

Appendix A: Test results

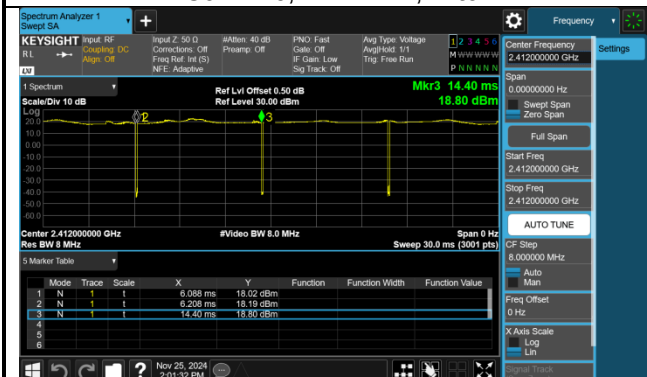
1. Duty Cycle

1.1 Test Data

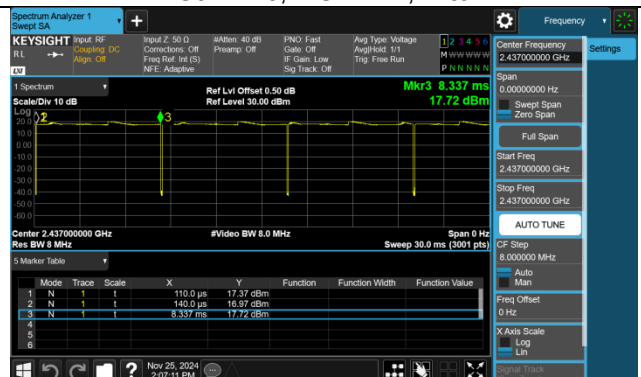
WLAN Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11b	2412	Ant0	98.56	0.00
802.11b	2437	Ant0	99.64	0.00
802.11b	2462	Ant0	98.44	0.00
802.11g	2412	Ant0	90.47	0.43
802.11g	2437	Ant0	89.47	0.48
802.11g	2462	Ant0	97.37	0.12
802.11n (HT20)	2412	Ant0	93.40	0.30
802.11n (HT20)	2437	Ant0	92.72	0.33
802.11n (HT20)	2462	Ant0	97.19	0.12
802.11n (HT40)	2422	Ant0	84.44	0.73
802.11n (HT40)	2437	Ant0	87.56	0.58
802.11n (HT40)	2452	Ant0	94.53	0.24

