

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

Product Name: CLOUD DIGITAL PHOTO FRAME

Trade Mark: N/A

Test Model: K10

FCC ID: 2AASZ-F1041P0VP

Environmental Conditions

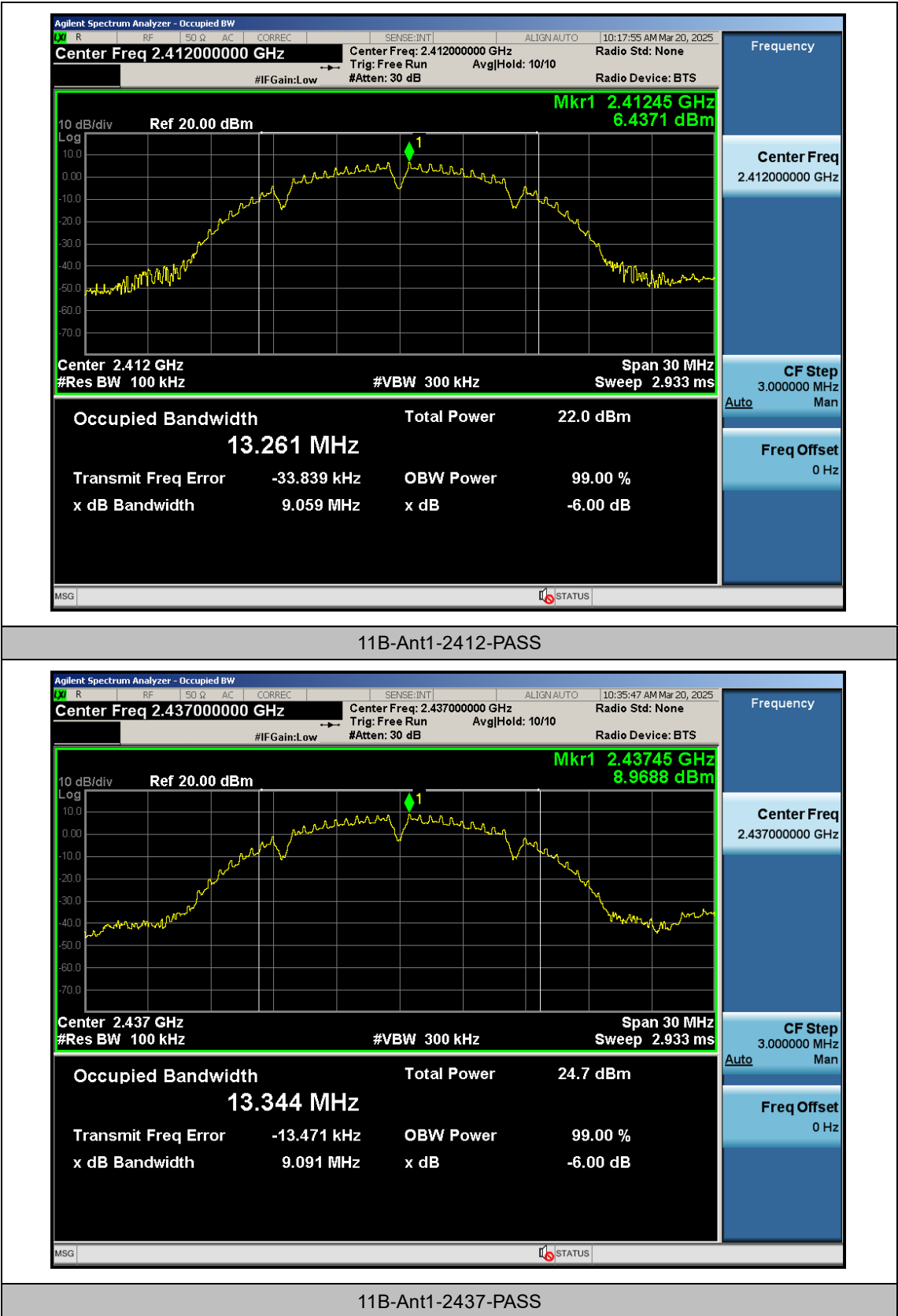
Temperature:	24.8°C
Relative Humidity:	63%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

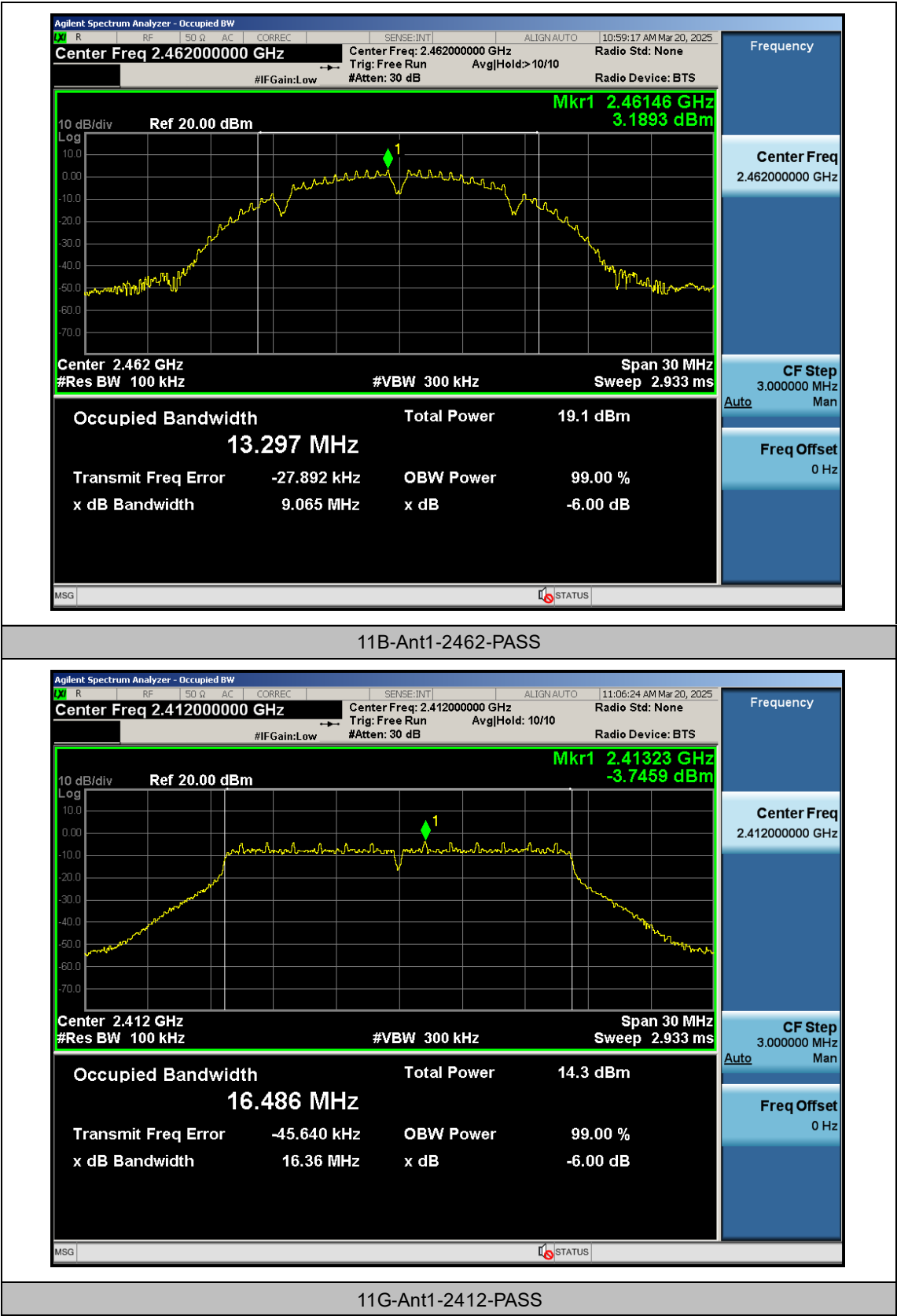
Appendix A: DTS Bandwidth

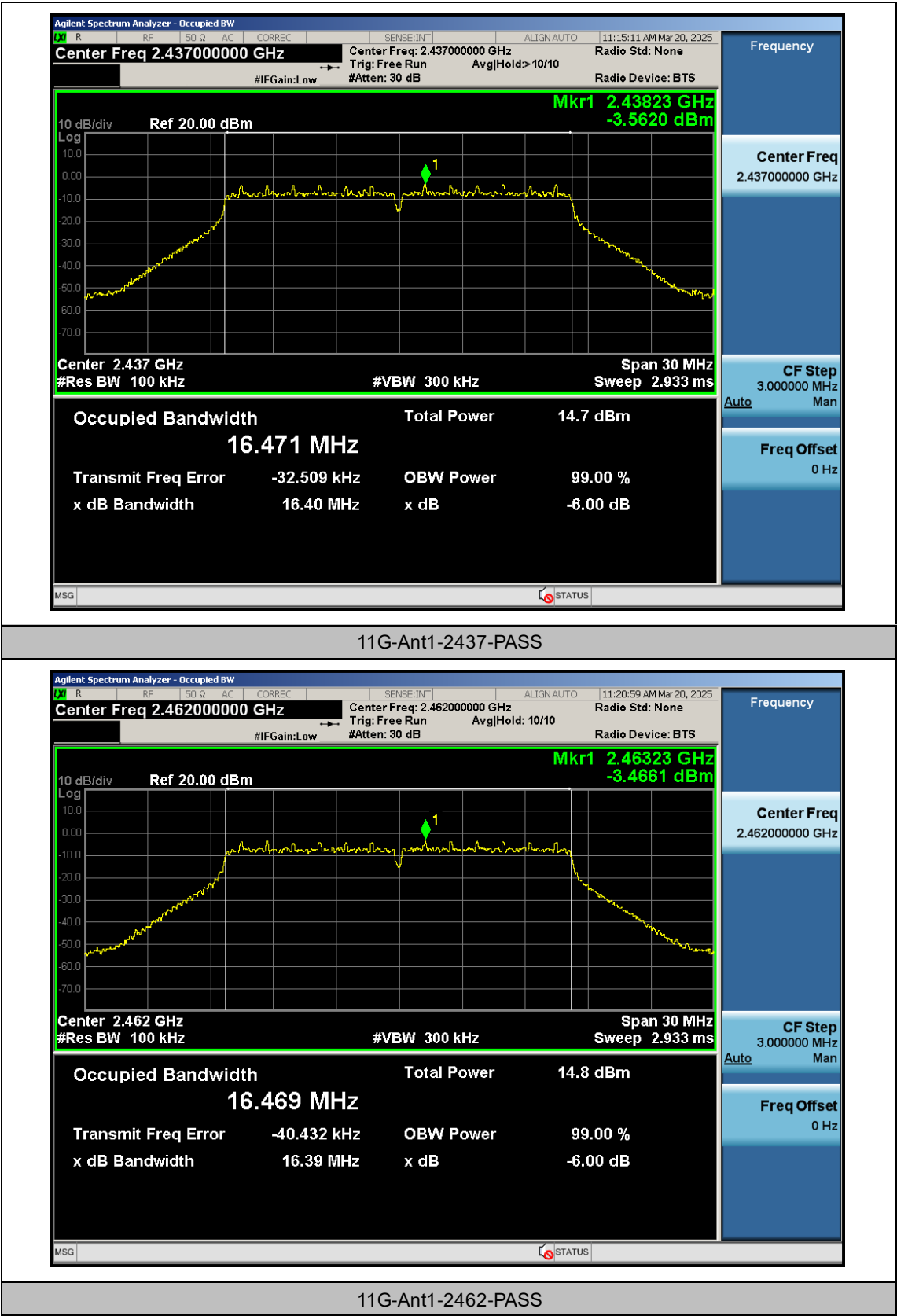
Test Result

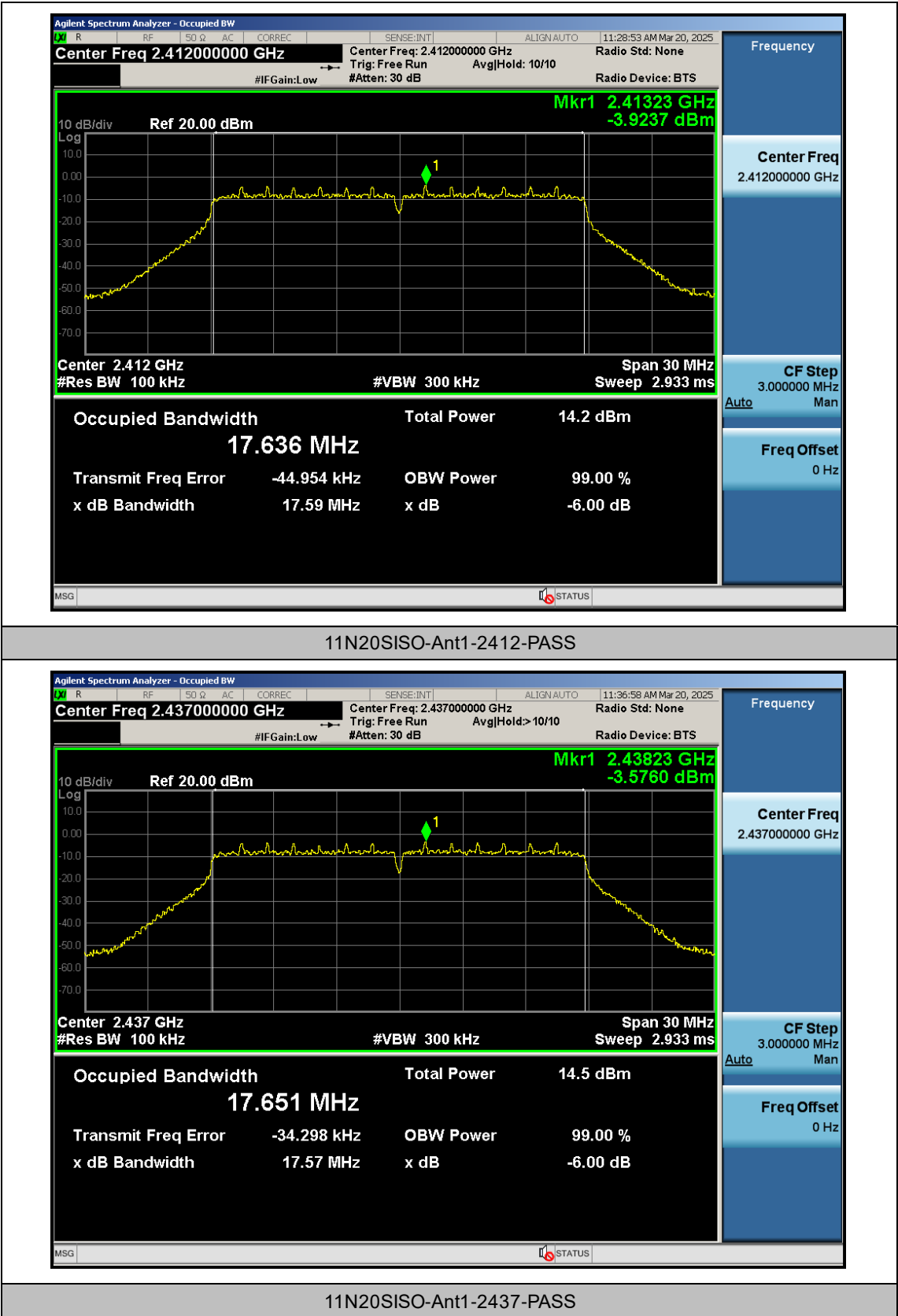
Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.059	2408.480	2416.000	0.5	PASS
11B	Ant1	2437	9.091	2432.960	2441.040	0.5	PASS
11B	Ant1	2462	9.065	2458.440	2466.000	0.5	PASS
11G	Ant1	2412	16.364	2404.080	2419.920	0.5	PASS
11G	Ant1	2437	16.396	2428.840	2445.160	0.5	PASS
11G	Ant1	2462	16.390	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.590	2403.200	2420.800	0.5	PASS
11N20SISO	Ant1	2437	17.573	2428.200	2445.760	0.5	PASS
11N20SISO	Ant1	2462	17.574	2453.200	2470.800	0.5	PASS
11N40SISO	Ant1	2422	35.708	2403.840	2440.160	0.5	PASS
11N40SISO	Ant1	2437	35.430	2418.840	2454.600	0.5	PASS
11N40SISO	Ant1	2452	35.874	2433.840	2469.760	0.5	PASS

