

Appendix: 2.4G WIFI

Contents

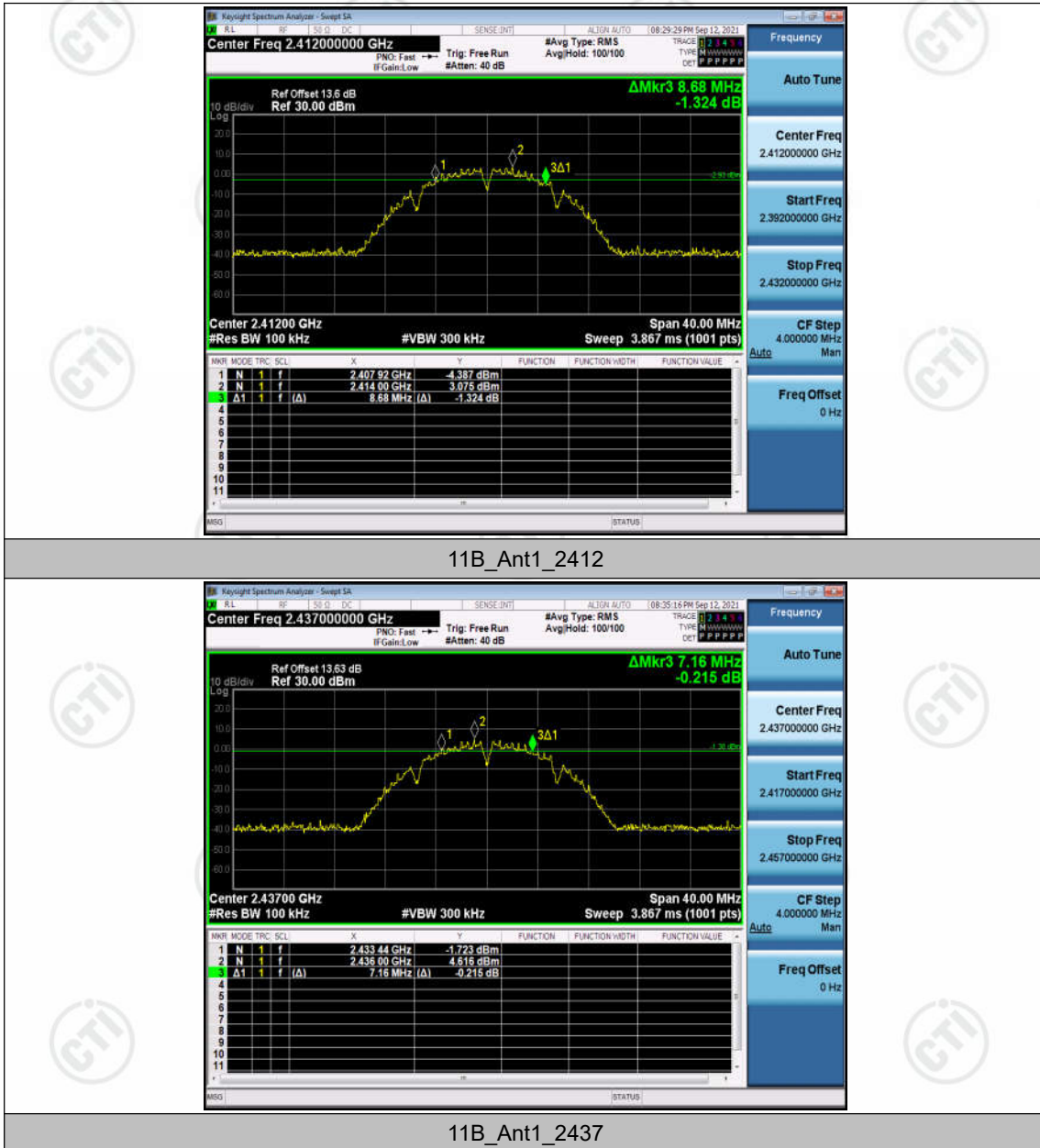
Appendix A: DTS Bandwidth.....	3
Test Result.....	3
Test Graphs.....	4
Appendix B: Occupied Channel Bandwidth.....	10
Test Result.....	10
Test Graphs.....	11
Appendix C: Maximum conducted output power.....	17
Test Result.....	17
Appendix D: Maximum power spectral density.....	18
Test Result.....	18
Test Graphs.....	19
Appendix E: Band edge measurements.....	25
Test Result.....	25
Test Graphs.....	26
Appendix F:Conducted Spurious Emission.....	30
Test Result.....	30
Test Graphs.....	32
Appendix G: Duty Cycle.....	50
Test Result.....	50
Test Graphs.....	51

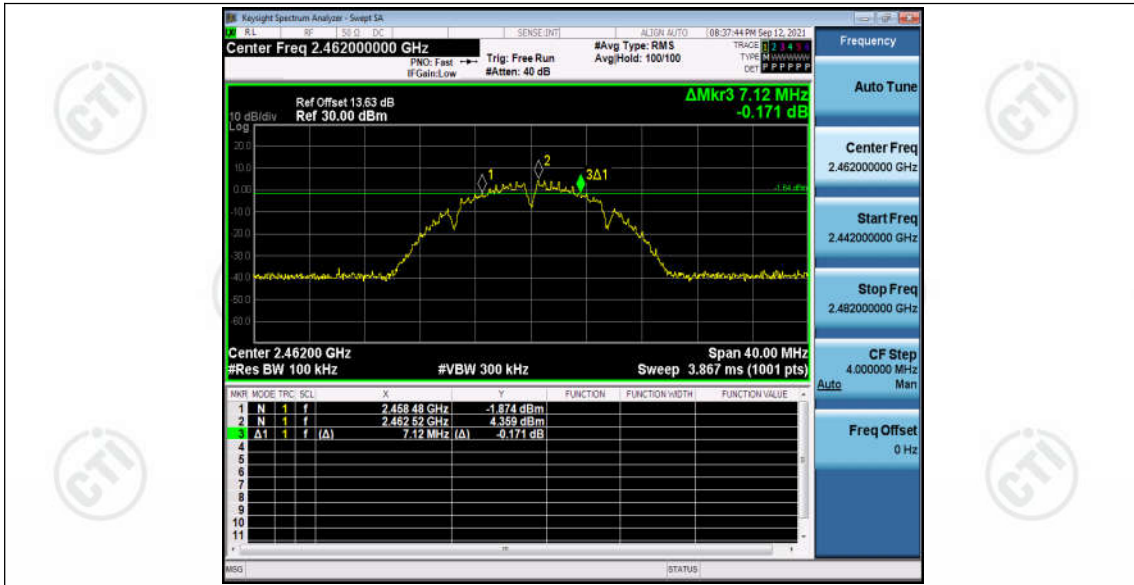
Appendix A: DTS Bandwidth

Test Result

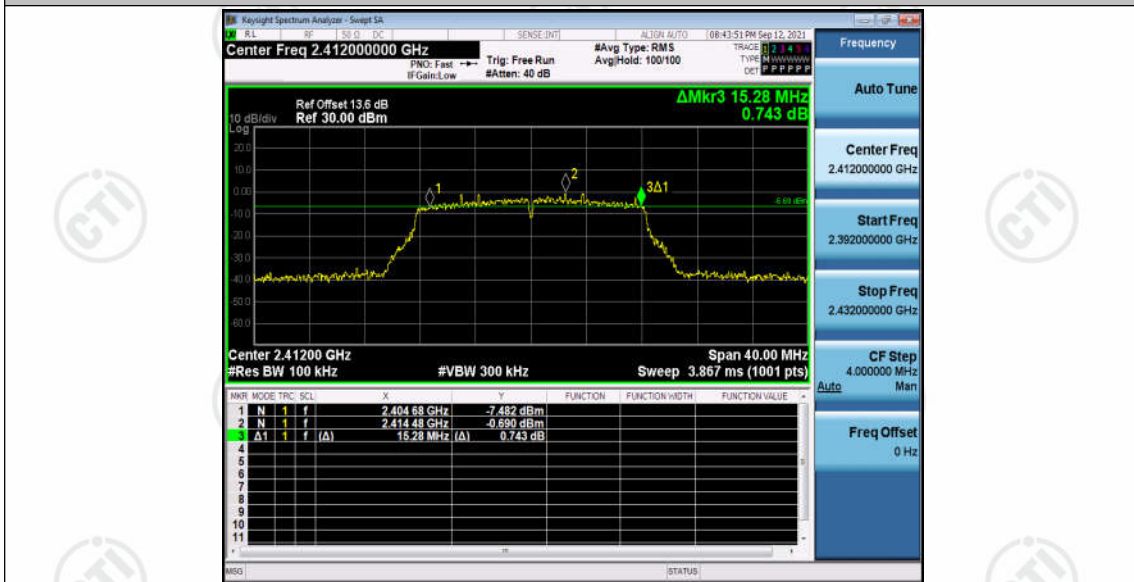
Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.680	2407.920	2416.600	0.5	PASS
		2437	7.160	2433.440	2440.600	0.5	PASS
		2462	7.120	2458.480	2465.600	0.5	PASS
11G	Ant1	2412	15.280	2404.680	2419.960	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	15.040	2454.480	2469.520	0.5	PASS
11N20SISO	Ant1	2412	16.400	2404.040	2420.440	0.5	PASS
		2437	15.520	2429.400	2444.920	0.5	PASS
		2462	12.640	2456.920	2469.560	0.5	PASS
11N40SISO	Ant1	2422	34.080	2405.600	2439.680	0.5	PASS
		2437	35.200	2419.400	2454.600	0.5	PASS
		2452	32.640	2436.880	2469.520	0.5	PASS