1.2 Test Plots

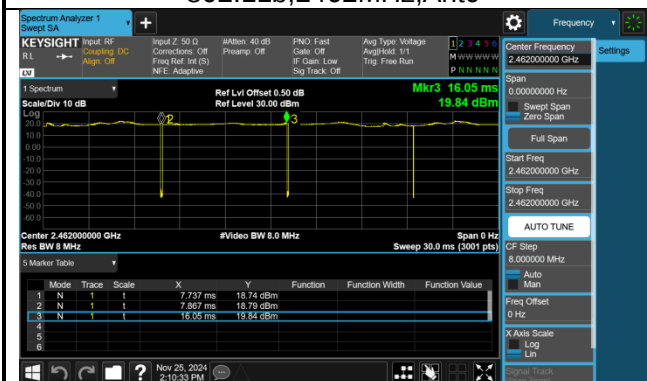
802.11b,2412MHz,Ant0



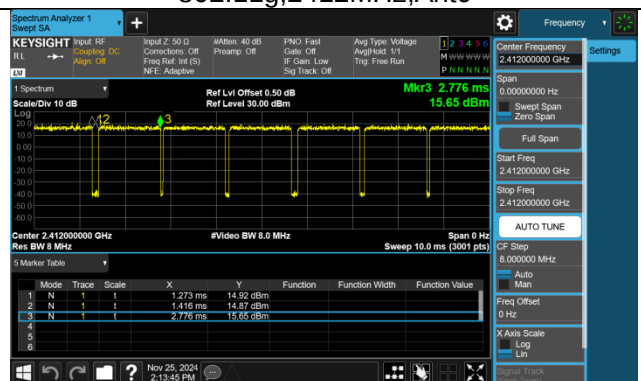
802.11b,2437MHz,Ant0



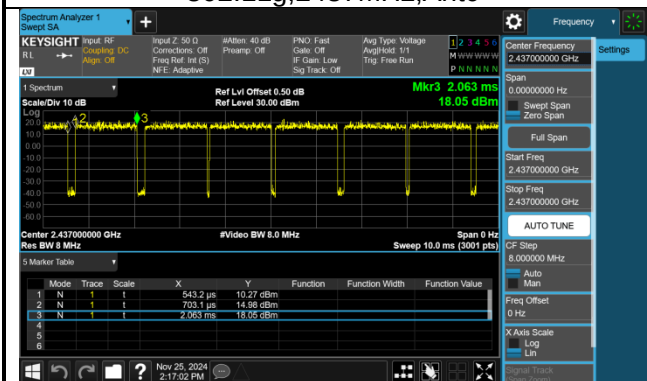
802.11b,2462MHz,Ant0



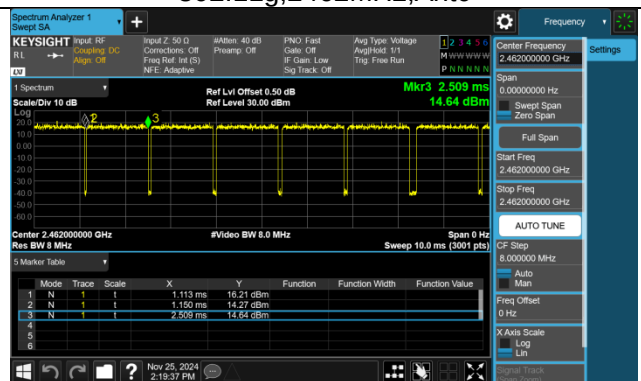
802.11g,2412MHz,Ant0



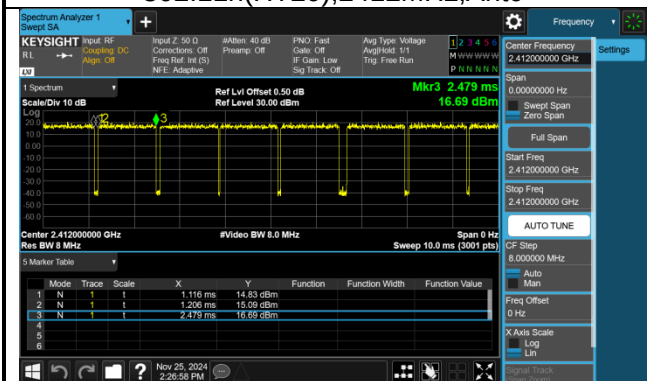
802.11g,2437MHz,Ant0



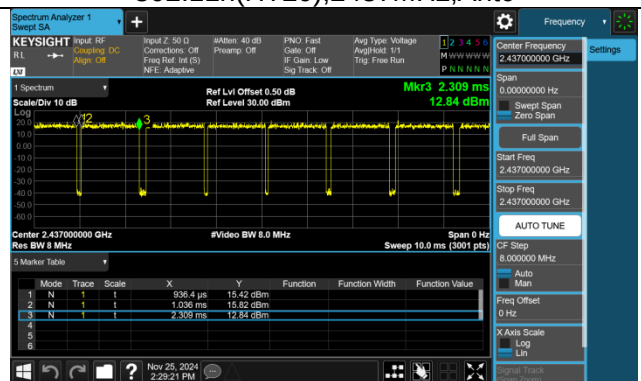
802.11g,2462MHz,Ant0

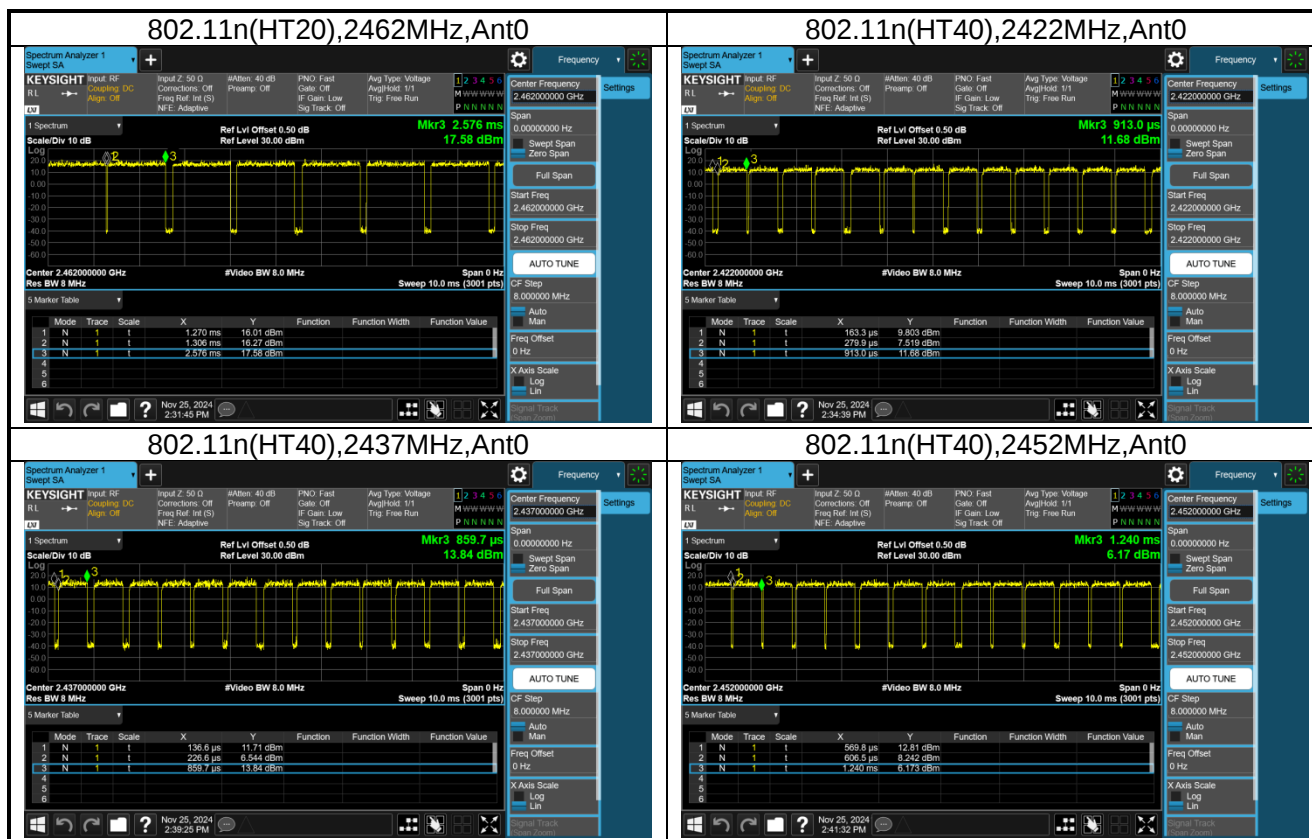


802.11n(HT20),2412MHz,Ant0



802.11n(HT20),2437MHz,Ant0



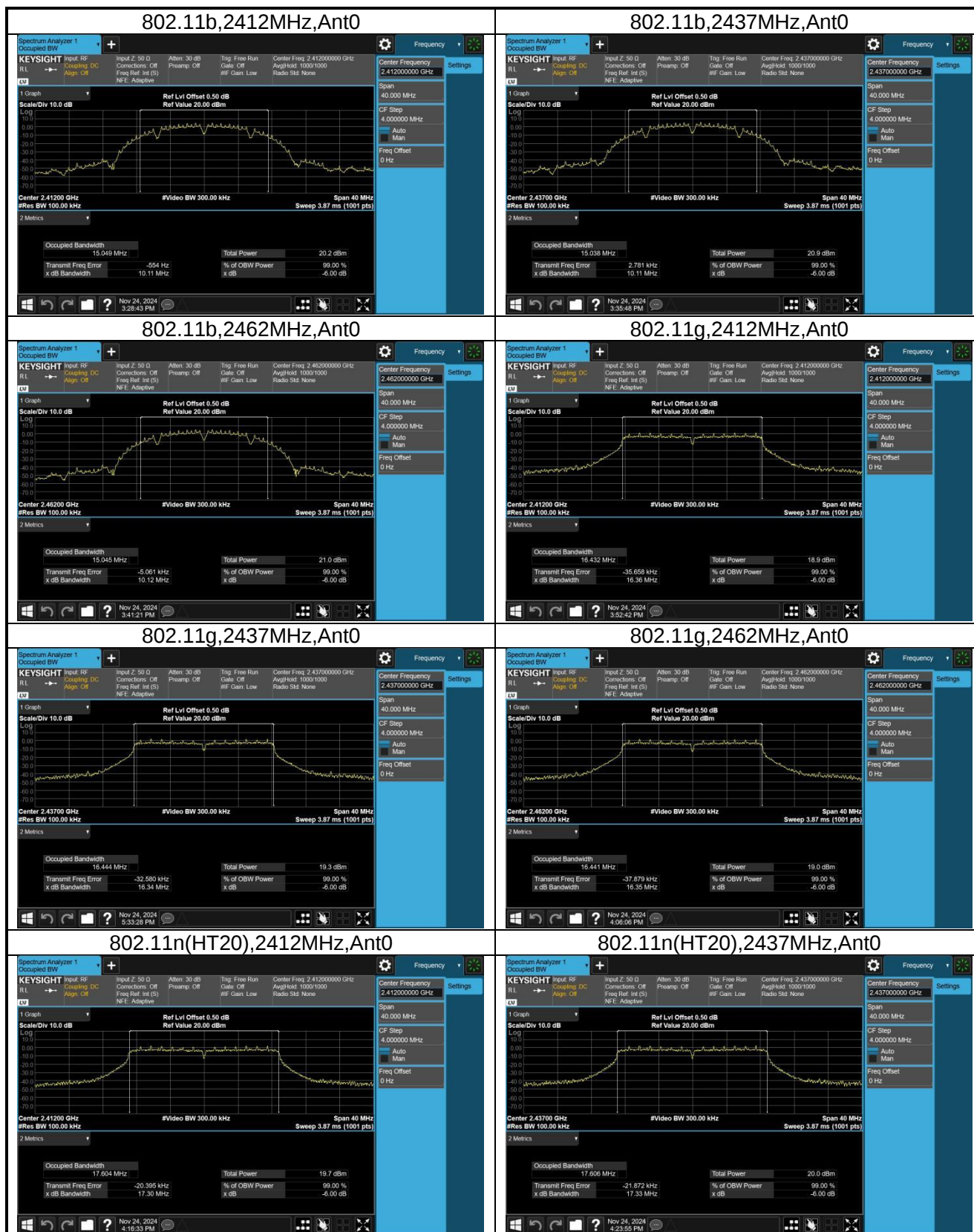


