

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

Product Name: Wifi Pineapple Pager

Trade Mark: /

Test Model: Mk1

FCC ID: 2A52Y-MK1

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

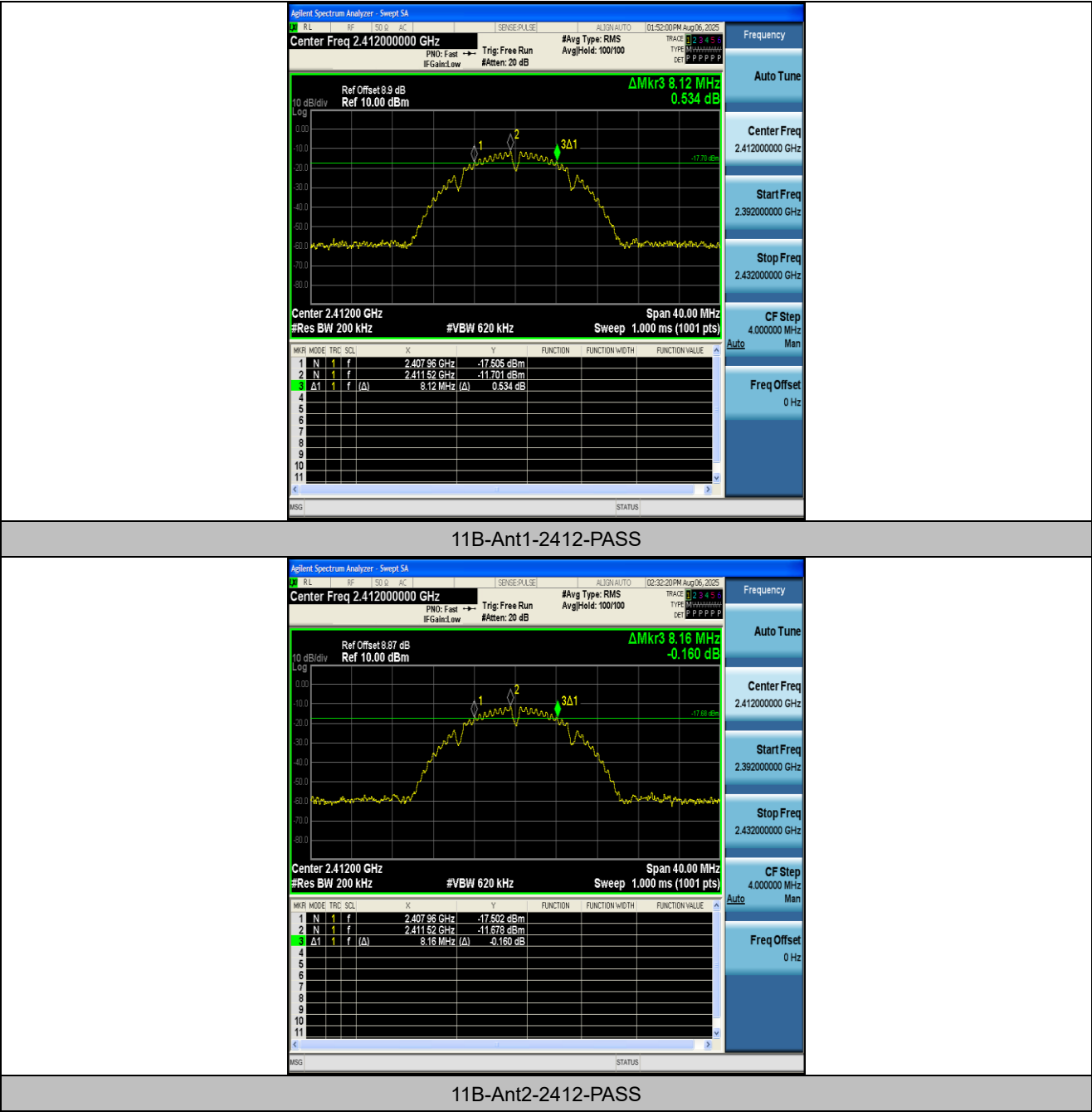
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	8.120	2407.960	2416.080	0.5	PASS
11B	Ant2	2412	8.160	2407.960	2416.120	0.5	PASS
11B	Ant1	2437	8.120	2432.960	2441.080	0.5	PASS
11B	Ant2	2437	8.120	2432.960	2441.080	0.5	PASS
11B	Ant1	2462	8.120	2458.000	2466.120	0.5	PASS
11B	Ant2	2462	8.120	2458.000	2466.120	0.5	PASS
11G	Ant1	2412	15.960	2404.040	2420.000	0.5	PASS
11G	Ant2	2412	16.120	2404.040	2420.160	0.5	PASS
11G	Ant1	2437	16.160	2428.920	2445.080	0.5	PASS
11G	Ant2	2437	16.360	2428.840	2445.200	0.5	PASS
11G	Ant1	2462	16.320	2453.880	2470.200	0.5	PASS
11G	Ant2	2462	16.280	2453.920	2470.200	0.5	PASS
11N20MIMO	Ant1	2412	17.040	2403.480	2420.520	0.5	PASS
11N20MIMO	Ant2	2412	17.120	2403.200	2420.320	0.5	PASS
11N20MIMO	Ant1	2437	17.360	2428.360	2445.720	0.5	PASS
11N20MIMO	Ant2	2437	17.560	2428.240	2445.800	0.5	PASS
11N20MIMO	Ant1	2462	17.320	2453.320	2470.640	0.5	PASS
11N20MIMO	Ant2	2462	16.880	2453.960	2470.840	0.5	PASS
11N40MIMO	Ant1	2422	35.120	2404.960	2440.080	0.5	PASS
11N40MIMO	Ant2	2422	32.160	2406.800	2438.960	0.5	PASS
11N40MIMO	Ant1	2437	31.440	2421.480	2452.920	0.5	PASS
11N40MIMO	Ant2	2437	30.480	2421.320	2451.800	0.5	PASS

11N40MIMO	Ant1	2452	35.840	2434.240	2470.080	0.5	PASS
11N40MIMO	Ant2	2452	35.840	2434.160	2470.000	0.5	PASS
11AX20MIMO	Ant1	2412	19.120	2402.480	2421.600	0.5	PASS
11AX20MIMO	Ant2	2412	19.000	2402.560	2421.560	0.5	PASS
11AX20MIMO	Ant1	2437	19.000	2427.520	2446.520	0.5	PASS
11AX20MIMO	Ant2	2437	19.040	2427.400	2446.440	0.5	PASS
11AX20MIMO	Ant1	2462	19.120	2452.480	2471.600	0.5	PASS
11AX20MIMO	Ant2	2462	18.960	2452.560	2471.520	0.5	PASS
11AX40MIMO	Ant1	2422	31.840	2407.520	2439.360	0.5	PASS
11AX40MIMO	Ant2	2422	34.640	2404.960	2439.600	0.5	PASS
11AX40MIMO	Ant1	2437	38.080	2418.040	2456.120	0.5	PASS
11AX40MIMO	Ant2	2437	37.680	2418.280	2455.960	0.5	PASS
11AX40MIMO	Ant1	2452	37.840	2433.120	2470.960	0.5	PASS
11AX40MIMO	Ant2	2452	38.080	2433.040	2471.120	0.5	PASS

