

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BO32-KYX-0035

Company : Shenzhen Kaiyixing Electronics Co., Ltd.

EUT : WIFI wall clock

Model Number : KYX-0035

Report No. : CTA26010400201

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	2406.960	2417.160	0.5	PASS
		2437	10.200	2431.960	2442.160	0.5	PASS
		2462	10.200	2456.960	2467.160	0.5	PASS
11G	Ant1	2412	15.760	2404.120	2419.880	0.5	PASS
		2437	15.960	2429.040	2445.000	0.5	PASS
		2462	15.880	2454.120	2470.000	0.5	PASS
11N20SISO	Ant1	2412	16.920	2403.720	2420.640	0.5	PASS
		2437	16.520	2429.080	2445.600	0.5	PASS
		2462	16.960	2453.680	2470.640	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



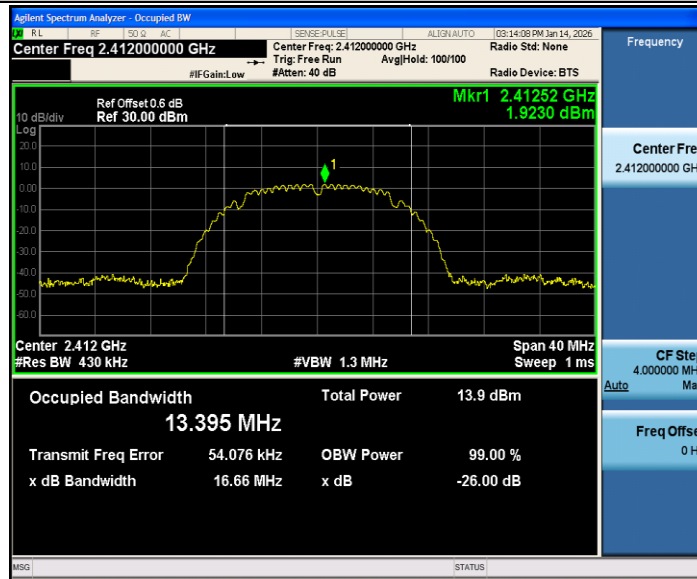
Appendix B: Occupied Channel Bandwidth

Test Result

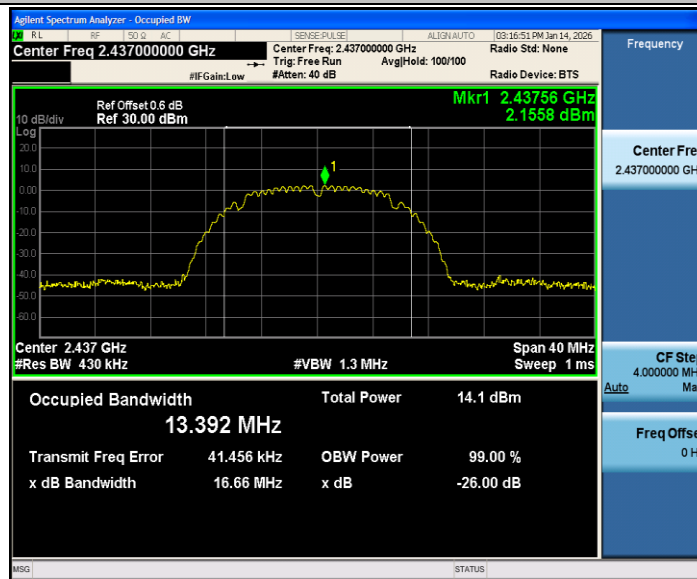
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.395	2405.3566	2418.7516	---	---
		2437	13.392	2430.3455	2443.7375	---	---
		2462	13.399	2455.3263	2468.7253	---	---
11G	Ant1	2412	16.846	2403.5977	2420.4437	---	---
		2437	16.886	2428.5873	2445.4733	---	---
		2462	16.774	2453.6696	2470.4436	---	---
11N20SISO	Ant1	2412	17.889	2403.1042	2420.9932	---	---
		2437	17.892	2428.0974	2445.9894	---	---
		2462	17.888	2453.0828	2470.9708	---	---

