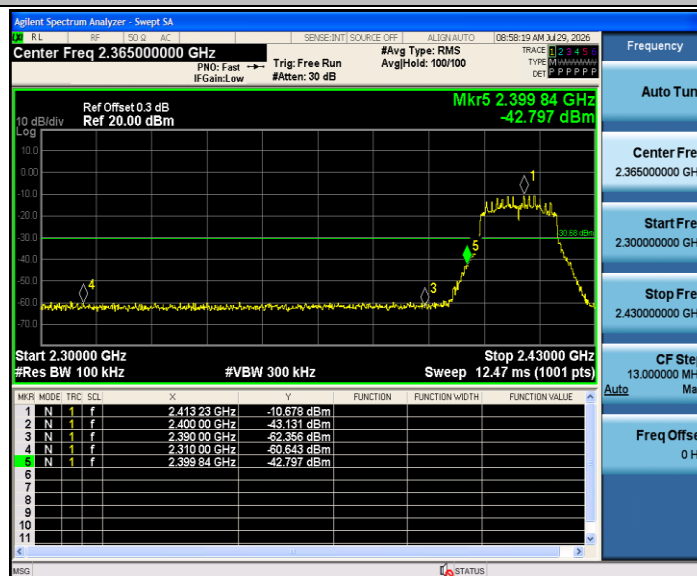
11G_Ant1_Low_2412



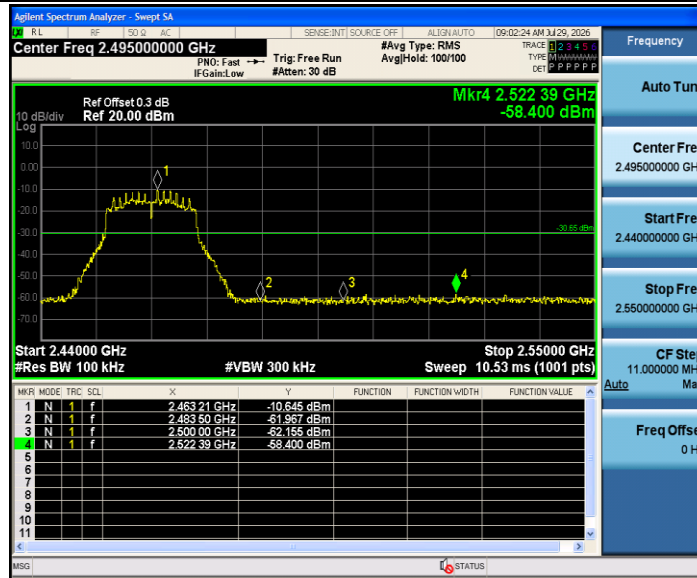
11G_Ant1_High_2462



