

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

Product Name: Espresso Machine

Trade Mark:  Meraki

Test Model: MEM03

FCC ID: 2BH5S-MEM03

Environmental Conditions

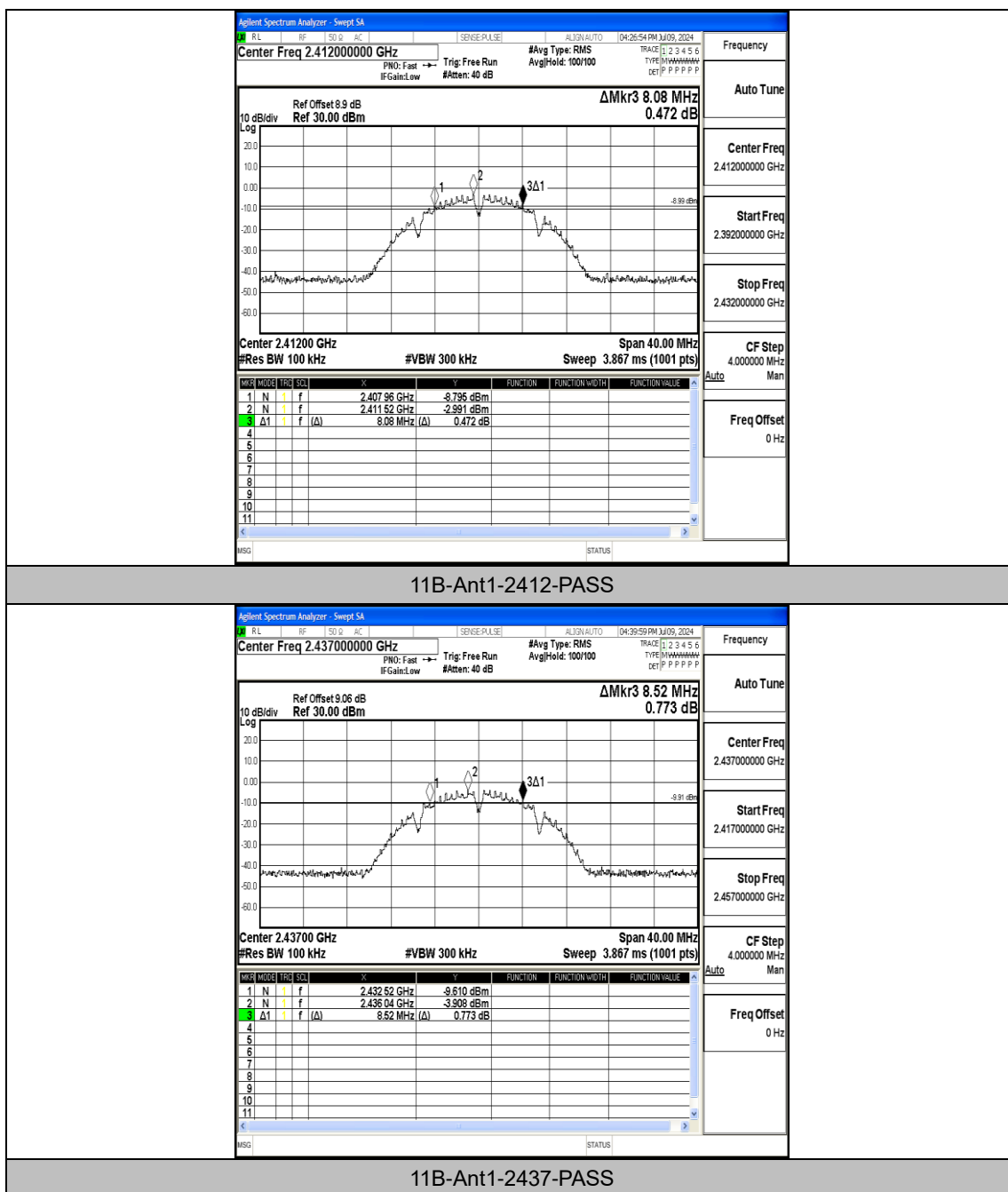
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

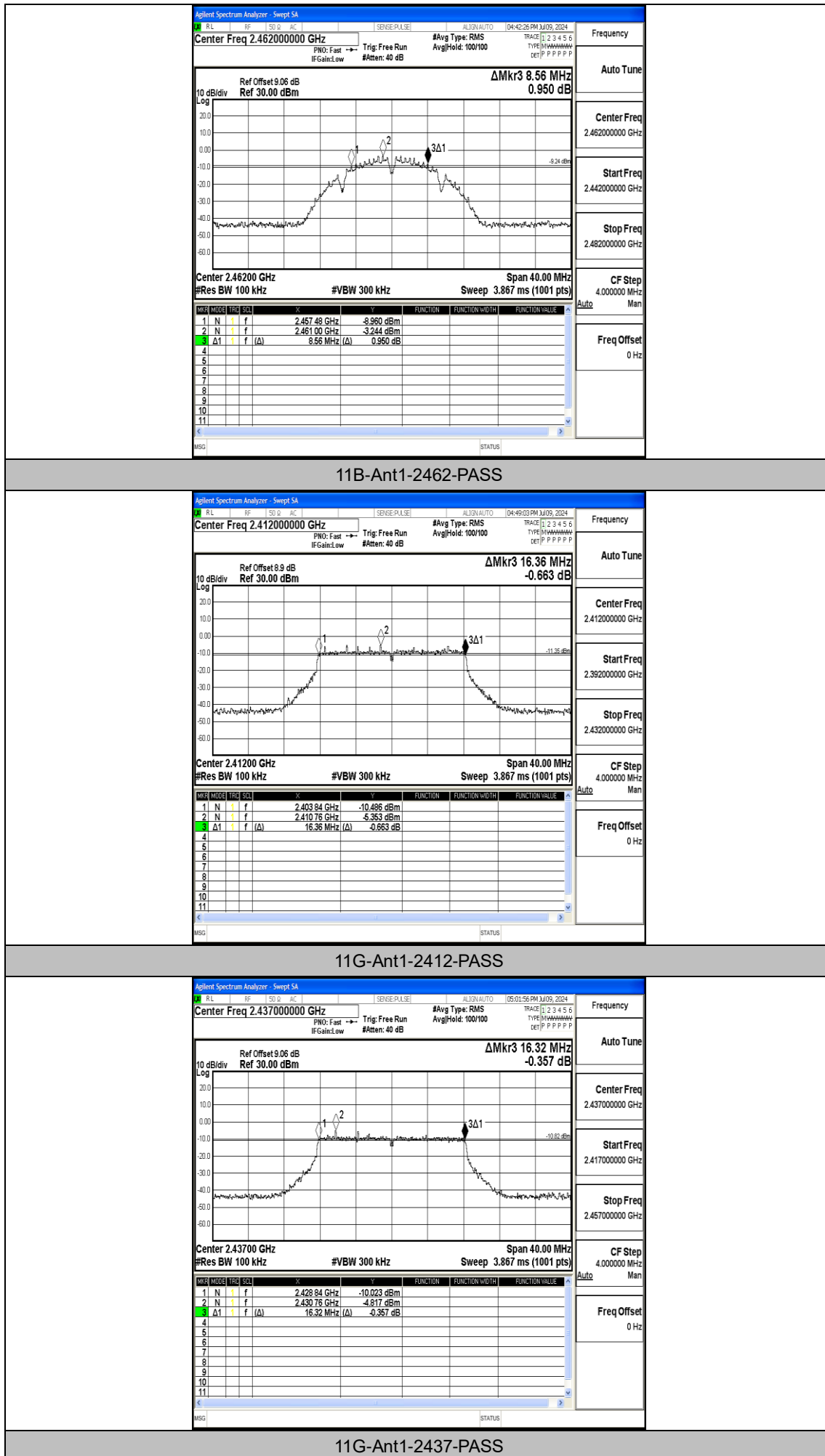
Appendix A: DTS Bandwidth

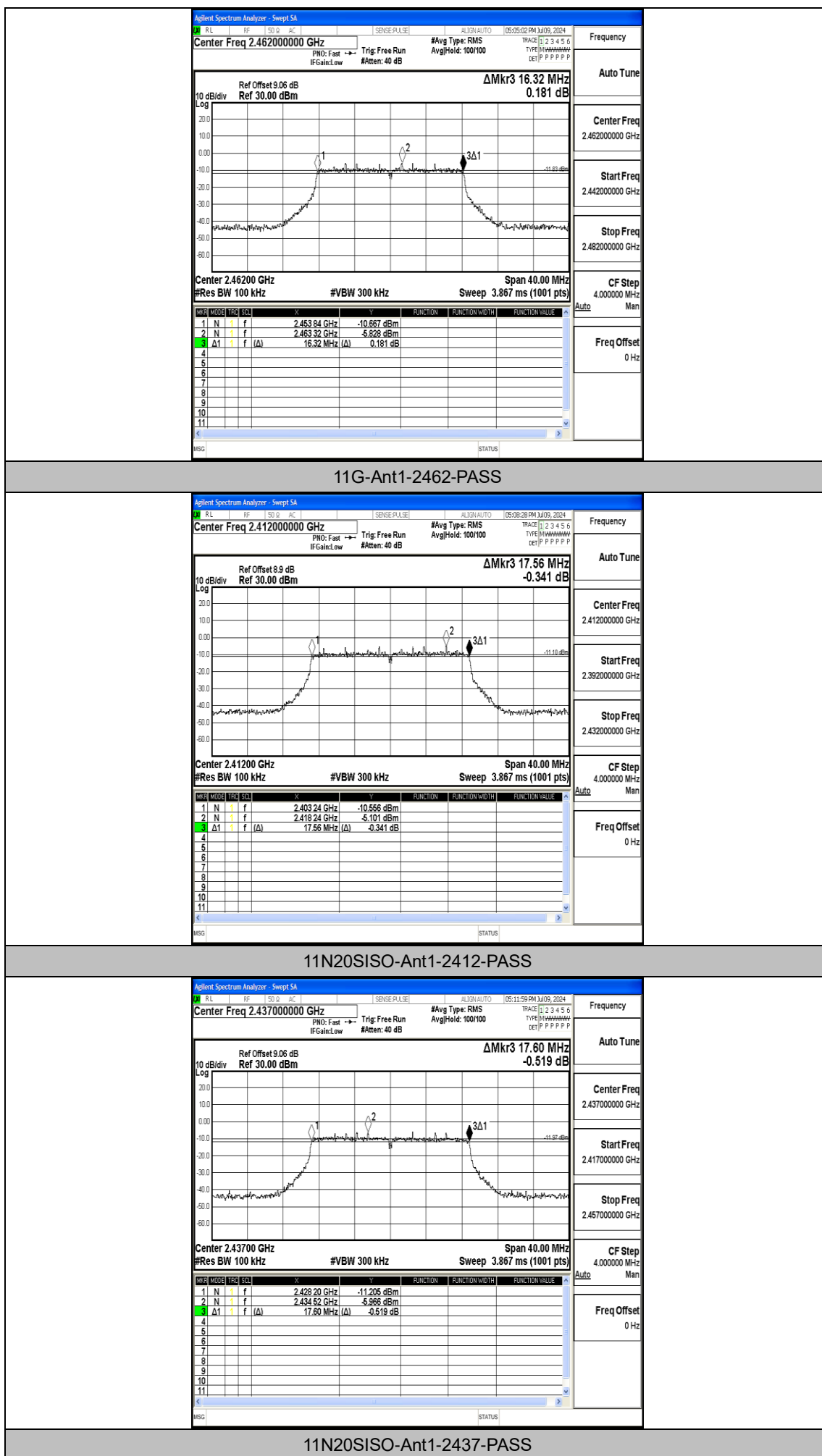
Test Result

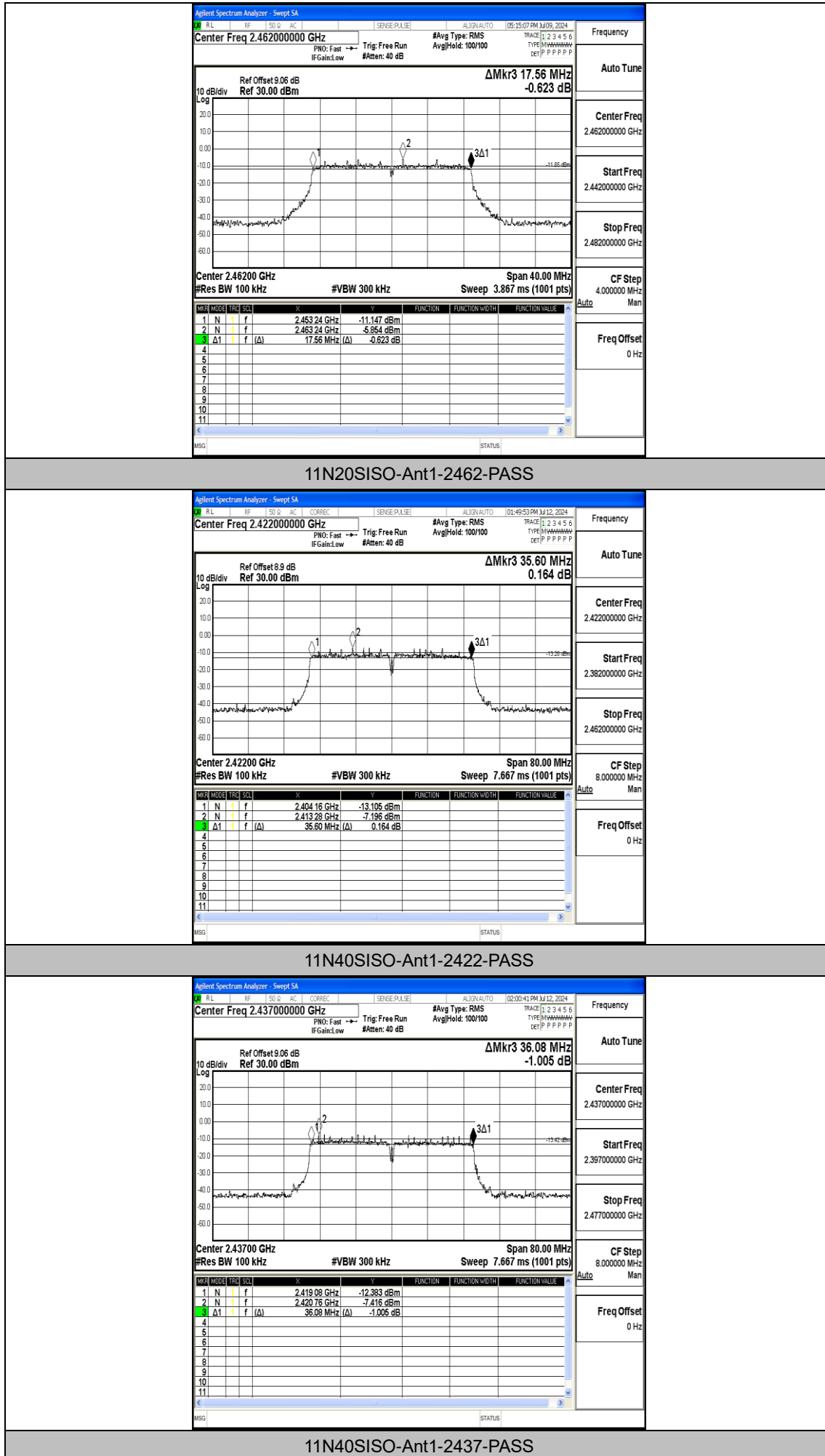
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.080	2407.960	2416.040	0.5	PASS
11B	Ant1	2437	8.520	2432.520	2441.040	0.5	PASS
11B	Ant1	2462	8.560	2457.480	2466.040	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
11G	Ant1	2437	16.320	2428.840	2445.160	0.5	PASS
11G	Ant1	2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.240	2420.800	0.5	PASS
11N20SISO	Ant1	2437	17.600	2428.200	2445.800	0.5	PASS
11N20SISO	Ant1	2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.160	2439.760	0.5	PASS
11N40SISO	Ant1	2437	36.080	2419.080	2455.160	0.5	PASS
11N40SISO	Ant1	2452	35.920	2433.840	2469.760	0.5	PASS

