

Appendix: 2.4G WIFI

## Contents

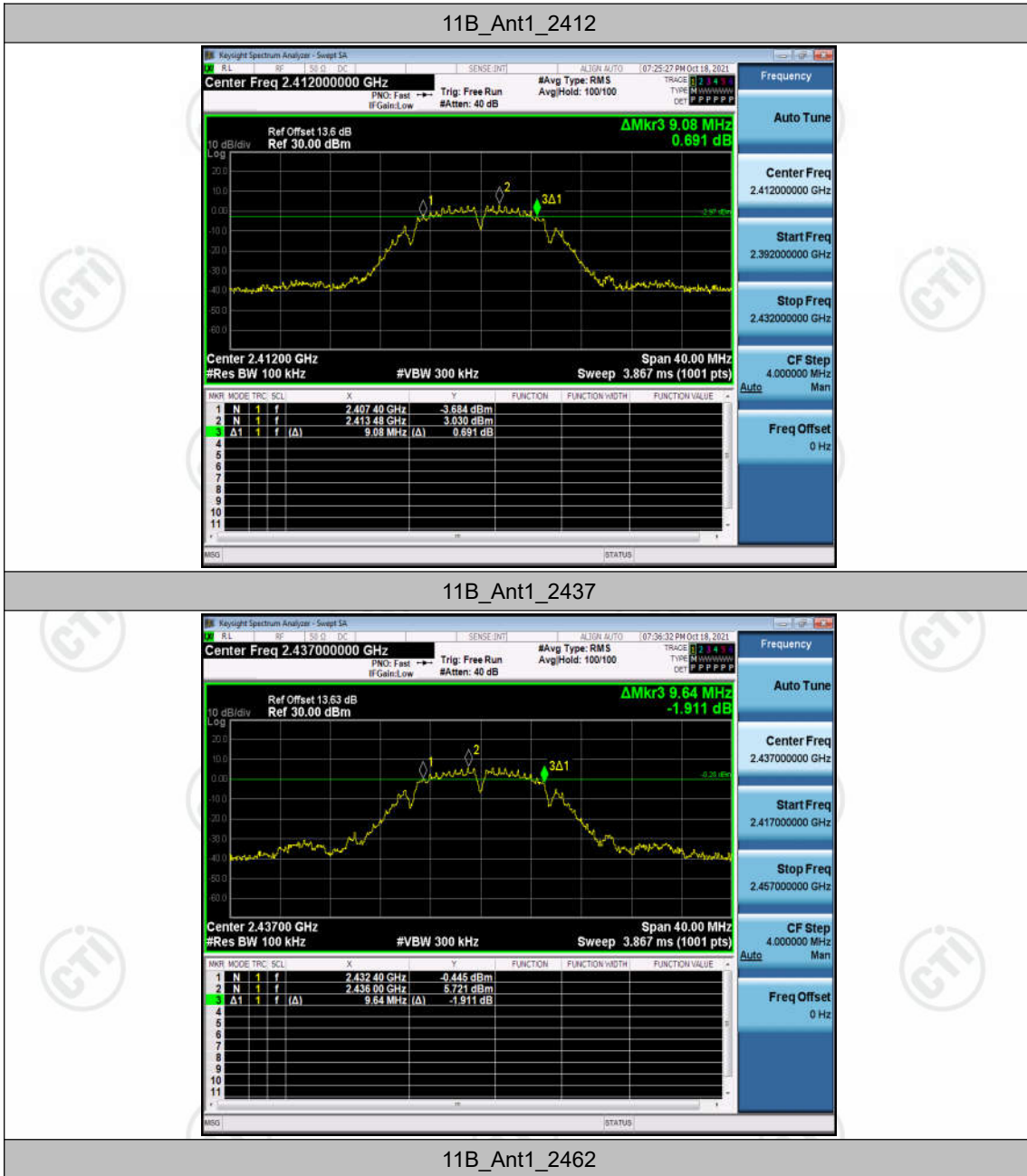
Contents.....	2
AppendixA: DTS Bandwidth.....	3
Test Result.....	3
Test Graphs.....	4
AppendixB: Occupied Channel Bandwidth.....	10
Test Result.....	10
Test Graphs.....	11
AppendixC: Maximum conducted output power.....	17
Test Result.....	17
AppendixD: Maximum power spectral density.....	18
Test Result.....	18
Test Graphs.....	19
AppendixE: Band edge measurements.....	25
Test Result.....	25
Test Graphs.....	26
AppendixF: Conducted Spurious Emission.....	30
Test Result.....	30
Test Graphs.....	32
AppendixG: Duty Cycle.....	50
Test Result.....	50
Test Graphs.....	51

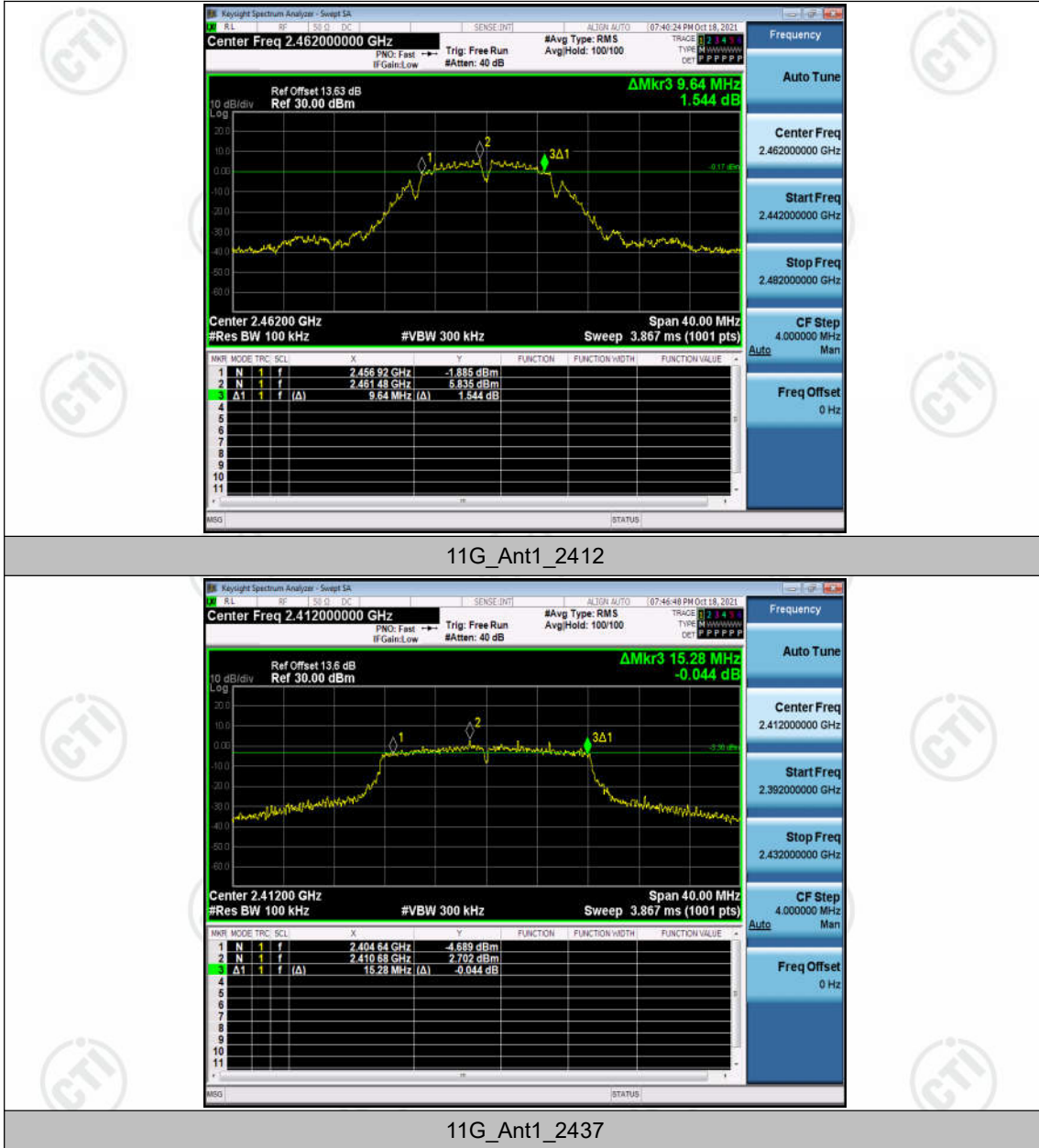
## AppendixA: DTS Bandwidth

### Test Result

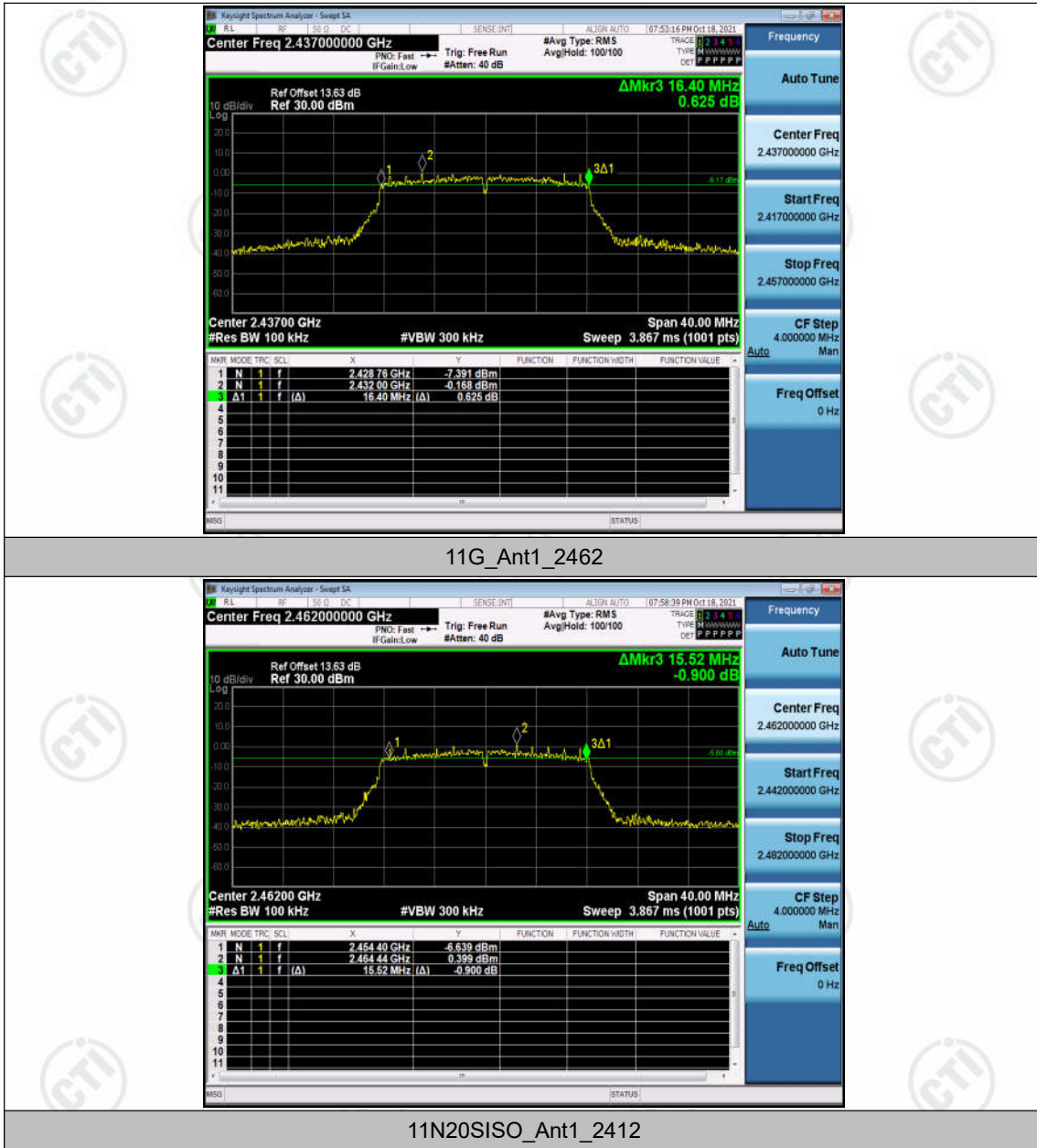
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.400	2416.480	0.5	PASS
		2437	9.640	2432.400	2442.040	0.5	PASS
		2462	9.640	2456.920	2466.560	0.5	PASS
11G	Ant1	2412	15.280	2404.640	2419.920	0.5	PASS
		2437	16.400	2428.760	2445.160	0.5	PASS
		2462	15.520	2454.400	2469.920	0.5	PASS
11N20SIS O	Ant1	2412	17.680	2403.120	2420.800	0.5	PASS
		2437	17.160	2428.600	2445.760	0.5	PASS
		2462	17.640	2453.160	2470.800	0.5	PASS
11N40SIS O	Ant1	2422	35.200	2404.400	2439.600	0.5	PASS
		2437	35.200	2419.320	2454.520	0.5	PASS
		2452	35.280	2434.320	2469.600	0.5	PASS

