

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BYJW-W5K8Z

Company : GAINWISE HK CO., LIMITED

EUT : MINI PC

Model Number : E1 PRO

Report No. : CTA26081001002

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	9.160	2407.440	2416.600	0.5	PASS
		2437	9.120	2432.480	2441.600	0.5	PASS
		2462	9.120	2457.480	2466.600	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.240	2453.920	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.320	2403.400	2420.720	0.5	PASS
		2437	17.400	2428.320	2445.720	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	36.080	2404.000	2440.080	0.5	PASS
		2437	36.160	2419.080	2455.240	0.5	PASS
		2452	36.000	2434.080	2470.080	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



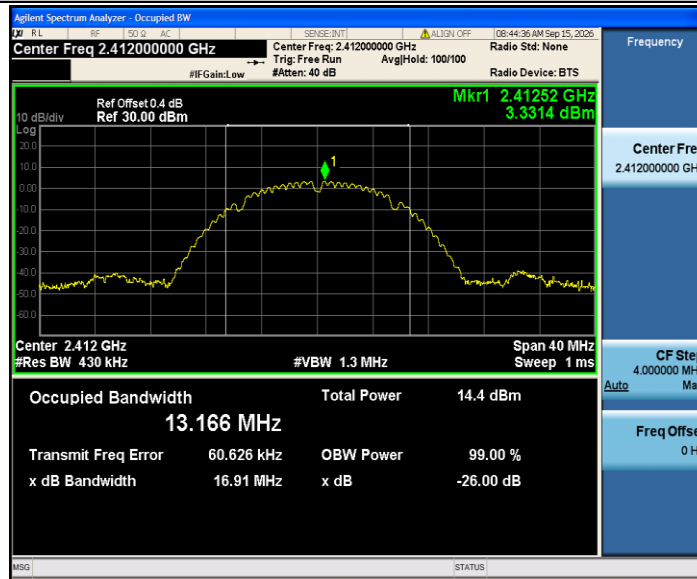
Appendix B: Occupied Channel Bandwidth

Test Result

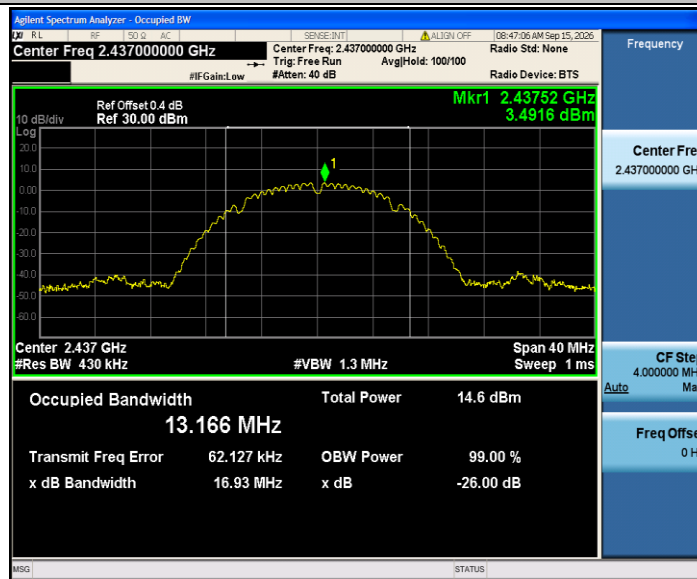
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.166	2405.4776	2418.6436	---	---
		2437	13.166	2430.4791	2443.6451	---	---
		2462	13.145	2455.4841	2468.6291	---	---
11G	Ant1	2412	17.355	2403.3578	2420.7128	---	---
		2437	17.334	2428.3478	2445.6818	---	---
		2462	17.383	2453.2967	2470.6797	---	---
11N20SISO	Ant1	2412	18.405	2402.8290	2421.2340	---	---
		2437	18.452	2427.8137	2446.2657	---	---
		2462	18.425	2452.7974	2471.2224	---	---
11N40SISO	Ant1	2422	36.714	2403.7346	2440.4486	---	---
		2437	36.775	2418.7276	2455.5026	---	---
		2452	36.793	2433.6773	2470.4703	---	---

