

Appendix A: Test results

1. Duty Cycle

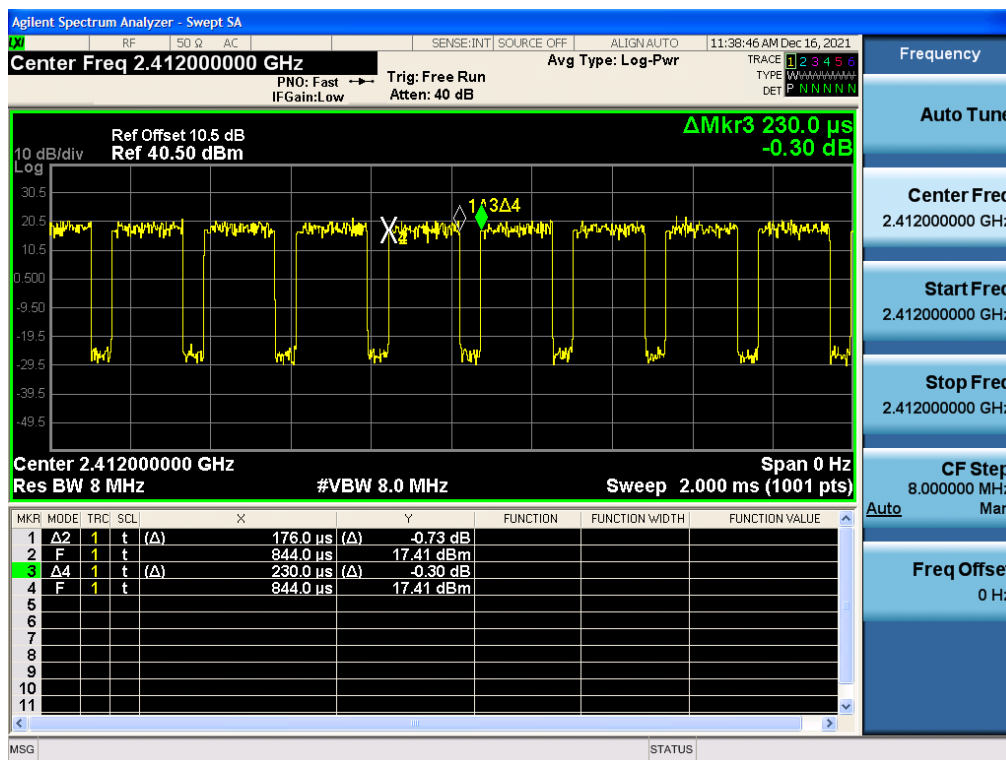
1.1 Test Data

Mode	Data rates (Mbps)	On Time (msec)	Period (msec)	Duty Cycle (linear)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/ T Minimum VBW (kHz)	Average Factor (dB)
IEEE 802.11g	6 Mbps	0.1760	0.2300	0.77	76.52	1.16	5.68	-2.32

Remark:

- 1) Duty cycle= On Time/ Period;
- 2) Duty Cycle factor = $10 * \log(1/ \text{Duty cycle})$;
- 3) Average factor = $20 \log_{10} \text{Duty Cycle}$.

