

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BDQV-WP-5020

Company : Shenzhen Tenganda Intelligent Equipment Co., Ltd

EUT : Surveillance camera

Model Number : WP-5020

Report No. : CTA26042201901

Reviewed By : Eric Wang

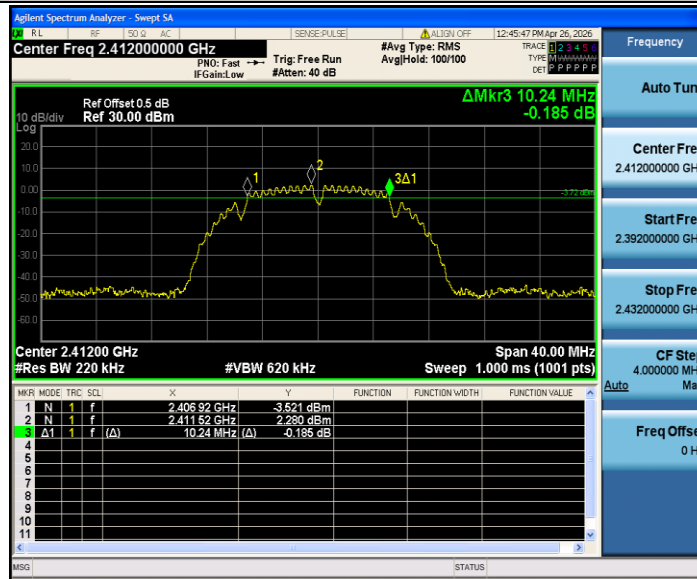
Appendix A: DTS Bandwidth

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	10.200	2431.920	2442.120	0.5	PASS
		2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	15.920	2404.040	2419.960	0.5	PASS
		2437	15.880	2429.040	2444.920	0.5	PASS
		2462	15.560	2454.240	2469.800	0.5	PASS
11N20SISO	Ant1	2412	16.720	2403.720	2420.440	0.5	PASS
		2437	16.640	2428.480	2445.120	0.5	PASS
		2462	16.960	2453.480	2470.440	0.5	PASS
11N40SISO	Ant1	2422	36.000	2403.920	2439.920	0.5	PASS
		2437	35.280	2419.720	2455.000	0.5	PASS
		2452	35.680	2434.320	2470.000	0.5	PASS

Test Graphs

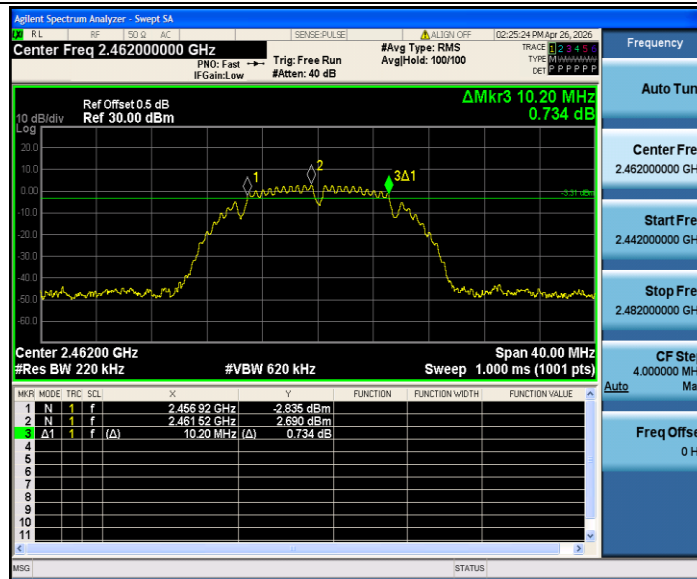
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



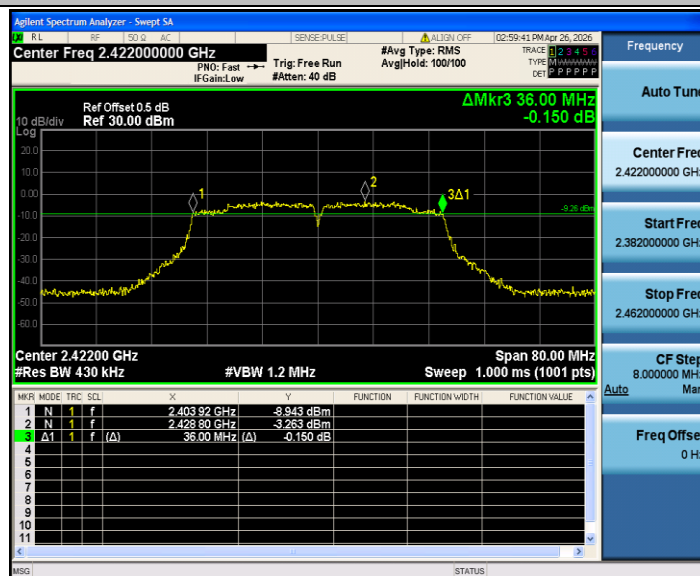
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



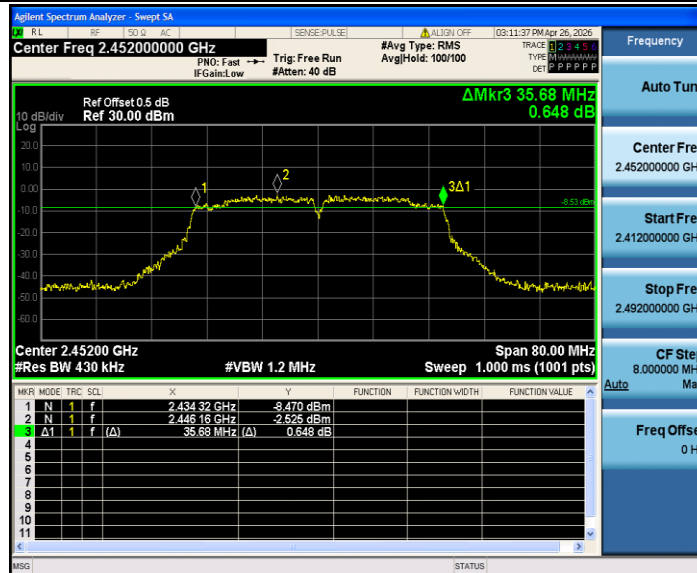
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