Test Graphs

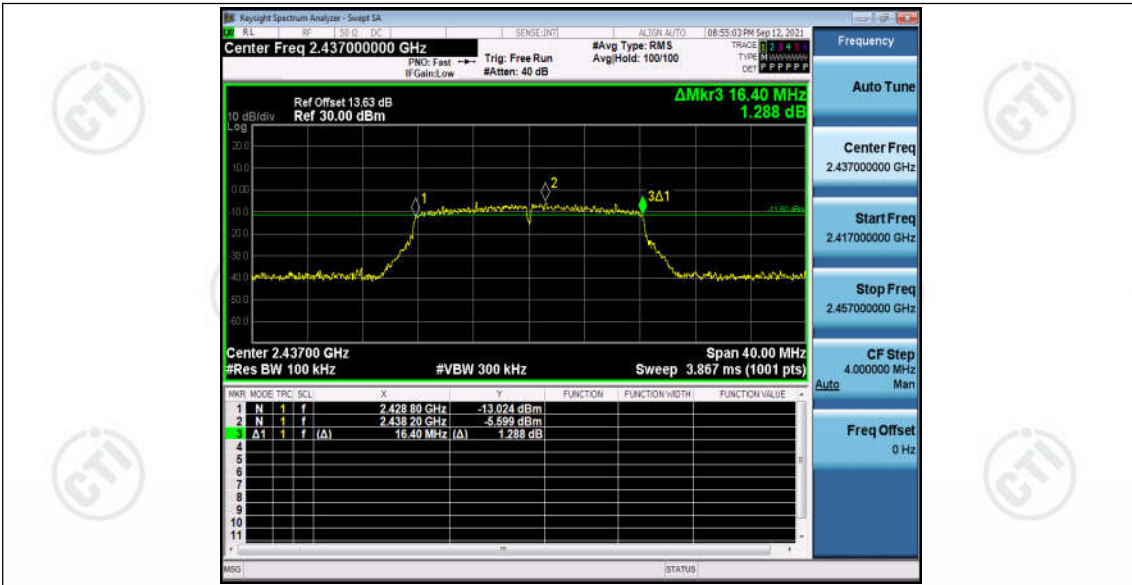




11B_Ant1_2462



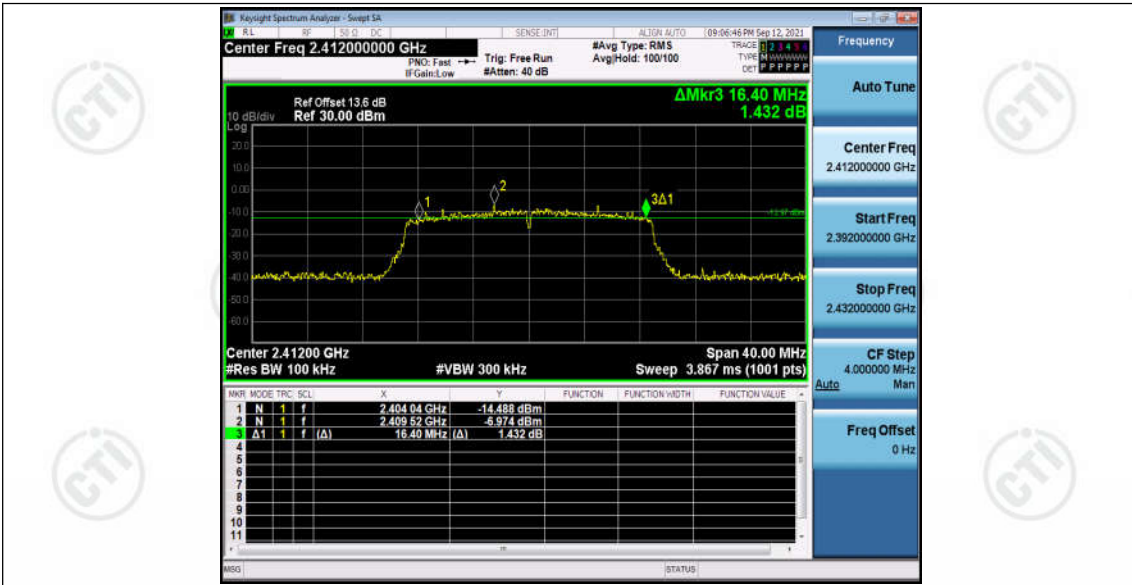
11G_Ant1_2412



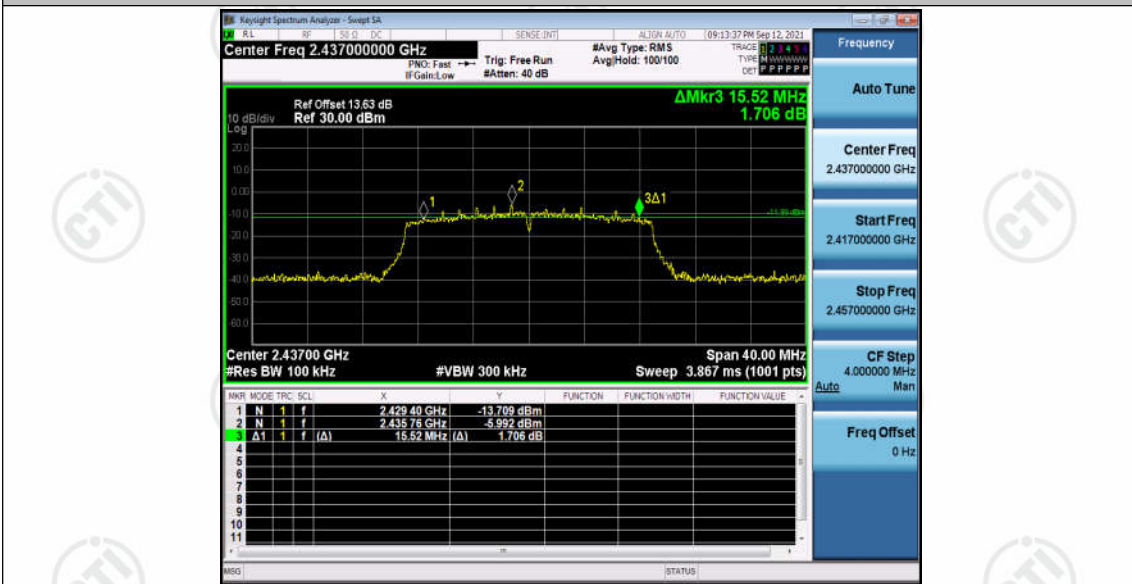
11G_Ant1_2437



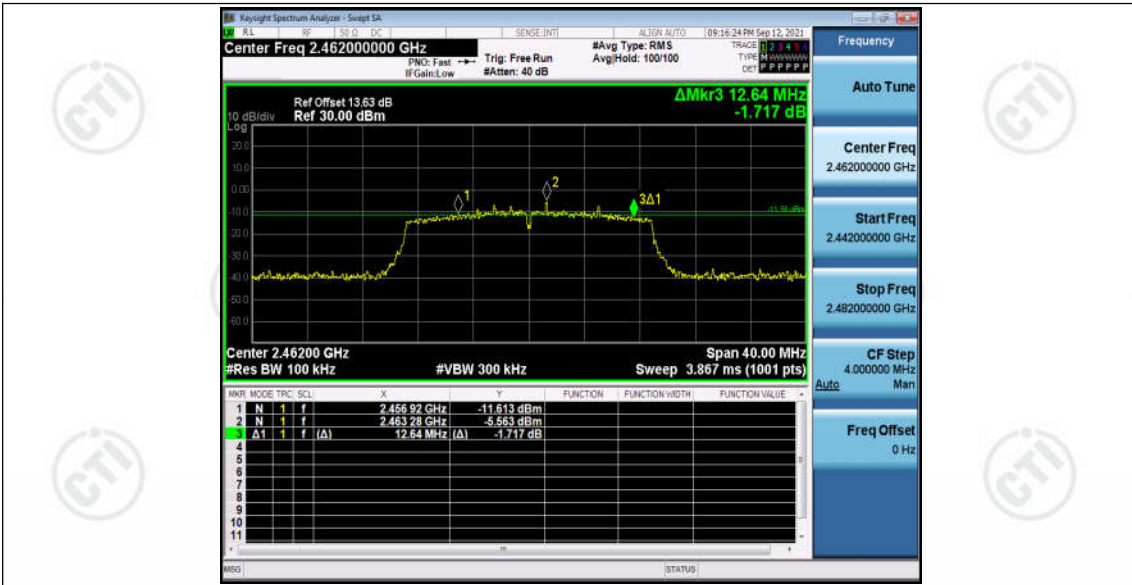
11G_Ant1_2462



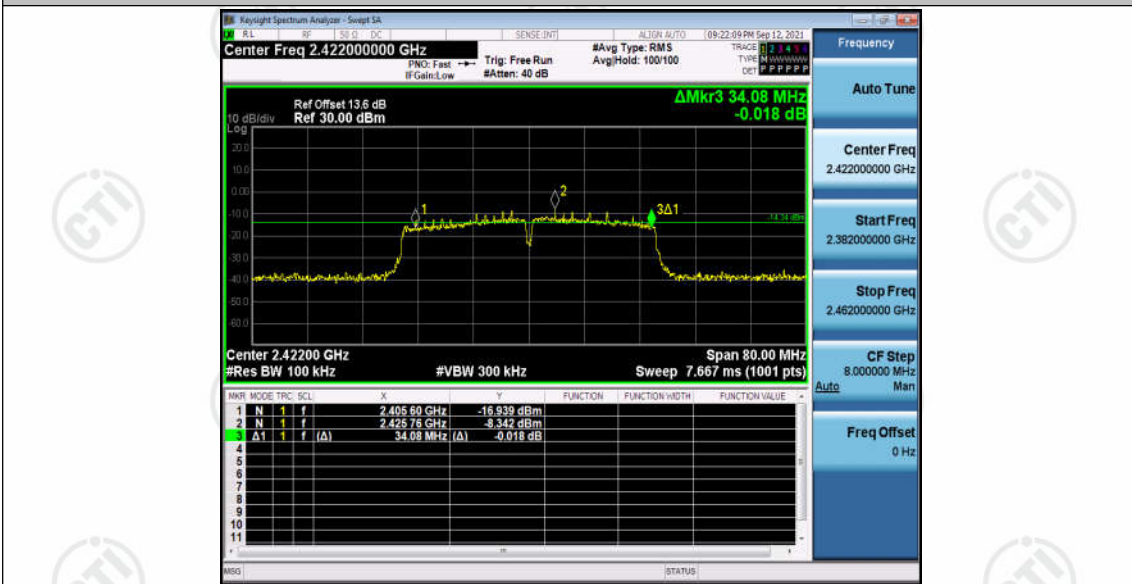
11N20SISO_Ant1_2412



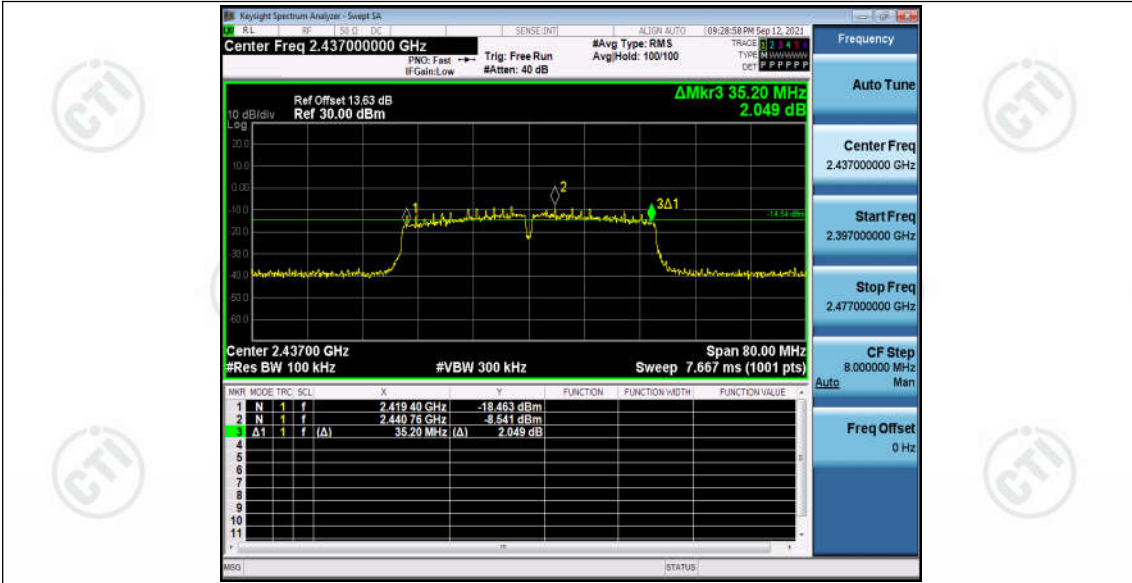
11N20SISO_Ant1_2437



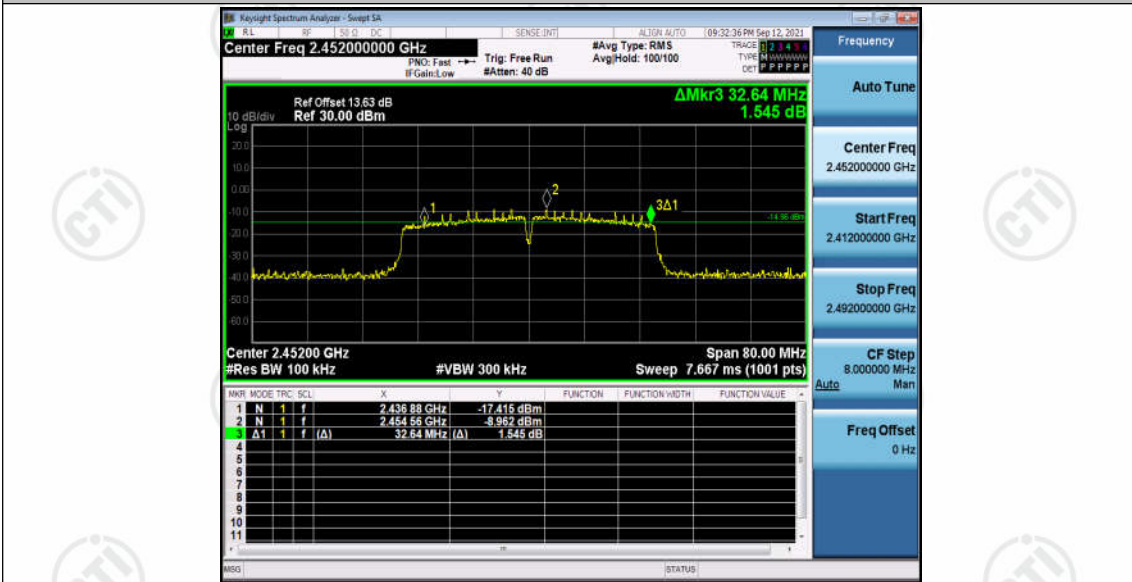
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



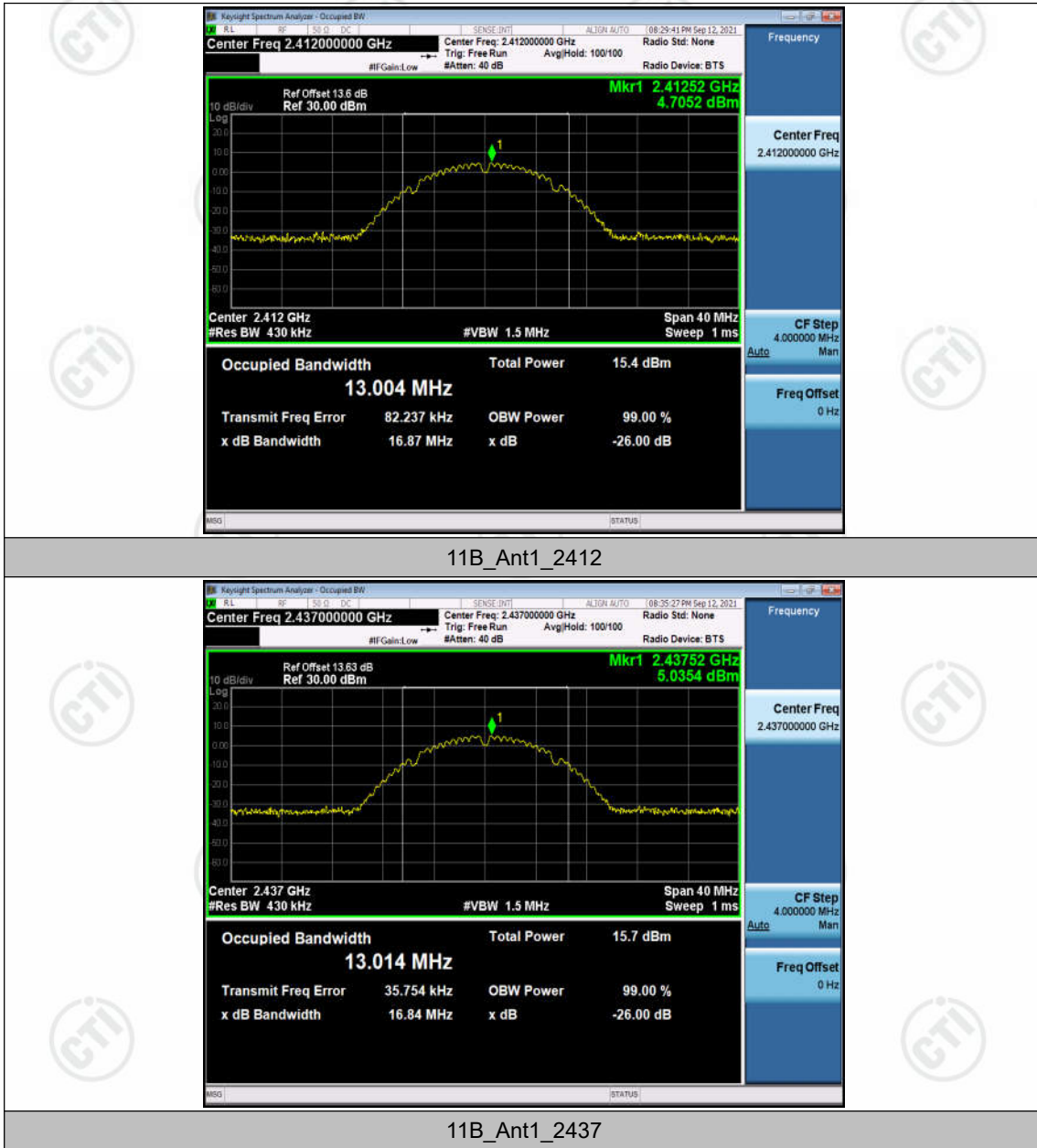
11N40SISO_Ant1_2452

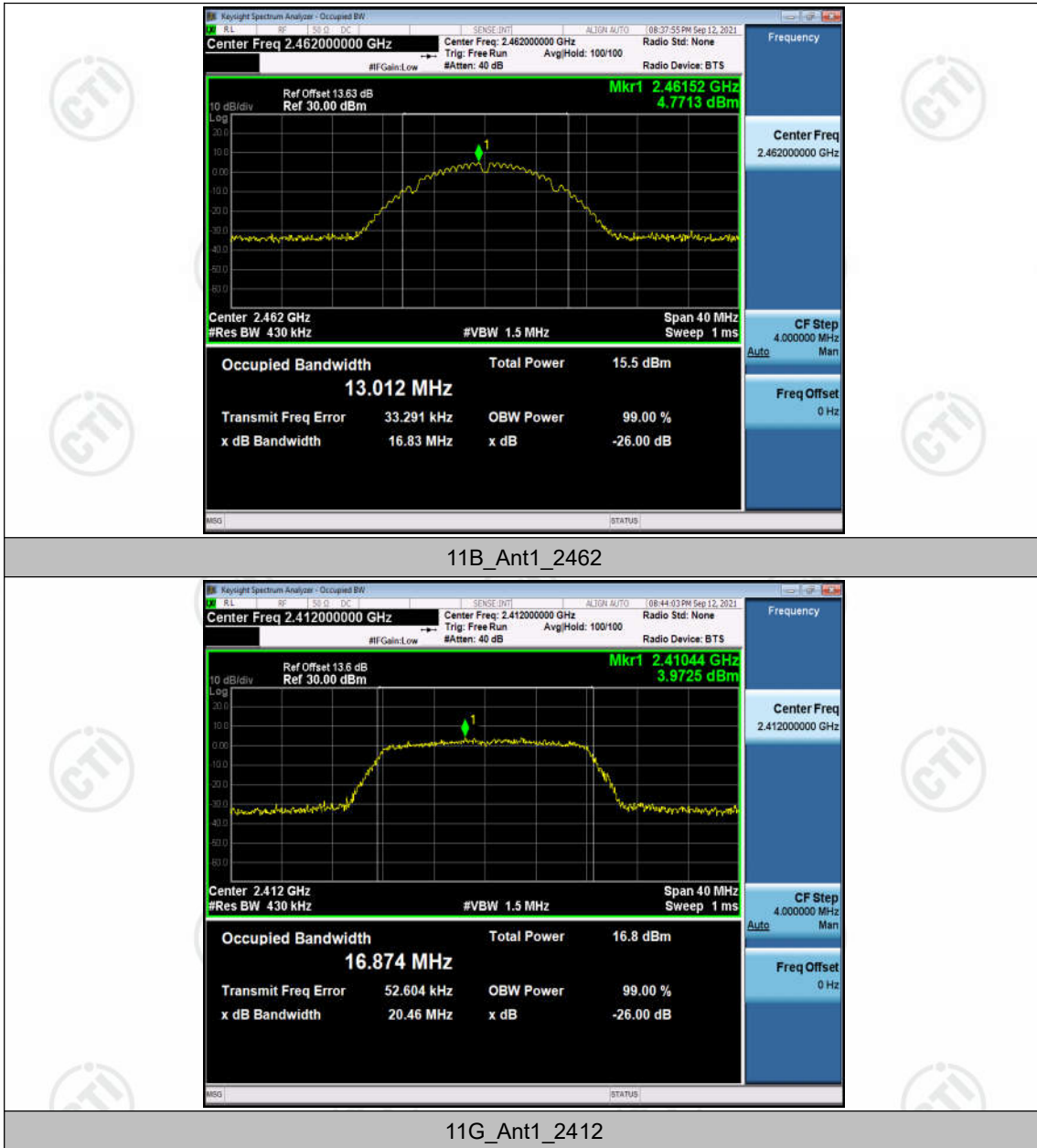
Appendix B: Occupied Channel Bandwidth

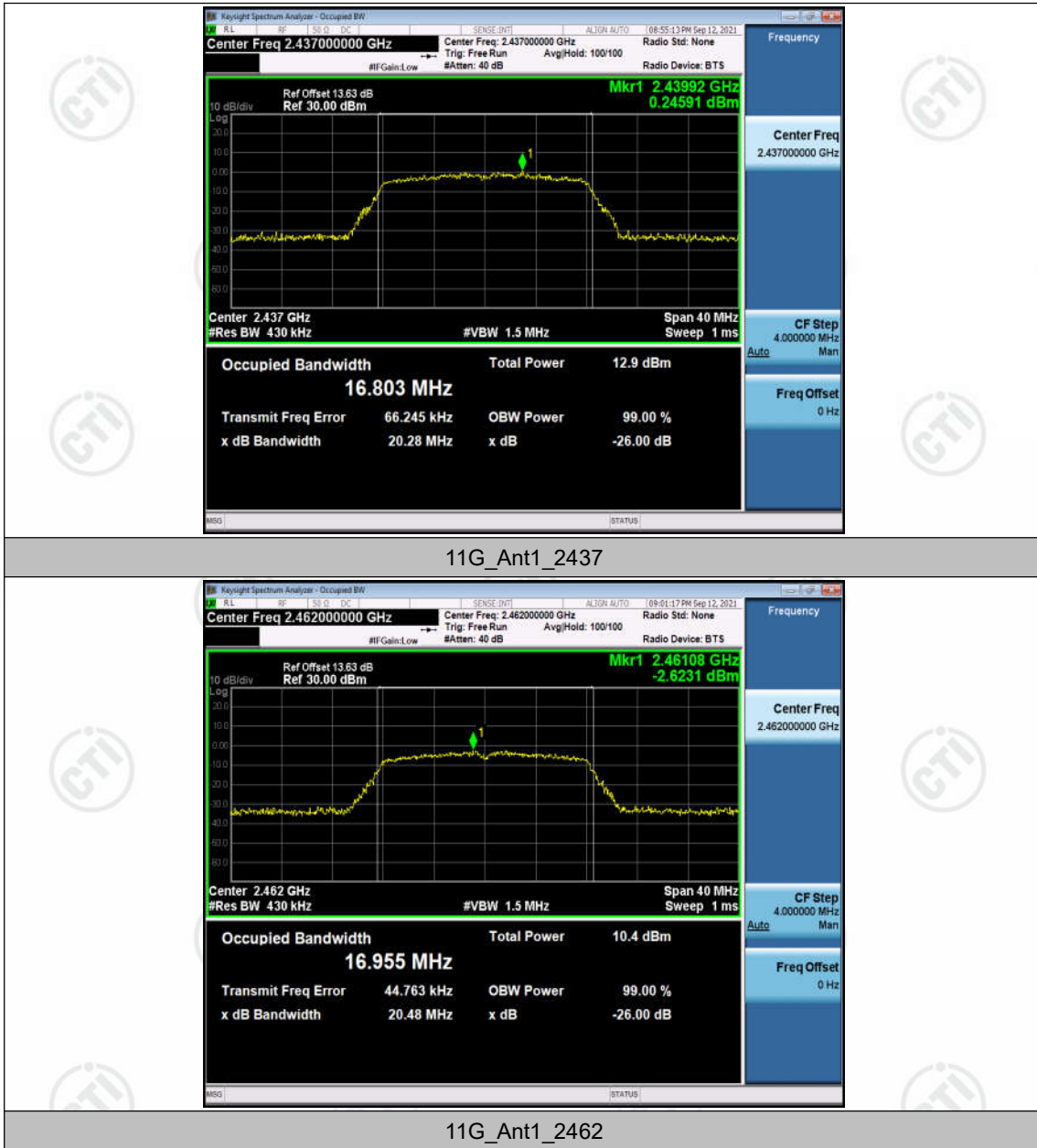
Test Result

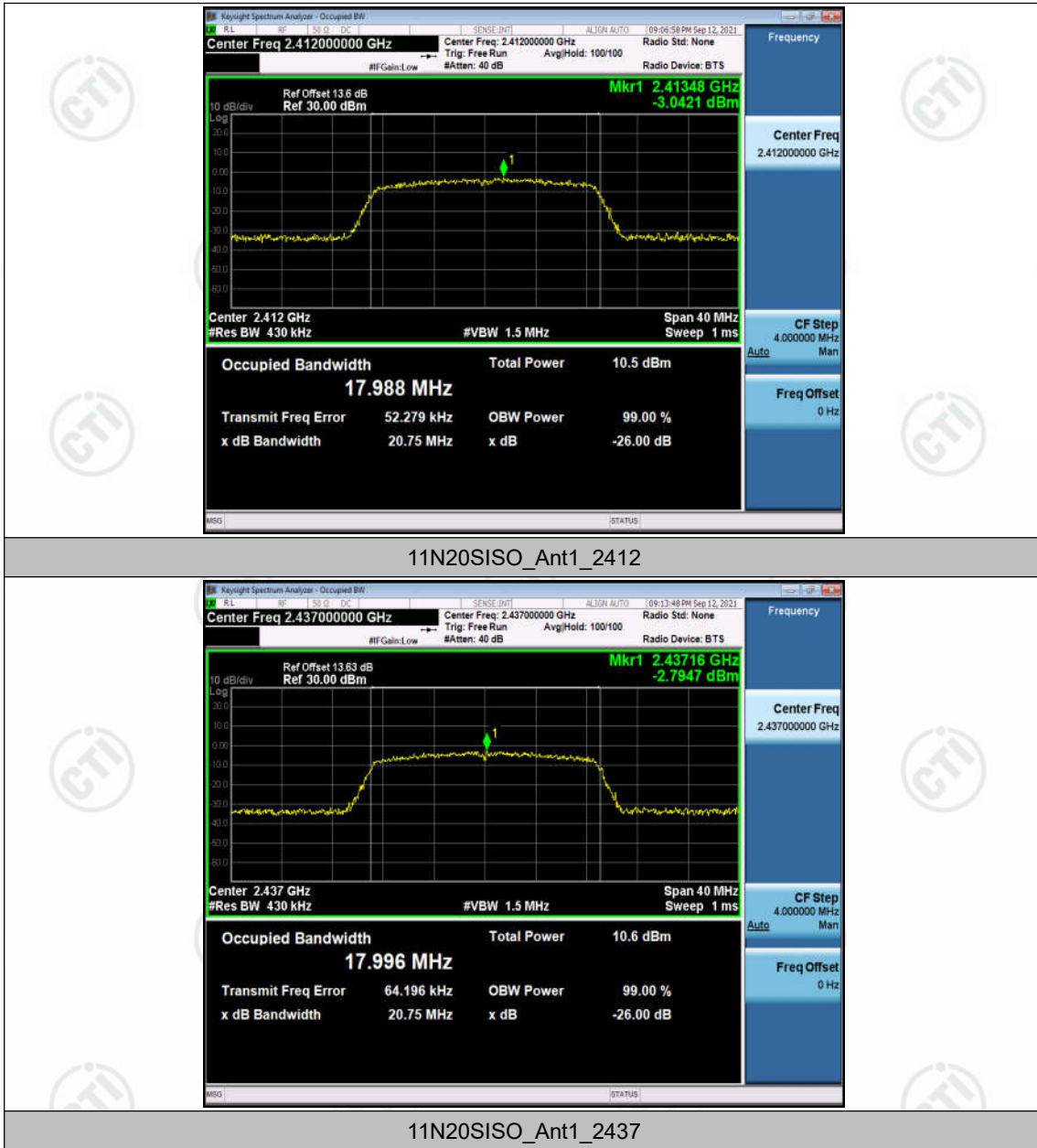
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.004	2405.580	2418.584	---	PASS
		2437	13.014	2430.529	2443.543	---	PASS
		2462	13.012	2455.527	2468.539	---	PASS
11G	Ant1	2412	16.874	2403.616	2420.490	---	PASS
		2437	16.803	2428.665	2445.468	---	PASS
		2462	16.955	2453.567	2470.522	---	PASS
11N20SISO	Ant1	2412	17.988	2403.058	2421.046	---	PASS
		2437	17.996	2428.066	2446.062	---	PASS
		2462	17.931	2453.058	2470.989	---	PASS
11N40SISO	Ant1	2422	36.387	2404.000	2440.387	---	PASS
		2437	36.462	2418.919	2455.381	---	PASS
		2452	36.407	2433.883	2470.290	---	PASS

