

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

Product Name: bird feeder camera

Trade Mark: /

Test Model: V8-WNQ-02

FCC ID: 2AY58-V8-WNQ-02

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

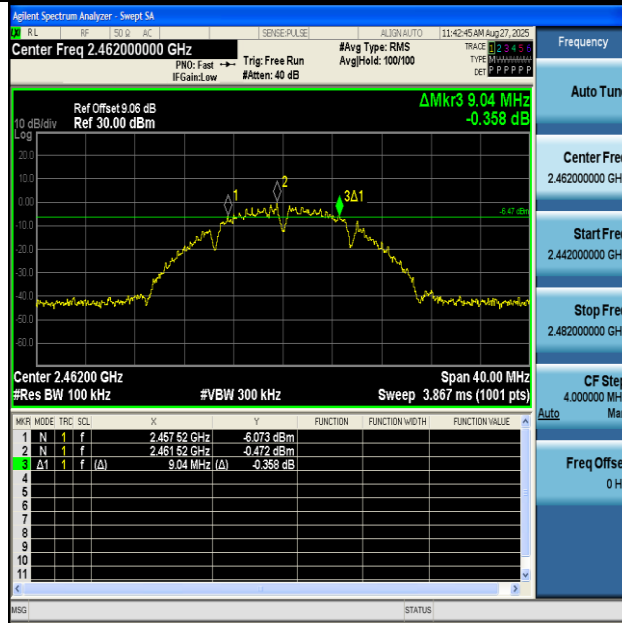
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.520	2407.000	2416.520	0.5	PASS
11B	Ant1	2437	8.520	2432.960	2441.480	0.5	PASS
11B	Ant1	2462	9.040	2457.520	2466.560	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
11G	Ant1	2437	15.880	2428.880	2444.760	0.5	PASS
11G	Ant1	2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.720	2403.120	2420.840	0.5	PASS
11N20SISO	Ant1	2437	17.680	2428.160	2445.840	0.5	PASS
11N20SISO	Ant1	2462	17.640	2453.200	2470.840	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
11N40SISO	Ant1	2437	36.320	2418.840	2455.160	0.5	PASS
11N40SISO	Ant1	2452	36.400	2433.760	2470.160	0.5	PASS
11AX20SISO	Ant1	2412	18.800	2402.520	2421.320	0.5	PASS
11AX20SISO	Ant1	2437	18.760	2427.520	2446.280	0.5	PASS
11AX20SISO	Ant1	2462	18.720	2452.600	2471.320	0.5	PASS
11AX40SISO	Ant1	2422	36.880	2403.200	2440.080	0.5	PASS
11AX40SISO	Ant1	2437	36.320	2418.200	2454.520	0.5	PASS
11AX40SISO	Ant1	2452	37.120	2433.200	2470.320	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



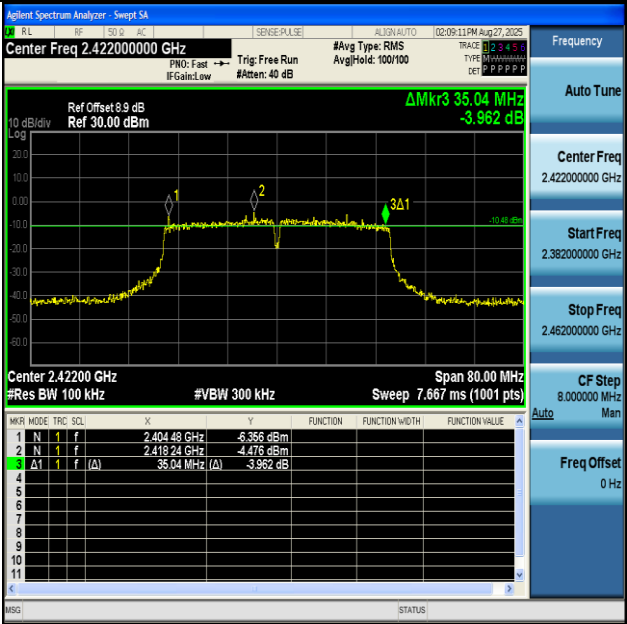
11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



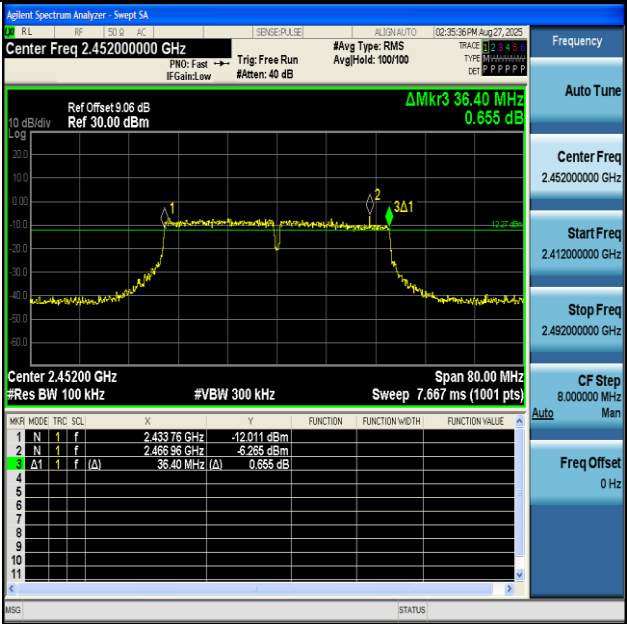
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