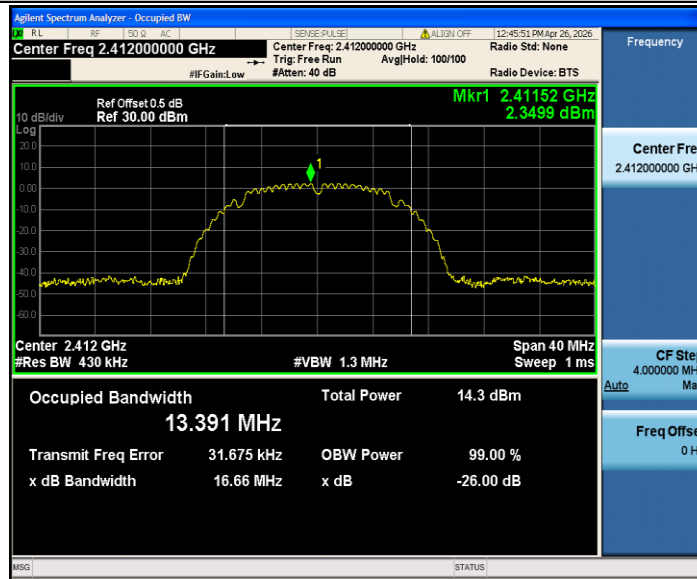
Appendix B: Occupied Channel Bandwidth

Test Result

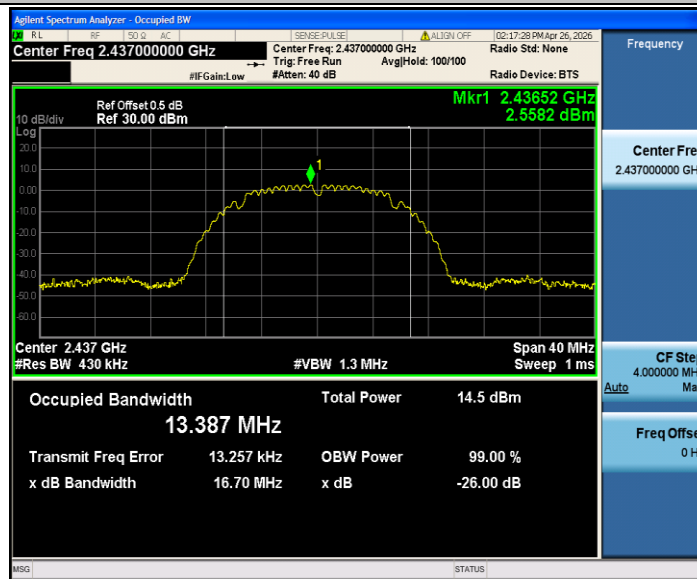
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.391	2405.3362	2418.7272	---	---
		2437	13.387	2430.3198	2443.7068	---	---
		2462	13.459	2455.2647	2468.7237	---	---
11G	Ant1	2412	16.872	2403.6107	2420.4827	---	---
		2437	16.851	2428.6042	2445.4552	---	---
		2462	16.839	2453.6048	2470.4438	---	---
11N20SISO	Ant1	2412	17.869	2403.0812	2420.9502	---	---
		2437	17.910	2428.0374	2445.9474	---	---
		2462	17.864	2453.1013	2470.9653	---	---
11N40SISO	Ant1	2422	36.016	2404.0692	2440.0852	---	---
		2437	36.040	2419.0764	2455.1164	---	---
		2452	36.031	2434.1086	2470.1396	---	---