Test Graphs

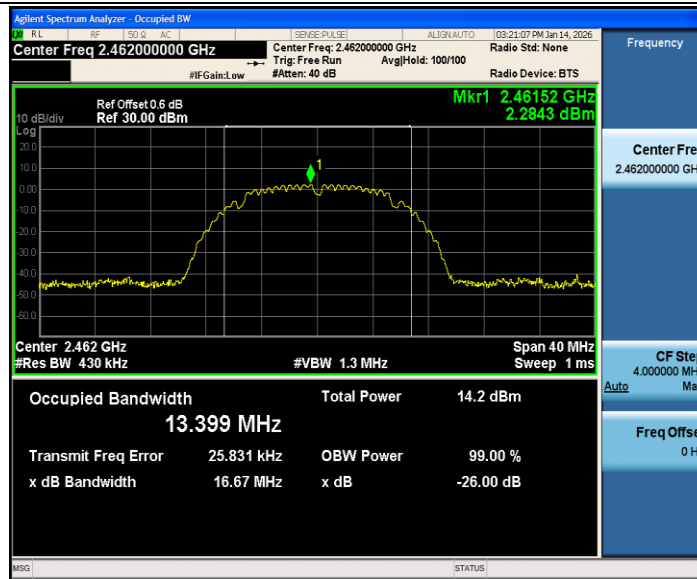
11B_Ant1_2412



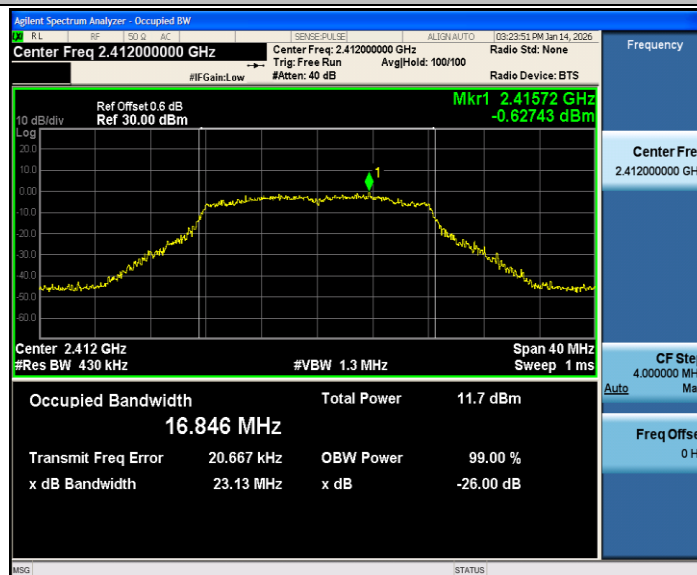
11B_Ant1_2437



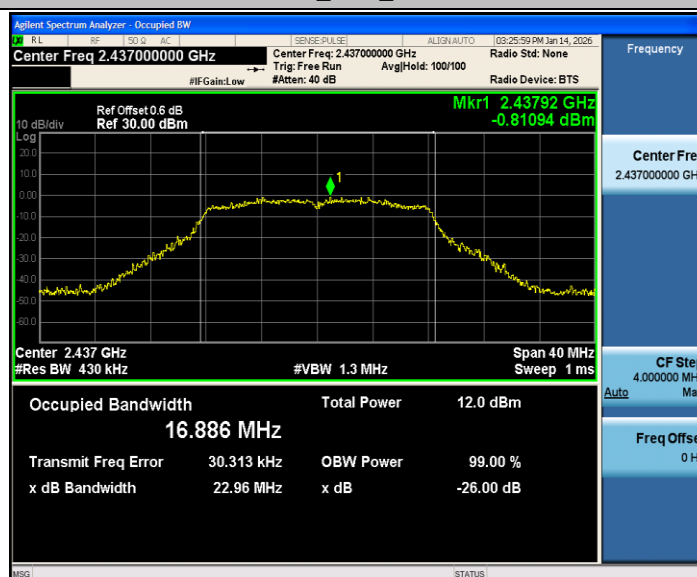
11B_Ant1_2462



11G_Ant1_2412



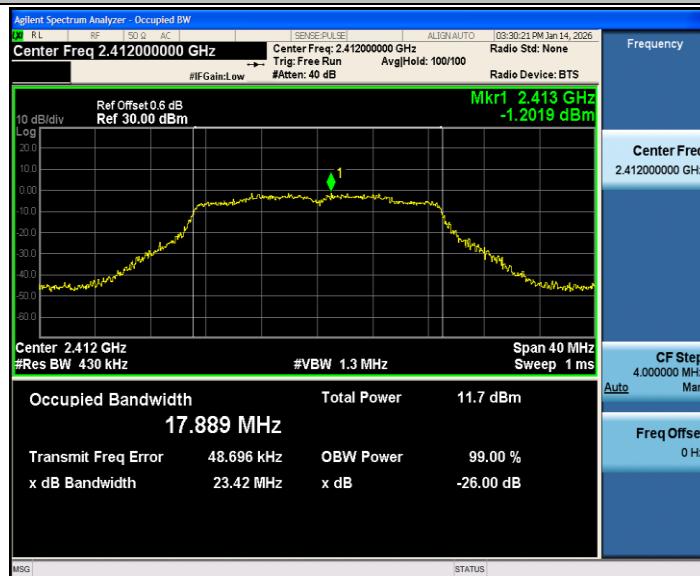
11G_Ant1_2437



11G_Ant1_2462



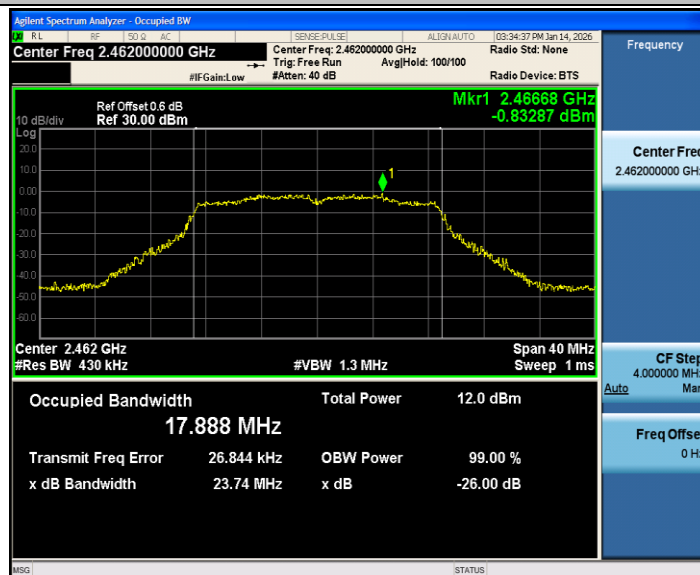
11N20SISO_Ant1_2412



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	13.59	≤30.00	PASS
		2437	13.81	≤30.00	PASS
		2462	13.99	≤30.00	PASS
11G	Ant1	2412	12.66	≤30.00	PASS
		2437	12.92	≤30.00	PASS
		2462	13.08	≤30.00	PASS
11N20SISO	Ant1	2412	12.66	≤30.00	PASS
		2437	12.73	≤30.00	PASS
		2462	12.96	≤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	-12.69	≤8.00	PASS
		2437	-12.45	≤8.00	PASS
		2462	-11.57	≤8.00	PASS
11G	Ant1	2412	-18.78	≤8.00	PASS
		2437	-19.33	≤8.00	PASS
		2462	-19.40	≤8.00	PASS
11N20SISO	Ant1	2412	-18.38	≤8.00	PASS
		2437	-18.79	≤8.00	PASS
		2462	-18.35	≤8.00	PASS