Test Graphs











11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix C: Maximum conducted output power

Test Result

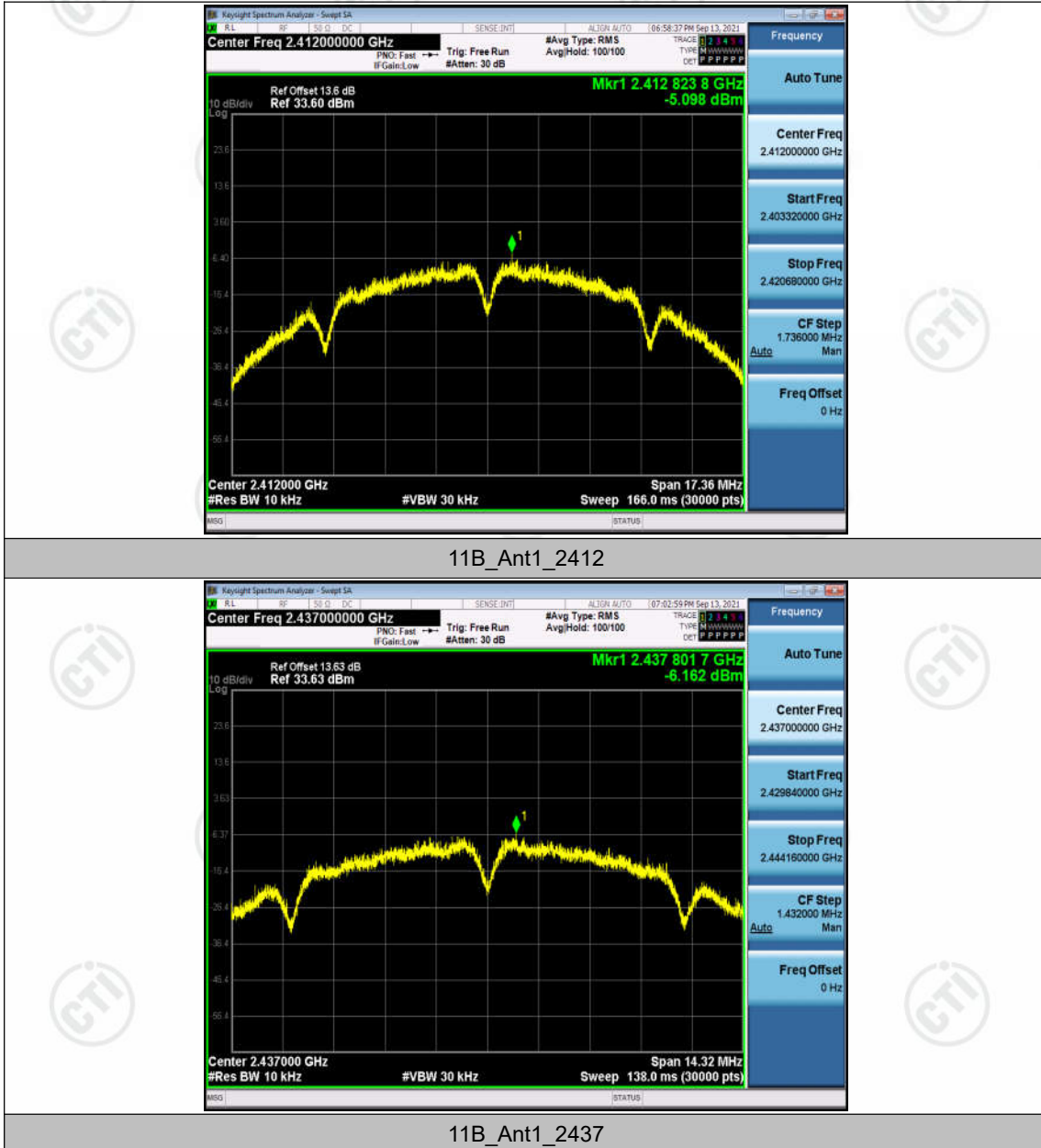
Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	12.66	<=30	PASS
		2437	12.40	<=30	PASS
		2462	12.06	<=30	PASS
11G	Ant1	2412	11.52	<=30	PASS
		2437	11.64	<=30	PASS
		2462	11.40	<=30	PASS
11N20SISO	Ant1	2412	11.35	<=30	PASS
		2437	11.44	<=30	PASS
		2462	10.58	<=30	PASS
11N40SISO	Ant1	2422	11.46	<=30	PASS
		2437	11.55	<=30	PASS
		2452	11.21	<=30	PASS

Appendix D: Maximum power spectral density

Test Result

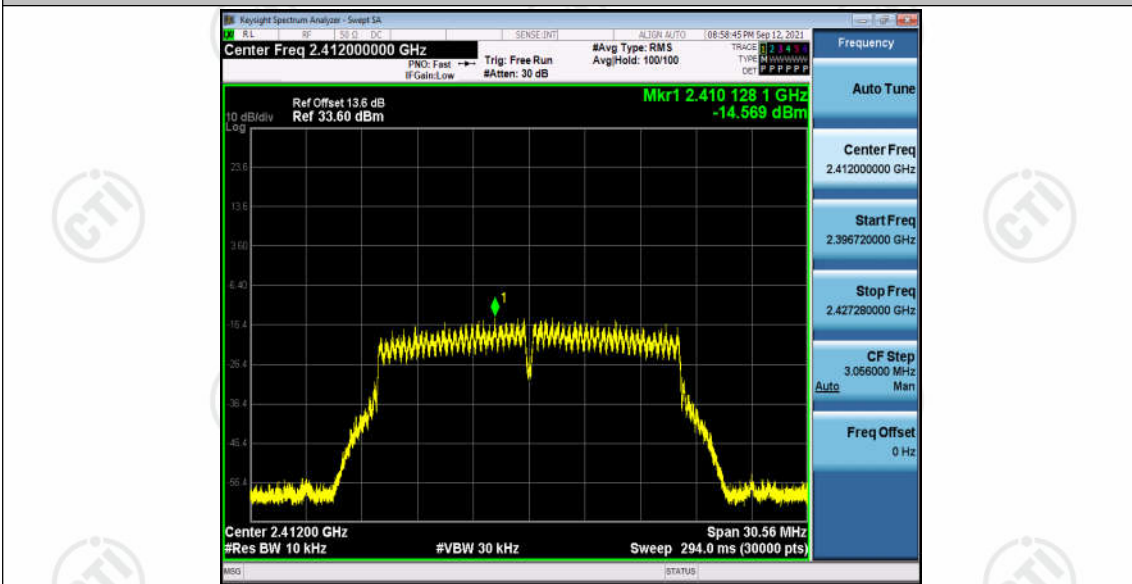
Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.1	<=8	PASS
		2437	-6.16	<=8	PASS
		2462	-6.46	<=8	PASS
11G	Ant1	2412	-14.57	<=8	PASS
		2437	-13.83	<=8	PASS
		2462	-14.05	<=8	PASS
11N20SISO	Ant1	2412	-13.54	<=8	PASS
		2437	-14.19	<=8	PASS
		2462	-14.93	<=8	PASS
11N40SISO	Ant1	2422	-15.97	<=8	PASS
		2437	-17.44	<=8	PASS
		2452	-17.52	<=8	PASS

