

Appendix Test Data for WLAN(2. 4G) (Conducted Measurement)

Product Name: DOCKSTREAM RFID Smart Fountain

Trade Mark: PETLIBRO

Test Model: PLWF305

FCC ID: 2A3DE-PLWF305

Environmental Conditions

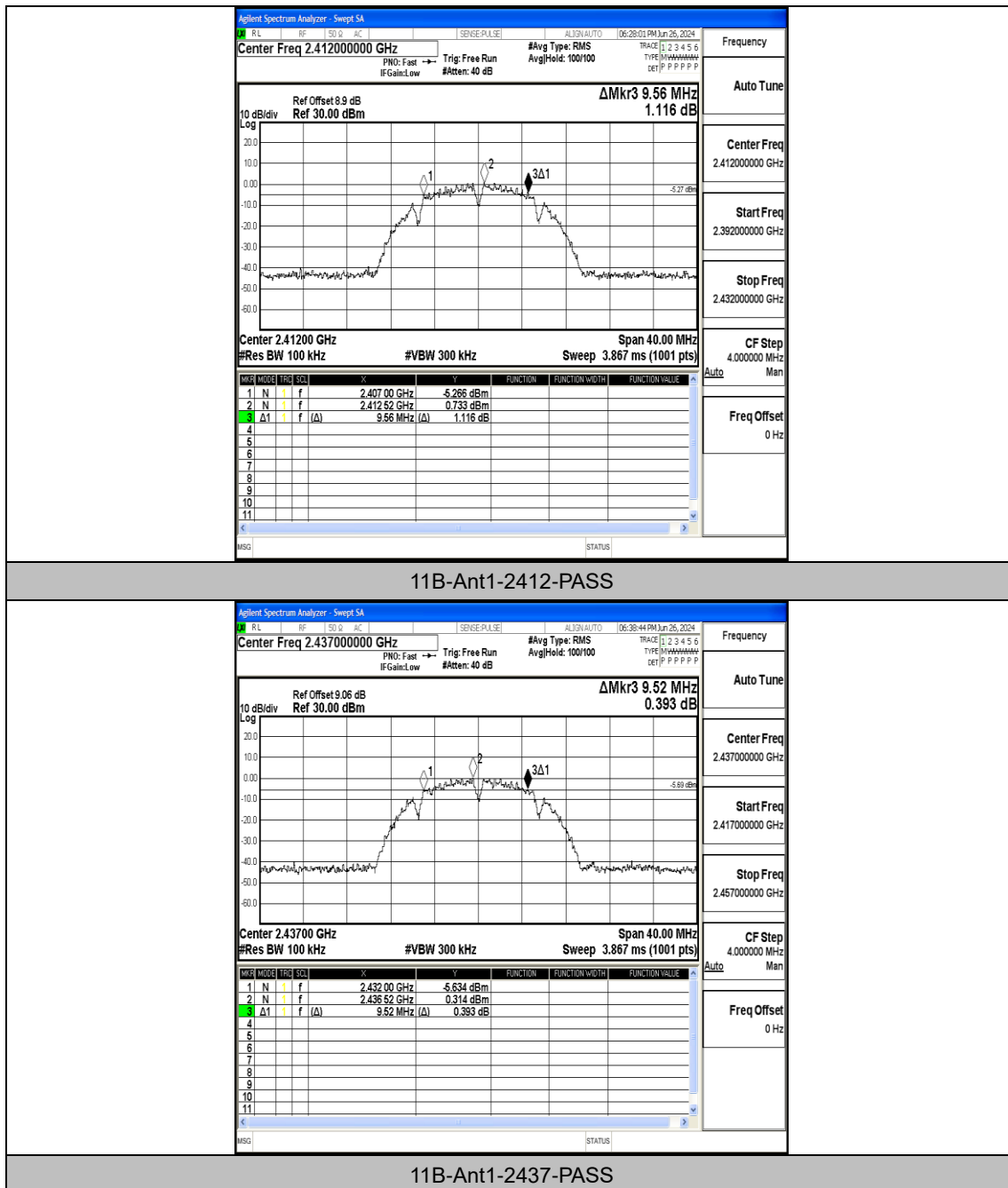
Temperature:	23.5℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

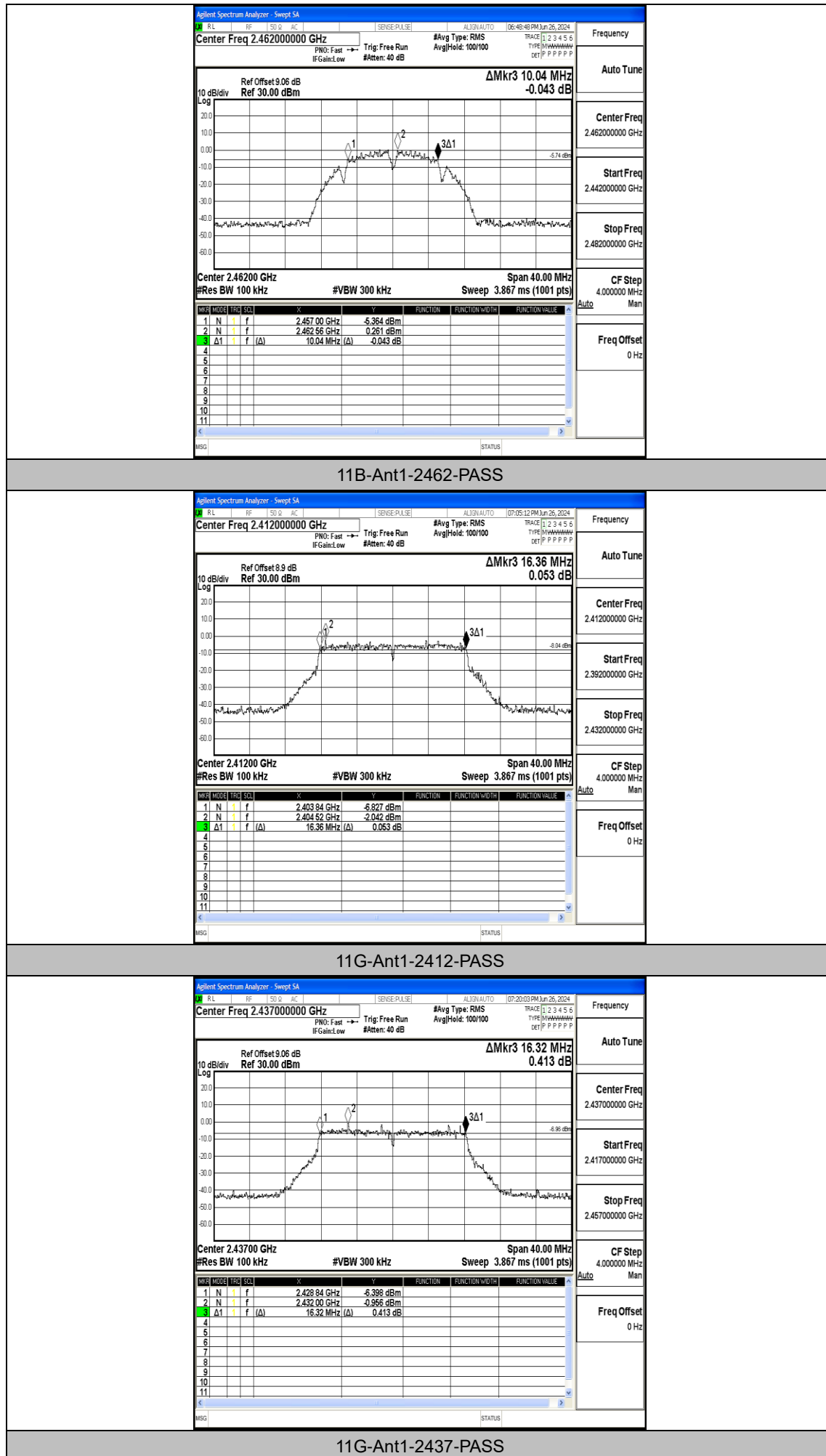
Appendix A: DTS Bandwidth

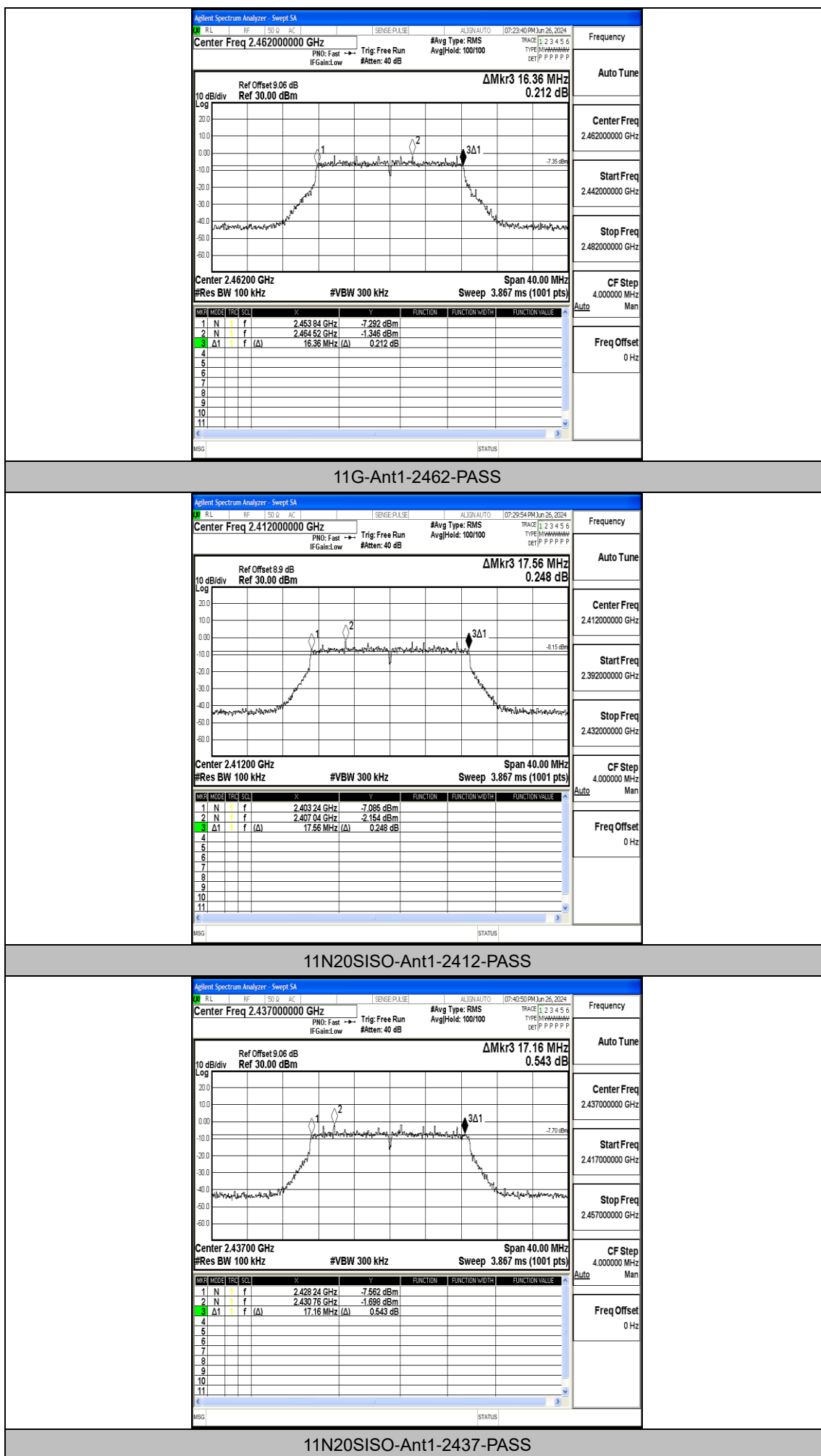
Test Result

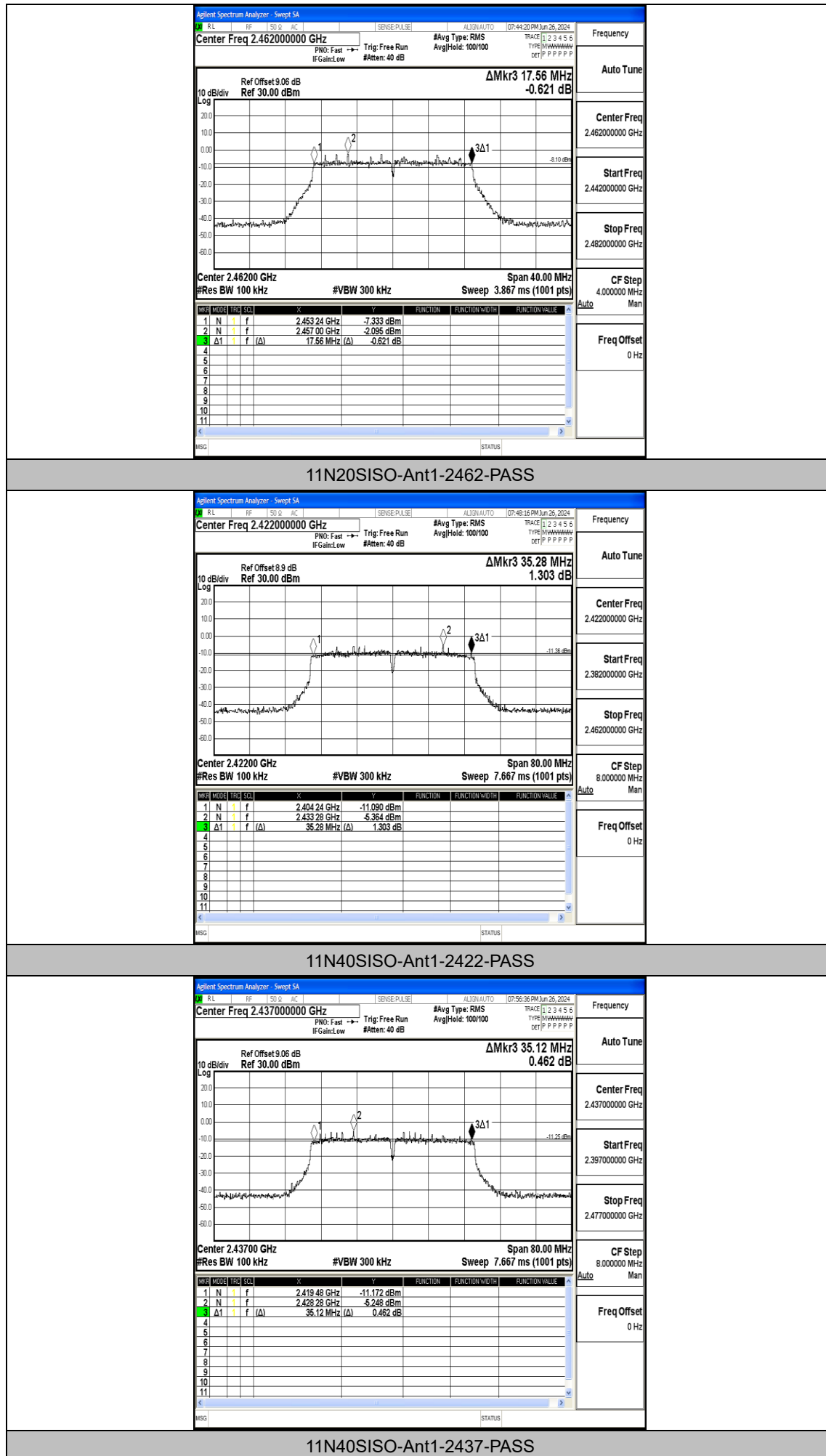
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.560	2407.000	2416.560	0.5	PASS
11B	Ant1	2437	9.520	2432.000	2441.520	0.5	PASS
11B	Ant1	2462	10.040	2457.000	2467.040	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
11G	Ant1	2437	16.320	2428.840	2445.160	0.5	PASS
11G	Ant1	2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.240	2420.800	0.5	PASS
11N20SISO	Ant1	2437	17.160	2428.240	2445.400	0.5	PASS
11N20SISO	Ant1	2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	35.280	2404.240	2439.520	0.5	PASS
11N40SISO	Ant1	2437	35.120	2419.480	2454.600	0.5	PASS
11N40SISO	Ant1	2452	35.520	2434.240	2469.760	0.5	PASS