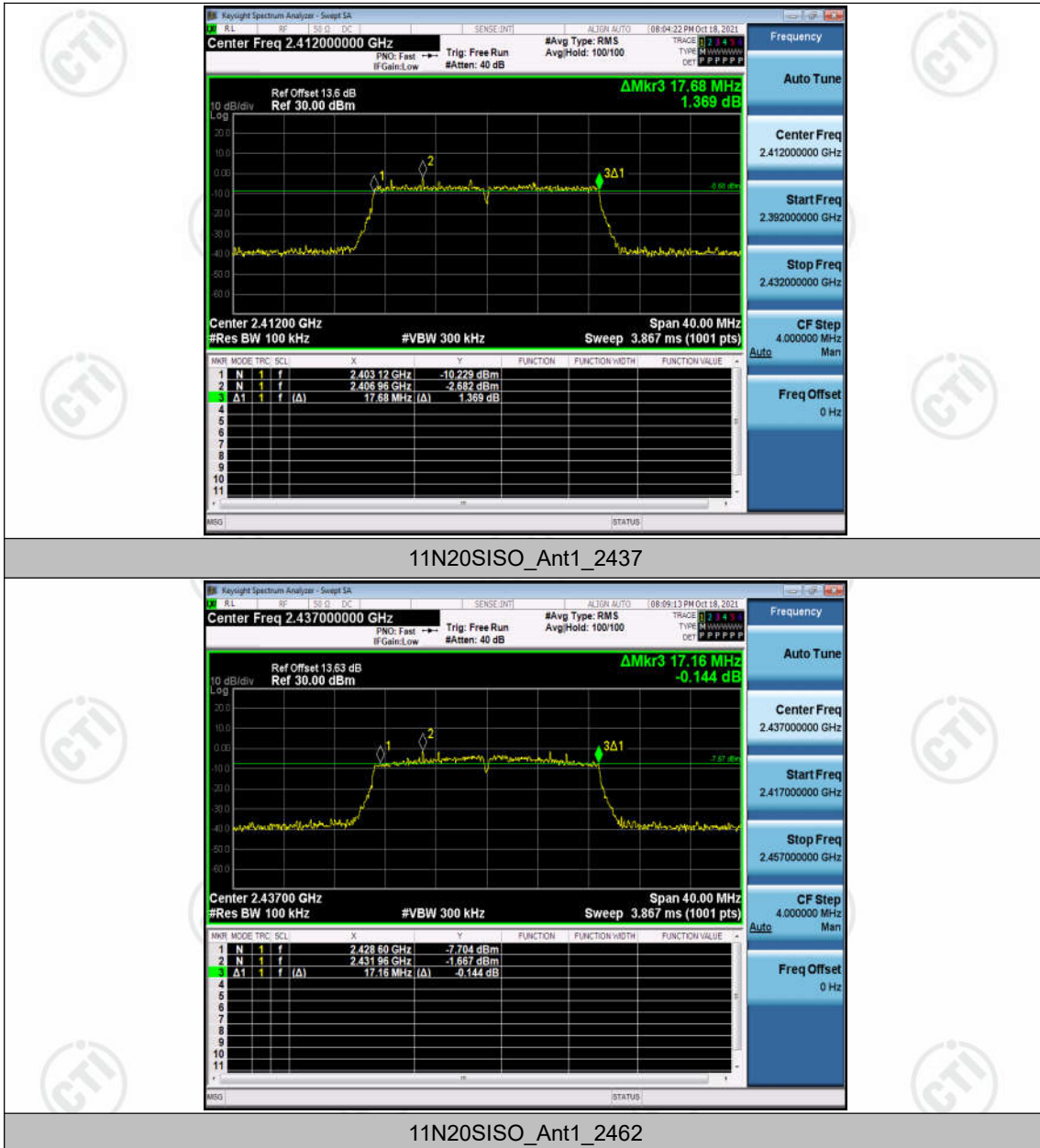
## Test Graphs

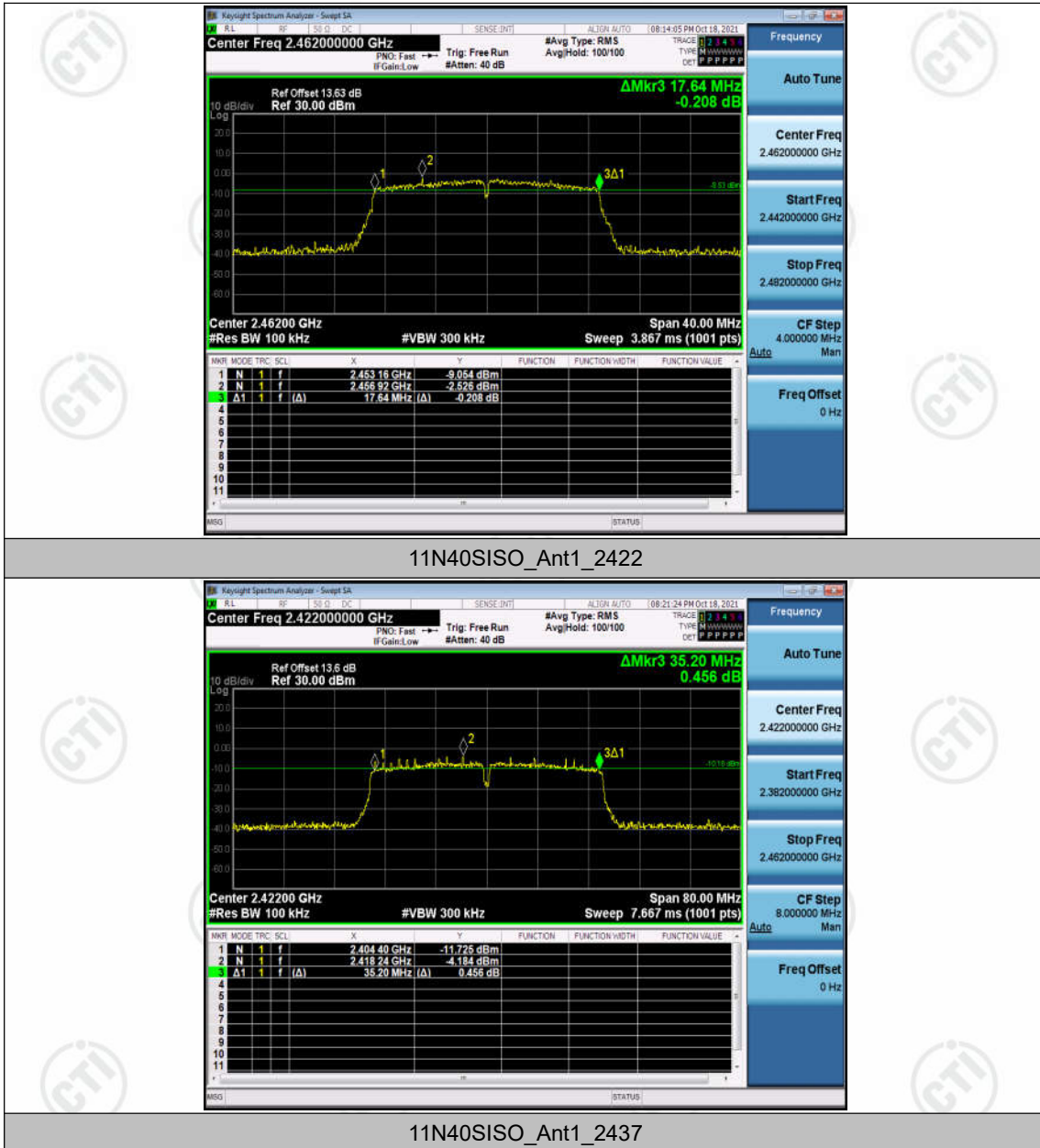




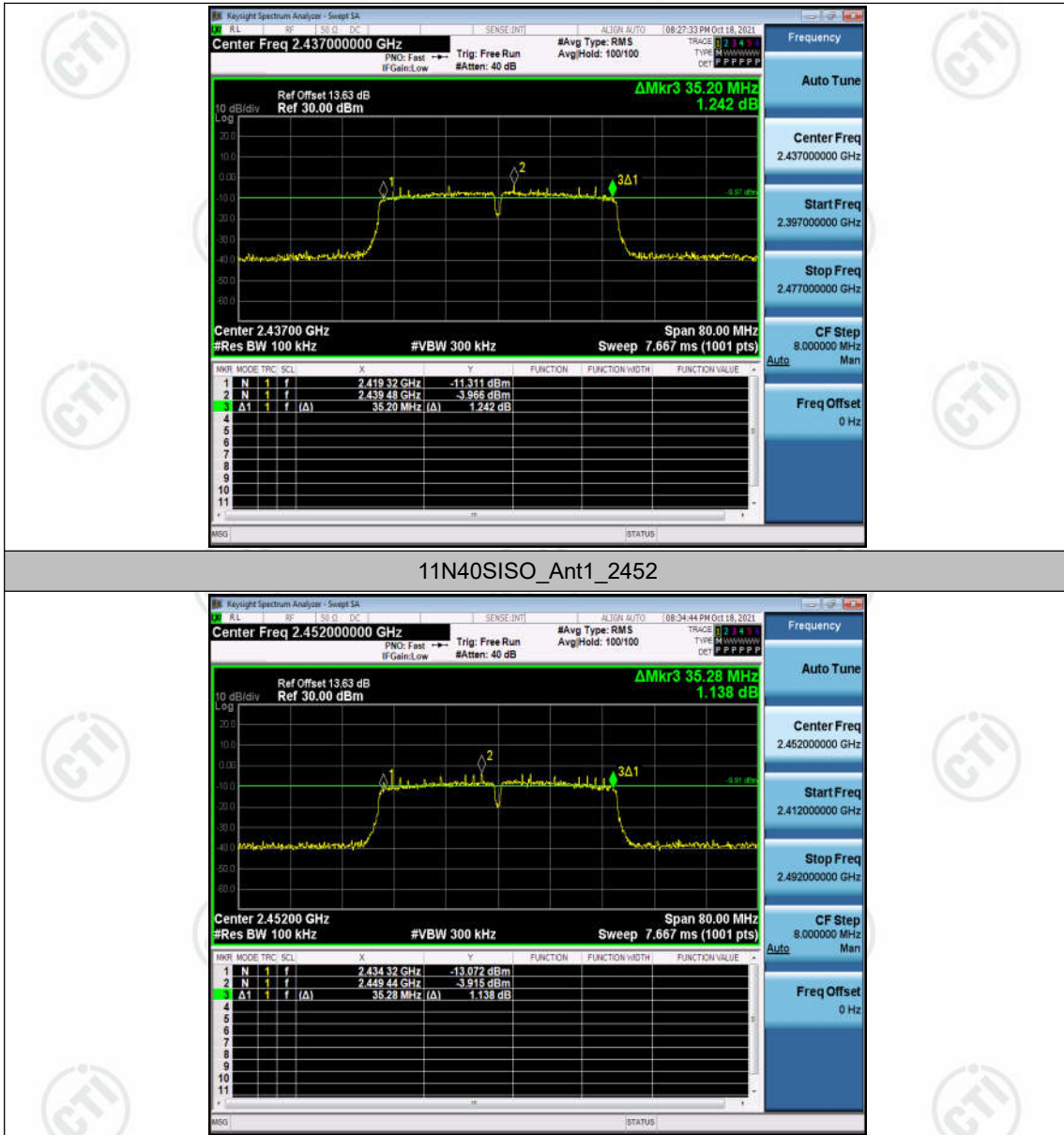










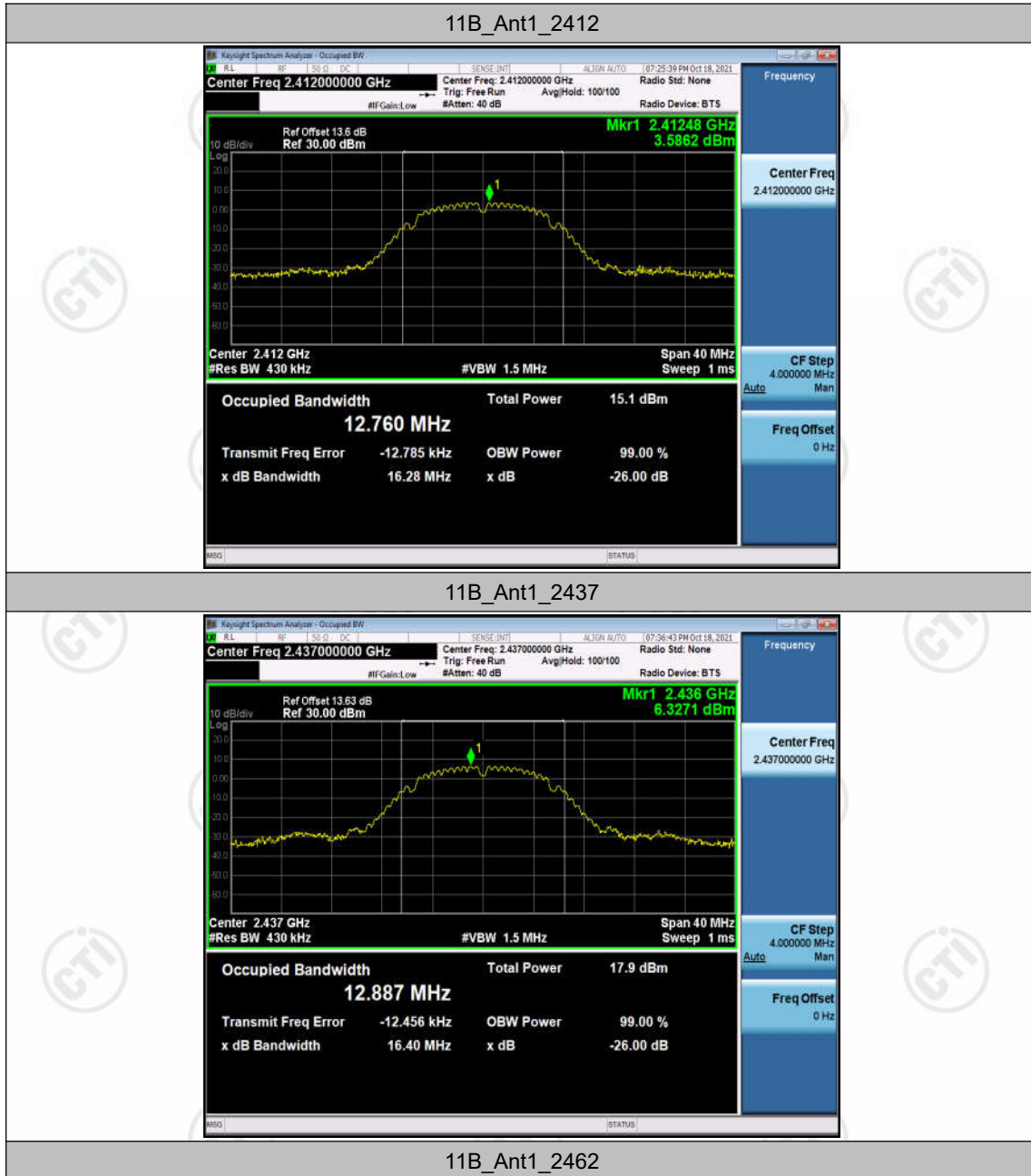


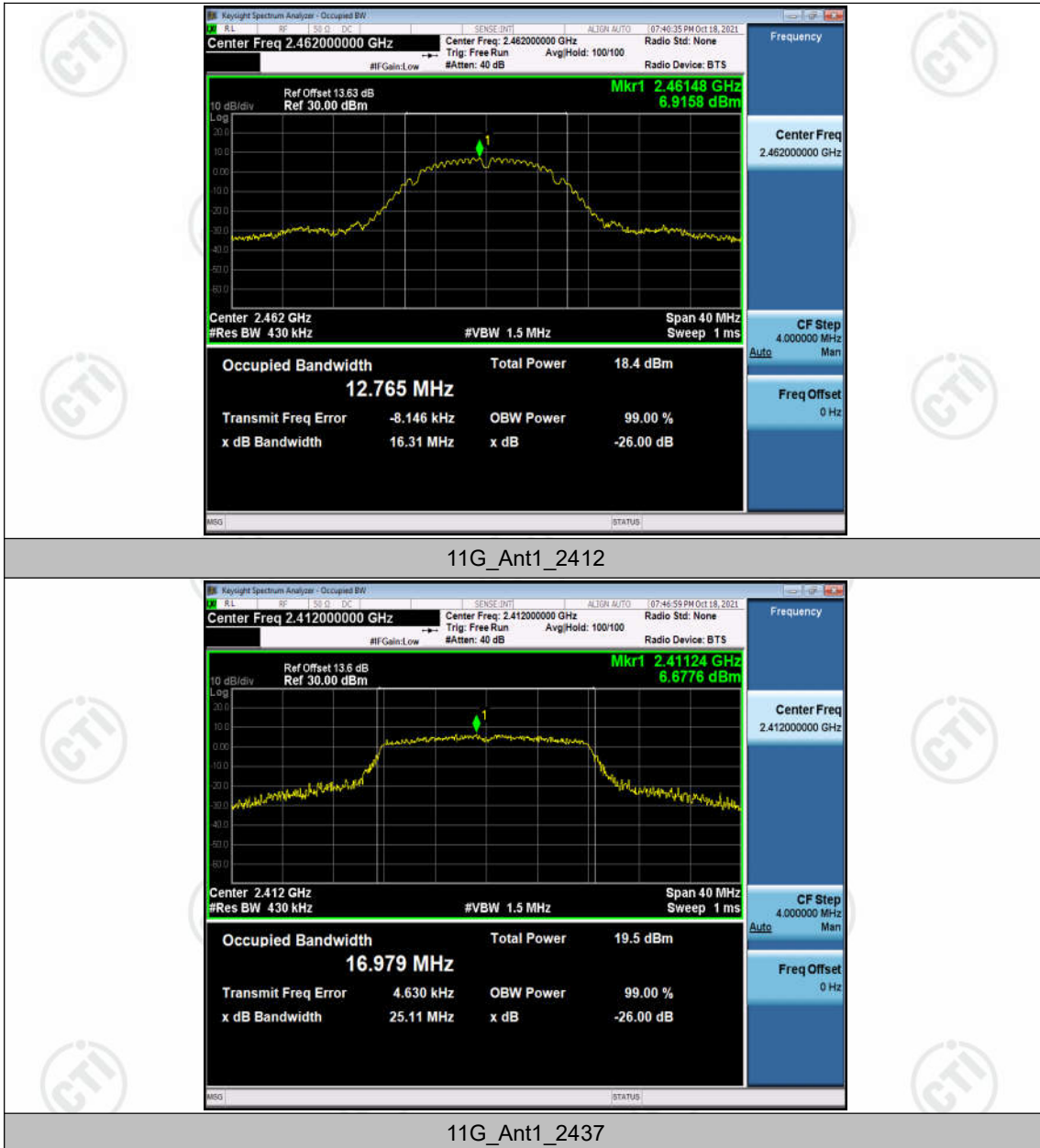
## AppendixB: Occupied Channel Bandwidth

### Test Result

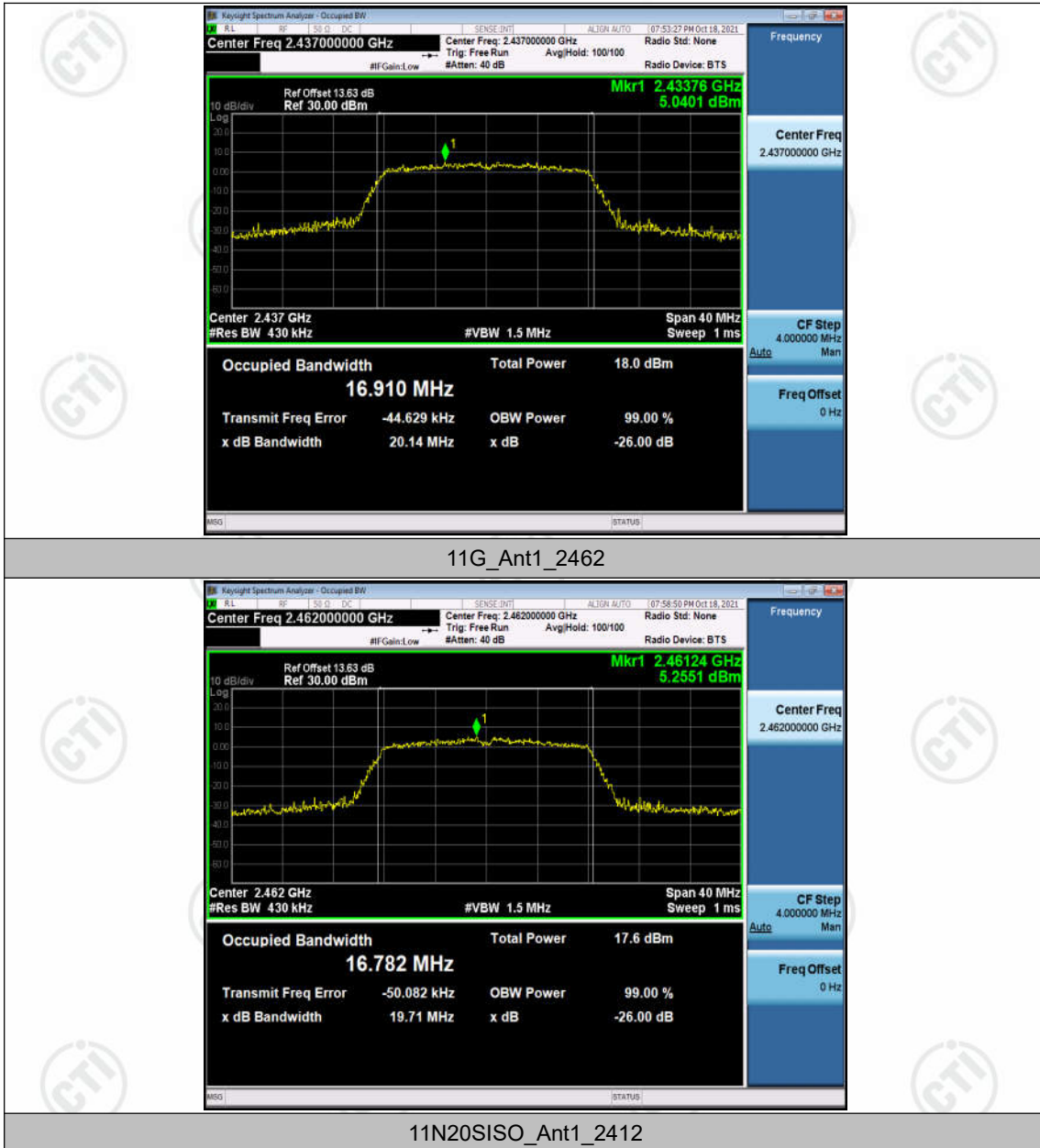
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.760	2405.607	2418.367	---	PASS
		2437	12.887	2430.544	2443.431	---	PASS
		2462	12.765	2455.609	2468.374	---	PASS
11G	Ant1	2412	16.979	2403.515	2420.494	---	PASS
		2437	16.910	2428.500	2445.410	---	PASS
		2462	16.782	2453.559	2470.341	---	PASS
11N20SIS O	Ant1	2412	18.010	2403.006	2421.016	---	PASS
		2437	17.742	2428.111	2445.853	---	PASS
		2462	17.739	2453.125	2470.864	---	PASS
11N40SIS O	Ant1	2422	36.096	2403.979	2440.075	---	PASS
		2437	36.092	2418.960	2455.052	---	PASS
		2452	36.111	2433.927	2470.038	---	PASS