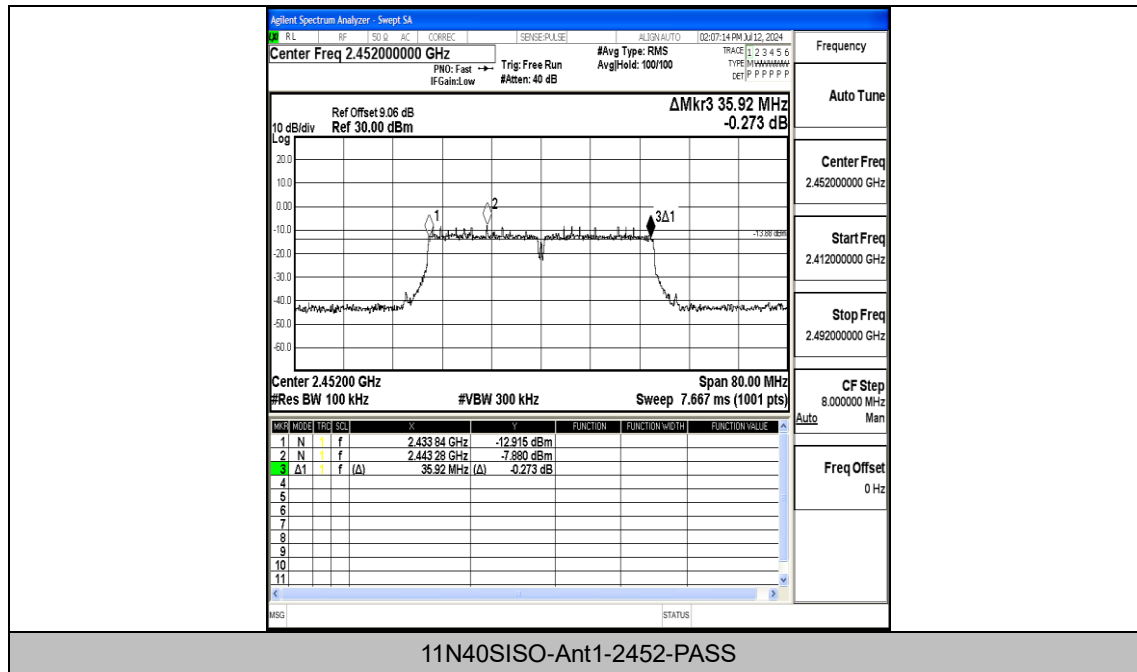
Test Graphs









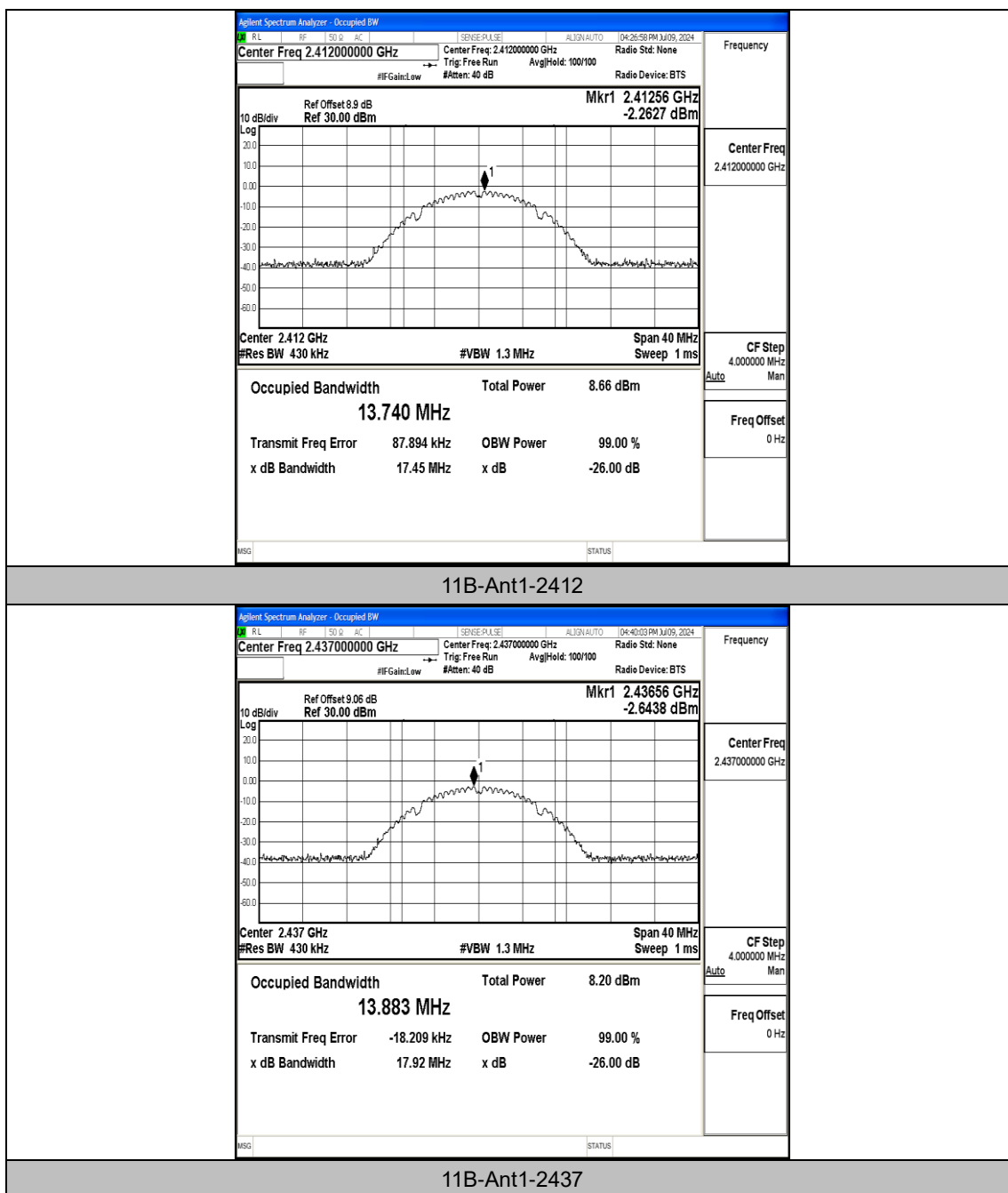


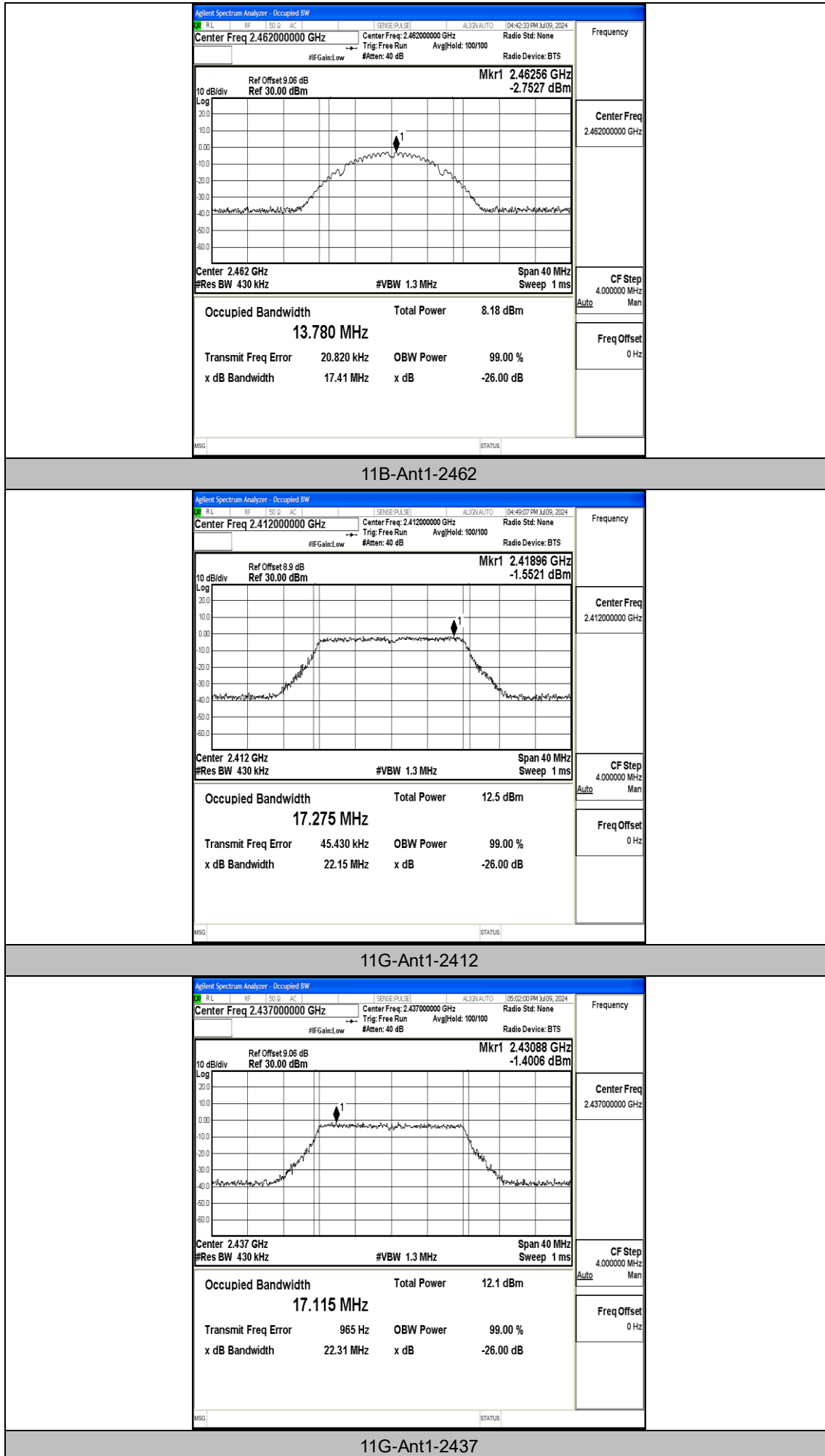
Appendix B: Occupied Channel Bandwidth

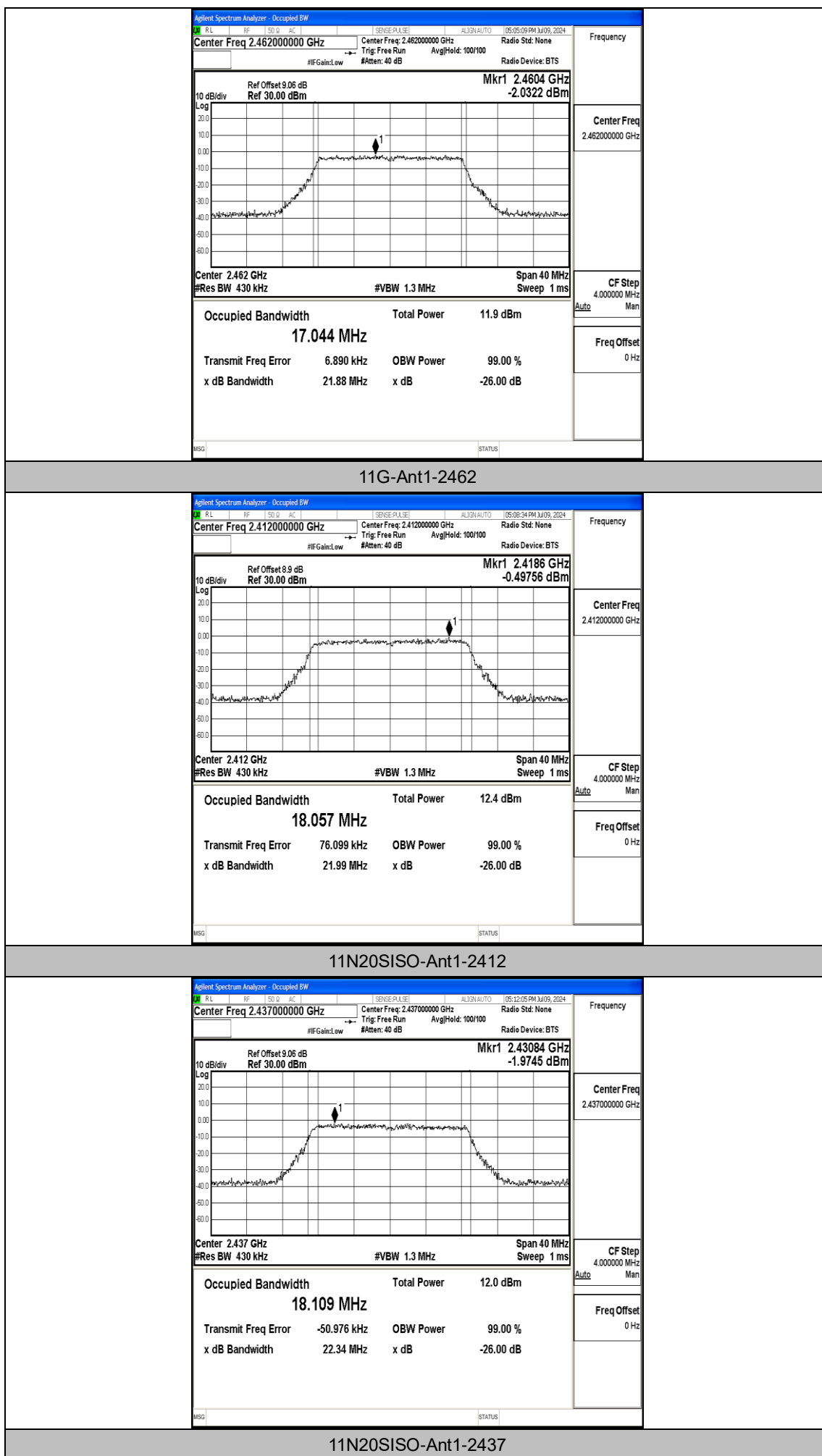
Test Result

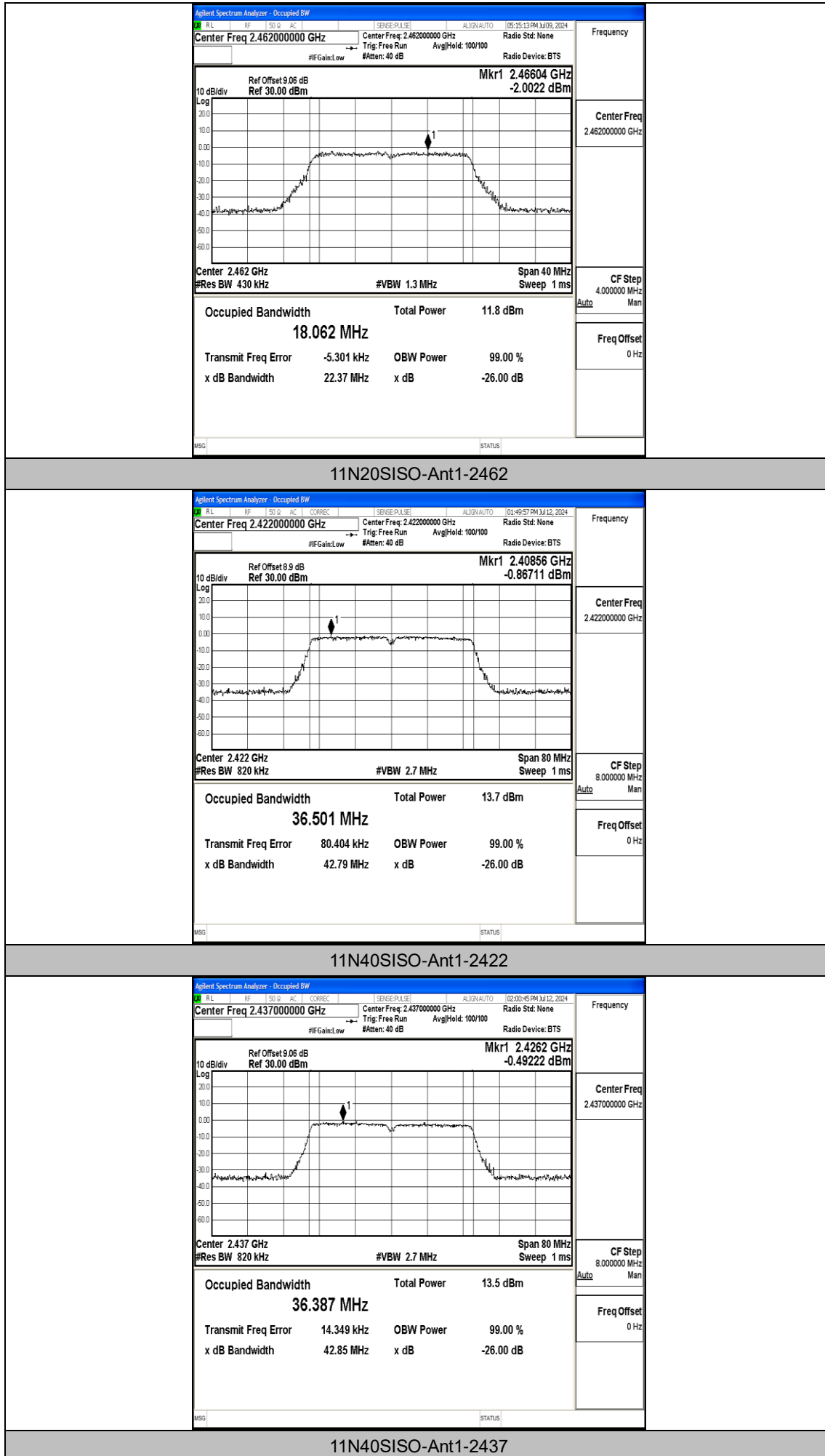
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.740	2405.2179	2418.9579	---	---
11B	Ant1	2437	13.883	2430.0403	2443.9233	---	---
11B	Ant1	2462	13.780	2455.1308	2468.9108	---	---
11G	Ant1	2412	17.275	2403.4079	2420.6829	---	---
11G	Ant1	2437	17.115	2428.4435	2445.5585	---	---
11G	Ant1	2462	17.044	2453.4849	2470.5289	---	---
11N20SISO	Ant1	2412	18.057	2403.0476	2421.1046	---	---
11N20SISO	Ant1	2437	18.109	2427.8945	2446.0035	---	---
11N20SISO	Ant1	2462	18.062	2452.9637	2471.0257	---	---
11N40SISO	Ant1	2422	36.501	2403.8299	2440.3309	---	---
11N40SISO	Ant1	2437	36.387	2418.8209	2455.2079	---	---
11N40SISO	Ant1	2452	36.585	2433.8050	2470.3900	---	---

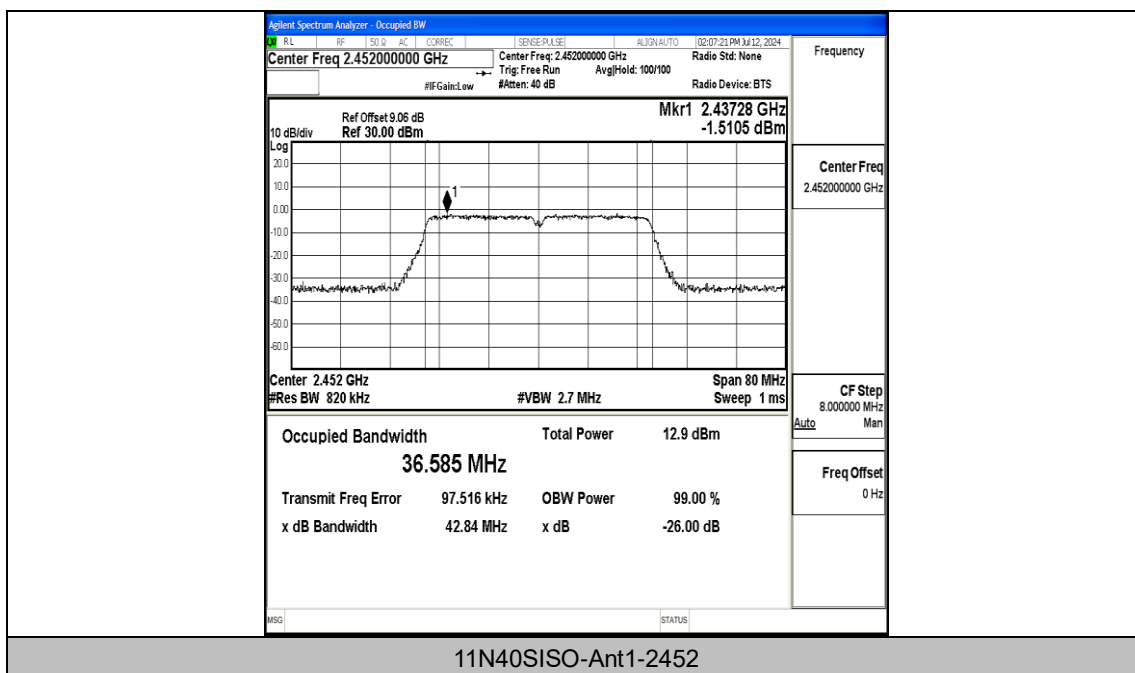
Test Graphs











Appendix C: Maximum Average conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	5.57	≤30.00	PASS
11B	Ant1	2437	5.10	≤30.00	PASS
11B	Ant1	2462	5.00	≤30.00	PASS
11G	Ant1	2412	6.48	≤30.00	PASS
11G	Ant1	2437	5.30	≤30.00	PASS
11G	Ant1	2462	5.82	≤30.00	PASS
11N20SISO	Ant1	2412	6.50	≤30.00	PASS
11N20SISO	Ant1	2437	6.08	≤30.00	PASS
11N20SISO	Ant1	2462	5.50	≤30.00	PASS
11N40SISO	Ant1	2422	6.19	≤30.00	PASS
11N40SISO	Ant1	2437	6.56	≤30.00	PASS
11N40SISO	Ant1	2452	6.06	≤30.00	PASS

