

Appendix: 2.4G Wi-Fi

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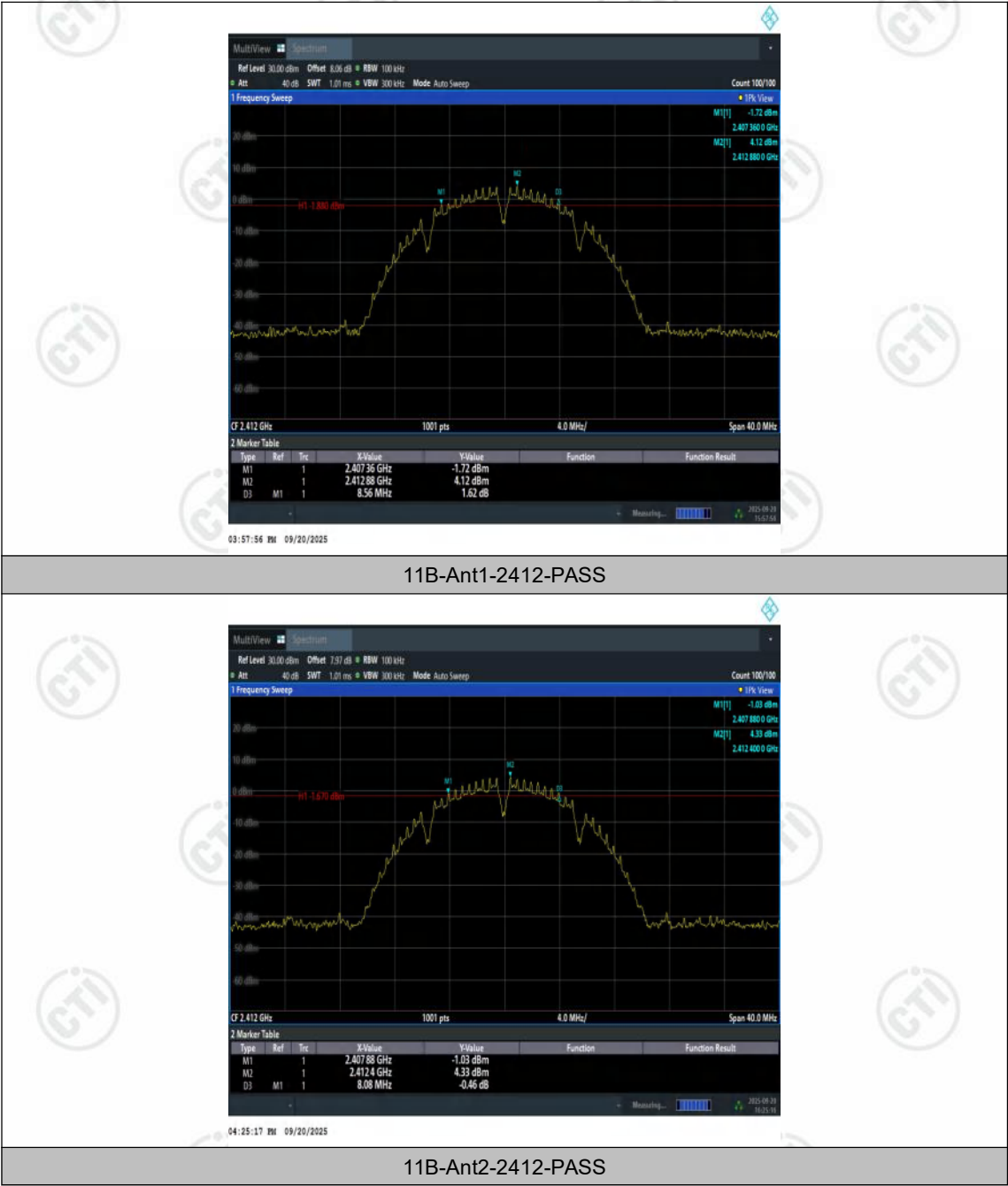
 Test Result 90

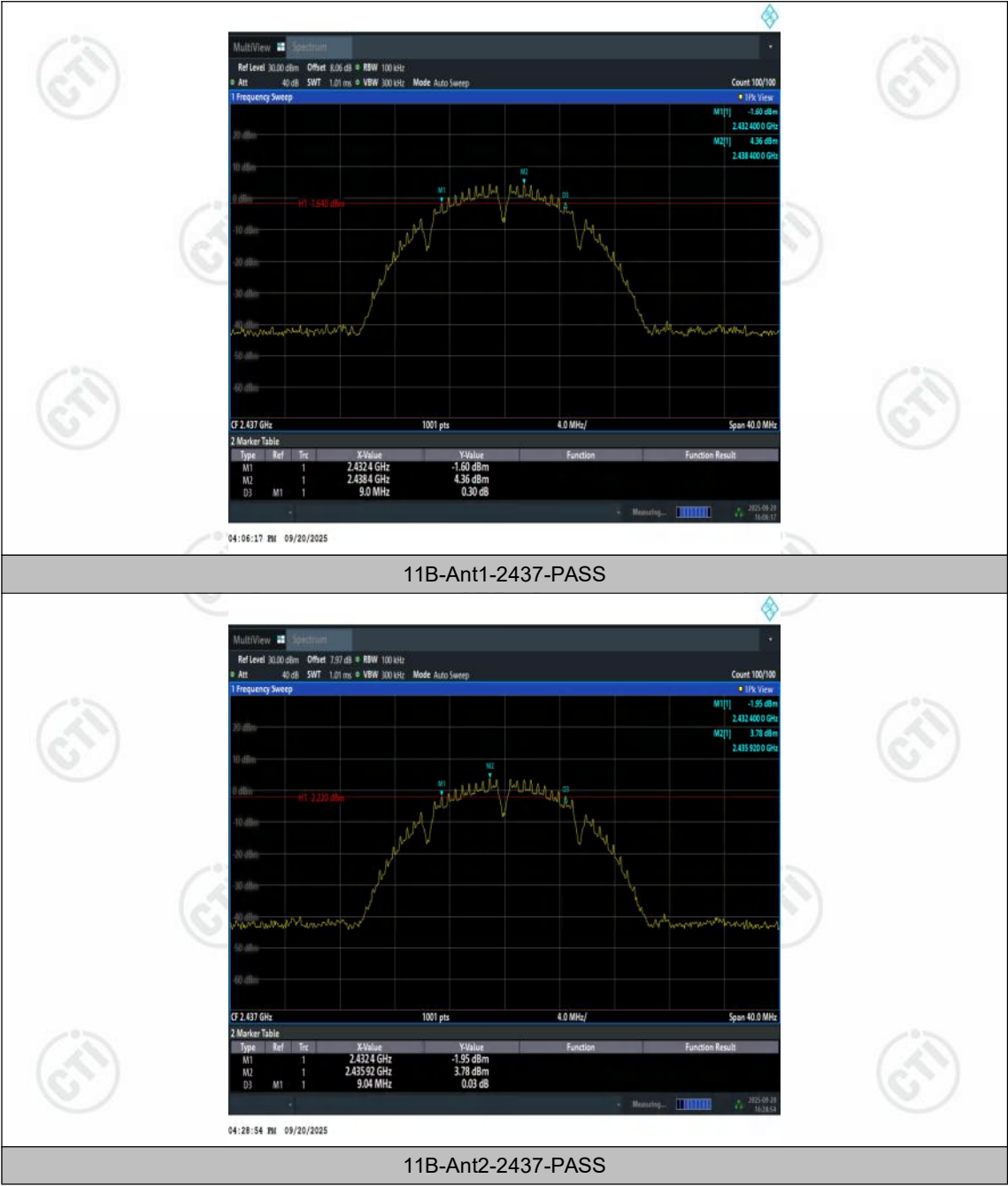
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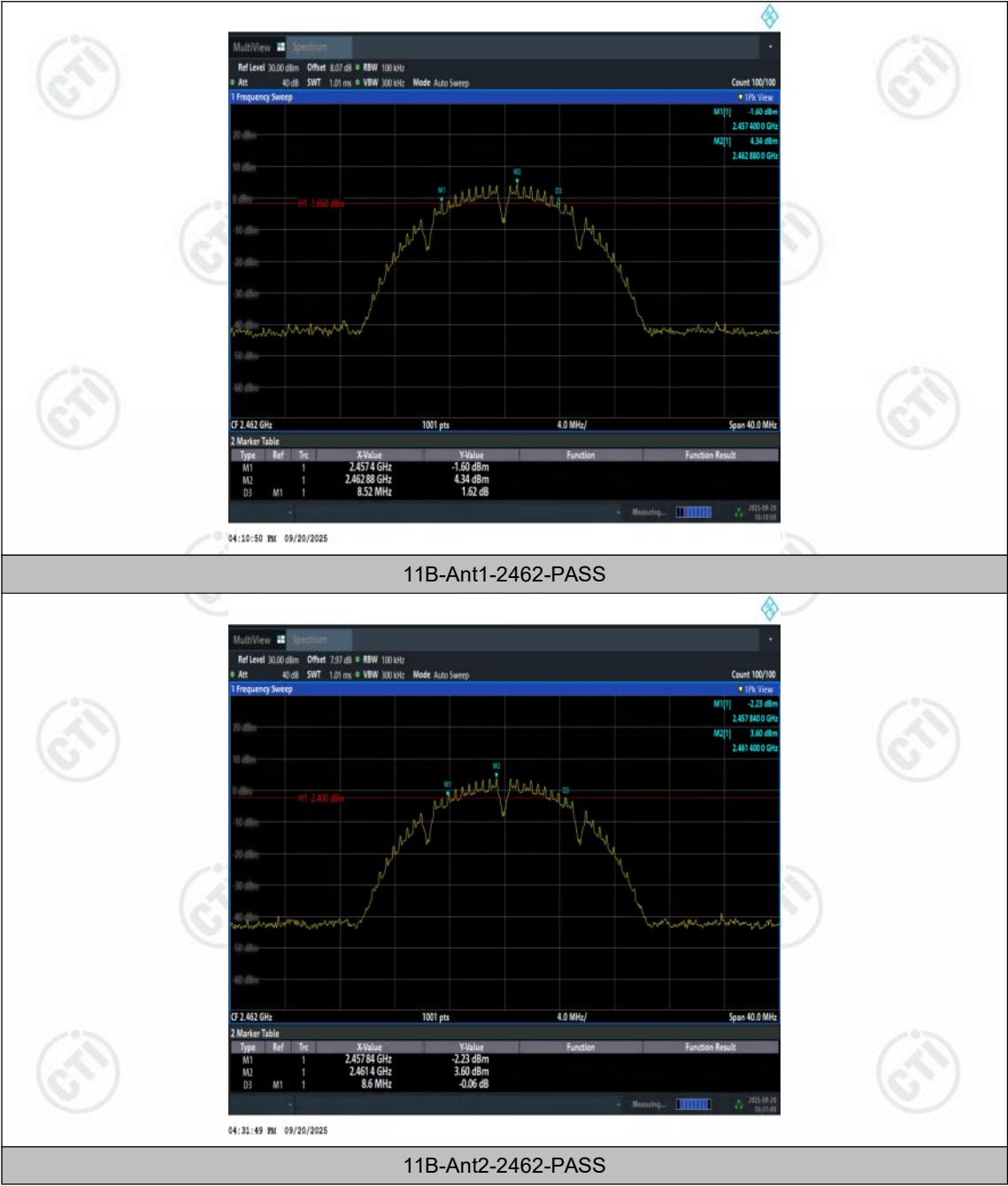
Appendix A: DTS Bandwidth**Test Result**

TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.56	2407.36	2415.92	0.5	PASS
11B	Ant2	2412	8.08	2407.88	2415.96	0.5	PASS
11B	Ant1	2437	9.00	2432.40	2441.40	0.5	PASS
11B	Ant2	2437	9.04	2432.40	2441.44	0.5	PASS
11B	Ant1	2462	8.52	2457.40	2465.92	0.5	PASS
11B	Ant2	2462	8.60	2457.84	2466.44	0.5	PASS
11G	Ant1	2412	15.16	2404.32	2419.48	0.5	PASS
11G	Ant2	2412	15.12	2404.36	2419.48	0.5	PASS
11G	Ant1	2437	15.16	2429.32	2444.48	0.5	PASS
11G	Ant2	2437	15.16	2429.32	2444.48	0.5	PASS
11G	Ant1	2462	15.12	2454.44	2469.56	0.5	PASS
11G	Ant2	2462	15.16	2454.32	2469.48	0.5	PASS
11N20MIMO	Ant1	2412	15.12	2404.44	2419.56	0.5	PASS
11N20MIMO	Ant2	2412	15.72	2404.44	2420.16	0.5	PASS
11N20MIMO	Ant1	2437	15.16	2429.40	2444.56	0.5	PASS
11N20MIMO	Ant2	2437	16.28	2428.84	2445.12	0.5	PASS
11N20MIMO	Ant1	2462	15.12	2454.44	2469.56	0.5	PASS
11N20MIMO	Ant2	2462	15.68	2454.44	2470.12	0.5	PASS
11N40MIMO	Ant1	2422	35.12	2404.48	2439.60	0.5	PASS
11N40MIMO	Ant2	2422	35.12	2404.48	2439.60	0.5	PASS
11N40MIMO	Ant1	2437	35.12	2419.48	2454.60	0.5	PASS
11N40MIMO	Ant2	2437	35.12	2419.48	2454.60	0.5	PASS
11N40MIMO	Ant1	2452	35.12	2434.48	2469.60	0.5	PASS
11N40MIMO	Ant2	2452	35.12	2434.48	2469.60	0.5	PASS