Test Graphs

11B_Ant1_2412



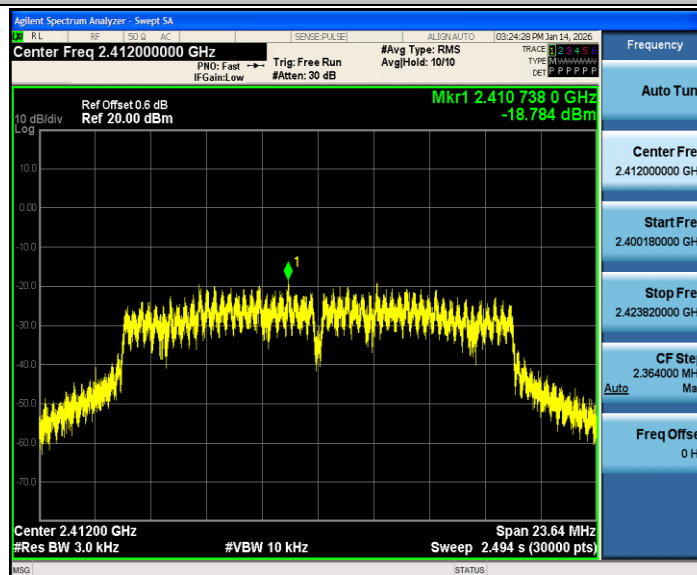
11B_Ant1_2437



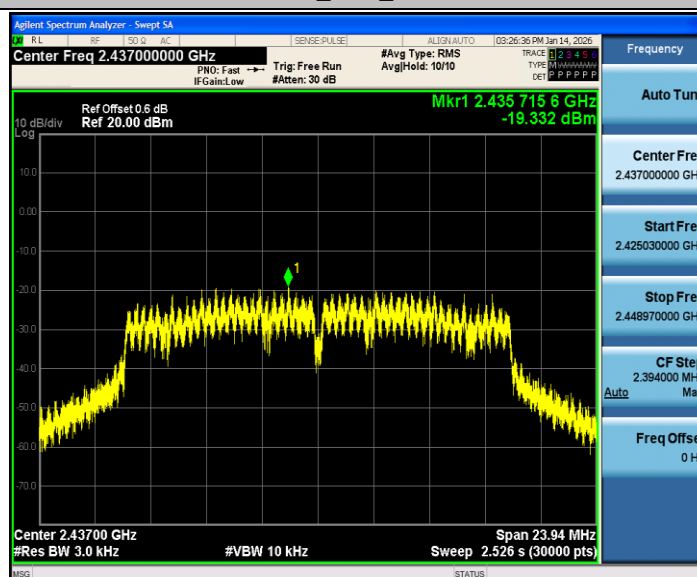
11B_Ant1_2462



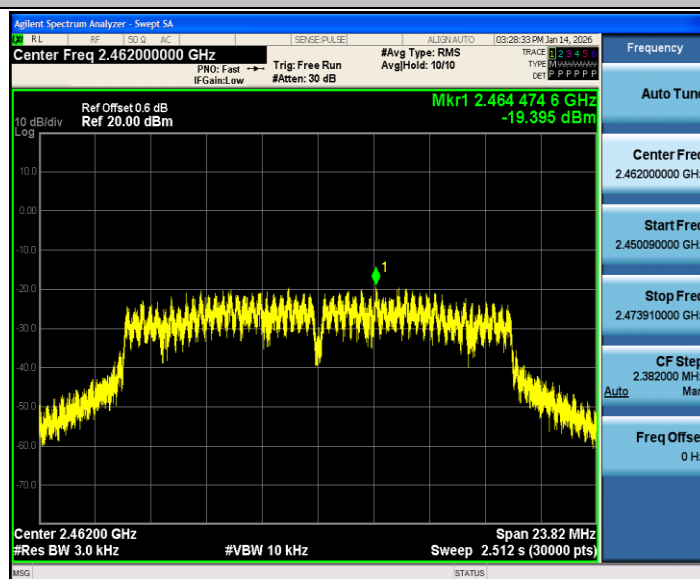
11G_Ant1_2412



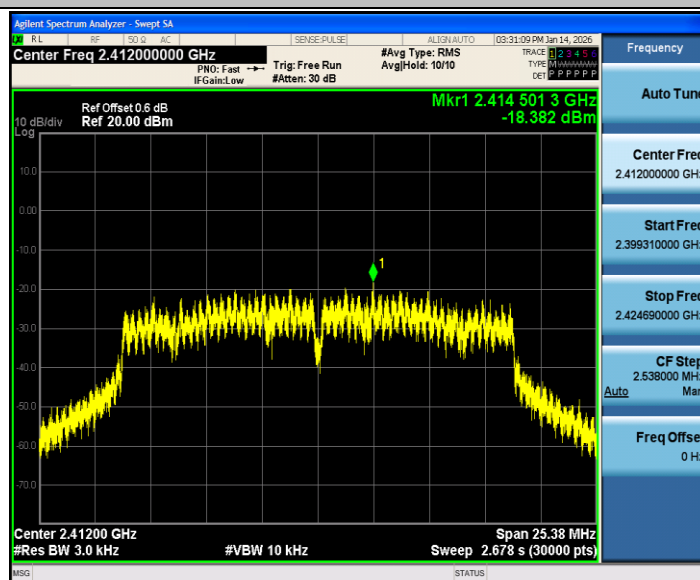
11G_Ant1_2437



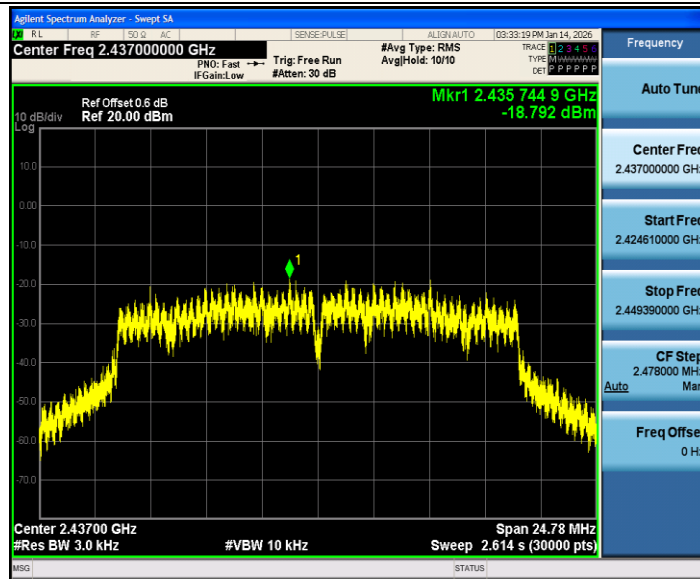
11G_Ant1_2462



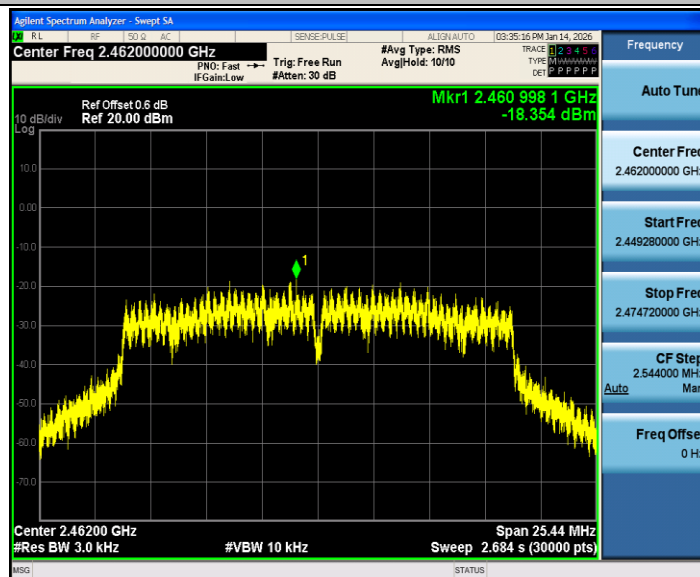
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



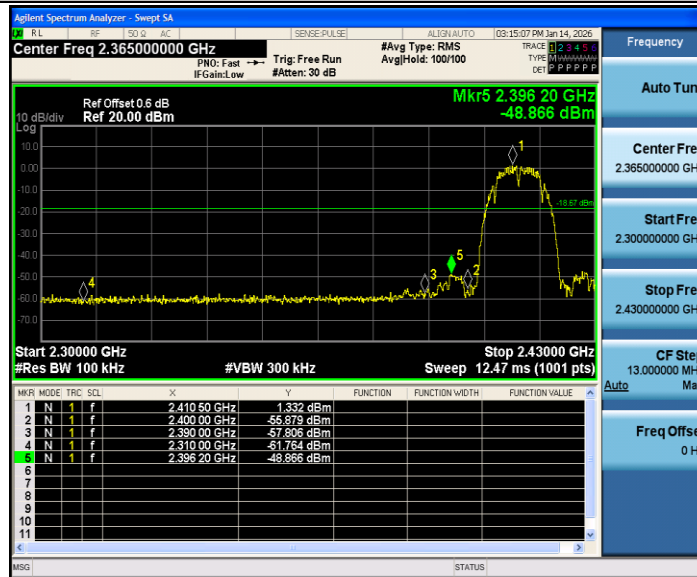
Appendix E: Band edge measurements

Test Result

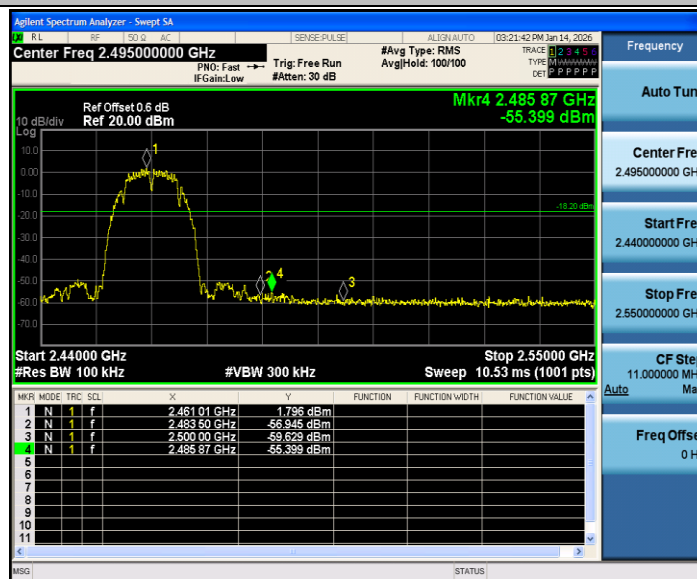
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.33	-48.87	≤-18.67	PASS
		High	2462	1.80	-55.4	≤-18.2	PASS
11G	Ant1	Low	2412	-3.69	-36.71	≤-23.69	PASS
		High	2462	-3.41	-56.79	≤-23.41	PASS
11N20SISO	Ant1	Low	2412	-3.68	-36.41	≤-23.68	PASS
		High	2462	-3.32	-56.95	≤-23.32	PASS