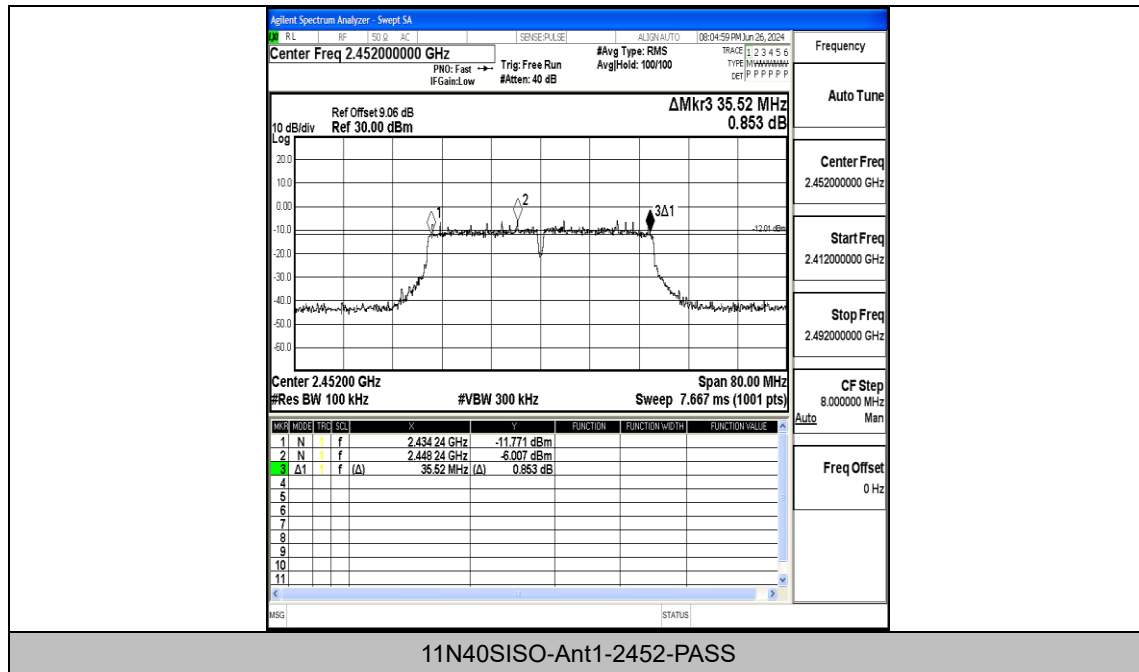
Test Graphs









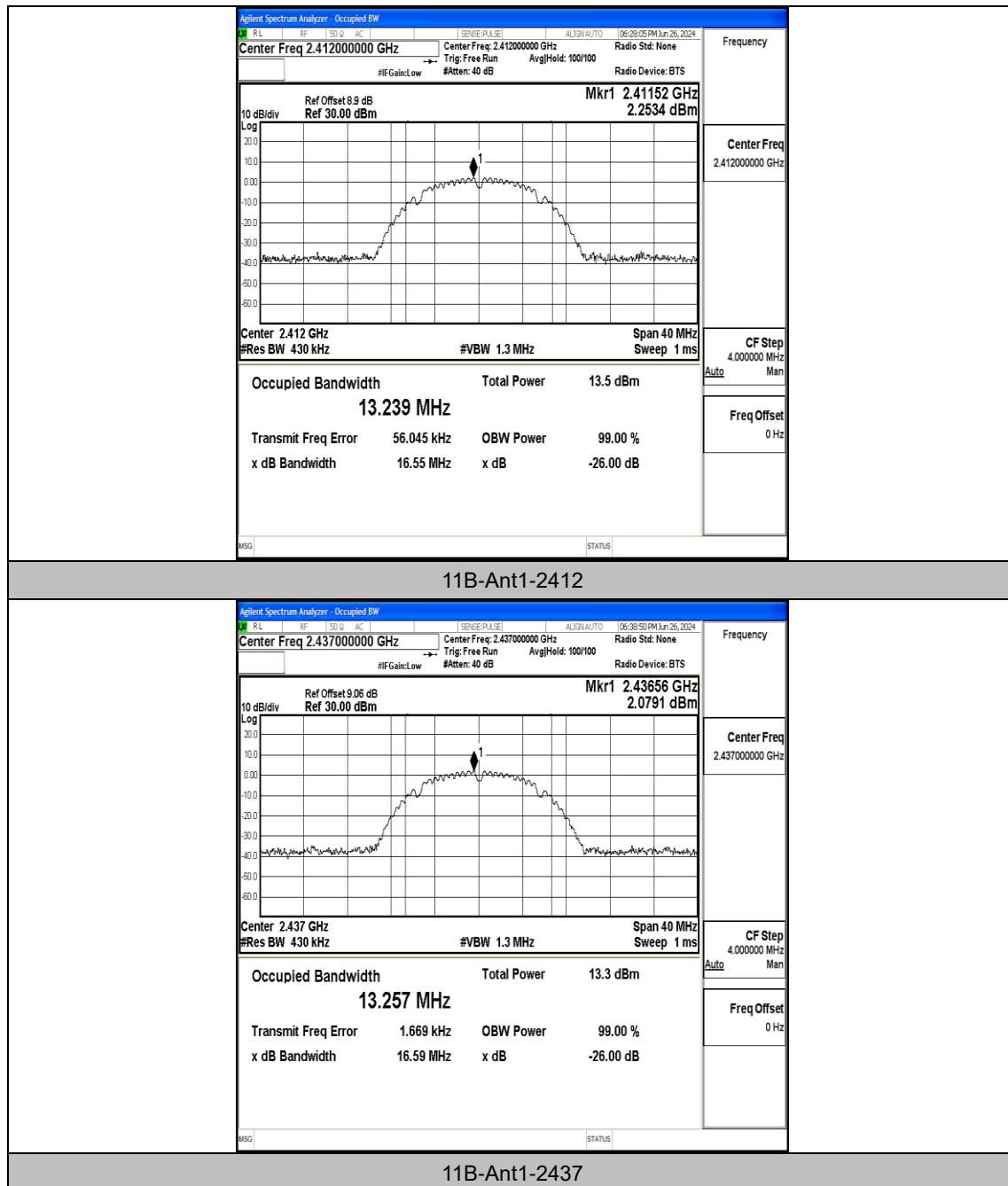


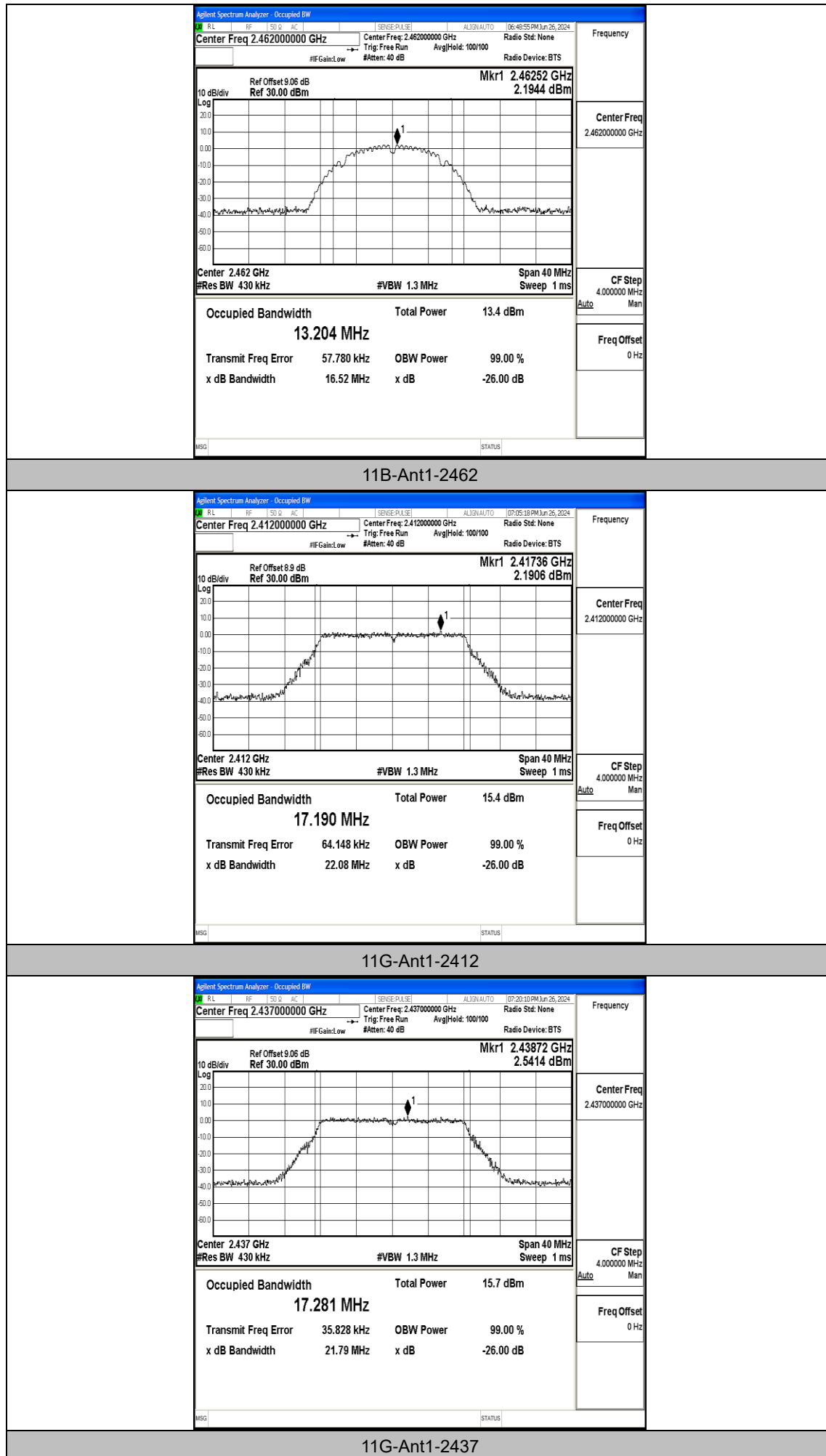
Appendix B: Occupied Channel Bandwidth

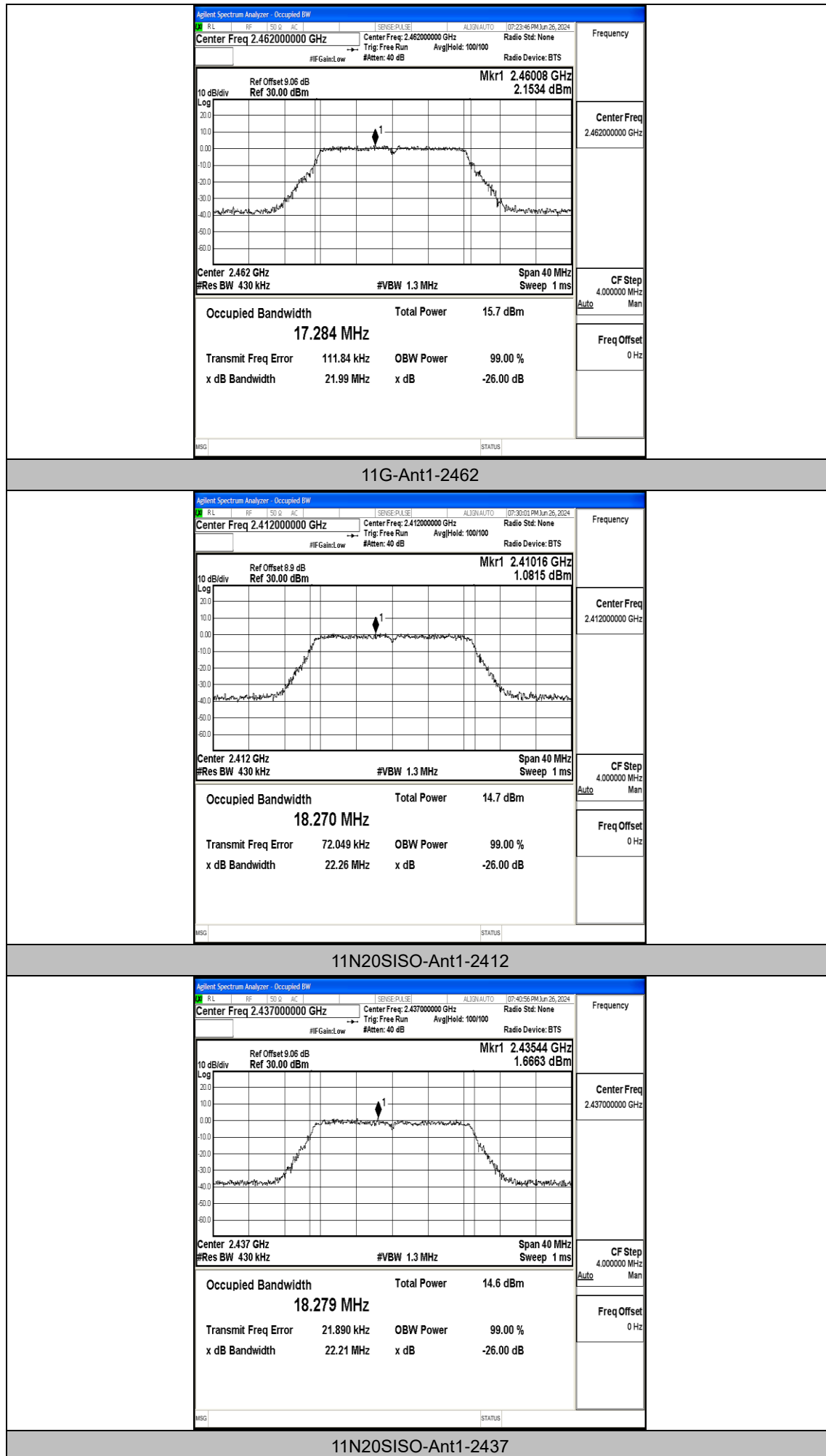
Test Result

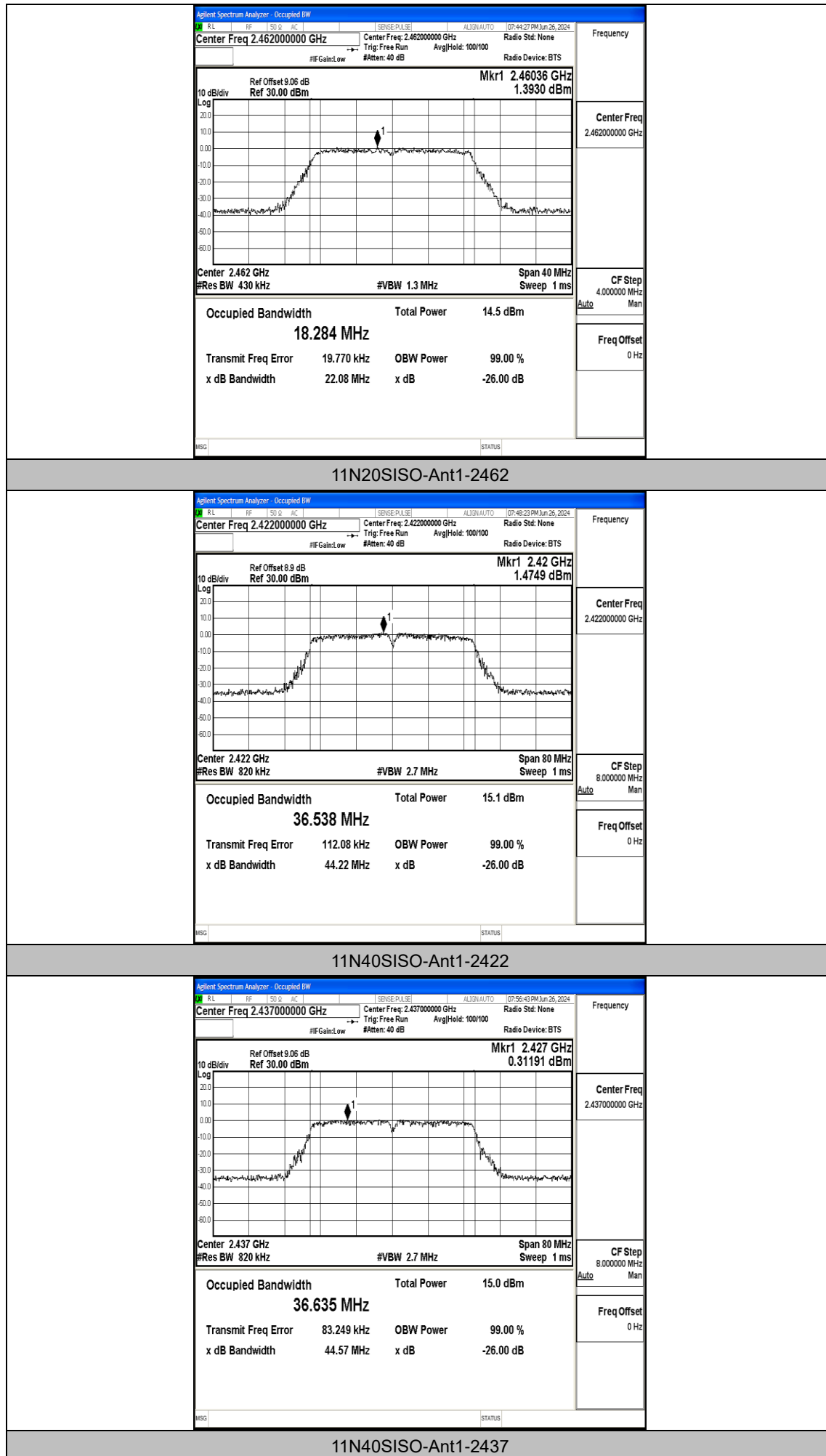
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.239	2405.4365	2418.6755	---	---
11B	Ant1	2437	13.257	2430.3732	2443.6302	---	---
11B	Ant1	2462	13.204	2455.4558	2468.6598	---	---
11G	Ant1	2412	17.190	2403.4692	2420.6592	---	---
11G	Ant1	2437	17.281	2428.3953	2445.6763	---	---
11G	Ant1	2462	17.284	2453.4698	2470.7538	---	---
11N20SISO	Ant1	2412	18.270	2402.9371	2421.2071	---	---
11N20SISO	Ant1	2437	18.279	2427.8824	2446.1614	---	---
11N20SISO	Ant1	2462	18.284	2452.8778	2471.1618	---	---
11N40SISO	Ant1	2422	36.538	2403.8431	2440.3811	---	---
11N40SISO	Ant1	2437	36.635	2418.7658	2455.4008	---	---
11N40SISO	Ant1	2452	36.749	2433.8394	2470.5884	---	---

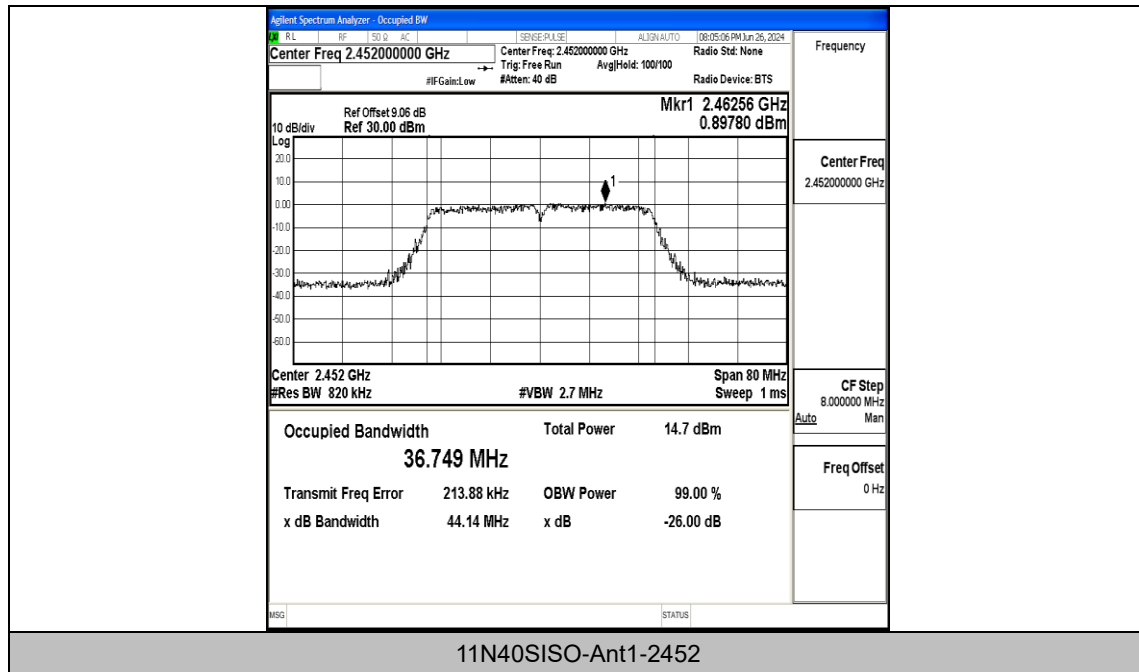
Test Graphs











Appendix C: Maximum Average conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	9.45	≤30.00	PASS
11B	Ant1	2437	9.34	≤30.00	PASS
11B	Ant1	2462	10.43	≤30.00	PASS
11G	Ant1	2412	10.00	≤30.00	PASS
11G	Ant1	2437	10.30	≤30.00	PASS
11G	Ant1	2462	10.66	≤30.00	PASS
11N20SISO	Ant1	2412	9.76	≤30.00	PASS
11N20SISO	Ant1	2437	8.94	≤30.00	PASS
11N20SISO	Ant1	2462	9.14	≤30.00	PASS
11N40SISO	Ant1	2422	9.18	≤30.00	PASS
11N40SISO	Ant1	2437	7.89	≤30.00	PASS
11N40SISO	Ant1	2452	9.51	≤30.00	PASS

