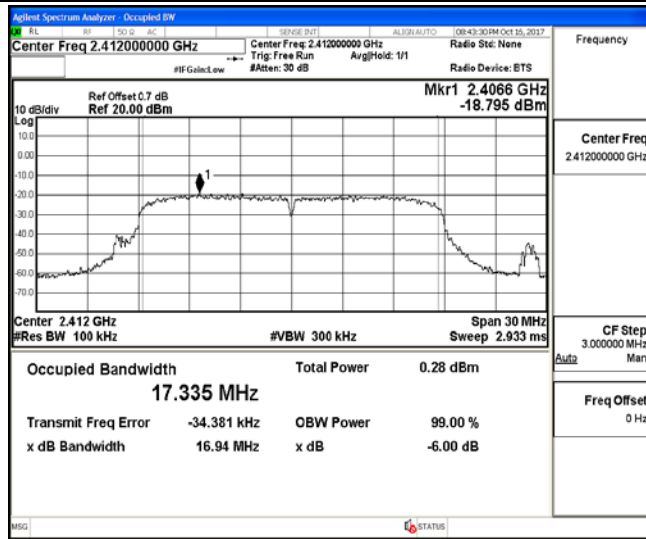


6 dB Bandwidth

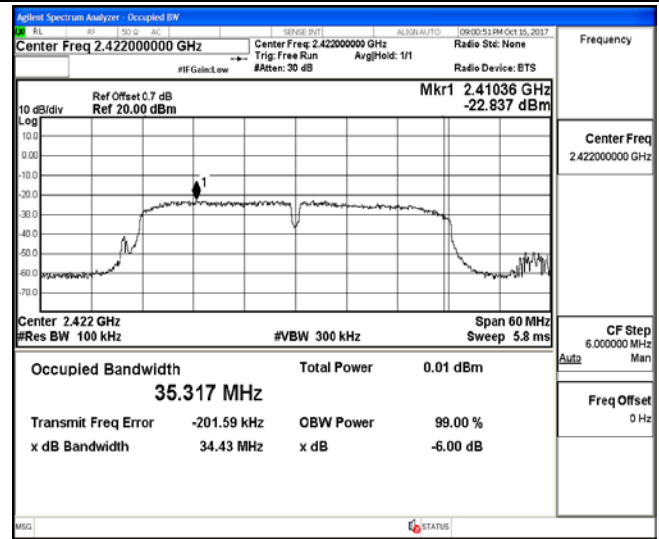
Antenna 2

IEEE 802.11n HT20

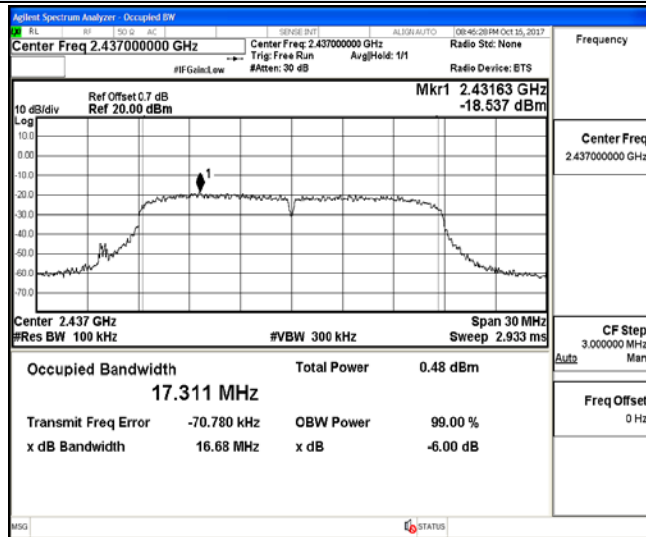


Antenna 2

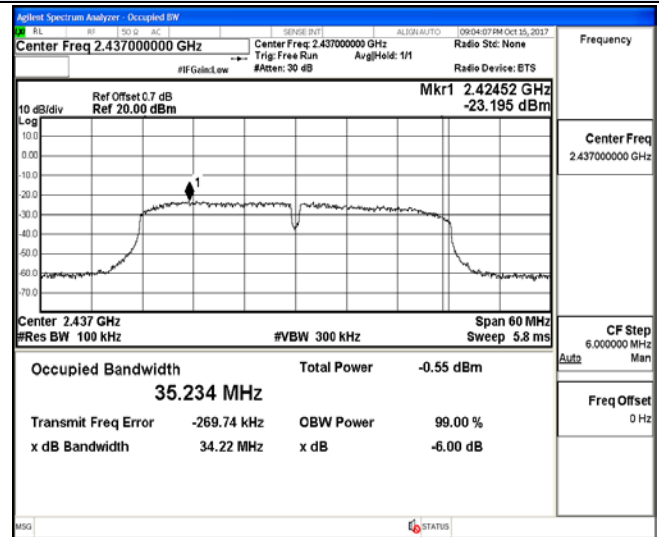
IEEE 802.11n HT40



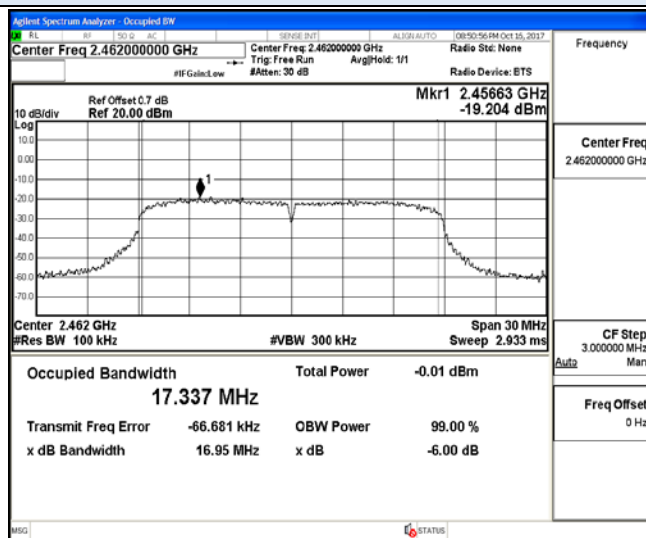
Channel 1 / 2412 MHz



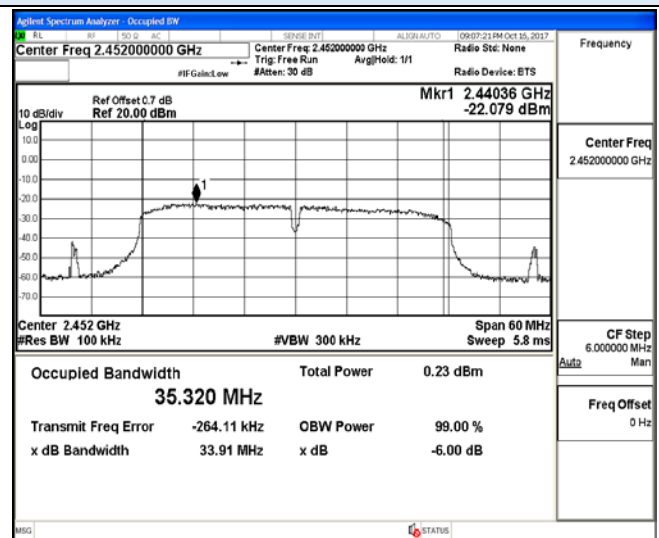
Channel 3 / 2422 MHz



Channel 6 / 2437 MHz



Channel 6 / 2437 MHz



Channel 11 / 2462 MHz

Channel 9 / 2452 MHz

5.5. Radiated Emissions Measurement

5.5.1. Standard Applicable

15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
\1\ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(\2)
13.36-13.41			

\1\ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

\2\ Above 38.6

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

5.5.2. Measuring Instruments and Setting

Please refer to equipment list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10 th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/B kHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