Test Graphs

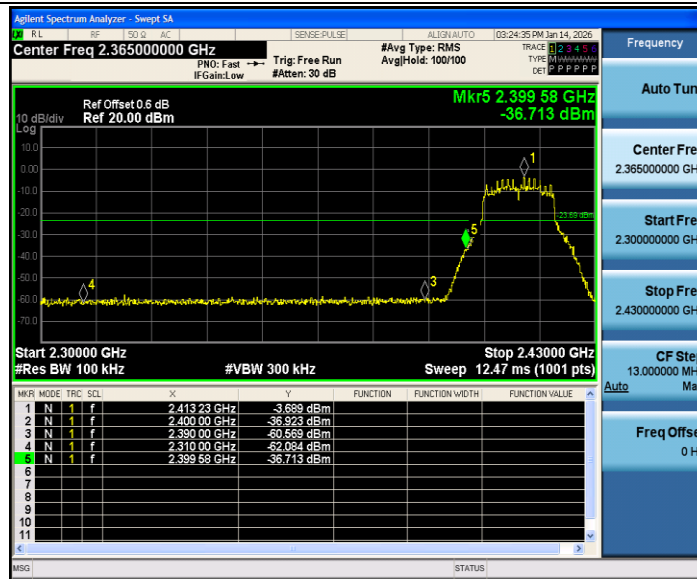
11B_Ant1_Low_2412



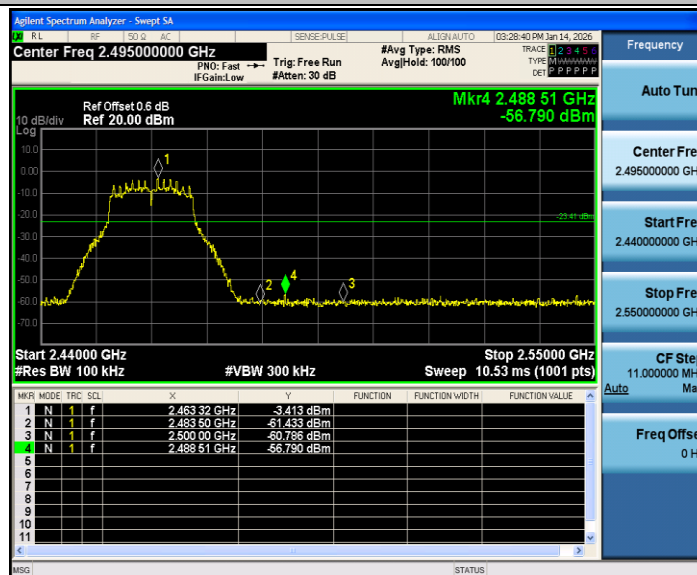
11B_Ant1_High_2462



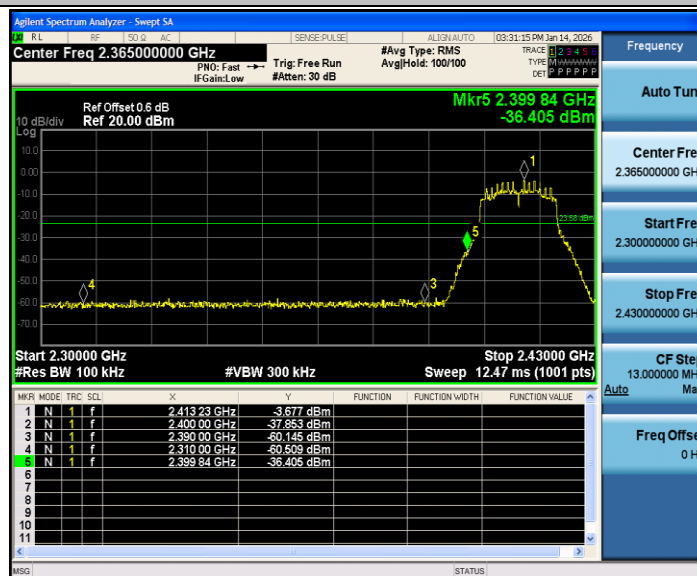
11G_Ant1_Low_2412



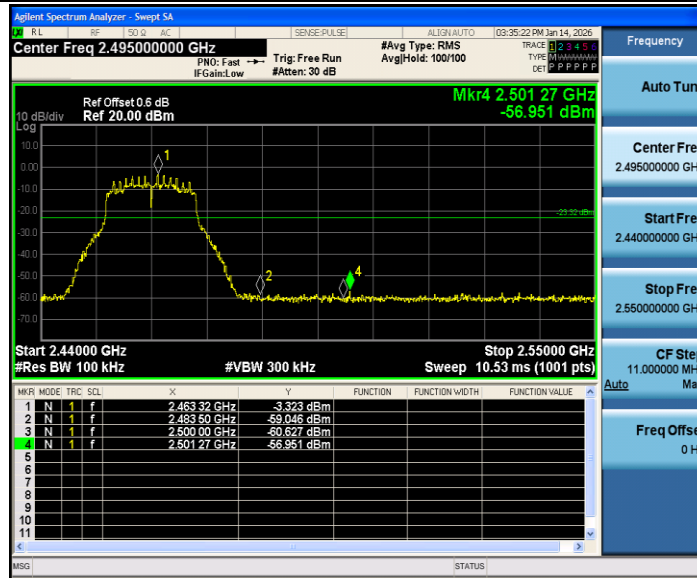
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

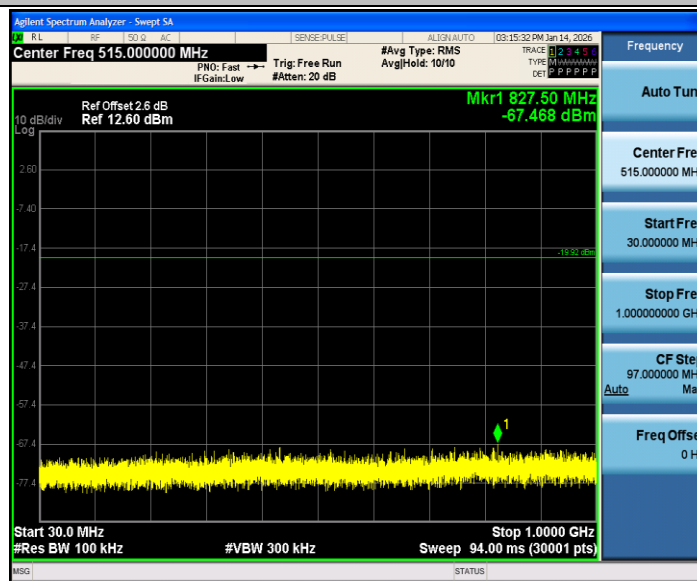
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.08	0.08	---	PASS
			30~1000	0.08	-67.47	≤-19.92	PASS
			1000~26500	0.08	-55.14	≤-19.92	PASS
		2437	Reference	0.92	0.92	---	PASS
			30~1000	0.92	-67.86	≤-19.08	PASS
			1000~26500	0.92	-55.17	≤-19.08	PASS
		2462	Reference	0.56	0.56	---	PASS
			30~1000	0.56	-66.9	≤-19.44	PASS
			1000~26500	0.56	-55.02	≤-19.44	PASS
11G	Ant1	2412	Reference	-4.25	-4.25	---	PASS
			30~1000	-4.25	-67.64	≤-24.25	PASS
			1000~26500	-4.25	-54.81	≤-24.25	PASS
		2437	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-67.88	≤-23.54	PASS
			1000~26500	-3.54	-54.54	≤-23.54	PASS
		2462	Reference	-4.18	-4.18	---	PASS
			30~1000	-4.18	-67.86	≤-24.18	PASS
			1000~26500	-4.18	-55.12	≤-24.18	PASS
11N20SISO	Ant1	2412	Reference	-4.39	-4.39	---	PASS
			30~1000	-4.39	-68.06	≤-24.39	PASS
			1000~26500	-4.39	-55.24	≤-24.39	PASS
		2437	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-67.44	≤-23.87	PASS
			1000~26500	-3.87	-55.22	≤-23.87	PASS
		2462	Reference	-3.86	-3.86	---	PASS
			30~1000	-3.86	-67.67	≤-23.86	PASS
			1000~26500	-3.86	-54.66	≤-23.86	PASS