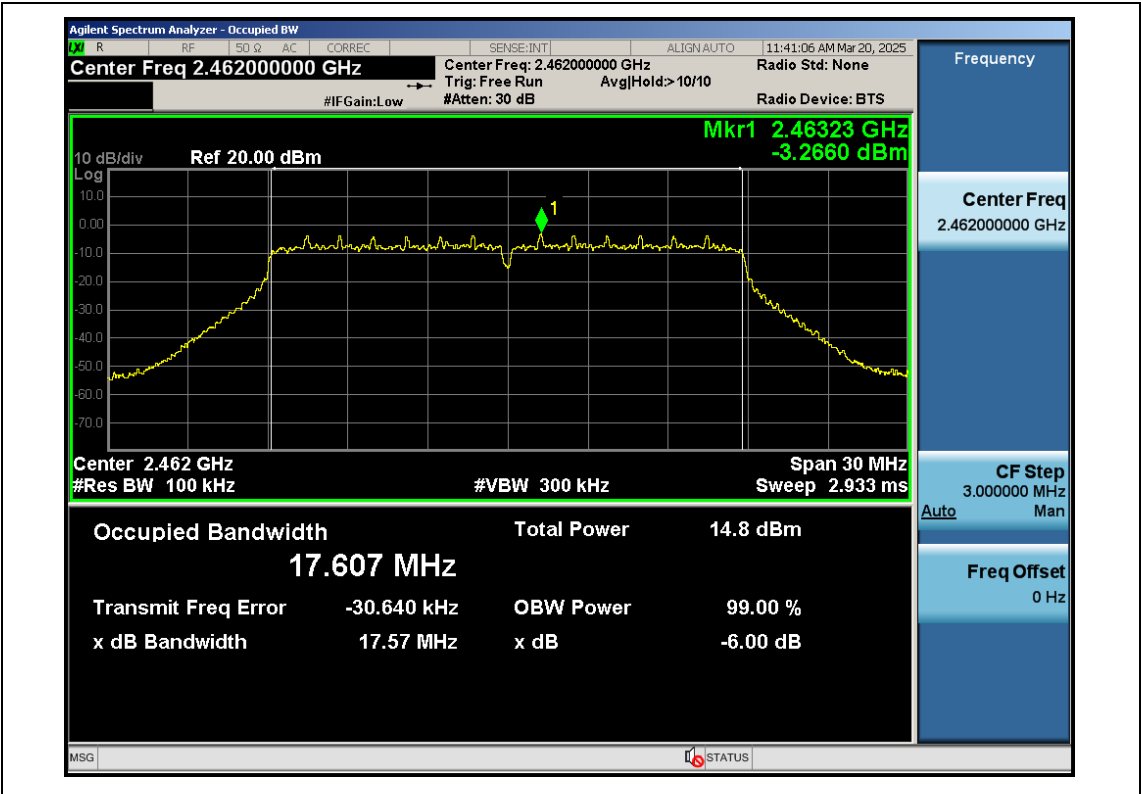
Test Graphs



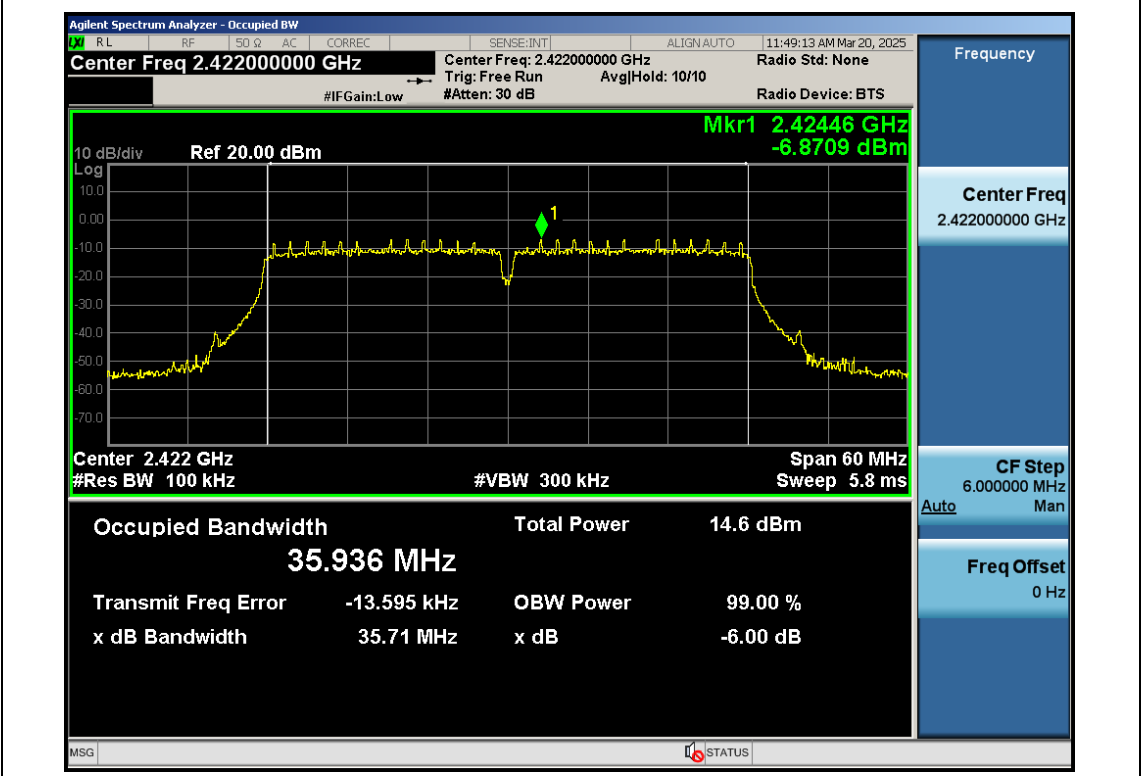




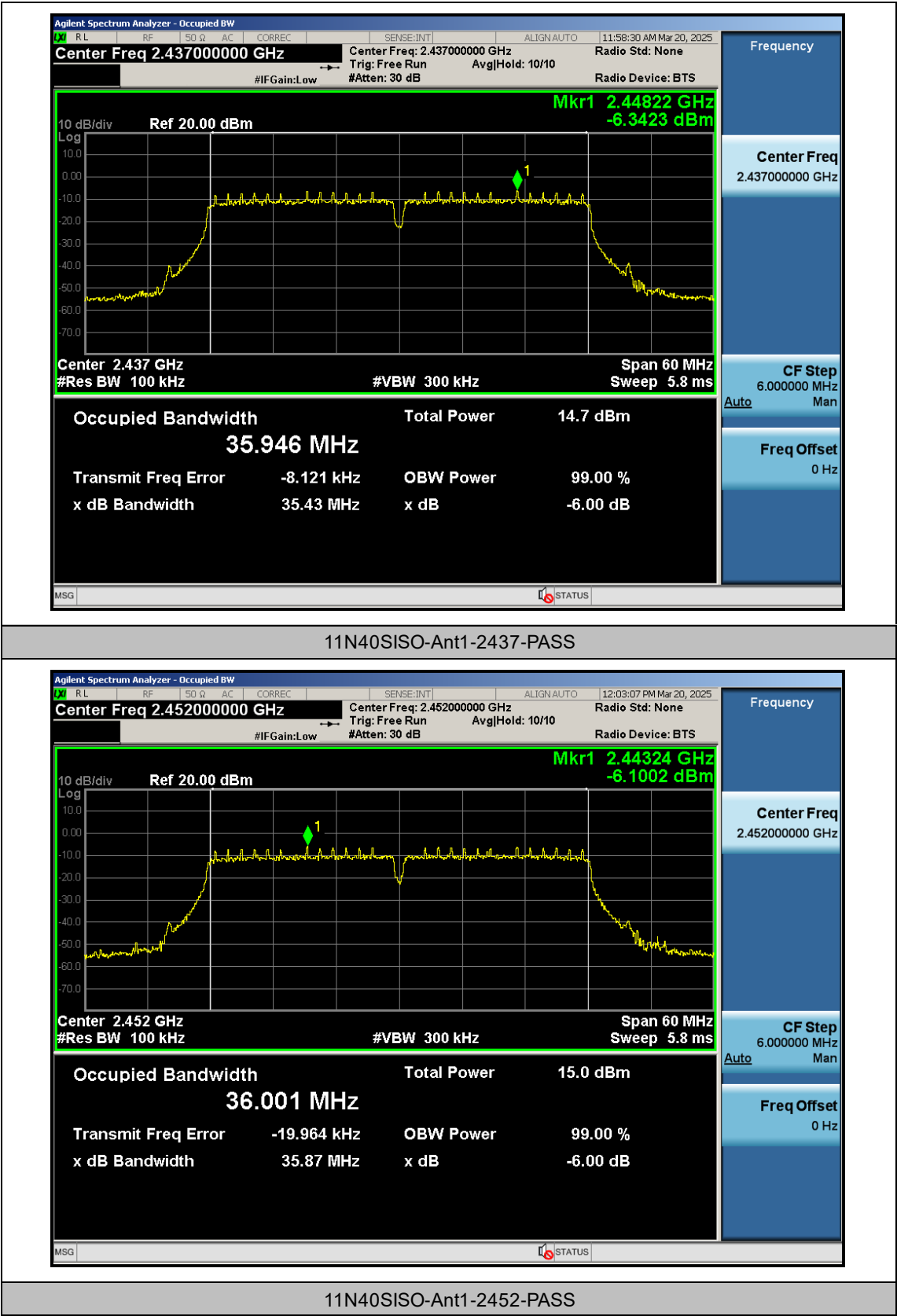




11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS

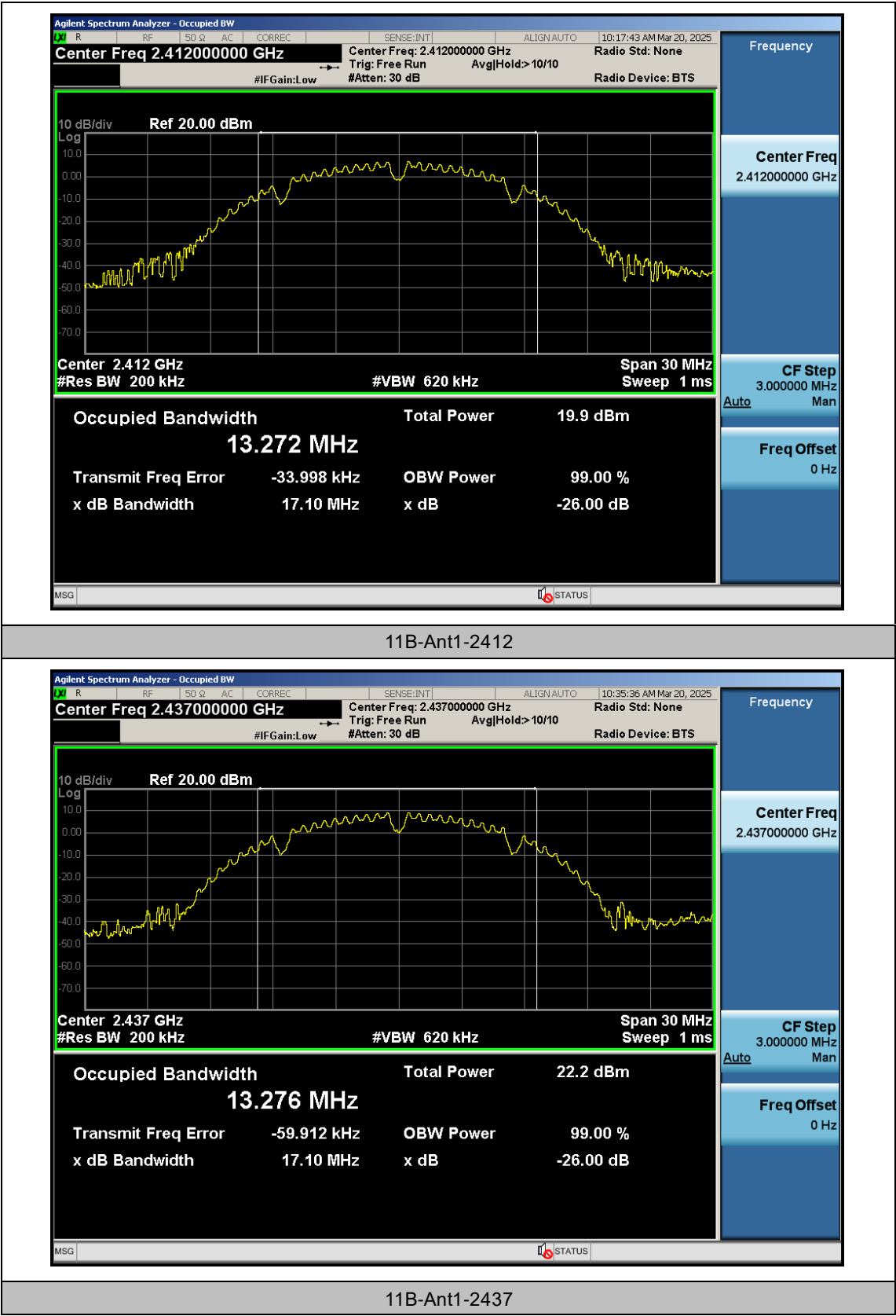


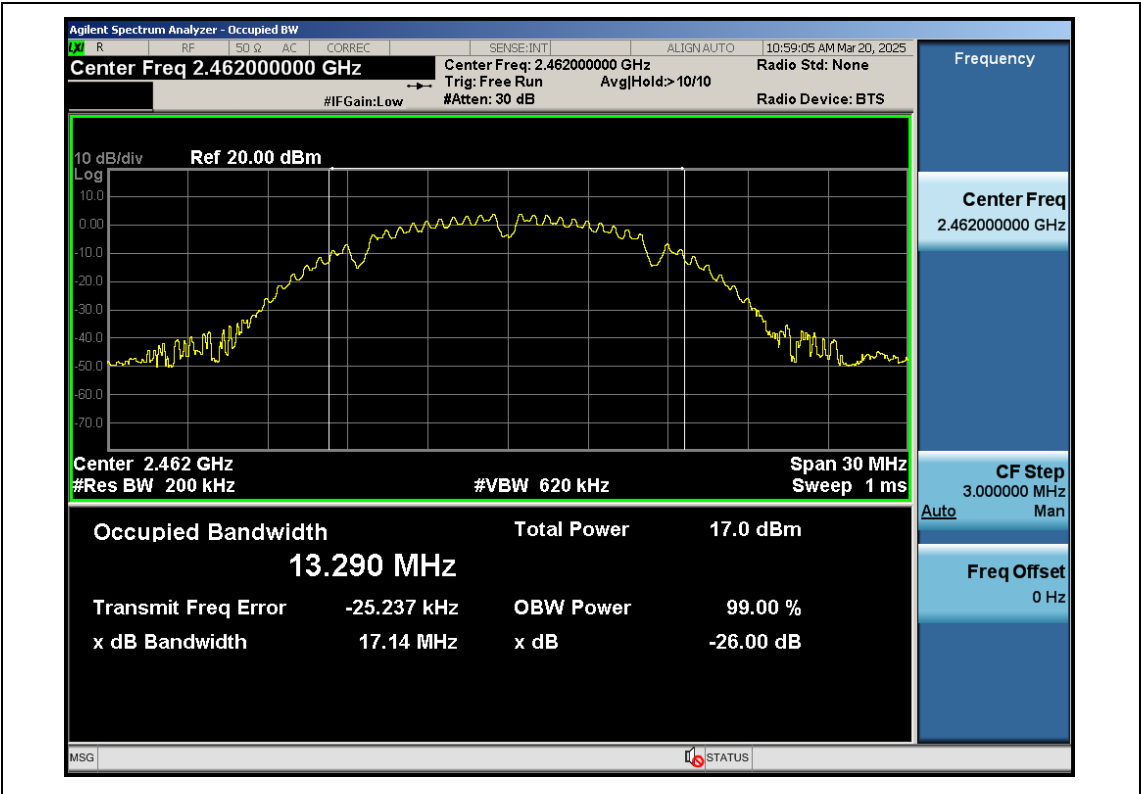
Appendix B: Occupied Channel Bandwidth

Test Result

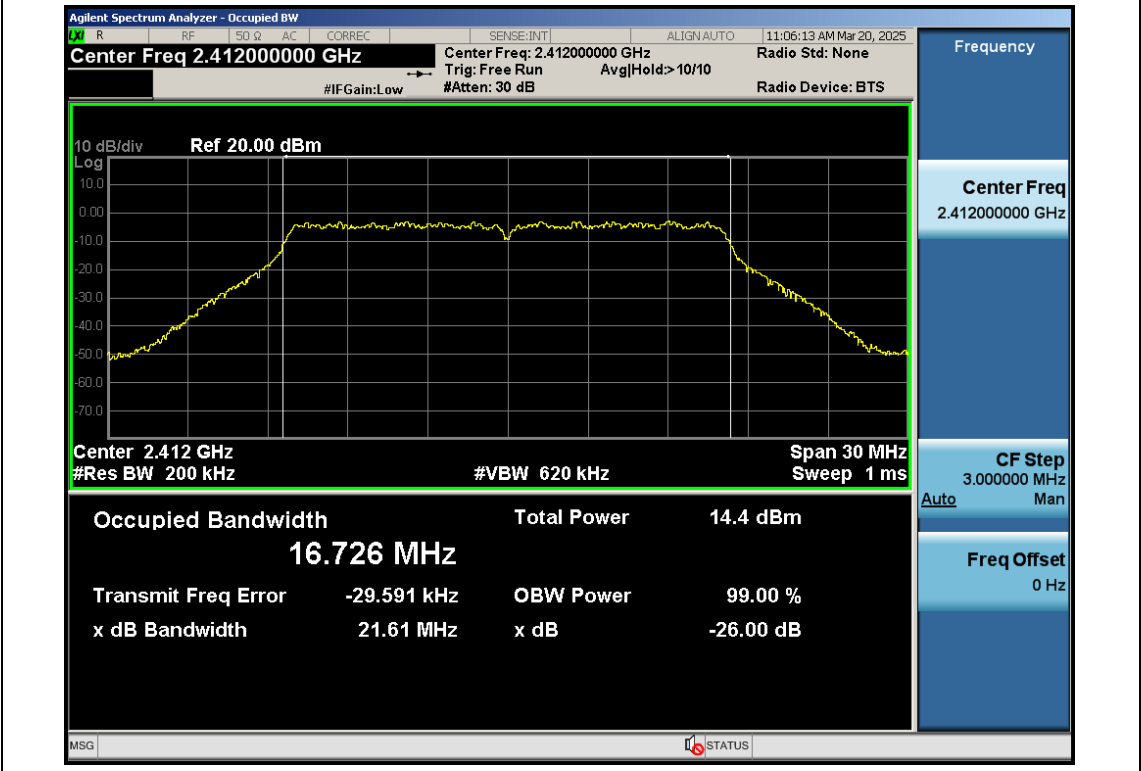
Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	13.272	2405.5322	2418.5372	---	---
11B	Ant1	2437	13.276	2430.4934	2443.4324	---	---
11B	Ant1	2462	13.290	2455.4052	2468.6732	---	---
11G	Ant1	2412	16.726	2403.6424	2420.3314	---	---
11G	Ant1	2437	16.632	2428.0125	2445.6625	---	---
11G	Ant1	2462	16.647	2452.9809	2470.9829	---	---
11N20SISO	Ant1	2412	17.755	2402.4078	2421.5698	---	---
11N20SISO	Ant1	2437	17.761	2427.4071	2446.2701	---	---
11N20SISO	Ant1	2462	17.721	2452.3924	2471.6924	---	---
11N40SISO	Ant1	2422	36.148	2403.2076	2440.7226	---	---
11N40SISO	Ant1	2437	36.127	2418.2404	2455.4314	---	---
11N40SISO	Ant1	2452	36.199	2432.9114	2470.6424	---	---