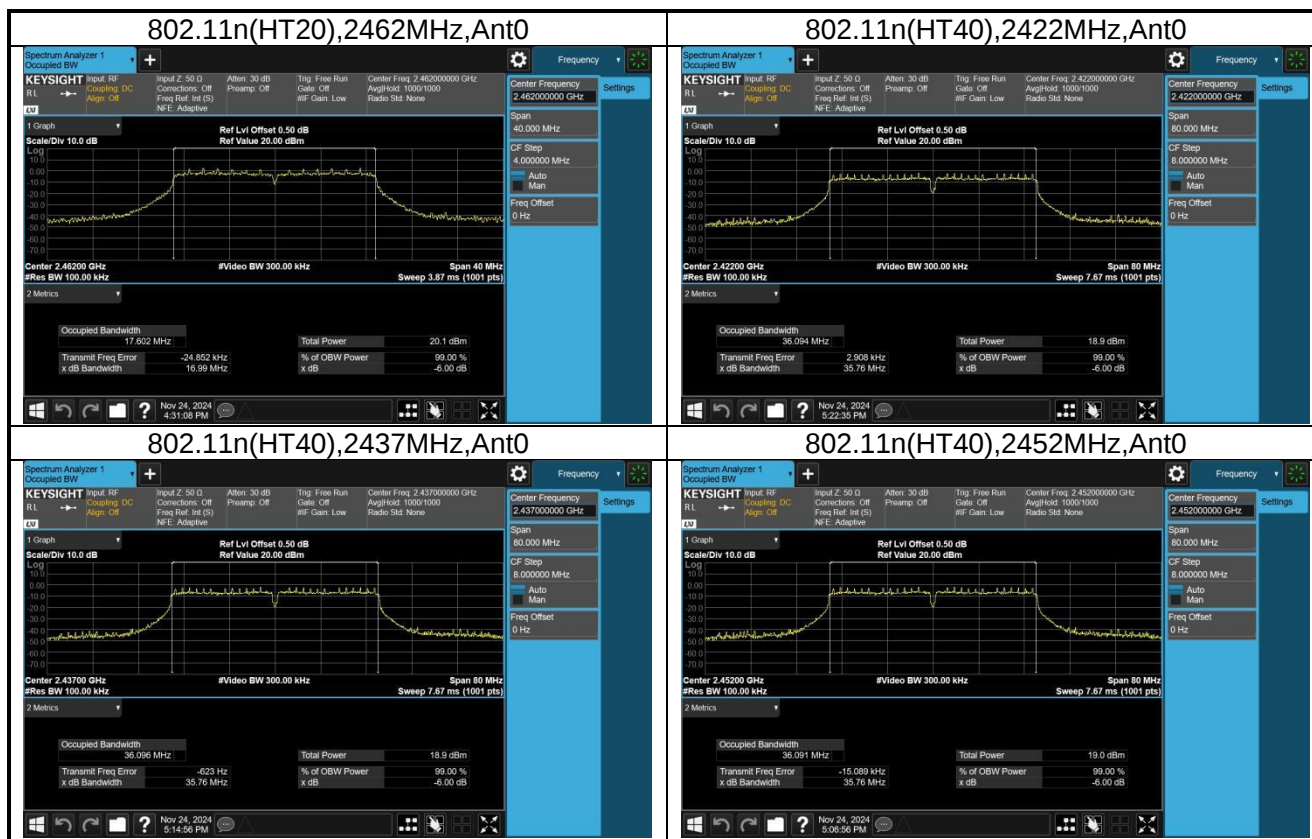
2. Minimum 6dB bandwidth

2.1 Test Data

WLAN Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11b	2412	Ant0	10.11	Pass
802.11b	2437	Ant0	10.12	Pass
802.11b	2462	Ant0	10.12	Pass
802.11g	2412	Ant0	16.36	Pass
802.11g	2437	Ant0	16.34	Pass
802.11g	2462	Ant0	16.35	Pass
802.11n (HT20)	2412	Ant0	17.30	Pass
802.11n (HT20)	2437	Ant0	17.33	Pass
802.11n (HT20)	2462	Ant0	16.99	Pass
802.11n (HT40)	2422	Ant0	35.76	Pass
802.11n (HT40)	2437	Ant0	35.76	Pass
802.11n (HT40)	2452	Ant0	35.76	Pass

