

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BTN5-X7

Company : Shenzhen Yu Lai Technology Co., Ltd.

EUT : WiFi camera

Model Number : X7

Report No. : CTA25120202002

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	9.120	2407.480	2416.600	0.5	PASS
		2437	8.200	2433.040	2441.240	0.5	PASS
		2462	8.800	2457.560	2466.360	0.5	PASS
11G	Ant1	2412	16.240	2403.920	2420.160	0.5	PASS
		2437	16.320	2428.880	2445.200	0.5	PASS
		2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.360	2403.400	2420.760	0.5	PASS
		2437	17.200	2428.480	2445.680	0.5	PASS
		2462	17.400	2453.320	2470.720	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462

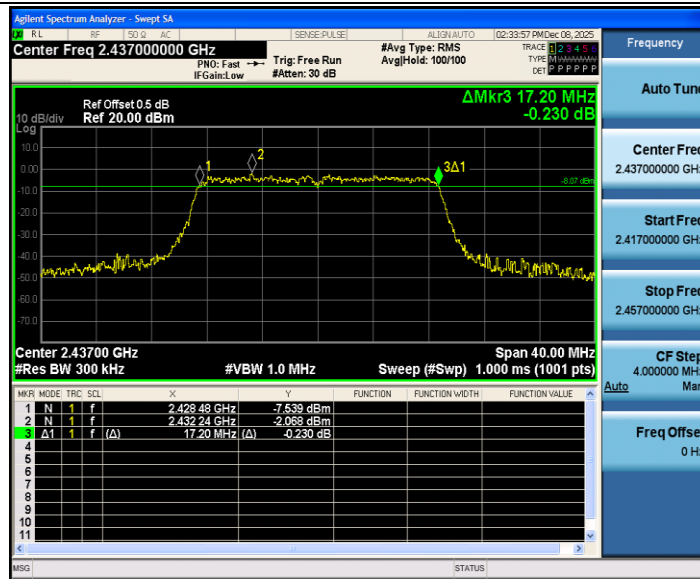


11G_Ant1_2412

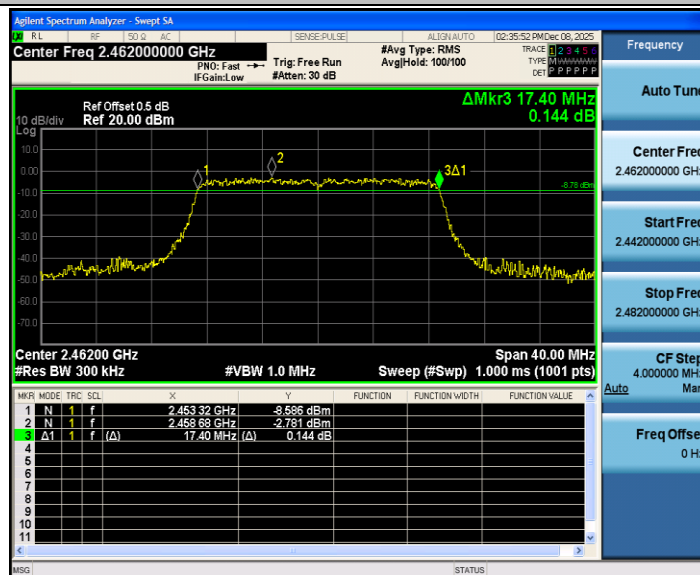


11G_Ant1_2437





11N20SISO_Ant1_2462



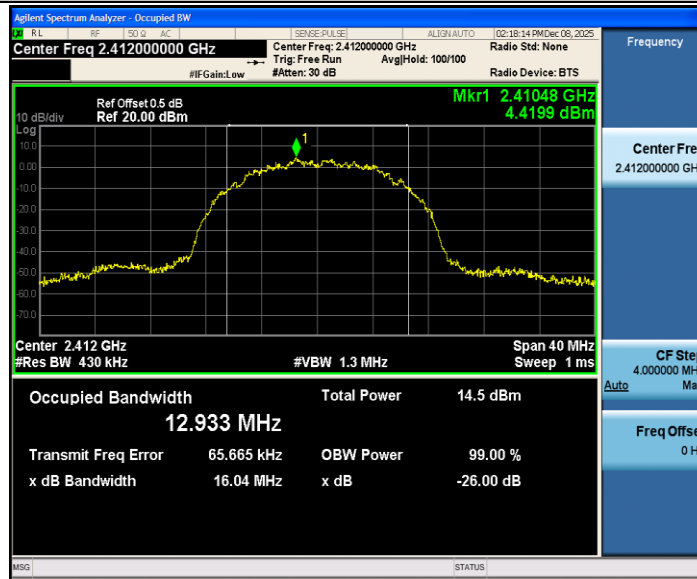
Appendix B: Occupied Channel Bandwidth

Test Result

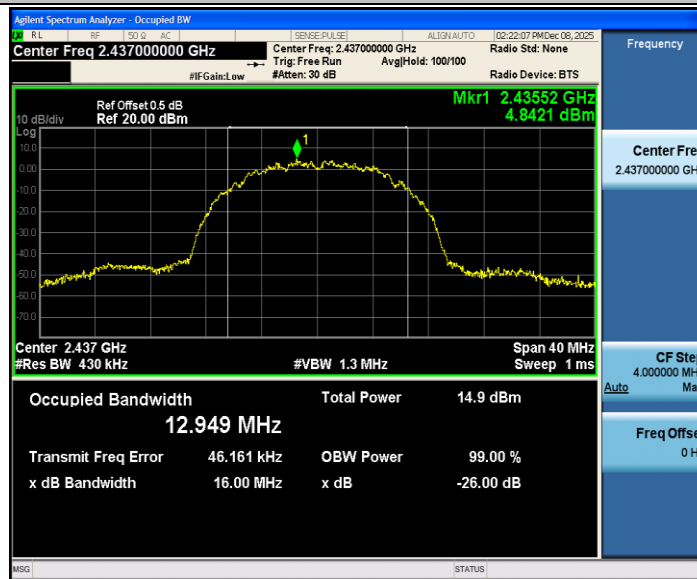
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.933	2405.5992	2418.5322	---	---
		2437	12.949	2430.5717	2443.5207	---	---
		2462	12.989	2455.5049	2468.4939	---	---
11G	Ant1	2412	16.594	2403.7577	2420.3517	---	---
		2437	16.604	2428.7383	2445.3423	---	---
		2462	16.590	2453.7317	2470.3217	---	---
11N20SISO	Ant1	2412	17.461	2403.3296	2420.7906	---	---
		2437	17.438	2428.3195	2445.7575	---	---
		2462	17.439	2453.3062	2470.7452	---	---