## Test Graphs

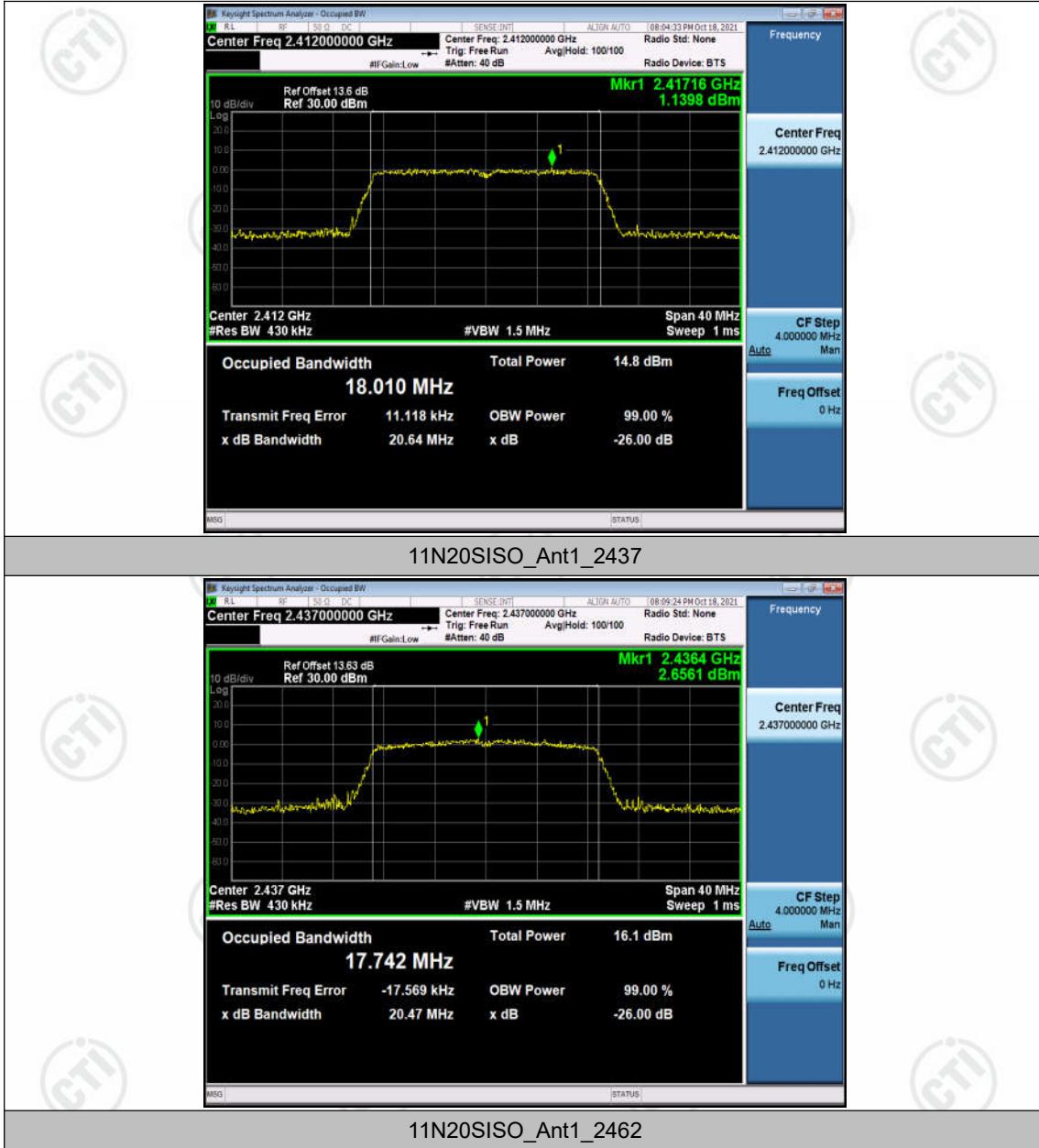


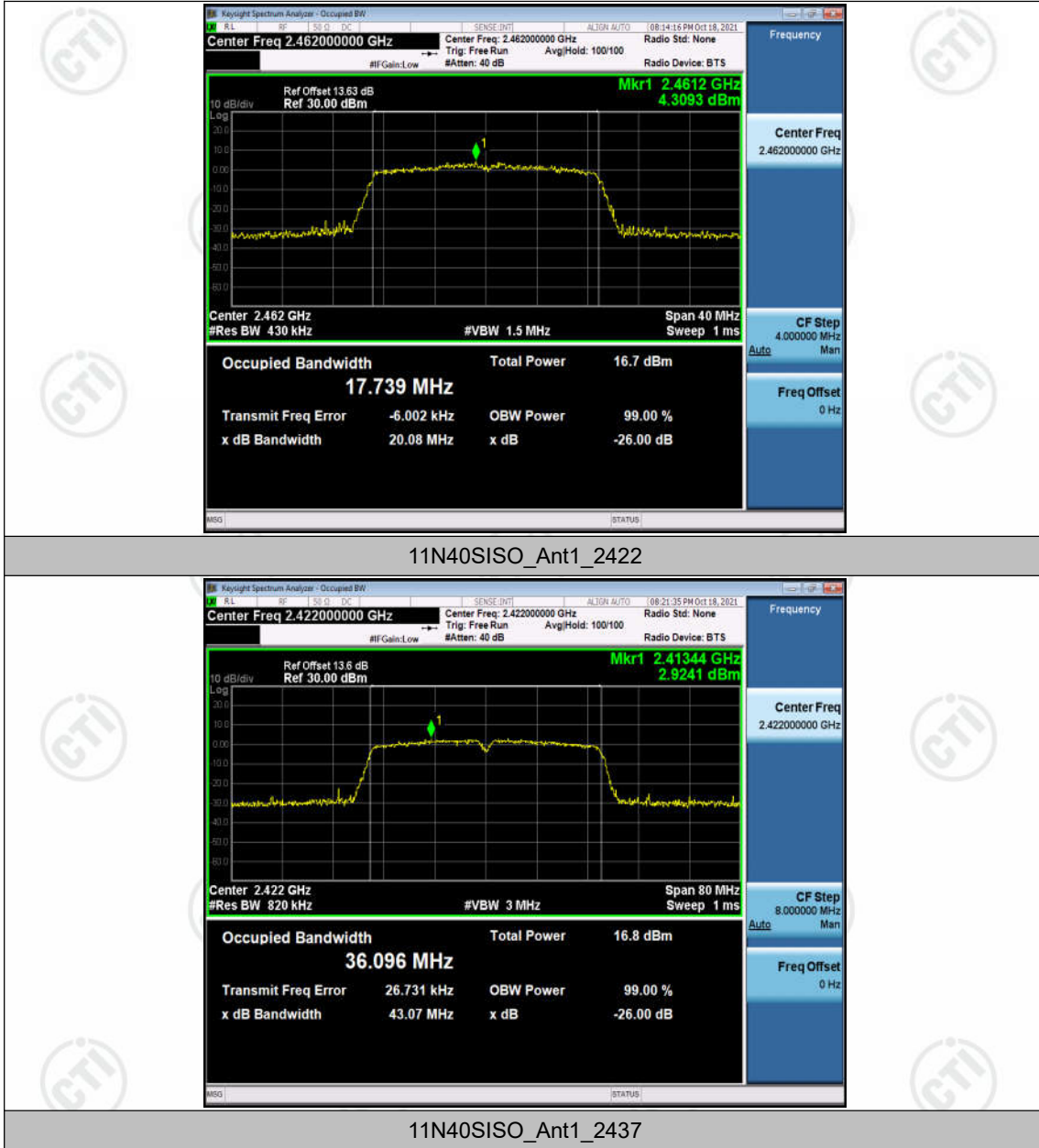


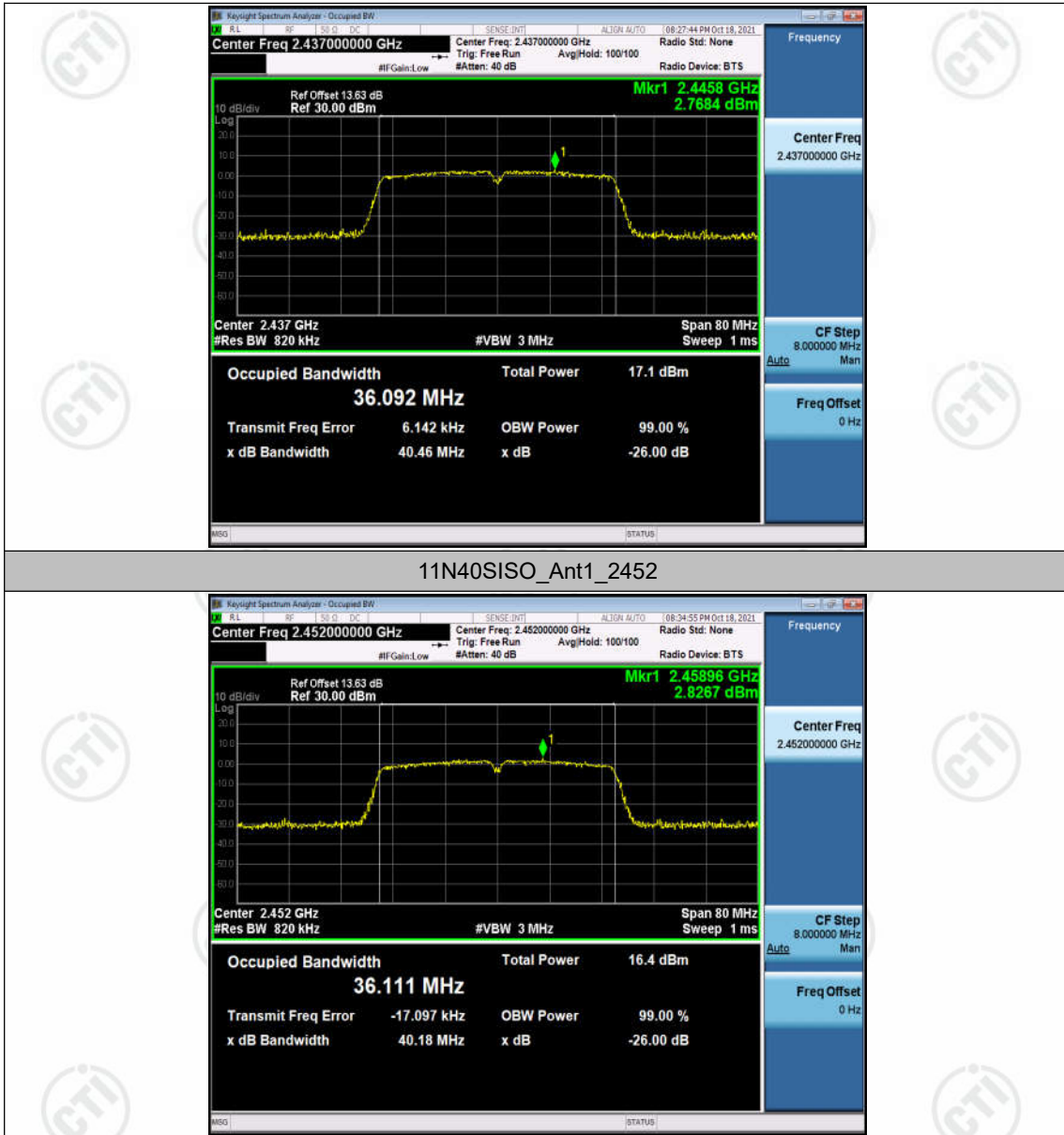












**AppendixC: Maximum conducted output power****Test Result**

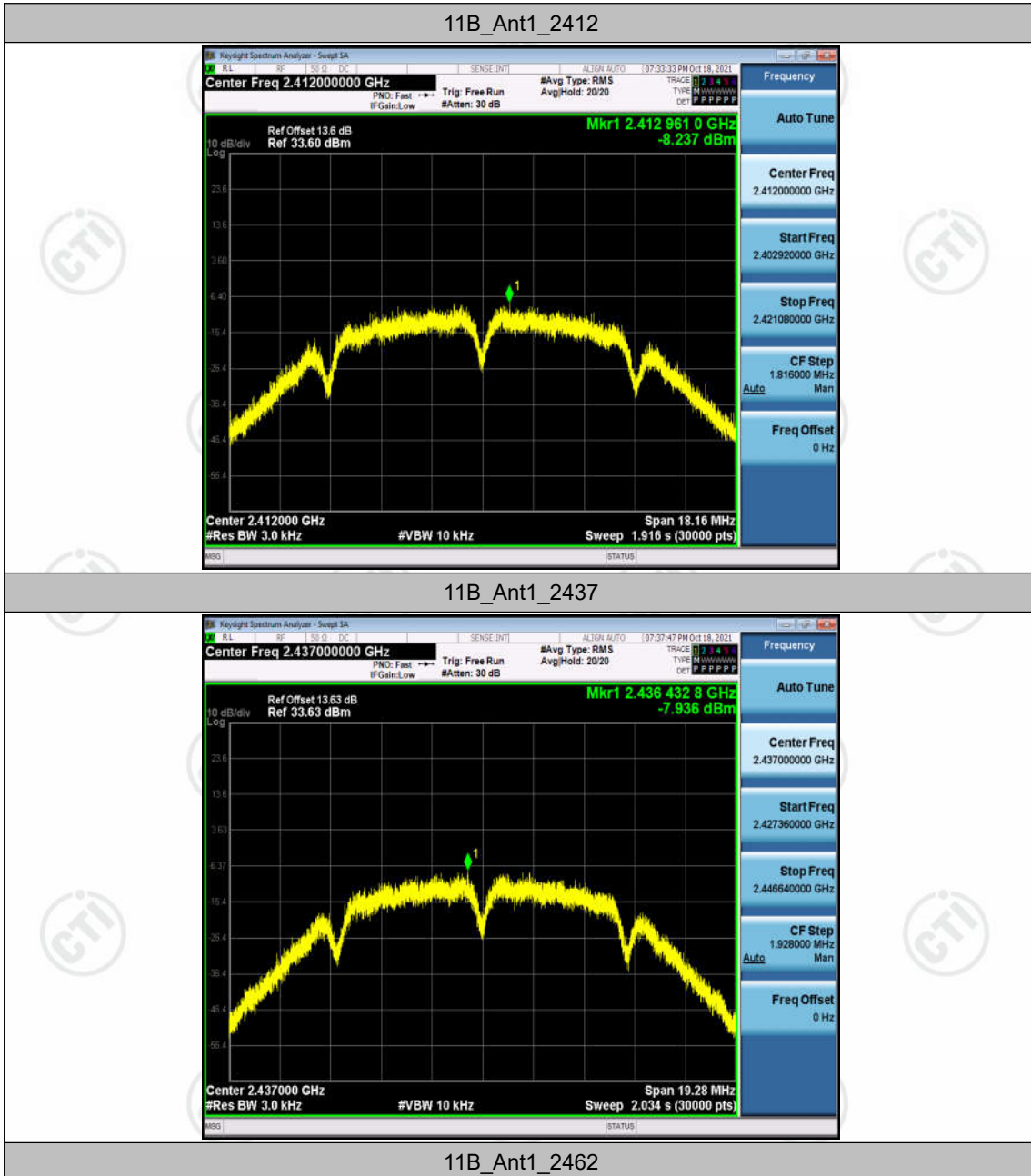
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	16.43	<=30	PASS
		2437	16.72	<=30	PASS
		2462	16.48	<=30	PASS
11G	Ant1	2412	15.42	<=30	PASS
		2437	15.44	<=30	PASS
		2462	15.44	<=30	PASS
11N20SISO	Ant1	2412	14.60	<=30	PASS
		2437	14.85	<=30	PASS
		2462	14.69	<=30	PASS
11N40SISO	Ant1	2422	13.96	<=30	PASS
		2437	13.23	<=30	PASS
		2452	13.58	<=30	PASS

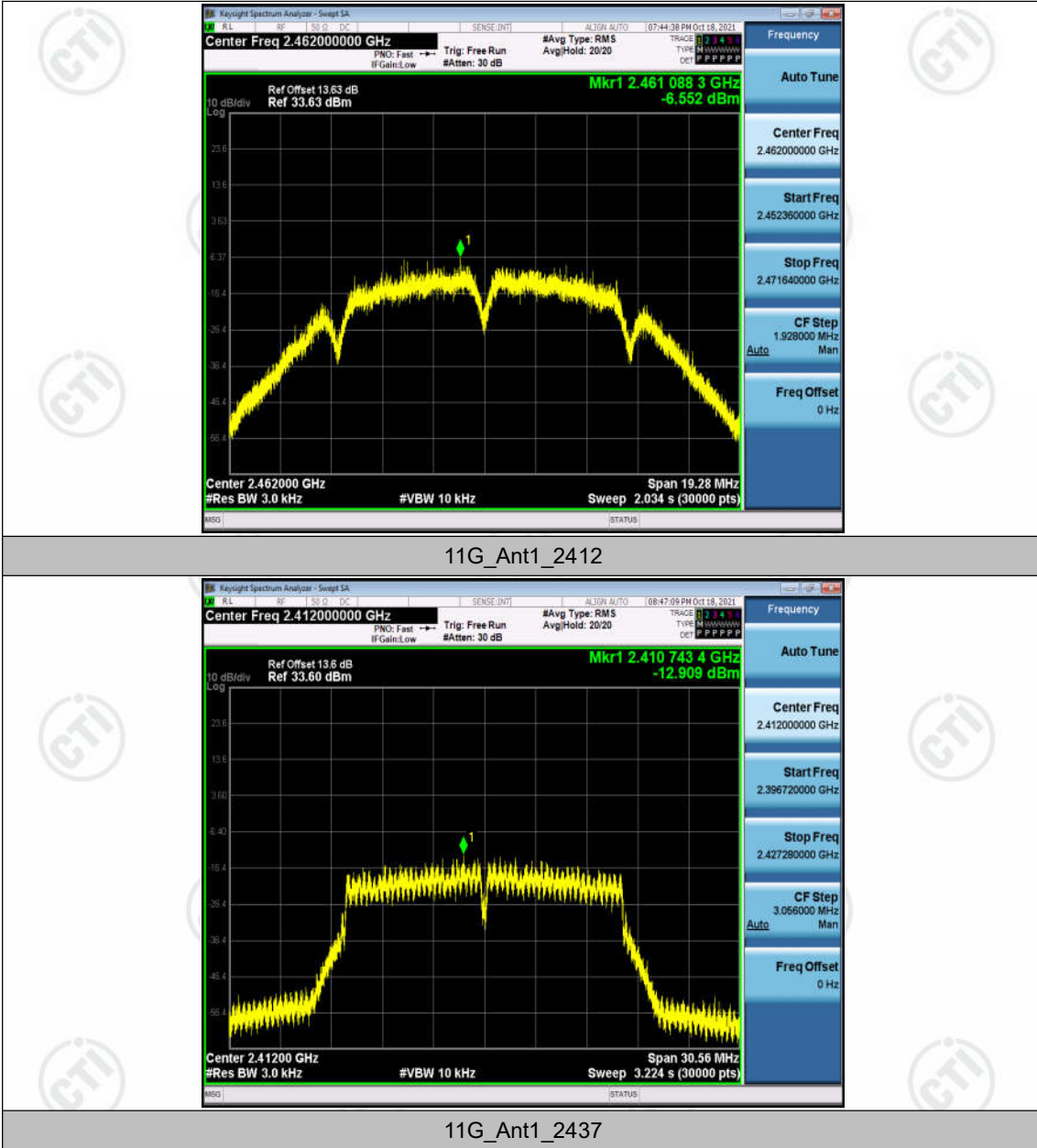
**AppendixD: Maximum power spectral density****Test Result**

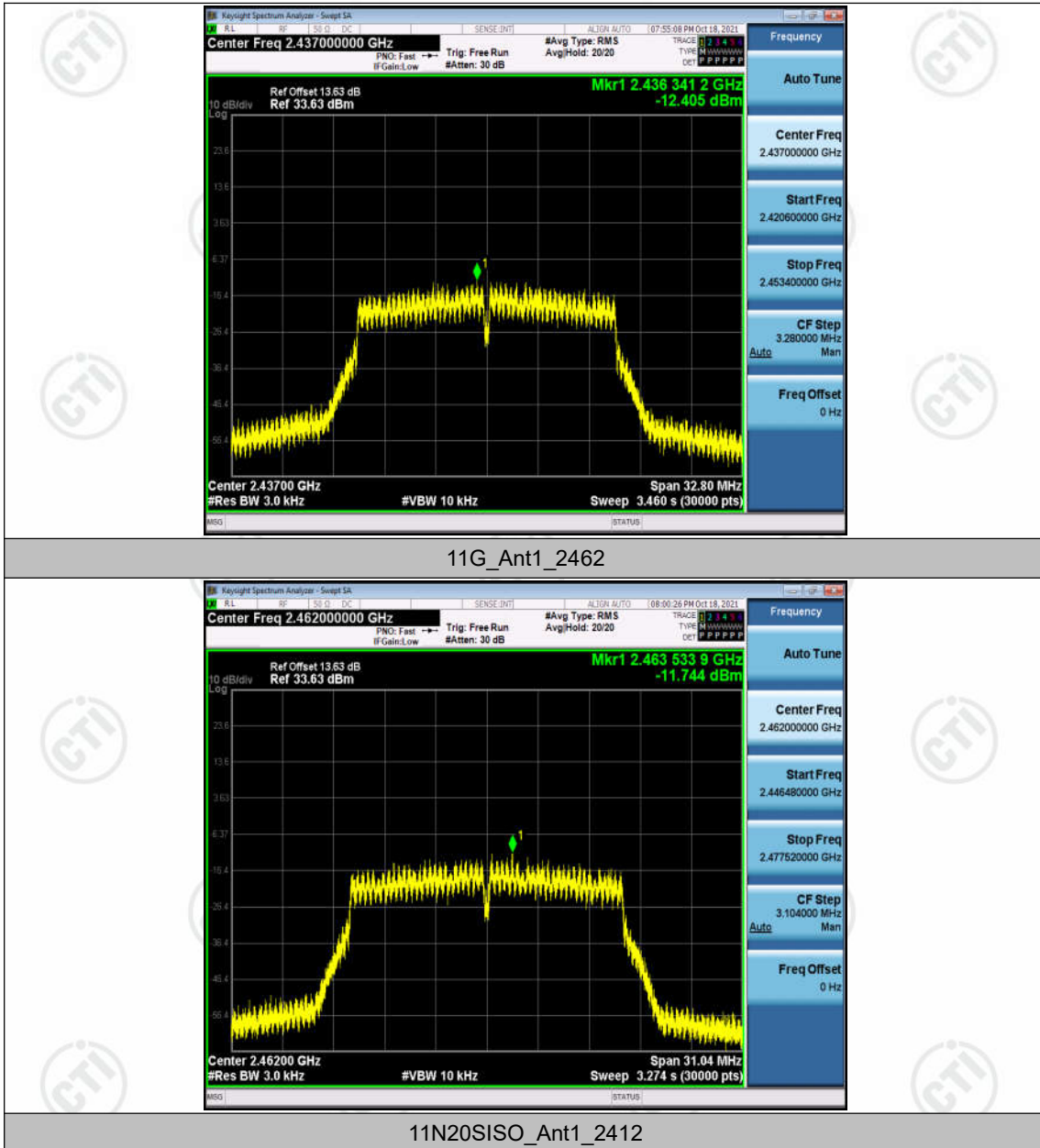
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.24	<=8	PASS
		2437	-7.94	<=8	PASS
		2462	-6.55	<=8	PASS
11G	Ant1	2412	-12.91	<=8	PASS
		2437	-12.41	<=8	PASS
		2462	-11.74	<=8	PASS
11N20SISO	Ant1	2412	-16.16	<=8	PASS
		2437	-13.51	<=8	PASS
		2462	-13.87	<=8	PASS
11N40SISO	Ant1	2422	-17.64	<=8	PASS
		2437	-17.42	<=8	PASS
		2452	-17.06	<=8	PASS