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

Test Graphs

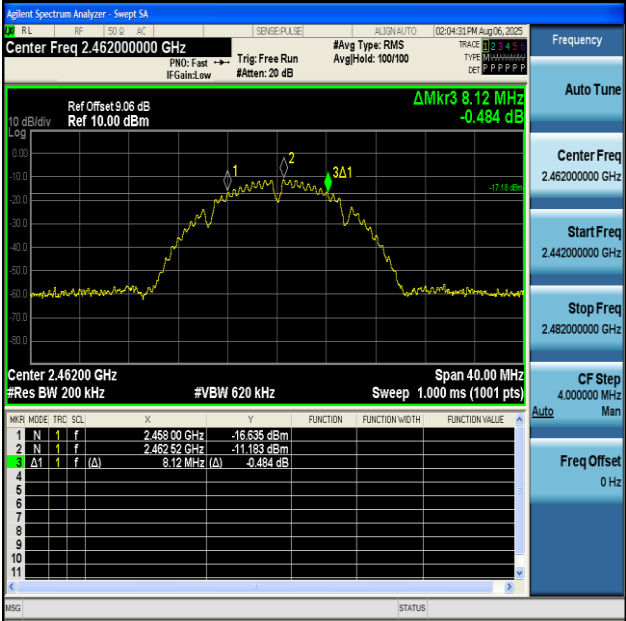




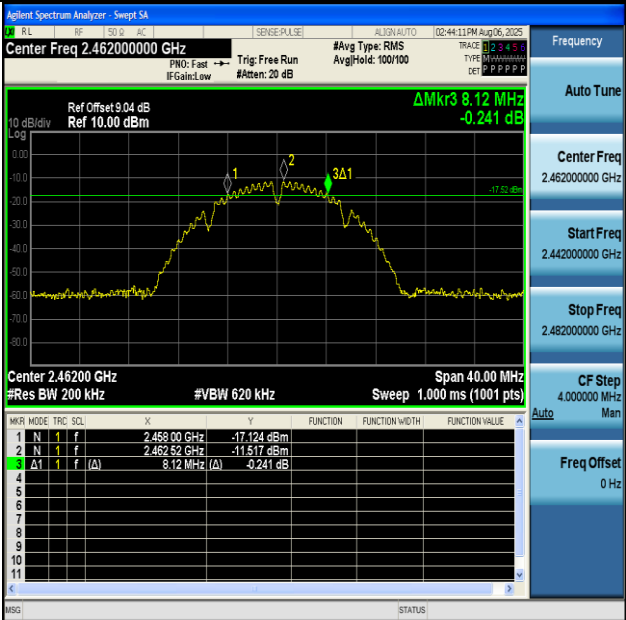
11B-Ant1-2437-PASS



11B-Ant2-2437-PASS



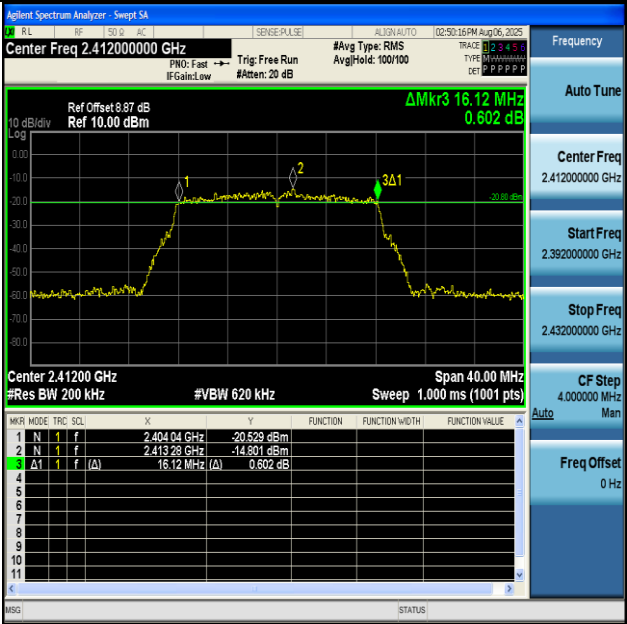
11B-Ant1-2462-PASS



11B-Ant2-2462-PASS



11G-Ant1-2412-PASS



11G-Ant2-2412-PASS



11G-Ant1-2437-PASS



11G-Ant2-2437-PASS



11G-Ant1-2462-PASS



11G-Ant2-2462-PASS



11N20MIMO-Ant1-2412-PASS



11N20MIMO-Ant2-2412-PASS



11N20MIMO-Ant1-2437-PASS



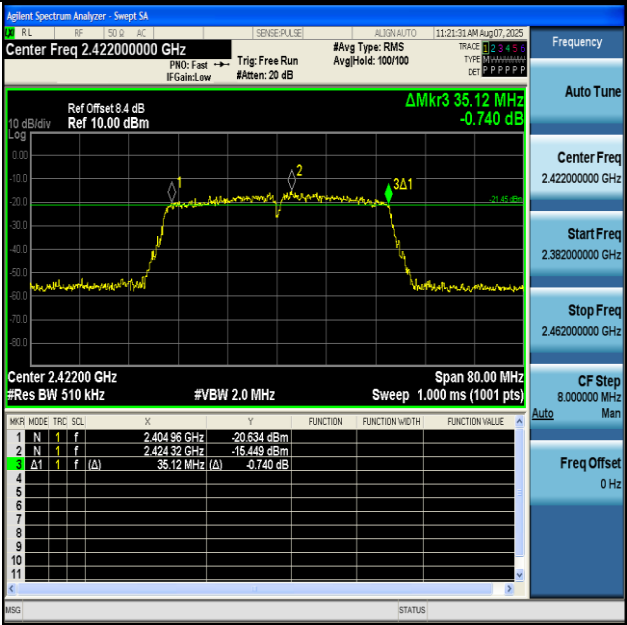
11N20MIMO-Ant2-2437-PASS



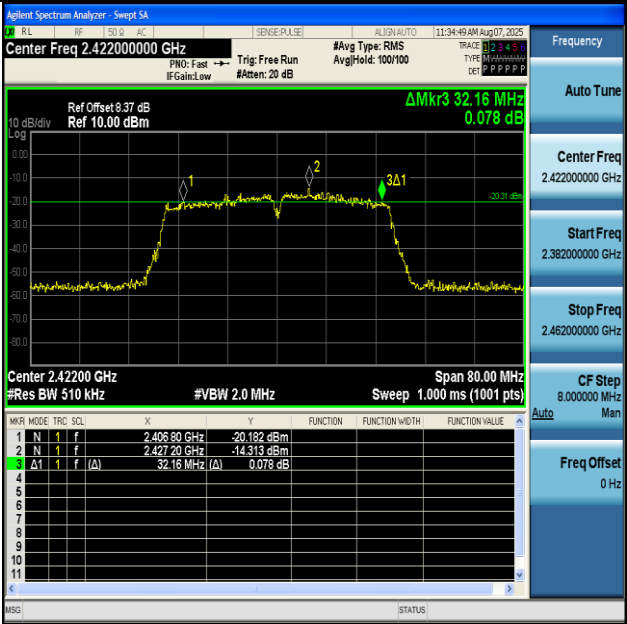
11N20MIMO-Ant1-2462-PASS



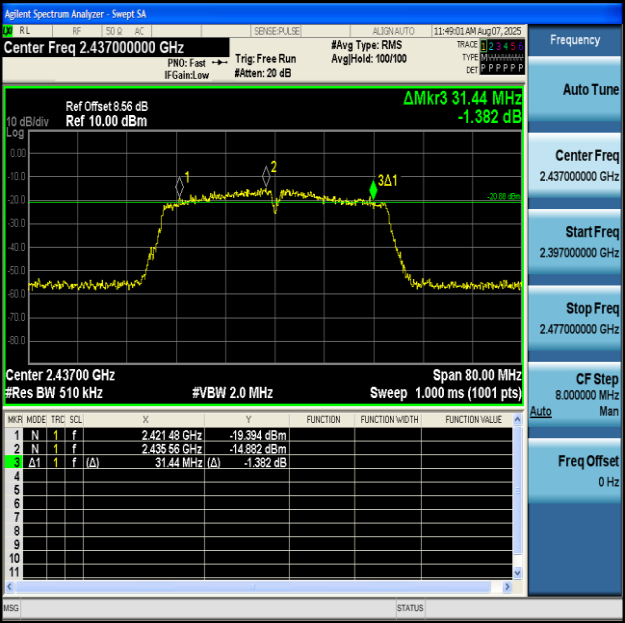
11N20MIMO-Ant2-2462-PASS



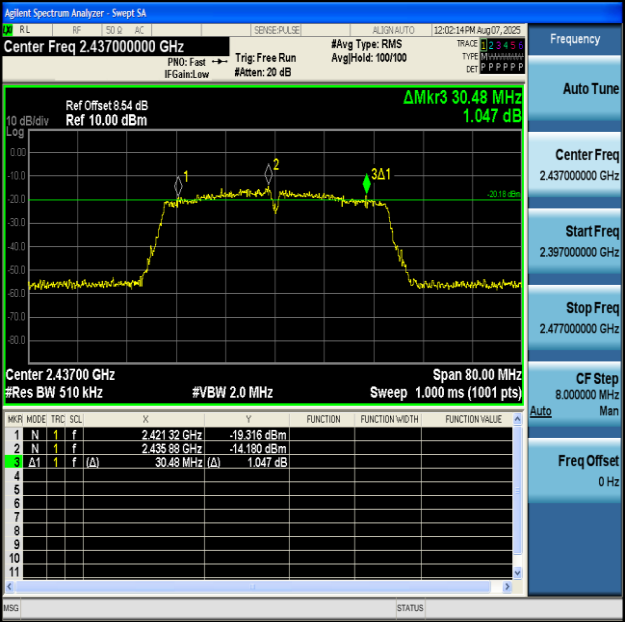
11N40MIMO-Ant1-2422-PASS



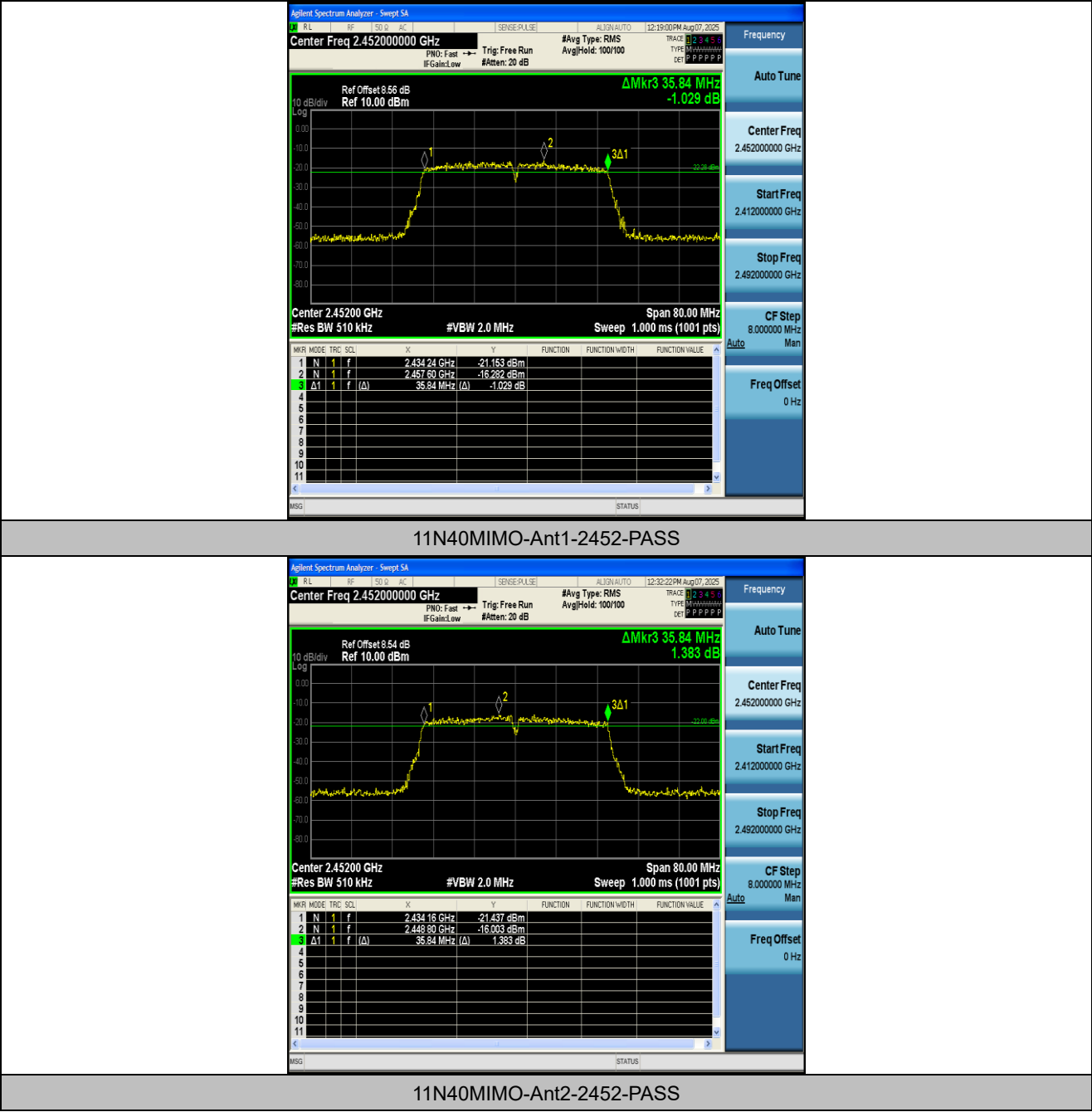
11N40MIMO-Ant2-2422-PASS

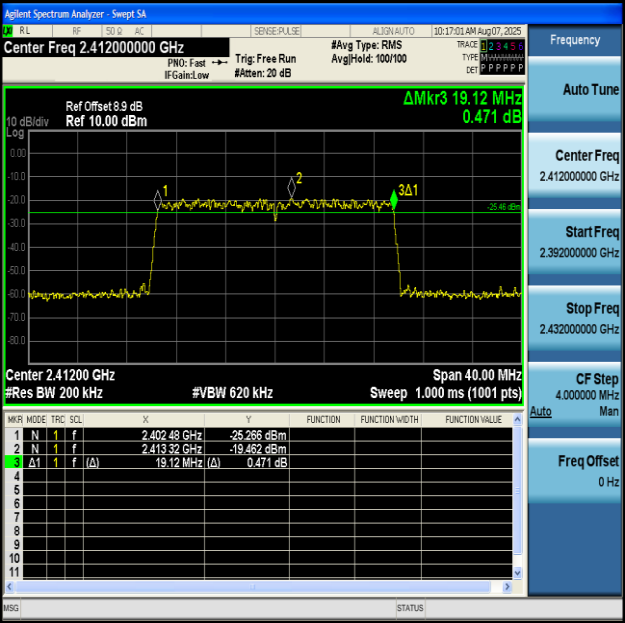


11N40MIMO-Ant1-2437-PASS

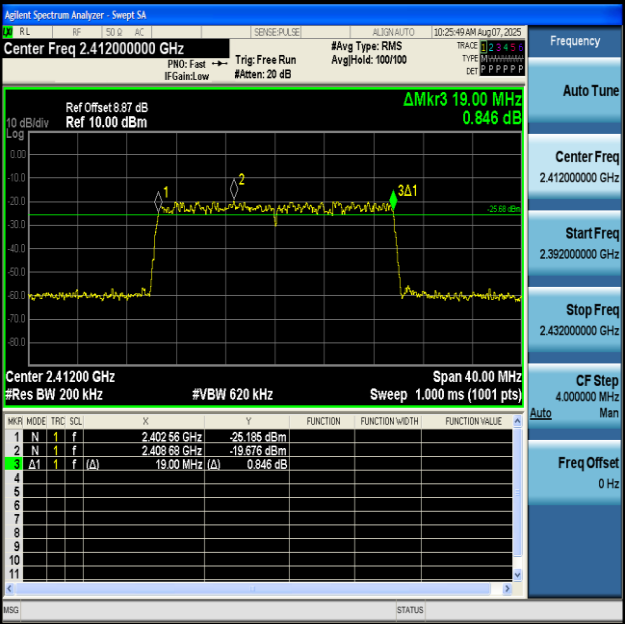


11N40MIMO-Ant2-2437-PASS





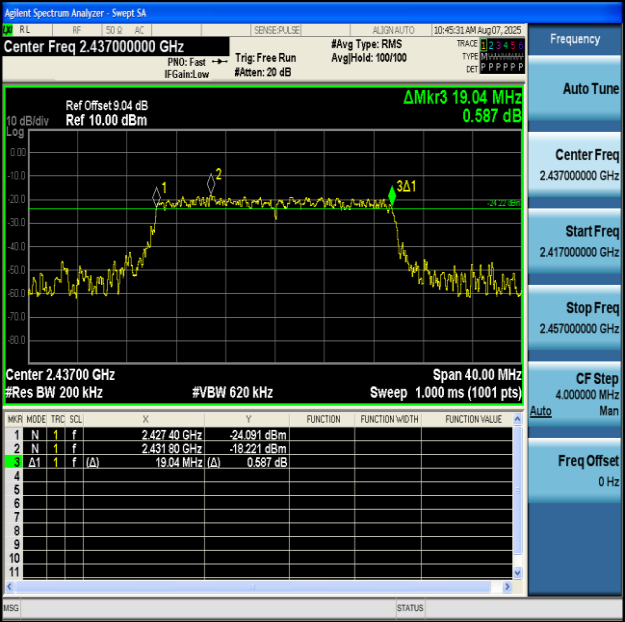
11AX20MIMO-Ant1-2412-PASS



11AX20MIMO-Ant2-2412-PASS



11AX20MIMO-Ant1-2437-PASS



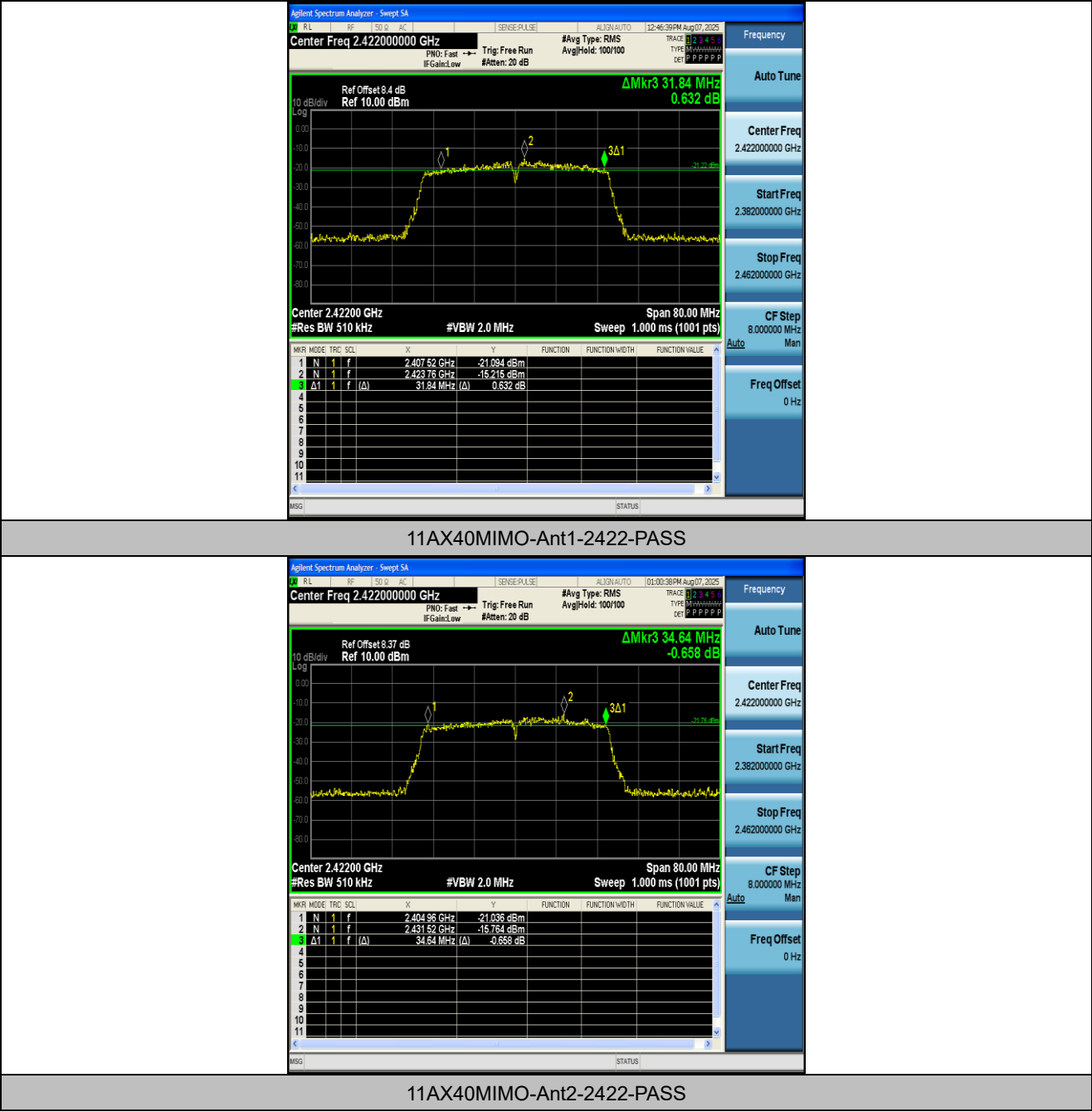
11AX20MIMO-Ant2-2437-PASS

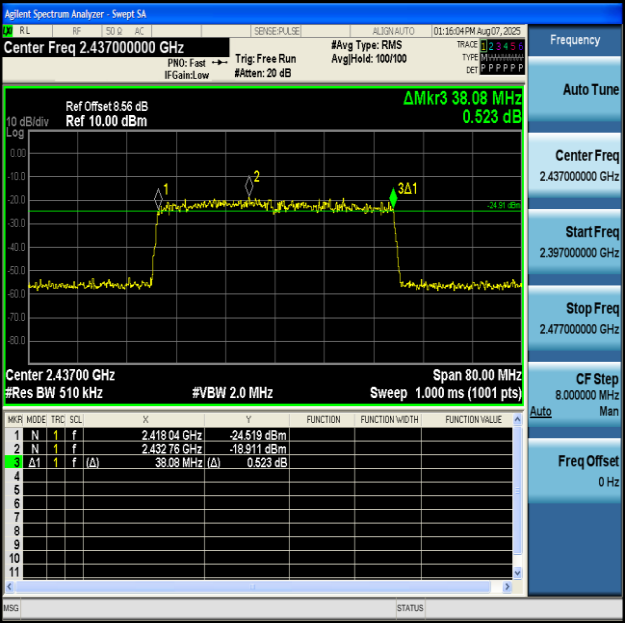


11AX20MIMO-Ant1-2462-PASS

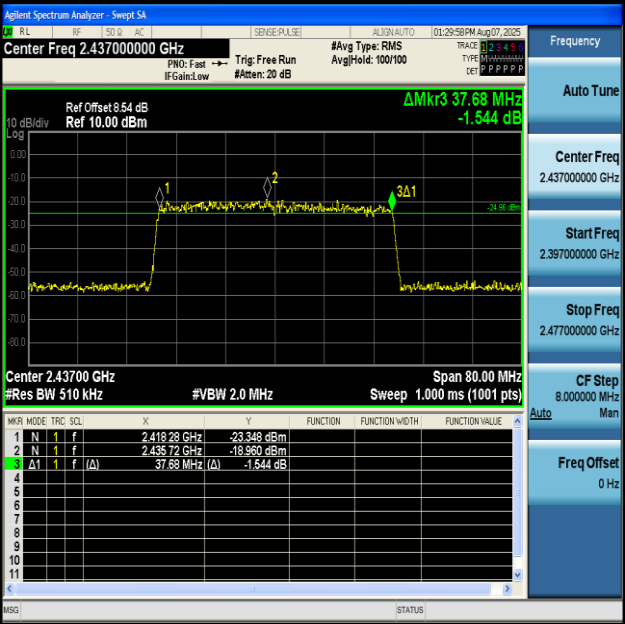


11AX20MIMO-Ant2-2462-PASS

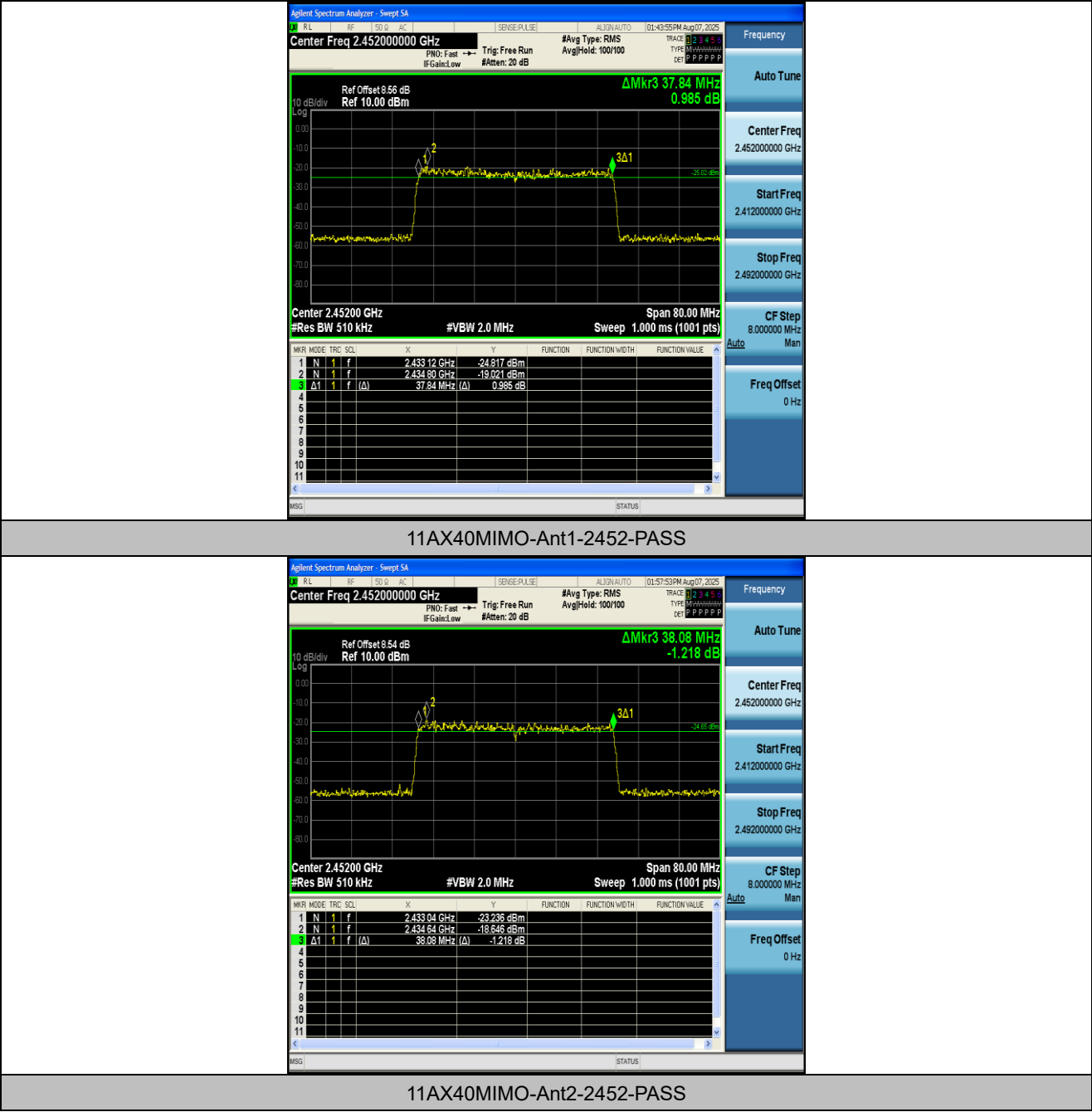




11AX40MIMO-Ant1-2437-PASS



11AX40MIMO-Ant2-2437-PASS



11AX40MIMO-Ant2-2452-PASS

Appendix B: Occupied Channel Bandwidth

Test Result

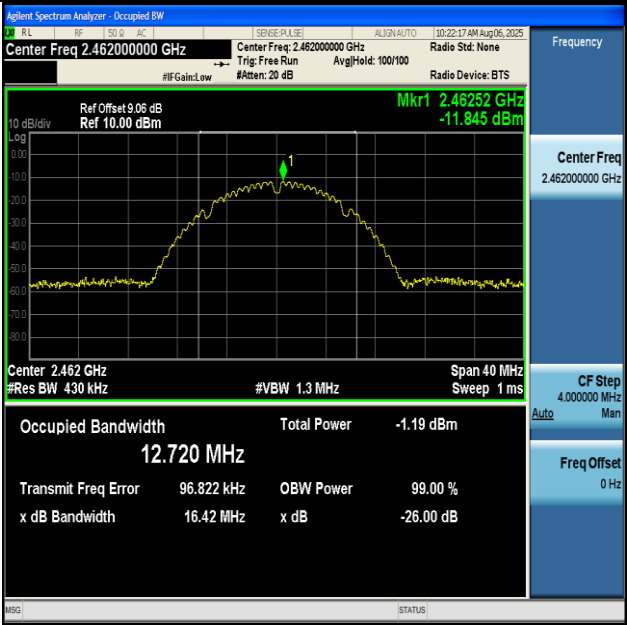
Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	12.863	2405.5945	2418.4575	---	---
11B	Ant2	2412	12.841	2405.6018	2418.4428	---	---
11B	Ant1	2437	12.606	2430.6701	2443.2761	---	---