2.2 Test Plots



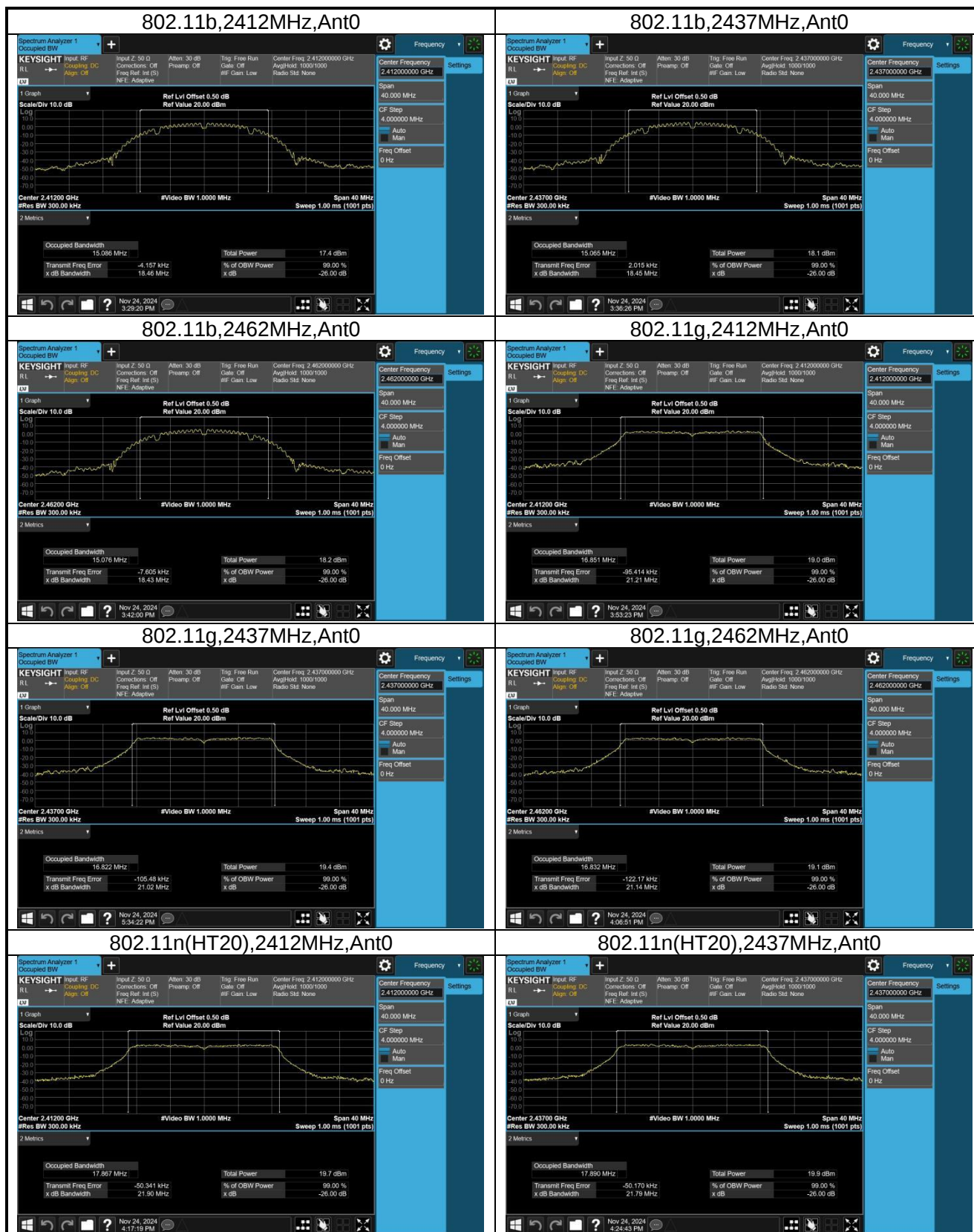


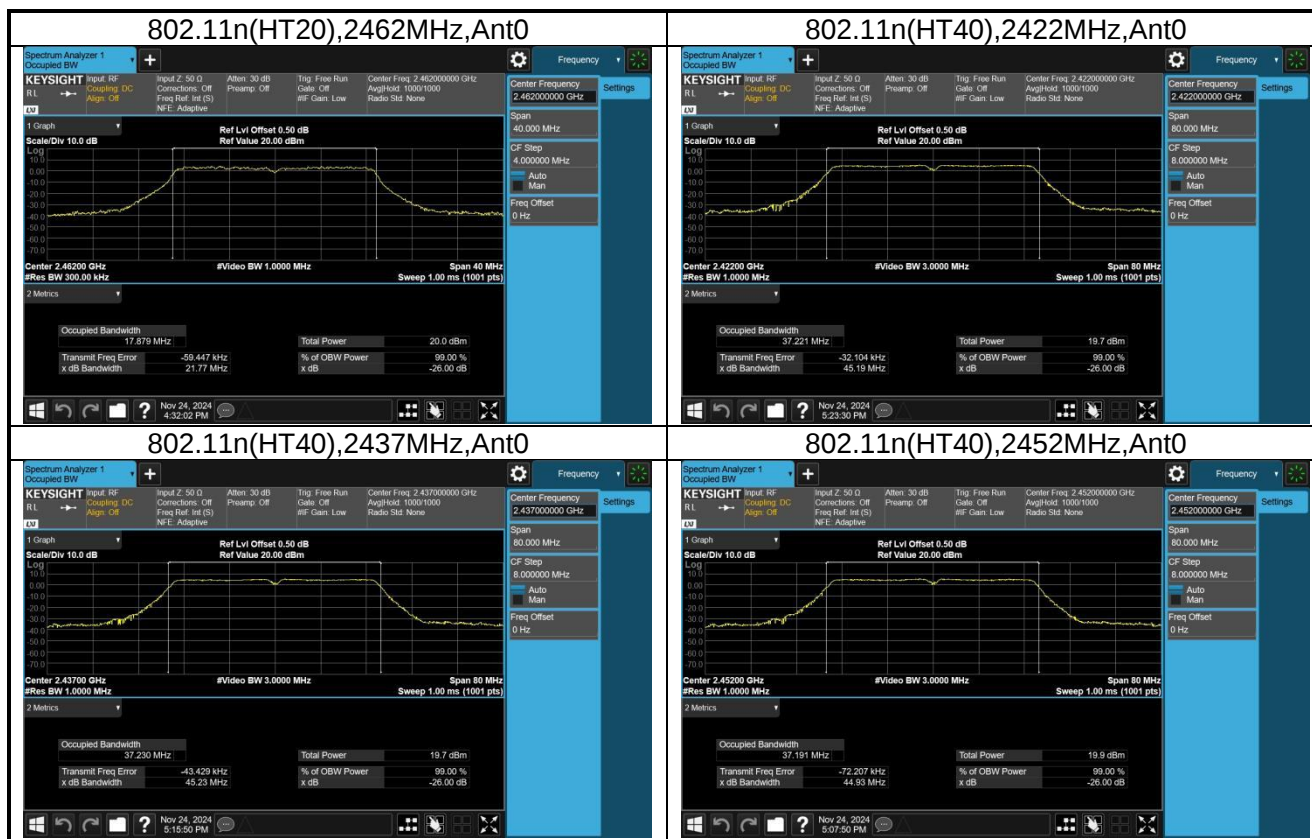
3. Occupied Bandwidth

3.1 Test Data

WLAN 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11b	2412	Ant0	15.086	Pass
802.11b	2437	Ant0	15.065	Pass
802.11b	2462	Ant0	15.076	Pass
802.11g	2412	Ant0	16.851	Pass
802.11g	2437	Ant0	16.822	Pass
802.11g	2462	Ant0	16.832	Pass
802.11n (HT20)	2412	Ant0	17.867	Pass
802.11n (HT20)	2437	Ant0	17.890	Pass
802.11n (HT20)	2462	Ant0	17.879	Pass
802.11n (HT40)	2422	Ant0	37.221	Pass
802.11n (HT40)	2437	Ant0	37.230	Pass
802.11n (HT40)	2452	Ant0	37.191	Pass