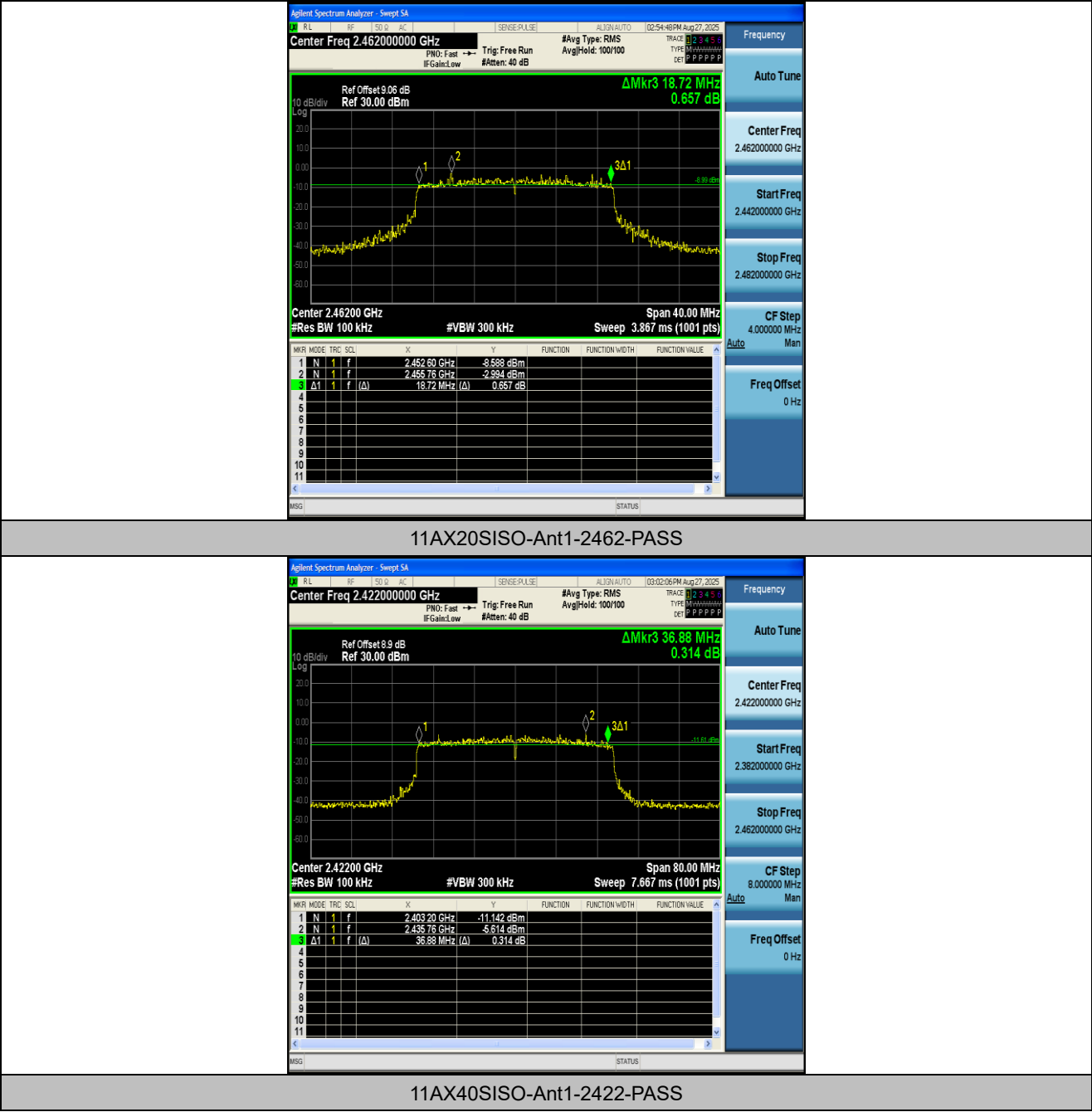
11N40SISO-Ant1-2452-PASS

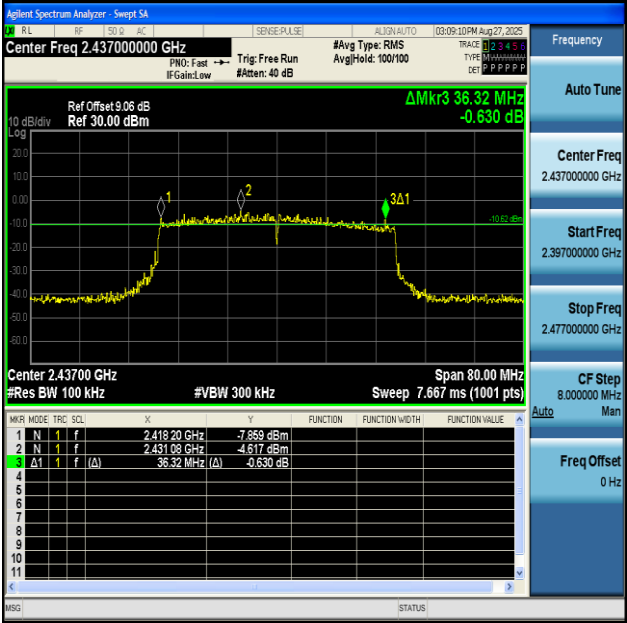


11AX20SISO-Ant1-2412-PASS



11AX20SISO-Ant1-2437-PASS





11AX40SISO-Ant1-2437-PASS



11AX40SISO-Ant1-2452-PASS

Appendix B: Occupied Channel Bandwidth

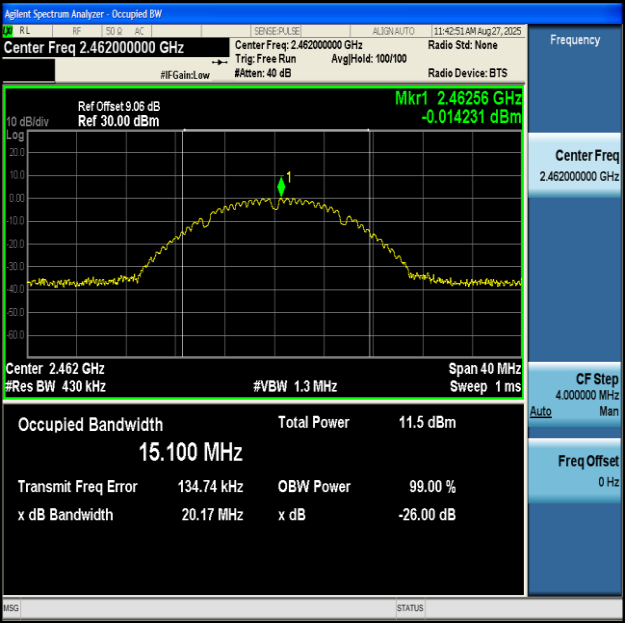
Test Result

Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	15.052	2404.5361	2419.5881	---	---
11B	Ant1	2437	14.846	2429.5592	2444.4052	---	---
11B	Ant1	2462	15.100	2454.5847	2469.6847	---	---
11G	Ant1	2412	16.800	2403.5961	2420.3961	---	---
11G	Ant1	2437	16.856	2428.5226	2445.3786	---	---
11G	Ant1	2462	16.932	2453.5404	2470.4724	---	---
11N20SISO	Ant1	2412	18.416	2402.7687	2421.1847	---	---
11N20SISO	Ant1	2437	18.113	2427.8812	2445.9942	---	---
11N20SISO	Ant1	2462	18.467	2452.8114	2471.2784	---	---
11N40SISO	Ant1	2422	36.526	2403.7328	2440.2588	---	---
11N40SISO	Ant1	2437	36.374	2418.7123	2455.0863	---	---
11N40SISO	Ant1	2452	36.806	2433.5351	2470.3411	---	---
11AX20SISO	Ant1	2412	19.194	2402.4663	2421.6603	---	---
11AX20SISO	Ant1	2437	19.082	2427.4490	2446.5310	---	---
11AX20SISO	Ant1	2462	19.261	2452.4239	2471.6849	---	---
11AX40SISO	Ant1	2422	37.968	2403.0173	2440.9853	---	---
11AX40SISO	Ant1	2437	37.853	2418.0078	2455.8608	---	---
11AX40SISO	Ant1	2452	37.996	2433.0003	2470.9963	---	---