Test Graphs





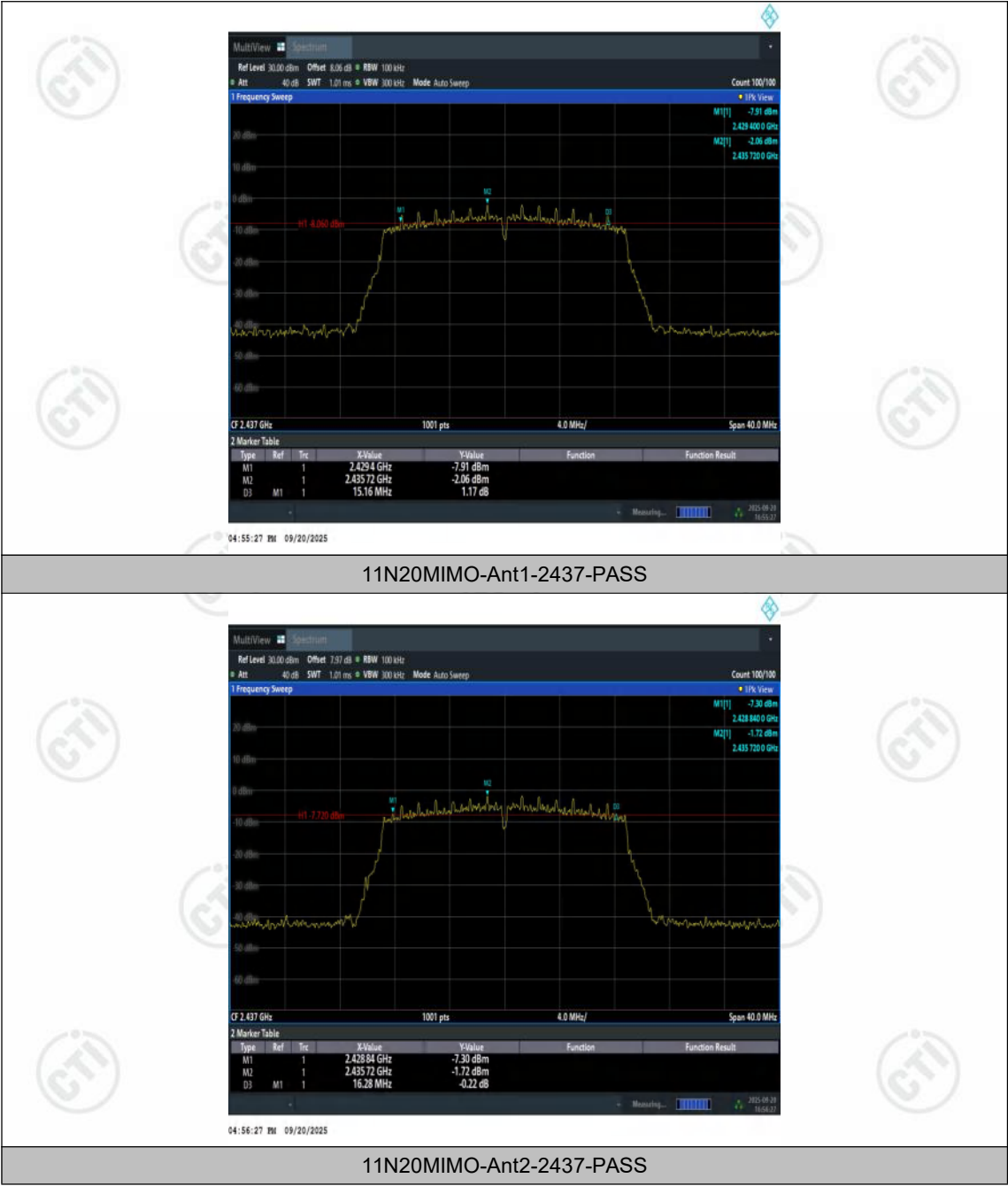




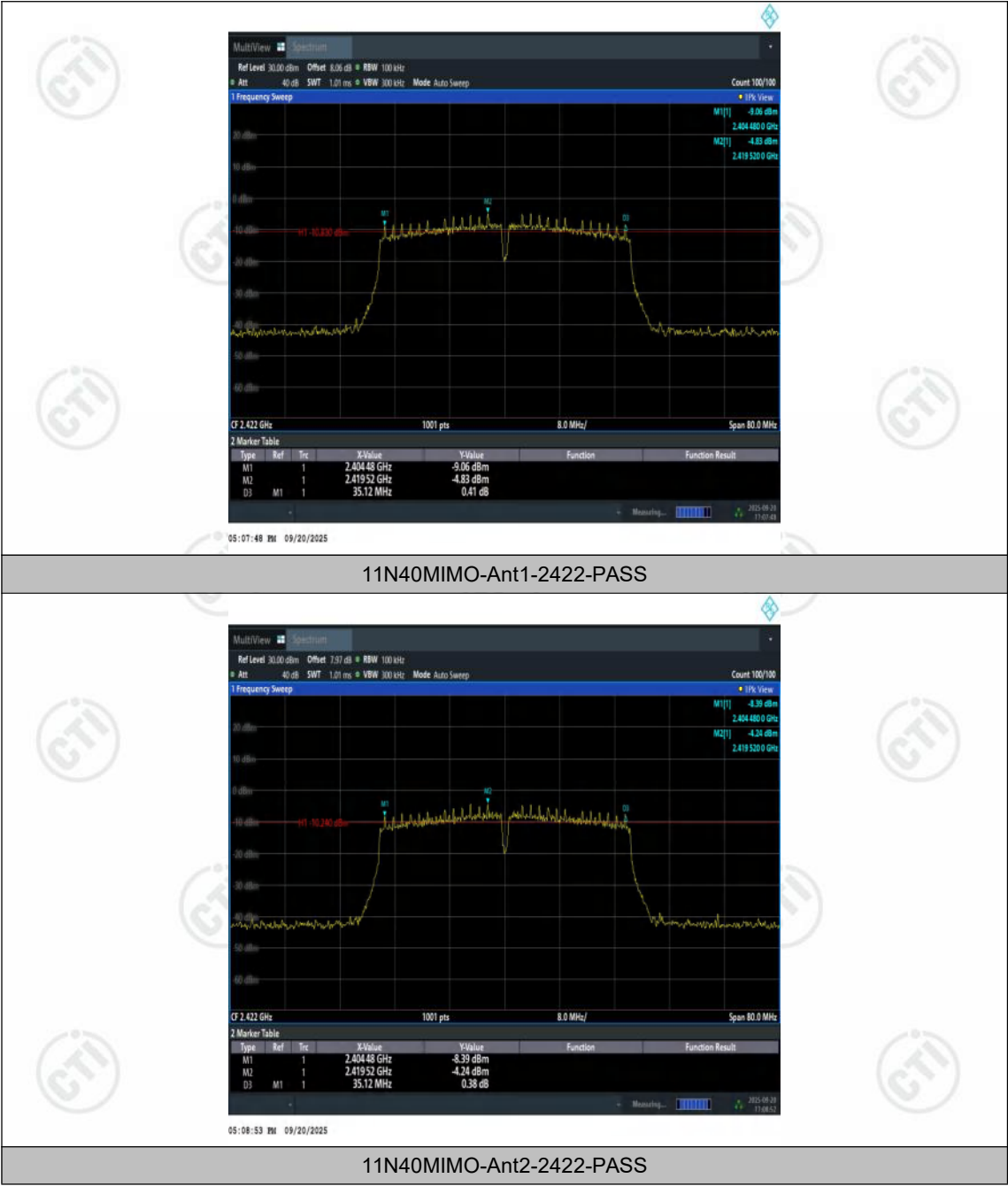


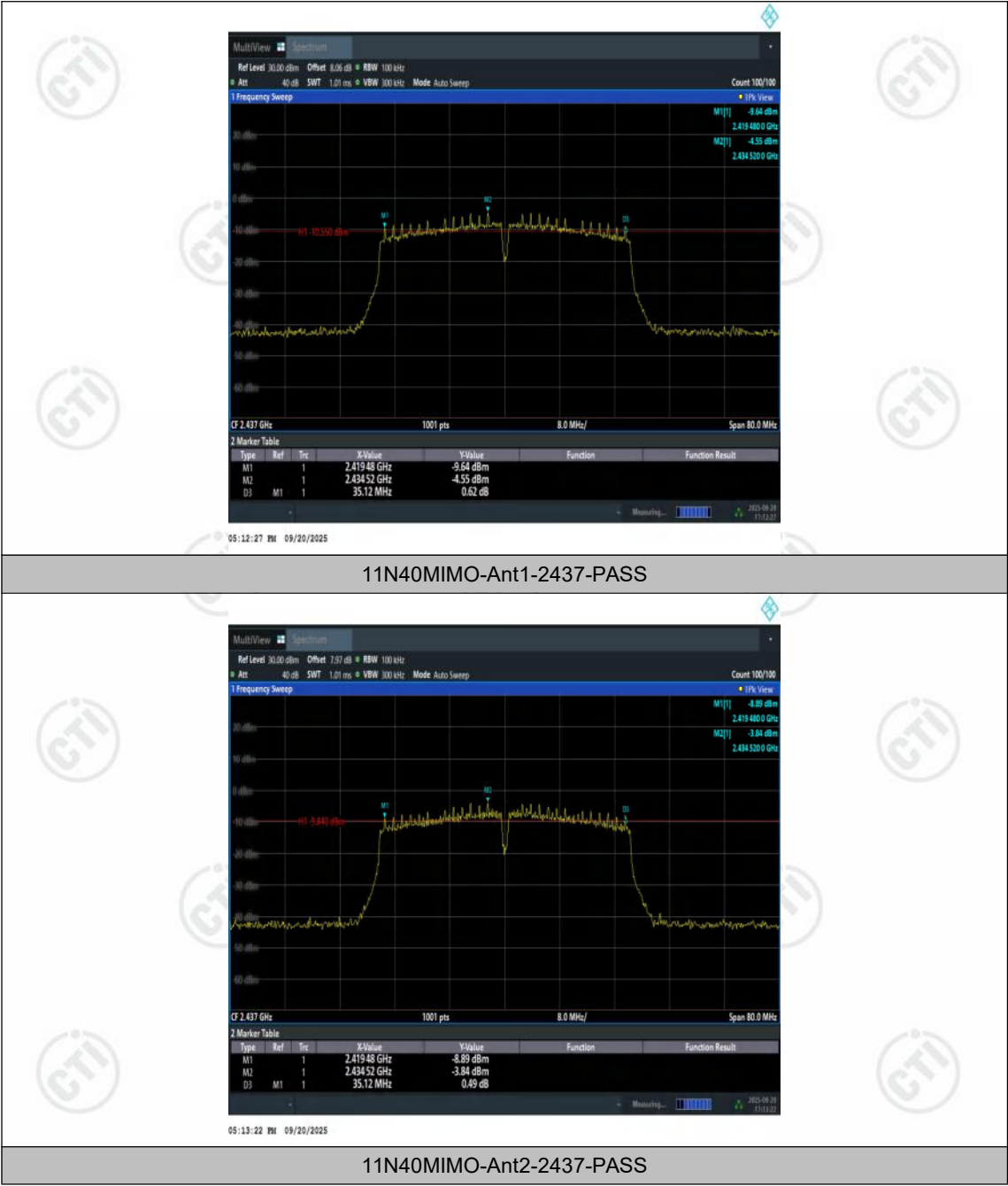


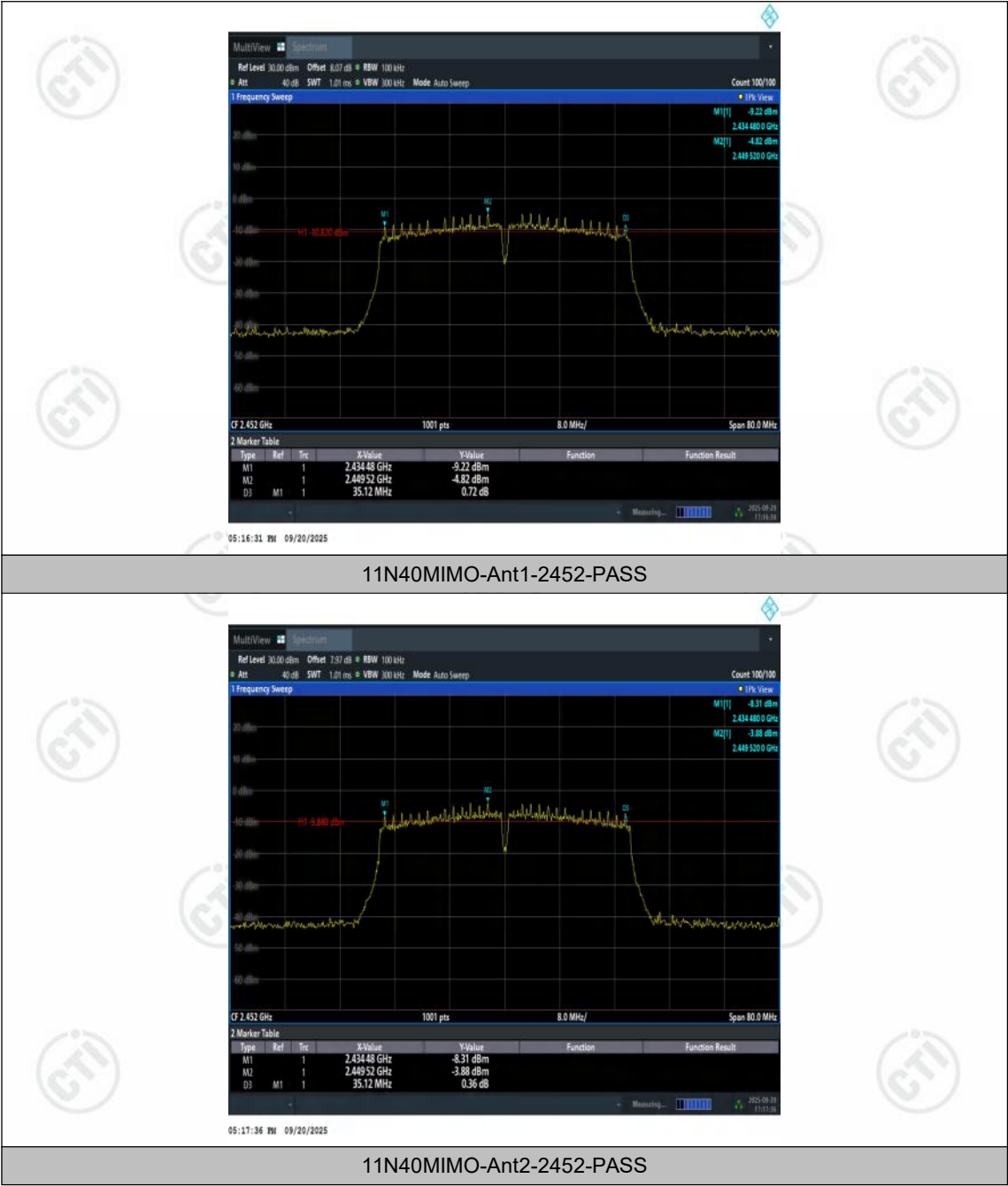












Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.414	2405.2207	2418.6347	---	---
11B	Ant2	2412	13.426	2405.2300	2418.6560	---	---
11B	Ant1	2437	13.396	2430.2219	2443.6183	---	---
11B	Ant2	2437	13.441	2430.2297	2443.6705	---	---
11B	Ant1	2462	13.400	2455.2233	2468.6233	---	---
11B	Ant2	2462	13.445	2455.2212	2468.6664	---	---
11G	Ant1	2412	17.188	2403.3451	2420.5331	---	---
11G	Ant2	2412	17.180	2403.3362	2420.5166	---	---
11G	Ant1	2437	17.203	2428.3131	2445.5159	---	---
11G	Ant2	2437	17.177	2428.3185	2445.4952	---	---
11G	Ant1	2462	17.180	2453.4398	2470.6194	---	---
11G	Ant2	2462	17.121	2453.3606	2470.4815	---	---
11N20MIMO	Ant1	2412	18.037	2403.0235	2421.0607	---	---
11N20MIMO	Ant2	2412	17.748	2403.1498	2420.8982	---	---
11N20MIMO	Ant1	2437	18.030	2428.0074	2446.0376	---	---
11N20MIMO	Ant2	2437	17.775	2428.1317	2445.9066	---	---
11N20MIMO	Ant1	2462	18.032	2453.0130	2471.0446	---	---
11N20MIMO	Ant2	2462	17.750	2453.1419	2470.8922	---	---
11N40MIMO	Ant1	2422	36.440	2403.8369	2440.2773	---	---
11N40MIMO	Ant2	2422	36.343	2403.9009	2440.2442	---	---
11N40MIMO	Ant1	2437	36.166	2418.9440	2455.1103	---	---
11N40MIMO	Ant2	2437	36.141	2418.9860	2455.1267	---	---
11N40MIMO	Ant1	2452	36.451	2433.8290	2470.2804	---	---
11N40MIMO	Ant2	2452	36.362	2433.8366	2470.1990	---	---

Test Graphs

























Appendix C: Maximum conducted output power

Test Result

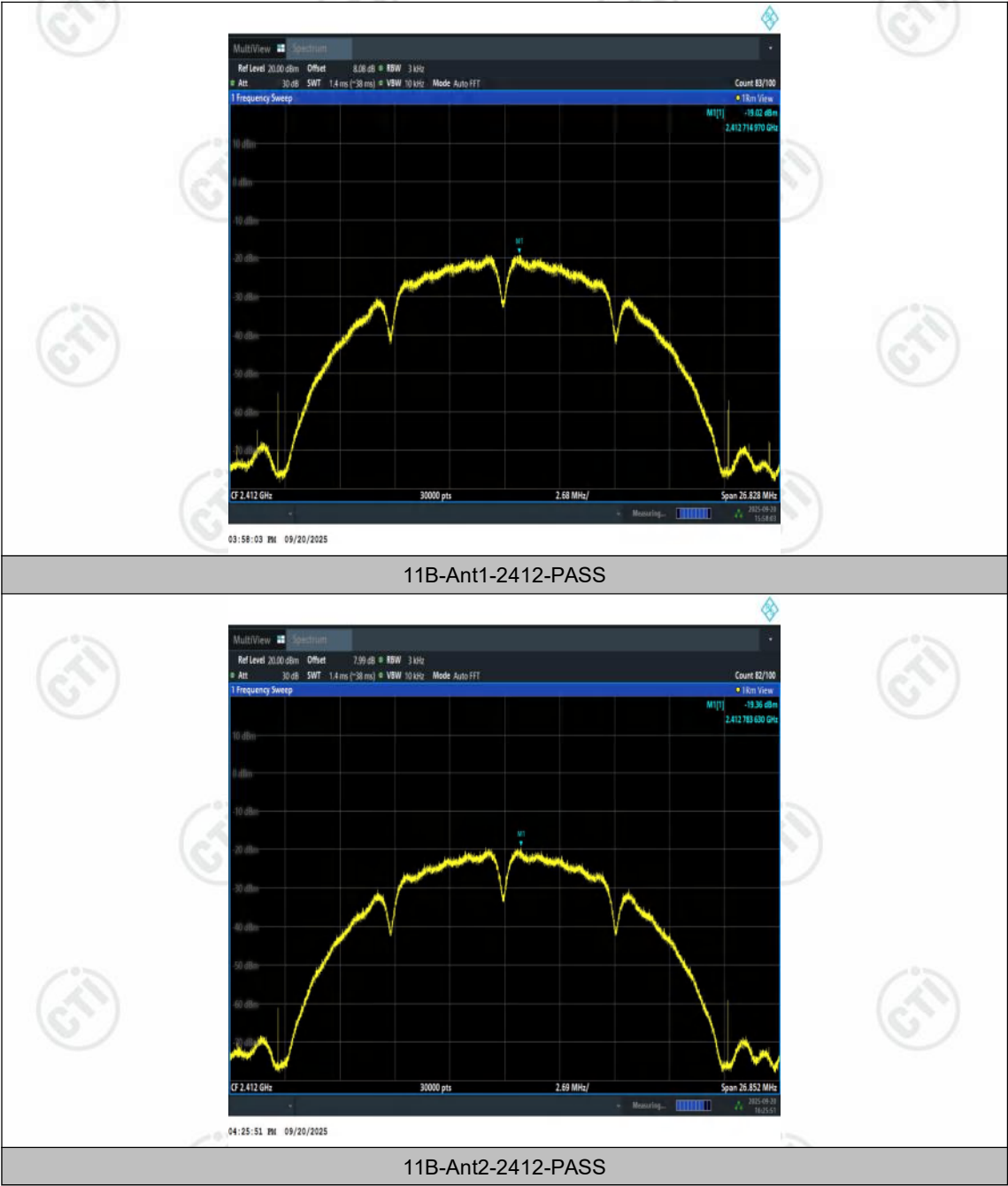
TestMode	Antenna	Frequency [MHz]	Set Power	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	---	13.22	≤30.00	PASS
11B	Ant2	2412	---	13.31	≤30.00	PASS
11B	Ant1	2437	---	13.36	≤30.00	PASS
11B	Ant2	2437	---	13.59	≤30.00	PASS
11B	Ant1	2462	---	13.14	≤30.00	PASS
11B	Ant2	2462	---	13.47	≤30.00	PASS
11G	Ant1	2412	---	12.48	≤30.00	PASS
11G	Ant2	2412	---	12.44	≤30.00	PASS
11G	Ant1	2437	---	12.27	≤30.00	PASS
11G	Ant2	2437	---	12.46	≤30.00	PASS
11G	Ant1	2462	---	12.35	≤30.00	PASS
11G	Ant2	2462	---	12.69	≤30.00	PASS
11N20MIMO	Ant1	2412	---	9.56	≤30.00	PASS
11N20MIMO	Ant2	2412	---	9.91	≤30.00	PASS
11N20MIMO	total	2412	---	12.75	≤30.00	PASS
11N20MIMO	Ant1	2437	---	9.62	≤30.00	PASS
11N20MIMO	Ant2	2437	---	9.95	≤30.00	PASS
11N20MIMO	total	2437	---	12.80	≤30.00	PASS
11N20MIMO	Ant1	2462	---	9.67	≤30.00	PASS
11N20MIMO	Ant2	2462	---	10.22	≤30.00	PASS
11N20MIMO	total	2462	---	12.96	≤30.00	PASS
11N40MIMO	Ant1	2422	---	9.59	≤30.00	PASS
11N40MIMO	Ant2	2422	---	9.88	≤30.00	PASS
11N40MIMO	total	2422	---	12.75	≤30.00	PASS
11N40MIMO	Ant1	2437	---	9.70	≤30.00	PASS
11N40MIMO	Ant2	2437	---	9.91	≤30.00	PASS
11N40MIMO	total	2437	---	12.82	≤30.00	PASS
11N40MIMO	Ant1	2452	---	9.83	≤30.00	PASS
11N40MIMO	Ant2	2452	---	10.26	≤30.00	PASS
11N40MIMO	total	2452	---	13.06	≤30.00	PASS

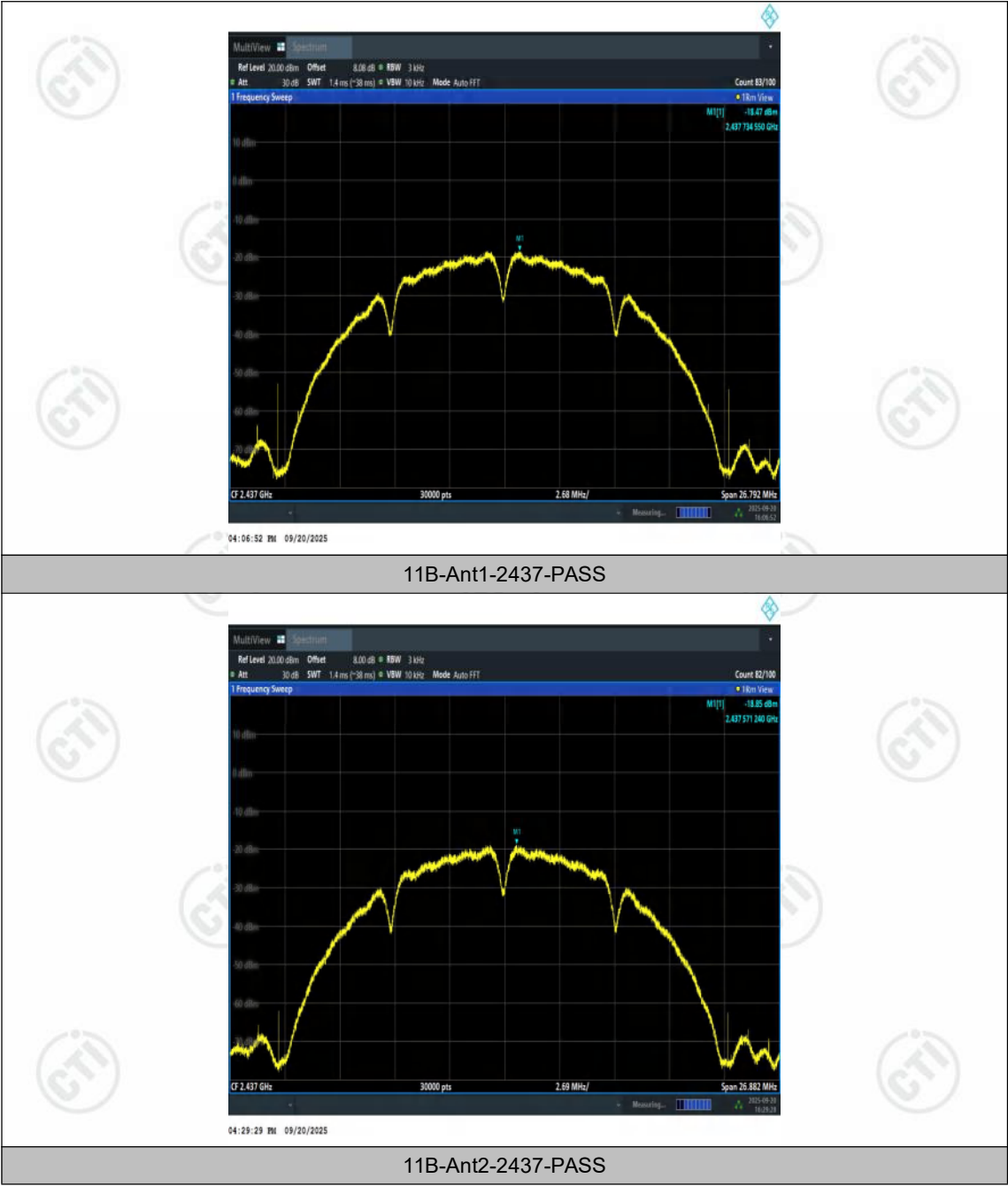
Appendix D: Maximum power spectral density