Test Graphs

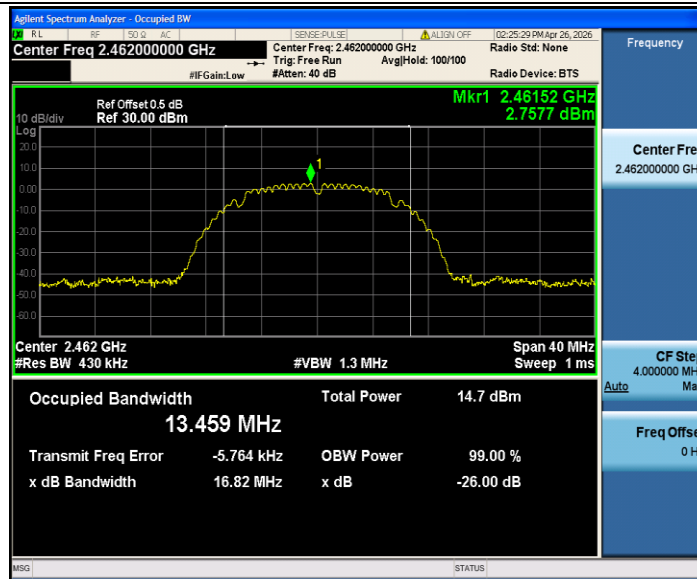
11B_Ant1_2412



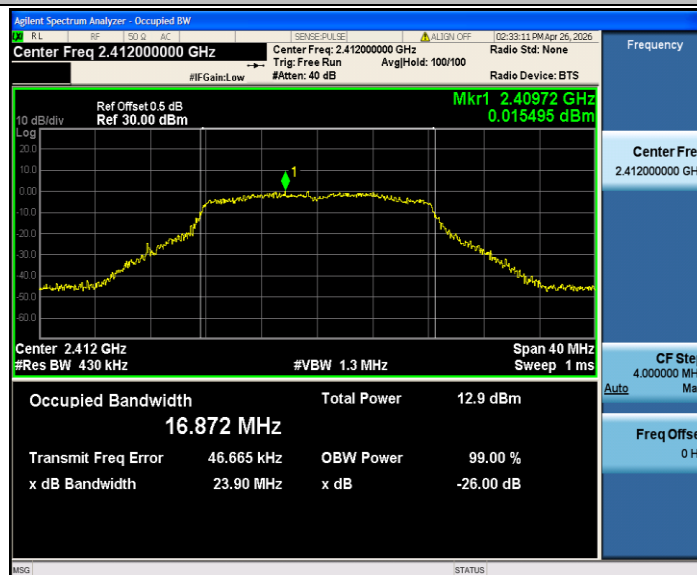
11B_Ant1_2437



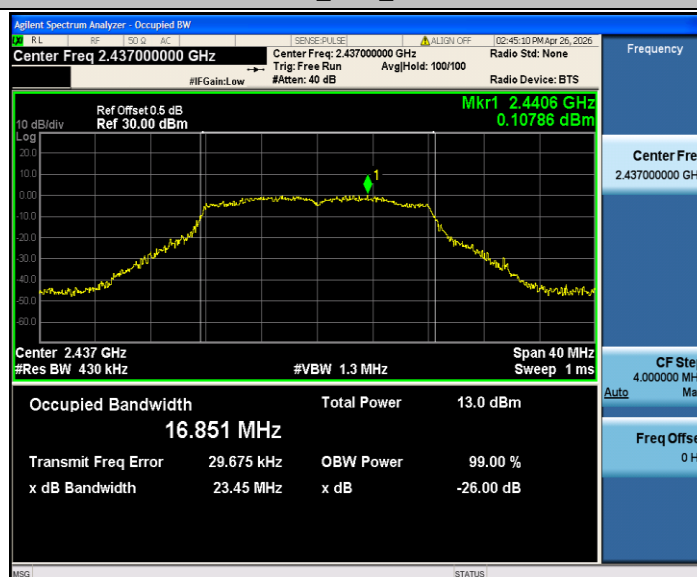
11B_Ant1_2462



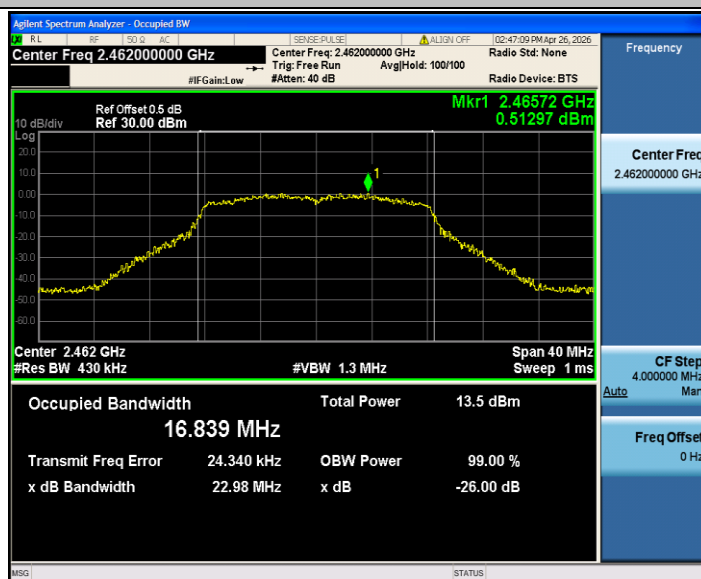
11G_Ant1_2412



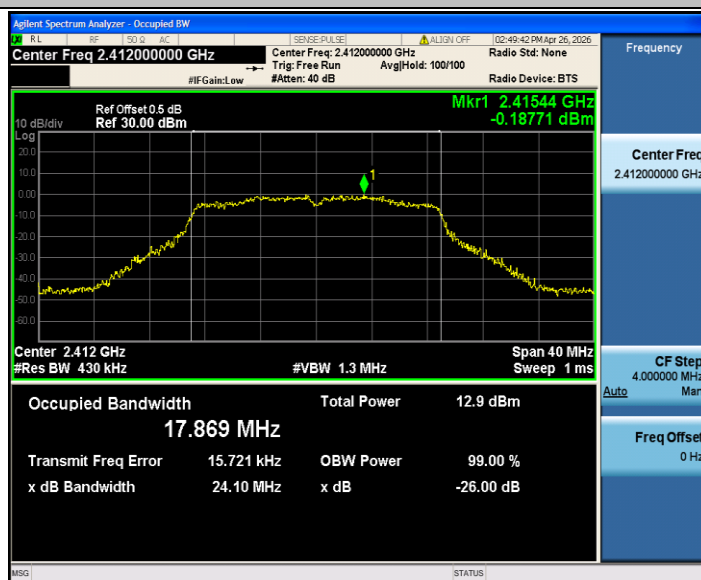
11G_Ant1_2437



11G_Ant1_2462



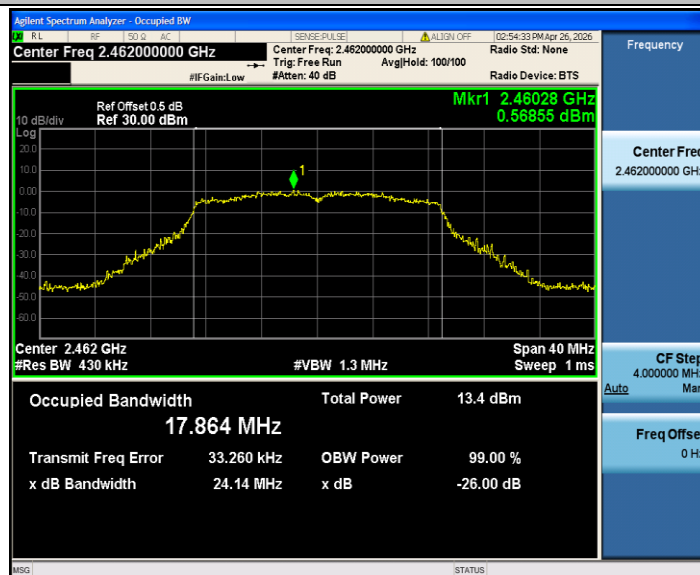
11N20SISO_Ant1_2412



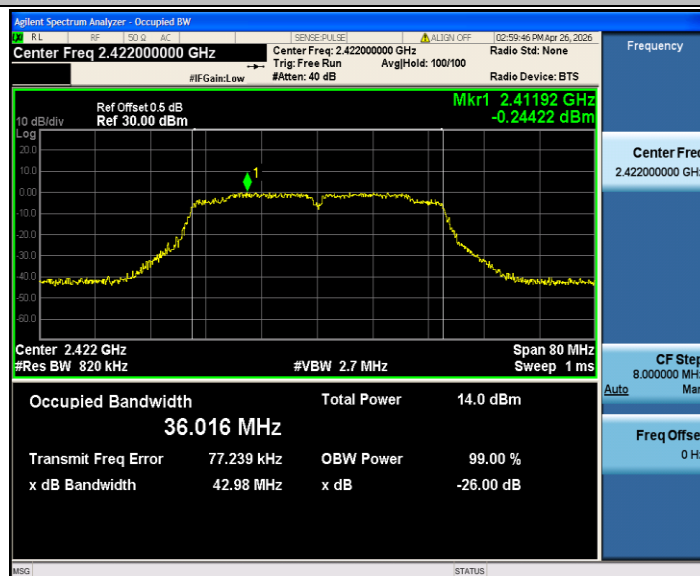
11N20SISO_Ant1_2437



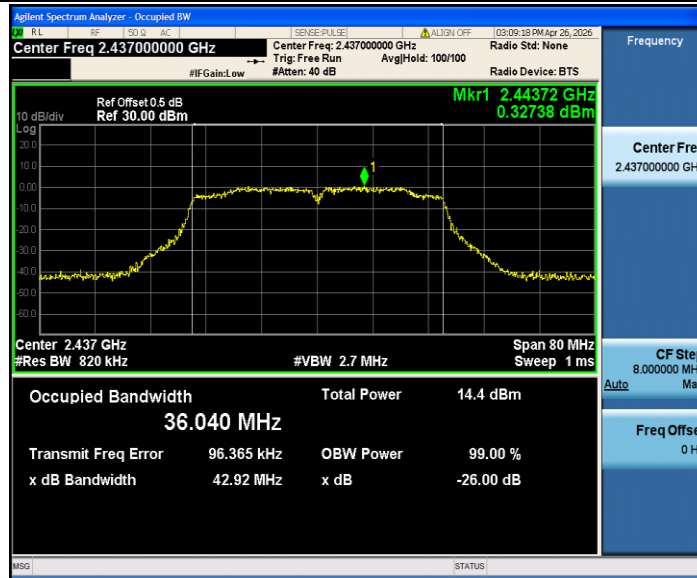
11N20SISO_Ant1_2462



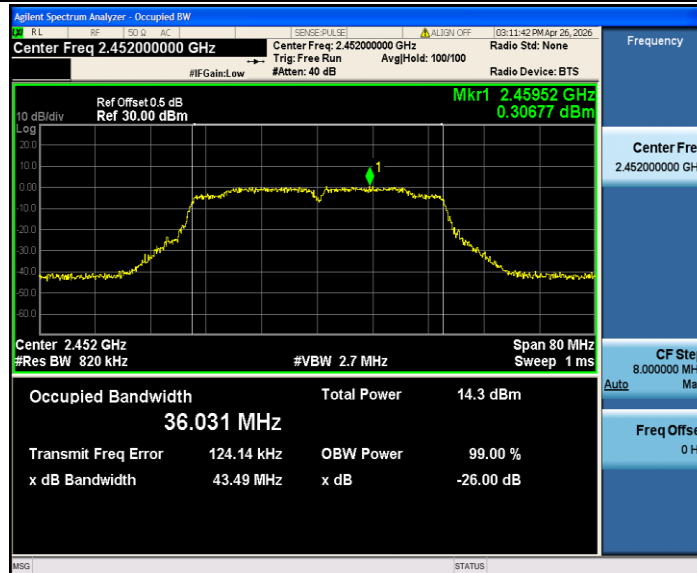
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.10	≤30.00	PASS
		2437	14.26	≤30.00	PASS
		2462	14.41	≤30.00	PASS
11G	Ant1	2412	13.88	≤30.00	PASS
		2437	14.22	≤30.00	PASS
		2462	14.30	≤30.00	PASS
11N20SISO	Ant1	2412	13.71	≤30.00	PASS
		2437	13.97	≤30.00	PASS
		2462	14.23	≤30.00	PASS
11N40SISO	Ant1	2422	14.15	≤30.00	PASS
		2437	14.46	≤30.00	PASS
		2452	14.47	≤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	-11.18	≤8.00	PASS
		2437	-11.87	≤8.00	PASS
		2462	-11.68	≤8.00	PASS
11G	Ant1	2412	-18.33	≤8.00	PASS
		2437	-17.69	≤8.00	PASS
		2462	-16.91	≤8.00	PASS
11N20SISO	Ant1	2412	-17.66	≤8.00	PASS
		2437	-17.68	≤8.00	PASS
		2462	-16.36	≤8.00	PASS
11N40SISO	Ant1	2422	-20.30	≤8.00	PASS
		2437	-19.16	≤8.00	PASS
		2452	-20.09	≤8.00	PASS