Test Graphs

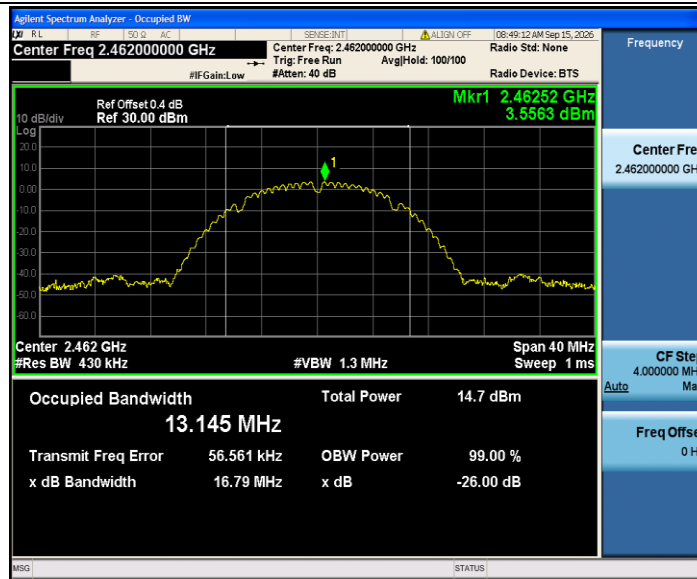
11B_Ant1_2412



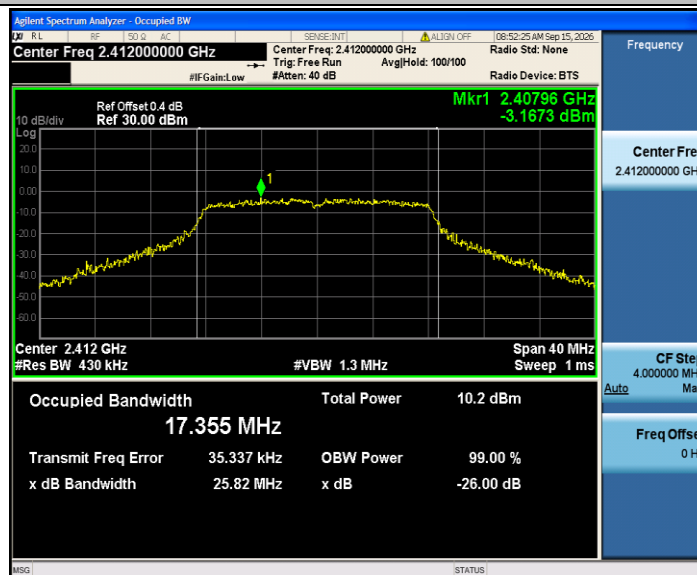
11B_Ant1_2437



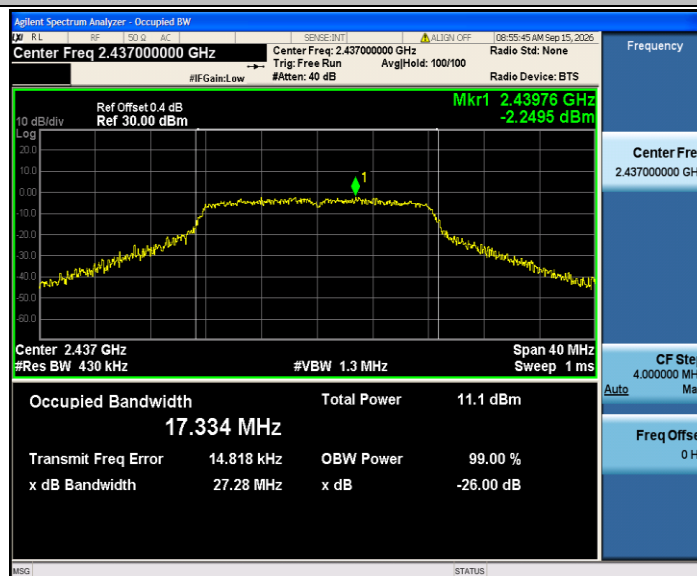
11B_Ant1_2462



11G_Ant1_2412



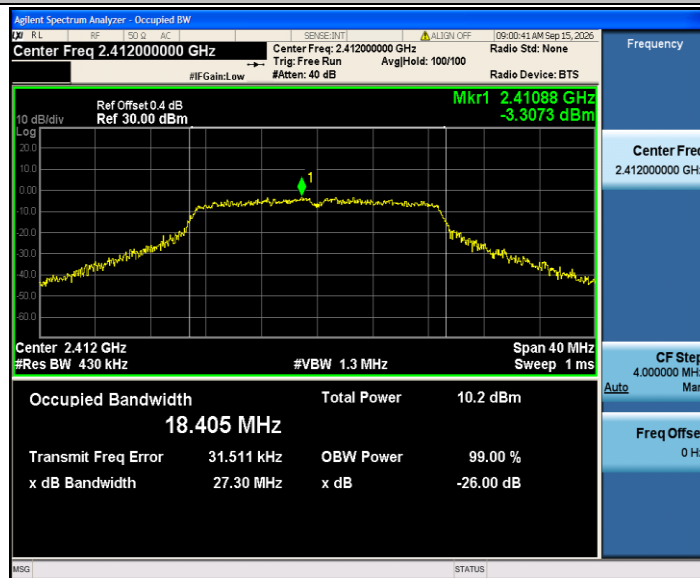
11G_Ant1_2437



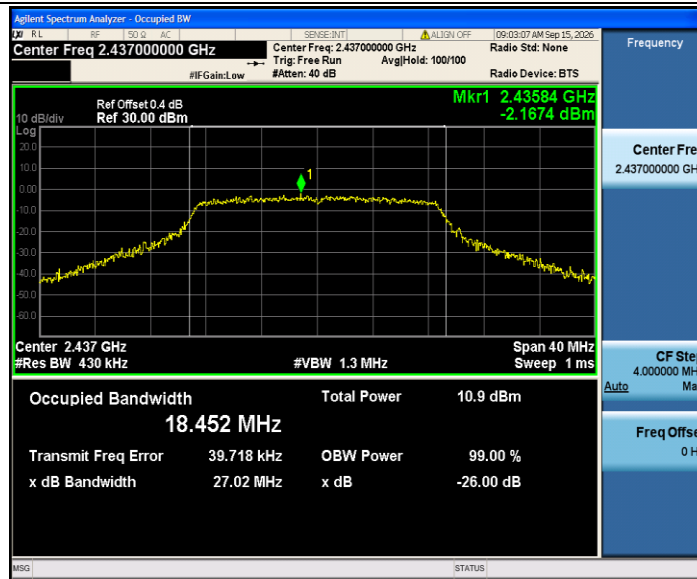
11G_Ant1_2462



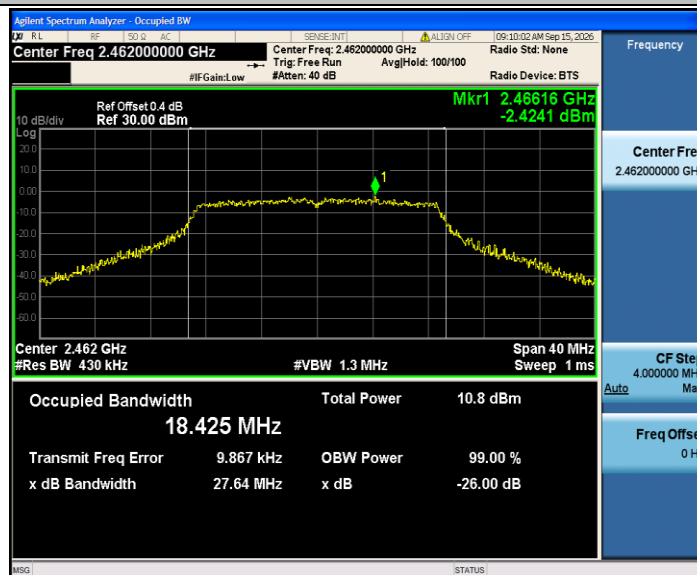
11N20SISO_Ant1_2412



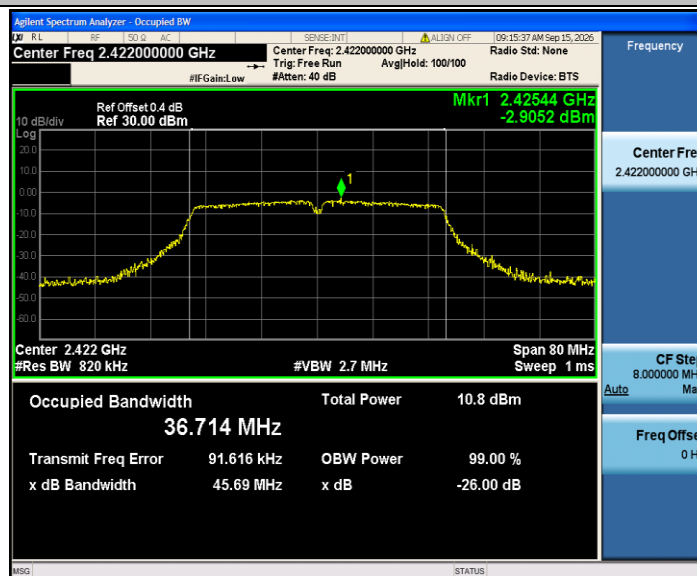
11N20SISO_Ant1_2437



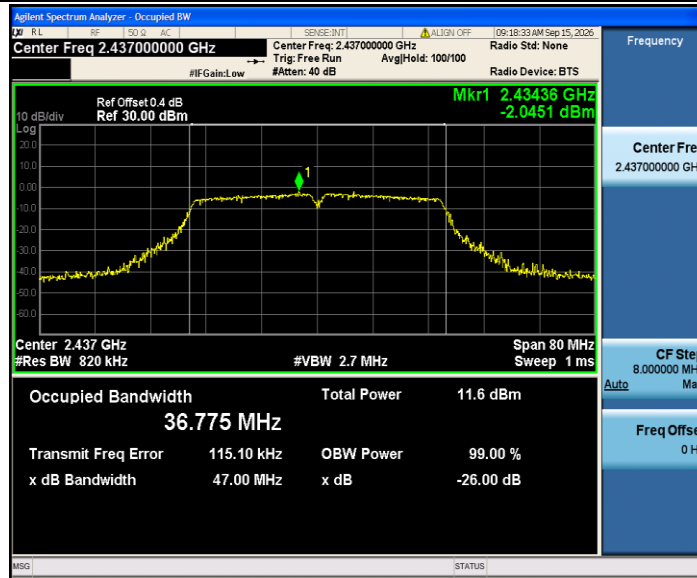
11N20SISO_Ant1_2462



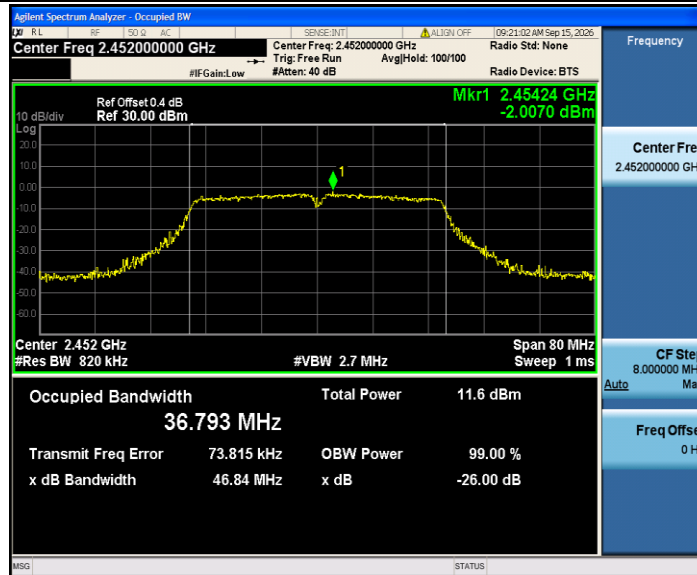
11N40SISO_Ant1_2422



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	14.12	≤30.00	PASS
		2437	14.28	≤30.00	PASS
		2462	14.32	≤30.00	PASS
11G	Ant1	2412	11.45	≤30.00	PASS
		2437	12.15	≤30.00	PASS
		2462	11.96	≤30.00	PASS
11N20SISO	Ant1	2412	11.20	≤30.00	PASS
		2437	12.04	≤30.00	PASS
		2462	11.92	≤30.00	PASS
11N40SISO	Ant1	2422	11.21	≤30.00	PASS
		2437	12.01	≤30.00	PASS
		2452	11.82	≤30.00	PASS