Test Graphs

11B_Ant1_2412



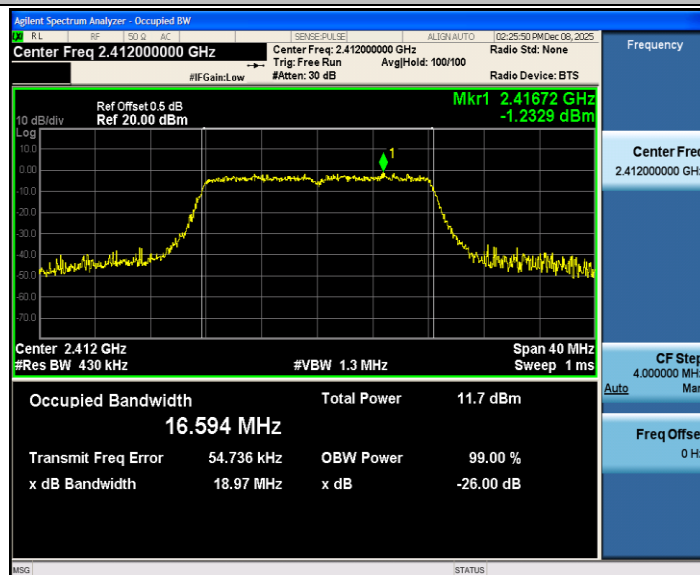
11B_Ant1_2437



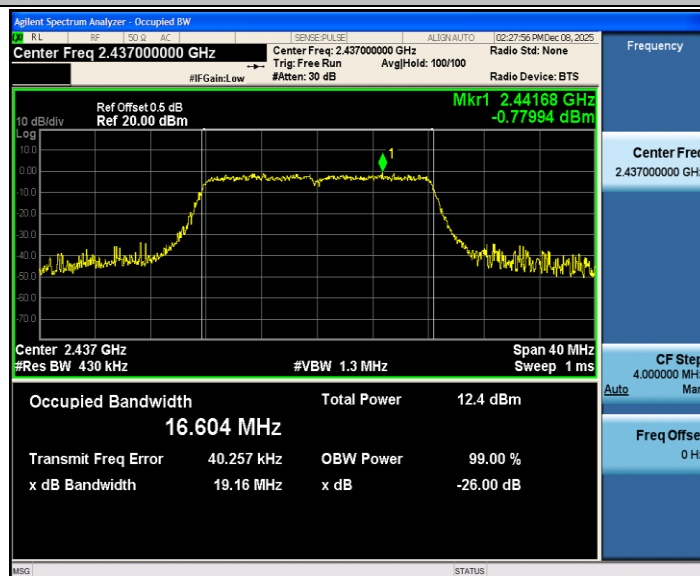
11B_Ant1_2462



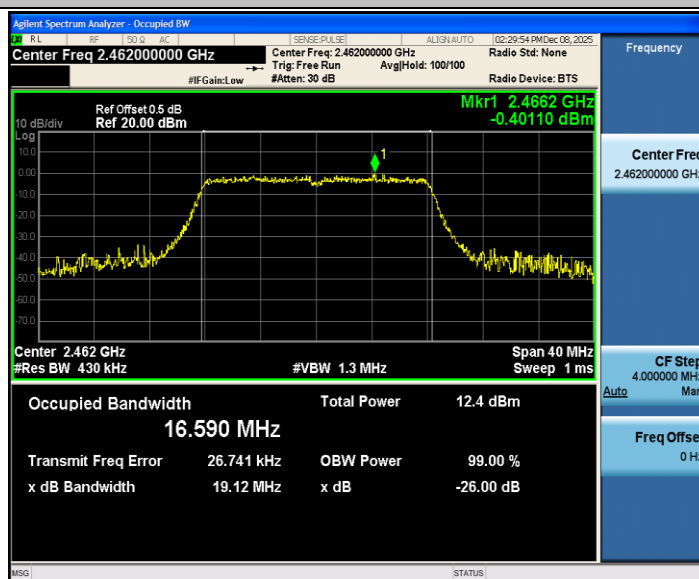
11G_Ant1_2412



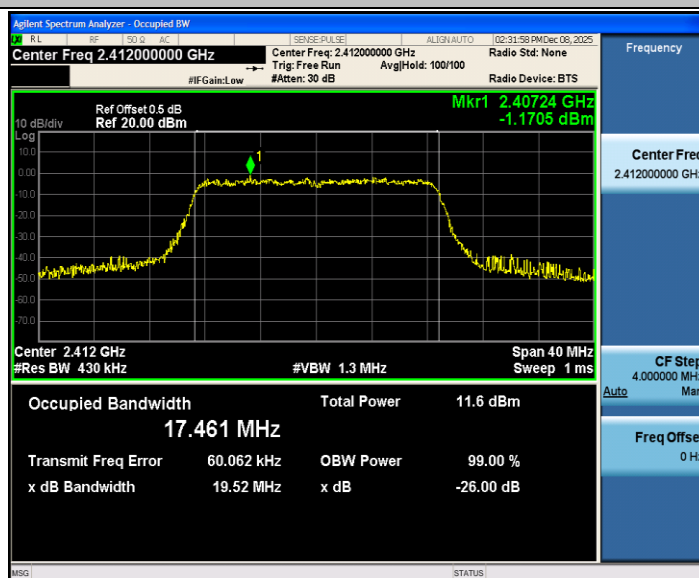
11G_Ant1_2437



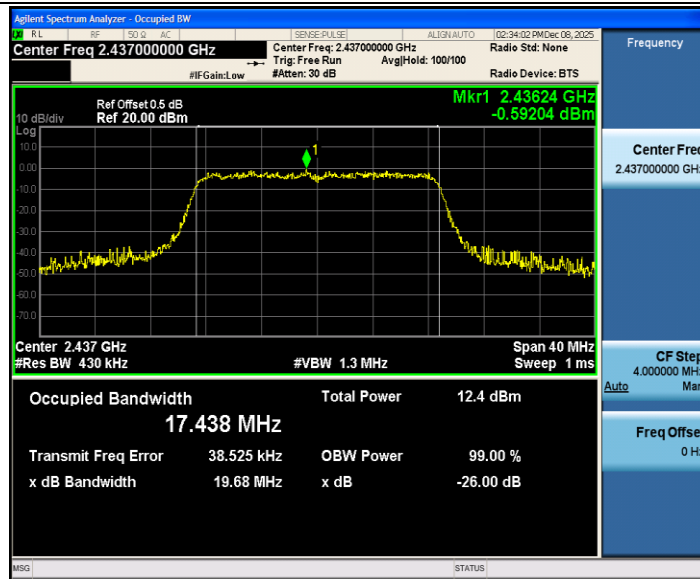
11G_Ant1_2462



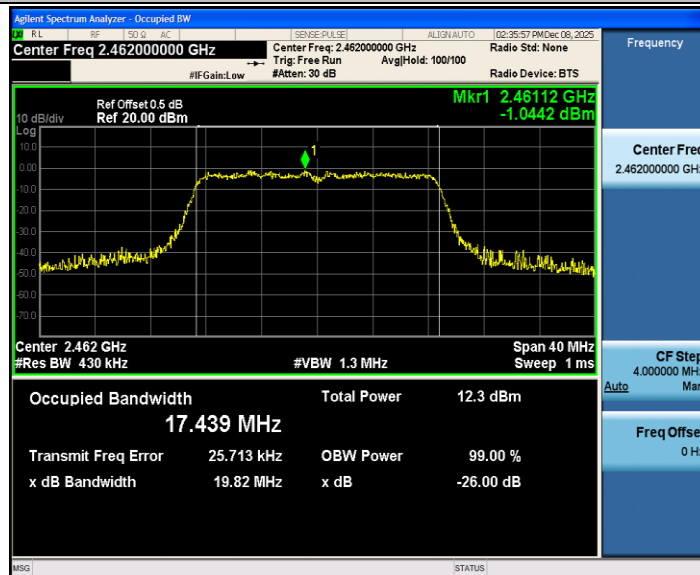
11N20SISO_Ant1_2412



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	13.93	≤30.00	PASS
		2437	14.26	≤30.00	PASS
		2462	14.31	≤30.00	PASS
11G	Ant1	2412	12.54	≤30.00	PASS
		2437	13.19	≤30.00	PASS
		2462	13.18	≤30.00	PASS
11N20SISO	Ant1	2412	12.76	≤30.00	PASS
		2437	13.59	≤30.00	PASS
		2462	13.57	≤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	-15.26	≤8.00	PASS
		2437	-14.59	≤8.00	PASS
		2462	-14.38	≤8.00	PASS
11G	Ant1	2412	-21.98	≤8.00	PASS
		2437	-21.13	≤8.00	PASS
		2462	-21.18	≤8.00	PASS
11N20SISO	Ant1	2412	-21.38	≤8.00	PASS
		2437	-21.03	≤8.00	PASS
		2462	-21.03	≤8.00	PASS