Test Graphs

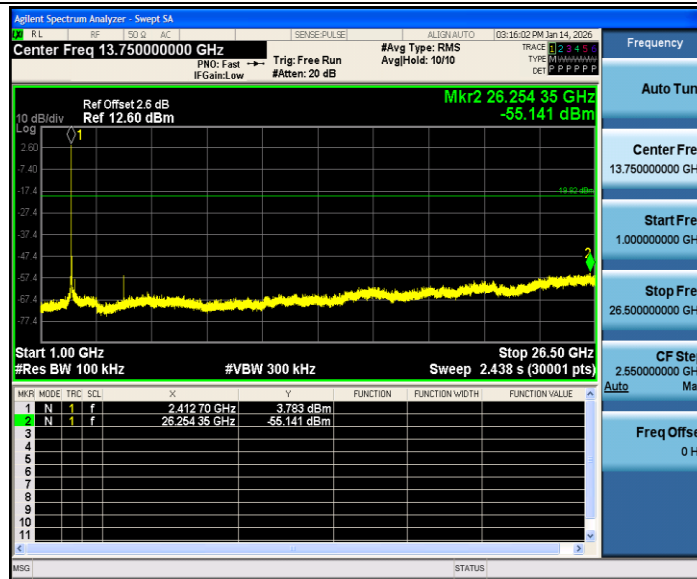
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



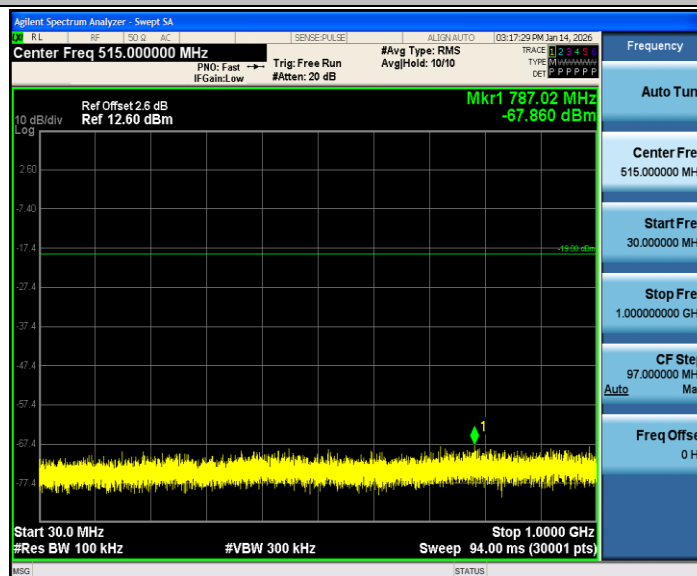
11B_Ant1_2412_1000~26500



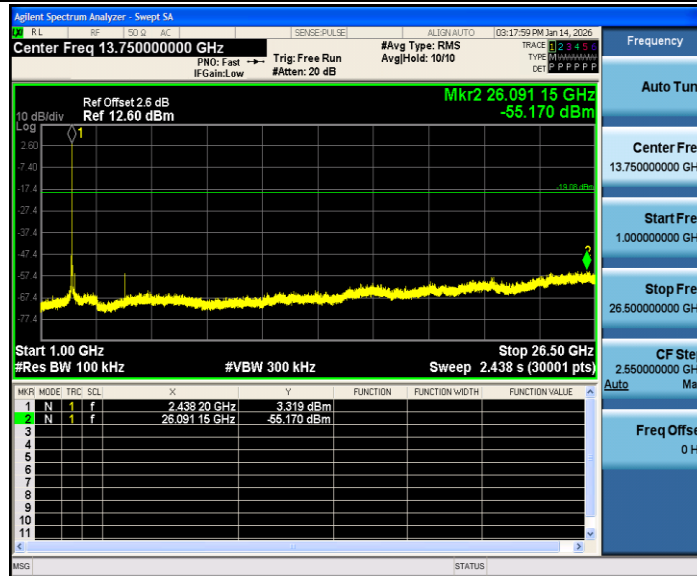
11B_Ant1_2437_0~Reference



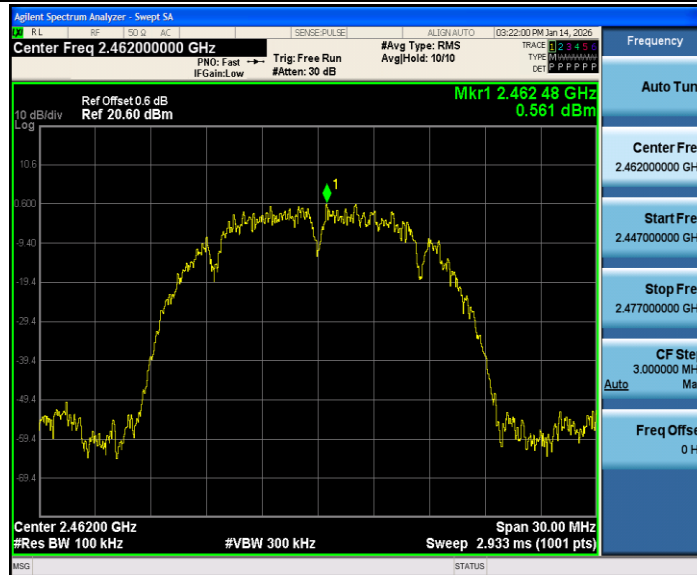
11B_Ant1_2437_30~1000



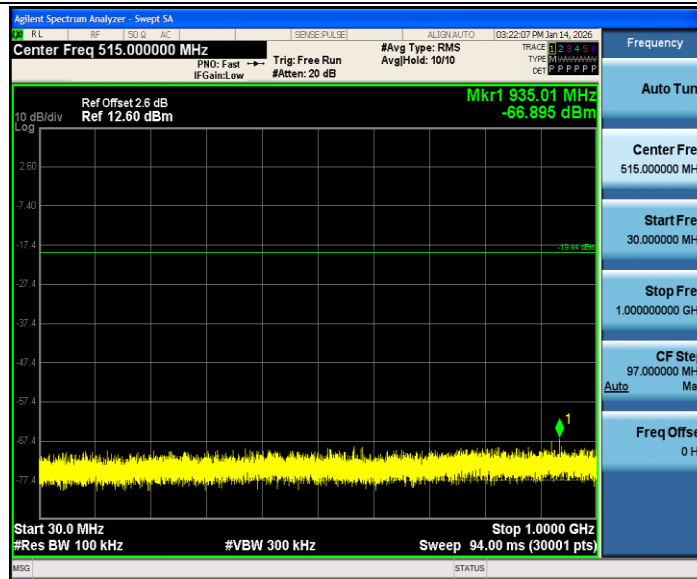
11B_Ant1_2437_1000~26500



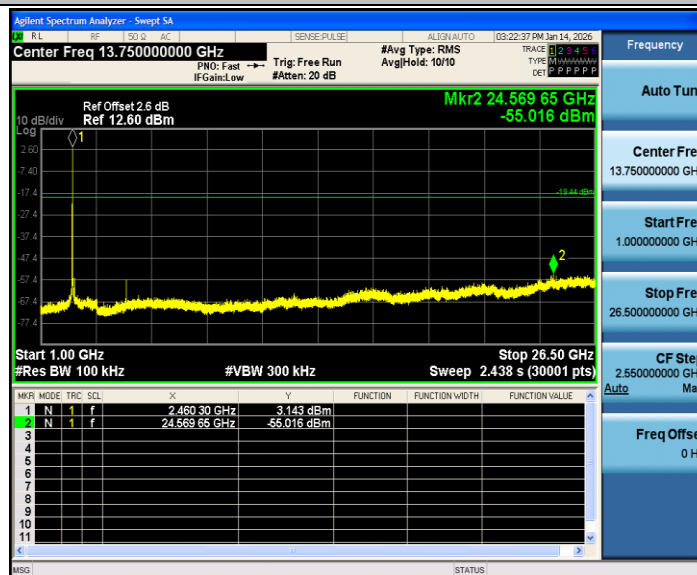
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