11B	Ant2	2437	12.537	2430.6816	2443.2186	---	---
11B	Ant1	2462	12.720	2455.7368	2468.4568	---	---
11B	Ant2	2462	12.652	2455.7677	2468.4197	---	---
11G	Ant1	2412	16.863	2403.5333	2420.3963	---	---
11G	Ant2	2412	16.615	2403.7255	2420.3405	---	---
11G	Ant1	2437	17.491	2428.1426	2445.6336	---	---
11G	Ant2	2437	17.078	2428.4579	2445.5359	---	---
11G	Ant1	2462	17.612	2453.2721	2470.8841	---	---
11G	Ant2	2462	17.307	2453.4198	2470.7268	---	---
11N20MIMO	Ant1	2412	17.733	2403.1622	2420.8952	---	---
11N20MIMO	Ant2	2412	17.737	2403.1550	2420.8920	---	---
11N20MIMO	Ant1	2437	18.046	2427.9392	2445.9852	---	---
11N20MIMO	Ant2	2437	18.081	2427.9478	2446.0288	---	---
11N20MIMO	Ant1	2462	18.262	2452.9831	2471.2451	---	---
11N20MIMO	Ant2	2462	18.215	2452.9872	2471.2022	---	---
11N40MIMO	Ant1	2422	36.159	2404.0688	2440.2278	---	---
11N40MIMO	Ant2	2422	36.158	2404.0412	2440.1992	---	---
11N40MIMO	Ant1	2437	35.880	2419.1053	2454.9853	---	---
11N40MIMO	Ant2	2437	35.897	2419.1309	2455.0279	---	---
11N40MIMO	Ant1	2452	36.309	2433.9486	2470.2576	---	---
11N40MIMO	Ant2	2452	36.355	2433.8237	2470.1787	---	---
11AX20MIMO	Ant1	2412	19.008	2402.5171	2421.5251	---	---
11AX20MIMO	Ant2	2412	19.002	2402.5136	2421.5156	---	---
11AX20MIMO	Ant1	2437	19.119	2427.4515	2446.5705	---	---
11AX20MIMO	Ant2	2437	19.104	2427.4269	2446.5309	---	---
11AX20MIMO	Ant1	2462	19.152	2452.5124	2471.6644	---	---
11AX20MIMO	Ant2	2462	19.039	2452.5316	2471.5706	---	---
11AX40MIMO	Ant1	2422	38.017	2403.0954	2441.1124	---	---
11AX40MIMO	Ant2	2422	38.007	2403.1011	2441.1081	---	---
11AX40MIMO	Ant1	2437	37.721	2418.1884	2455.9094	---	---
11AX40MIMO	Ant2	2437	37.833	2418.1440	2455.9770	---	---
11AX40MIMO	Ant1	2452	38.000	2433.0014	2471.0014	---	---
11AX40MIMO	Ant2	2452	38.016	2433.0527	2471.0687	---	---

