

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

Product Name: Intelligent quadcopter

Trade Mark: /

Test Model: YL-01

FCC ID: 2BOUB-YL01WF

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

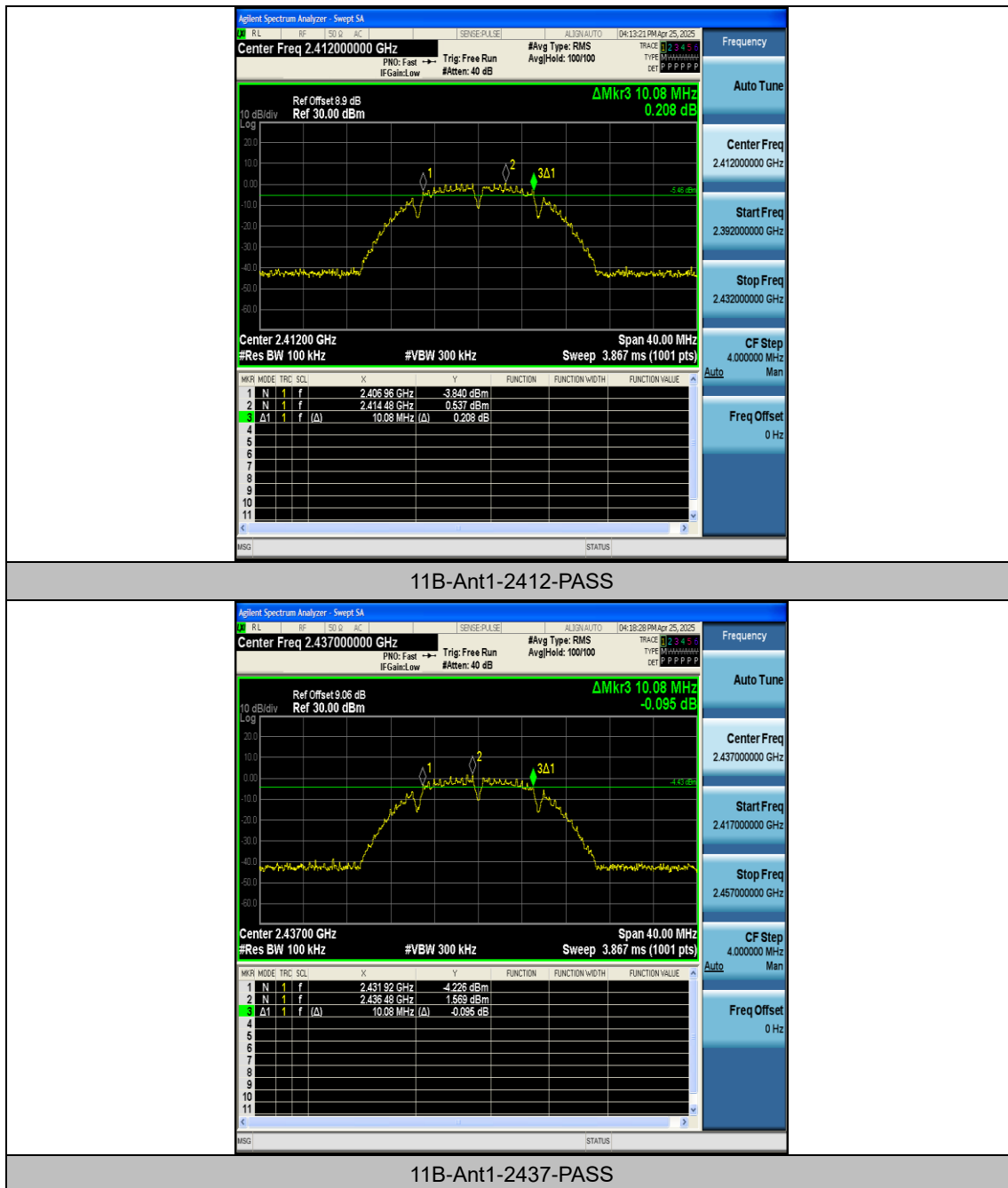
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
11B	Ant1	2437	10.080	2431.920	2442.000	0.5	PASS
11B	Ant1	2462	10.120	2456.920	2467.040	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
11G	Ant1	2437	16.320	2428.800	2445.120	0.5	PASS
11G	Ant1	2462	15.680	2454.440	2470.120	0.5	PASS
11N20SISO	Ant1	2412	16.920	2403.600	2420.520	0.5	PASS
11N20SISO	Ant1	2437	15.080	2429.480	2444.560	0.5	PASS
11N20SISO	Ant1	2462	16.760	2453.600	2470.360	0.5	PASS

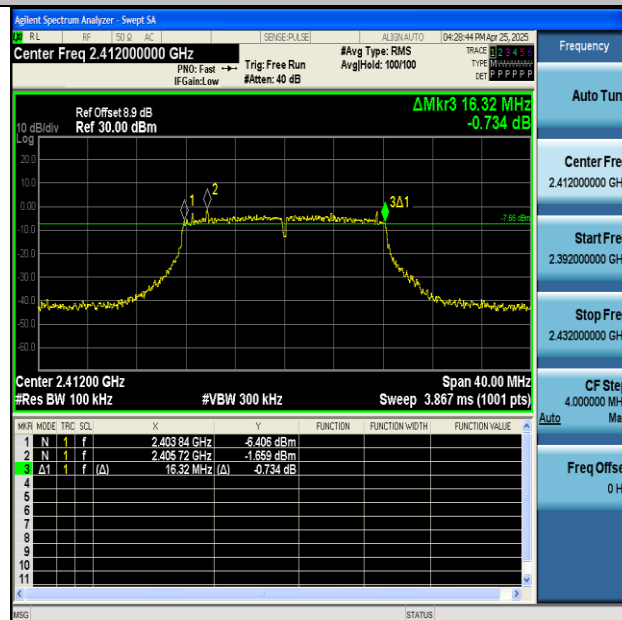
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





11B-Ant1-2462-PASS



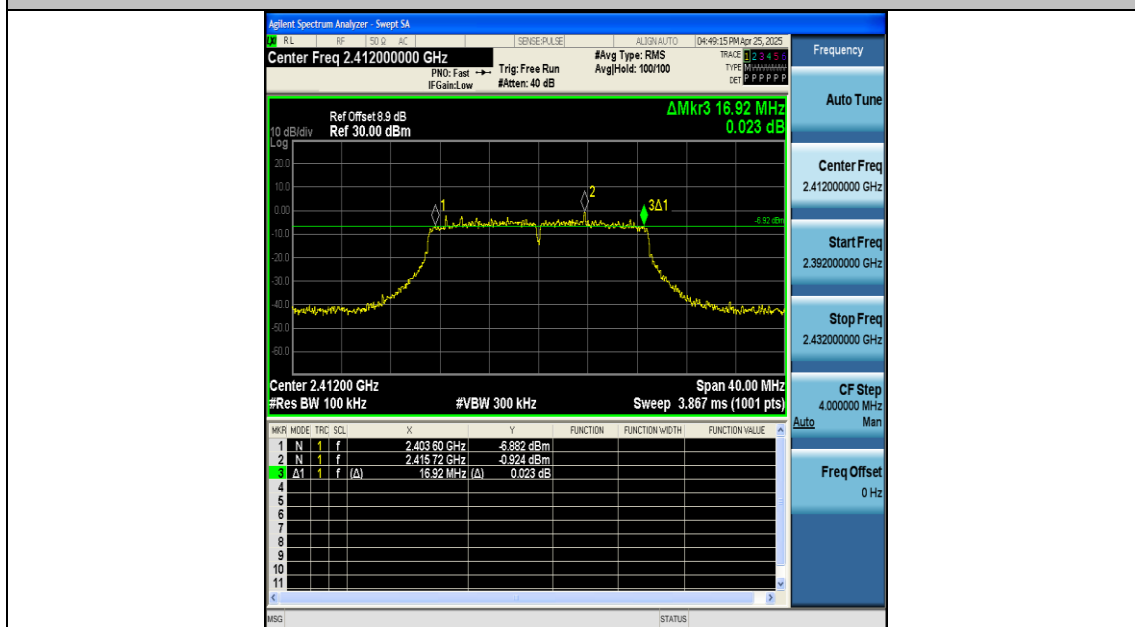
11G-Ant1-2412-PASS



11G-Ant1-2437-PASS



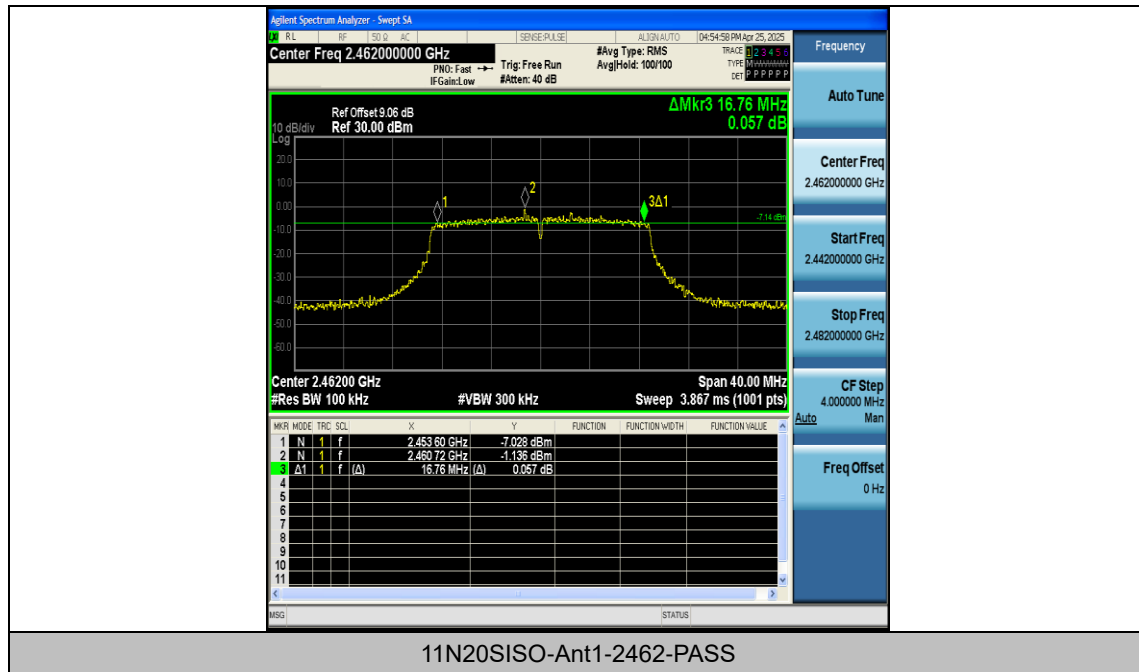
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



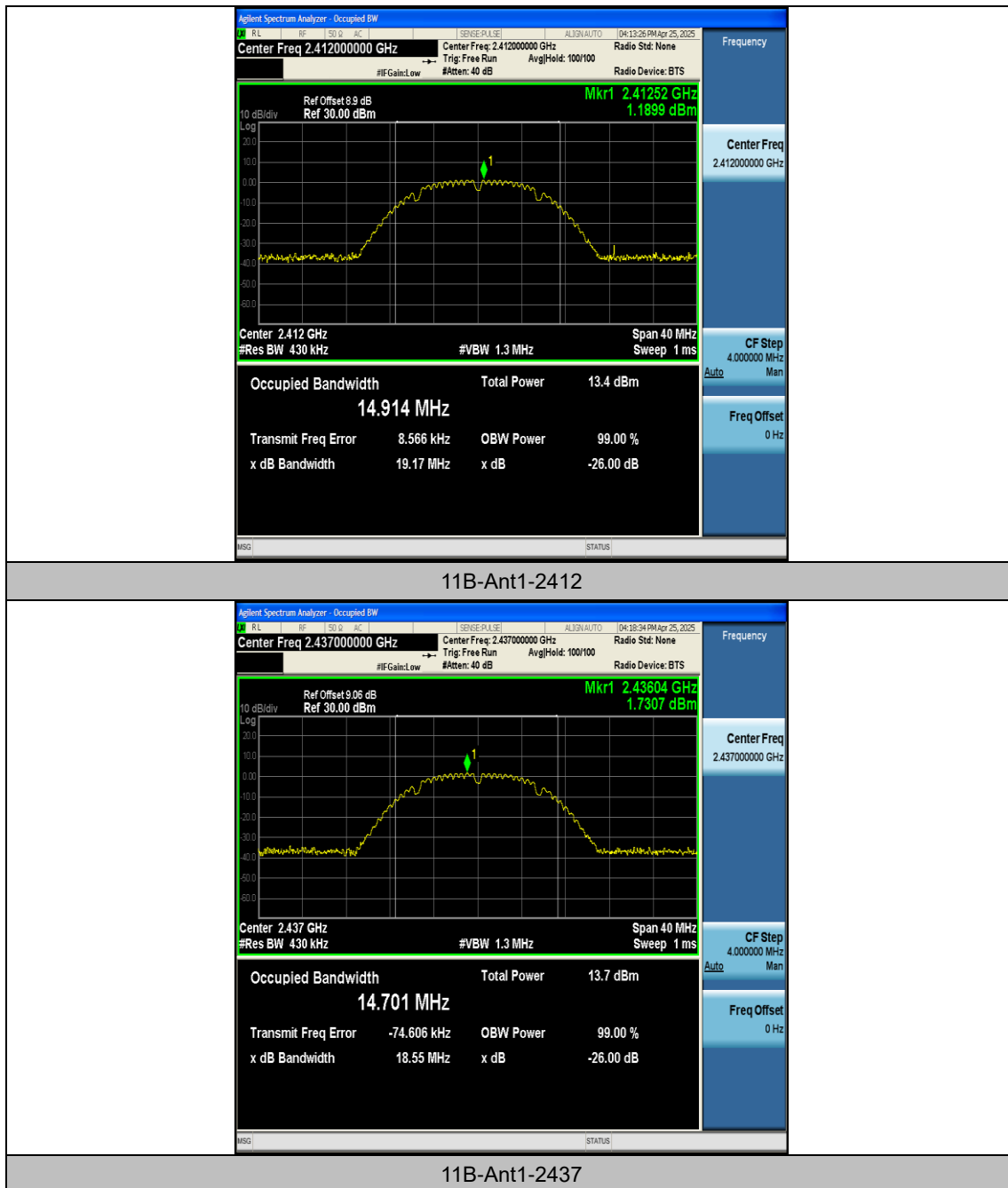
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	14.914	2404.5516	2419.4656	---	---
11B	Ant1	2437	14.701	2429.5749	2444.2759	---	---
11B	Ant1	2462	14.825	2454.6384	2469.4634	---	---
11G	Ant1	2412	16.860	2403.5707	2420.4307	---	---
11G	Ant1	2437	16.615	2428.6830	2445.2980	---	---
11G	Ant1	2462	16.708	2453.7033	2470.4113	---	---
11N20SISO	Ant1	2412	17.956	2403.0277	2420.9837	---	---
11N20SISO	Ant1	2437	17.805	2428.0469	2445.8519	---	---
11N20SISO	Ant1	2462	17.826	2453.1506	2470.9766	---	---

