

Appendix A: Test results

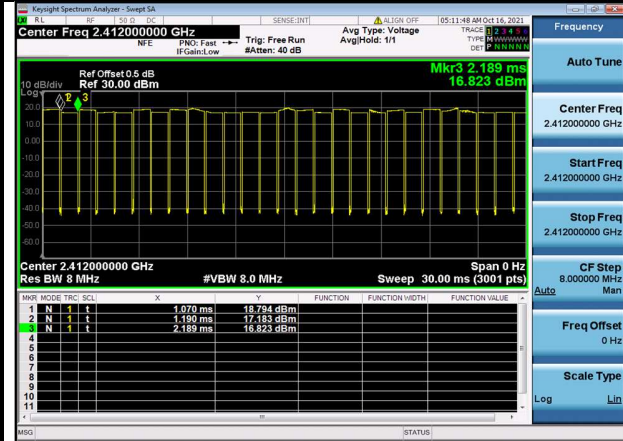
1. Duty Cycle

1.1 Test Data

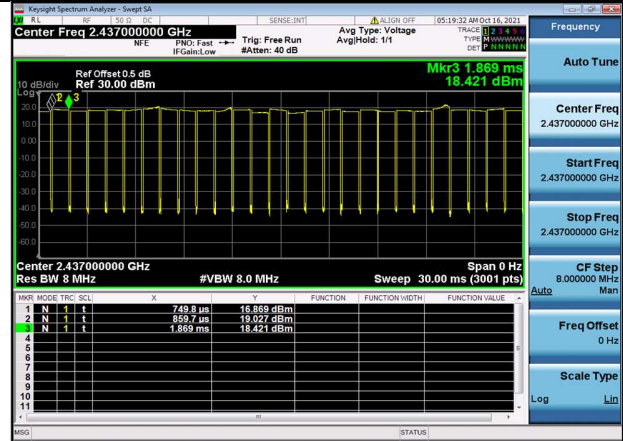
WLAN Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11b	2412	Ant0	89.29	0.49
802.11b	2437	Ant0	90.18	0.45
802.11b	2462	Ant0	90.18	0.45
802.11g	2412	Ant0	91.18	0.40
802.11g	2437	Ant0	89.86	0.46
802.11g	2462	Ant0	89.86	0.46
802.11n (HT20)	2412	Ant0	89.86	0.46
802.11n (HT20)	2437	Ant0	89.71	0.47
802.11n (HT20)	2462	Ant0	89.71	0.47