Test Graphs





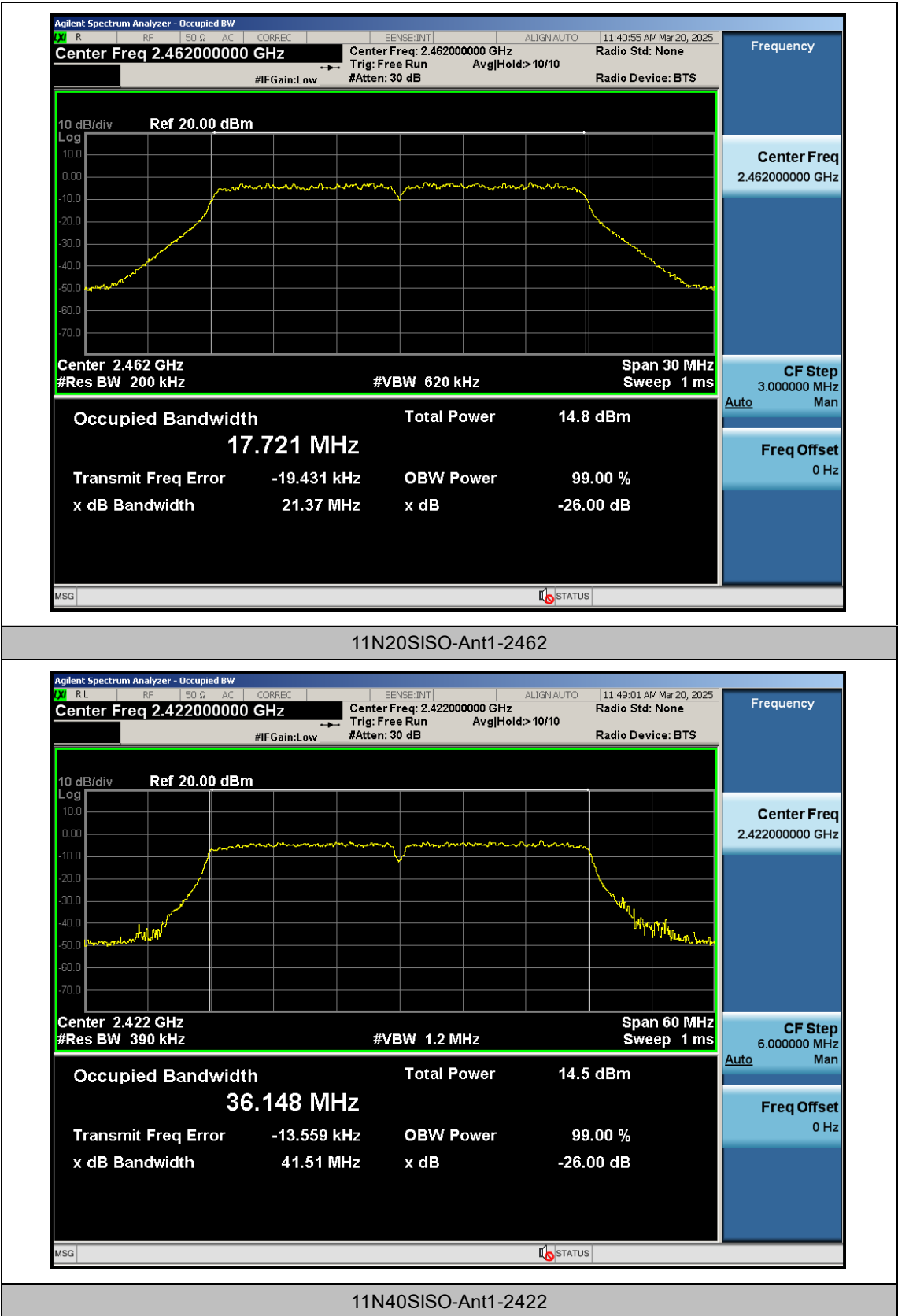
11B-Ant1-2462

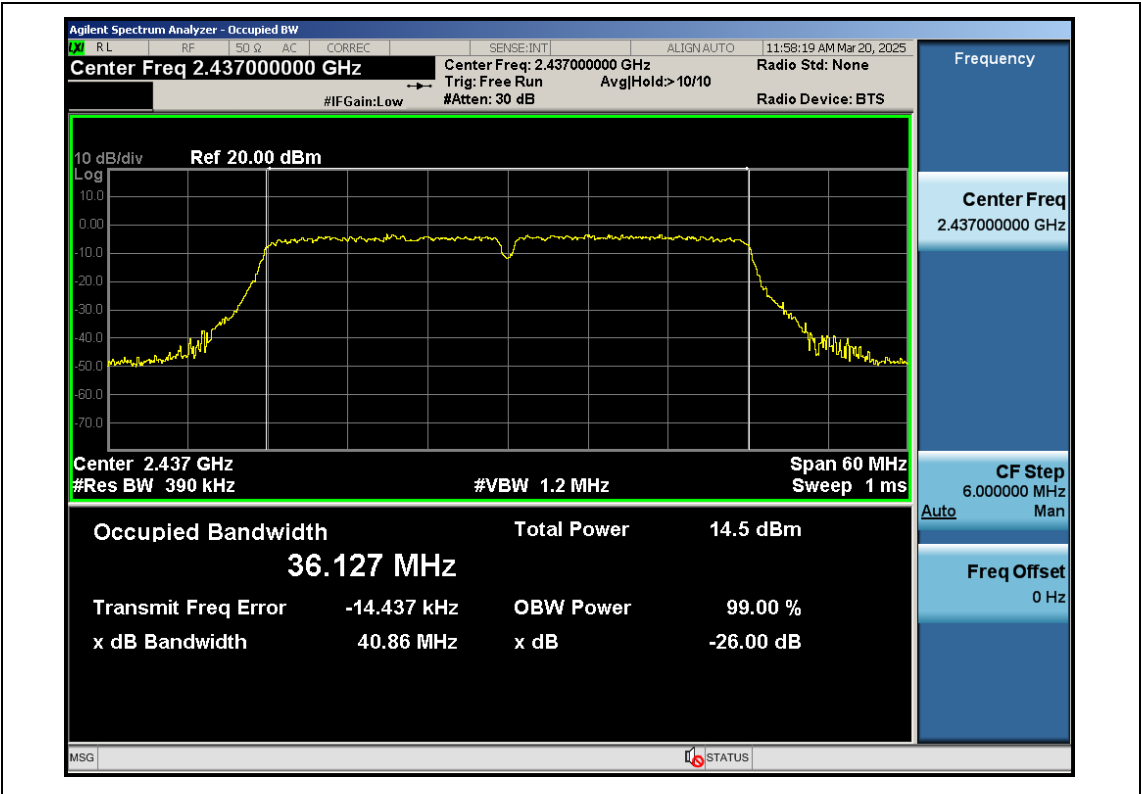


11G-Ant1-2412

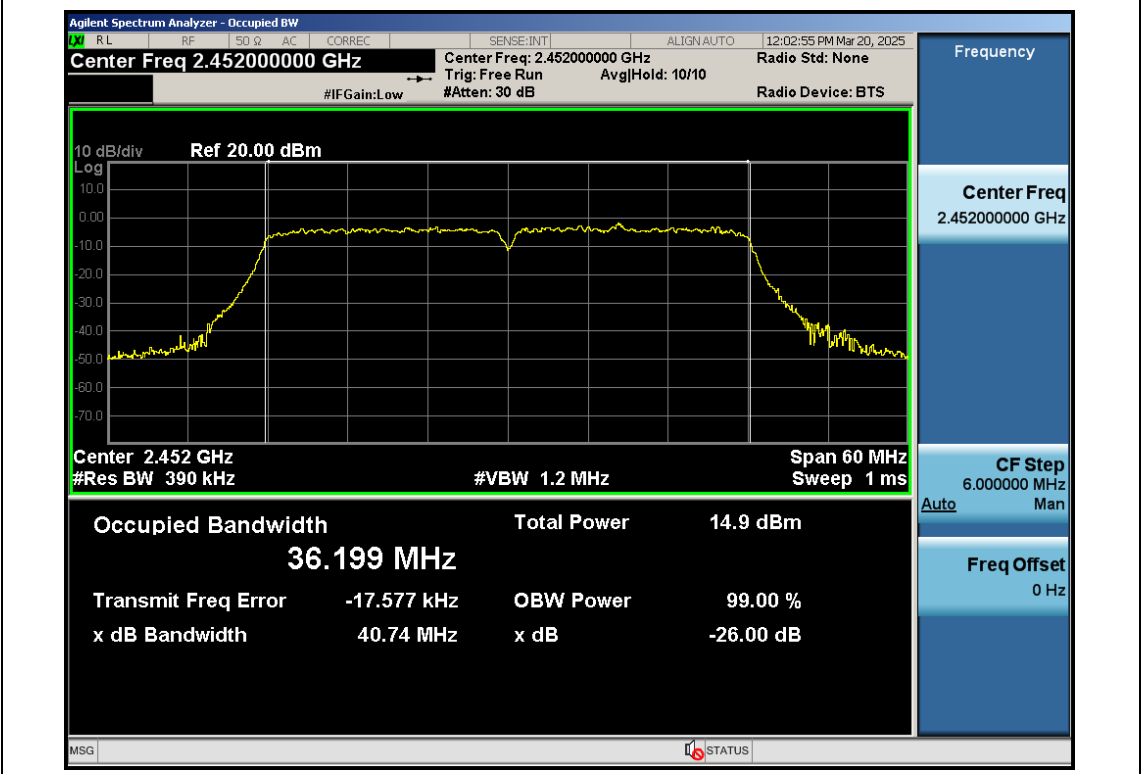








11N40SISO-Ant1-2437



11N40SISO-Ant1-2452

Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	14.33	≤30.00	PASS
11B	Ant1	2437	11.53	≤30.00	PASS
11B	Ant1	2462	12.19	≤30.00	PASS
11G	Ant1	2412	7.30	≤30.00	PASS
11G	Ant1	2437	6.80	≤30.00	PASS
11G	Ant1	2462	7.33	≤30.00	PASS
11N20SISO	Ant1	2412	7.00	≤30.00	PASS
11N20SISO	Ant1	2437	7.19	≤30.00	PASS
11N20SISO	Ant1	2462	6.93	≤30.00	PASS
11N40SISO	Ant1	2422	5.92	≤30.00	PASS
11N40SISO	Ant1	2437	7.12	≤30.00	PASS
11N40SISO	Ant1	2452	6.91	≤30.00	PASS

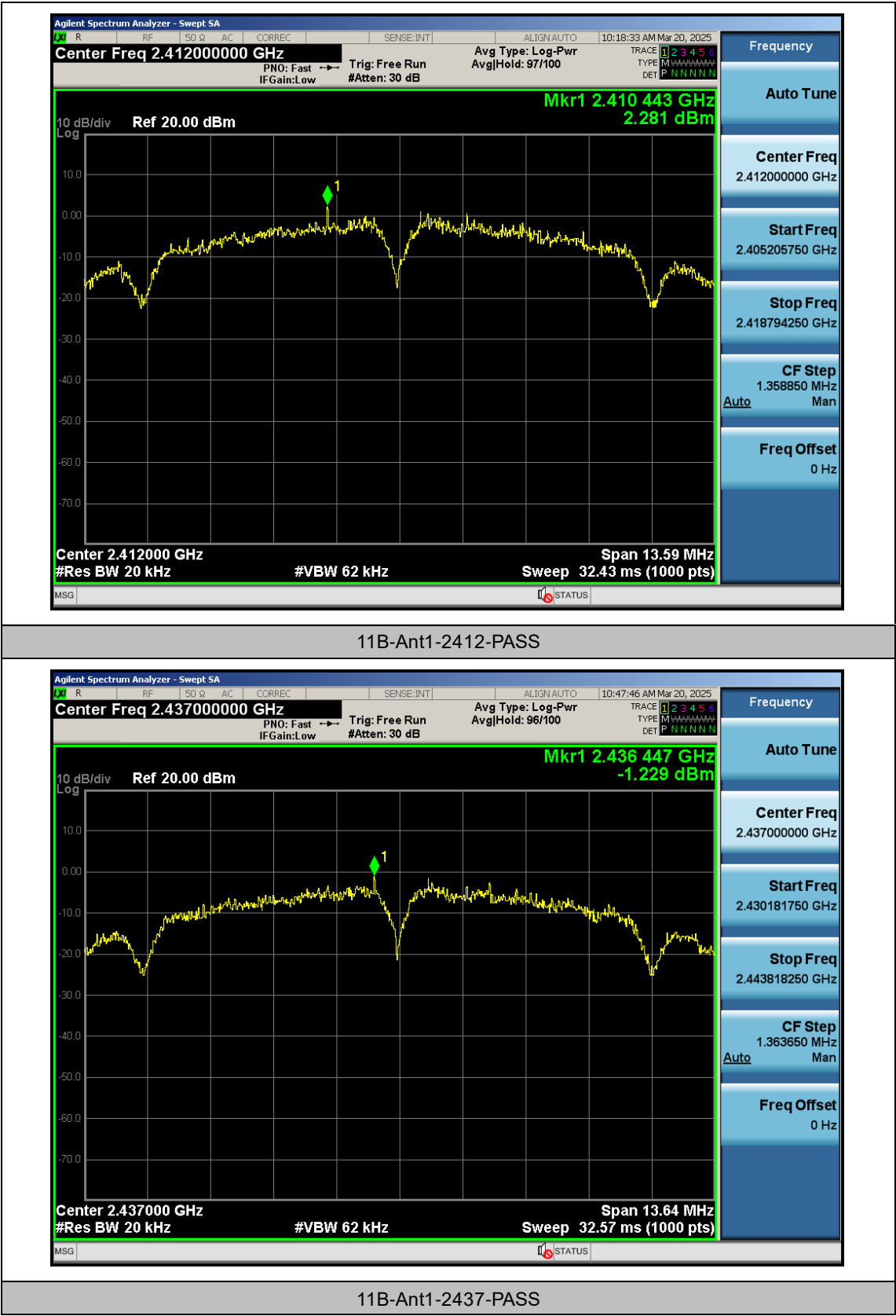
Note: The Duty Cycle Factor is compensated in the result.

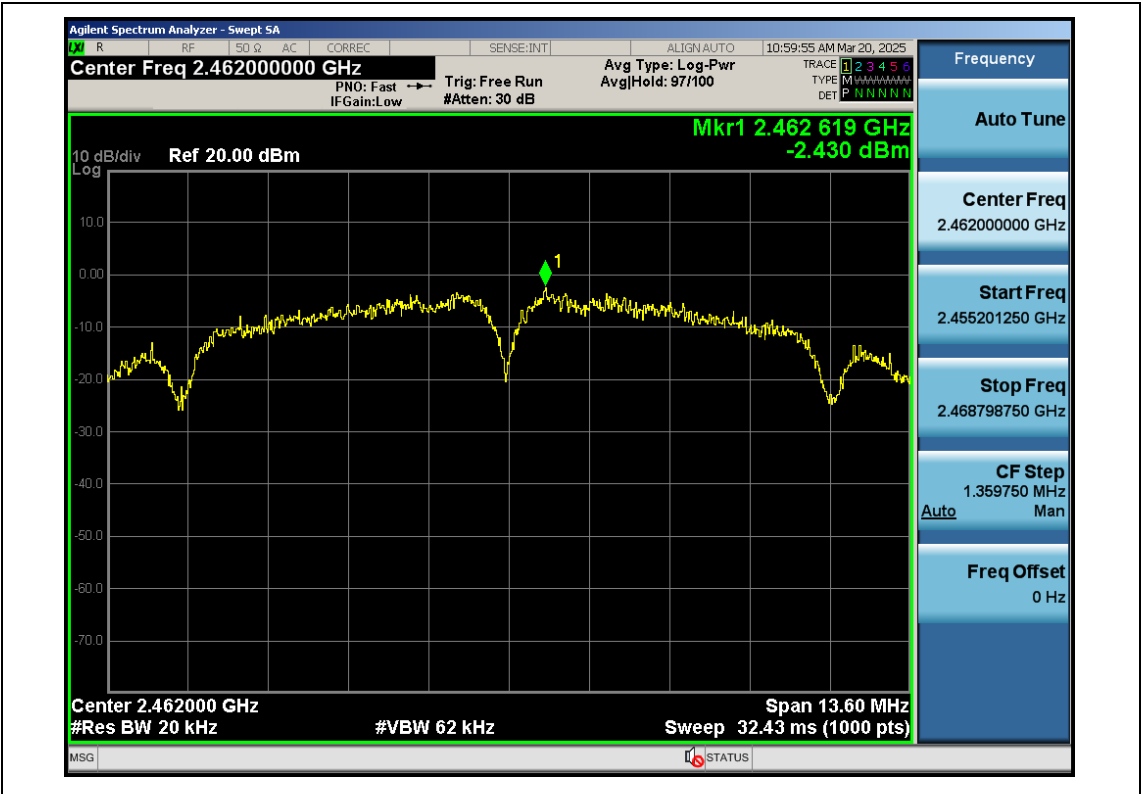
Appendix D: Maximum Average power spectral density

Test Result

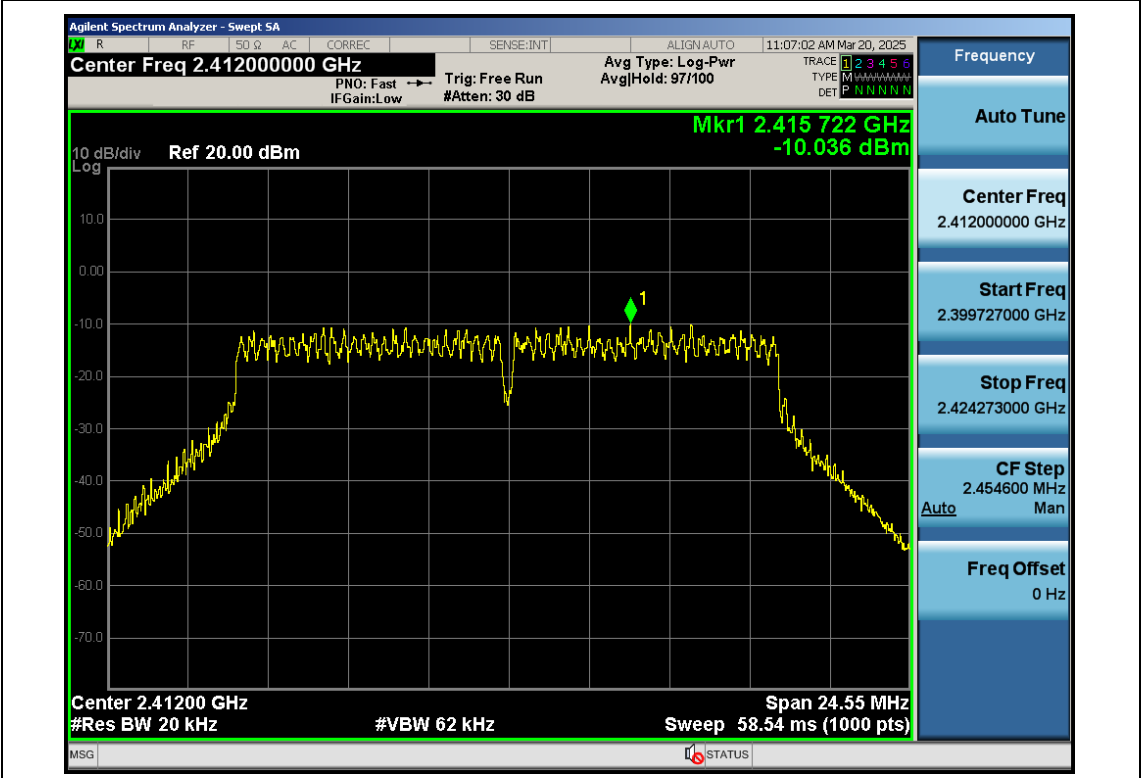
Test Mode	Test Channel	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
802.11B	2412	2.281	-5.958	≤8	Pass
	2437	-1.229	-9.468	≤8	Pass
	2462	-2.430	-10.669	≤8	Pass
802.11G	2412	-10.036	-18.275	≤8	Pass
	2437	-9.953	-18.192	≤8	Pass
	2462	-9.156	-17.395	≤8	Pass
11N20SISO	2412	-10.142	-18.381	≤8	Pass
	2437	-10.576	-18.815	≤8	Pass
	2462	-9.817	-18.056	≤8	Pass
11N40SISO	2422	-12.947	-21.186	≤8	Pass
	2437	-12.613	-20.852	≤8	Pass
	2452	-12.545	-20.784	≤8	Pass