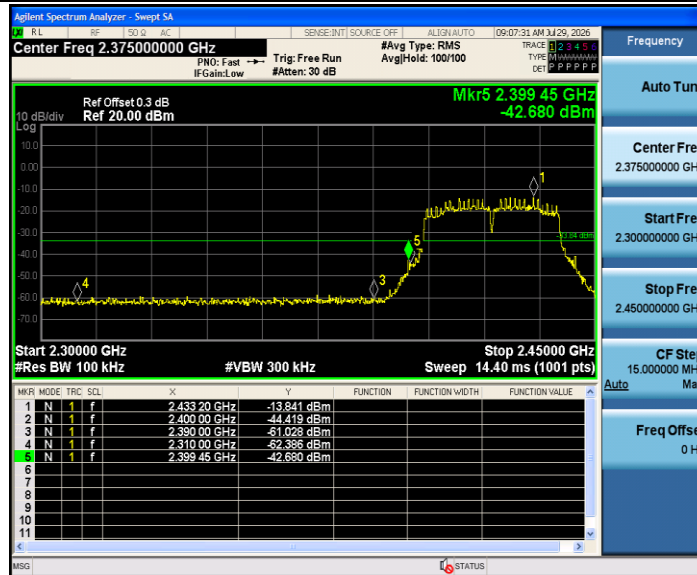
11N20SISO_Ant1_Low_2412



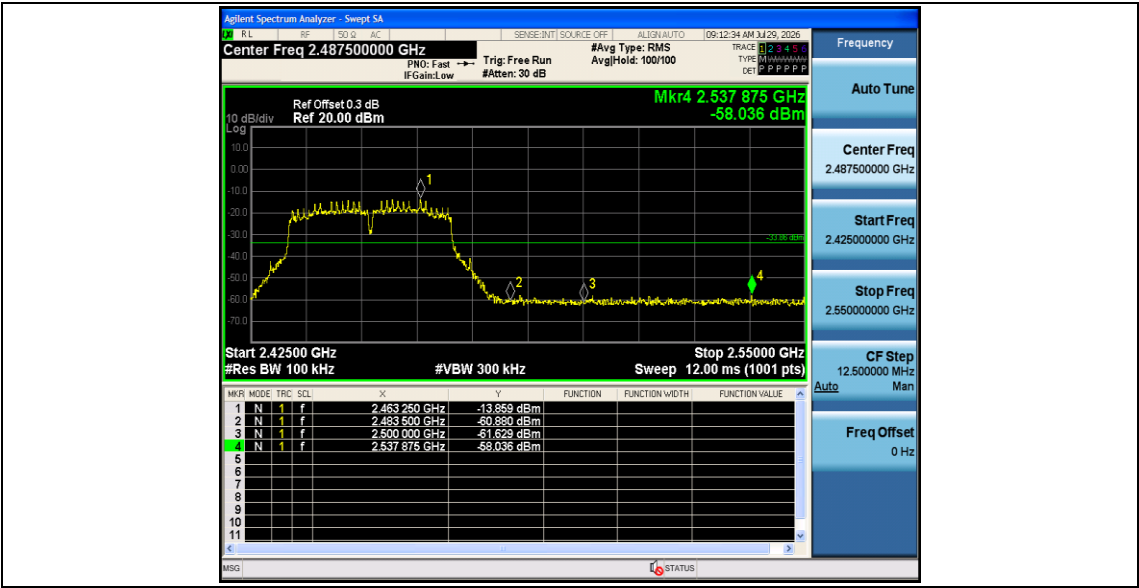
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