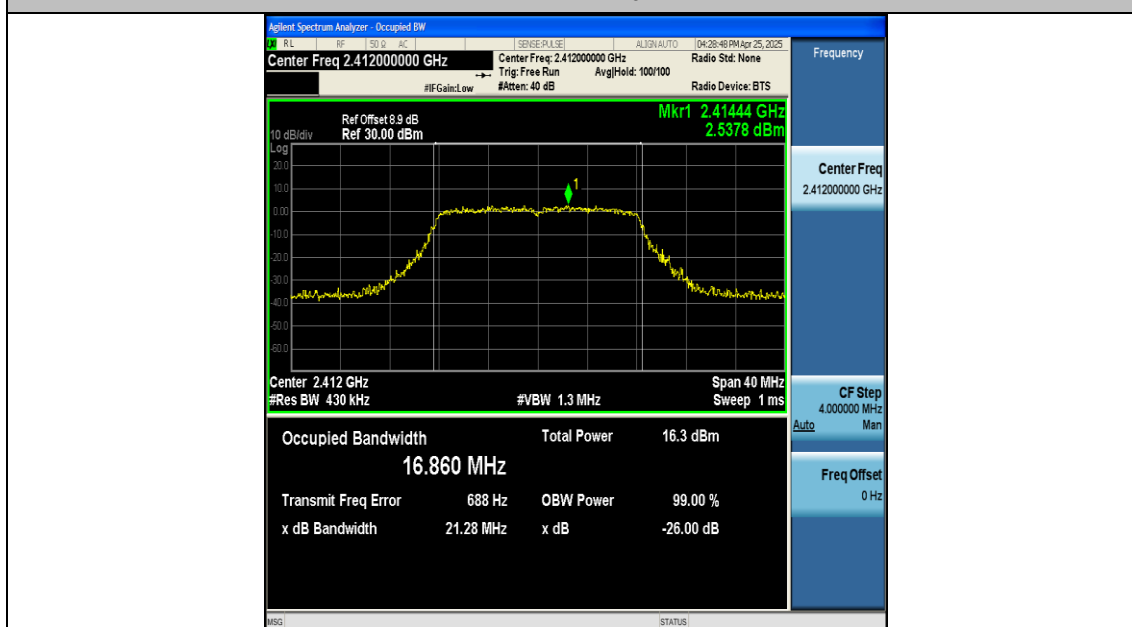
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

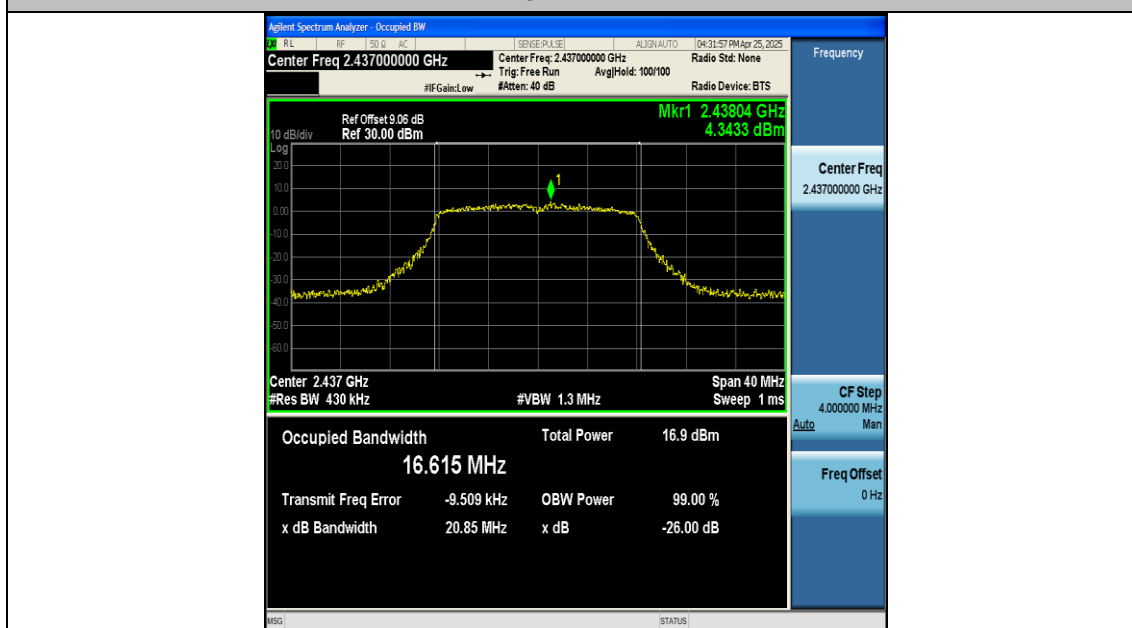




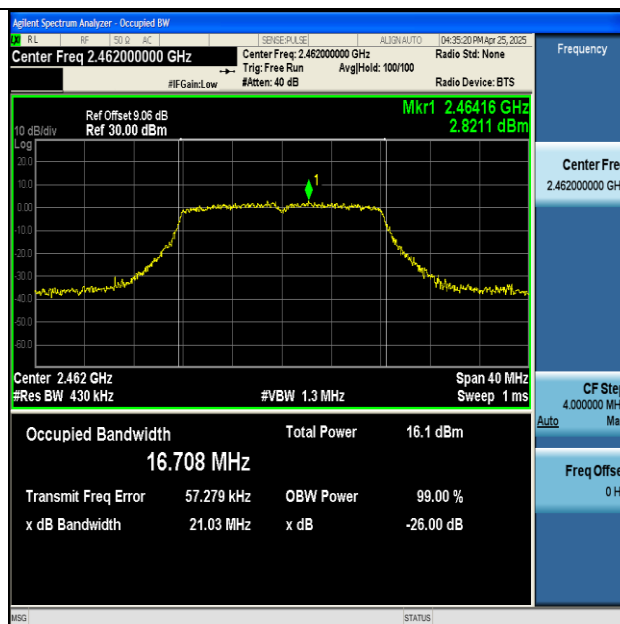
11B-Ant1-2462



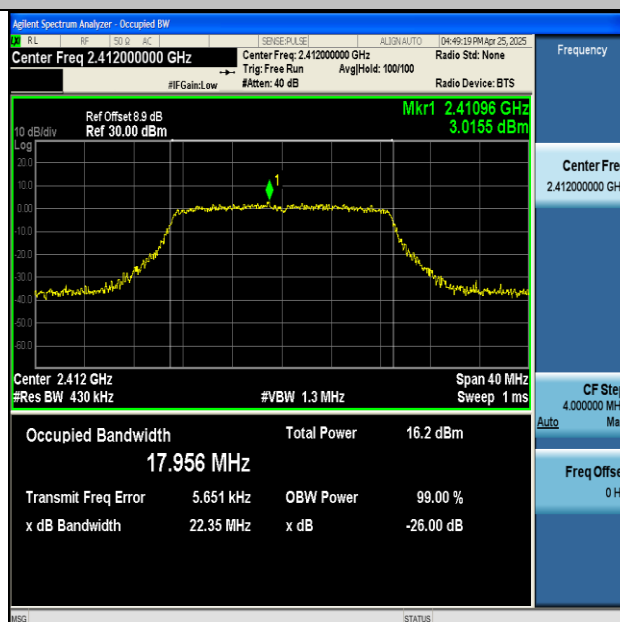
11G-Ant1-2412



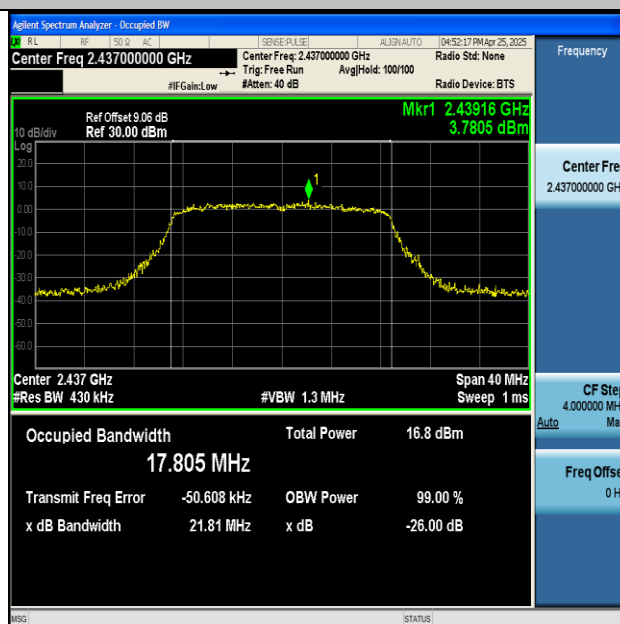
11G-Ant1-2437



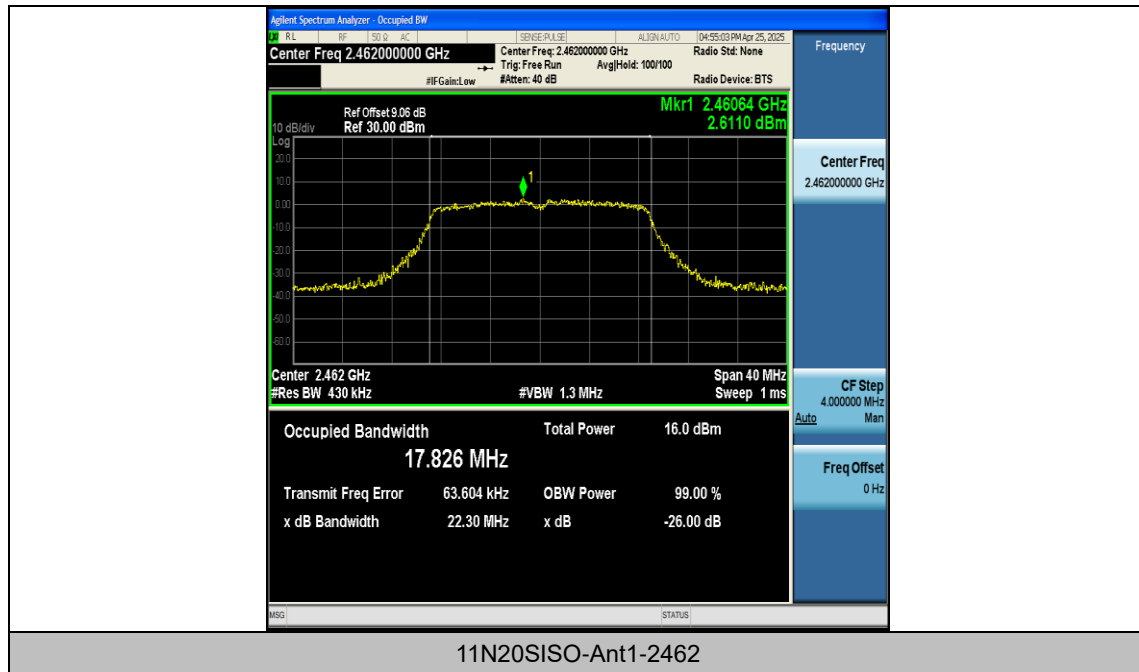
11G-Ant1-2462



11N20SISO-Ant1-2412



11N20SISO-Ant1-2437



Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	10.14	≤30.00	PASS
11B	Ant1	2437	10.63	≤30.00	PASS
11B	Ant1	2462	10.18	≤30.00	PASS
11G	Ant1	2412	10.38	≤30.00	PASS
11G	Ant1	2437	11.12	≤30.00	PASS
11G	Ant1	2462	10.19	≤30.00	PASS
11N20SISO	Ant1	2412	10.44	≤30.00	PASS
11N20SISO	Ant1	2437	10.95	≤30.00	PASS
11N20SISO	Ant1	2462	10.02	≤30.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