5.5.3. Test Procedures

1) Sequence of testing 9 kHz to 30 MHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- If the EUT is a floor standing device, it is placed on the ground.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Premeasurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 1.5 meter.
- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).
- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Premeasurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ($\pm 45^\circ$) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Premeasurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 2.5 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ($\pm 45^\circ$) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 1 meter.
- The EUT was set into operation.

Premeasurement:

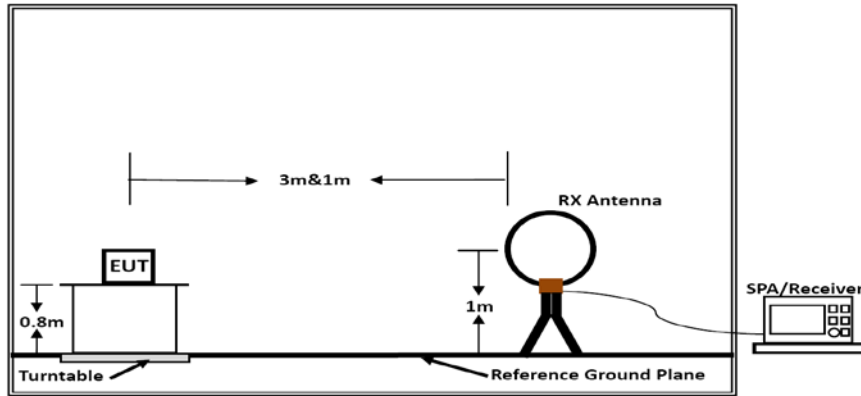
- The antenna is moved spherical over the EUT in different polarizations of the antenna.