Test Graphs

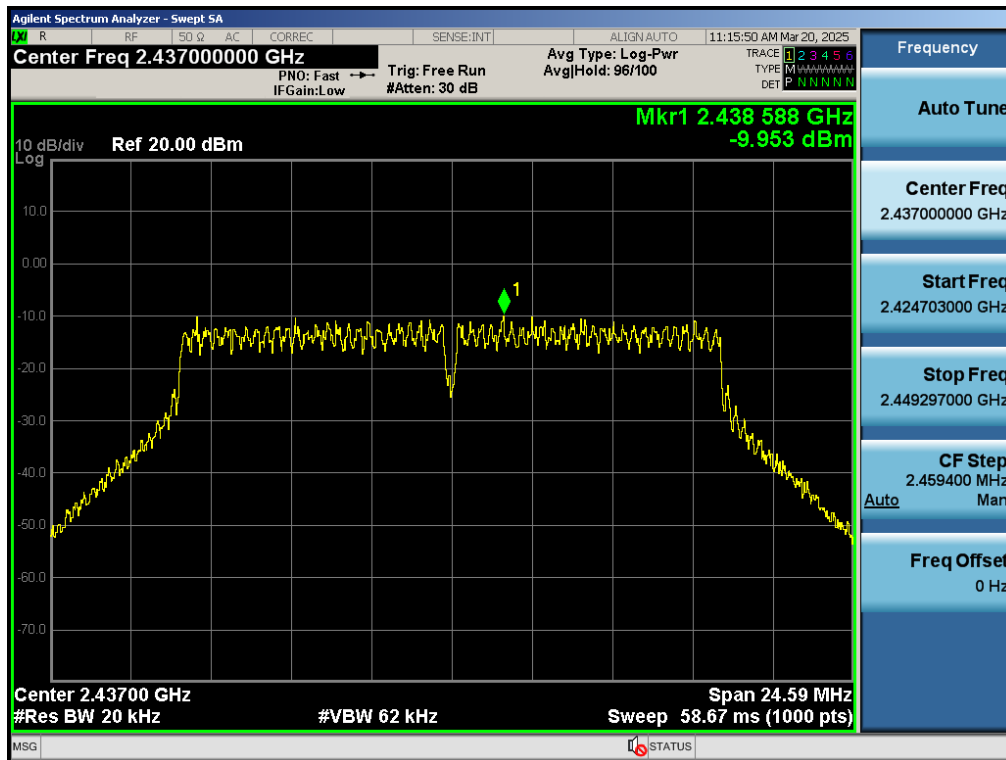




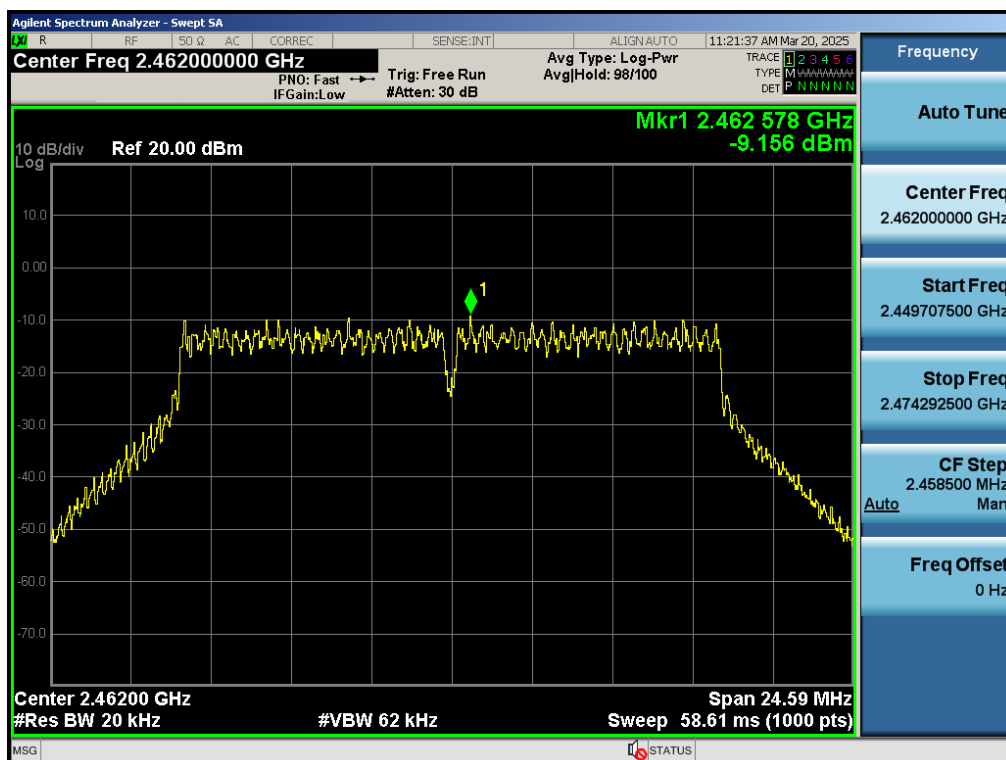
11B-Ant1-2462-PASS



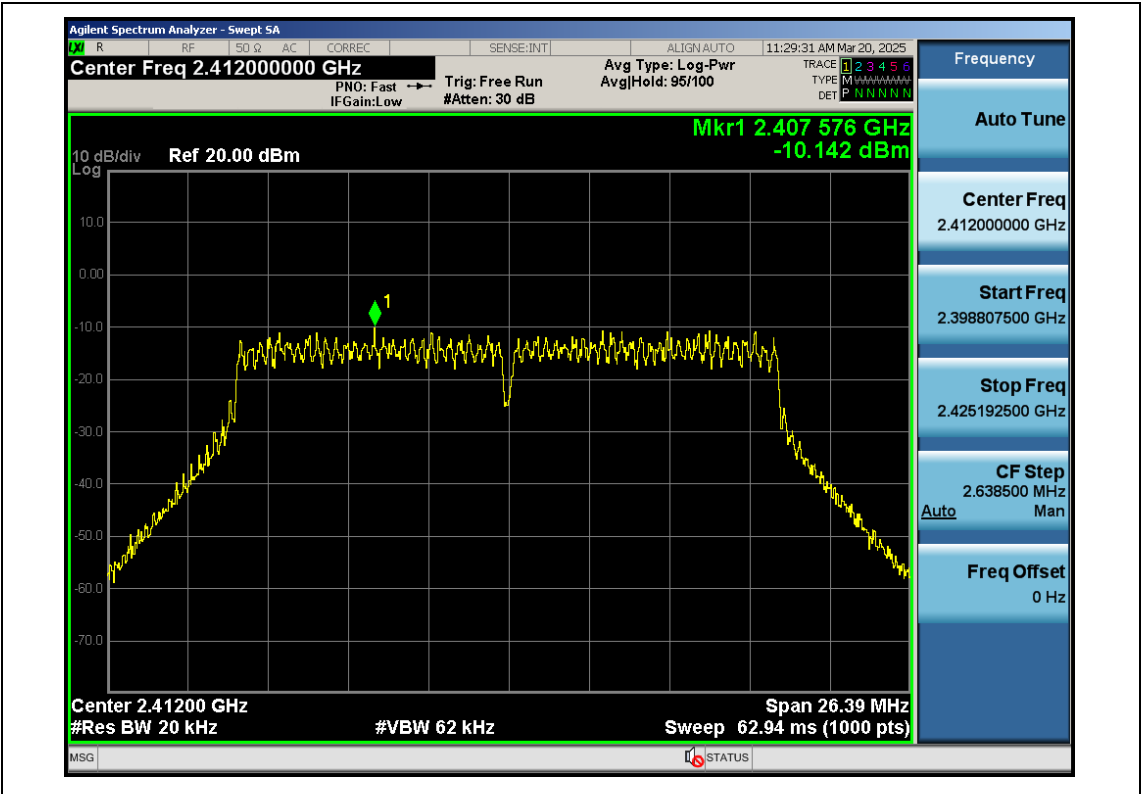
11G-Ant1-2412-PASS



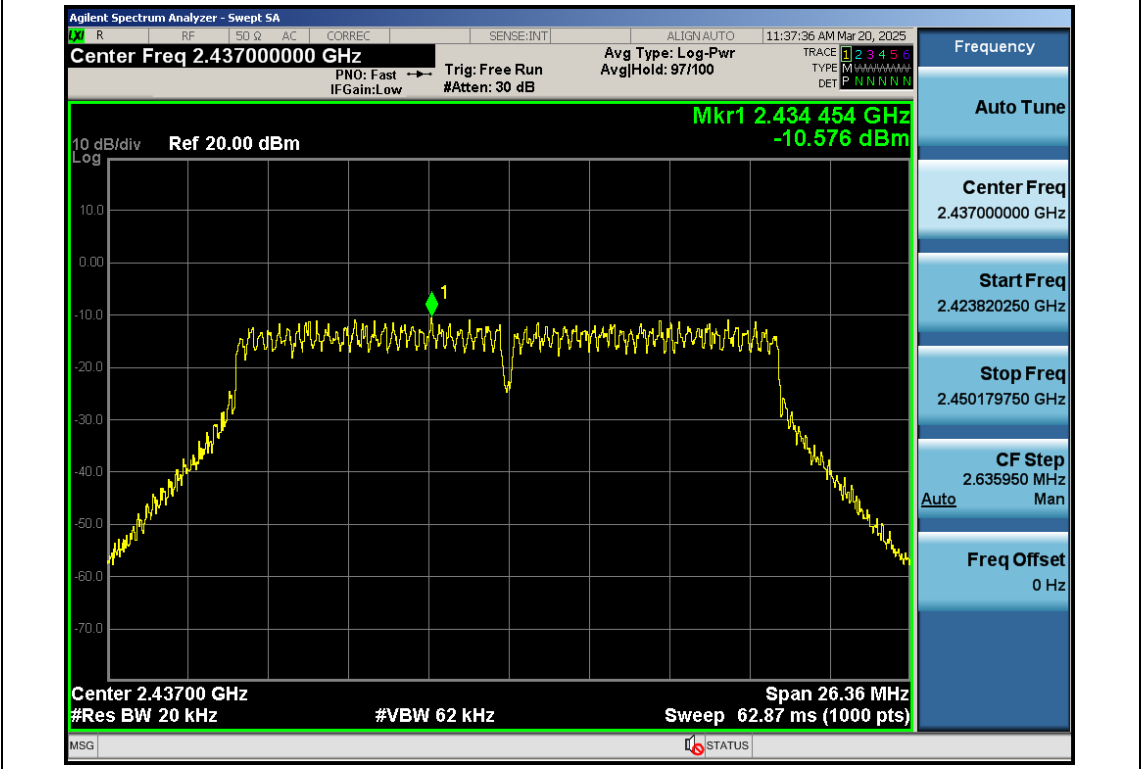
11G-Ant1-2437-PASS



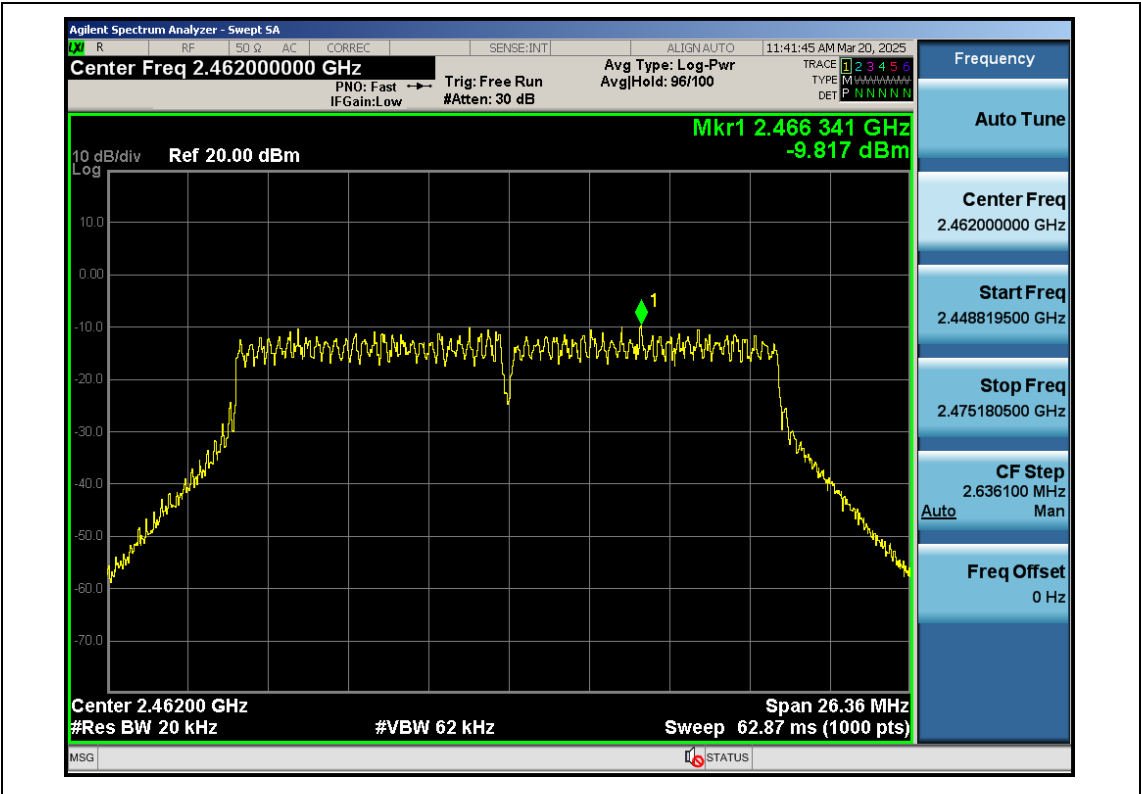
11G-Ant1-2462-PASS



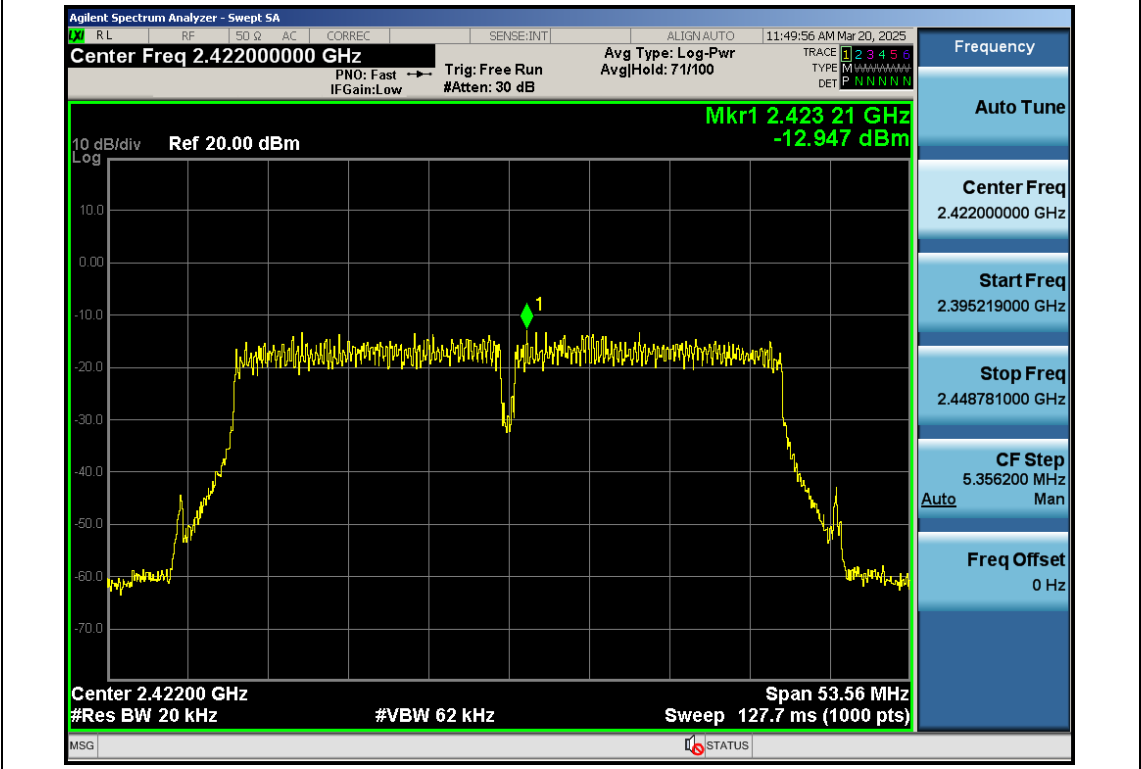
11N20SISO-Ant1-2412-PASS



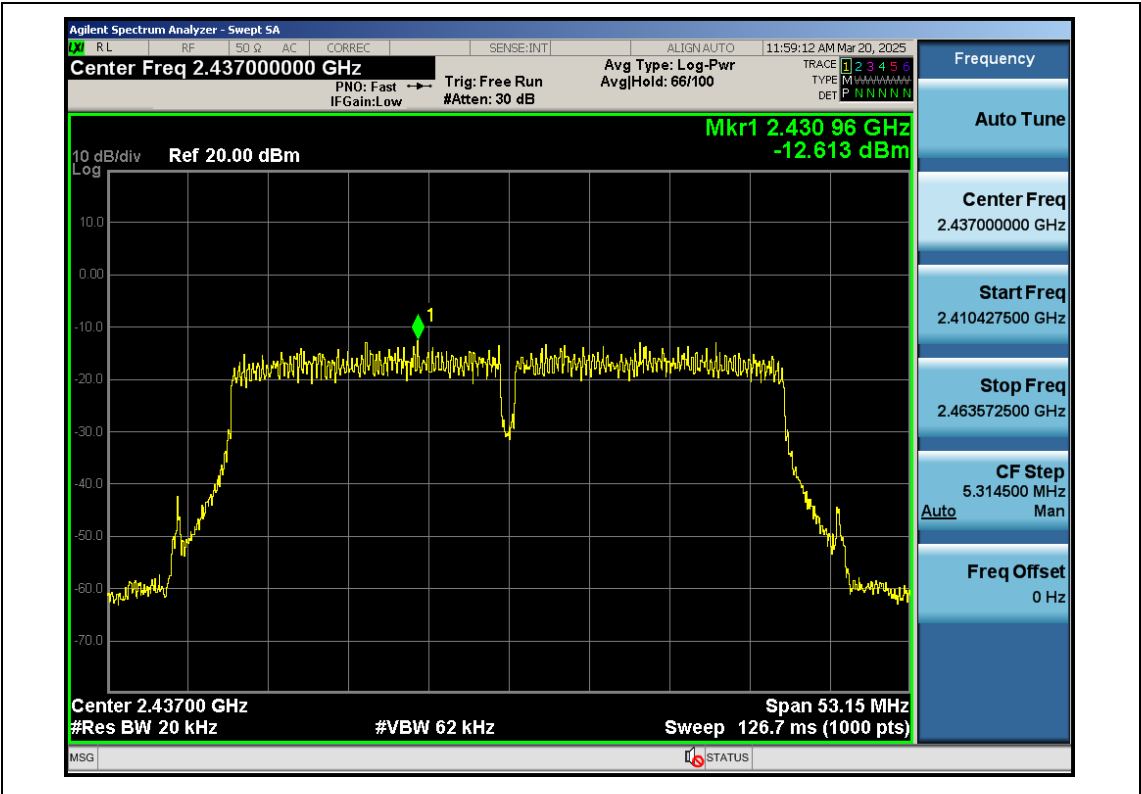
11N20SISO-Ant1-2437-PASS



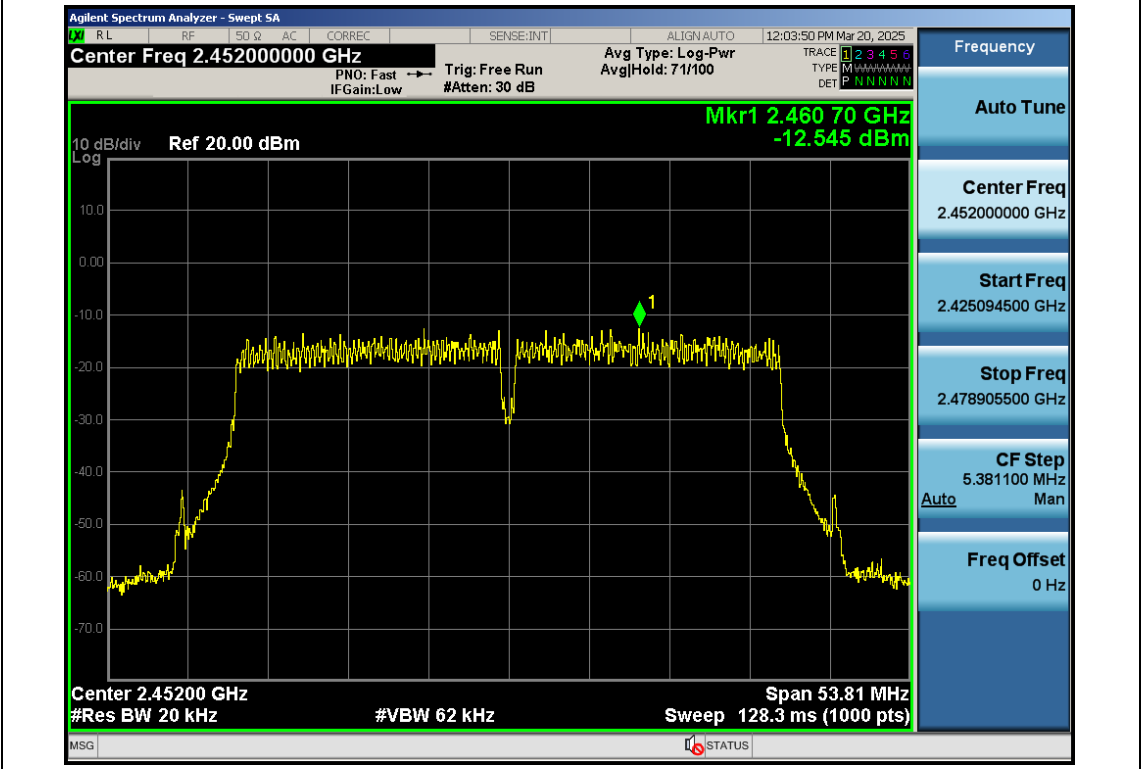
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

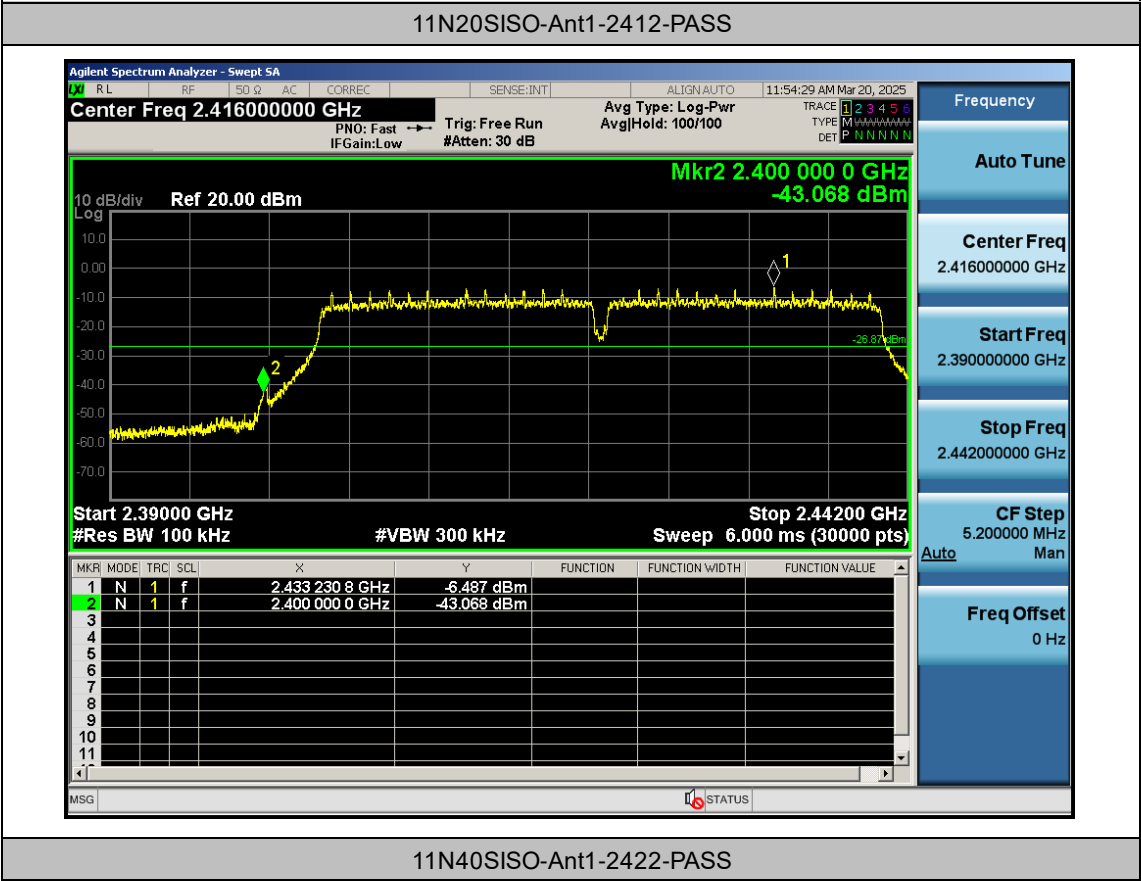
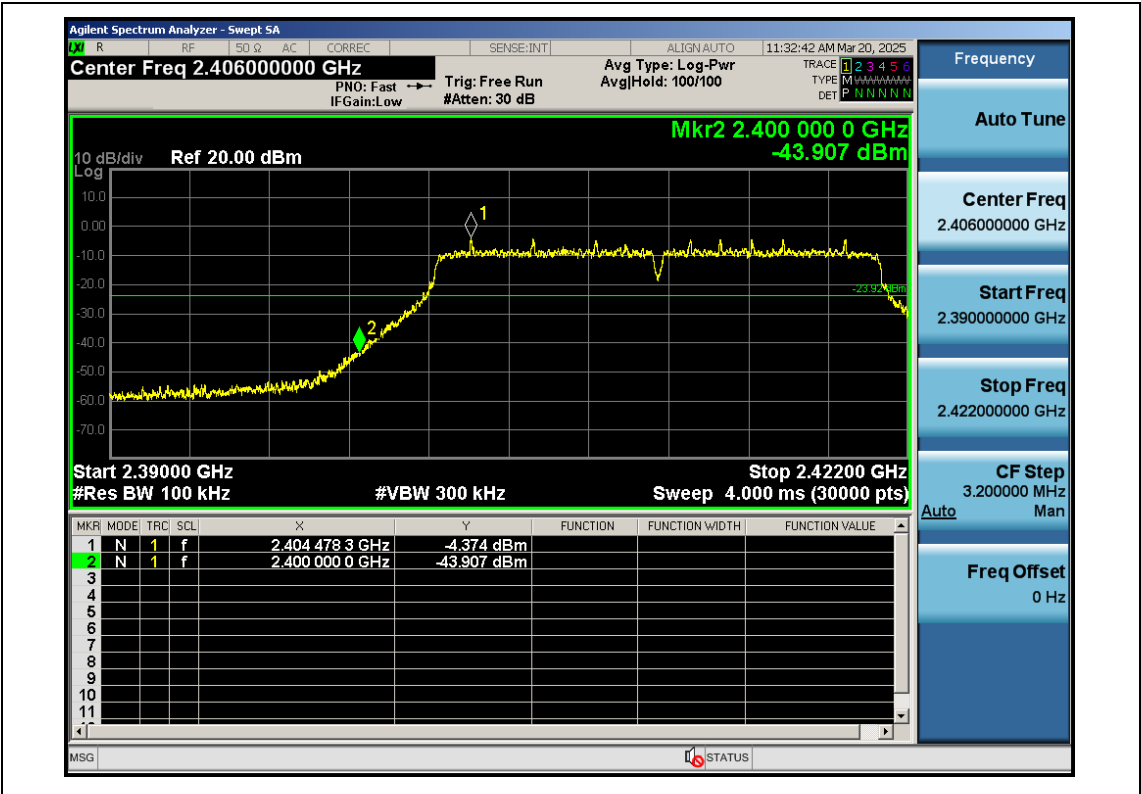
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency. [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	8.265	-48.37	≤ -13.56	PASS
11G	Ant1	Low	2412	-4.044	-43.02	≤ -23.75	PASS
11N20SI SO	Ant1	Low	2412	-4.374	-43.91	≤ -23.92	PASS
11N40SI SO	Ant1	Low	2422	-6.487	-43.07	≤ -26.87	PASS

