

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BWFP-DM40

Company : Shenzhen Liangxiang Technology Co., Ltd

EUT : thumb camera

Model Number : DM40

Report No. : CTA26081702101

Reviewed By : Eric Wang

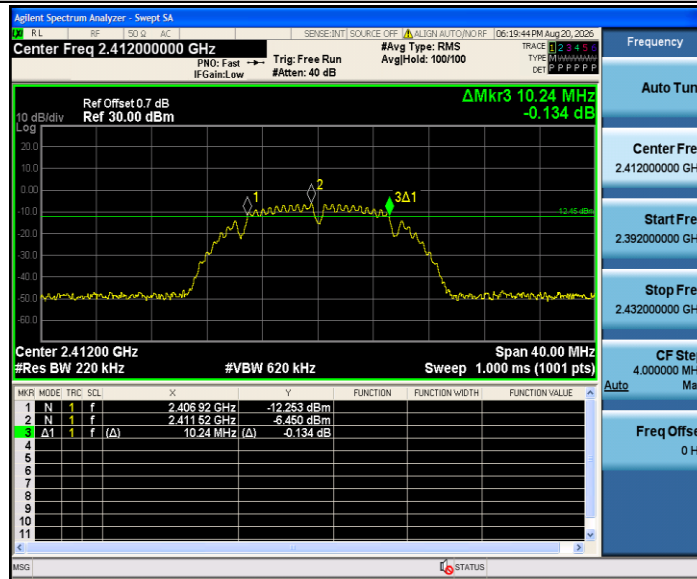
Appendix A: DTS Bandwidth

Test Result

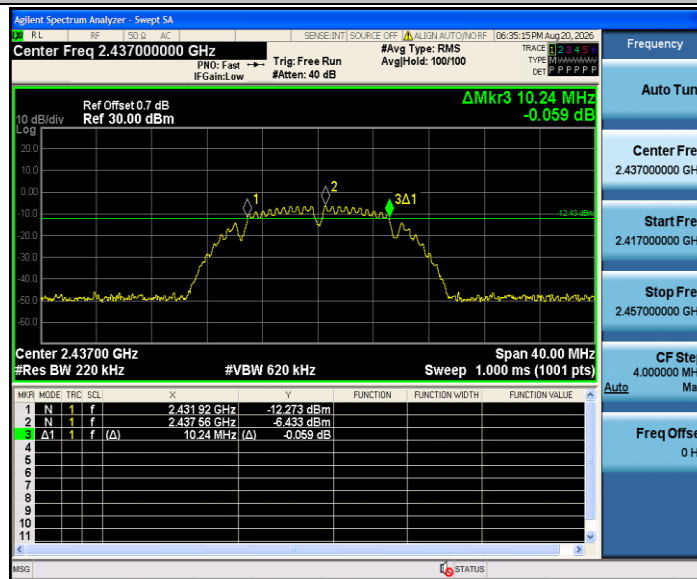
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.240	2406.920	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.240	2456.920	2467.160	0.5	PASS
11G	Ant1	2412	15.880	2403.960	2419.840	0.5	PASS
		2437	15.520	2429.240	2444.760	0.5	PASS
		2462	15.560	2454.440	2470.000	0.5	PASS
11N20SISO	Ant1	2412	17.160	2403.480	2420.640	0.5	PASS
		2437	16.760	2428.680	2445.440	0.5	PASS
		2462	16.040	2454.160	2470.200	0.5	PASS

Test Graphs

11B_Ant1_2412



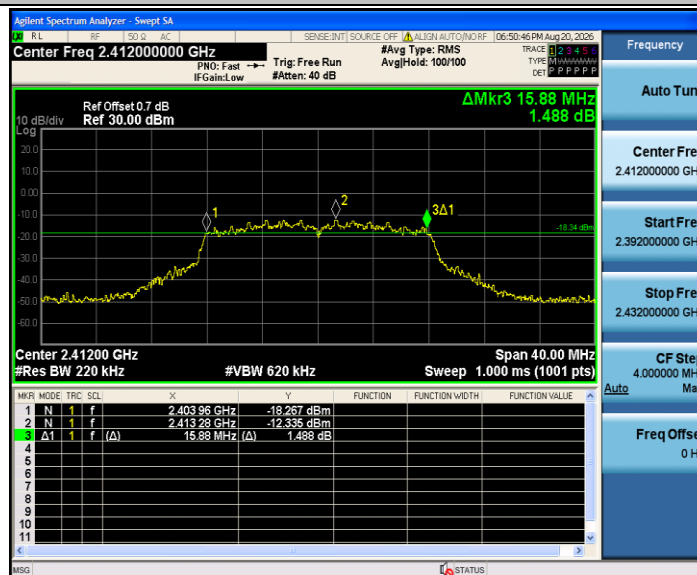
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



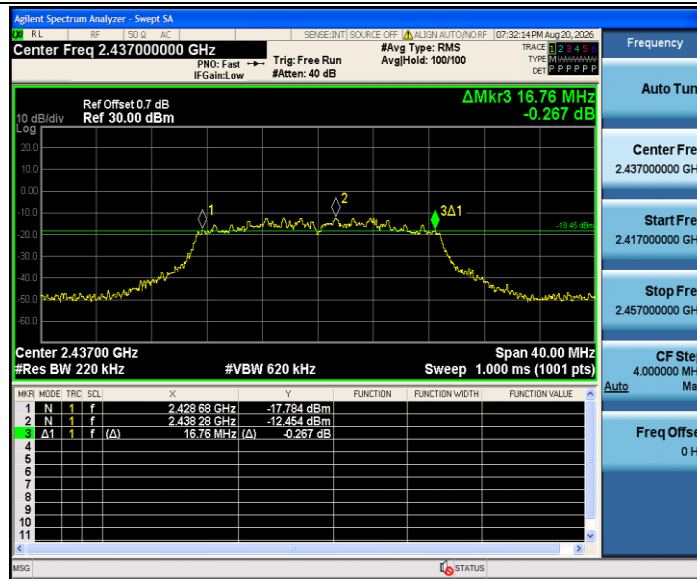
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



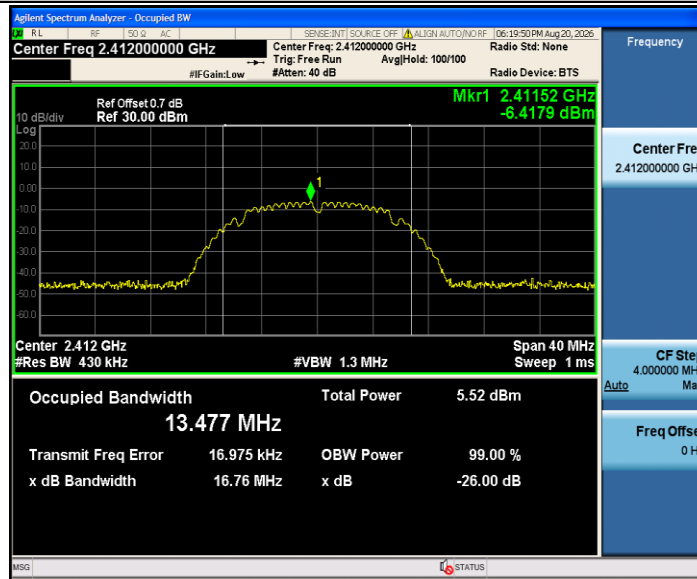
Appendix B: Occupied Channel Bandwidth

Test Result

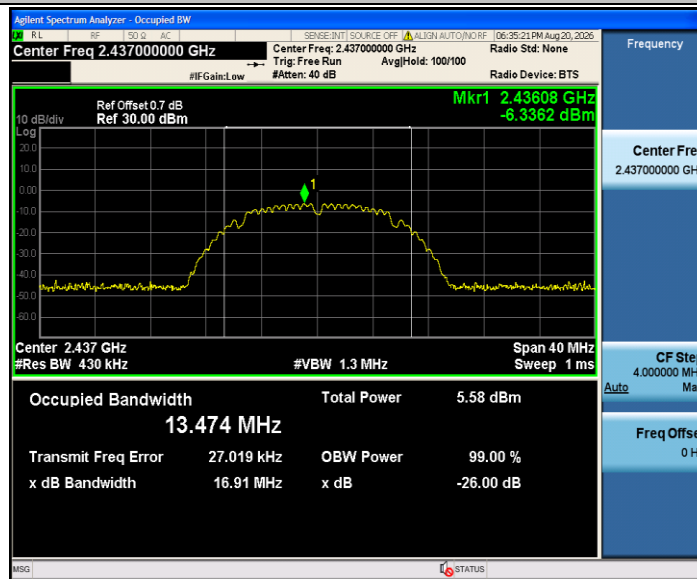
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.477	2405.2785	2418.7555	---	---
		2437	13.474	2430.2900	2443.7640	---	---
		2462	13.478	2455.2901	2468.7681	---	---
11G	Ant1	2412	16.896	2403.5870	2420.4830	---	---
		2437	16.899	2428.6146	2445.5136	---	---
		2462	16.850	2453.6079	2470.4579	---	---
11N20SISO	Ant1	2412	17.982	2403.0276	2421.0096	---	---
		2437	17.926	2428.0778	2446.0038	---	---
		2462	17.897	2453.0931	2470.9901	---	---