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

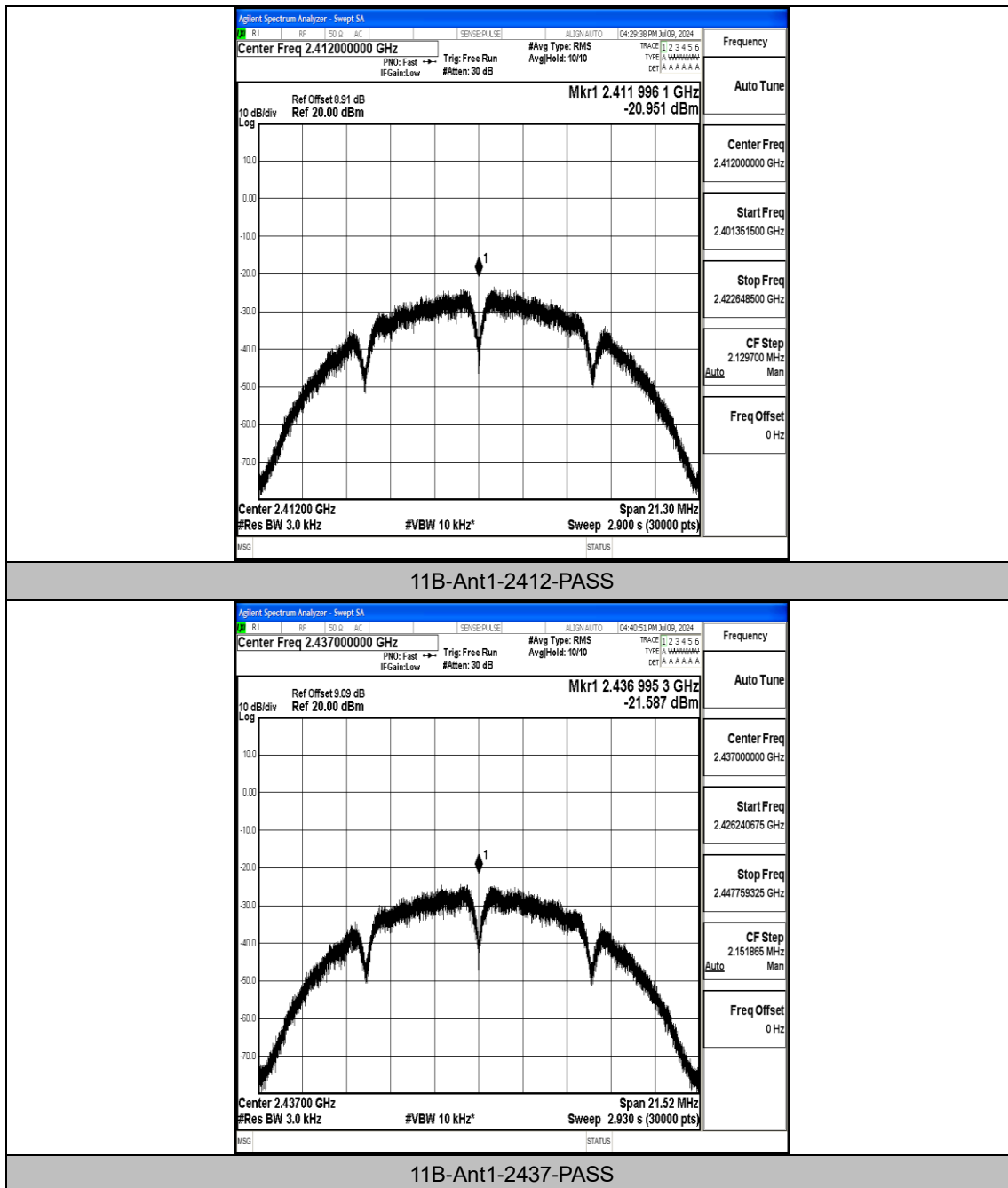
Appendix D: Maximum Average power spectral density

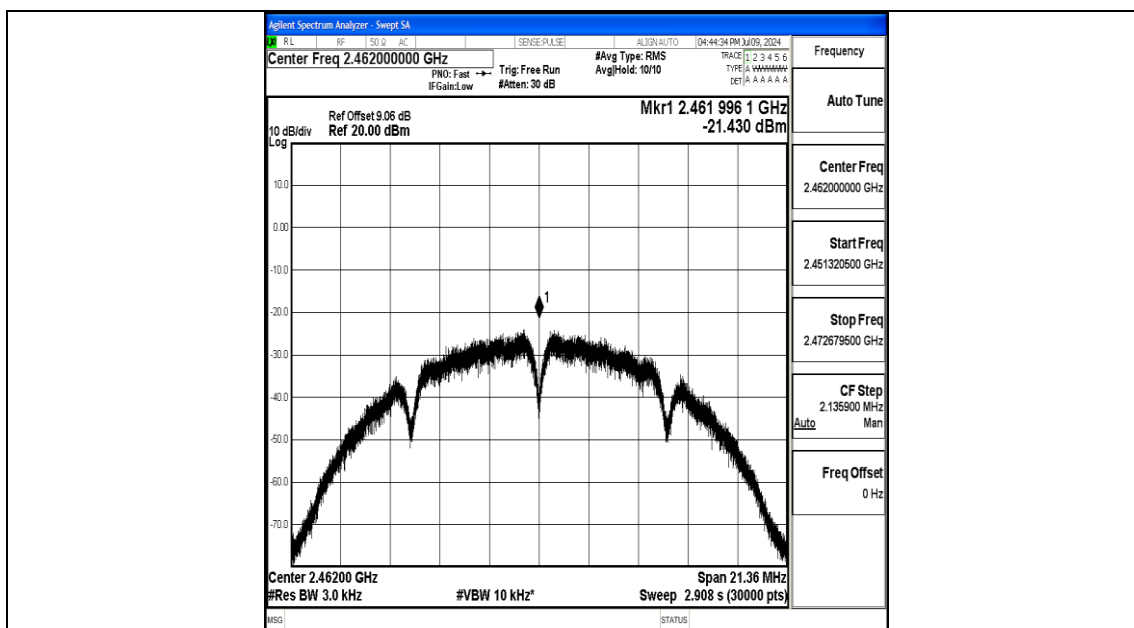
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-20.95	≤8.00	PASS
11B	Ant1	2437	-21.59	≤8.00	PASS
11B	Ant1	2462	-21.43	≤8.00	PASS
11G	Ant1	2412	-17.25	≤8.00	PASS
11G	Ant1	2437	-17.84	≤8.00	PASS
11G	Ant1	2462	-17.11	≤8.00	PASS
11N20SISO	Ant1	2412	-16.80	≤8.00	PASS
11N20SISO	Ant1	2437	-18.03	≤8.00	PASS
11N20SISO	Ant1	2462	-17.67	≤8.00	PASS
11N40SISO	Ant1	2422	-17.43	≤8.00	PASS
11N40SISO	Ant1	2437	-18.11	≤8.00	PASS
11N40SISO	Ant1	2452	-18.66	≤8.00	PASS

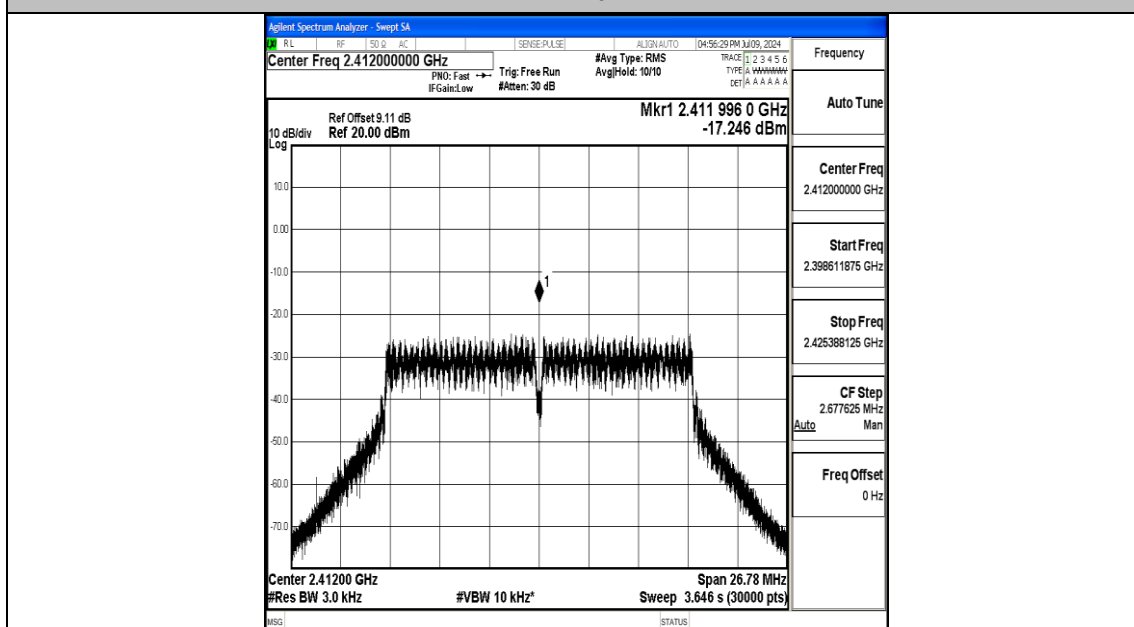
Note: The Duty Cycle Factor is compensated in the result.