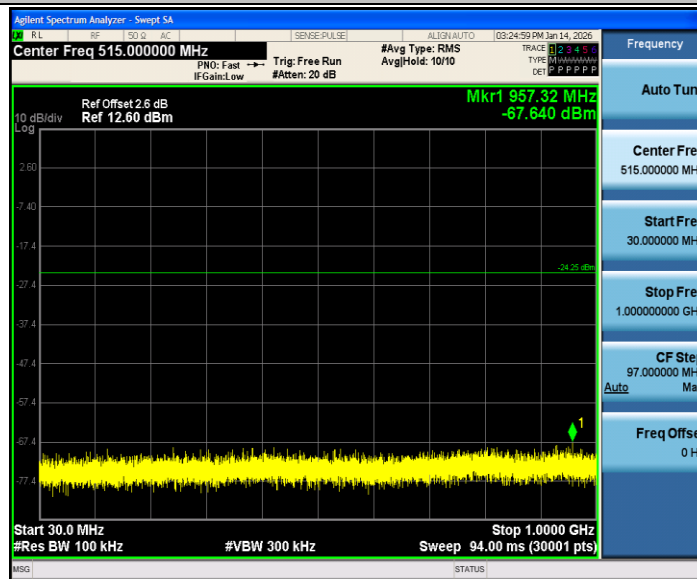
11B_Ant1_2462_1000~26500



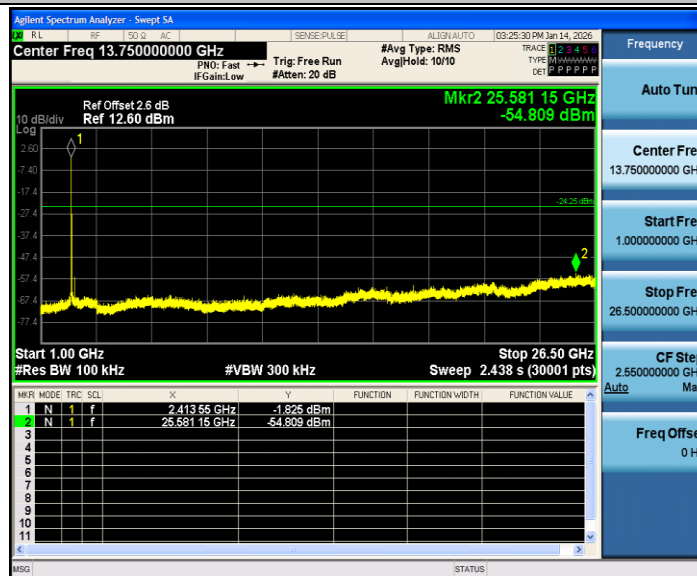
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



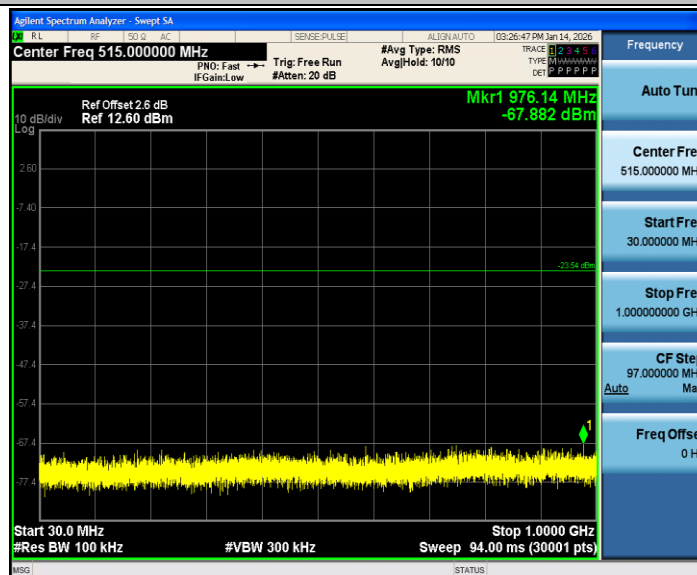
11G_Ant1_2412_1000~26500



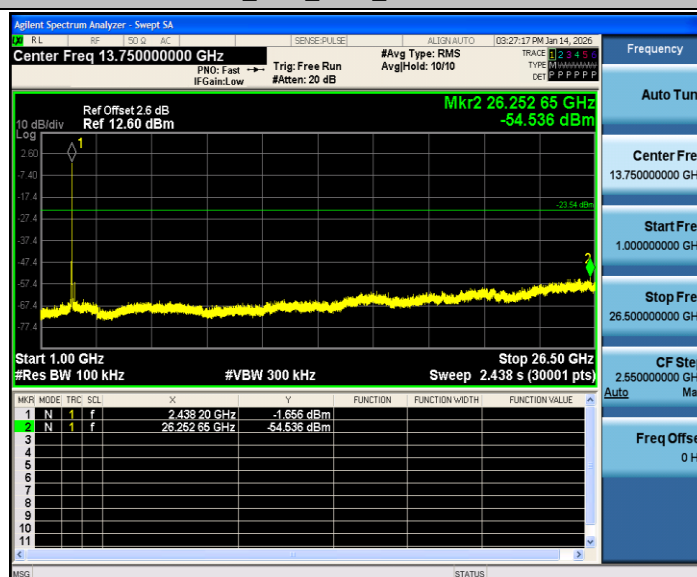
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