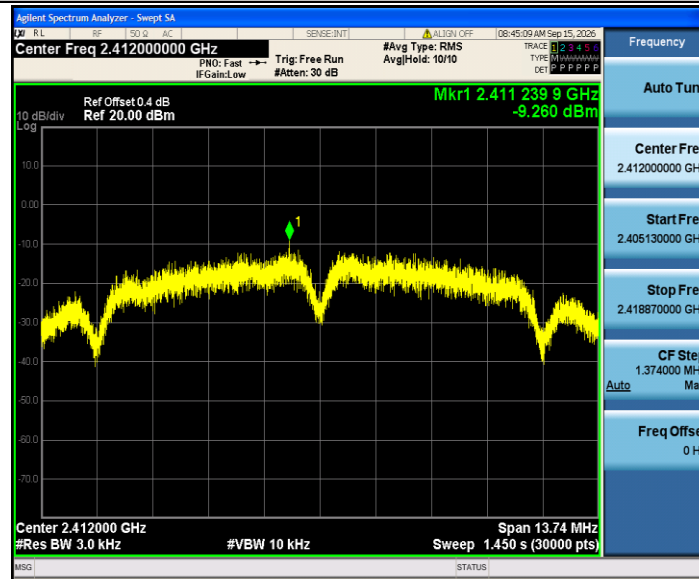
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.26	≤8.00	PASS
		2437	-10.95	≤8.00	PASS
		2462	-10.62	≤8.00	PASS
11G	Ant1	2412	-20.50	≤8.00	PASS
		2437	-19.74	≤8.00	PASS
		2462	-20.47	≤8.00	PASS
11N20SISO	Ant1	2412	-20.23	≤8.00	PASS
		2437	-19.66	≤8.00	PASS
		2462	-20.54	≤8.00	PASS
11N40SISO	Ant1	2422	-23.48	≤8.00	PASS
		2437	-22.57	≤8.00	PASS
		2452	-22.80	≤8.00	PASS