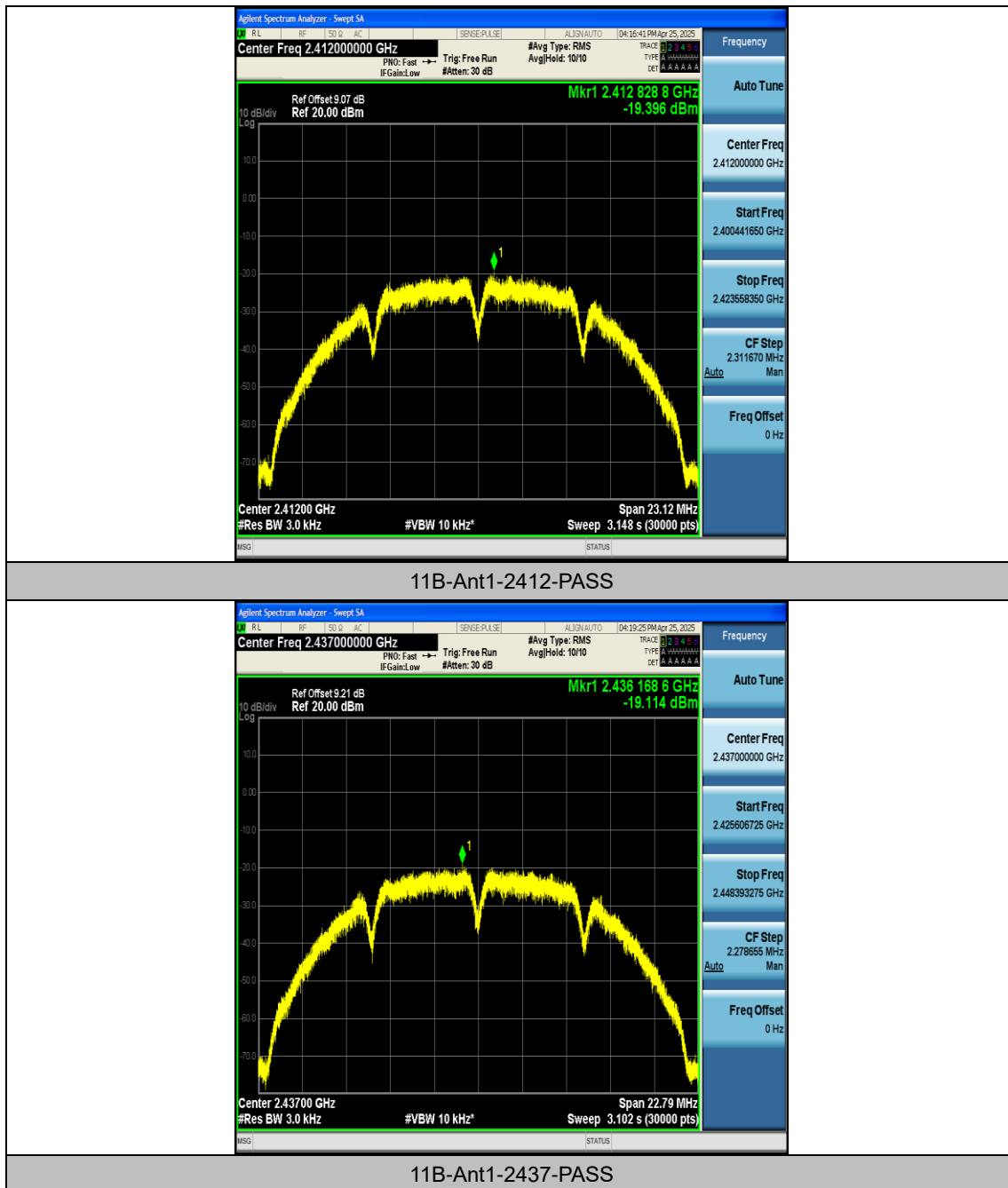
Appendix D: Maximum Average power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Raw. Data [dBm/3kHz]	Dc. Factor	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-19.57	0.17	-19.40	≤8.00	PASS
11B	Ant1	2437	-19.26	0.15	-19.11	≤8.00	PASS
11B	Ant1	2462	-19.66	0.14	-19.52	≤8.00	PASS
11G	Ant1	2412	-20.32	0.41	-19.91	≤8.00	PASS
11G	Ant1	2437	-19.33	0.48	-18.85	≤8.00	PASS
11G	Ant1	2462	-19.45	0.48	-18.97	≤8.00	PASS
11N20SISO	Ant1	2412	-20.76	0.51	-20.25	≤8.00	PASS
11N20SISO	Ant1	2437	-20.09	0.51	-19.58	≤8.00	PASS
11N20SISO	Ant1	2462	-20.44	0.51	-19.93	≤8.00	PASS

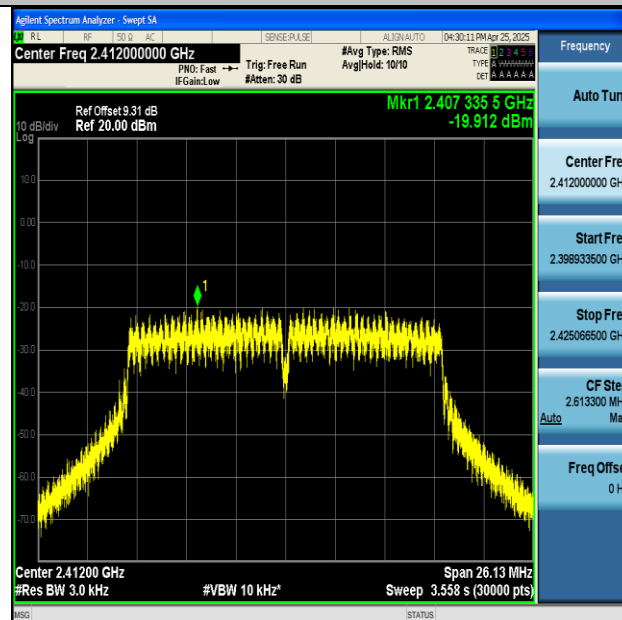
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

Test Graphs

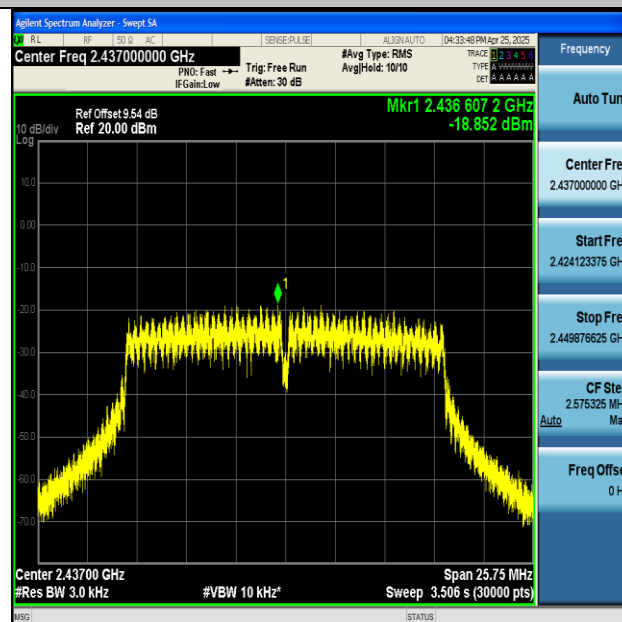




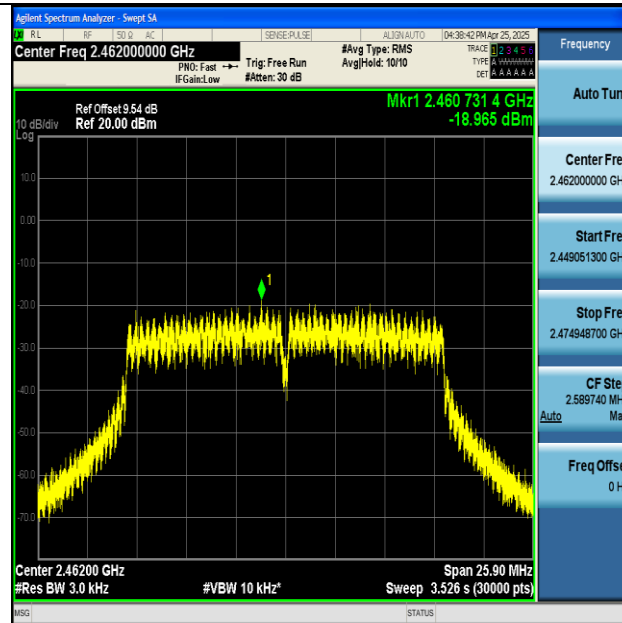
11B-Ant1-2462-PASS



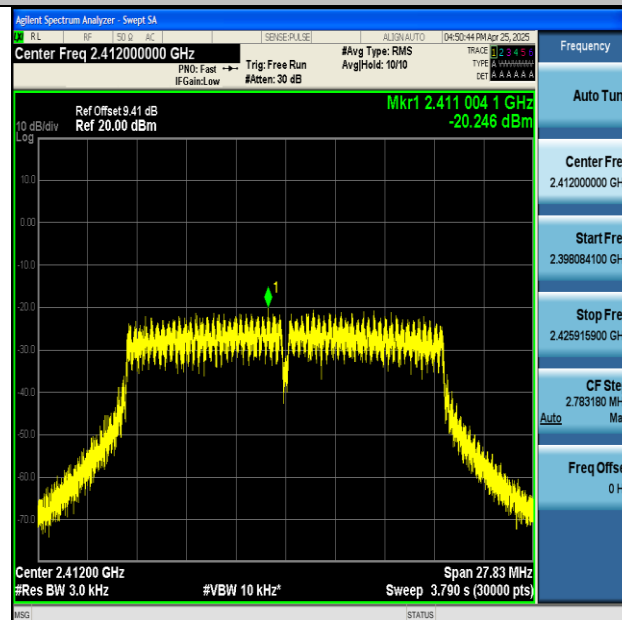
11G-Ant1-2412-PASS



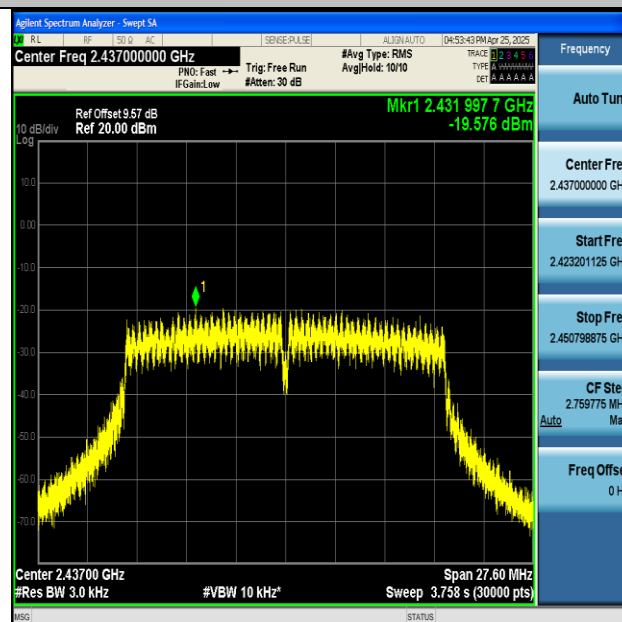
11G-Ant1-2437-PASS



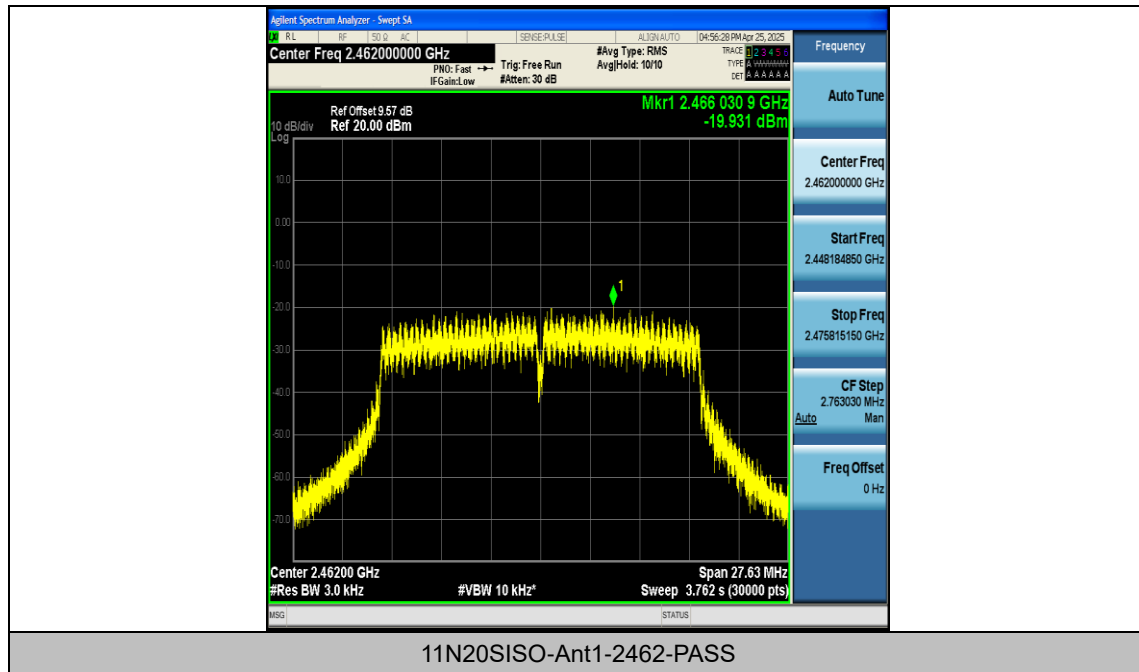
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