Final measurement:

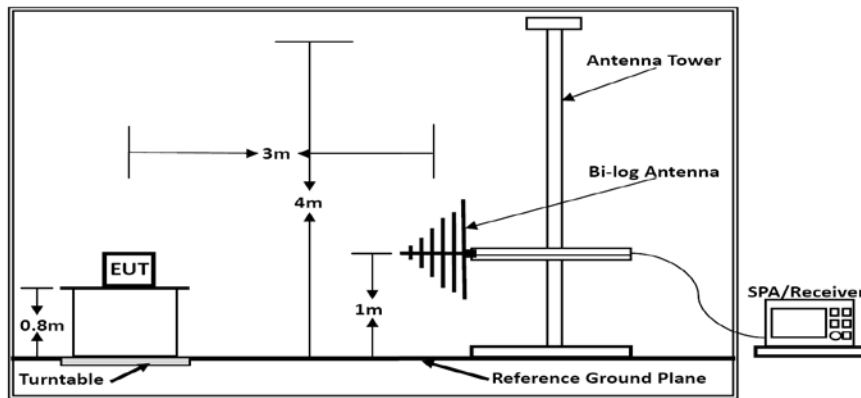
- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

5.5.4. Test Setup Layout

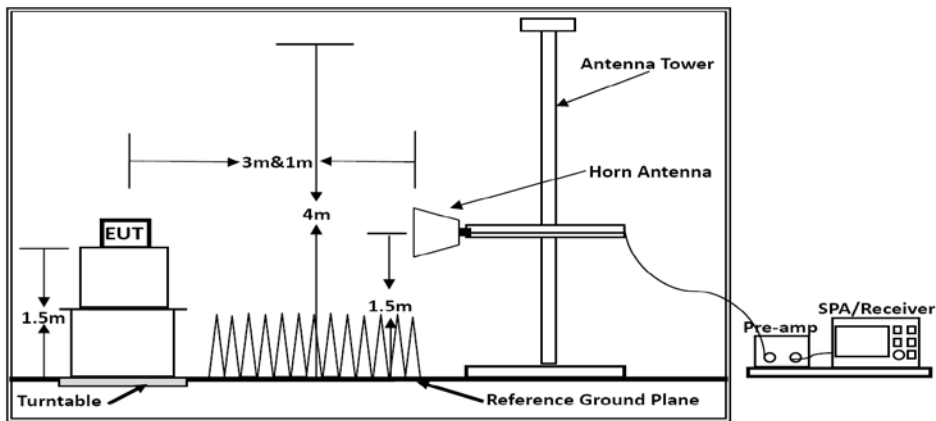
For radiated emissions below 30MHz



Below 30MHz



Below 1GHz



Above 1GHz

Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.

Distance extrapolation factor = $20 \log(\text{specific distance [3m]} / \text{test distance [1m]})$ (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

5.5.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.5.6. Results of Radiated Emissions (9 KHz~30MHz)

Temperature	24.5°C	Humidity	56.2%
Test Engineer	Jayden Zhuo	Configurations	IEEE 802.11b/g/n
Test Date	September 27, 2017		

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dBuV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

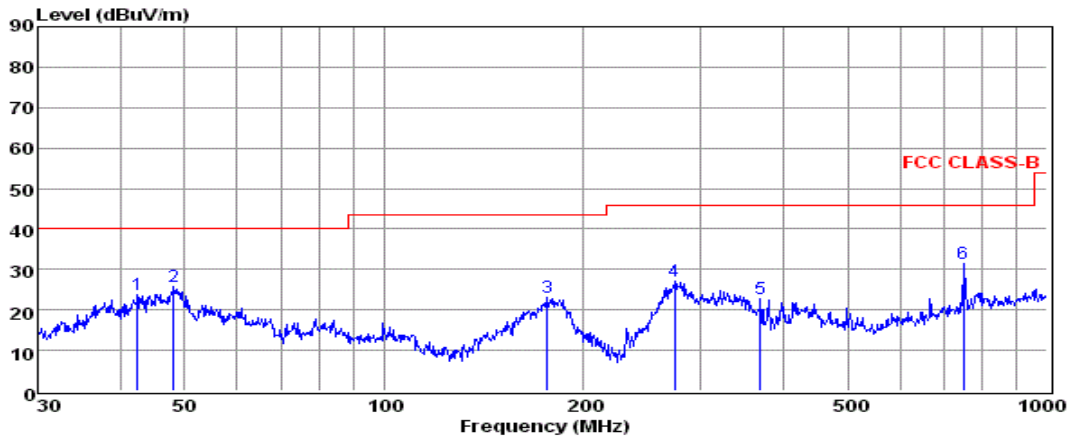
Limit line = specific limits (dBuV) + distance extrapolation factor.