1.2 Test Plots

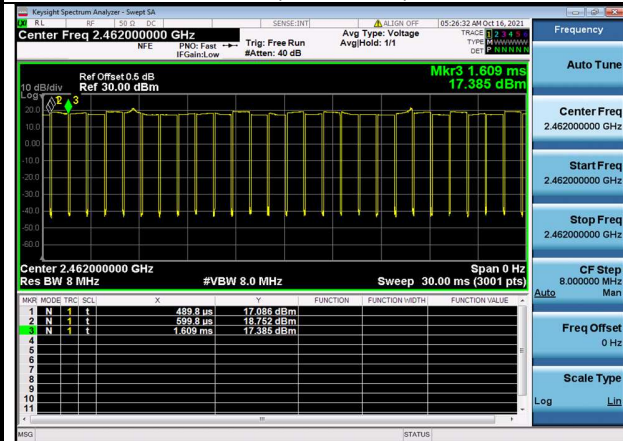
802.11b,2412MHz,Ant0



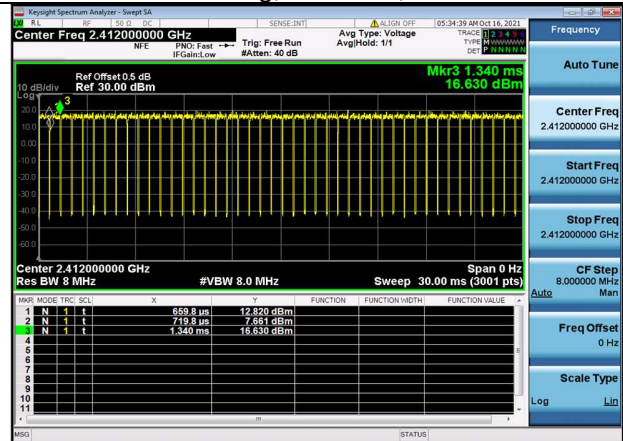
802.11b,2437MHz,Ant0



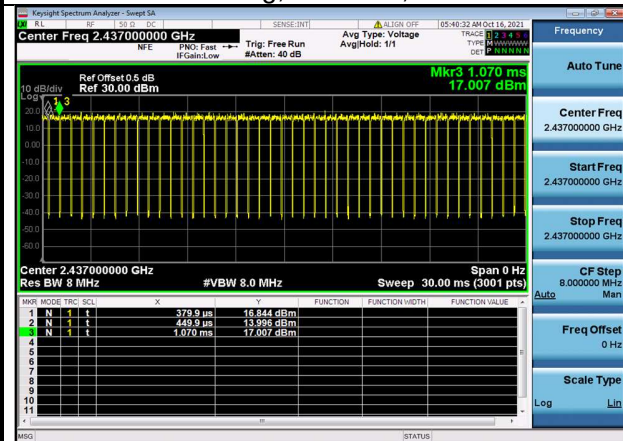
802.11b,2462MHz,Ant0



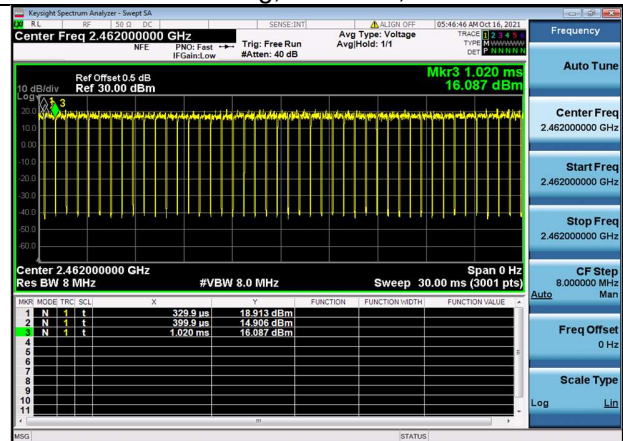
802.11g,2412MHz,Ant0



802.11g,2437MHz,Ant0

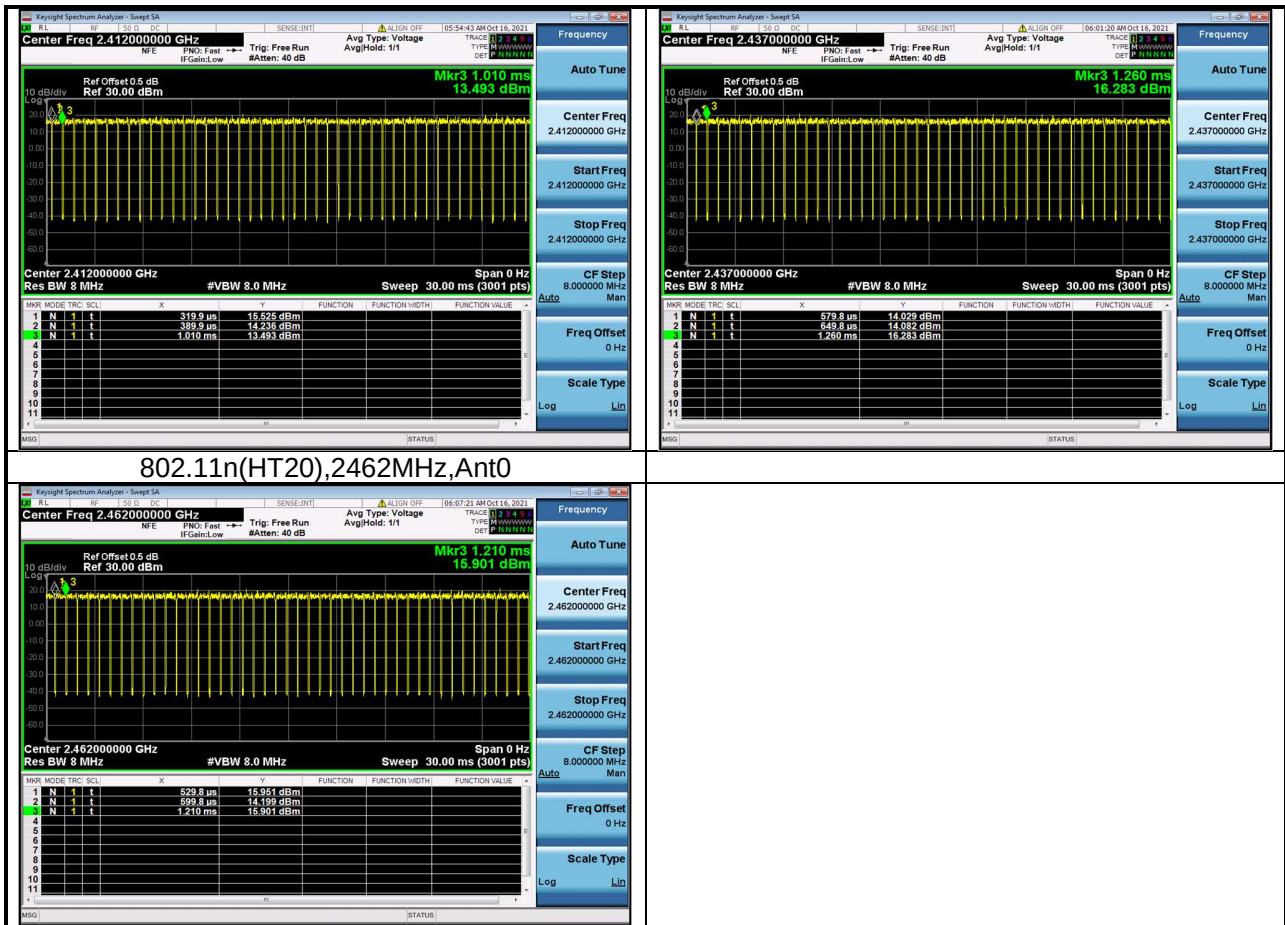


802.11g,2462MHz,Ant0



802.11n(HT20),2412MHz,Ant0

802.11n(HT20),2437MHz,Ant0