Test Graphs

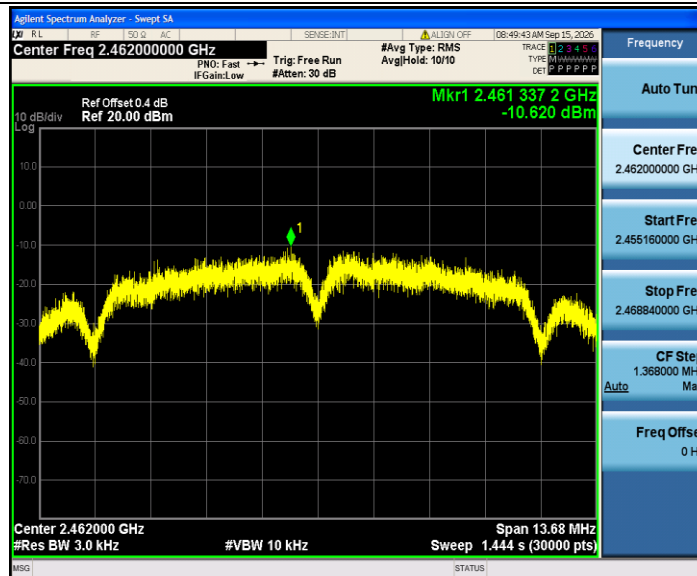
11B_Ant1_2412



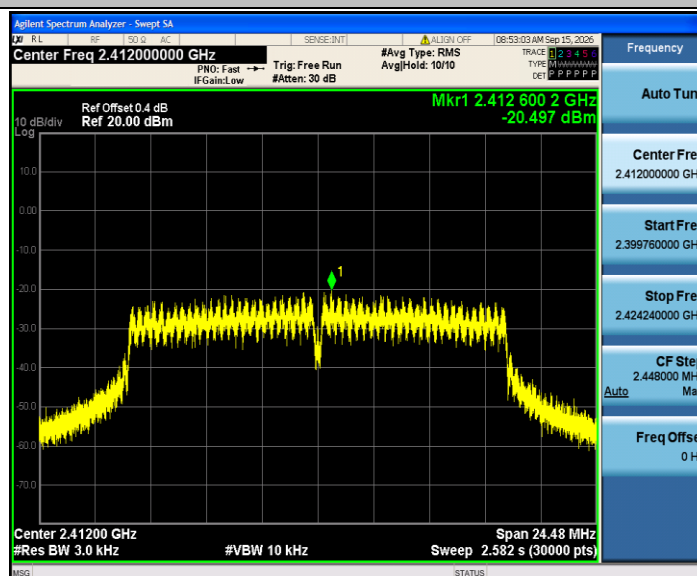
11B_Ant1_2437



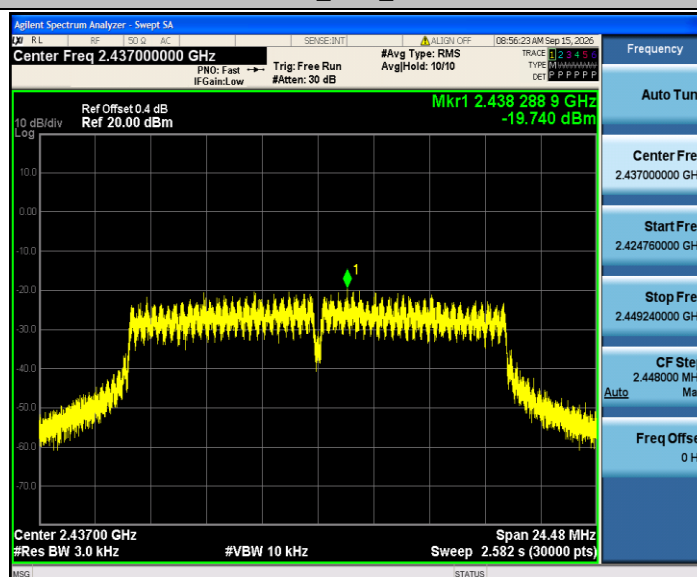
11B_Ant1_2462



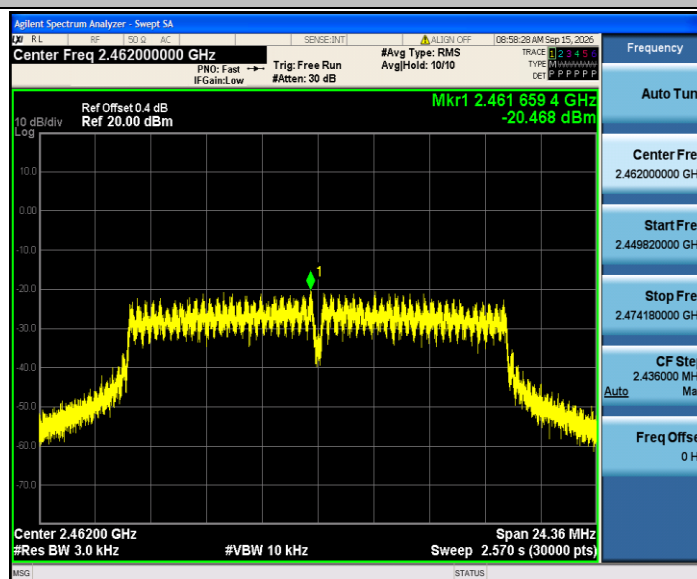
11G_Ant1_2412



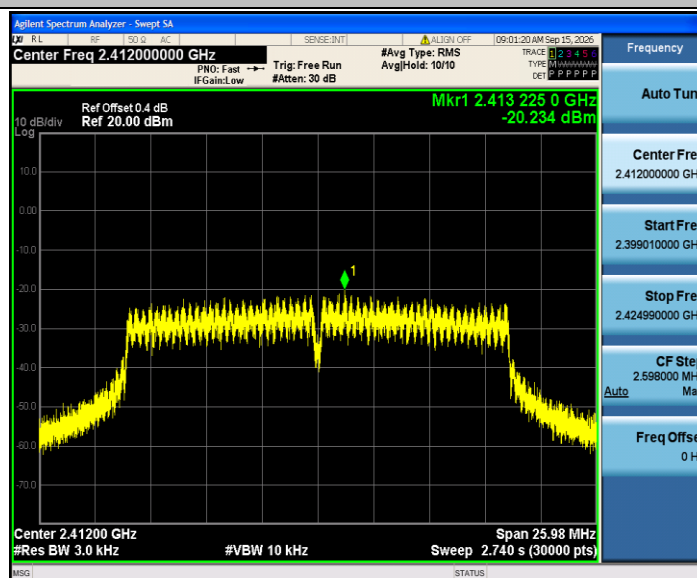
11G_Ant1_2437



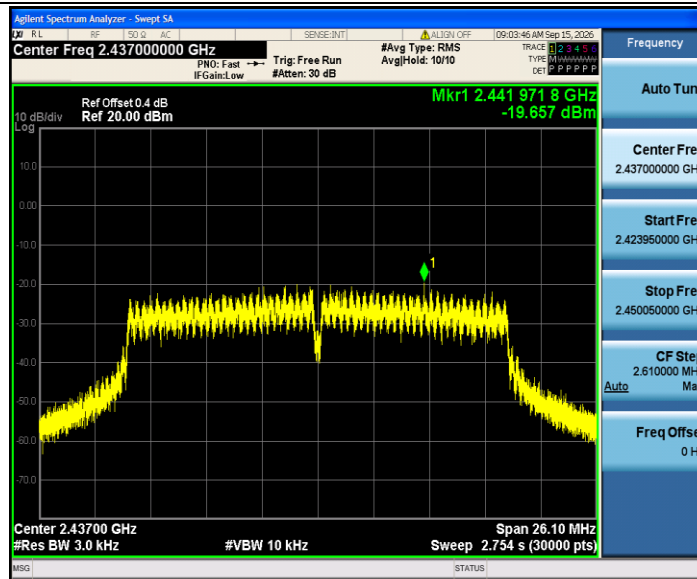
11G_Ant1_2462



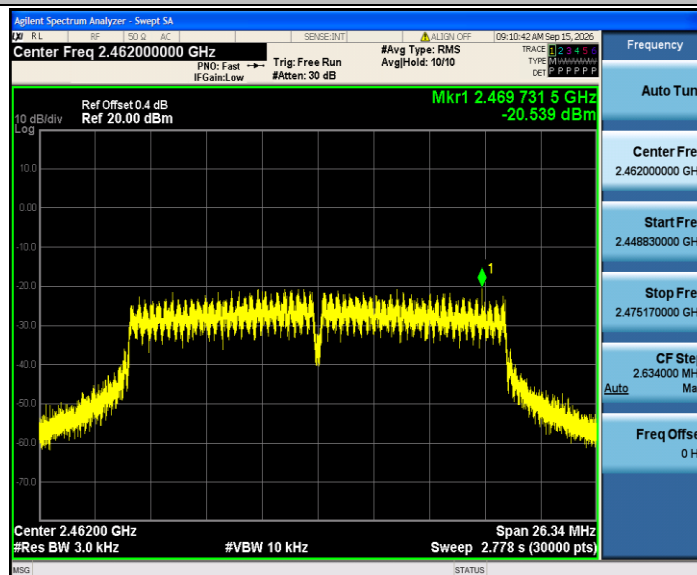
11N20SISO_Ant1_2412



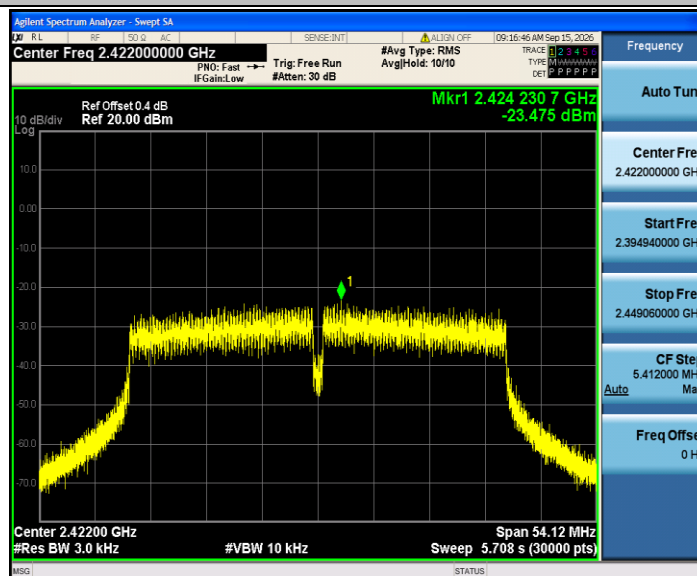
11N20SISO_Ant1_2437



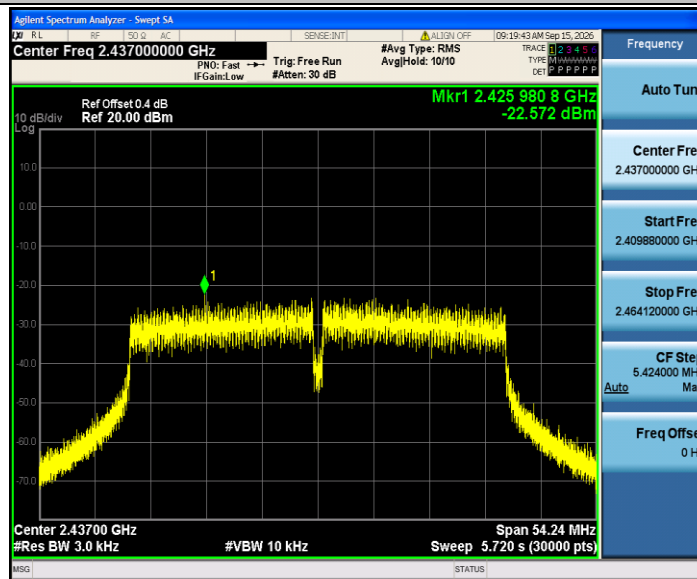
11N20SISO_Ant1_2462



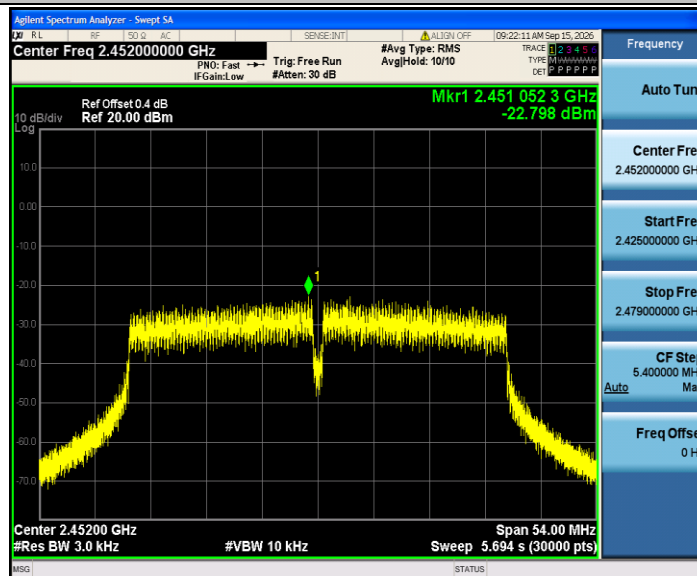
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