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

Test Graphs





11B-Ant1-2462



11G-Ant1-2412



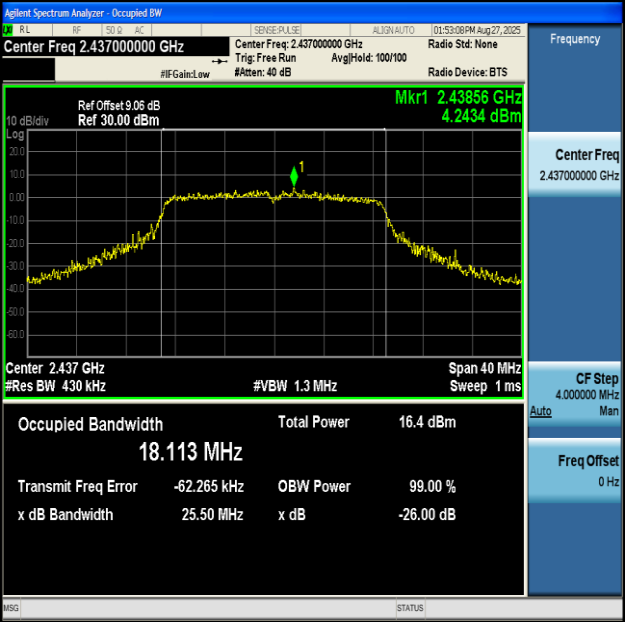
11G-Ant1-2437



11G-Ant1-2462



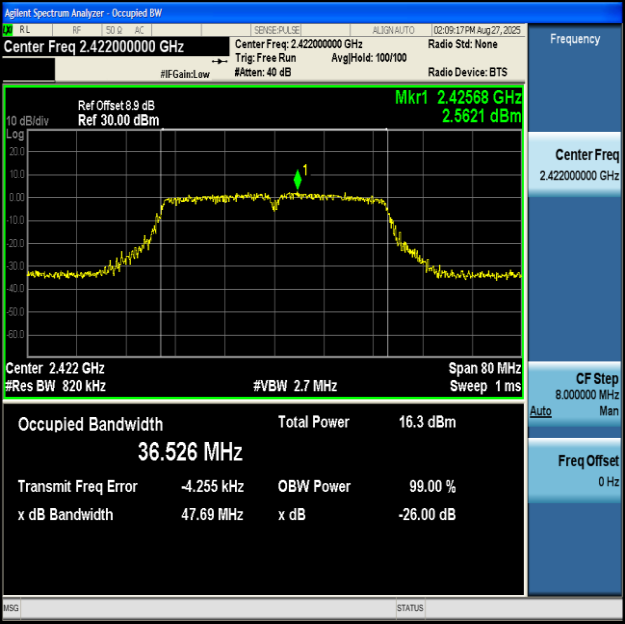
11N20SISO-Ant1-2412



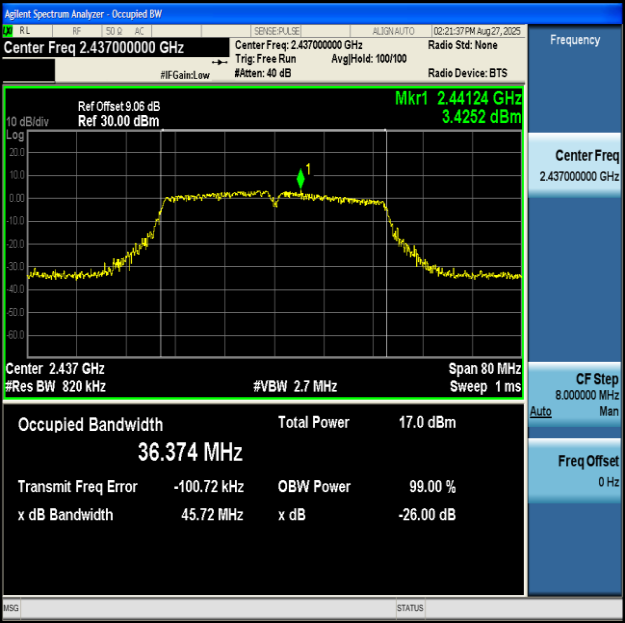
11N20SISO-Ant1-2437



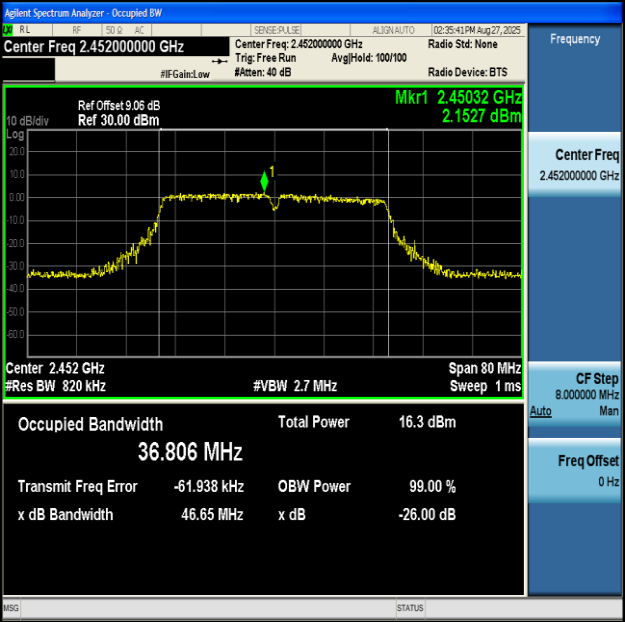
11N20SISO-Ant1-2462



11N40SISO-Ant1-2422



11N40SISO-Ant1-2437



11N40SISO-Ant1-2452



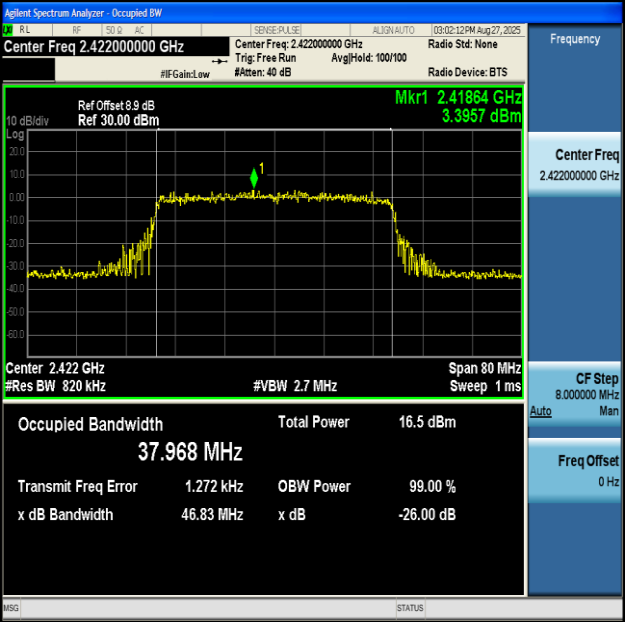
11AX20SISO-Ant1-2412



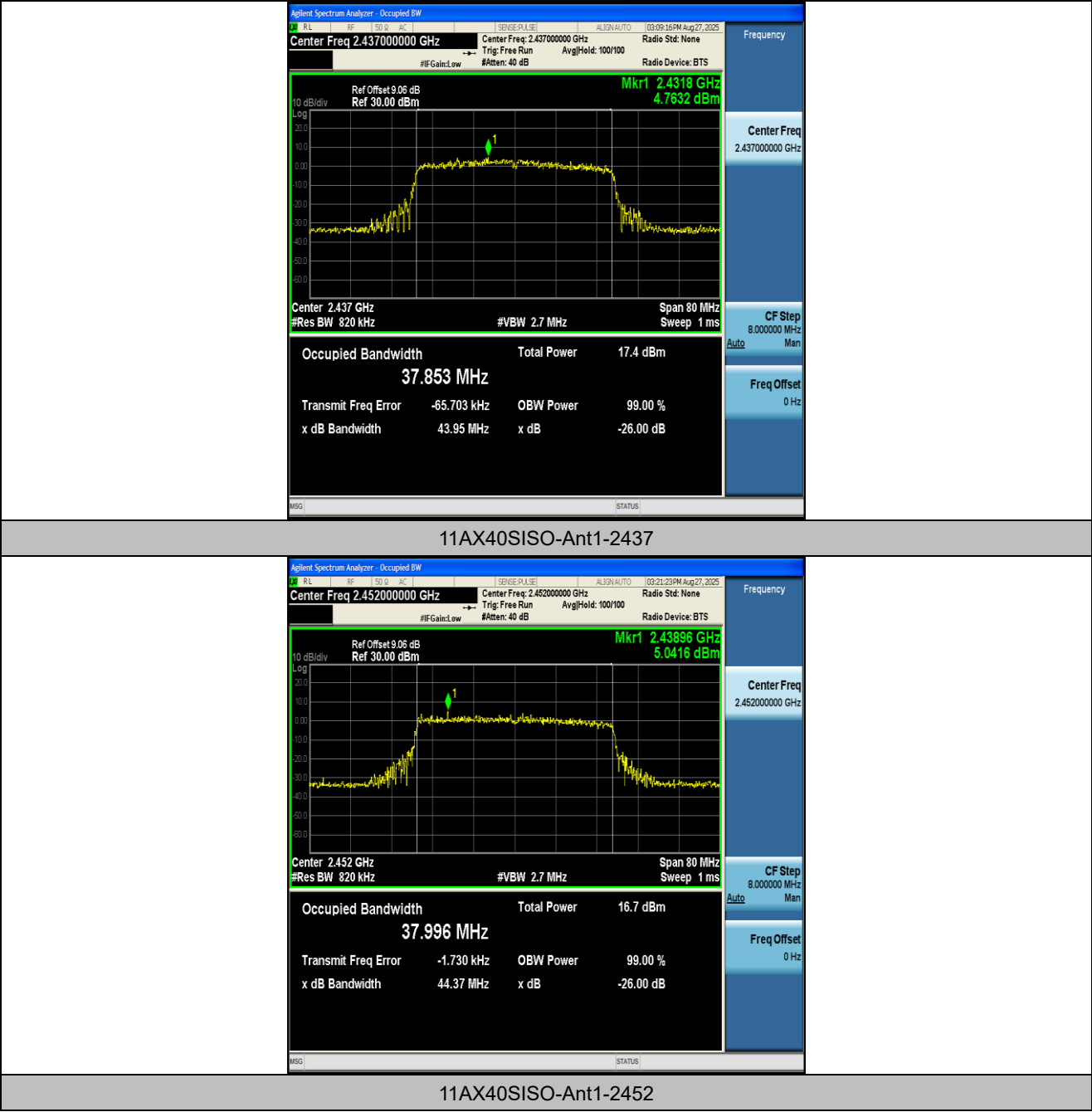
11AX20SISO-Ant1-2437



11AX20SISO-Ant1-2462



11AX40SISO-Ant1-2422



Appendix C: Maximum Peak conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	12.94	≤30.00	PASS
11B	Ant1	2437	12.14	≤30.00	PASS
11B	Ant1	2462	10.94	≤30.00	PASS
11G	Ant1	2412	15.23	≤30.00	PASS
11G	Ant1	2437	16.35	≤30.00	PASS
11G	Ant1	2462	14.45	≤30.00	PASS
11N20SISO	Ant1	2412	15.75	≤30.00	PASS
11N20SISO	Ant1	2437	17.32	≤30.00	PASS
11N20SISO	Ant1	2462	15.66	≤30.00	PASS
11N40SISO	Ant1	2422	16.25	≤30.00	PASS
11N40SISO	Ant1	2437	17.15	≤30.00	PASS
11N40SISO	Ant1	2452	16.45	≤30.00	PASS