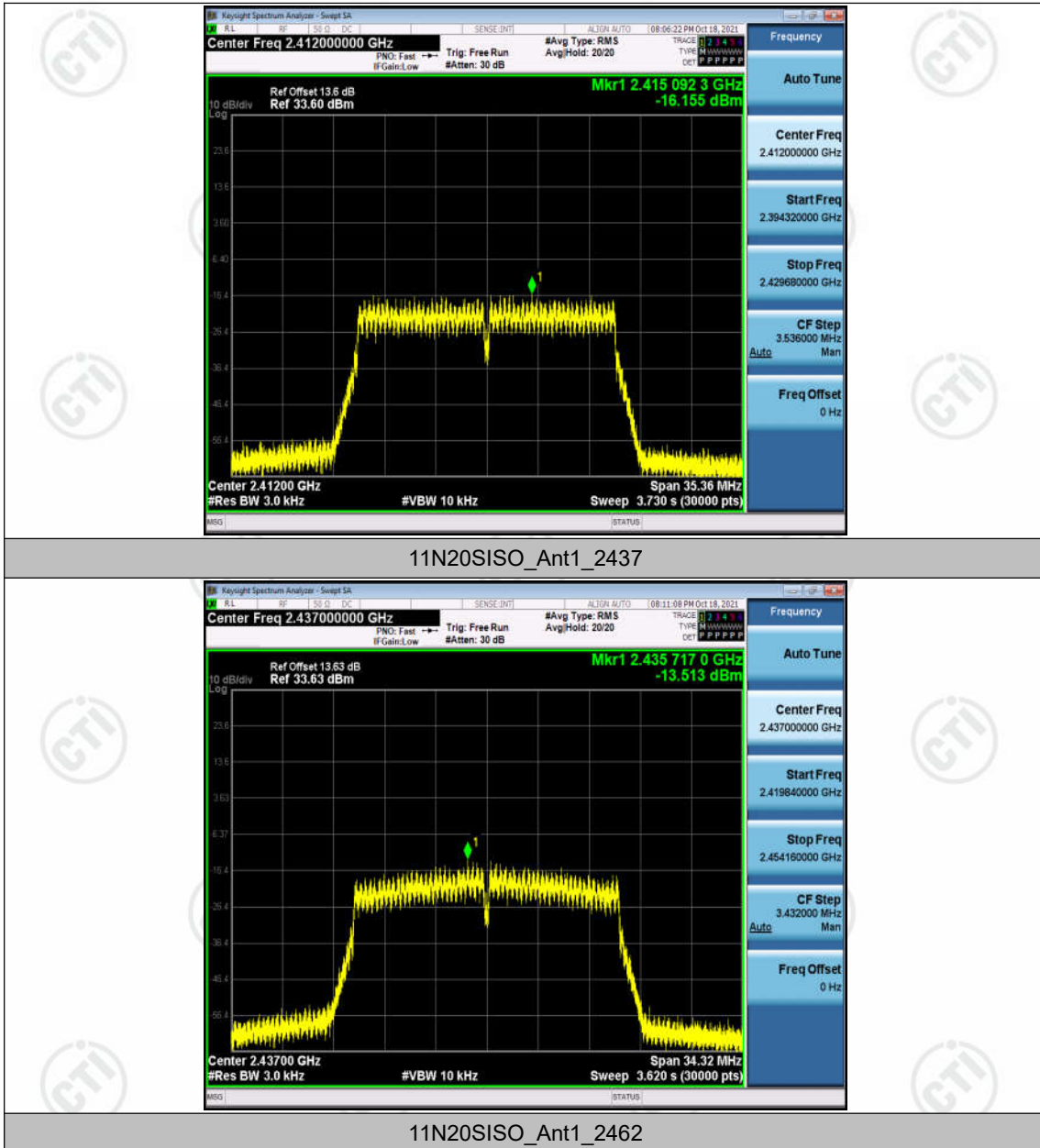


## Test Graphs

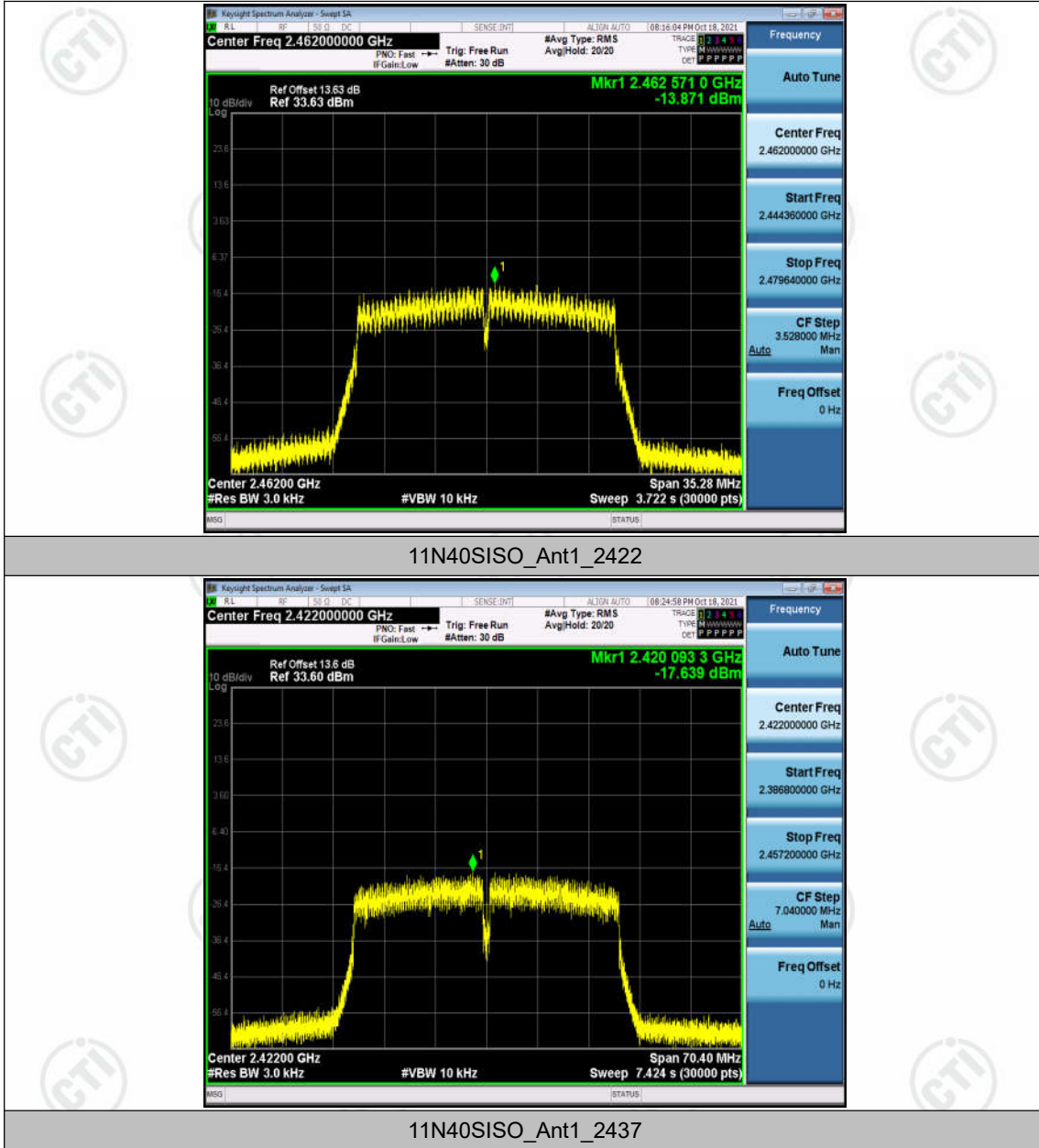




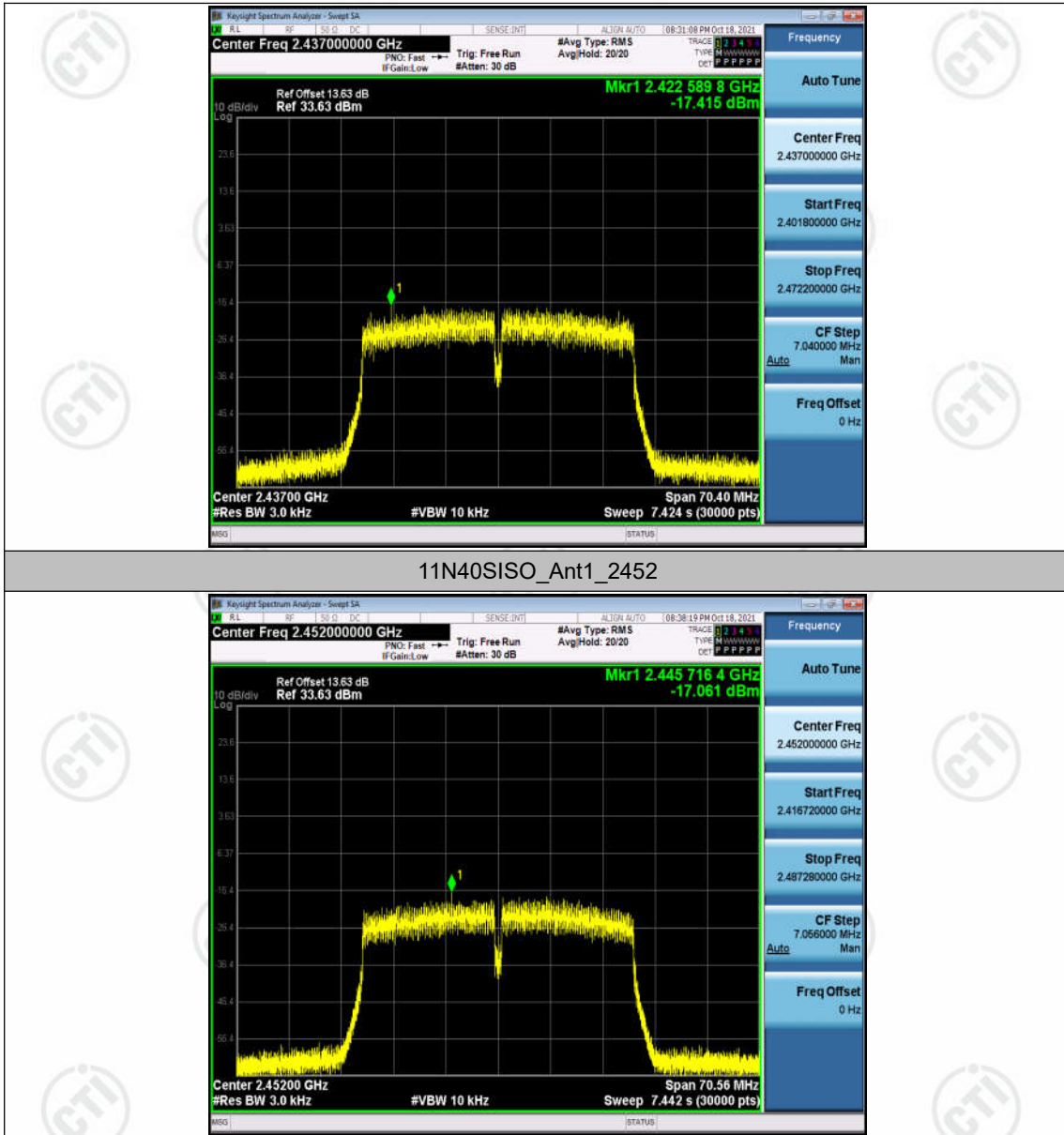












**AppendixE:Band edge measurements****Test Result**

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.66	-31.78	<=-14.34	PASS
		High	2462	6.70	-45.36	<=-13.31	PASS
11G	Ant1	Low	2412	2.56	-25.27	<=-17.44	PASS
		High	2462	1.55	-44.7	<=-18.45	PASS
11N20SI SO	Ant1	Low	2412	-2.36	-38.52	<=-22.36	PASS
		High	2462	0.65	-45.09	<=-19.35	PASS
11N40SI SO	Ant1	Low	2422	-3.42	-39.05	<=-23.42	PASS
		High	2452	-3.90	-43.27	<=-23.9	PASS

## Test Graphs

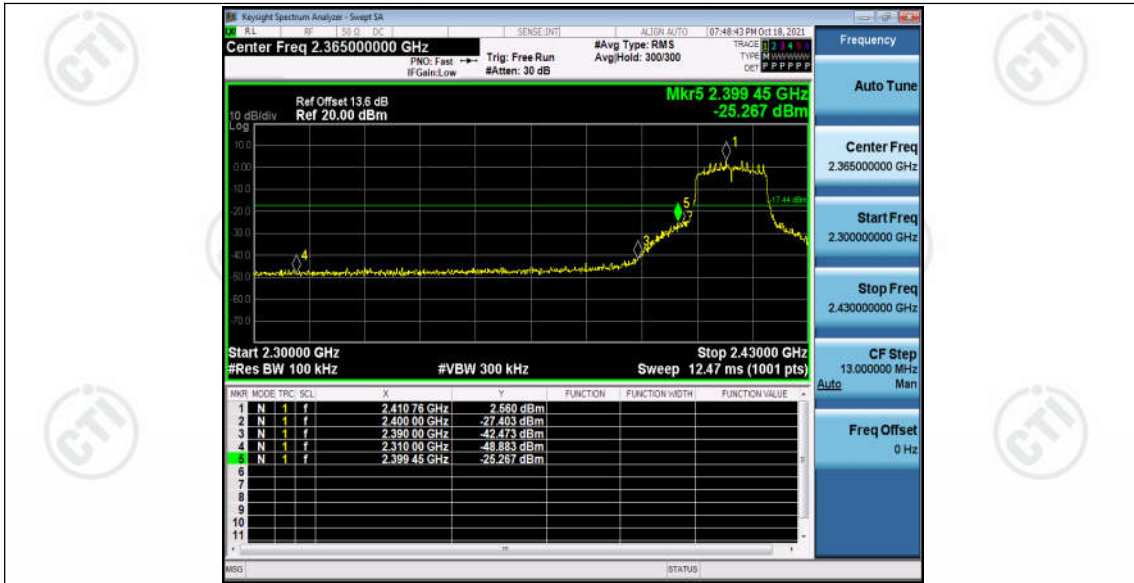
11B\_Ant1\_Low\_2412



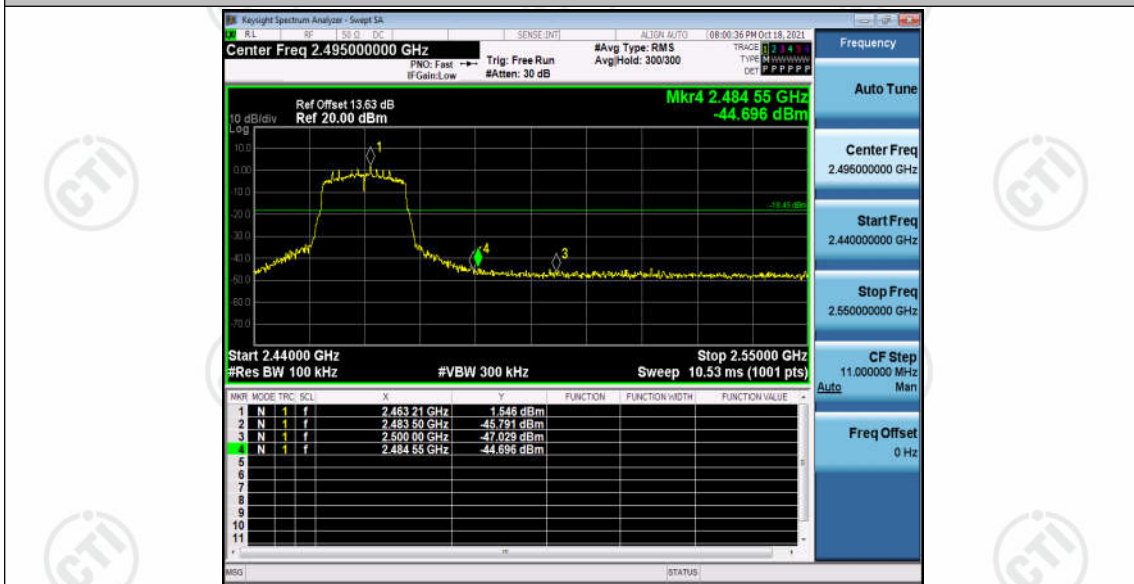
11B\_Ant1\_High\_2462



11G\_Ant1\_Low\_2412

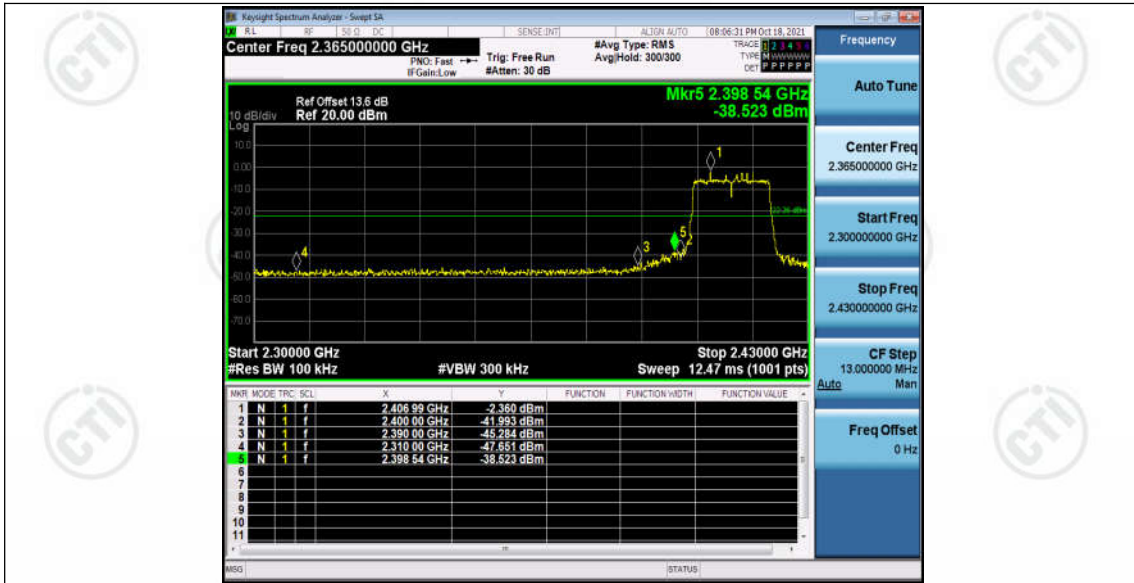


11G\_Ant1\_High\_2462

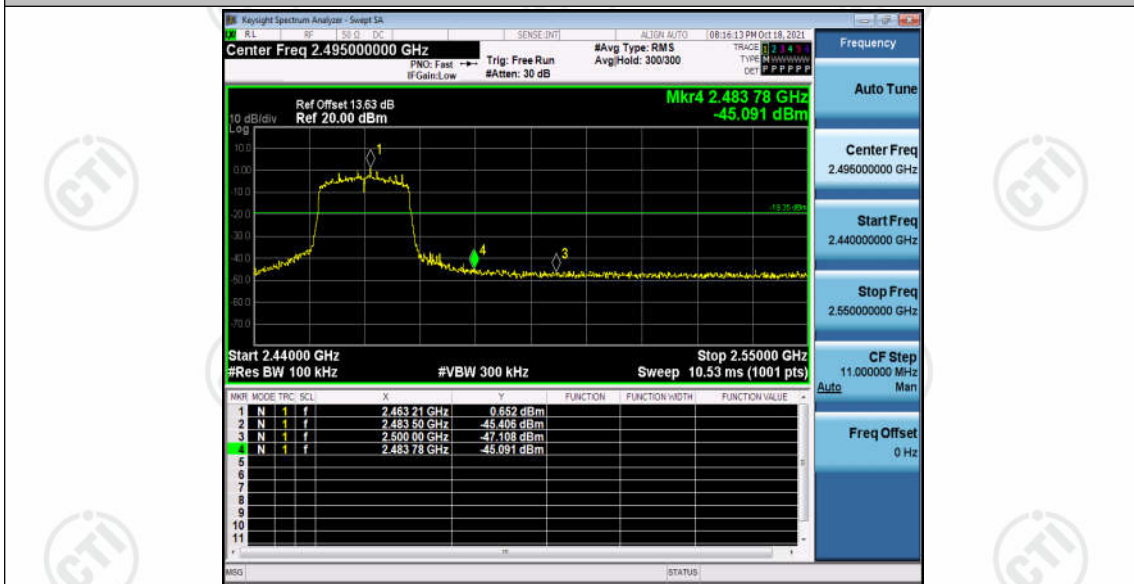


11N20SISO\_Ant1\_Low\_2412



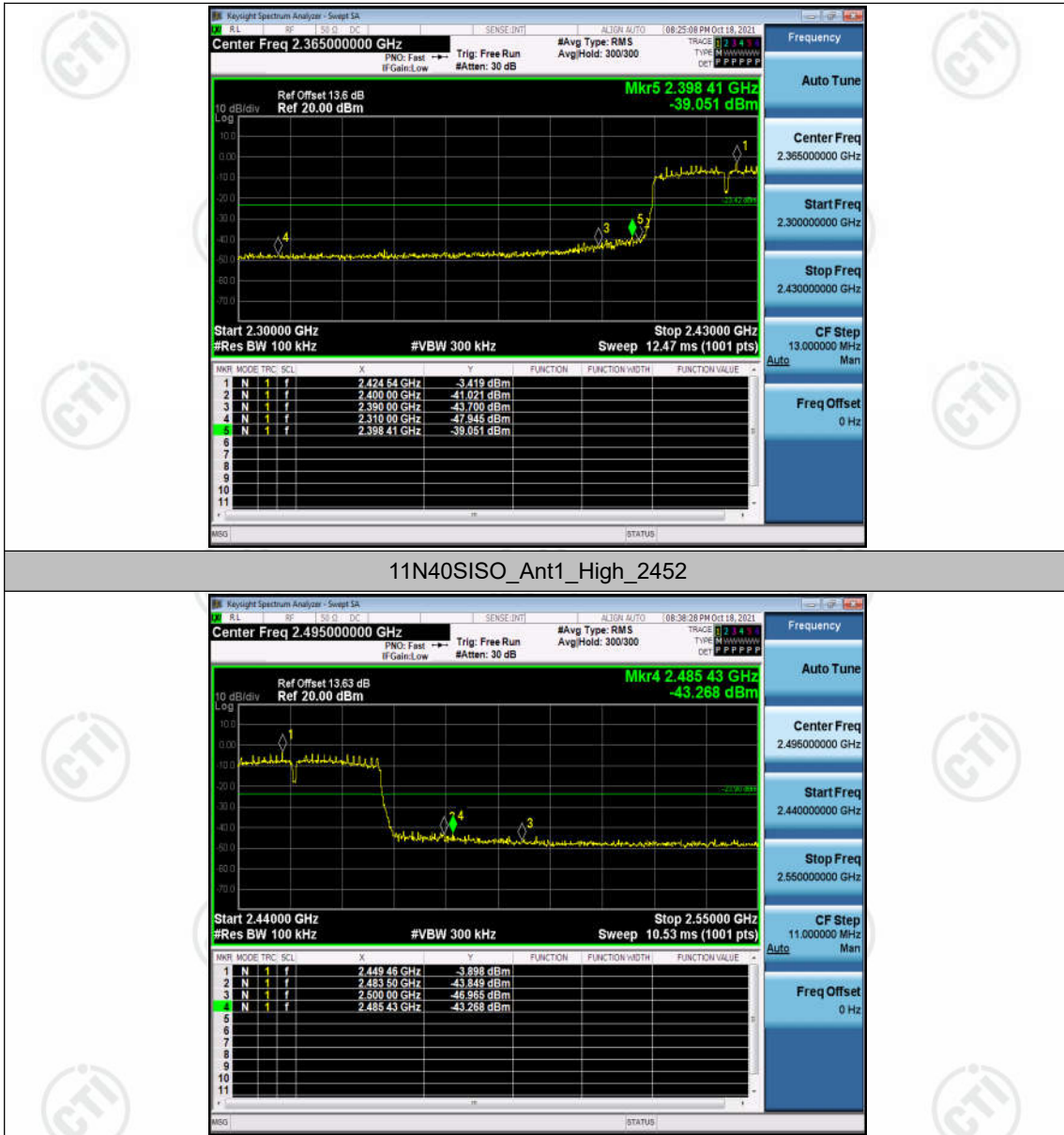


11N20SISO\_Ant1\_High\_2462



11N40SISO\_Ant1\_Low\_2422





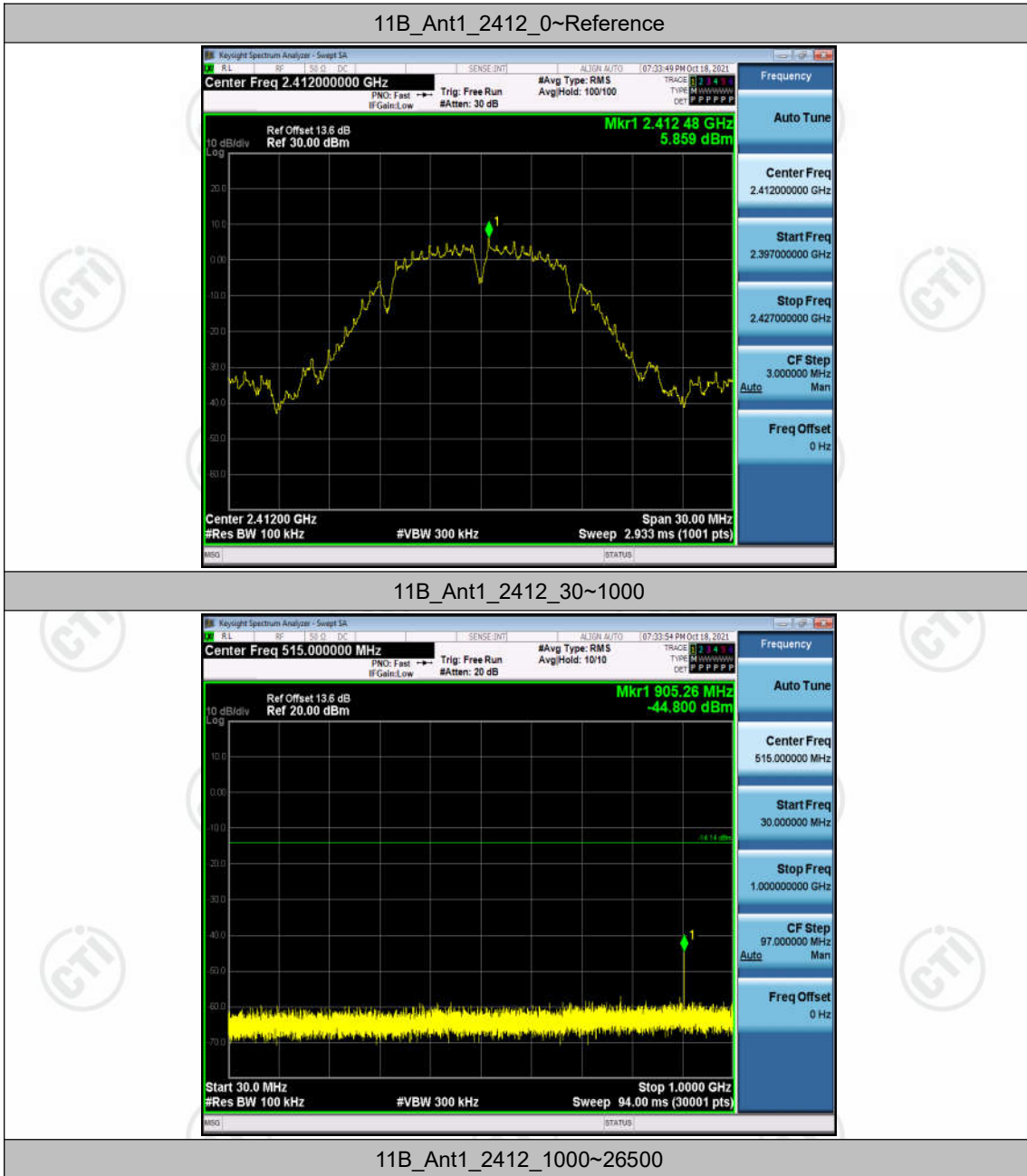
## Appendix F: Conducted Spurious Emission