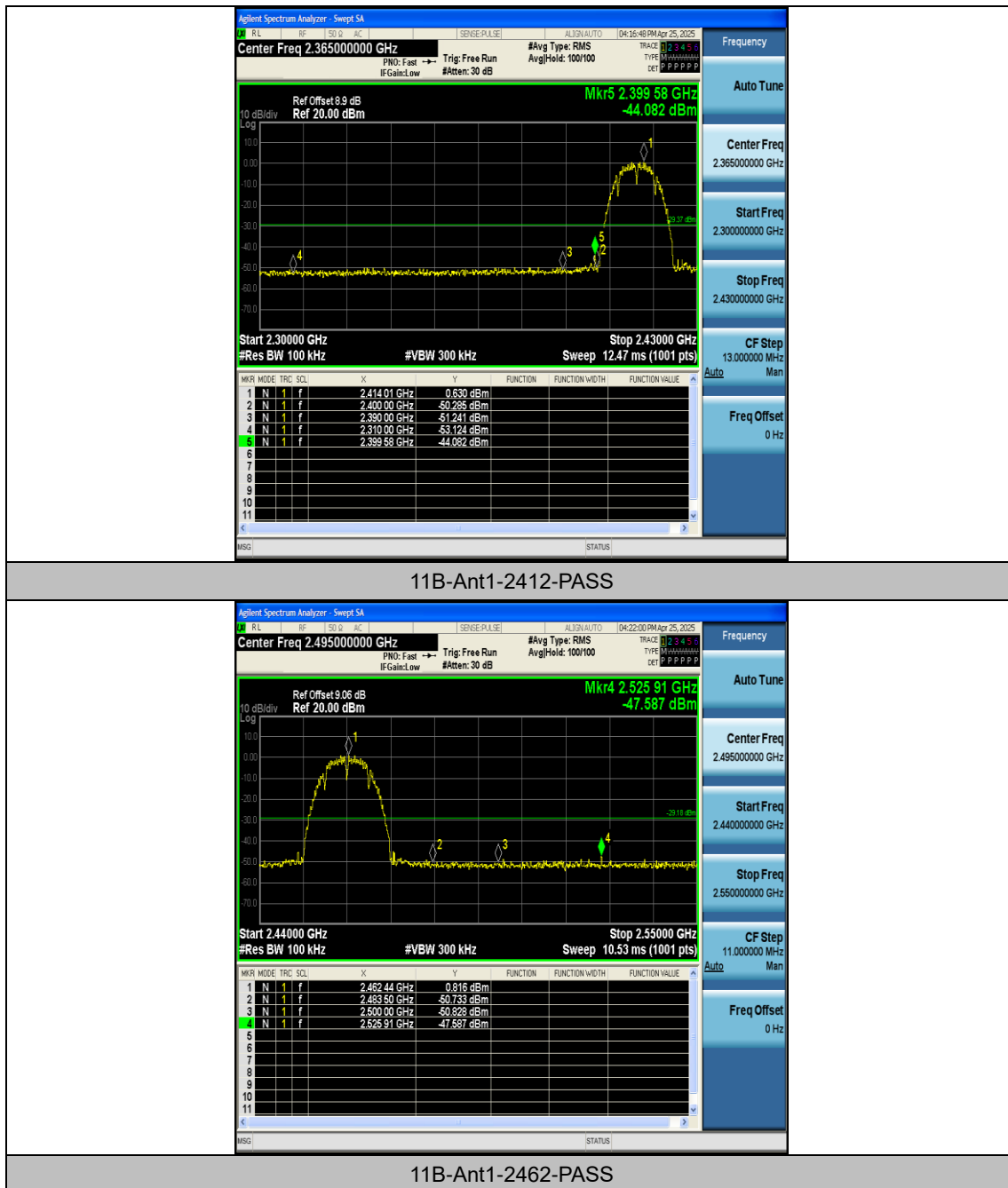
Appendix E: Band edge measurements

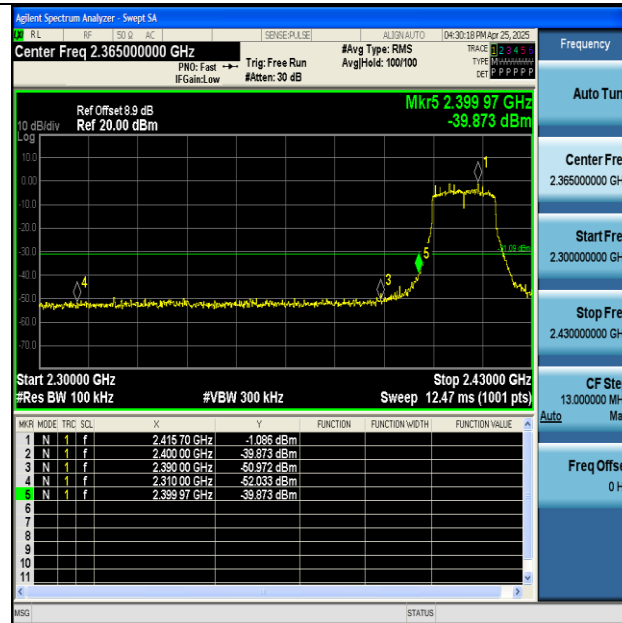
Test Result

Test Mode	Antenna	Ch. Name	Frequency. [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	0.63	-44.08	≤ -29.37	PASS
11B	Ant1	High	2462	0.82	-47.59	≤ -29.18	PASS
11G	Ant1	Low	2412	-1.09	-39.87	≤ -31.09	PASS
11G	Ant1	High	2462	-1.38	-48.67	≤ -31.38	PASS
11N20SI SO	Ant1	Low	2412	-1.82	-37.48	≤ -31.82	PASS
11N20SI SO	Ant1	High	2462	-0.50	-49.25	≤ -30.5	PASS

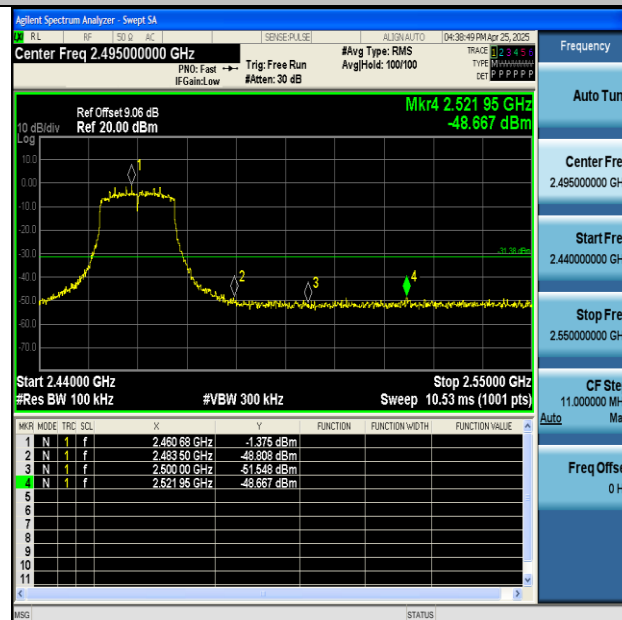
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