Test Graphs

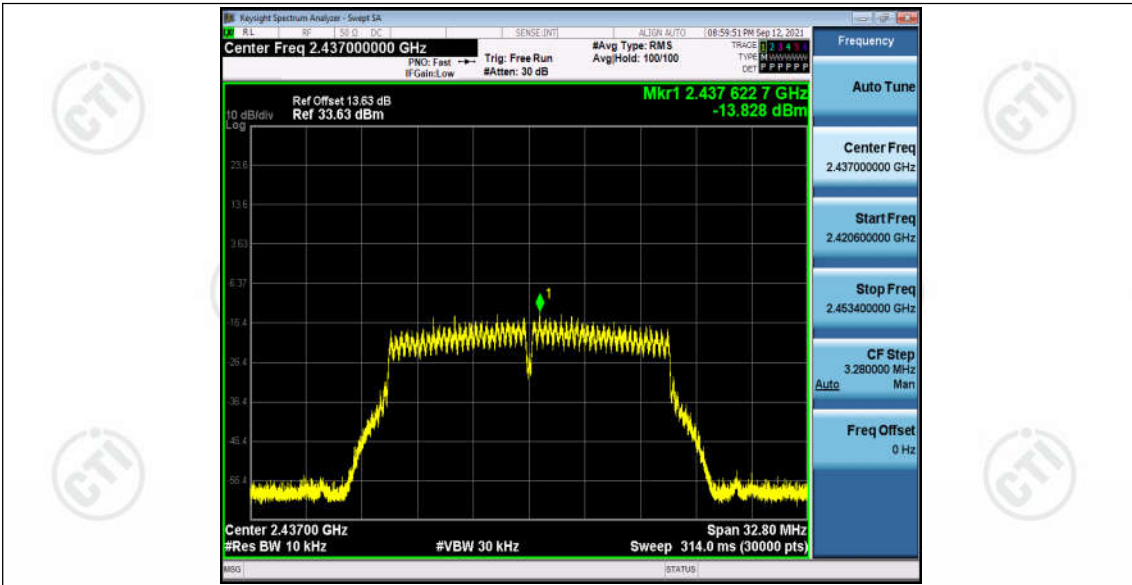




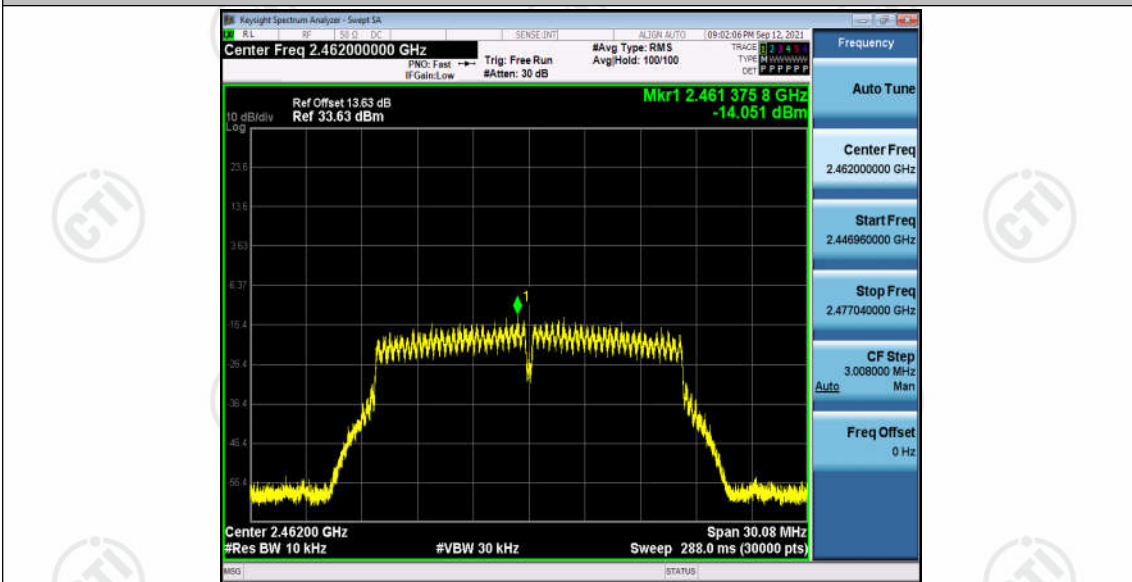
11B_Ant1_2462



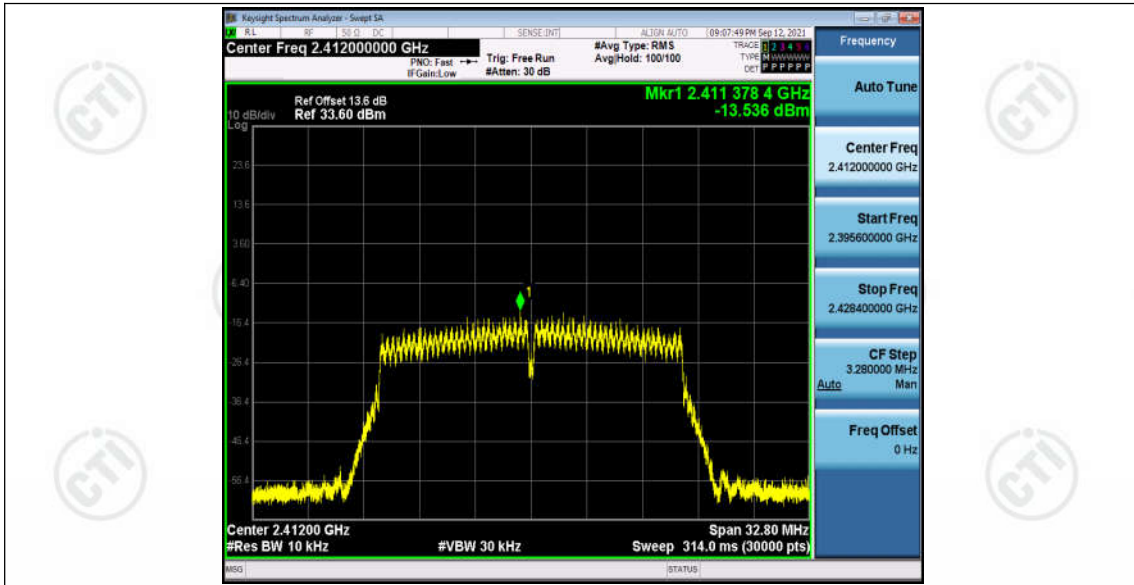
11G_Ant1_2412



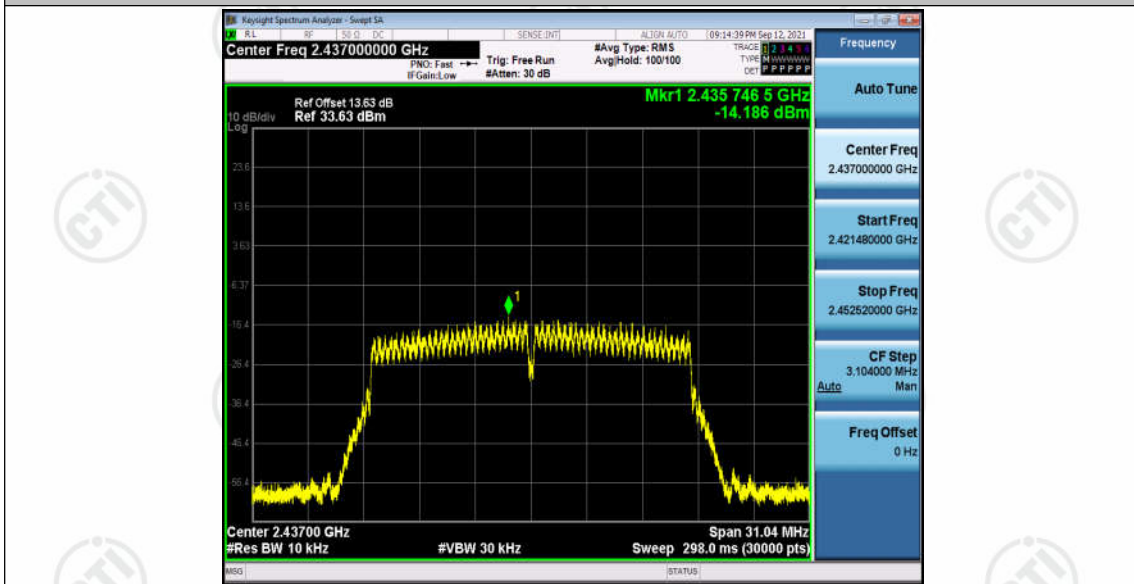
11G_Ant1_2437



11G_Ant1_2462



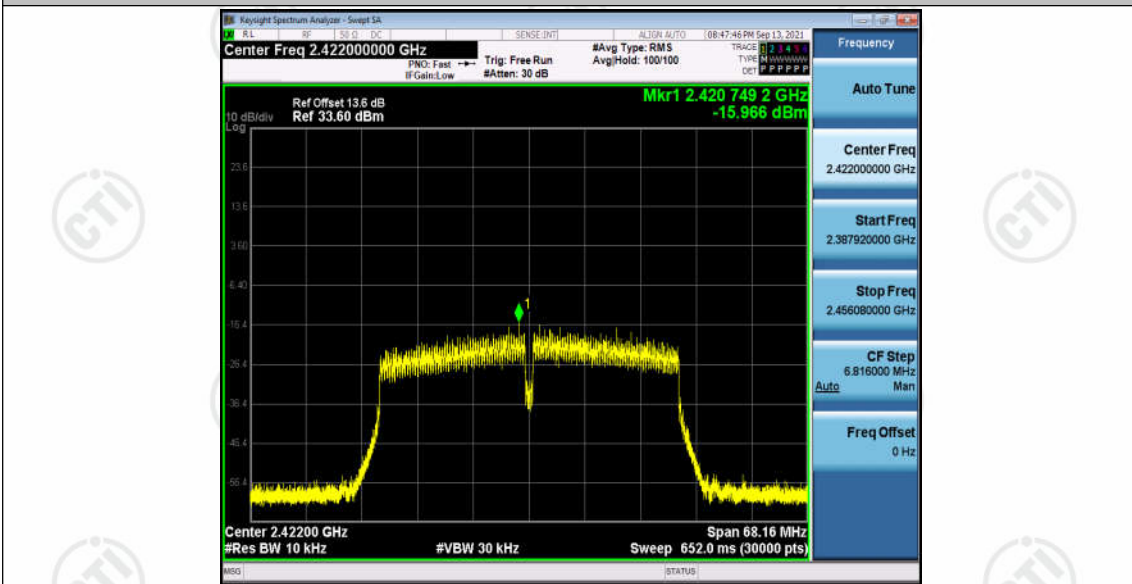
11N20SISO_Ant1_2412



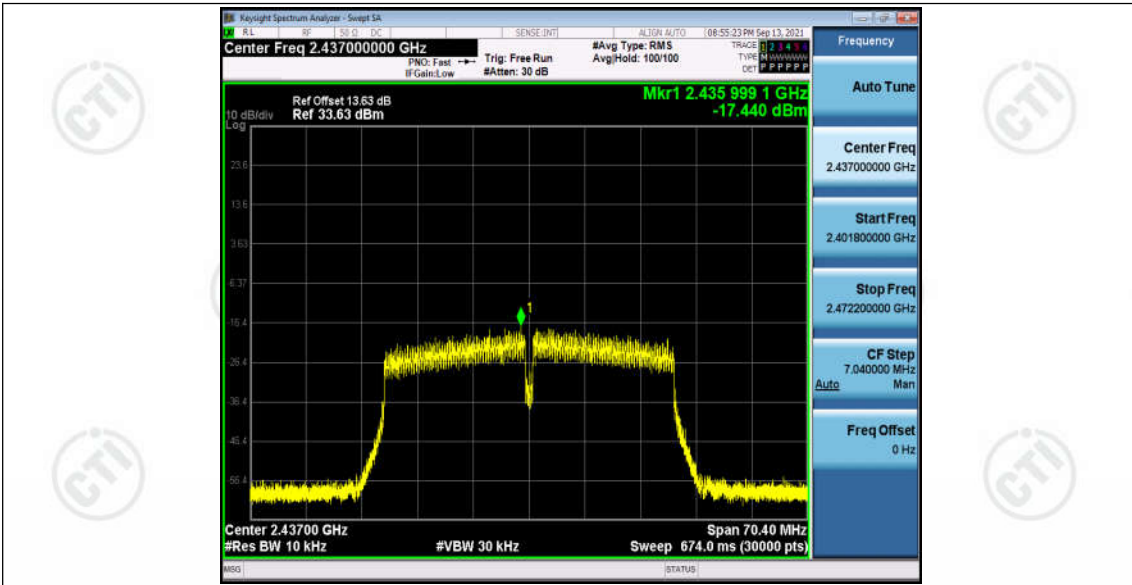
11N20SISO_Ant1_2437



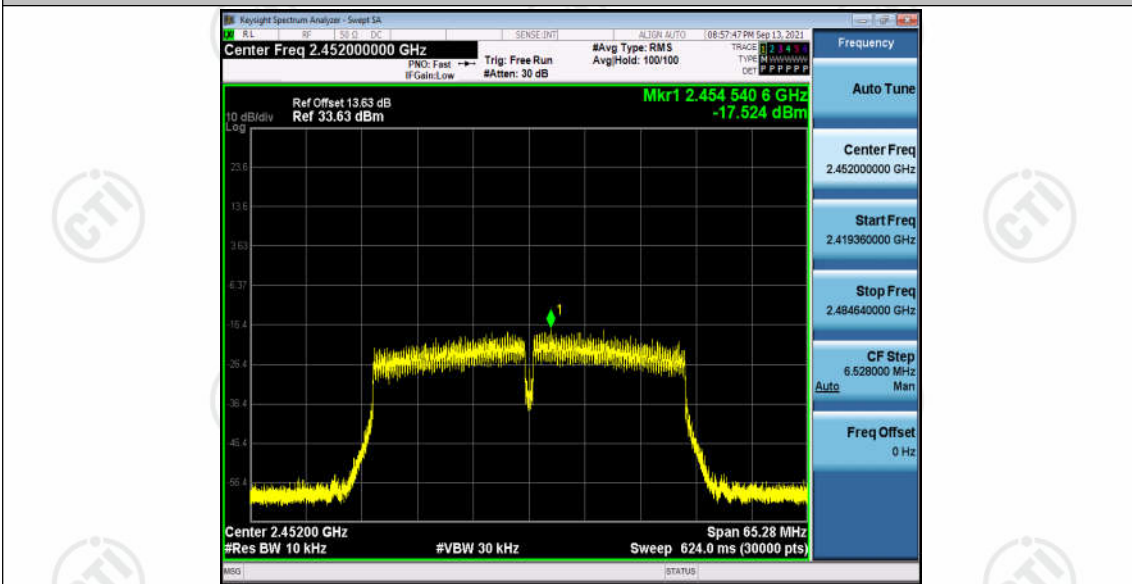
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



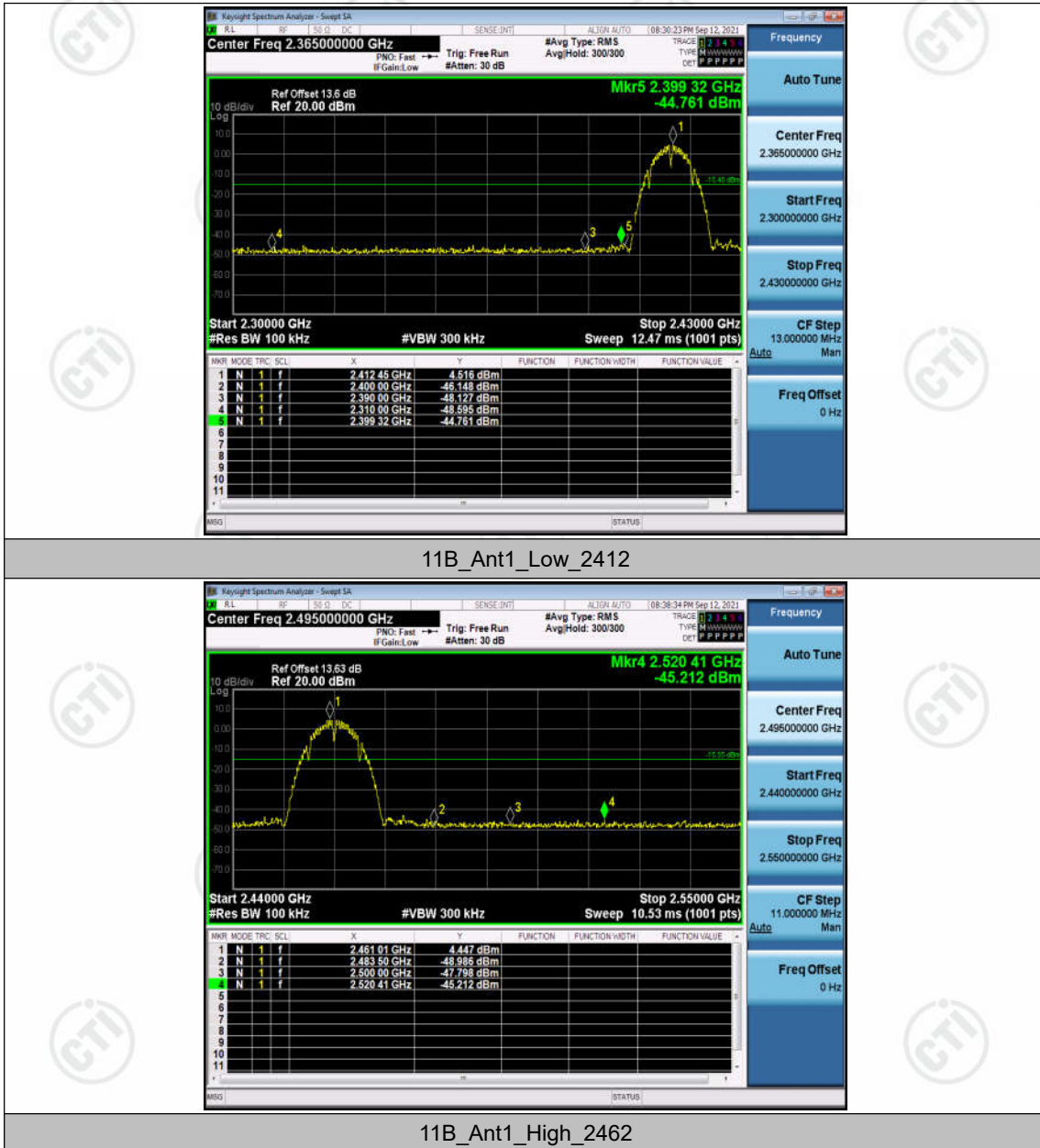
11N40SISO_Ant1_2452

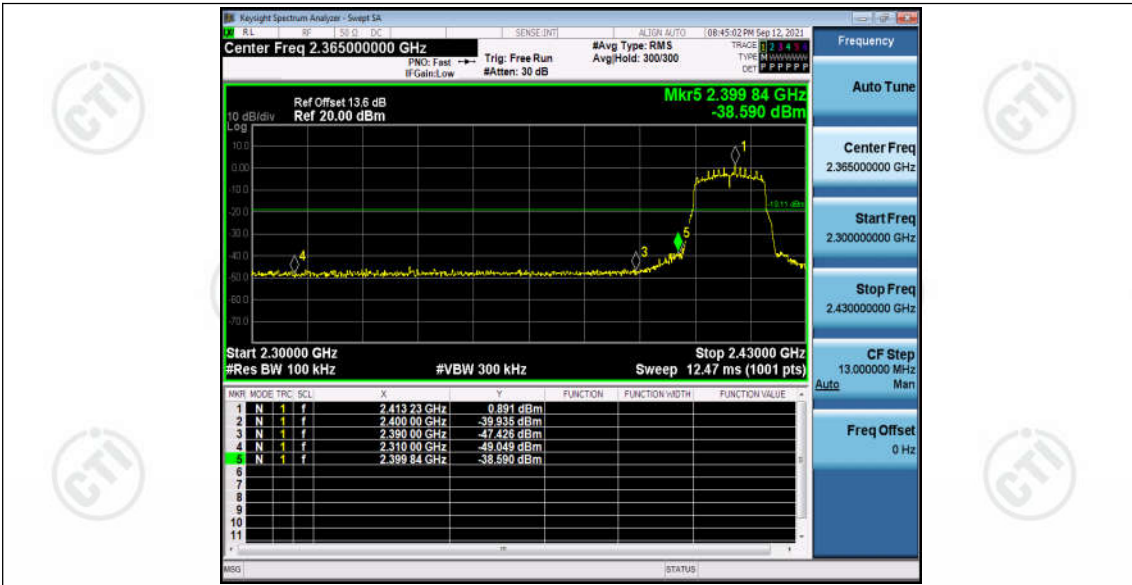
Appendix E: Band edge measurements

Test Result

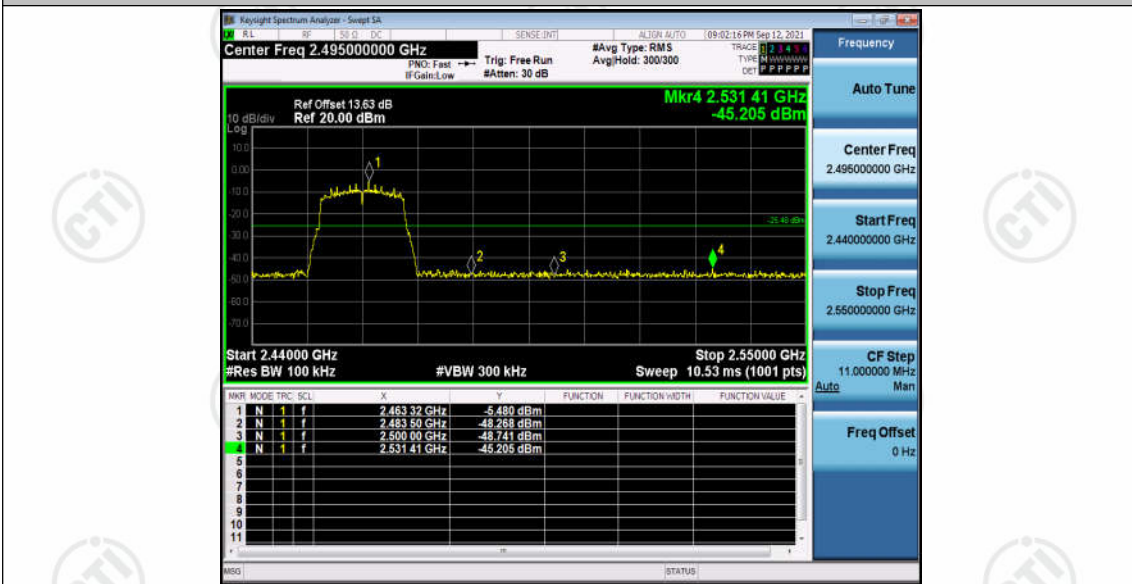
Test Mode	Antenna	Ch Name	Channel	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.52	-44.76	<=-15.48	PASS
		High	2462	4.45	-45.21	<=-15.55	PASS
11G	Ant1	Low	2412	0.89	-38.59	<=-19.11	PASS
		High	2462	-5.48	-45.21	<=-25.48	PASS
11N20SISO	Ant1	Low	2412	-5.24	-45.8	<=-25.24	PASS
		High	2462	-5.92	-45.12	<=-25.92	PASS
11N40SISO	Ant1	Low	2422	-8.00	-45.19	<=-28	PASS
		High	2452	-8.36	-45.27	<=-28.36	PASS

Test Graphs

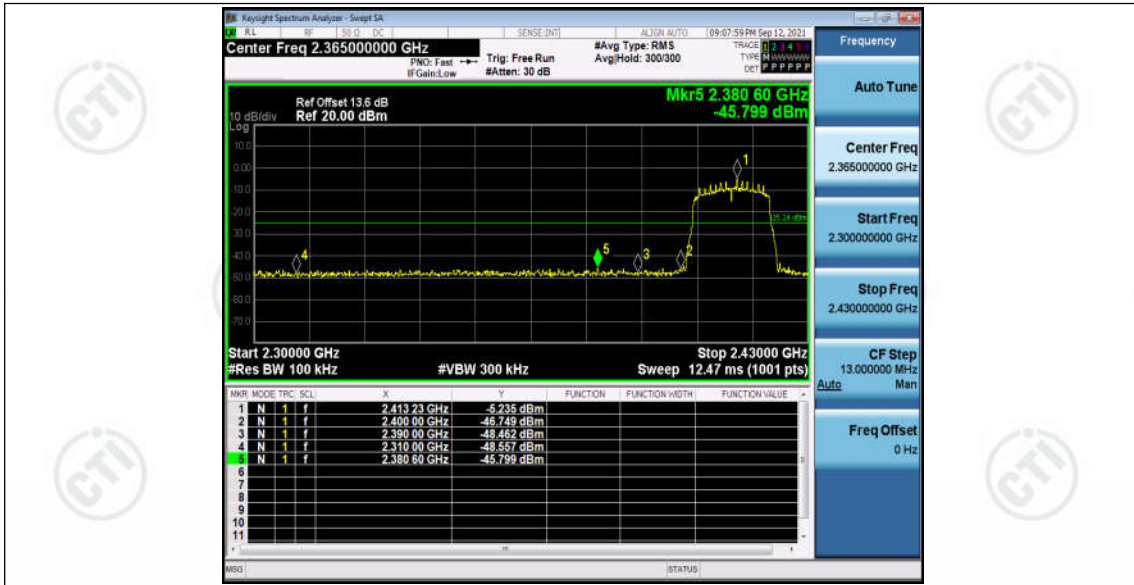




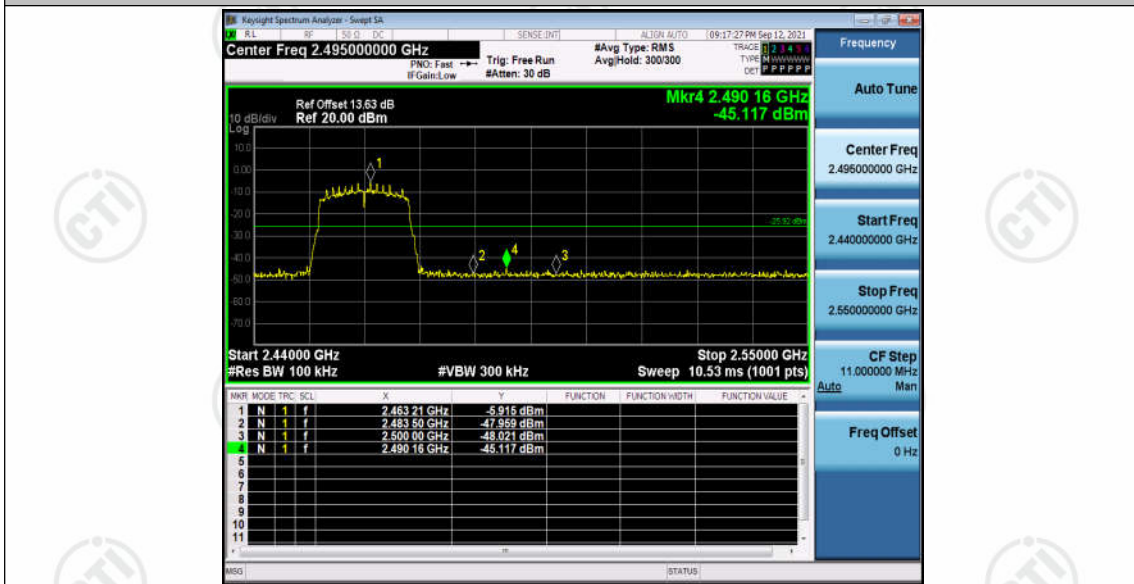
11G_Ant1_Low_2412



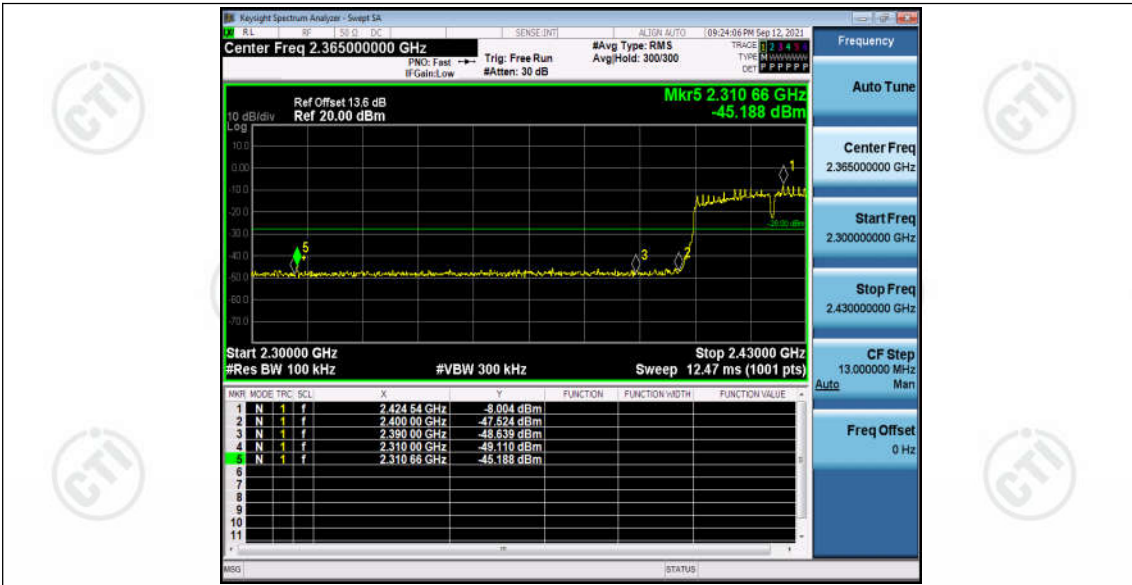
11G_Ant1_High_2462



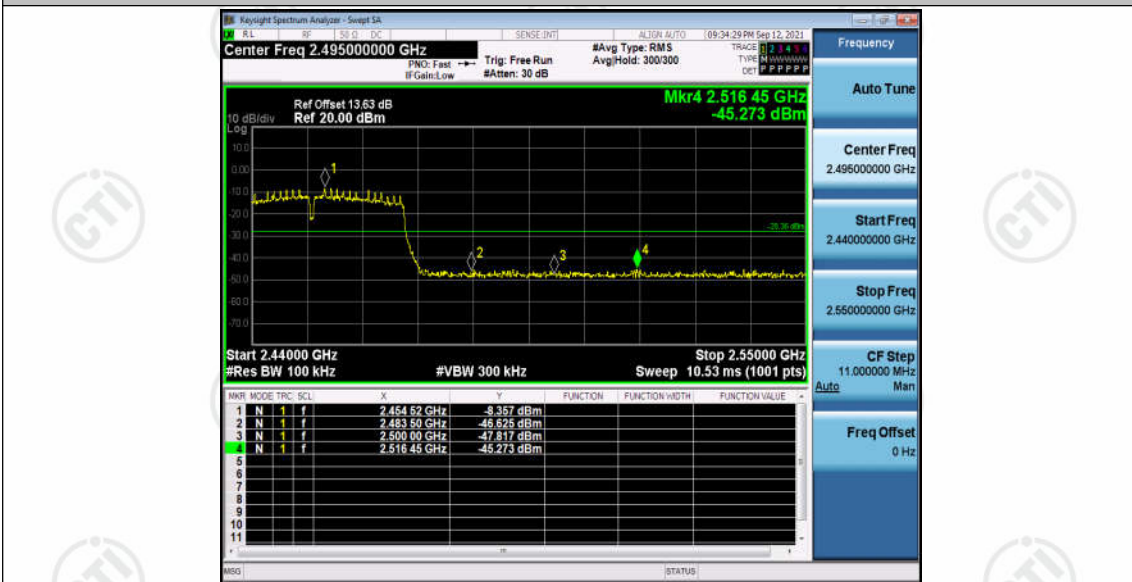
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