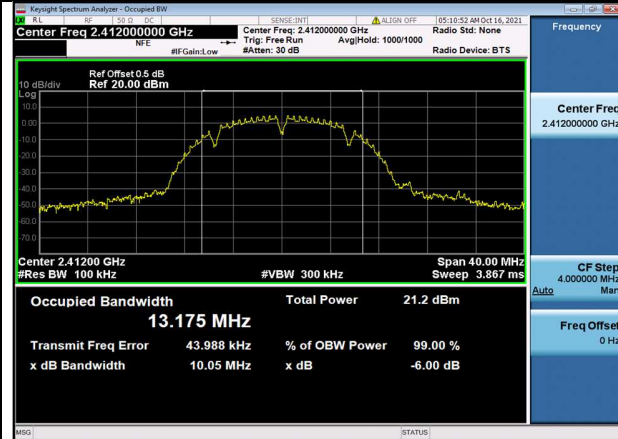
2. Minimum 6dB bandwidth

2.1 Test Data

WLAN Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11b	2412	Ant0	10.05	Pass
802.11b	2437	Ant0	10.06	Pass
802.11b	2462	Ant0	10.06	Pass
802.11g	2412	Ant0	16.39	Pass
802.11g	2437	Ant0	16.38	Pass
802.11g	2462	Ant0	16.38	Pass
802.11n (HT20)	2412	Ant0	17.61	Pass
802.11n (HT20)	2437	Ant0	17.61	Pass
802.11n (HT20)	2462	Ant0	17.60	Pass