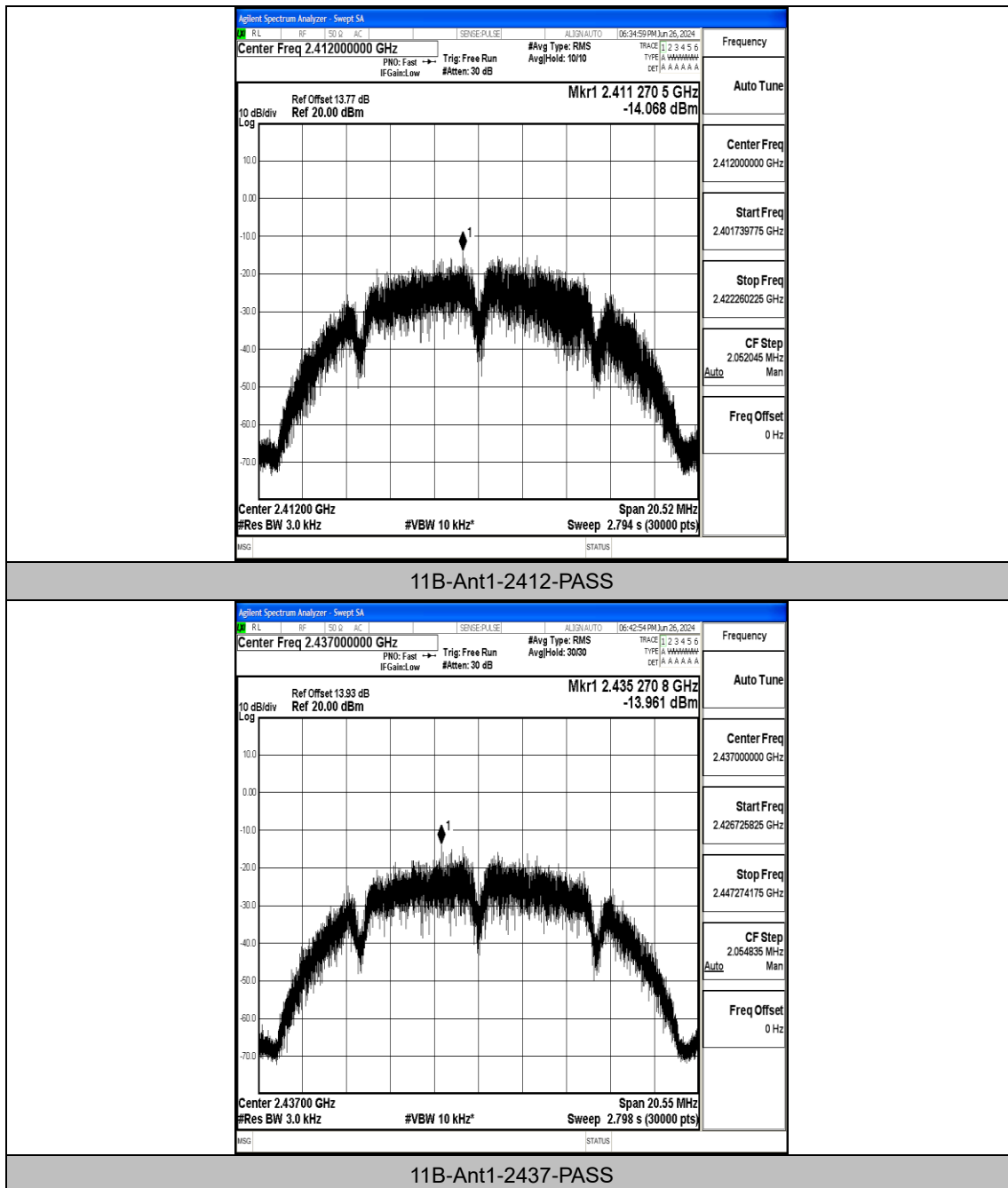
Note: The Duty Cycle Factor is compensated in the result.

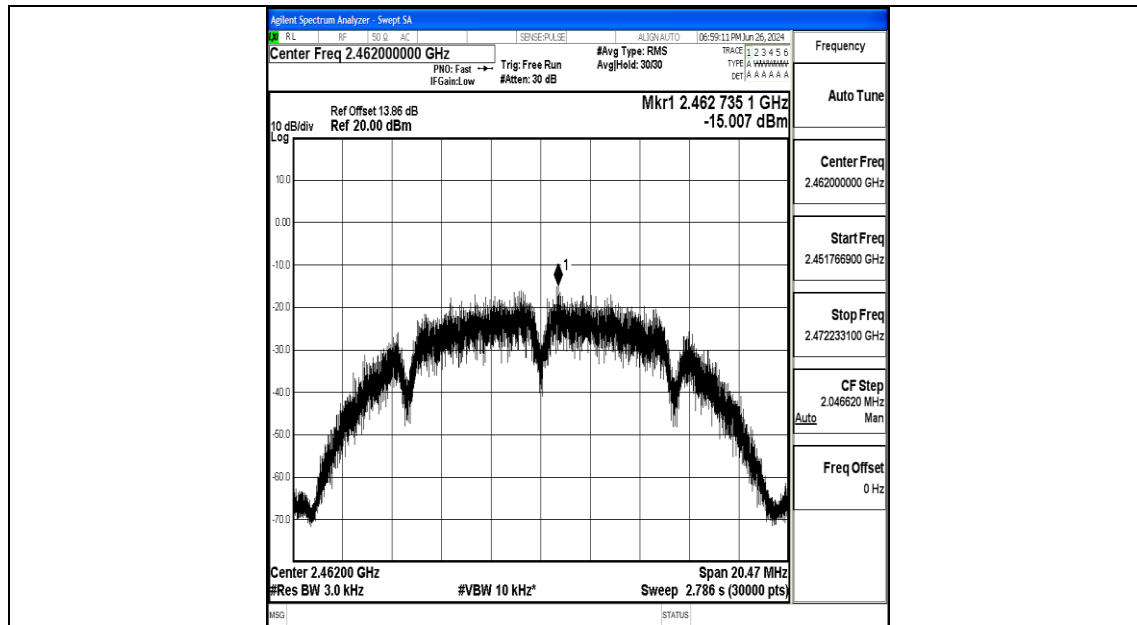
Appendix D: Maximum Average power spectral density

Test Result

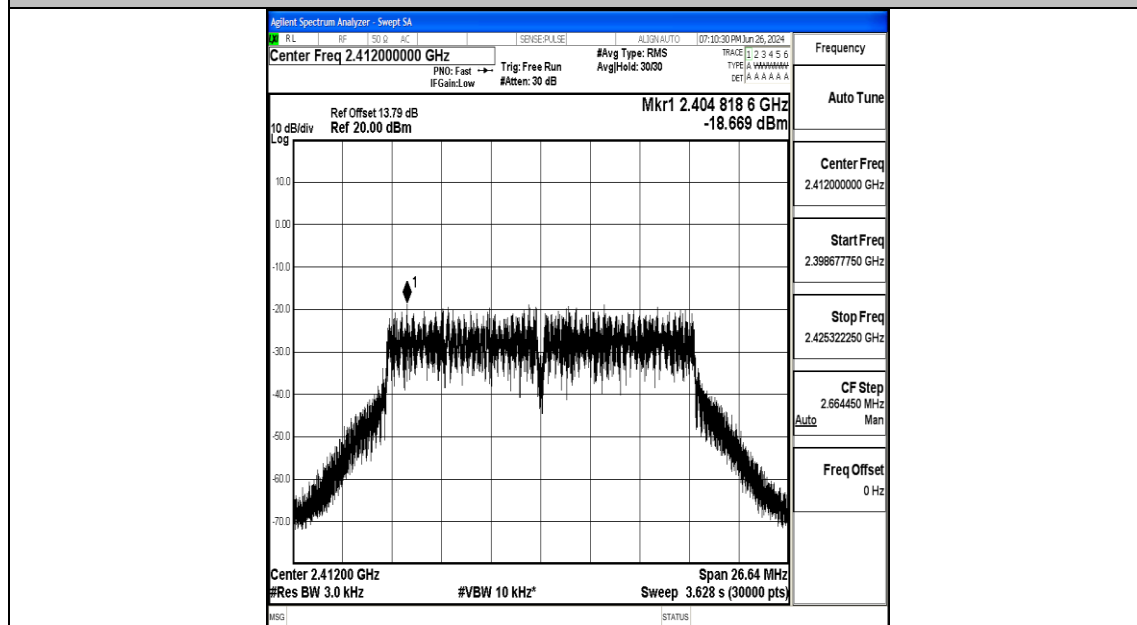
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.07	≤8.00	PASS
11B	Ant1	2437	-13.96	≤8.00	PASS
11B	Ant1	2462	-15.01	≤8.00	PASS
11G	Ant1	2412	-18.67	≤8.00	PASS
11G	Ant1	2437	-18.28	≤8.00	PASS
11G	Ant1	2462	-17.13	≤8.00	PASS
11N20SISO	Ant1	2412	-17.16	≤8.00	PASS
11N20SISO	Ant1	2437	-18.87	≤8.00	PASS
11N20SISO	Ant1	2462	-18.44	≤8.00	PASS
11N40SISO	Ant1	2422	-22.56	≤8.00	PASS
11N40SISO	Ant1	2437	-22.32	≤8.00	PASS
11N40SISO	Ant1	2452	-21.79	≤8.00	PASS