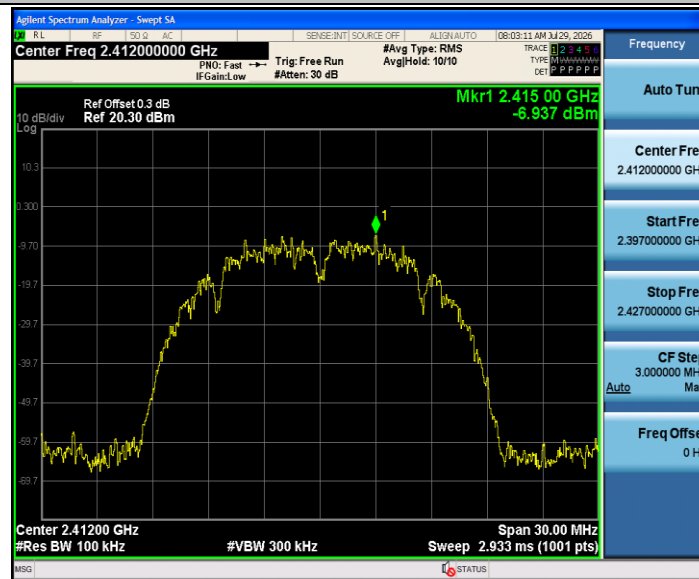
Appendix F: Conducted Spurious Emission

Test Result

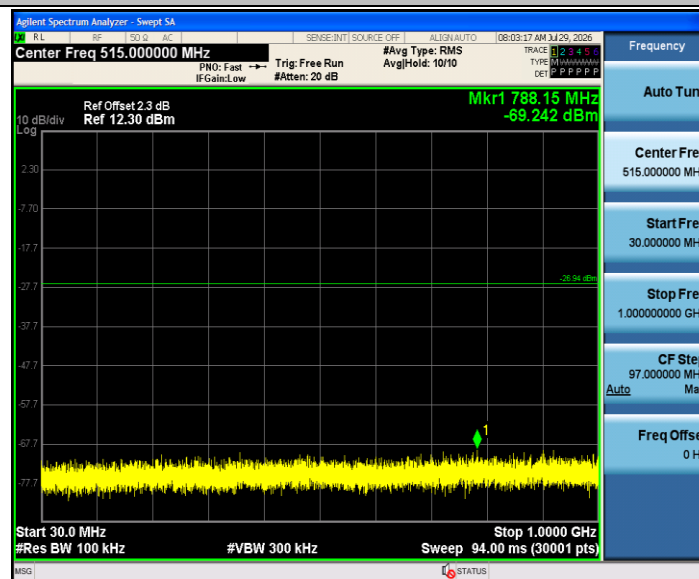
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-6.94	-6.94	---	PASS
			30~1000	-6.94	-69.24	≤-26.94	PASS
			1000~26500	-6.94	-46.52	≤-26.94	PASS
		2437	Reference	-5.70	-5.70	---	PASS
			30~1000	-5.70	-68.2	≤-25.7	PASS
			1000~26500	-5.70	-47.24	≤-25.7	PASS
		2462	Reference	-5.48	-5.48	---	PASS
			30~1000	-5.48	-68	≤-25.48	PASS
			1000~26500	-5.48	-46.89	≤-25.48	PASS
11G	Ant1	2412	Reference	-11.36	-11.36	---	PASS
			30~1000	-11.36	-69.28	≤-31.36	PASS
			1000~26500	-11.36	-46.57	≤-31.36	PASS
		2437	Reference	-10.89	-10.89	---	PASS
			30~1000	-10.89	-67.4	≤-30.89	PASS
			1000~26500	-10.89	-47	≤-30.89	PASS
		2462	Reference	-11.54	-11.54	---	PASS
			30~1000	-11.54	-69.63	≤-31.54	PASS
			1000~26500	-11.54	-47.15	≤-31.54	PASS
11N20SISO	Ant1	2412	Reference	-11.98	-11.98	---	PASS
			30~1000	-11.98	-67.77	≤-31.98	PASS
			1000~26500	-11.98	-46.81	≤-31.98	PASS
		2437	Reference	-12.18	-12.18	---	PASS
			30~1000	-12.18	-69.06	≤-32.18	PASS
			1000~26500	-12.18	-47.06	≤-32.18	PASS
		2462	Reference	-10.55	-10.55	---	PASS
			30~1000	-10.55	-68.61	≤-30.55	PASS
			1000~26500	-10.55	-46.8	≤-30.55	PASS
11N40SISO	Ant1	2422	Reference	-13.78	-13.78	---	PASS
			30~1000	-13.78	-68.46	≤-33.78	PASS
			1000~26500	-13.78	-46.85	≤-33.78	PASS
		2437	Reference	-14.01	-14.01	---	PASS
			30~1000	-14.01	-68.5	≤-34.01	PASS
			1000~26500	-14.01	-46.08	≤-34.01	PASS
		2452	Reference	-13.96	-13.96	---	PASS
			30~1000	-13.96	-69.19	≤-33.96	PASS
			1000~26500	-13.96	-46.93	≤-33.96	PASS