2.2 Test Plots

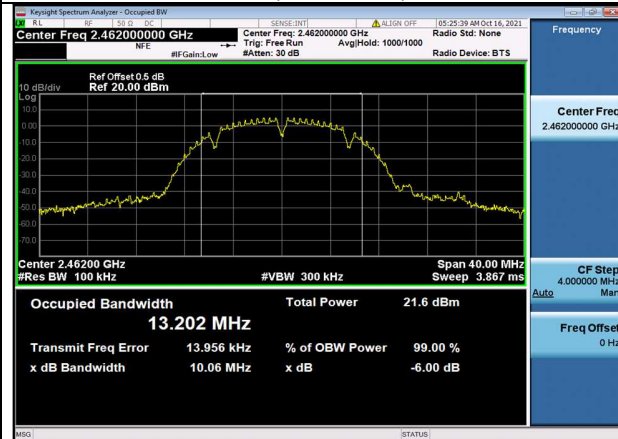
802.11b,2412MHz,Ant0



802.11b,2437MHz,Ant0



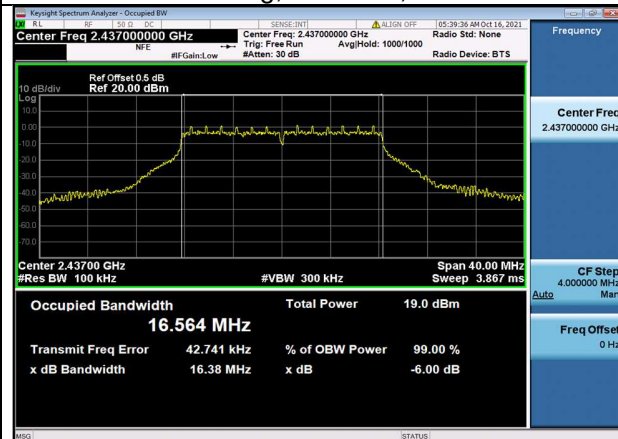
802.11b,2462MHz,Ant0



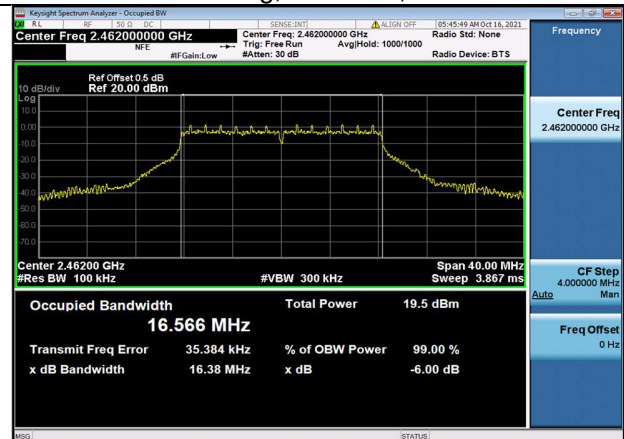
802.11g,2412MHz,Ant0



802.11g,2437MHz,Ant0



802.11g,2462MHz,Ant0



802.11n(HT20),2412MHz,Ant0

802.11n(HT20),2437MHz,Ant0

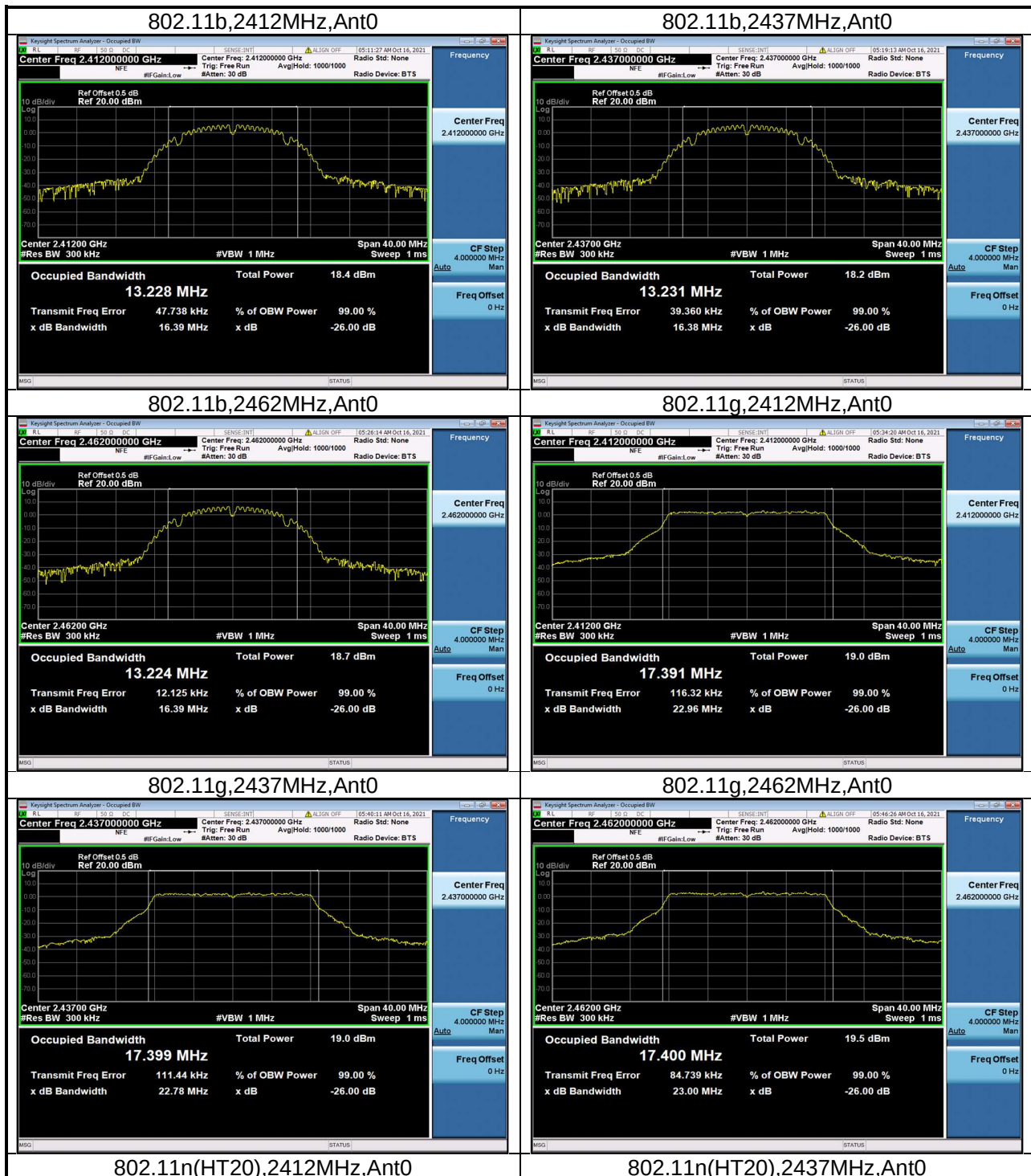


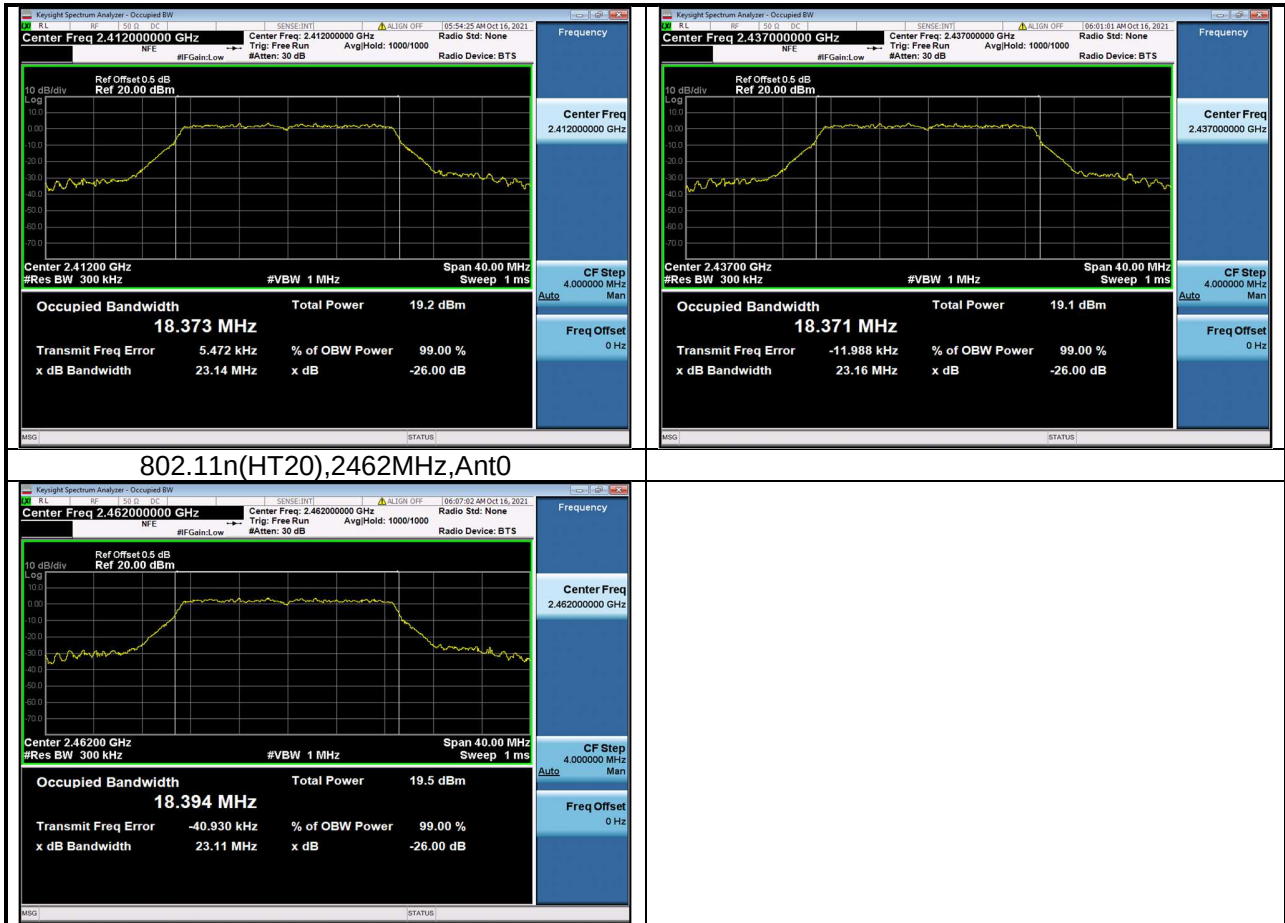
3. Occupied Bandwidth

3.1 Test Data

WLAN 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11b	2412	Ant0	13.228	Pass
802.11b	2437	Ant0	13.231	Pass
802.11b	2462	Ant0	13.224	Pass
802.11g	2412	Ant0	17.391	Pass
802.11g	2437	Ant0	17.399	Pass
802.11g	2462	Ant0	17.400	Pass
802.11n (HT20)	2412	Ant0	18.373	Pass