Test Graphs

11B_Ant1_2412



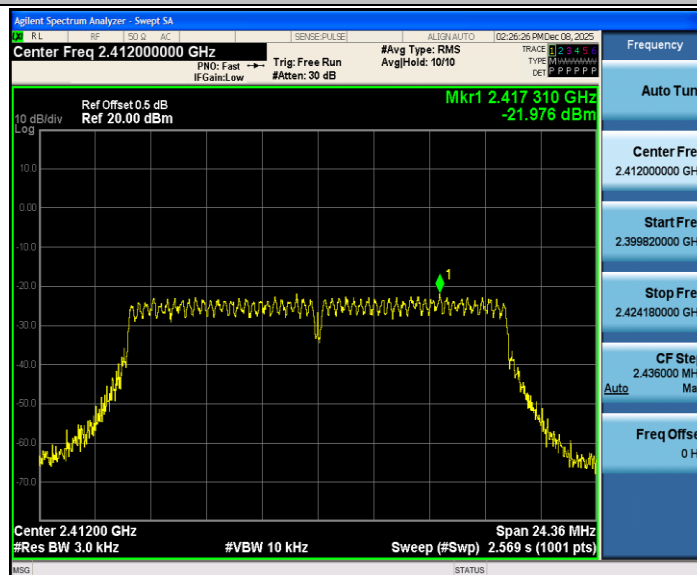
11B_Ant1_2437



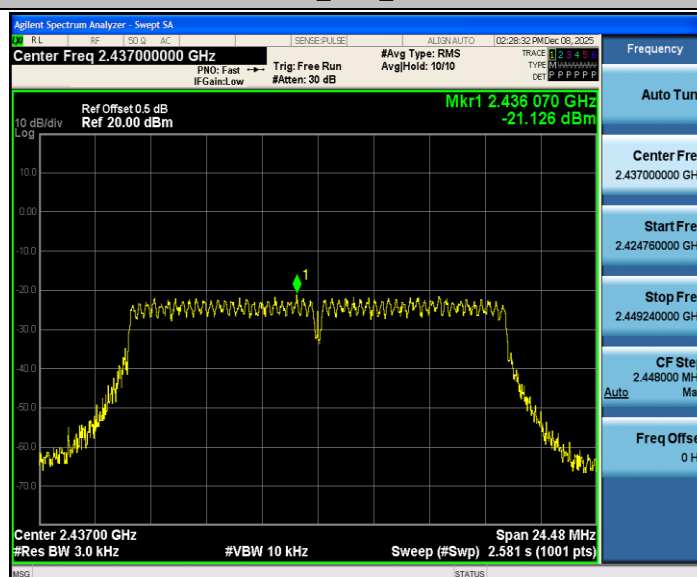
11B_Ant1_2462



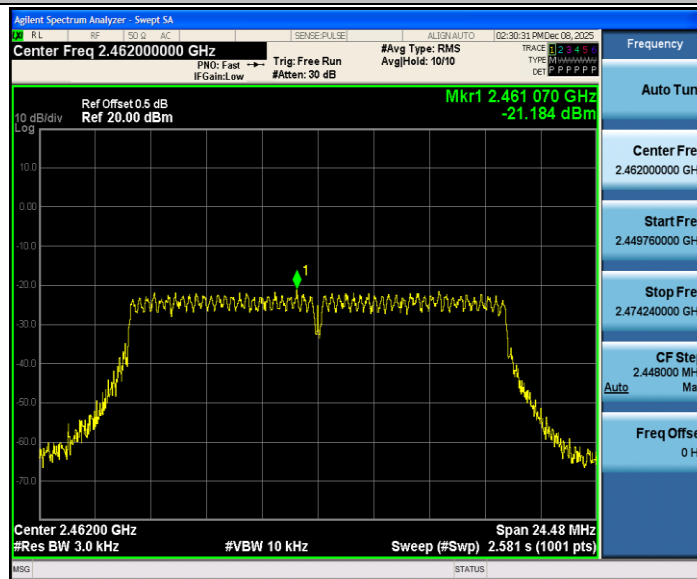
11G_Ant1_2412



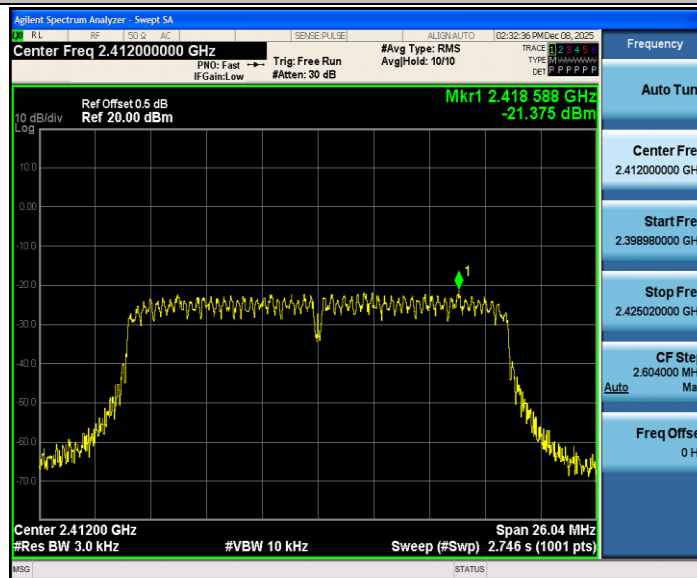
11G_Ant1_2437



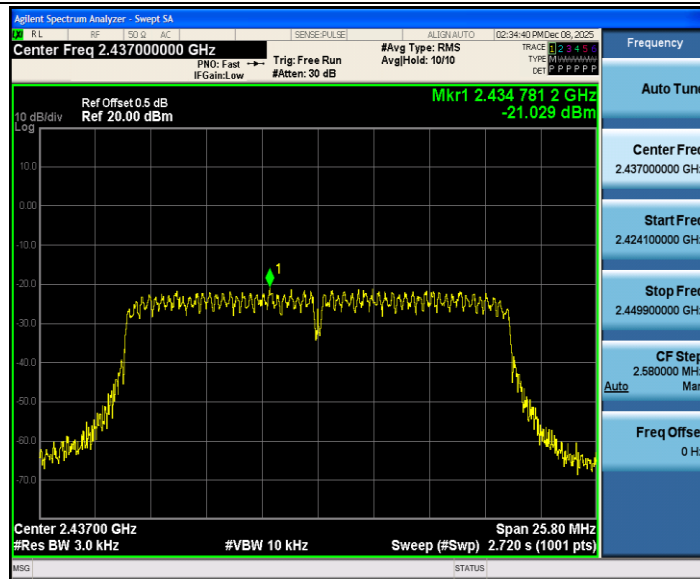
11G_Ant1_2462



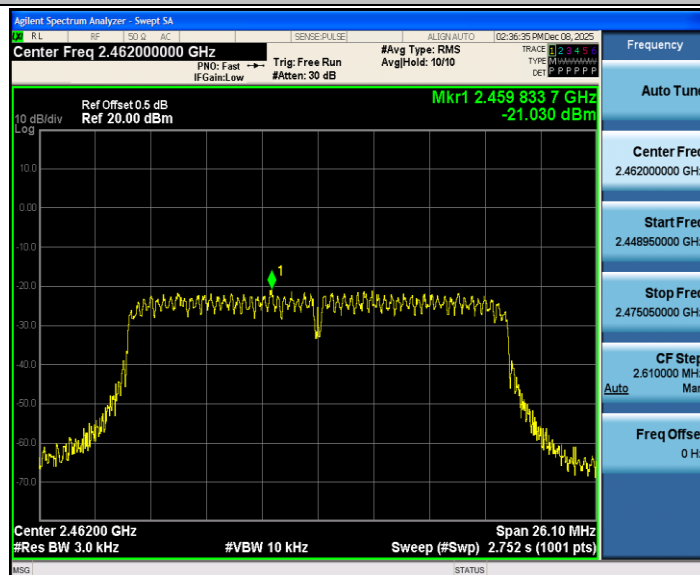
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