Test Graphs

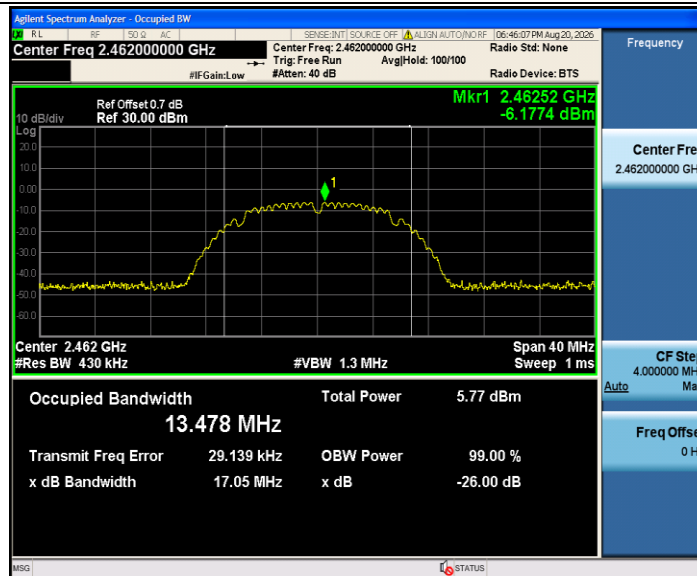
11B_Ant1_2412



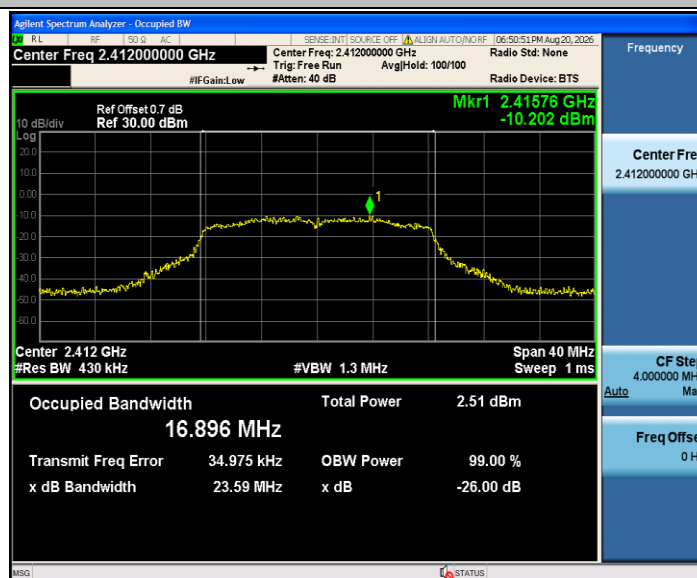
11B_Ant1_2437



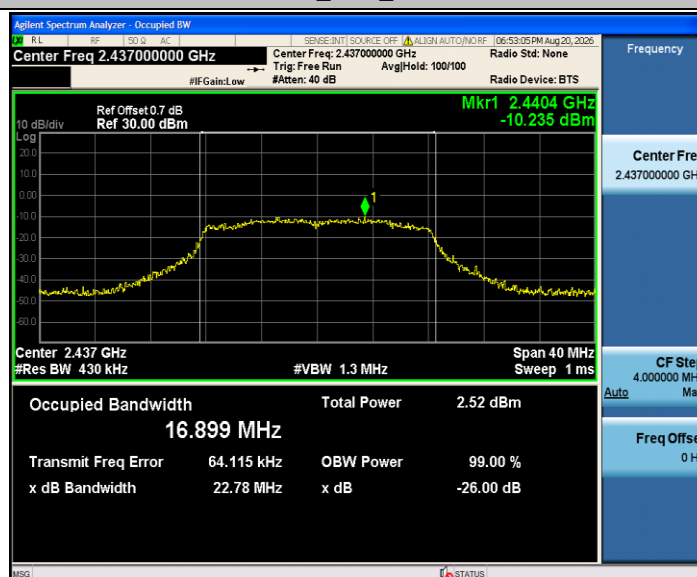
11B_Ant1_2462



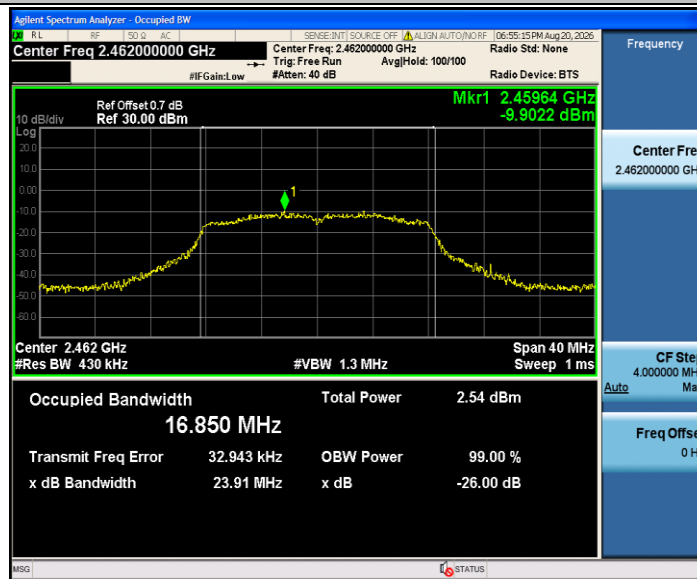
11G_Ant1_2412



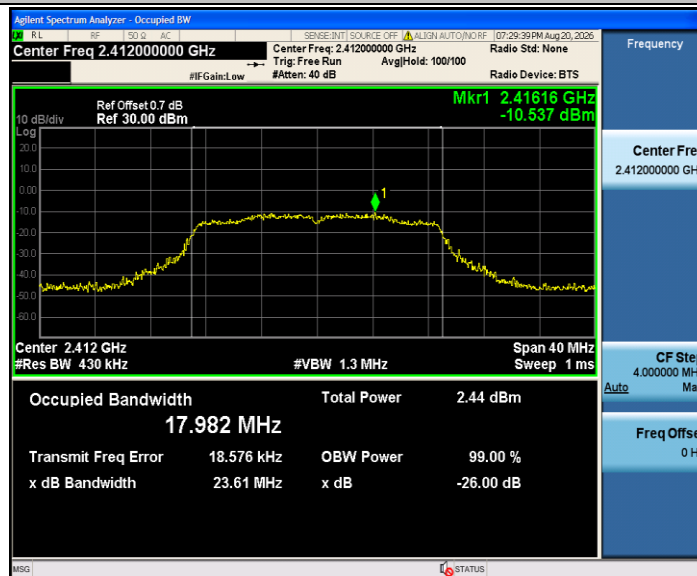
11G_Ant1_2437



11G_Ant1_2462



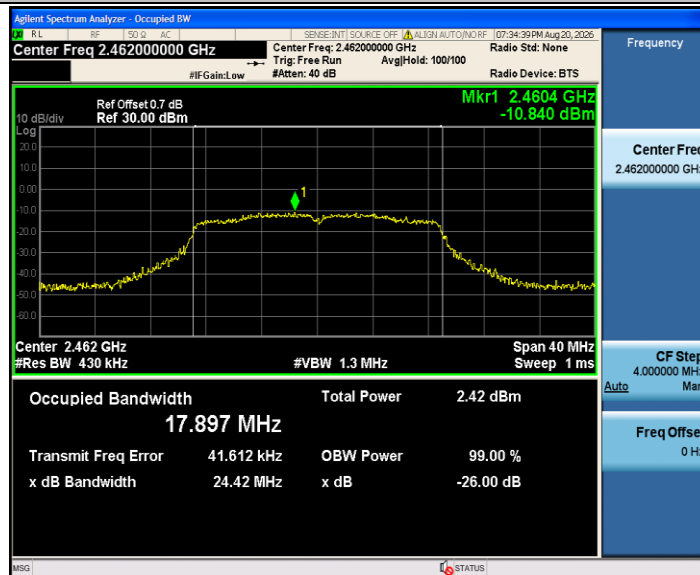
11N20SISO_Ant1_2412



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	5.14	≤30.00	PASS
		2437	5.24	≤30.00	PASS
		2462	5.47	≤30.00	PASS
11G	Ant1	2412	3.39	≤30.00	PASS
		2437	3.34	≤30.00	PASS
		2462	3.33	≤30.00	PASS
11N20SISO	Ant1	2412	3.40	≤30.00	PASS
		2437	3.25	≤30.00	PASS
		2462	3.20	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