802.11n (HT20)	2437	Ant0	18.371	Pass
802.11n (HT20)	2462	Ant0	18.394	Pass

3.2 Test Plots





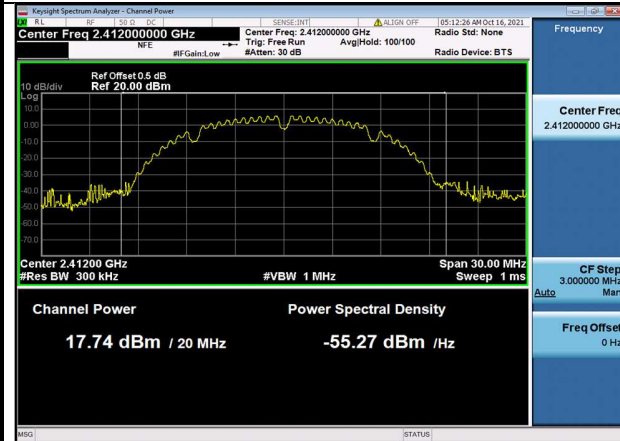
4. Maximum conducted output power and e.i.r.p

4.1 Test Data

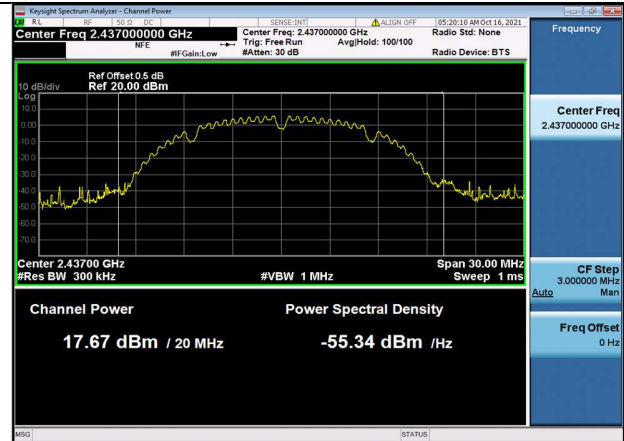
WLAN AVGSA Output Power							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Limit (dBm)	EIRP (dBm)	Result
802.11b	2412	Ant0	0.49	18.23	30	20.73	Pass
802.11b	2437	Ant0	0.45	18.12	30	20.62	Pass
802.11b	2462	Ant0	0.45	18.58	30	21.08	Pass
802.11g	2412	Ant0	0.40	17.89	30	20.39	Pass
802.11g	2437	Ant0	0.46	17.95	30	20.45	Pass
802.11g	2462	Ant0	0.46	18.45	30	20.95	Pass
802.11n (HT20)	2412	Ant0	0.46	18.02	30	20.52	Pass
802.11n (HT20)	2437	Ant0	0.47	18.04	30	20.54	Pass
802.11n (HT20)	2462	Ant0	0.47	18.44	30	20.94	Pass