Test Graphs

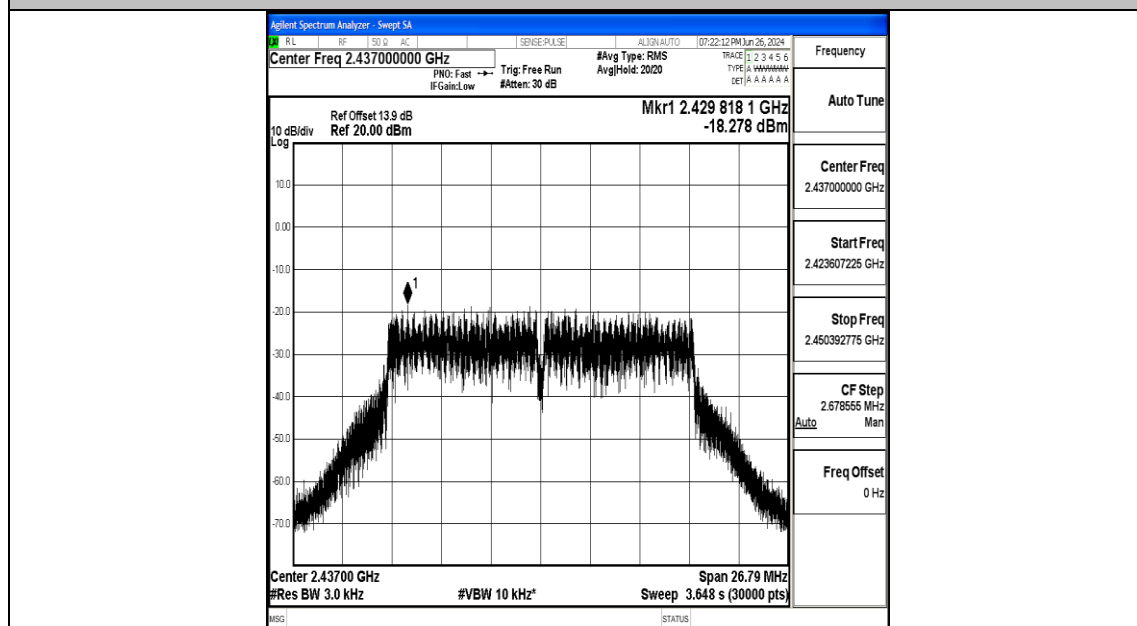




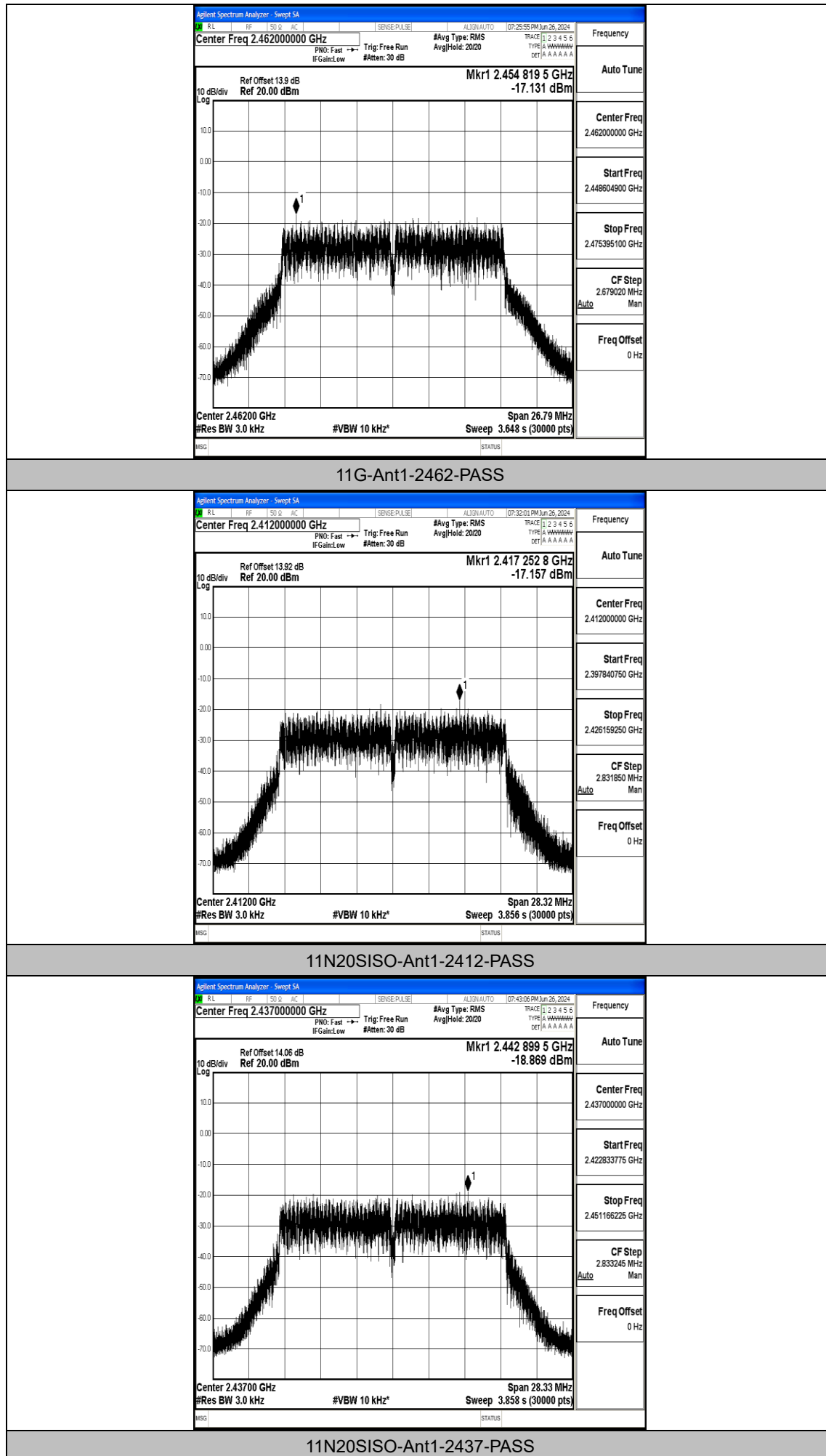
11B-Ant1-2462-PASS

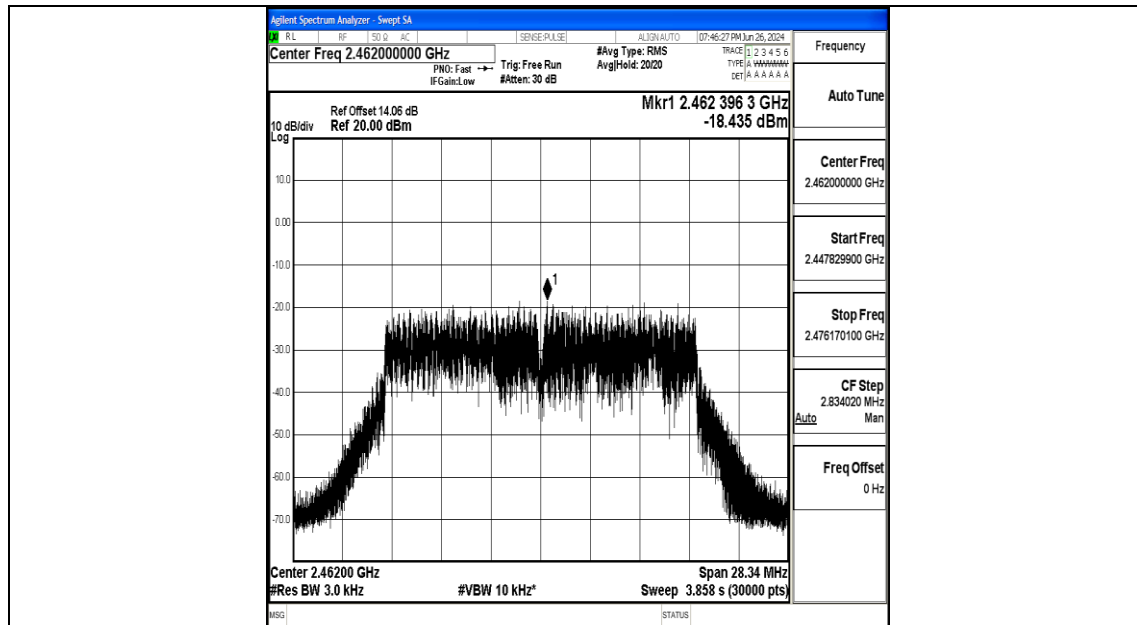


11G-Ant1-2412-PASS

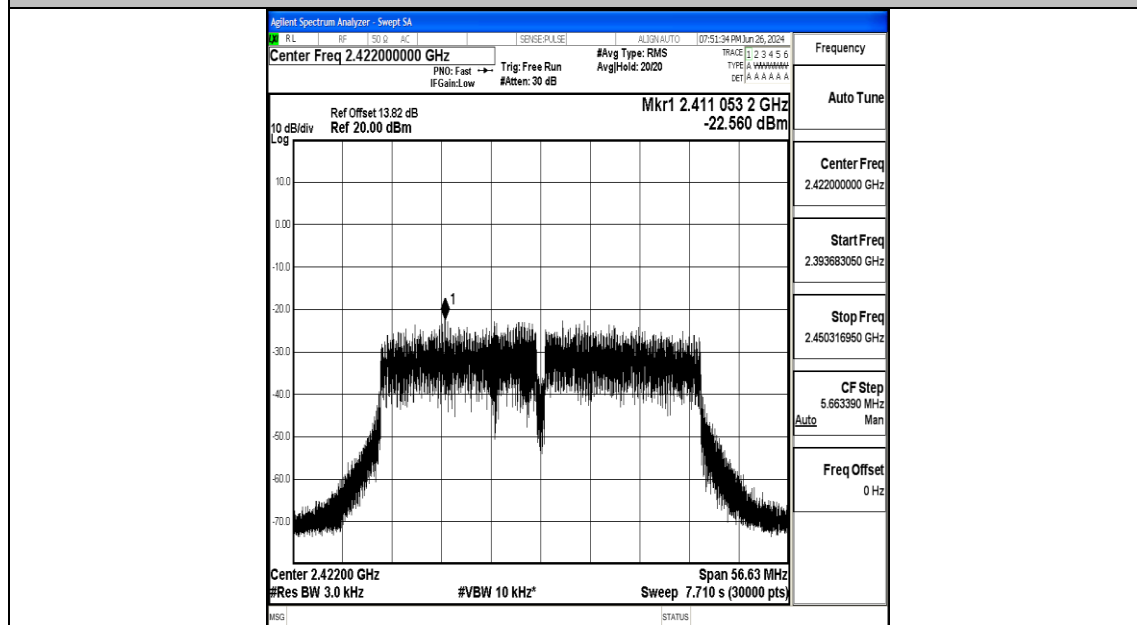


11G-Ant1-2437-PASS

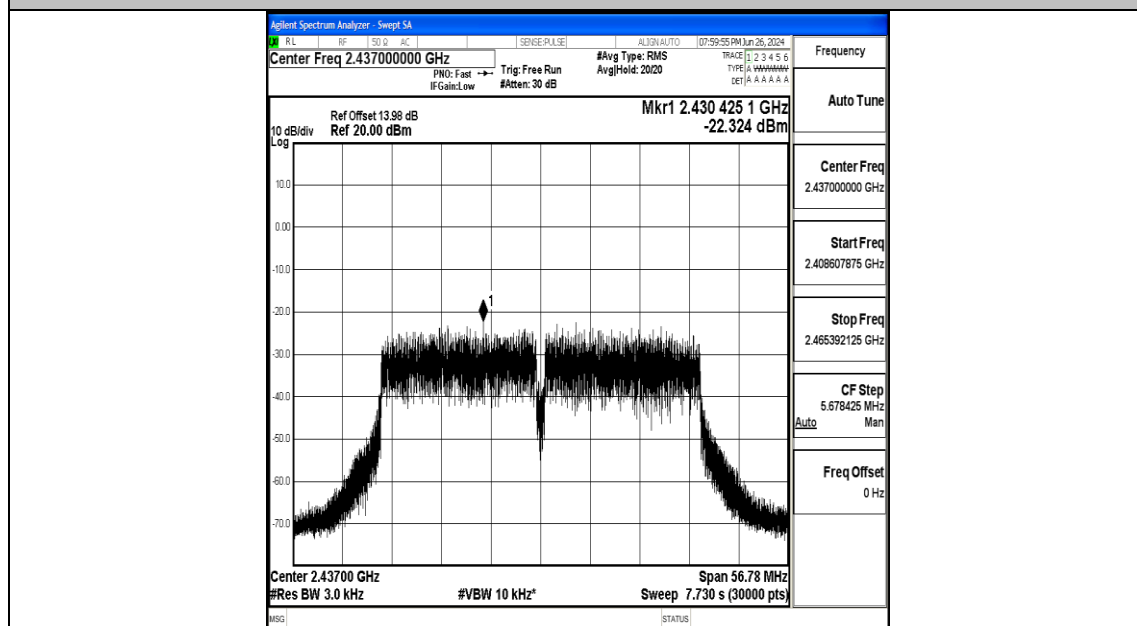




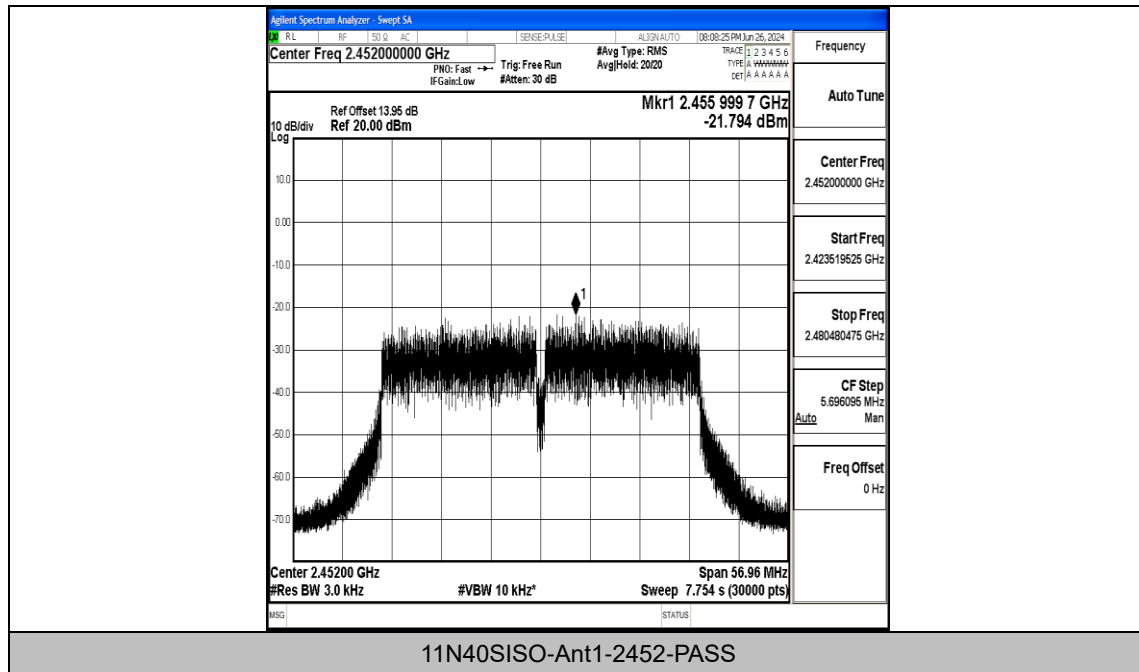
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS

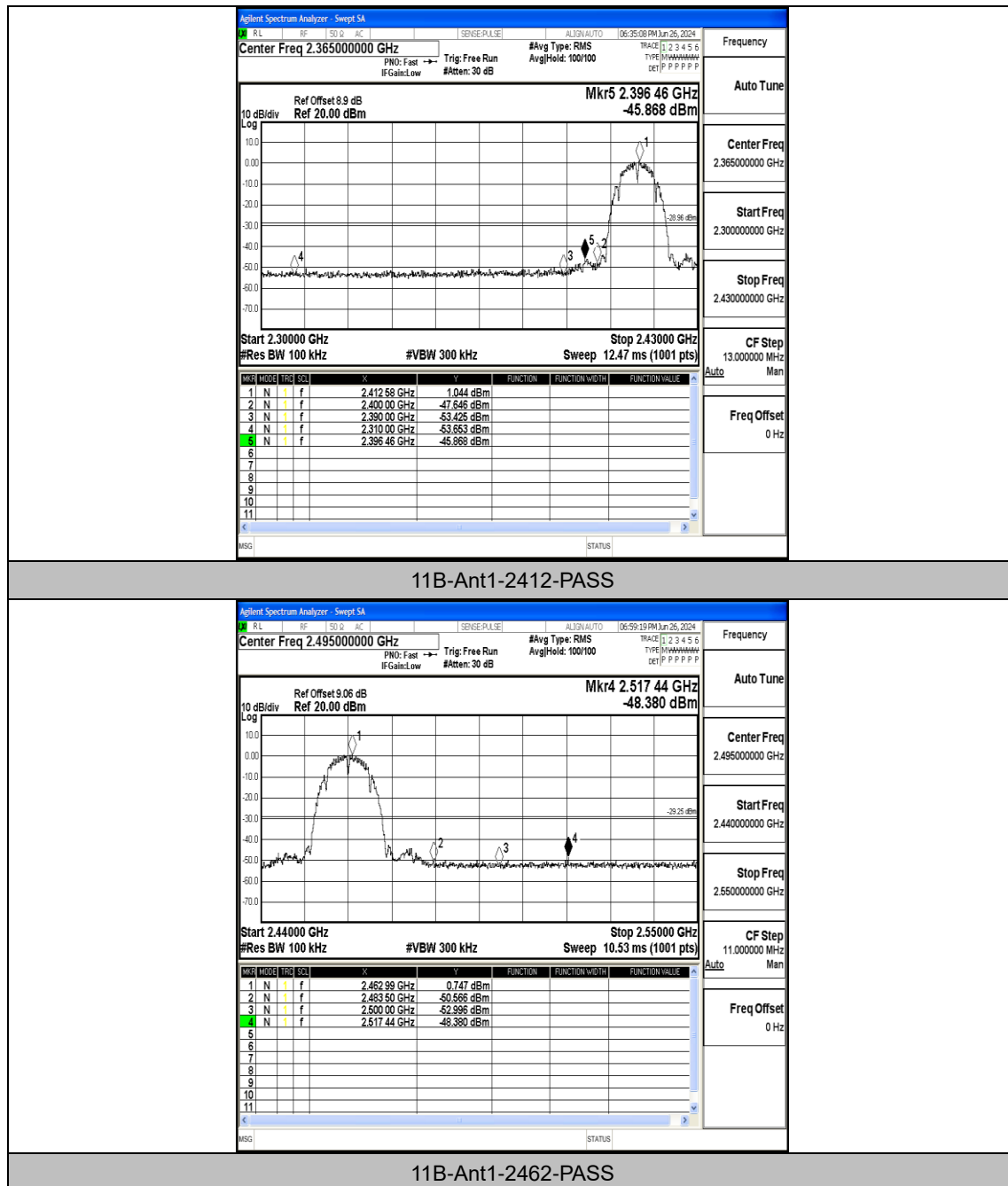


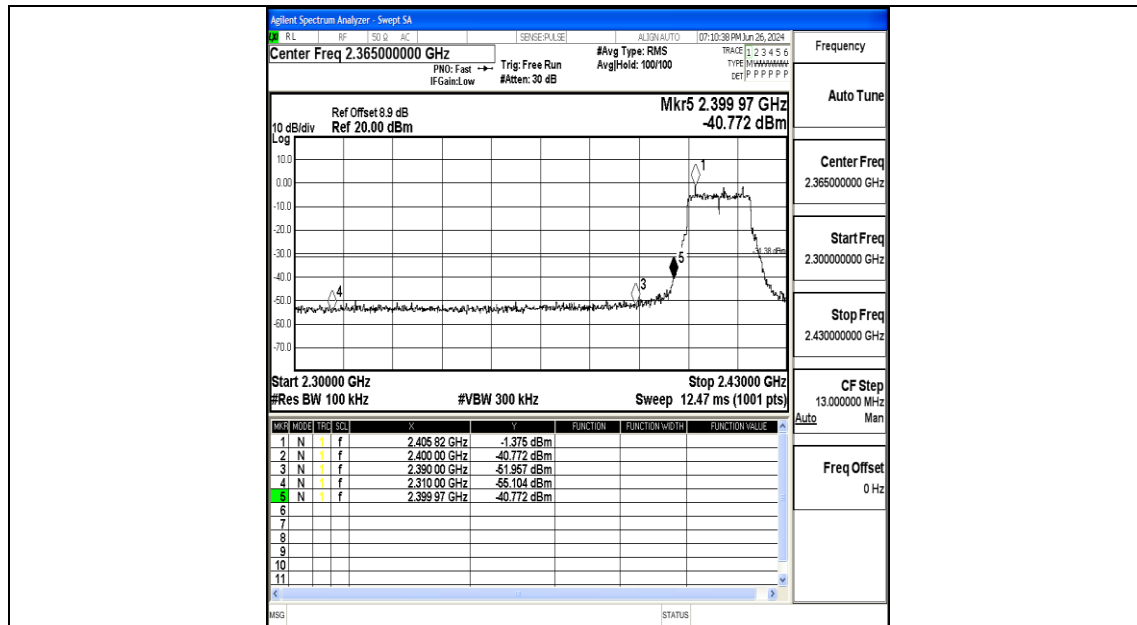
Appendix E: Band edge measurements

Test Result

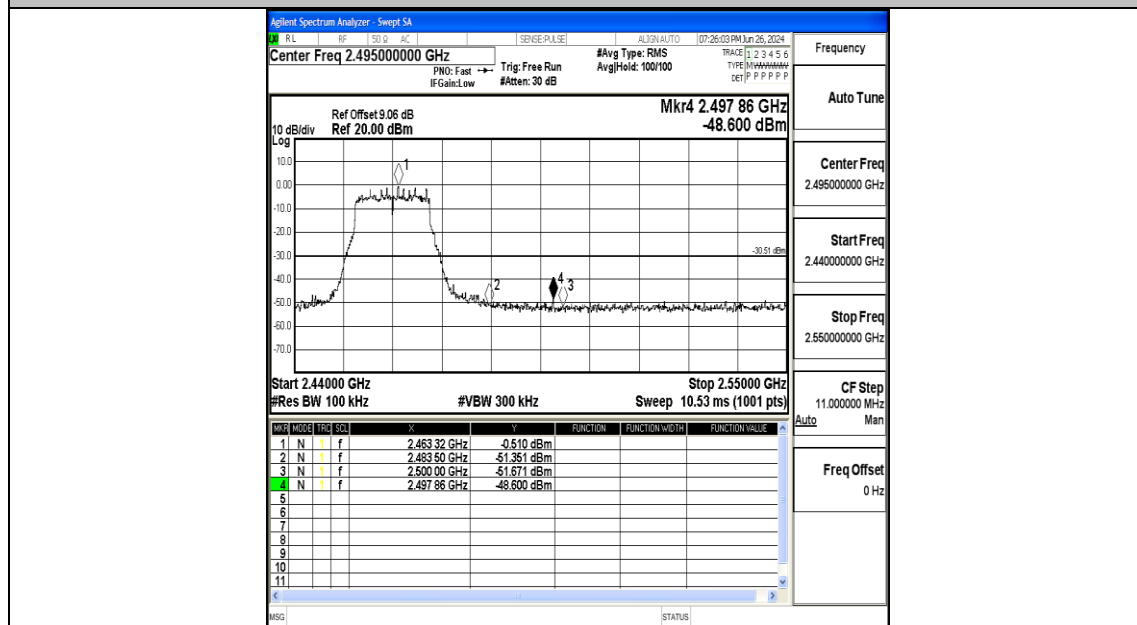
TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.04	-45.87	≤-28.96	PASS
11B	Ant1	High	2462	0.75	-48.38	≤-29.25	PASS
11G	Ant1	Low	2412	-1.38	-40.77	≤-31.38	PASS
11G	Ant1	High	2462	-0.51	-48.6	≤-30.51	PASS
11N20SISO	Ant1	Low	2412	-1.89	-40.99	≤-31.89	PASS
11N20SISO	Ant1	High	2462	-2.52	-47.08	≤-32.52	PASS
11N40SISO	Ant1	Low	2422	-5.09	-38.76	≤-35.09	PASS
11N40SISO	Ant1	High	2452	-5.88	-46.35	≤-35.88	PASS