Note: $\text{offset(dB)} = \text{cable loss(dB)} + \text{attenuator factor(dB)}$

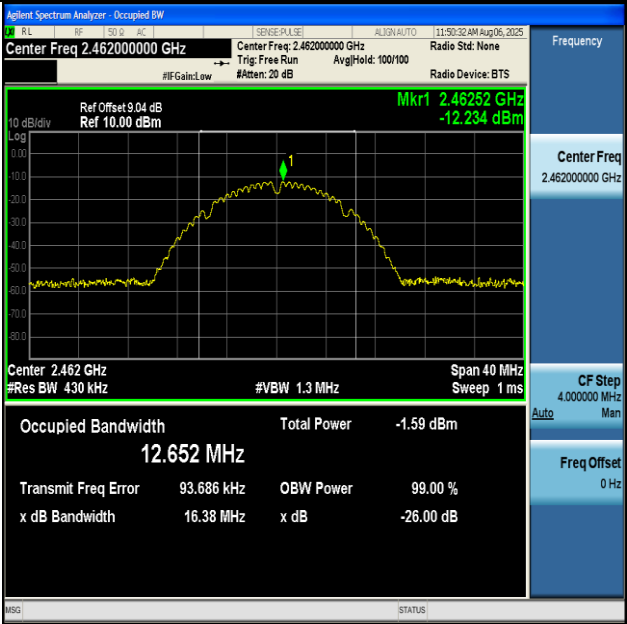
Test Graphs



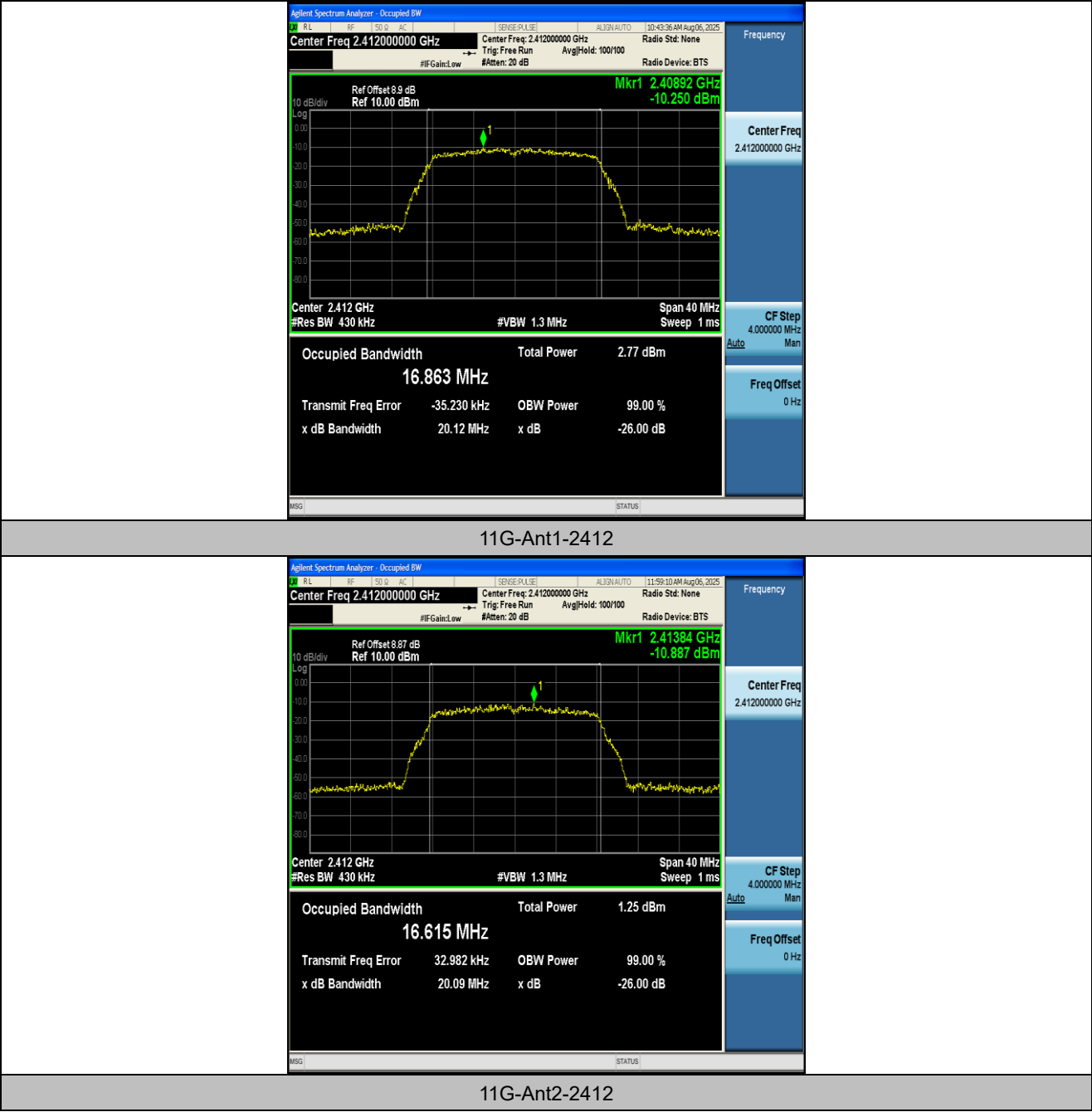


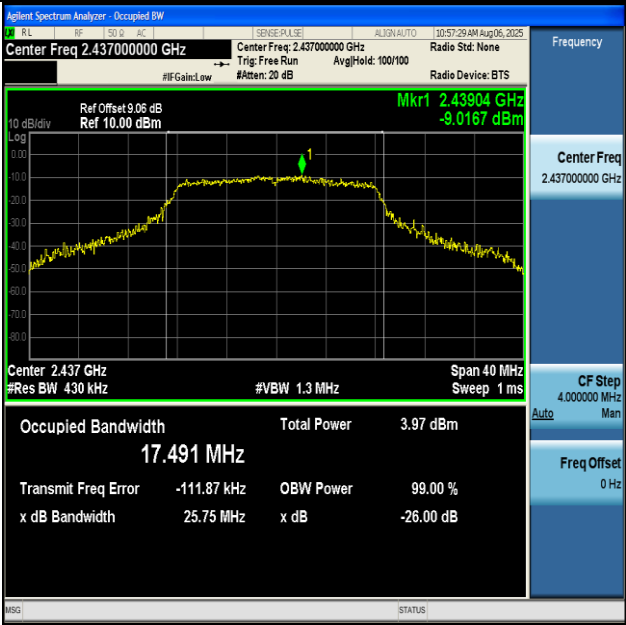


11B-Ant1-2462

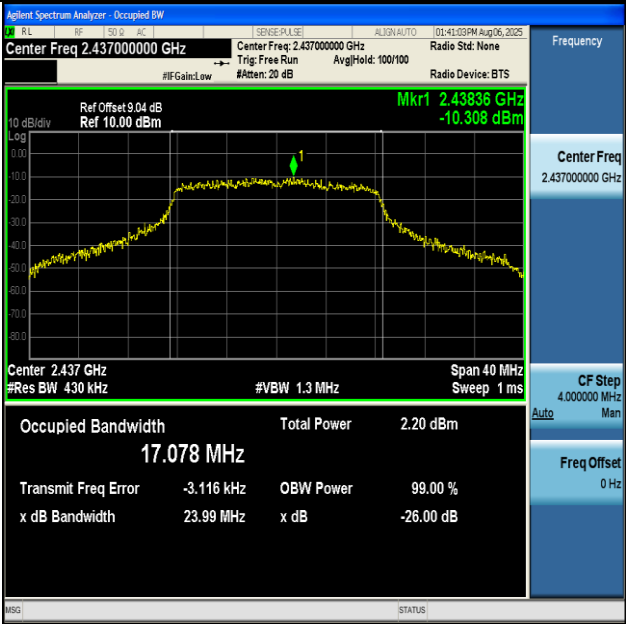


11B-Ant2-2462

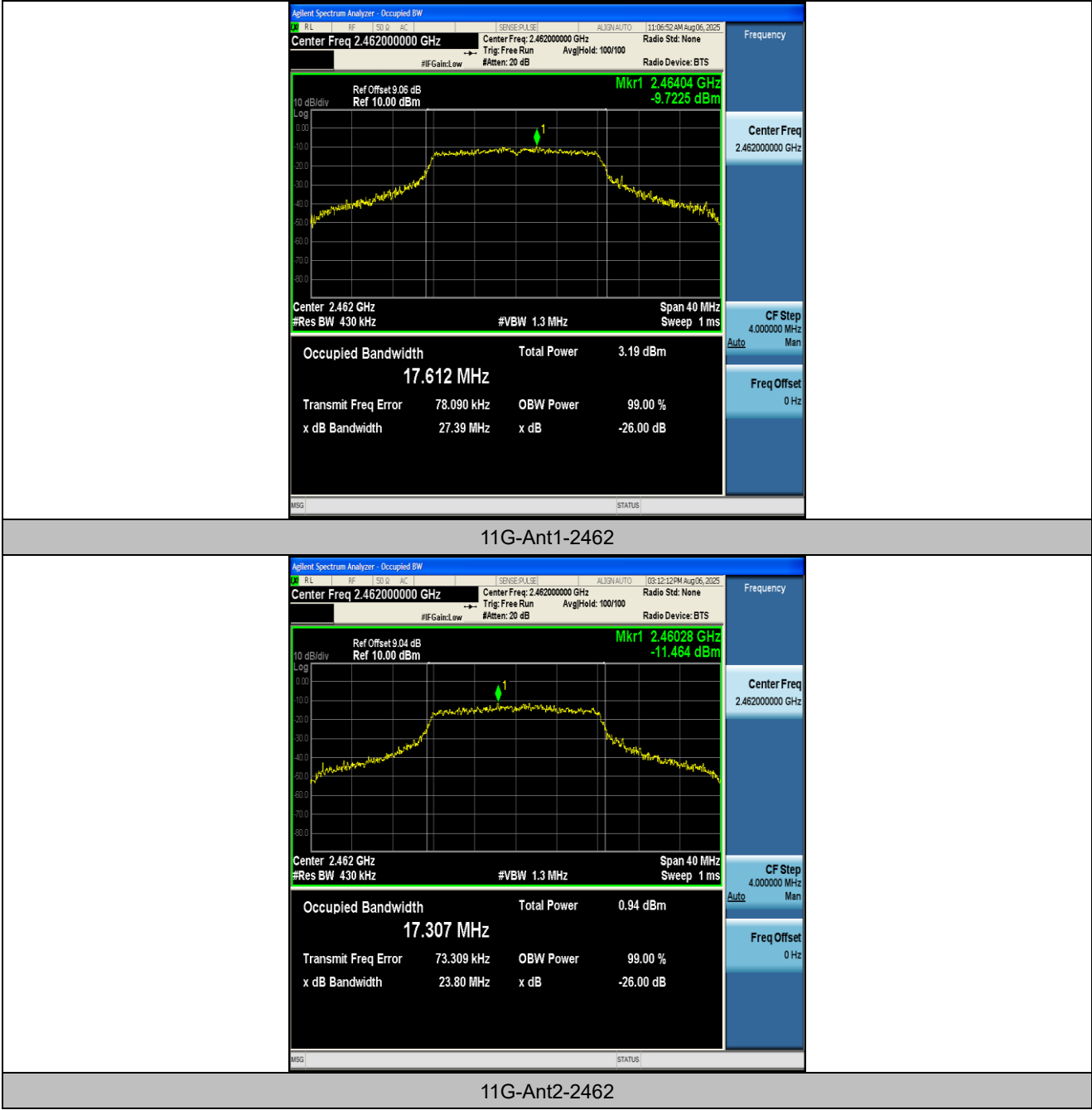


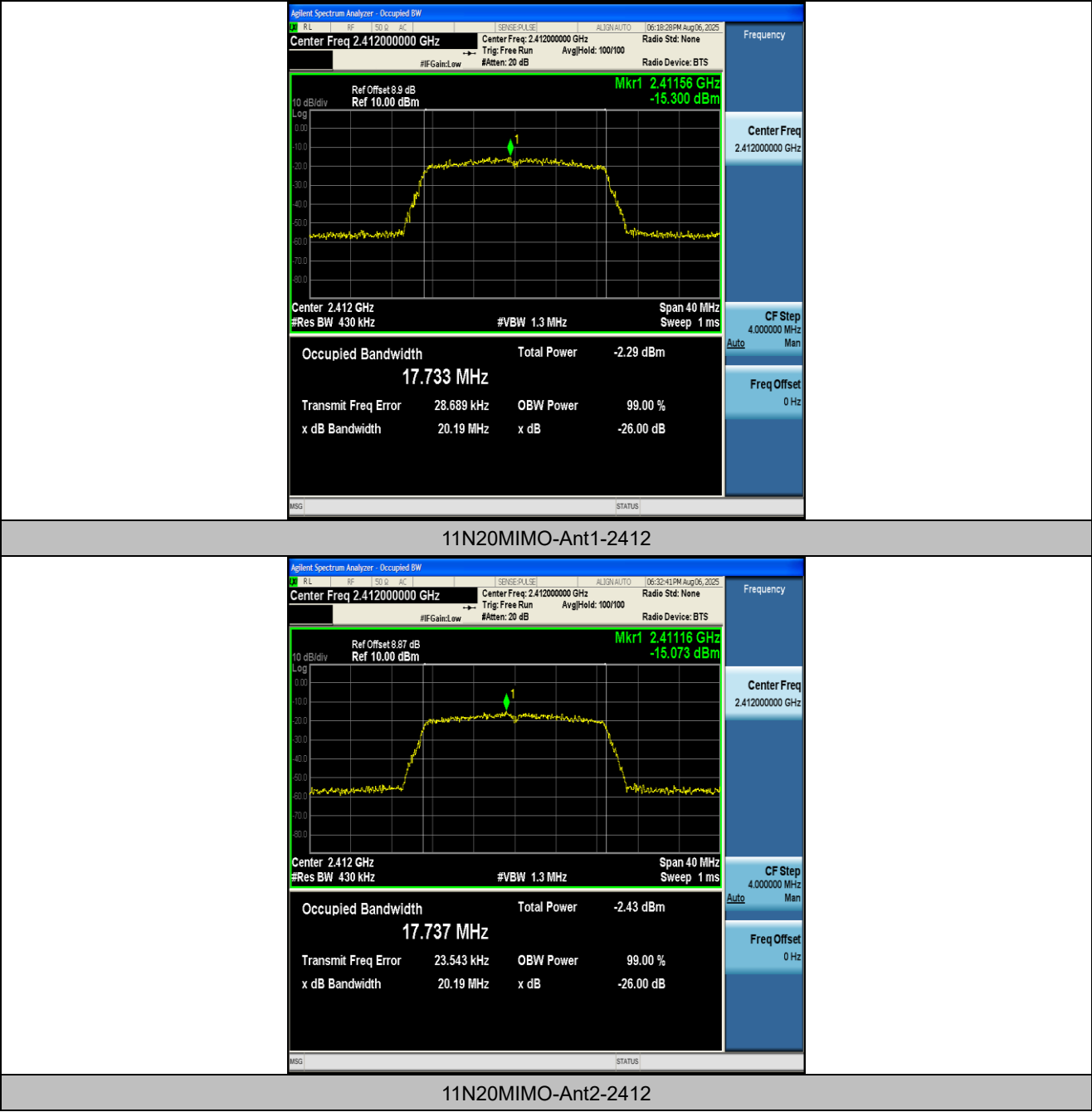


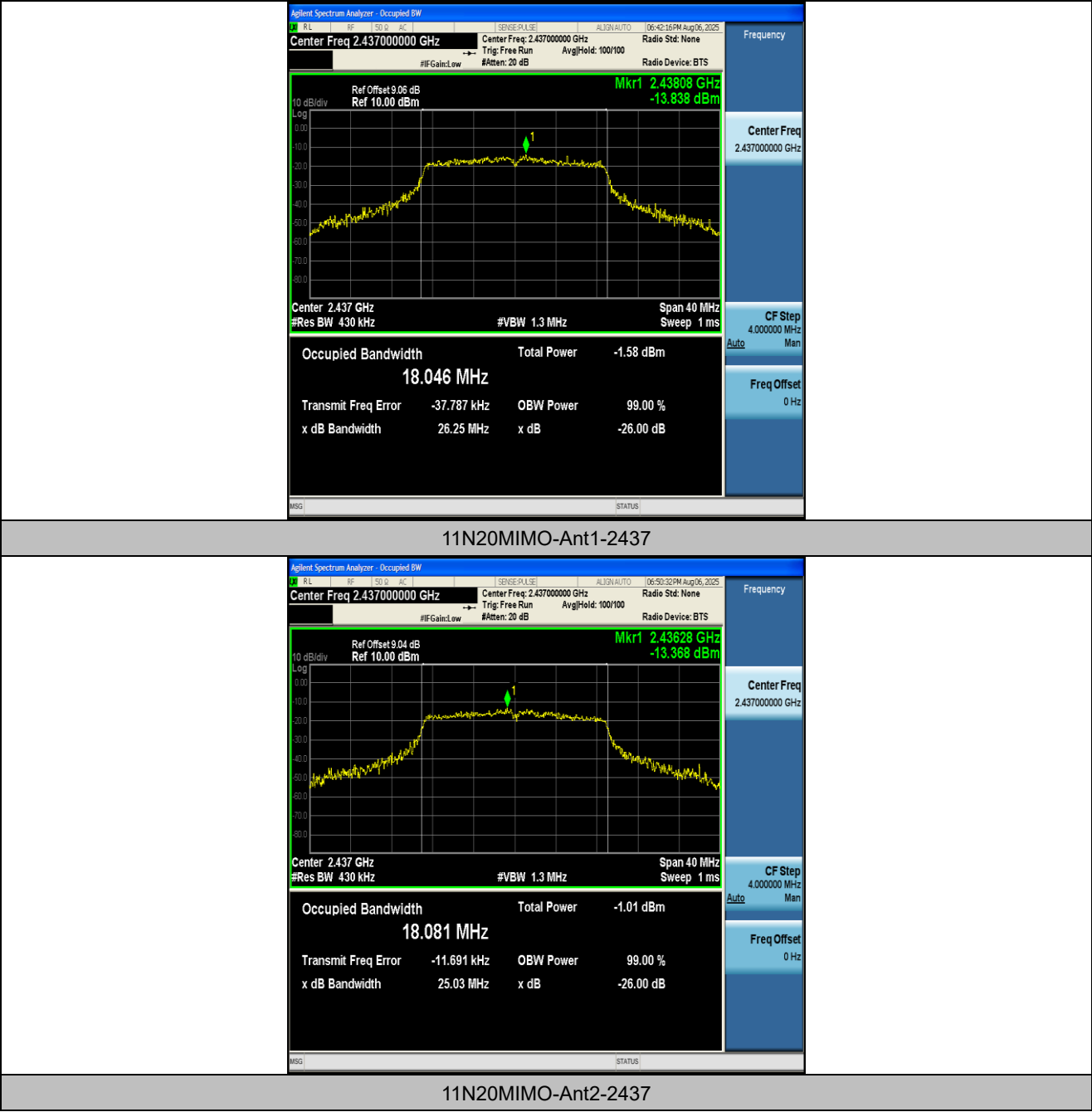
11G-Ant1-2437

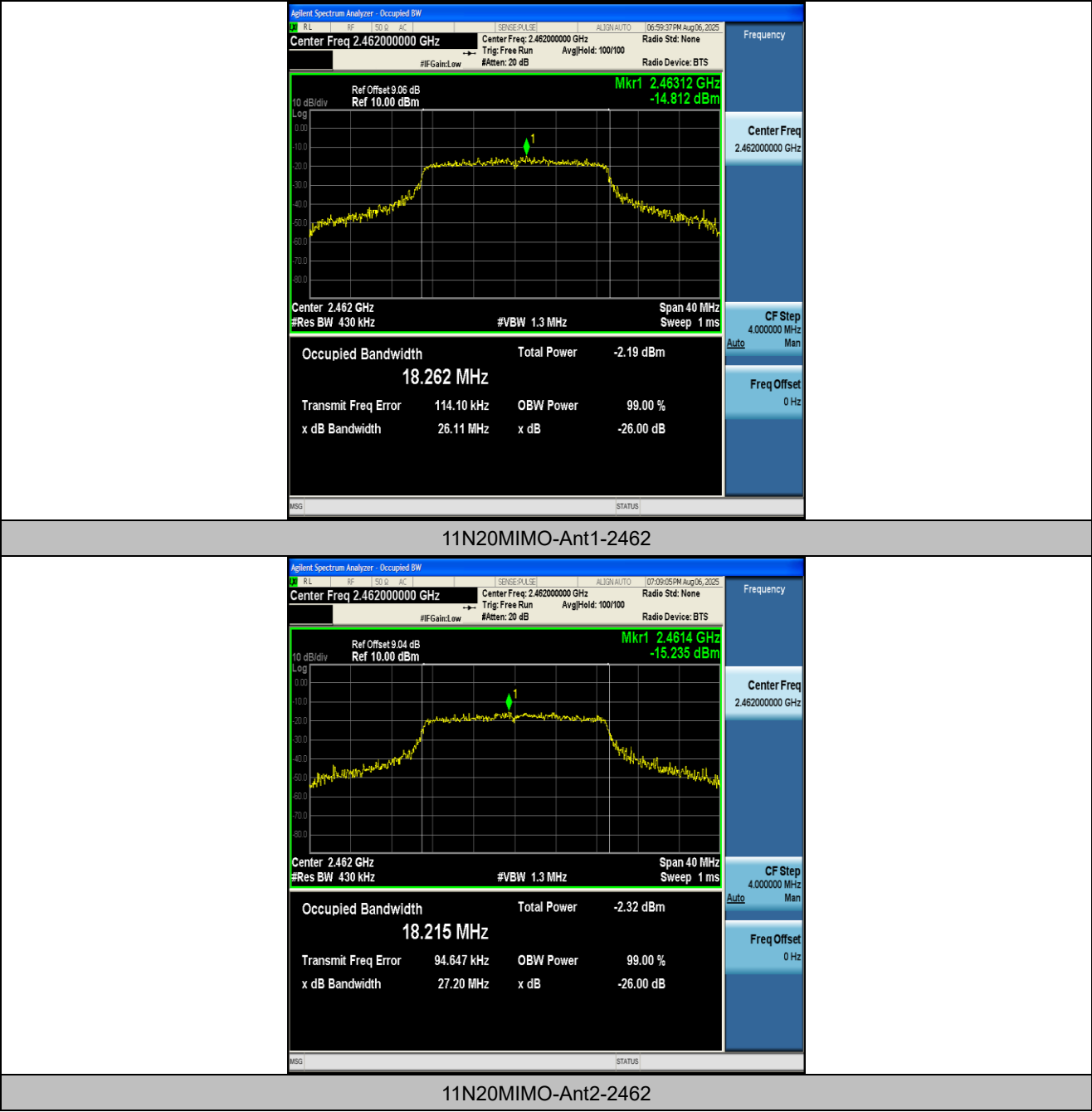


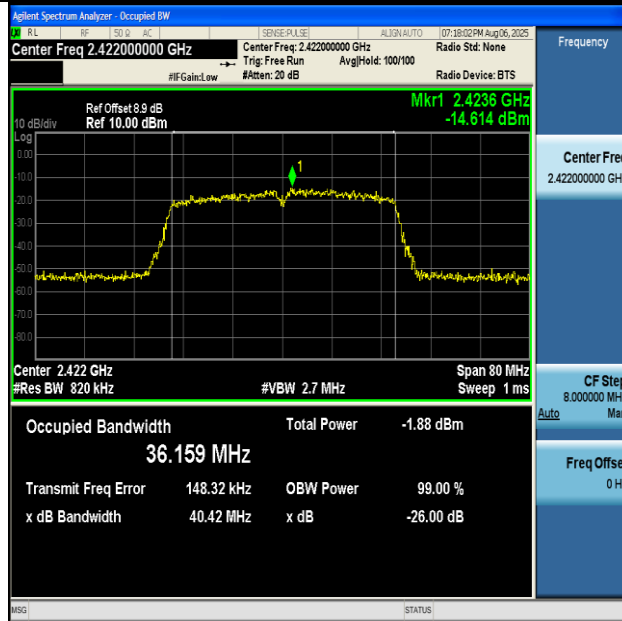
11G-Ant2-2437



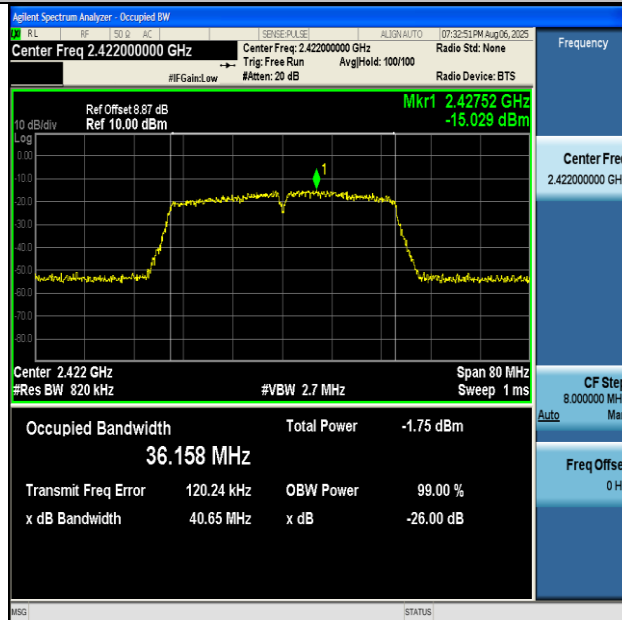




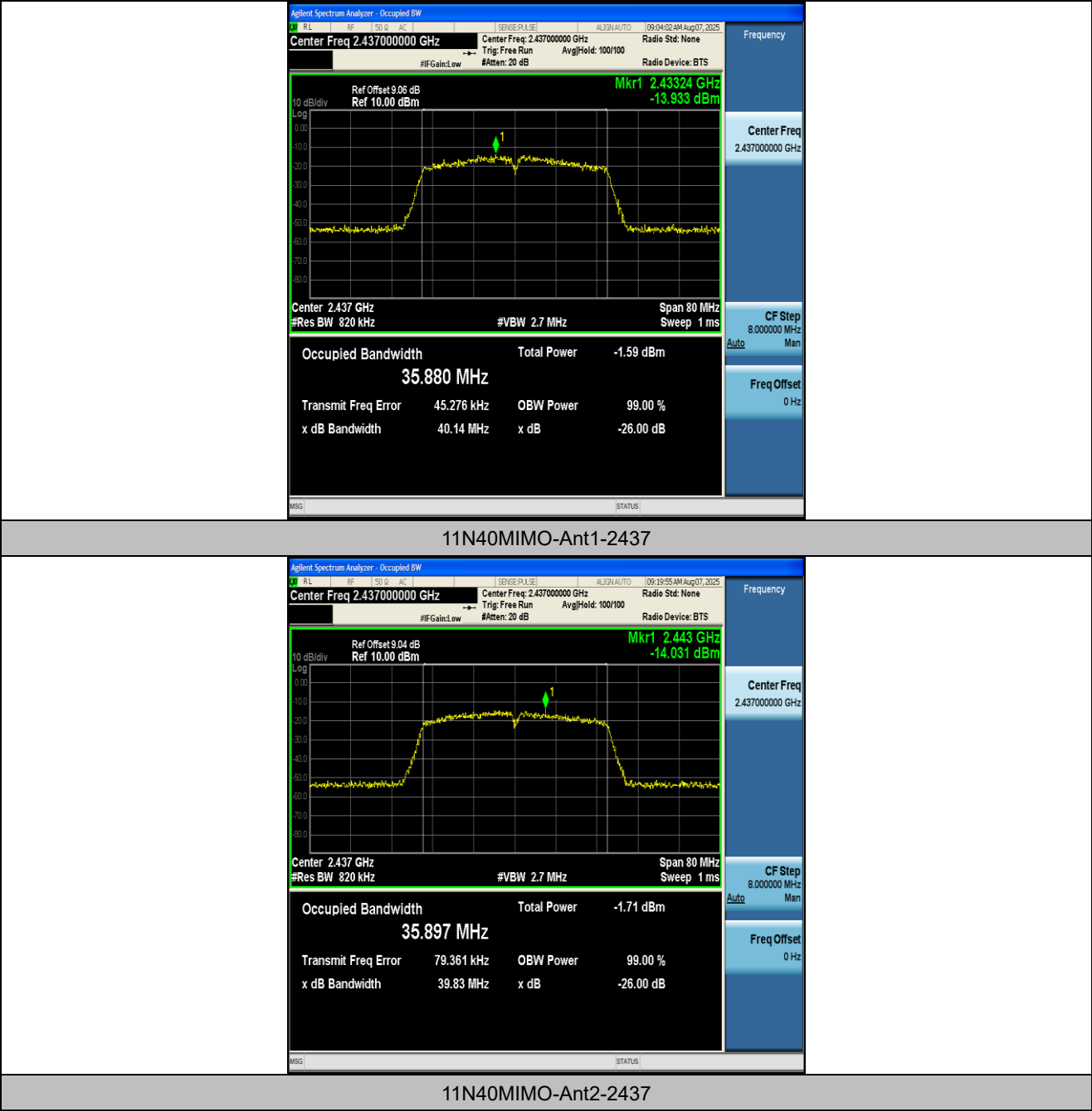


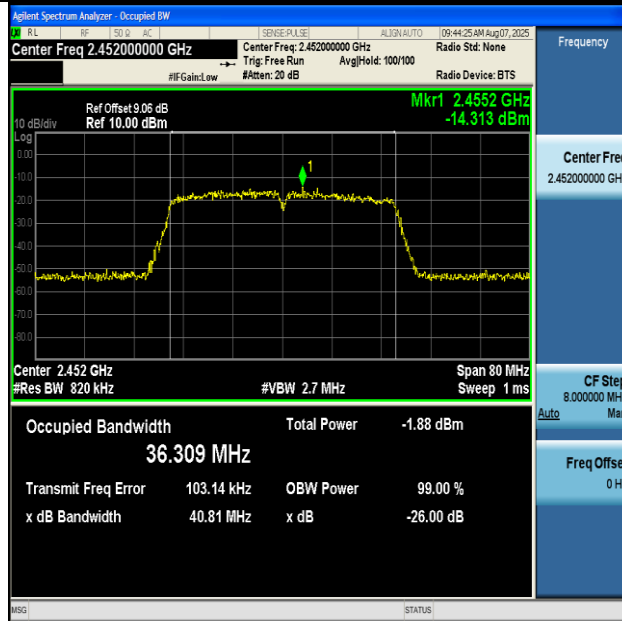


11N40MIMO-Ant1-2422

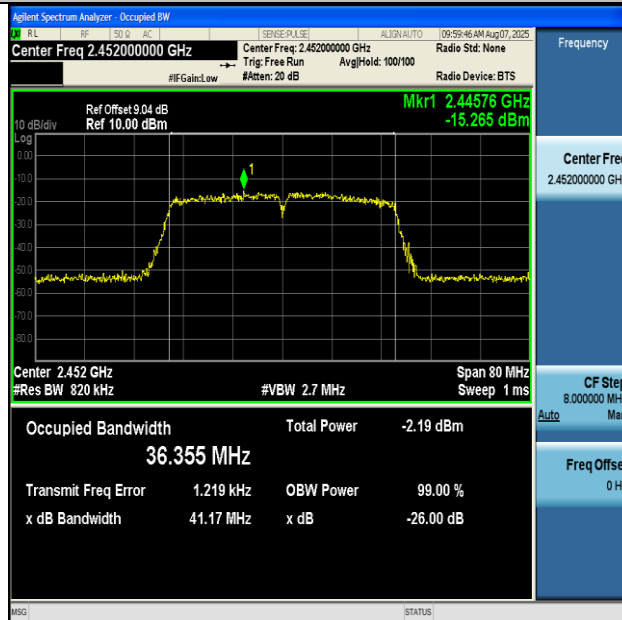


11N40MIMO-Ant2-2422

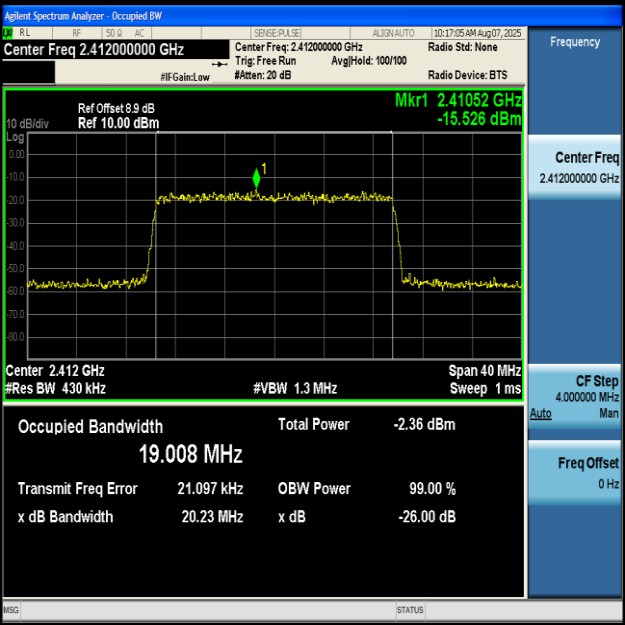




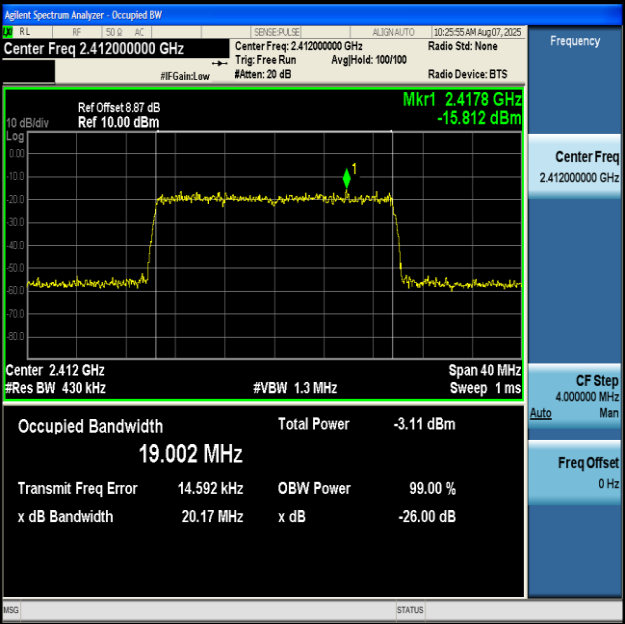
11N40MIMO-Ant1-2452



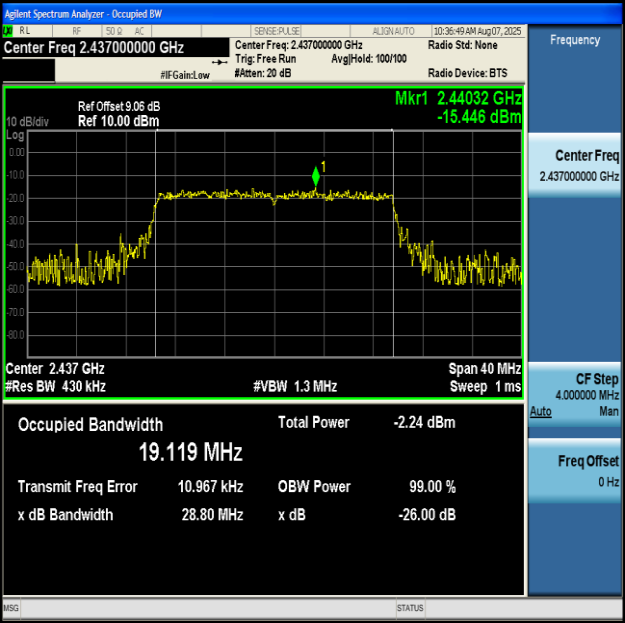
11N40MIMO-Ant2-2452



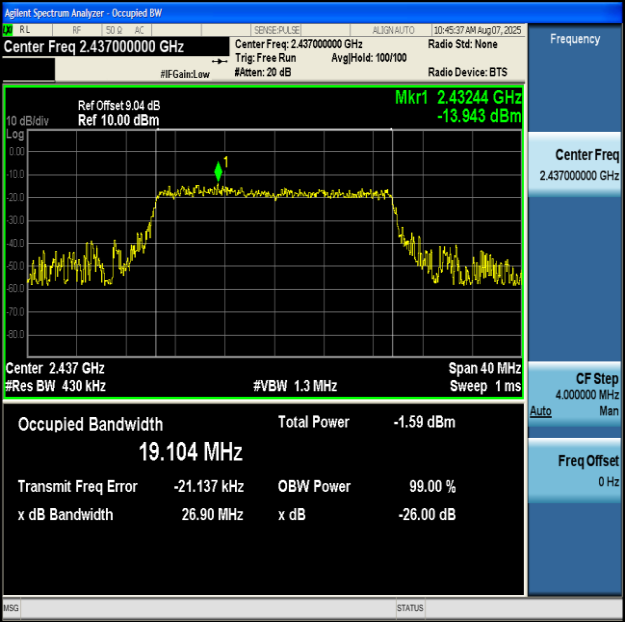
11AX20MIMO-Ant1-2412



11AX20MIMO-Ant2-2412



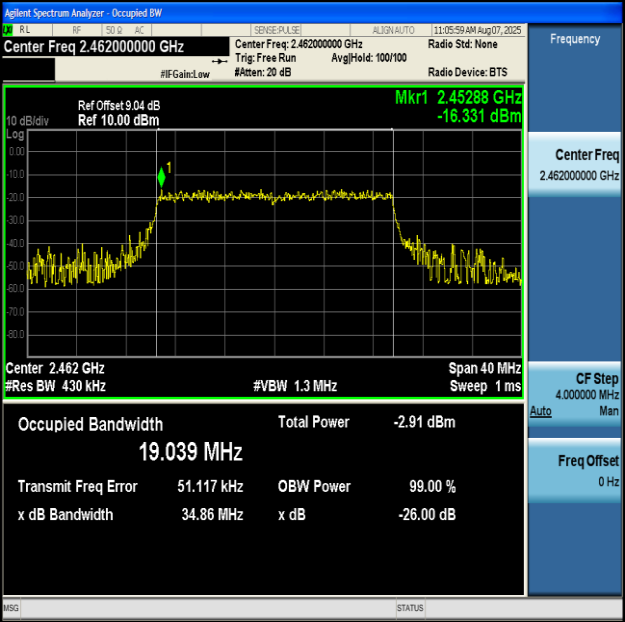
11AX20MIMO-Ant1-2437



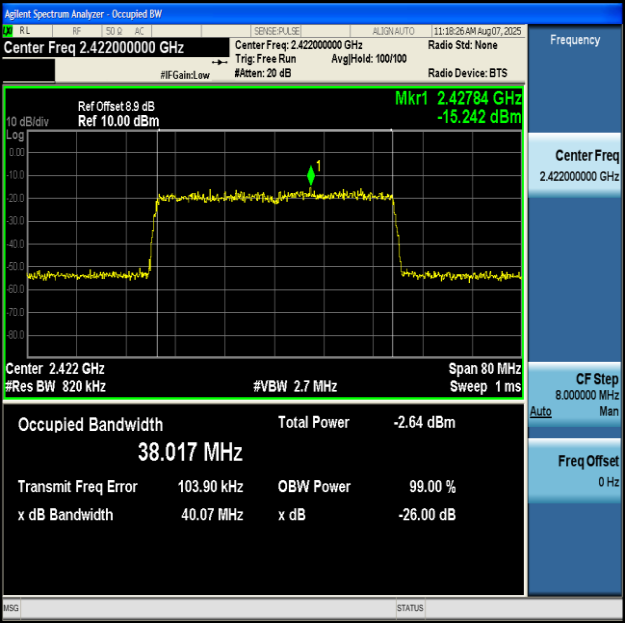
11AX20MIMO-Ant2-2437



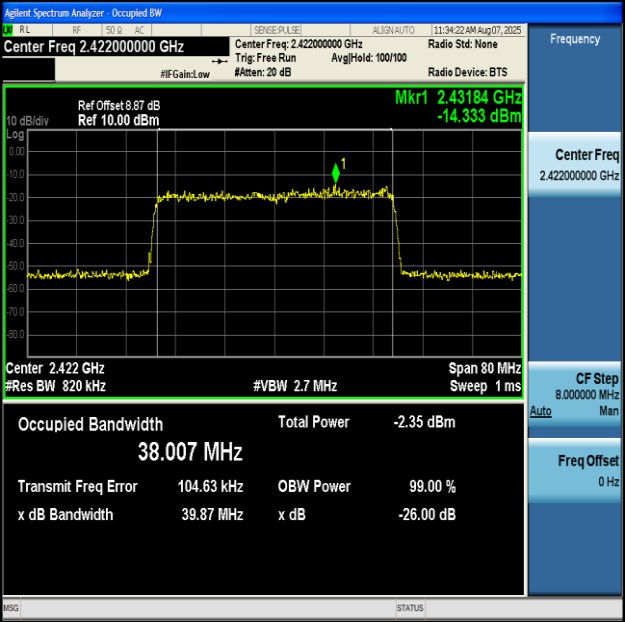
11AX20MIMO-Ant1-2462



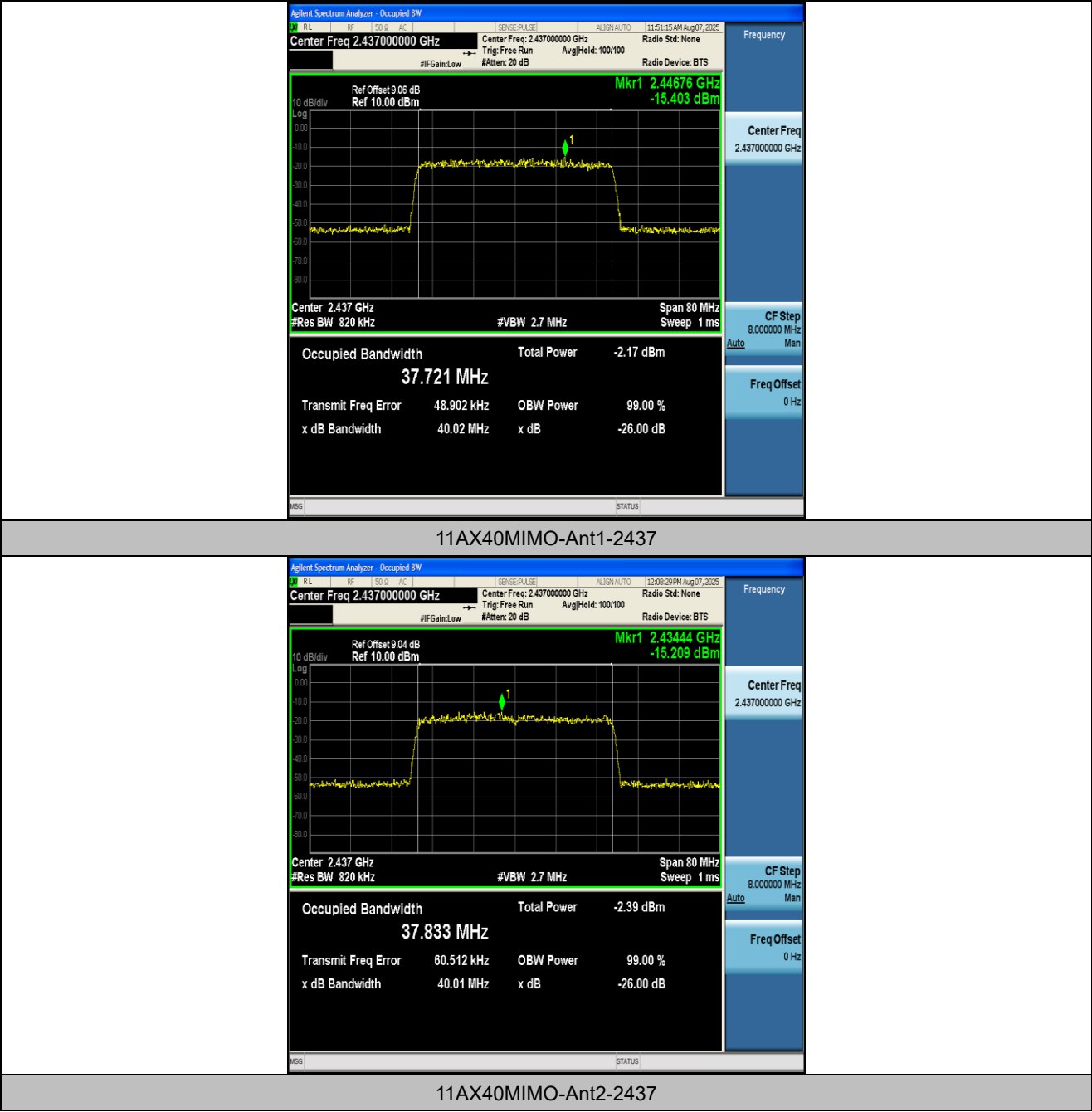
11AX20MIMO-Ant2-2462

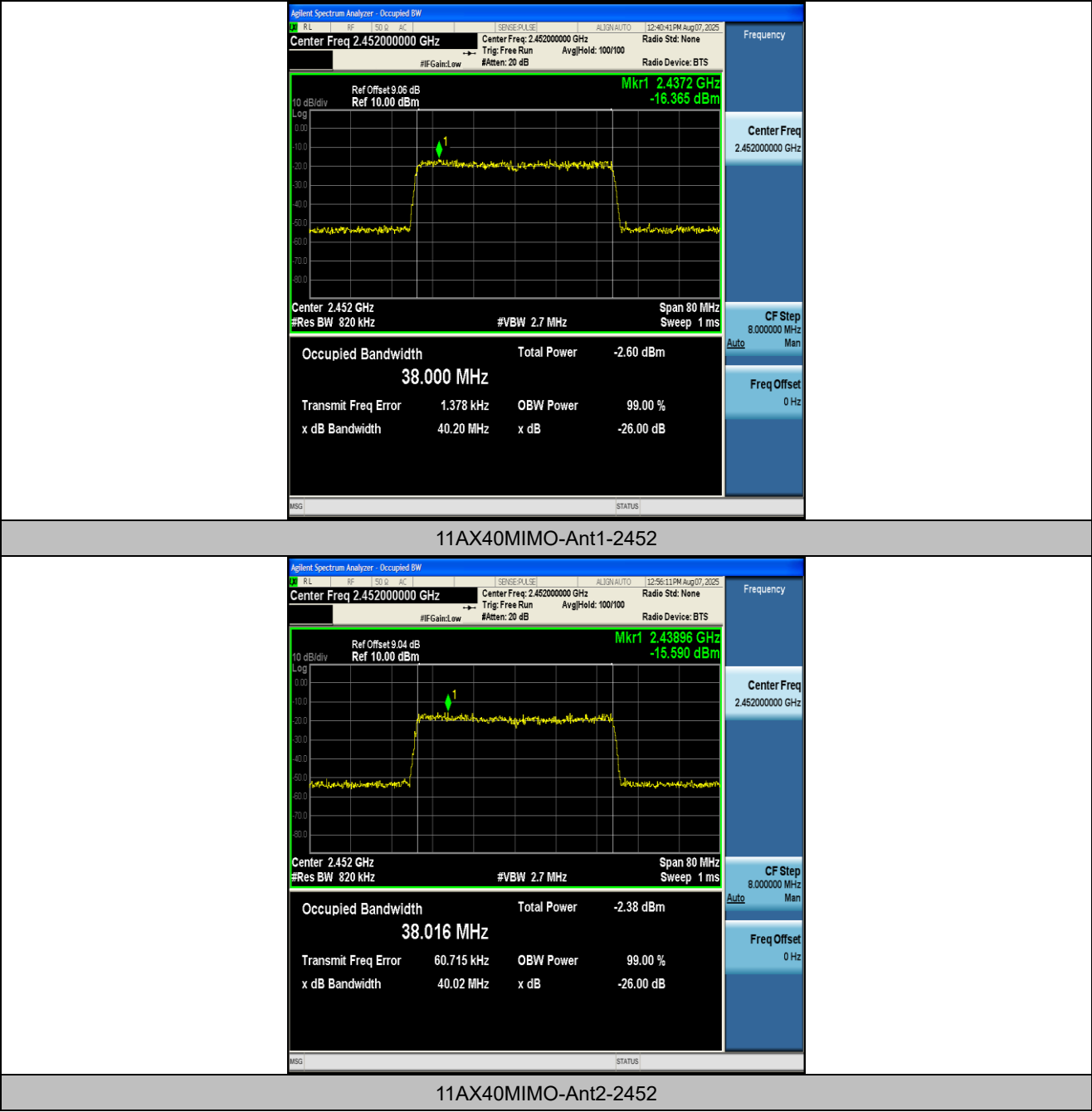