4.2 Test Plots

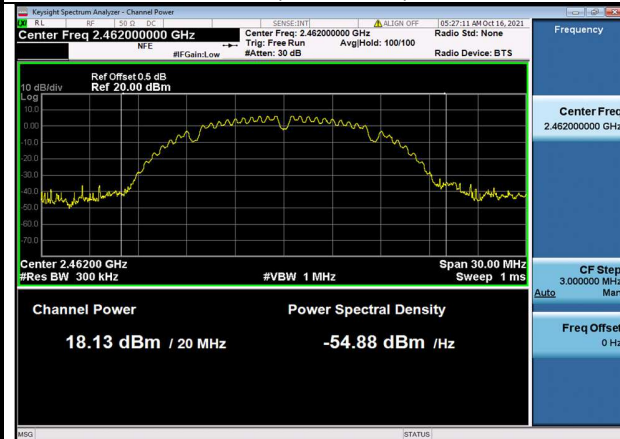
802.11b,2412MHz,Ant0



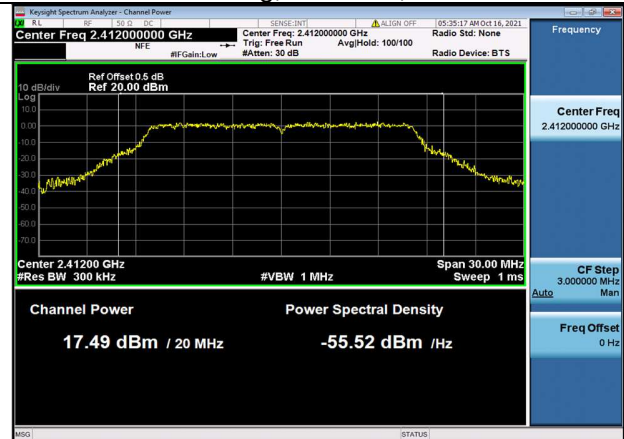
802.11b,2437MHz,Ant0



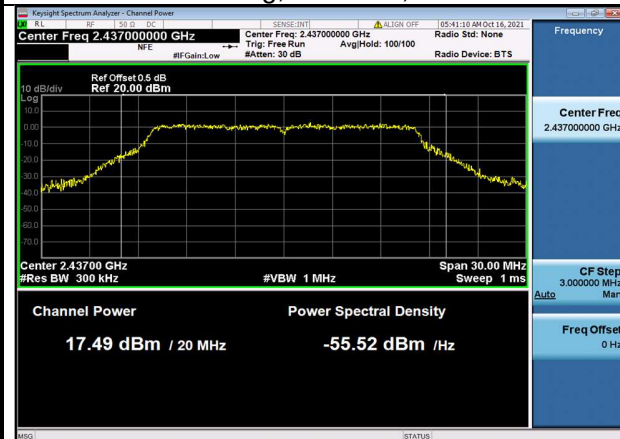
802.11b,2462MHz,Ant0



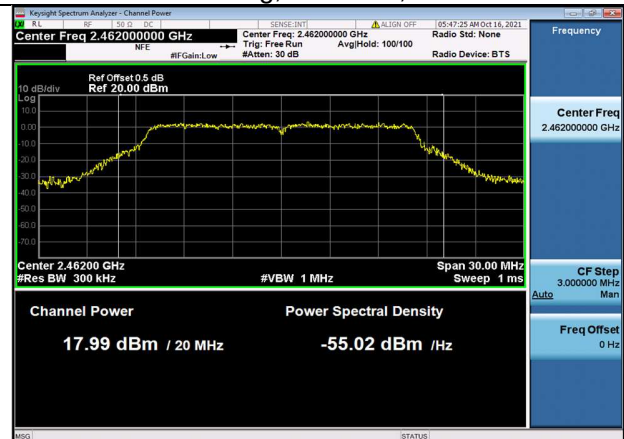
802.11g,2412MHz,Ant0



802.11g,2437MHz,Ant0

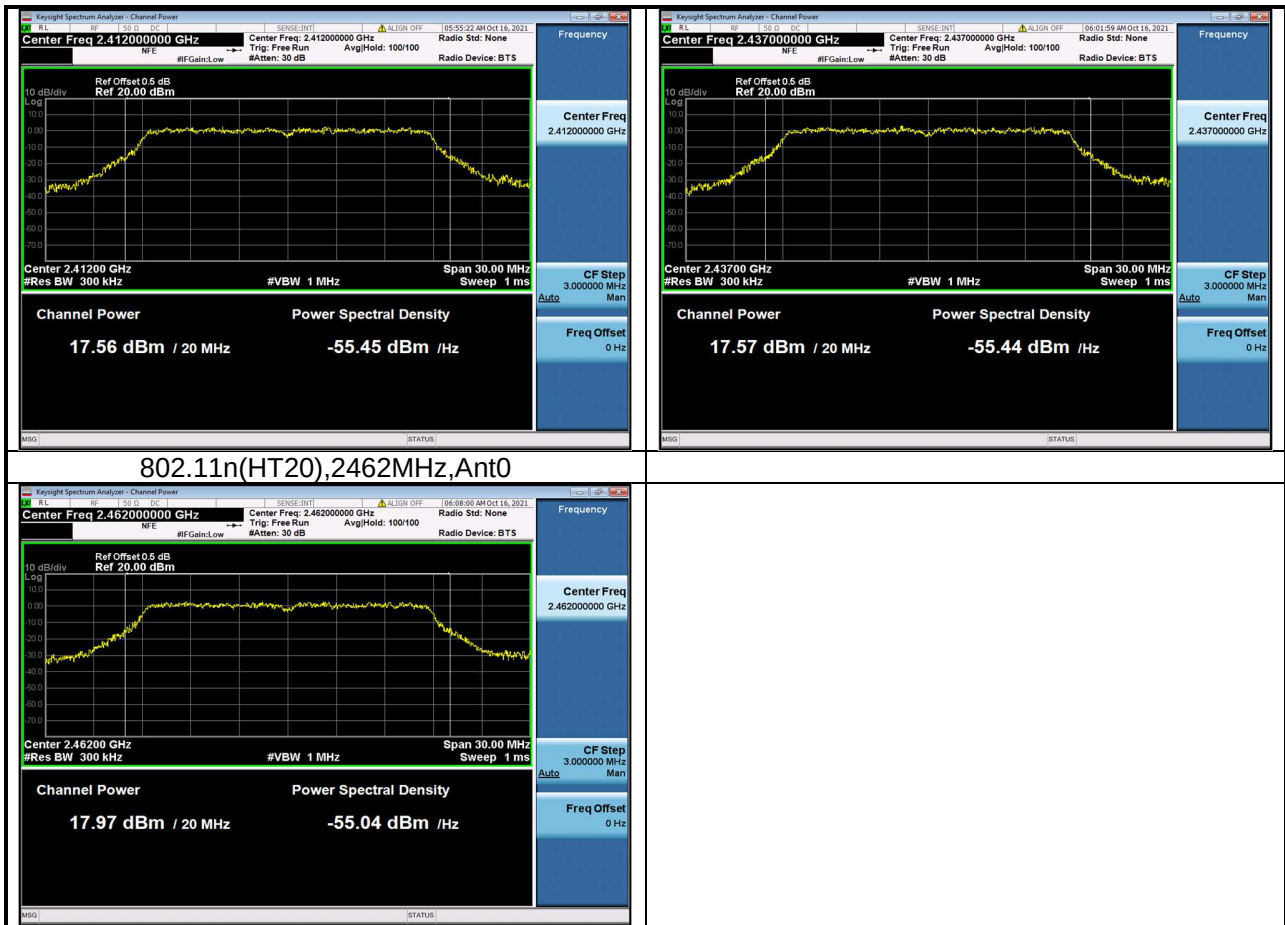


802.11g,2462MHz,Ant0



802.11n(HT20),2412MHz,Ant0

802.11n(HT20),2437MHz,Ant0



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	0.49	-1.740	100	8	Pass
802.11b	2437	Ant0	0.45	-2.386	100	8	Pass
802.11b	2462	Ant0	0.45	-2.193	100	8	Pass
802.11g	2412	Ant0	0.40	-7.237	100	8	Pass
802.11g	2437	Ant0	0.46	-7.206	100	8	Pass
802.11g	2462	Ant0	0.46	-6.493	100	8	Pass
802.11n (HT20)	2412	Ant0	0.46	-6.622	100	8	Pass
802.11n (HT20)	2437	Ant0	0.47	-7.604	100	8	Pass
802.11n (HT20)	2462	Ant0	0.47	-7.284	100	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	4.52	Pass
802.11b	2412	Ant0	2	Band Edge	-44.21	Pass
802.11b	2412	Ant0	3	30MHz~2310MHz	-46.75	Pass
802.11b	2412	Ant0	4	2500MHz~5000MHz	-52.44	Pass
802.11b	2412	Ant0	5	5000MHz~15000MHz	-54.82	Pass
802.11b	2412	Ant0	6	15000MHz~25000MHz	-53.70	Pass
802.11b	2437	Ant0	1	Reference Level	4.56	Pass
802.11b	2437	Ant0	2	Band Edge	-51.53	Pass
802.11b	2437	Ant0	3	30MHz~2310MHz	-53.17	Pass
802.11b	2437	Ant0	4	2500MHz~5000MHz	-44.45	Pass
802.11b	2437	Ant0	5	5000MHz~15000MHz	-55.24	Pass
802.11b	2437	Ant0	6	15000MHz~25000MHz	-53.23	Pass
802.11b	2462	Ant0	1	Reference Level	5.03	Pass
802.11b	2462	Ant0	2	Band Edge	-53.02	Pass
802.11b	2462	Ant0	3	30MHz~2310MHz	-42.68	Pass
802.11b	2462	Ant0	4	2500MHz~5000MHz	-49.67	Pass
802.11b	2462	Ant0	5	5000MHz~15000MHz	-54.56	Pass
802.11b	2462	Ant0	6	15000MHz~25000MHz	-53.23	Pass
802.11g	2412	Ant0	1	Reference Level	1.05	Pass