Test Graphs

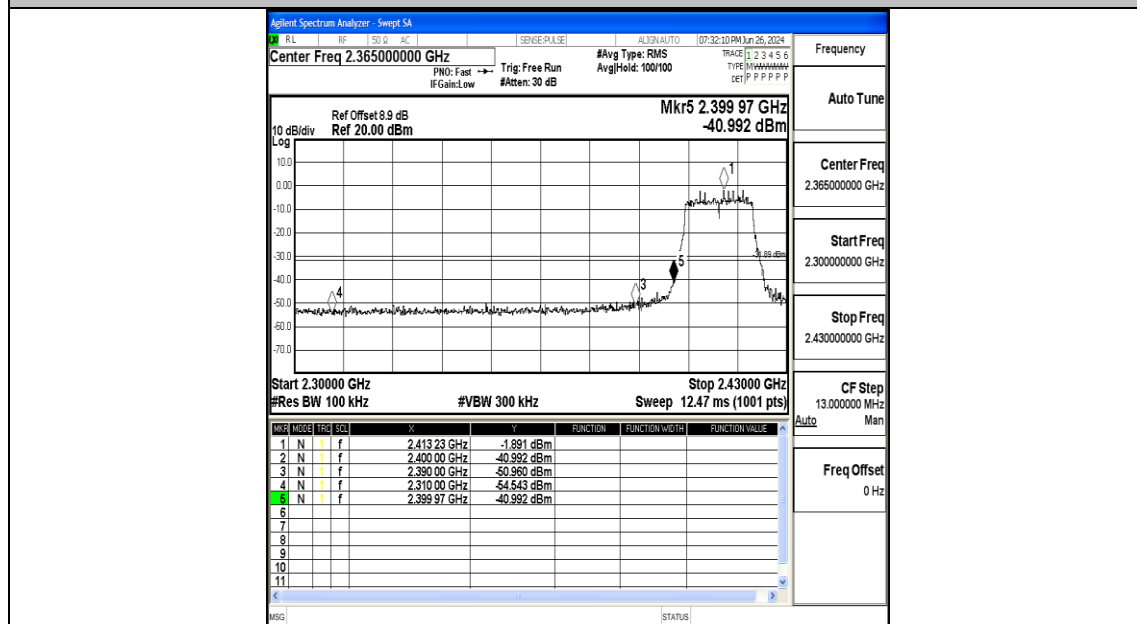




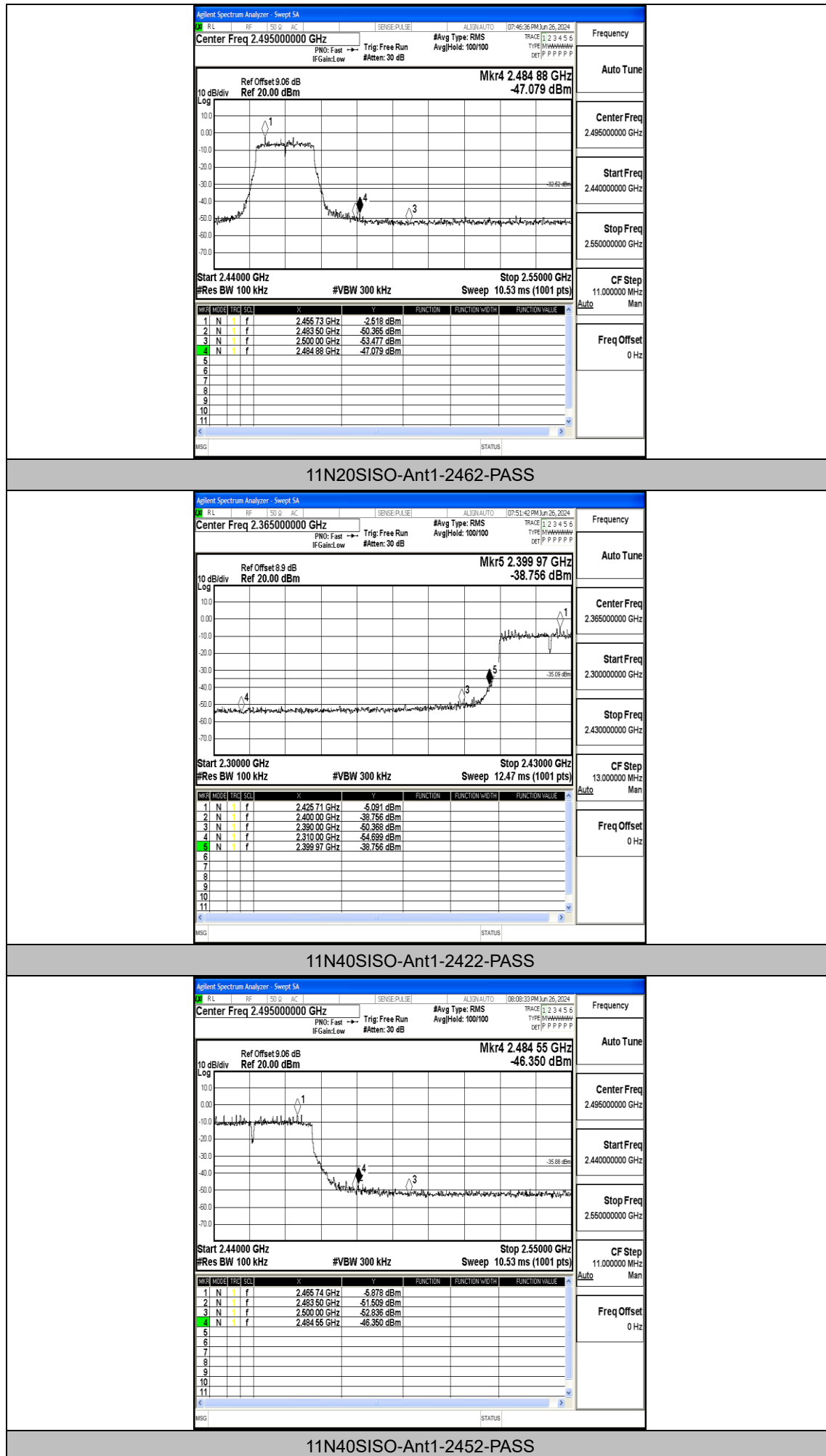
11G-Ant1-2412-PASS



11G-Ant1-2462-PASS



11N20ISO-Ant1-2412-PASS

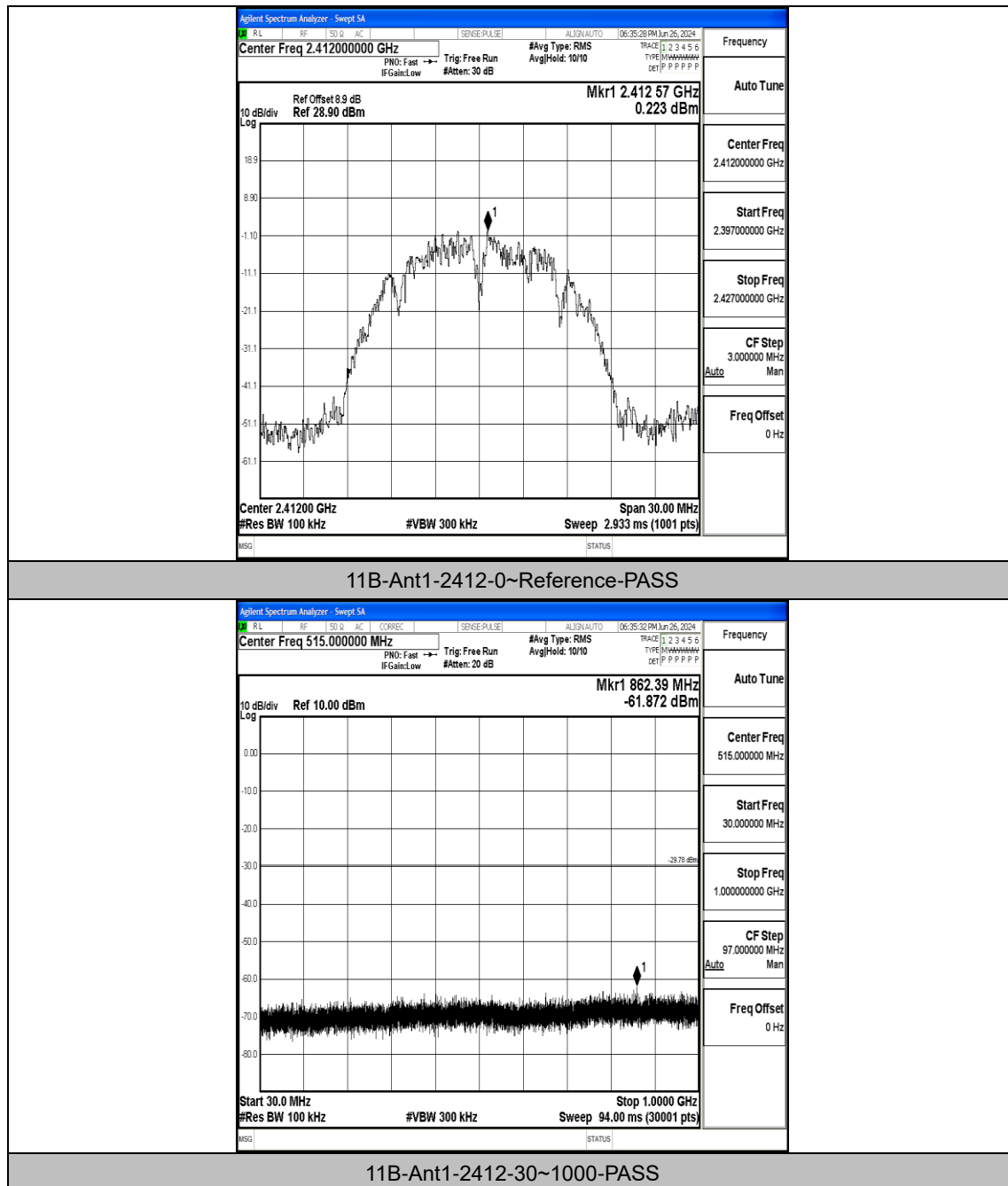


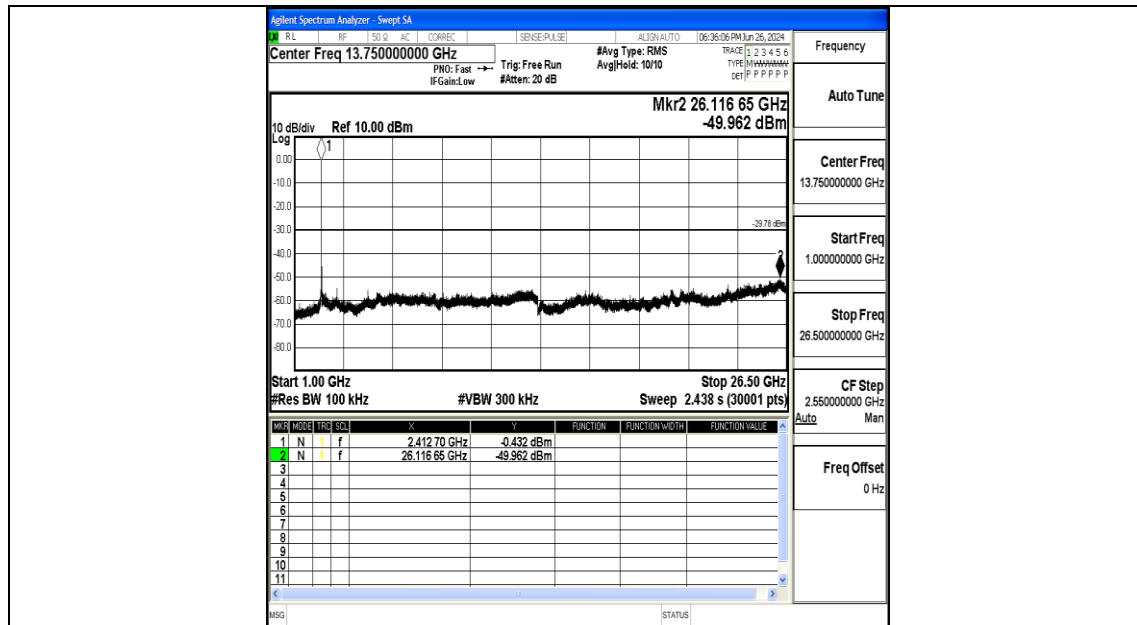
Appendix F: Conducted Spurious Emission

Test Result

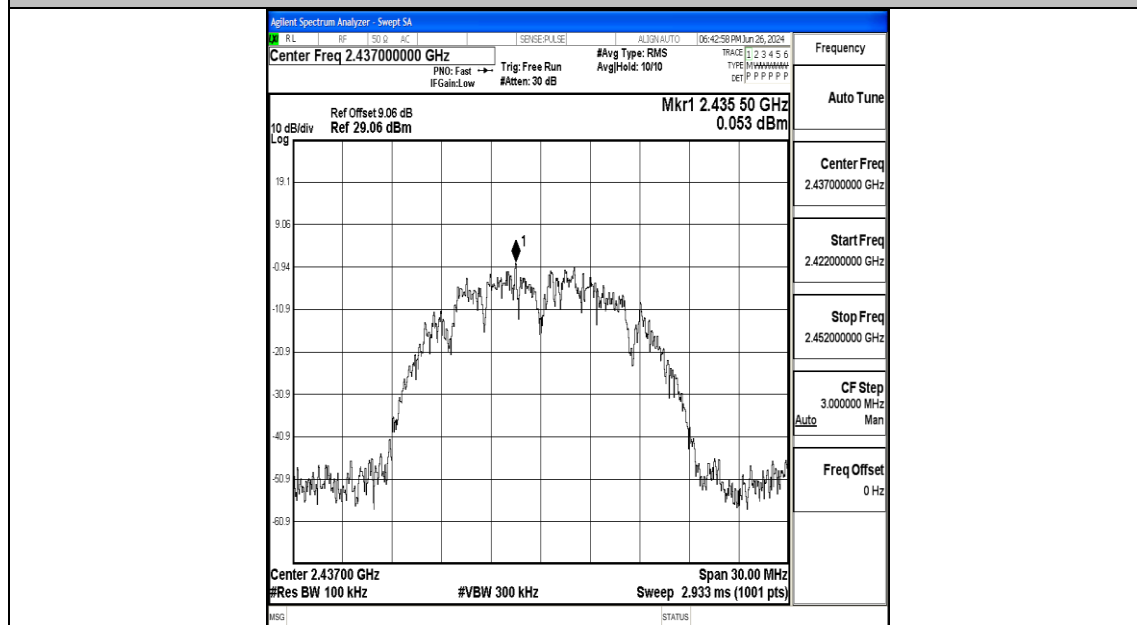
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	0.22	0.22	---	PASS
11B	Ant1	2412	30~1000	0.22	-61.87	≤-29.78	PASS
11B	Ant1	2412	1000~26500	0.22	-49.96	≤-29.78	PASS
11B	Ant1	2437	0~Reference	0.05	0.05	---	PASS
11B	Ant1	2437	30~1000	0.05	-62.44	≤-29.95	PASS
11B	Ant1	2437	1000~26500	0.05	-49.9	≤-29.95	PASS
11B	Ant1	2462	0~Reference	0.20	0.20	---	PASS
11B	Ant1	2462	30~1000	0.20	-60.79	≤-29.8	PASS
11B	Ant1	2462	1000~26500	0.20	-50.49	≤-29.8	PASS
11G	Ant1	2412	0~Reference	-4.59	-4.59	---	PASS
11G	Ant1	2412	30~1000	-4.59	-62.33	≤-34.59	PASS
11G	Ant1	2412	1000~26500	-4.59	-50.02	≤-34.59	PASS
11G	Ant1	2437	0~Reference	-3.54	-3.54	---	PASS
11G	Ant1	2437	30~1000	-3.54	-62.36	≤-33.54	PASS
11G	Ant1	2437	1000~26500	-3.54	-49.89	≤-33.54	PASS
11G	Ant1	2462	0~Reference	-1.19	-1.19	---	PASS
11G	Ant1	2462	30~1000	-1.19	-62.69	≤-31.19	PASS
11G	Ant1	2462	1000~26500	-1.19	-50.07	≤-31.19	PASS
11N20SISO	Ant1	2412	0~Reference	-4.05	-4.05	---	PASS
11N20SISO	Ant1	2412	30~1000	-4.05	-62.39	≤-34.05	PASS
11N20SISO	Ant1	2412	1000~26500	-4.05	-49.9	≤-34.05	PASS
11N20SISO	Ant1	2437	0~Reference	-5.98	-5.98	---	PASS
11N20SISO	Ant1	2437	30~1000	-5.98	-62.01	≤-35.98	PASS
11N20SISO	Ant1	2437	1000~26500	-5.98	-50.09	≤-35.98	PASS
11N20SISO	Ant1	2462	0~Reference	-5.00	-5.00	---	PASS
11N20SISO	Ant1	2462	30~1000	-5.00	-63.02	≤-35	PASS
11N20SISO	Ant1	2462	1000~26500	-5.00	-50.59	≤-35	PASS
11N40SISO	Ant1	2422	0~Reference	-5.49	-5.49	---	PASS
11N40SISO	Ant1	2422	30~1000	-5.49	-62.54	≤-35.49	PASS
11N40SISO	Ant1	2422	1000~26500	-5.49	-50.39	≤-35.49	PASS
11N40SISO	Ant1	2437	0~Reference	-6.35	-6.35	---	PASS
11N40SISO	Ant1	2437	30~1000	-6.35	-62.23	≤-36.35	PASS
11N40SISO	Ant1	2437	1000~26500	-6.35	-50.62	≤-36.35	PASS
11N40SISO	Ant1	2452	0~Reference	-7.50	-7.50	---	PASS
11N40SISO	Ant1	2452	30~1000	-7.50	-63.07	≤-37.5	PASS
11N40SISO	Ant1	2452	1000~26500	-7.50	-49.97	≤-37.5	PASS