Test Graphs



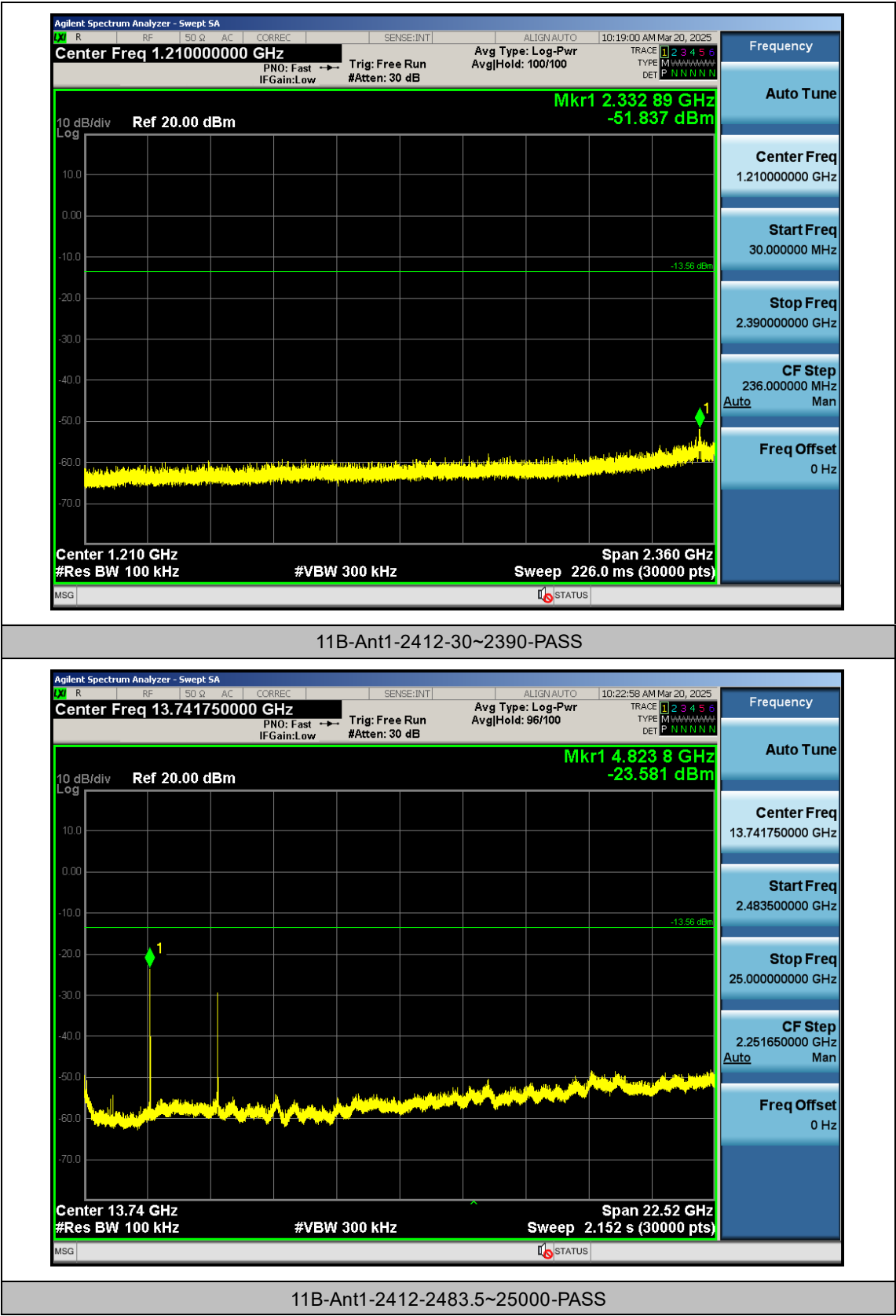


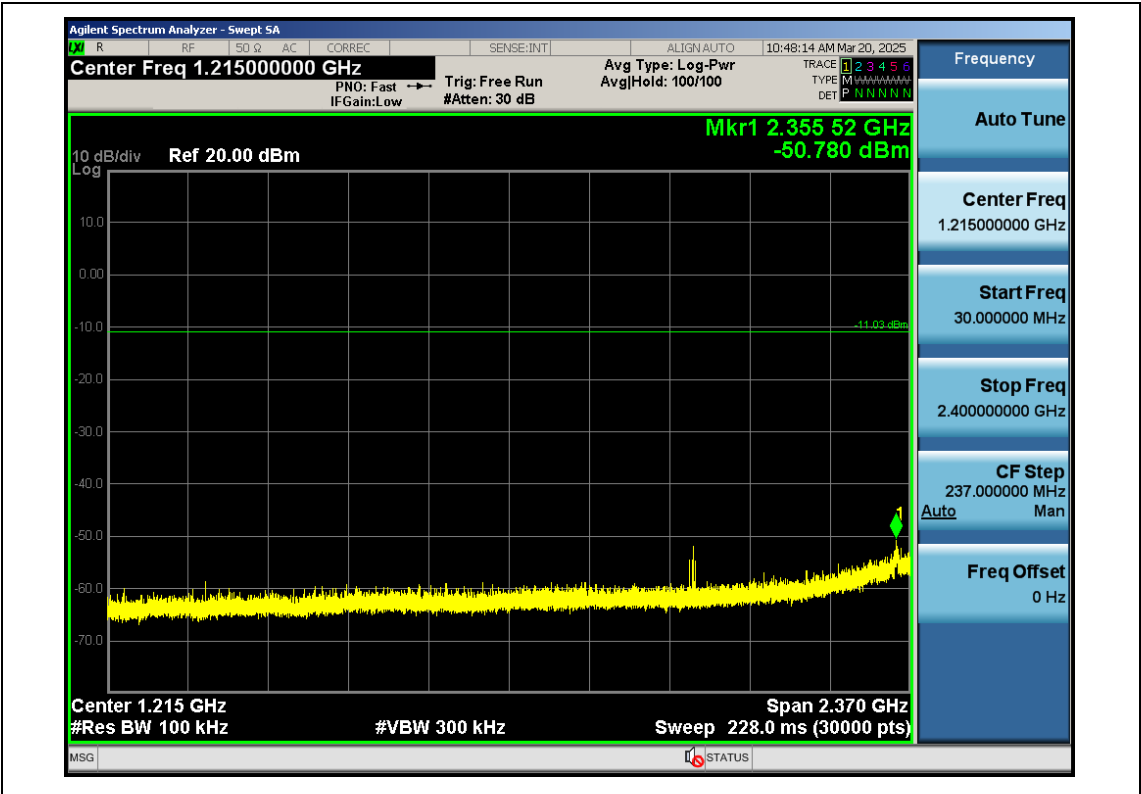
Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	-51.84	-51.84	---	PASS
11B	Ant1	2412	30~2390	-51.84	-23.58	≤-13.56	PASS
11B	Ant1	2412	2483.5~25000			≤-13.56	PASS
11B	Ant1	2437	0~Reference	-50.78	-50.78	---	PASS
11B	Ant1	2437	30~2400	-50.78	-23.05	≤-11.03	PASS
11B	Ant1	2437	2483.5~25000			≤-11.03	PASS
11B	Ant1	2462	0~Reference	-53.22	-53.22	---	PASS
11B	Ant1	2462	30~2400	-53.22	-36.28	≤-16.81	PASS
11B	Ant1	2462	2500~25000			≤-16.81	PASS
11G	Ant1	2412	0~Reference	-53.84	-53.84	---	PASS
11G	Ant1	2412	30~2390	-53.84	-37.43	≤-23.75	PASS
11G	Ant1	2412	2483.5~25000			≤-23.75	PASS
11G	Ant1	2437	0~Reference	-55.57	-55.57	---	PASS
11G	Ant1	2437	30~2400	-55.57	-38.68	≤-23.56	PASS
11G	Ant1	2437	2483.5~25000			≤-23.56	PASS
11G	Ant1	2462	0~Reference	-50.92	-50.92	---	PASS
11G	Ant1	2462	30~2400	-50.92	-40.98	≤-23.47	PASS
11G	Ant1	2462	2500~25000			≤-23.47	PASS
11N20SISO	Ant1	2412	0~Reference	-54.60	-54.60	---	PASS
11N20SISO	Ant1	2412	30~2390	-54.60	-36.84	≤-23.92	PASS
11N20SISO	Ant1	2412	2483.5~25000			≤-23.92	PASS
11N20SISO	Ant1	2437	0~Reference	-48.34	-48.34	---	PASS
11N20SISO	Ant1	2437	30~2400	-48.34	-39.94	≤-23.58	PASS
11N20SISO	Ant1	2437	2483.5~25000			≤-23.58	PASS
11N20SISO	Ant1	2462	0~Reference	-54.78	-54.78	---	PASS
11N20SISO	Ant1	2462	30~2400	-54.78	-41.72	≤-23.27	PASS
11N20SISO	Ant1	2462	2500~25000			≤-23.27	PASS
11N40SISO	Ant1	2422	0~Reference	-53.94	-53.94	---	PASS
11N40SISO	Ant1	2422	30~2390	-53.94	-38.61	≤-26.87	PASS
11N40SISO	Ant1	2422	2483.5~25000			≤-26.87	PASS
11N40SISO	Ant1	2437	0~Reference	-55.00	-55.00	---	PASS
11N40SISO	Ant1	2437	30~2400	-55.00	-40.12	≤-26.34	PASS
11N40SISO	Ant1	2437	2483.5~25000			≤-26.34	PASS
11N40SISO	Ant1	2452	0~Reference	-55.20	-55.20	---	PASS
11N40SISO	Ant1	2452	30~2400	-55.20	-40.86	≤-26.10	PASS
11N40SISO	Ant1	2452	2500~25000			≤-26.10	PASS