11AX40MIMO-Ant1-2422



11AX40MIMO-Ant2-2422





Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	-2.95	≤30.00	PASS
11B	Ant2	2412	-3.60	≤30.00	PASS
11B	Ant1	2437	-2.73	≤30.00	PASS
11B	Ant2	2437	-3.30	≤30.00	PASS
11B	Ant1	2462	-4.07	≤30.00	PASS
11B	Ant2	2462	-4.53	≤30.00	PASS
11G	Ant1	2412	-3.02	≤30.00	PASS
11G	Ant2	2412	-4.77	≤30.00	PASS
11G	Ant1	2437	-2.21	≤30.00	PASS
11G	Ant2	2437	-4.14	≤30.00	PASS
11G	Ant1	2462	-2.69	≤30.00	PASS
11G	Ant2	2462	-5.38	≤30.00	PASS
11N20MIMO	Ant1	2412	-8.48	≤30.00	PASS
11N20MIMO	Ant2	2412	-8.14	≤30.00	PASS
11N20MIMO	total	2412	-5.30	≤30.00	PASS
11N20MIMO	Ant1	2437	-7.66	≤30.00	PASS
11N20MIMO	Ant2	2437	-7.20	≤30.00	PASS
11N20MIMO	total	2437	-4.41	≤30.00	PASS
11N20MIMO	Ant1	2462	-8.21	≤30.00	PASS
11N20MIMO	Ant2	2462	-8.62	≤30.00	PASS
11N20MIMO	total	2462	-5.40	≤30.00	PASS
11N40MIMO	Ant1	2422	-8.75	≤30.00	PASS
11N40MIMO	Ant2	2422	-8.01	≤30.00	PASS
11N40MIMO	total	2422	-5.35	≤30.00	PASS
11N40MIMO	Ant1	2437	-7.92	≤30.00	PASS
11N40MIMO	Ant2	2437	-8.32	≤30.00	PASS
11N40MIMO	total	2437	-5.11	≤30.00	PASS
11N40MIMO	Ant1	2452	-8.54	≤30.00	PASS
11N40MIMO	Ant2	2452	-8.43	≤30.00	PASS
11N40MIMO	total	2452	-5.47	≤30.00	PASS
11AX20MIMO	Ant2	2412	-8.90	≤30.00	PASS
11AX20MIMO	total	2412	-5.81	≤30.00	PASS
11AX20MIMO	Ant1	2412	-8.75	≤30.00	PASS