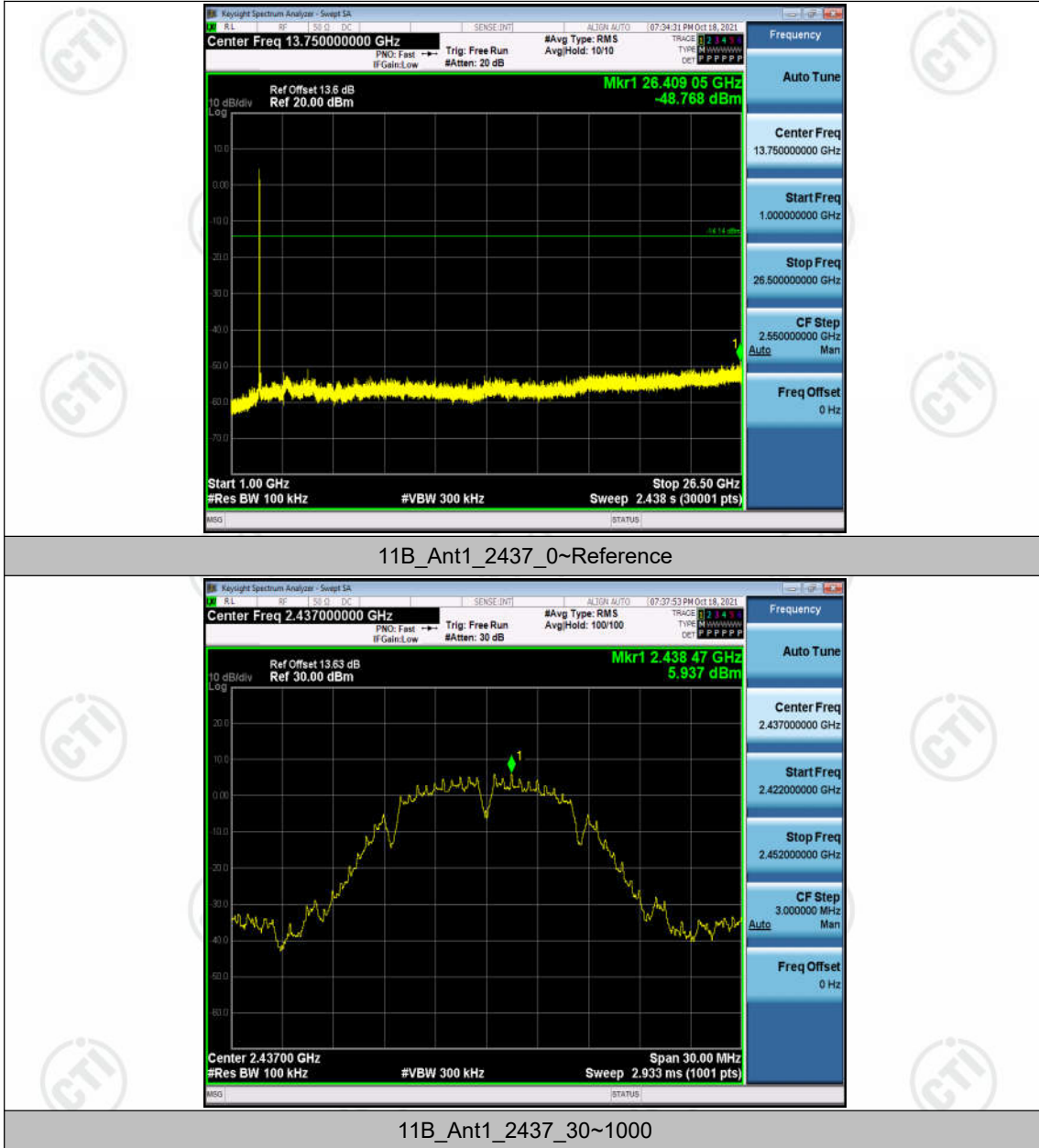
### Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.86	5.86	---	PASS
			30~1000	30~1000	-44.8	<=-14.141	PASS
			1000~26500	1000~26500	-48.768	<=-14.141	PASS
		2437	Reference	5.94	5.94	---	PASS
			30~1000	30~1000	-55.731	<=-14.063	PASS
			1000~26500	1000~26500	-49.664	<=-14.063	PASS
		2462	Reference	6.70	6.70	---	PASS
			30~1000	30~1000	-56.562	<=-13.305	PASS
			1000~26500	1000~26500	-49.684	<=-13.305	PASS
11G	Ant1	2412	Reference	2.50	2.50	---	PASS
			30~1000	30~1000	-57.087	<=-17.503	PASS
			1000~26500	1000~26500	-49.399	<=-17.503	PASS
		2437	Reference	1.71	1.71	---	PASS
			30~1000	30~1000	-55.802	<=-18.294	PASS
			1000~26500	1000~26500	-49.725	<=-18.294	PASS
		2462	Reference	0.64	0.64	---	PASS
			30~1000	30~1000	-43.438	<=-19.356	PASS
			1000~26500	1000~26500	-48.6	<=-19.356	PASS
11N20SIS O	Ant1	2412	Reference	-2.42	-2.42	---	PASS
			30~1000	30~1000	-57.297	<=-22.422	PASS
			1000~26500	1000~26500	-48.938	<=-22.422	PASS
		2437	Reference	-0.54	-0.54	---	PASS
			30~1000	30~1000	-44.072	<=-20.544	PASS
			1000~26500	1000~26500	-47.307	<=-20.544	PASS
		2462	Reference	-0.86	-0.86	---	PASS
			30~1000	30~1000	-57.164	<=-20.859	PASS

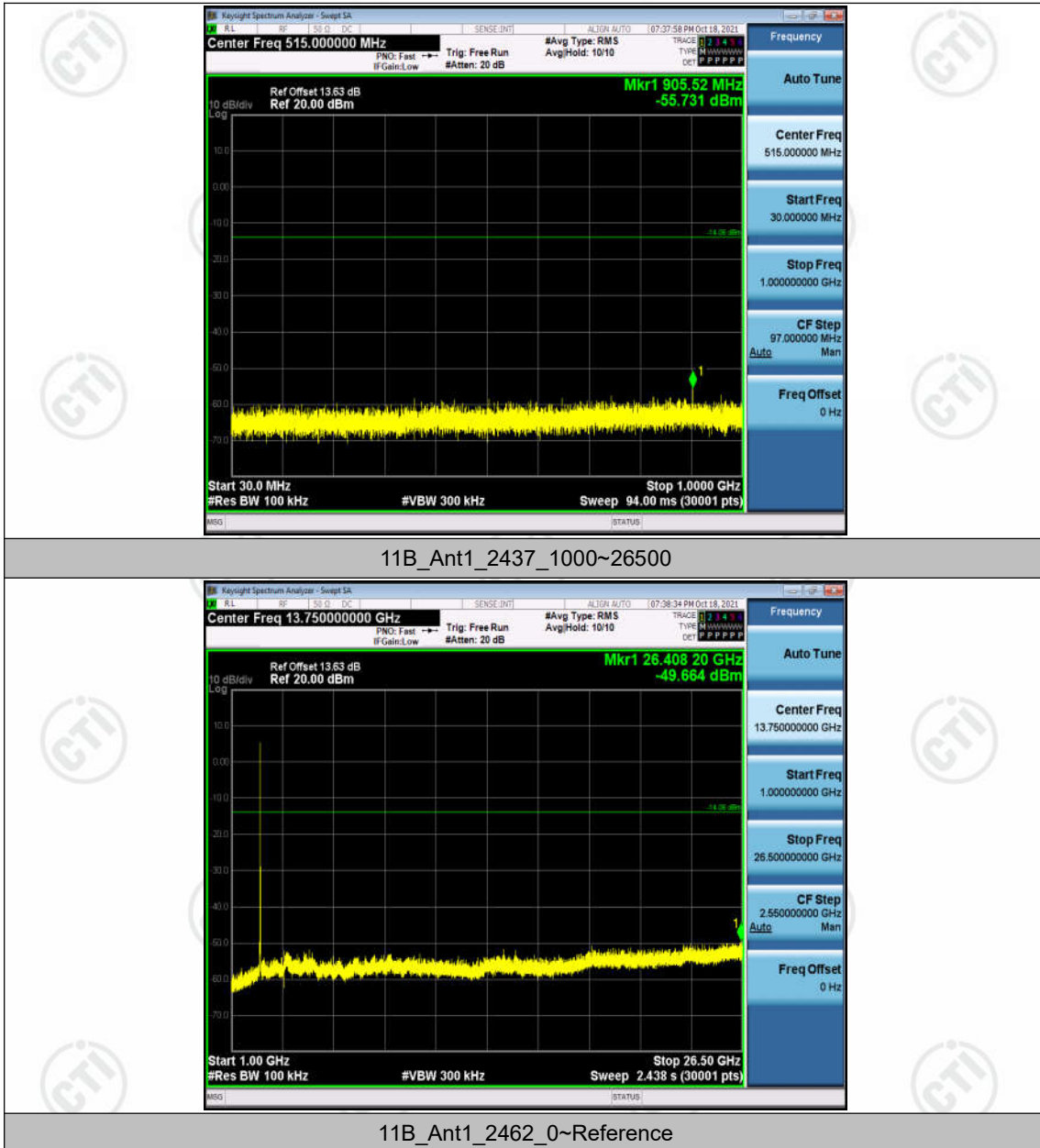
			1000~26500	1000~2650 0	-49.246	<=-20.859	PASS
11N40SIS O	Ant1	2422	Reference	-4.21	-4.21	---	PASS
			30~1000	30~1000	-57.784	<=-24.208	PASS
			1000~26500	1000~2650 0	-48.541	<=-24.208	PASS
		2437	Reference	-3.34	-3.34	---	PASS
			30~1000	30~1000	-57.496	<=-23.336	PASS
			1000~26500	1000~2650 0	-49.904	<=-23.336	PASS
		2452	Reference	-4.26	-4.26	---	PASS
			30~1000	30~1000	-57.732	<=-24.264	PASS
			1000~26500	1000~2650 0	-48.695	<=-24.264	PASS