Test Graphs

11B_Ant1_2412



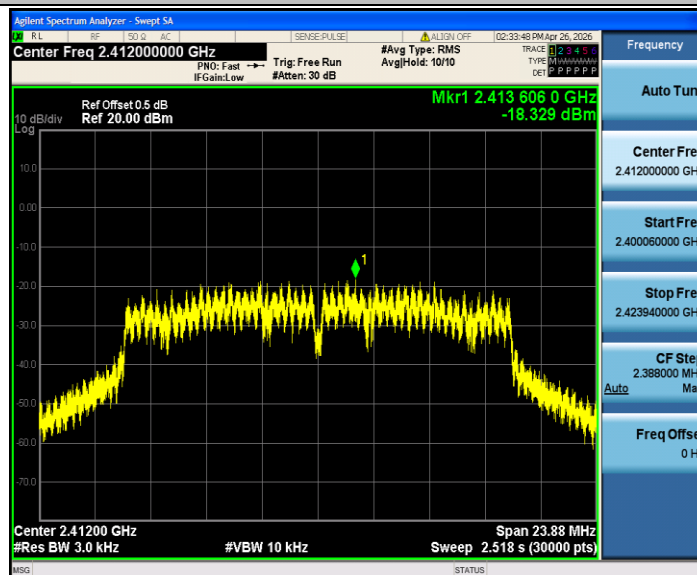
11B_Ant1_2437



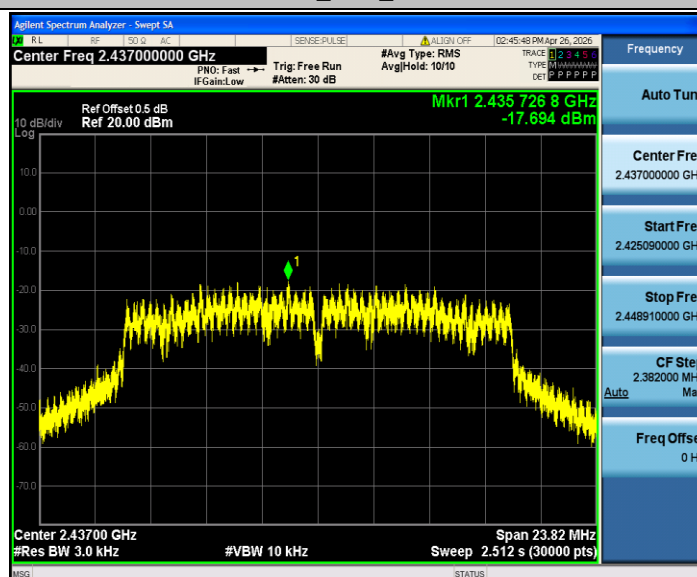
11B_Ant1_2462



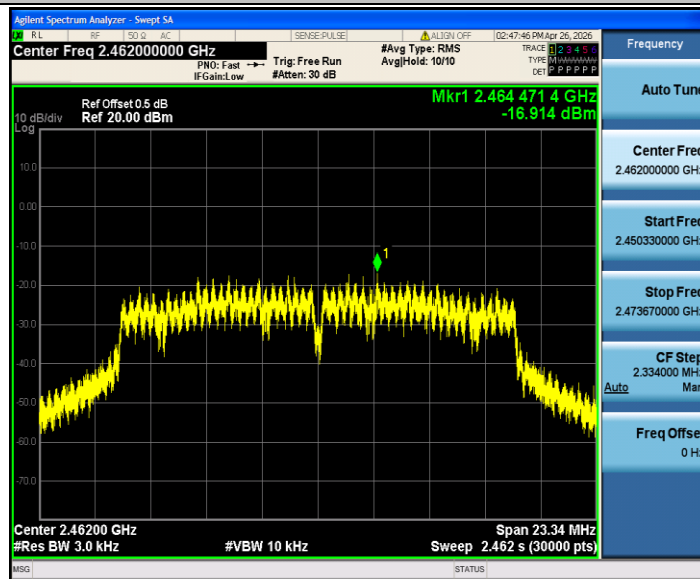
11G_Ant1_2412



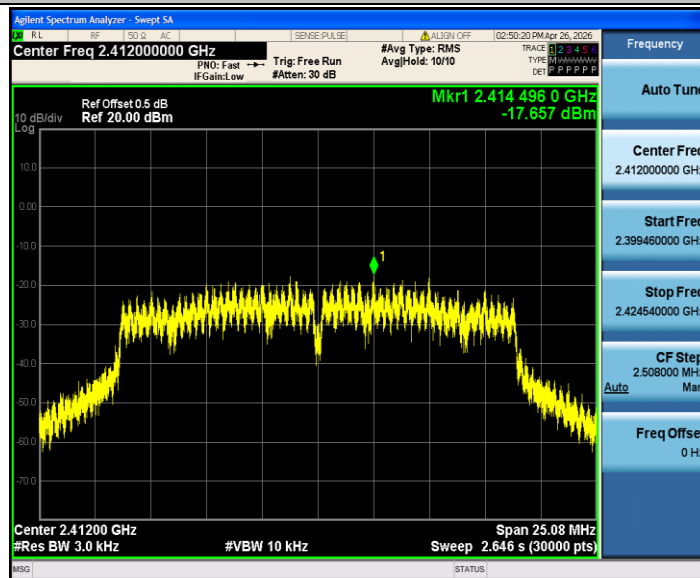
11G_Ant1_2437



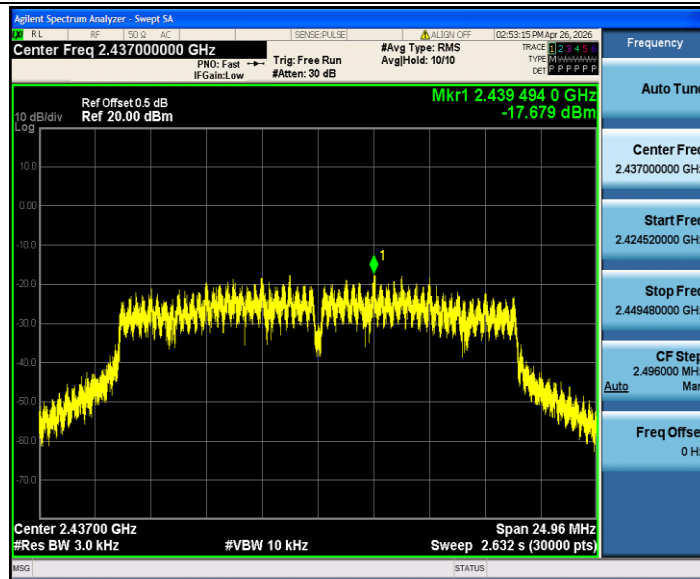
11G_Ant1_2462



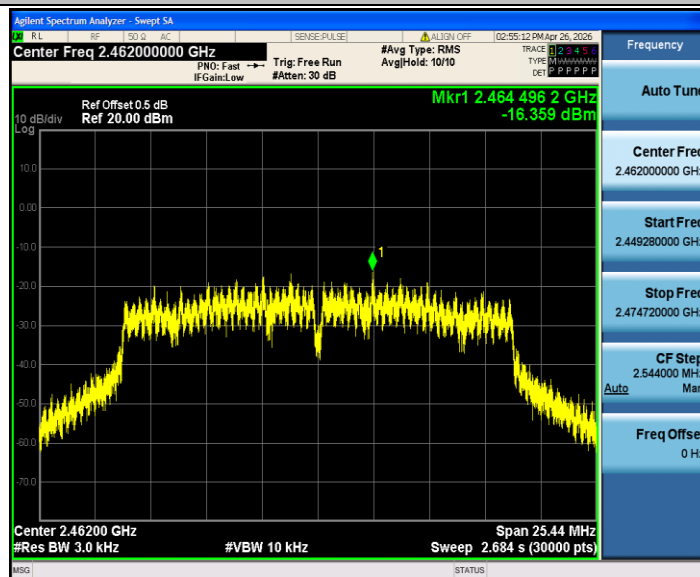
11N20SISO_Ant1_2412



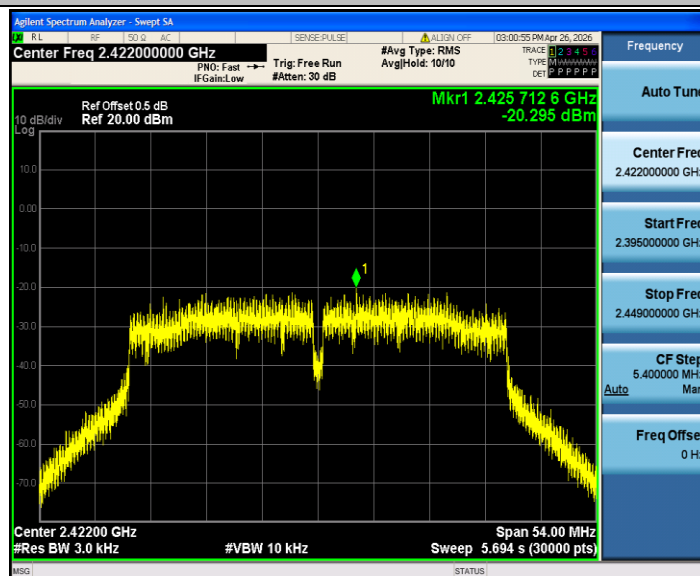
11N20SISO_Ant1_2437



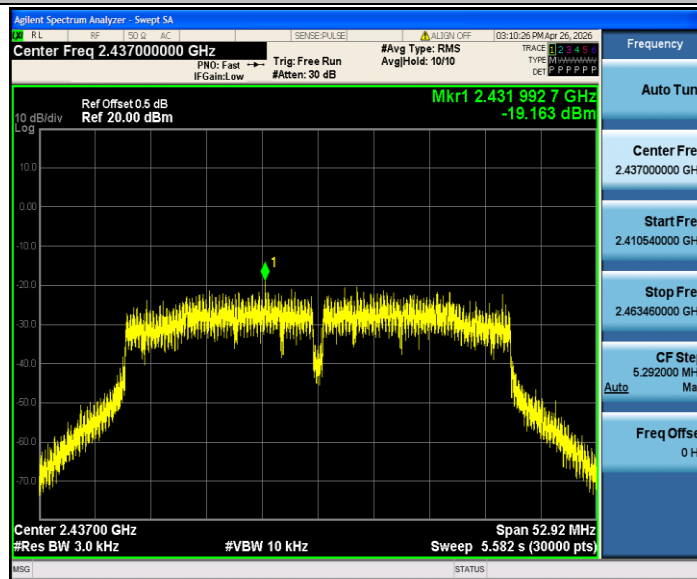
11N20SISO_Ant1_2462



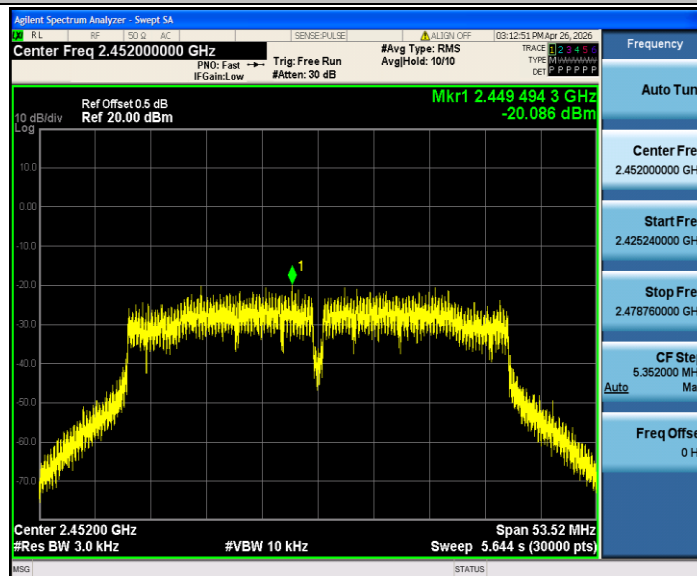