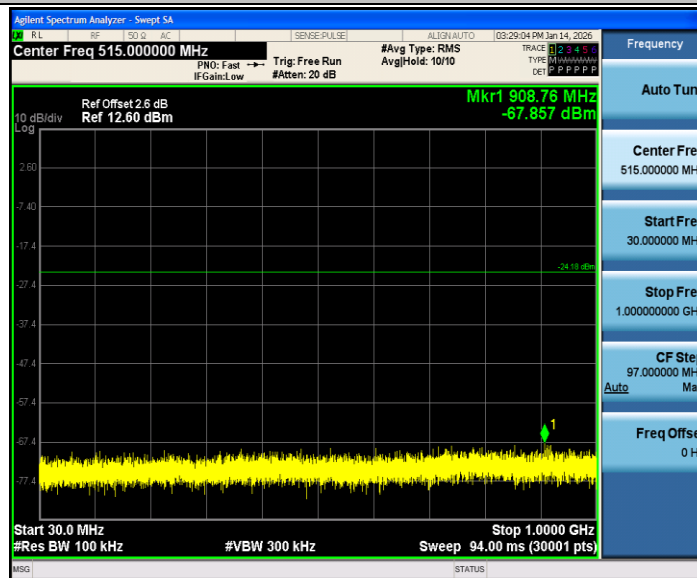
11G_Ant1_2437_1000~26500



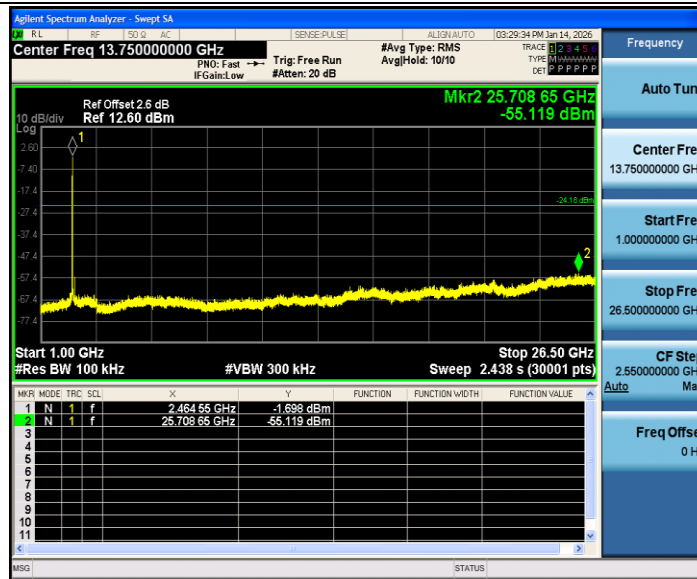
11G_Ant1_2462_0~Reference



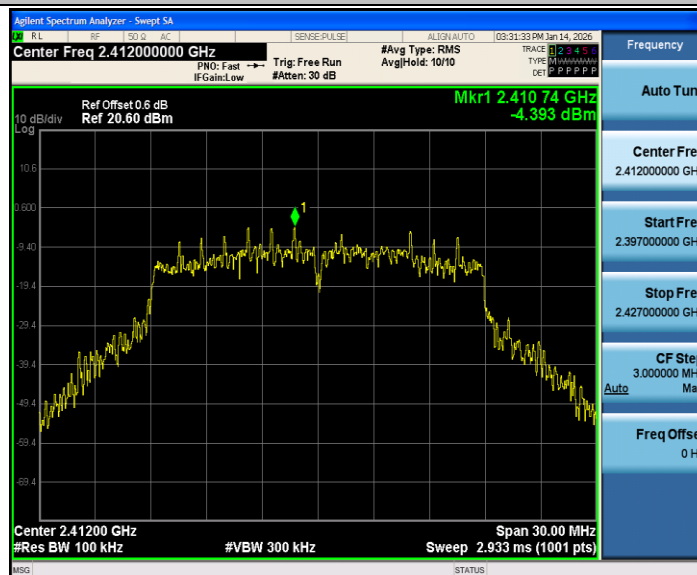
11G_Ant1_2462_30~1000



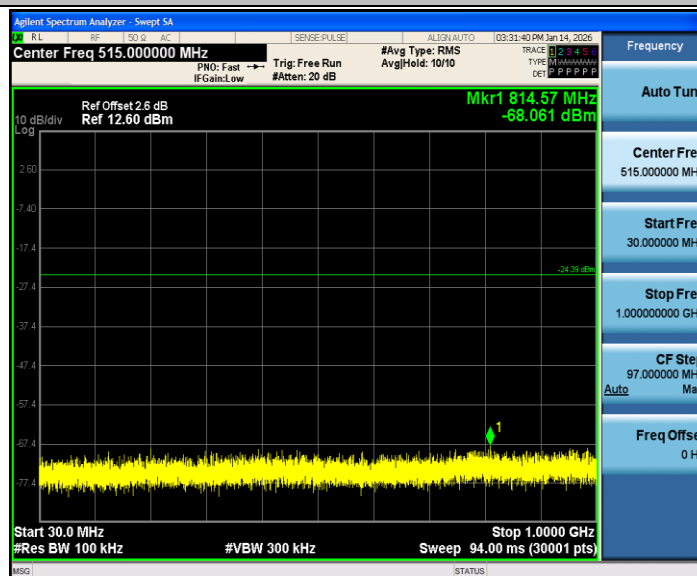
11G_Ant1_2462_1000~26500



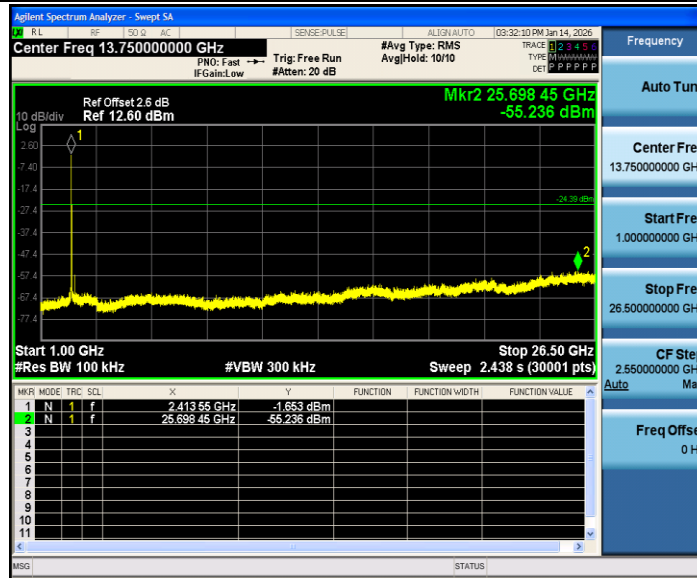
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



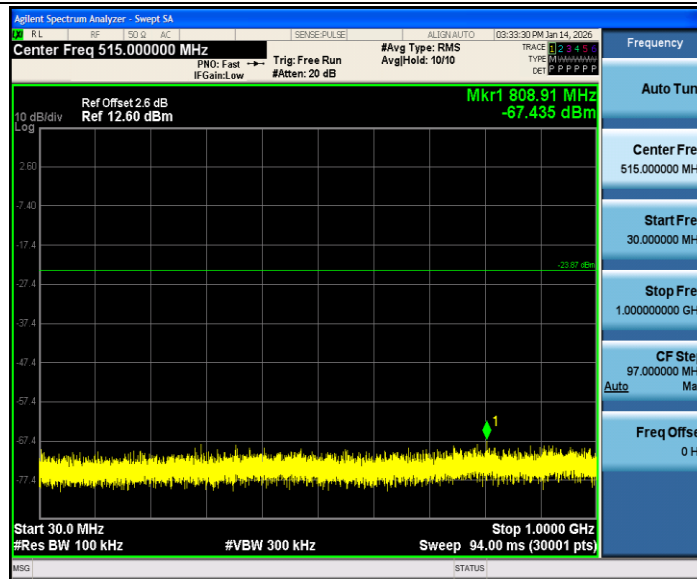
11N20SISO_Ant1_2412_1000~26500



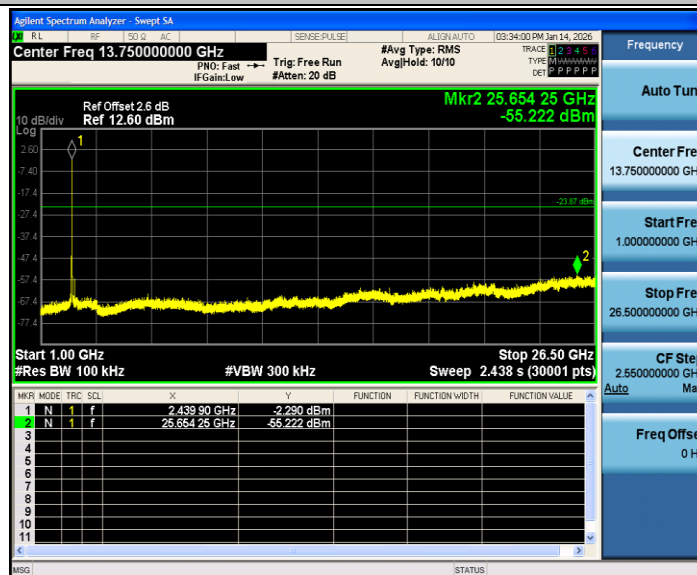
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