Test Graphs

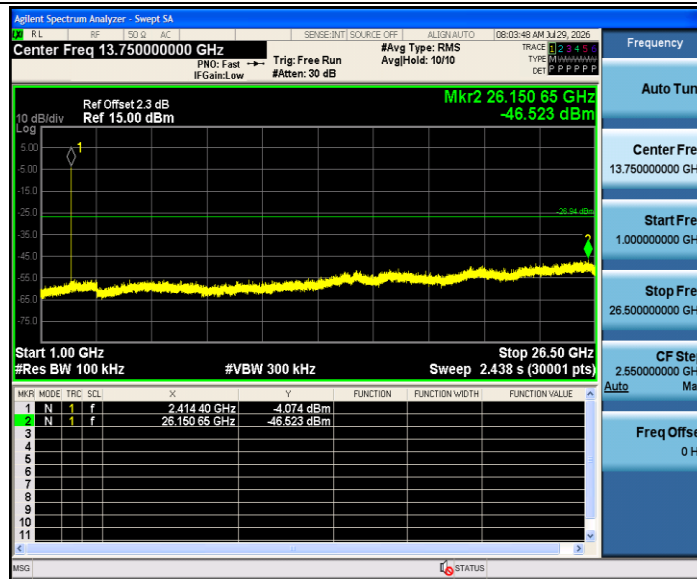
11B_Ant1_2412_0~Reference



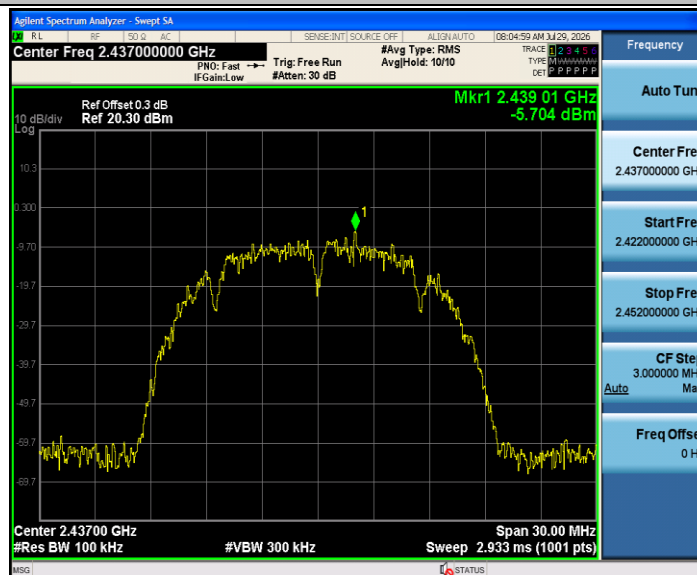
11B_Ant1_2412_30~1000



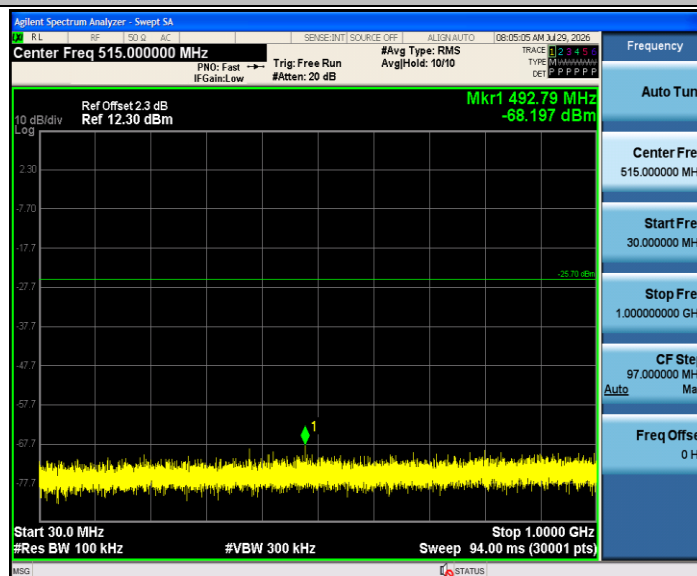
11B_Ant1_2412_1000~26500



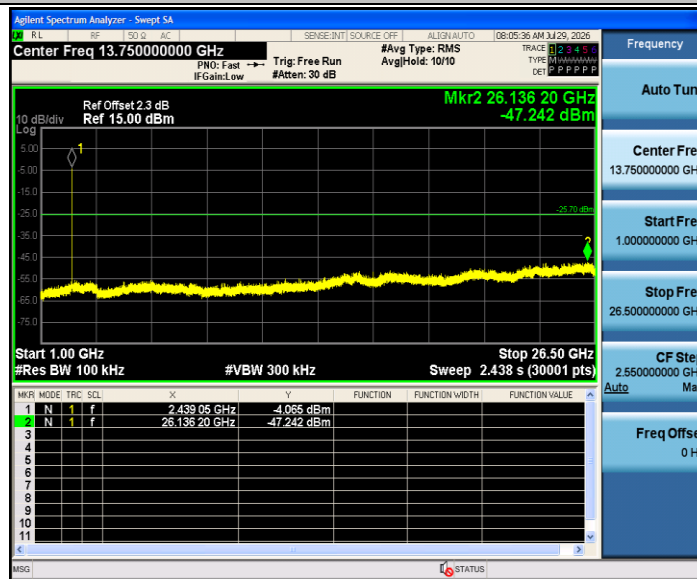
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