5.5.7. Results of Radiated Emissions (30MHz~1GHz)

Temperature	24.5°C	Humidity	56.2%
Test Engineer	Jayden Zhuo	Configurations	802.11n HT40 Low Channel, Chain 0+Chain 1+Chain 2
Test Date	September 27, 2017		

The Worst Test result for 802.11n HT40 (Low Channel) @Chain 0+Chain 1+Chain 2

Horizontal



pol:

HORIZONTAL

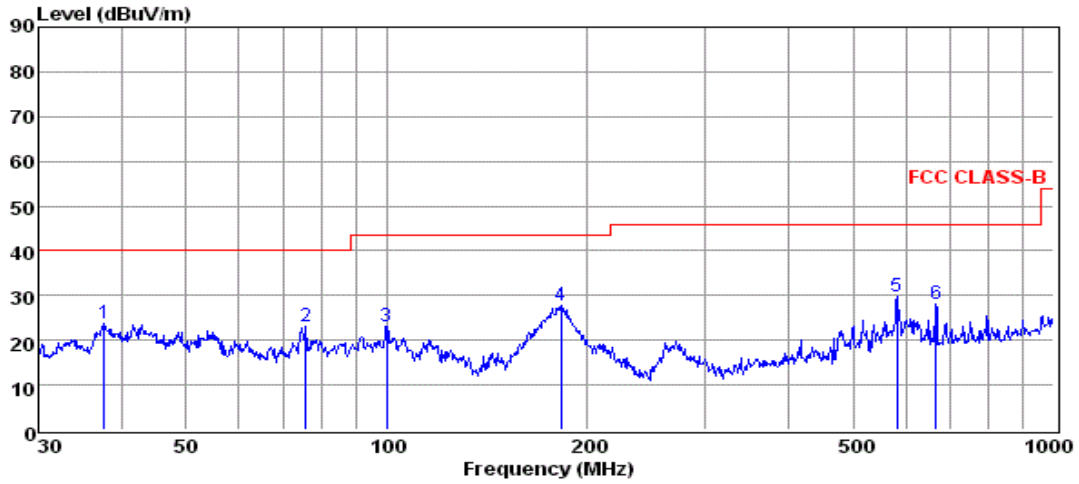
	Freq MHz	Reading dBuV	CabLos dB	Antfac dB/m	Measured dBuV/m	Limit dBuV/m	Over dB	Remark
1	42.45	9.54	0.50	13.57	23.61	40.00	-16.39	QP
2	48.16	12.13	0.35	13.36	25.84	40.00	-14.16	QP
3	176.27	12.88	0.73	9.42	23.03	43.50	-20.47	QP
4	274.19	13.42	1.04	12.49	26.95	46.00	-19.05	QP
5	369.40	6.95	1.22	14.51	22.68	46.00	-23.32	QP
6	747.48	10.28	1.65	19.40	31.33	46.00	-14.67	QP

Note: 1. All readings are Quasi-peak values.

2. Measured= Reading + Antenna Factor + Cable Loss

3. The emission that are 20db below the official limit are not reported

Vertical



pol:

VERTICAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	37.68	10.24	0.38	12.99	23.61	40.00	-16.39	QP
2	75.45	14.66	0.54	7.87	23.07	40.00	-16.93	QP
3	99.88	9.29	0.60	13.15	23.04	43.50	-20.46	QP
4	182.56	17.03	0.89	9.91	27.83	43.50	-15.67	QP
5	582.74	10.09	1.54	18.13	29.76	46.00	-16.24	QP
6	665.80	7.74	1.55	18.69	27.98	46.00	-18.02	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that ate 20db bllow the official limit are not reported

Note:

- 1). Pre-scan all modes and recorded the worst case results in this report (IEEE 802.11n HT40 (Low Channel) @ Chain 0+Chain 1+Chain 2.
- 2). Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3). Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

5.5.8. Results for Radiated Emissions (Above 1GHz)

IEEE 802.11b

Antenna 0

Channel 1 / 2412 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4824.00	56.48	33.06	35.04	3.94	58.44	74.00	-15.56	Peak	Horizontal
4824.00	41.69	33.06	35.04	3.94	43.65	54.00	-10.35	Average	Horizontal
4824.00	54.22	33.06	35.04	3.94	56.18	74.00	-17.82	Peak	Vertical
4824.00	41.44	33.06	35.04	3.94	43.40	54.00	-10.60	Average	Vertical

Channel 6 / 2437 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	59.42	33.16	35.15	3.96	61.39	74.00	-12.61	Peak	Horizontal
4874.00	40.45	33.16	35.15	3.96	42.42	54.00	-11.58	Average	Horizontal
4874.00	53.86	33.16	35.15	3.96	55.83	74.00	-18.17	Peak	Vertical
4874.00	41.91	33.16	35.15	3.96	43.88	54.00	-10.12	Average	Vertical

Channel 11 / 2462 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4924.00	57.72	33.26	35.14	3.98	59.82	74.00	-14.18	Peak	Horizontal
4924.00	44.20	33.26	35.14	3.98	46.30	54.00	-7.70	Average	Horizontal
4924.00	53.05	33.26	35.14	3.98	55.15	74.00	-18.85	Peak	Vertical
4924.00	39.99	33.26	35.14	3.98	42.09	54.00	-11.91	Average	Vertical

IEEE 802.11g

Antenna 0

Channel 1 / 2412 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4824.00	54.93	33.06	35.04	3.94	56.89	74.00	-17.11	Peak	Horizontal
4824.00	40.84	33.06	35.04	3.94	42.80	54.00	-11.20	Average	Horizontal
4824.00	54.59	33.06	35.04	3.94	56.55	74.00	-17.45	Peak	Vertical
4824.00	41.50	33.06	35.04	3.94	43.46	54.00	-10.54	Average	Vertical