3.2 Test Plots



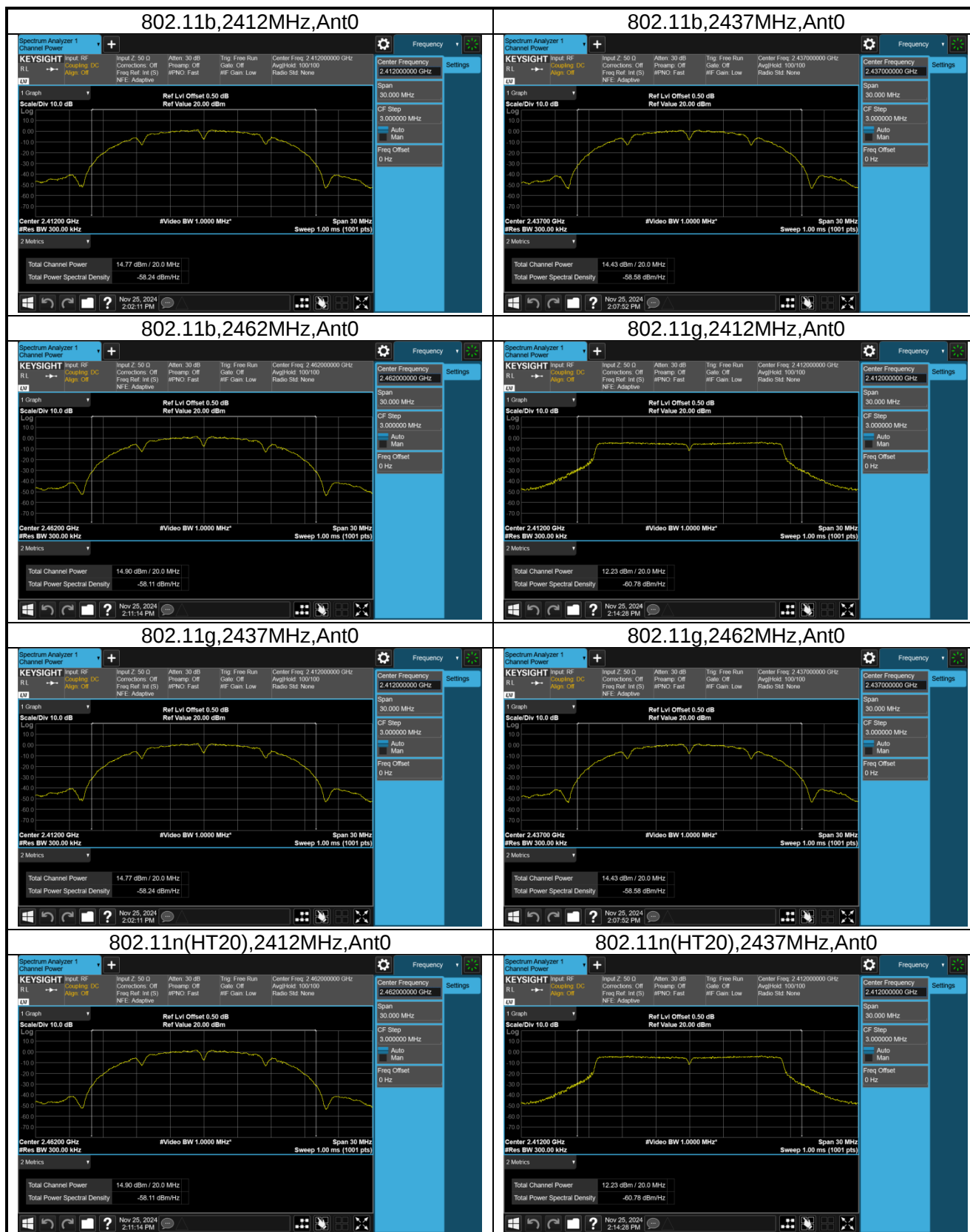


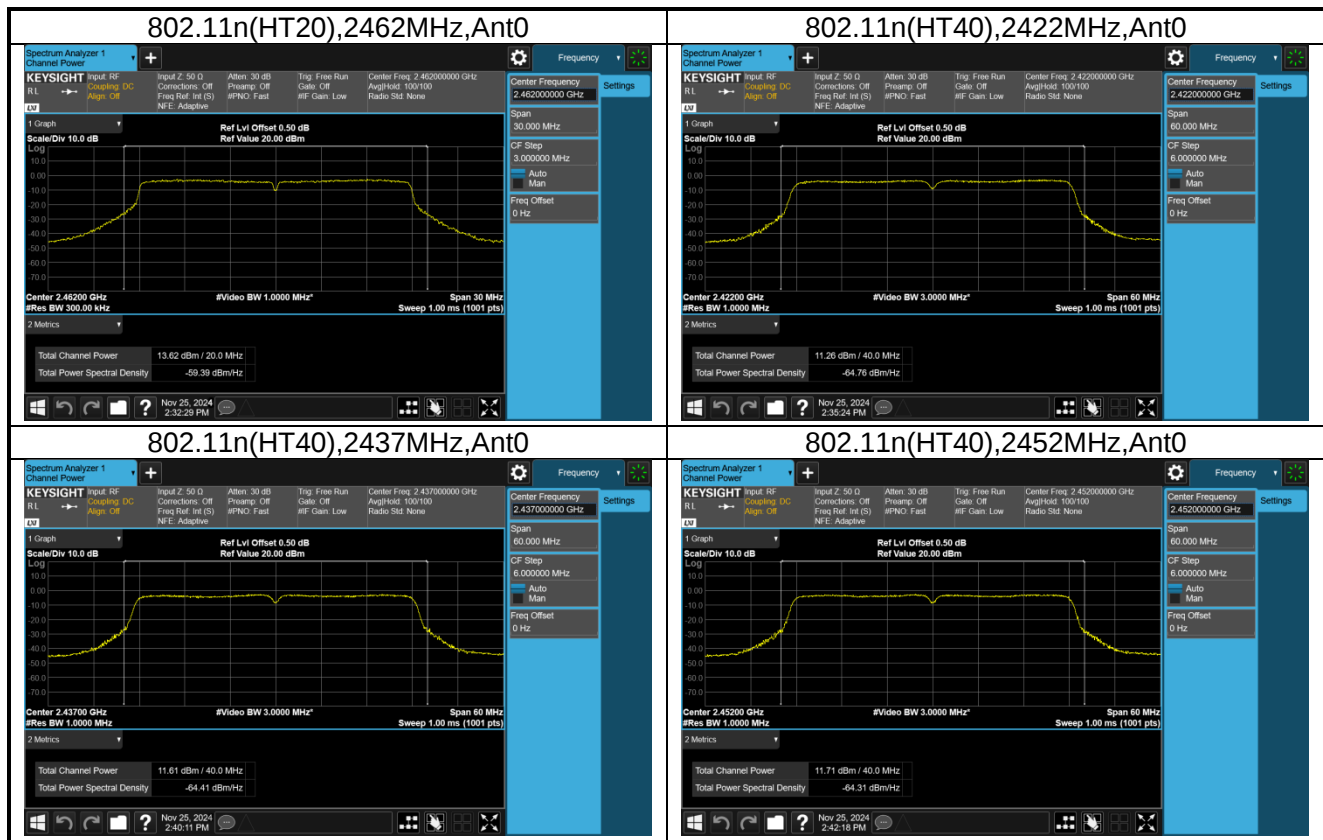
4. Maximum conducted output power and e.i.r.p