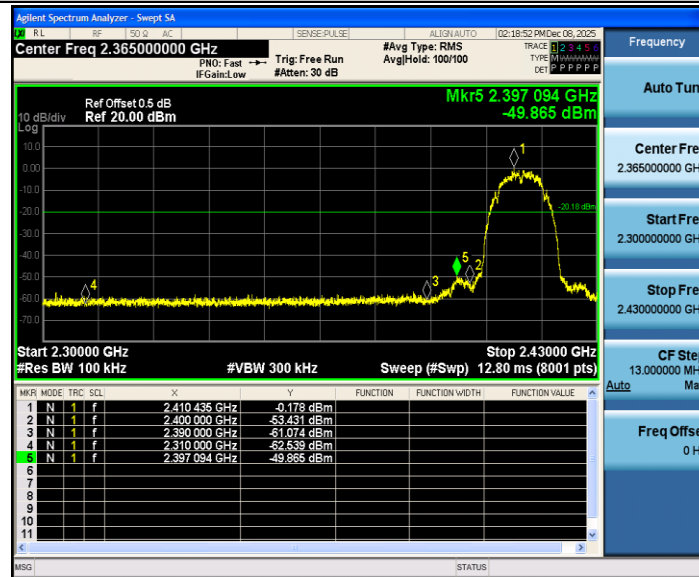
Appendix E: Band edge measurements

Test Result

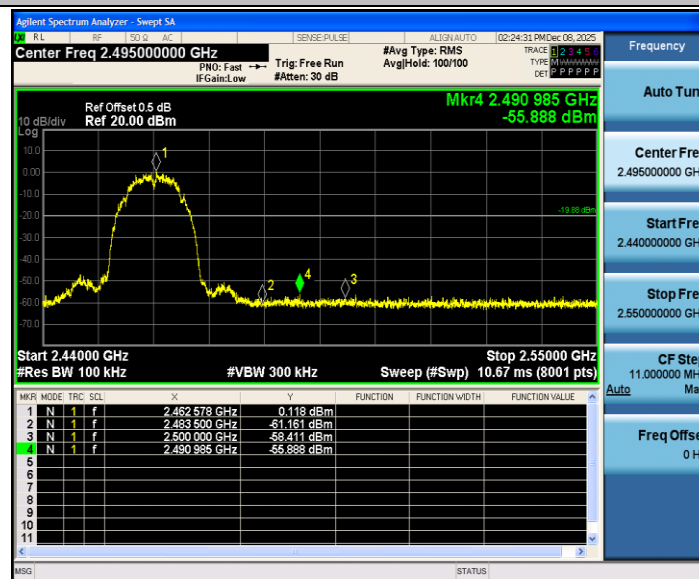
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-0.18	-49.87	≤-20.18	PASS
		High	2462	0.12	-55.89	≤-19.88	PASS
11G	Ant1	Low	2412	-7.69	-46.2	≤-27.69	PASS
		High	2462	-7.44	-53.04	≤-27.44	PASS
11N20SISO	Ant1	Low	2412	-7.80	-44.56	≤-27.8	PASS
		High	2462	-7.38	-54.39	≤-27.38	PASS