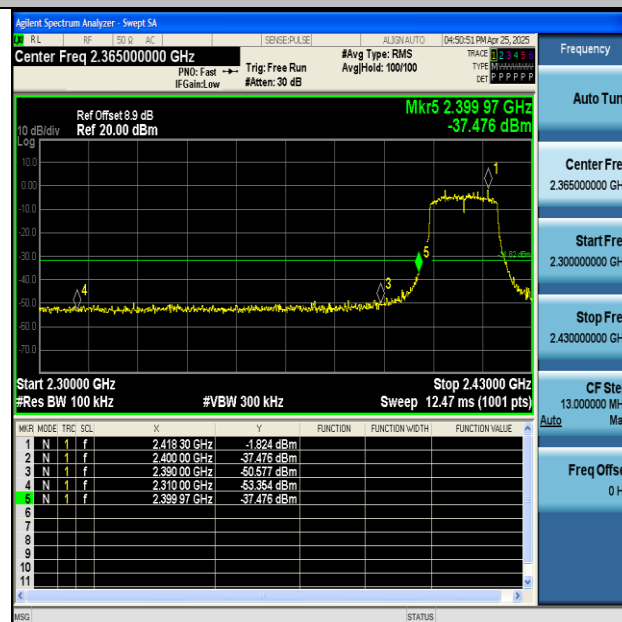




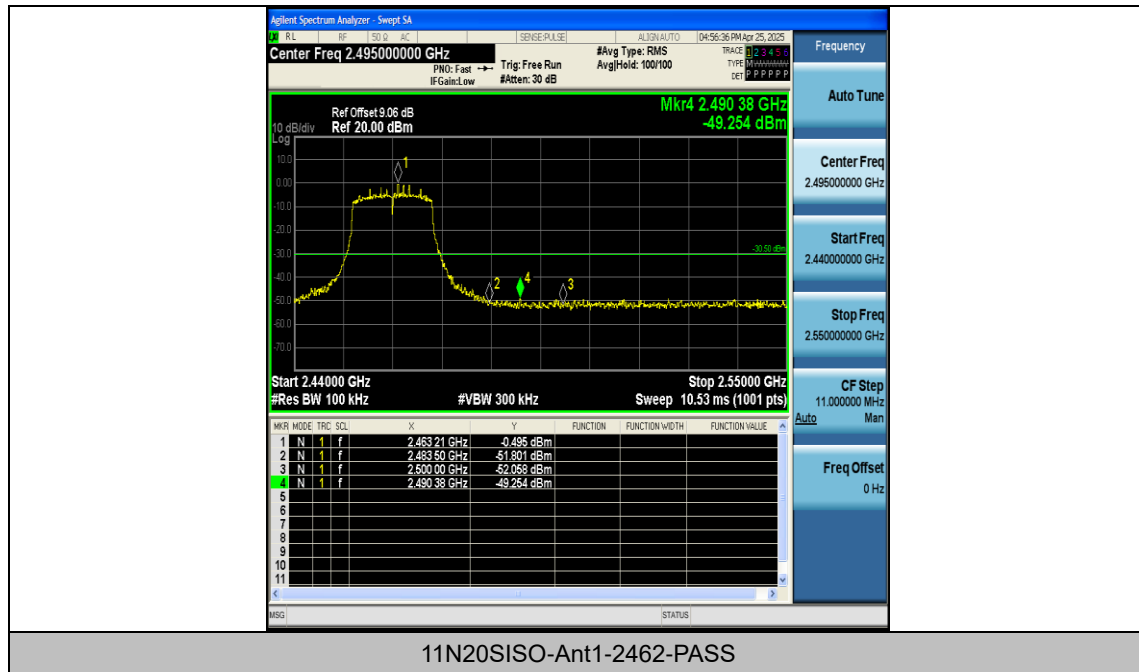
11G-Ant1-2412-PASS



11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



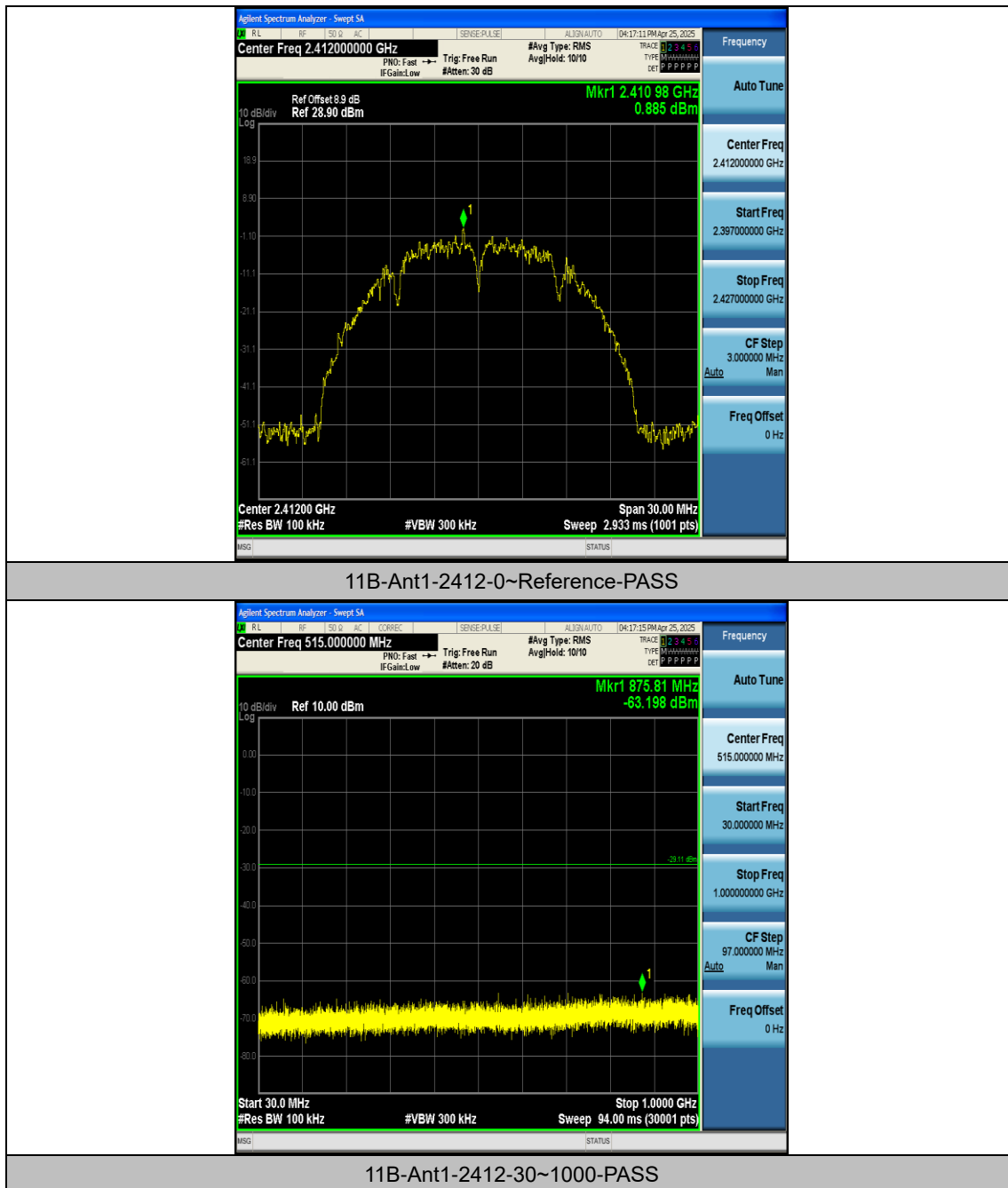
Appendix F: Conducted Spurious Emission

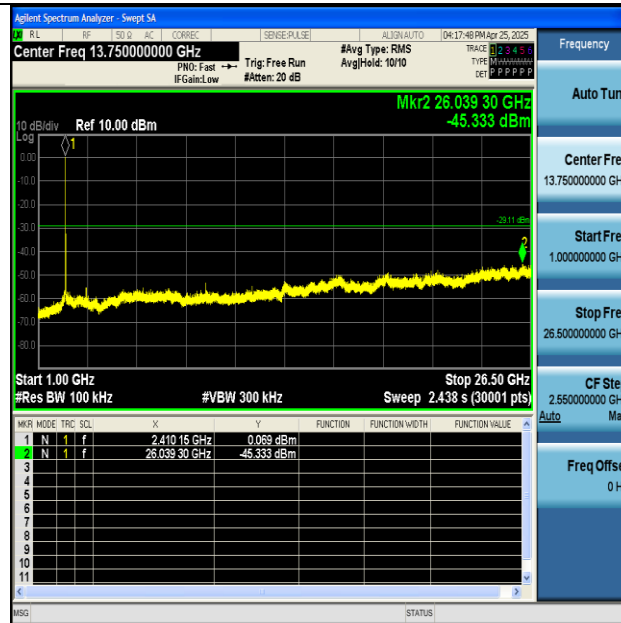
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	0.89	0.89	---	PASS
11B	Ant1	2412	30~1000	0.89	-63.2	≤-29.11	PASS
11B	Ant1	2412	1000~26500	0.89	-45.33	≤-29.11	PASS
11B	Ant1	2437	0~Reference	-0.06	-0.06	---	PASS
11B	Ant1	2437	30~1000	-0.06	-63.02	≤-30.06	PASS
11B	Ant1	2437	1000~26500	-0.06	-44.83	≤-30.06	PASS
11B	Ant1	2462	0~Reference	0.28	0.28	---	PASS
11B	Ant1	2462	30~1000	0.28	-63.57	≤-29.72	PASS
11B	Ant1	2462	1000~26500	0.28	-45.17	≤-29.72	PASS
11G	Ant1	2412	0~Reference	-0.77	-0.77	---	PASS
11G	Ant1	2412	30~1000	-0.77	-62.91	≤-30.77	PASS
11G	Ant1	2412	1000~26500	-0.77	-45.43	≤-30.77	PASS
11G	Ant1	2437	0~Reference	0.56	0.56	---	PASS
11G	Ant1	2437	30~1000	0.56	-62.65	≤-29.44	PASS
11G	Ant1	2437	1000~26500	0.56	-45.52	≤-29.44	PASS
11G	Ant1	2462	0~Reference	-1.46	-1.46	---	PASS
11G	Ant1	2462	30~1000	-1.46	-62.49	≤-31.46	PASS
11G	Ant1	2462	1000~26500	-1.46	-44.72	≤-31.46	PASS
11N20SISO	Ant1	2412	0~Reference	-3.73	-3.73	---	PASS
11N20SISO	Ant1	2412	30~1000	-3.73	-63.03	≤-33.73	PASS
11N20SISO	Ant1	2412	1000~26500	-3.73	-44.51	≤-33.73	PASS
11N20SISO	Ant1	2437	0~Reference	-3.00	-3.00	---	PASS
11N20SISO	Ant1	2437	30~1000	-3.00	-62.71	≤-33	PASS
11N20SISO	Ant1	2437	1000~26500	-3.00	-45.79	≤-33	PASS
11N20SISO	Ant1	2462	0~Reference	-2.69	-2.69	---	PASS
11N20SISO	Ant1	2462	30~1000	-2.69	-62.6	≤-32.69	PASS
11N20SISO	Ant1	2462	1000~26500	-2.69	-44.9	≤-32.69	PASS

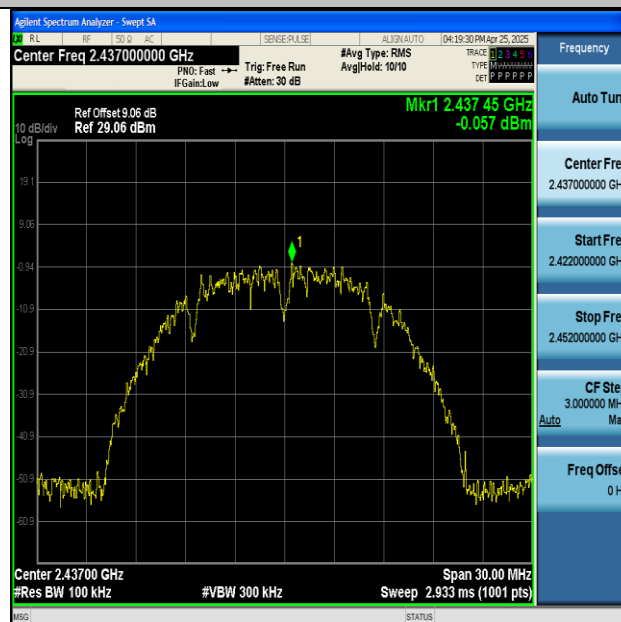
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