4.1 Test Data

WLAN AVGSA Output Power							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Limit (dBm)	EIRP (dBm)	Result
802.11b	2412	Ant0	0.00	14.77	30	18.77	Pass
802.11b	2437	Ant0	0.00	14.43	30	18.43	Pass
802.11b	2462	Ant0	0.00	14.90	30	18.90	Pass
802.11g	2412	Ant0	0.43	12.66	30	16.66	Pass
802.11g	2437	Ant0	0.48	12.54	30	16.54	Pass
802.11g	2462	Ant0	0.12	12.77	30	16.77	Pass
802.11n (HT20)	2412	Ant0	0.30	13.40	30	17.40	Pass
802.11n (HT20)	2437	Ant0	0.33	13.55	30	17.55	Pass
802.11n (HT20)	2462	Ant0	0.12	13.74	30	17.74	Pass
802.11n (HT40)	2422	Ant0	0.73	11.99	30	15.99	Pass
802.11n (HT40)	2437	Ant0	0.58	12.19	30	16.19	Pass
802.11n (HT40)	2452	Ant0	0.24	11.95	30	15.95	Pass

4.2 Test Plots



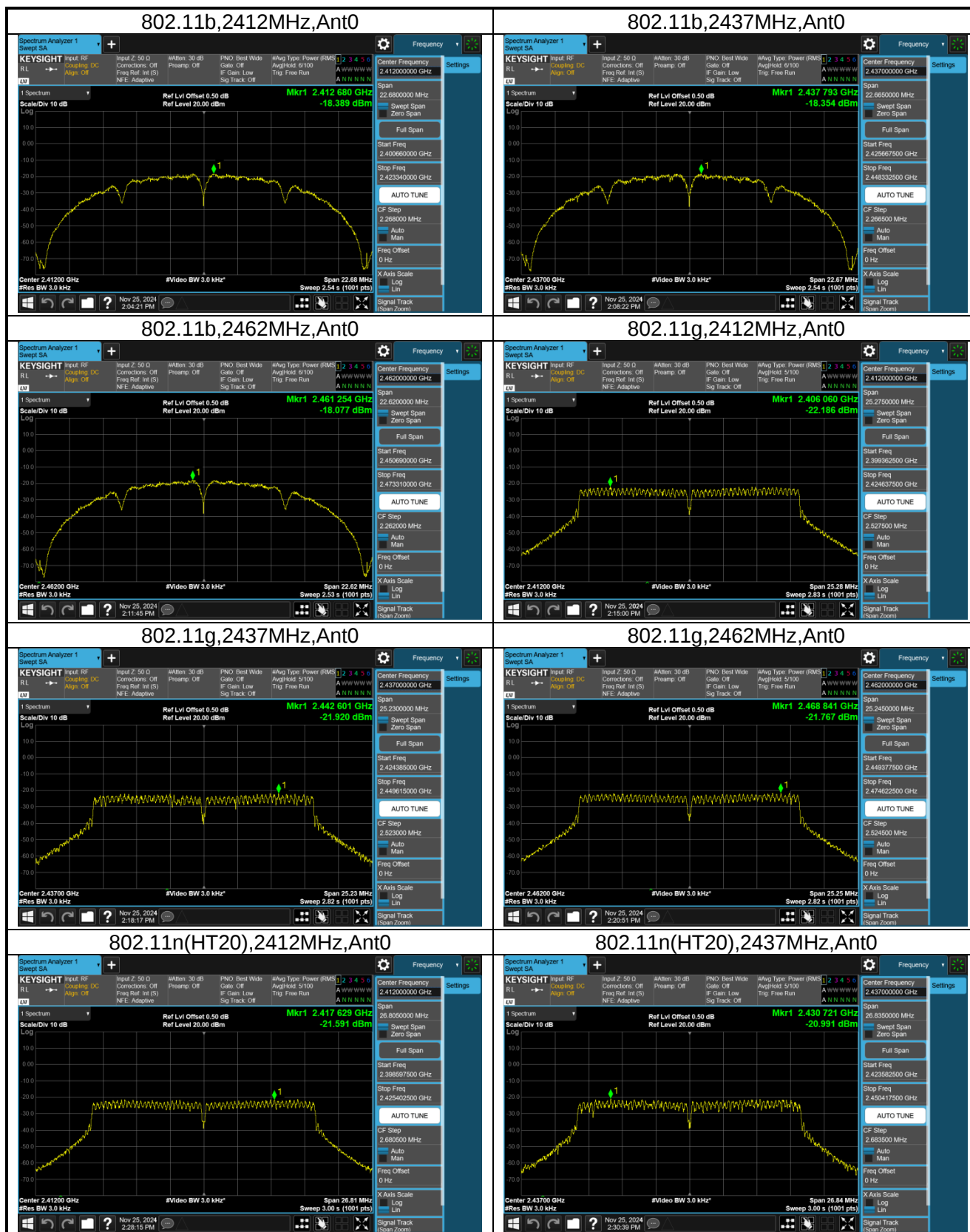


5. Power spectrum density

5.1 Test Data

WLAN AVGSA Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm)	RBW (kHz)	Limit (dBm)	Result
802.11b	2412	Ant0	0.00	-18.389	3	8	Pass
802.11b	2437	Ant0	0.00	-18.354	3	8	Pass
802.11b	2462	Ant0	0.00	-18.077	3	8	Pass
802.11g	2412	Ant0	0.43	-21.618	3	8	Pass
802.11g	2437	Ant0	0.48	-21.440	3	8	Pass
802.11g	2462	Ant0	0.12	-21.647	3	8	Pass
802.11n (HT20)	2412	Ant0	0.30	-21.291	3	8	Pass
802.11n (HT20)	2437	Ant0	0.33	-20.661	3	8	Pass
802.11n (HT20)	2462	Ant0	0.12	-21.389	3	8	Pass
802.11n (HT40)	2422	Ant0	0.73	-20.559	10	8	Pass
802.11n (HT40)	2437	Ant0	0.58	-20.291	10	8	Pass
802.11n (HT40)	2452	Ant0	0.24	-20.517	10	8	Pass