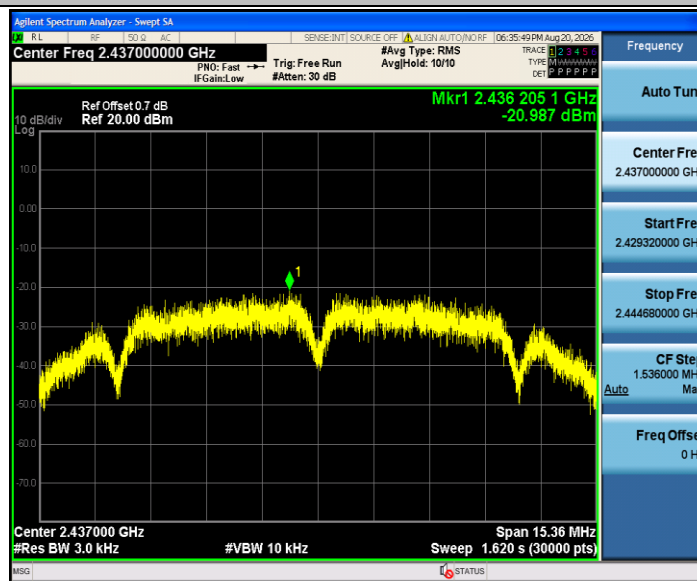
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-20.05	≤8.00	PASS
		2437	-20.99	≤8.00	PASS
		2462	-19.91	≤8.00	PASS
11G	Ant1	2412	-27.23	≤8.00	PASS
		2437	-28.81	≤8.00	PASS
		2462	-28.44	≤8.00	PASS
11N20SISO	Ant1	2412	-27.56	≤8.00	PASS
		2437	-28.23	≤8.00	PASS
		2462	-28.45	≤8.00	PASS

Test Graphs

11B_Ant1_2412



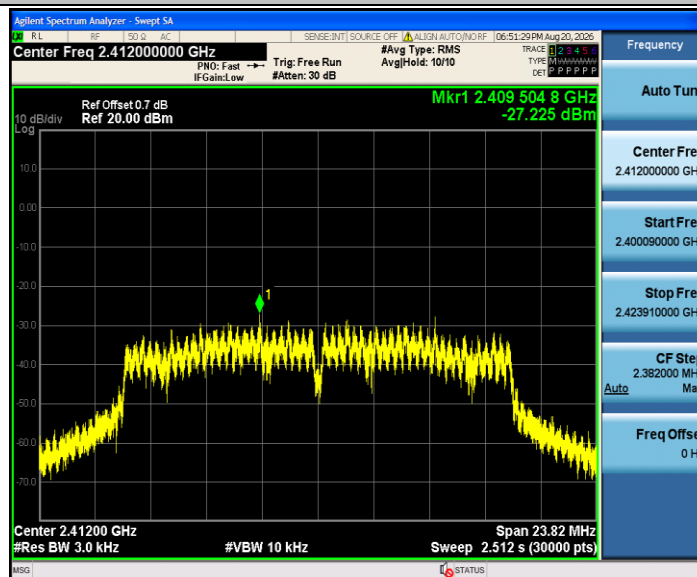
11B_Ant1_2437



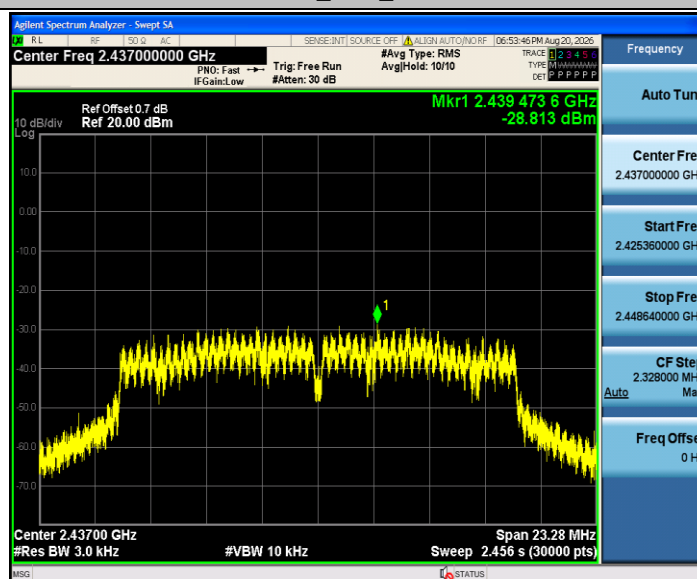
11B_Ant1_2462



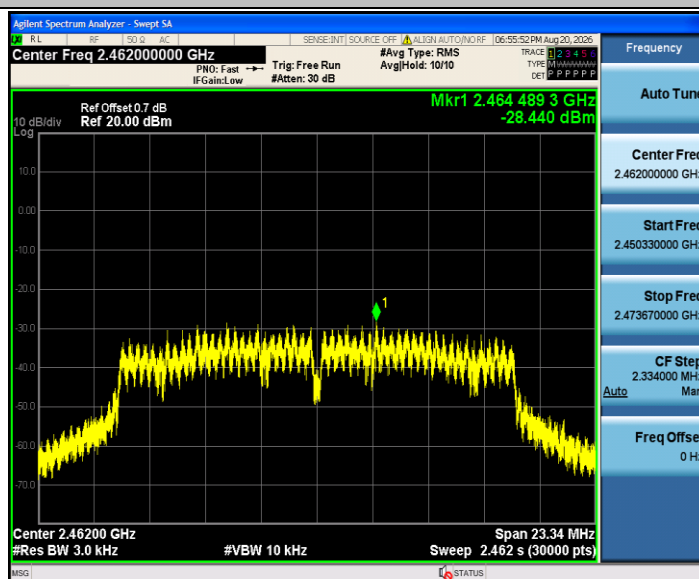
11G_Ant1_2412



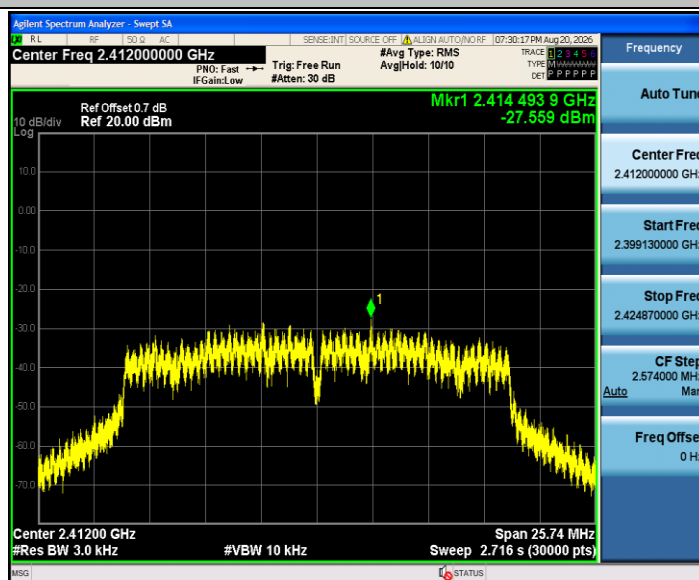
11G_Ant1_2437



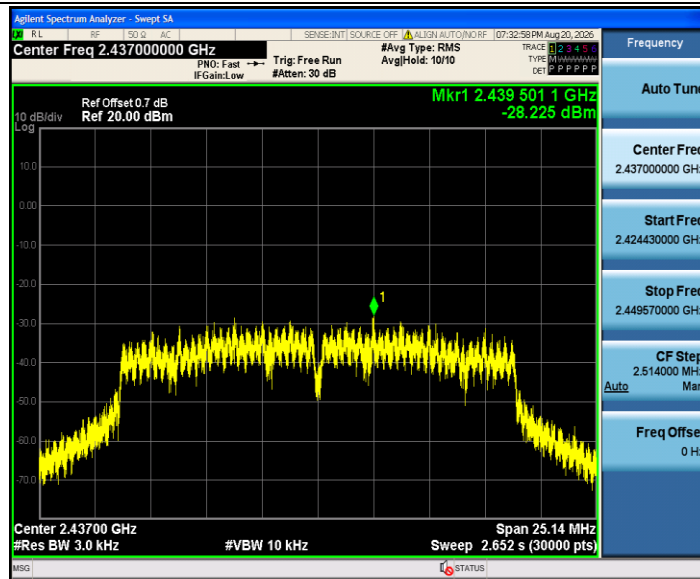
11G_Ant1_2462



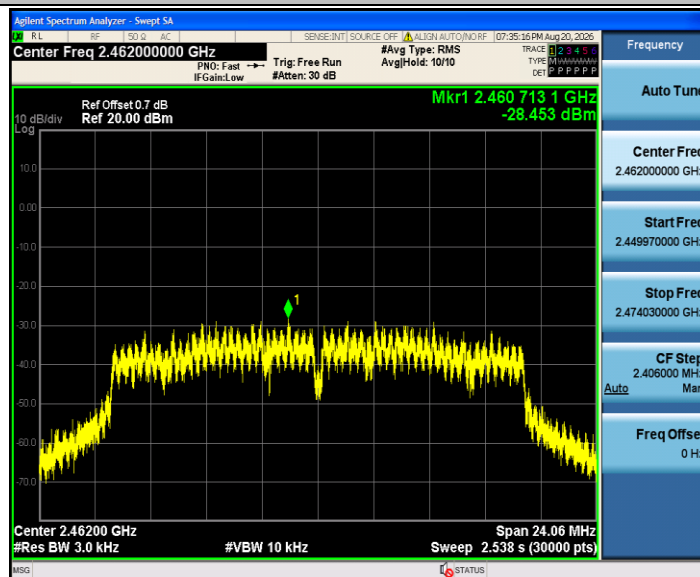
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