11AX20MIMO	Ant1	2437	-8.54	≤30.00	PASS
11AX20MIMO	Ant2	2437	-8.21	≤30.00	PASS

11AX20MIMO	total	2437	-5.36	≤30.00	PASS
11AX20MIMO	Ant1	2462	-8.65	≤30.00	PASS
11AX20MIMO	Ant2	2462	-9.19	≤30.00	PASS
11AX20MIMO	total	2462	-5.90	≤30.00	PASS
11AX40MIMO	Ant1	2422	-8.85	≤30.00	PASS
11AX40MIMO	Ant2	2422	-8.65	≤30.00	PASS
11AX40MIMO	total	2422	-5.74	≤30.00	PASS
11AX40MIMO	Ant1	2437	-8.92	≤30.00	PASS
11AX40MIMO	Ant2	2437	-9.13	≤30.00	PASS
11AX40MIMO	total	2437	-6.01	≤30.00	PASS
11AX40MIMO	Ant1	2452	-8.74	≤30.00	PASS
11AX40MIMO	Ant2	2452	-8.58	≤30.00	PASS
11AX40MIMO	total	2452	-5.65	≤30.00	PASS

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

Appendix D: Maximum Average power spectral density

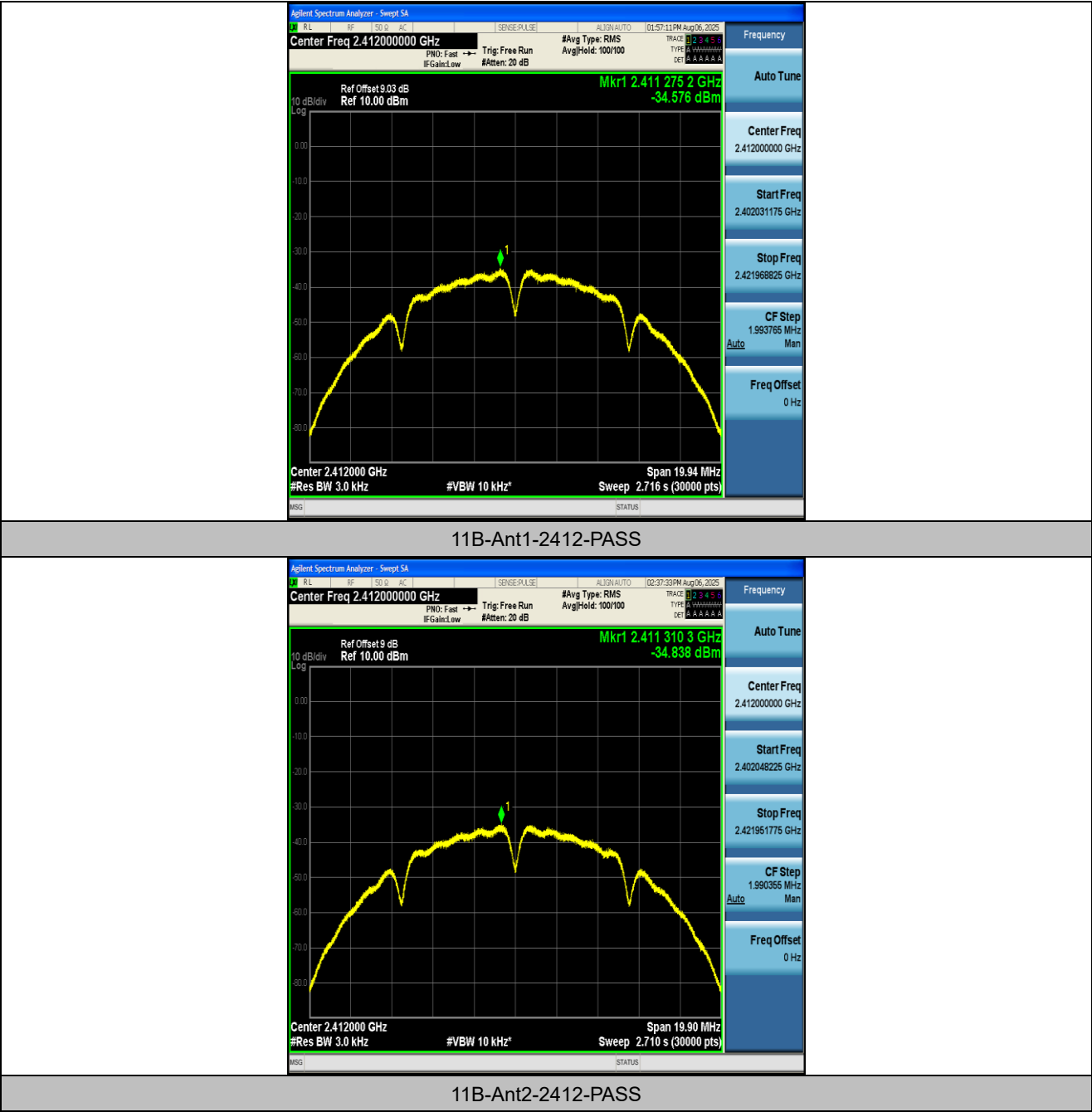
Test Result

Test Mode	Antenna	Frequency [MHz]	Raw. Data [dBm/3-100kHz]	Dc. Factor	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-34.71	0.13	-34.58	≤8.00	PASS
11B	Ant2	2412	-34.97	0.13	-34.84	≤8.00	PASS
11B	Ant1	2437	-33.57	0.13	-33.44	≤8.00	PASS
11B	Ant2	2437	-33.31	0.13	-33.18	≤8.00	PASS
11B	Ant1	2462	-34.23	0.13	-34.10	≤8.00	PASS
11B	Ant2	2462	-34.74	0.13	-34.61	≤8.00	PASS
11G	Ant1	2412	-37.77	0.72	-37.05	≤8.00	PASS
11G	Ant2	2412	-38.95	0.69	-38.26	≤8.00	PASS
11G	Ant1	2437	-37.24	0.72	-36.52	≤8.00	PASS
11G	Ant2	2437	-37.66	0.69	-36.97	≤8.00	PASS