11AX20SISO	Ant1	2412	16.48	≤30.00	PASS
11AX20SISO	Ant1	2437	17.80	≤30.00	PASS
11AX20SISO	Ant1	2462	16.16	≤30.00	PASS
11AX40SISO	Ant1	2422	16.73	≤30.00	PASS
11AX40SISO	Ant1	2437	17.45	≤30.00	PASS
11AX40SISO	Ant1	2452	16.62	≤30.00	PASS

Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	10.89	≤30.00	PASS
11B	Ant1	2437	10.23	≤30.00	PASS
11B	Ant1	2462	9.09	≤30.00	PASS
11G	Ant1	2412	11.11	≤30.00	PASS
11G	Ant1	2437	10.07	≤30.00	PASS
11G	Ant1	2462	7.20	≤30.00	PASS
11N20SISO	Ant1	2412	10.00	≤30.00	PASS
11N20SISO	Ant1	2437	11.18	≤30.00	PASS
11N20SISO	Ant1	2462	9.08	≤30.00	PASS
11N40SISO	Ant1	2422	10.15	≤30.00	PASS

11N40SISO	Ant1	2437	10.62	≤30.00	PASS
11N40SISO	Ant1	2452	10.07	≤30.00	PASS
11AX20SISO	Ant1	2412	8.91	≤30.00	PASS
11AX20SISO	Ant1	2437	10.96	≤30.00	PASS
11AX20SISO	Ant1	2462	8.85	≤30.00	PASS
11AX40SISO	Ant1	2422	8.92	≤30.00	PASS
11AX40SISO	Ant1	2437	9.16	≤30.00	PASS
11AX40SISO	Ant1	2452	10.91	≤30.00	PASS

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

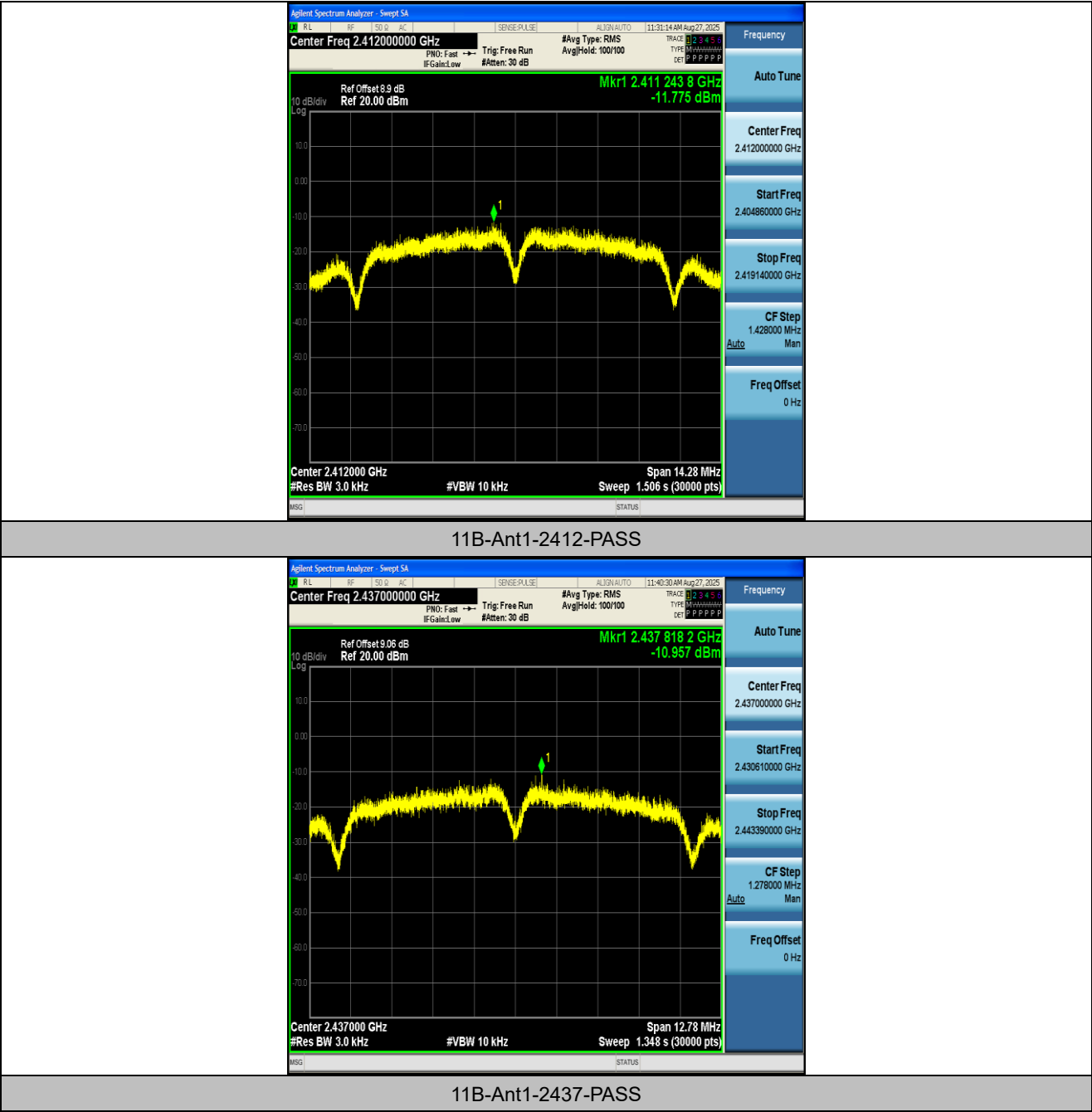
Appendix D: Maximum Average power spectral density