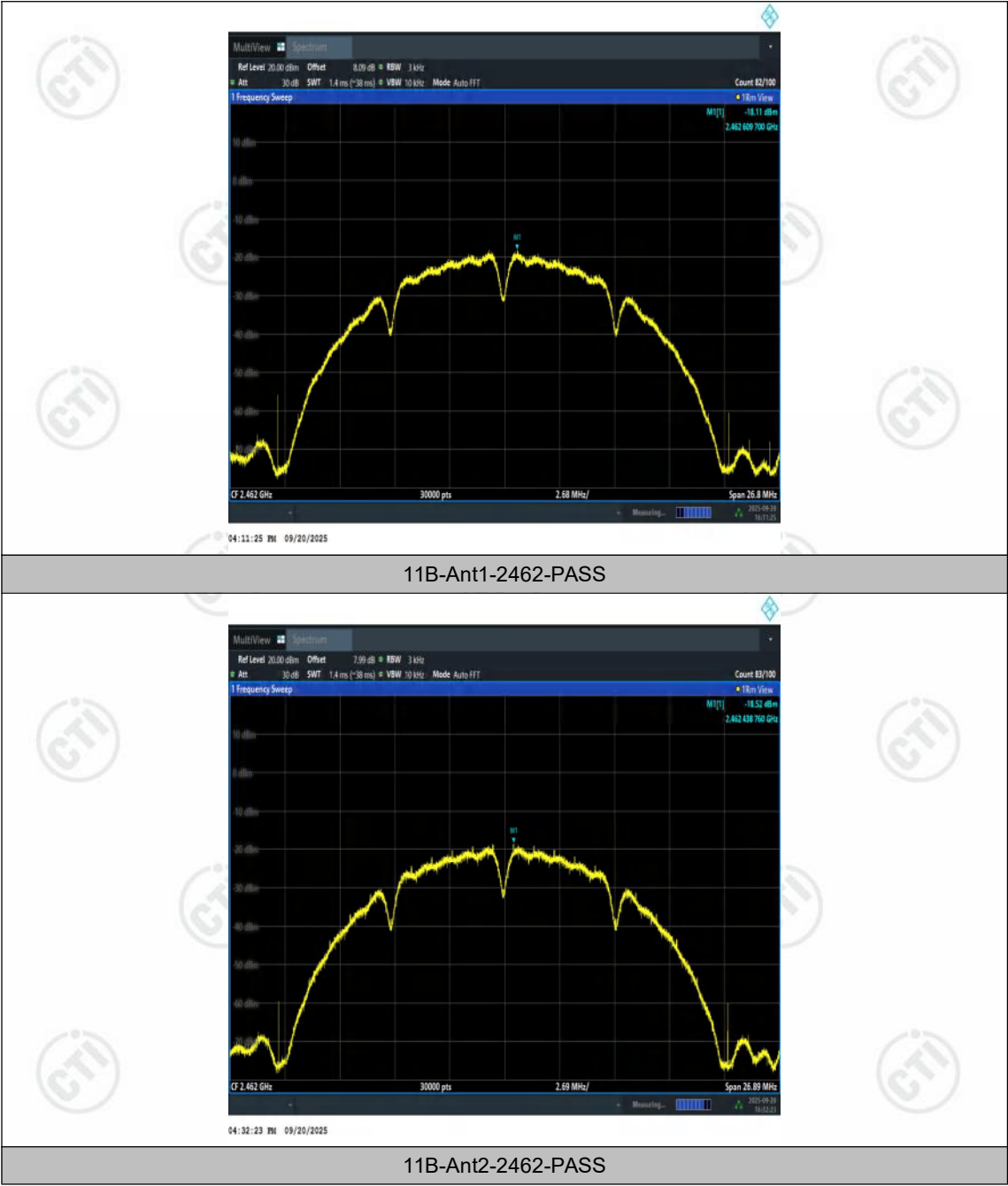
Test Result

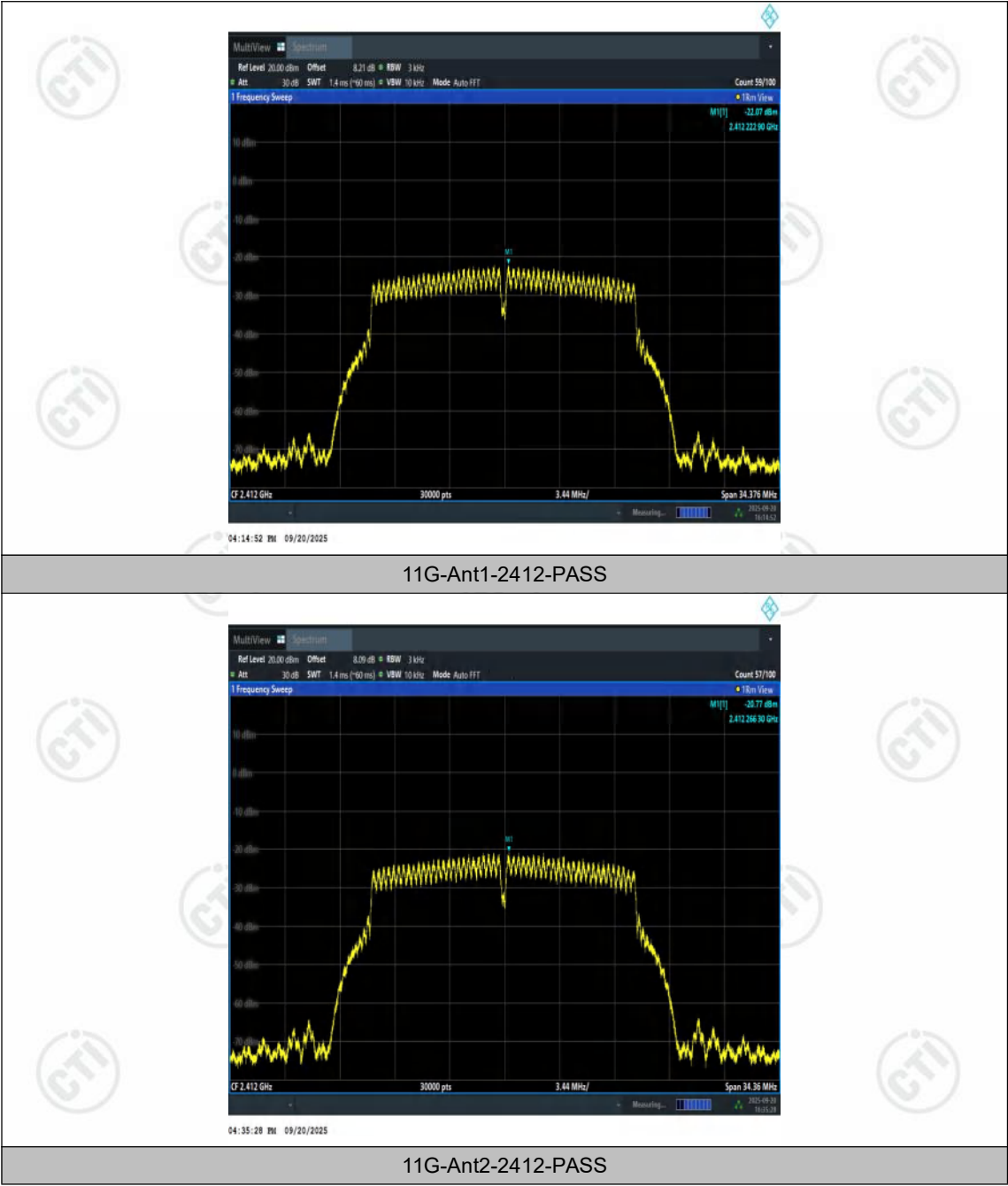
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-19.02	≤8.00	PASS
11B	Ant2	2412	-19.36	≤8.00	PASS
11B	Ant1	2437	-18.47	≤8.00	PASS
11B	Ant2	2437	-18.85	≤8.00	PASS
11B	Ant1	2462	-18.11	≤8.00	PASS
11B	Ant2	2462	-18.52	≤8.00	PASS
11G	Ant1	2412	-22.07	≤8.00	PASS
11G	Ant2	2412	-20.77	≤8.00	PASS
11G	Ant1	2437	-21.08	≤8.00	PASS
11G	Ant2	2437	-21.82	≤8.00	PASS
11G	Ant1	2462	-21.28	≤8.00	PASS
11G	Ant2	2462	-21.78	≤8.00	PASS
11N20MIMO	Ant1	2412	-25.06	≤8.00	PASS
11N20MIMO	Ant2	2412	-23.59	≤8.00	PASS
11N20MIMO	total	2412	-21.25	≤8.00	PASS
11N20MIMO	Ant1	2437	-24.03	≤8.00	PASS
11N20MIMO	Ant2	2437	-23.55	≤8.00	PASS
11N20MIMO	total	2437	-20.77	≤8.00	PASS
11N20MIMO	Ant1	2462	-24.09	≤8.00	PASS
11N20MIMO	Ant2	2462	-23.05	≤8.00	PASS
11N20MIMO	total	2462	-20.53	≤8.00	PASS
11N40MIMO	Ant1	2422	-24.97	≤8.00	PASS
11N40MIMO	Ant2	2422	-24.34	≤8.00	PASS
11N40MIMO	total	2422	-21.63	≤8.00	PASS
11N40MIMO	Ant1	2437	-25.24	≤8.00	PASS
11N40MIMO	Ant2	2437	-25.04	≤8.00	PASS
11N40MIMO	total	2437	-22.13	≤8.00	PASS
11N40MIMO	Ant1	2452	-25.24	≤8.00	PASS
11N40MIMO	Ant2	2452	-25.13	≤8.00	PASS
11N40MIMO	total	2452	-22.17	≤8.00	PASS