Test Graphs

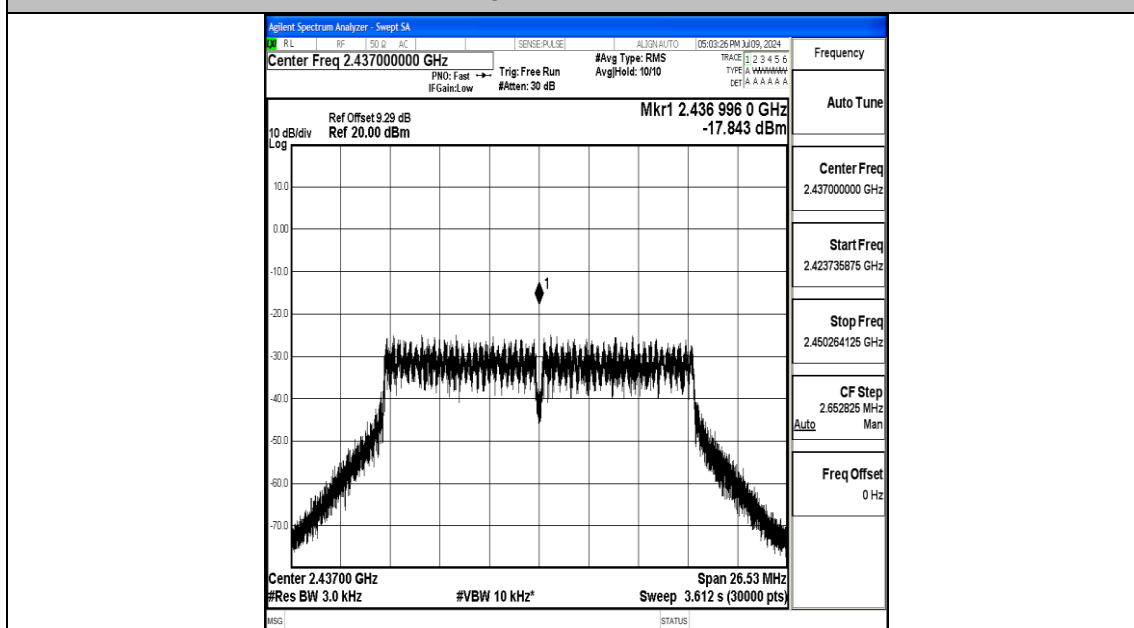




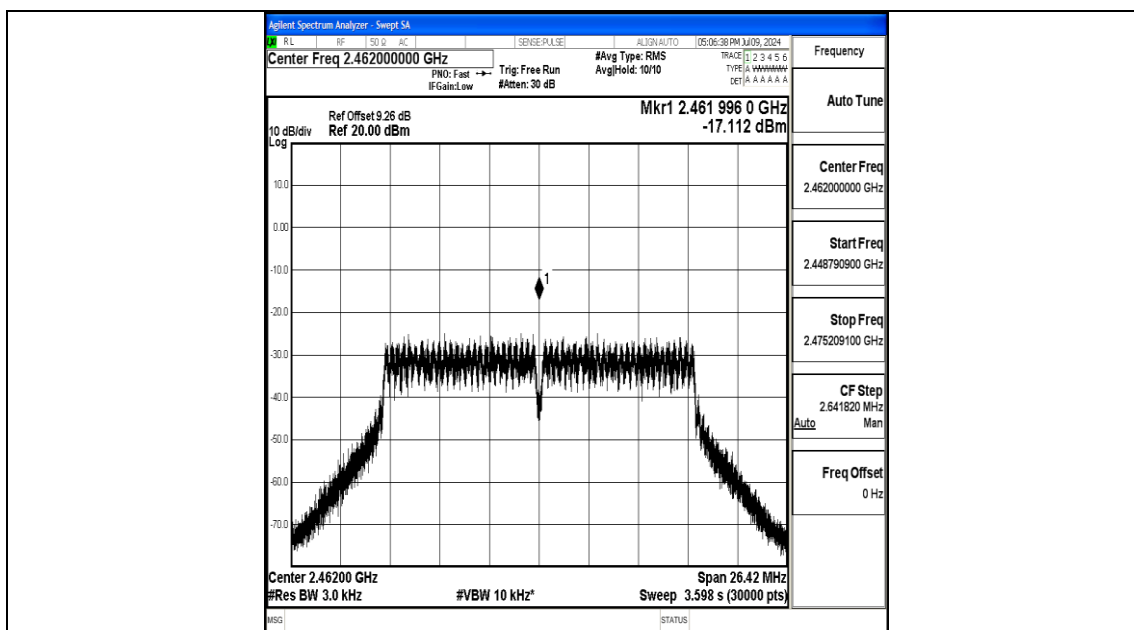
11B-Ant1-2462-PASS



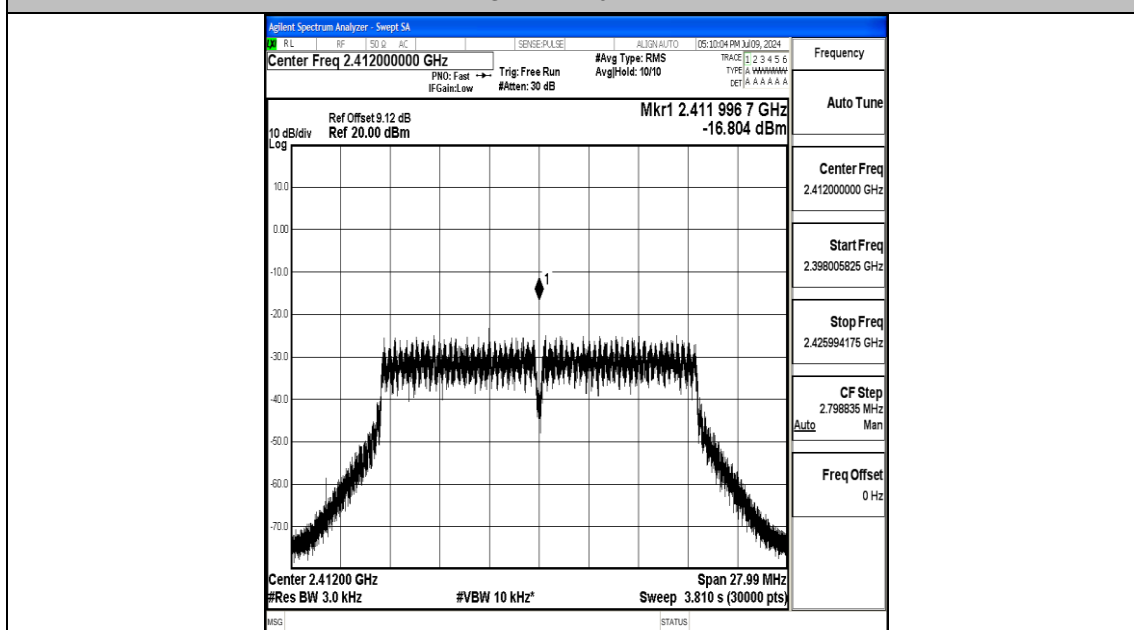
11G-Ant1-2412-PASS



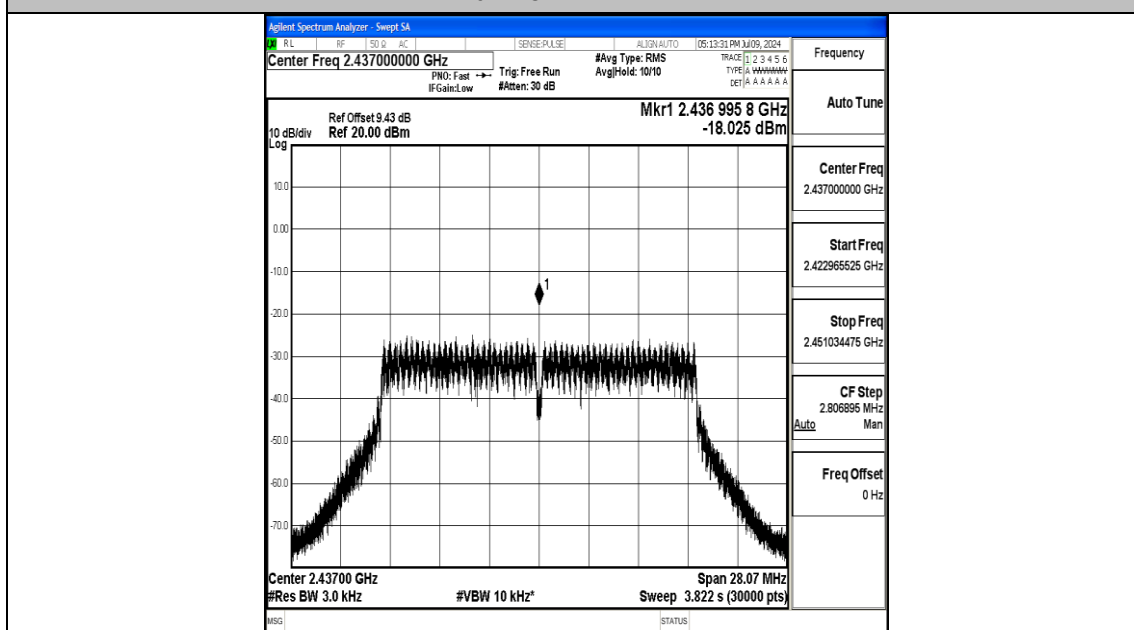
11G-Ant1-2437-PASS



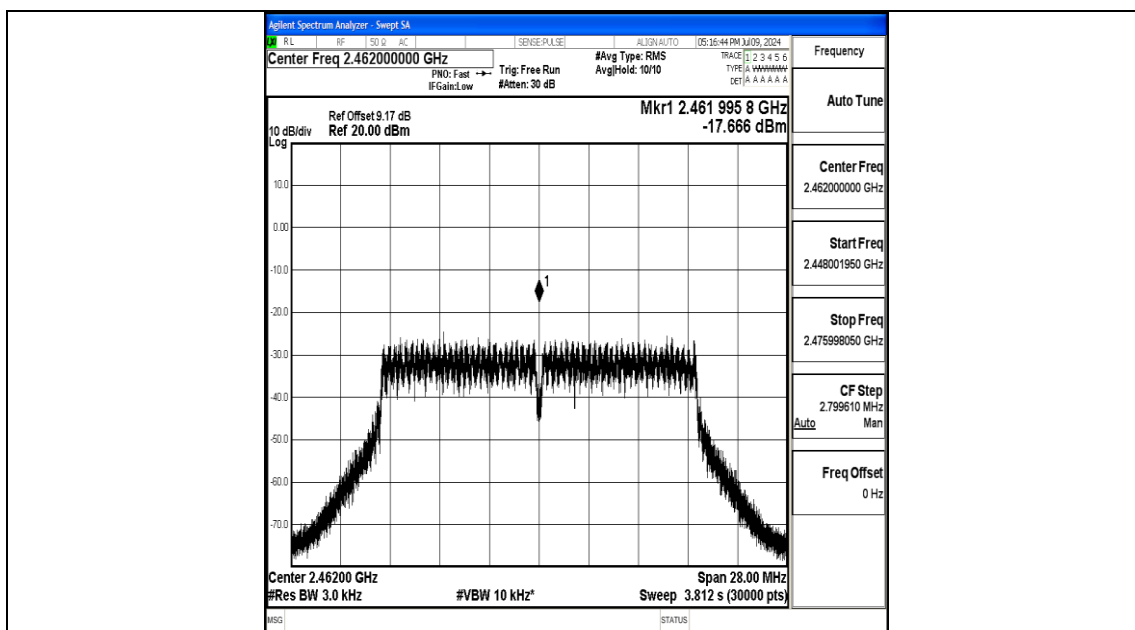
11G-Ant1-2462-PASS



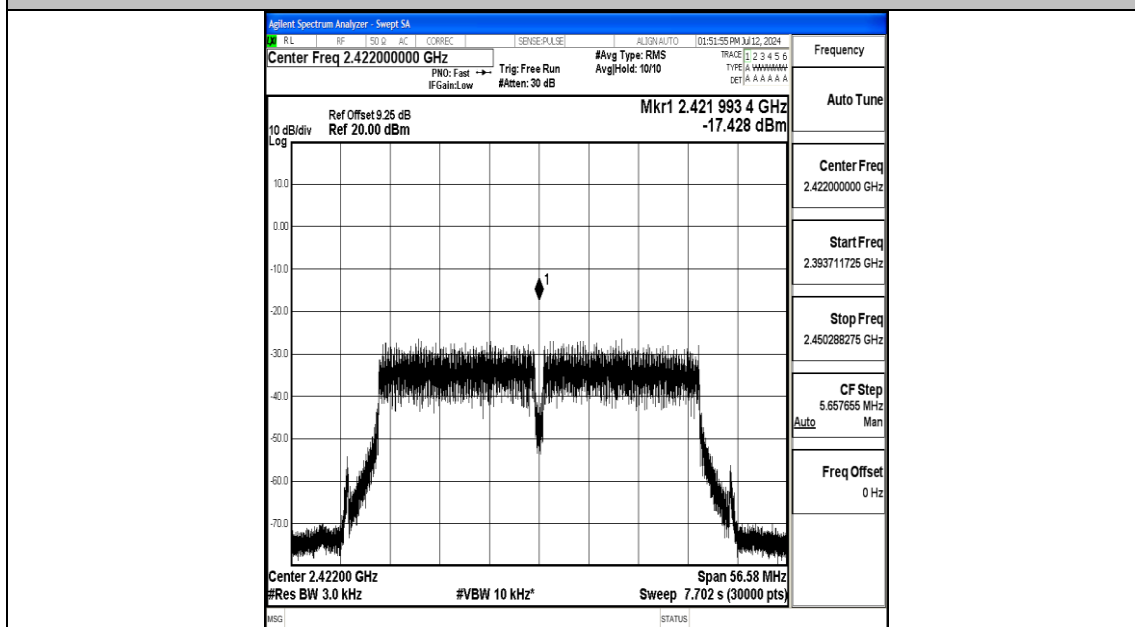
11N20SISO-Ant1-2412-PASS



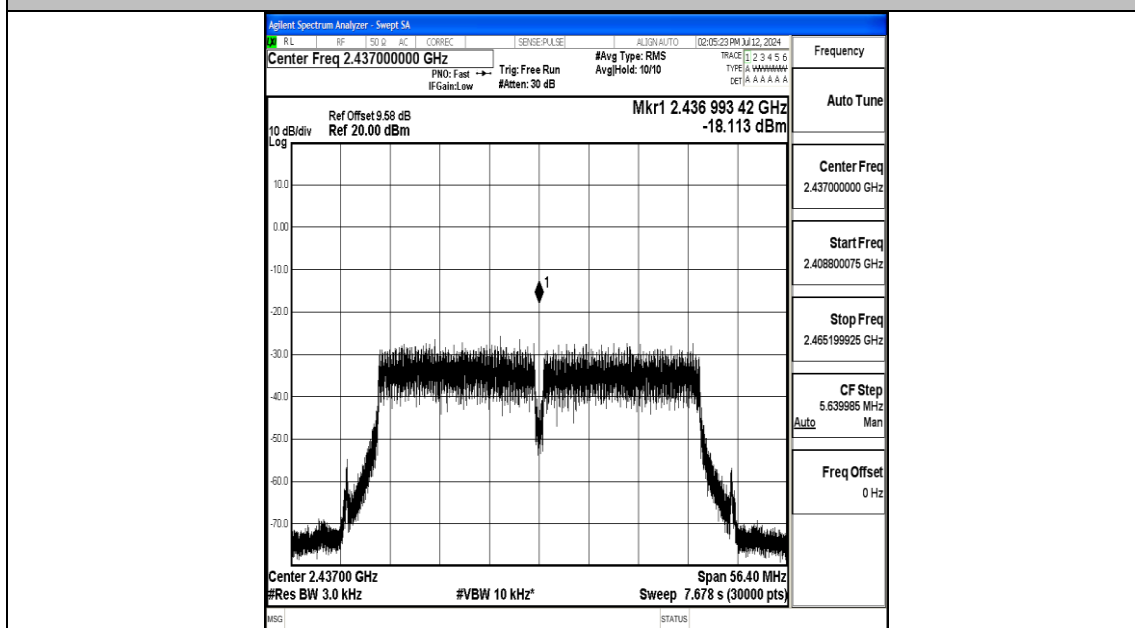
11N20SISO-Ant1-2437-PASS



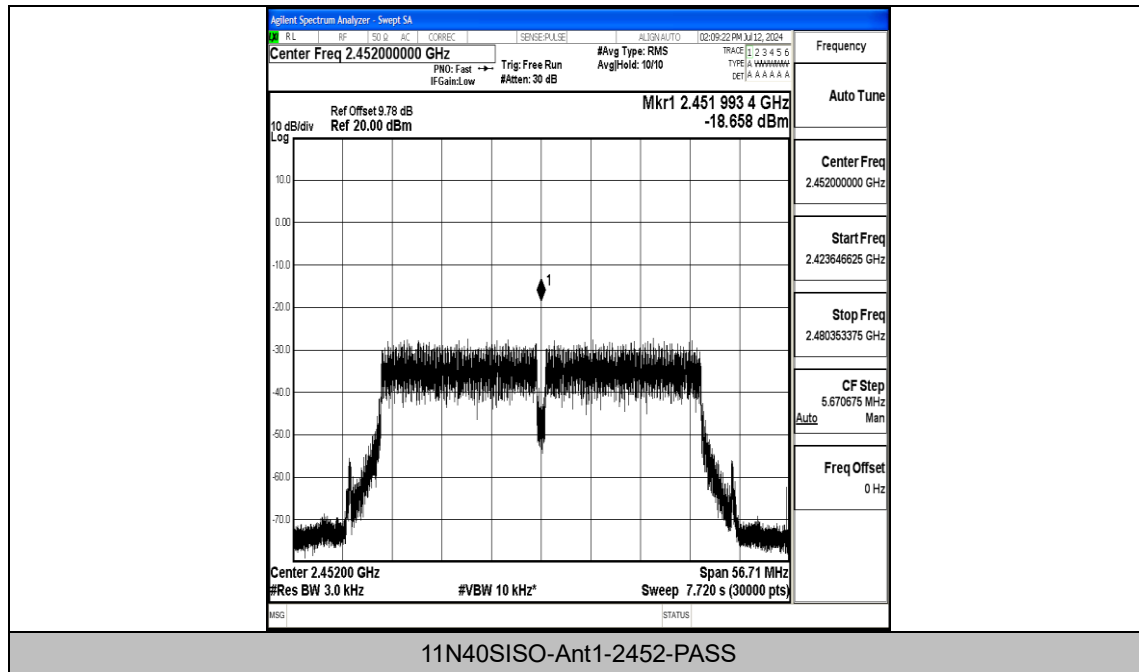
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS

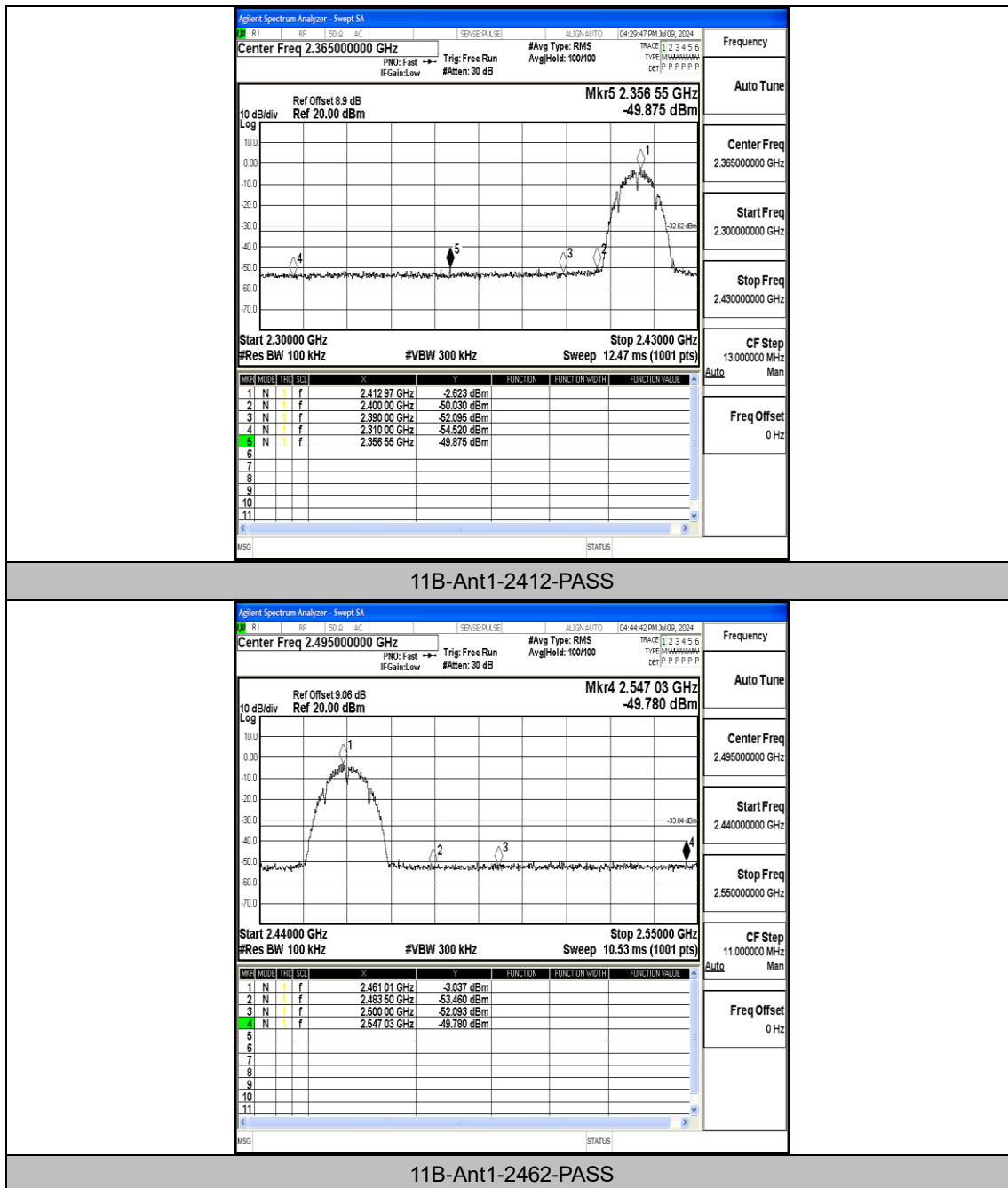


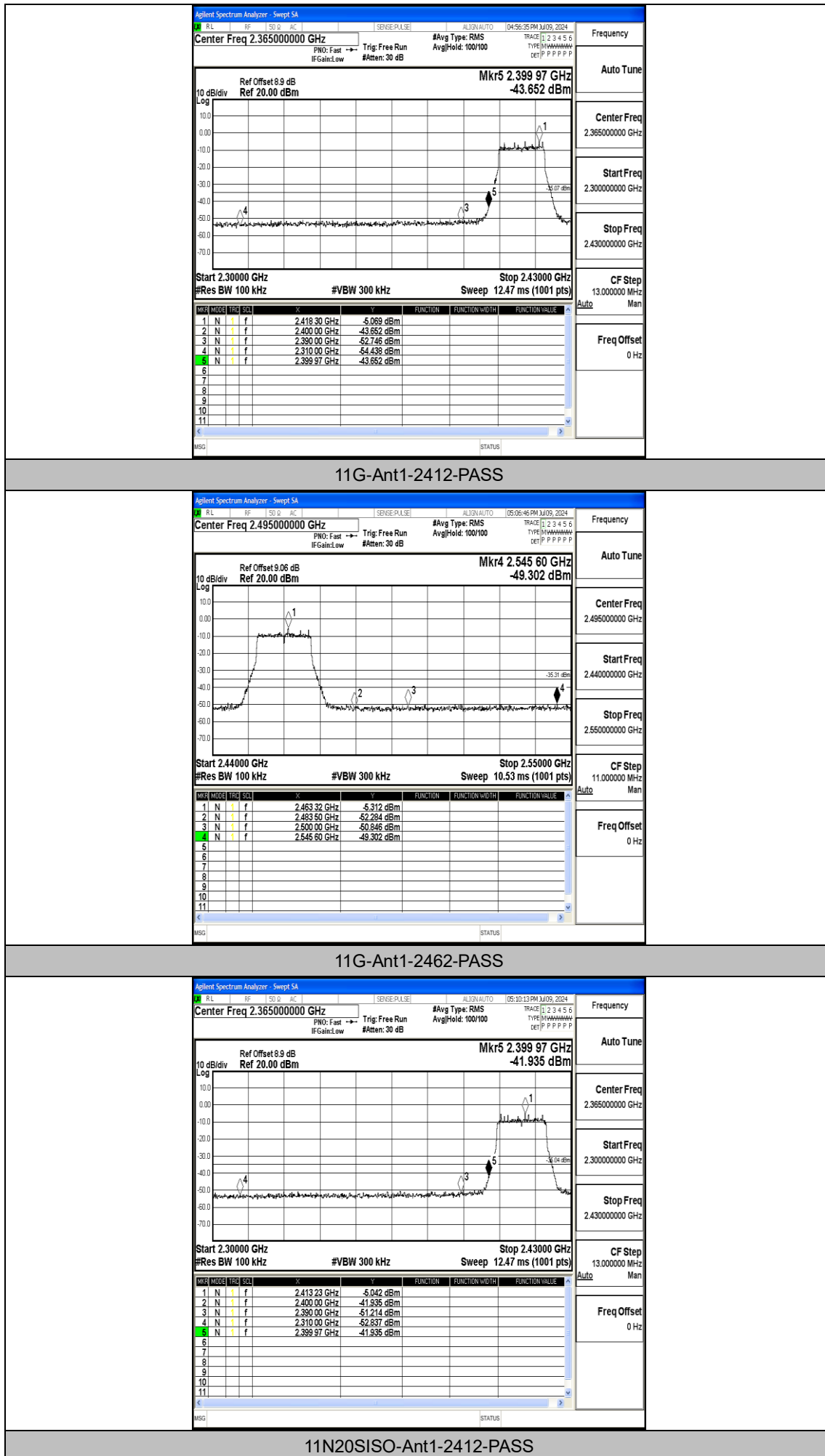
Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-2.62	-49.88	≤-32.62	PASS
11B	Ant1	High	2462	-3.04	-49.78	≤-33.04	PASS
11G	Ant1	Low	2412	-5.07	-43.65	≤-35.07	PASS
11G	Ant1	High	2462	-5.31	-49.3	≤-35.31	PASS
11N20SISO	Ant1	Low	2412	-5.04	-41.94	≤-35.04	PASS
11N20SISO	Ant1	High	2462	-5.82	-48.95	≤-35.82	PASS
11N40SISO	Ant1	Low	2422	-7.12	-40.7	≤-37.12	PASS
11N40SISO	Ant1	High	2452	-7.93	-49.6	≤-37.93	PASS