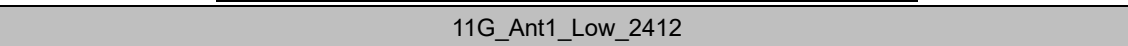
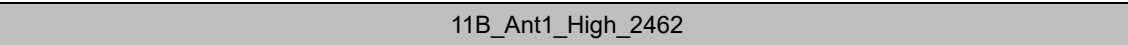


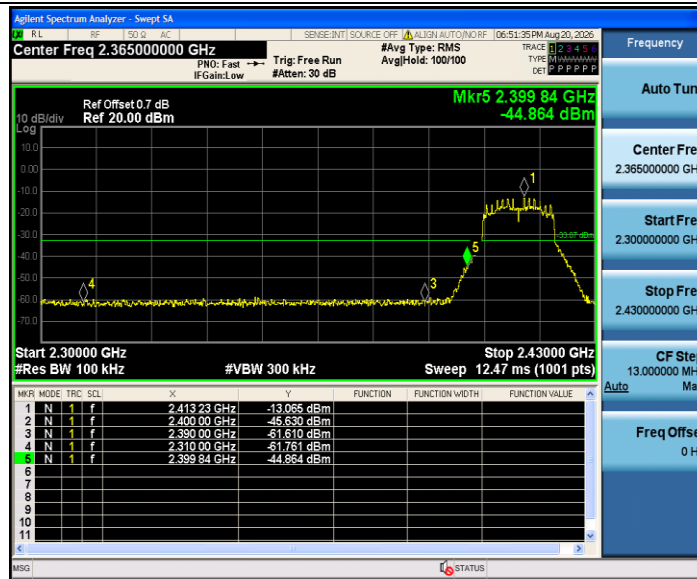
Appendix E: Band edge measurements

Test Result

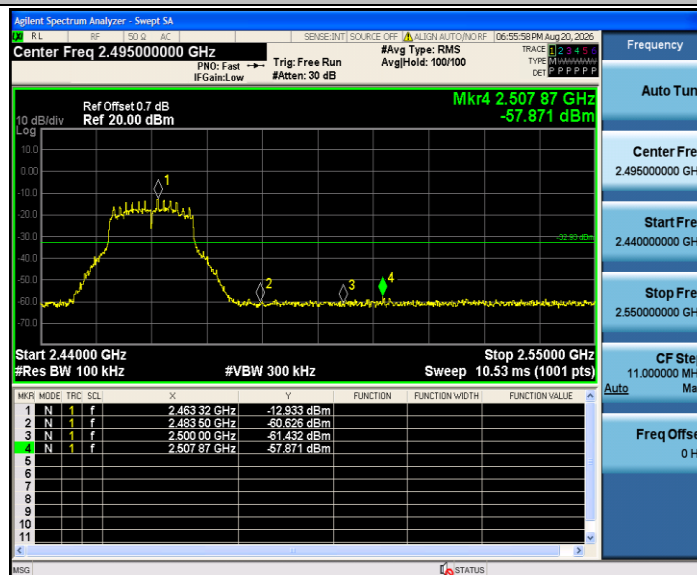
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-7.39	-56.36	≤-27.39	PASS
		High	2462	-6.88	-58.12	≤-26.88	PASS
11G	Ant1	Low	2412	-13.07	-44.86	≤-33.07	PASS
		High	2462	-12.93	-57.87	≤-32.93	PASS
11N20SISO	Ant1	Low	2412	-13.15	-44.12	≤-33.15	PASS
		High	2462	-13.30	-57.47	≤-33.3	PASS

11B_Ant1_Low_2412

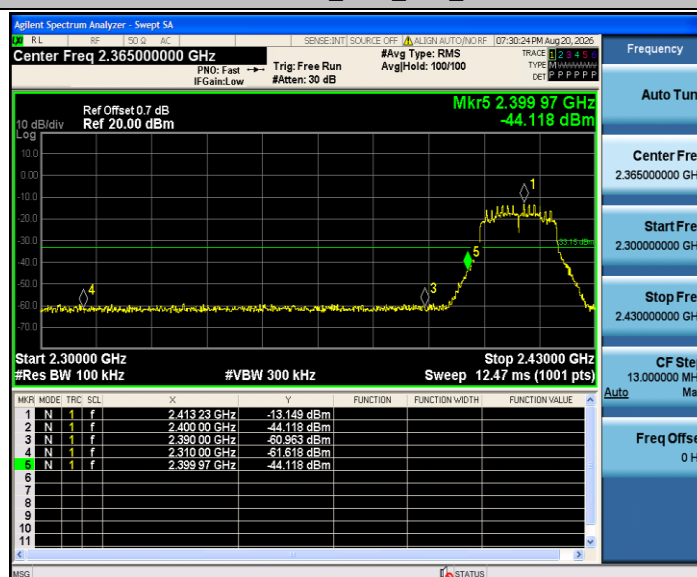




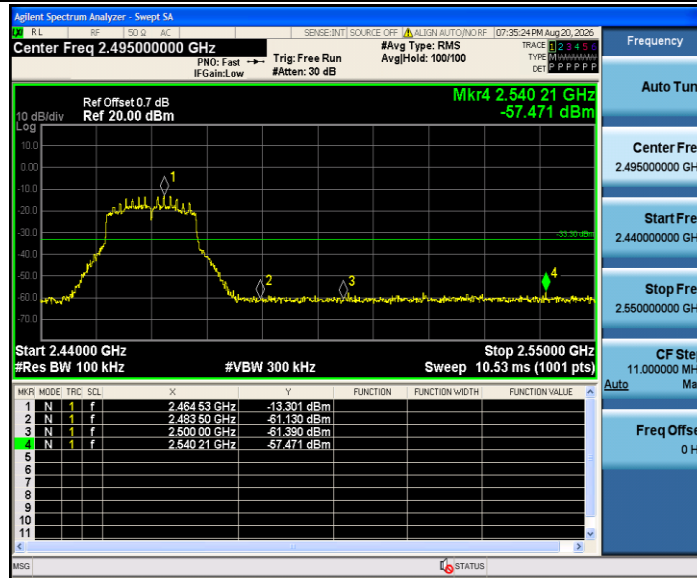
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

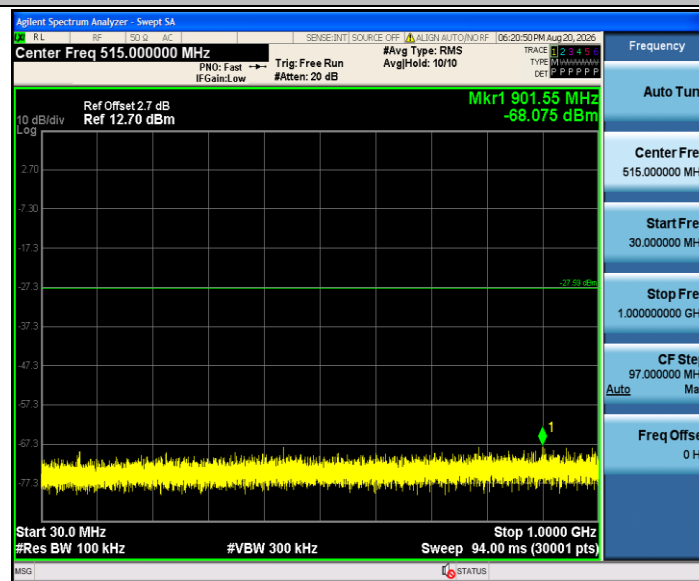
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-7.59	-7.59	---	PASS
			30~1000	-7.59	-68.08	≤-27.59	PASS
			1000~26500	-7.59	-45.96	≤-27.59	PASS
		2437	Reference	-7.05	-7.05	---	PASS
			30~1000	-7.05	-68.23	≤-27.05	PASS
			1000~26500	-7.05	-46.75	≤-27.05	PASS
		2462	Reference	-7.82	-7.82	---	PASS
			30~1000	-7.82	-67.77	≤-27.82	PASS
			1000~26500	-7.82	-46.57	≤-27.82	PASS
11G	Ant1	2412	Reference	-13.73	-13.73	---	PASS
			30~1000	-13.73	-68.33	≤-33.73	PASS
			1000~26500	-13.73	-46.21	≤-33.73	PASS
		2437	Reference	-13.78	-13.78	---	PASS
			30~1000	-13.78	-67.86	≤-33.78	PASS
			1000~26500	-13.78	-46.46	≤-33.78	PASS
		2462	Reference	-12.97	-12.97	---	PASS
			30~1000	-12.97	-68.25	≤-32.97	PASS
			1000~26500	-12.97	-46.17	≤-32.97	PASS
11N20SISO	Ant1	2412	Reference	-13.77	-13.77	---	PASS
			30~1000	-13.77	-67.52	≤-33.77	PASS
			1000~26500	-13.77	-45.04	≤-33.77	PASS
		2437	Reference	-13.46	-13.46	---	PASS
			30~1000	-13.46	-67.81	≤-33.46	PASS
			1000~26500	-13.46	-46.01	≤-33.46	PASS
		2462	Reference	-14.47	-14.47	---	PASS
			30~1000	-14.47	-67.81	≤-34.47	PASS
			1000~26500	-14.47	-46.1	≤-34.47	PASS