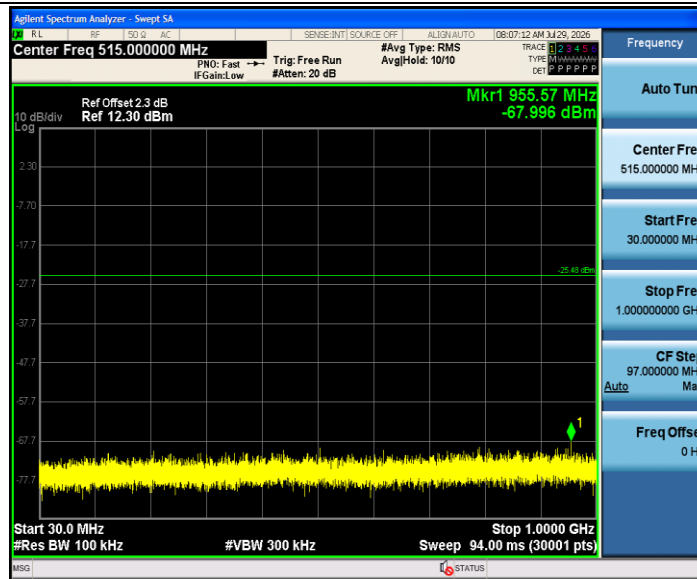
11B_Ant1_2437_1000~26500



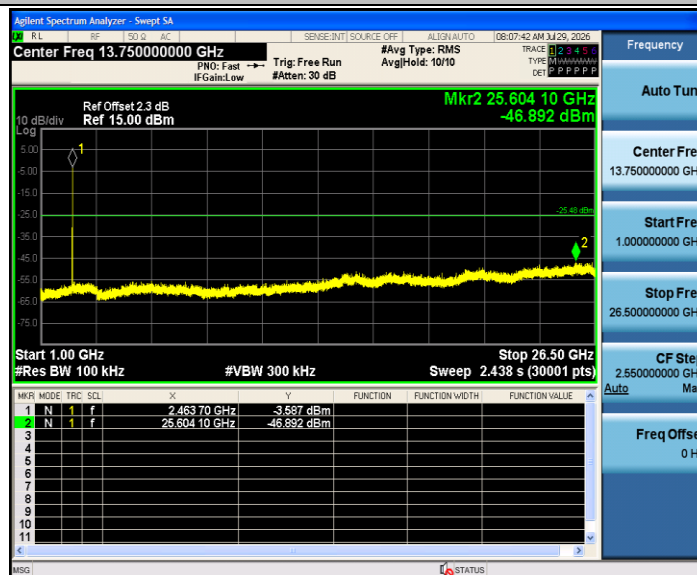
11B_Ant1_2462_0~Reference



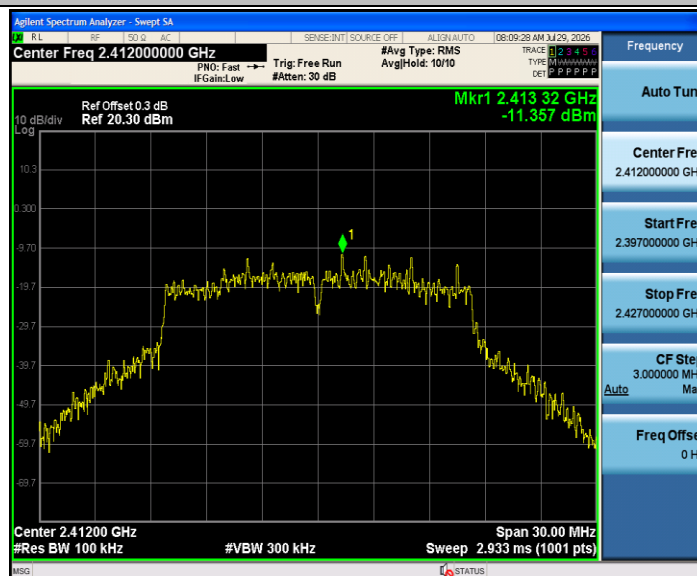
11B_Ant1_2462_30~1000



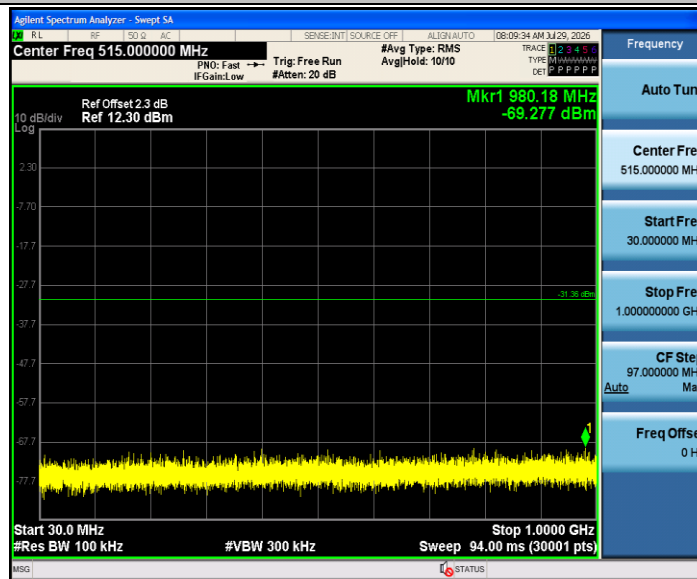
11B_Ant1_2462_1000~26500