Test Graphs





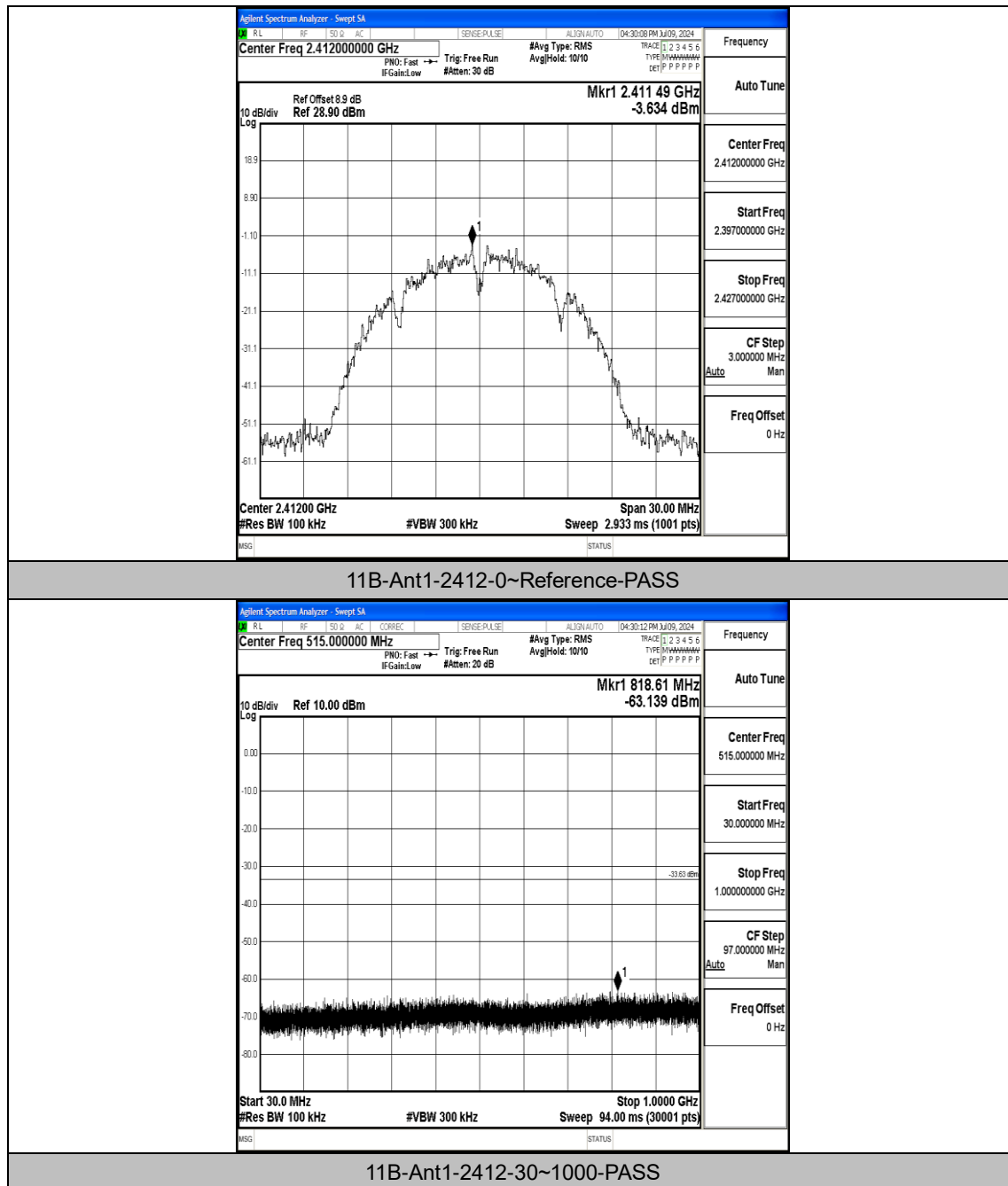


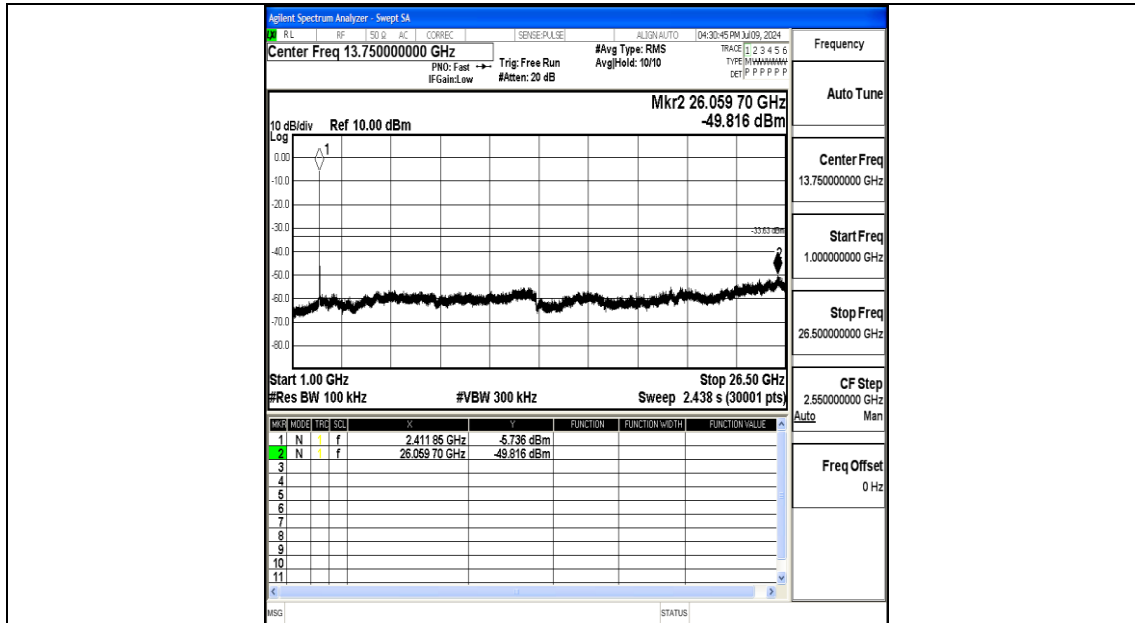
Appendix F: Conducted Spurious Emission

Test Result

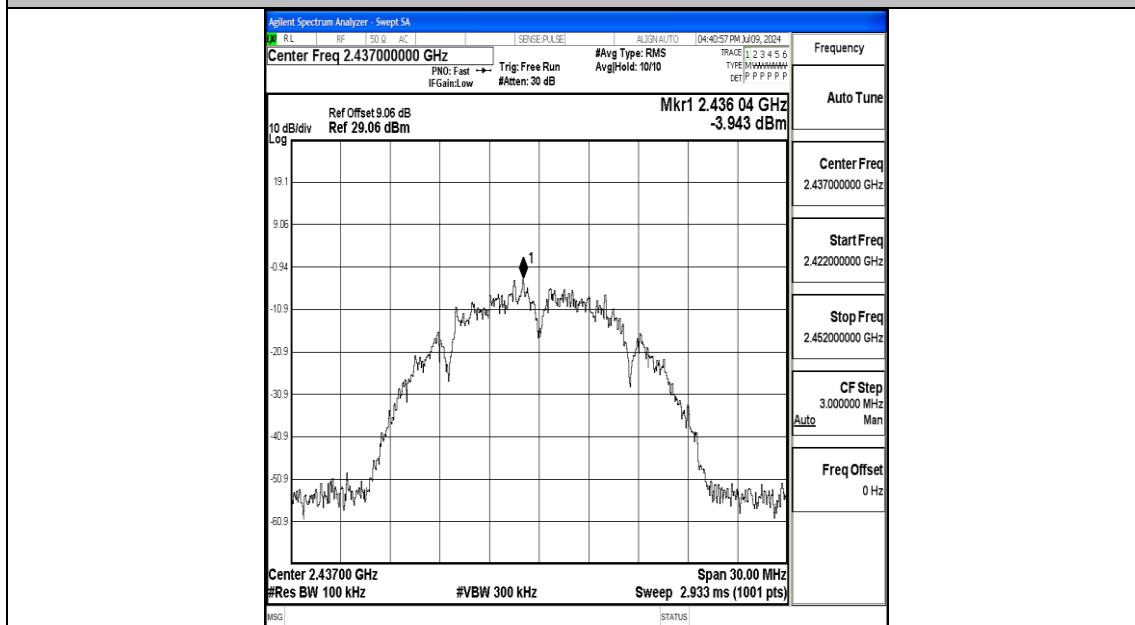
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	-3.63	-3.63	---	PASS
11B	Ant1	2412	30~1000	-3.63	-63.14	≤-33.63	PASS
11B	Ant1	2412	1000~26500	-3.63	-49.82	≤-33.63	PASS
11B	Ant1	2437	0~Reference	-3.94	-3.94	---	PASS
11B	Ant1	2437	30~1000	-3.94	-62.85	≤-33.94	PASS
11B	Ant1	2437	1000~26500	-3.94	-50.74	≤-33.94	PASS
11B	Ant1	2462	0~Reference	-5.49	-5.49	---	PASS
11B	Ant1	2462	30~1000	-5.49	-62.33	≤-35.49	PASS
11B	Ant1	2462	1000~26500	-5.49	-49.84	≤-35.49	PASS
11G	Ant1	2412	0~Reference	-6.28	-6.28	---	PASS
11G	Ant1	2412	30~1000	-6.28	-62.48	≤-36.28	PASS
11G	Ant1	2412	1000~26500	-6.28	-50.32	≤-36.28	PASS
11G	Ant1	2437	0~Reference	-7.76	-7.76	---	PASS
11G	Ant1	2437	30~1000	-7.76	-62.09	≤-37.76	PASS
11G	Ant1	2437	1000~26500	-7.76	-50.44	≤-37.76	PASS
11G	Ant1	2462	0~Reference	-5.85	-5.85	---	PASS
11G	Ant1	2462	30~1000	-5.85	-62.41	≤-35.85	PASS
11G	Ant1	2462	1000~26500	-5.85	-50.4	≤-35.85	PASS
11N20SISO	Ant1	2412	0~Reference	-8.24	-8.24	---	PASS
11N20SISO	Ant1	2412	30~1000	-8.24	-62.93	≤-38.24	PASS
11N20SISO	Ant1	2412	1000~26500	-8.24	-50.29	≤-38.24	PASS
11N20SISO	Ant1	2437	0~Reference	-8.86	-8.86	---	PASS
11N20SISO	Ant1	2437	30~1000	-8.86	-62.31	≤-38.86	PASS
11N20SISO	Ant1	2437	1000~26500	-8.86	-50.04	≤-38.86	PASS
11N20SISO	Ant1	2462	0~Reference	-7.83	-7.83	---	PASS
11N20SISO	Ant1	2462	30~1000	-7.83	-63.15	≤-37.83	PASS
11N20SISO	Ant1	2462	1000~26500	-7.83	-49.83	≤-37.83	PASS
11N40SISO	Ant1	2422	0~Reference	-7.38	-7.38	---	PASS
11N40SISO	Ant1	2422	30~1000	-7.38	-62.78	≤-37.38	PASS
11N40SISO	Ant1	2422	1000~26500	-7.38	-50.63	≤-37.38	PASS
11N40SISO	Ant1	2437	0~Reference	-9.89	-9.89	---	PASS
11N40SISO	Ant1	2437	30~1000	-9.89	-62.78	≤-39.89	PASS
11N40SISO	Ant1	2437	1000~26500	-9.89	-50.24	≤-39.89	PASS
11N40SISO	Ant1	2452	0~Reference	-10.52	-10.52	---	PASS
11N40SISO	Ant1	2452	30~1000	-10.52	-62.5	≤-40.52	PASS
11N40SISO	Ant1	2452	1000~26500	-10.52	-50.01	≤-40.52	PASS