Test Graphs

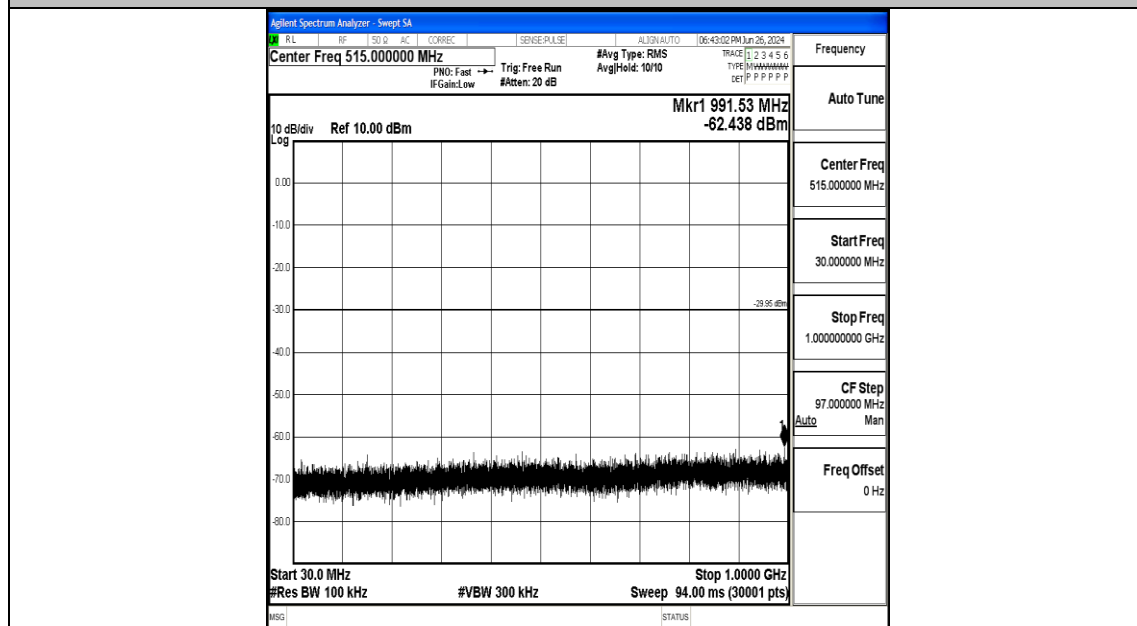




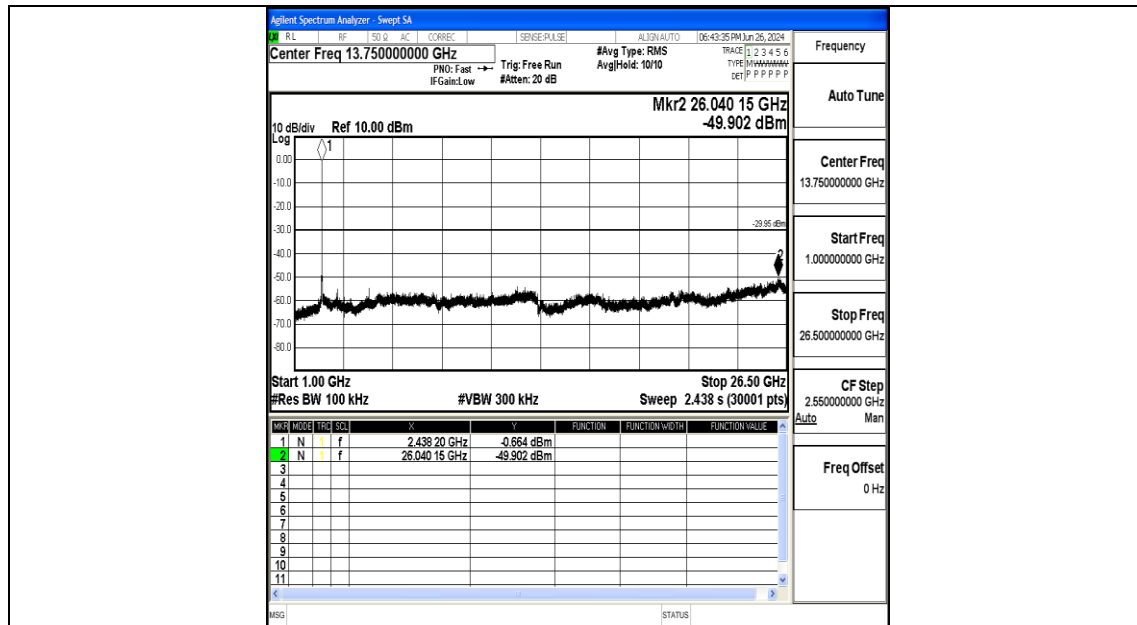
11B-Ant1-2412-1000~26500-PASS



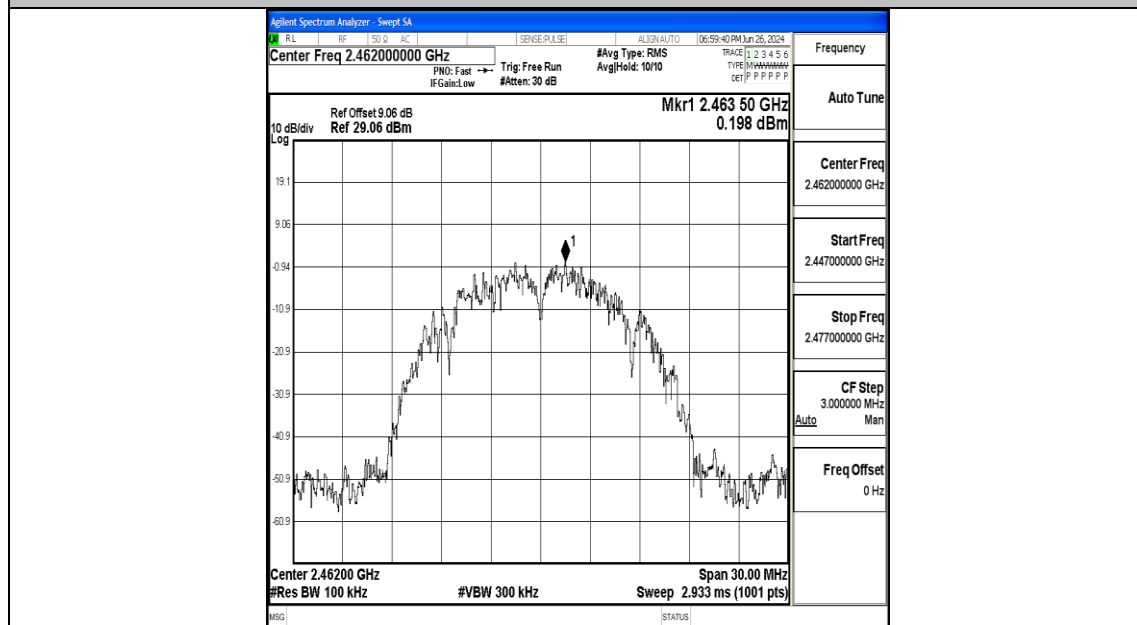
11B-Ant1-2437-0~Reference-PASS



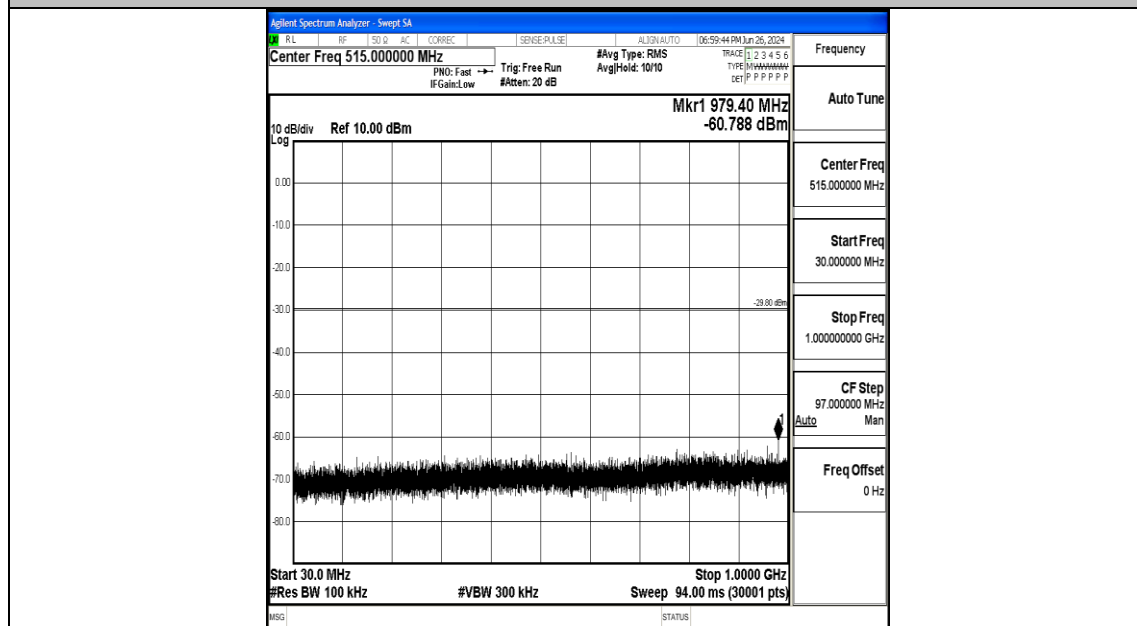
11B-Ant1-2437-30~1000-PASS



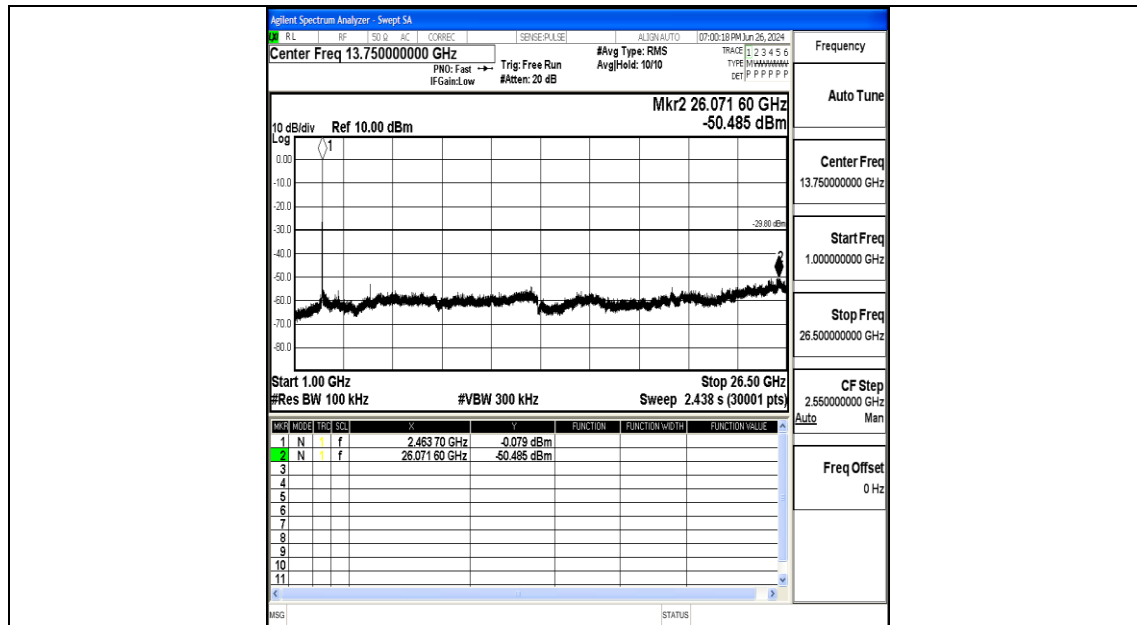
11B-Ant1-2437-1000~26500-PASS



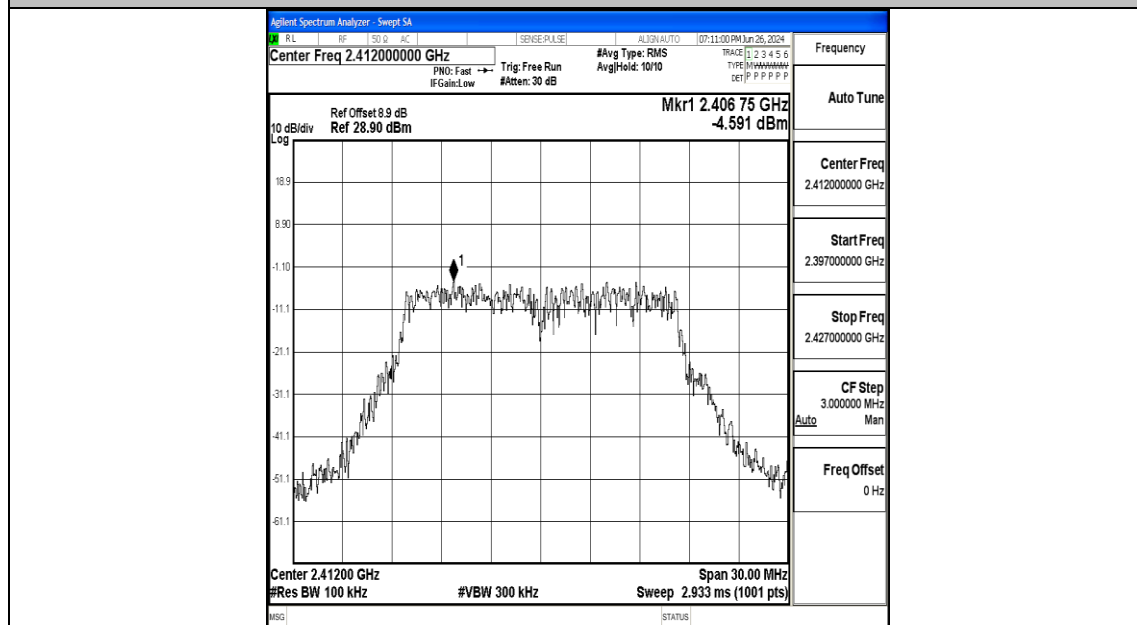
11B-Ant1-2462-0~Reference-PASS



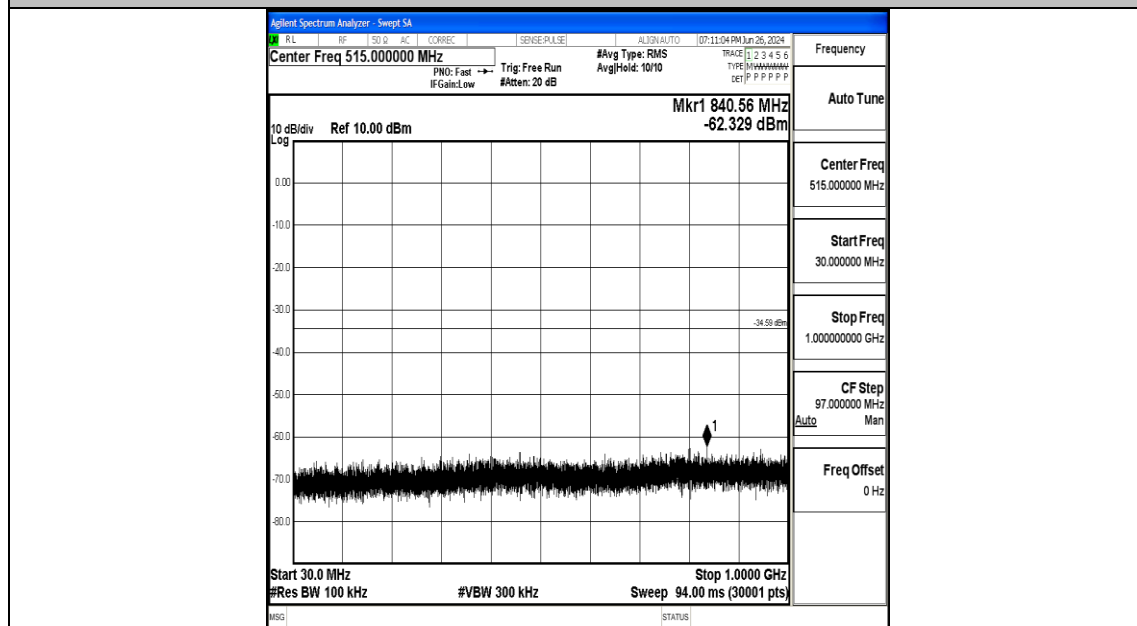
11B-Ant1-2462-30~1000-PASS



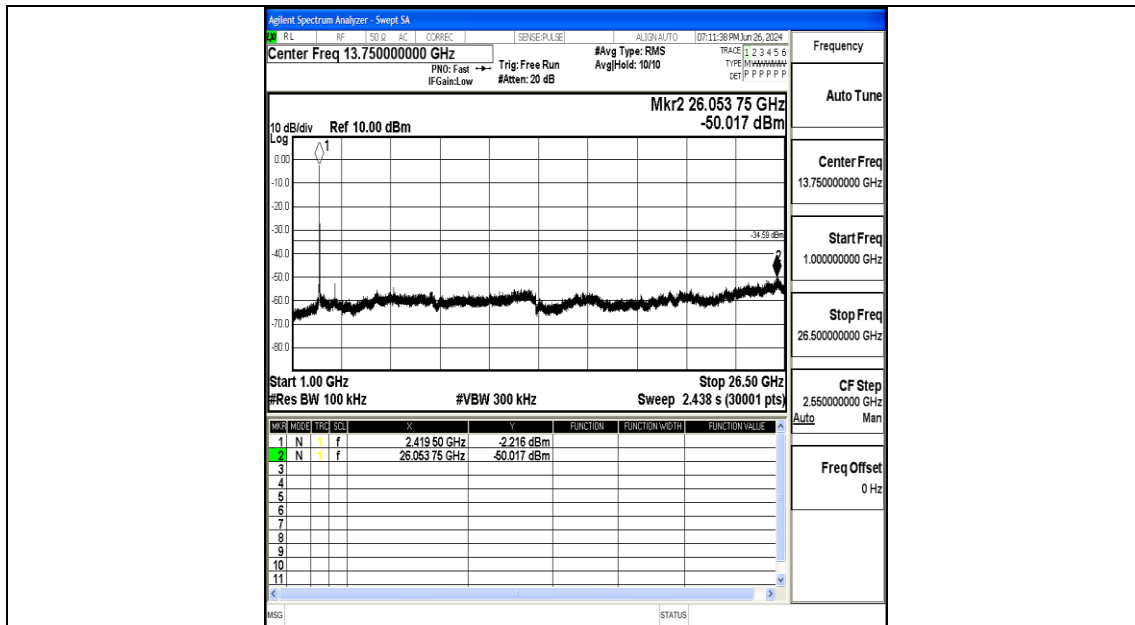
11B-Ant1-2462-1000~26500-PASS



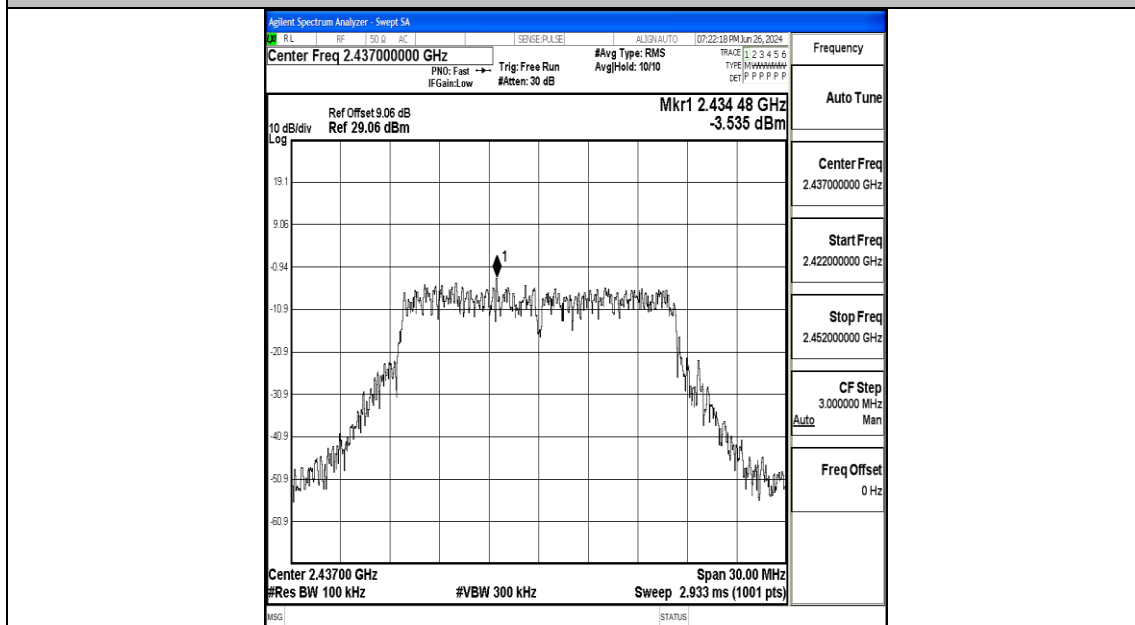
11G-Ant1-2412-0~Reference-PASS



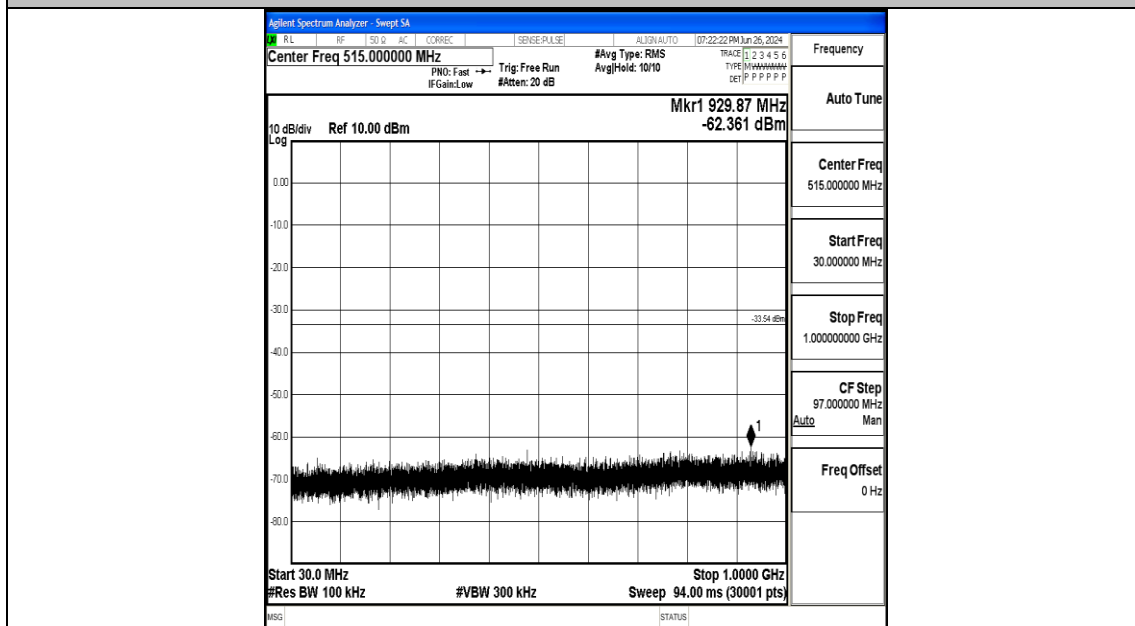