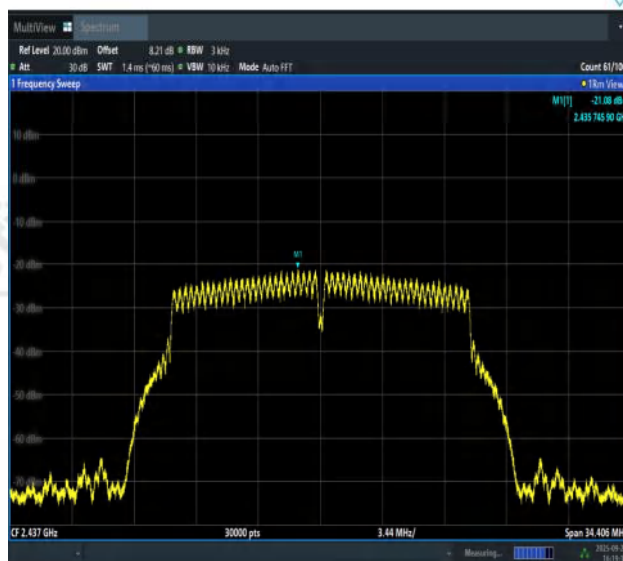
Test Graphs



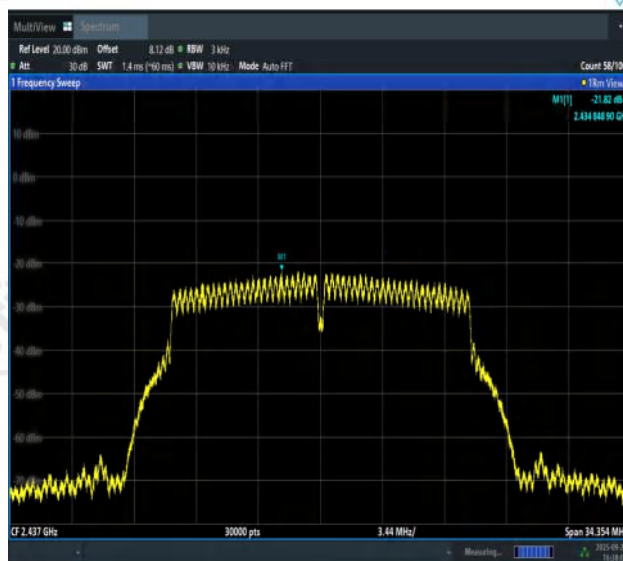




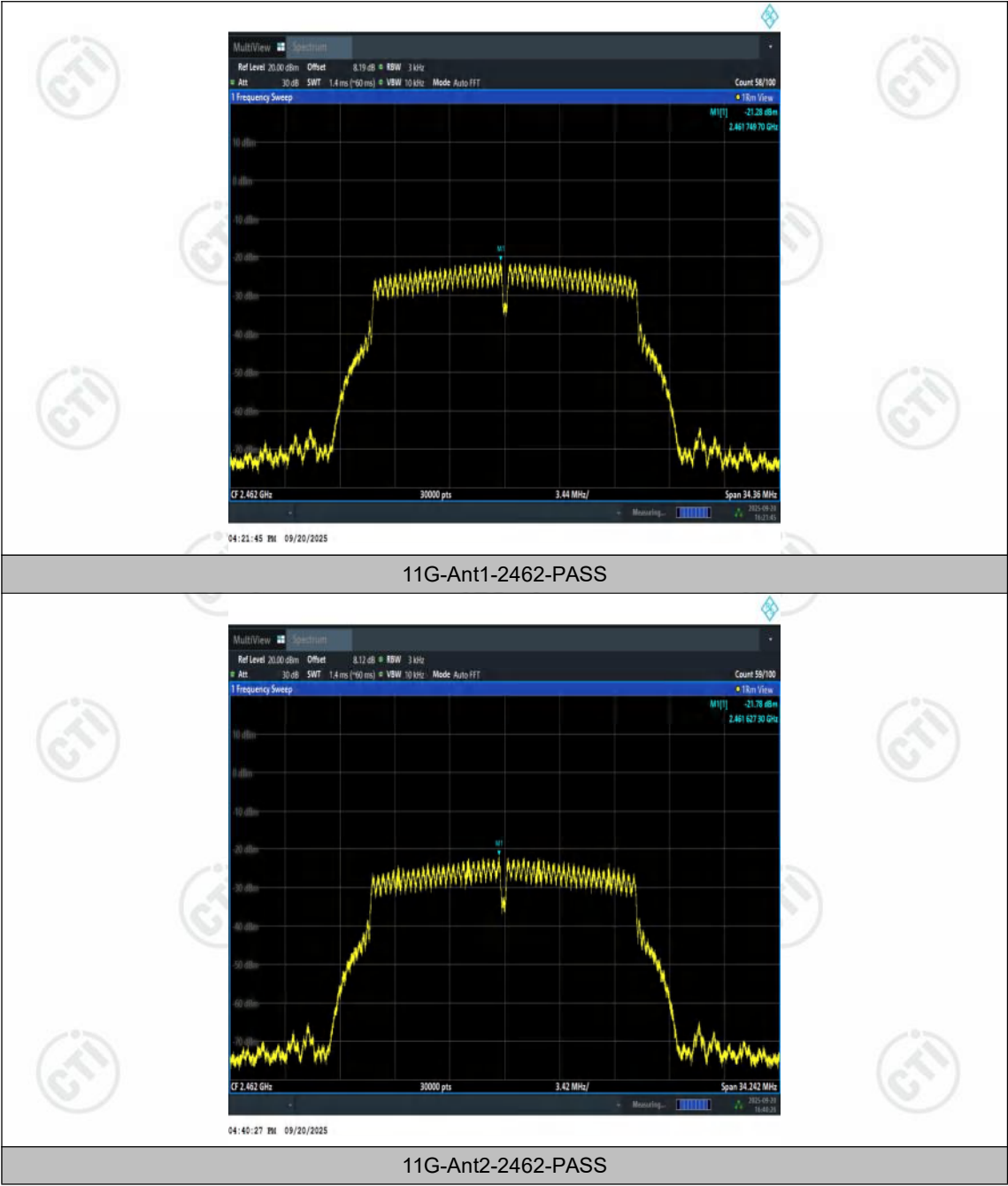


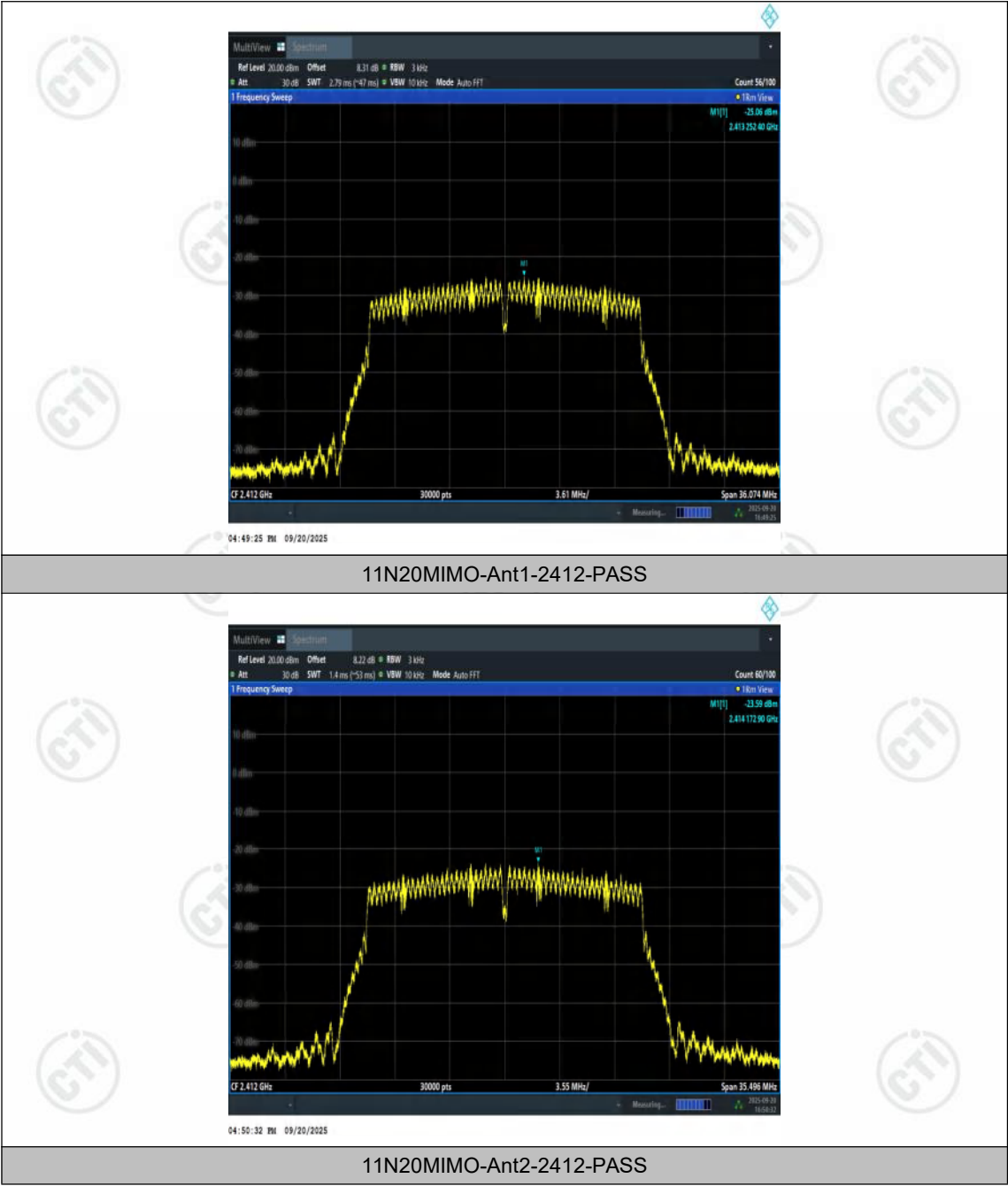


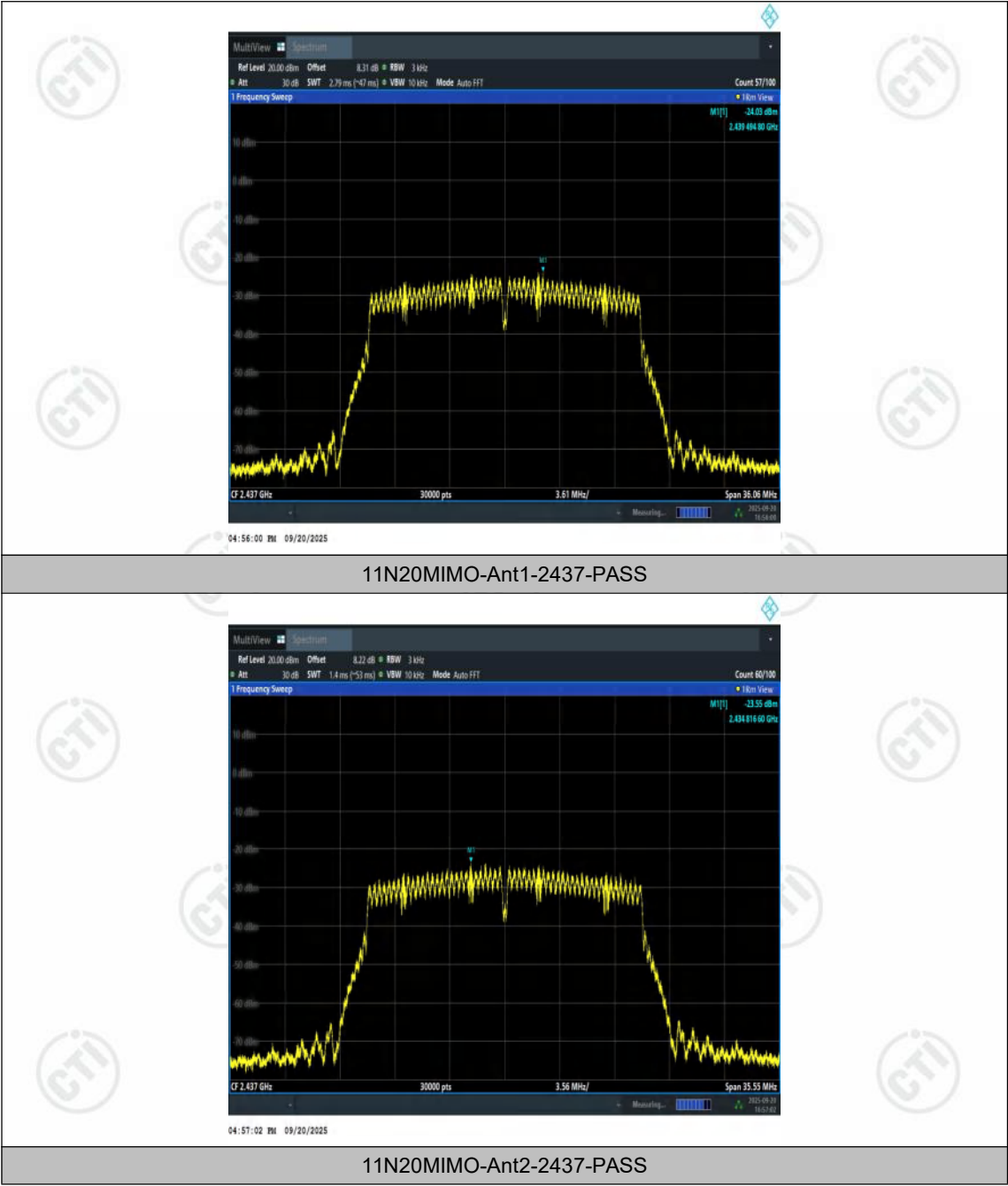
11G-Ant1-2437-PASS

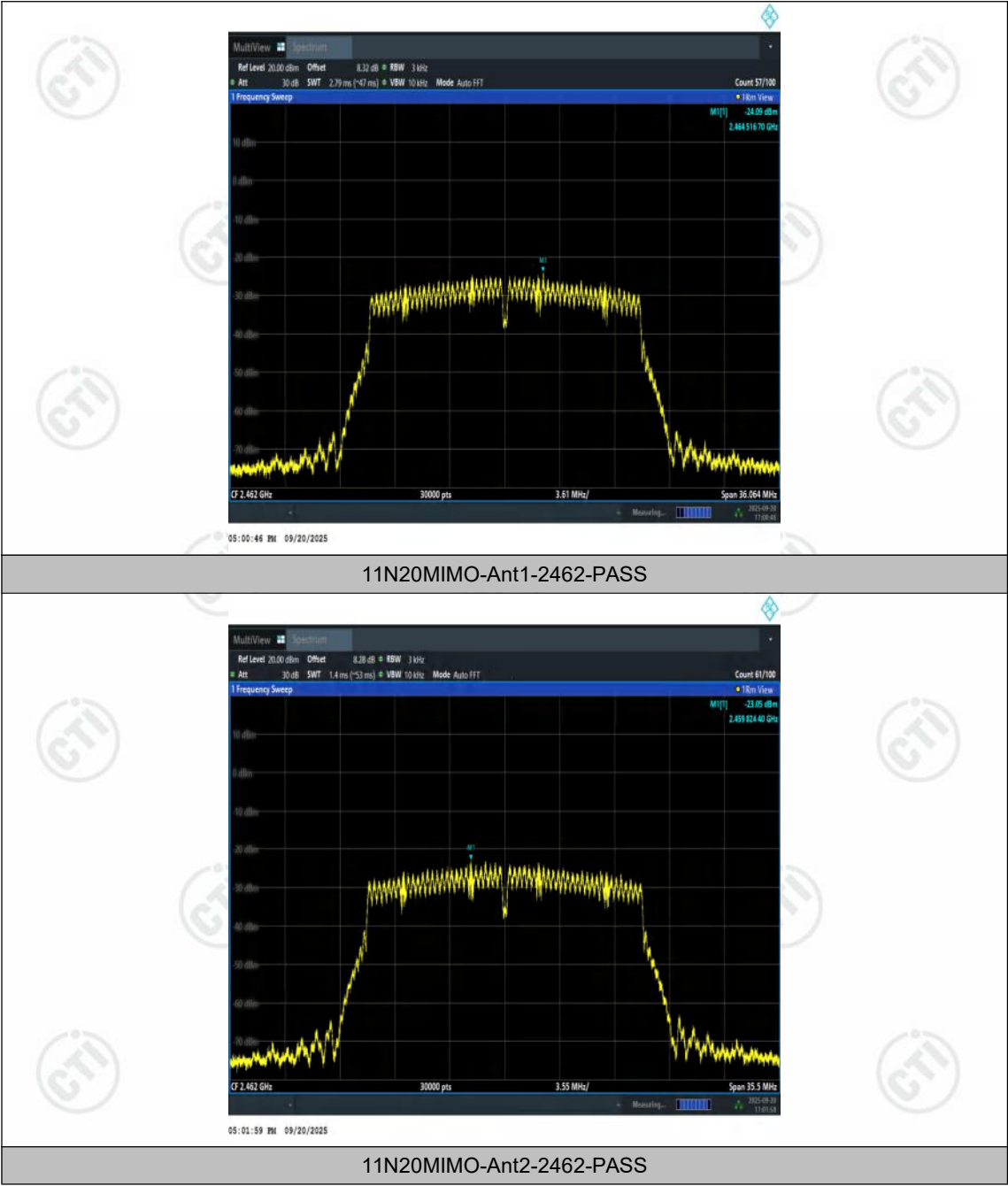


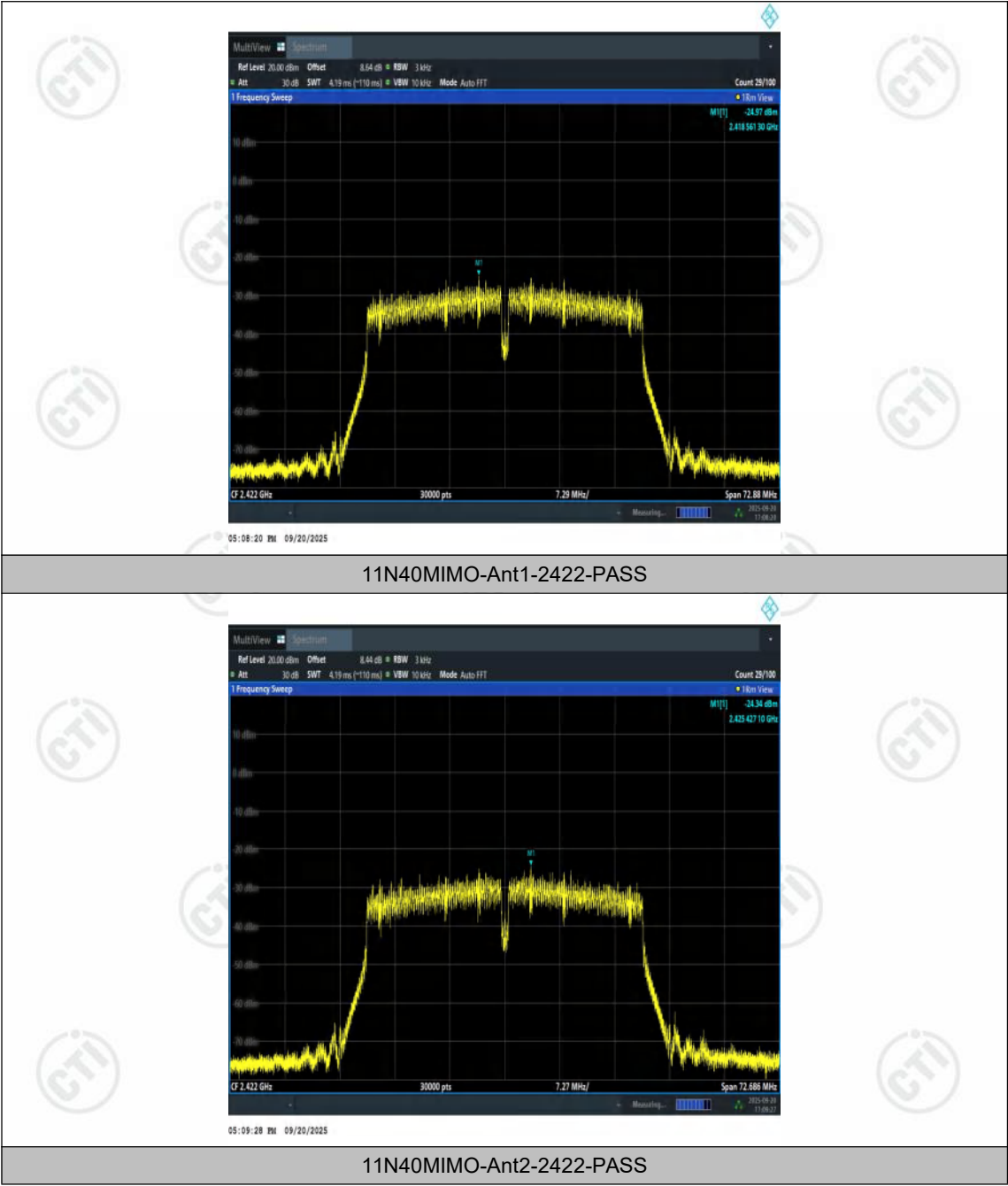
11G-Ant2-2437-PASS









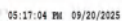




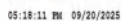
11N40MIMO-Ant1-2437-PASS



11N40MIMO-Ant2-2437-PASS



11N40MIMO-Ant1-2452-PASS



11N40MIMO-Ant2-2452-PASS

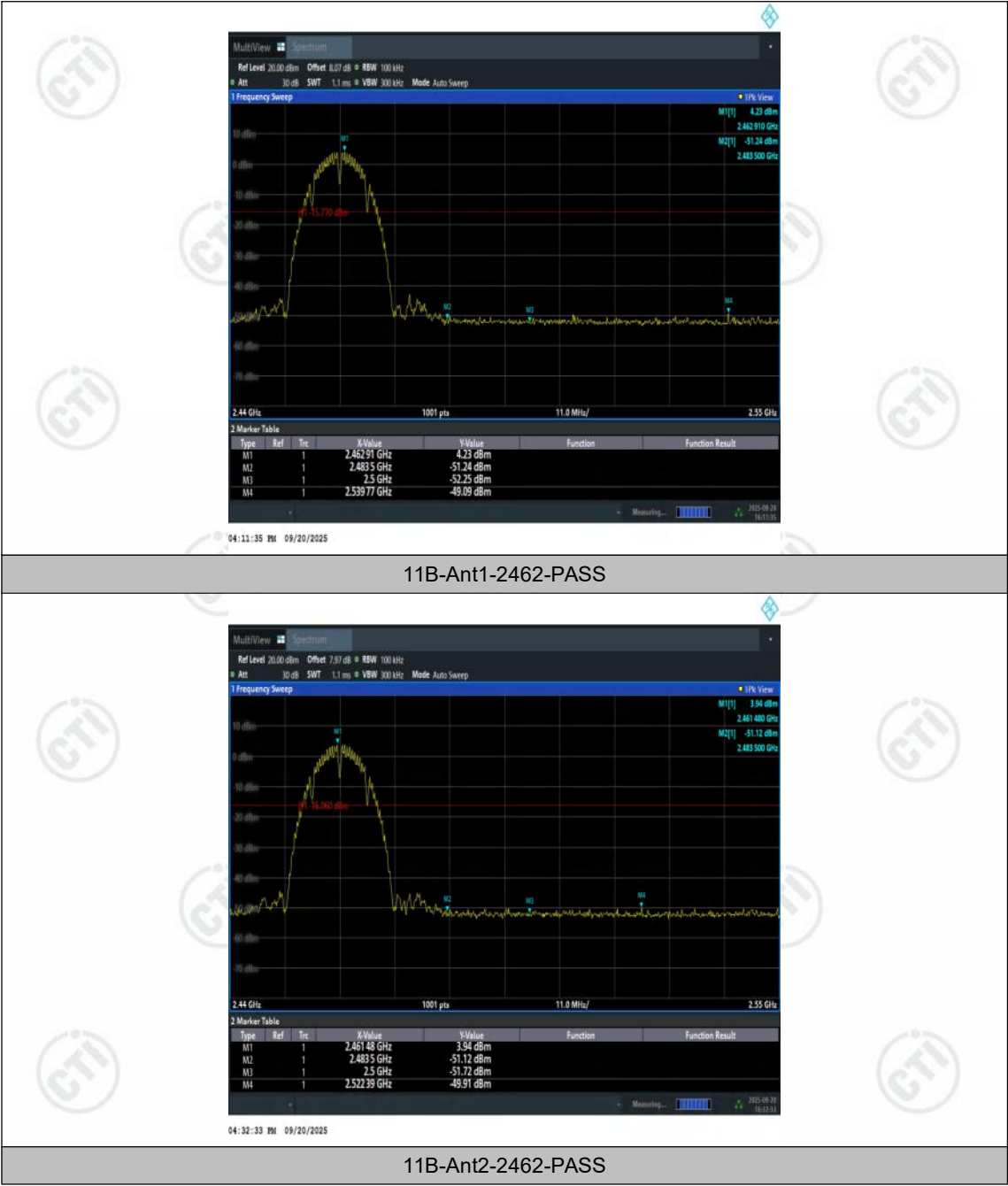
Appendix F: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.29	-44.43	≤-15.71	PASS
11B	Ant2	Low	2412	3.89	-44.93	≤-16.11	PASS
11B	Ant1	High	2462	4.23	-49.09	≤-15.77	PASS
11B	Ant2	High	2462	3.94	-49.91	≤-16.06	PASS
11G	Ant1	Low	2412	0.48	-43.4	≤-19.52	PASS
11G	Ant2	Low	2412	1.49	-42.83	≤-18.51	PASS
11G	Ant1	High	2462	1.15	-48.59	≤-18.85	PASS
11G	Ant2	High	2462	1.05	-48.56	≤-18.95	PASS
11N20MIMO	Ant1	Low	2412	-2.04	-45.1	≤-22.04	PASS
11N20MIMO	Ant2	Low	2412	-1.82	-44.99	≤-21.82	PASS
11N20MIMO	Ant1	High	2462	-2.21	-50.08	≤-22.21	PASS
11N20MIMO	Ant2	High	2462	-1.45	-49.27	≤-21.45	PASS
11N40MIMO	Ant1	Low	2422	-4.71	-45.63	≤-24.71	PASS
11N40MIMO	Ant2	Low	2422	-4.17	-43.66	≤-24.17	PASS
11N40MIMO	Ant1	High	2452	-4.78	-47.53	≤-24.78	PASS
11N40MIMO	Ant2	High	2452	-3.90	-47.91	≤-23.9	PASS