Test Graphs

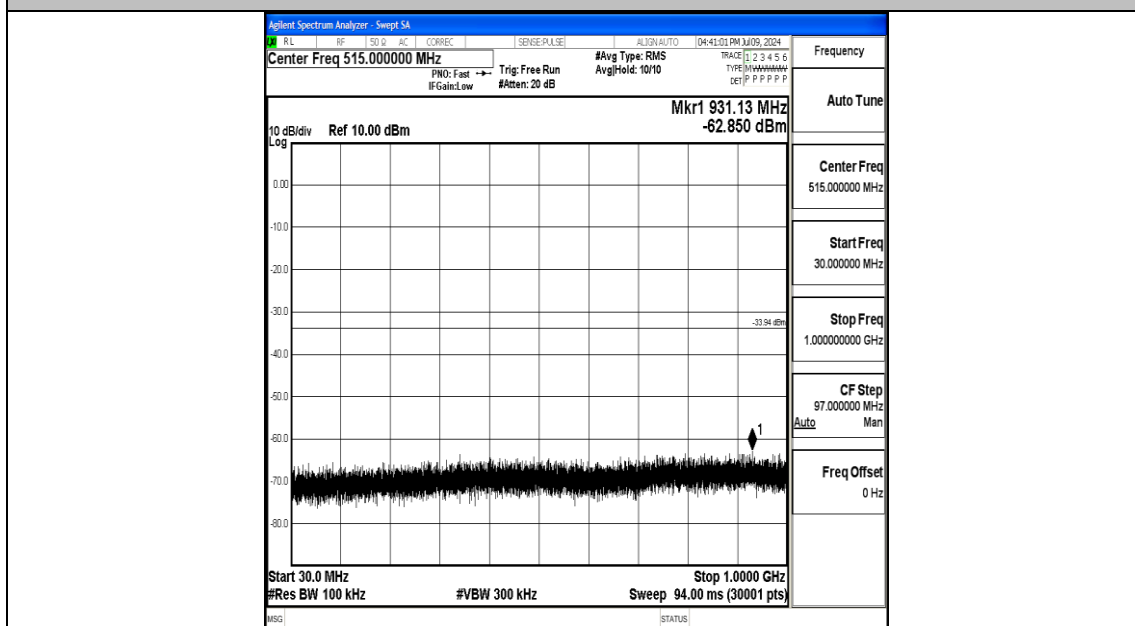




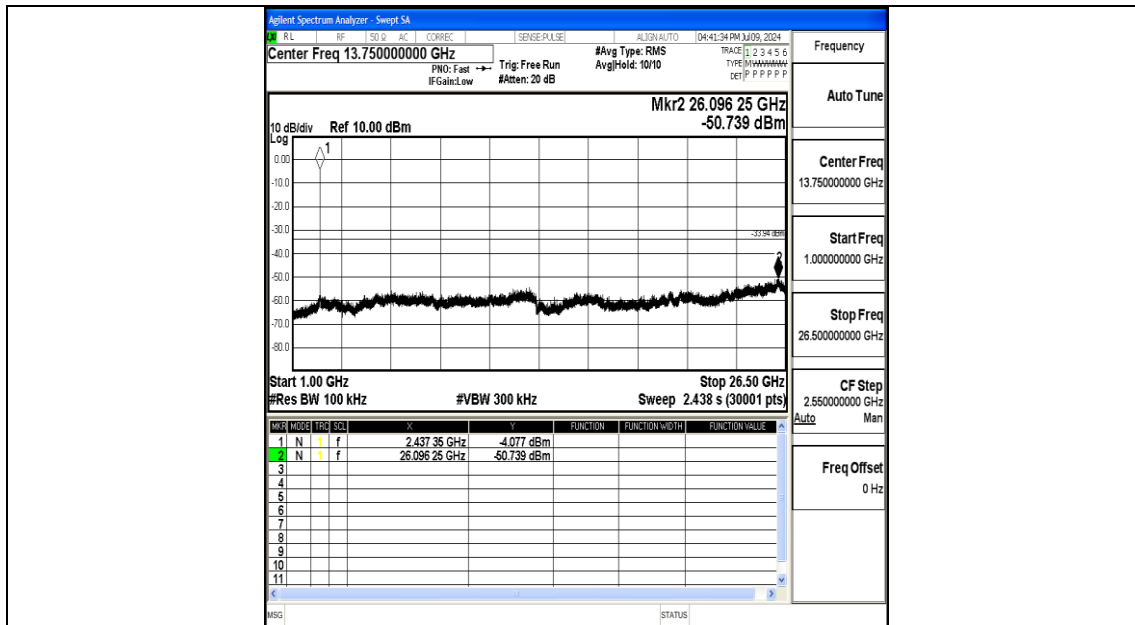
11B-Ant1-2412-1000~26500-PASS



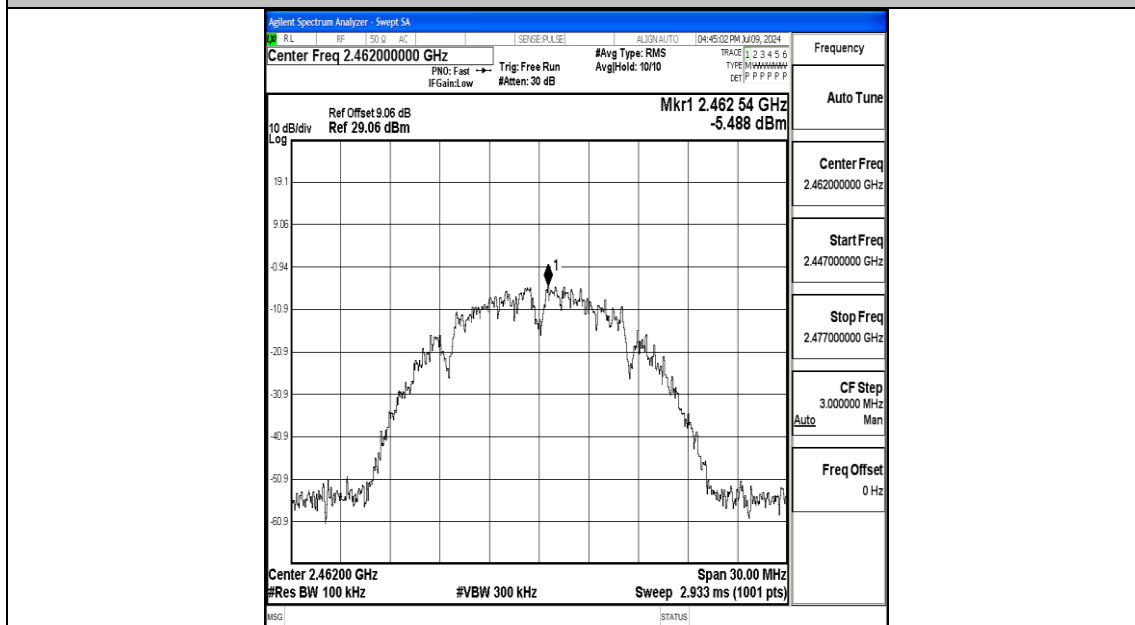
11B-Ant1-2437-0~Reference-PASS



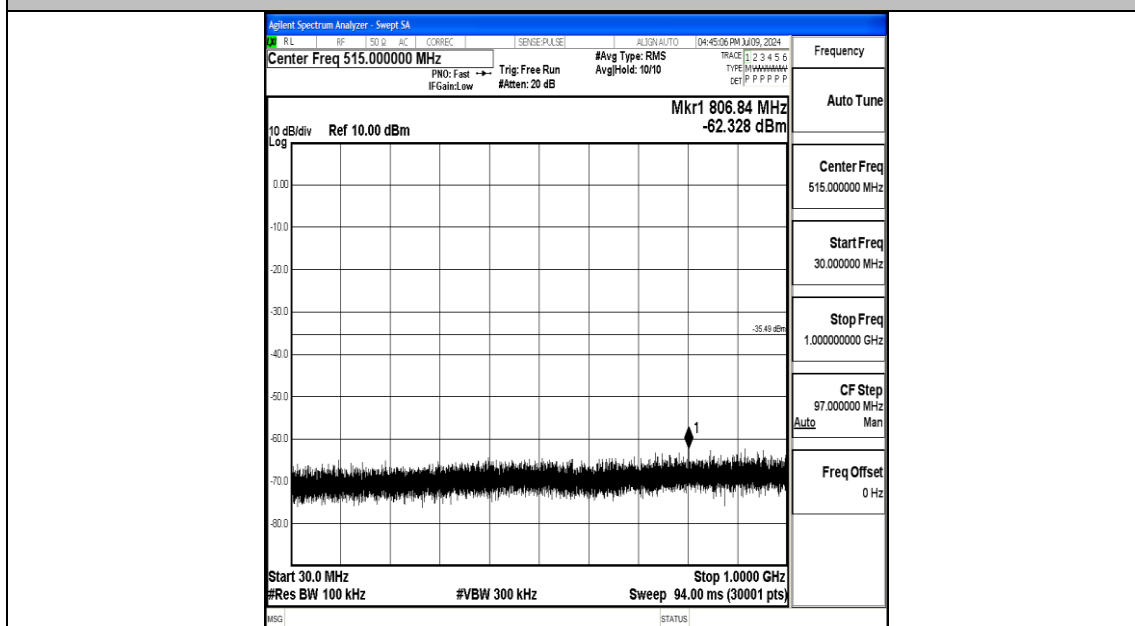
11B-Ant1-2437-30~1000-PASS



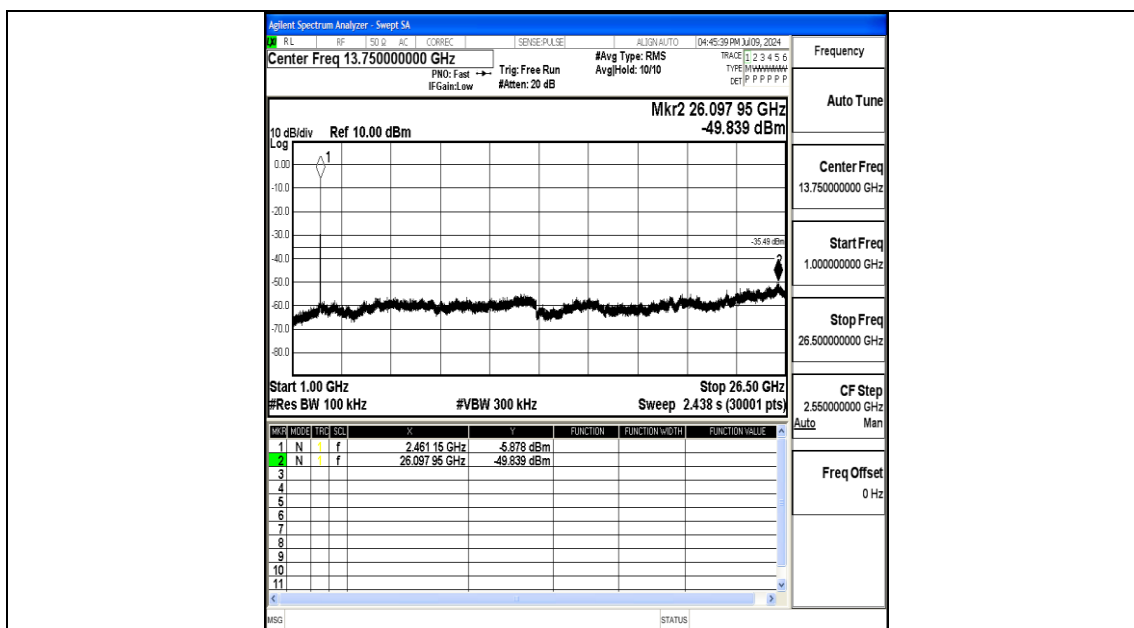
11B-Ant1-2437-1000~26500-PASS



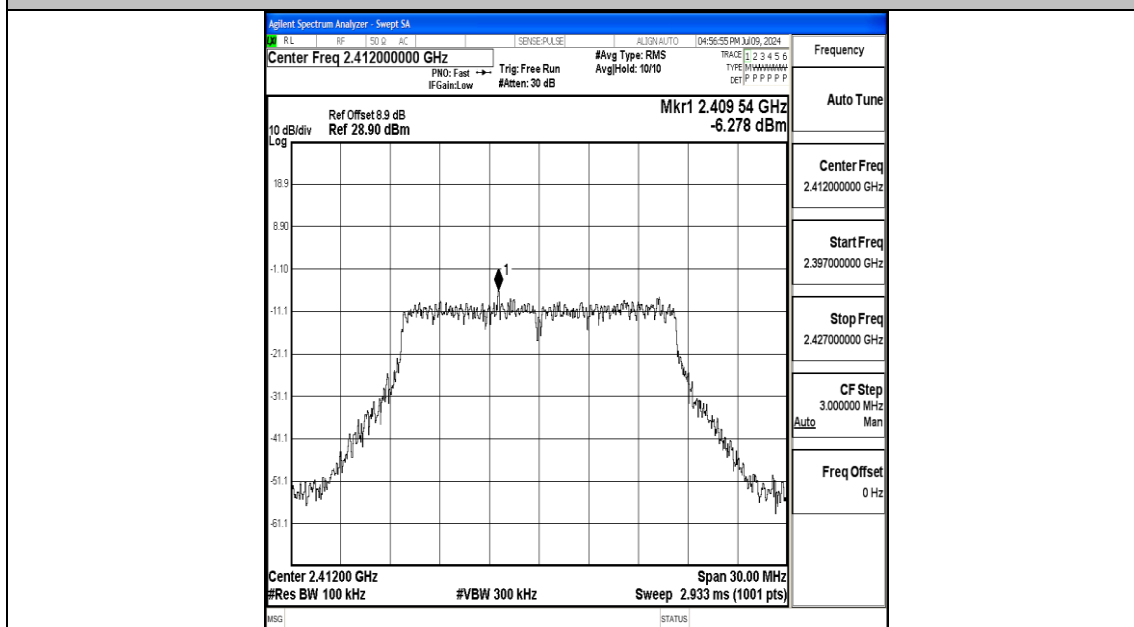
11B-Ant1-2462-0~Reference-PASS



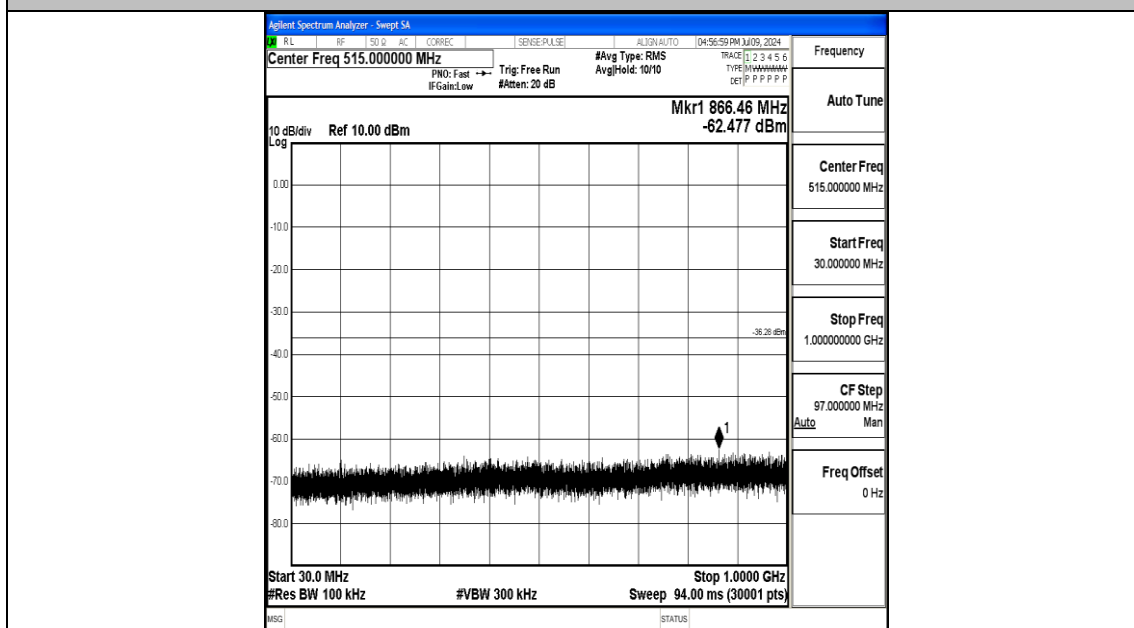
11B-Ant1-2462-30~1000-PASS



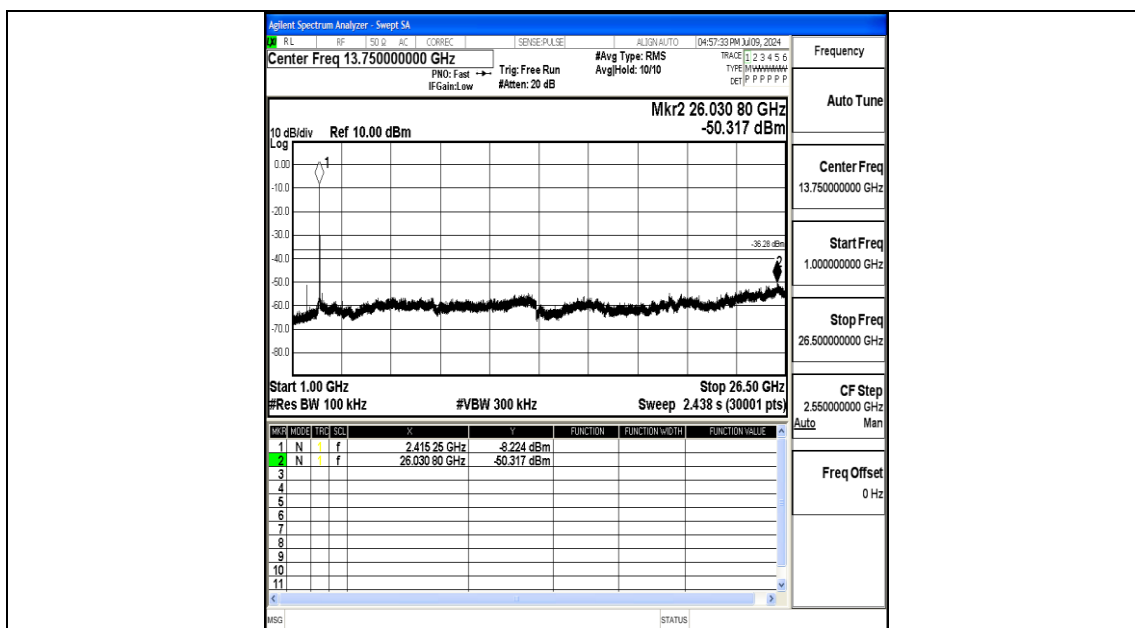
11B-Ant1-2462-1000~26500-PASS



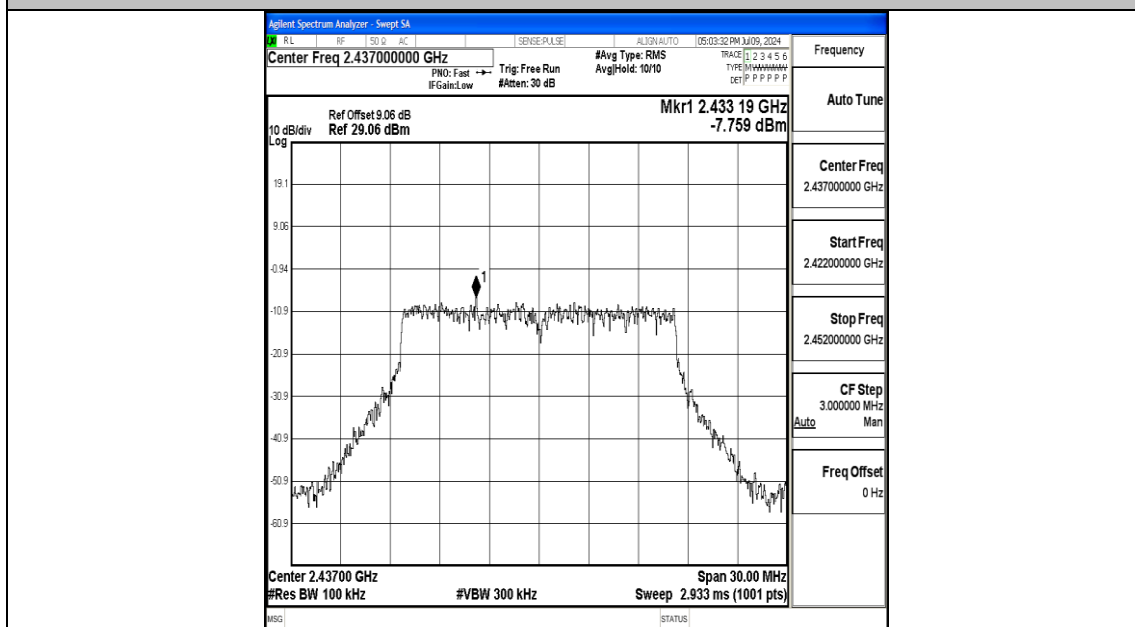
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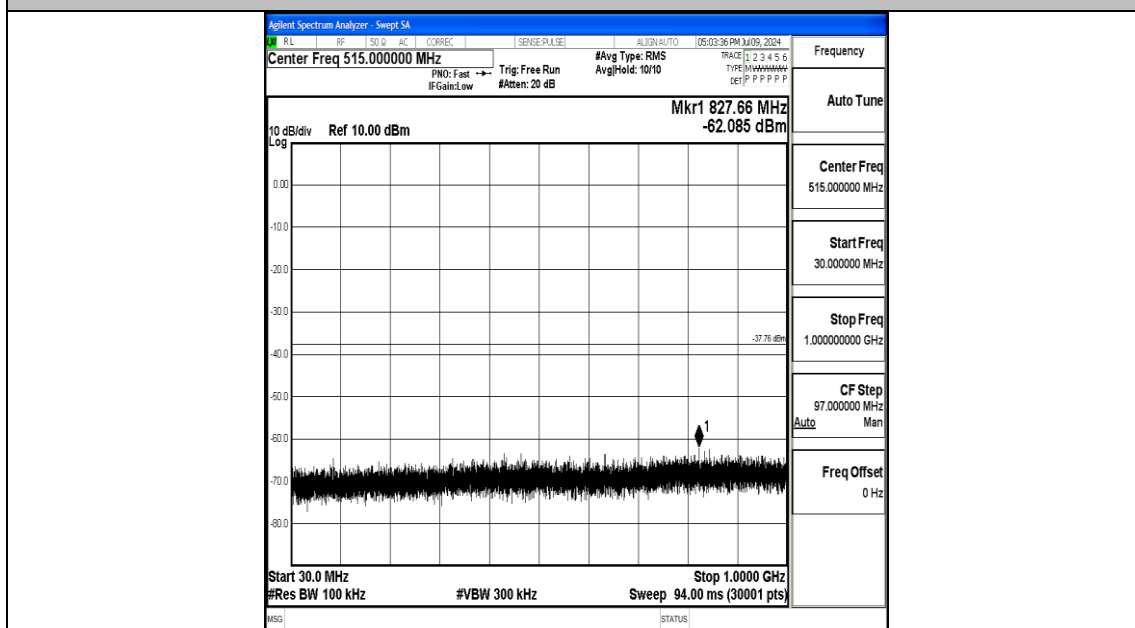
11G-Ant1-2412-30~1000-PASS