11G-Ant1-2412-30~1000-PASS



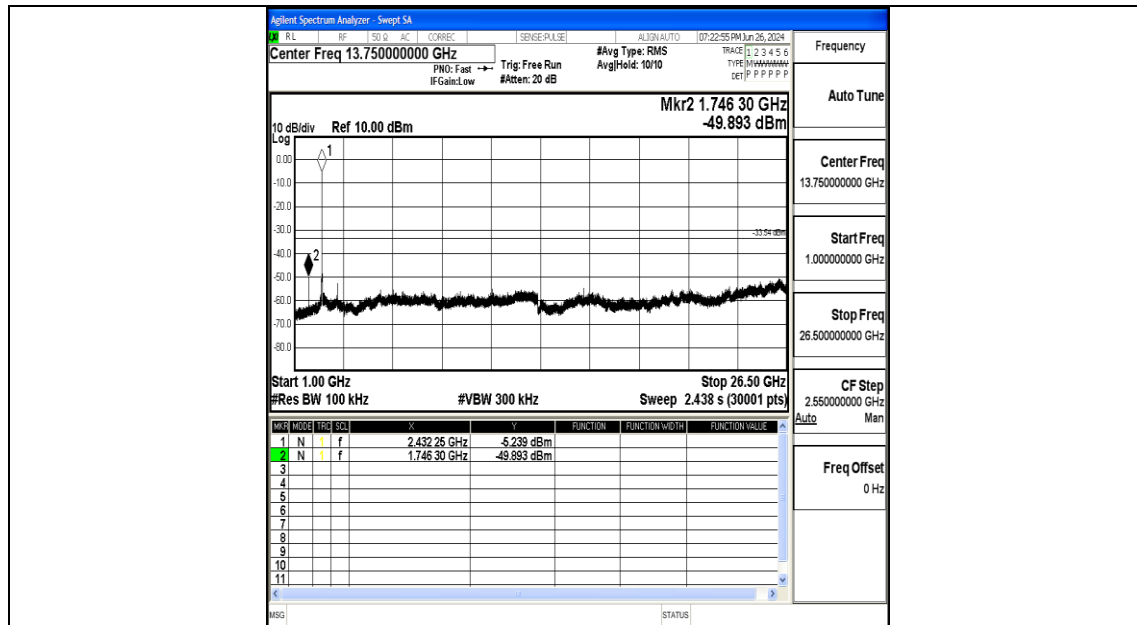
11G-Ant1-2412-1000~26500-PASS



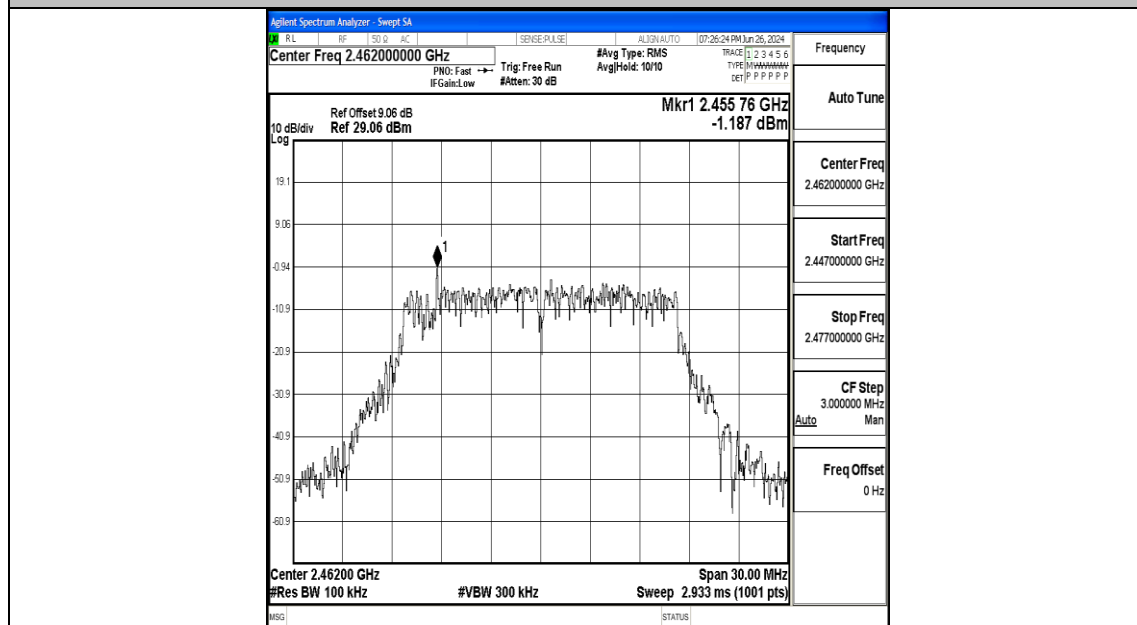
11G-Ant1-2437-0~Reference-PASS



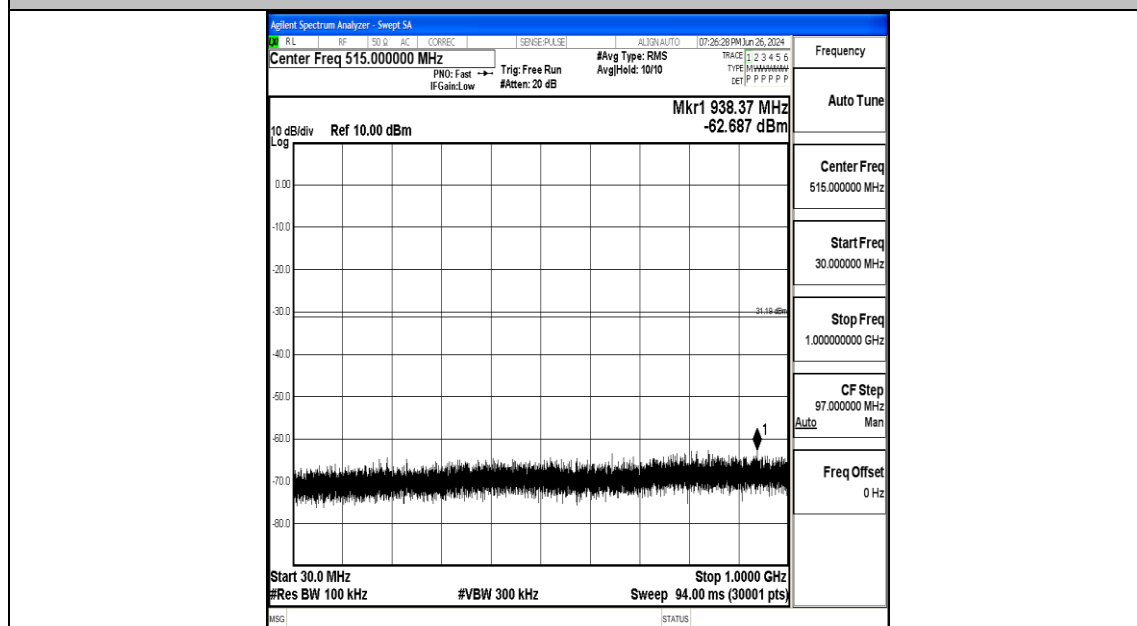
11G-Ant1-2437-30~1000-PASS



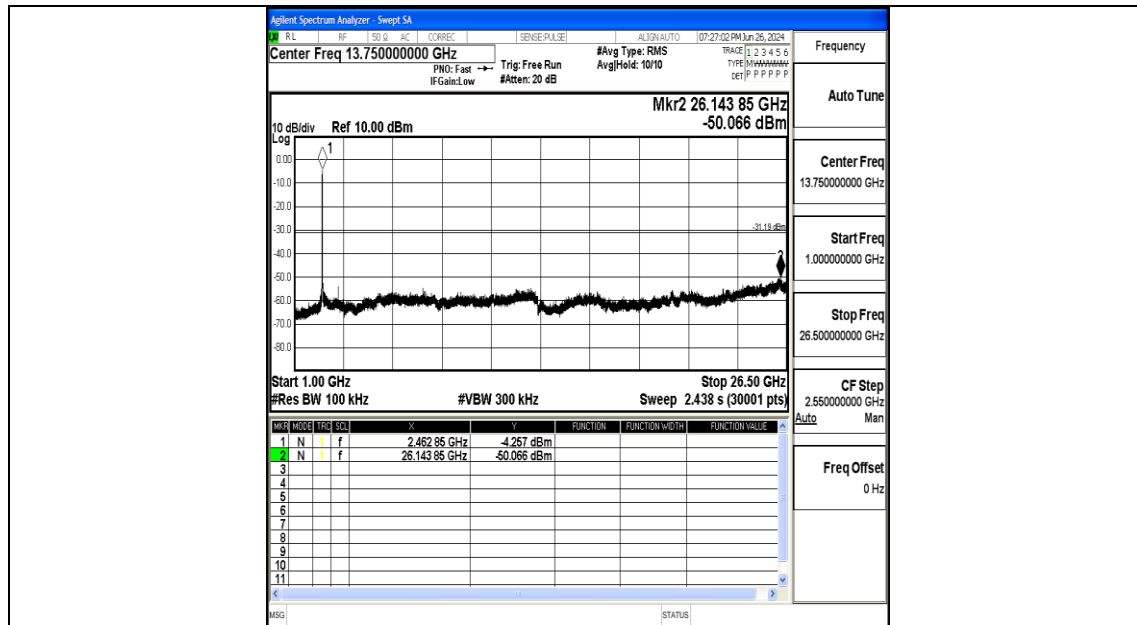
11G-Ant1-2437-1000~26500-PASS



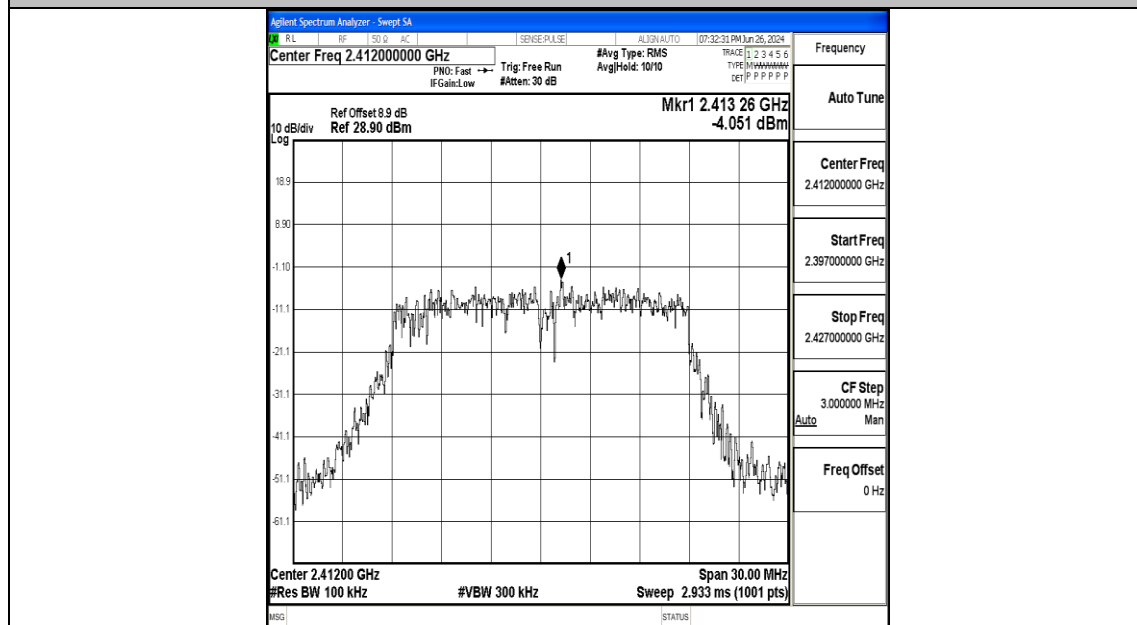
11G-Ant1-2462-0~Reference-PASS



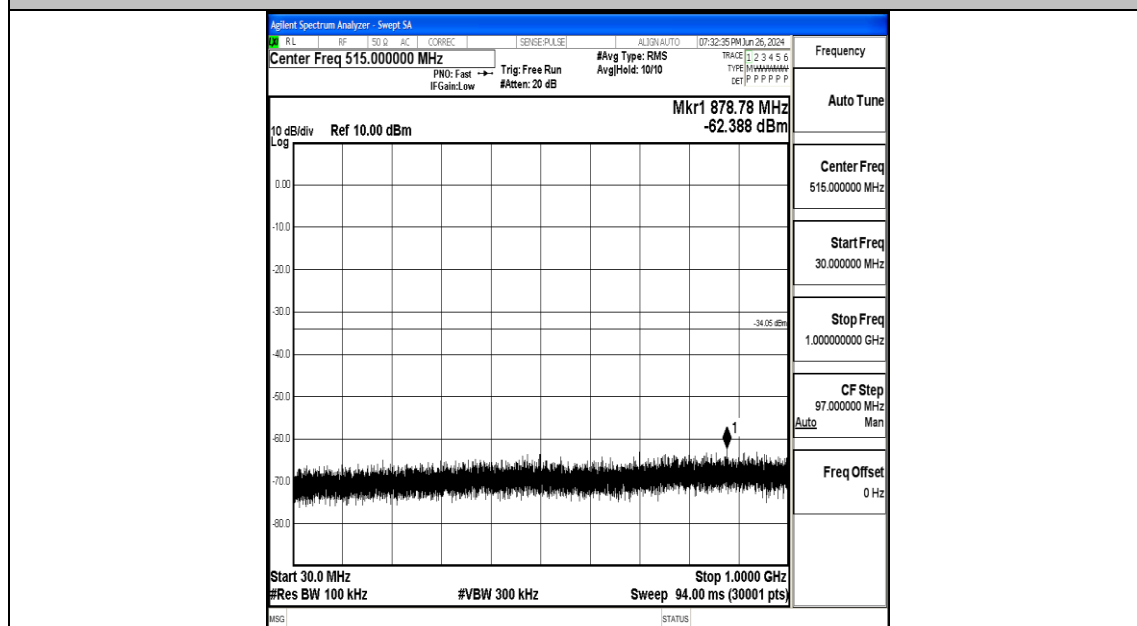
11G-Ant1-2462-30~1000-PASS



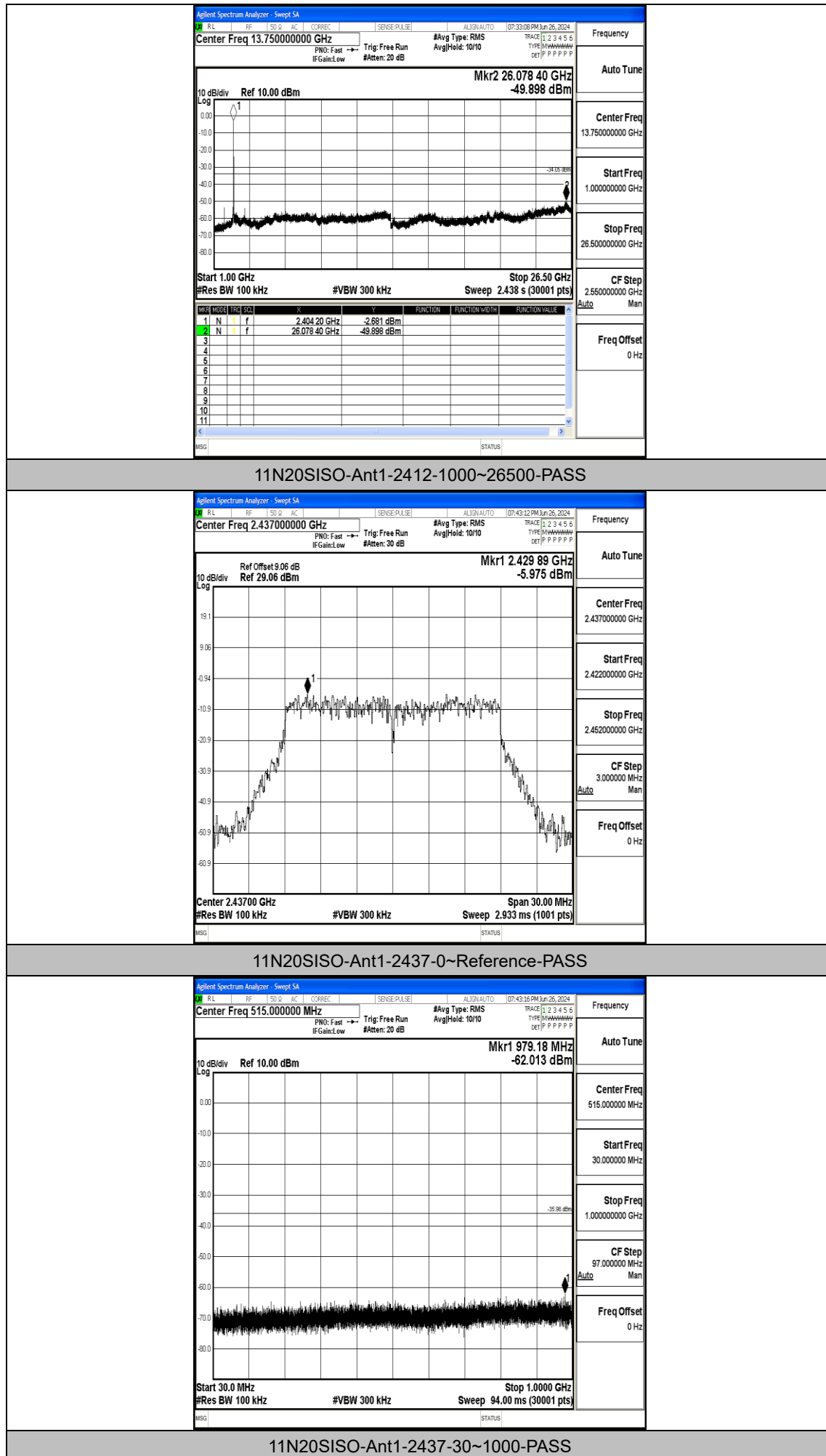
11G-Ant1-2462-1000~26500-PASS

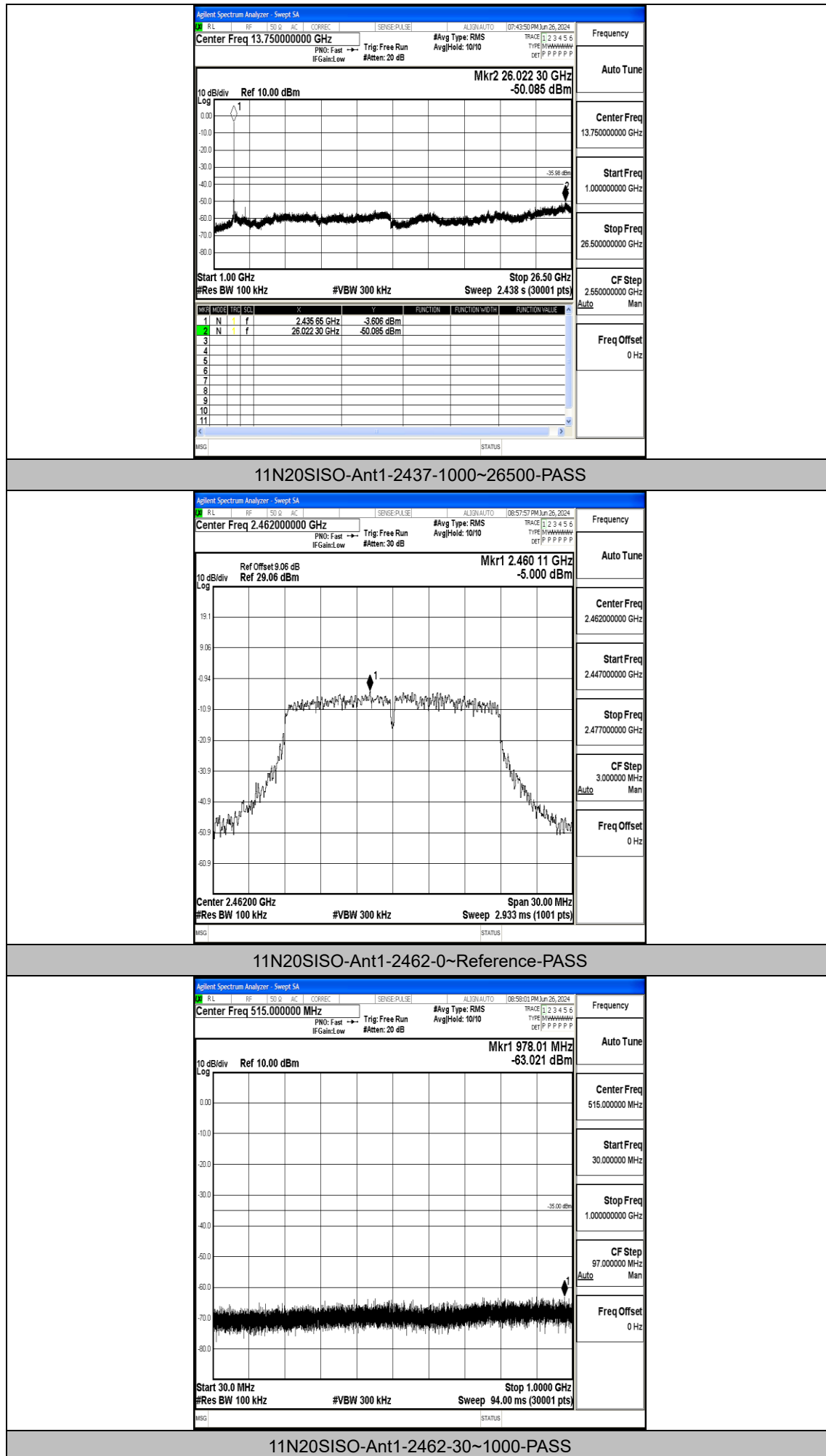


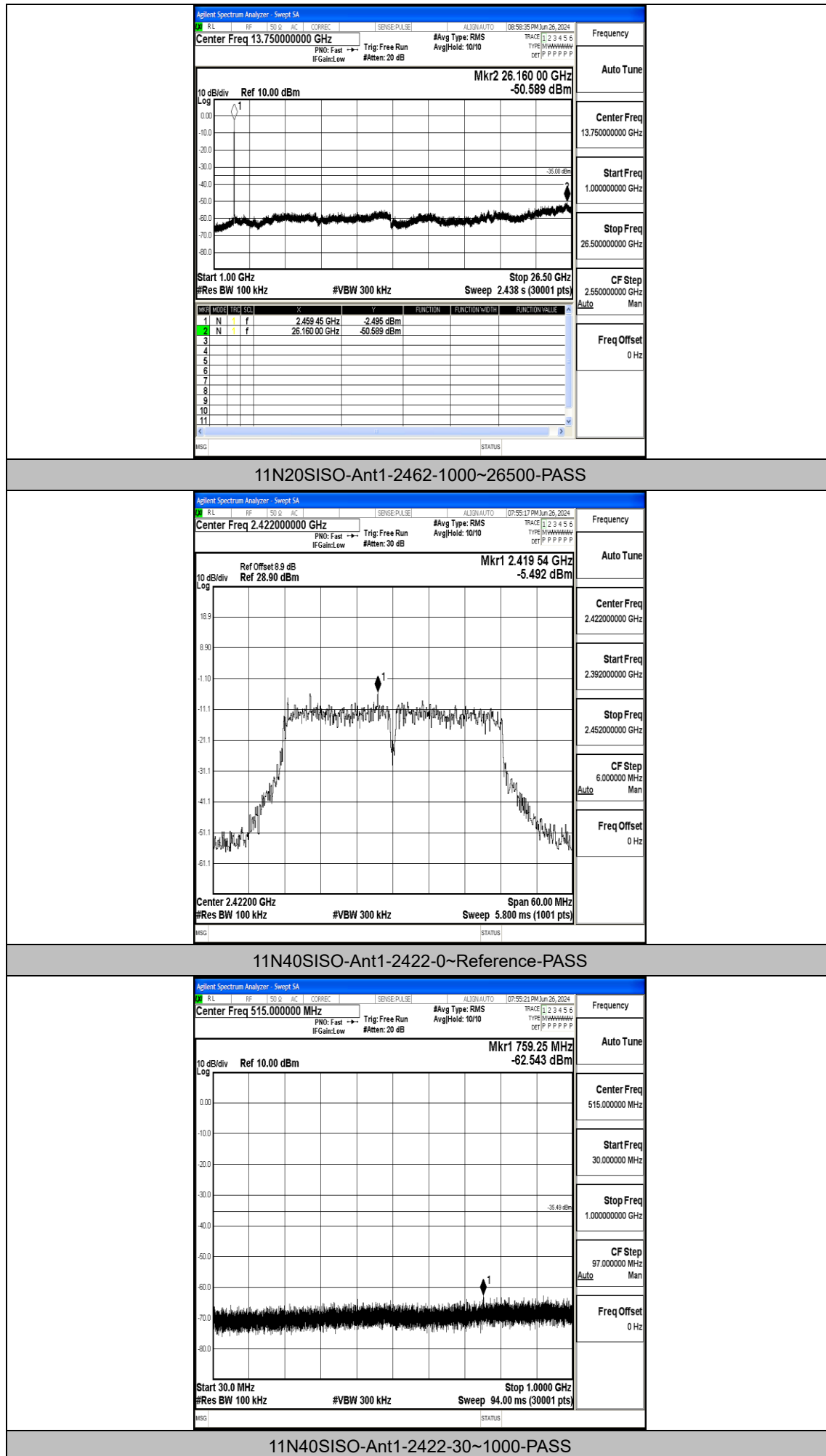
11N20SISO-Ant1-2412-0~Reference-PASS