Test Graphs

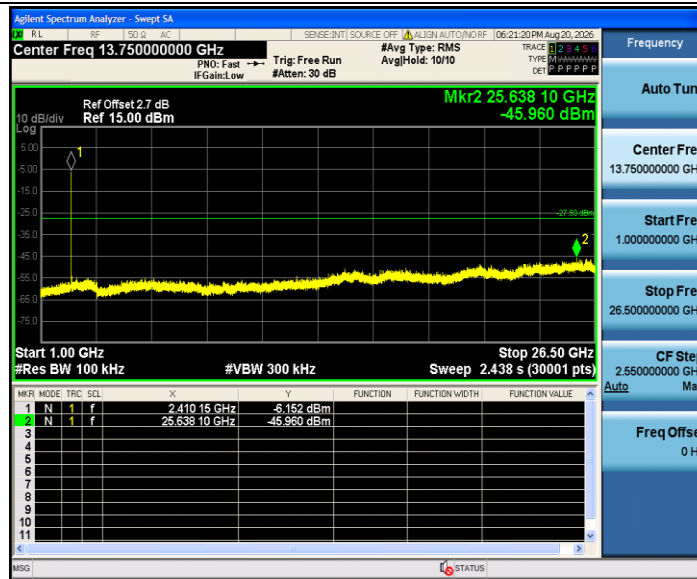
11B_Ant1_2412_0~Reference



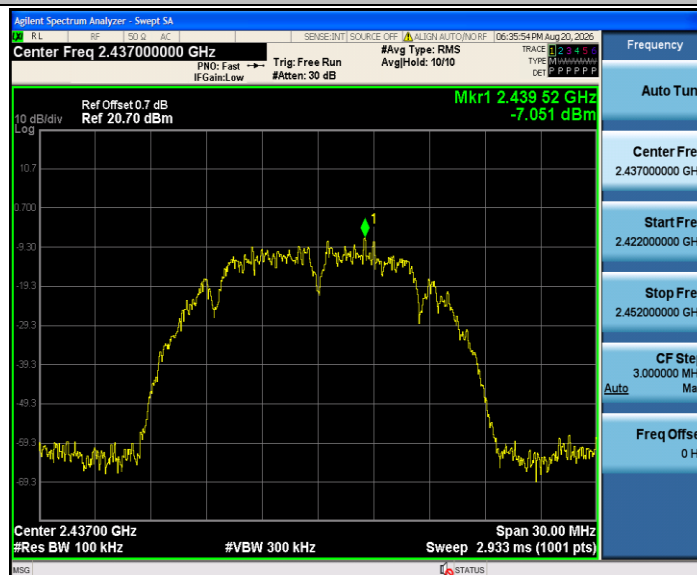
11B_Ant1_2412_30~1000



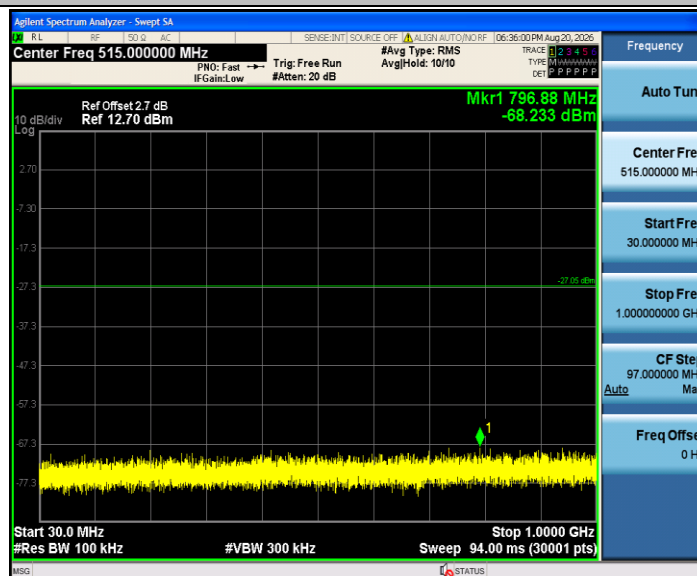
11B_Ant1_2412_1000~26500



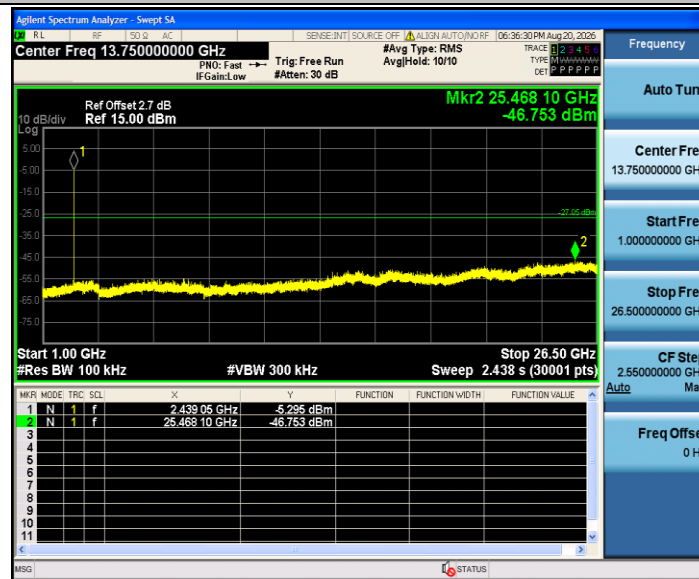
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