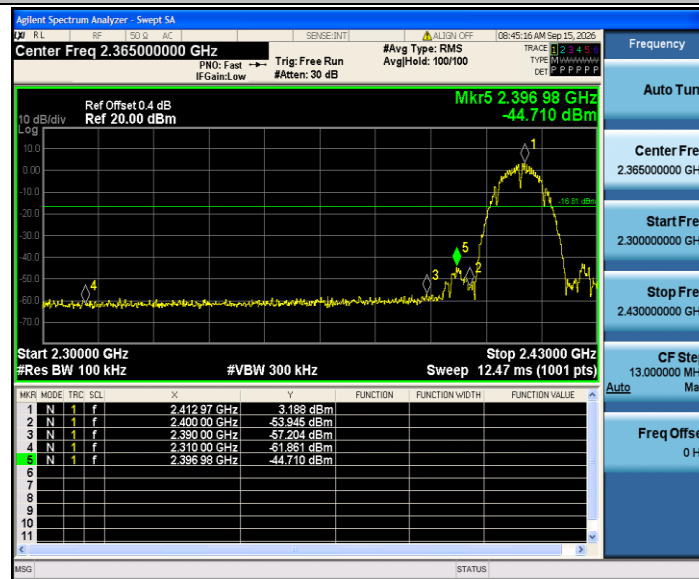
Appendix E: Band edge measurements

Test Result

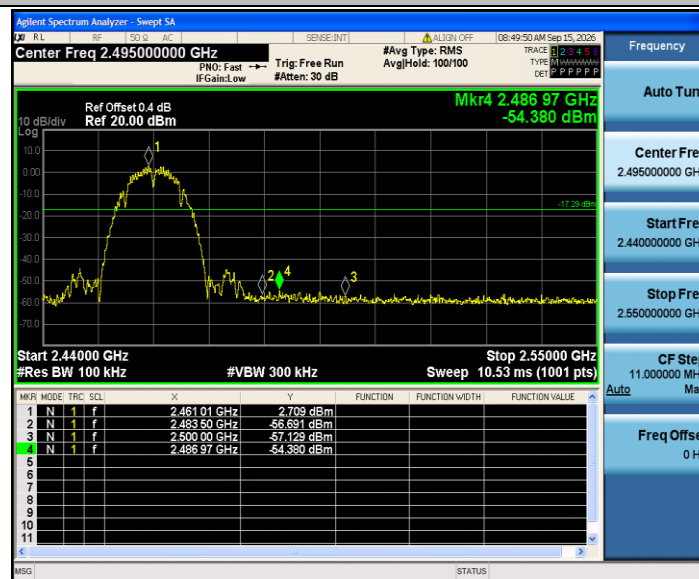
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.19	-44.71	≤-16.81	PASS
		High	2462	2.71	-54.38	≤-17.29	PASS
11G	Ant1	Low	2412	-6.66	-37.13	≤-26.66	PASS
		High	2462	-8.00	-54.96	≤-28	PASS
11N20SISO	Ant1	Low	2412	-7.79	-36.12	≤-27.79	PASS
		High	2462	-6.57	-53.6	≤-26.57	PASS
11N40SISO	Ant1	Low	2422	-9.67	-41.67	≤-29.67	PASS
		High	2452	-8.94	-50.17	≤-28.94	PASS