Test Graphs

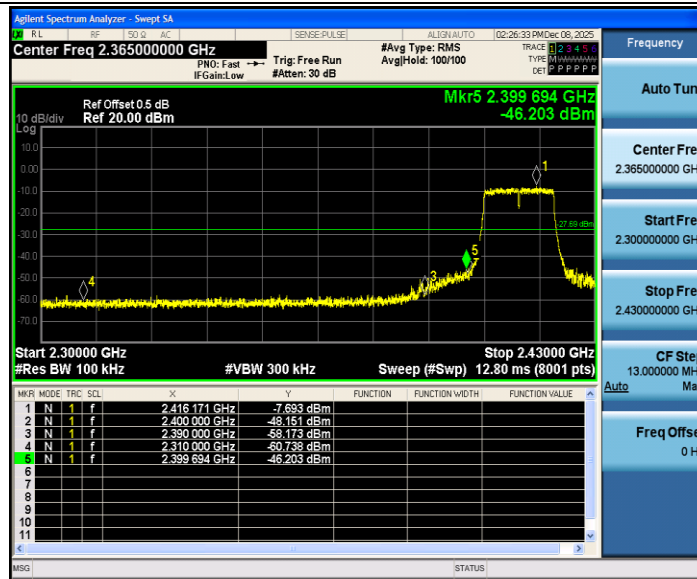
11B_Ant1_Low_2412



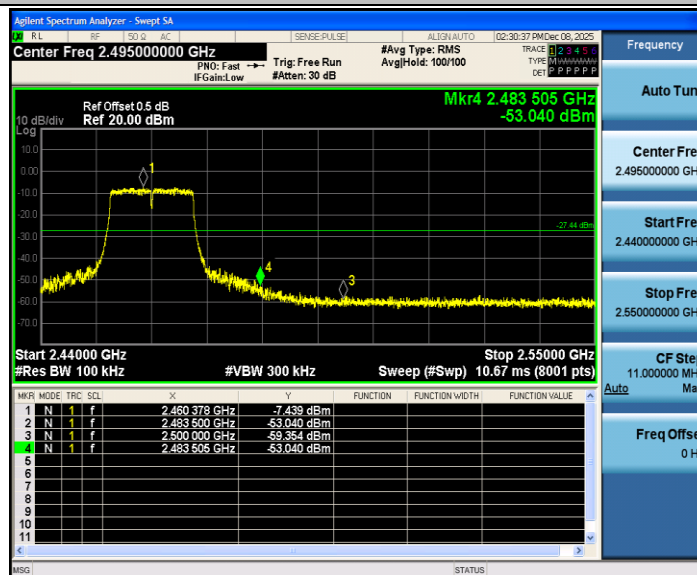
11B_Ant1_High_2462



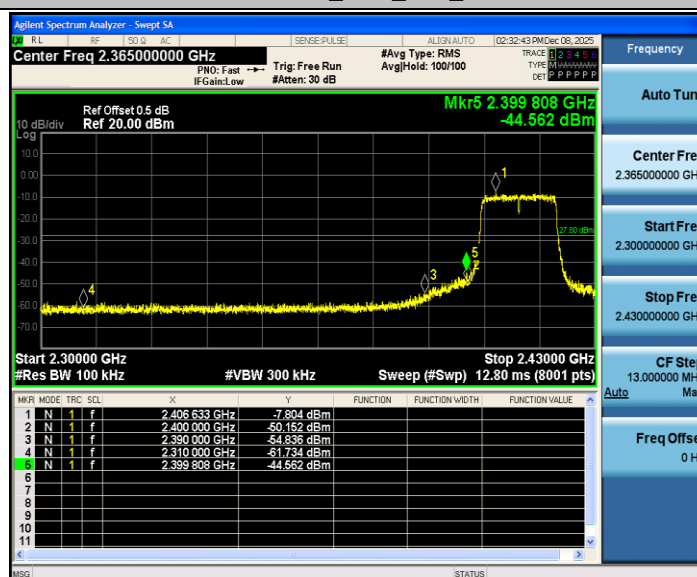
11G_Ant1_Low_2412



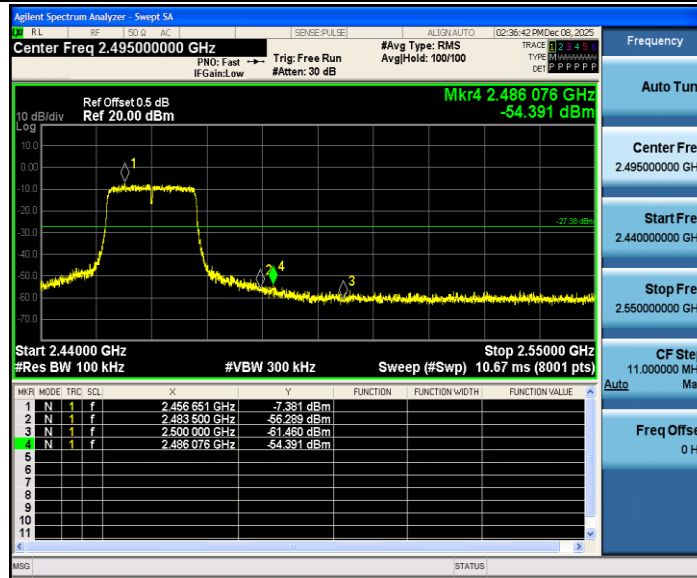
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

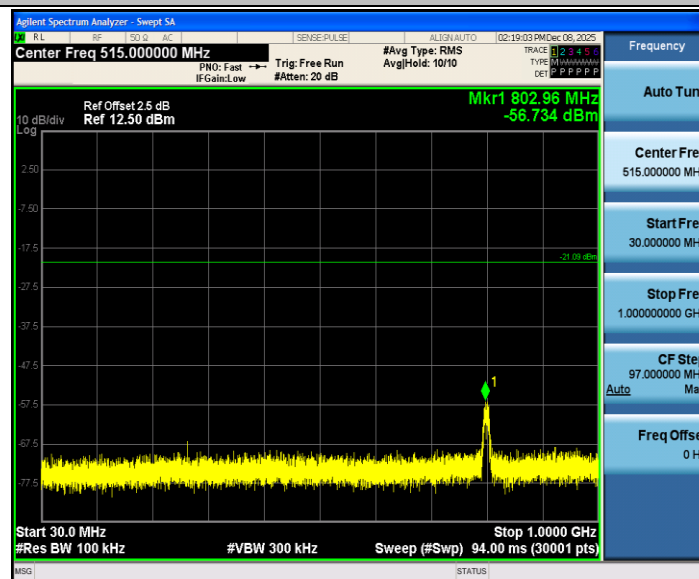
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-1.09	-1.09	---	PASS
			30~1000	-1.09	-56.73	≤-21.09	PASS
			1000~26500	-1.09	-44.38	≤-21.09	PASS
		2437	Reference	0.56	0.56	---	PASS
			30~1000	0.56	-55.22	≤-19.44	PASS
			1000~26500	0.56	-44.97	≤-19.44	PASS
		2462	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-55.63	≤-21.19	PASS
			1000~26500	-1.19	-45.52	≤-21.19	PASS
11G	Ant1	2412	Reference	-8.52	-8.52	---	PASS
			30~1000	-8.52	-59.26	≤-28.52	PASS
			1000~26500	-8.52	-43.88	≤-28.52	PASS
		2437	Reference	-7.64	-7.64	---	PASS
			30~1000	-7.64	-60.49	≤-27.64	PASS
			1000~26500	-7.64	-44.5	≤-27.64	PASS
		2462	Reference	-7.80	-7.80	---	PASS
			30~1000	-7.80	-59.48	≤-27.8	PASS
			1000~26500	-7.80	-45.04	≤-27.8	PASS
11N20SISO	Ant1	2412	Reference	-8.72	-8.72	---	PASS
			30~1000	-8.72	-60.53	≤-28.72	PASS
			1000~26500	-8.72	-44.02	≤-28.72	PASS
		2437	Reference	-7.83	-7.83	---	PASS
			30~1000	-7.83	-60.5	≤-27.83	PASS
			1000~26500	-7.83	-44.32	≤-27.83	PASS
		2462	Reference	-8.28	-8.28	---	PASS
			30~1000	-8.28	-59.98	≤-28.28	PASS
			1000~26500	-8.28	-44.79	≤-28.28	PASS