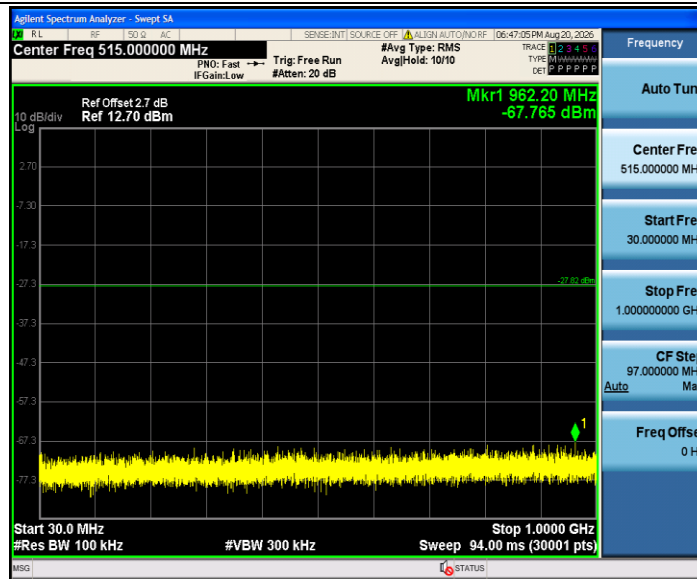
11B_Ant1_2437_1000~26500



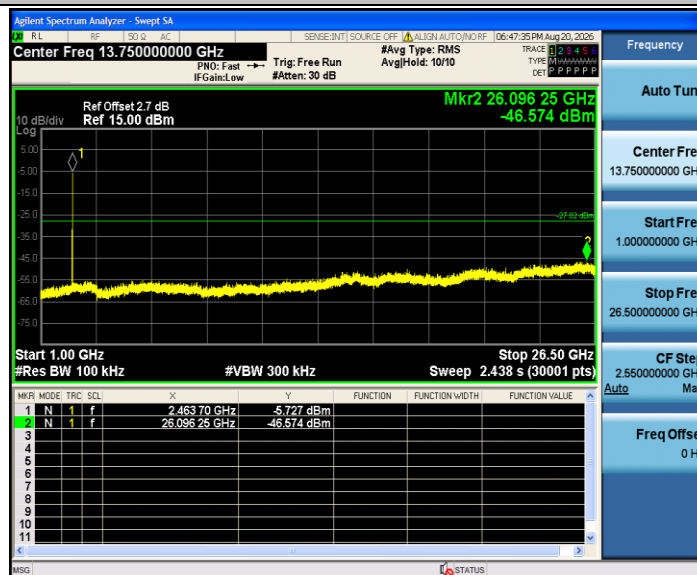
11B_Ant1_2462_0~Reference



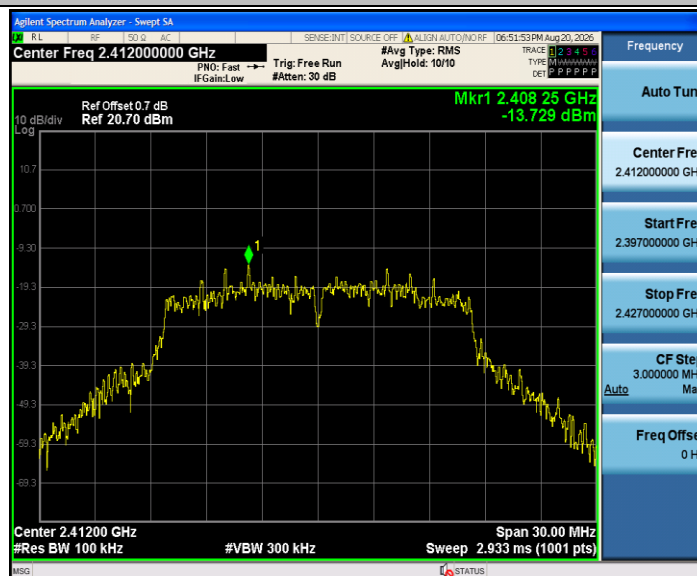
11B_Ant1_2462_30~1000



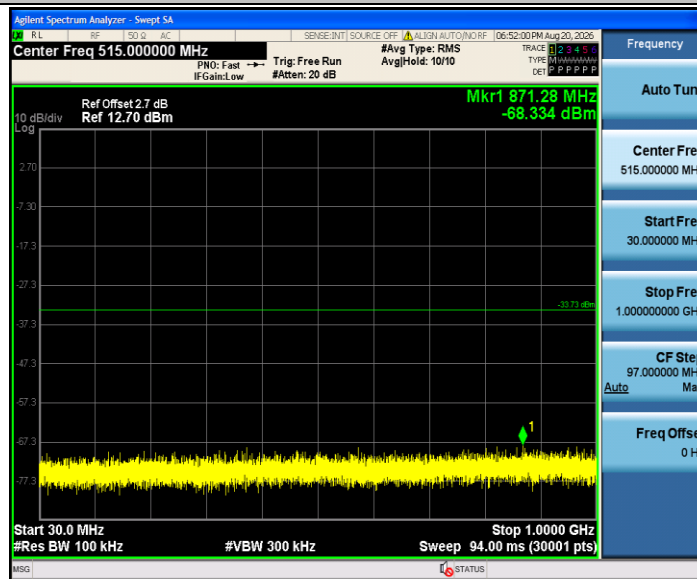
11B_Ant1_2462_1000~26500



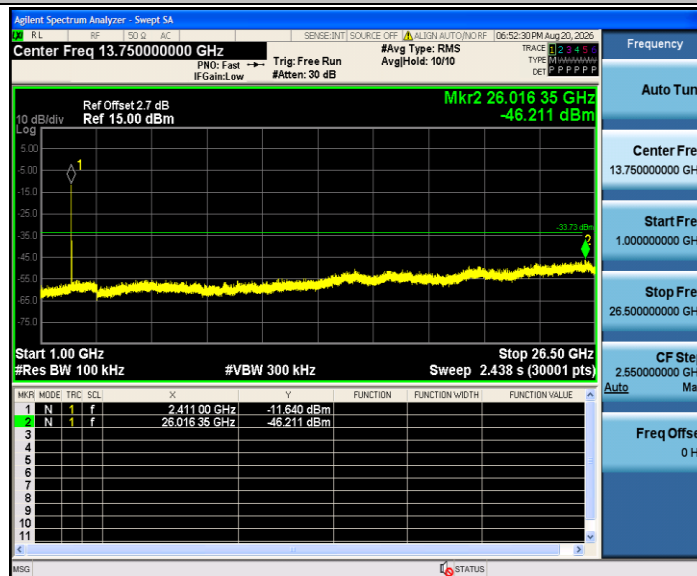
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