1.2 Test Plots

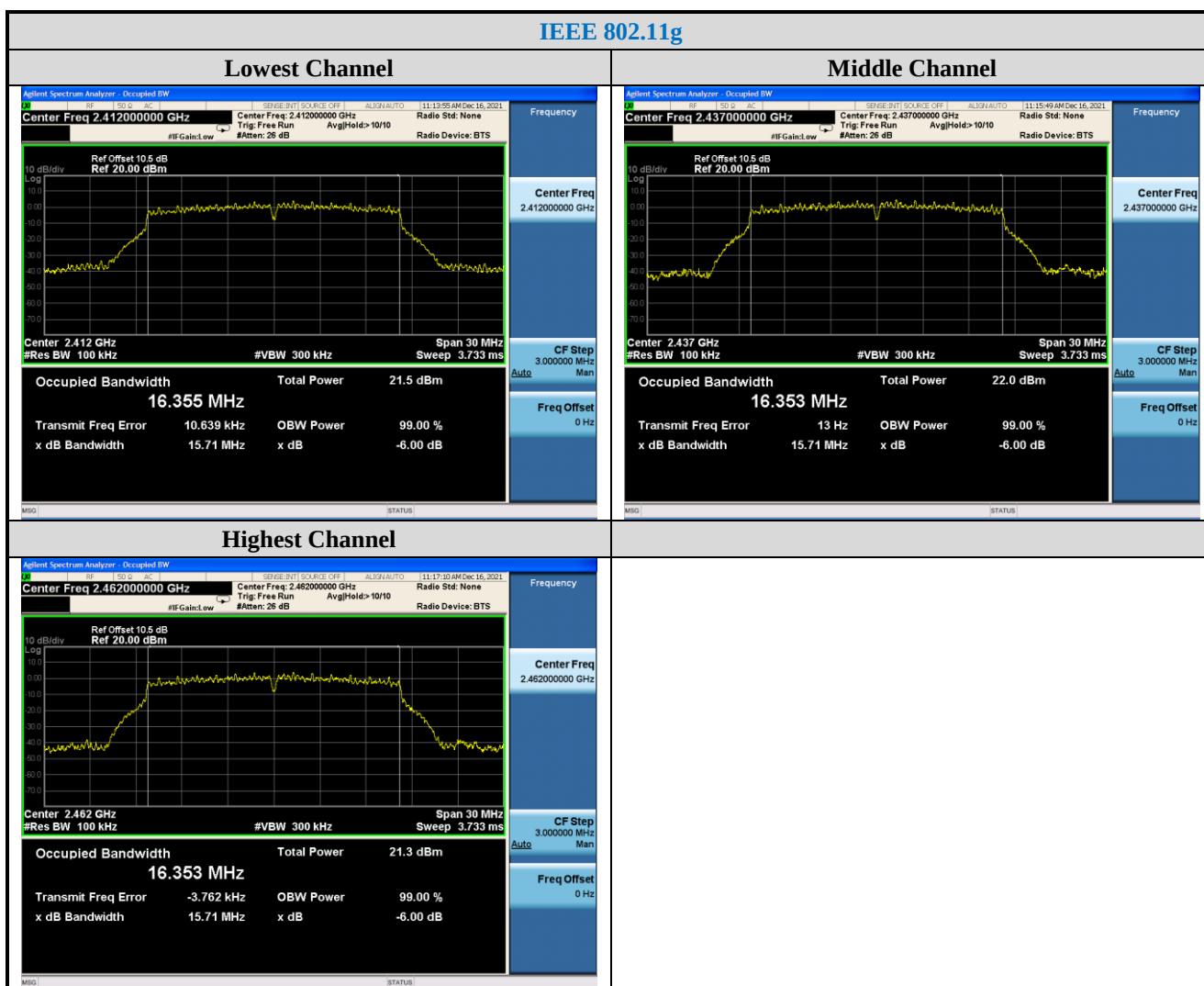


2. Minimum 6dB bandwidth

2.1 Test Data

WLAN Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11g	2412	Ant0	15.71	Pass
802.11g	2437	Ant0	15.71	Pass
802.11g	2462	Ant0	15.71	Pass