Test Graphs

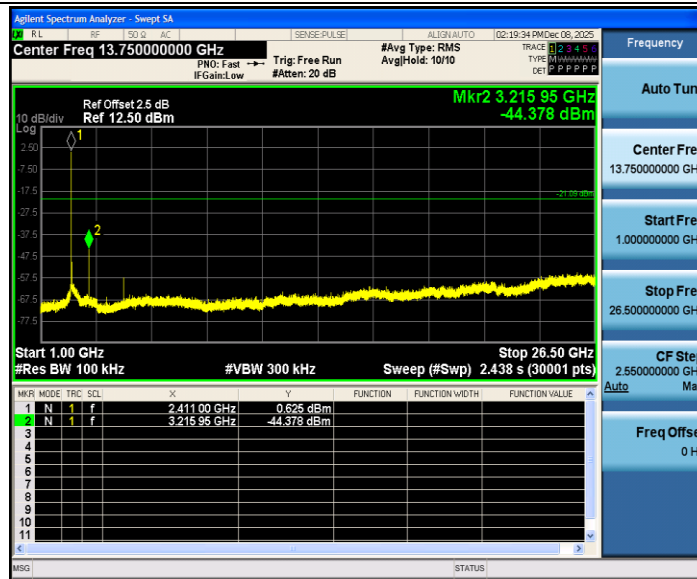
11B_Ant1_2412_0~Reference



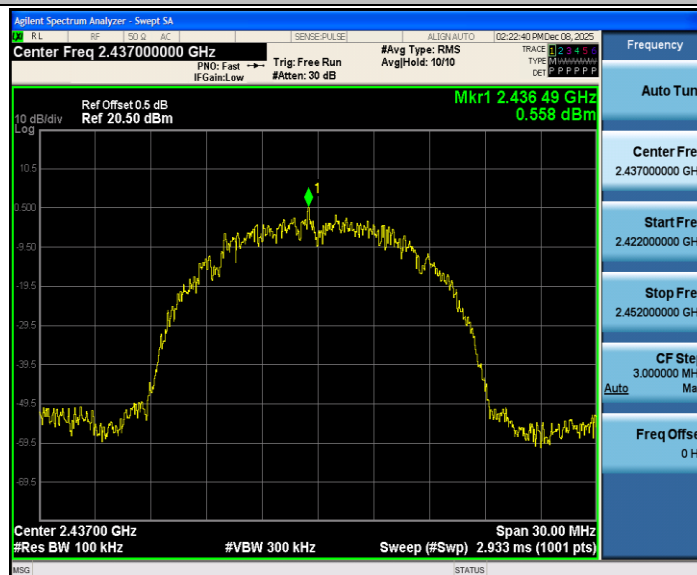
11B_Ant1_2412_30~1000



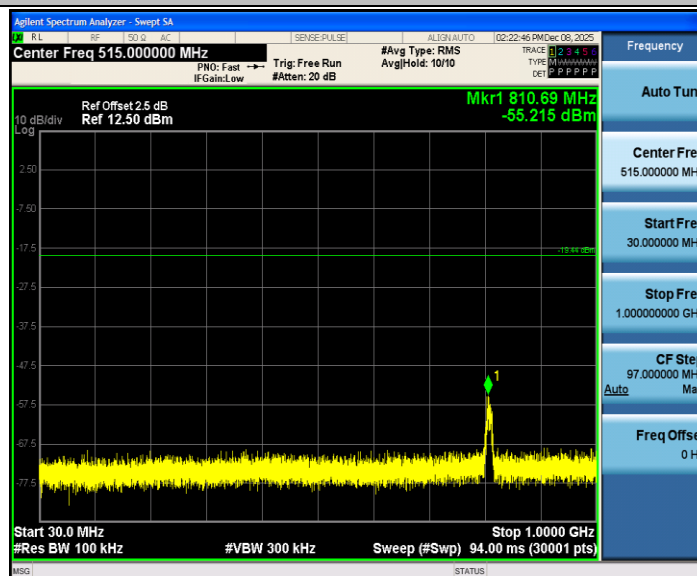
11B_Ant1_2412_1000~26500



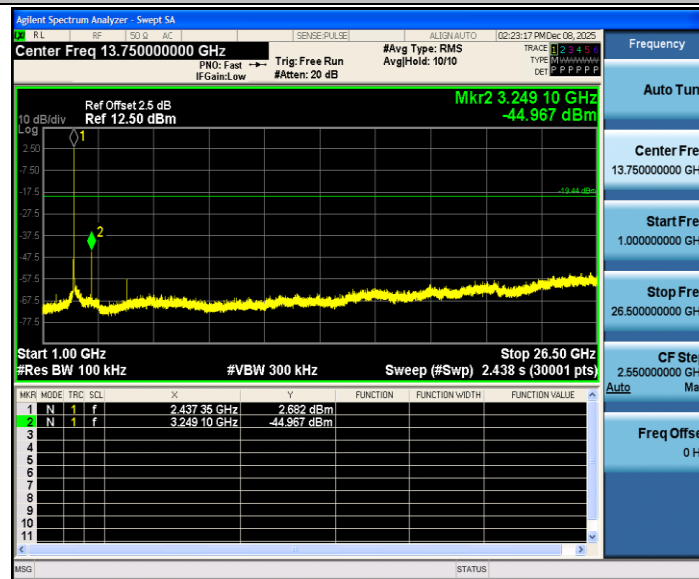
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