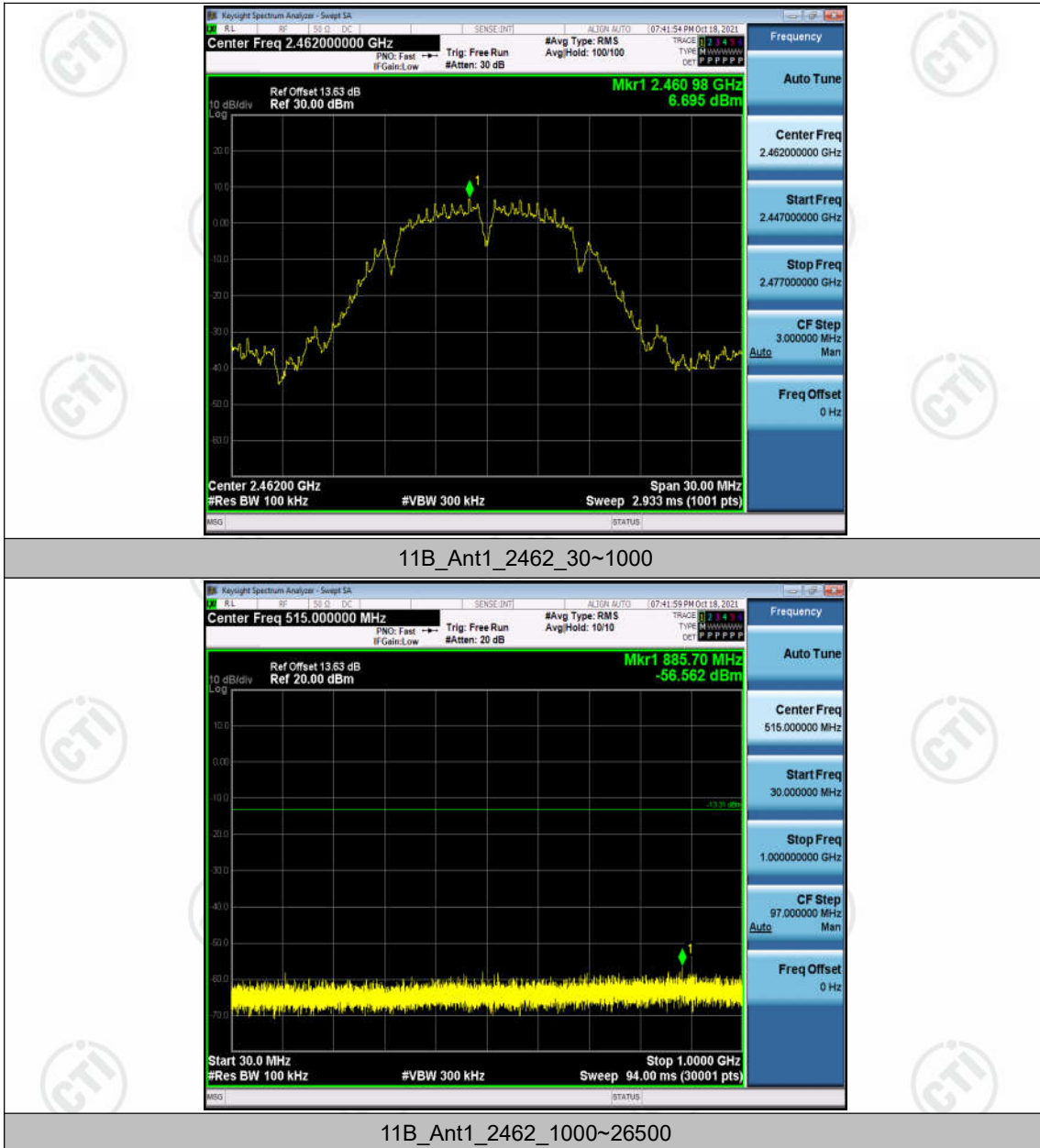
## Test Graphs

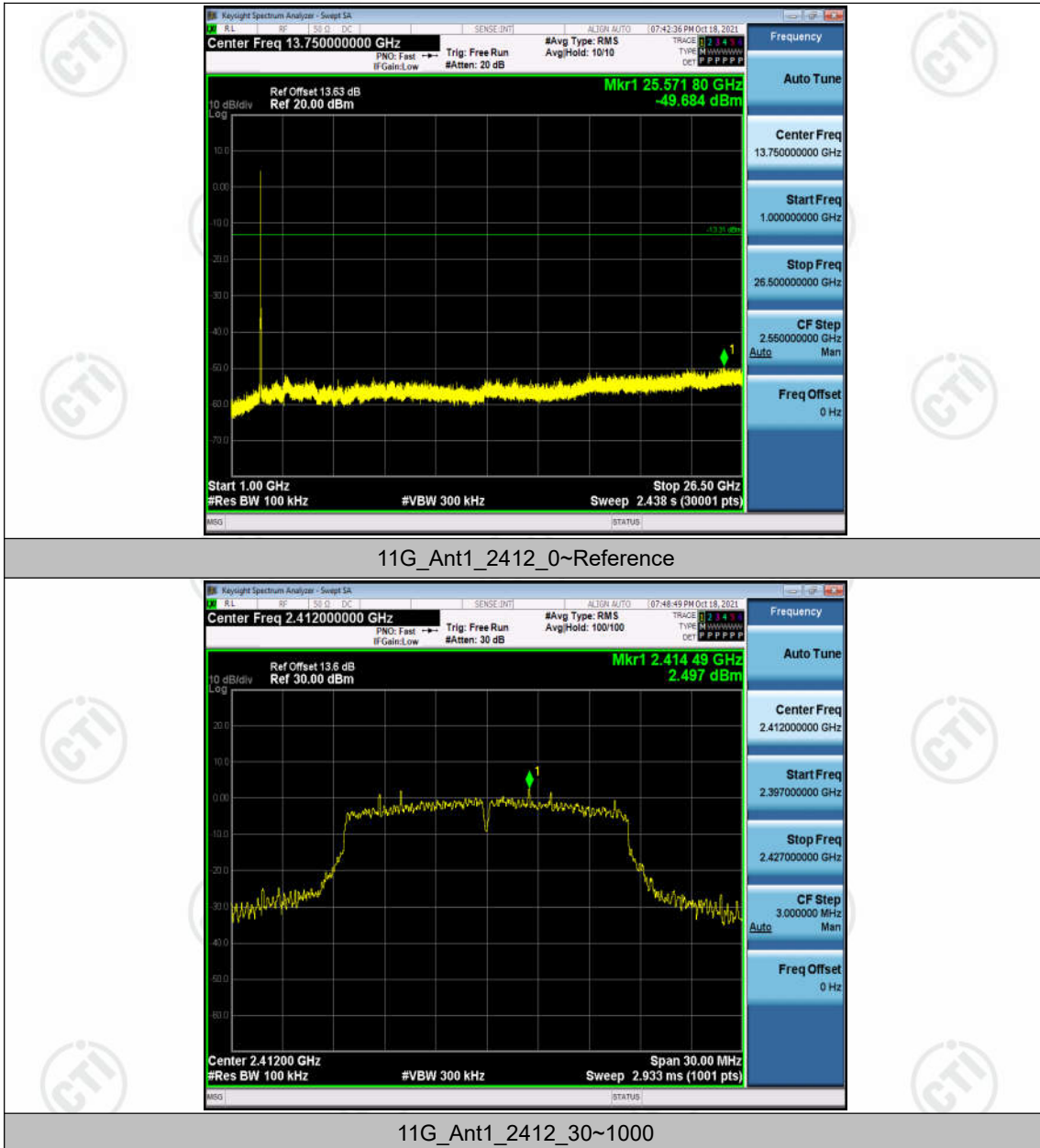


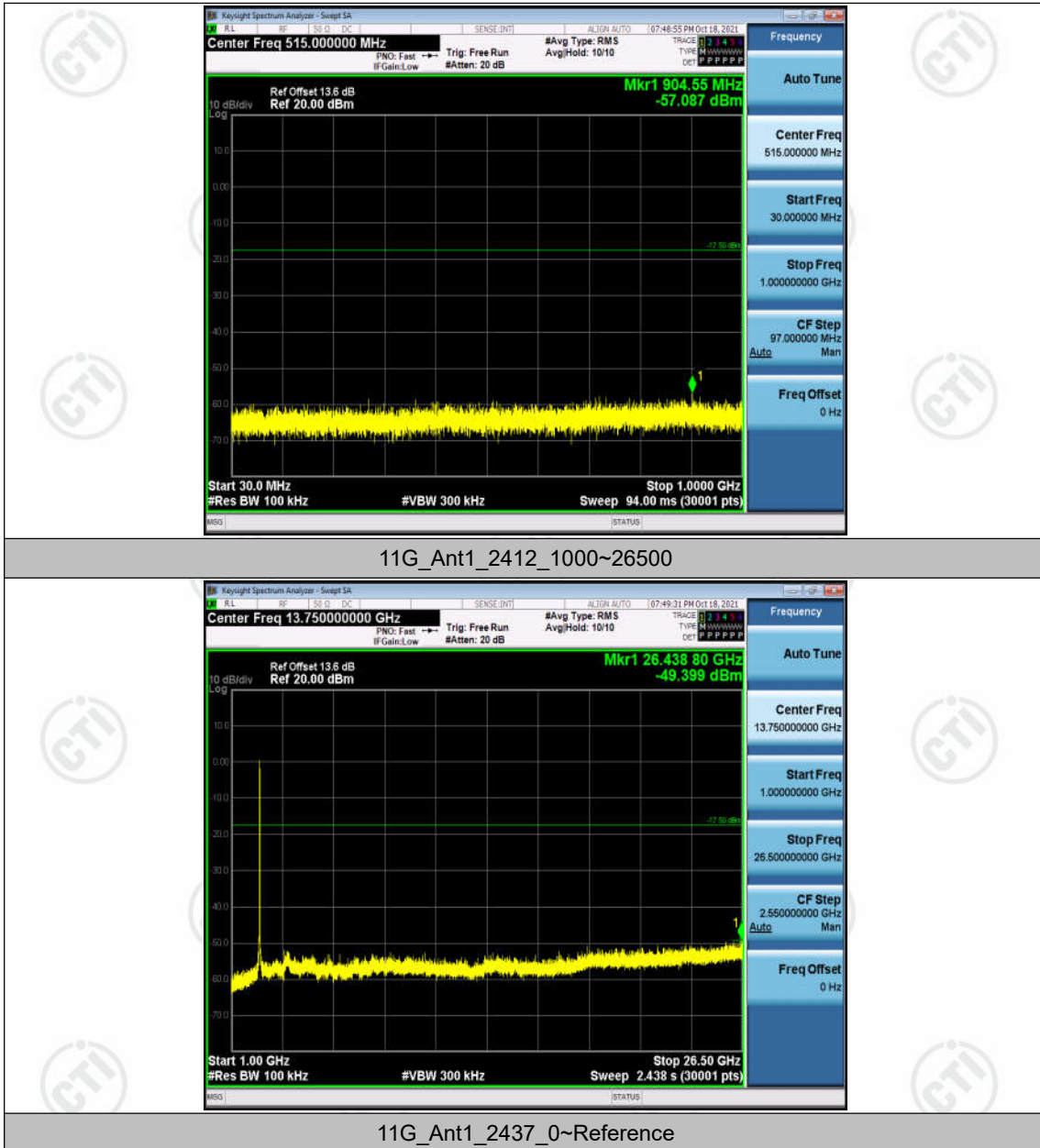




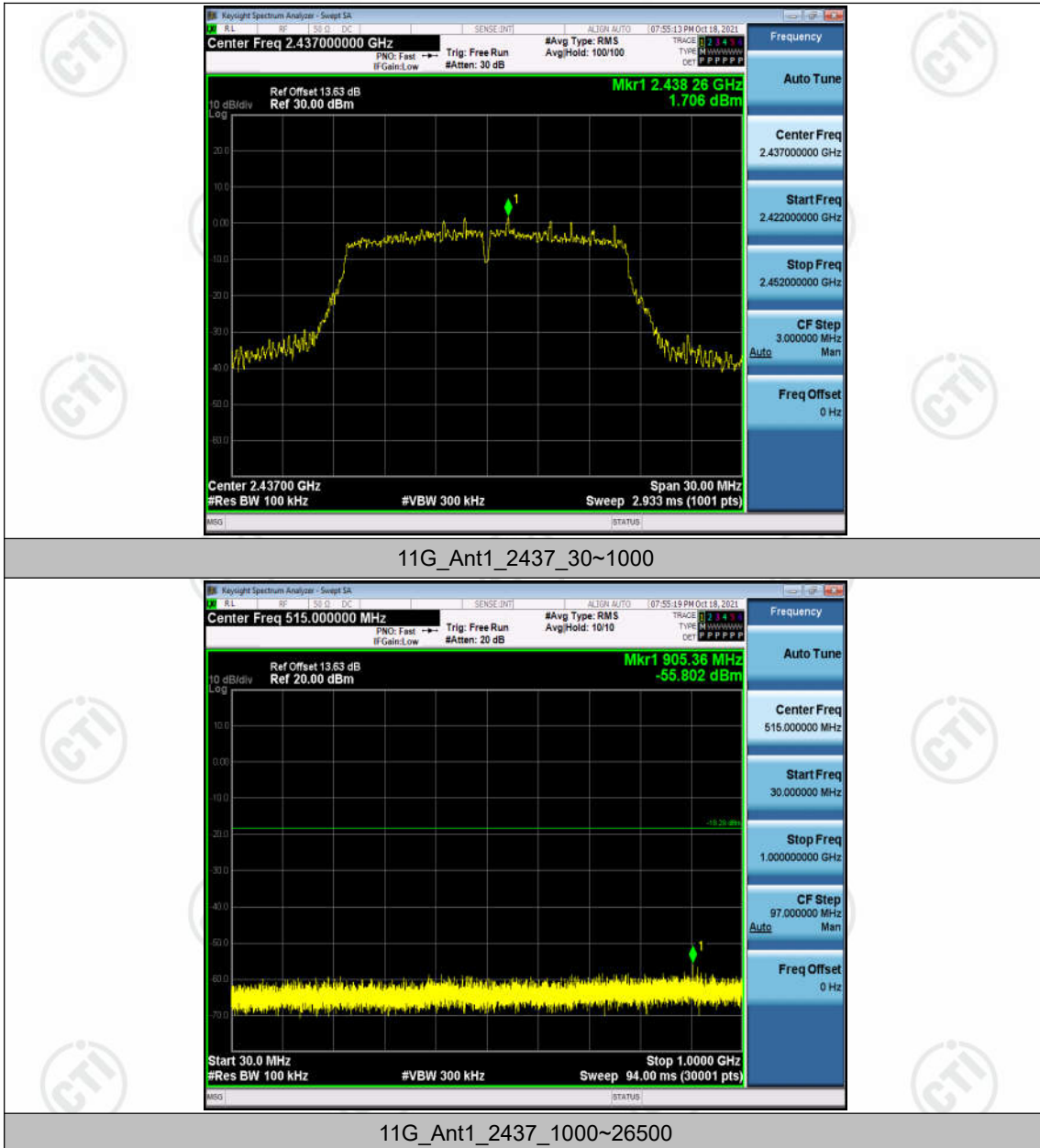




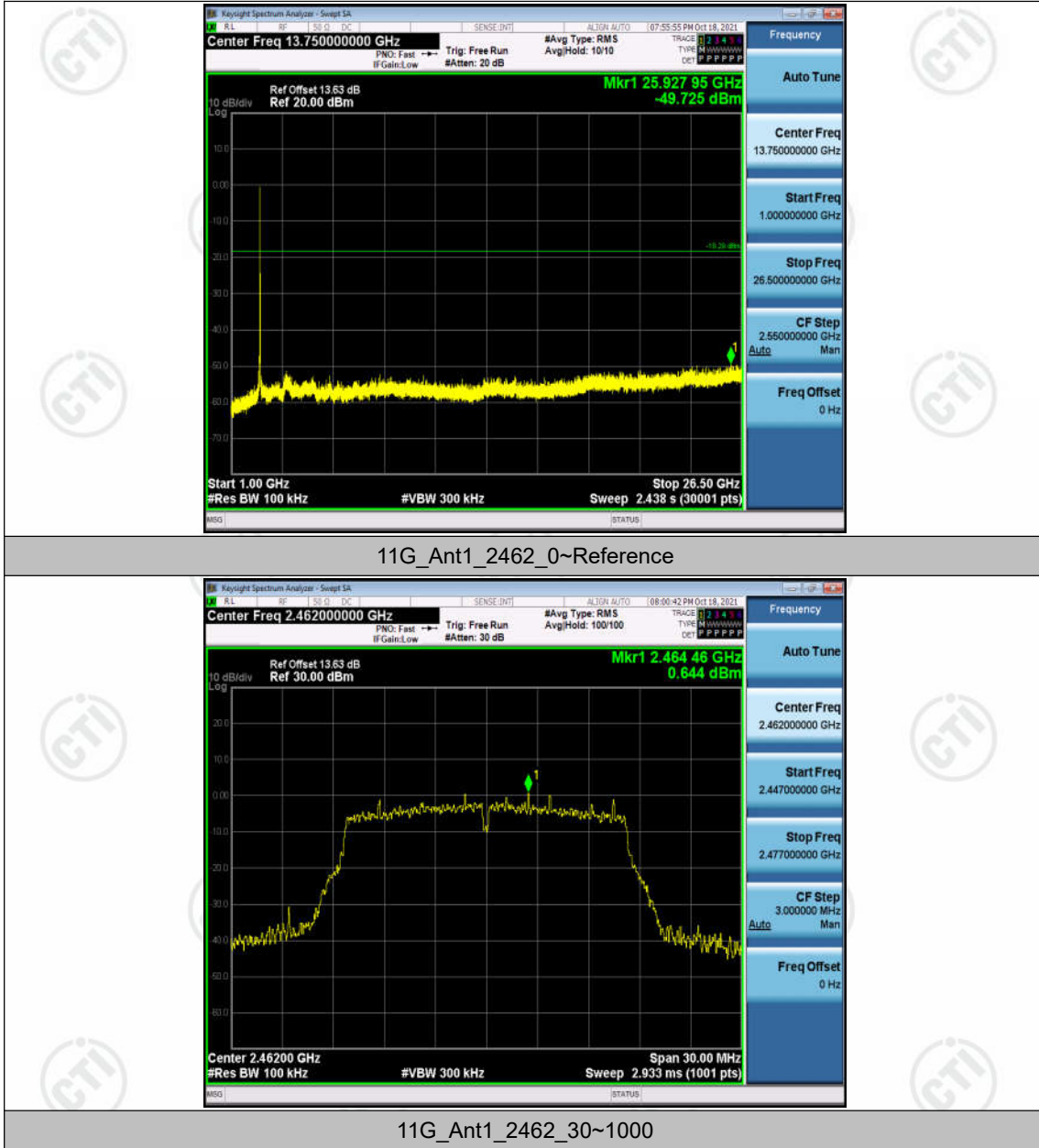


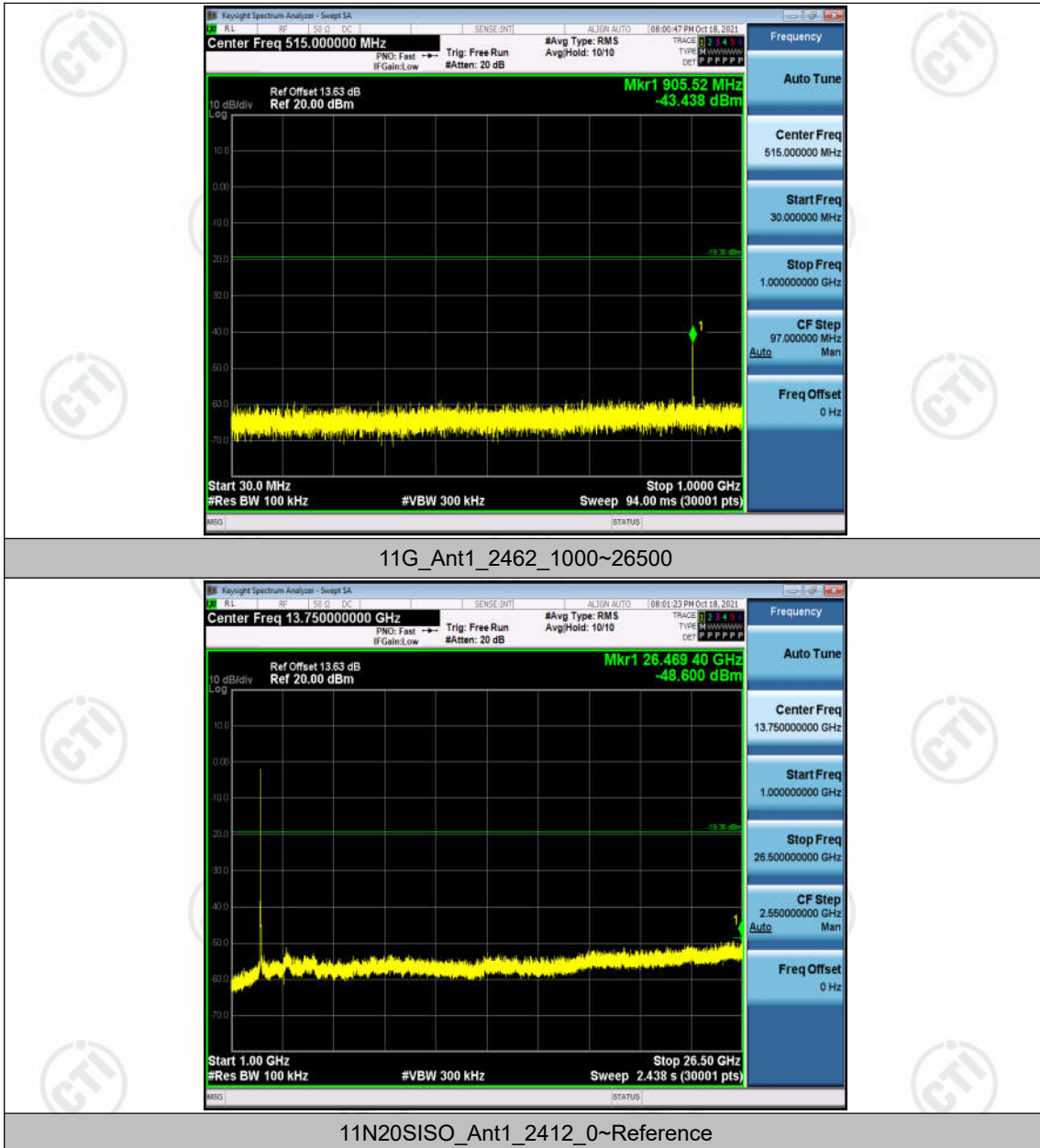


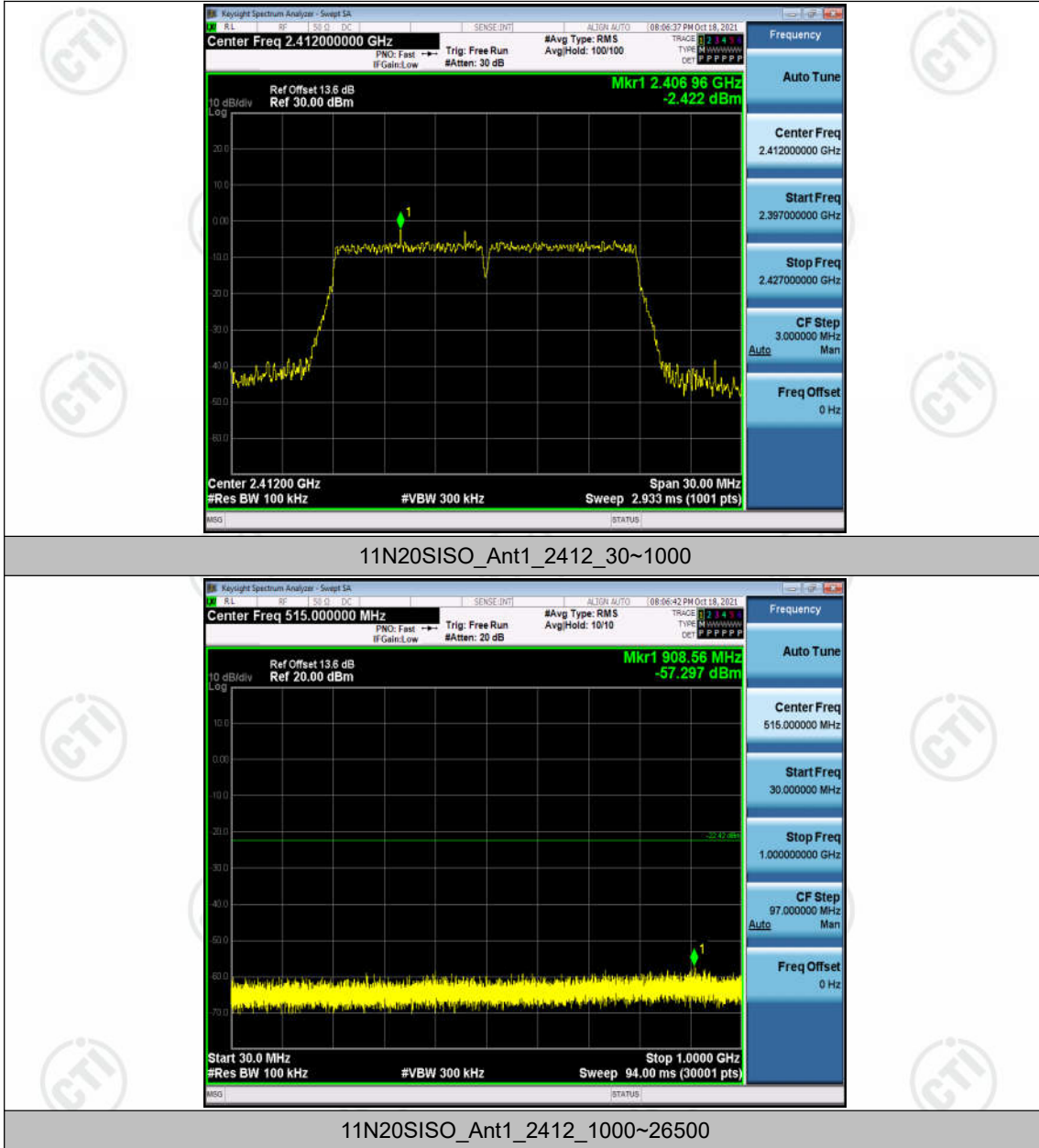


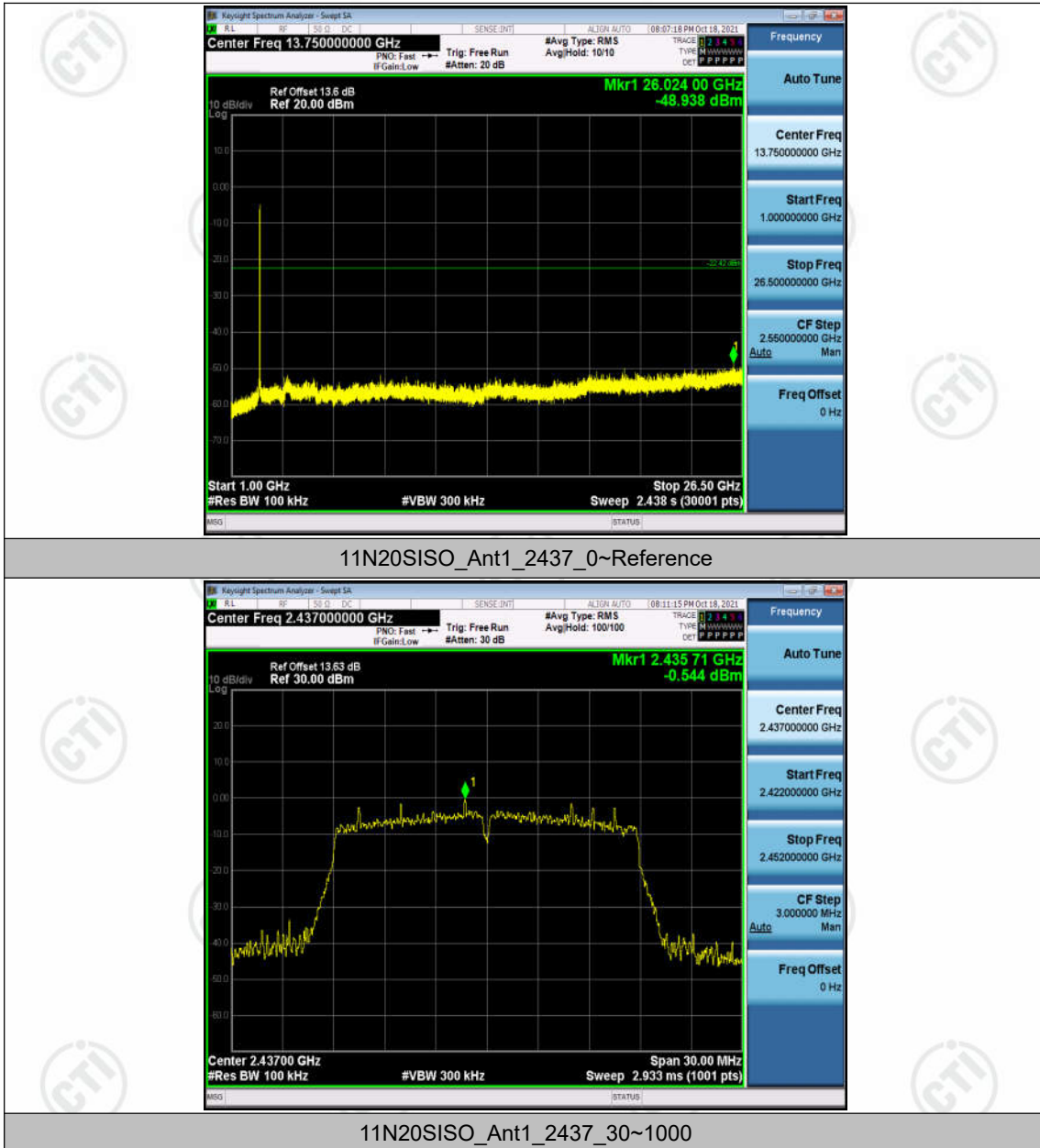




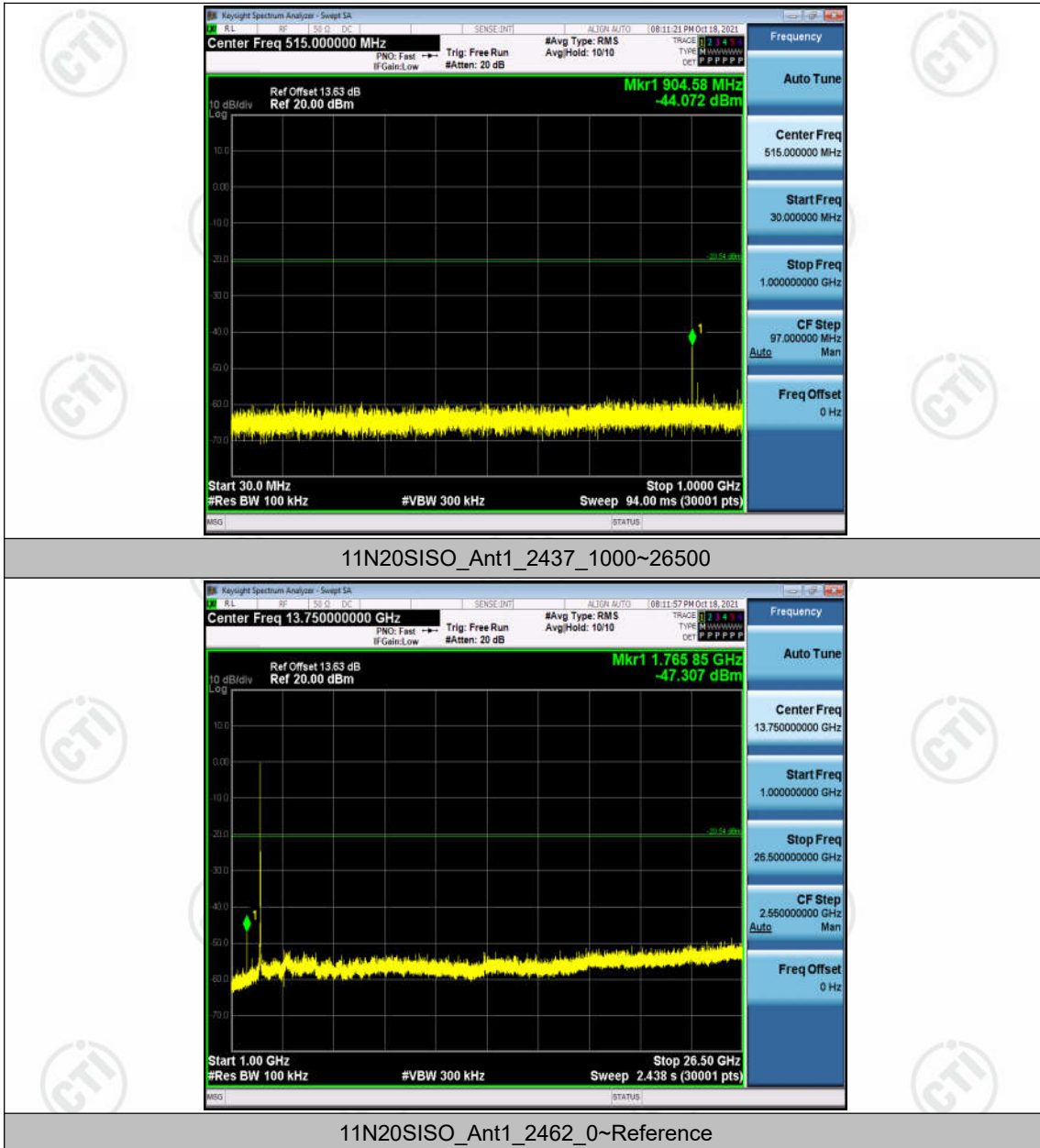




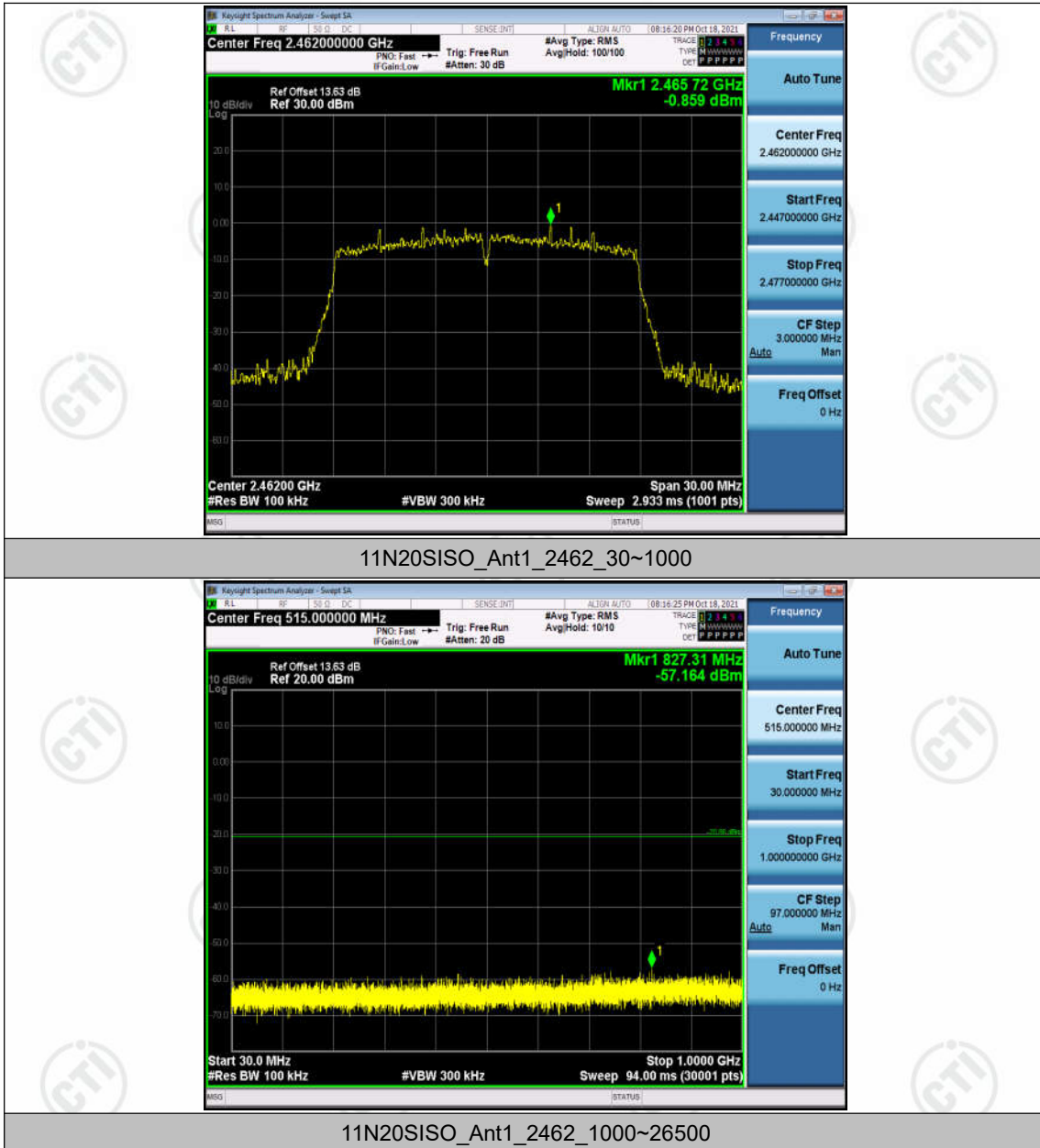


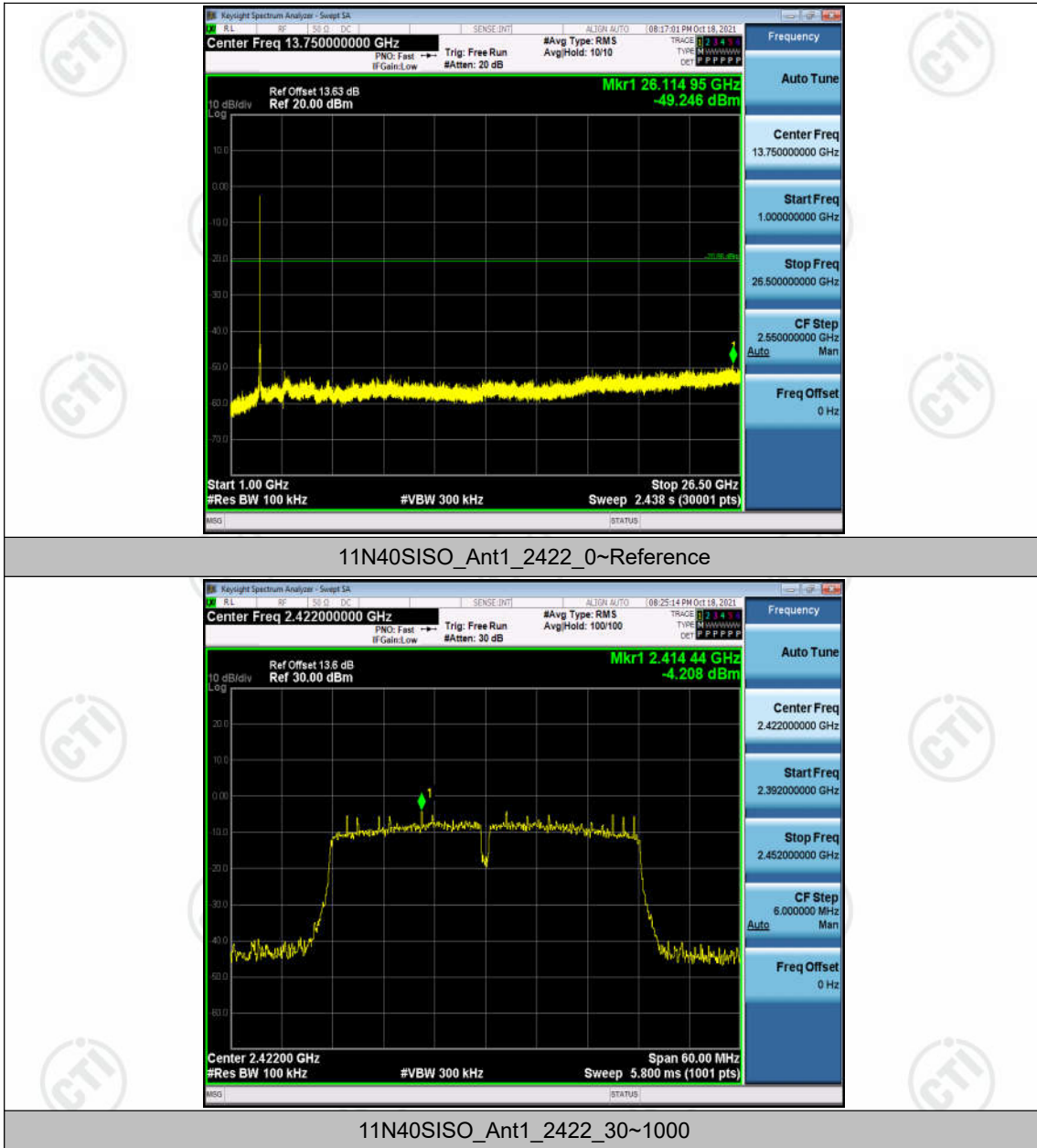


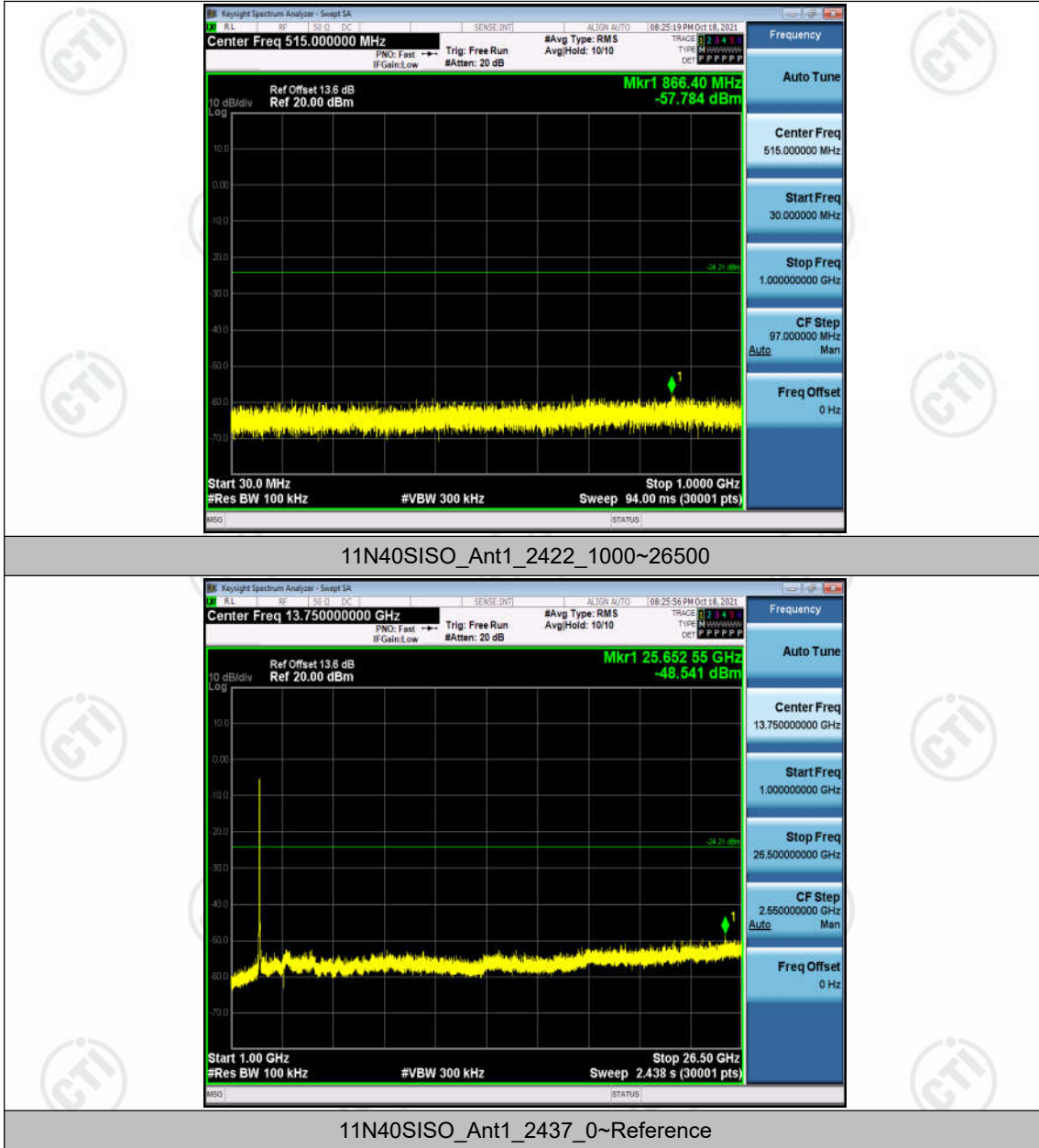