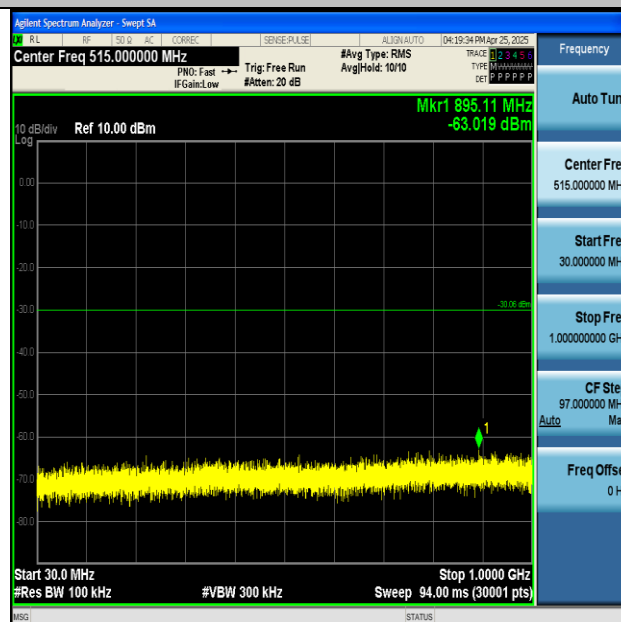




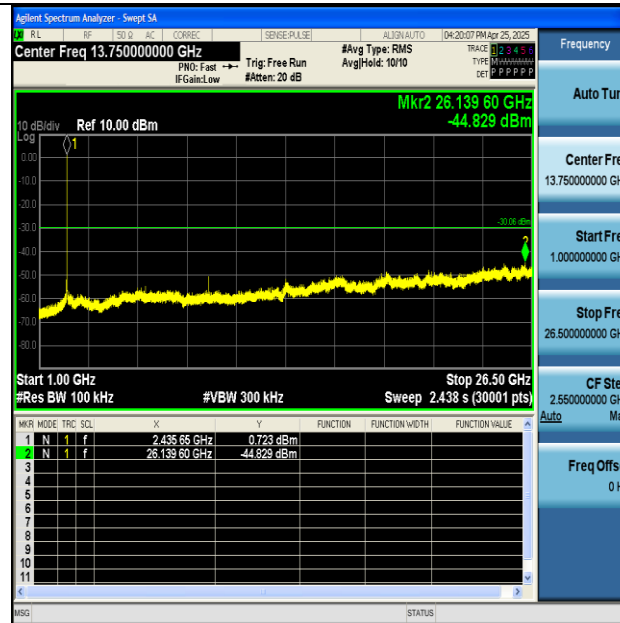
11B-Ant1-2412-1000~26500-PASS



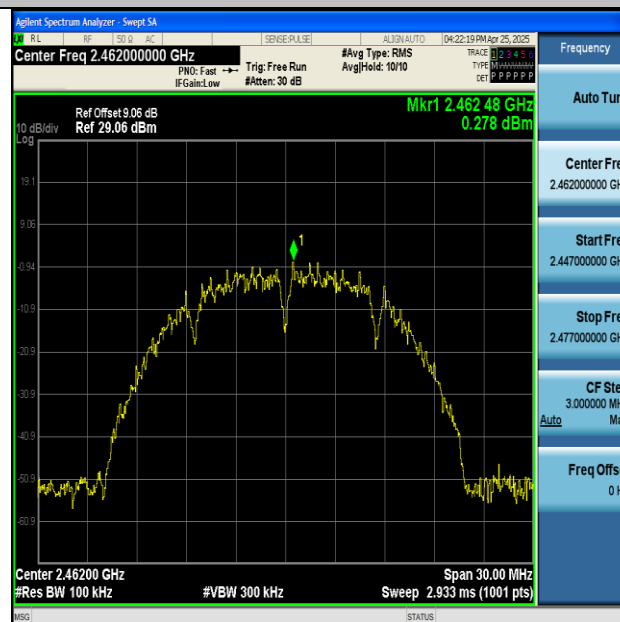
11B-Ant1-2437-0~Reference-PASS



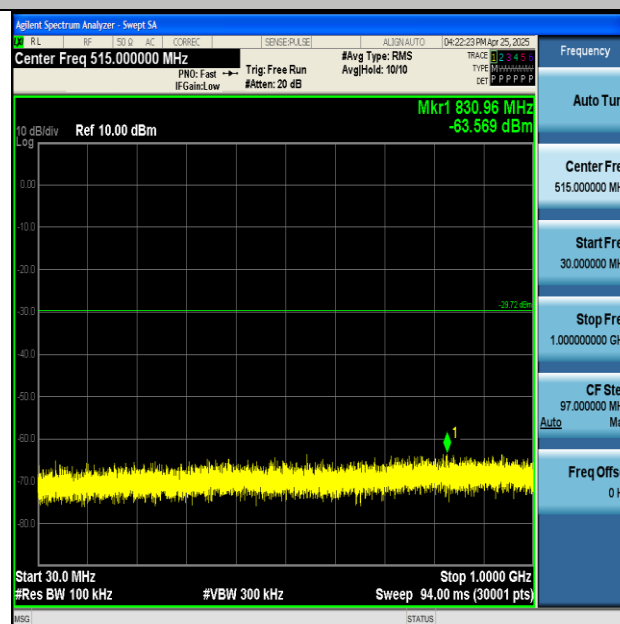
11B-Ant1-2437-30~1000-PASS



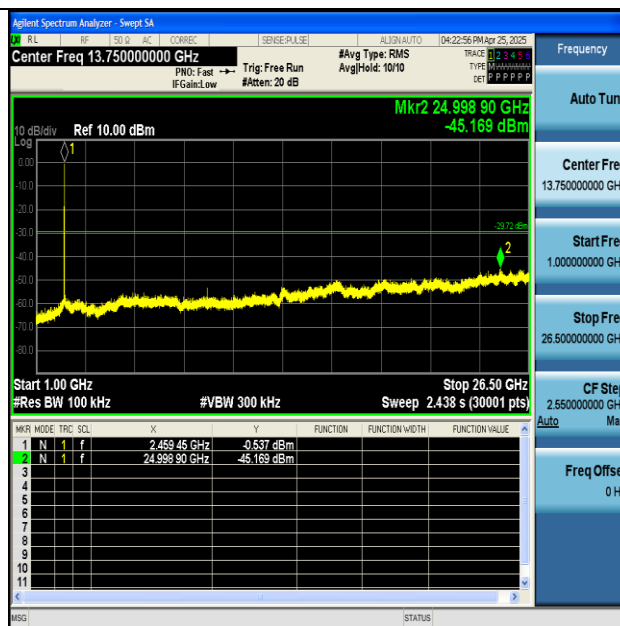
11B-Ant1-2437-1000~26500-PASS



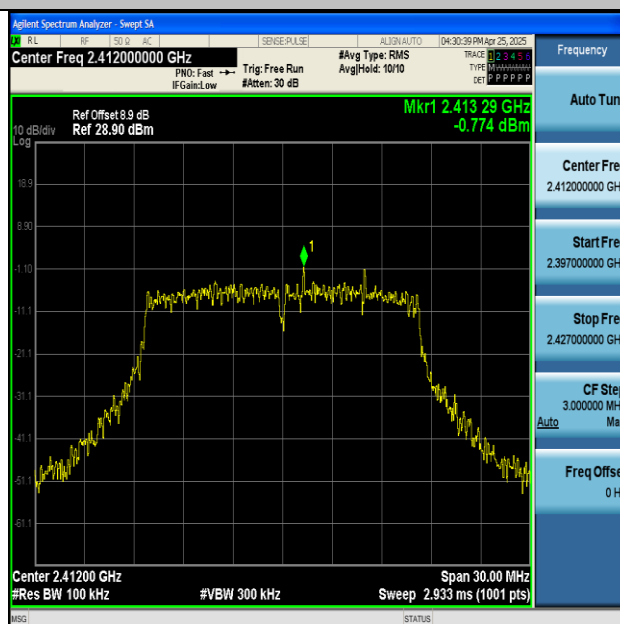
11B-Ant1-2462-0~Reference-PASS



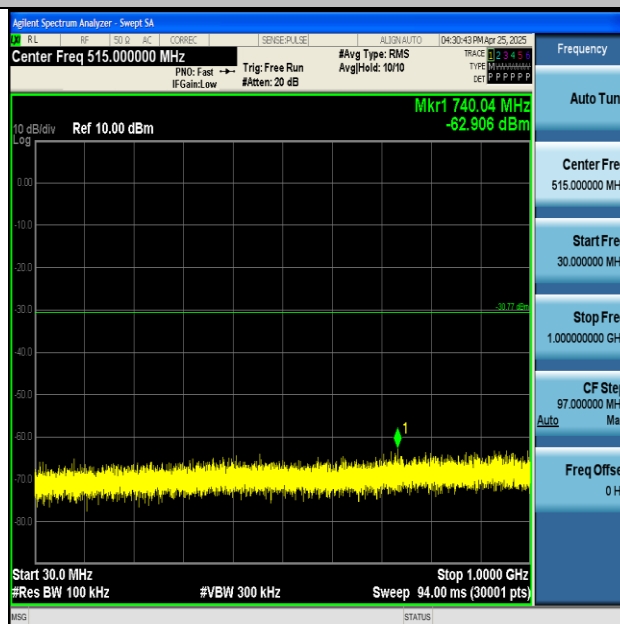
11B-Ant1-2462-30~1000-PASS



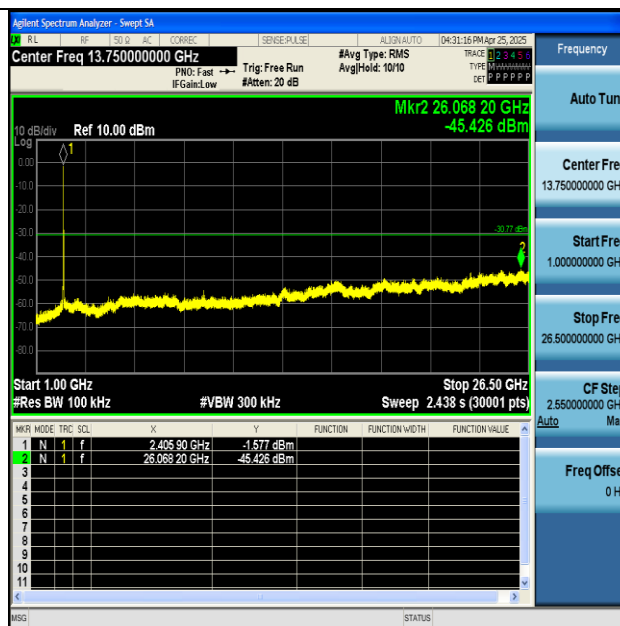
11B-Ant1-2462-1000~26500-PASS



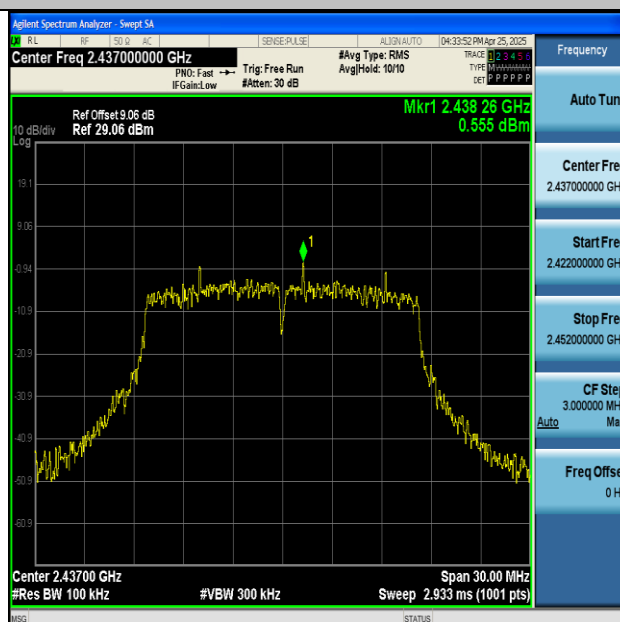
11G-Ant1-2412-0~Reference-PASS



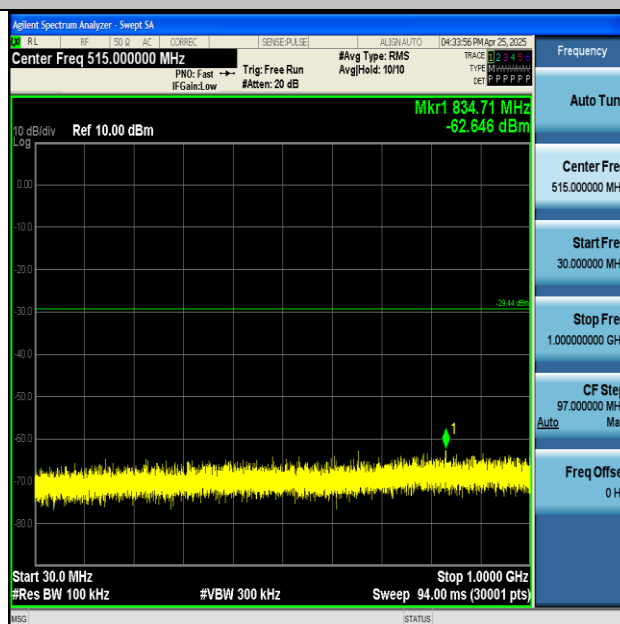
11G-Ant1-2412-30~1000-PASS



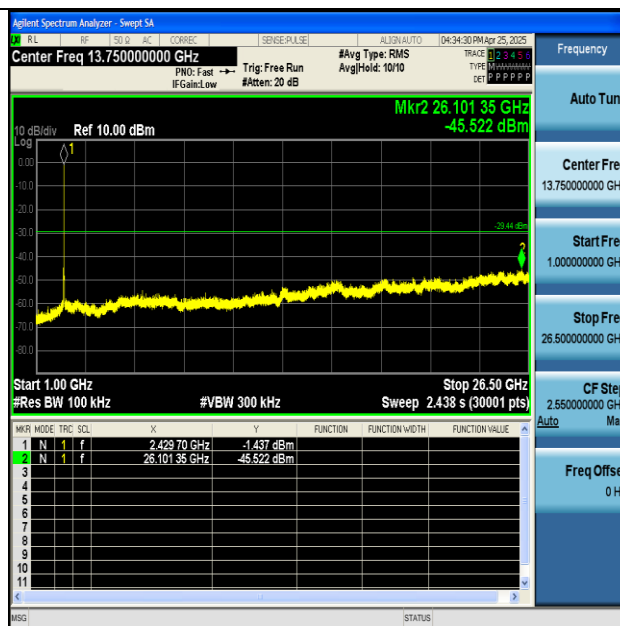
11G-Ant1-2412-1000~26500-PASS



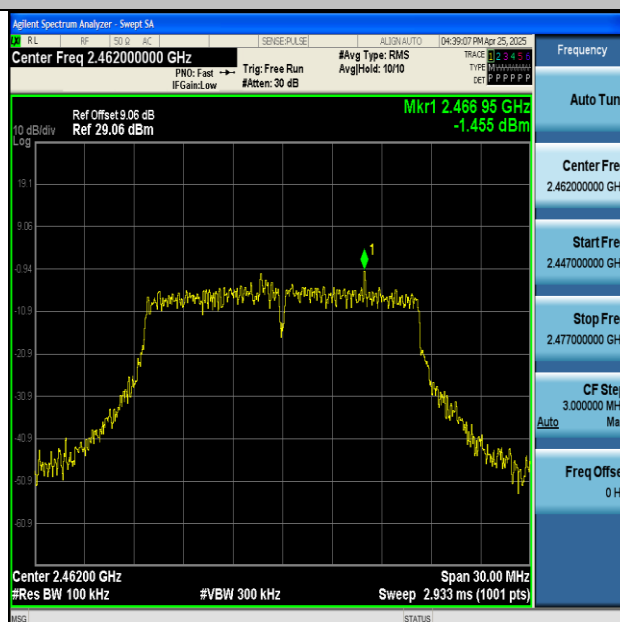