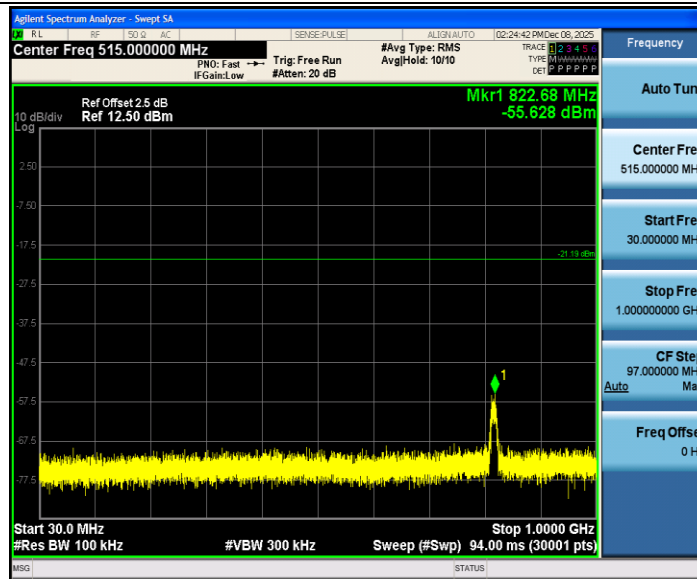
11B_Ant1_2437_1000~26500



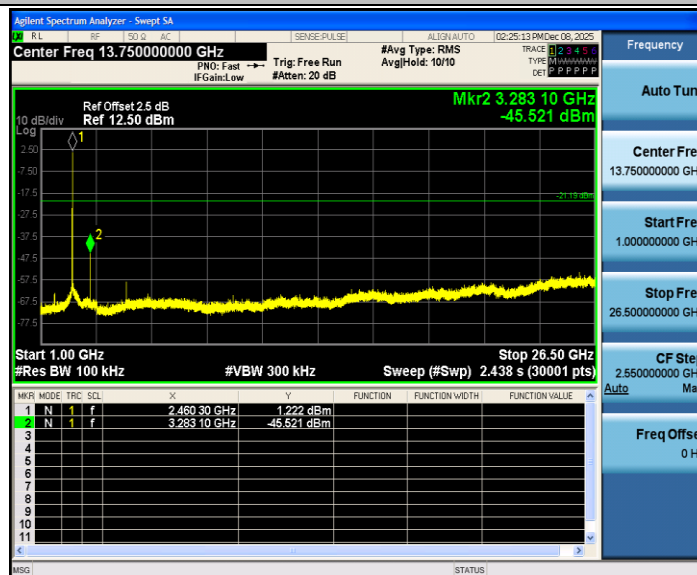
11B_Ant1_2462_0~Reference



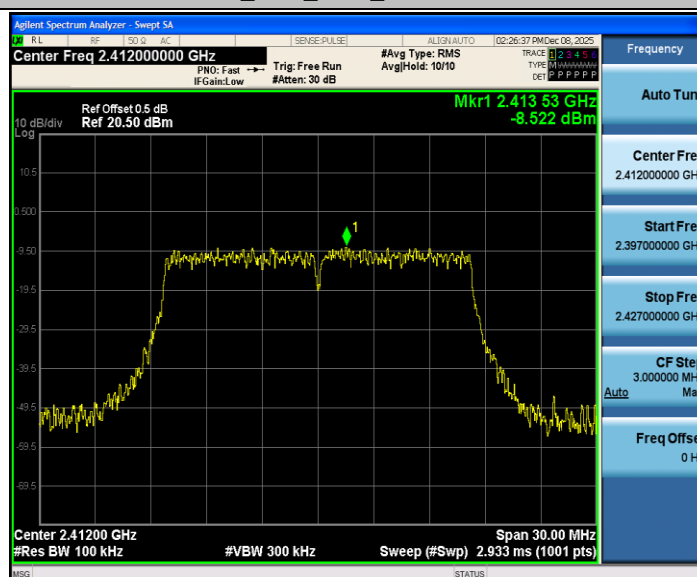
11B_Ant1_2462_30~1000



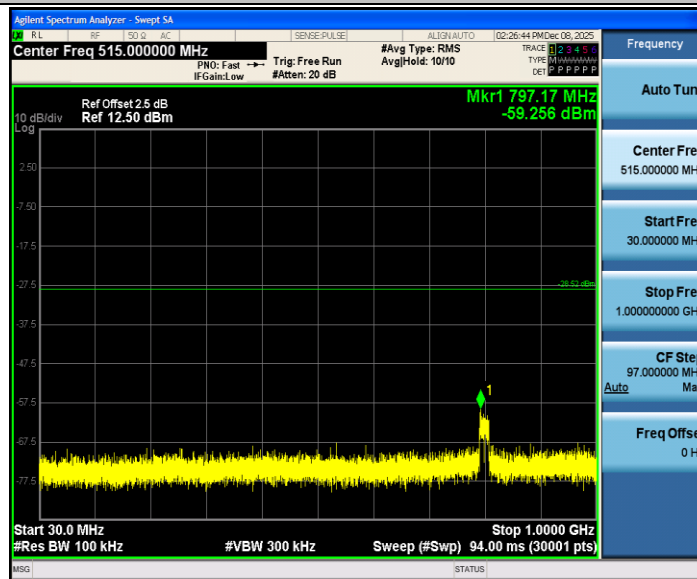
11B_Ant1_2462_1000~26500



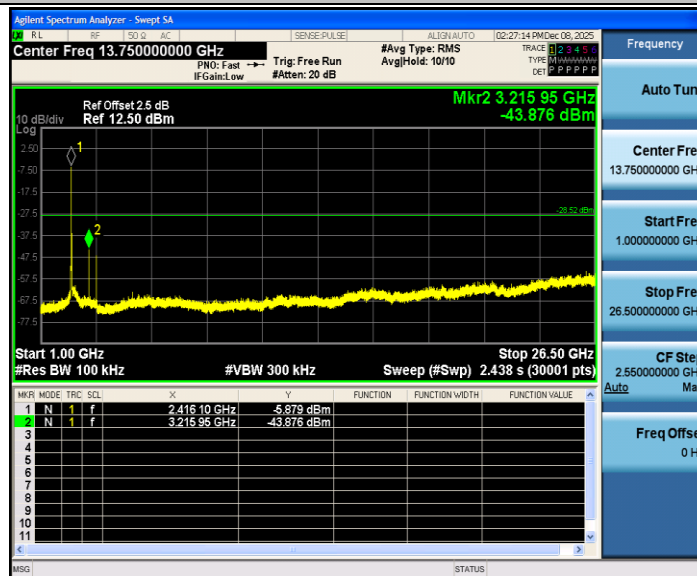
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