Channel 6 / 2437 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	60.23	33.16	35.15	3.96	62.20	74.00	-11.80	Peak	Horizontal
4874.00	41.59	33.16	35.15	3.96	43.56	54.00	-10.44	Average	Horizontal
4874.00	53.20	33.16	35.15	3.96	55.17	74.00	-18.83	Peak	Vertical
4874.00	42.15	33.16	35.15	3.96	44.12	54.00	-9.88	Average	Vertical

Channel 11 / 2462 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4924.00	57.25	33.26	35.14	3.98	59.35	74.00	-14.65	Peak	Horizontal
4924.00	43.38	33.26	35.14	3.98	45.48	54.00	-8.52	Average	Horizontal
4924.00	54.09	33.26	35.14	3.98	56.19	74.00	-17.81	Peak	Vertical
4924.00	41.25	33.26	35.14	3.98	43.35	54.00	-10.65	Average	Vertical

IEEE 802.11n HT20

Combined Antenna 0, Antenna 1 and Antenna 2

Channel 1 / 2412 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4824.00	55.29	33.06	35.04	3.94	57.25	74.00	-16.75	Peak	Horizontal
4824.00	42.27	33.06	35.04	3.94	44.23	54.00	-9.77	Average	Horizontal
4824.00	54.49	33.06	35.04	3.94	56.45	74.00	-17.55	Peak	Vertical
4824.00	39.65	33.06	35.04	3.94	41.61	54.00	-12.39	Average	Vertical

Channel 6 / 2437 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	58.17	33.16	35.15	3.96	60.14	74.00	-13.86	Peak	Horizontal
4874.00	40.97	33.16	35.15	3.96	42.94	54.00	-11.06	Average	Horizontal
4874.00	54.42	33.16	35.15	3.96	56.39	74.00	-17.61	Peak	Vertical
4874.00	38.84	33.16	35.15	3.96	40.81	54.00	-13.19	Average	Vertical

Channel 11 / 2462 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4924.00	59.14	33.26	35.14	3.98	61.24	74.00	-12.76	Peak	Horizontal
4924.00	43.02	33.26	35.14	3.98	45.12	54.00	-8.88	Average	Horizontal
4924.00	55.00	33.26	35.14	3.98	57.10	74.00	-16.90	Peak	Vertical
4924.00	38.80	33.26	35.14	3.98	40.90	54.00	-13.10	Average	Vertical

IEEE 802.11n HT40

Combined Antenna 0, Antenna 1 and Antenna 2

Channel 3 / 2422 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4844.00	54.45	33.06	35.04	3.94	56.41	74.00	-17.59	Peak	Horizontal
4844.00	41.56	33.06	35.04	3.94	43.52	54.00	-10.48	Average	Horizontal
4844.00	55.26	33.06	35.04	3.94	57.22	74.00	-16.78	Peak	Vertical
4844.00	39.78	33.06	35.04	3.94	41.74	54.00	-12.26	Average	Vertical

Channel 6 / 2437 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	58.48	33.16	35.15	3.96	60.45	74.00	-13.55	Peak	Horizontal
4874.00	41.66	33.16	35.15	3.96	43.63	54.00	-10.37	Average	Horizontal
4874.00	55.90	33.16	35.15	3.96	57.87	74.00	-16.13	Peak	Vertical
4874.00	38.52	33.16	35.15	3.96	40.49	54.00	-13.51	Average	Vertical

Channel 9 / 2452 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4904.00	58.56	33.26	35.14	3.98	60.66	74.00	-13.34	Peak	Horizontal
4904.00	42.82	33.26	35.14	3.98	44.92	54.00	-9.08	Average	Horizontal
4904.00	55.16	33.26	35.14	3.98	57.26	74.00	-16.74	Peak	Vertical
4904.00	39.25	33.26	35.14	3.98	41.35	54.00	-12.65	Average	Vertical

Notes:

1. Measuring frequencies from 9 KHz - 10th harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2. Radiated emissions measured in frequency range from 9 KHz ~10th harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4. Worst case data at 1Mbps at IEEE 802.11b; 6Mbps at IEEE 802.11g; 6.5Mbps at IEEE 802.11n HT20; 13.5Mbps at IEEE 802.11n HT40;
5. Pre-scan at Antenna 0, Antenna 1 and Antenna 2 for IEEE 802.11b and IEEE 802.11g mode, pre-scan at Antenna 0, Antenna 1, Antenna 2 and Combined Antenna 0, Antenna 1 and Antenna 2 for IEEE 802.11n mode, recorded worst case;

5.6. Conducted Spurious Emissions and Band Edges Test

5.6.1. Standard Applicable

According to §15.247 (d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.6.2. Measuring Instruments and Setting

Please refer to section 6 of equipment list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Detector	Peak
Attenuation	Auto
RB / VB (Emission in restricted band)	100KHz/300KHz
RB / VB (Emission in non-restricted band)	100KHz/300KHz

5.6.3. Test Procedures

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz

The spectrum from 9 KHz to 26.5GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

5.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 5.4.4.