Test Graphs

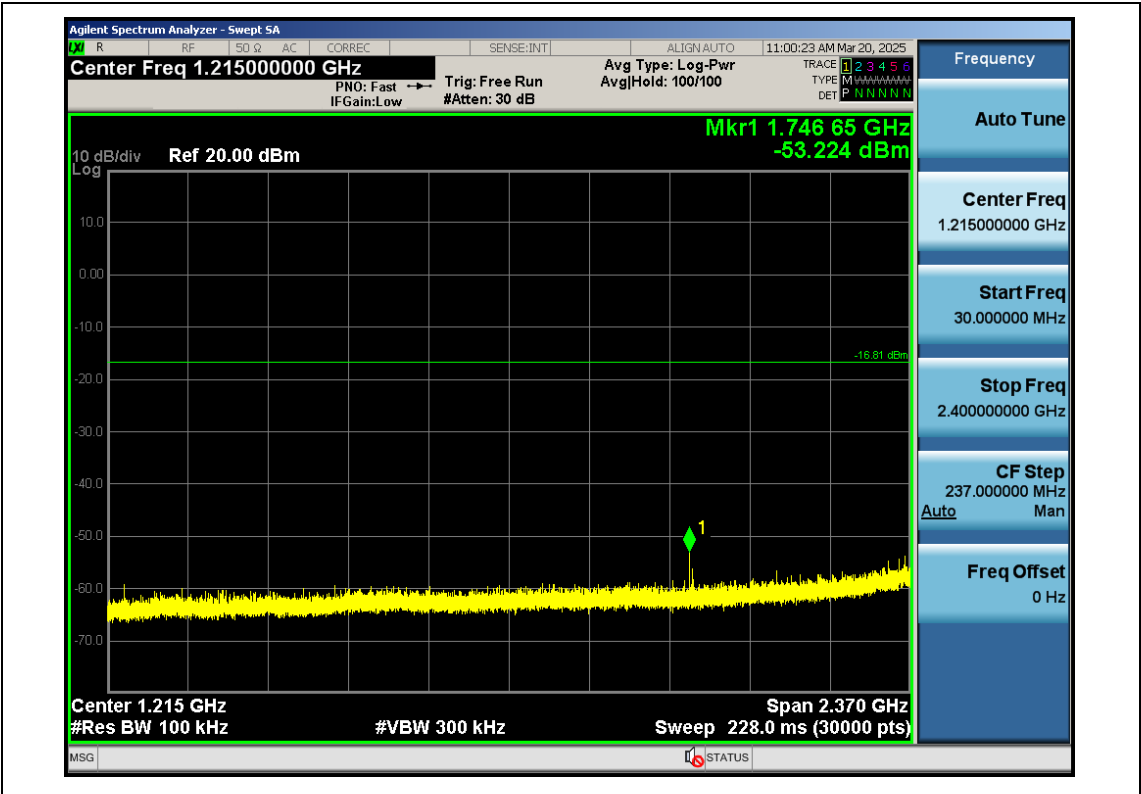




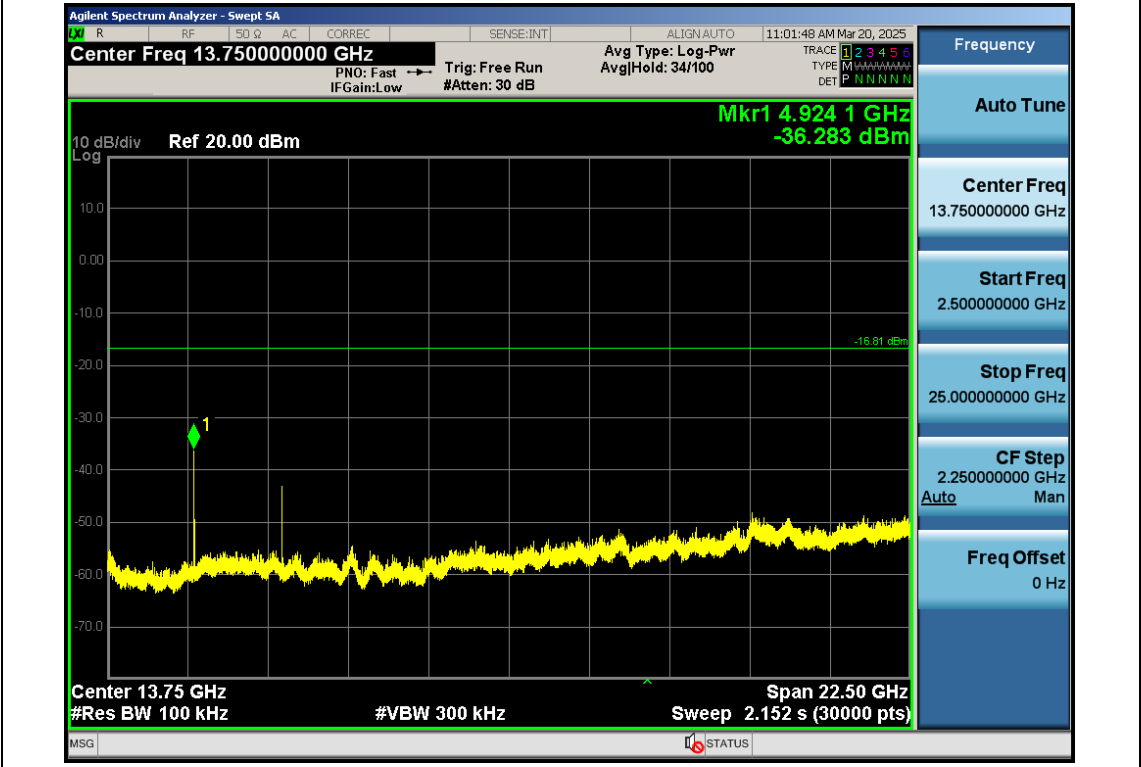
11B-Ant1-2437-30~2400-PASS



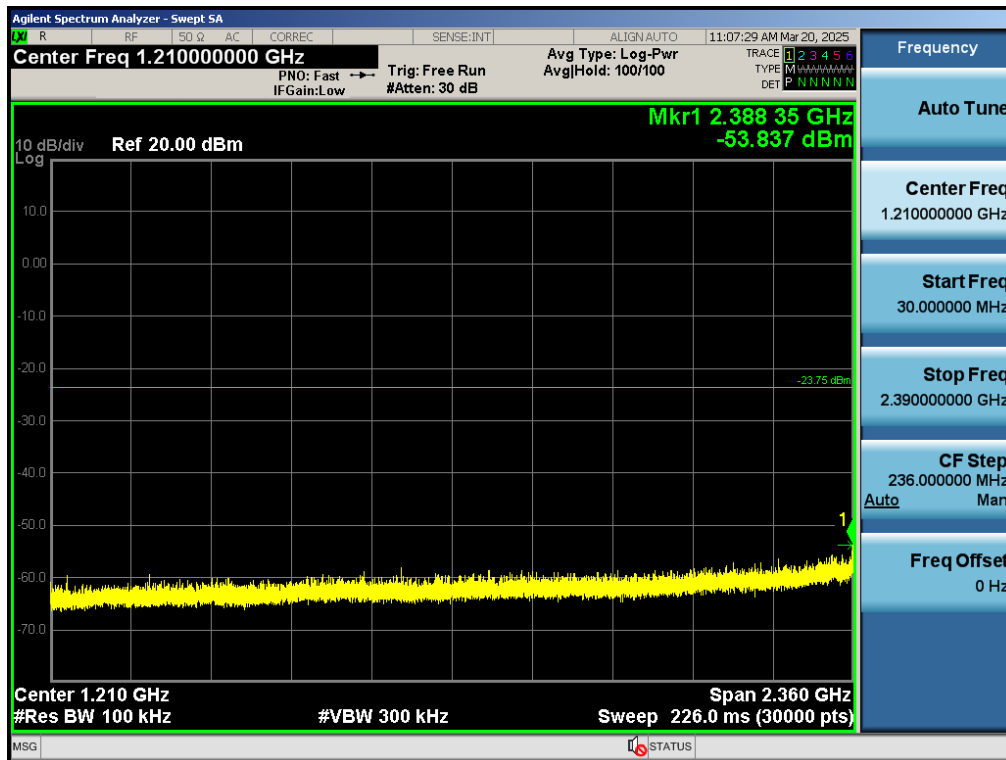
11B-Ant1-2437-2483.5~25000-PASS



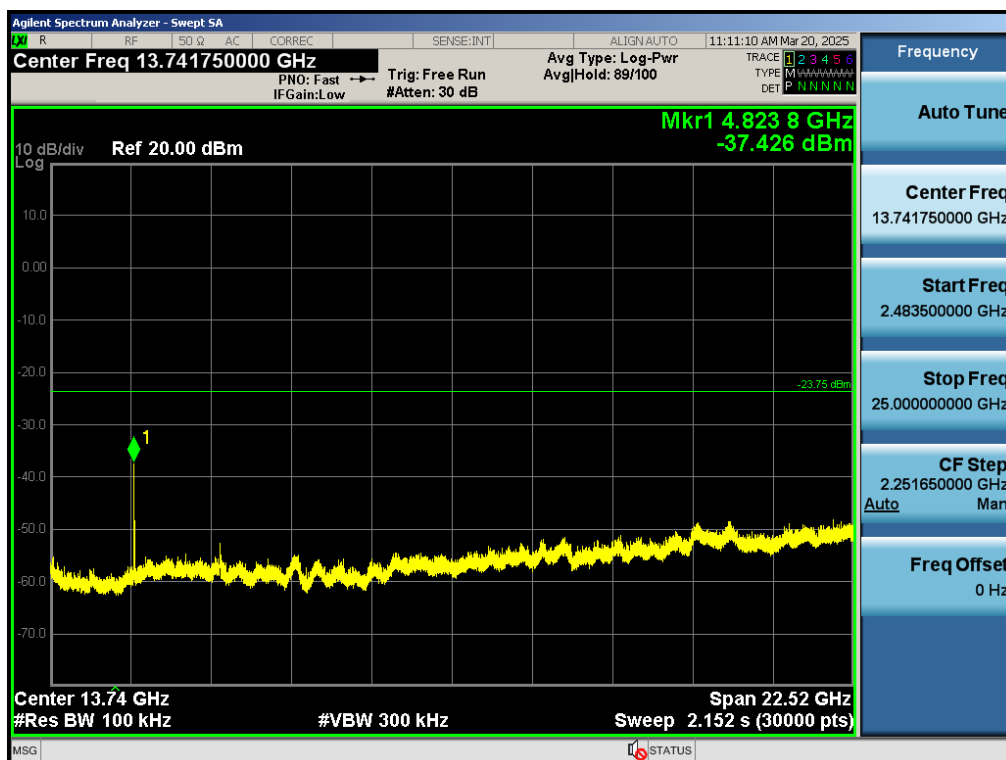
11B-Ant1-2462-30~2400-PASS



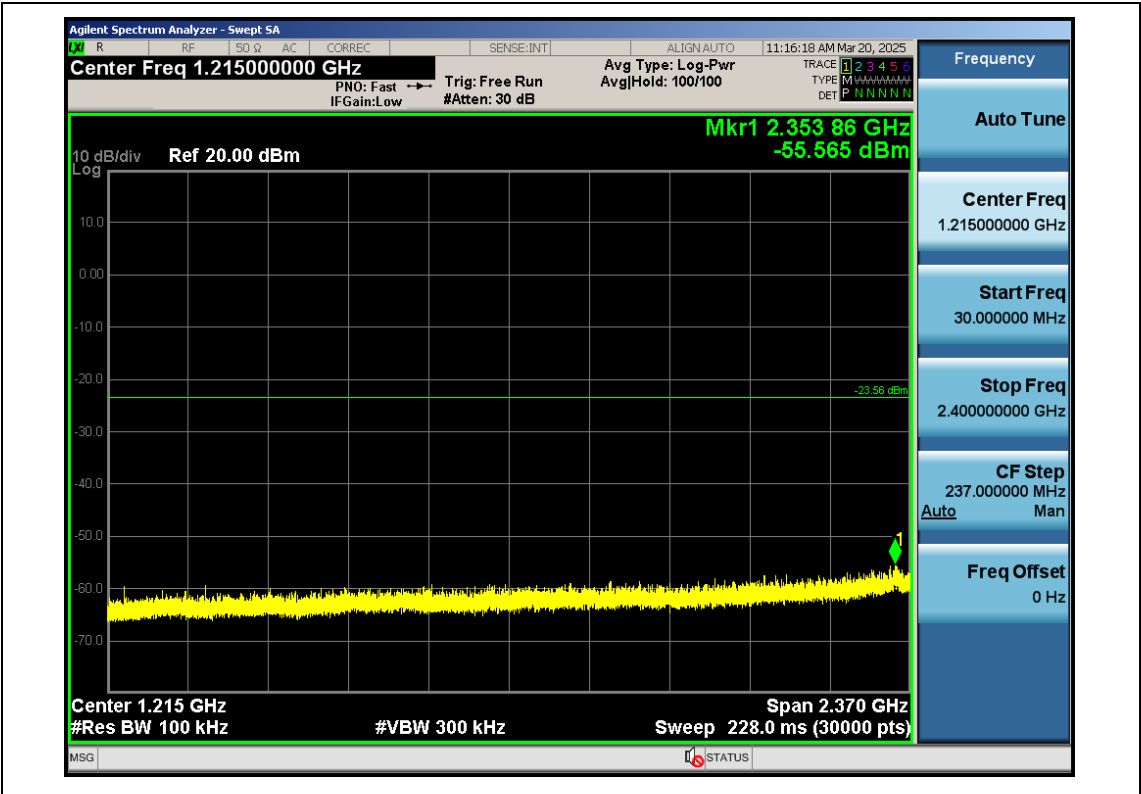
11B-Ant1-2462-2500~25000-PASS



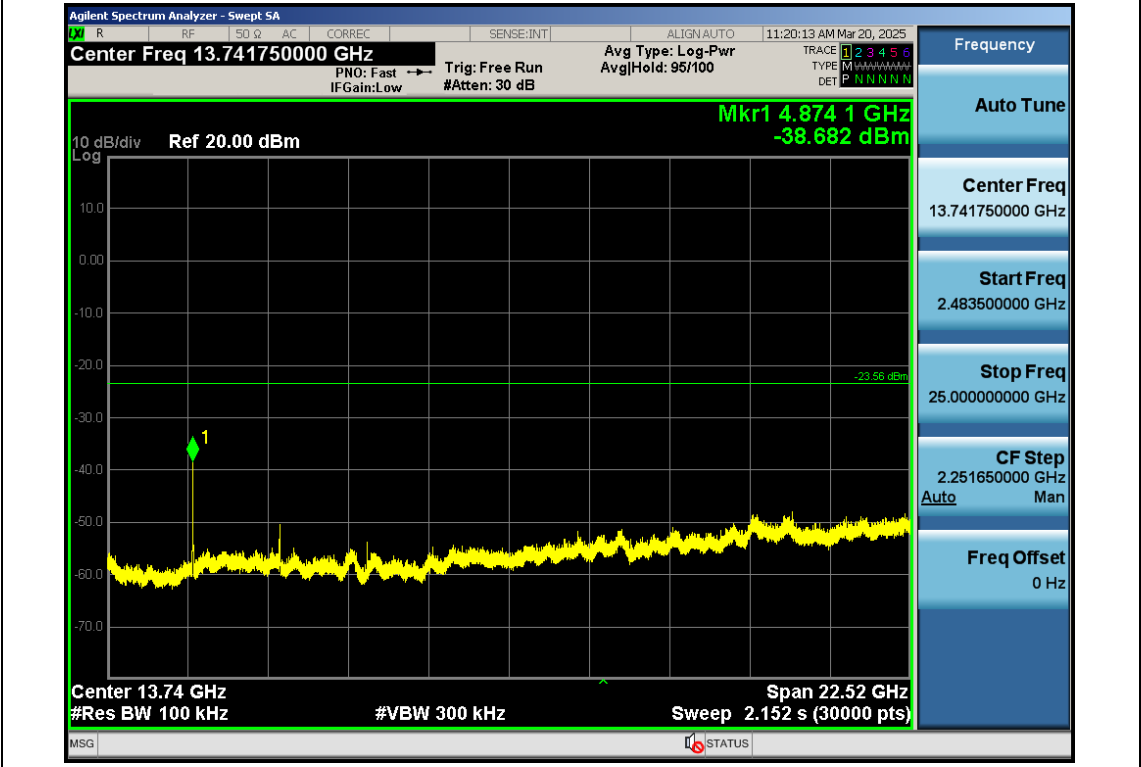
11G-Ant1-2412-30~2390-PASS



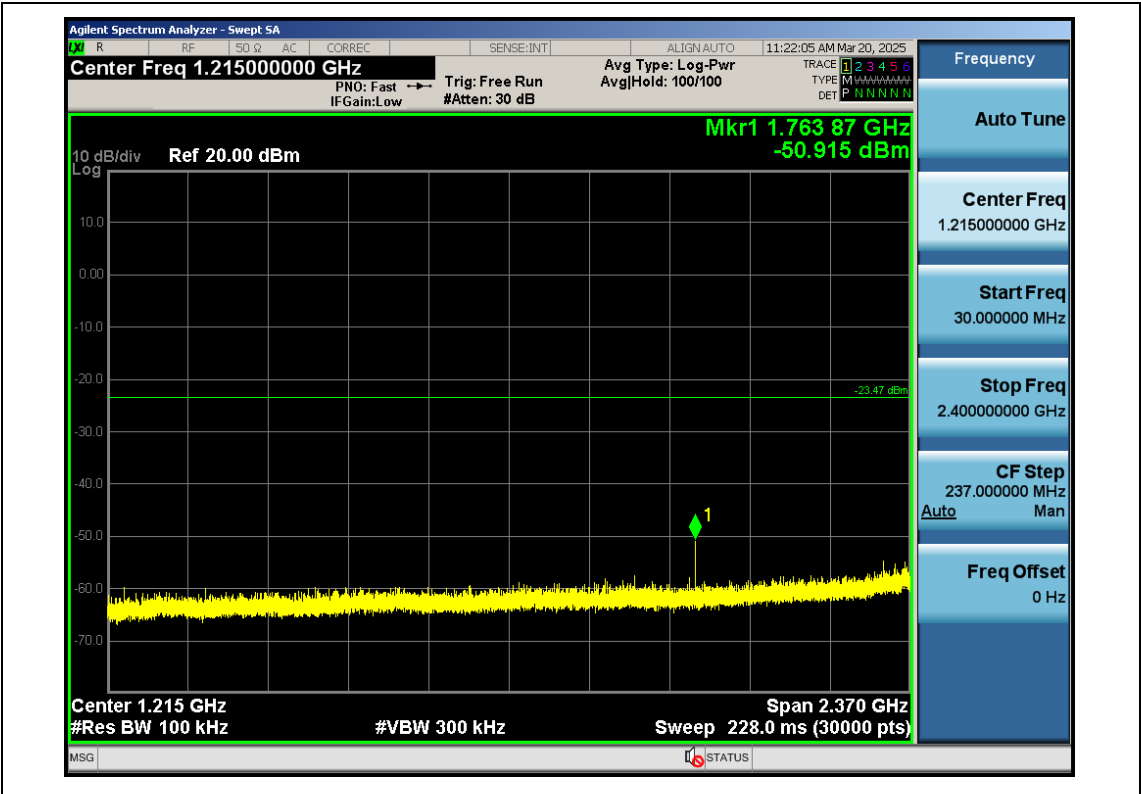
11G-Ant1-2412-2483.5~25000-PASS



11G-Ant1-2437-30~2400-PASS



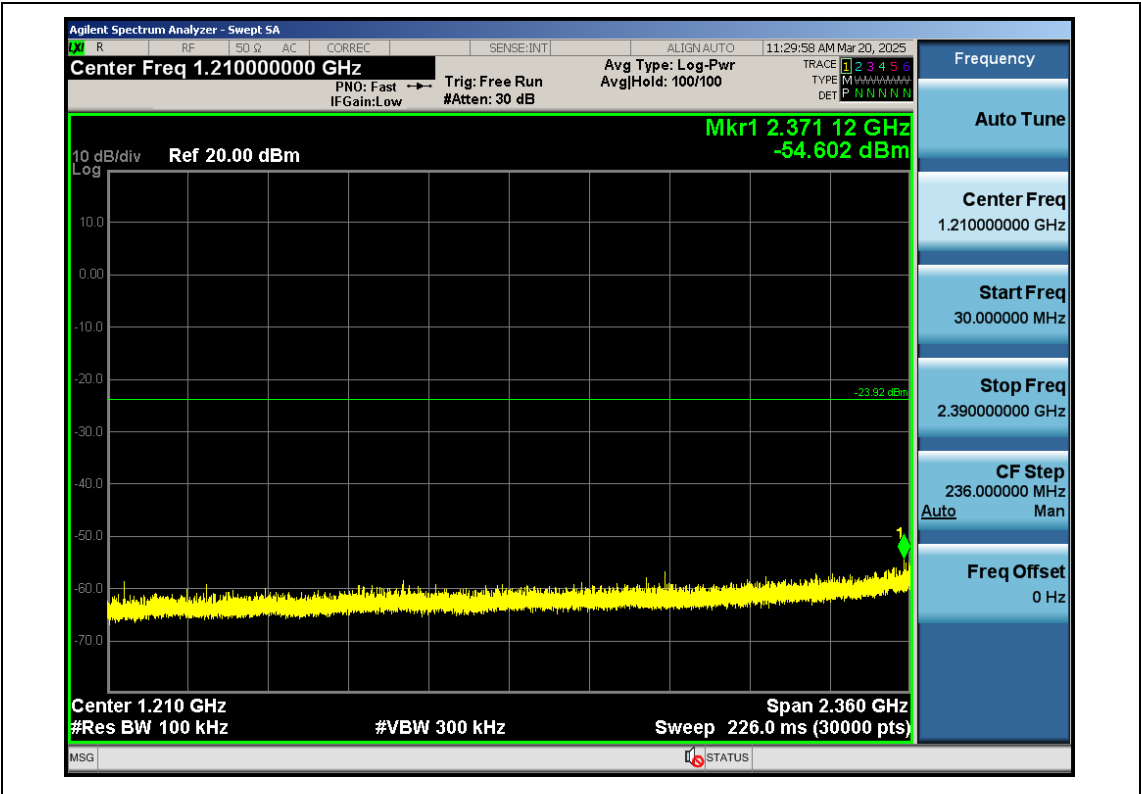
11G-Ant1-2483.5-2483.5~25000-PASS



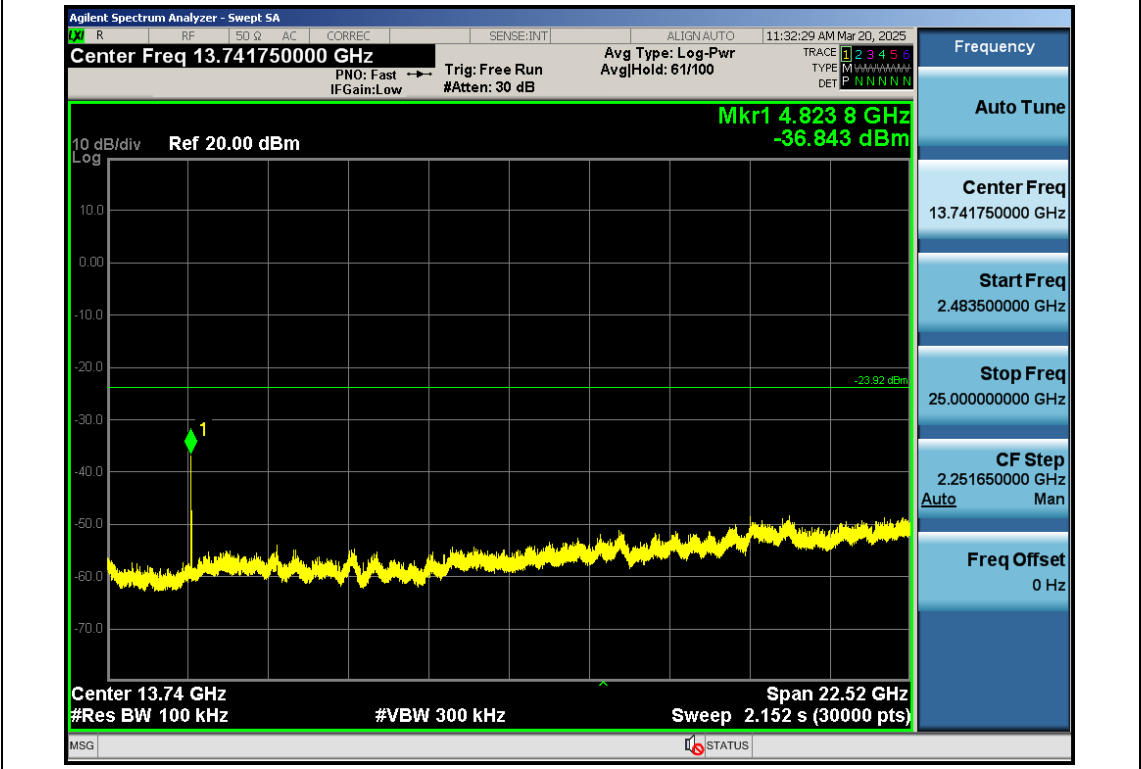
11G-Ant1-2462-30~2400-PASS



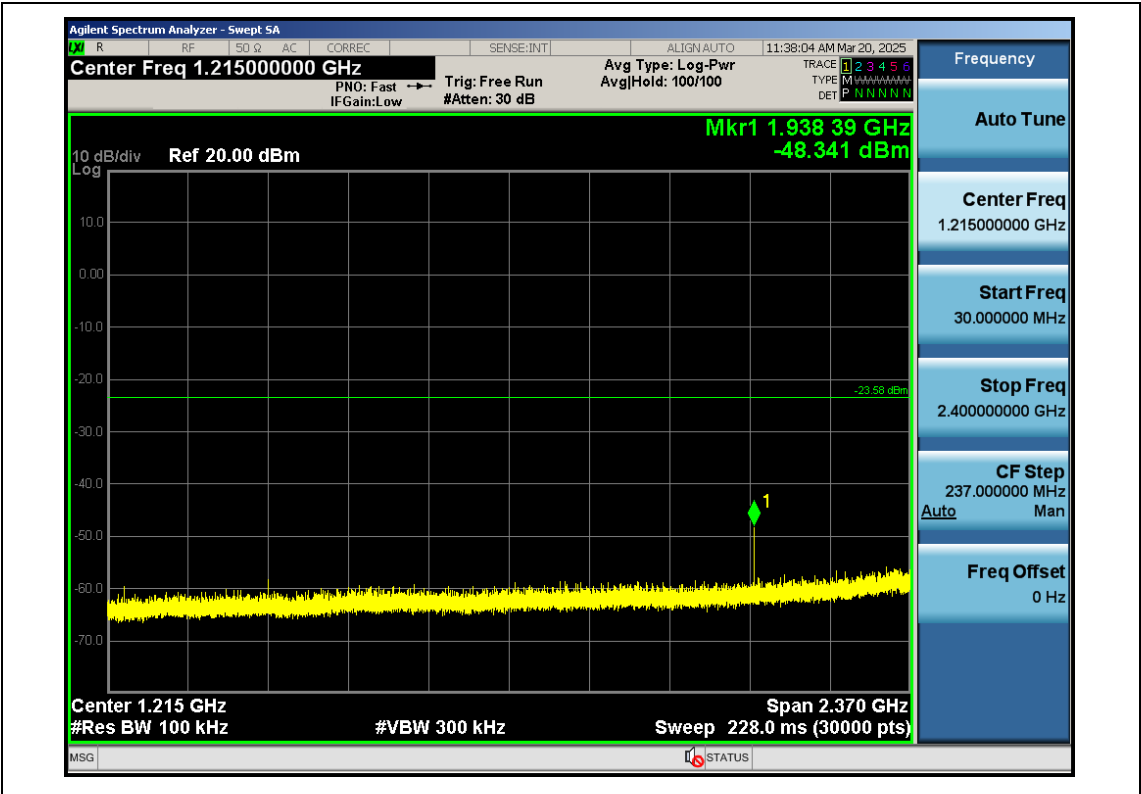
11G-Ant1-2462-2500~25000-PASS



11N20SISO-Ant1-2412-30~2390-PASS



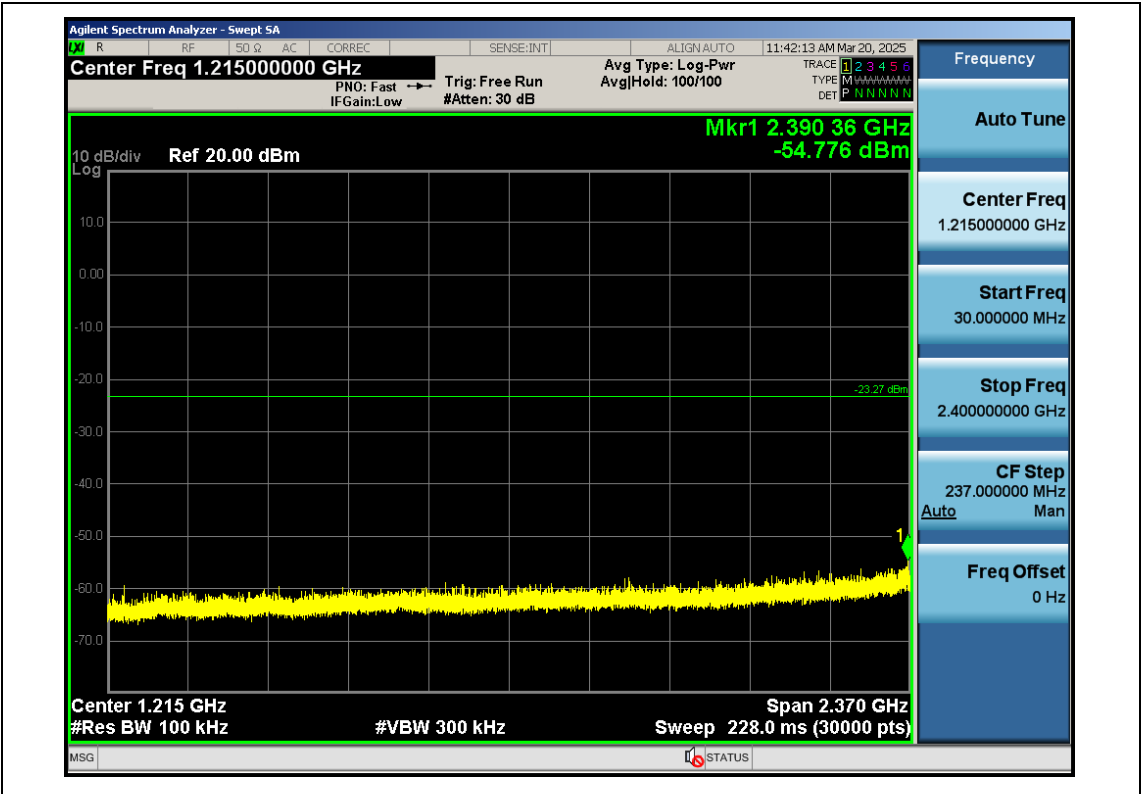
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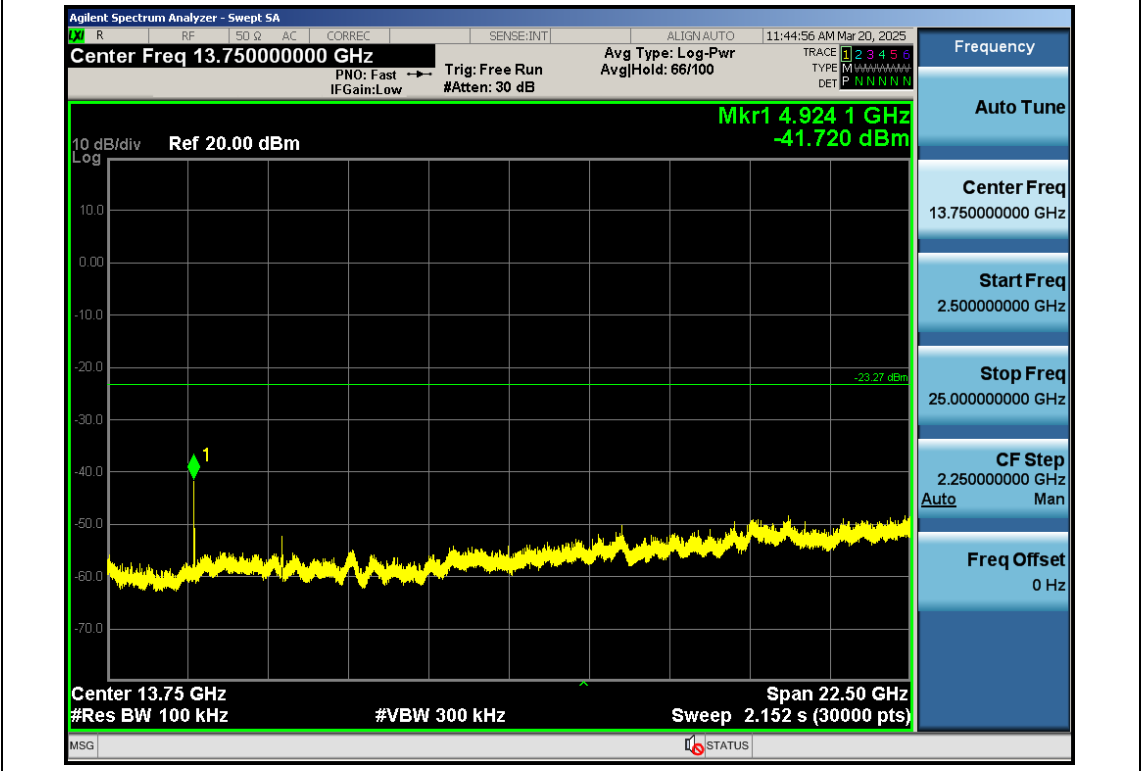
11N20SISO-Ant1-2437-30~2400-PASS