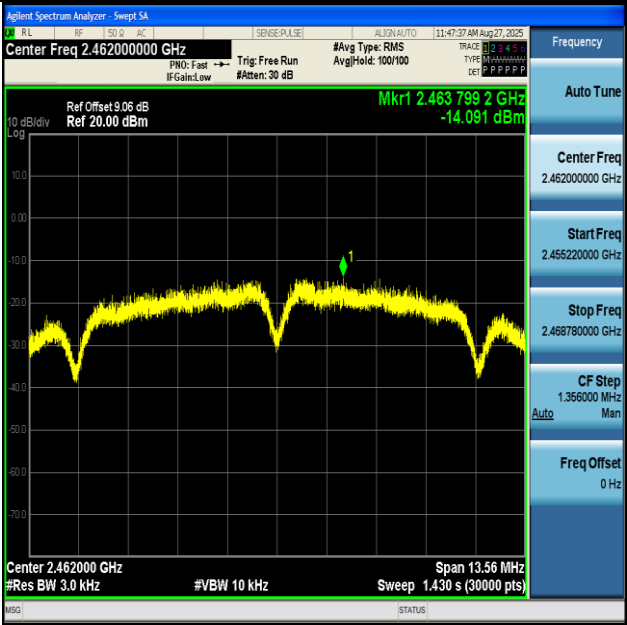
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-11.78	≤8.00	PASS
11B	Ant1	2437	-10.96	≤8.00	PASS
11B	Ant1	2462	-14.09	≤8.00	PASS
11G	Ant1	2412	-16.00	≤8.00	PASS
11G	Ant1	2437	-13.85	≤8.00	PASS
11G	Ant1	2462	-16.31	≤8.00	PASS
11N20SISO	Ant1	2412	-14.96	≤8.00	PASS
11N20SISO	Ant1	2437	-13.21	≤8.00	PASS
11N20SISO	Ant1	2462	-13.89	≤8.00	PASS
11N40SISO	Ant1	2422	-16.77	≤8.00	PASS
11N40SISO	Ant1	2437	-15.64	≤8.00	PASS
11N40SISO	Ant1	2452	-17.84	≤8.00	PASS
11AX20SISO	Ant1	2412	-16.54	≤8.00	PASS
11AX20SISO	Ant1	2437	-15.15	≤8.00	PASS
11AX20SISO	Ant1	2462	-16.37	≤8.00	PASS
11AX40SISO	Ant1	2422	-18.62	≤8.00	PASS
11AX40SISO	Ant1	2437	-18.12	≤8.00	PASS
11AX40SISO	Ant1	2452	-19.30	≤8.00	PASS

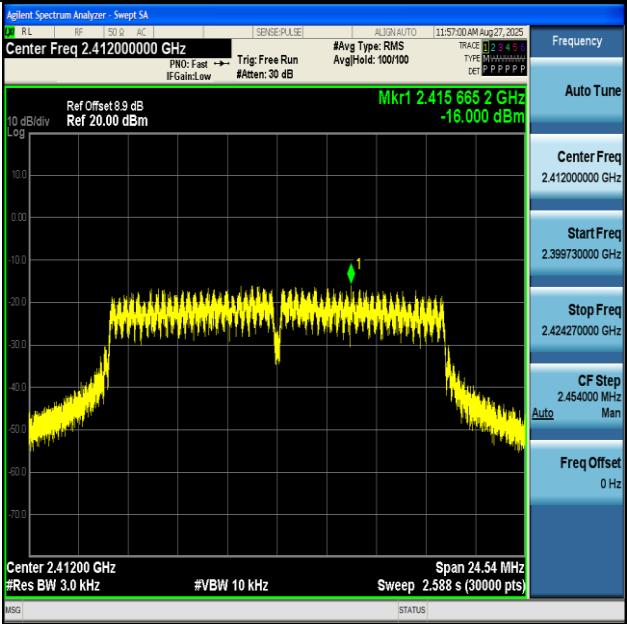
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