5.6.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.6.6. Test Results of Conducted Spurious Emissions

Temperature	24.5°C	Humidity	56.2%
Test Engineer	Jayden Zhuo	Configurations	IEEE 802.11b/g/n

Test Mode	Channel	Frequency (MHz)	Measured Frequency Range	Spurious RF Conducted Emission (dBc)			Limits (dBc)	Verdict
				Antenna 0	Antenna 1	Antenna 2		
IEEE 802.11b	1	2412	9 KHz – 26.5 GHz	<-20	<-20	<-20	-20	PASS
	6	2437	9 KHz – 26.5 GHz	<-20	<-20	<-20		
	11	2462	9 KHz – 26.5 GHz	<-20	<-20	<-20		
IEEE 802.11g	1	2412	9 KHz – 26.5 GHz	<-20	<-20	<-20	-20	PASS
	6	2437	9 KHz – 26.5 GHz	<-20	<-20	<-20		
	11	2462	9 KHz – 26.5 GHz	<-20	<-20	<-20		
IEEE 802.11n HT20	1	2412	9 KHz – 26.5 GHz	<-20	<-20	<-20	-20	PASS
	6	2437	9 KHz – 26.5 GHz	<-20	<-20	<-20		
	11	2462	9 KHz – 26.5 GHz	<-20	<-20	<-20		
IEEE 802.11n HT40	3	2422	9 KHz – 26.5 GHz	<-20	<-20	<-20	-20	PASS
	6	2437	9 KHz – 26.5 GHz	<-20	<-20	<-20		
	9	2452	9 KHz – 26.5 GHz	<-20	<-20	<-20		

Remark:

1. Measured RF conducted spurious emission at difference data rate for each mode and recorded worst case for each mode.
2. Test results including cable loss;
3. Worst case data at 1Mbps at IEEE 802.11b; 6Mbps at IEEE 802.11g; 6.5Mbps at IEEE 802.11n HT20; 13.5Mbps at IEEE 802.11n Ht40;
4. “---“means that the fundamental frequency not for 15.209 limits requirement.
5. Not recorded emission values from 9 KHz to 30 MHz as emission level at least 20 dBc lower than limit;
6. Please refer to following plots;

RF Conducted Spurious Emissions

Antenna 0

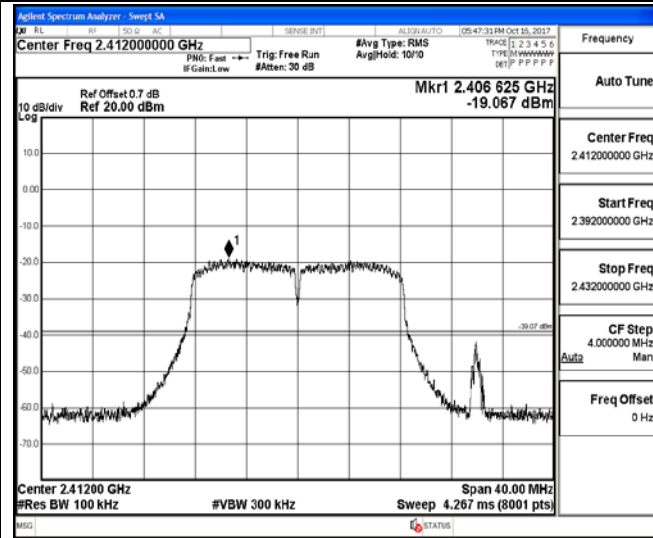
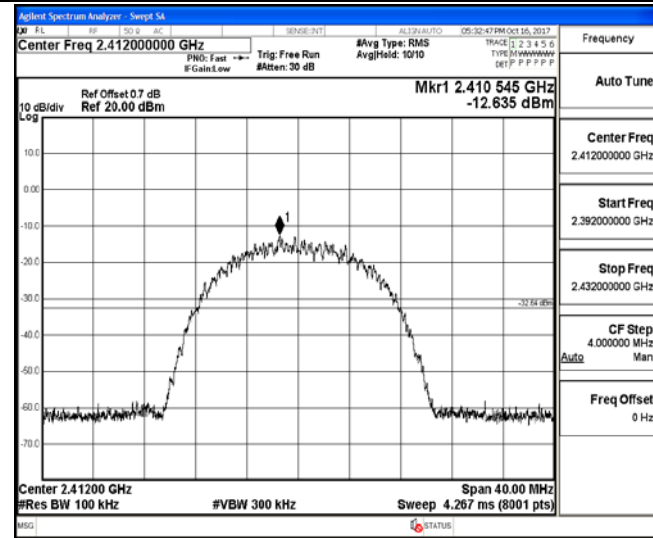
IEEE 802.11b