5.2 Test Plots





6. Emission outside the frequency band

6.1 Test Data

WLAN Transmitter Spurious Emission						
Mode	Test Frequency (MHz)	Ant	Plot No.	Frequency Range	Emission (dBm)	Result
802.11b	2412	Ant0	1	Reference Level	4.56	Pass
802.11b	2412	Ant0	2	Band Edge	-38.30	Pass
802.11b	2412	Ant0	3	30MHz~2310MHz	-58.61	Pass
802.11b	2412	Ant0	4	2500MHz~5000MHz	-55.65	Pass
802.11b	2412	Ant0	5	5000MHz~15000MHz	-54.45	Pass
802.11b	2412	Ant0	6	15000MHz~25000MHz	-51.70	Pass
802.11b	2437	Ant0	1	Reference Level	4.90	Pass
802.11b	2437	Ant0	2	Band Edge	-57.27	Pass
802.11b	2437	Ant0	3	30MHz~2310MHz	-58.69	Pass
802.11b	2437	Ant0	4	2500MHz~5000MHz	-56.17	Pass
802.11b	2437	Ant0	5	5000MHz~15000MHz	-55.04	Pass
802.11b	2437	Ant0	6	15000MHz~25000MHz	-52.18	Pass
802.11b	2462	Ant0	1	Reference Level	5.28	Pass
802.11b	2462	Ant0	2	Band Edge	-46.85	Pass
802.11b	2462	Ant0	3	30MHz~2310MHz	-58.03	Pass
802.11b	2462	Ant0	4	2500MHz~5000MHz	-54.23	Pass
802.11b	2462	Ant0	5	5000MHz~15000MHz	-54.22	Pass
802.11b	2462	Ant0	6	15000MHz~25000MHz	-51.81	Pass
802.11g	2412	Ant0	1	Reference Level	0.81	Pass
802.11g	2412	Ant0	2	Band Edge	-36.92	Pass
802.11g	2412	Ant0	3	30MHz~2310MHz	-54.98	Pass
802.11g	2412	Ant0	4	2500MHz~5000MHz	-55.90	Pass
802.11g	2412	Ant0	5	5000MHz~15000MHz	-54.79	Pass
802.11g	2412	Ant0	6	15000MHz~25000MHz	-51.89	Pass
802.11g	2462	Ant0	1	Reference Level	1.12	Pass

802.11g	2462	Ant0	2	Band Edge	-46.04	Pass
802.11g	2462	Ant0	3	30MHz~2310MHz	-54.48	Pass
802.11g	2462	Ant0	4	2500MHz~5000MHz	-55.53	Pass
802.11g	2462	Ant0	5	5000MHz~15000MHz	-54.88	Pass
802.11g	2462	Ant0	6	15000MHz~25000MHz	-51.14	Pass
802.11n (HT20)	2412	Ant0	1	Reference Level	1.86	Pass
802.11n (HT20)	2412	Ant0	2	Band Edge	-34.08	Pass
802.11n (HT20)	2412	Ant0	3	30MHz~2310MHz	-58.76	Pass
802.11n (HT20)	2412	Ant0	4	2500MHz~5000MHz	-55.96	Pass
802.11n (HT20)	2412	Ant0	5	5000MHz~15000MHz	-54.18	Pass
802.11n (HT20)	2412	Ant0	6	15000MHz~25000MHz	-52.06	Pass
802.11n (HT20)	2437	Ant0	1	Reference Level	2.18	Pass
802.11n (HT20)	2437	Ant0	2	Band Edge	-54.89	Pass
802.11n (HT20)	2437	Ant0	3	30MHz~2310MHz	-58.44	Pass
802.11n (HT20)	2437	Ant0	4	2500MHz~5000MHz	-56.44	Pass
802.11n (HT20)	2437	Ant0	5	5000MHz~15000MHz	-55.19	Pass
802.11n (HT20)	2437	Ant0	6	15000MHz~25000MHz	-51.89	Pass
802.11n (HT20)	2462	Ant0	1	Reference Level	2.11	Pass
802.11n (HT20)	2462	Ant0	2	Band Edge	-44.10	Pass
802.11n (HT20)	2462	Ant0	3	30MHz~2310MHz	-58.47	Pass
802.11n (HT20)	2462	Ant0	4	2500MHz~5000MHz	-55.98	Pass
802.11n (HT20)	2462	Ant0	5	5000MHz~15000MHz	-55.10	Pass
802.11n (HT20)	2462	Ant0	6	15000MHz~25000MHz	-52.28	Pass
802.11n (HT40)	2422	Ant0	1	Reference Level	-2.17	Pass
802.11n (HT40)	2422	Ant0	2	Band Edge	-36.30	Pass

802.11n (HT40)	2422	Ant0	3	30MHz~2310MHz	-56.53	Pass
802.11n (HT40)	2422	Ant0	4	2500MHz~5000MHz	-55.75	Pass
802.11n (HT40)	2422	Ant0	5	5000MHz~15000MHz	-54.93	Pass
802.11n (HT40)	2422	Ant0	6	15000MHz~25000MHz	-51.98	Pass
802.11n (HT40)	2437	Ant0	1	Reference Level	-1.98	Pass
802.11n (HT40)	2437	Ant0	2	Band Edge	-42.37	Pass
802.11n (HT40)	2437	Ant0	3	30MHz~2310MHz	-57.22	Pass
802.11n (HT40)	2437	Ant0	4	2500MHz~5000MHz	-55.92	Pass
802.11n (HT40)	2437	Ant0	5	5000MHz~15000MHz	-54.62	Pass
802.11n (HT40)	2437	Ant0	6	15000MHz~25000MHz	-52.17	Pass
802.11n (HT40)	2452	Ant0	1	Reference Level	-1.93	Pass
802.11n (HT40)	2452	Ant0	2	Band Edge	-39.52	Pass
802.11n (HT40)	2452	Ant0	3	30MHz~2310MHz	-56.99	Pass
802.11n (HT40)	2452	Ant0	4	2500MHz~5000MHz	-49.34	Pass
802.11n (HT40)	2452	Ant0	5	5000MHz~15000MHz	-54.96	Pass
802.11n (HT40)	2452	Ant0	6	15000MHz~25000MHz	-51.73	Pass

9.2 Test Plots

802.11b,2412MHz,Ant0,Plot 1,Reference
Level



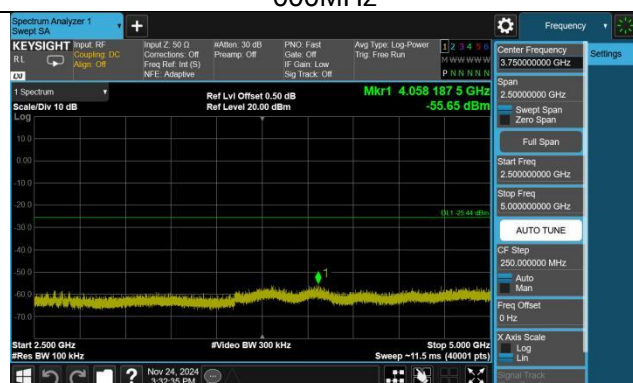
802.11b,2412MHz,Ant0,Plot 2,Band
Edge



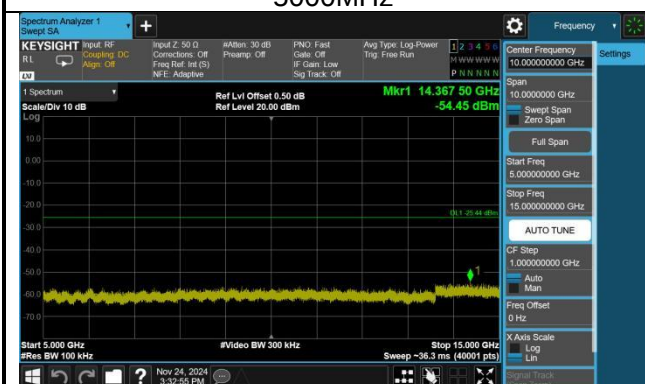
802.11b,2412MHz,Ant0,Plot 3,30MHz~231
0MHz