Test Graphs

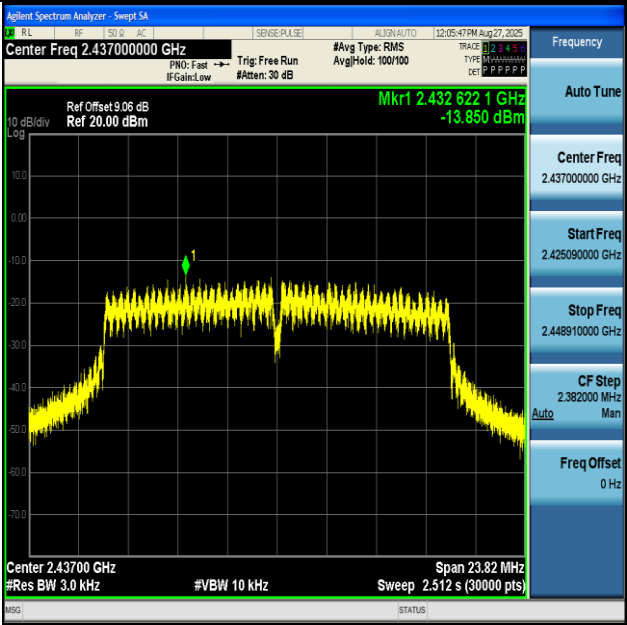




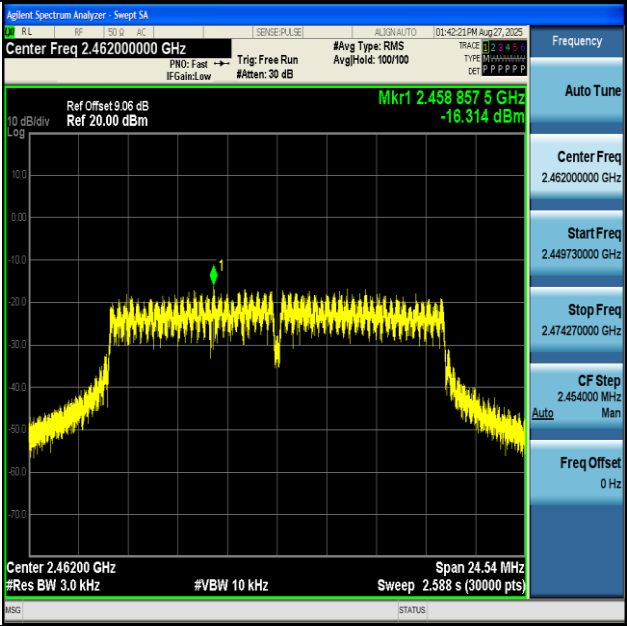
11B-Ant1-2462-PASS



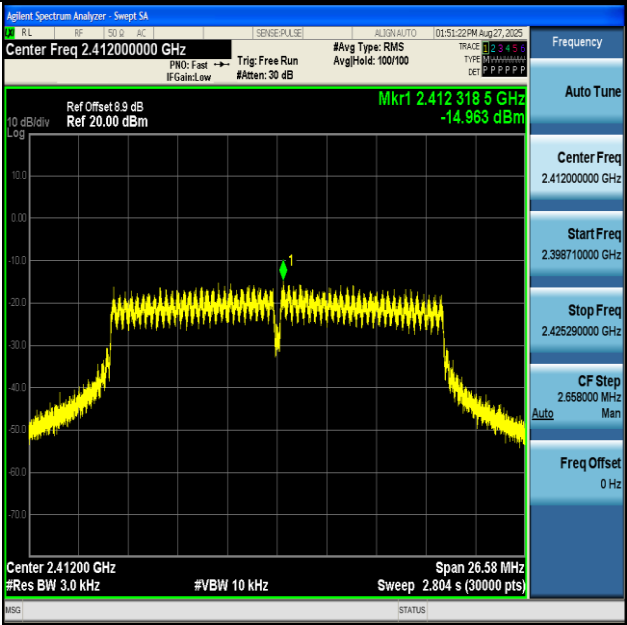
11G-Ant1-2412-PASS



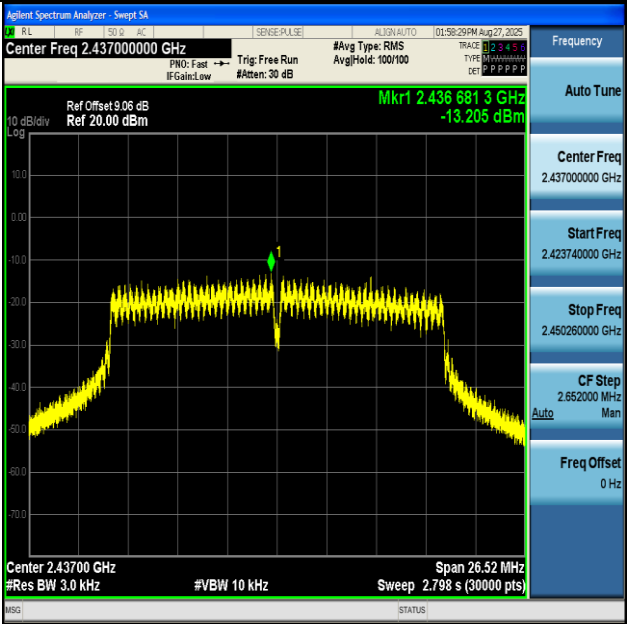
11G-Ant1-2437-PASS



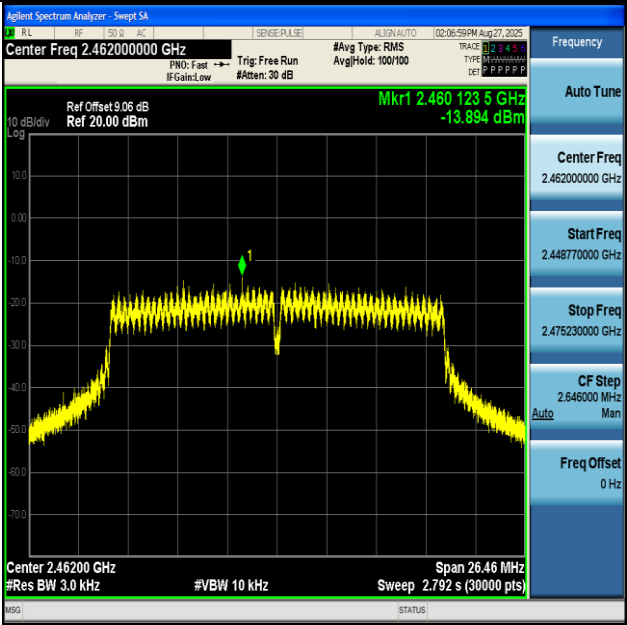
11G-Ant1-2462-PASS



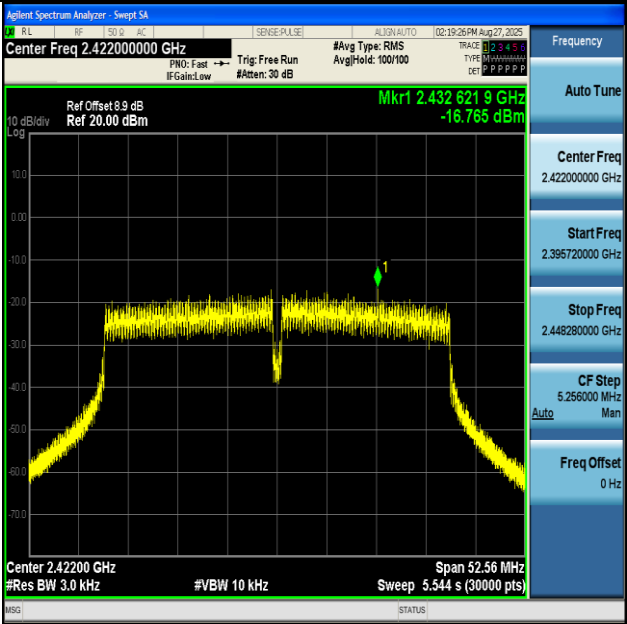
11N20SISO-Ant1-2412-PASS



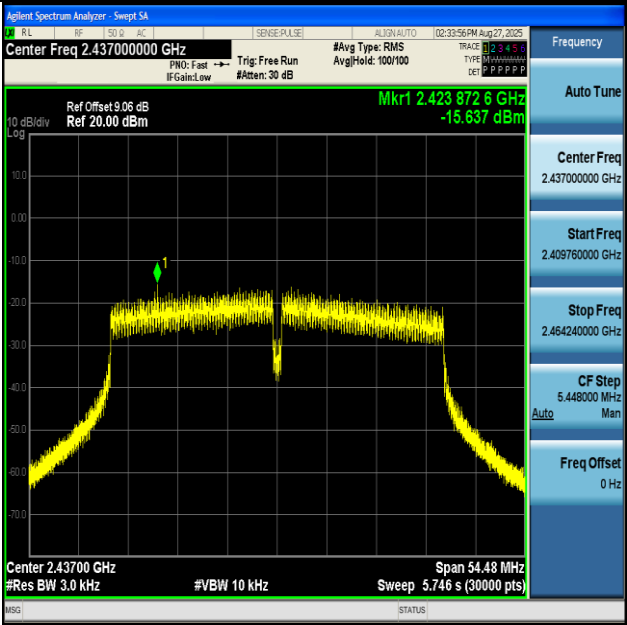
11N20SISO-Ant1-2437-PASS



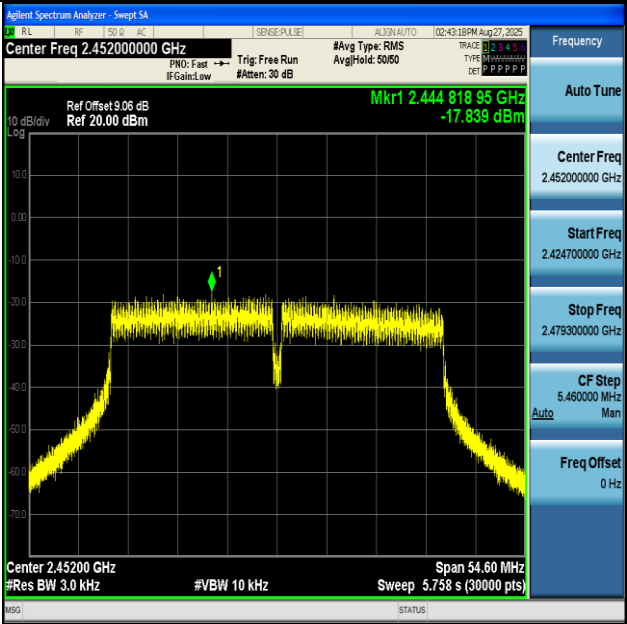
11N20SISO-Ant1-2462-PASS



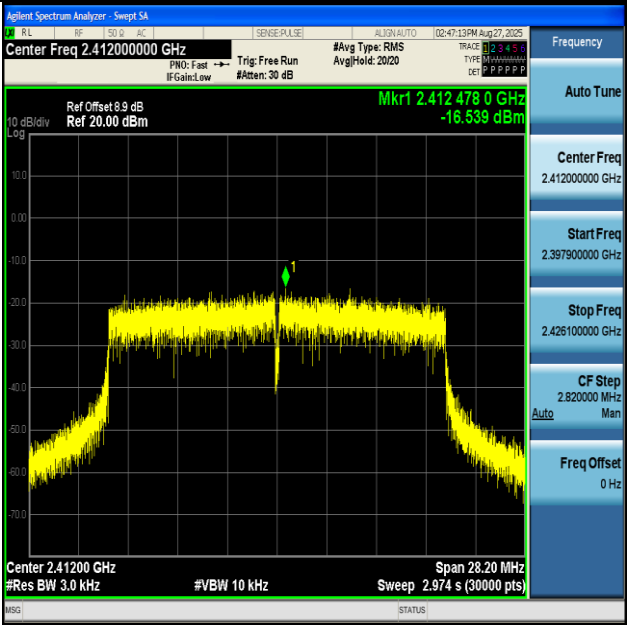
11N40SISO-Ant1-2422-PASS



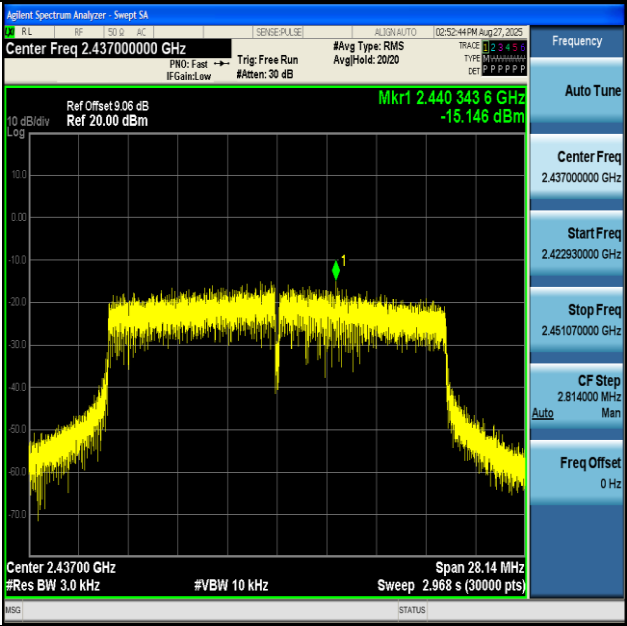