Test Graphs

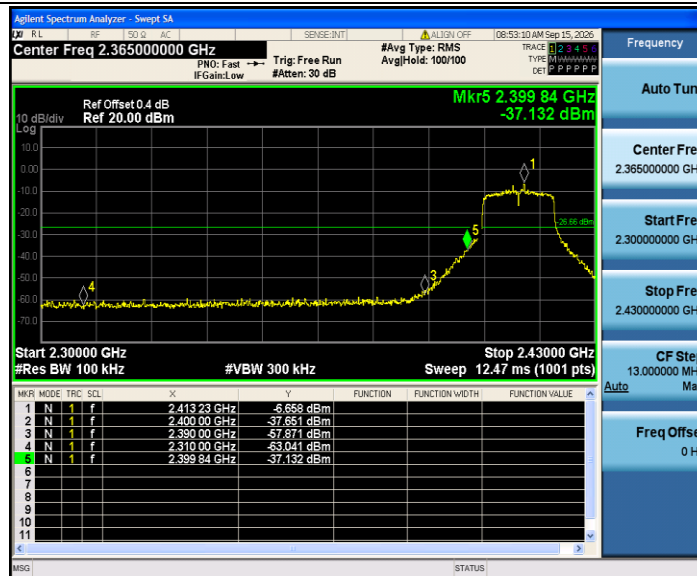
11B_Ant1_Low_2412



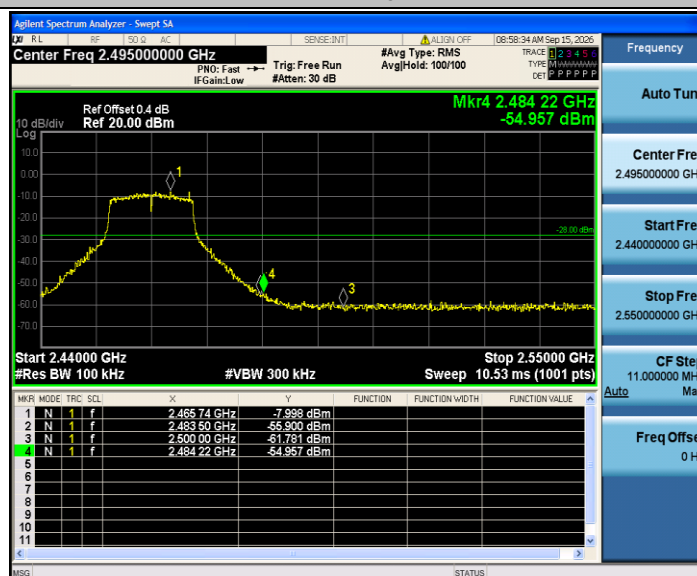
11B_Ant1_High_2462



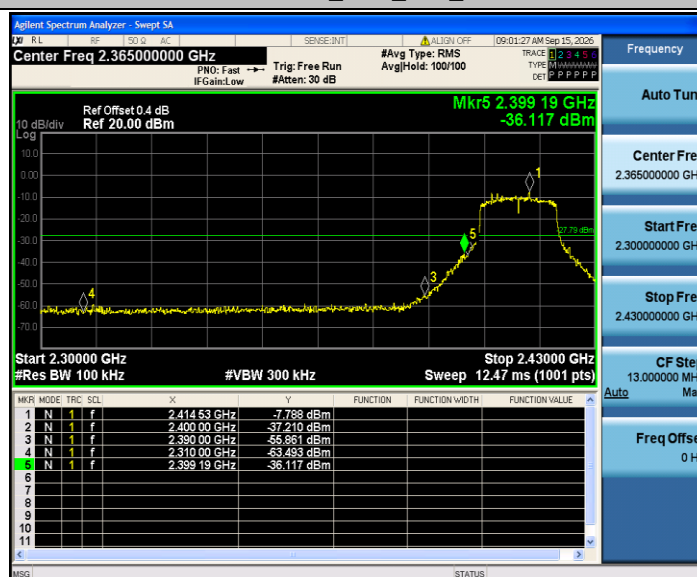
11G_Ant1_Low_2412



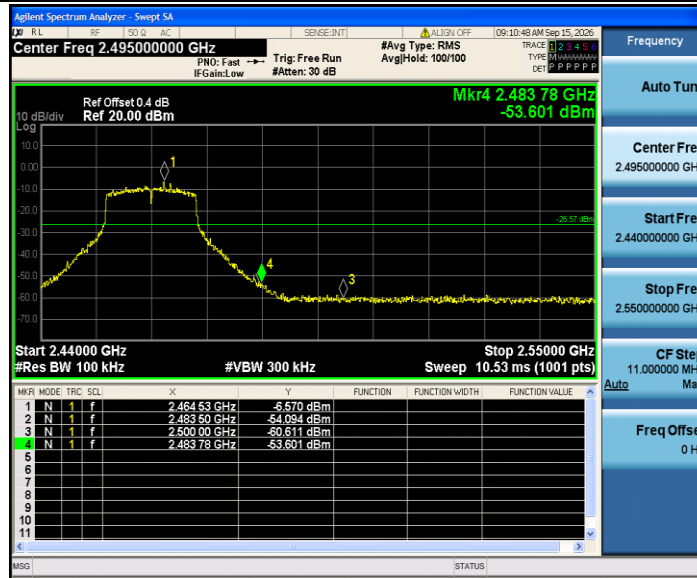
11G_Ant1_High_2462



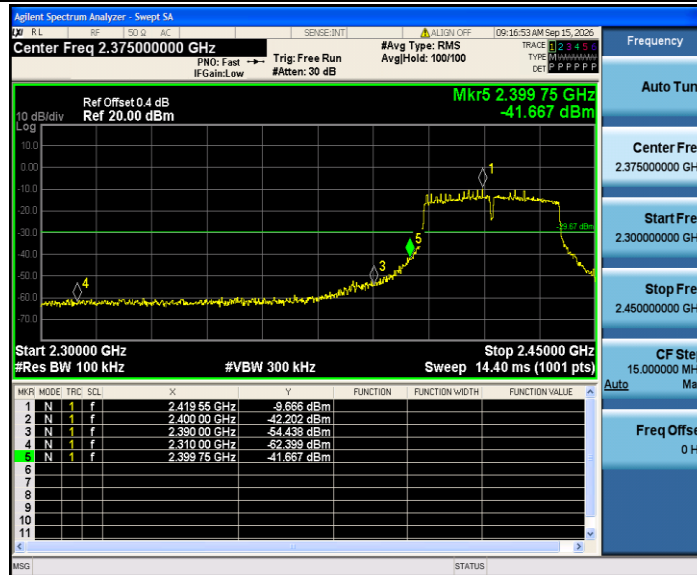
11N20SISO_Ant1_Low_2412



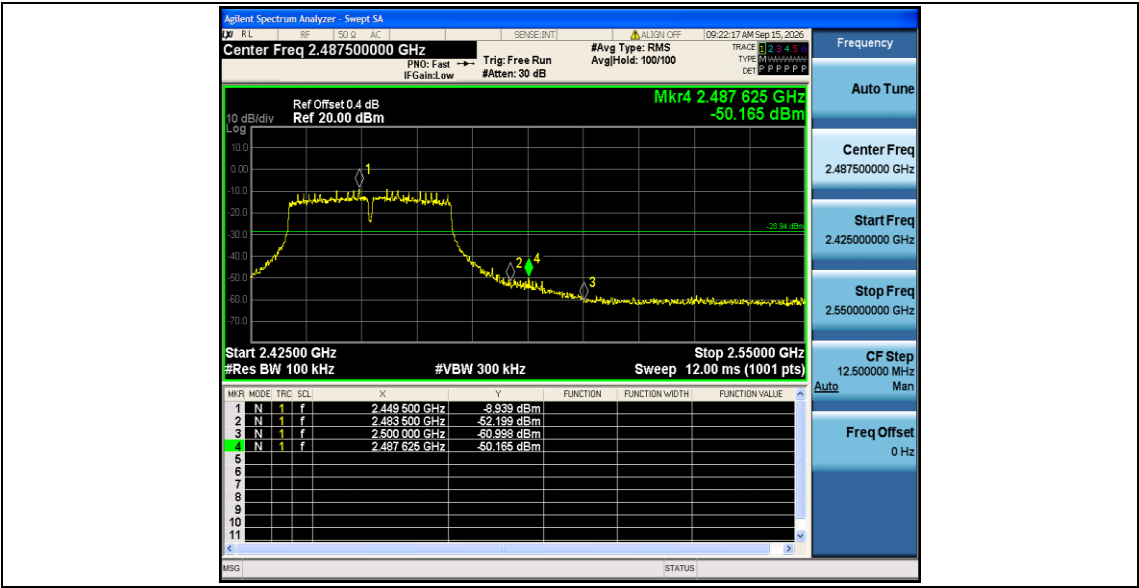
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

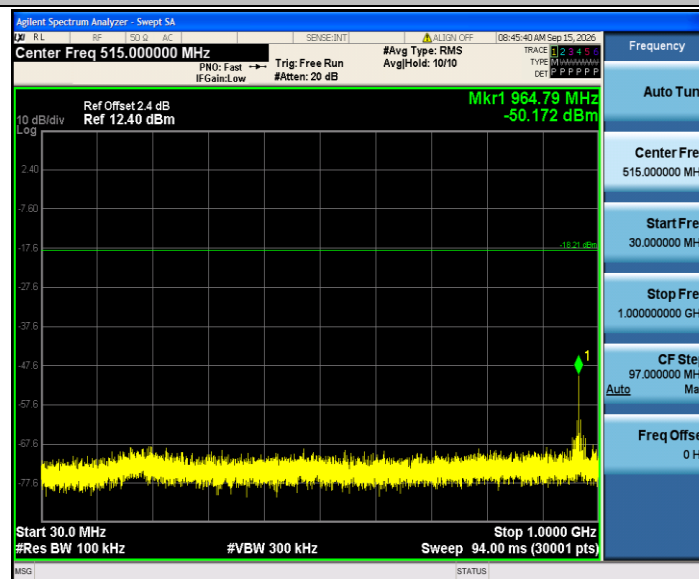
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.79	1.79	---	PASS
			30~1000	1.79	-50.17	≤-18.21	PASS
			1000~26500	1.79	-37.03	≤-18.21	PASS
		2437	Reference	1.75	1.75	---	PASS
			30~1000	1.75	-51.61	≤-18.25	PASS
			1000~26500	1.75	-38.81	≤-18.25	PASS
		2462	Reference	0.49	0.49	---	PASS
			30~1000	0.49	-52.87	≤-19.51	PASS
			1000~26500	0.49	-39.98	≤-19.51	PASS
11G	Ant1	2412	Reference	-9.66	-9.66	---	PASS
			30~1000	-9.66	-67.31	≤-29.66	PASS
			1000~26500	-9.66	-41.58	≤-29.66	PASS
		2437	Reference	-7.23	-7.23	---	PASS
			30~1000	-7.23	-67.87	≤-27.23	PASS
			1000~26500	-7.23	-43.21	≤-27.23	PASS
		2462	Reference	-8.91	-8.91	---	PASS
			30~1000	-8.91	-67.79	≤-28.91	PASS
			1000~26500	-8.91	-43.13	≤-28.91	PASS
11N20SISO	Ant1	2412	Reference	-10.01	-10.01	---	PASS
			30~1000	-10.01	-67.37	≤-30.01	PASS
			1000~26500	-10.01	-43.05	≤-30.01	PASS
		2437	Reference	-9.84	-9.84	---	PASS
			30~1000	-9.84	-67.99	≤-29.84	PASS
			1000~26500	-9.84	-43.16	≤-29.84	PASS
		2462	Reference	-9.67	-9.67	---	PASS
			30~1000	-9.67	-67.86	≤-29.67	PASS
			1000~26500	-9.67	-42.95	≤-29.67	PASS
11N40SISO	Ant1	2422	Reference	-12.78	-12.78	---	PASS
			30~1000	-12.78	-67.48	≤-32.78	PASS
			1000~26500	-12.78	-42.84	≤-32.78	PASS
		2437	Reference	-8.97	-8.97	---	PASS
			30~1000	-8.97	-67.06	≤-28.97	PASS
			1000~26500	-8.97	-42.58	≤-28.97	PASS
		2452	Reference	-9.49	-9.49	---	PASS
			30~1000	-9.49	-68.31	≤-29.49	PASS
			1000~26500	-9.49	-43.04	≤-29.49	PASS

Test Graphs

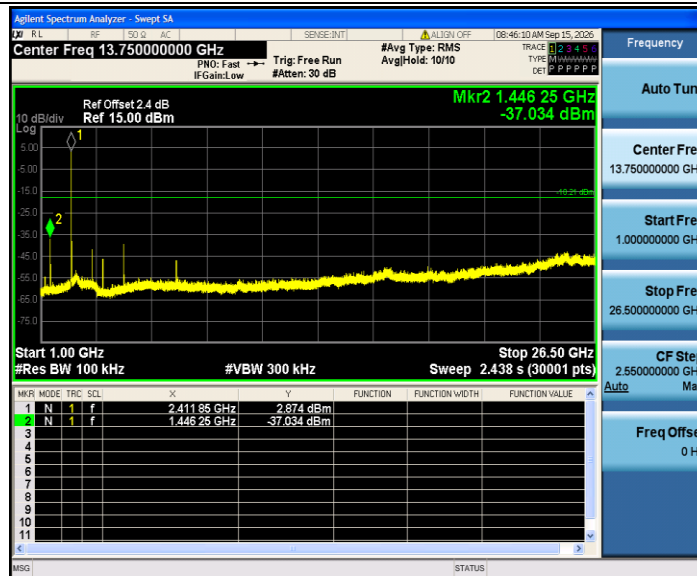
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