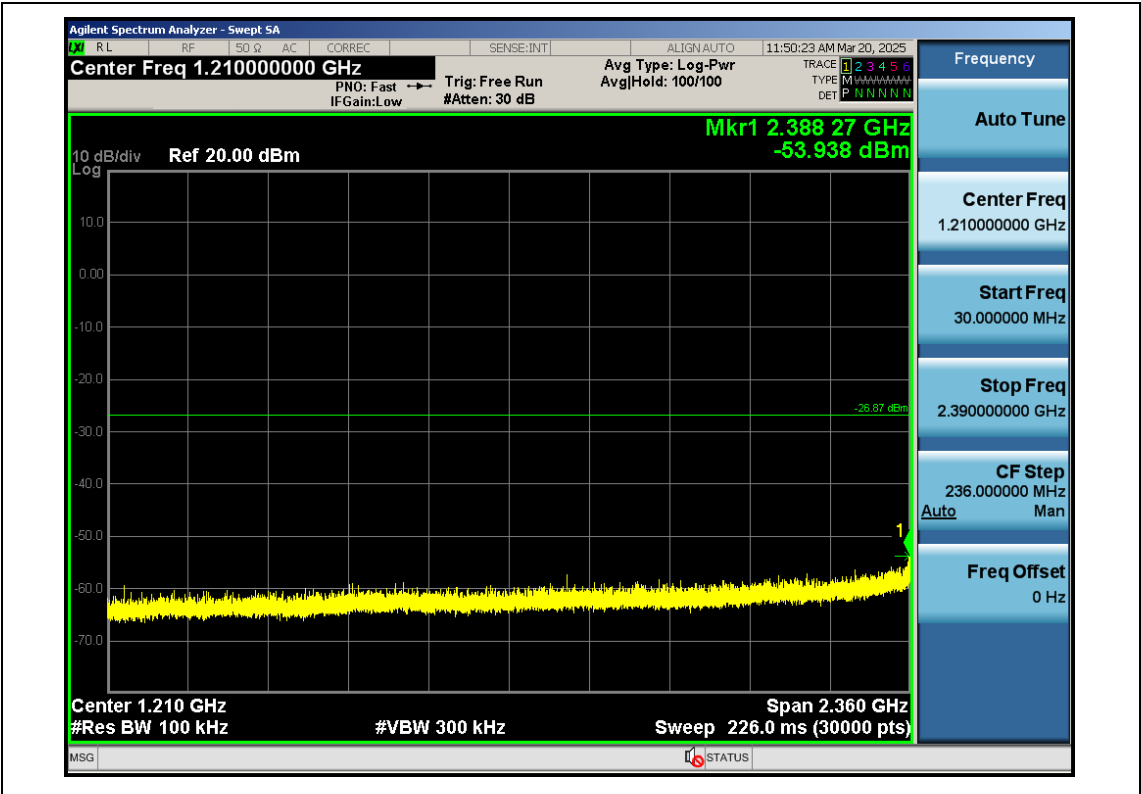
11N20SISO-Ant1-2437-2483.5~25000-PASS



11N20SISO-Ant1-2462-30~2400-PASS



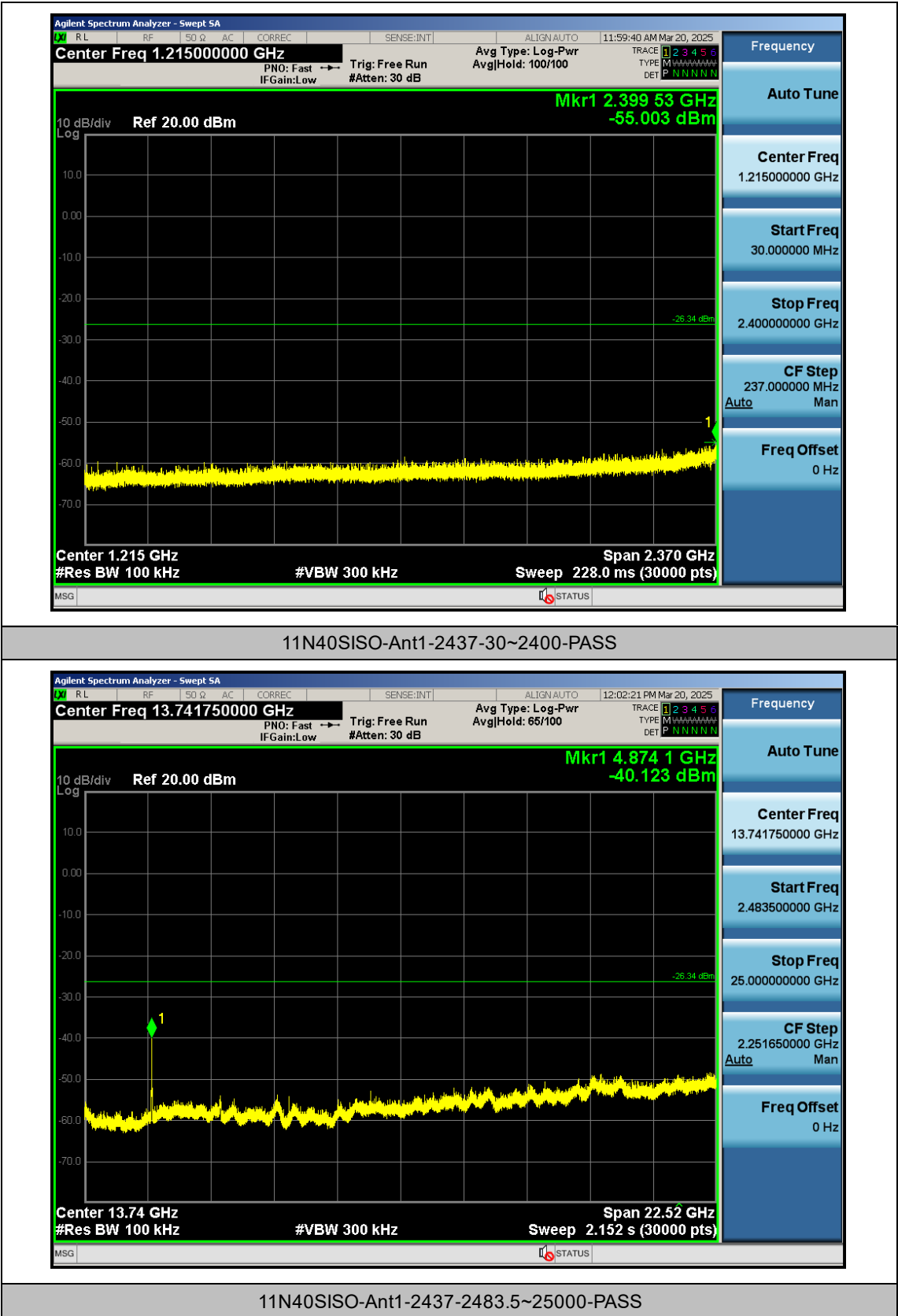
11N20SISO-Ant1-2462-2500~25000-PASS

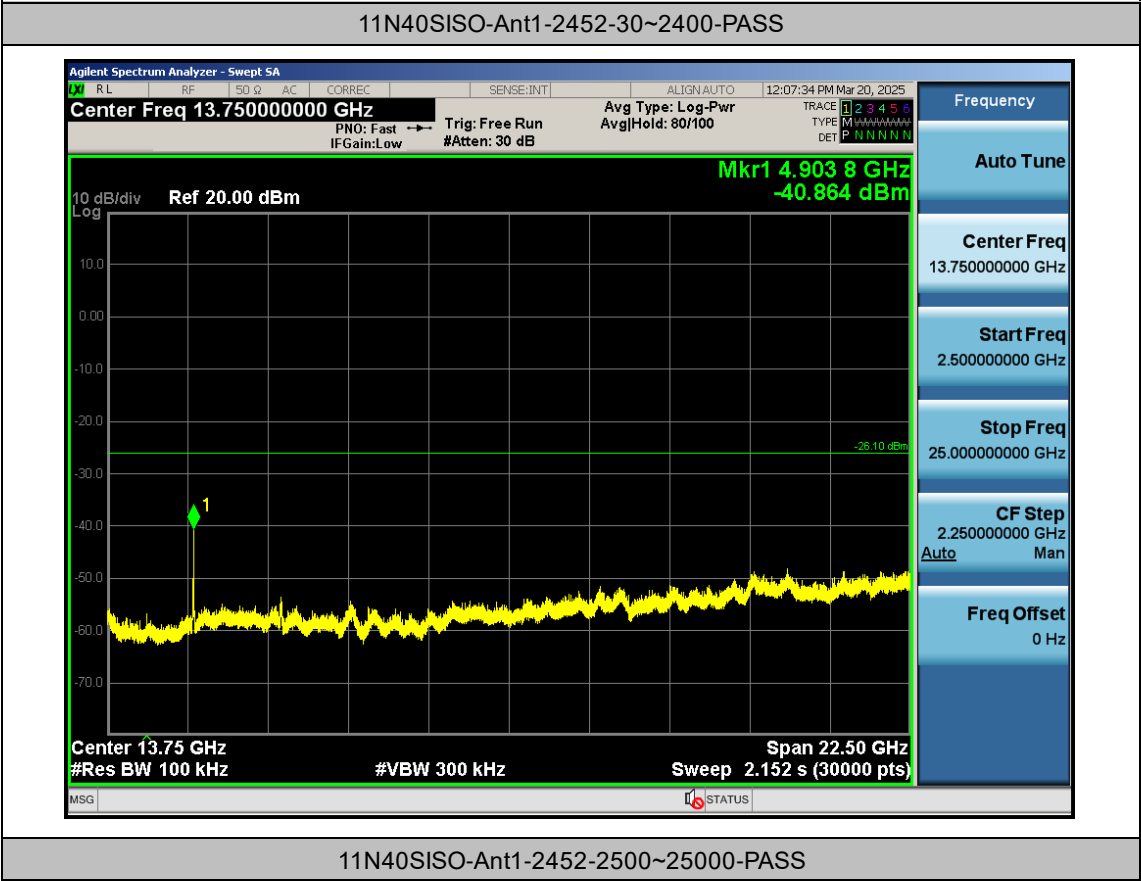
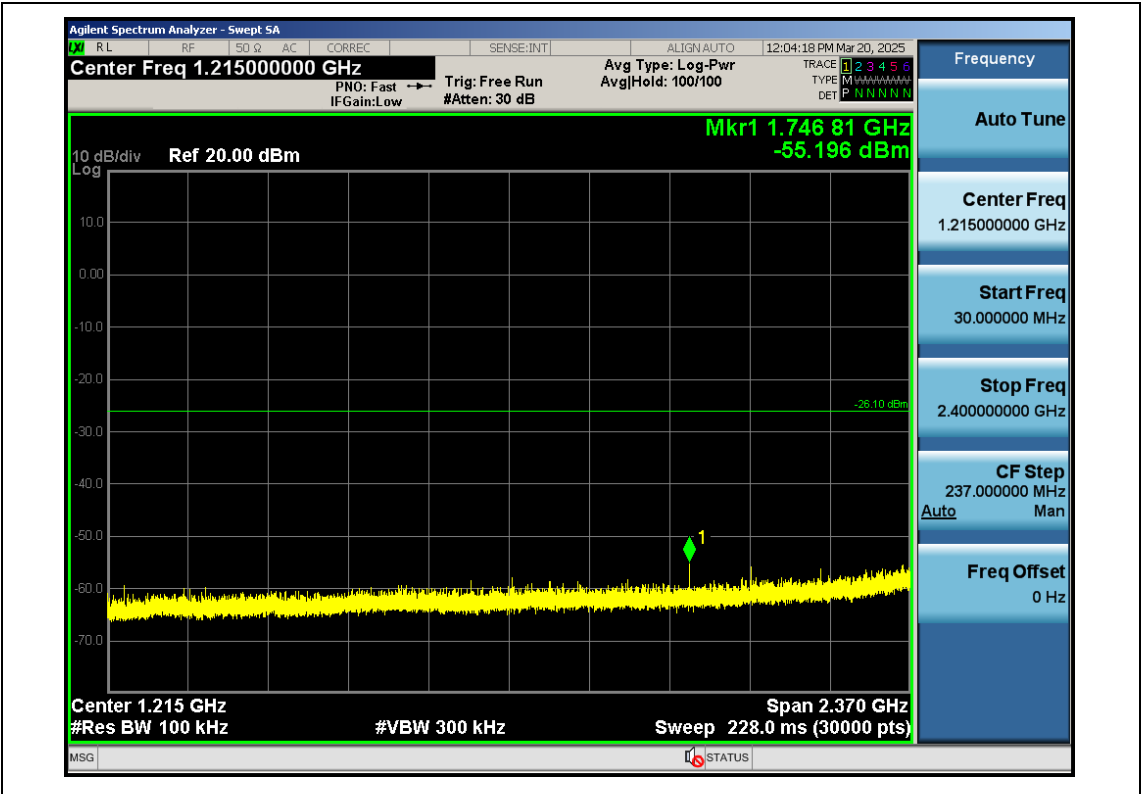


11N40SISO-Ant1-2422-30~2390-PASS



11N40SISO-Ant1-2422-2483.5~25000-PASS



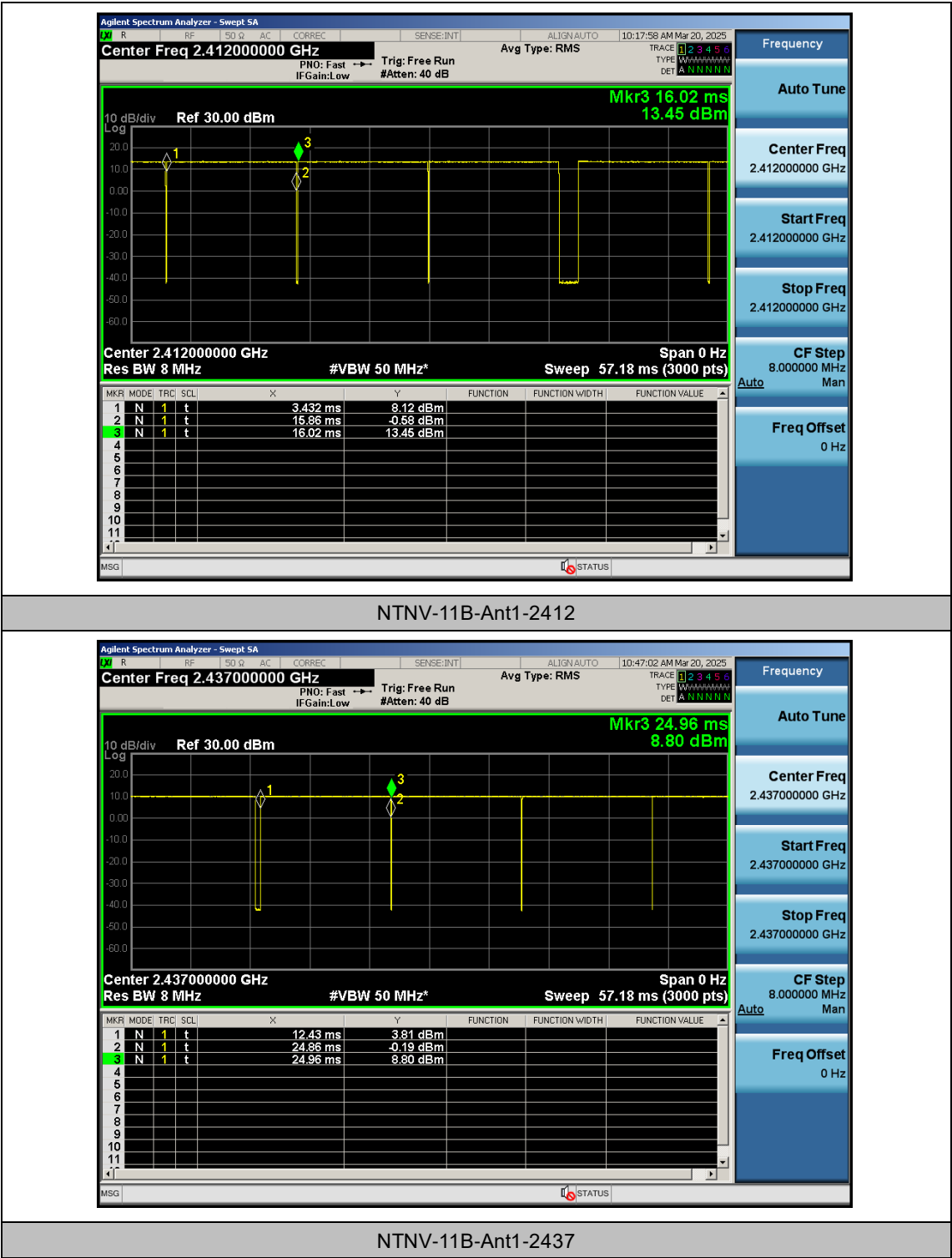


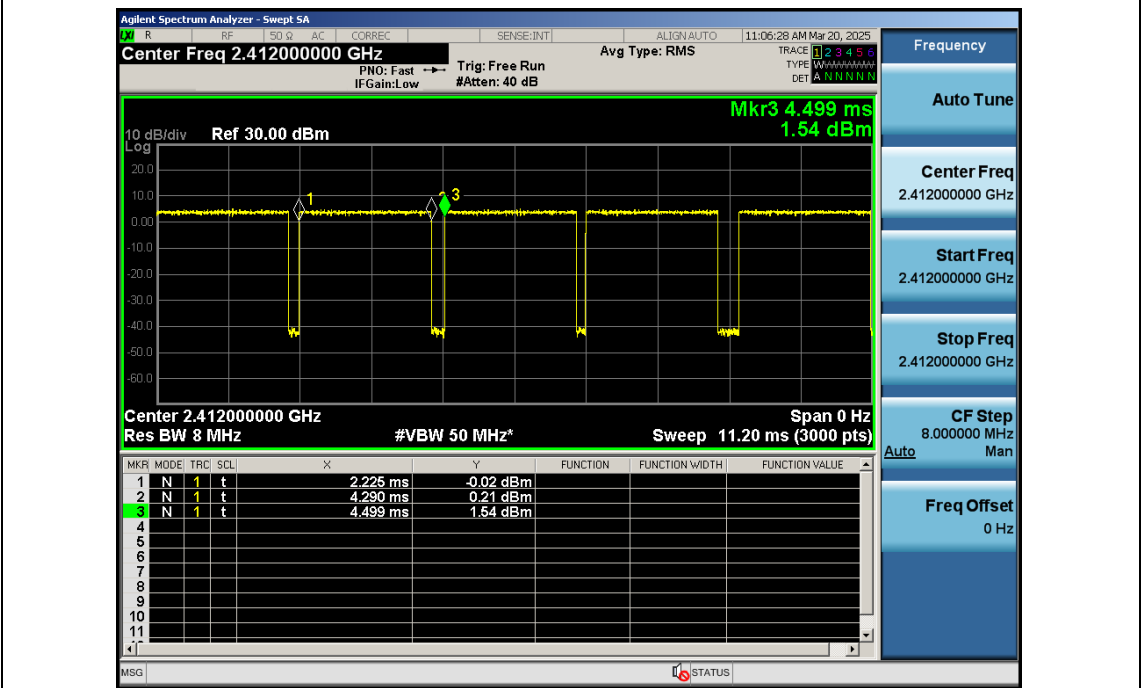
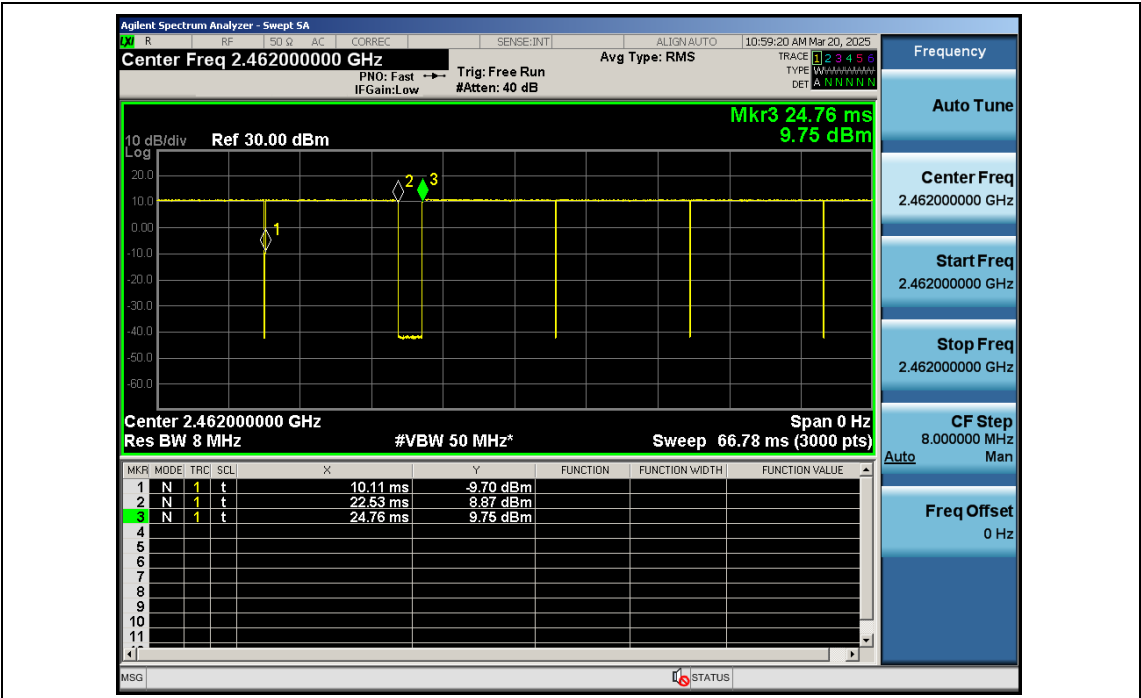
Appendix G: Duty Cycle