11N40SISO-Ant1-2437-PASS



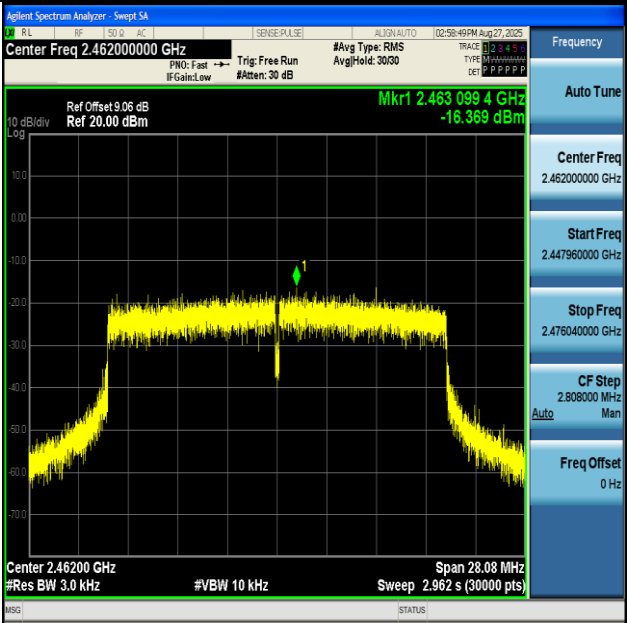
11N40SISO-Ant1-2452-PASS



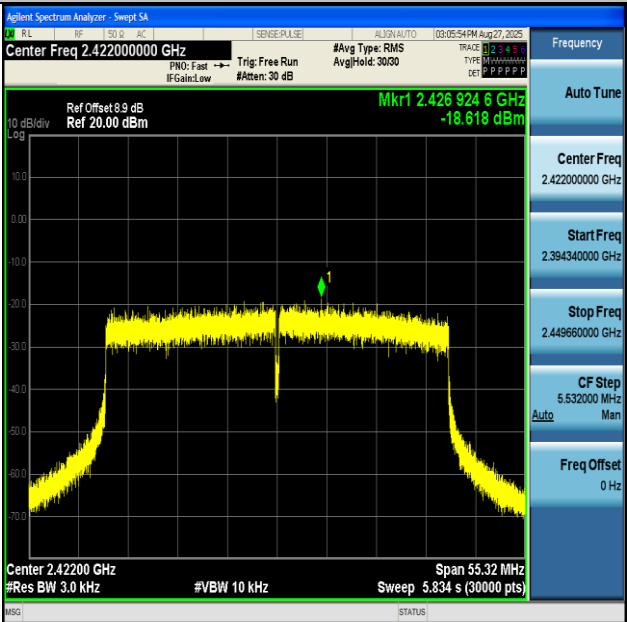
11AX20SISO-Ant1-2412-PASS



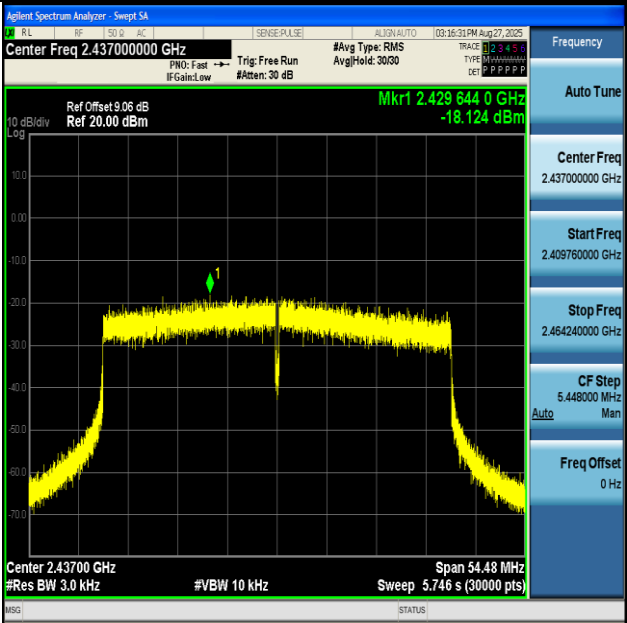
11AX20SISO-Ant1-2437-PASS



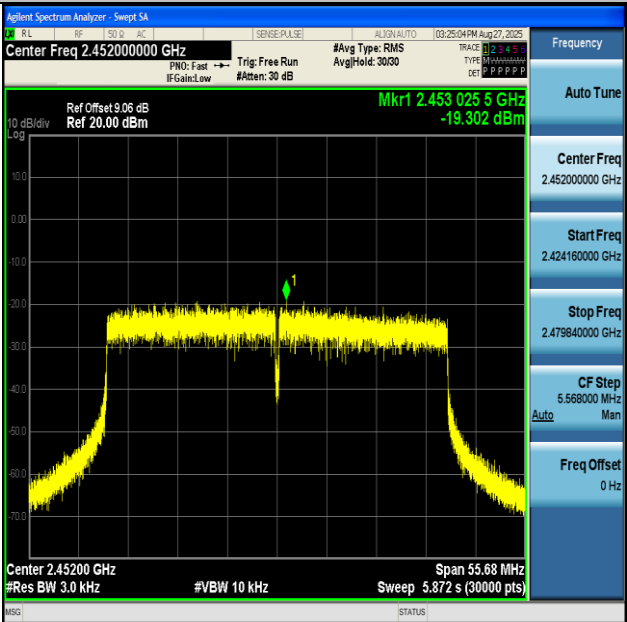
11AX20SISO-Ant1-2462-PASS



11AX40SISO-Ant1-2422-PASS



11AX40SISO-Ant1-2437-PASS



11AX40SISO-Ant1-2452-PASS

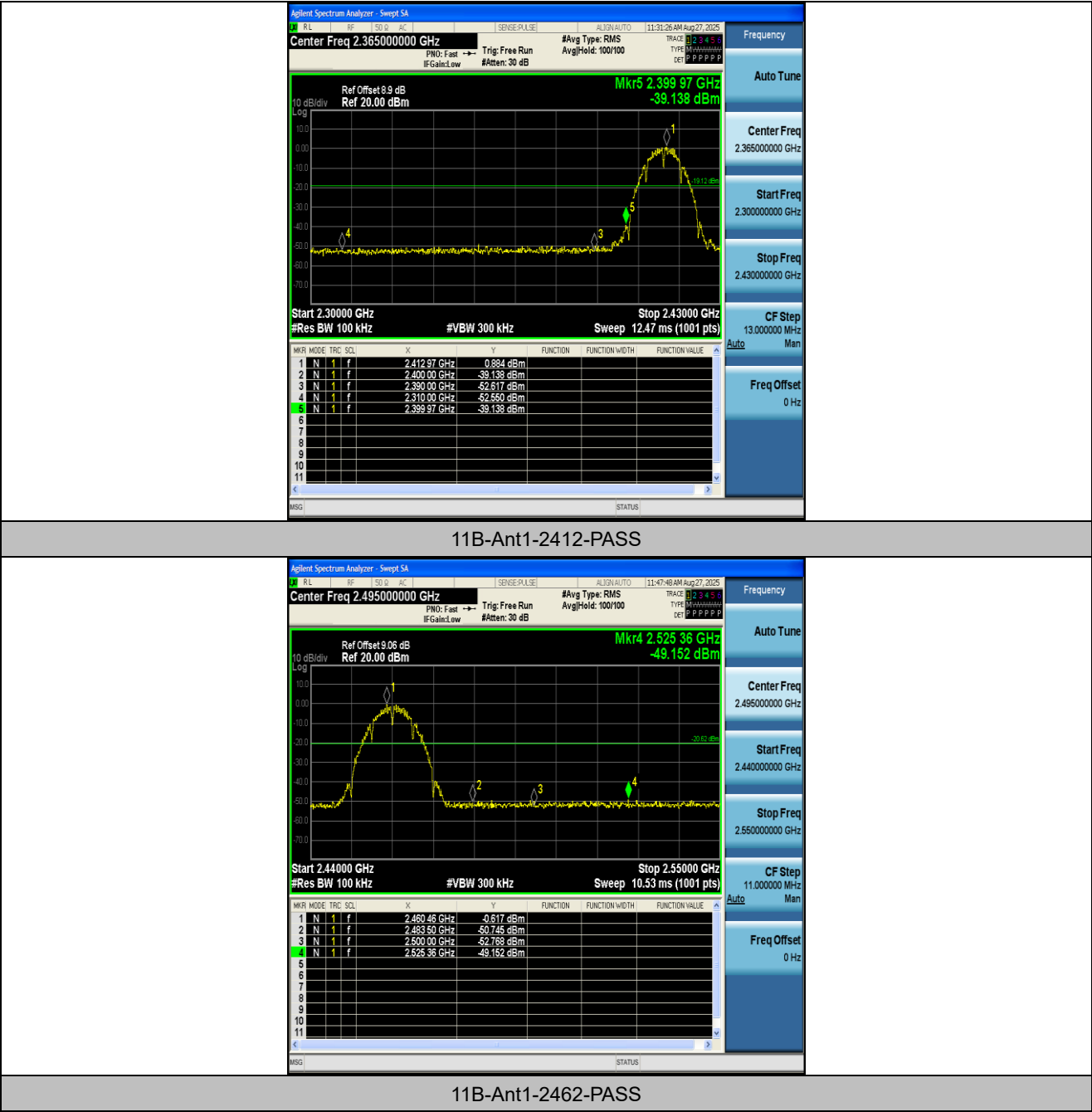
Appendix E: Band edge measurements

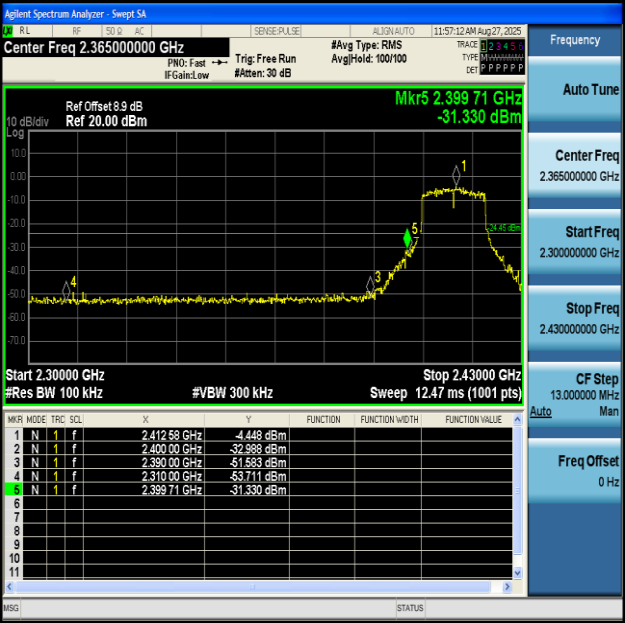
Test Result

Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	0.88	-39.14	≤-19.12	PASS
11B	Ant1	High	2462	-0.62	-49.15	≤-20.62	PASS