Test Graphs

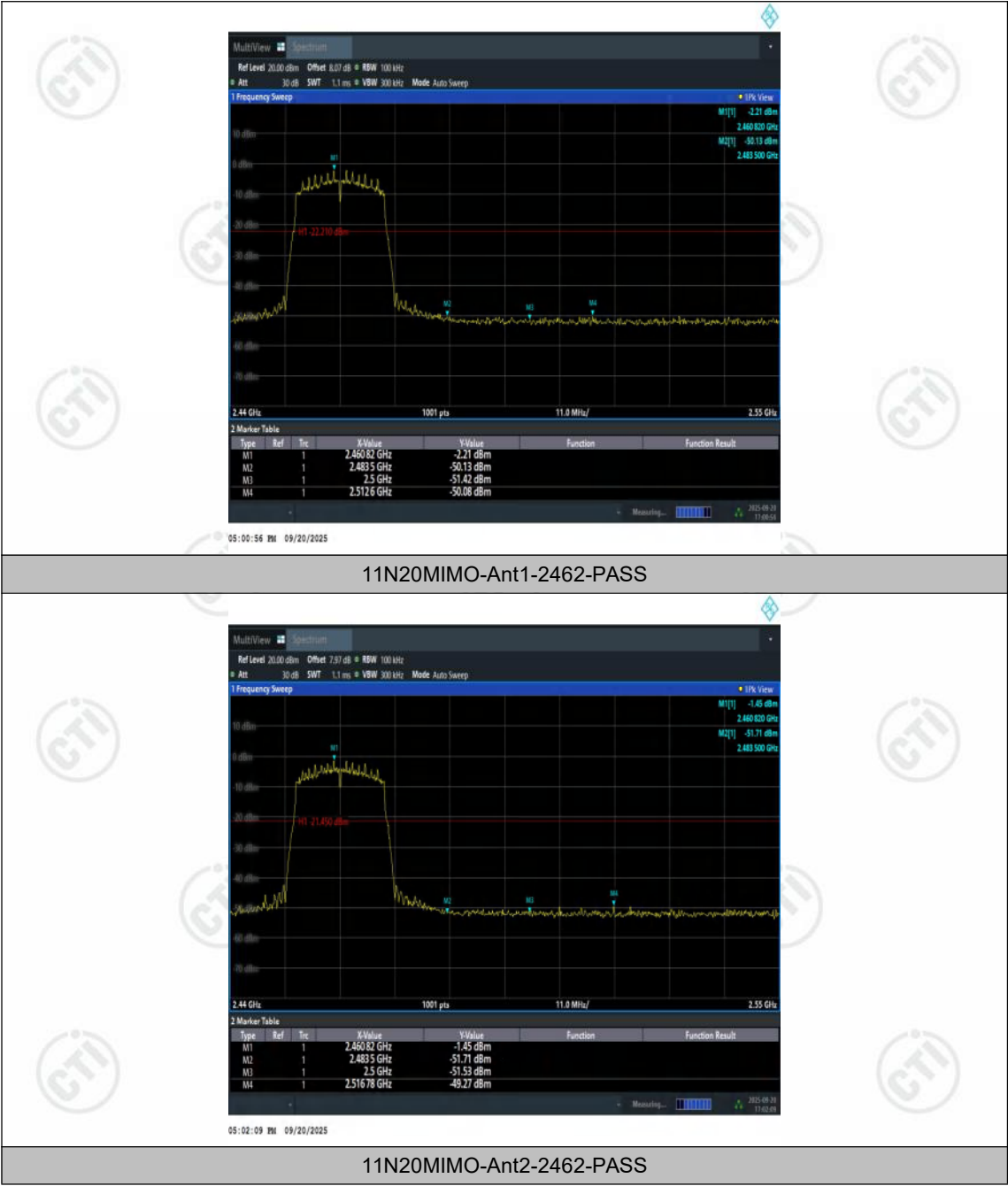




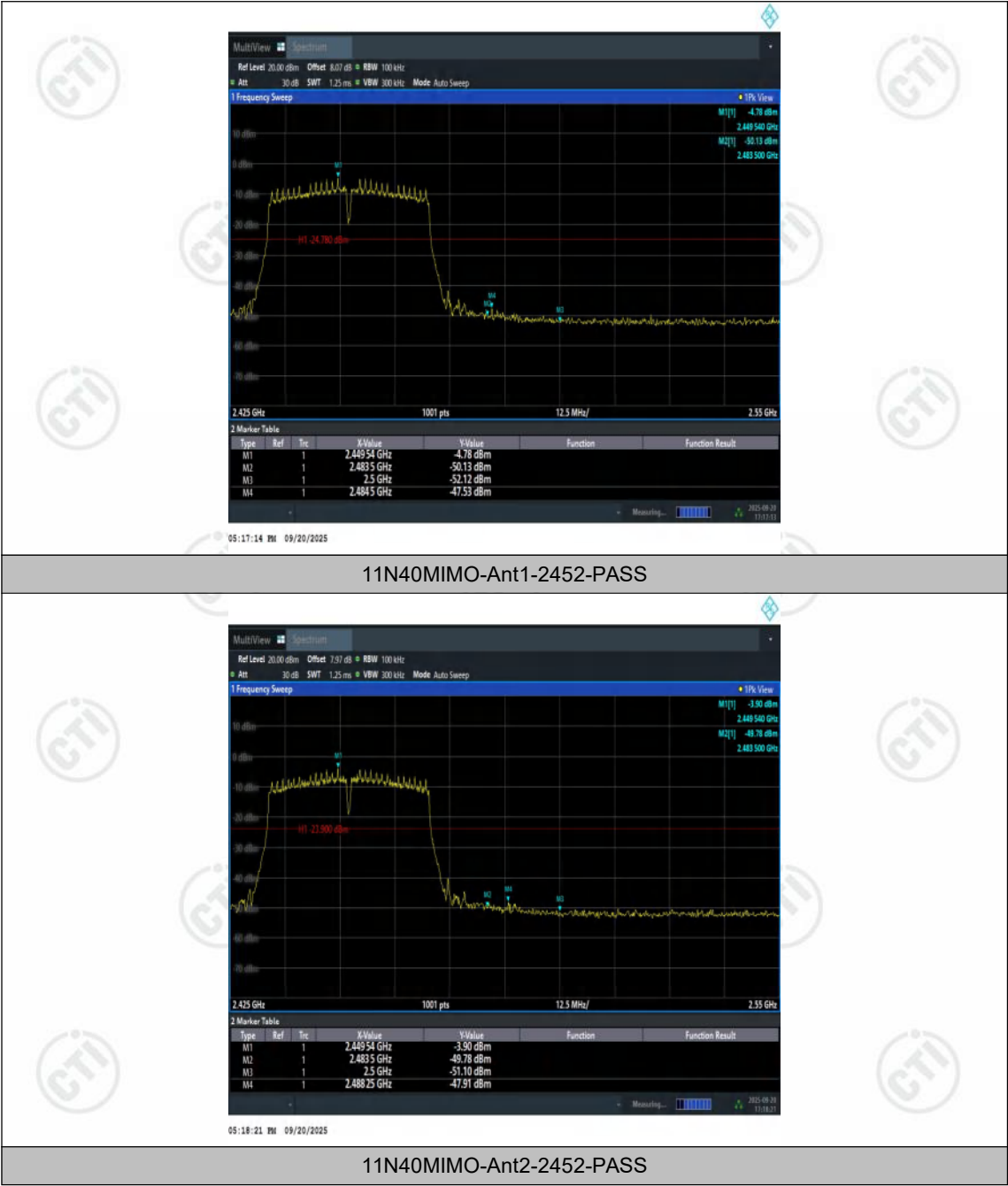












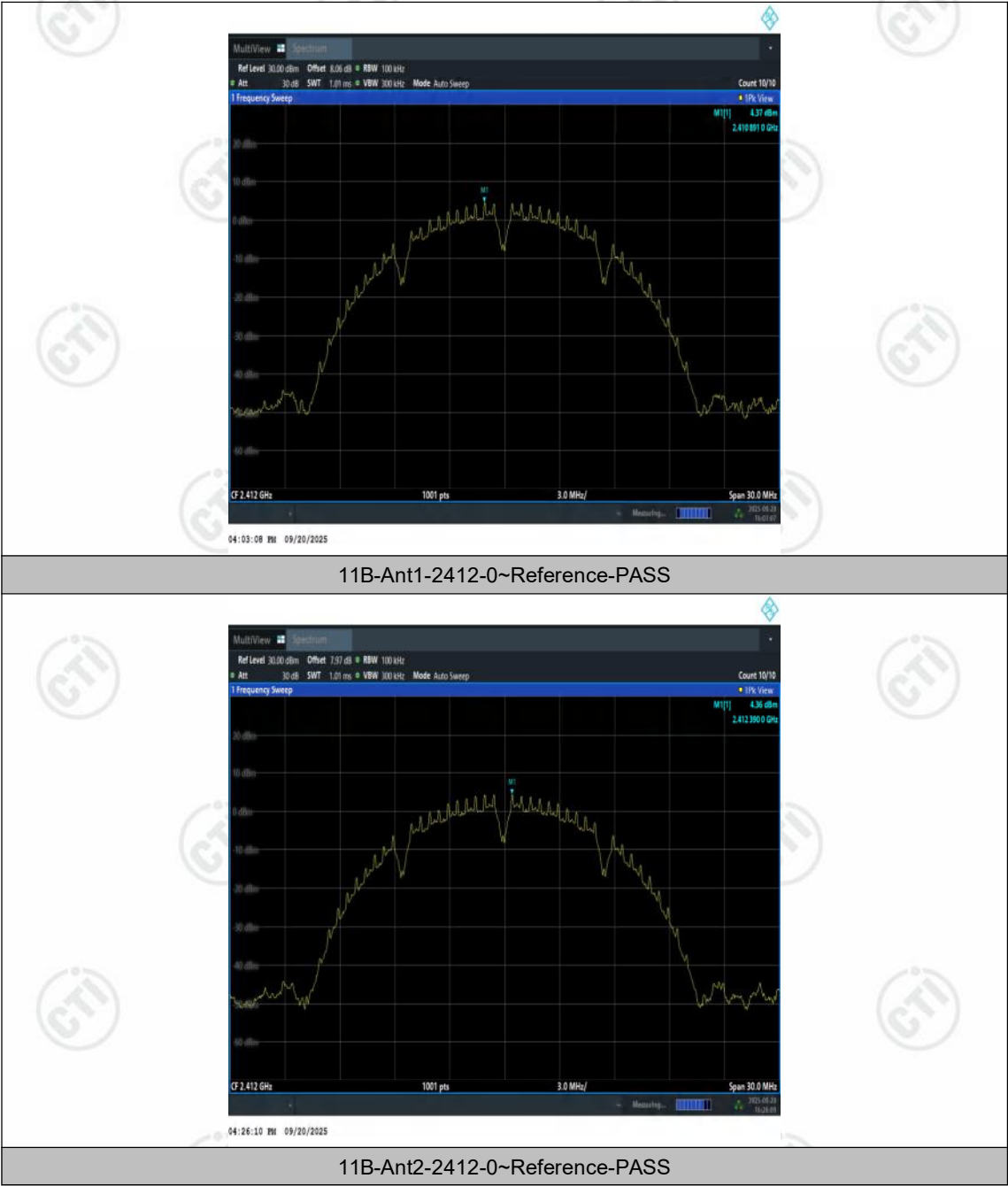
Appendix G: Conducted Spurious Emission

Test Result

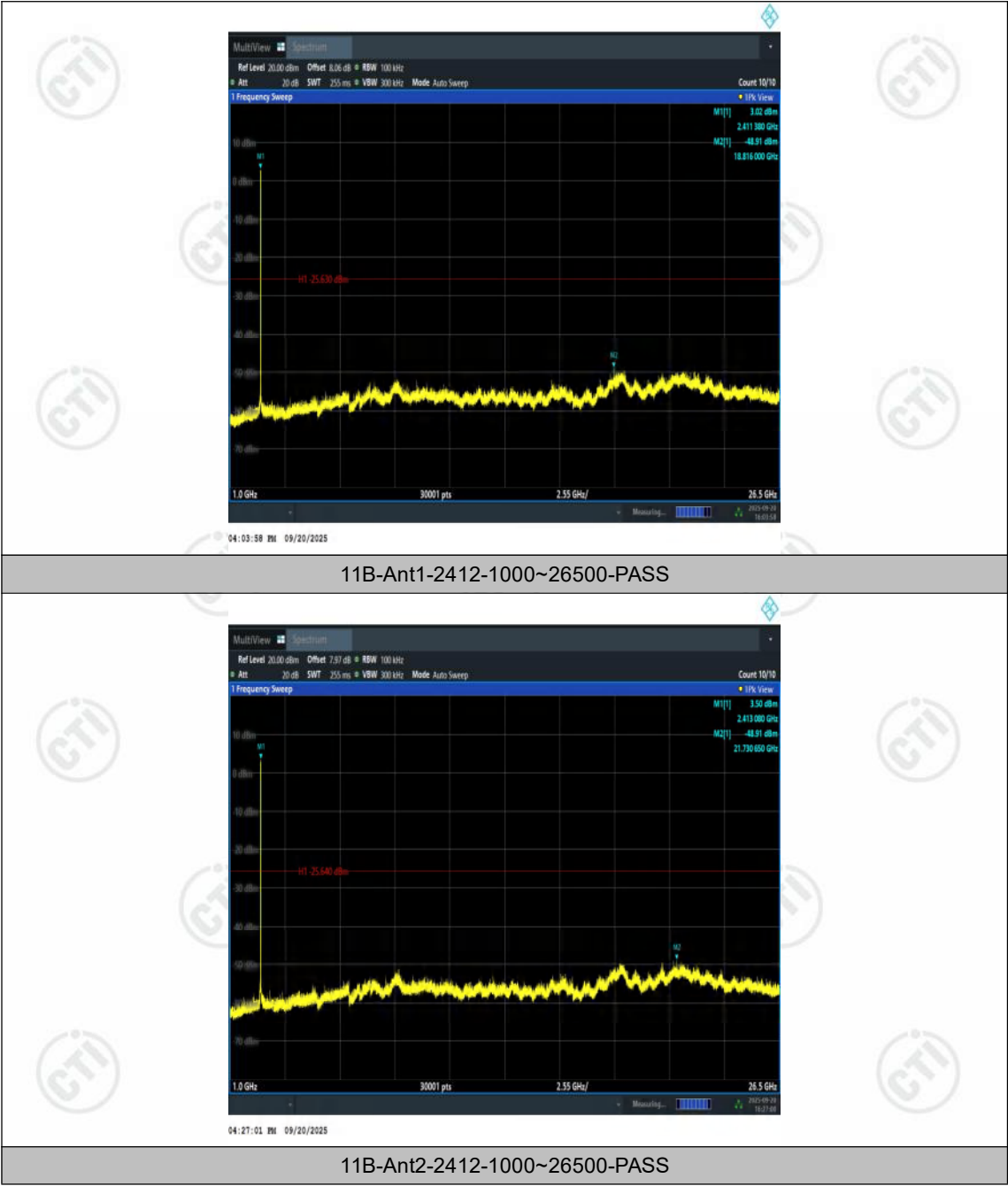
TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	4.37	4.37	---	PASS
11B	Ant2	2412	0~Reference	4.36	4.36	---	PASS
11B	Ant1	2412	30~1000	4.37	-59.24	≤-25.63	PASS
11B	Ant2	2412	30~1000	4.36	-58.78	≤-25.64	PASS
11B	Ant1	2412	1000~26500	4.37	-48.91	≤-25.63	PASS
11B	Ant2	2412	1000~26500	4.36	-48.91	≤-25.64	PASS
11B	Ant1	2437	0~Reference	4.70	4.70	---	PASS
11B	Ant2	2437	0~Reference	4.13	4.13	---	PASS
11B	Ant1	2437	30~1000	4.70	-59.04	≤-25.3	PASS
11B	Ant2	2437	30~1000	4.13	-59.12	≤-25.87	PASS
11B	Ant1	2437	1000~26500	4.70	-49.26	≤-25.3	PASS
11B	Ant2	2437	1000~26500	4.13	-49.09	≤-25.87	PASS
11B	Ant1	2462	0~Reference	4.41	4.41	---	PASS
11B	Ant2	2462	0~Reference	3.92	3.92	---	PASS
11B	Ant1	2462	30~1000	4.41	-59.42	≤-25.59	PASS
11B	Ant2	2462	30~1000	3.92	-58.23	≤-26.08	PASS
11B	Ant1	2462	1000~26500	4.41	-49.09	≤-25.59	PASS
11B	Ant2	2462	1000~26500	3.92	-48.59	≤-26.08	PASS
11G	Ant1	2412	0~Reference	0.92	0.92	---	PASS
11G	Ant2	2412	0~Reference	1.54	1.54	---	PASS
11G	Ant1	2412	30~1000	0.92	-58.96	≤-29.08	PASS
11G	Ant2	2412	30~1000	1.54	-57.67	≤-28.46	PASS
11G	Ant1	2412	1000~26500	0.92	-48.46	≤-29.08	PASS
11G	Ant2	2412	1000~26500	1.54	-49.04	≤-28.46	PASS
11G	Ant1	2437	0~Reference	1.28	1.28	---	PASS
11G	Ant2	2437	0~Reference	1.64	1.64	---	PASS
11G	Ant1	2437	30~1000	1.28	-59.45	≤-28.72	PASS
11G	Ant2	2437	30~1000	1.64	-58.44	≤-28.36	PASS
11G	Ant1	2437	1000~26500	1.28	-48.48	≤-28.72	PASS
11G	Ant2	2437	1000~26500	1.64	-49.59	≤-28.36	PASS
11G	Ant1	2462	0~Reference	1.22	1.22	---	PASS
11G	Ant2	2462	0~Reference	1.37	1.37	---	PASS
11G	Ant1	2462	30~1000	1.22	-58.37	≤-28.78	PASS
11G	Ant2	2462	30~1000	1.37	-58.91	≤-28.63	PASS
11G	Ant1	2462	1000~26500	1.22	-49.08	≤-28.78	PASS

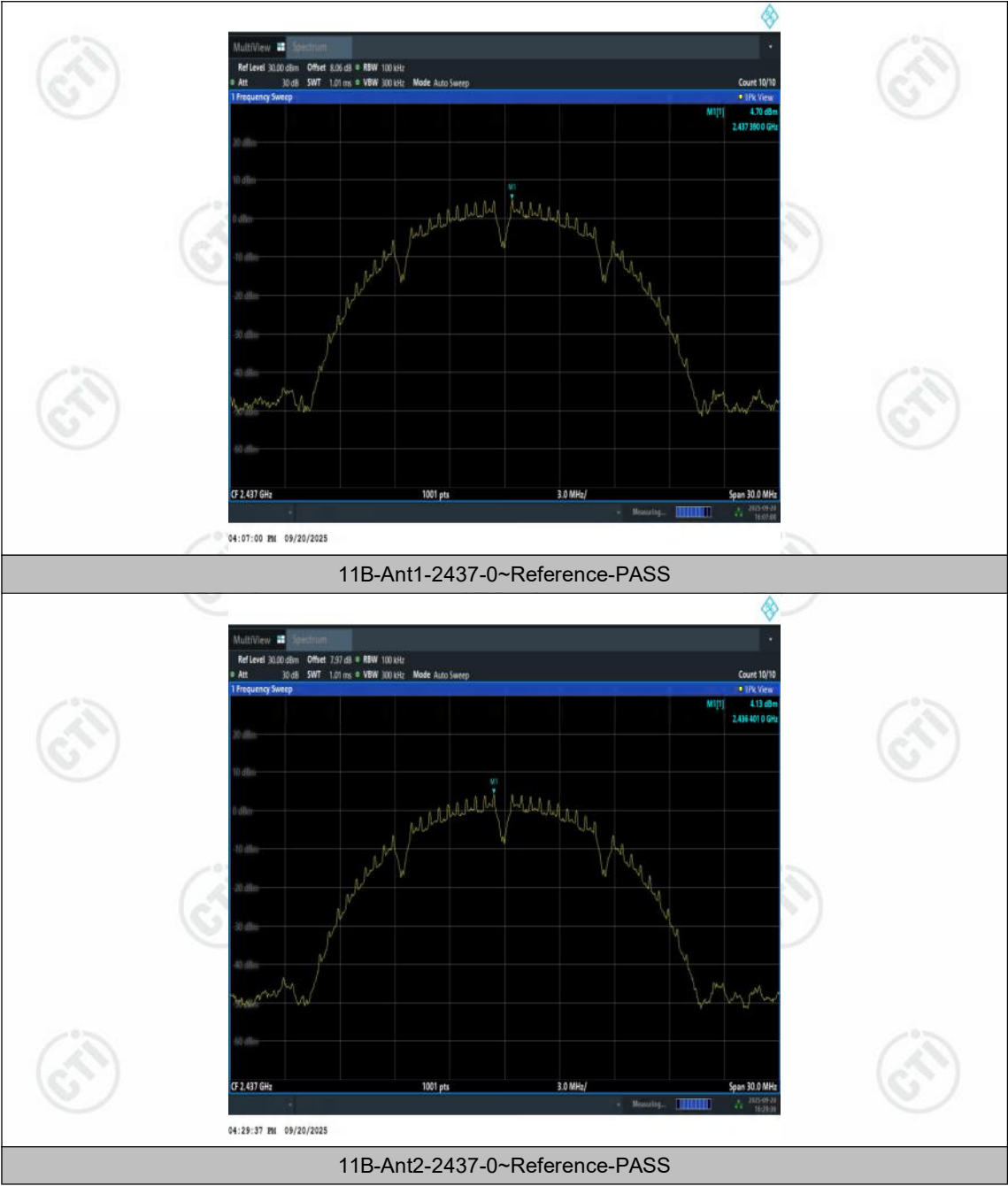
11G	Ant2	2462	1000~26500	1.37	-48.74	≤-28.63	PASS
11N20MIMO	Ant1	2412	0~Reference	-2.04	-2.04	---	PASS
11N20MIMO	Ant2	2412	0~Reference	-1.73	-1.73	---	PASS
11N20MIMO	Ant1	2412	30~1000	-2.04	-58.73	≤-32.04	PASS
11N20MIMO	Ant2	2412	30~1000	-1.73	-58.57	≤-31.73	PASS
11N20MIMO	Ant1	2412	1000~26500	-2.04	-48.93	≤-32.04	PASS
11N20MIMO	Ant2	2412	1000~26500	-1.73	-48.63	≤-31.73	PASS
11N20MIMO	Ant1	2437	0~Reference	-2.15	-2.15	---	PASS
11N20MIMO	Ant2	2437	0~Reference	-1.69	-1.69	---	PASS
11N20MIMO	Ant1	2437	30~1000	-2.15	-58.27	≤-32.15	PASS
11N20MIMO	Ant2	2437	30~1000	-1.69	-58.64	≤-31.69	PASS
11N20MIMO	Ant1	2437	1000~26500	-2.15	-49	≤-32.15	PASS
11N20MIMO	Ant2	2437	1000~26500	-1.69	-48.49	≤-31.69	PASS
11N20MIMO	Ant1	2462	0~Reference	-2.13	-2.13	---	PASS
11N20MIMO	Ant2	2462	0~Reference	-1.53	-1.53	---	PASS
11N20MIMO	Ant1	2462	30~1000	-2.13	-58.77	≤-32.13	PASS
11N20MIMO	Ant2	2462	30~1000	-1.53	-59.3	≤-31.53	PASS
11N20MIMO	Ant1	2462	1000~26500	-2.13	-48.6	≤-32.13	PASS
11N20MIMO	Ant2	2462	1000~26500	-1.53	-49.4	≤-31.53	PASS
11N40MIMO	Ant1	2422	0~Reference	-4.74	-4.74	---	PASS
11N40MIMO	Ant2	2422	0~Reference	-4.17	-4.17	---	PASS
11N40MIMO	Ant1	2422	30~1000	-4.74	-58.2	≤-34.74	PASS
11N40MIMO	Ant2	2422	30~1000	-4.17	-58.72	≤-34.17	PASS
11N40MIMO	Ant1	2422	1000~26500	-4.74	-48.71	≤-34.74	PASS
11N40MIMO	Ant2	2422	1000~26500	-4.17	-49.06	≤-34.17	PASS
11N40MIMO	Ant1	2437	0~Reference	-5.08	-5.08	---	PASS
11N40MIMO	Ant2	2437	0~Reference	-3.84	-3.84	---	PASS
11N40MIMO	Ant1	2437	30~1000	-5.08	-59.17	≤-35.08	PASS
11N40MIMO	Ant2	2437	30~1000	-3.84	-59.25	≤-33.84	PASS
11N40MIMO	Ant1	2437	1000~26500	-5.08	-48.99	≤-35.08	PASS
11N40MIMO	Ant2	2437	1000~26500	-3.84	-48.61	≤-33.84	PASS
11N40MIMO	Ant1	2452	0~Reference	-4.74	-4.74	---	PASS
11N40MIMO	Ant2	2452	0~Reference	-3.95	-3.95	---	PASS
11N40MIMO	Ant1	2452	30~1000	-4.74	-59.46	≤-34.74	PASS
11N40MIMO	Ant2	2452	30~1000	-3.95	-58.31	≤-33.95	PASS
11N40MIMO	Ant1	2452	1000~26500	-4.74	-49.3	≤-34.74	PASS
11N40MIMO	Ant2	2452	1000~26500	-3.95	-47.32	≤-33.95	PASS