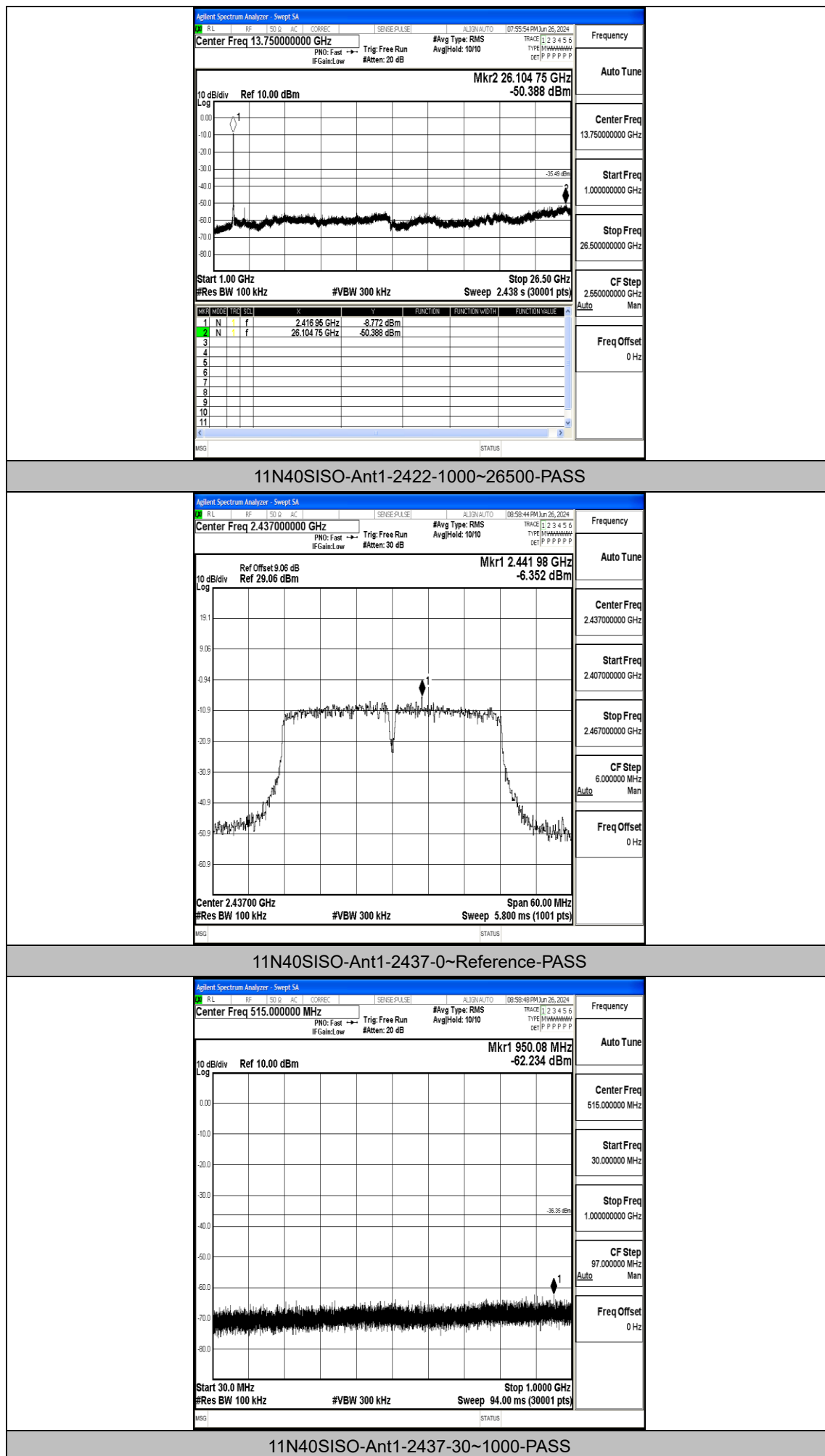


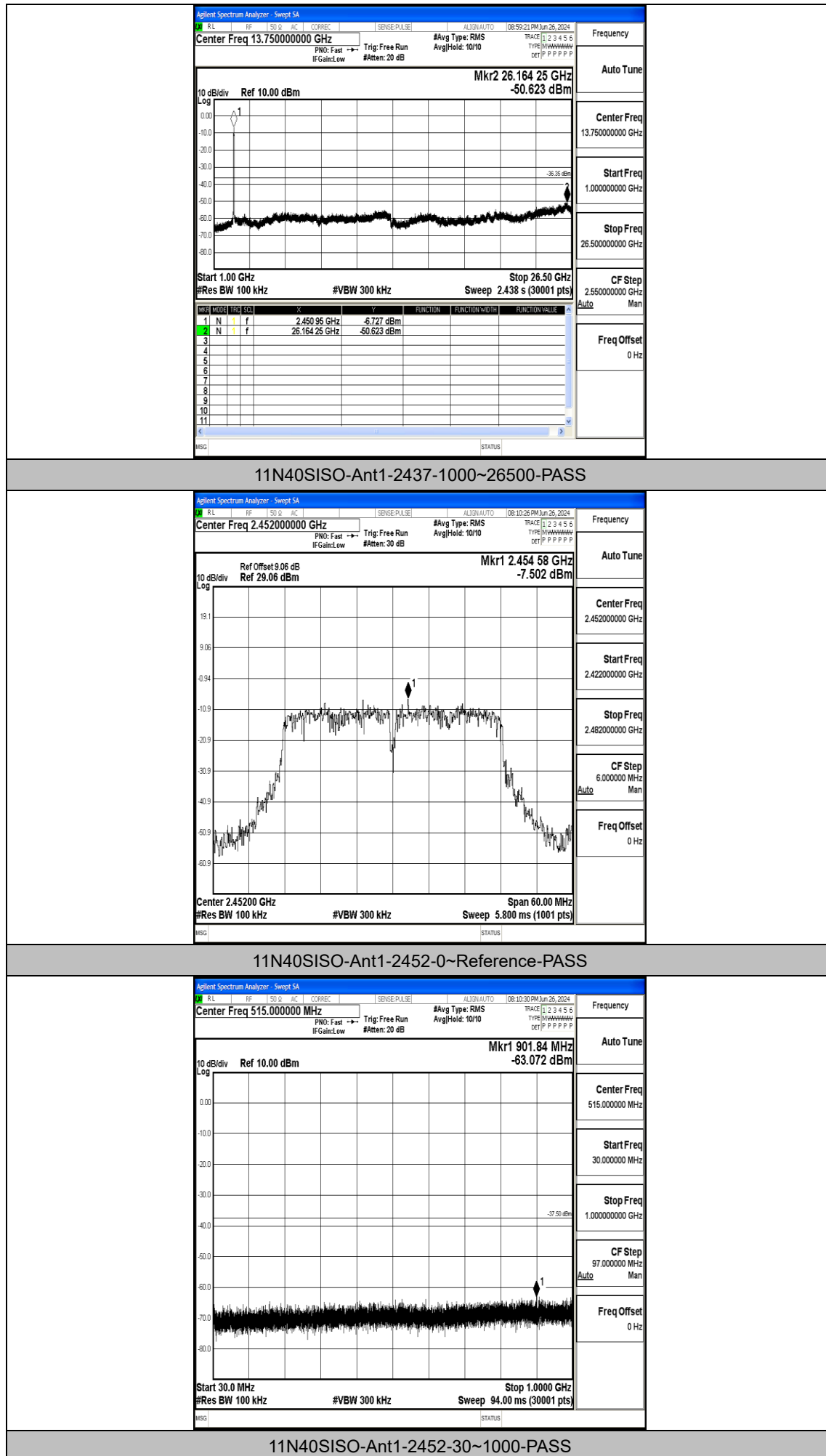
11N20SISO-Ant1-2412-30~1000-PASS

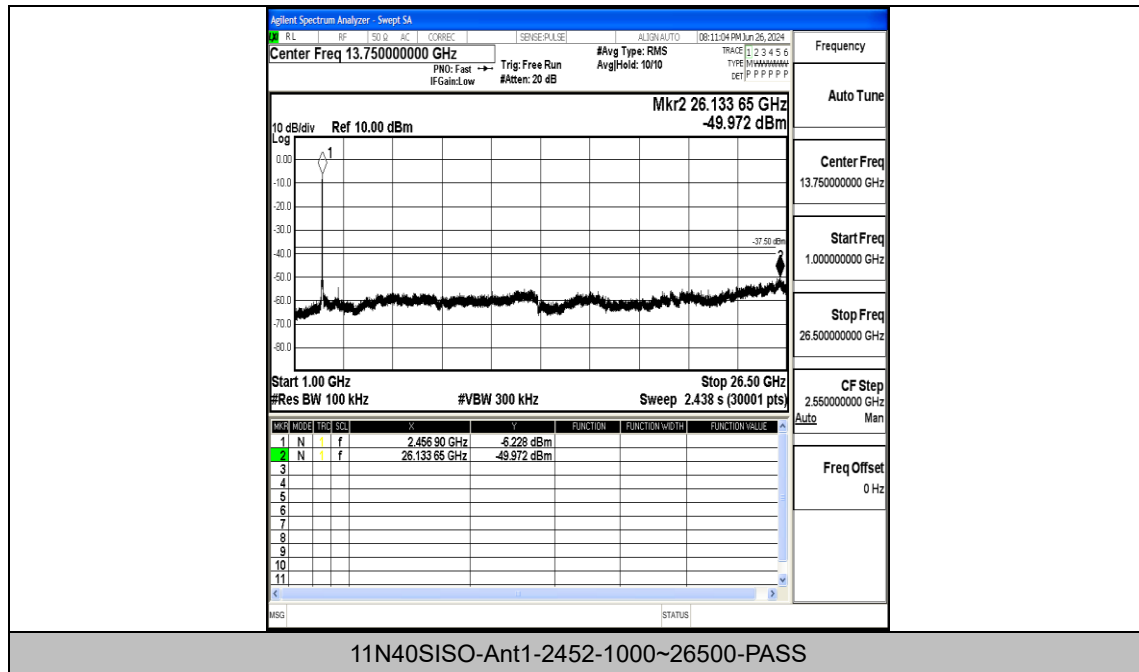












Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	0.59	1.81	32.60	4.87
11B	Ant1	2437	0.59	1.81	32.60	4.87
11B	Ant1	2462	0.60	1.81	33.15	4.80
11G	Ant1	2412	0.58	1.79	32.40	4.89
11G	Ant1	2437	0.59	1.80	32.78	4.84
11G	Ant1	2462	0.59	1.80	32.78	4.84
11N20SISO	Ant1	2412	0.56	1.78	31.46	5.02
11N20SISO	Ant1	2437	0.56	1.77	31.64	5.00
11N20SISO	Ant1	2462	0.56	1.77	31.64	5.00
11N40SISO	Ant1	2422	0.58	1.80	32.22	4.92
11N40SISO	Ant1	2437	0.58	1.80	32.22	4.92
11N40SISO	Ant1	2452	0.58	1.79	32.40	4.89

Test Graphs