Channel 1 / 2412 MHz

Antenna 0

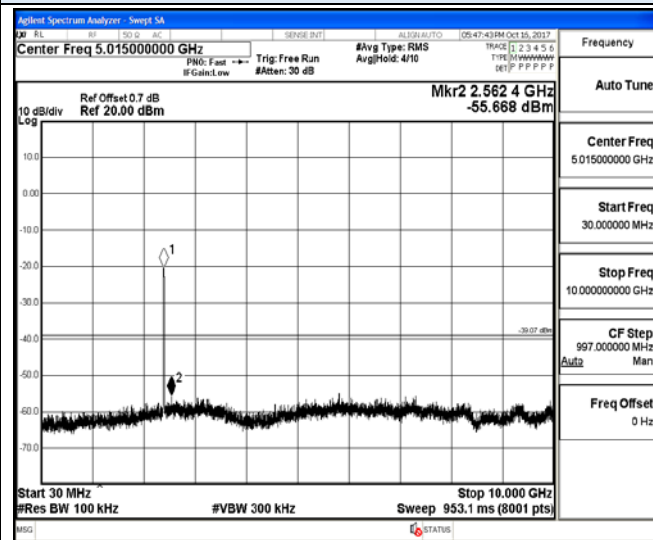
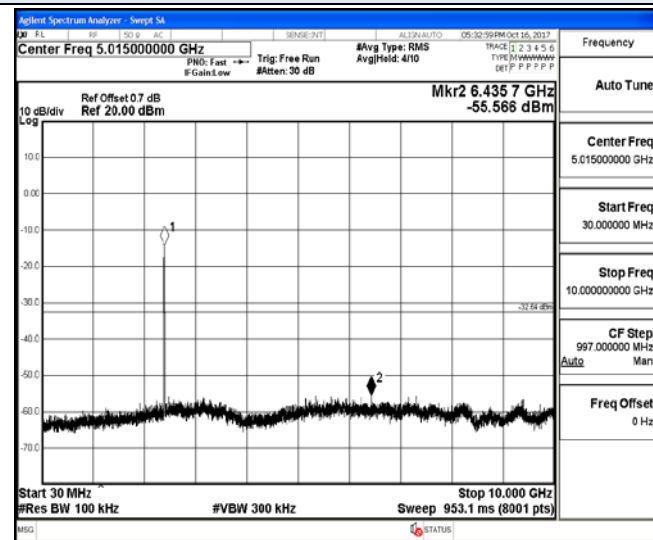
IEEE 802.11g

Channel 1 / 2412 MHz



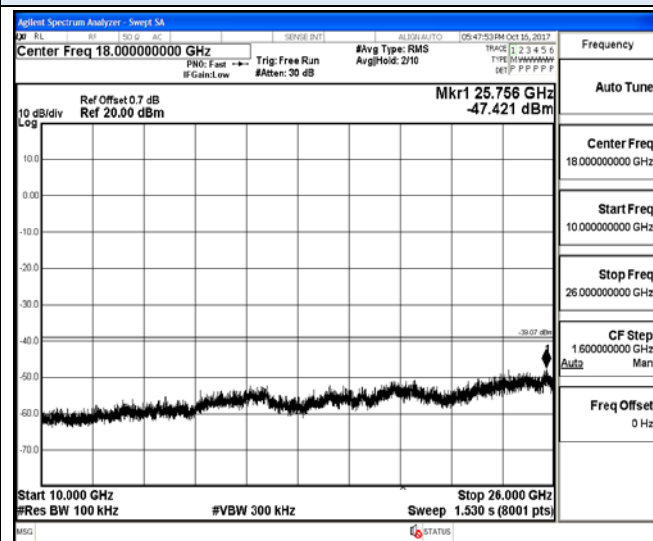
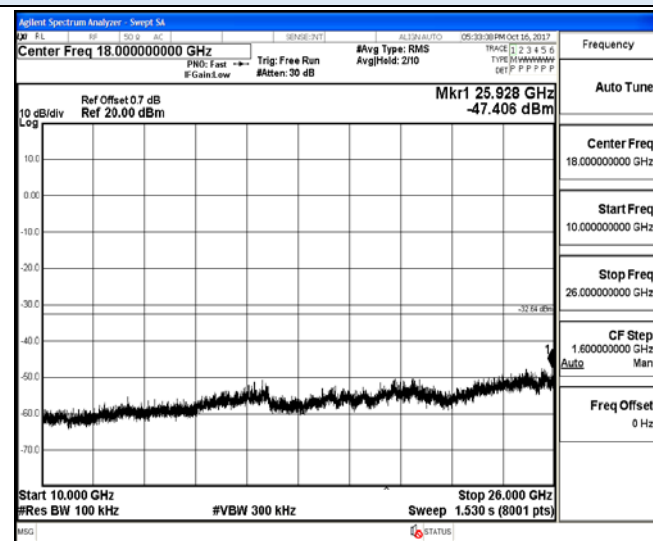
2392 MHz - 2432 MHz