11G	Ant1	2462	-37.71	0.72	-36.99	≤8.00	PASS
11G	Ant2	2462	-39.15	0.69	-38.46	≤8.00	PASS
11N20MIMO	Ant1	2412	-41.82	3.82	-38.00	≤8.00	PASS
11N20MIMO	Ant2	2412	-41.19	4.09	-37.10	≤8.00	PASS
11N20MIMO	total	2412	---	---	-34.52	≤8.00	PASS
11N20MIMO	Ant1	2437	-40.75	3.82	-36.93	≤8.00	PASS
11N20MIMO	Ant2	2437	-39.77	3.98	-35.79	≤8.00	PASS
11N20MIMO	total	2437	---	---	-33.31	≤8.00	PASS
11N20MIMO	Ant1	2462	-41.73	3.82	-37.91	≤8.00	PASS
11N20MIMO	Ant2	2462	-41.55	3.82	-37.73	≤8.00	PASS
11N20MIMO	total	2462	---	---	-34.81	≤8.00	PASS
11N40MIMO	Ant1	2422	-43.36	5.05	-38.31	≤8.00	PASS
11N40MIMO	Ant2	2422	-43.61	5.44	-38.17	≤8.00	PASS
11N40MIMO	total	2422	---	---	-35.23	≤8.00	PASS
11N40MIMO	Ant1	2437	-42.63	5.05	-37.58	≤8.00	PASS
11N40MIMO	Ant2	2437	-41.89	5.44	-36.45	≤8.00	PASS
11N40MIMO	total	2437	---	---	-33.97	≤8.00	PASS
11N40MIMO	Ant1	2452	-43.64	5.05	-38.59	≤8.00	PASS
11N40MIMO	Ant2	2452	-42.66	5.44	-37.22	≤8.00	PASS
11N40MIMO	total	2452	---	---	-34.84	≤8.00	PASS
11AX20MIMO	Ant1	2412	-42.07	4.64	-37.43	≤8.00	PASS
11AX20MIMO	Ant2	2412	-42.63	5.15	-37.48	≤8.00	PASS
11AX20MIMO	total	2412	---	---	-34.44	≤8.00	PASS
11AX20MIMO	Ant1	2437	-41.28	4.64	-36.64	≤8.00	PASS
11AX20MIMO	Ant2	2437	-41.10	4.64	-36.46	≤8.00	PASS
11AX20MIMO	total	2437	---	---	-33.54	≤8.00	PASS
11AX20MIMO	Ant1	2462	-41.78	5.03	-36.75	≤8.00	PASS