2.2 Test Plots



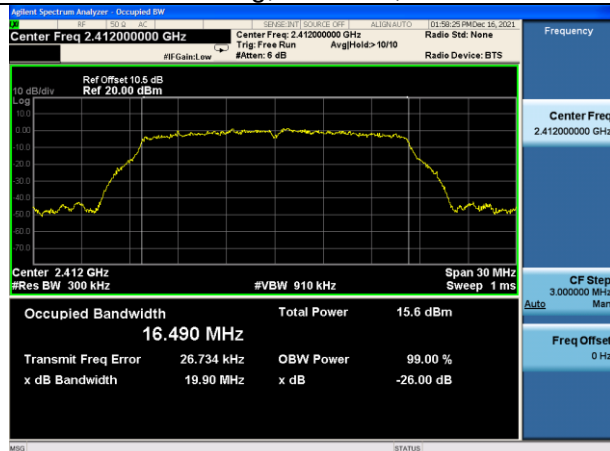
3. Occupied Bandwidth

3.1 Test Data

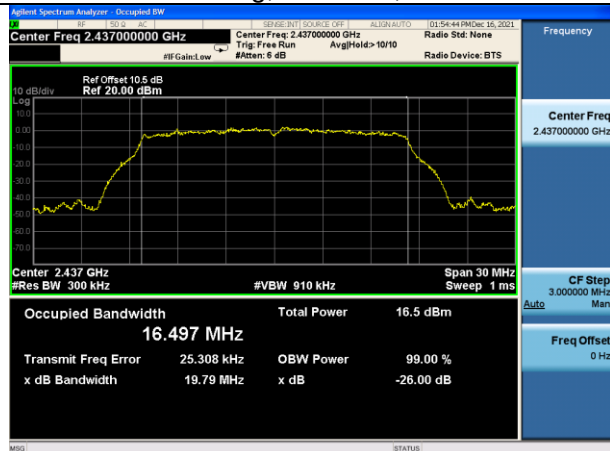
WLAN 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11g	2412	Ant0	16.490	Pass
802.11g	2437	Ant0	16.497	Pass
802.11g	2462	Ant0	16.491	Pass

3.2 Test Plots

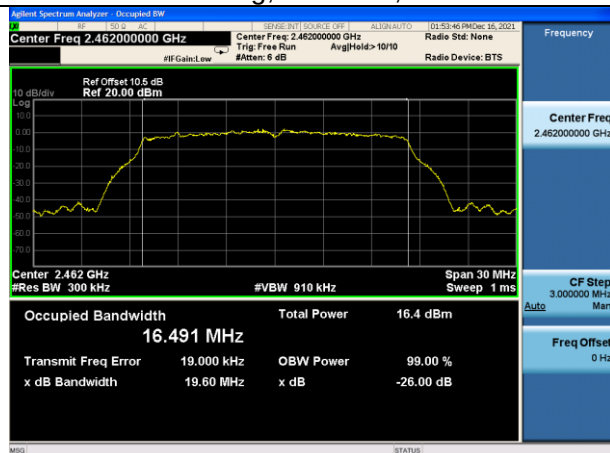
802.11g,2412MHz,Ant0



802.11g,2437MHz,Ant0



802.11g,2462MHz,Ant0



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

4.1 Test Data

WLAN Output Power							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Limit (dBm)	EIRP (dBm)	Result
802.11g	2412	Ant0	1.16	19.71	30	24.71	Pass
802.11g	2437	Ant0	1.16	20.81	30	25.81	Pass
802.11g	2462	Ant0	1.16	19.66	30	24.66	Pass

Note:

1: EIRP(dBm)= Power(dBm)+Antenna Gain(dBi);