11G-Ant1-2437-0~Reference-PASS



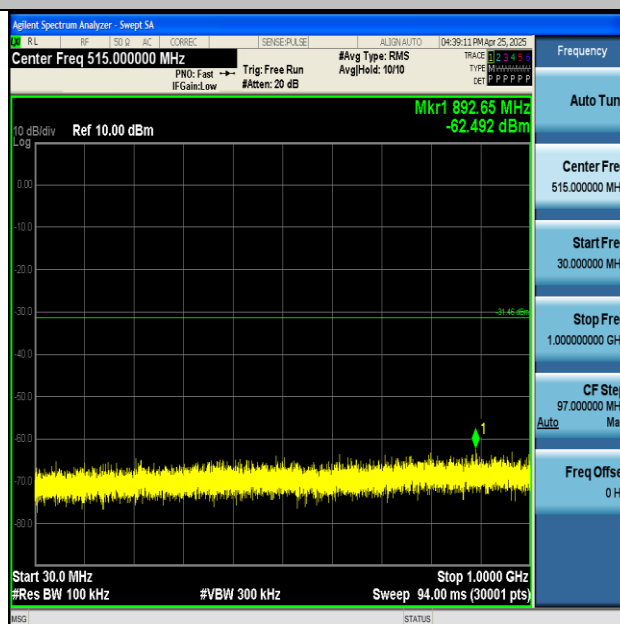
11G-Ant1-2437-30~1000-PASS



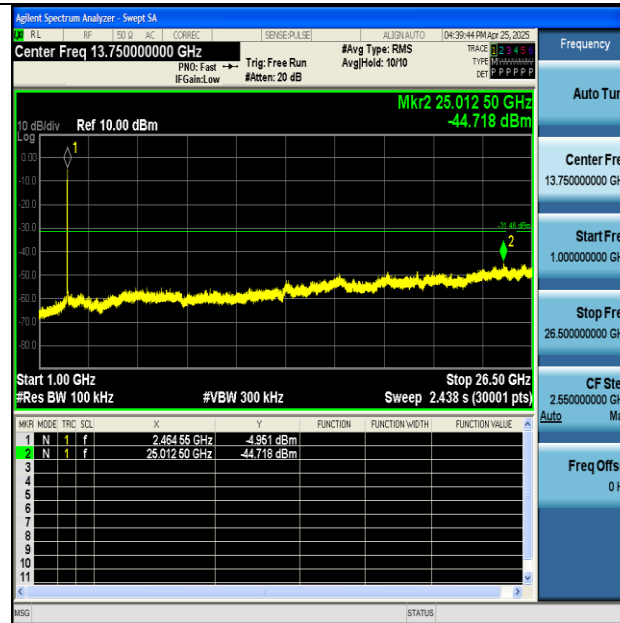
11G-Ant1-2437-1000~26500-PASS



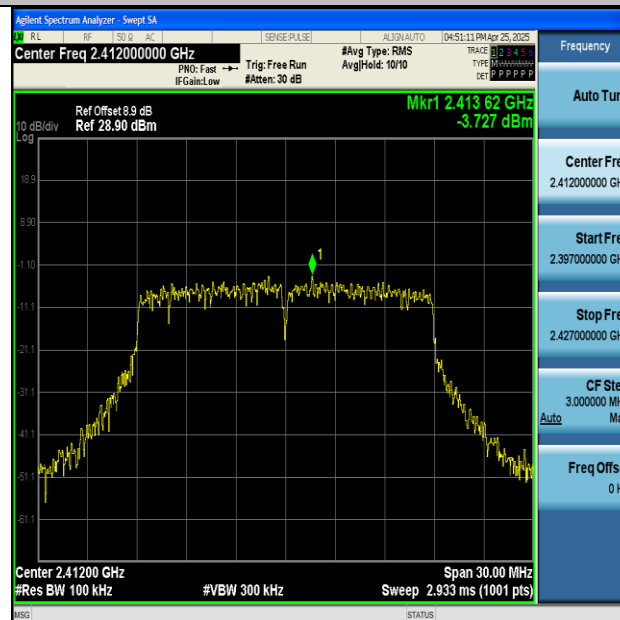
11G-Ant1-2462-0~Reference-PASS



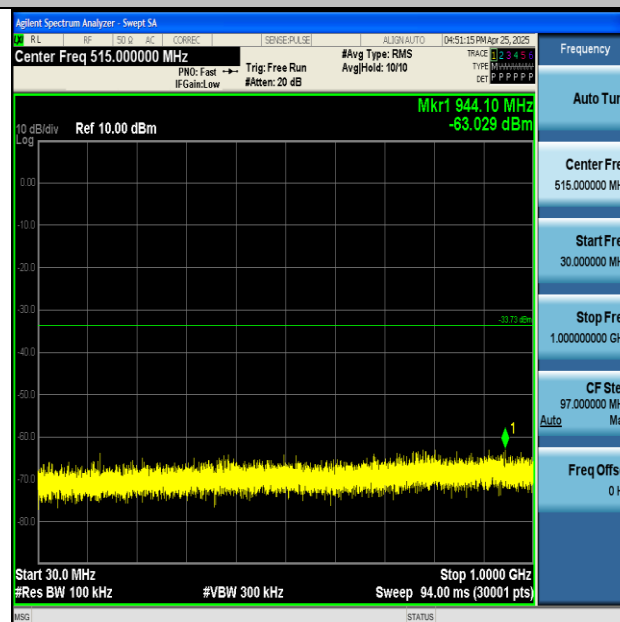
11G-Ant1-2462-30~1000-PASS



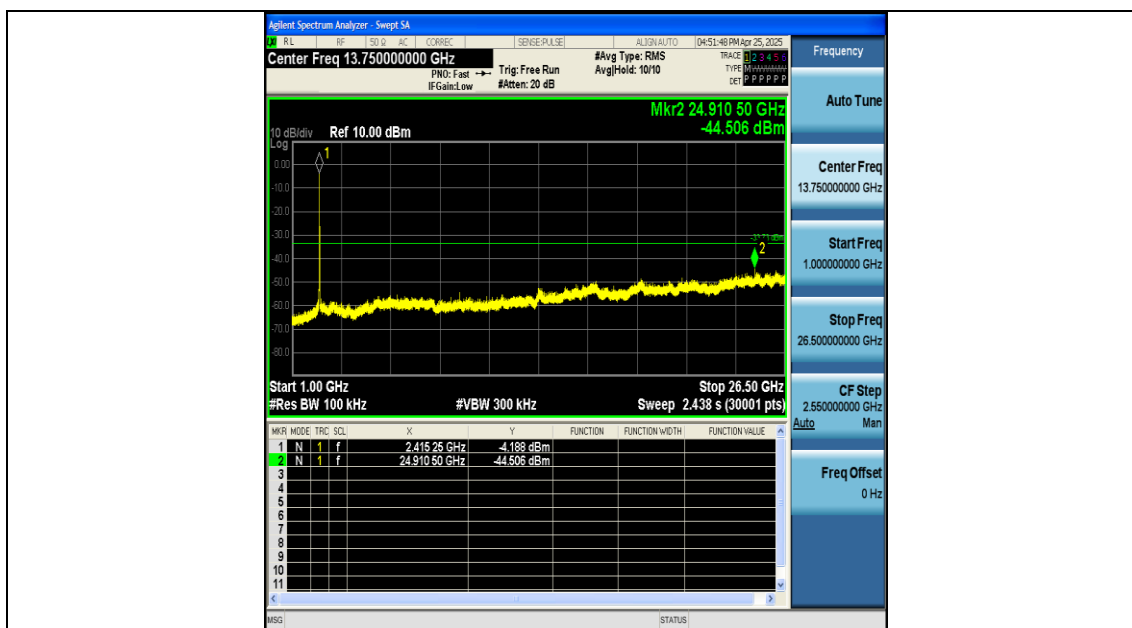
11G-Ant1-2462-1000~26500-PASS



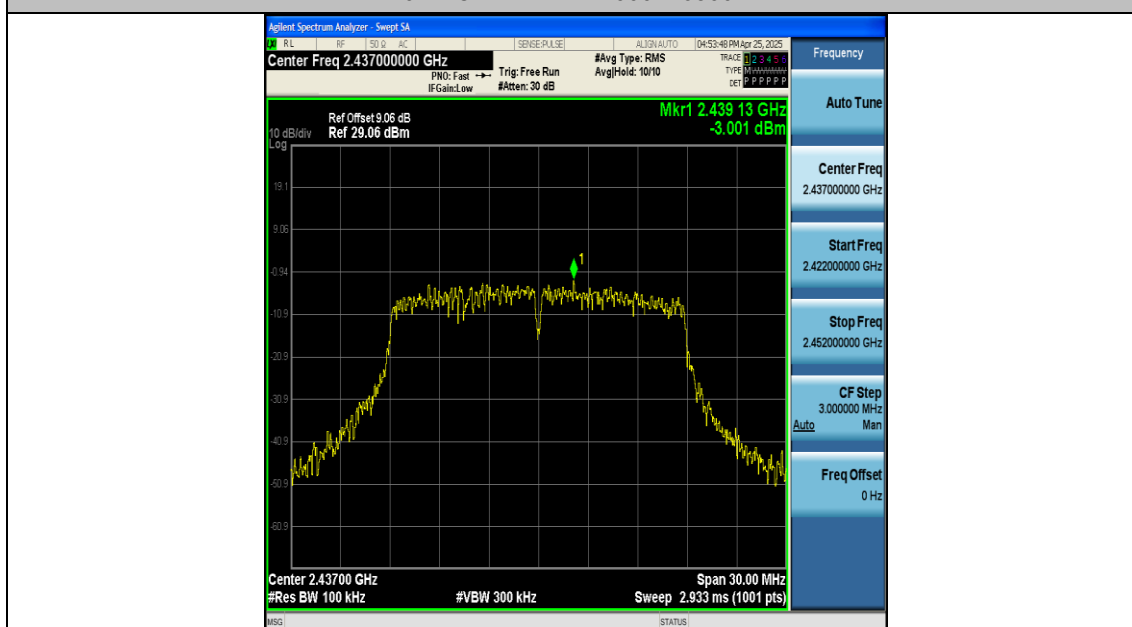
11N20SISO-Ant1-2412-0~Reference-PASS



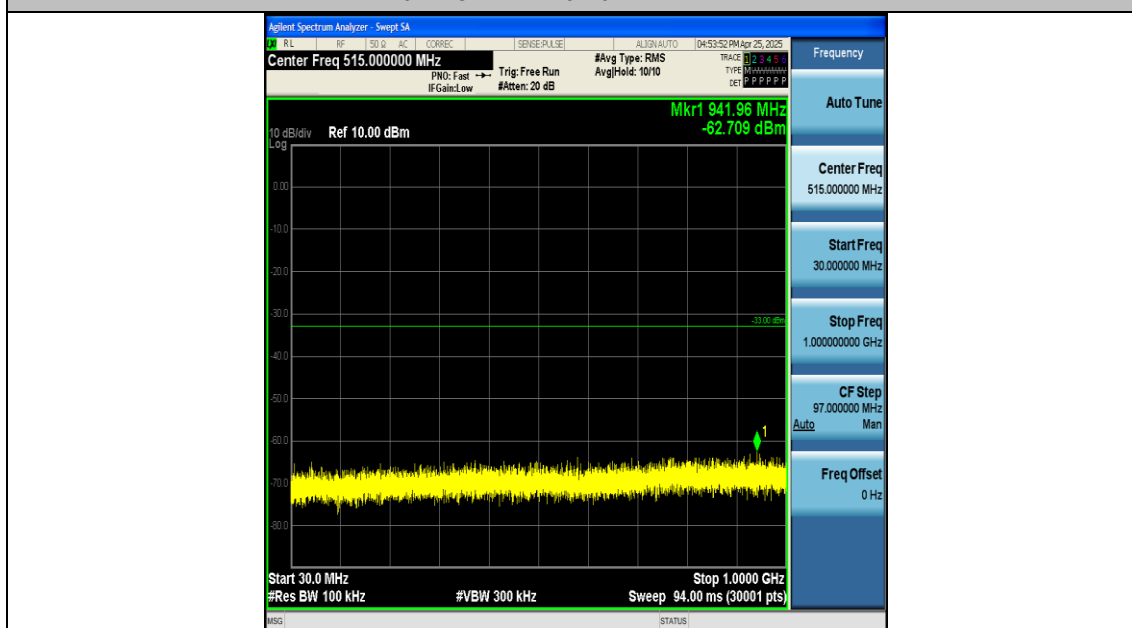
11N20SISO-Ant1-2412-30~1000-PASS



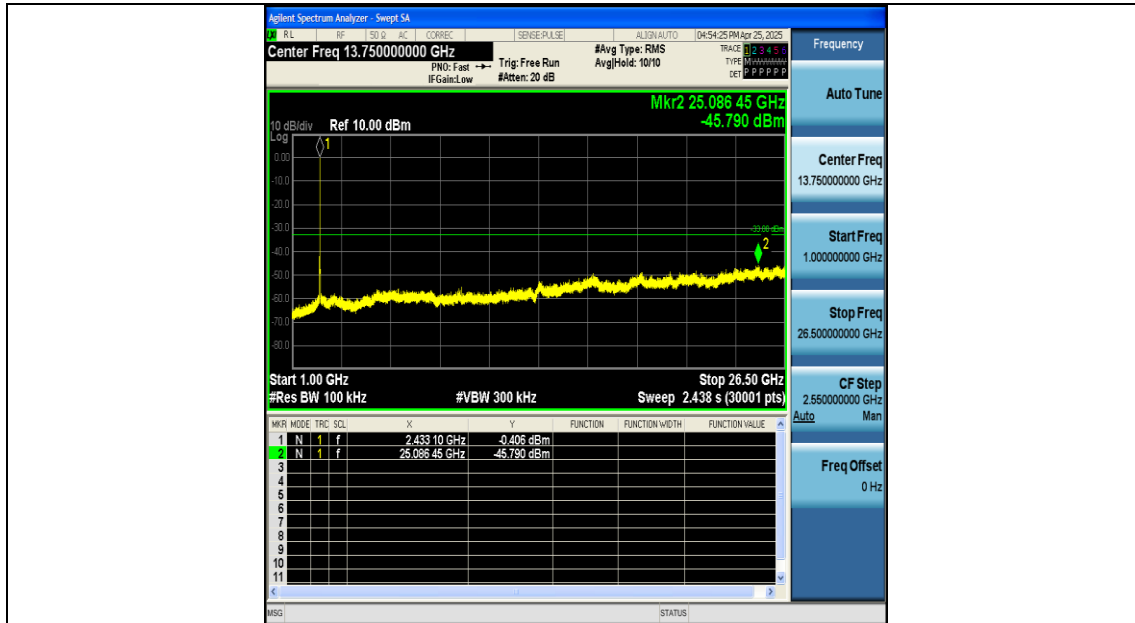
11N20SISO-Ant1-2412-1000~26500-PASS



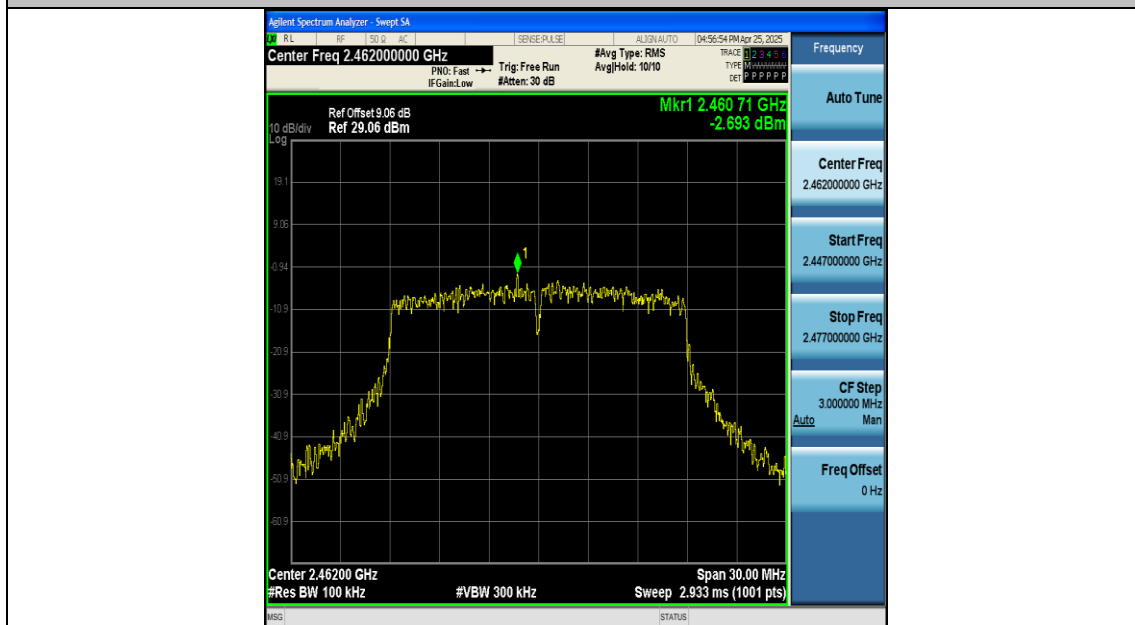
11N20SISO-Ant1-2437-0~Reference-PASS



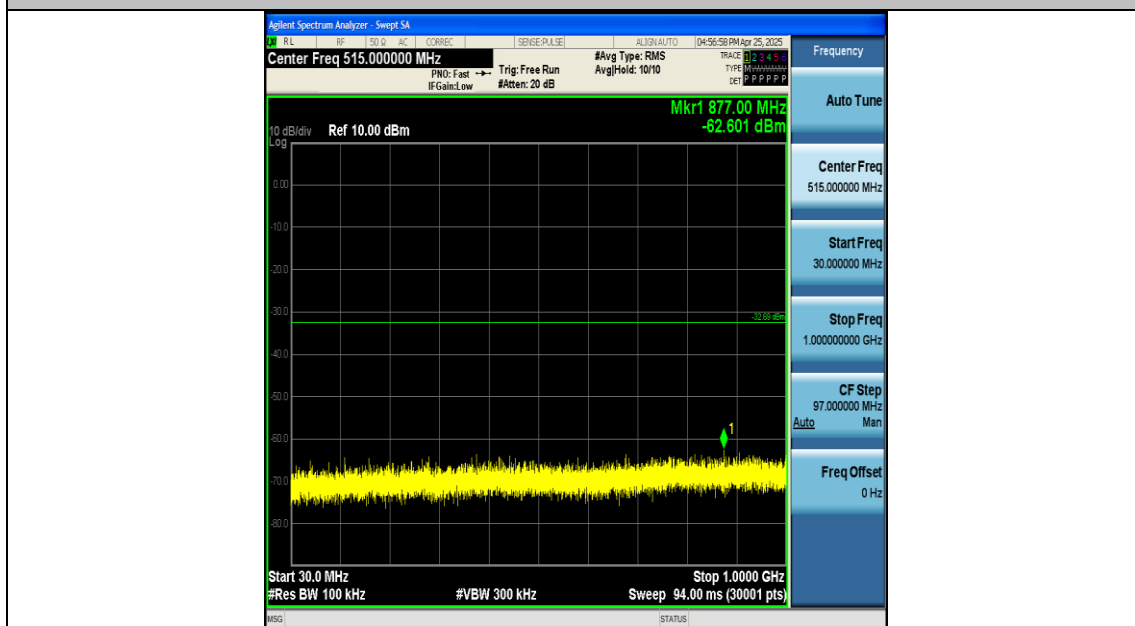
11N20SISO-Ant1-2437-30~1000-PASS



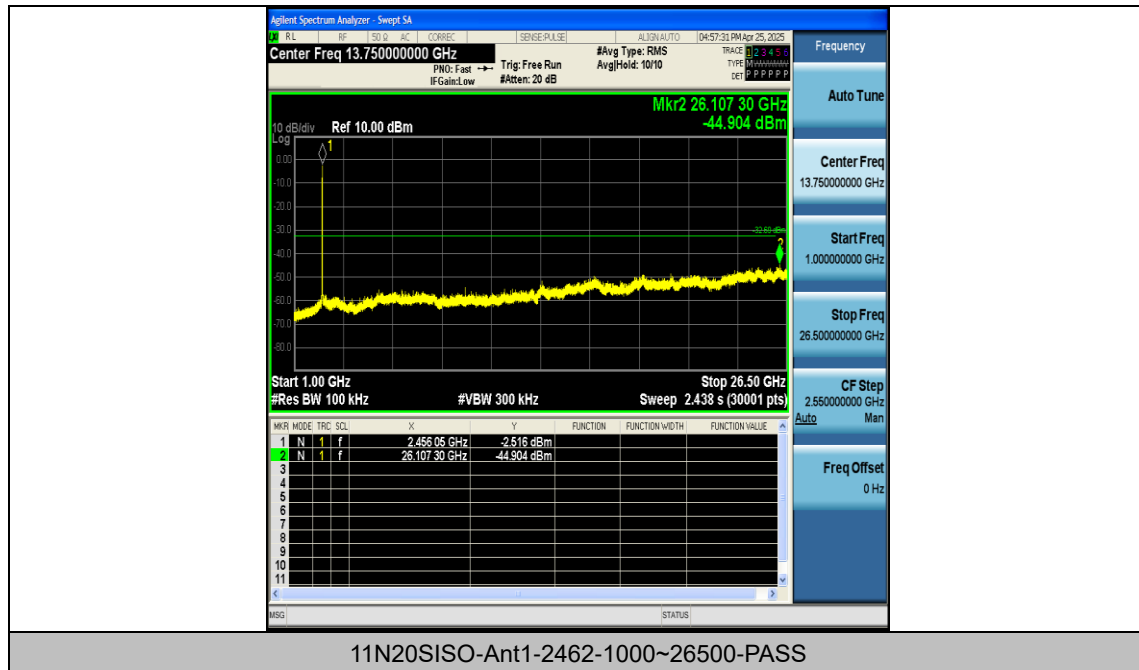