11AX20MIMO	Ant2	2462	-42.65	4.77	-37.88	≤8.00	PASS
11AX20MIMO	total	2462	---	---	-34.27	≤8.00	PASS
11AX40MIMO	Ant1	2422	-43.95	5.50	-38.45	≤8.00	PASS
11AX40MIMO	Ant2	2422	-44.47	5.80	-38.67	≤8.00	PASS
11AX40MIMO	total	2422	---	---	-35.55	≤8.00	PASS
11AX40MIMO	Ant1	2437	-45.51	5.50	-40.01	≤8.00	PASS
11AX40MIMO	Ant2	2437	-47.22	5.80	-41.42	≤8.00	PASS
11AX40MIMO	total	2437	---	---	-37.65	≤8.00	PASS
11AX40MIMO	Ant1	2452	-46.60	5.50	-41.10	≤8.00	PASS
11AX40MIMO	Ant2	2452	-46.51	5.80	-40.71	≤8.00	PASS
11AX40MIMO	total	2452	---	---	-37.89	≤8.00	PASS

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

Test Graphs





11B-Ant1-2437-PASS



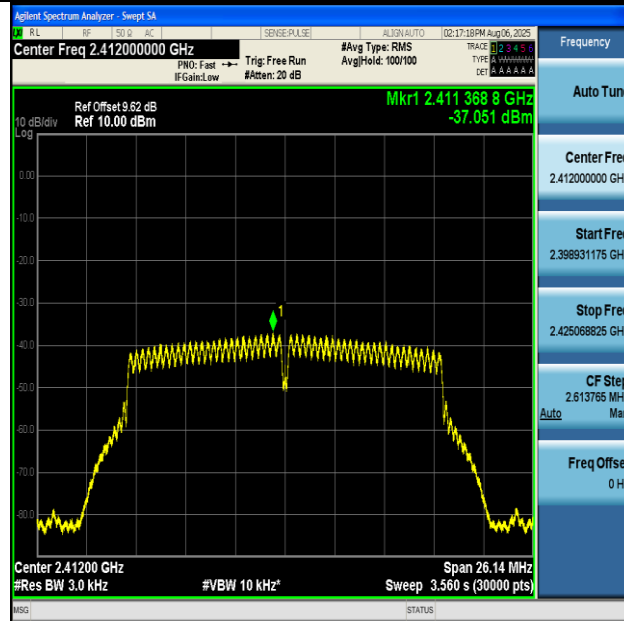
11B-Ant2-2437-PASS



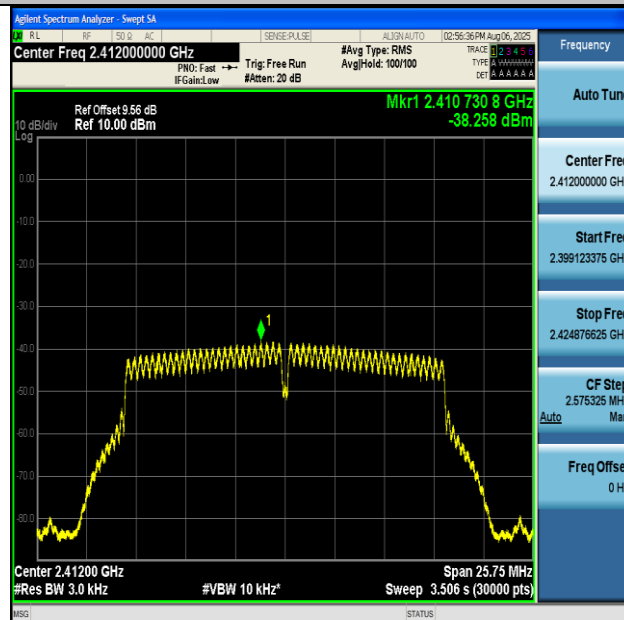
11B-Ant1-2462-PASS



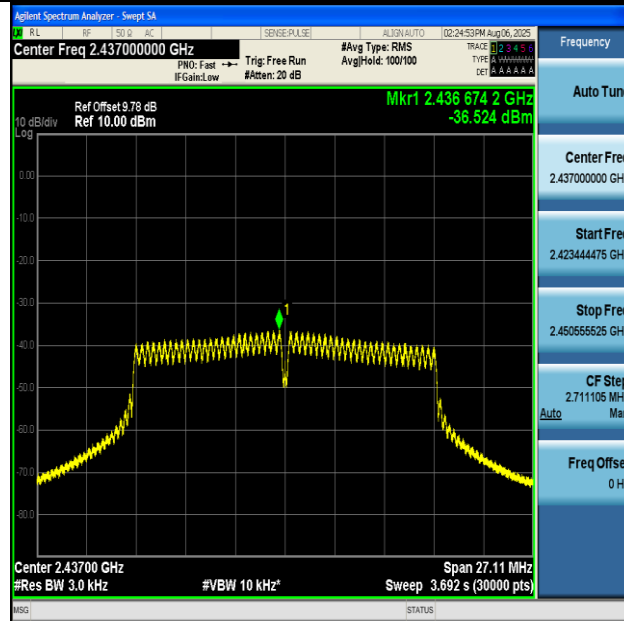
11B-Ant2-2462-PASS



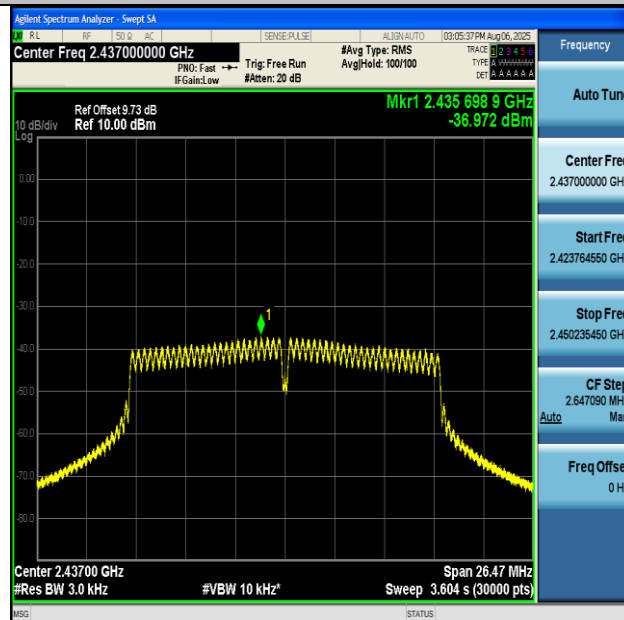
11G-Ant1-2412-PASS



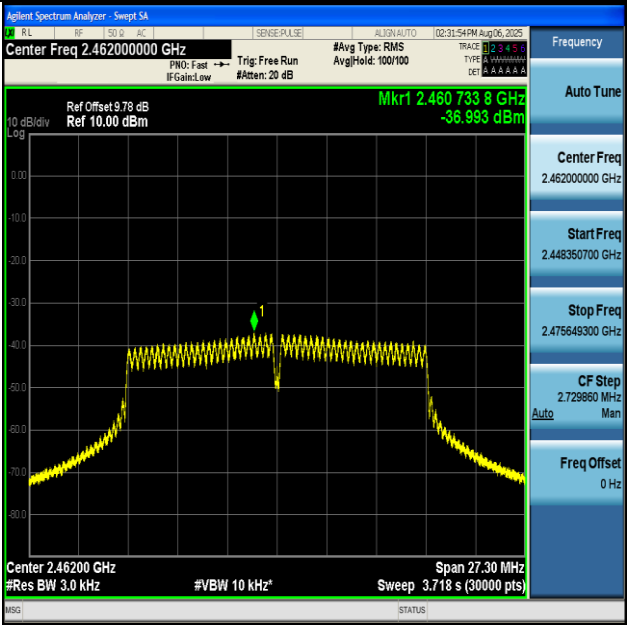
11G-Ant2-2412-PASS



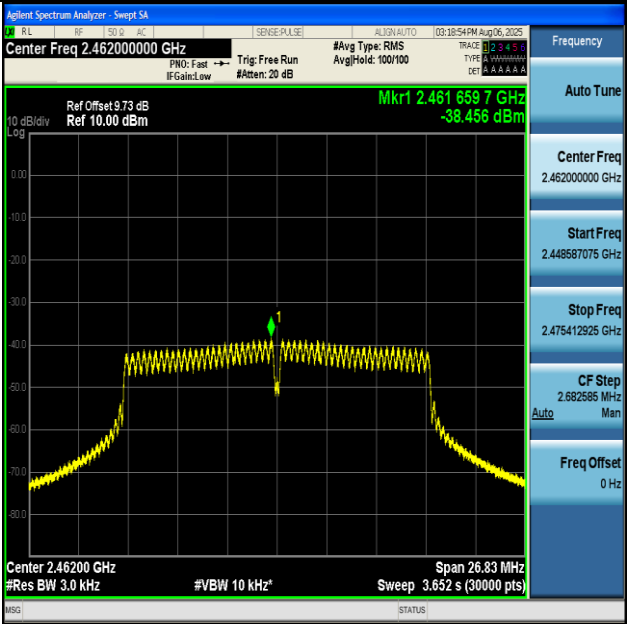
11G-Ant1-2437-PASS



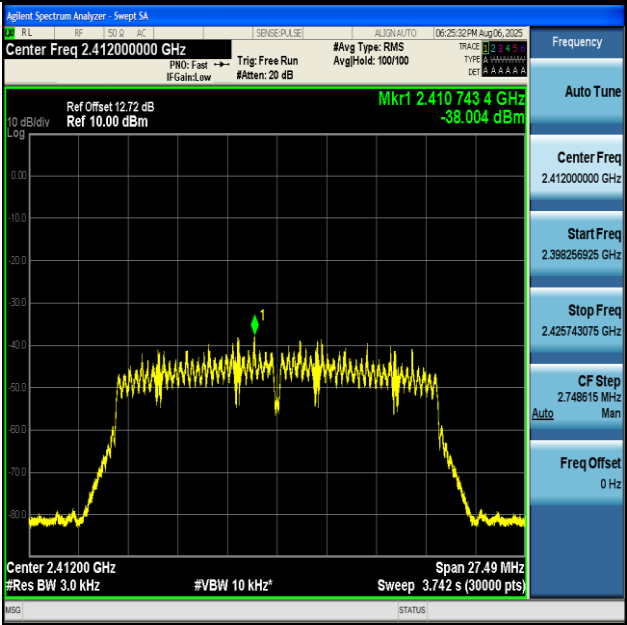
11G-Ant2-2437-PASS



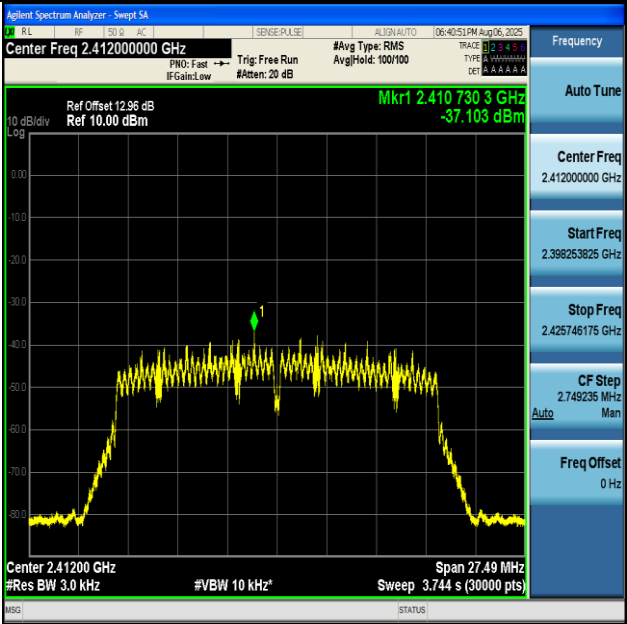
11G-Ant1-2462-PASS



11G-Ant2-2462-PASS



11N20MIMO-Ant1-2412-PASS



11N20MIMO-Ant2-2412-PASS