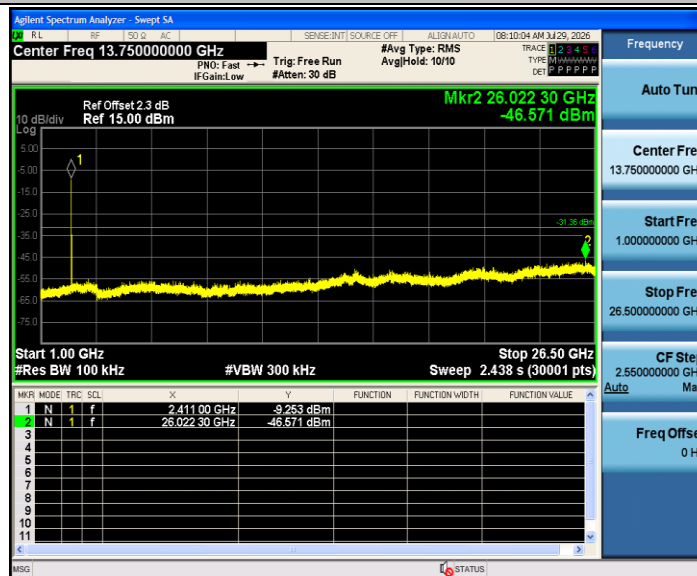
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



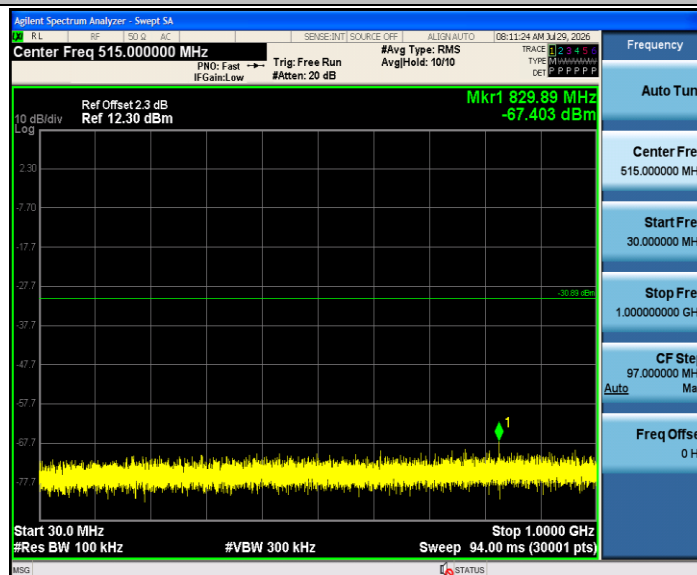
11G_Ant1_2412_1000~26500



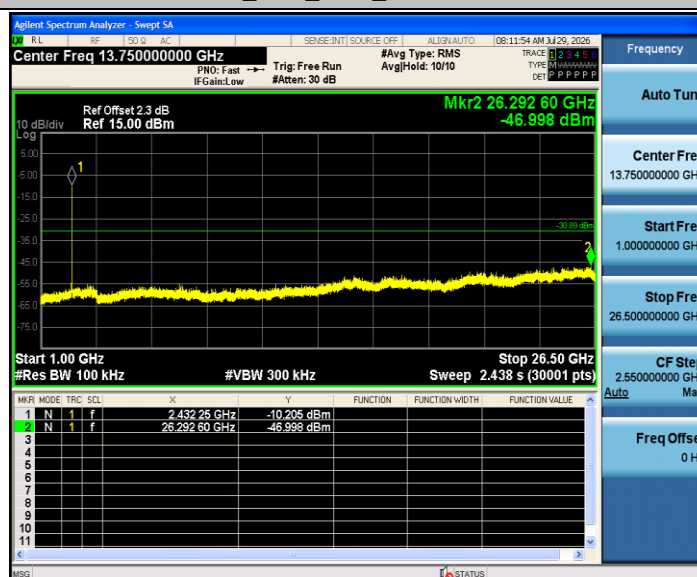
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