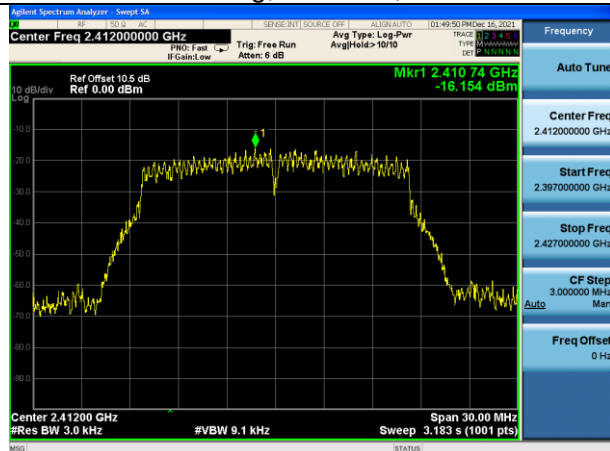
5. Power spectrum density

5.1 Test Data

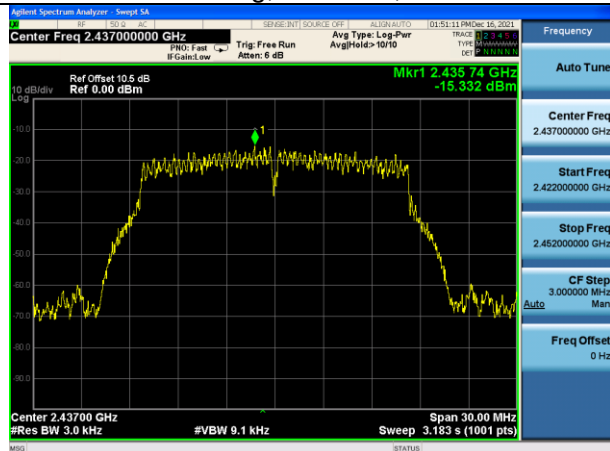
WLAN Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm)	RBW (kHz)	Limit (dBm)	Result
802.11g	2412	Ant0	1.16	-16.154	3	8	Pass
802.11g	2437	Ant0	1.16	-15.332	3	8	Pass
802.11g	2462	Ant0	1.16	-16.329	3	8	Pass