802.11g	2412	Ant0	2	Band Edge	-35.41	Pass
802.11g	2412	Ant0	3	30MHz~2310MHz	-47.18	Pass
802.11g	2412	Ant0	4	2500MHz~5000MHz	-52.32	Pass
802.11g	2412	Ant0	5	5000MHz~15000MHz	-55.44	Pass
802.11g	2412	Ant0	6	15000MHz~25000MHz	-53.49	Pass
802.11g	2437	Ant0	1	Reference Level	0.98	Pass

802.11g	2437	Ant0	2	Band Edge	-52.22	Pass
802.11g	2437	Ant0	3	30MHz~2310MHz	-54.88	Pass
802.11g	2437	Ant0	4	2500MHz~5000MHz	-45.25	Pass
802.11g	2437	Ant0	5	5000MHz~15000MHz	-55.79	Pass
802.11g	2437	Ant0	6	15000MHz~25000MHz	-53.08	Pass
802.11g	2462	Ant0	1	Reference Level	1.56	Pass
802.11g	2462	Ant0	2	Band Edge	-45.12	Pass
802.11g	2462	Ant0	3	30MHz~2310MHz	-55.88	Pass
802.11g	2462	Ant0	4	2500MHz~5000MHz	-53.55	Pass
802.11g	2462	Ant0	5	5000MHz~15000MHz	-55.02	Pass
802.11g	2462	Ant0	6	15000MHz~25000MHz	-52.71	Pass
802.11n (HT20)	2412	Ant0	1	Reference Level	1.05	Pass
802.11n (HT20)	2412	Ant0	2	Band Edge	-32.41	Pass
802.11n (HT20)	2412	Ant0	3	30MHz~2310MHz	-55.68	Pass
802.11n (HT20)	2412	Ant0	4	2500MHz~5000MHz	-49.80	Pass
802.11n (HT20)	2412	Ant0	5	5000MHz~15000MHz	-55.44	Pass
802.11n (HT20)	2412	Ant0	6	15000MHz~25000MHz	-53.54	Pass
802.11n (HT20)	2437	Ant0	1	Reference Level	1.04	Pass
802.11n (HT20)	2437	Ant0	2	Band Edge	-53.37	Pass
802.11n (HT20)	2437	Ant0	3	30MHz~2310MHz	-55.36	Pass
802.11n (HT20)	2437	Ant0	4	2500MHz~5000MHz	-53.42	Pass
802.11n (HT20)	2437	Ant0	5	5000MHz~15000MHz	-54.99	Pass
802.11n (HT20)	2437	Ant0	6	15000MHz~25000MHz	-52.75	Pass
802.11n (HT20)	2462	Ant0	1	Reference Level	1.55	Pass
802.11n (HT20)	2462	Ant0	2	Band Edge	-39.77	Pass
802.11n (HT20)	2462	Ant0	3	30MHz~2310MHz	-56.50	Pass
802.11n (HT20)	2462	Ant0	4	2500MHz~5000MHz	-53.05	Pass
802.11n	2462	Ant0	5	5000MHz~15000MHz	-55.76	Pass