Test Graphs

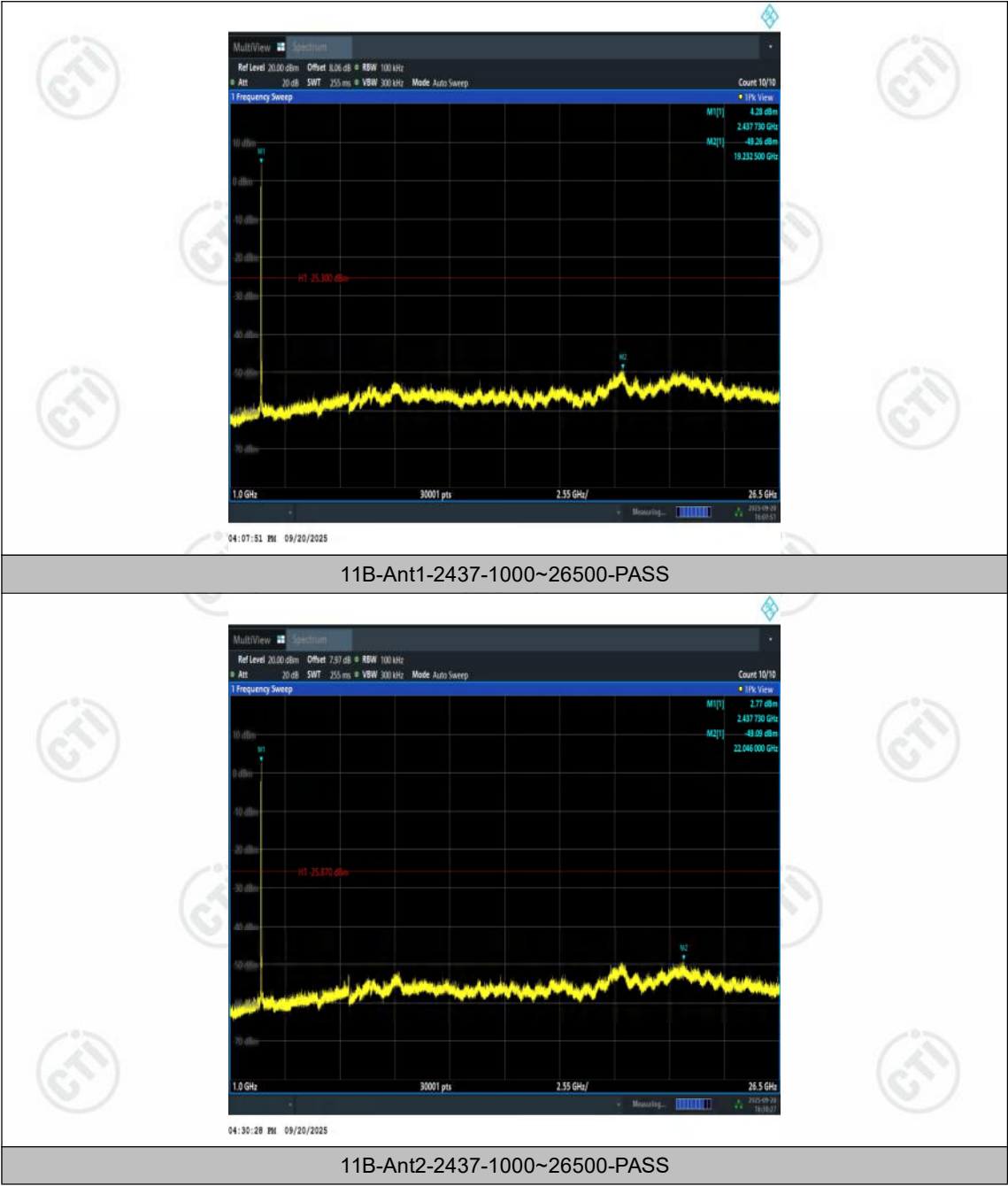


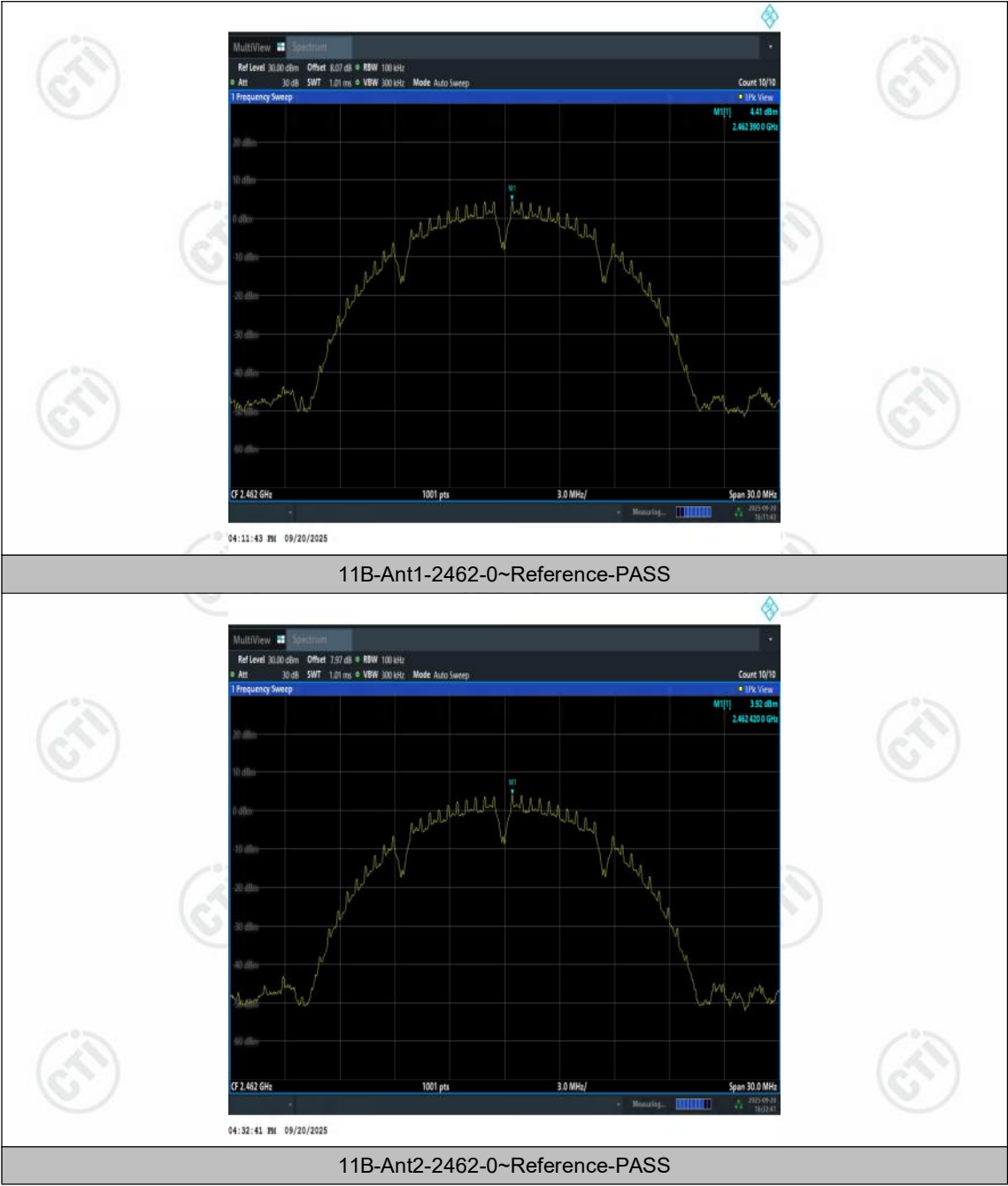


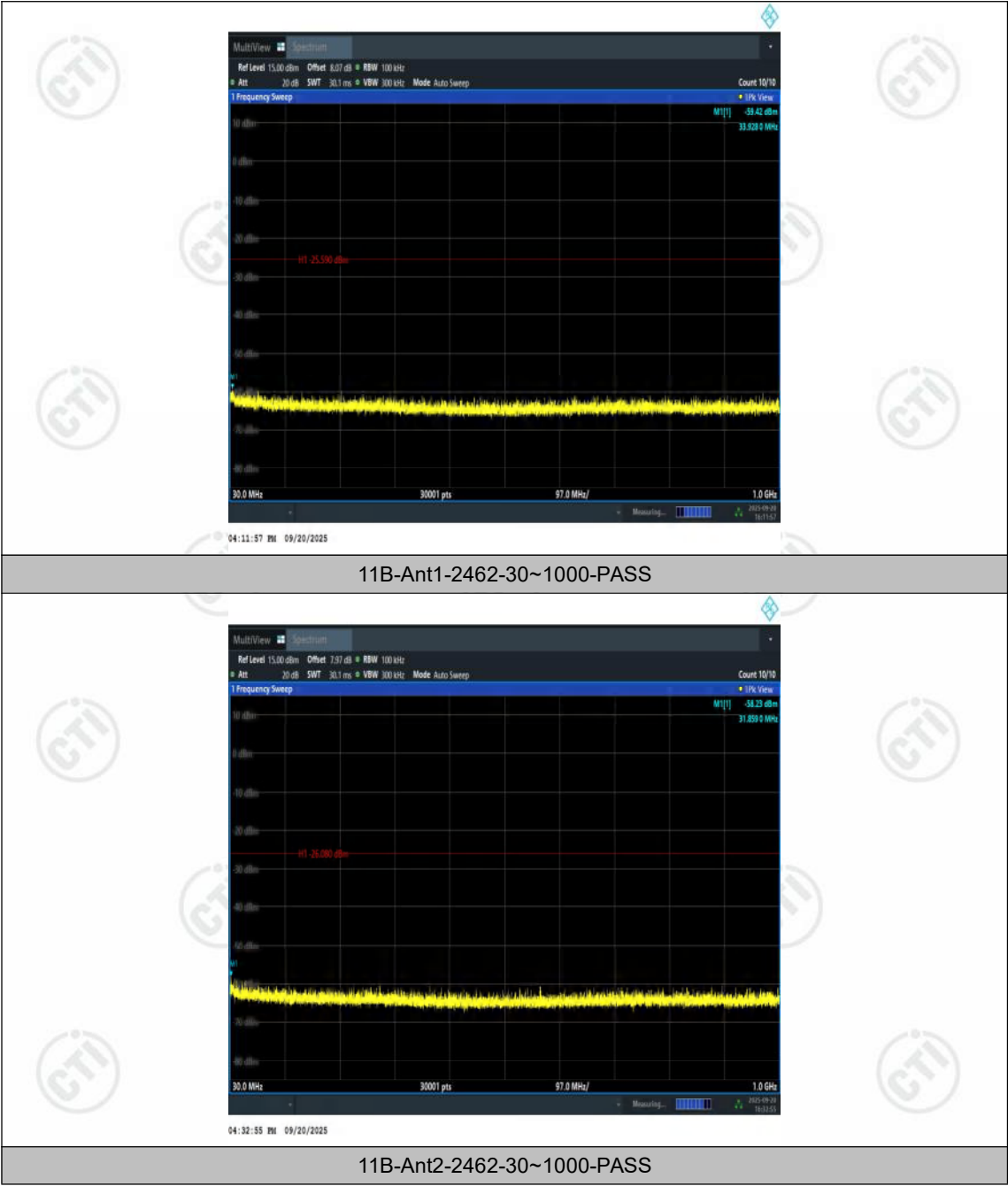


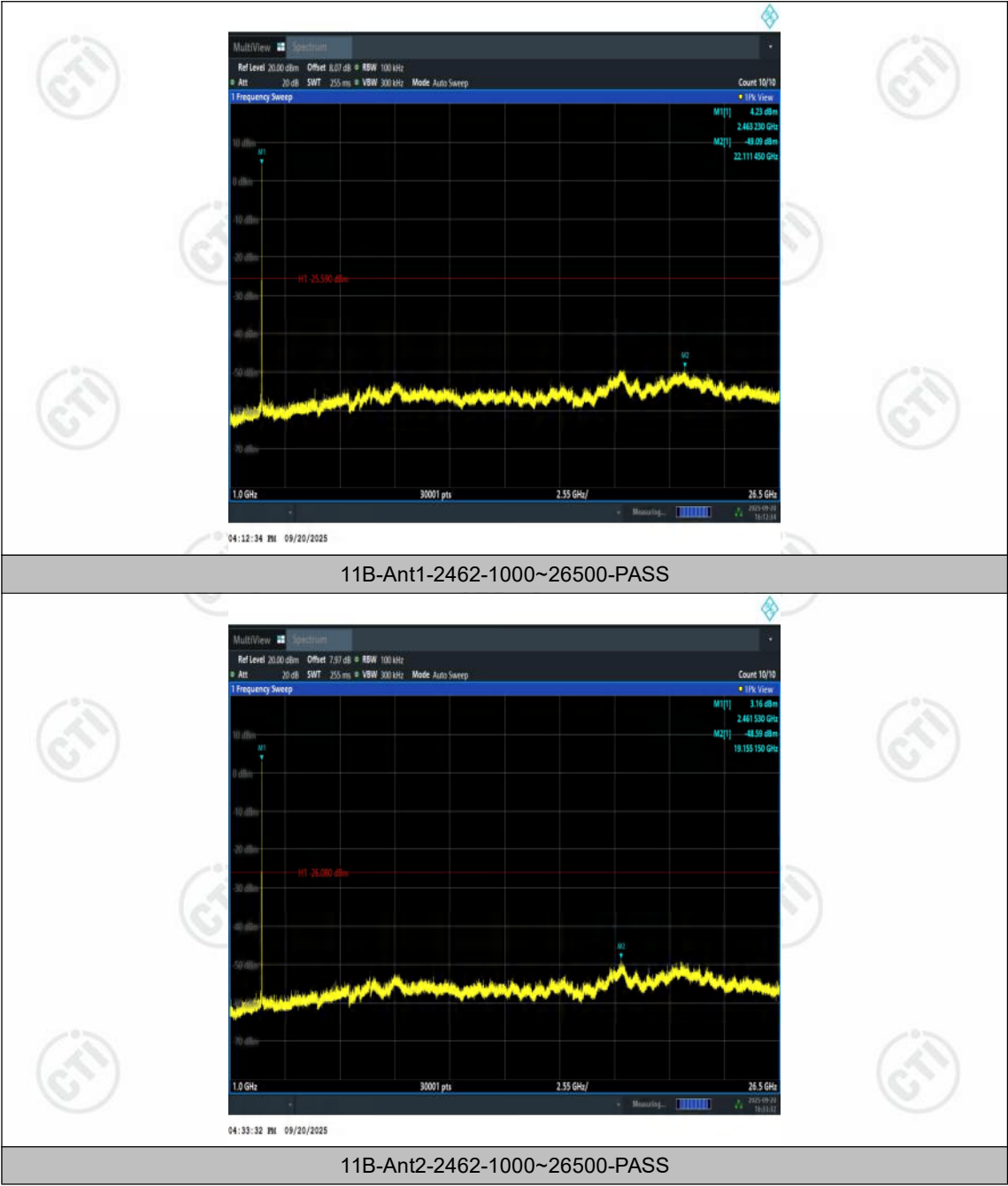












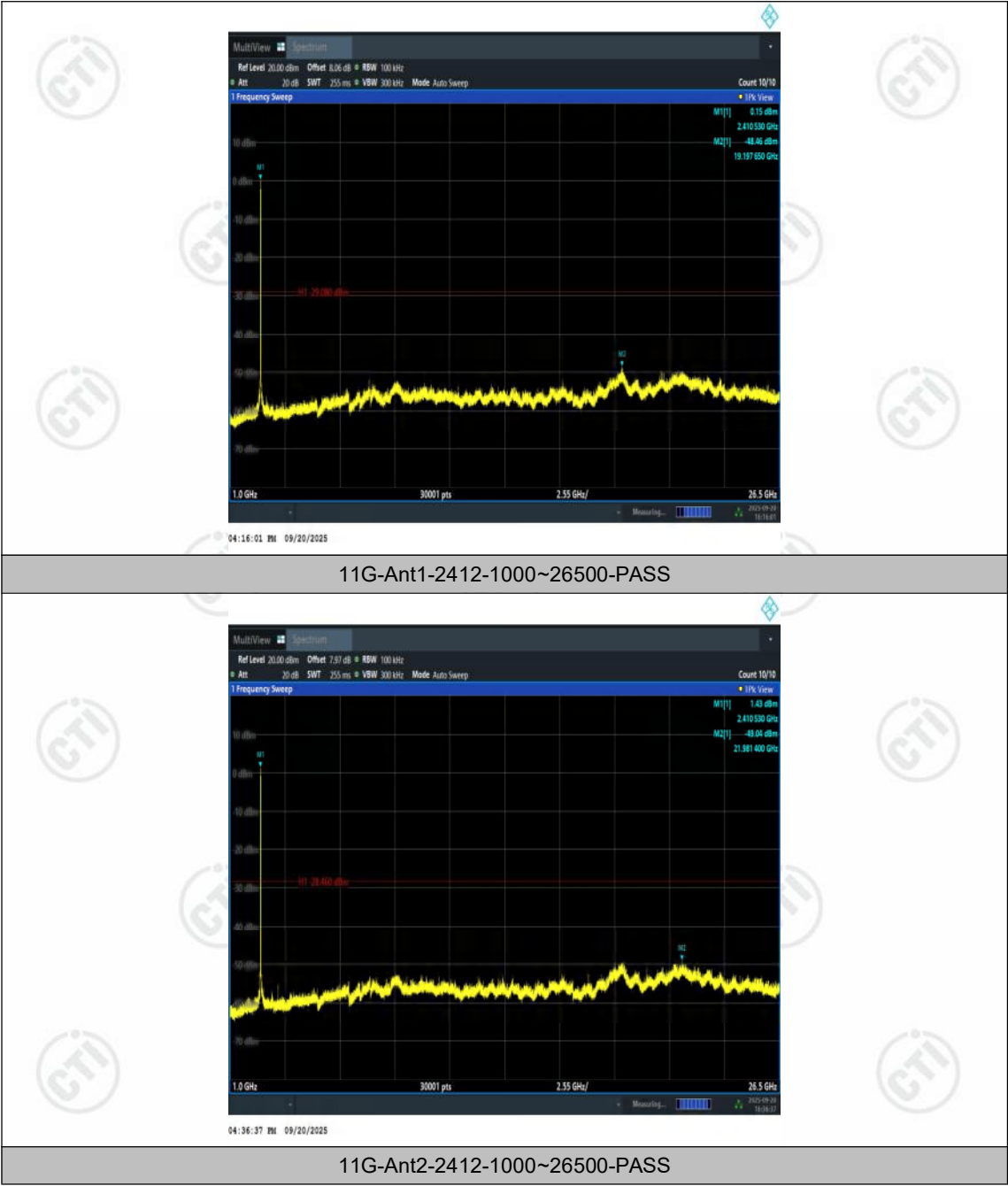




11G-Ant1-2412-30~1000-PASS

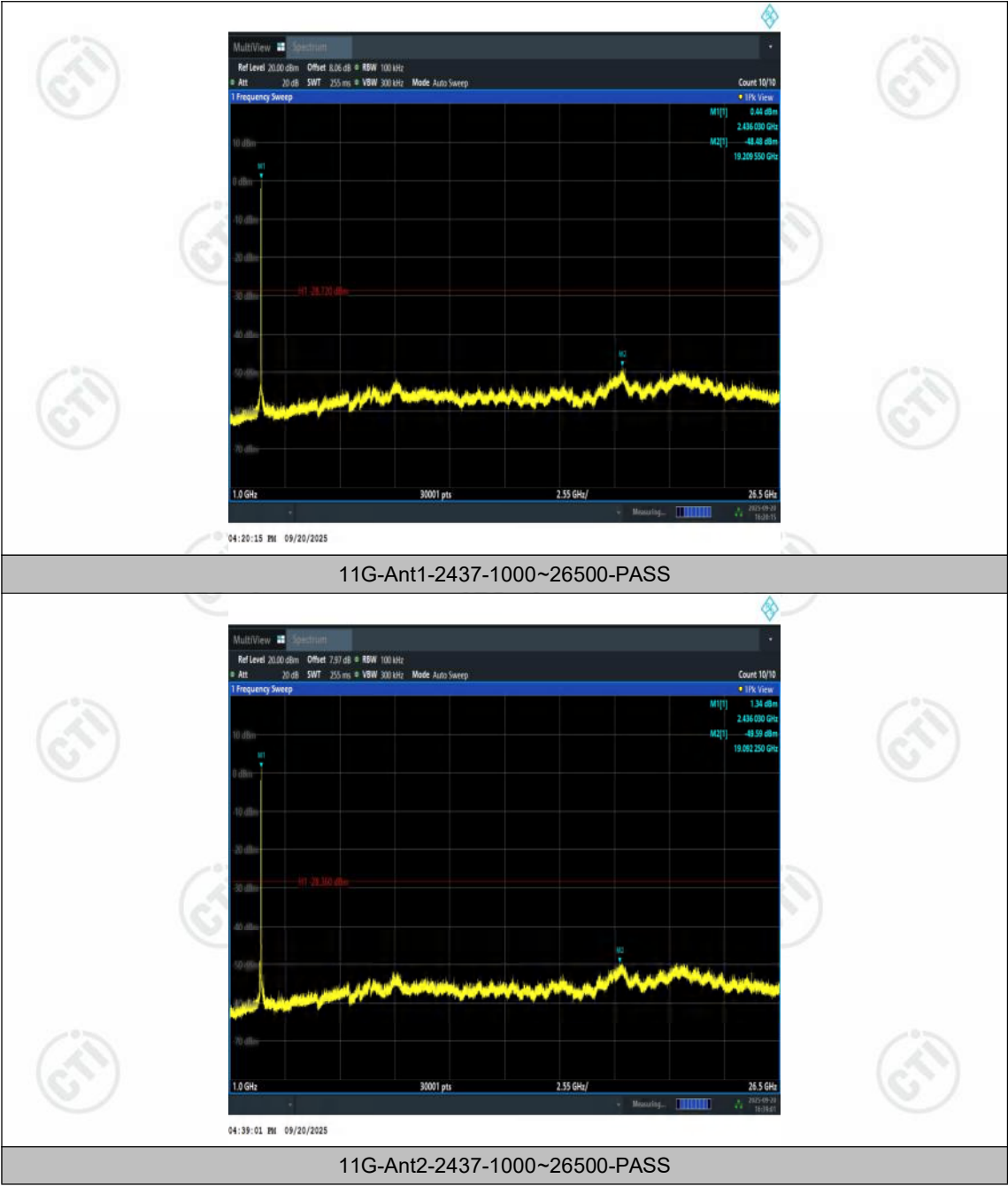


11G-Ant2-2412-30~1000-PASS



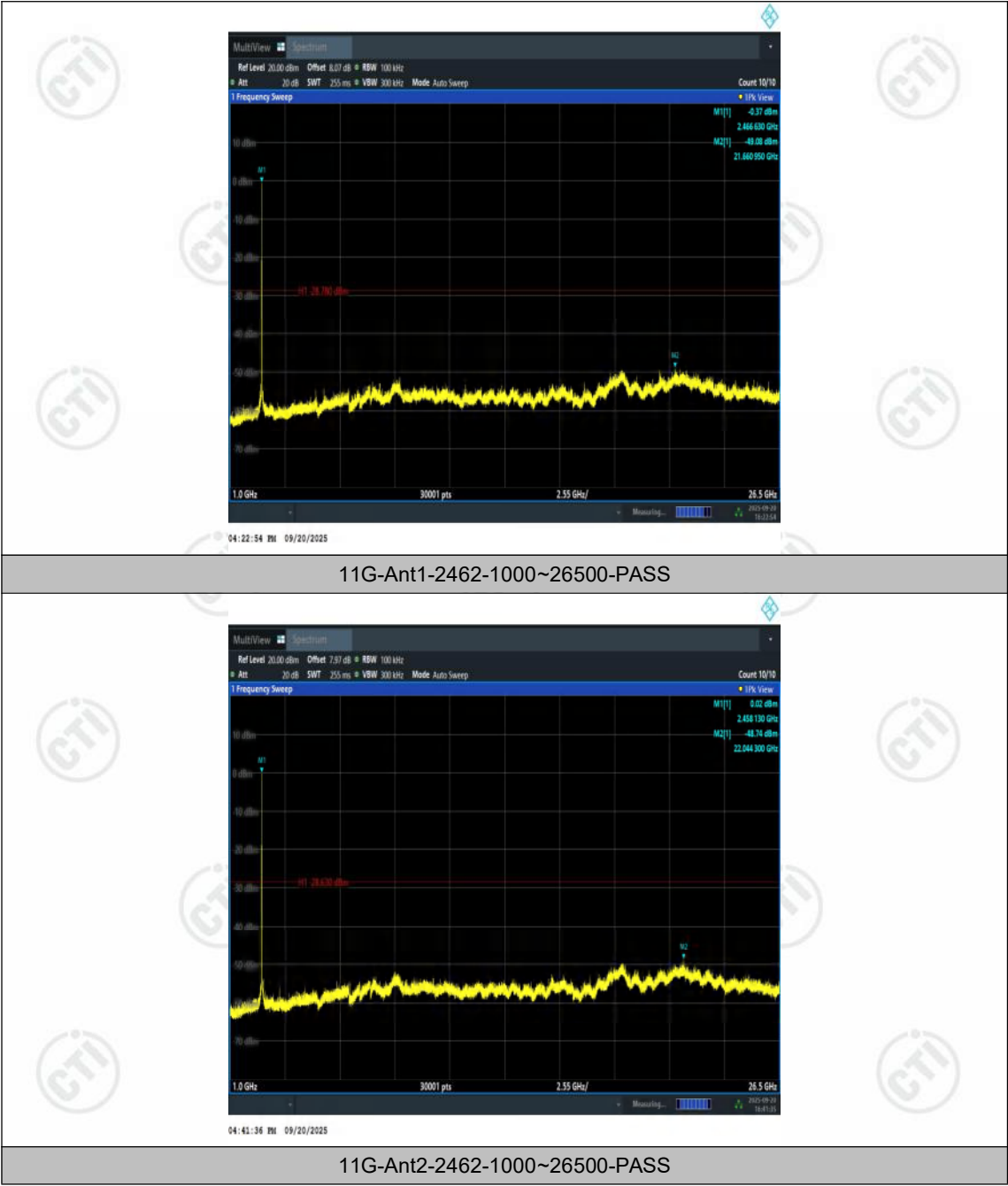




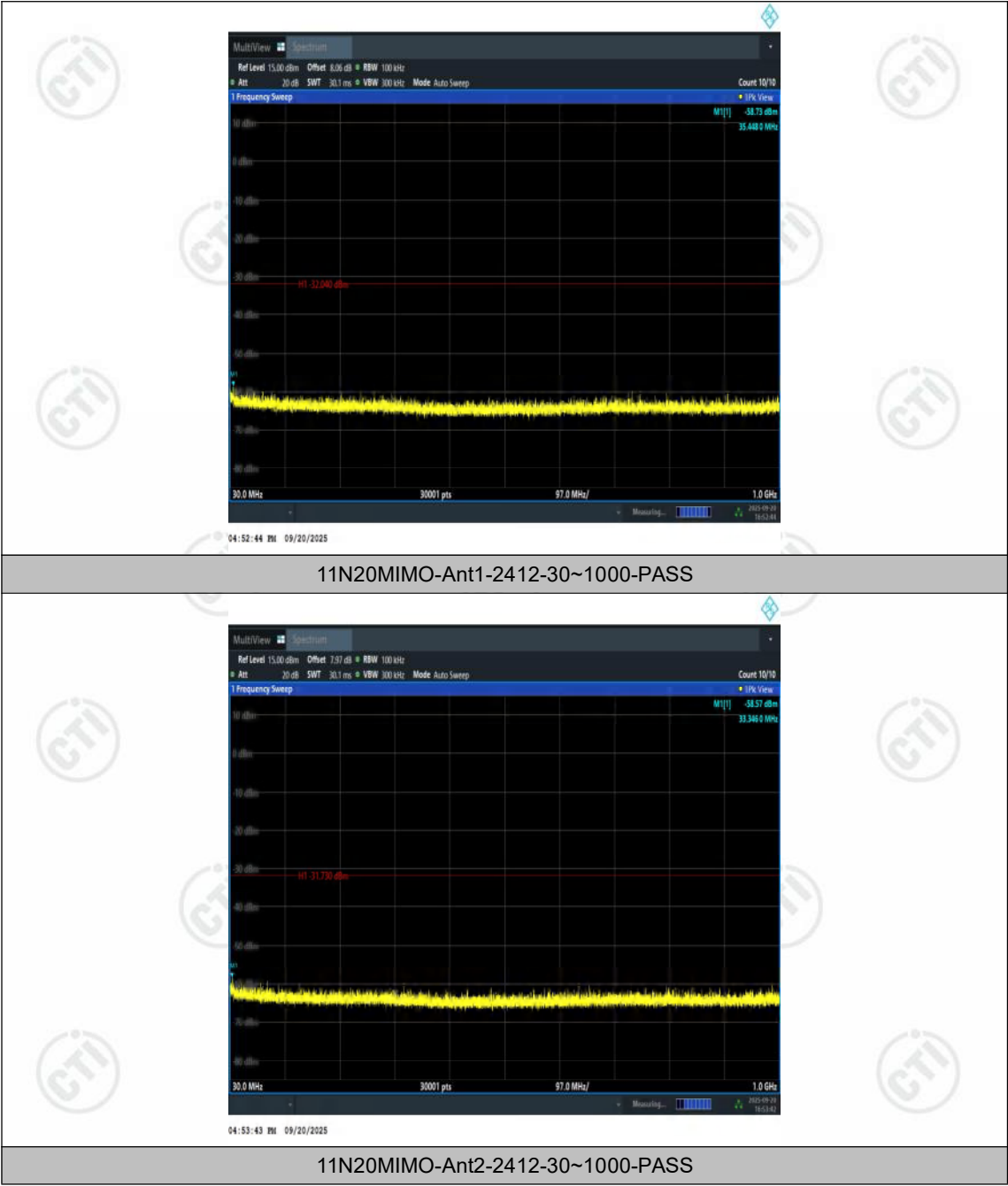


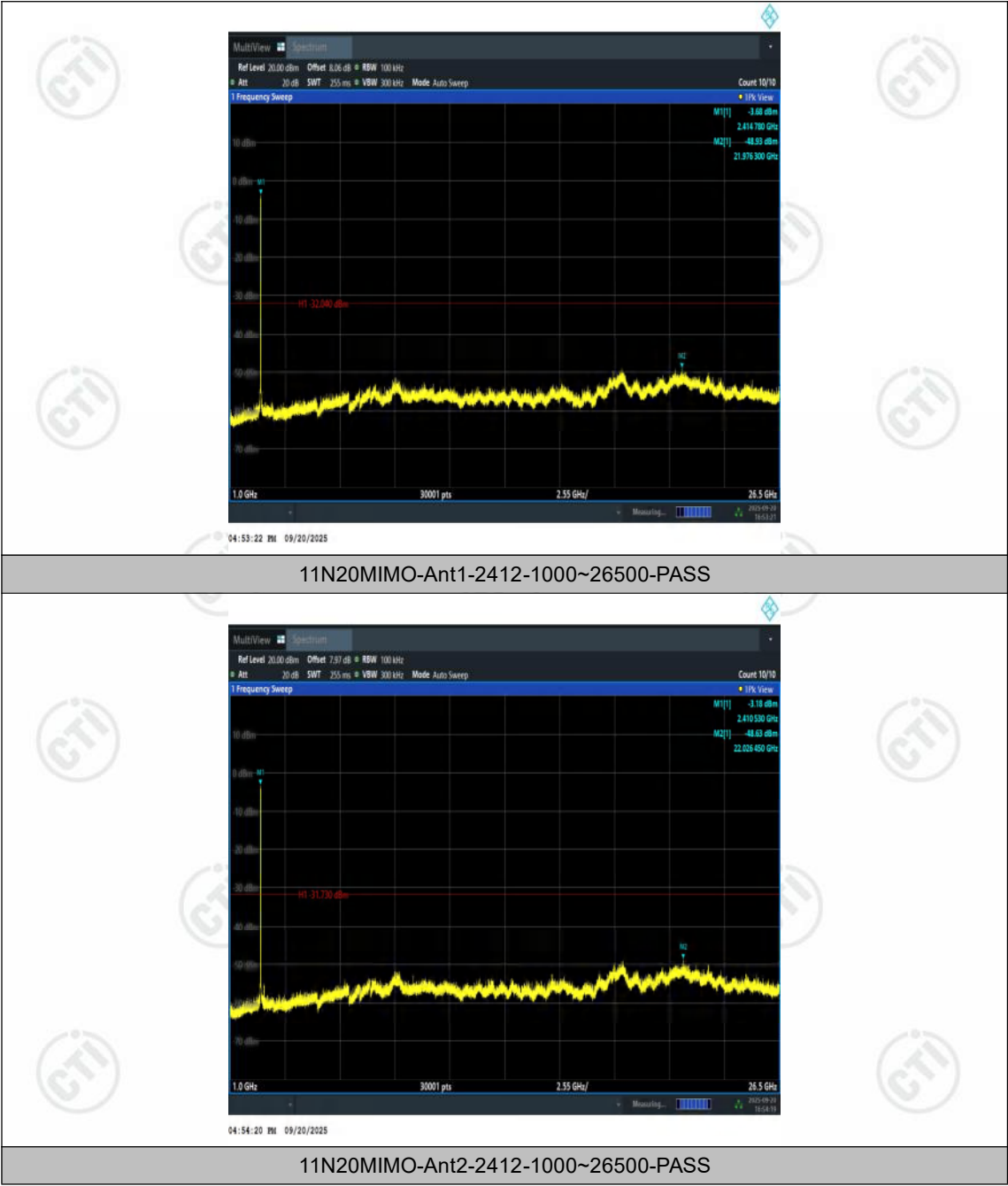






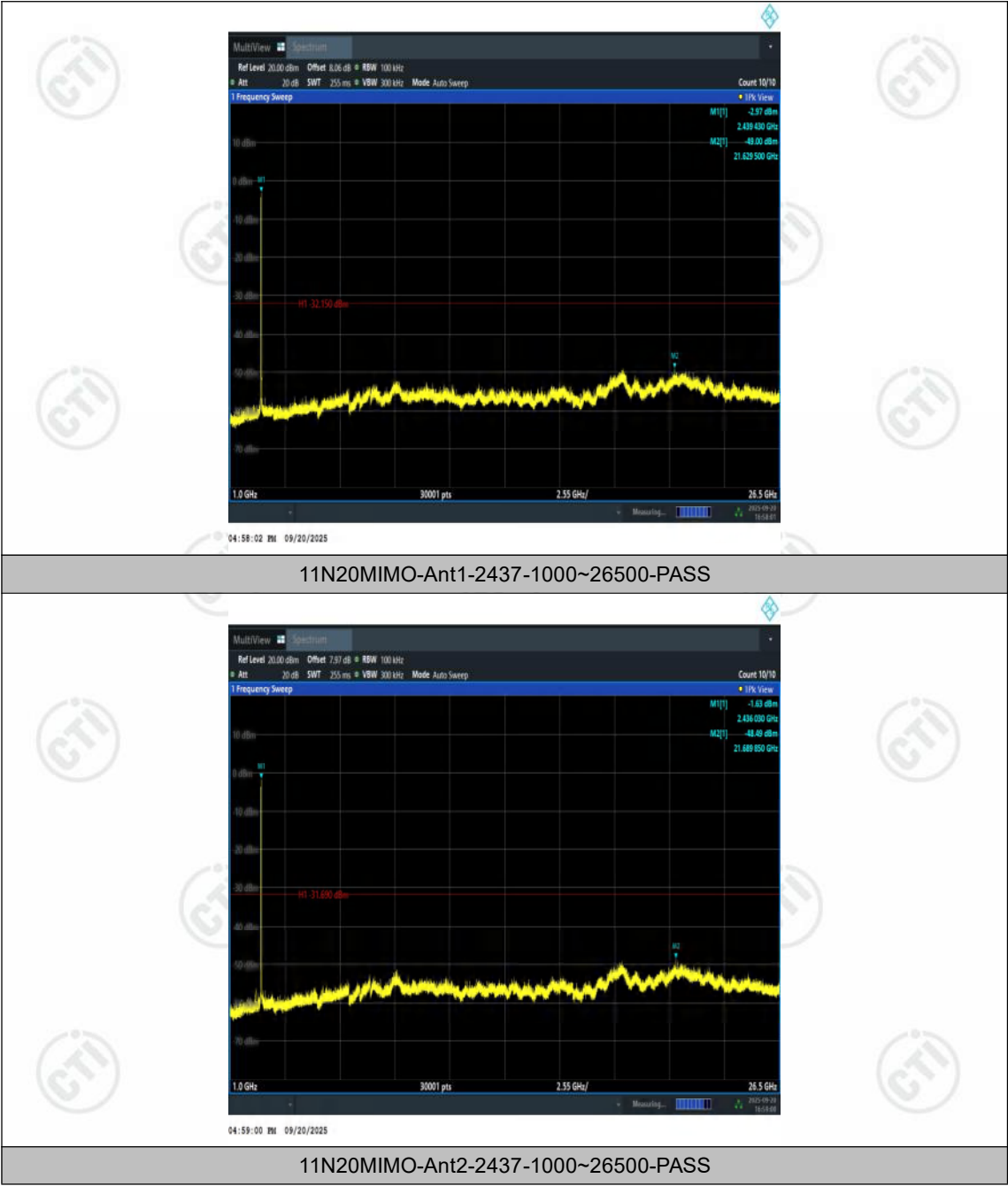




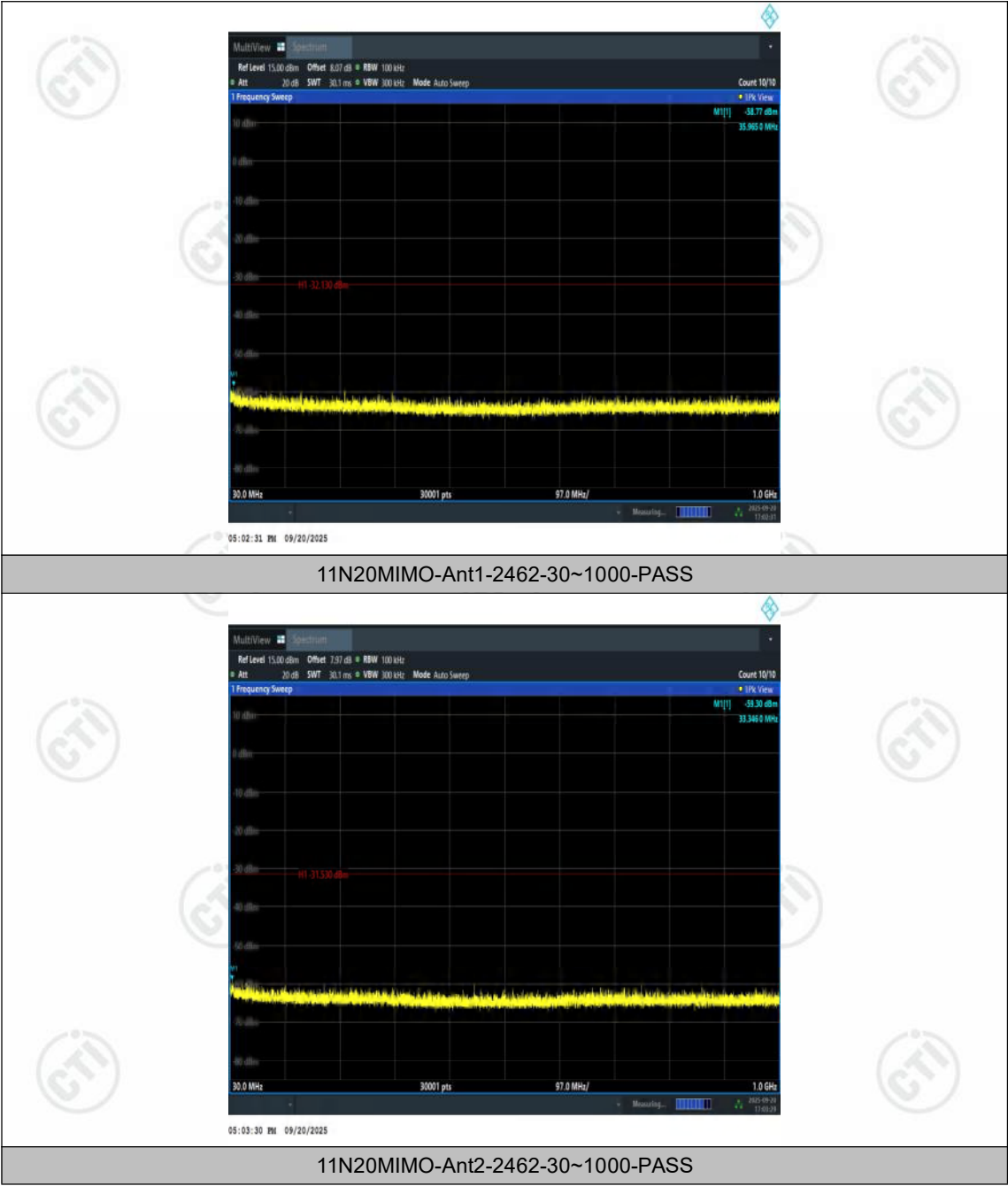


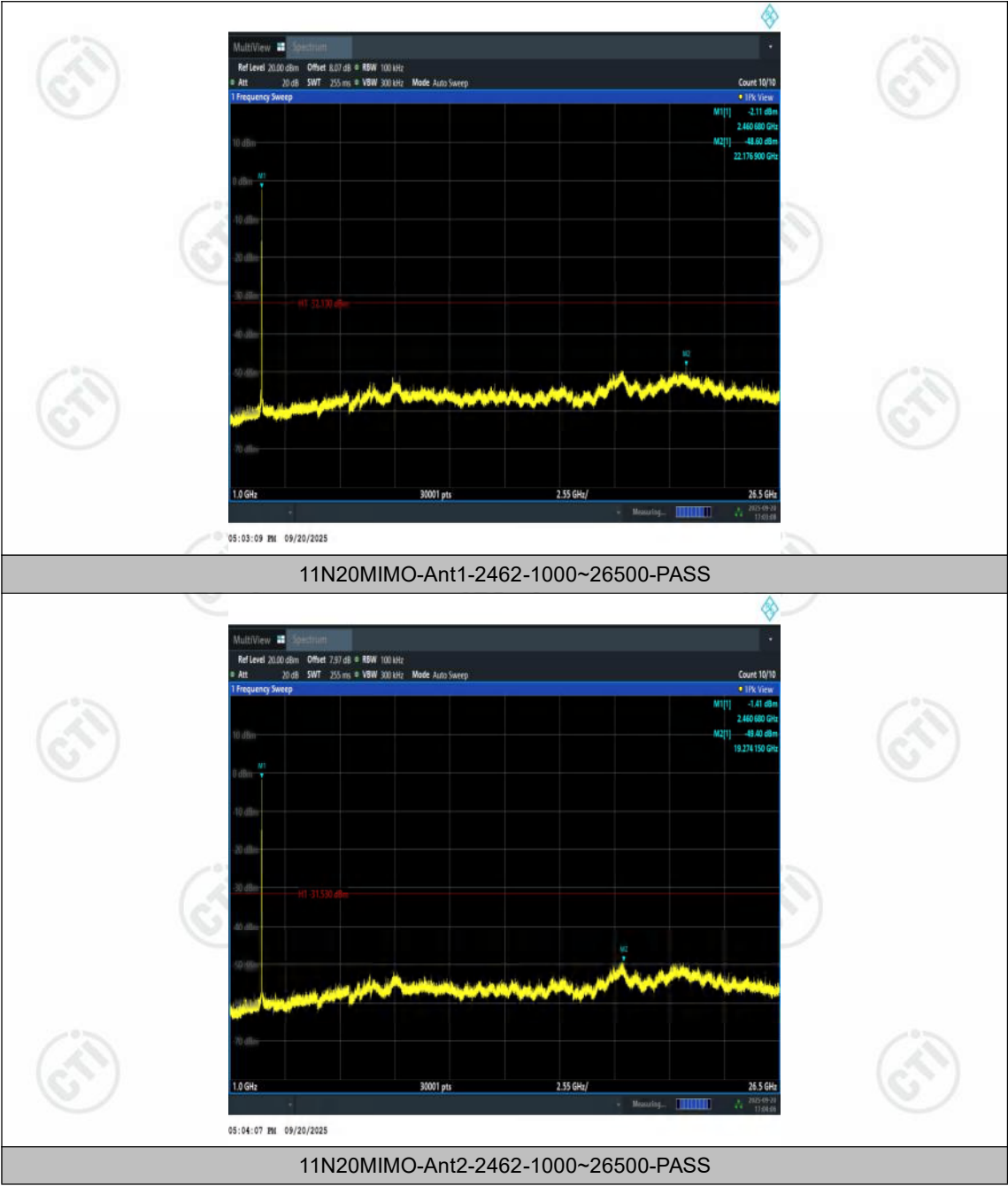




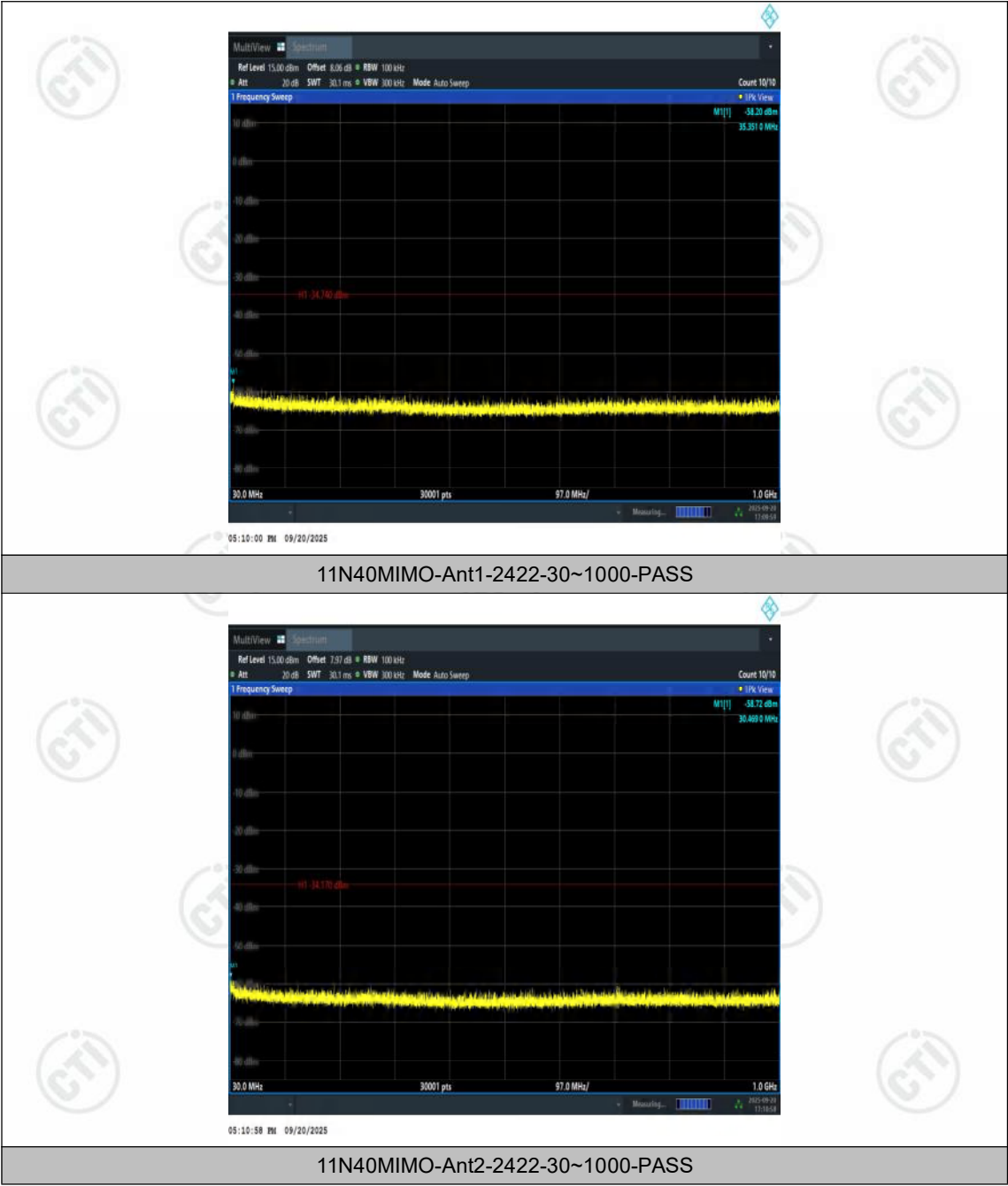