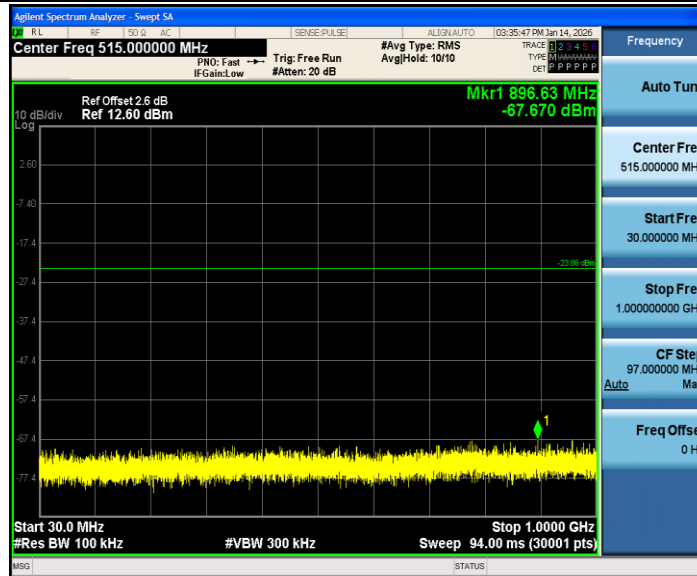
11N20SISO_Ant1_2437_1000~26500



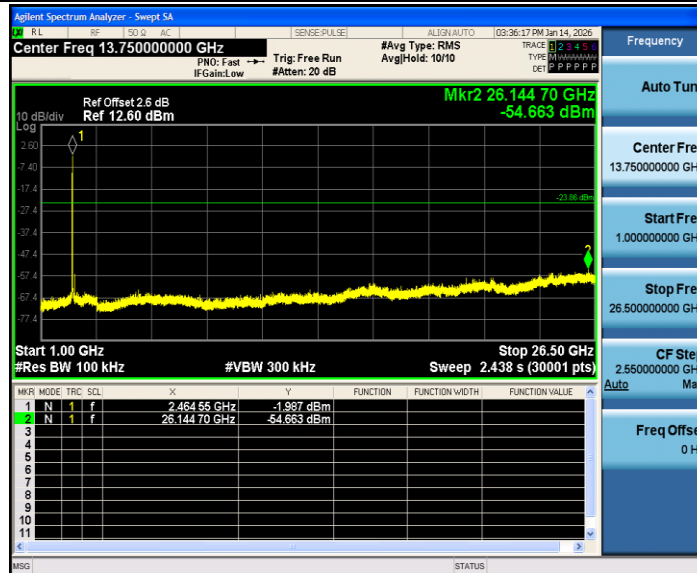
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



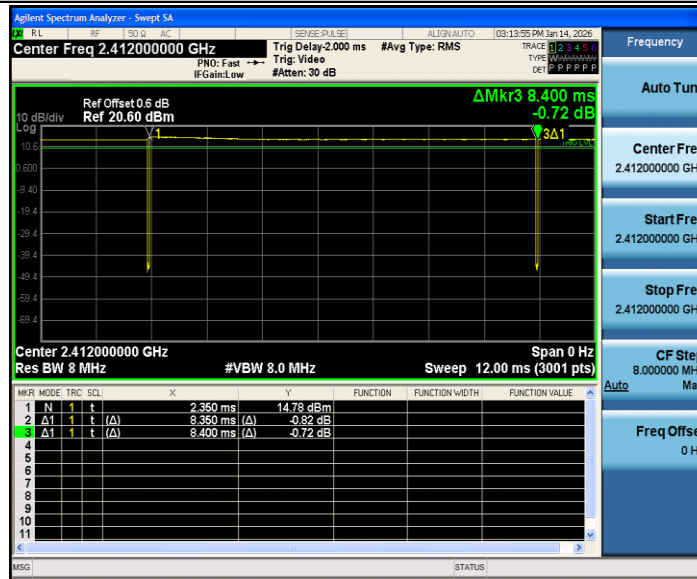
Appendix G: Duty Cycle

Test Result

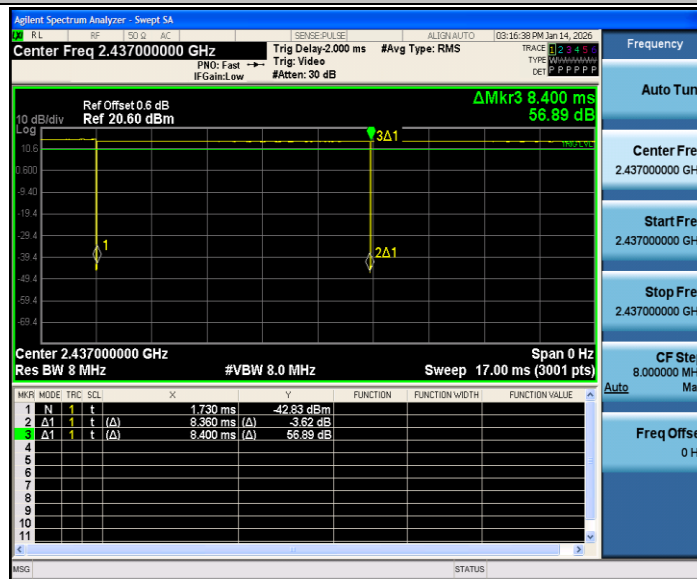
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	T Factor [dB]
11B	Ant1	2412	8.35	8.40	99.40	0.03	0.12
		2437	8.36	8.40	99.52	0.02	0.12
		2462	8.35	8.40	99.40	0.03	0.12
11G	Ant1	2412	0.15	0.20	75.00	1.25	6.67
		2437	0.15	0.20	75.00	1.25	6.67
		2462	0.15	0.20	75.00	1.25	6.67
11N20SISO	Ant1	2412	0.18	0.23	78.26	1.06	5.56
		2437	0.17	0.22	77.27	1.12	5.88
		2462	0.18	0.23	78.26	1.06	5.56

Test Graphs

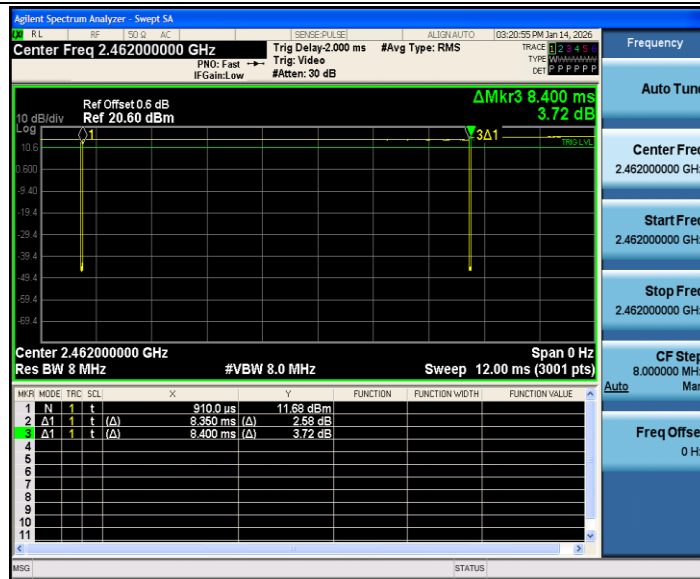
11B_Ant1_2412



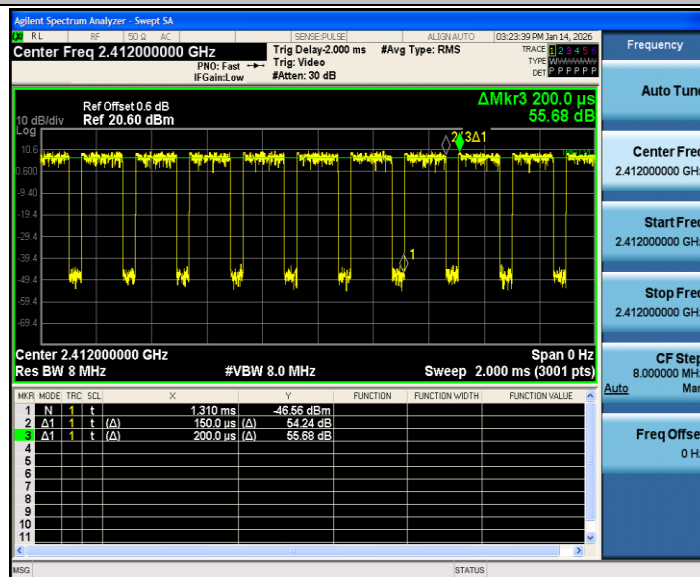
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437