5.2 Test Plots

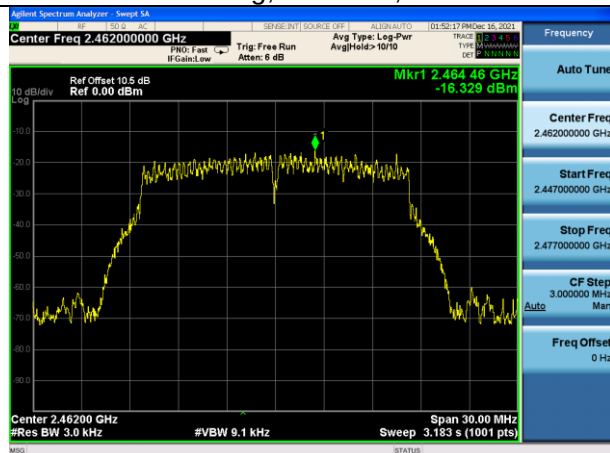
802.11g,2412MHz,Ant0



802.11g,2437MHz,Ant0



802.11g,2462MHz,Ant0



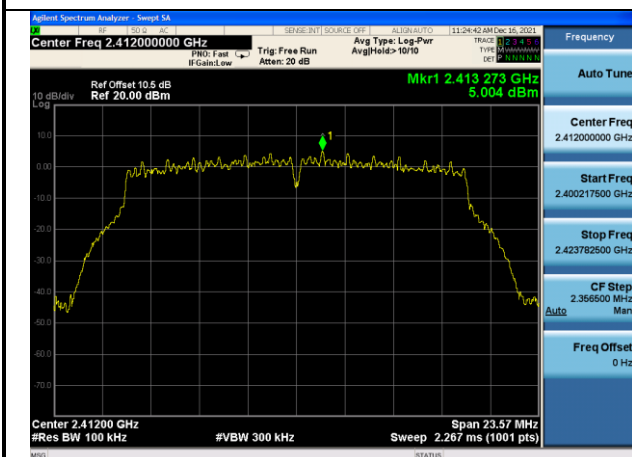
6. Emission outside the frequency band

6.1 Test Data

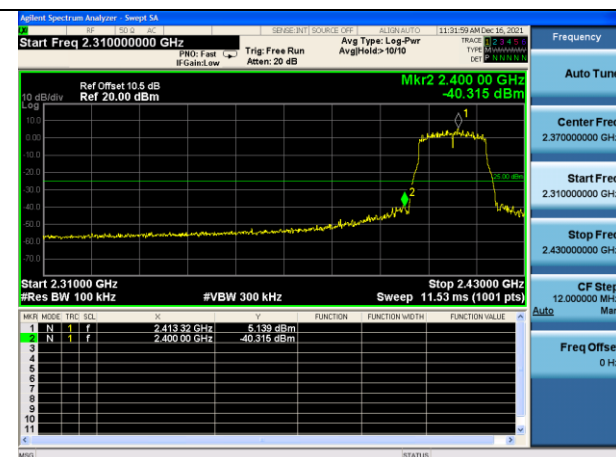
WLAN Transmitter Spurious Emission						
Mode	Test Frequency (MHz)	Ant	Plot No.	Frequency Range	Emission (dBm)	Result
802.11g	2412	Ant0	1	Reference Level	5.004	Pass
802.11g	2412	Ant0	2	Band Edge	-40.315	Pass
802.11g	2412	Ant0	3	30MHz~25000MHz	-35.345	Pass
802.11g	2437	Ant0	1	Reference Level	5.711	Pass
802.11g	2437	Ant0	3	30MHz~25000MHz	-41.874	Pass
802.11g	2462	Ant0	1	Reference Level	4.942	Pass
802.11g	2462	Ant0	2	Band Edge	-42.889	Pass
802.11g	2462	Ant0	3	30MHz~25000MHz	-34.887	Pass

9.2 Test Plots

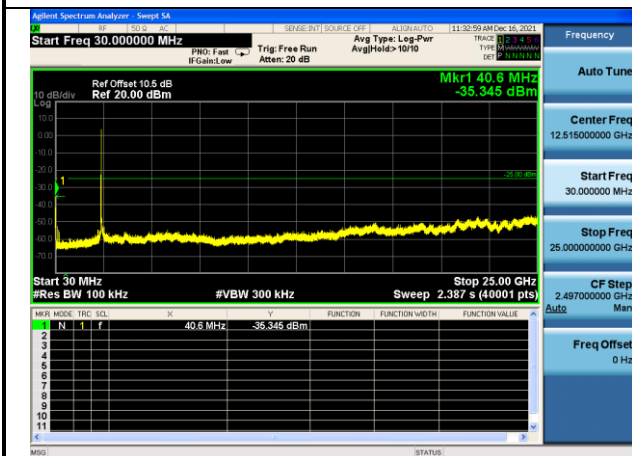
802.11g,2412MHz,Ant0,Plot 1,Reference Level



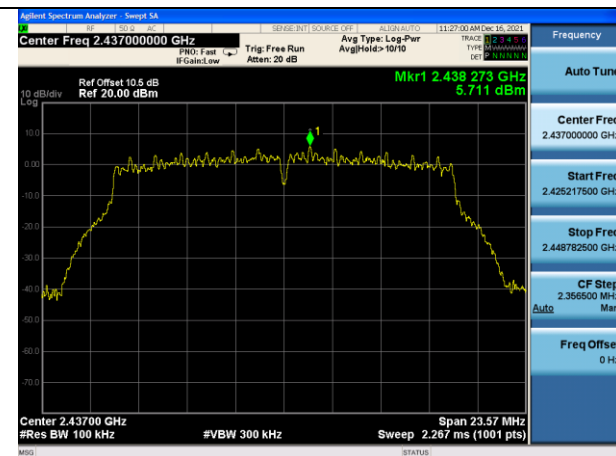
802.11g,2412MHz,Ant0,Plot 2,Band Edge



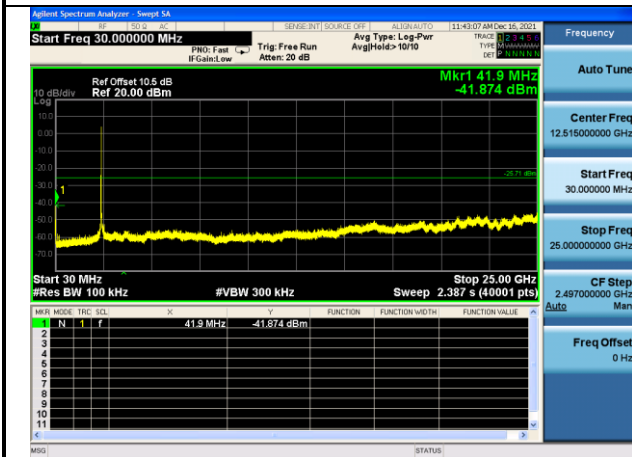
802.11g,2412MHz,Ant0,Plot 3,30MHz~2500 0MHz