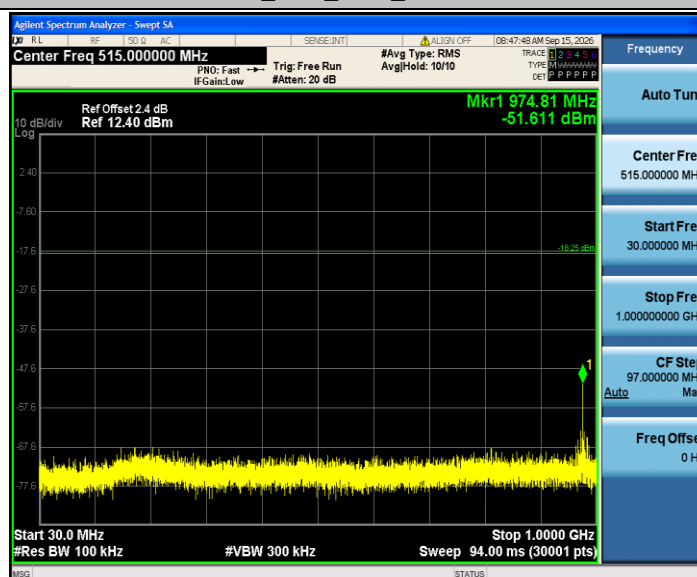
11B_Ant1_2412_1000~26500



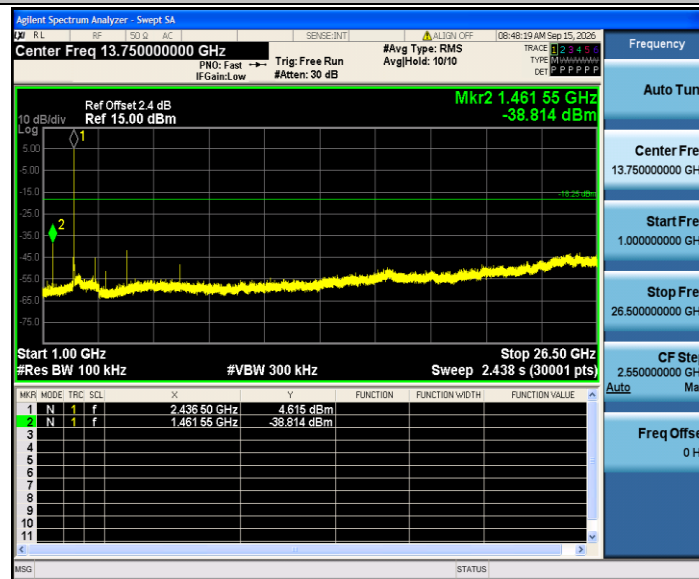
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



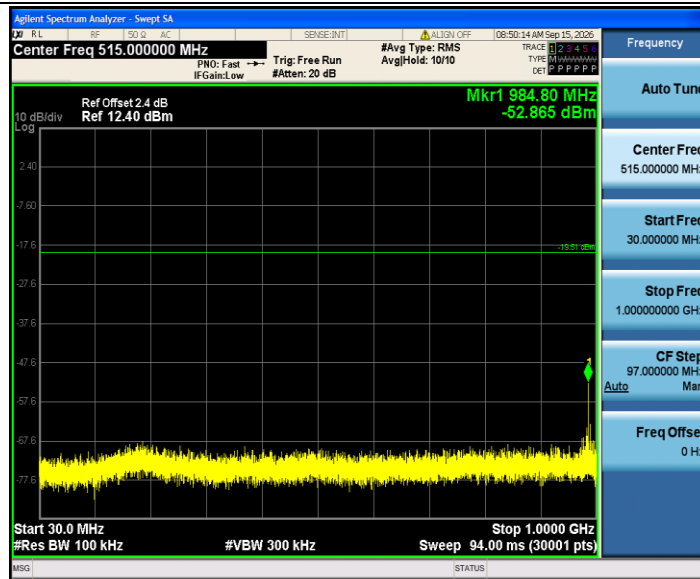
11B_Ant1_2437_1000~26500



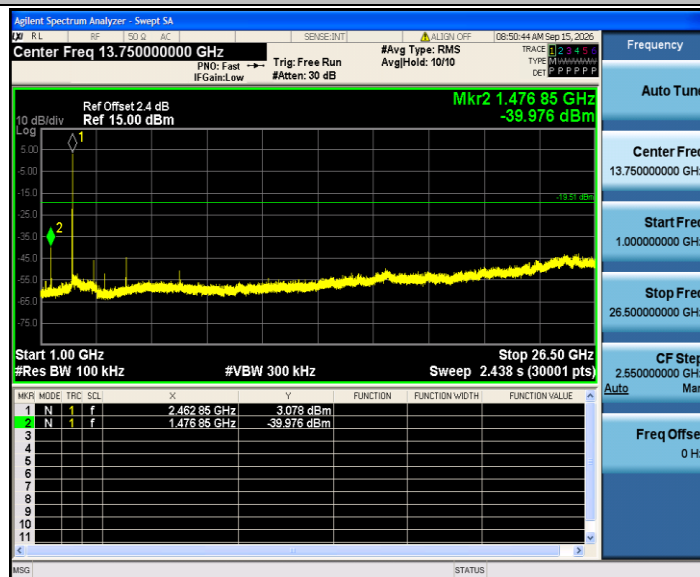
11B_Ant1_2462_0~Reference



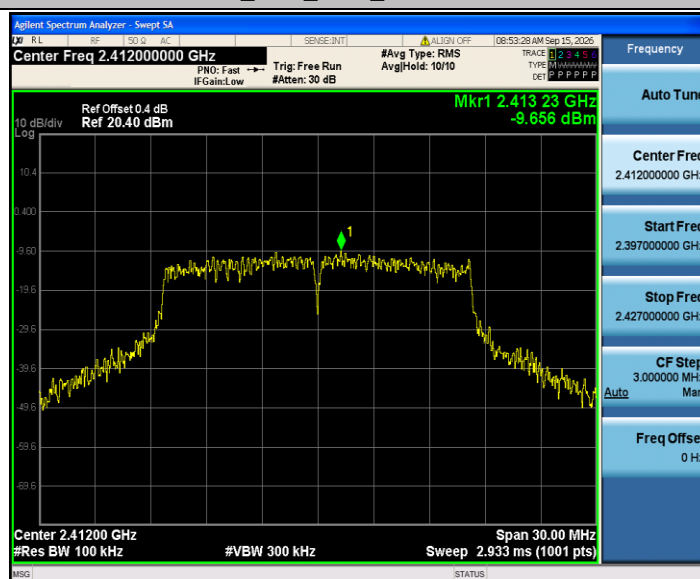
11B_Ant1_2462_30~1000



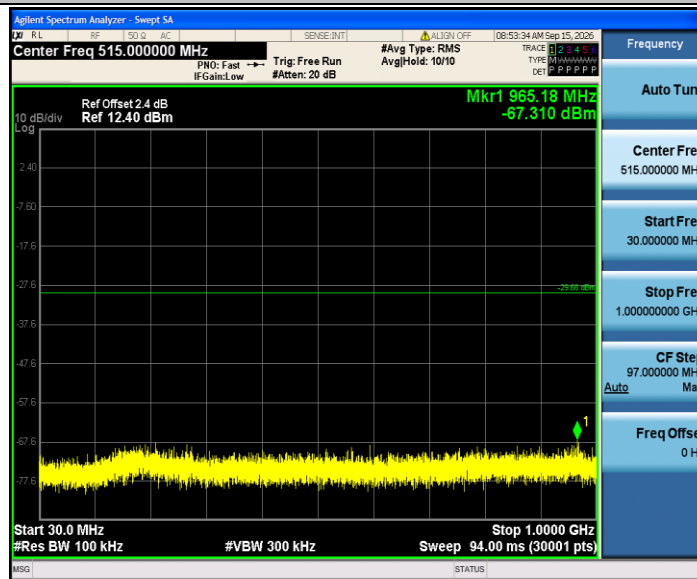
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