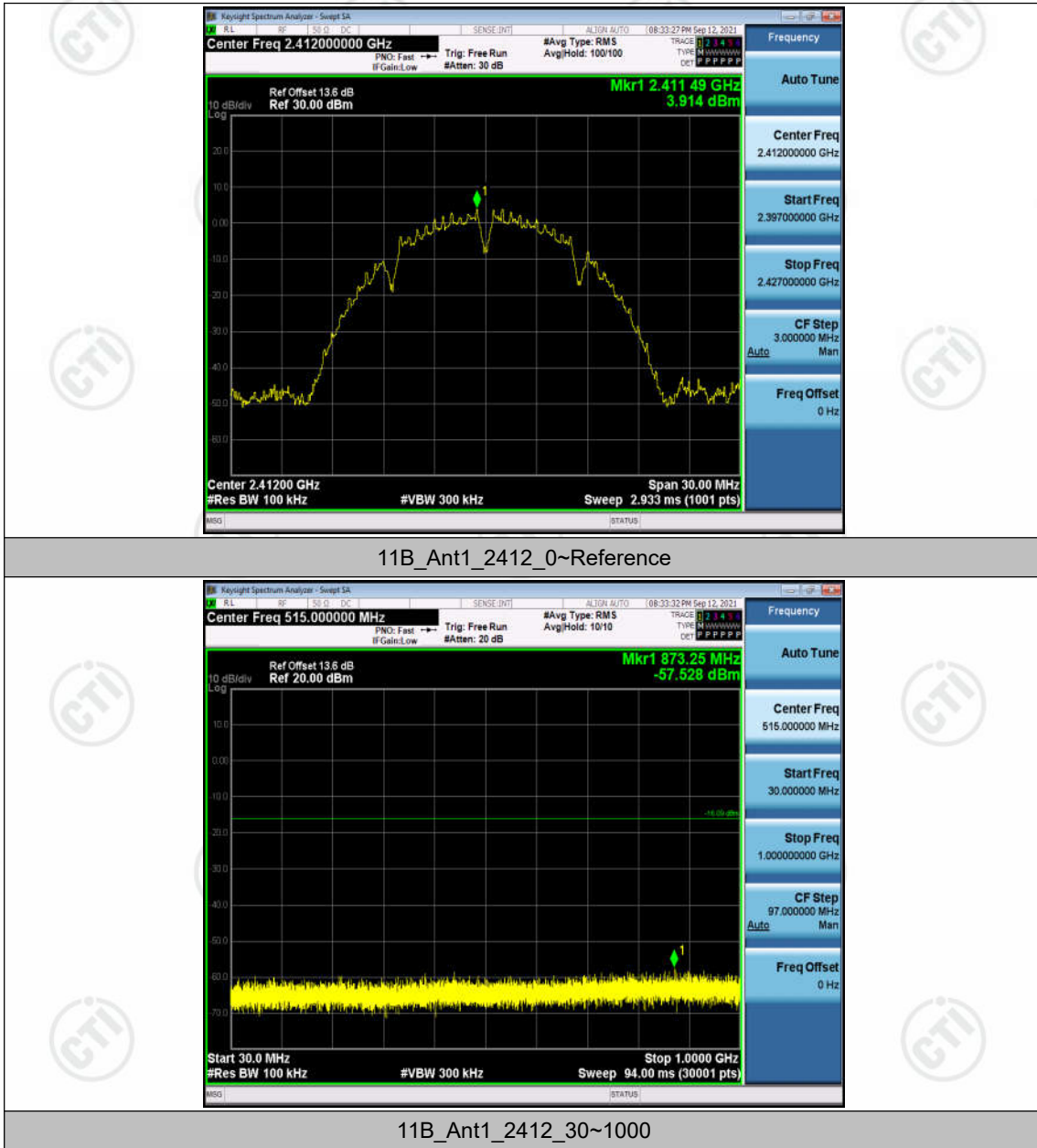
Appendix F: Conducted Spurious Emission

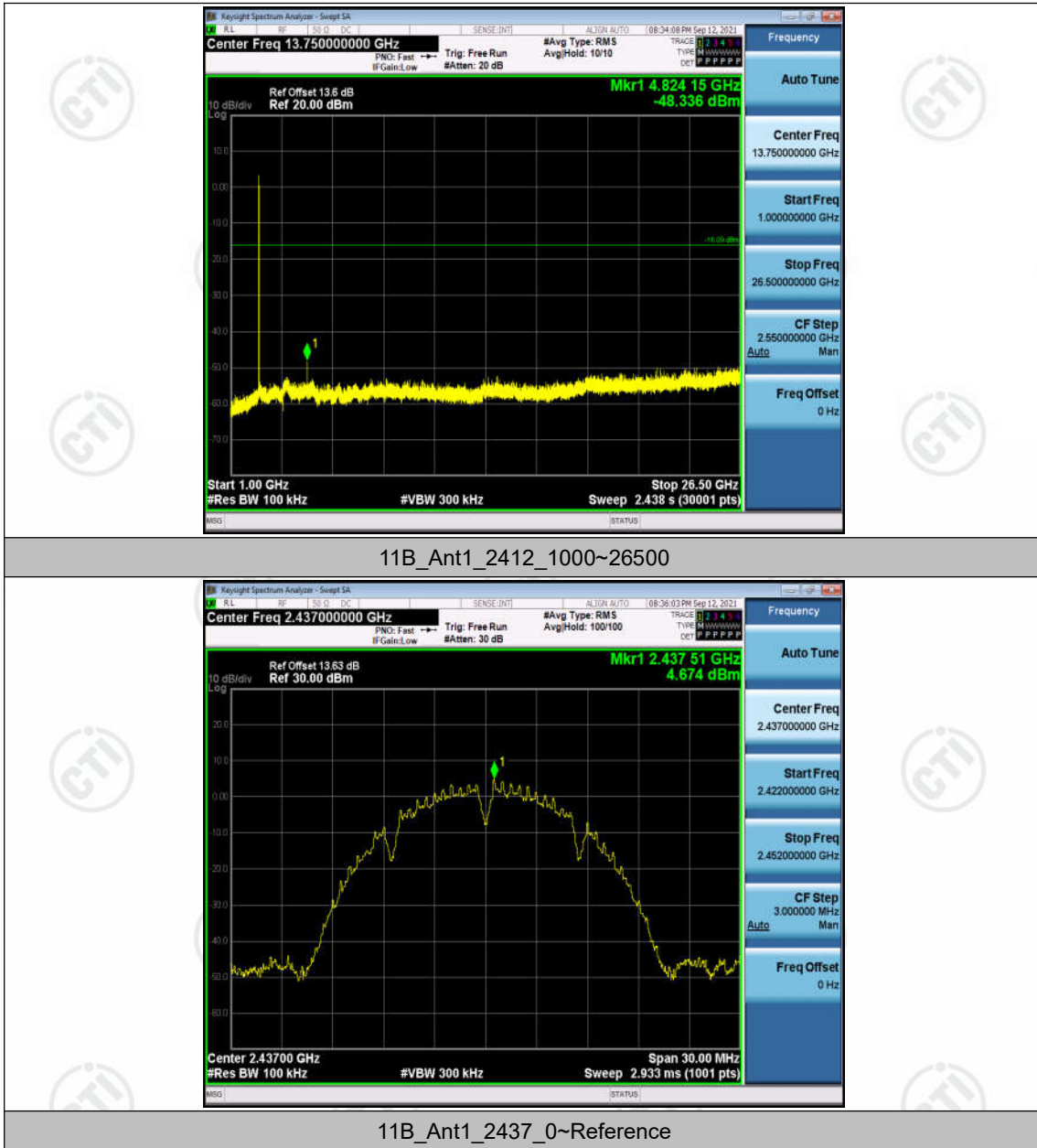
Test Result

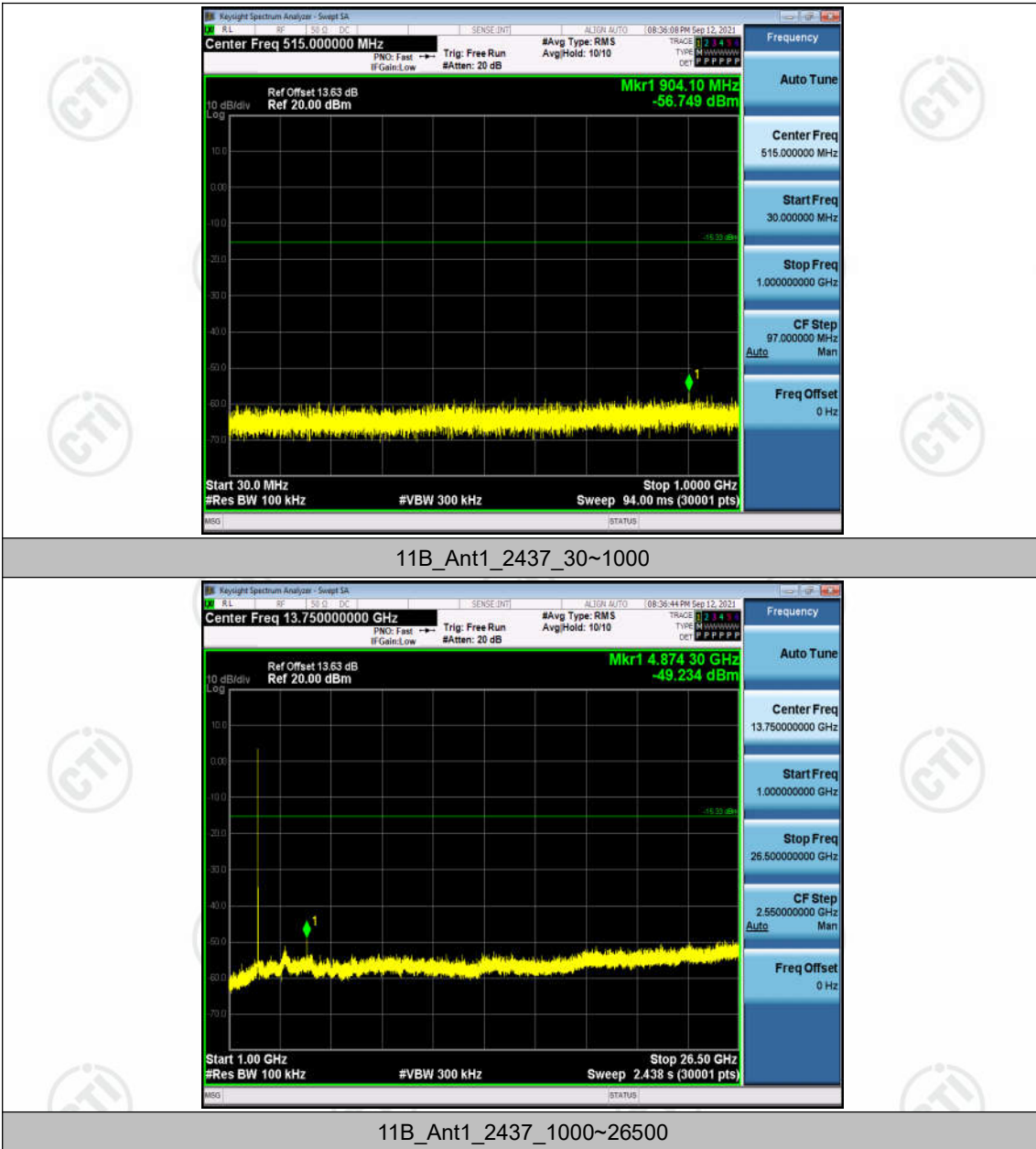
Test Mode	Antenna	Channel	Freq Range [Mhz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.91	3.91	---	PASS
			30~1000	30~1000	-57.528	<=-16.086	PASS
			1000~26500	1000~26500	-48.336	<=-16.086	PASS
		2437	Reference	4.67	4.67	---	PASS
			30~1000	30~1000	-56.749	<=-15.326	PASS
			1000~26500	1000~26500	-49.234	<=-15.326	PASS
		2462	Reference	4.48	4.48	---	PASS
			30~1000	30~1000	-57.226	<=-15.521	PASS
			1000~26500	1000~26500	-49.649	<=-15.521	PASS
11G	Ant1	2412	Reference	0.11	0.11	---	PASS
			30~1000	30~1000	-55.055	<=-19.886	PASS
			1000~26500	1000~26500	-49.123	<=-19.886	PASS
		2437	Reference	-3.54	-3.54	---	PASS
			30~1000	30~1000	-56.945	<=-23.539	PASS
			1000~26500	1000~26500	-48.838	<=-23.539	PASS
		2462	Reference	-6.51	-6.51	---	PASS
			30~1000	30~1000	-57.734	<=-26.514	PASS
			1000~26500	1000~26500	-49.168	<=-26.514	PASS
11N20SISO	Ant1	2412	Reference	-7.88	-7.88	---	PASS
			30~1000	30~1000	-57.926	<=-27.875	PASS
			1000~26500	1000~26500	-47.706	<=-27.875	PASS
		2437	Reference	-6.68	-6.68	---	PASS
			30~1000	30~1000	-56.284	<=-26.679	PASS
			1000~26500	1000~26500	-49.399	<=-26.679	PASS
		2462	Reference	-6.35	-6.35	---	PASS
			30~1000	30~1000	-57.926	<=-26.345	PASS
			1000~26500	1000~26500	-49.792	<=-26.345	PASS

11N40SISO	2422	Reference	-8.06	-8.06	---	PASS
		30~1000	30~1000	-57.591	<=-28.064	PASS
		1000~26500	1000~26500	-49.904	<=-28.064	PASS
	2437	Reference	-8.03	-8.03	---	PASS
		30~1000	30~1000	-56.783	<=-28.026	PASS
		1000~26500	1000~26500	-49.096	<=-28.026	PASS
	2452	Reference	-8.35	-8.35	---	PASS
		30~1000	30~1000	-56.784	<=-28.351	PASS
		1000~26500	1000~26500	-48.935	<=-28.351	PASS