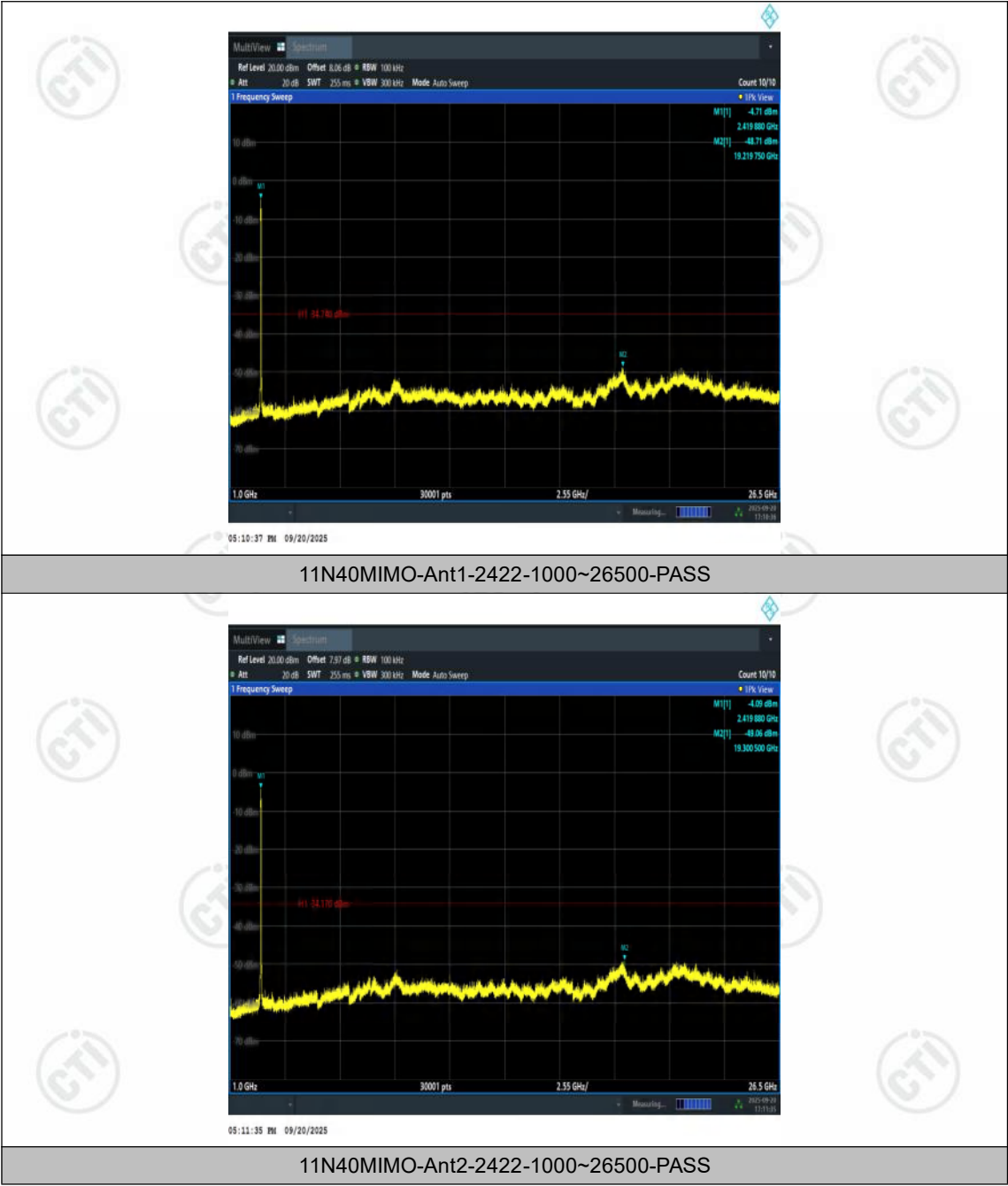






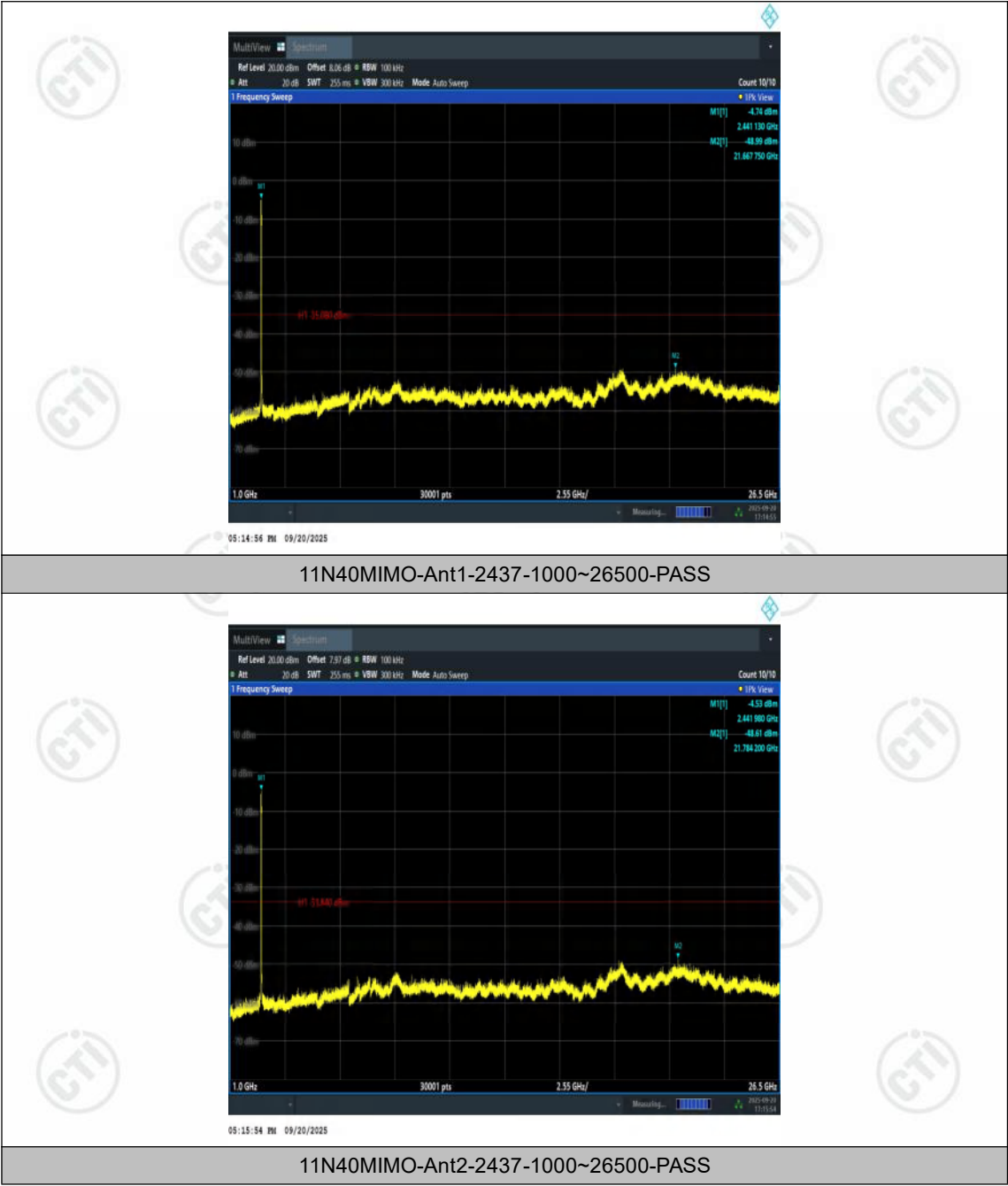






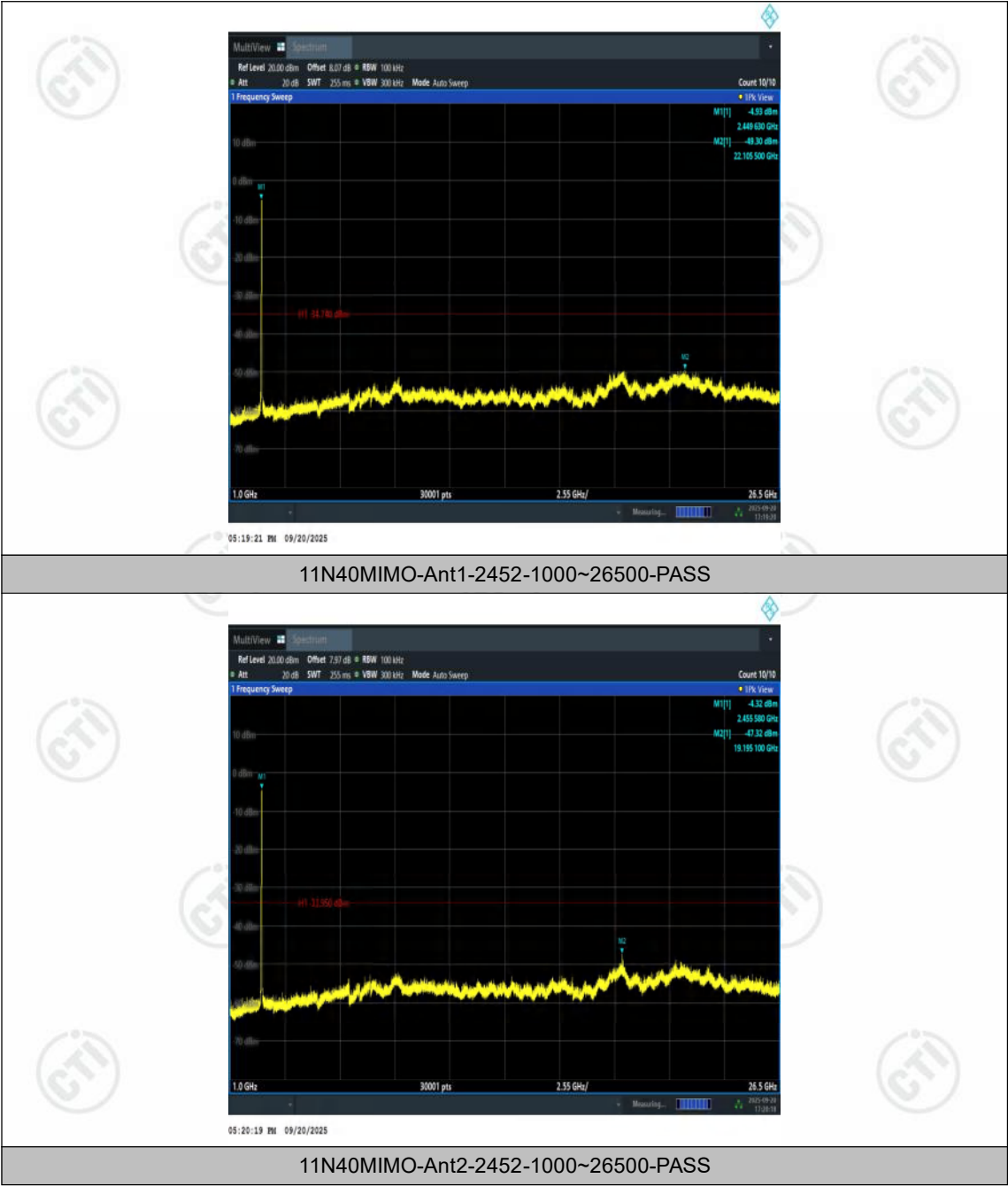












Appendix H: Duty Cycle**Test Result**

TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.40	8.43	99.64	0.02
11B	Ant2	2412	8.40	8.44	99.53	0.02
11B	Ant1	2437	8.39	8.43	99.53	0.02
11B	Ant2	2437	8.38	8.43	99.41	0.03
11B	Ant1	2462	8.39	8.43	99.53	0.02
11B	Ant2	2462	8.40	8.43	99.64	0.02
11G	Ant1	2412	1.39	1.44	96.53	0.15
11G	Ant2	2412	1.40	1.44	97.22	0.12
11G	Ant1	2437	1.39	1.44	96.53	0.15
11G	Ant2	2437	1.39	1.44	96.53	0.15
11G	Ant1	2462	1.40	1.44	97.22	0.12
11G	Ant2	2462	1.39	1.44	96.53	0.15