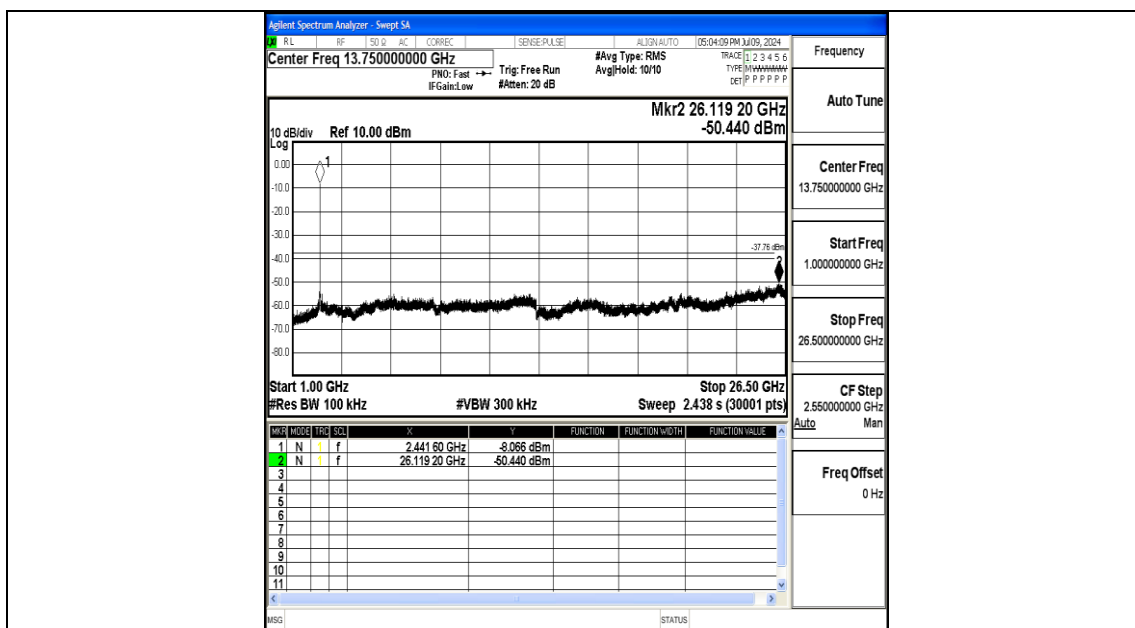
11G-Ant1-2412-1000~26500-PASS



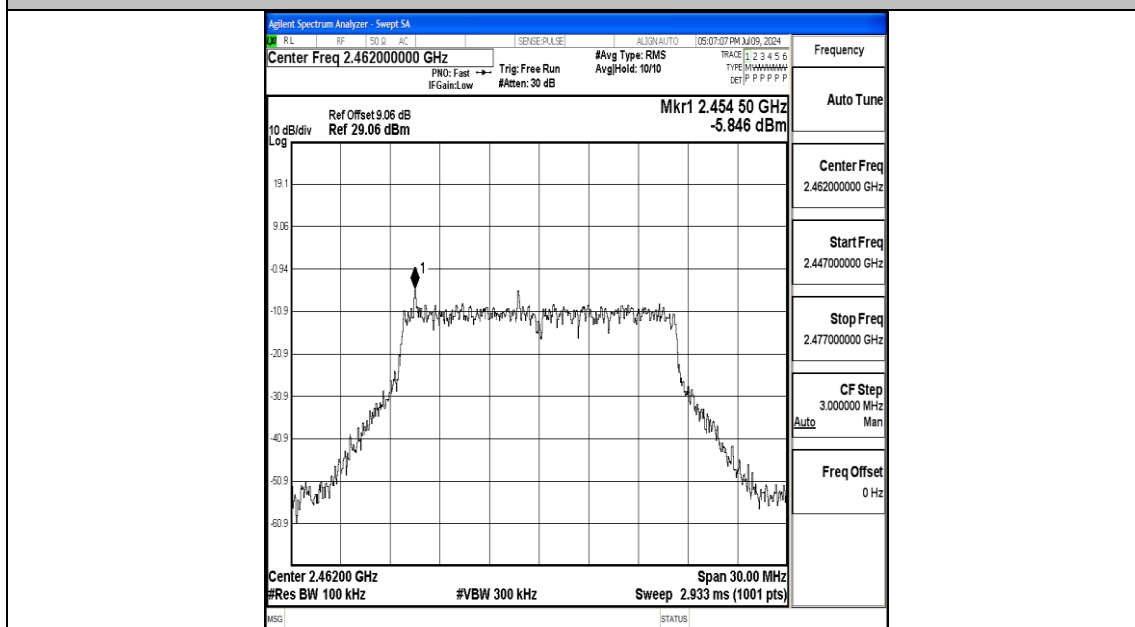
11G-Ant1-2437-0~Reference-PASS



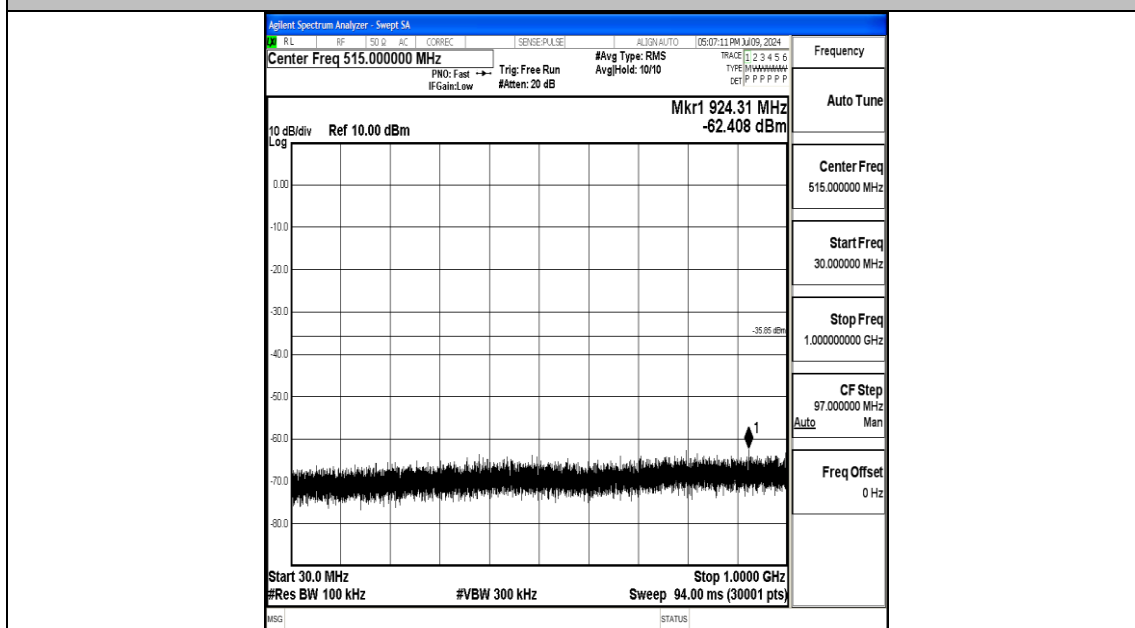
11G-Ant1-2437-30~1000-PASS



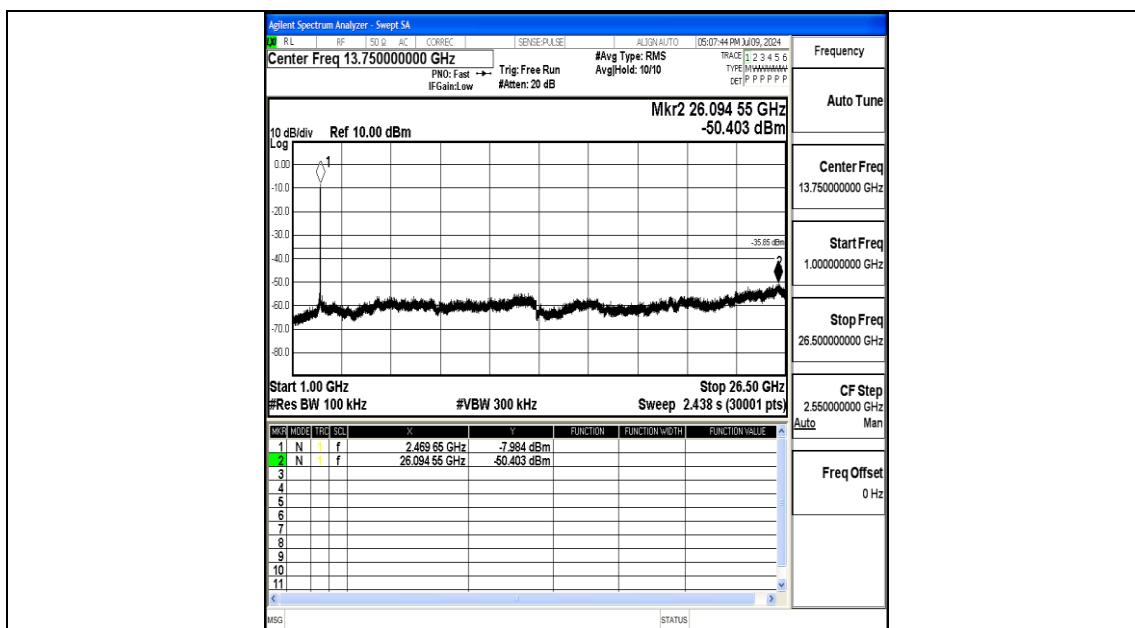
11G-Ant1-2437-1000~26500-PASS



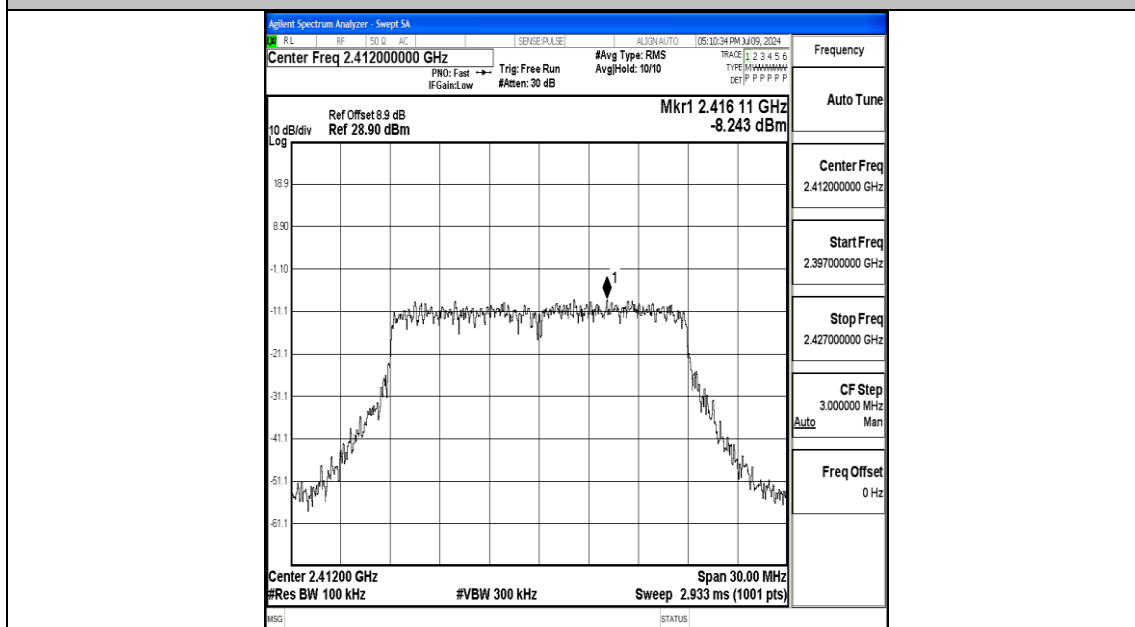
11G-Ant1-2462-0~Reference-PASS



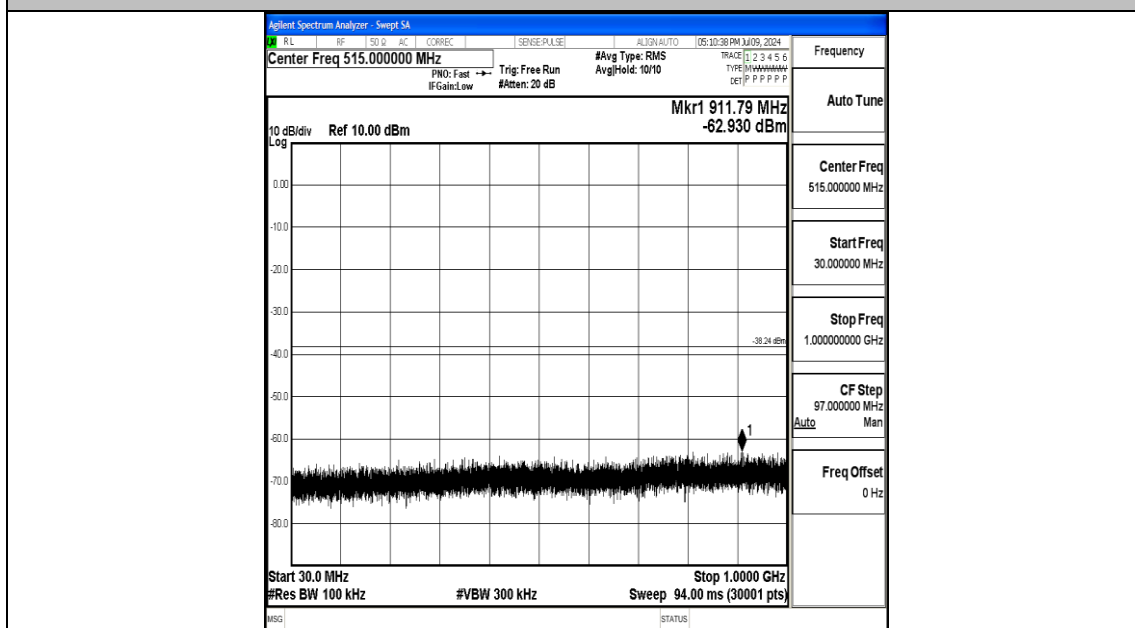
11G-Ant1-2462-30~1000-PASS



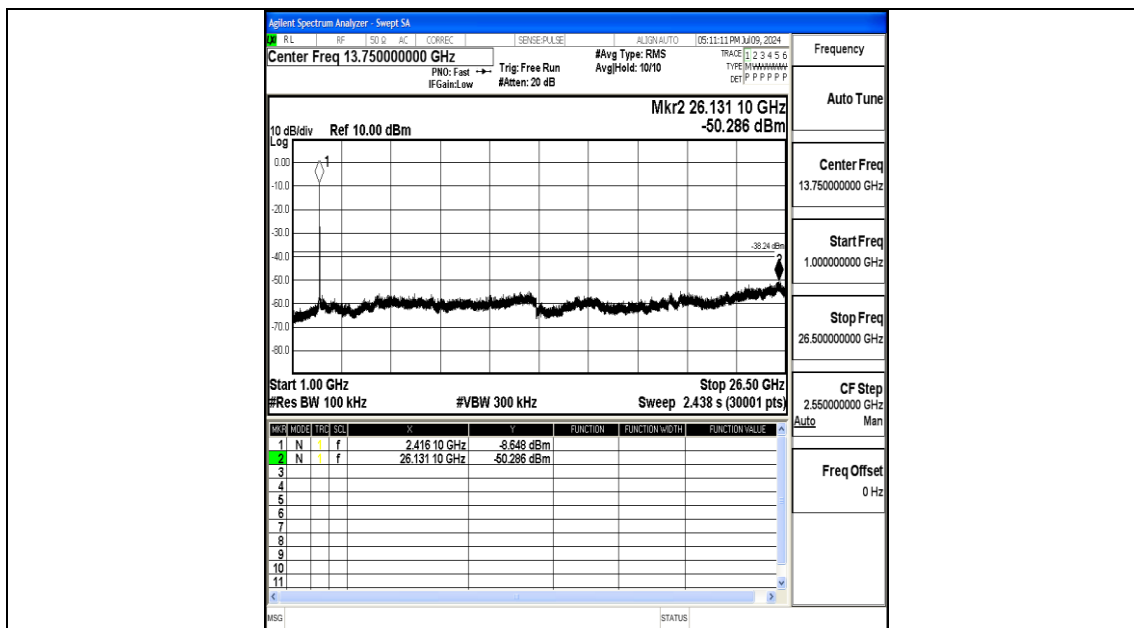
11G-Ant1-2462-1000~26500-PASS



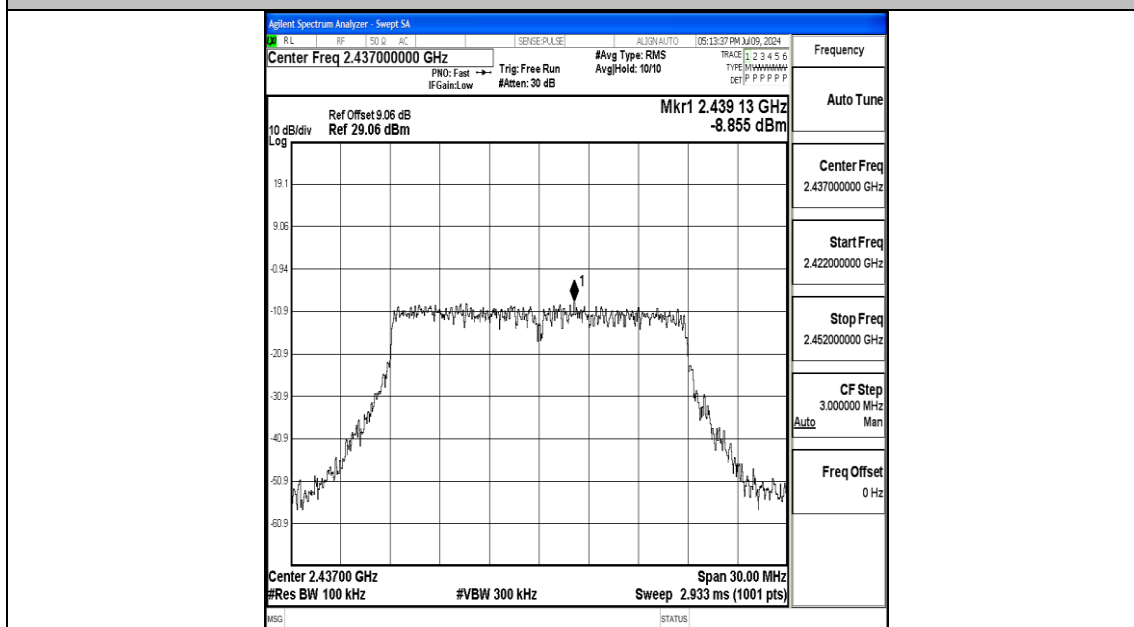
11N20SISO-Ant1-2412-0~Reference-PASS



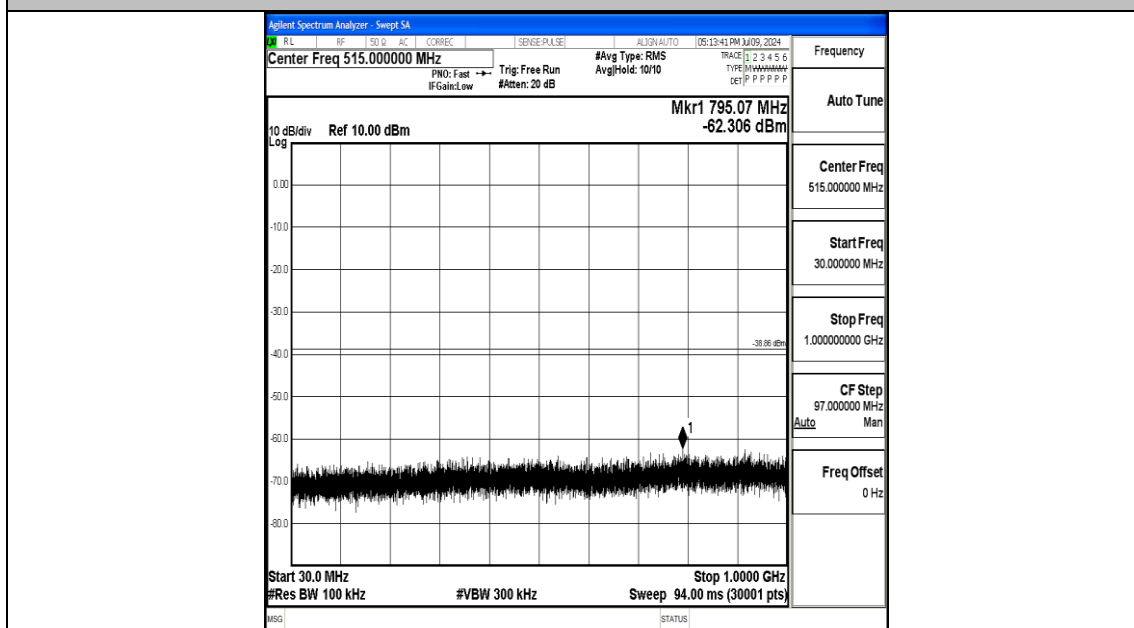
11N20SISO-Ant1-2412-30~1000-PASS



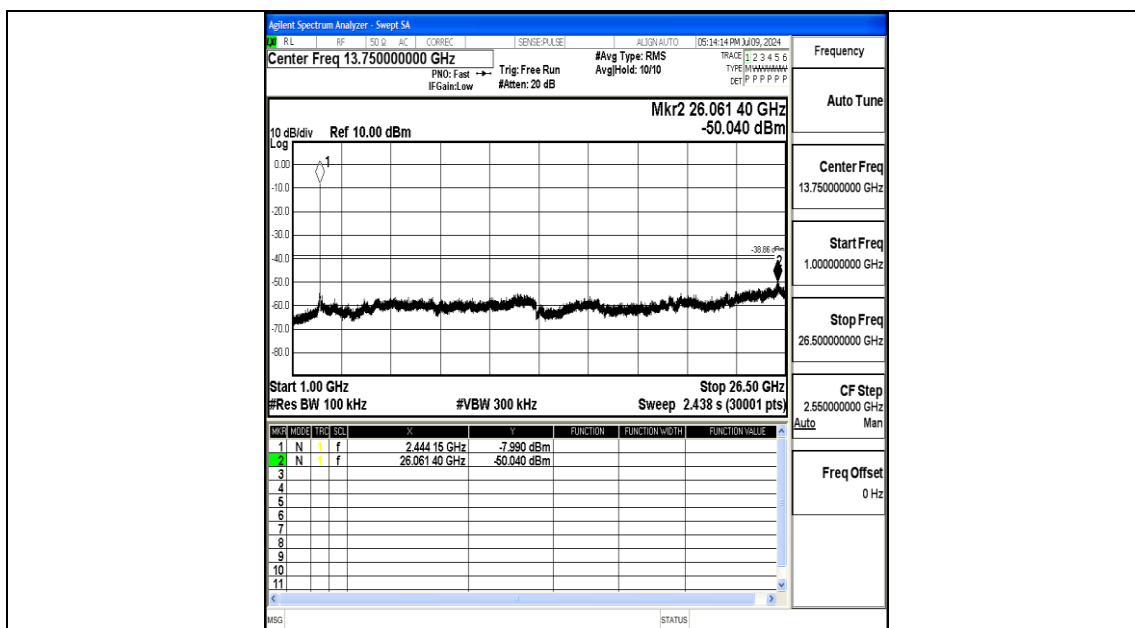
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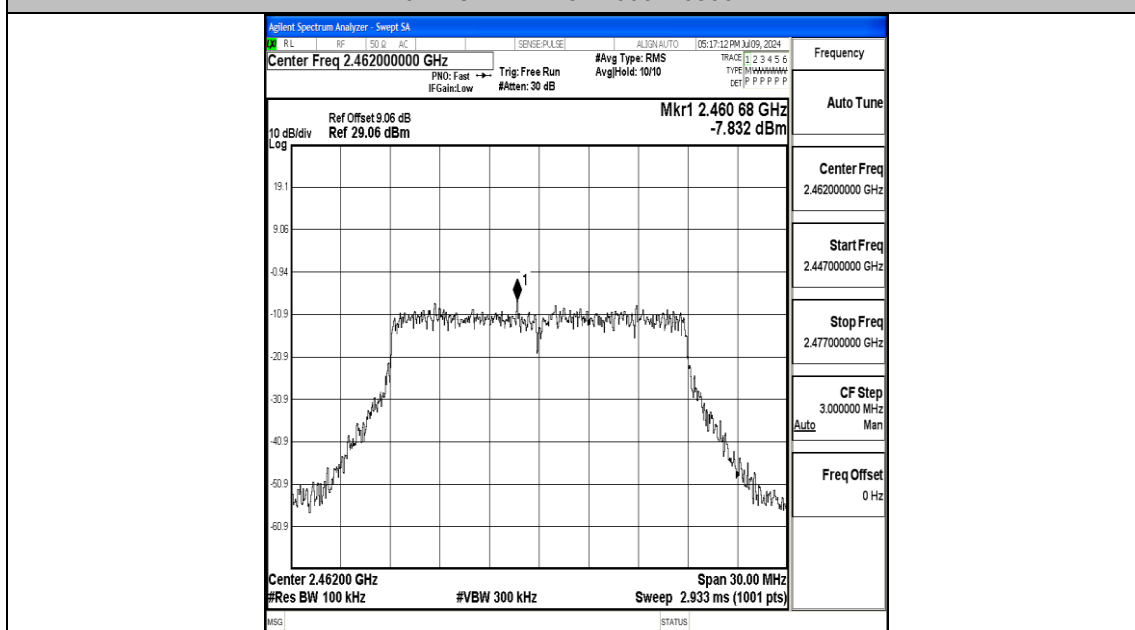
11N20SISO-Ant1-2437-0~Reference-PASS