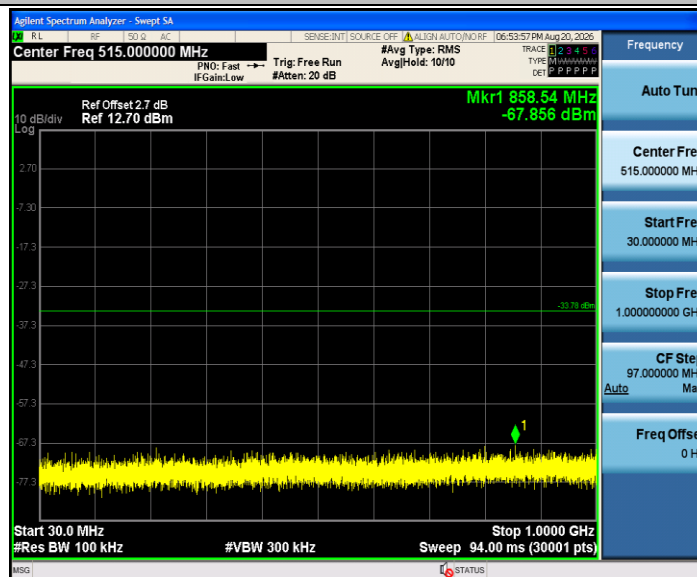
11G_Ant1_2412_1000~26500



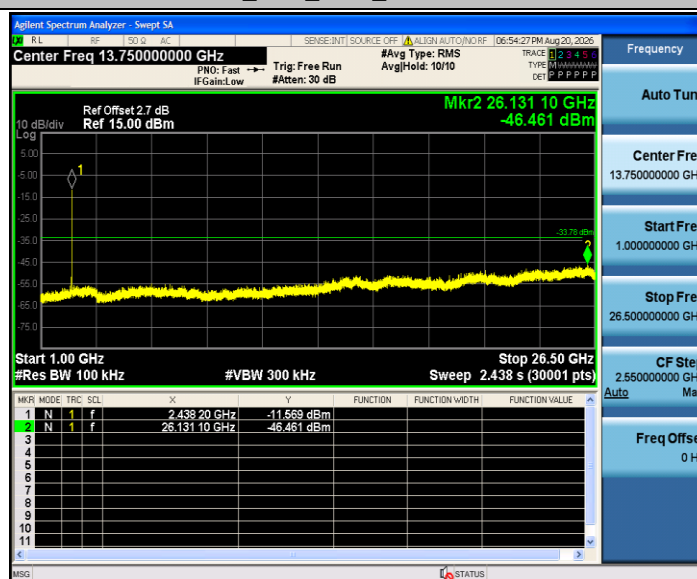
11G_Ant1_2437_0~Reference



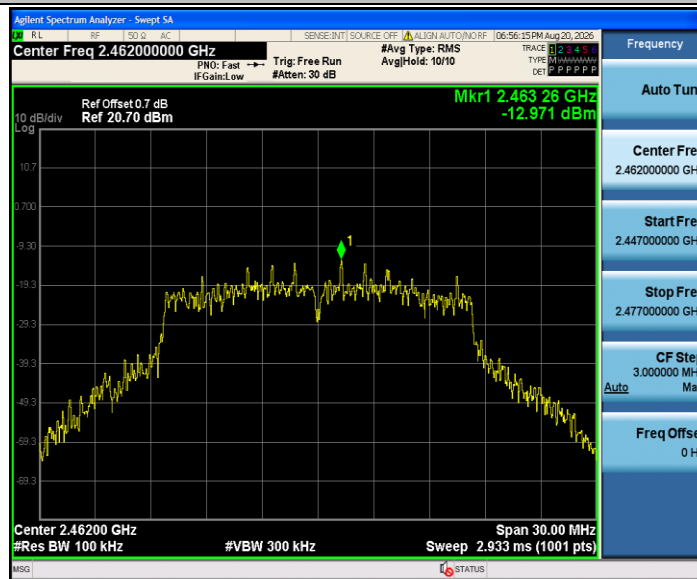
11G_Ant1_2437_30~1000



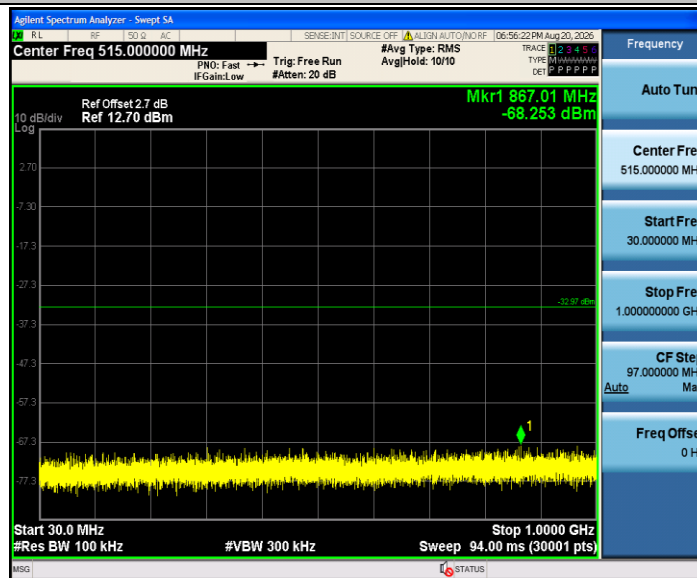
11G_Ant1_2437_1000~26500



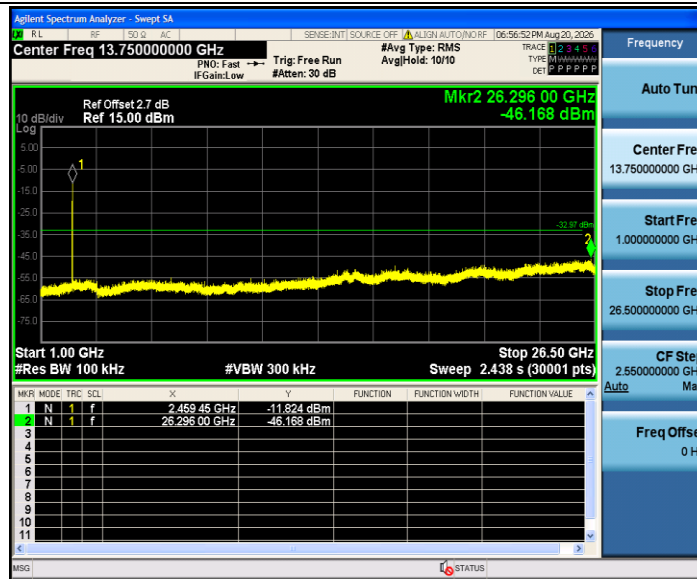
11G_Ant1_2462_0~Reference



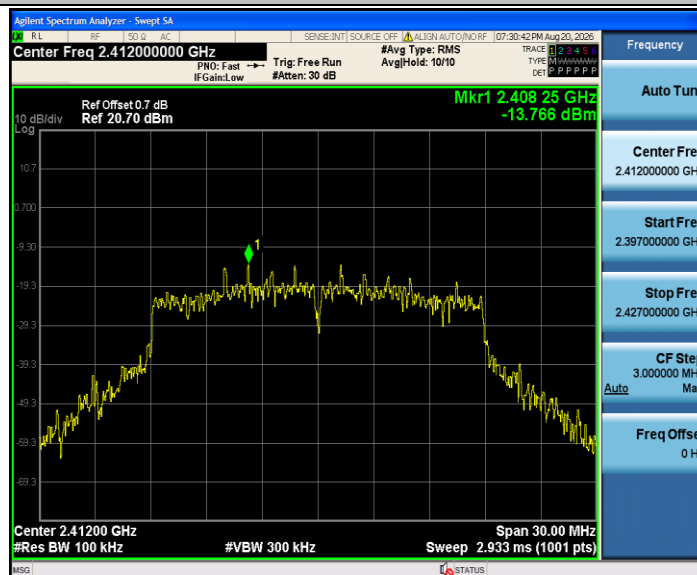
11G_Ant1_2462_30~1000



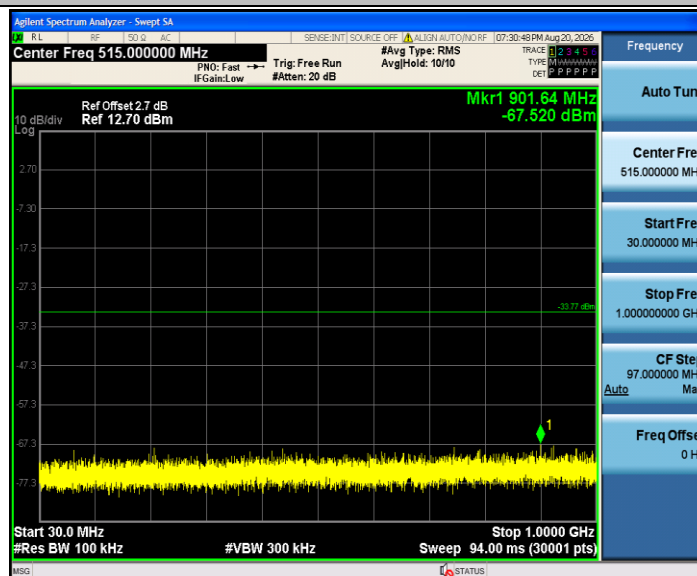
11G_Ant1_2462_1000~26500



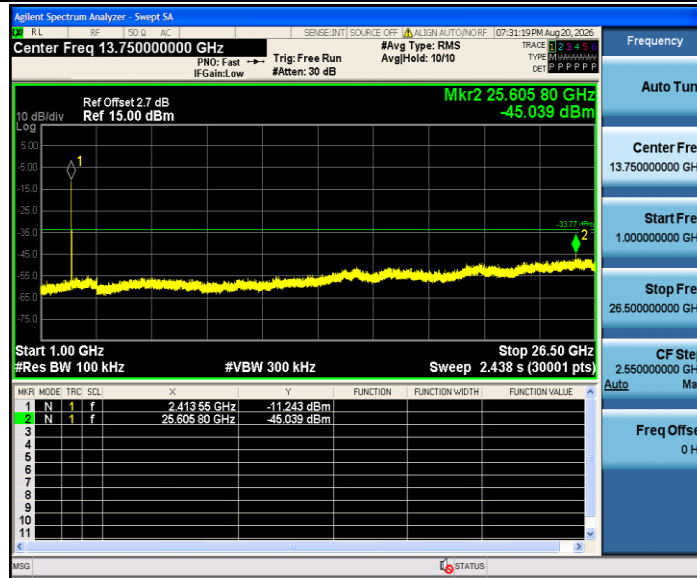
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



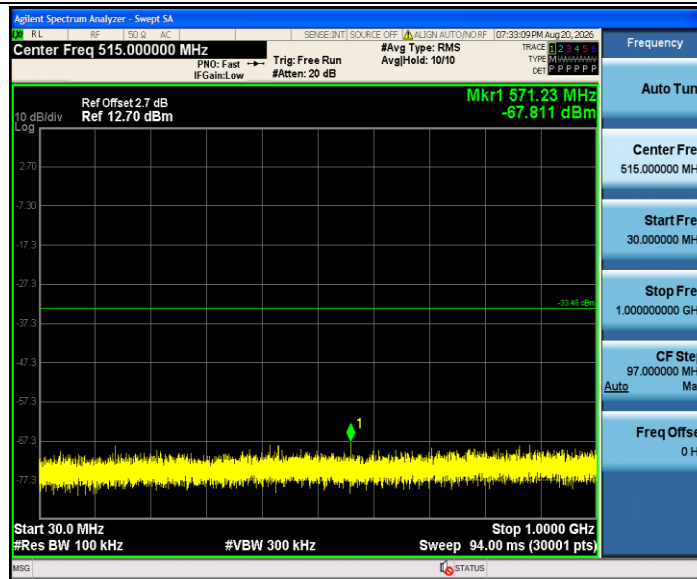
11N20SISO_Ant1_2412_1000~26500



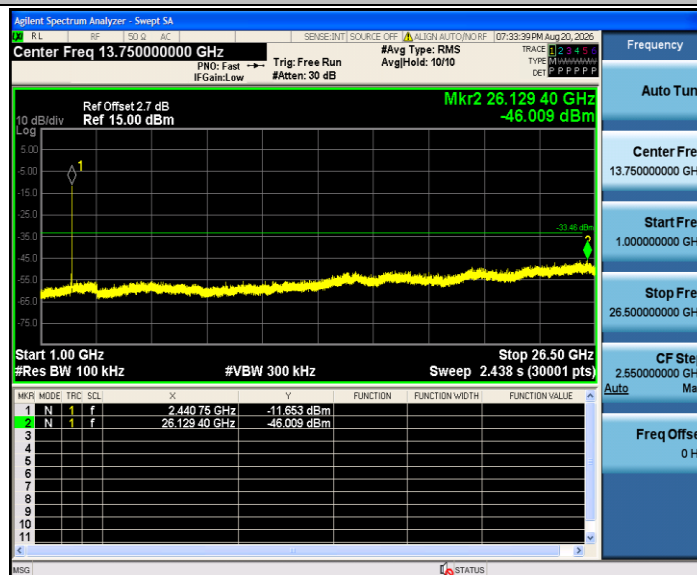
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