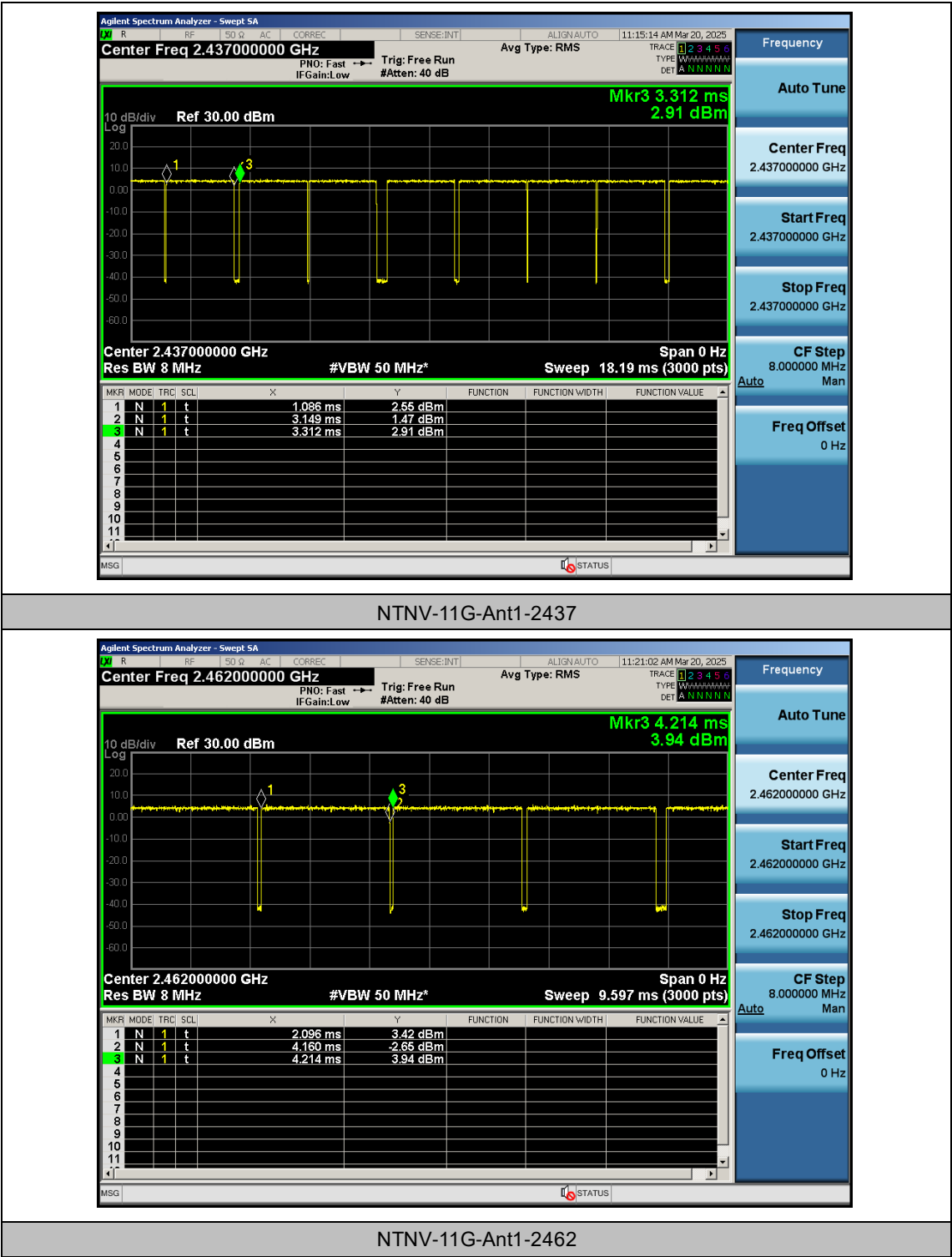
Test Result

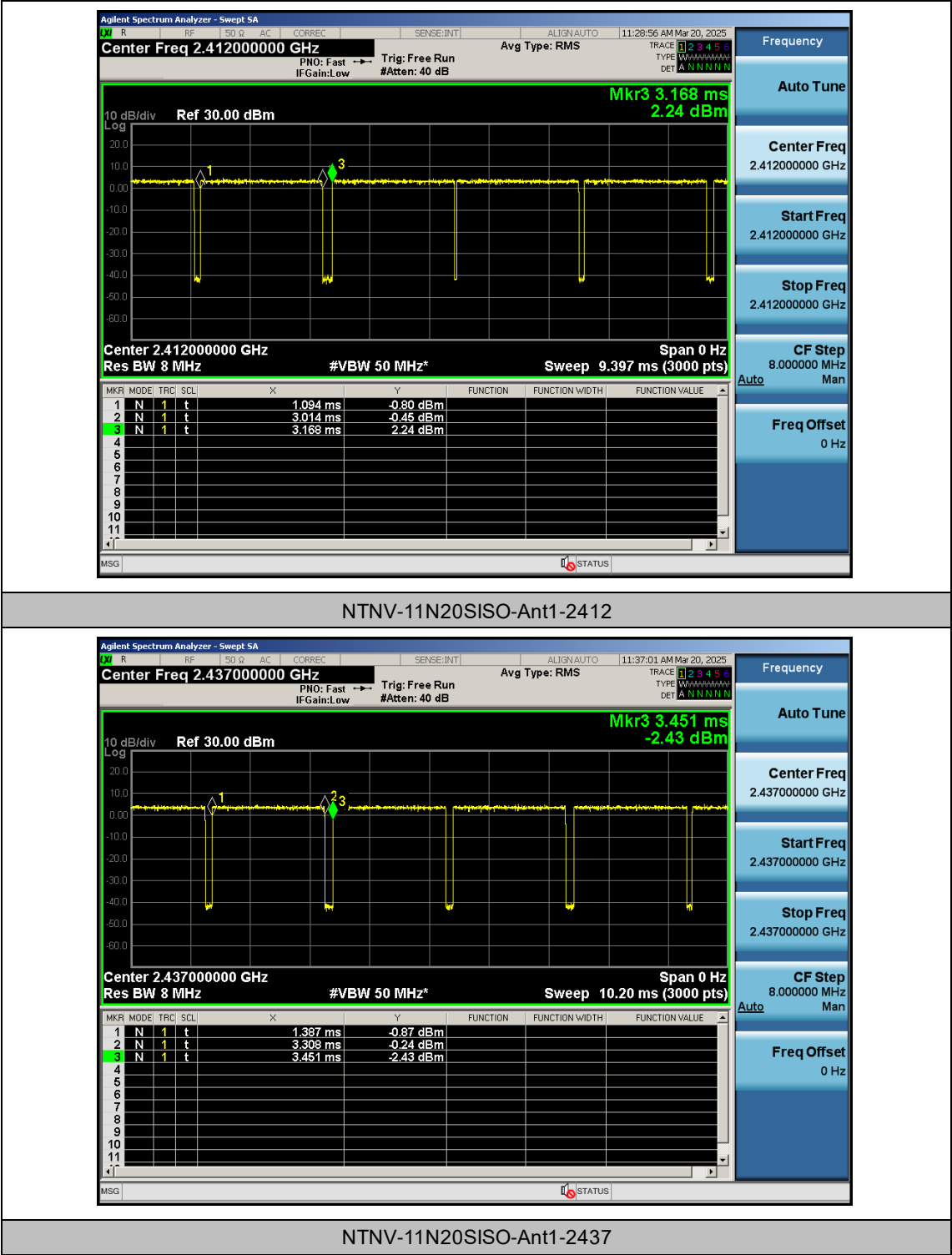
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.43	12.59	98.73	0.06
11B	Ant1	2437	12.43	12.53	99.20	0.03
11B	Ant1	2462	12.42	12.65	84.78	0.08
11G	Ant1	2412	2.07	2.27	90.81	0.42
11G	Ant1	2437	2.06	2.23	92.68	0.33
11G	Ant1	2462	2.06	2.12	97.45	0.11
11N20SISO	Ant1	2412	1.92	2.07	92.57	0.34
11N20SISO	Ant1	2437	1.92	2.06	93.07	0.31
11N20SISO	Ant1	2462	1.92	2.06	93.43	0.3
11N40SISO	Ant1	2422	0.94	1.04	90.59	0.43
11N40SISO	Ant1	2437	0.94	1.03	91.29	0.4
11N40SISO	Ant1	2452	0.94	0.98	96.33	0.16

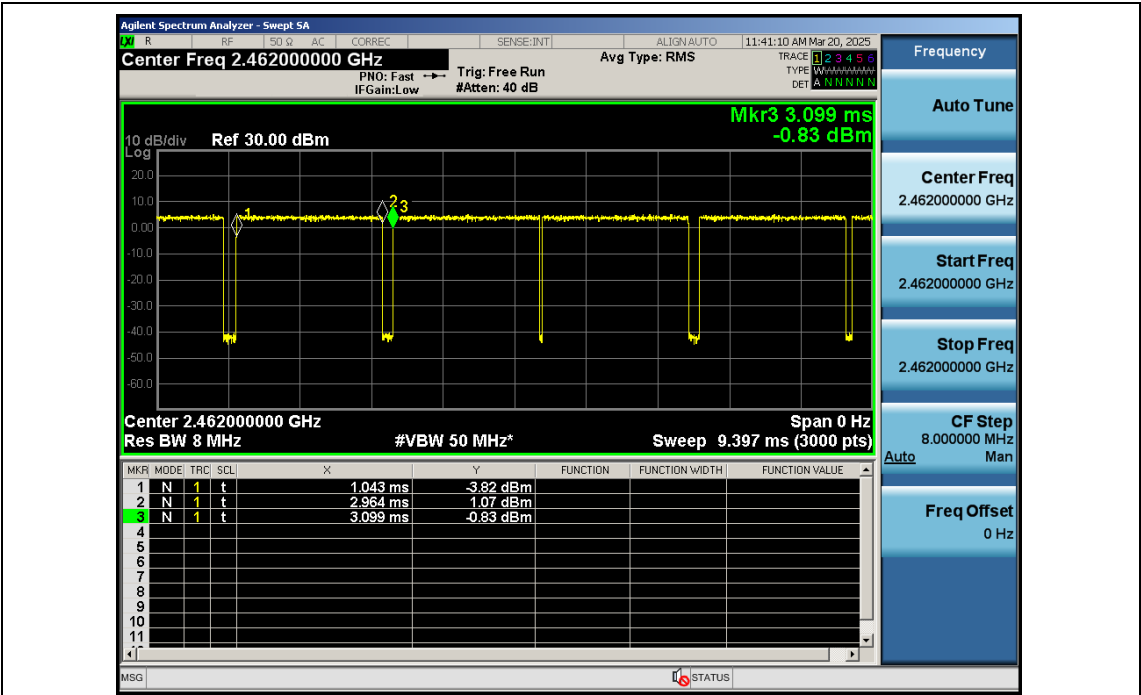
Test Graphs



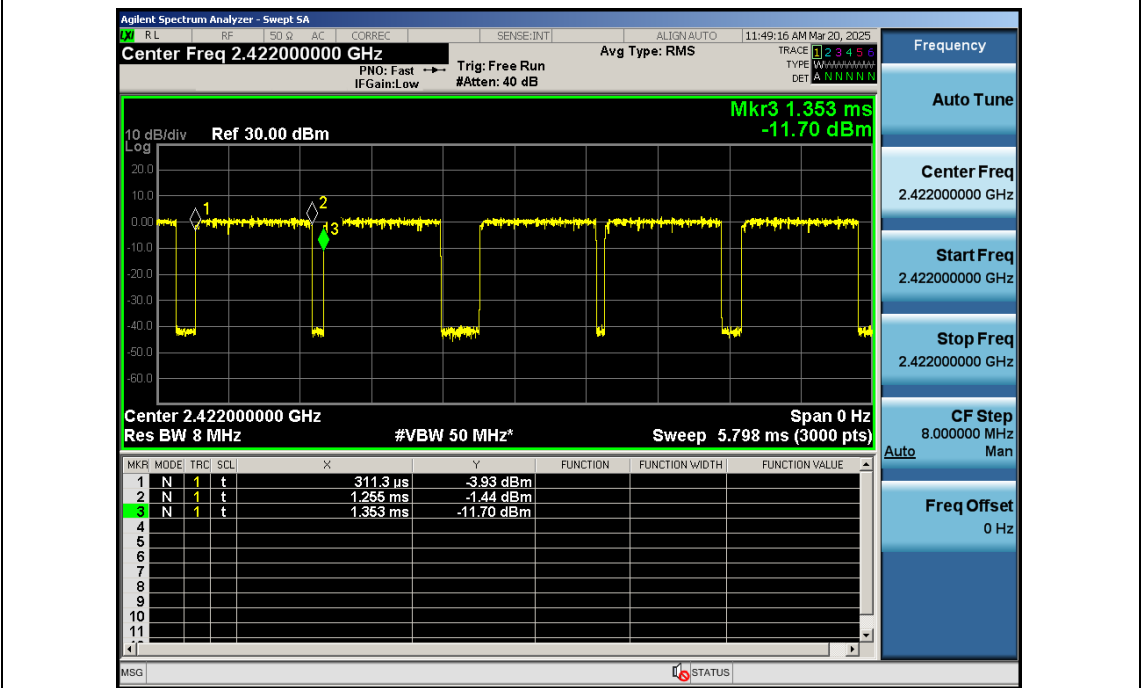




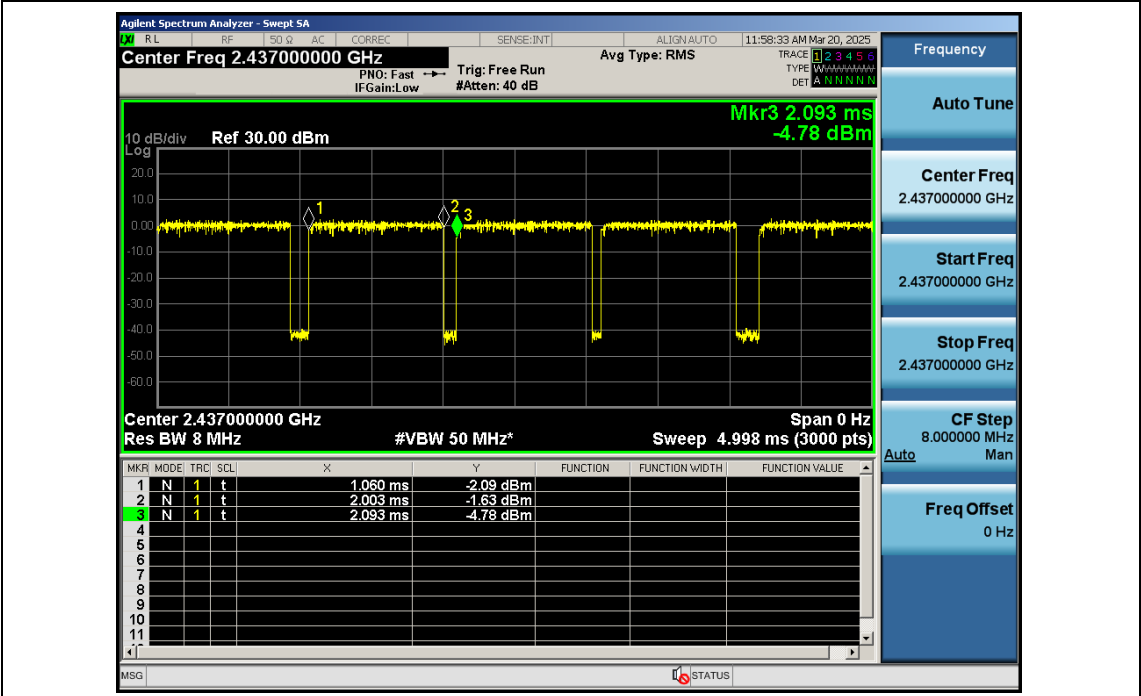




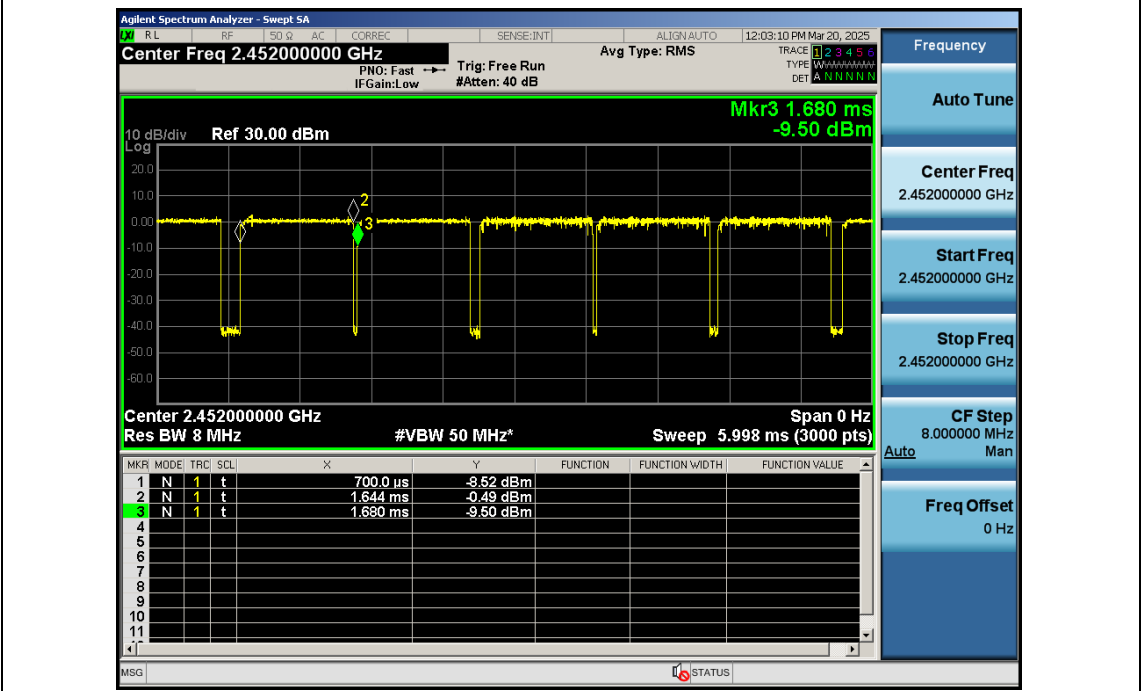
NTNV-11N20SISO-Ant1-2462



NTNV-11N40SISO-Ant1-2422



NTNV-11N40SISO-Ant1-2437



NTNV-11N40SISO-Ant1-2452