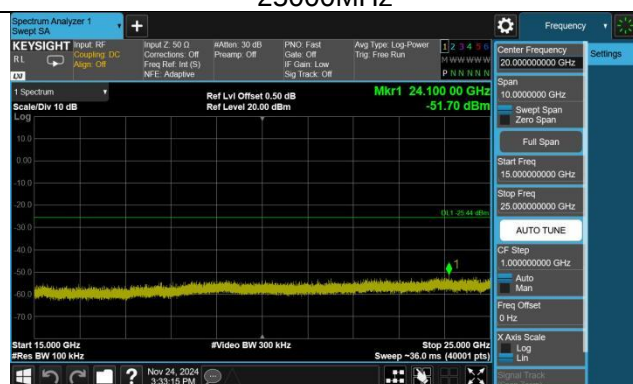
802.11b,2412MHz,Ant0,Plot 4,2500MHz~5
000MHz



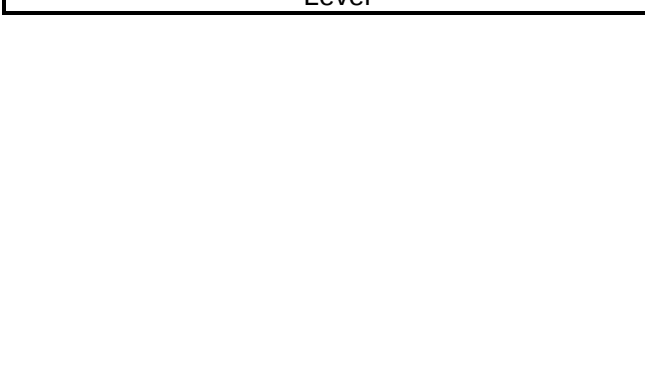
802.11b,2412MHz,Ant0,Plot 5,5000MHz~1
5000MHz



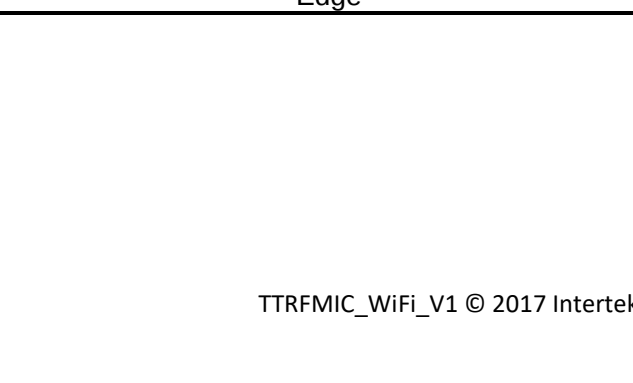
802.11b,2412MHz,Ant0,Plot 6,15000MHz~
25000MHz



802.11b,2437MHz,Ant0,Plot 1,Reference
Level



802.11b,2437MHz,Ant0,Plot 2,Band
Edge

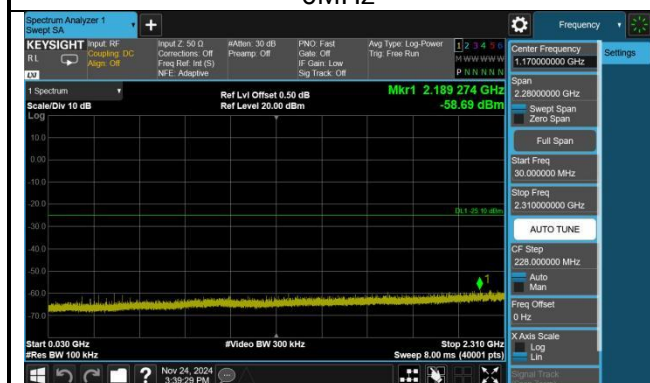




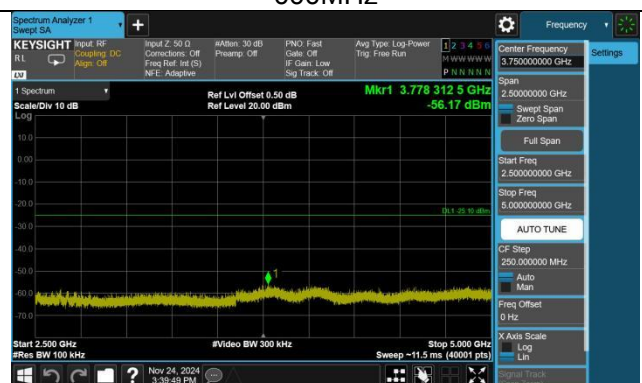
802.11b,2437MHz,Ant0,Plot 3,30MHz~2310MHz



802.11b,2437MHz,Ant0,Plot 4,2500MHz~5000MHz



802.11b,2437MHz,Ant0,Plot 5,5000MHz~15000MHz



802.11b,2437MHz,Ant0,Plot 6,15000MHz~25000MHz



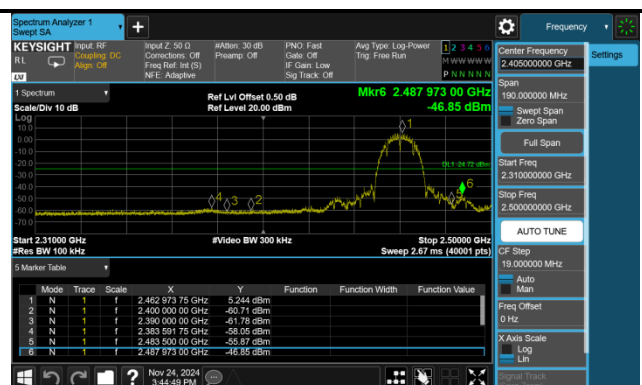
802.11b,2462MHz,Ant0,Plot 1,Reference Level



802.11b,2462MHz,Ant0,Plot 2,Band Edge



802.11b,2462MHz,Ant0,Plot 3,30MHz~231 0MHz



802.11b,2462MHz,Ant0,Plot 4,2500MHz~5 000MHz



802.11b,2462MHz,Ant0,Plot 5,5000MHz~1 5000MHz



802.11b,2462MHz,Ant0,Plot 6,15000MHz~25000MHz



802.11g,2412MHz,Ant0,Plot 1,Reference Level



802.11g,2412MHz,Ant0,Plot 2,Band Edge