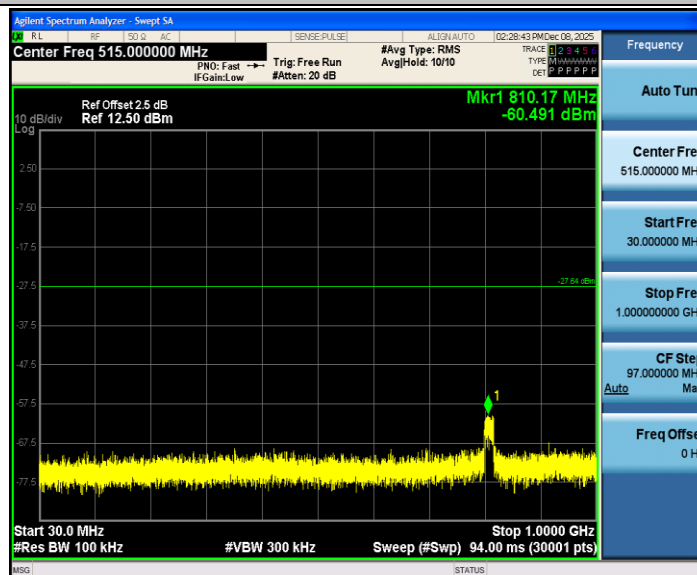
11G_Ant1_2412_1000~26500



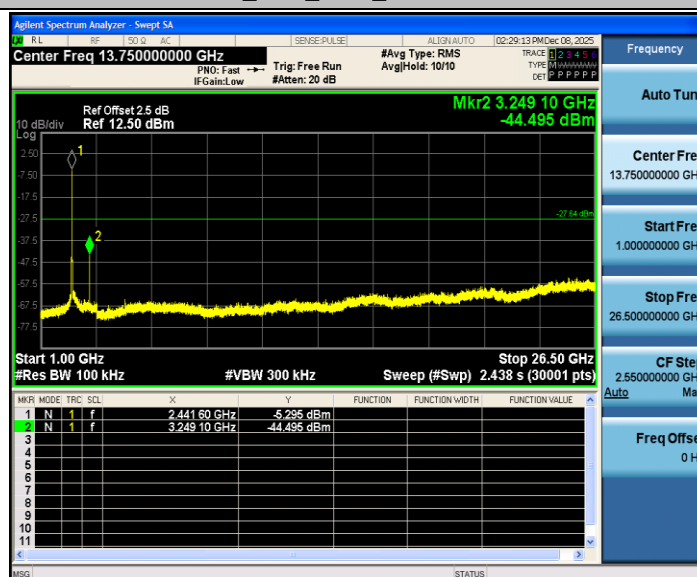
11G_Ant1_2437_0~Reference



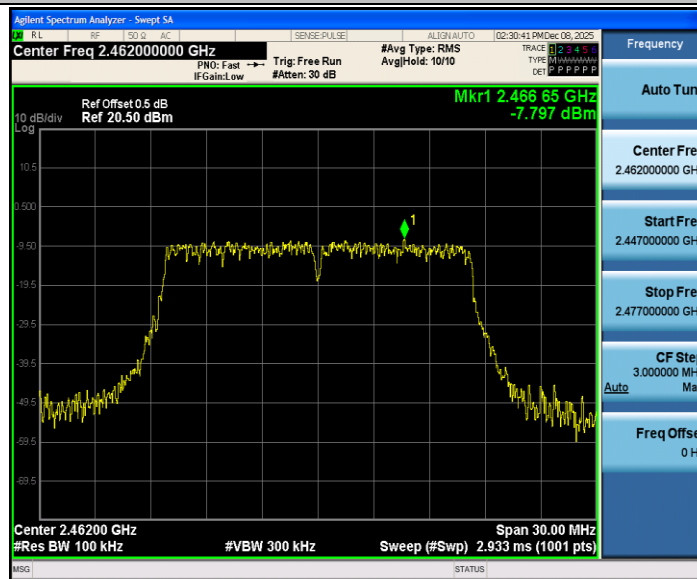
11G_Ant1_2437_30~1000



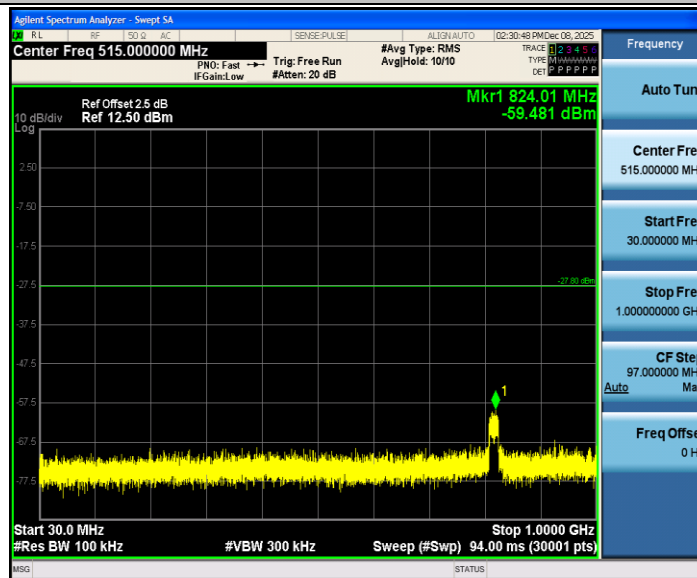
11G_Ant1_2437_1000~26500



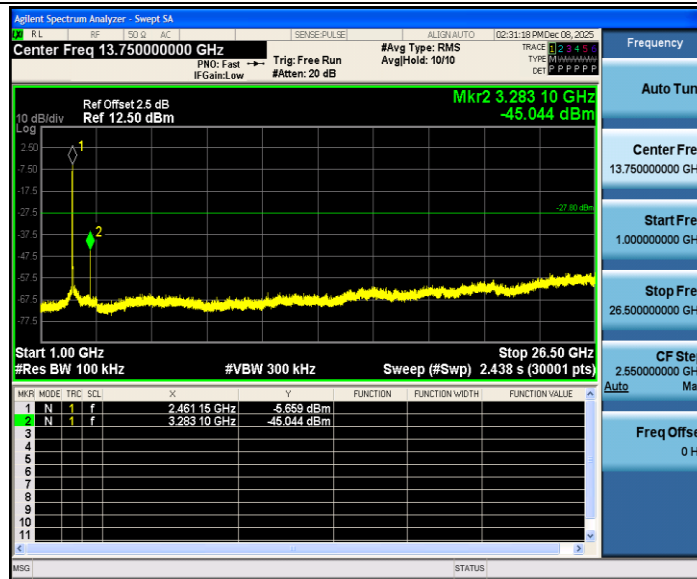
11G_Ant1_2462_0~Reference



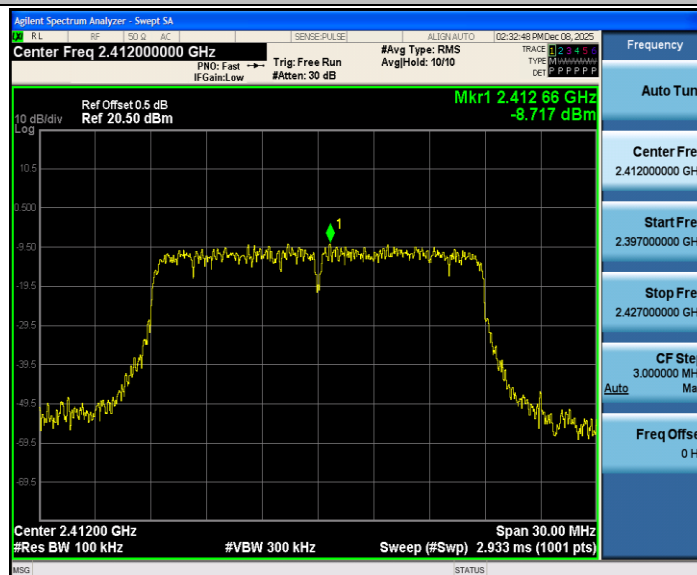
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