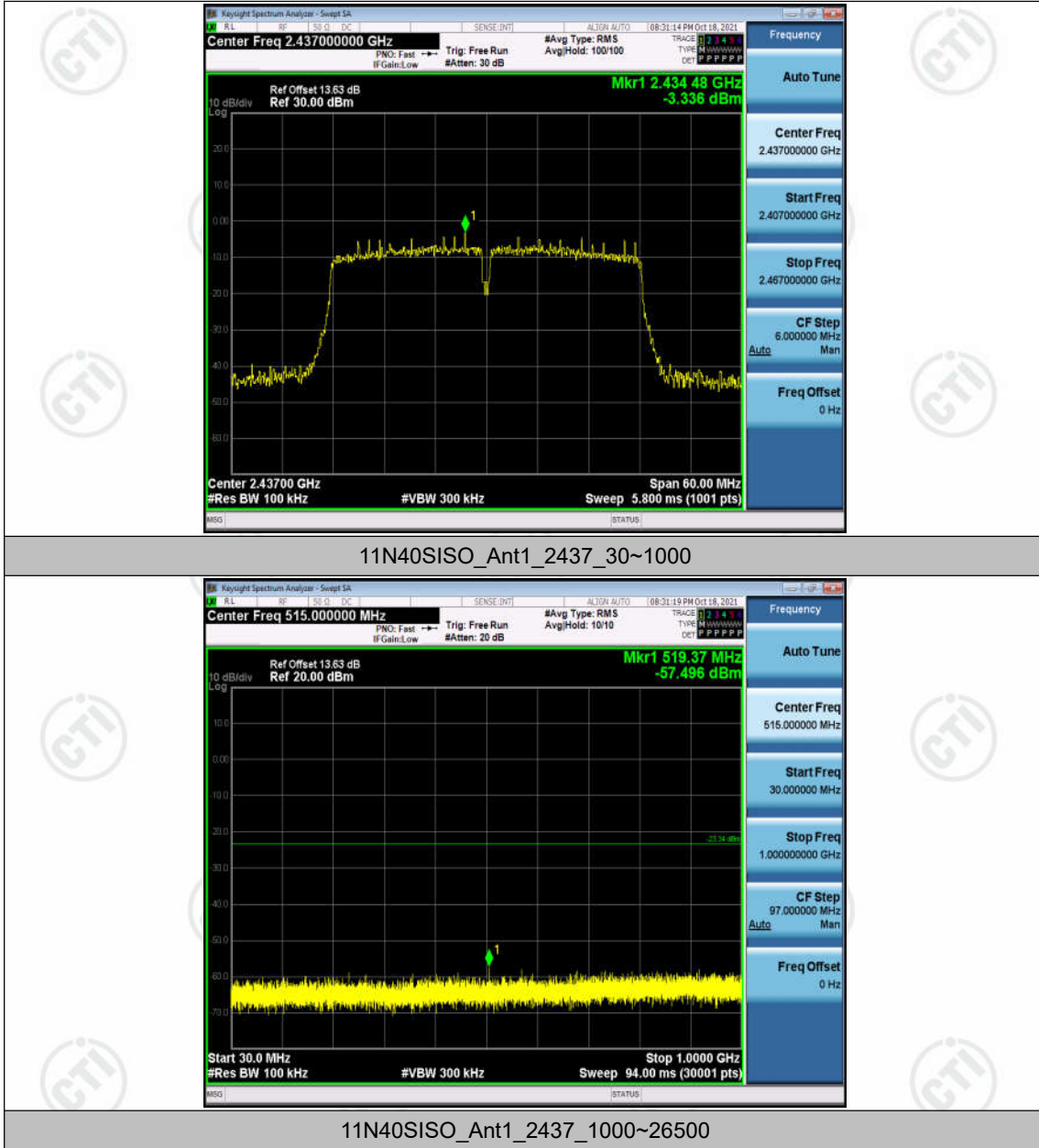




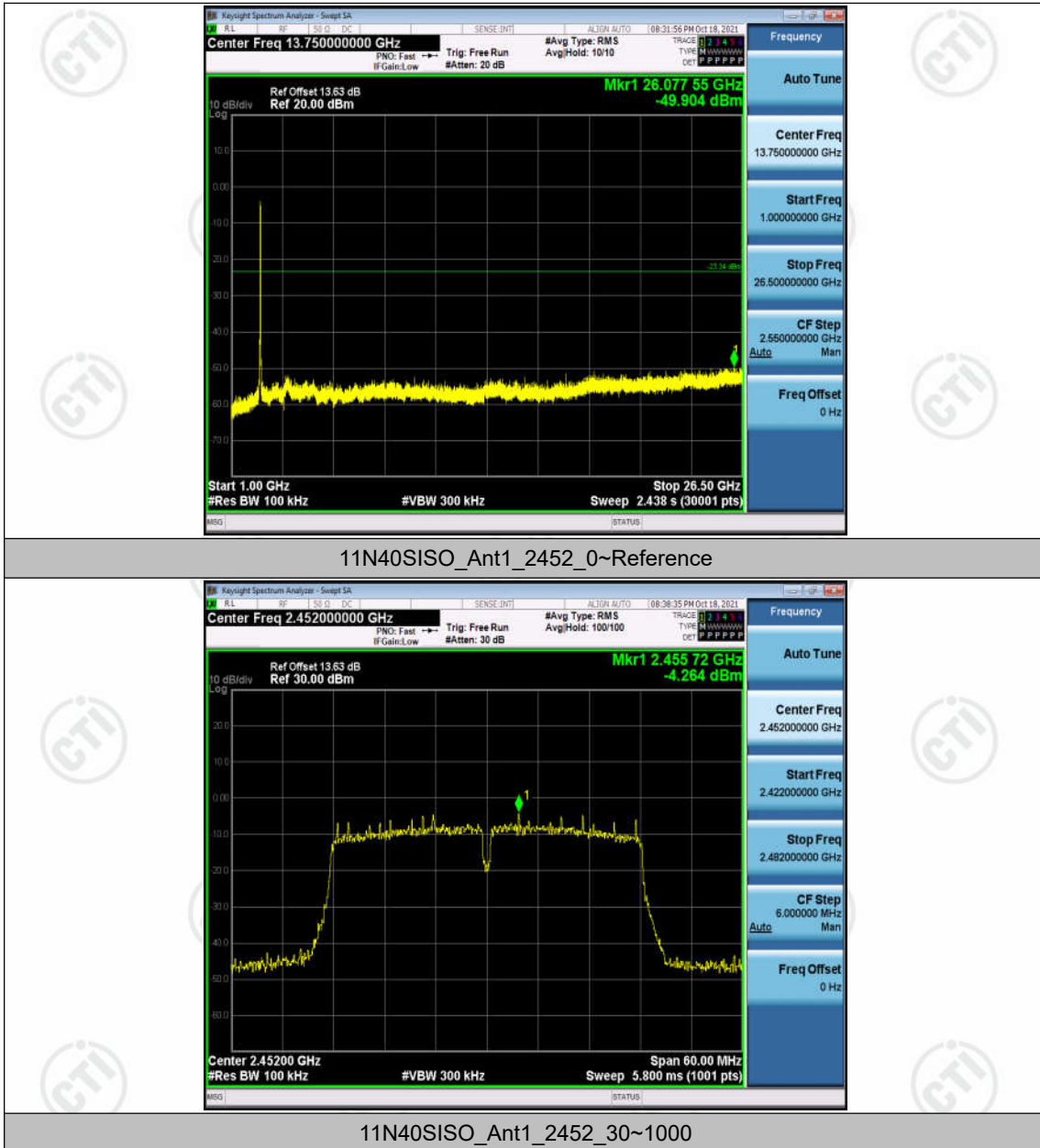




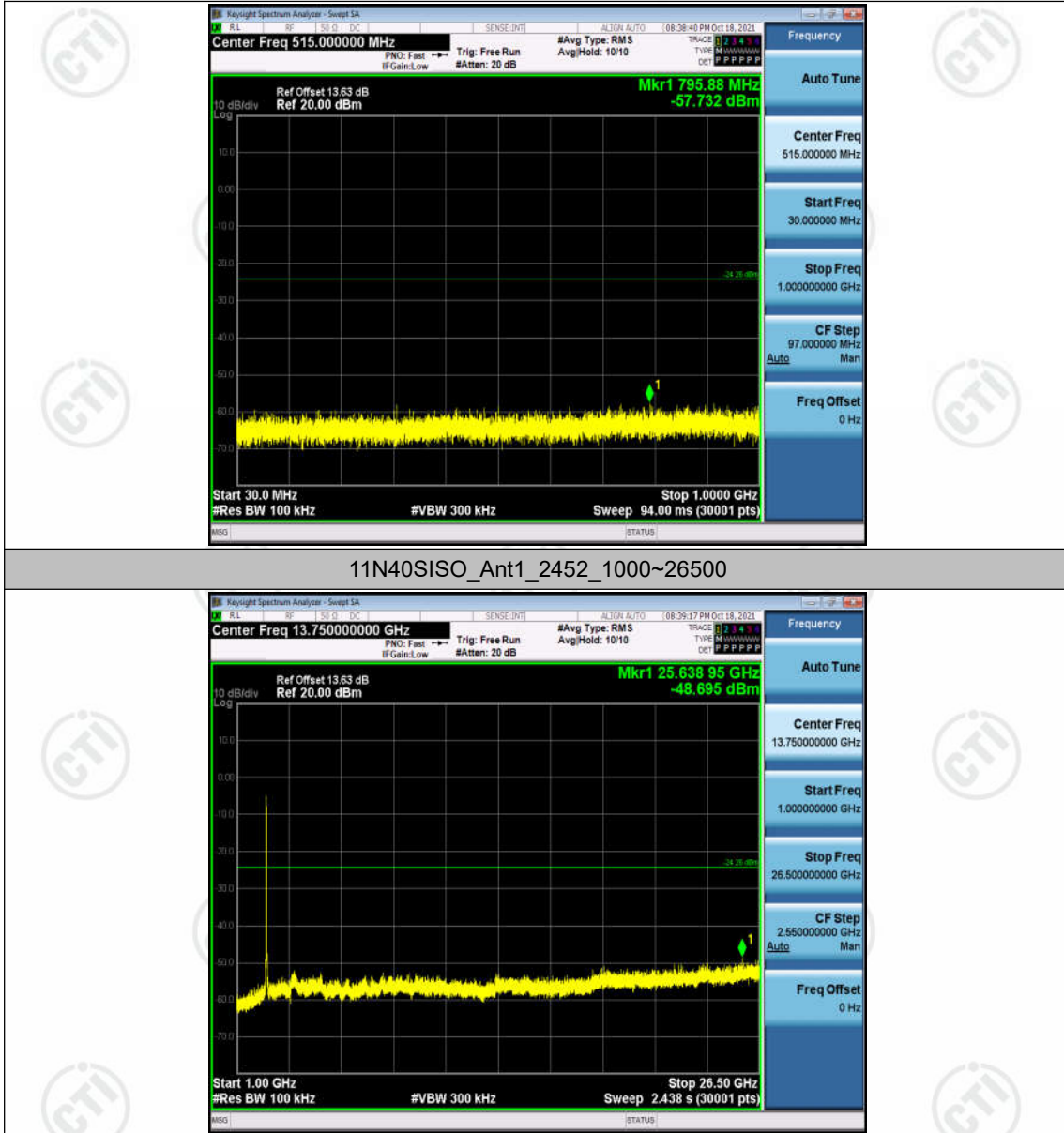










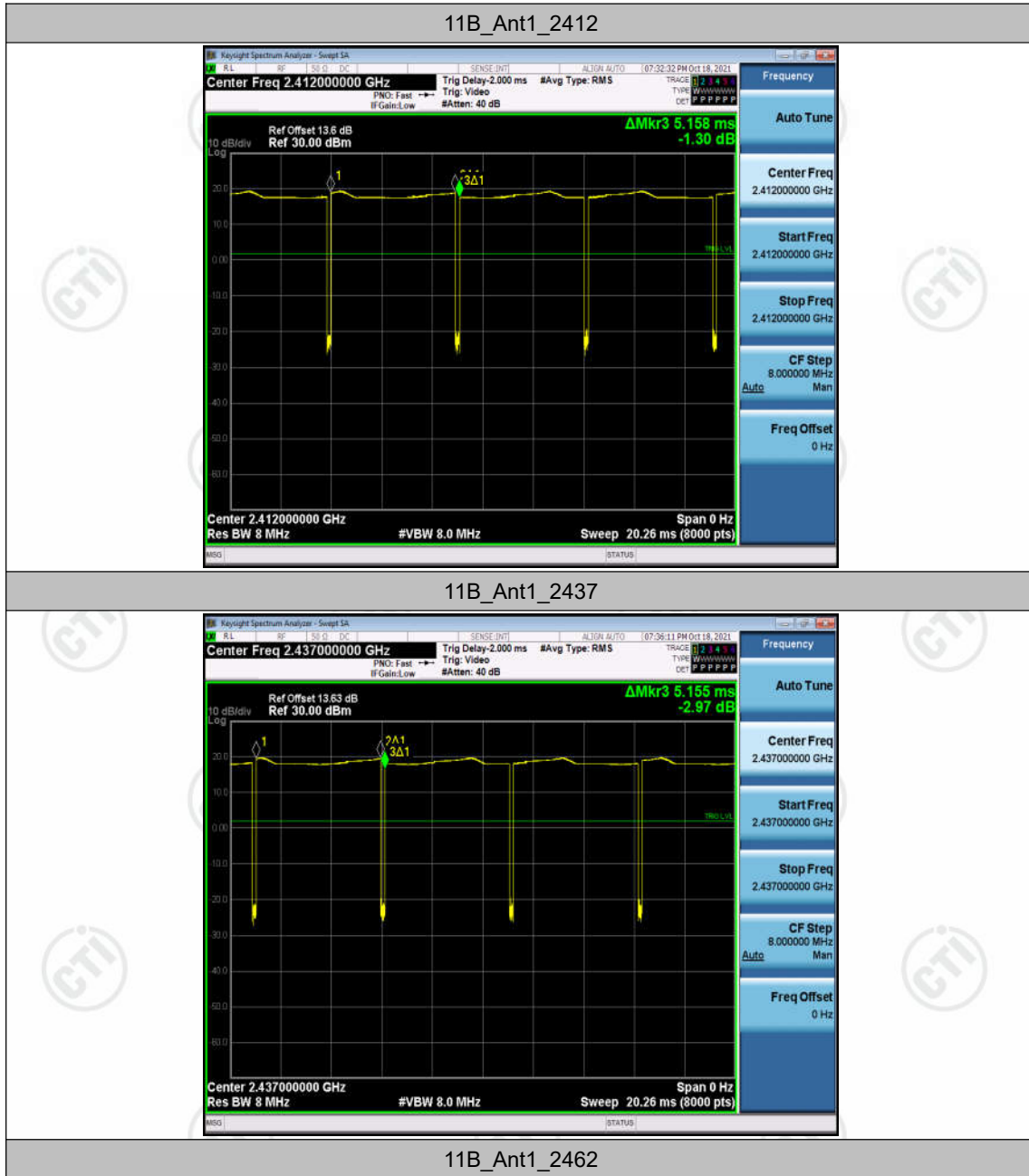


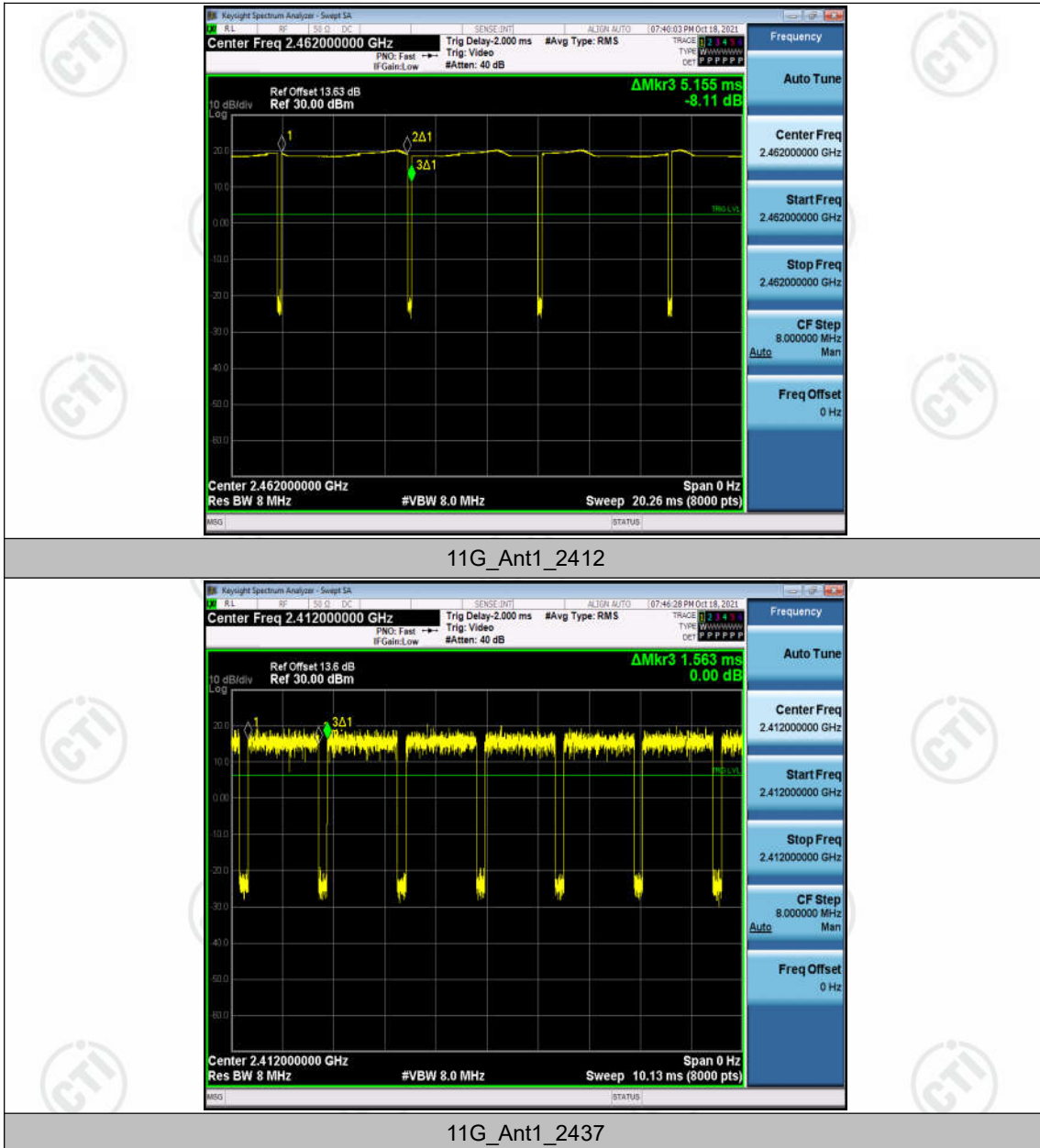
## AppendixG: DutyCycle

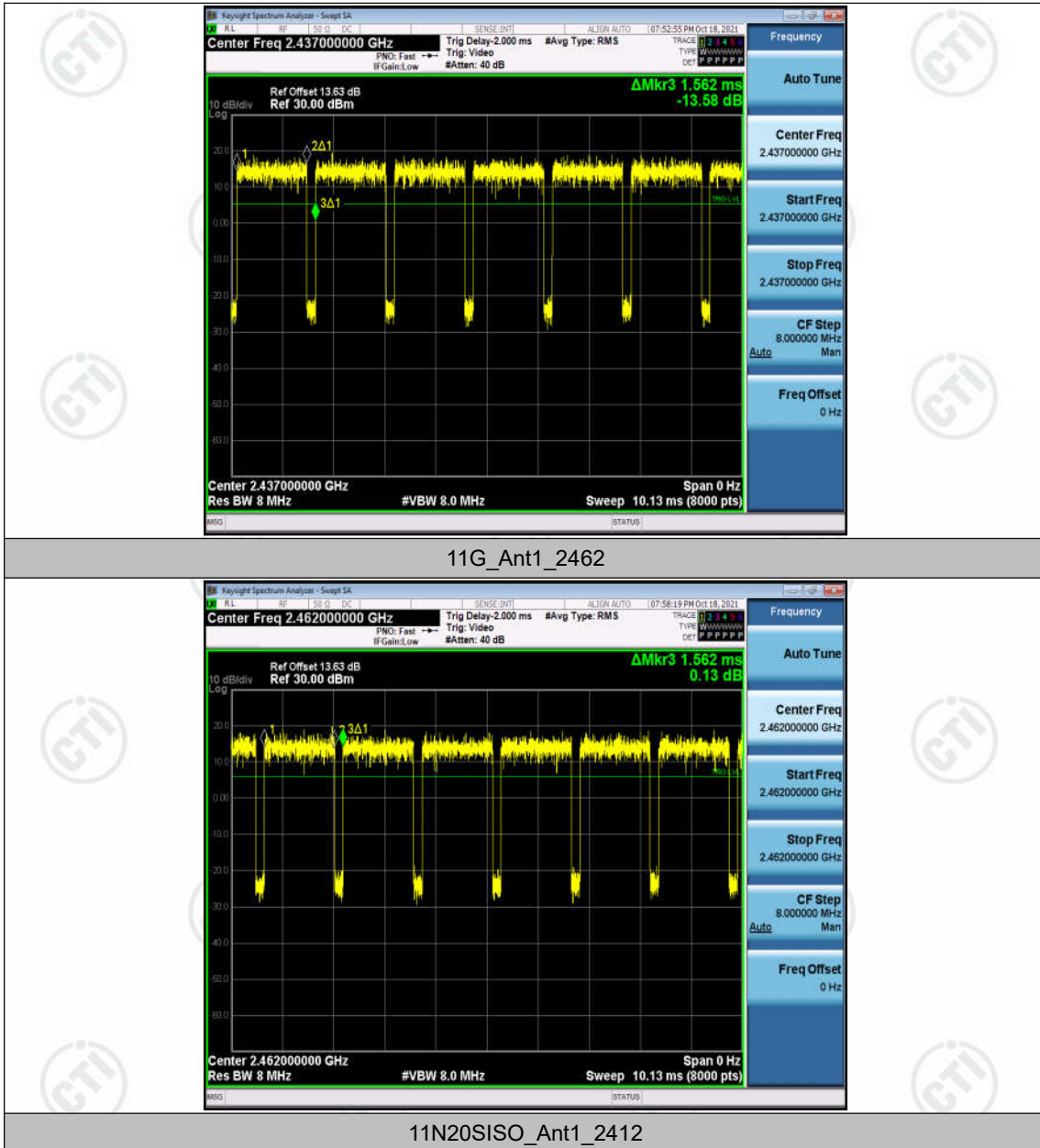
### Test Result

TestMode	Antenna	Channel	TransmissionDuration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	4.99	5.16	96.71	---	PASS
		2437	4.99	5.16	96.76	---	PASS
		2462	4.99	5.16	96.76	---	PASS
11G	Ant1	2412	1.39	1.56	88.90	---	PASS