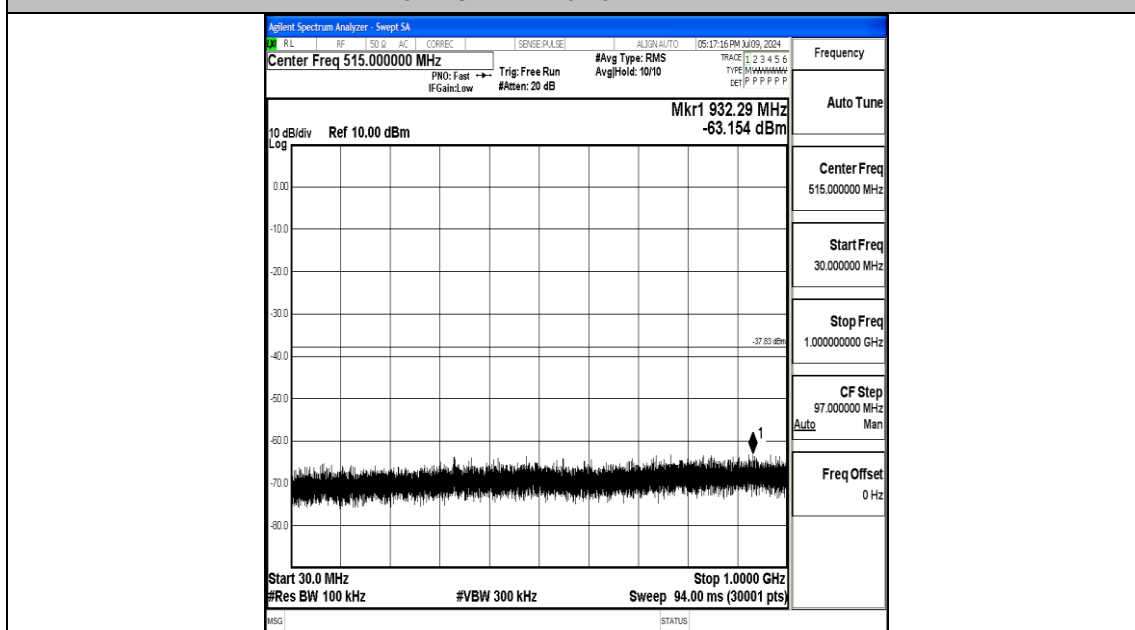
11N20SISO-Ant1-2437-30~1000-PASS



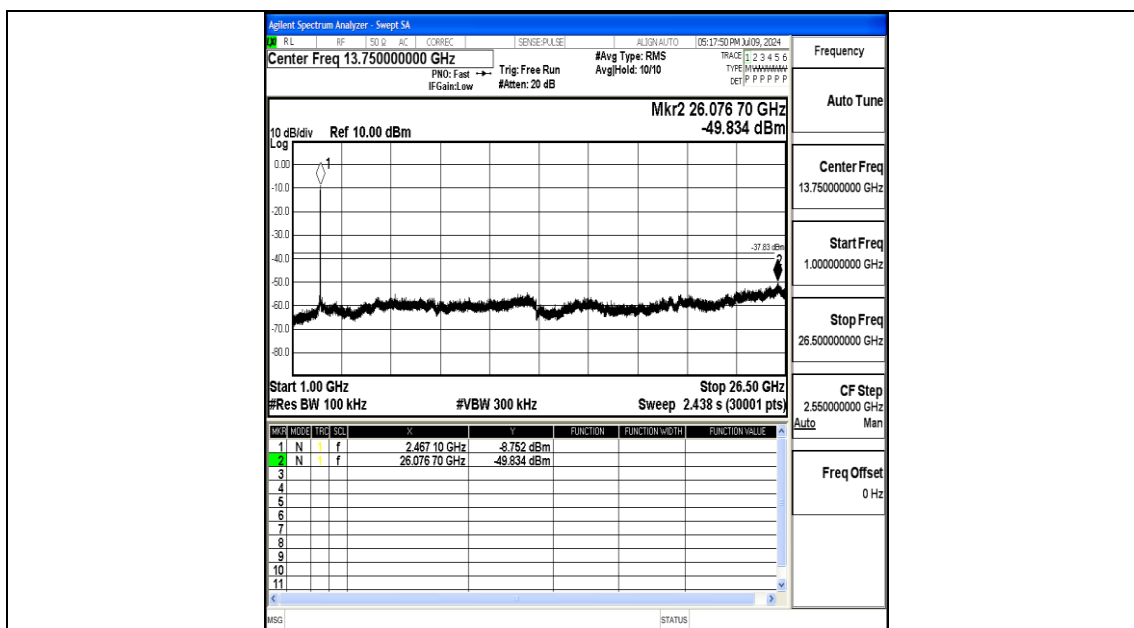
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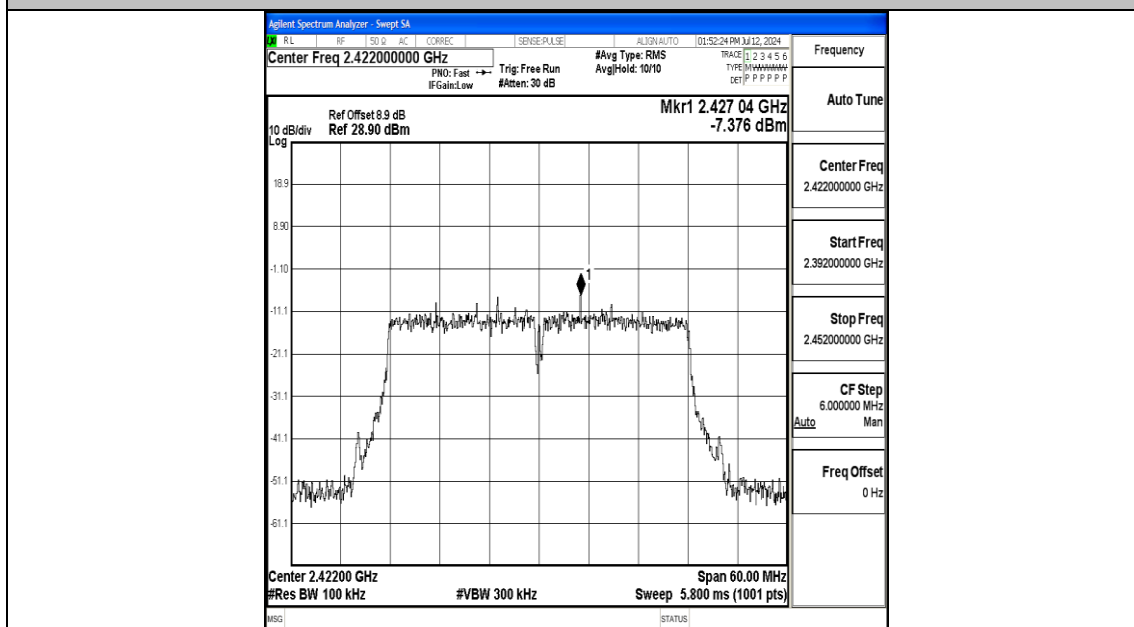
11N20SISO-Ant1-2462-0~Reference-PASS



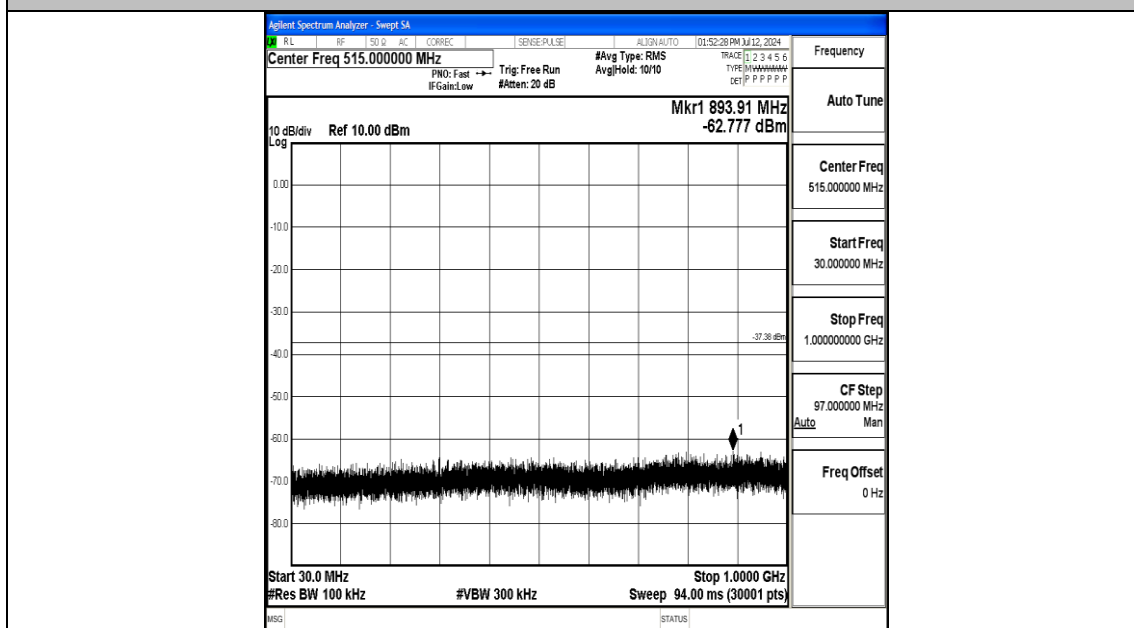
11N20SISO-Ant1-2462-30~1000-PASS



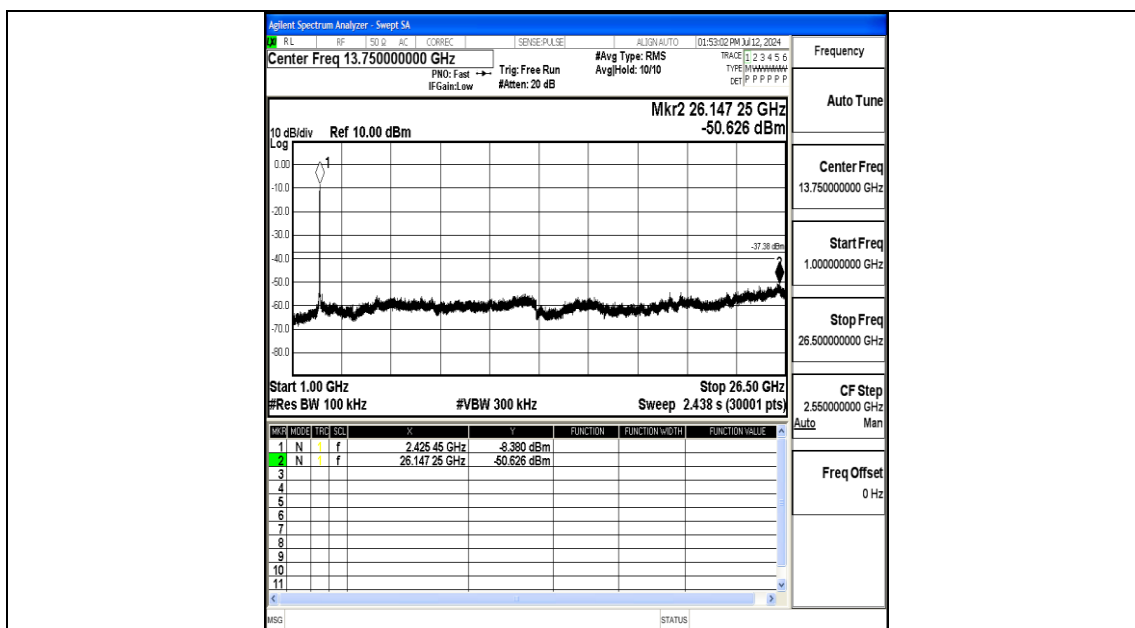
11N20SISO-Ant1-2462-1000~26500-PASS



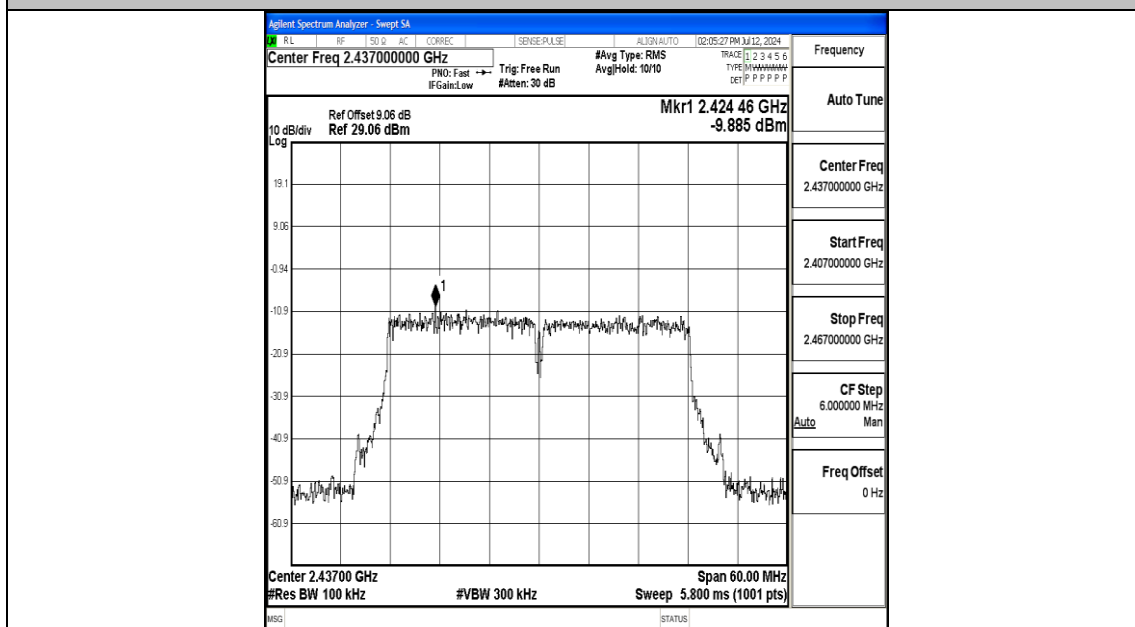
11N40SISO-Ant1-2422-0~Reference-PASS



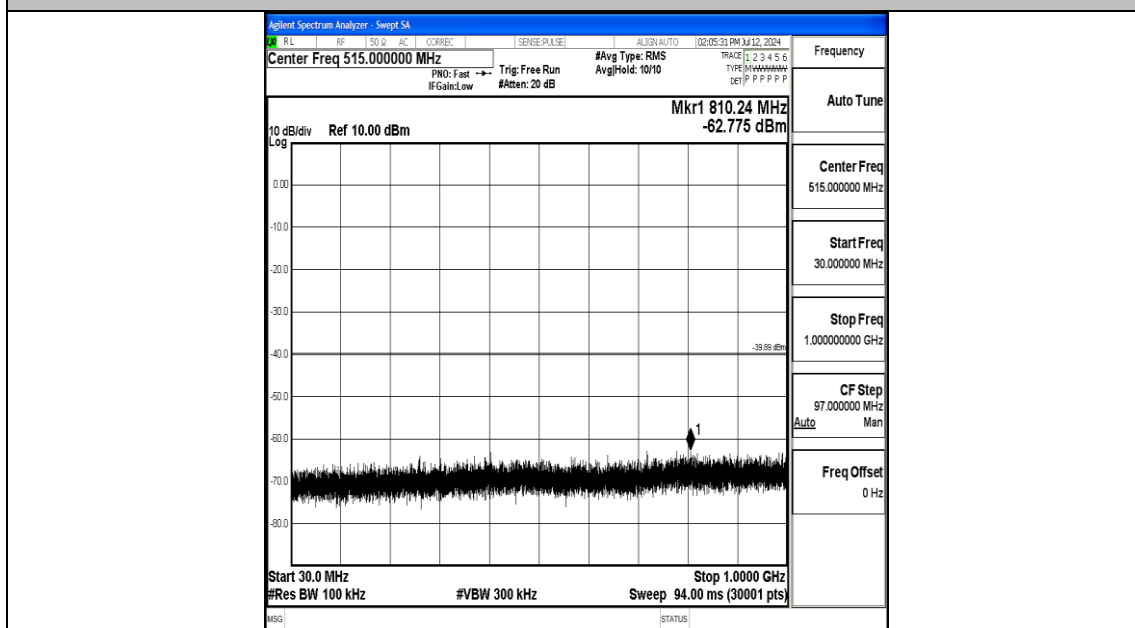
11N40SISO-Ant1-2422-30~1000-PASS



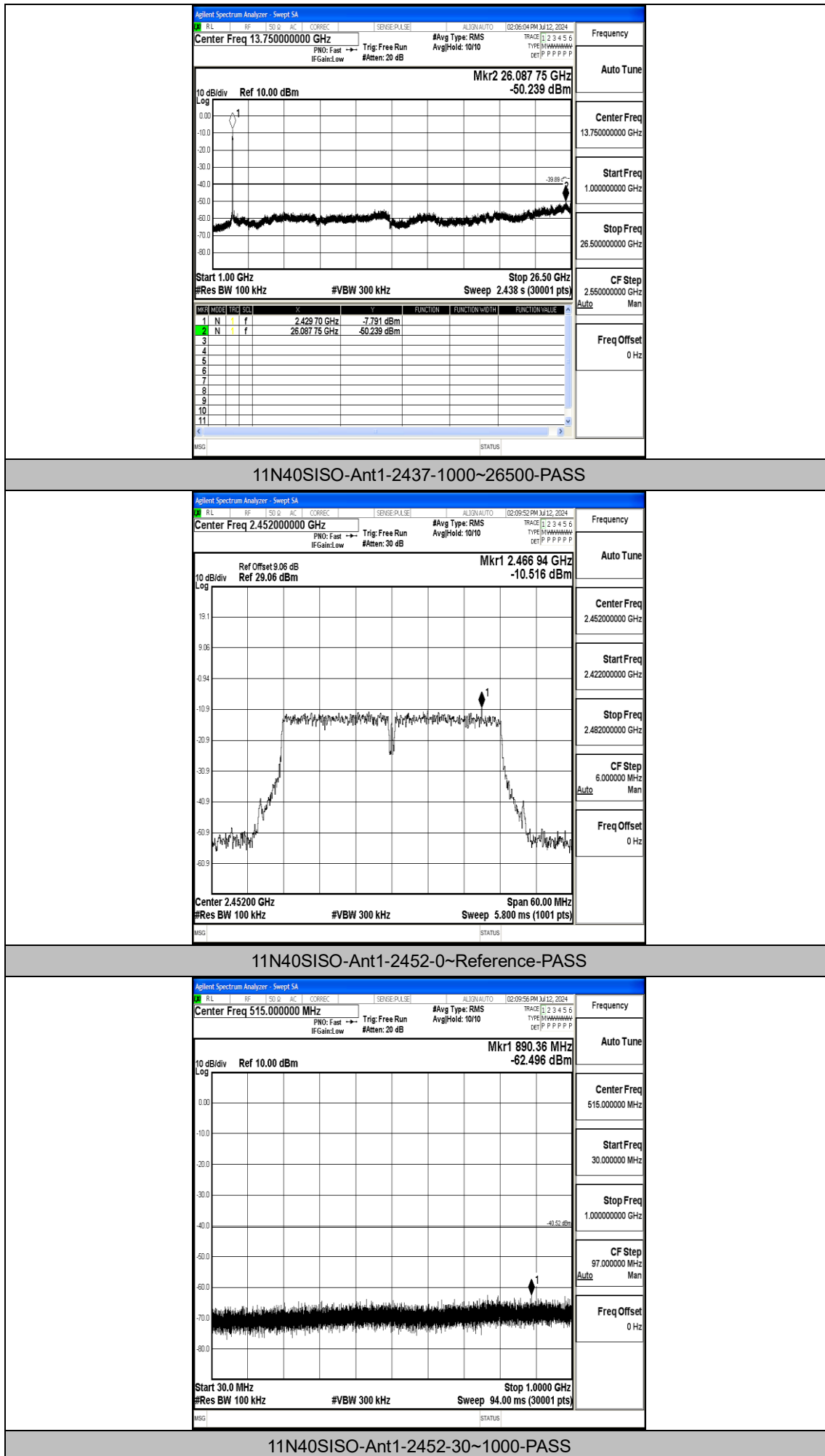
11N40SISO-Ant1-2422-1000~26500-PASS

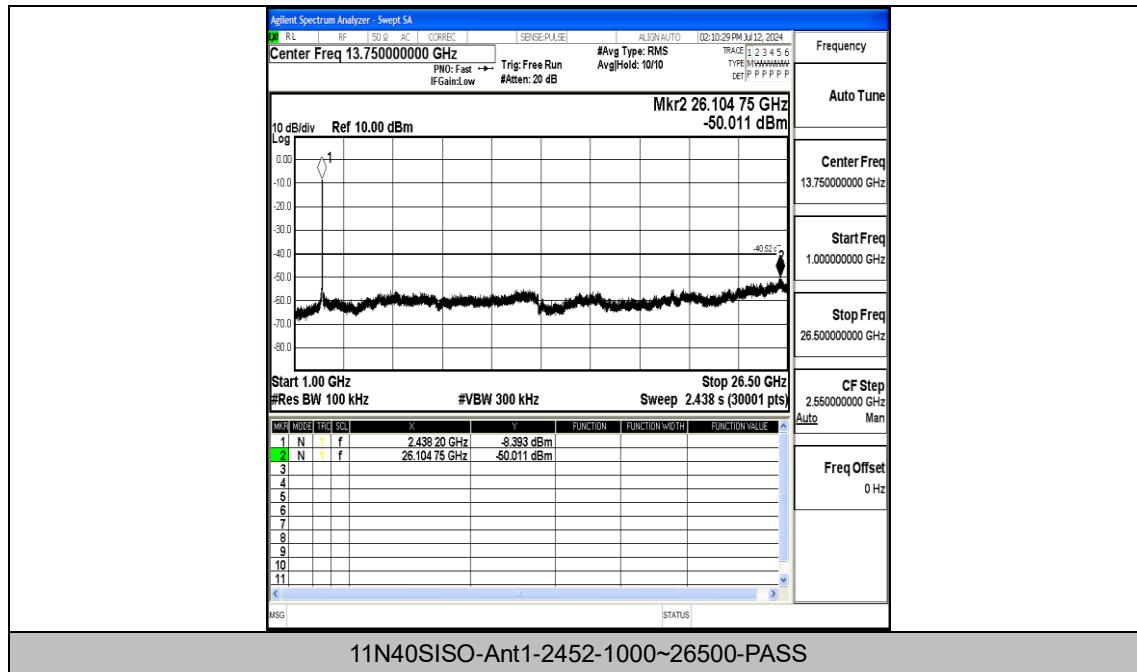


11N40SISO-Ant1-2437-0~Reference-PASS



11N40SISO-Ant1-2437-30~1000-PASS





Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.40	12.58	98.57	0.06
11B	Ant1	2437	12.41	12.49	99.36	0.03
11B	Ant1	2462	12.43	12.48	99.60	0.02
11G	Ant1	2412	2.06	2.16	95.37	0.21
11G	Ant1	2437	2.06	2.17	94.93	0.23
11G	Ant1	2462	2.07	2.17	95.39	0.20
11N20SISO	Ant1	2412	1.92	2.02	95.05	0.22
11N20SISO	Ant1	2437	1.92	2.09	91.87	0.37
11N20SISO	Ant1	2462	1.92	1.97	97.46	0.11
11N40SISO	Ant1	2422	0.94	1.02	92.16	0.35
11N40SISO	Ant1	2437	0.94	1.12	83.93	0.76
11N40SISO	Ant1	2452	0.95	1.12	84.82	0.72

Test Graphs