Test Graphs

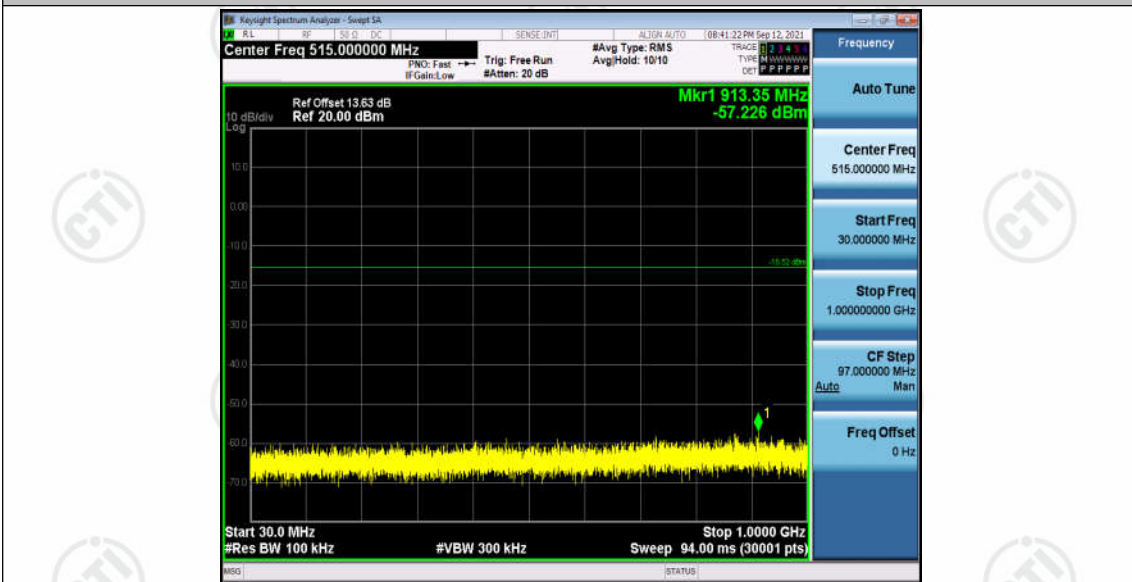








11B_Ant1_2462_0~Reference



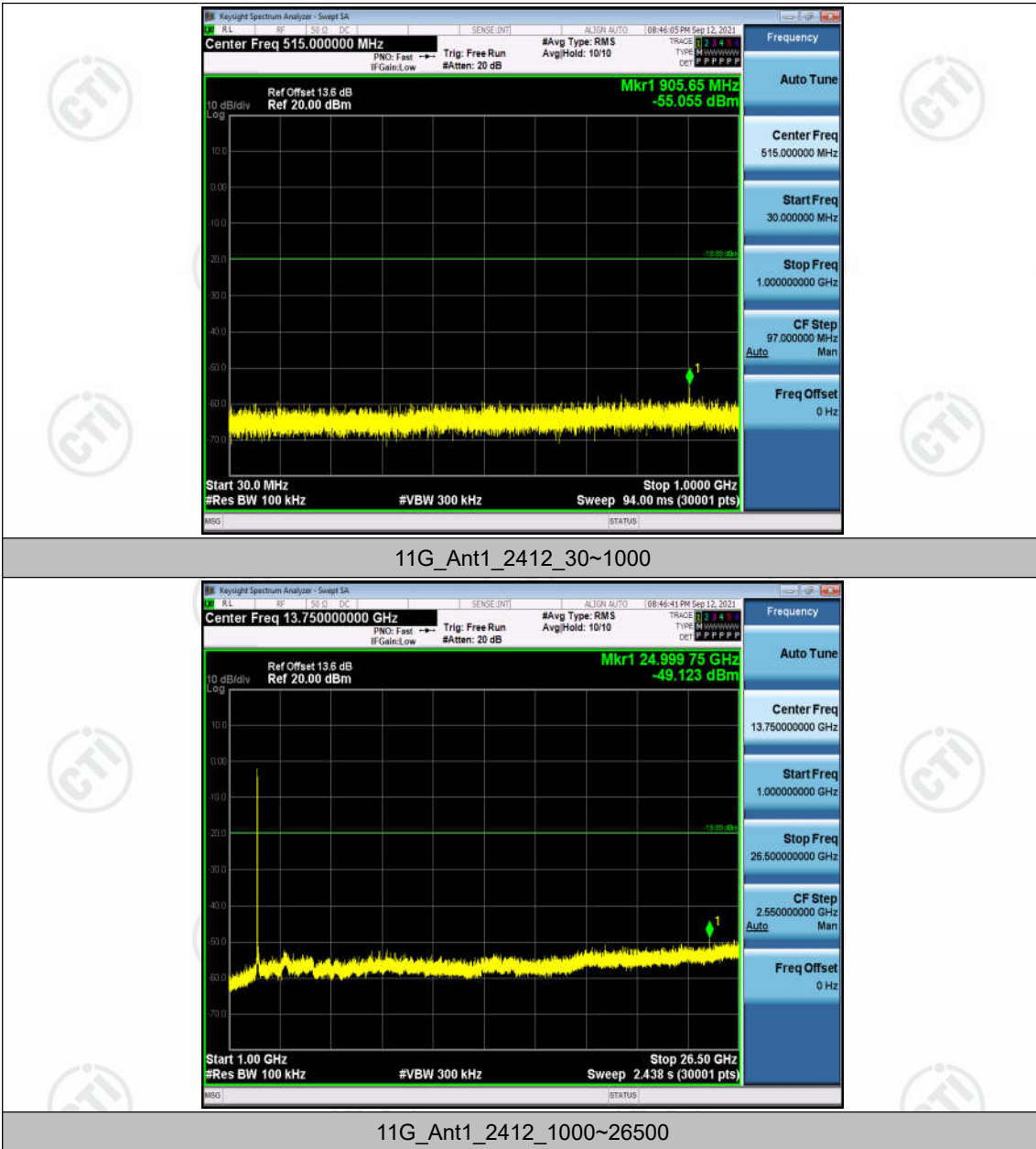
11B_Ant1_2462_30~1000

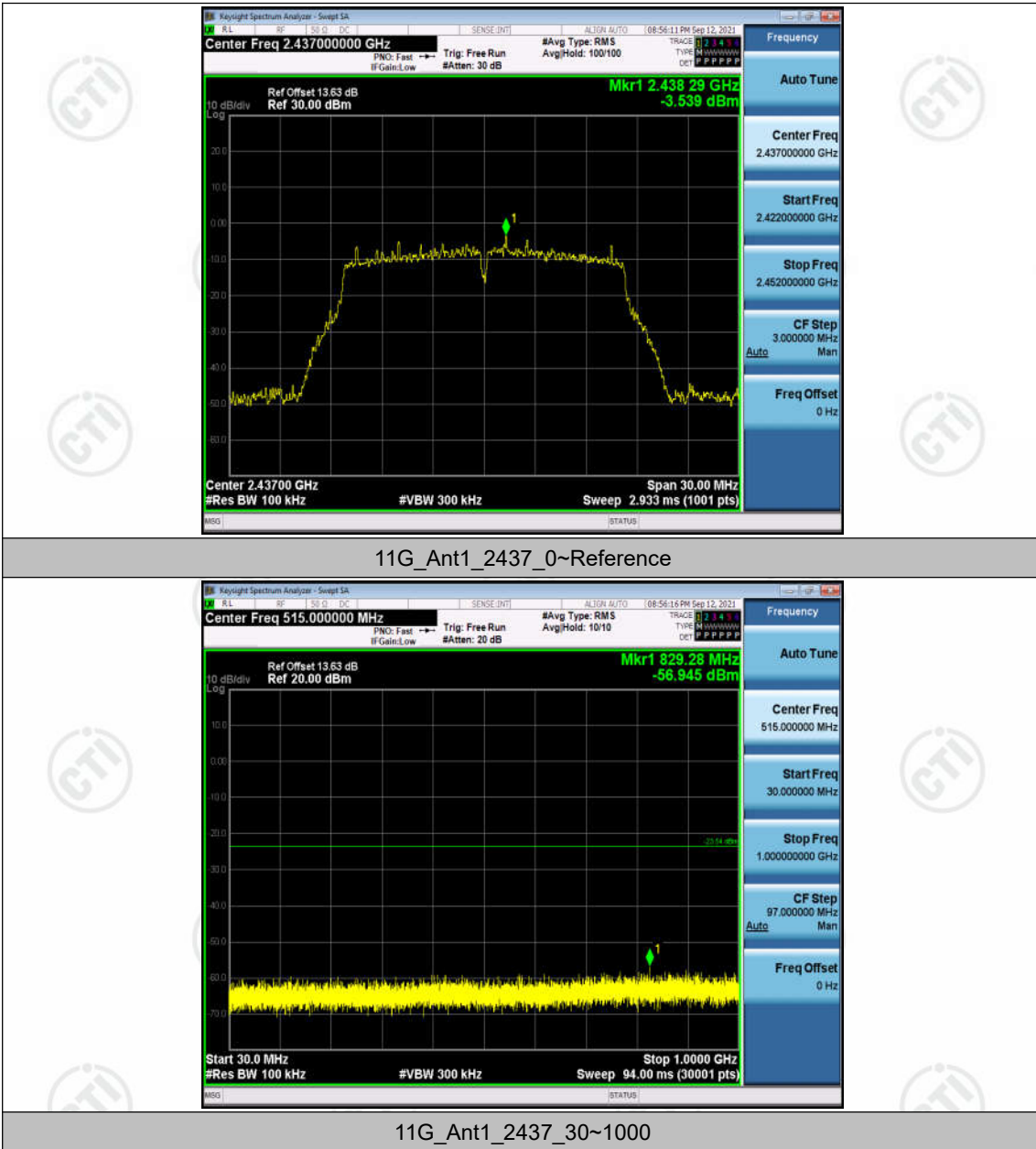


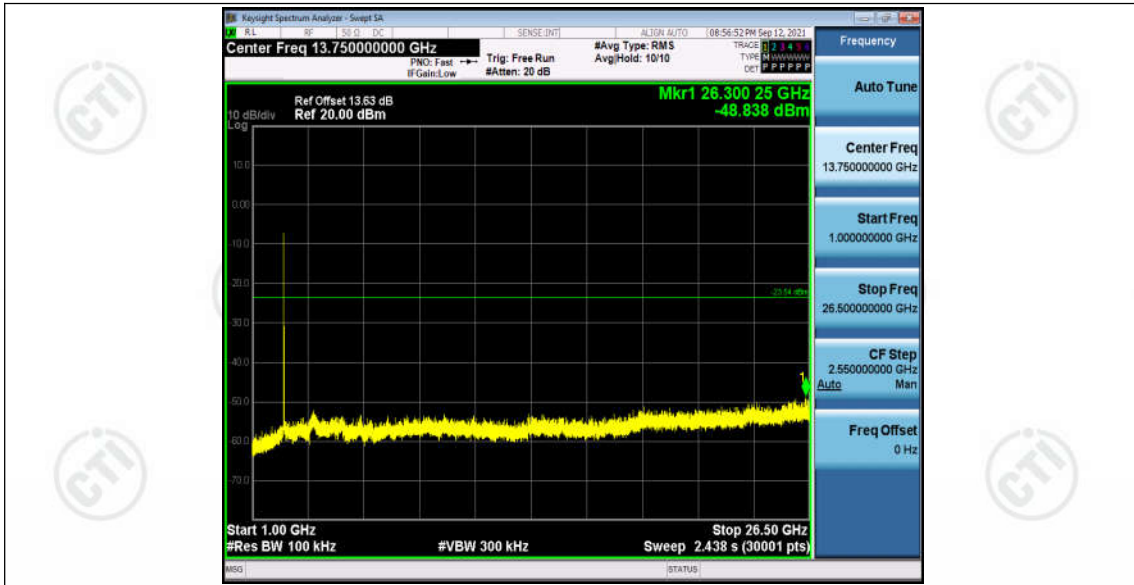
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



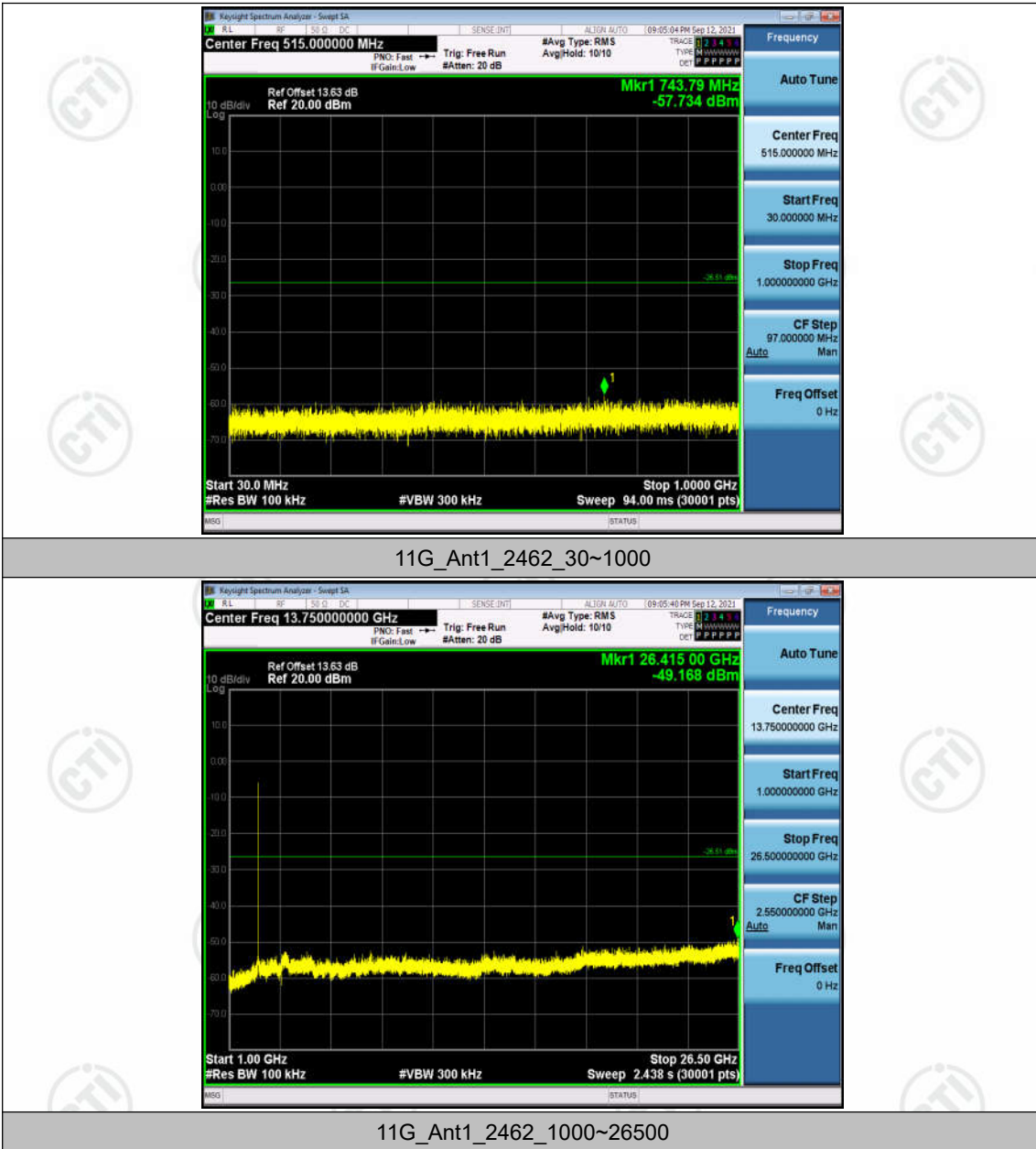




11G_Ant1_2437_1000~26500

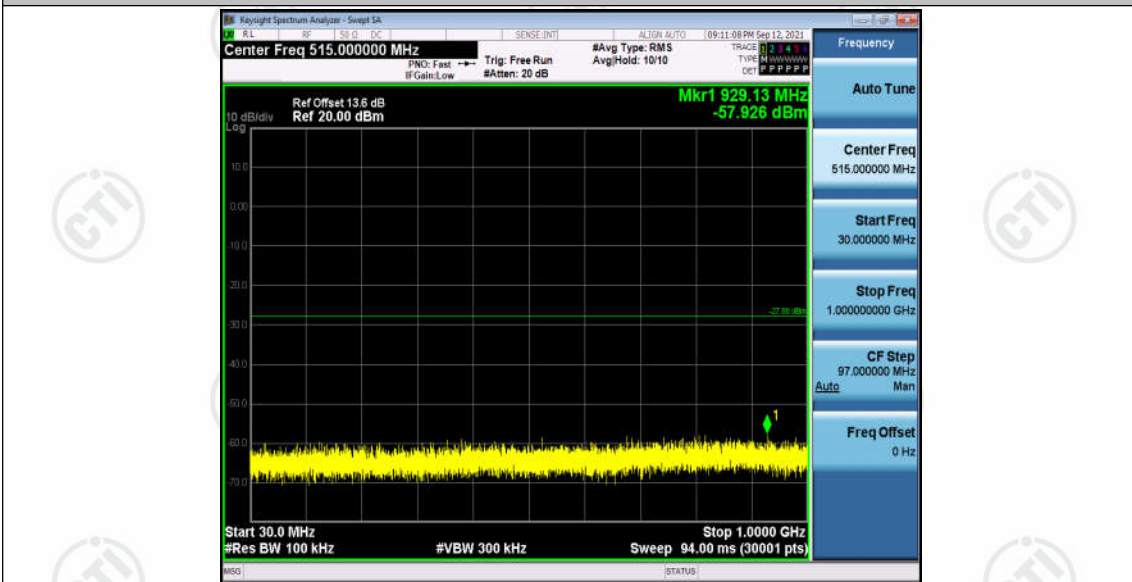


11G_Ant1_2462_0~Reference





11N20SISO_Ant1_2412_0~Reference



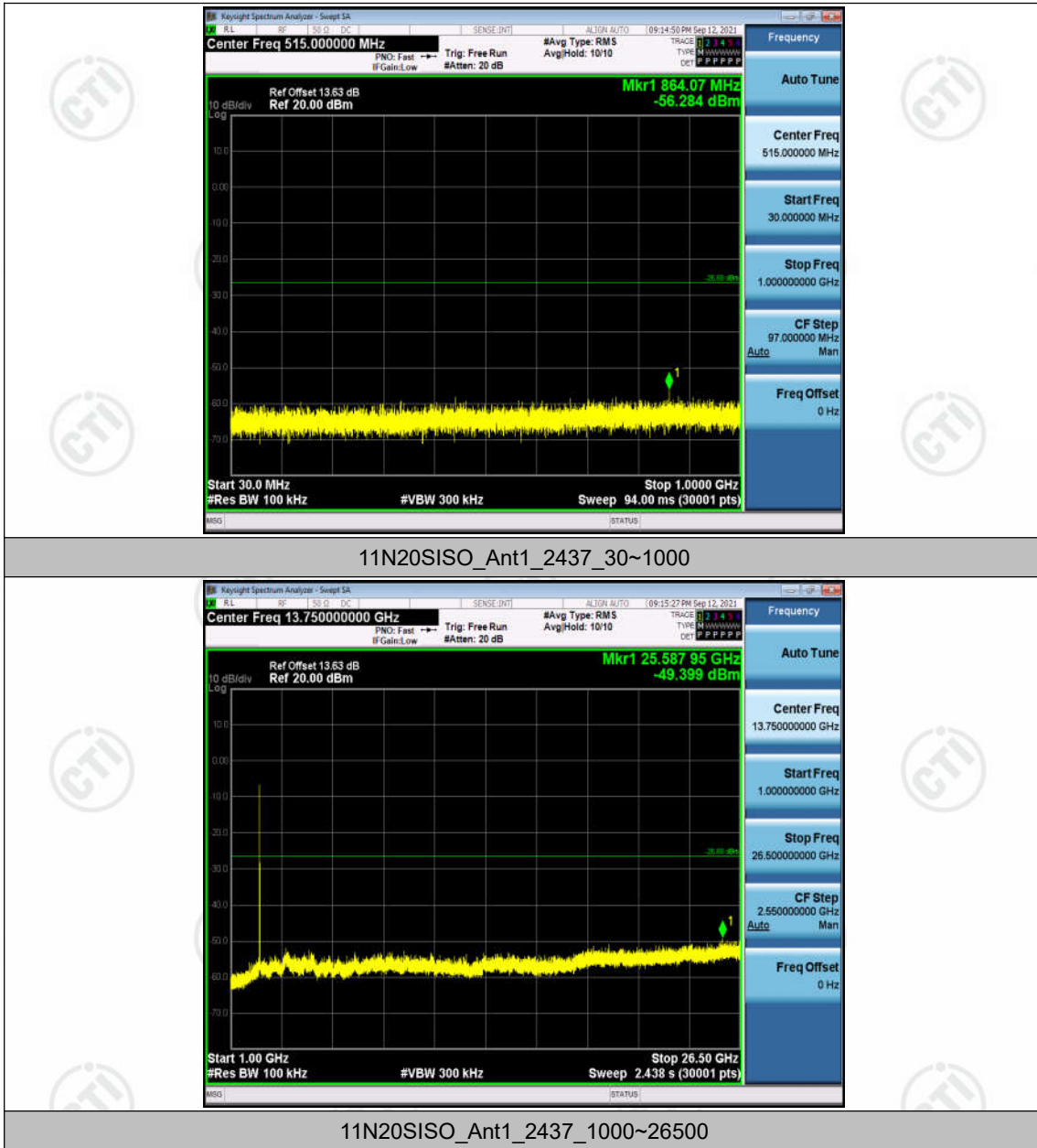
11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500