		2437	1.39	1.56	88.97	---	PASS
		2462	1.39	1.56	88.97	---	PASS
11N20SIS O	Ant1	2412	2.55	2.72	93.66	---	PASS
		2437	2.55	2.72	93.66	---	PASS
		2462	2.54	2.72	93.62	---	PASS
11N40SIS O	Ant1	2422	1.24	1.41	87.78	---	PASS
		2437	1.24	1.41	87.78	---	PASS
		2452	1.24	1.41	87.78	---	PASS

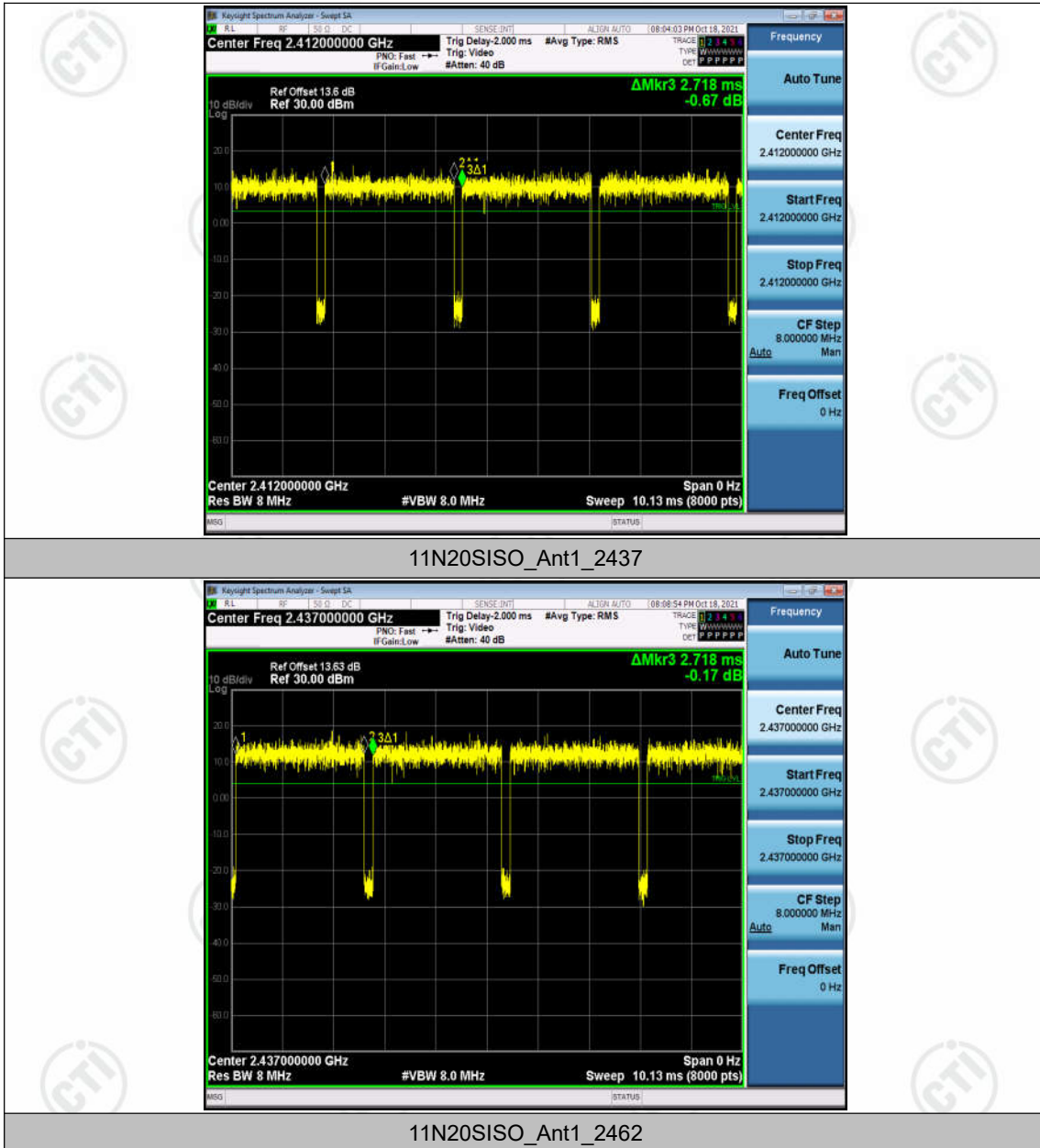
## Test Graphs





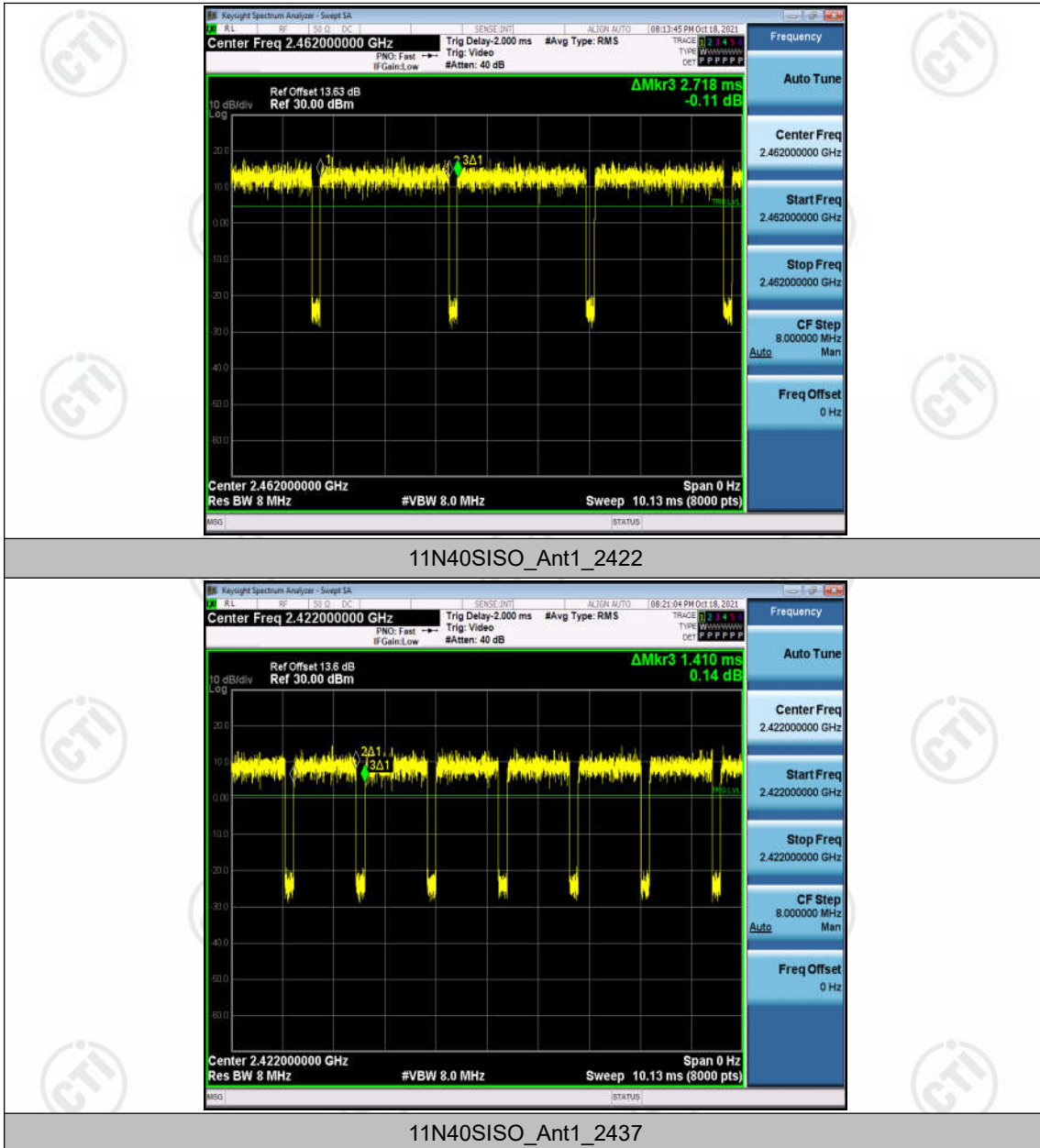


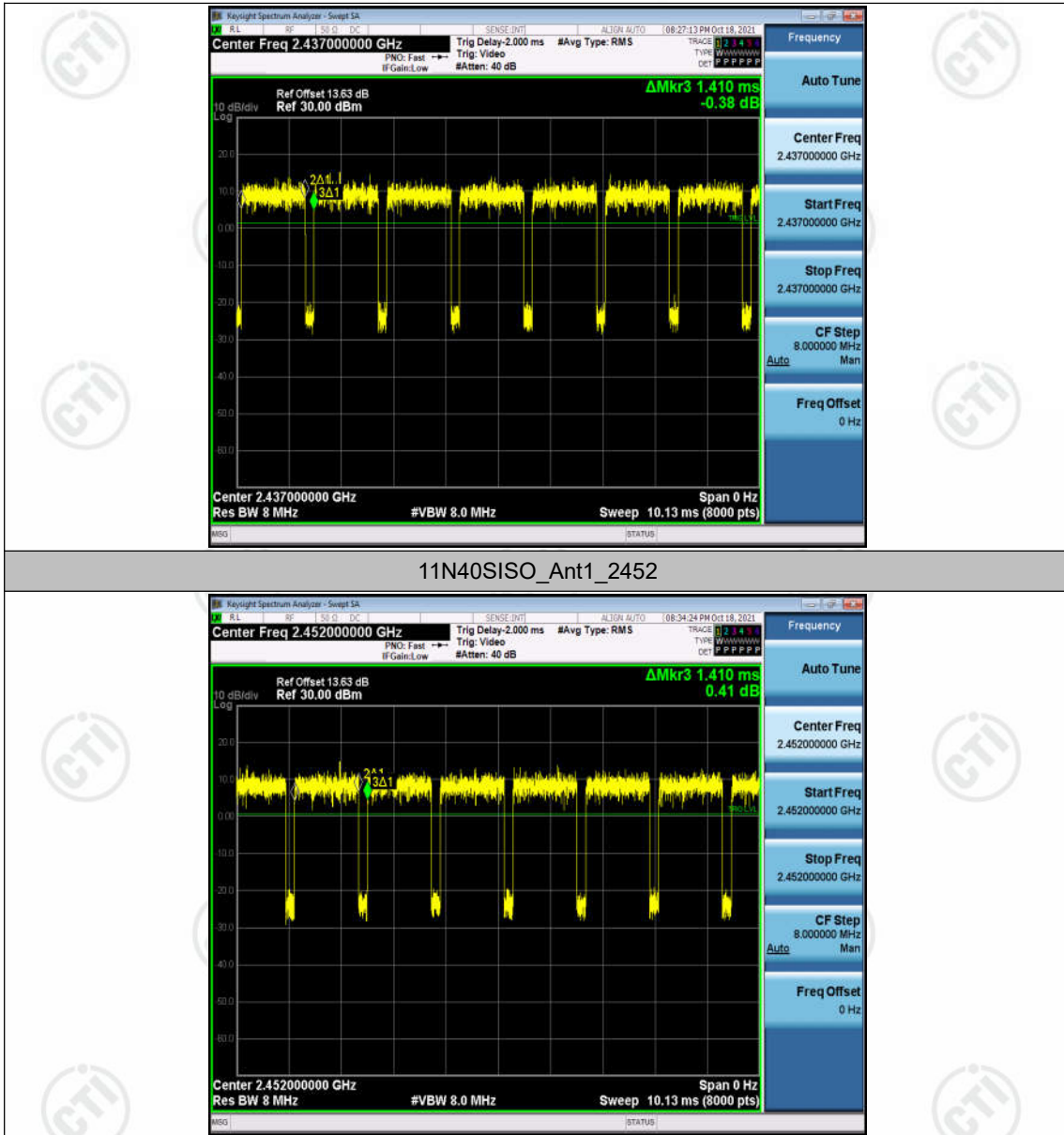




11N20SISO\_Ant1\_2437

11N20SISO\_Ant1\_2462





11N40SISO\_Ant1\_2452

\*\*\* End of Report \*\*\*