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



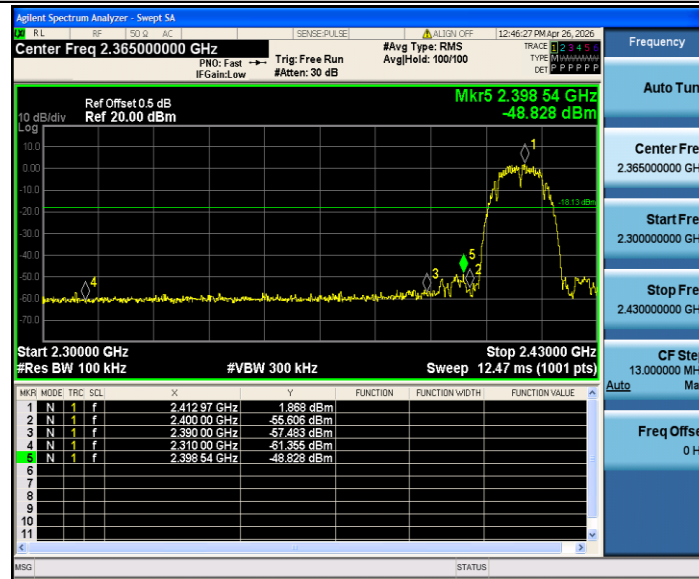
Appendix E: Band edge measurements

Test Result

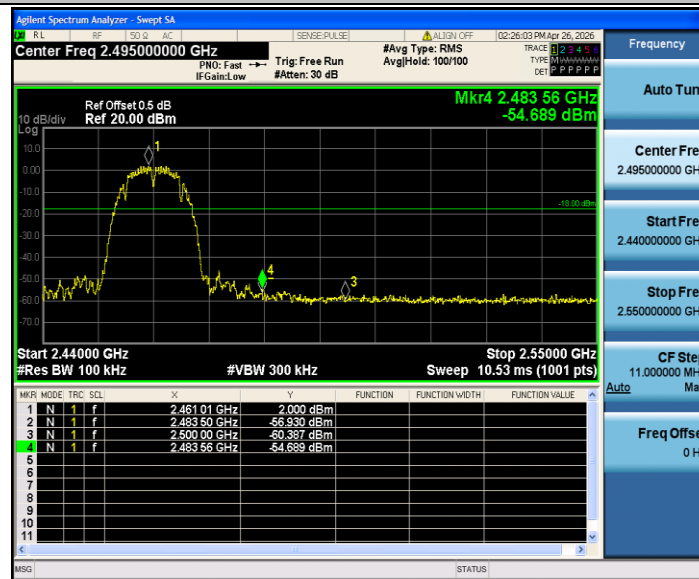
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.87	-48.83	≤-18.13	PASS
		High	2462	2.00	-54.69	≤-18	PASS
11G	Ant1	Low	2412	-2.60	-34.24	≤-22.6	PASS
		High	2462	-2.38	-57.12	≤-22.38	PASS
11N20SISO	Ant1	Low	2412	-2.61	-34.66	≤-22.61	PASS
		High	2462	-2.30	-57.43	≤-22.3	PASS
11N40SISO	Ant1	Low	2422	-5.85	-33.74	≤-25.85	PASS
		High	2452	-5.58	-56.37	≤-25.58	PASS