11G	Ant1	Low	2412	-4.45	-31.33	≤-24.45	PASS
11G	Ant1	High	2462	-2.95	-48.5	≤-22.95	PASS
11N20SISO	Ant1	Low	2412	-3.67	-29.93	≤-23.67	PASS
11N20SISO	Ant1	High	2462	-4.71	-48.09	≤-24.71	PASS
11N40SISO	Ant1	Low	2422	-5.48	-36.3	≤-25.48	PASS
11N40SISO	Ant1	High	2452	-4.69	-47.61	≤-24.69	PASS
11AX20SISO	Ant1	Low	2412	-2.97	-30.52	≤-22.97	PASS
11AX20SISO	Ant1	High	2462	-3.99	-48.92	≤-23.99	PASS
11AX40SISO	Ant1	Low	2422	-4.17	-34.54	≤-24.17	PASS
11AX40SISO	Ant1	High	2452	-6.58	-48.9	≤-26.58	PASS

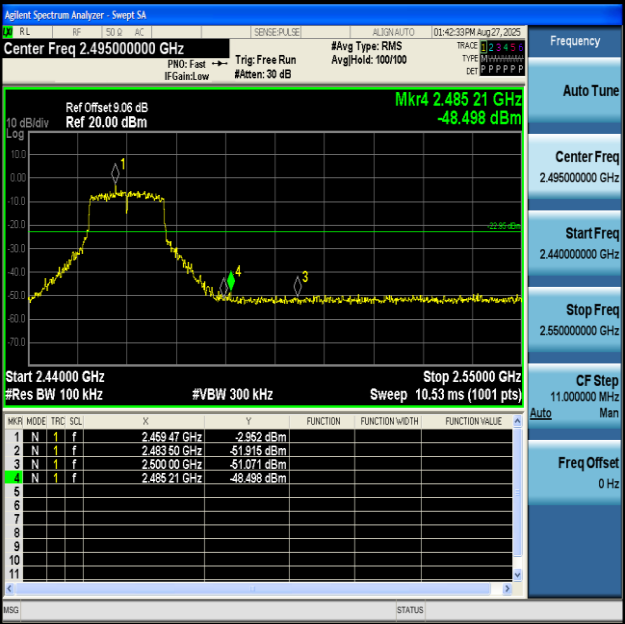
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





11G-Ant1-2412-PASS



11G-Ant1-2462-PASS