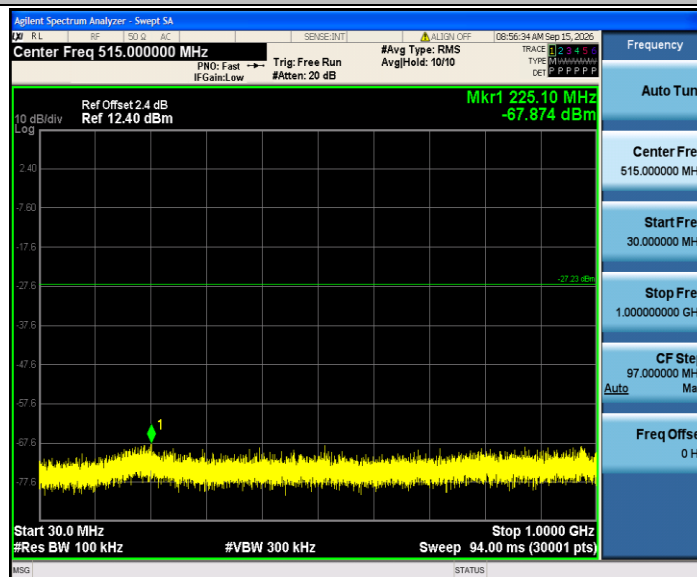
11G_Ant1_2412_1000~26500



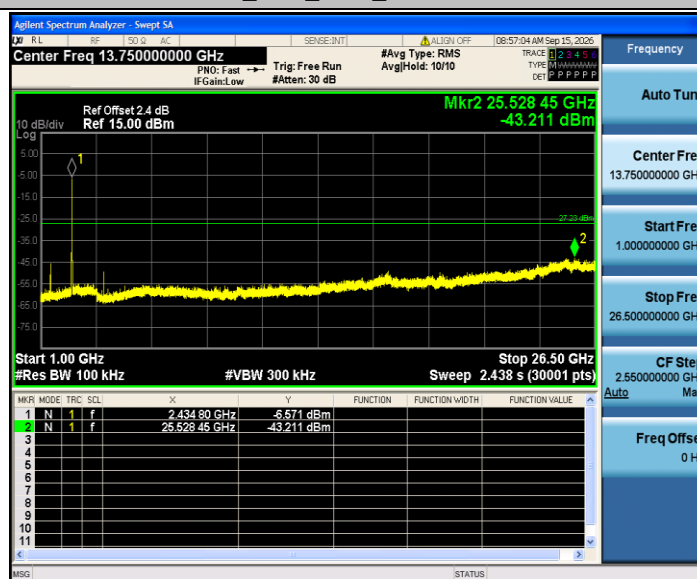
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



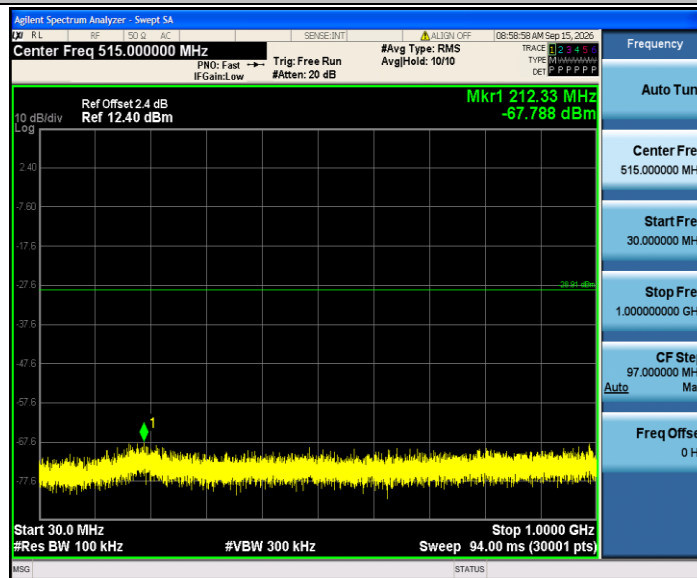
11G_Ant1_2437_1000~26500



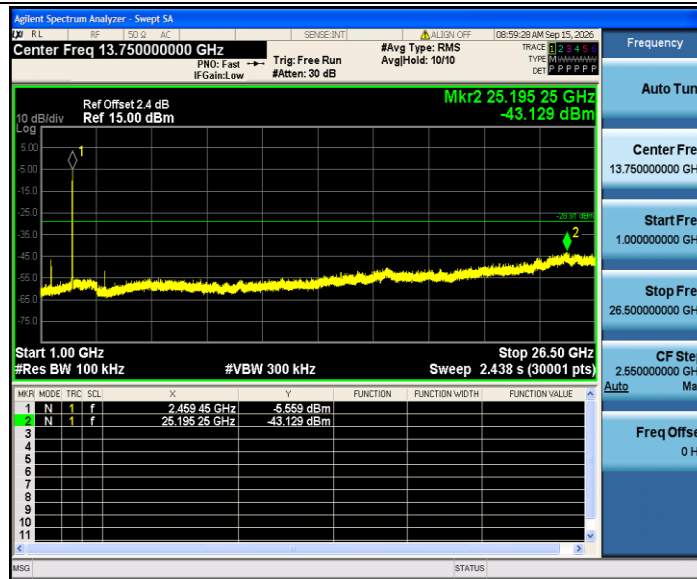
11G_Ant1_2462_0~Reference



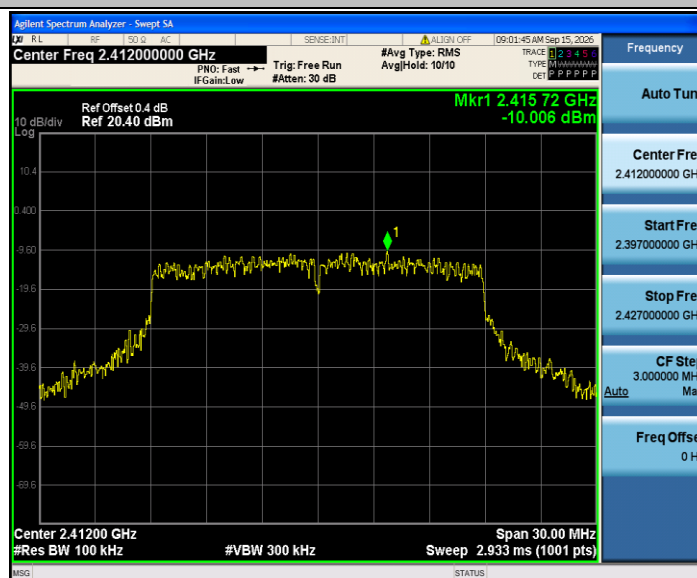
11G_Ant1_2462_30~1000



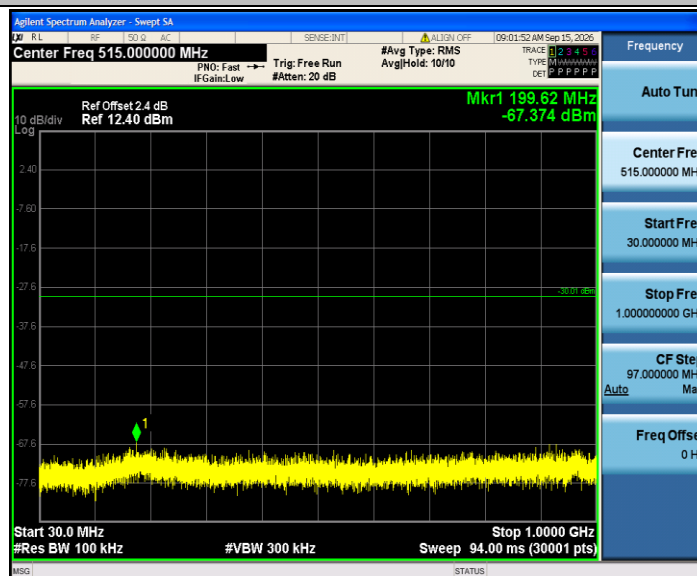
11G_Ant1_2462_1000~26500



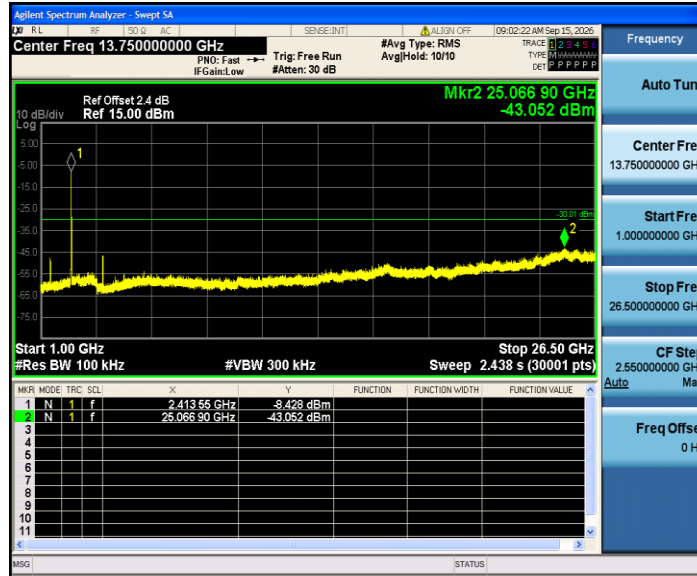
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000