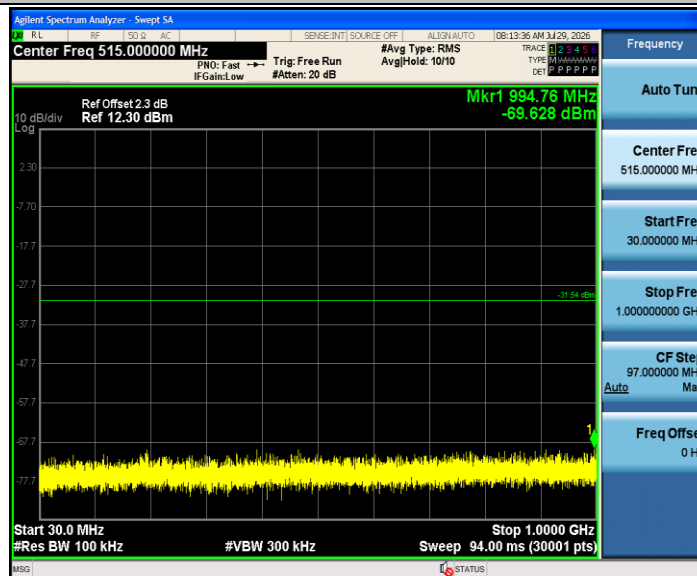
11G_Ant1_2437_1000~26500



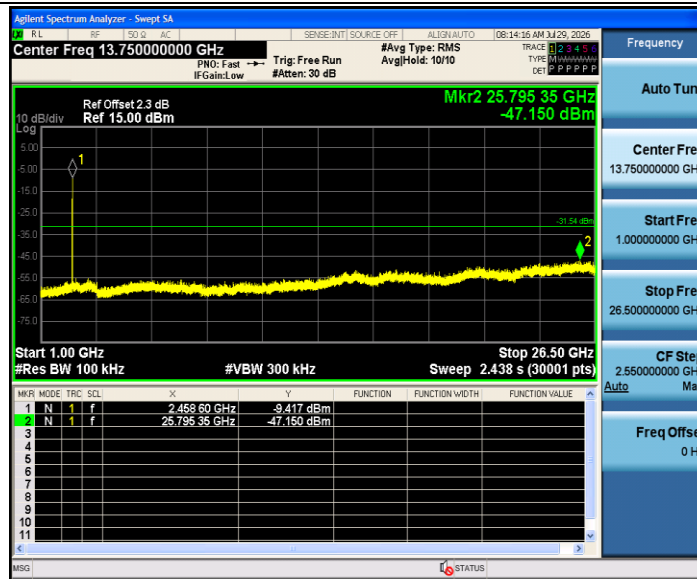
11G_Ant1_2462_0~Reference



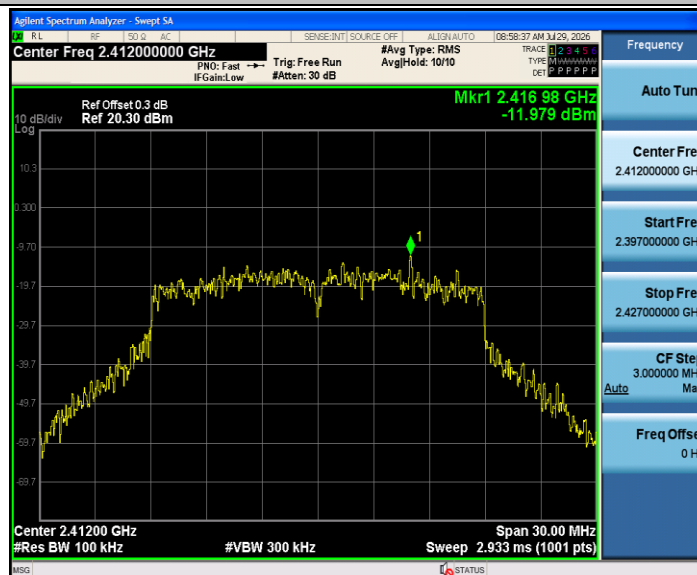
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