Test Graphs

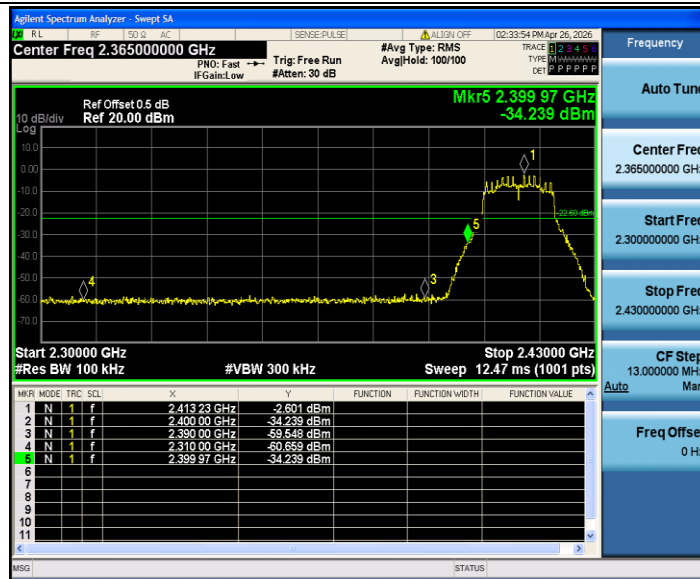
11B_Ant1_Low_2412



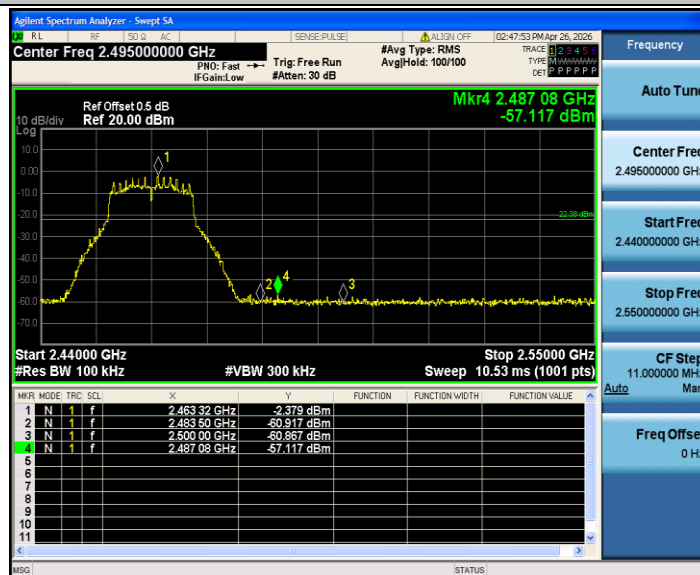
11B_Ant1_High_2462



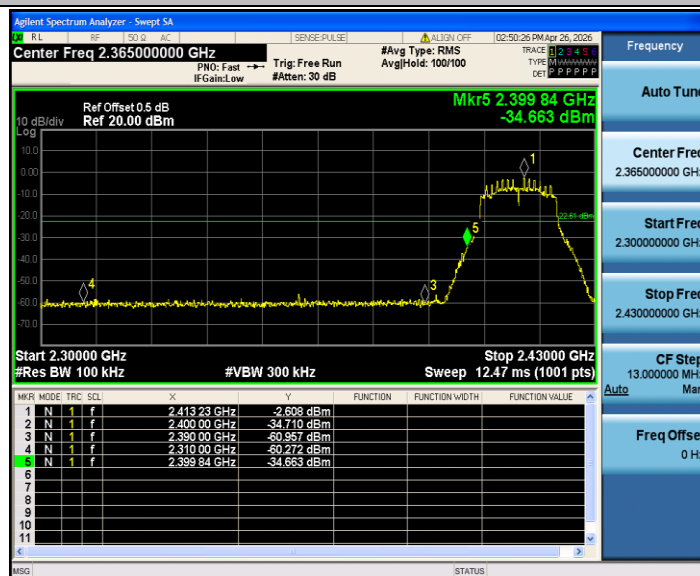
11G_Ant1_Low_2412



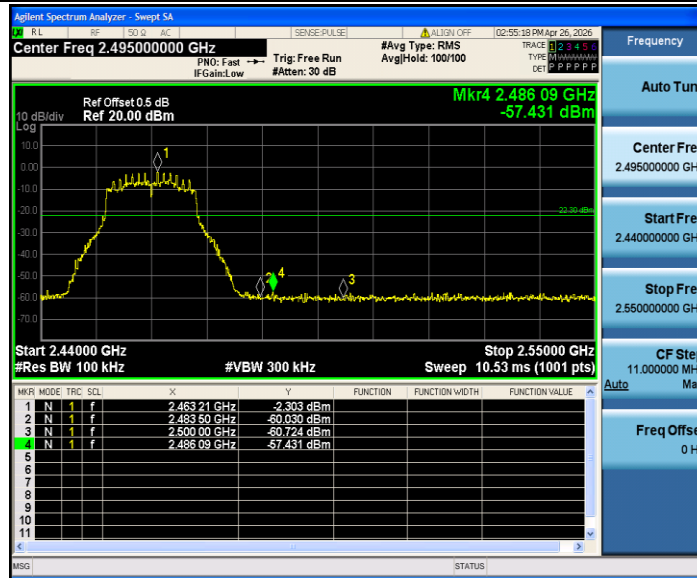
11G_Ant1_High_2462



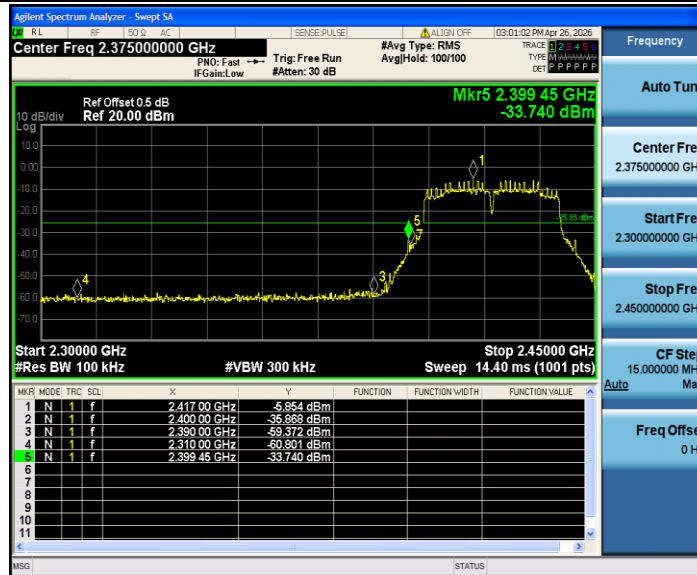
11N20SISO_Ant1_Low_2412



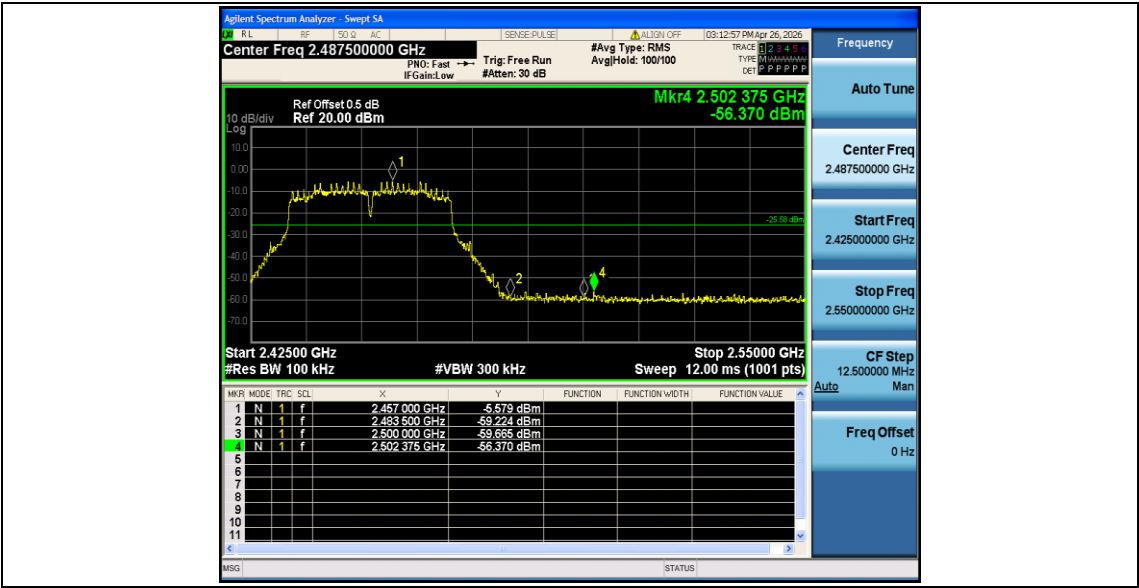
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