11N20MIMO	Ant1	2412	0.68	0.72	94.44	0.25
11N20MIMO	Ant2	2412	0.68	0.72	94.44	0.25
11N20MIMO	Ant1	2437	0.68	0.72	94.44	0.25
11N20MIMO	Ant2	2437	0.68	0.72	94.44	0.25
11N20MIMO	Ant1	2462	0.67	0.71	94.37	0.25
11N20MIMO	Ant2	2462	0.67	0.72	93.06	0.31
11N40MIMO	Ant1	2422	0.35	0.40	87.50	0.58
11N40MIMO	Ant2	2422	0.35	0.39	89.74	0.47
11N40MIMO	Ant1	2437	0.34	0.39	87.18	0.60
11N40MIMO	Ant2	2437	0.35	0.39	89.74	0.47
11N40MIMO	Ant1	2452	0.35	0.40	87.50	0.58
11N40MIMO	Ant2	2452	0.35	0.40	87.50	0.58

Test Graphs



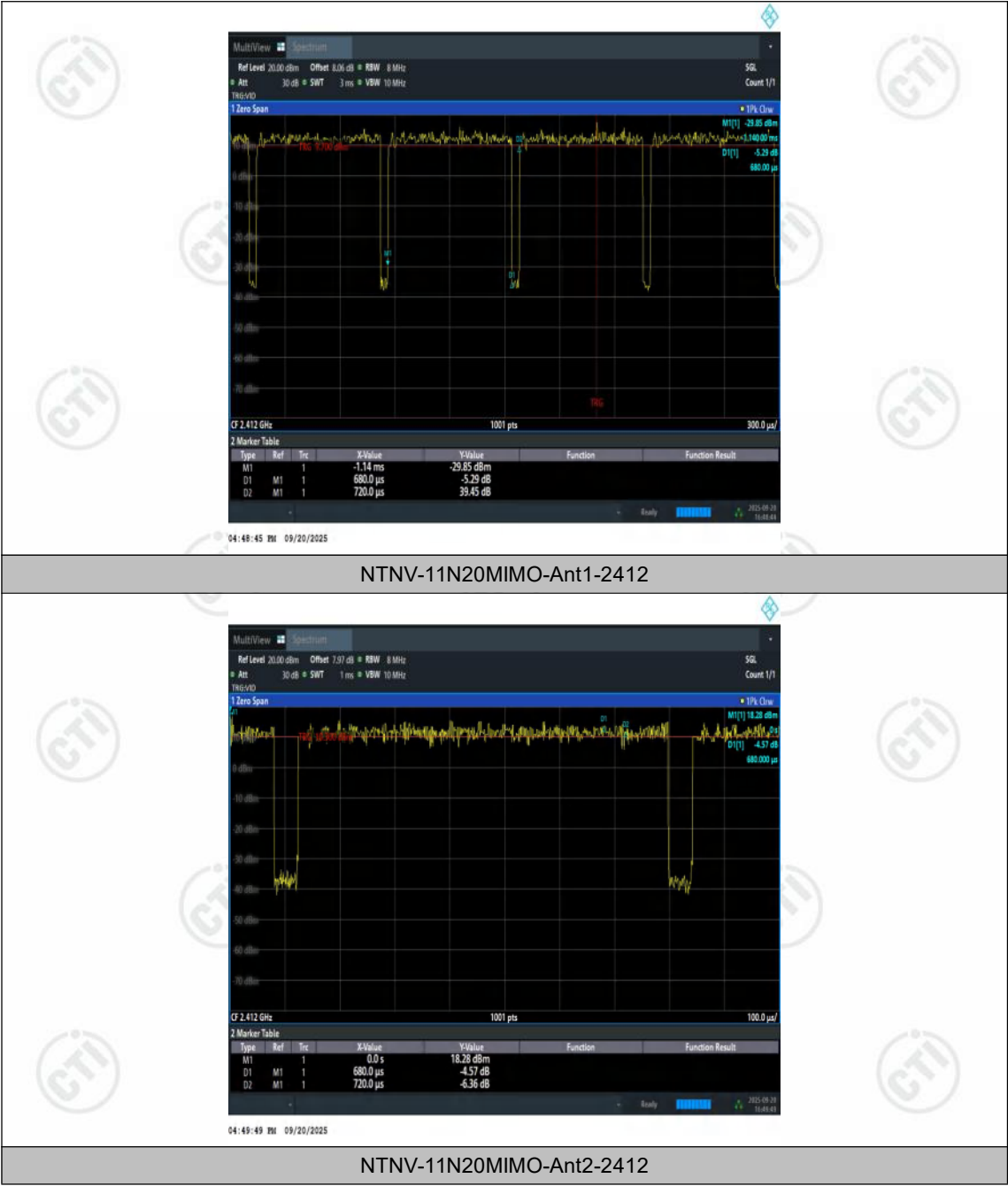








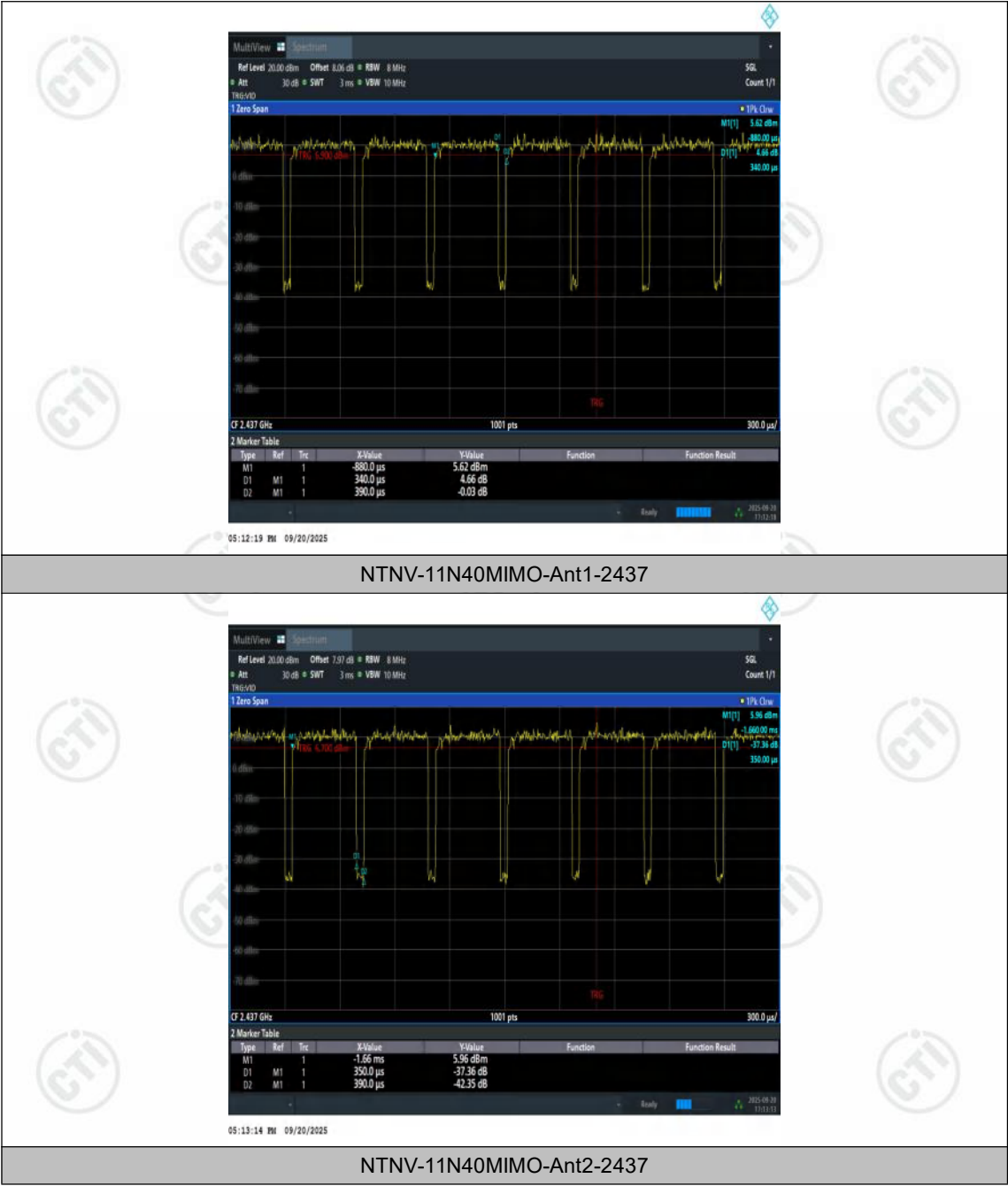














*** End of Report ***