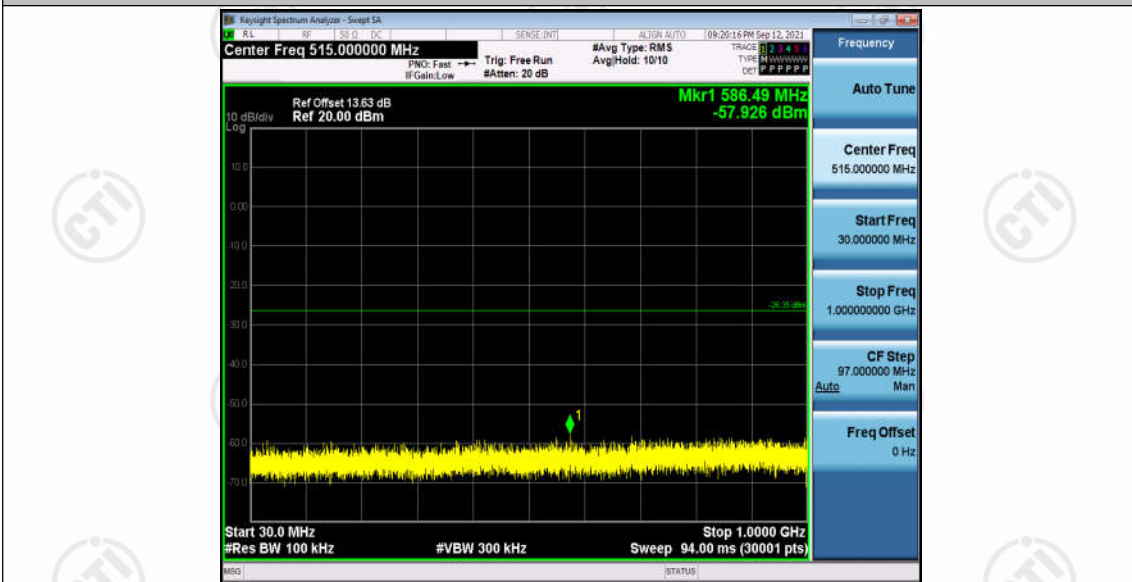


11N20SISO_Ant1_2437_0~Reference





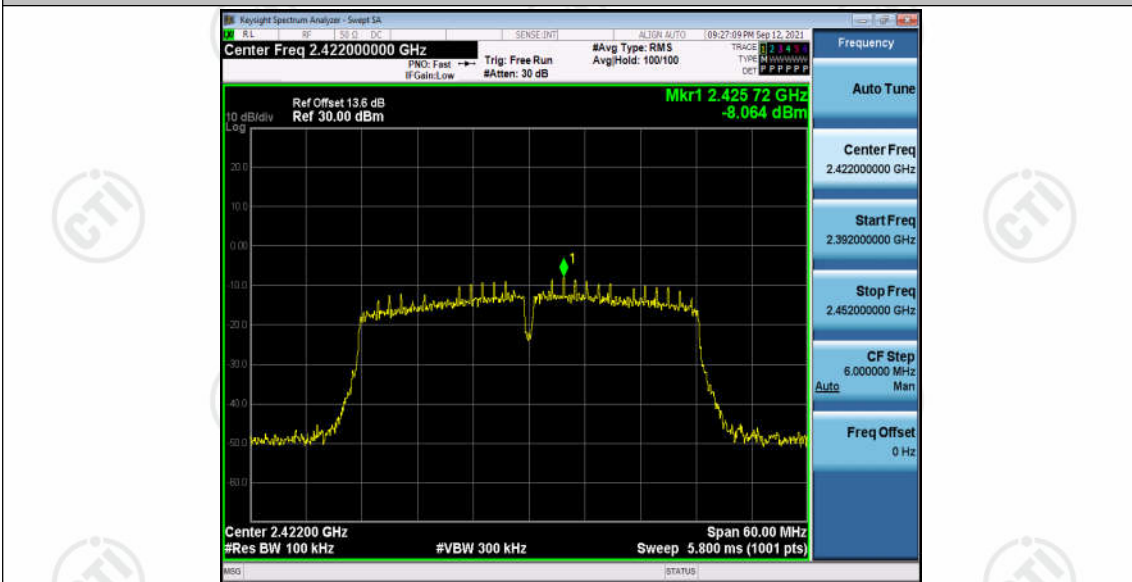
11N20SISO_Ant1_2462_0~Reference



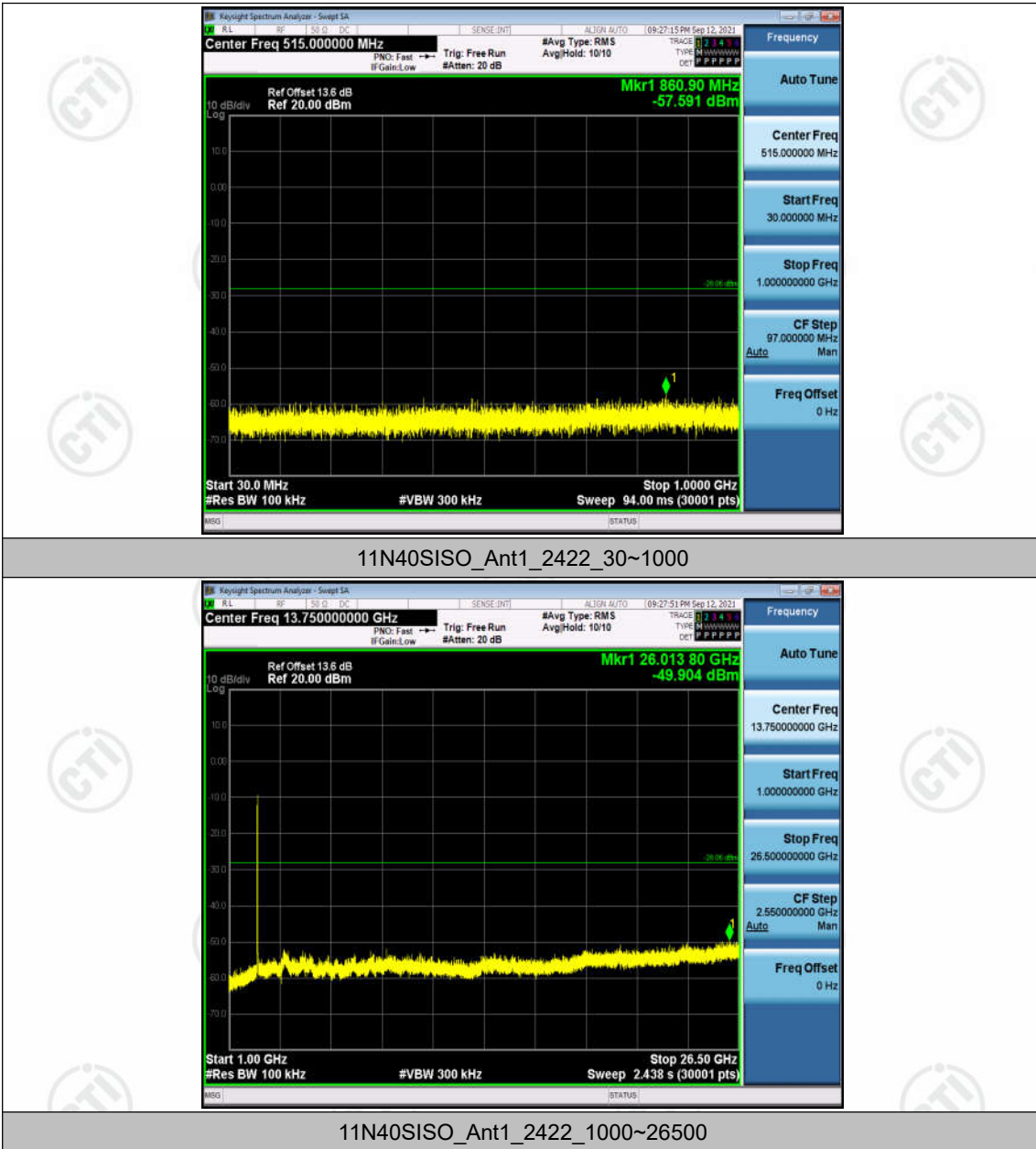
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500

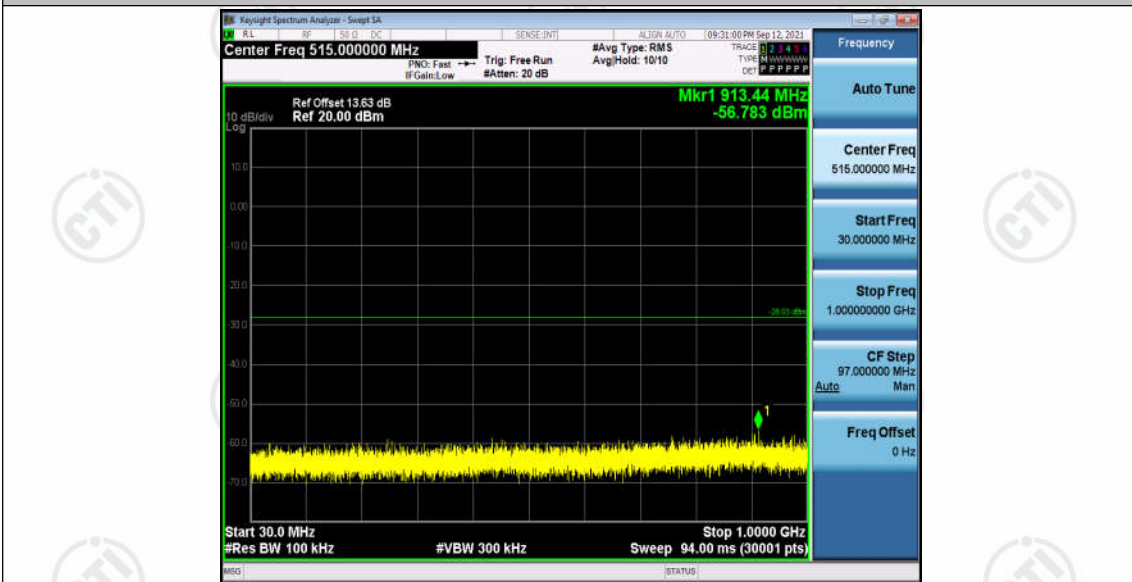


11N40SISO_Ant1_2422_0~Reference

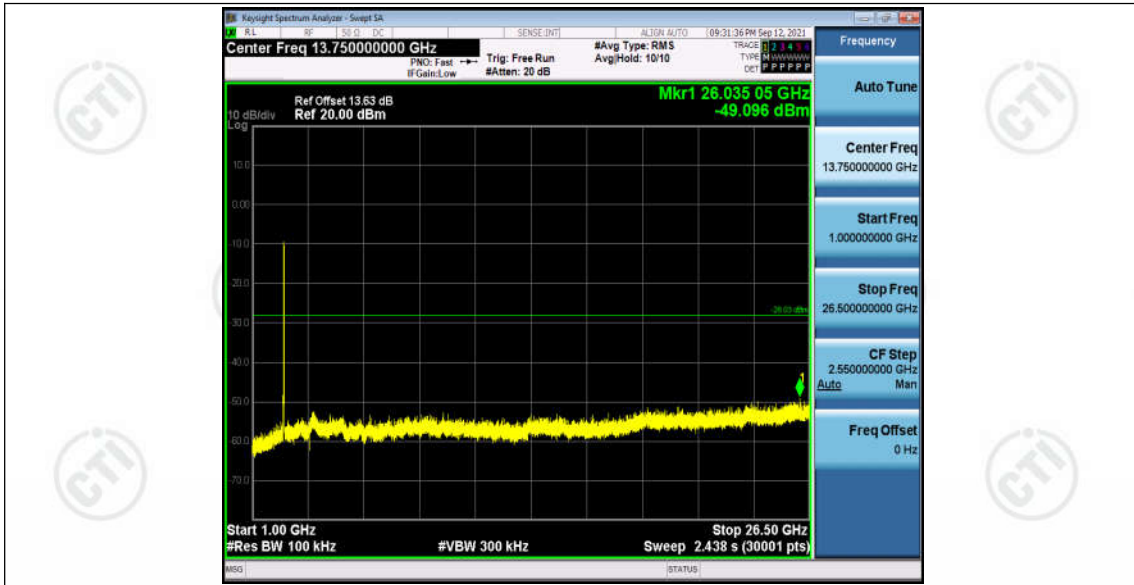




11N40SISO_Ant1_2437_0~Reference



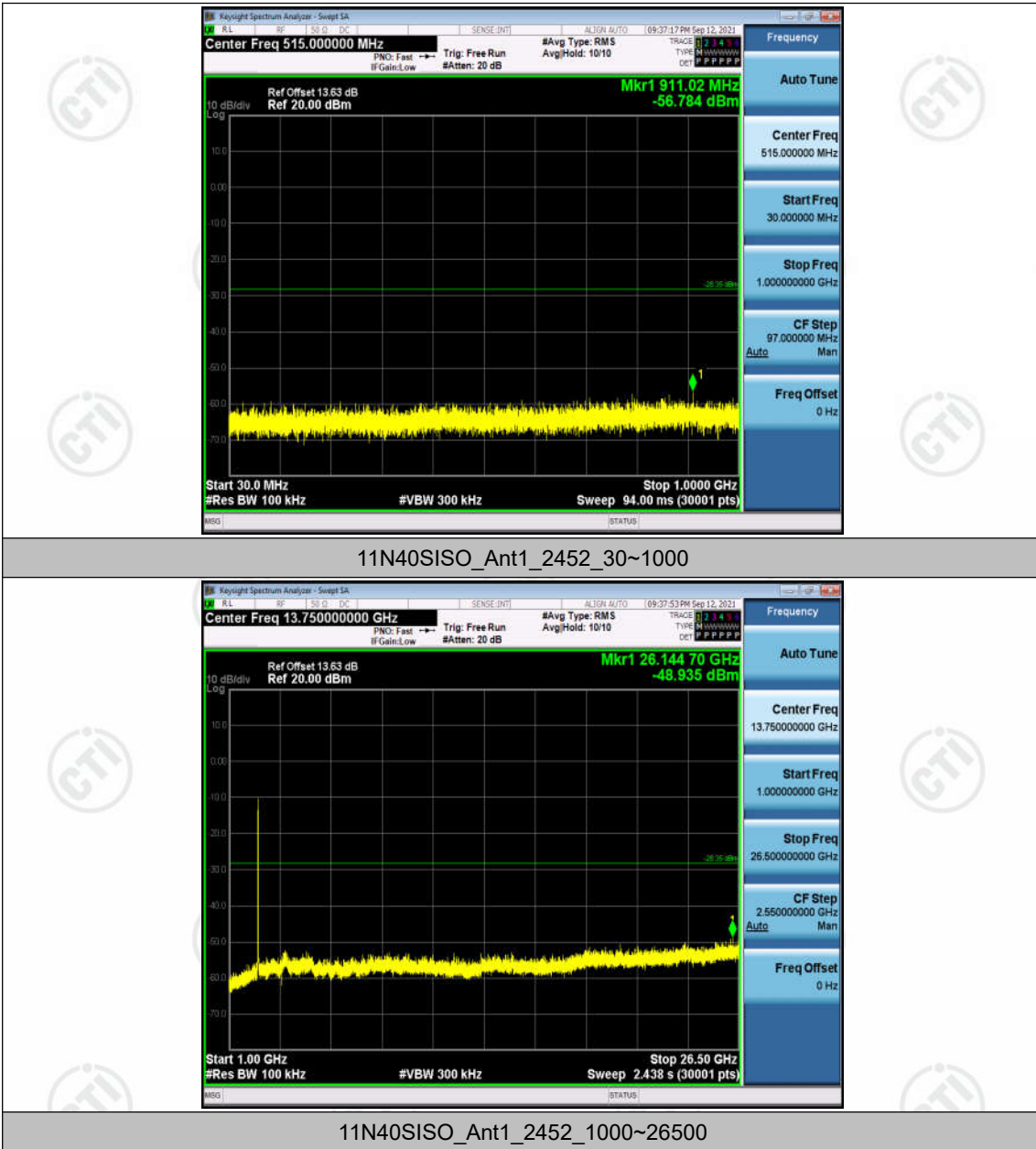
11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference

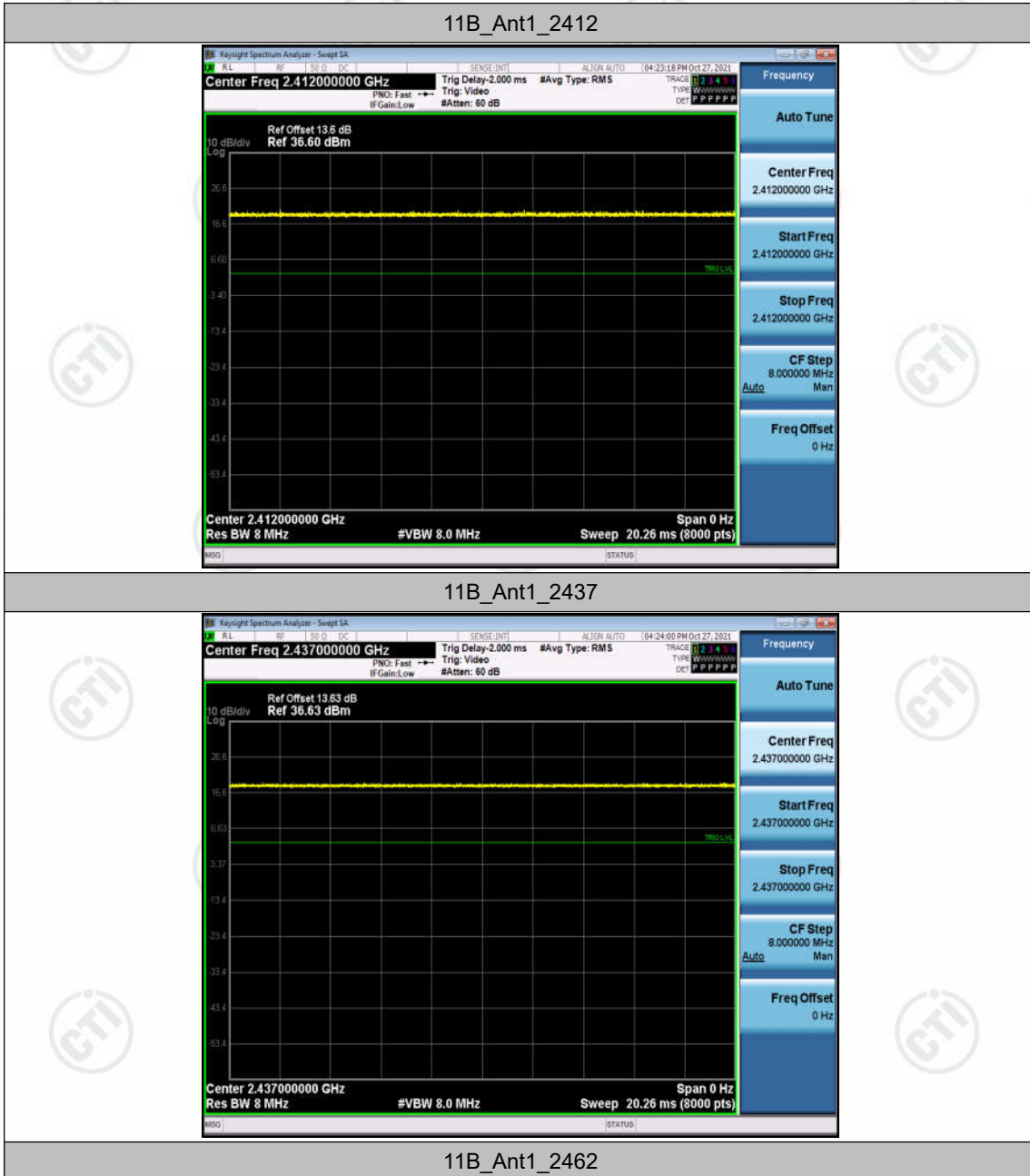


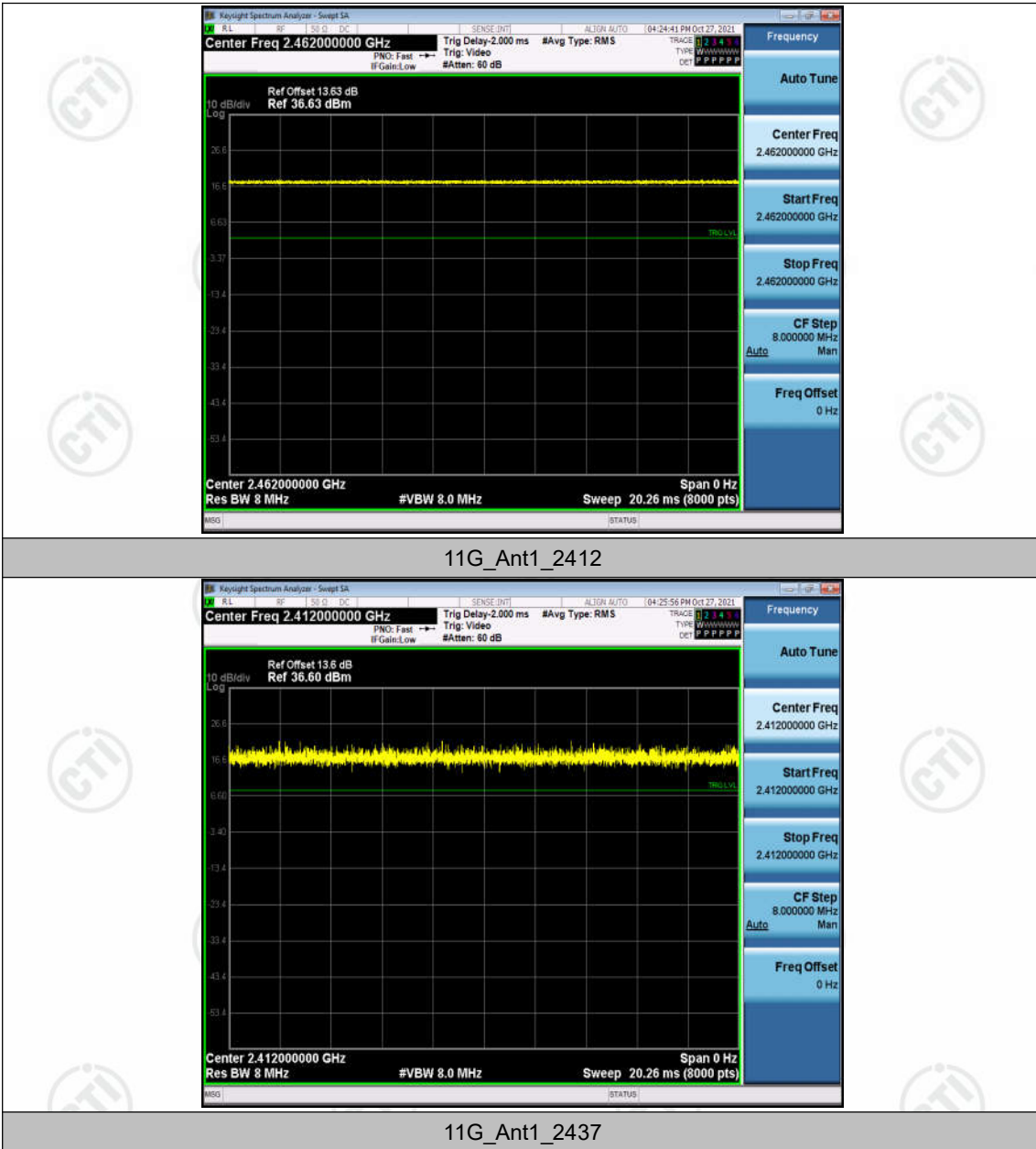
Appendix G: Duty Cycle

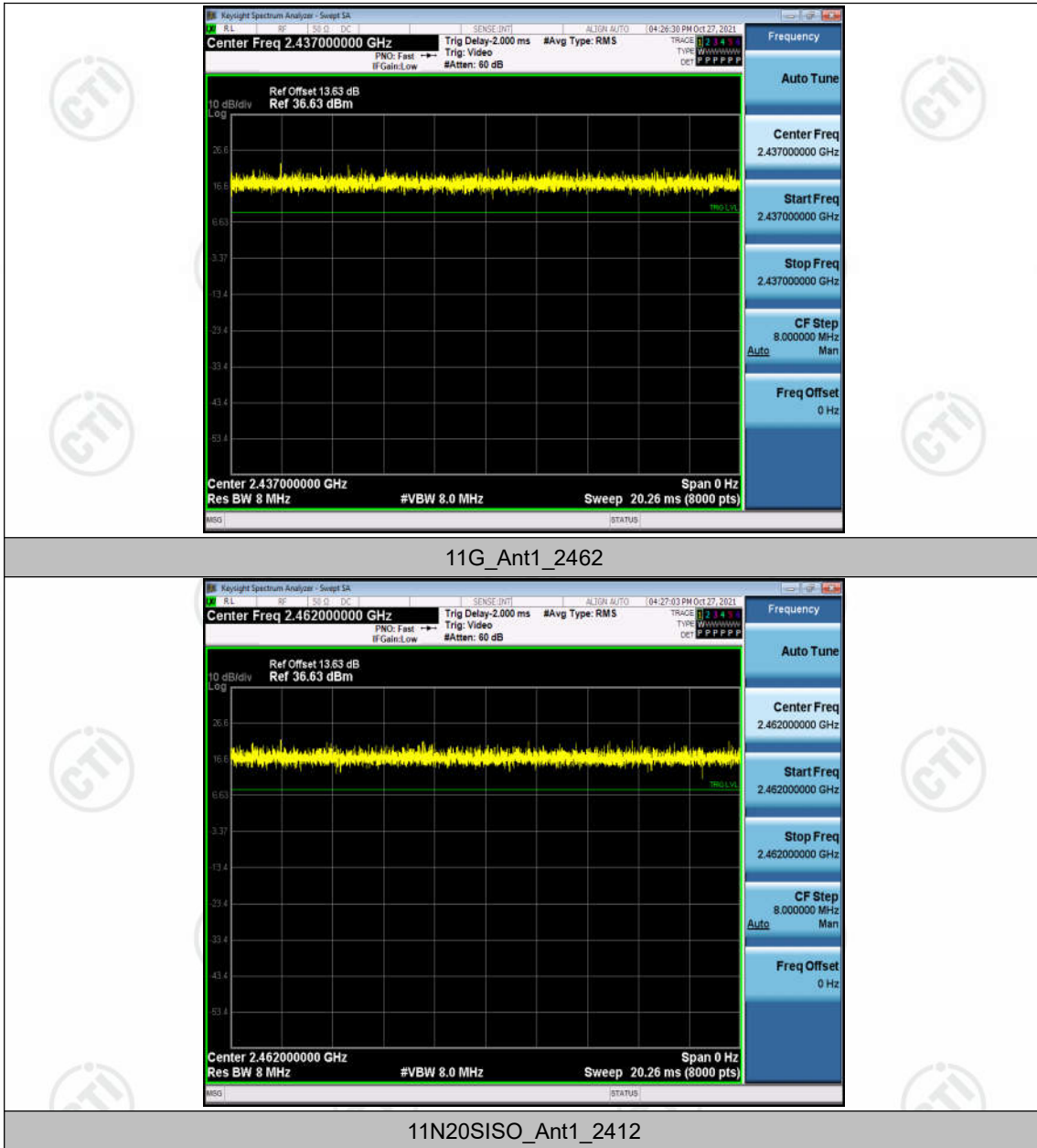
Test Result

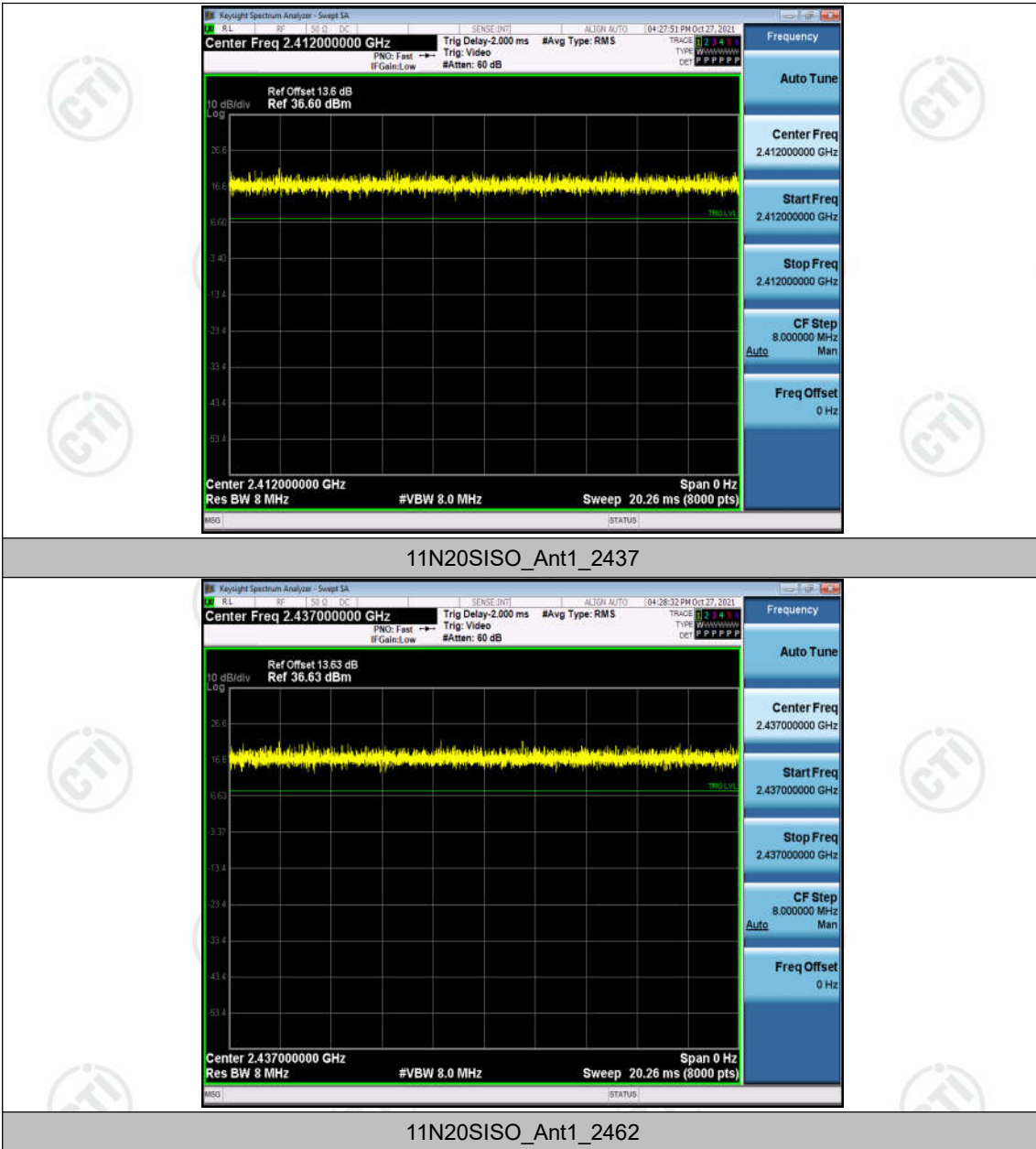
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	20.00	20.00	100.00	---	PASS
		2437	20.00	20.00	100.00	---	PASS
		2462	20.00	20.00	100.00	---	PASS
11G	Ant1	2412	20.00	20.00	100.00	---	PASS
		2437	20.00	20.00	100.00	---	PASS
		2462	20.00	20.00	100.00	---	PASS
11N20SISO	Ant1	2412	20.00	20.00	100.00	---	PASS
		2437	20.00	20.00	100.00	---	PASS
		2462	20.00	20.00	100.00	---	PASS
11N40SISO	Ant1	2422	20.00	20.00	100.00	---	PASS
		2437	20.00	20.00	100.00	---	PASS
		2452	20.00	20.00	100.00	---	PASS

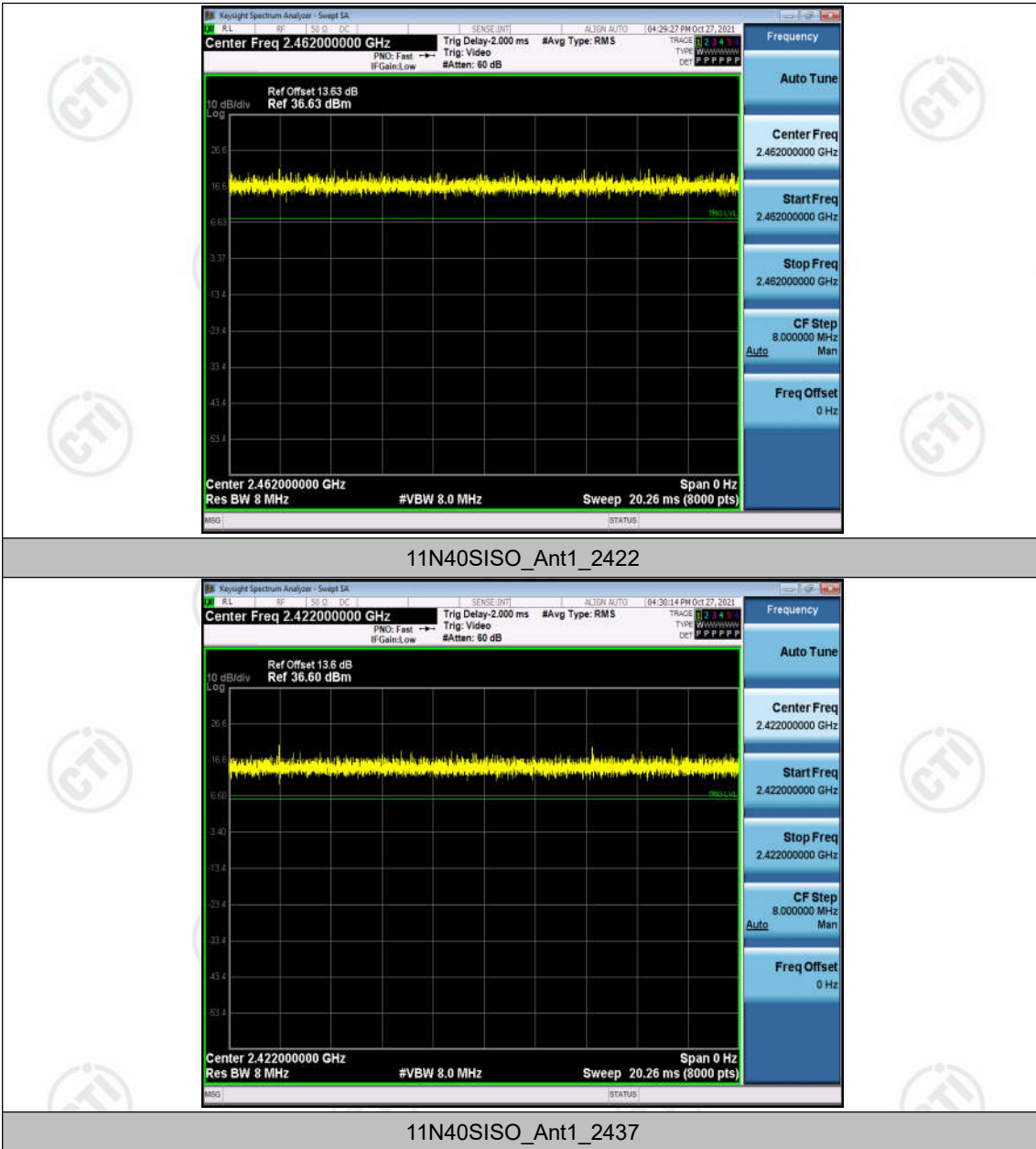
Test Graphs

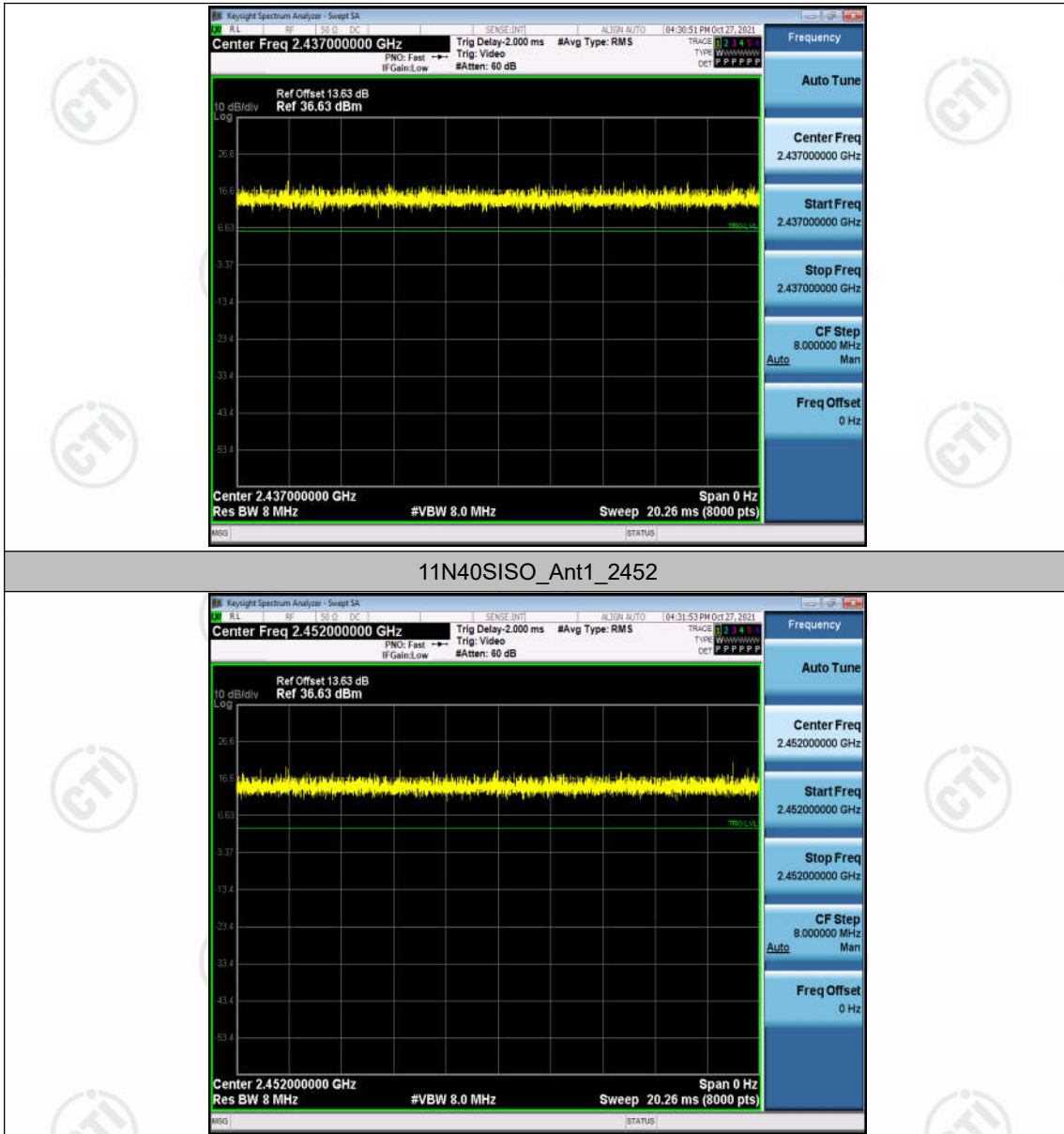












11N40SISO_Ant1_2452

*** End of Report ***