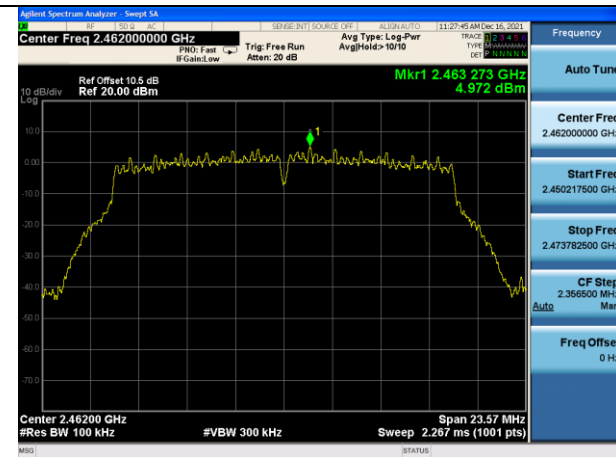
802.11g,2437MHz,Ant0,Plot 1,Reference Level



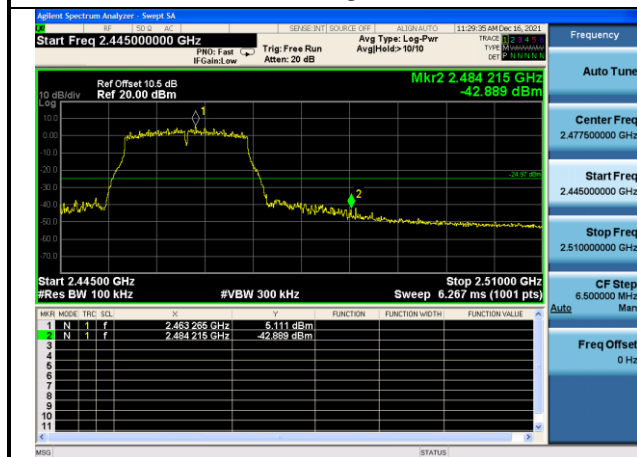
802.11g,2437MHz,Ant0,Plot 2,30MHz~2500 0MHz



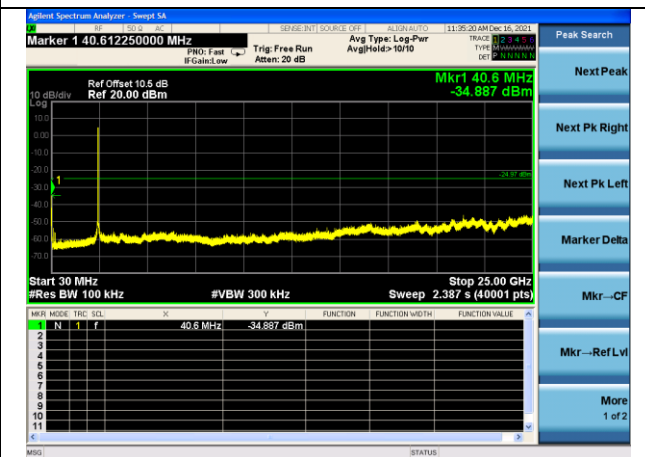
802.11g,2462MHz,Ant0,Plot 1,Reference Level



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



802.11g,2462MHz,Ant0,Plot 3,30MHz~2500
0MHz



7. Band Edges Compliance

7.1 Test Data

IEEE 802.11g