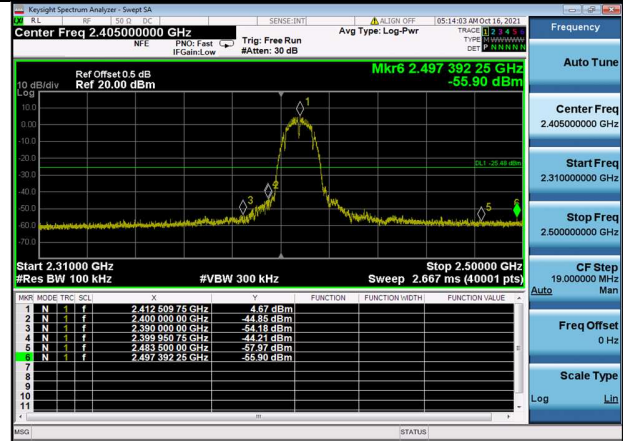
(HT20)						
802.11n (HT20)	2462	Ant0	6	15000MHz~25000MHz	-52.35	Pass

9.2 Test Plots

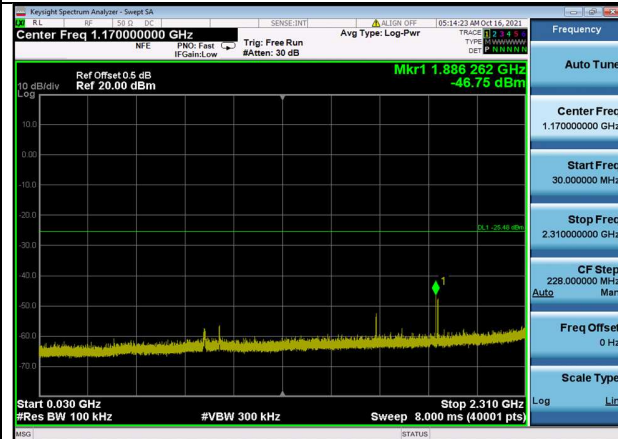
802.11b,2412MHz,Ant0,Plot 1,Reference Level



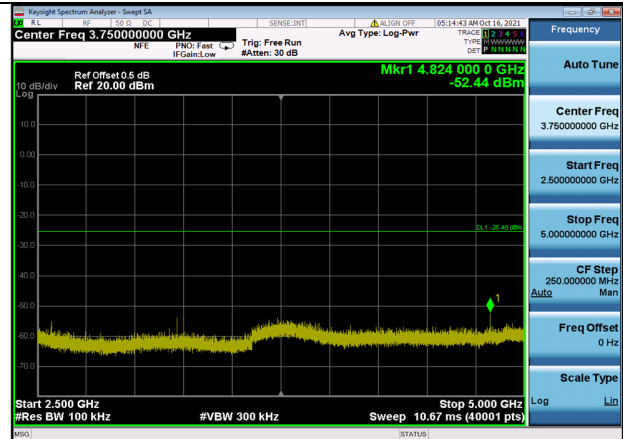
802.11b,2412MHz,Ant0,Plot 2,Band Edge



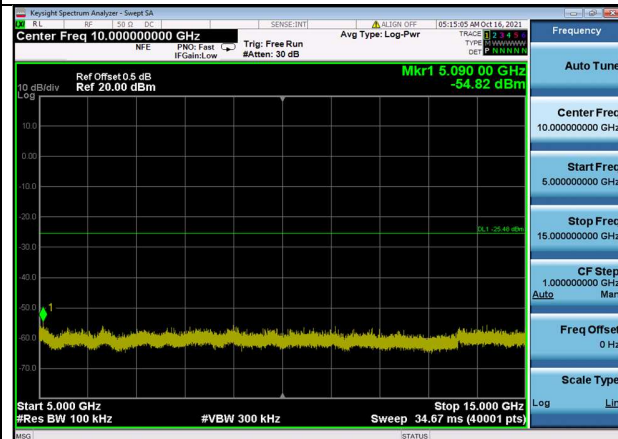
802.11b,2412MHz,Ant0,Plot 3,30MHz~2310MHz



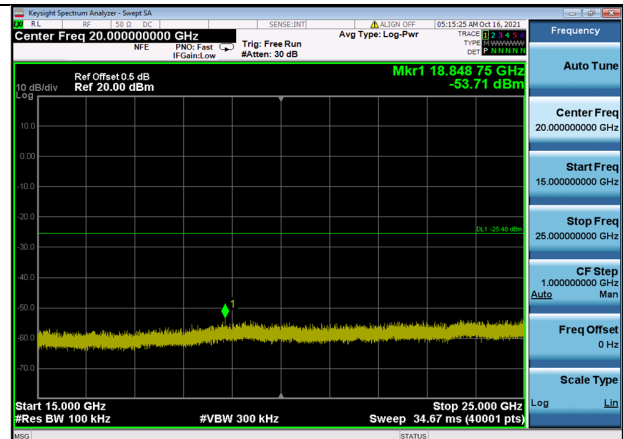
802.11b,2412MHz,Ant0,Plot 4,2500MHz~5000MHz



802.11b,2412MHz,Ant0,Plot 5,5000MHz~15000MHz



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



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

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