11N20SISO-Ant1-2437-1000~26500-PASS



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



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



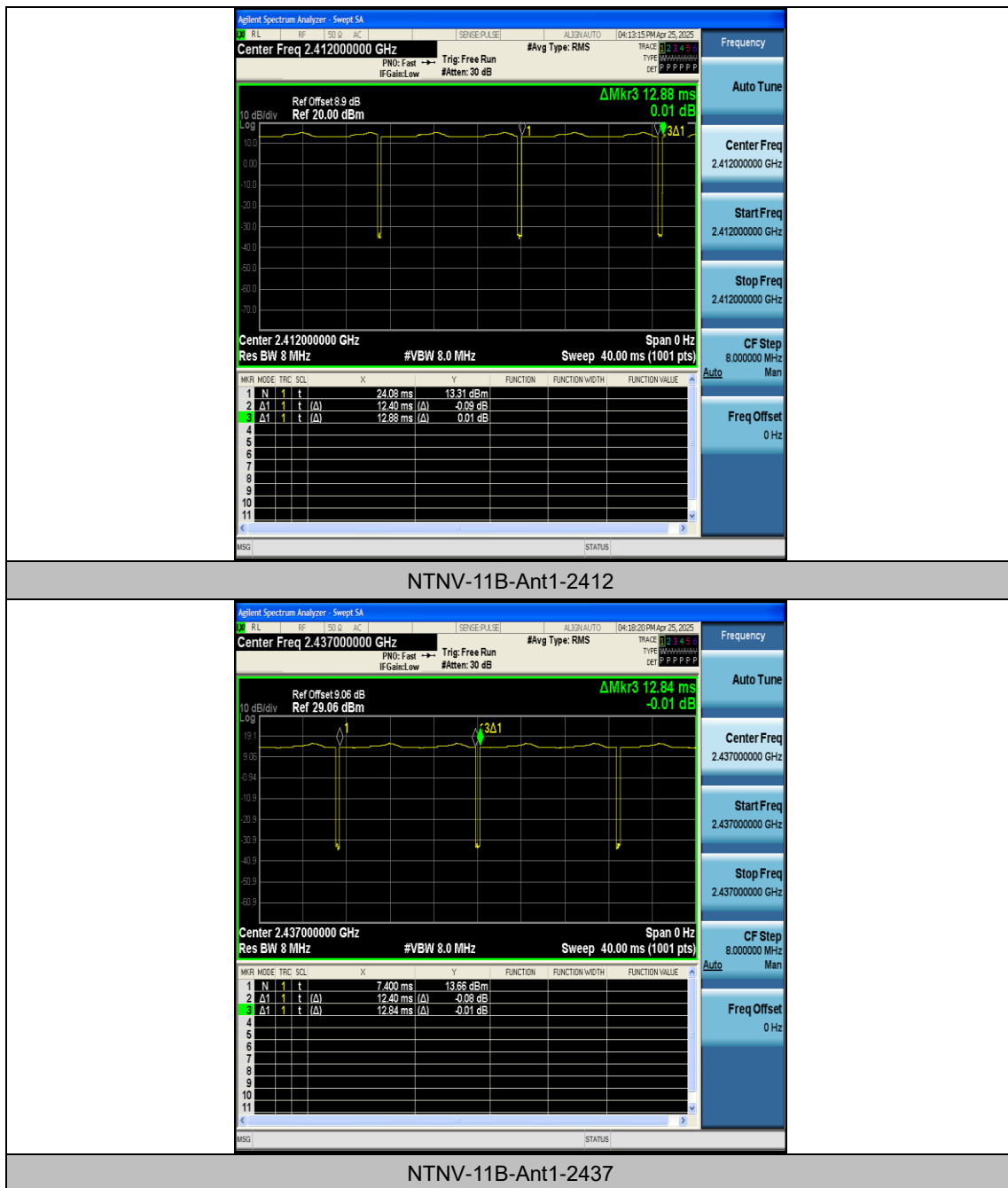
Appendix G: Duty Cycle

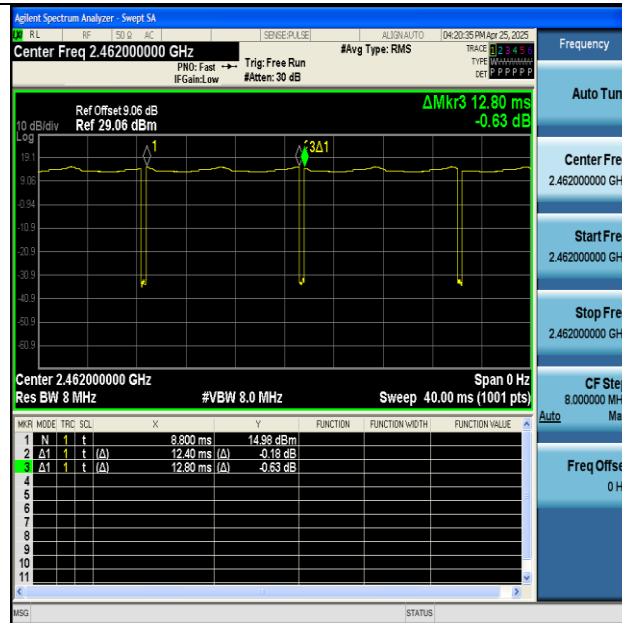
Test Result

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.40	12.88	96.27	0.17
11B	Ant1	2437	12.40	12.84	96.57	0.15
11B	Ant1	2462	12.40	12.80	96.88	0.14
11G	Ant1	2412	2.04	2.24	91.07	0.41
11G	Ant1	2437	2.04	2.28	89.47	0.48
11G	Ant1	2462	2.04	2.28	89.47	0.48
11N20SISO	Ant1	2412	1.92	2.16	88.89	0.51
11N20SISO	Ant1	2437	1.92	2.16	88.89	0.51
11N20SISO	Ant1	2462	1.92	2.16	88.89	0.51

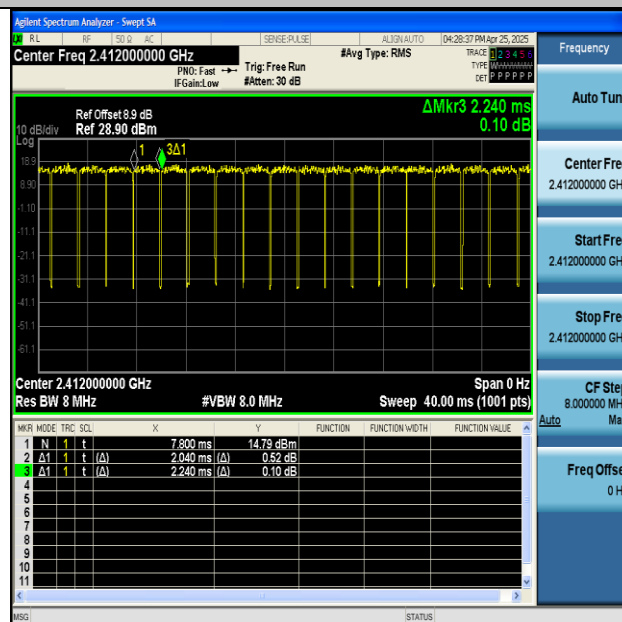
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

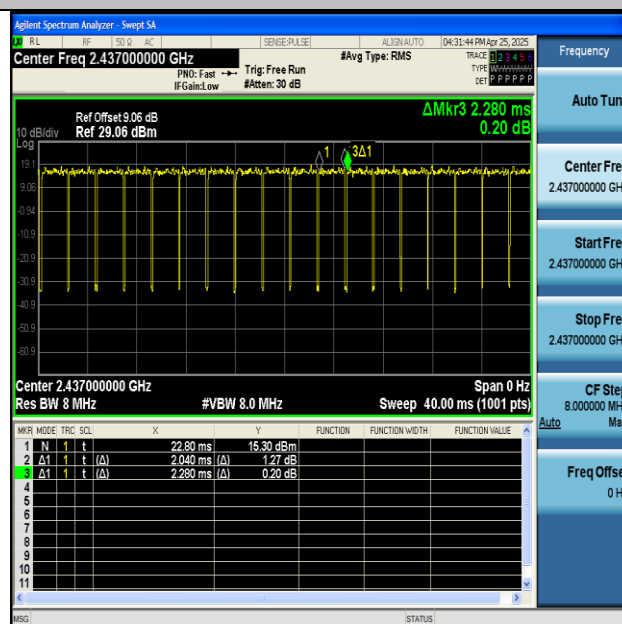




NTNV-11B-Ant1-2462



NTNV-11G-Ant1-2412



NTNV-11G-Ant1-2437