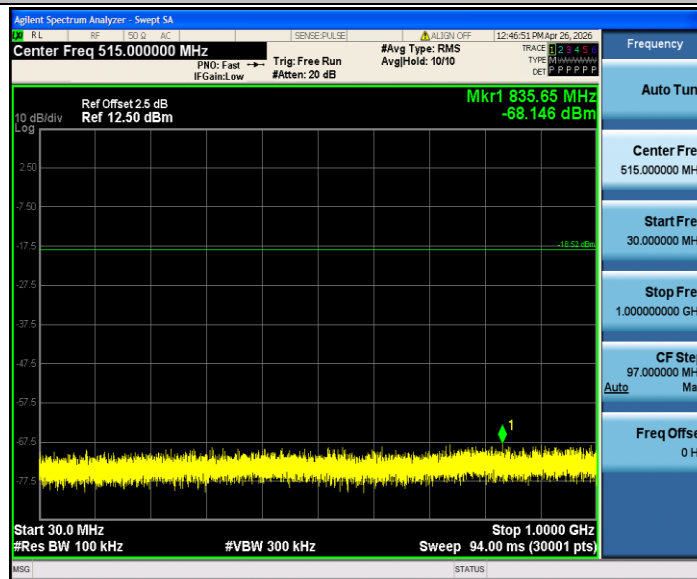
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.48	1.48	---	PASS
			30~1000	1.48	-68.15	≤-18.52	PASS
			1000~26500	1.48	-55.15	≤-18.52	PASS
		2437	Reference	1.70	1.70	---	PASS
			30~1000	1.70	-67.06	≤-18.3	PASS
			1000~26500	1.70	-55.03	≤-18.3	PASS
		2462	Reference	0.70	0.70	---	PASS
			30~1000	0.70	-68.18	≤-19.3	PASS
			1000~26500	0.70	-55.25	≤-19.3	PASS
11G	Ant1	2412	Reference	-3.53	-3.53	---	PASS
			30~1000	-3.53	-67.9	≤-23.53	PASS
			1000~26500	-3.53	-55.54	≤-23.53	PASS
		2437	Reference	-3.05	-3.05	---	PASS
			30~1000	-3.05	-67.9	≤-23.05	PASS
			1000~26500	-3.05	-54.79	≤-23.05	PASS
		2462	Reference	-2.77	-2.77	---	PASS
			30~1000	-2.77	-67.49	≤-22.77	PASS
			1000~26500	-2.77	-55.35	≤-22.77	PASS
11N20SISO	Ant1	2412	Reference	-3.22	-3.22	---	PASS
			30~1000	-3.22	-67.95	≤-23.22	PASS
			1000~26500	-3.22	-55.02	≤-23.22	PASS
		2437	Reference	-3.44	-3.44	---	PASS
			30~1000	-3.44	-67.93	≤-23.44	PASS
			1000~26500	-3.44	-55.19	≤-23.44	PASS
		2462	Reference	-2.75	-2.75	---	PASS
			30~1000	-2.75	-66.07	≤-22.75	PASS
			1000~26500	-2.75	-54.62	≤-22.75	PASS
11N40SISO	Ant1	2422	Reference	-6.34	-6.34	---	PASS
			30~1000	-6.34	-67.62	≤-26.34	PASS
			1000~26500	-6.34	-54.69	≤-26.34	PASS
		2437	Reference	-6.10	-6.10	---	PASS
			30~1000	-6.10	-66.95	≤-26.1	PASS
			1000~26500	-6.10	-54.42	≤-26.1	PASS
		2452	Reference	-5.60	-5.60	---	PASS
			30~1000	-5.60	-56.12	≤-25.6	PASS
			1000~26500	-5.60	-55.19	≤-25.6	PASS

Test Graphs

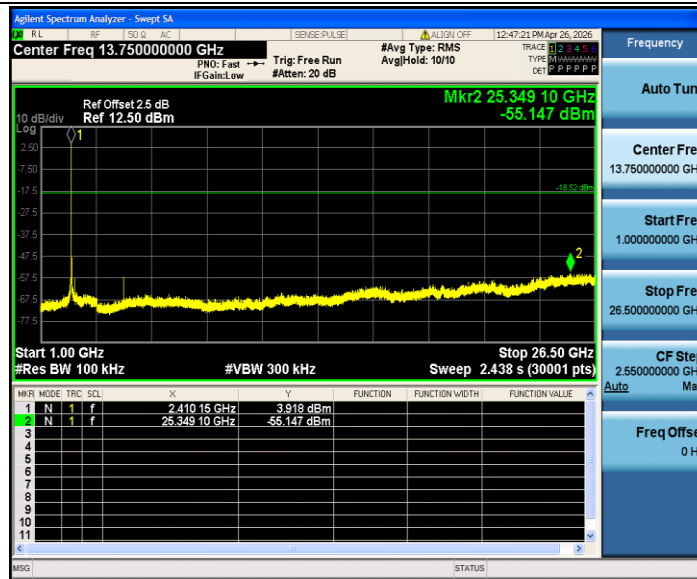
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



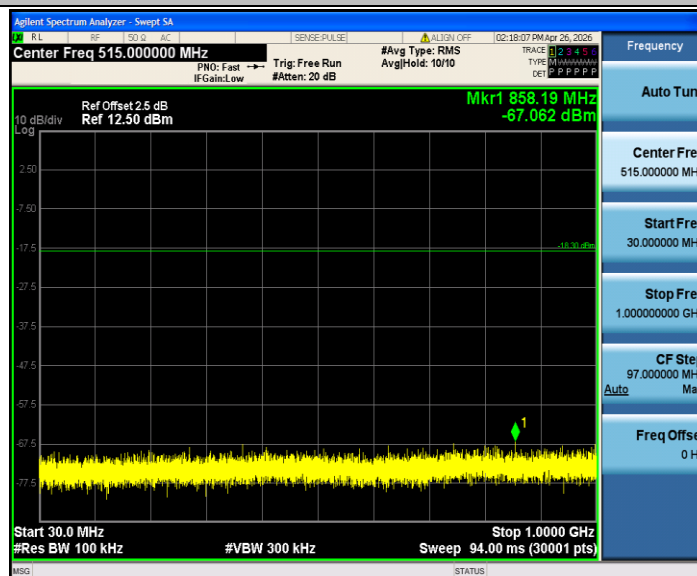
11B_Ant1_2412_1000~26500



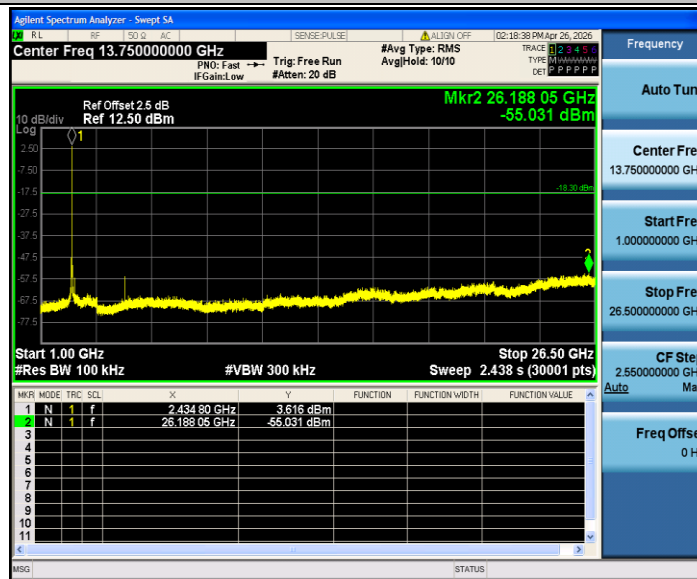
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