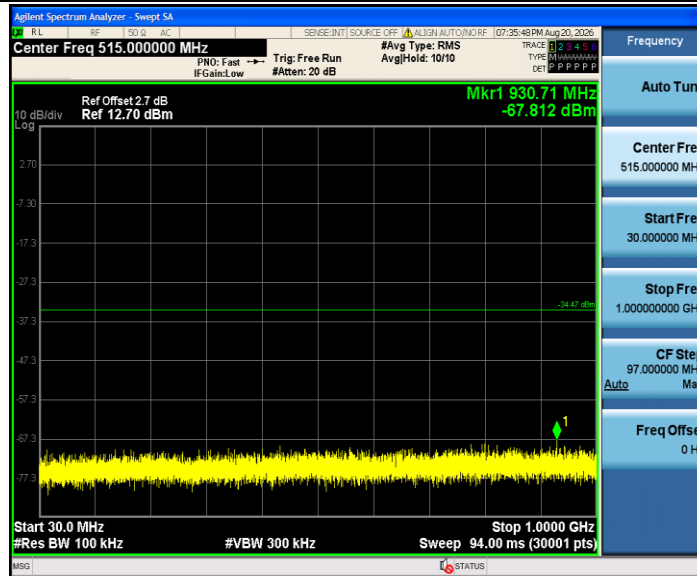
11N20SISO_Ant1_2437_1000~26500



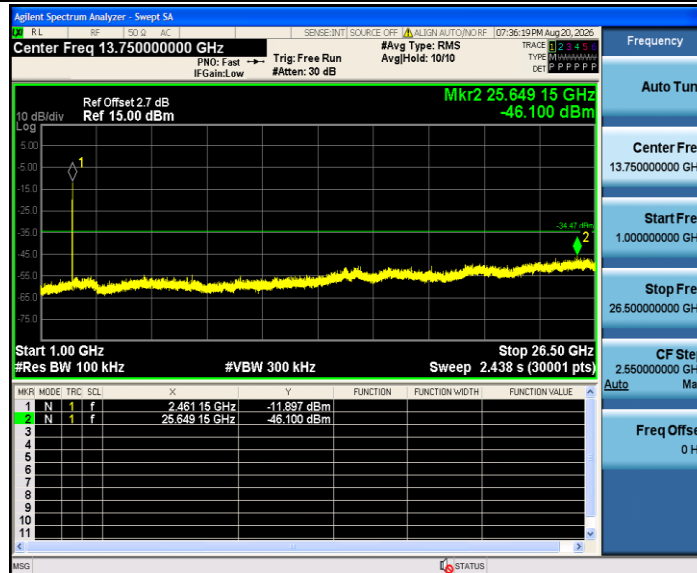
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



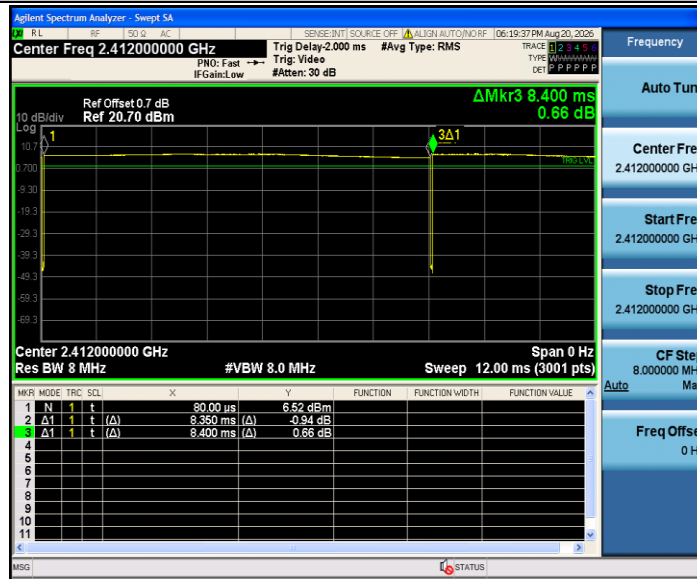
Appendix G: Duty Cycle

Test Result

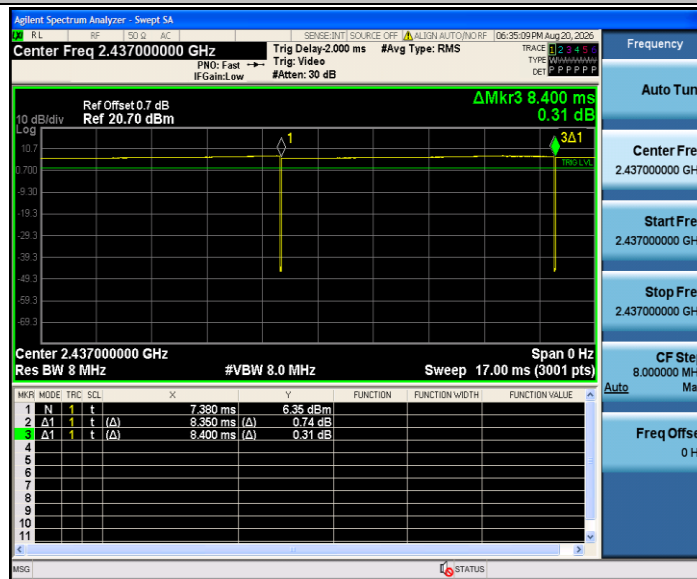
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	T Factor [dB]
11B	Ant1	2412	8.35	8.40	99.40	0.03	0.12
		2437	8.35	8.40	99.40	0.03	0.12
		2462	8.36	8.40	99.52	0.02	0.12
11G	Ant1	2412	0.14	0.19	73.68	1.33	7.14
		2437	0.14	0.19	73.68	1.33	7.14
		2462	0.15	0.20	75.00	1.25	6.67
11N20SISO	Ant1	2412	0.17	0.22	77.27	1.12	5.88
		2437	0.18	0.23	78.26	1.06	5.56
		2462	0.18	0.22	81.82	0.87	5.56

Test Graphs

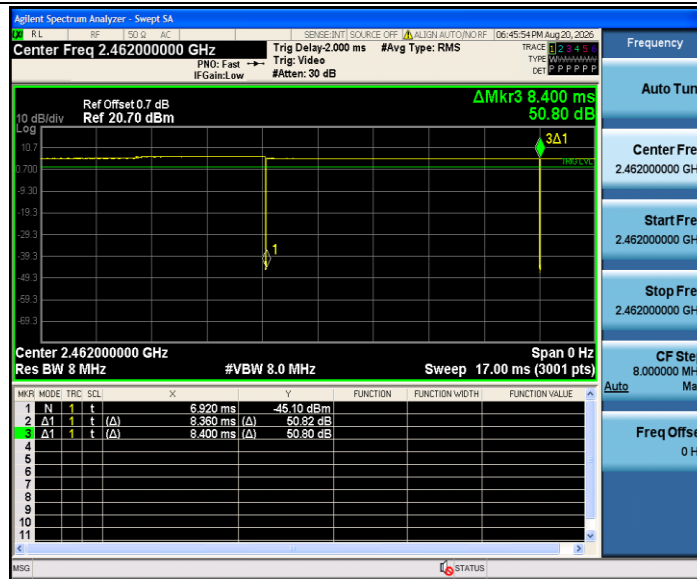
11B_Ant1_2412



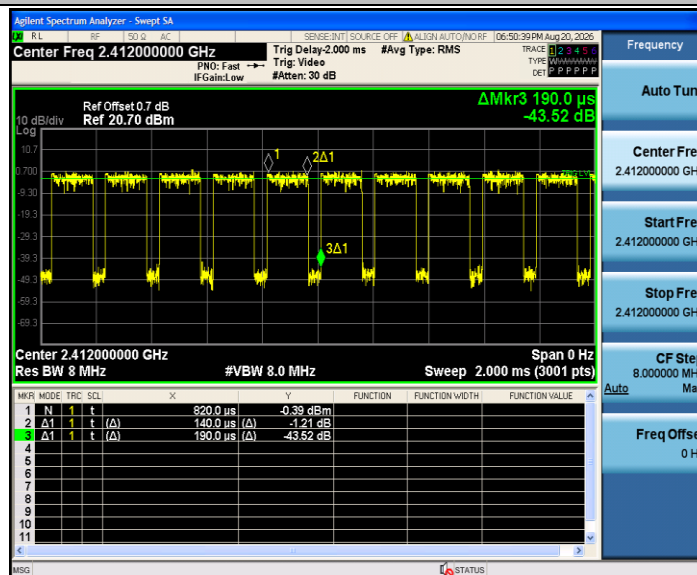
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437