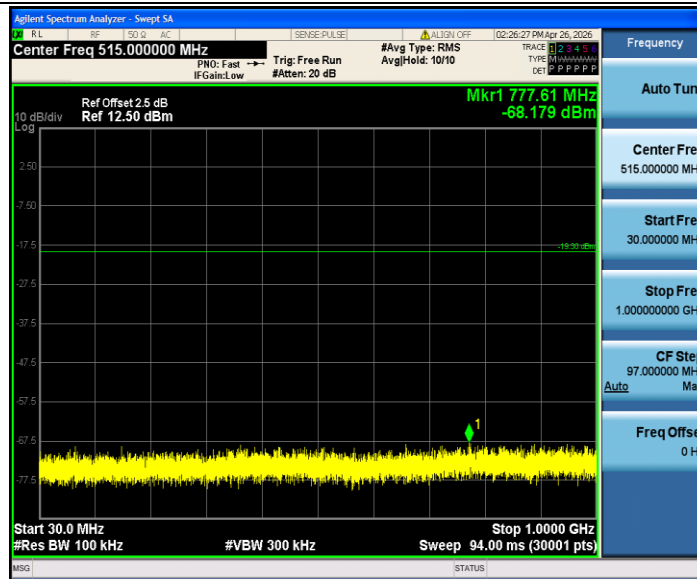
11B_Ant1_2437_1000~26500



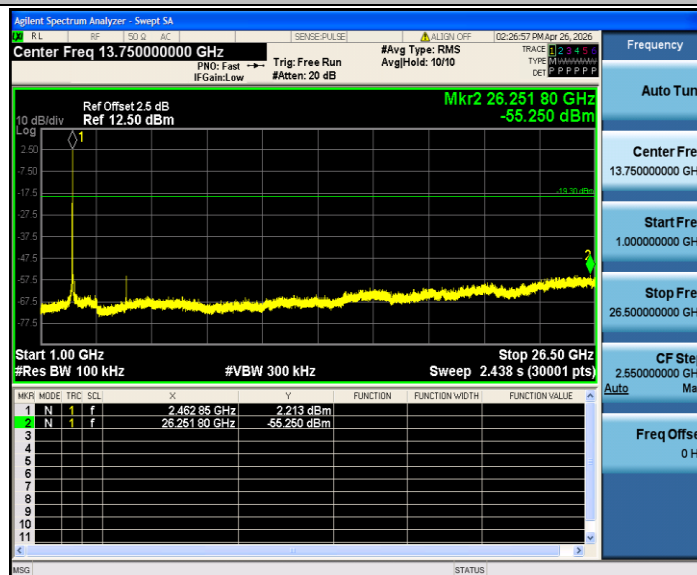
11B_Ant1_2462_0~Reference



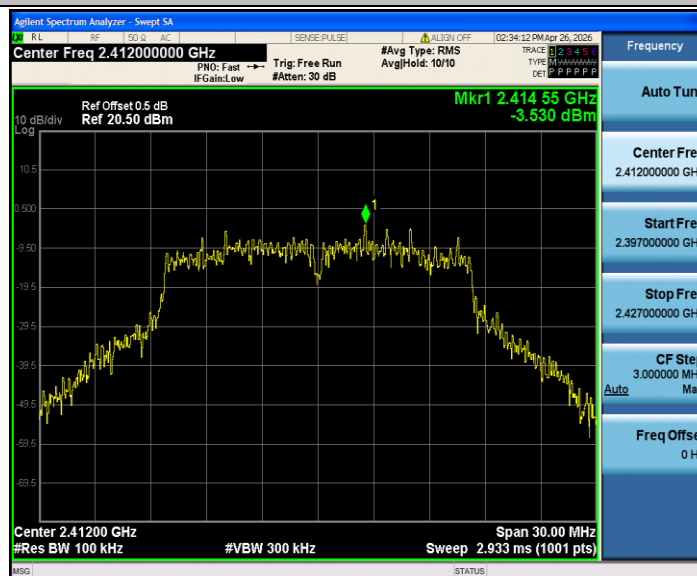
11B_Ant1_2462_30~1000



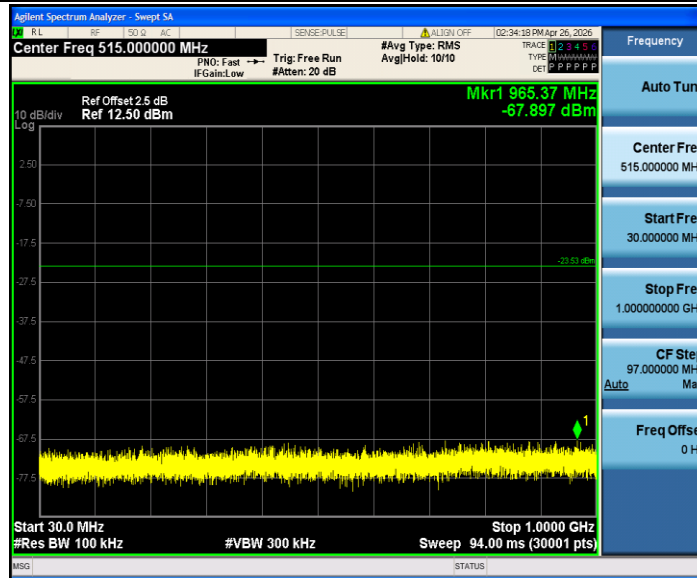
11B_Ant1_2462_1000~26500



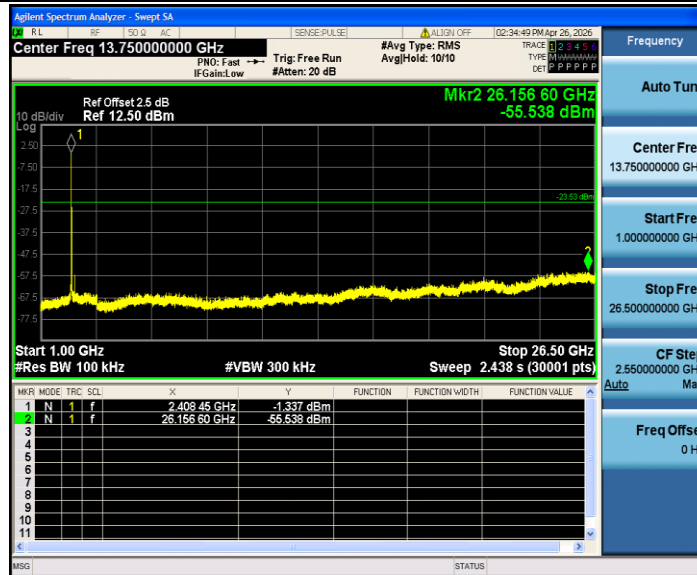
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



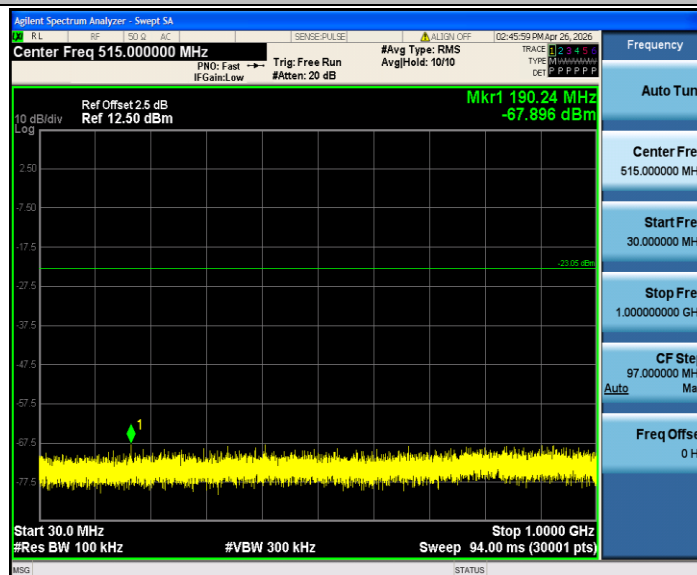
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