2392 MHz - 2432 MHz



30 MHz - 10 GHz

30 MHz - 10 GHz



10 GHz - 26 GHz

10 GHz - 26 GHz

RF Conducted Spurious Emissions

Antenna 0

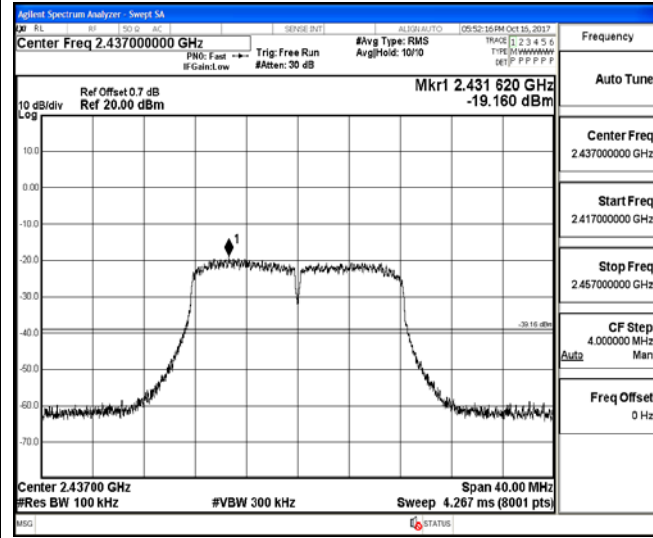
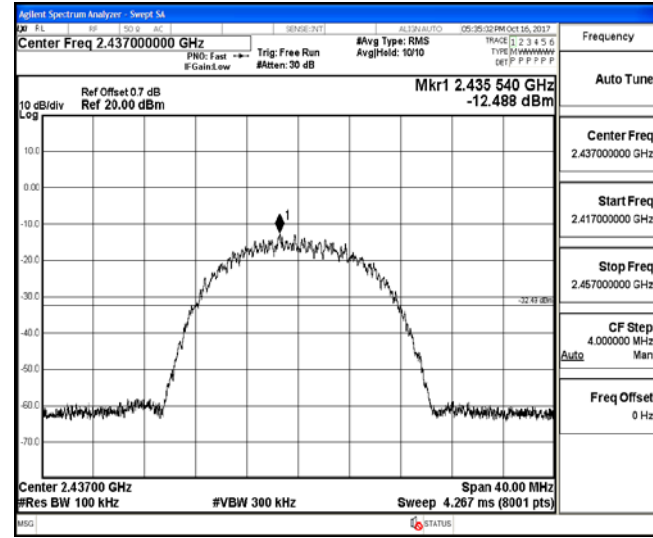
IEEE 802.11b

Channel 6 / 2437 MHz

Antenna 0

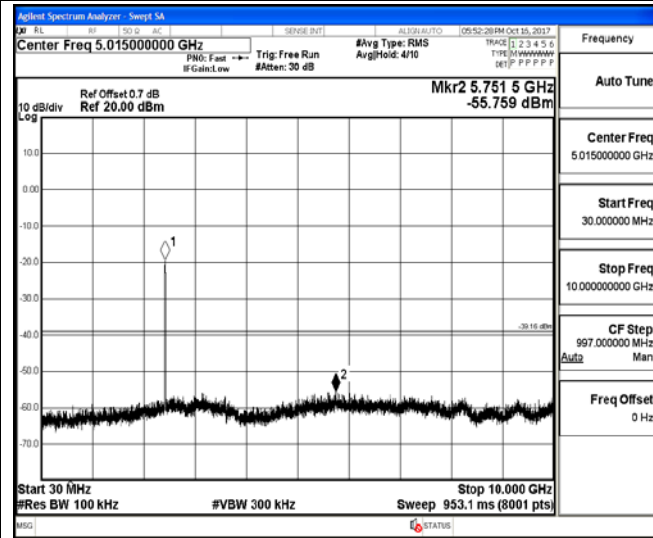
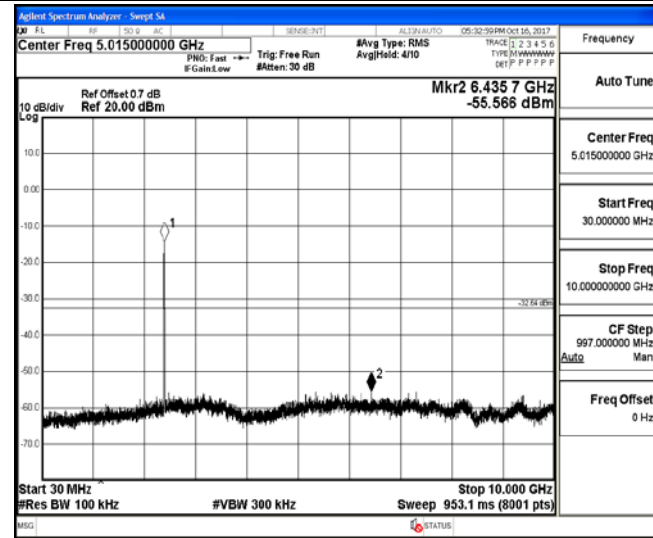
IEEE 802.11g

Channel 6 / 2437 MHz



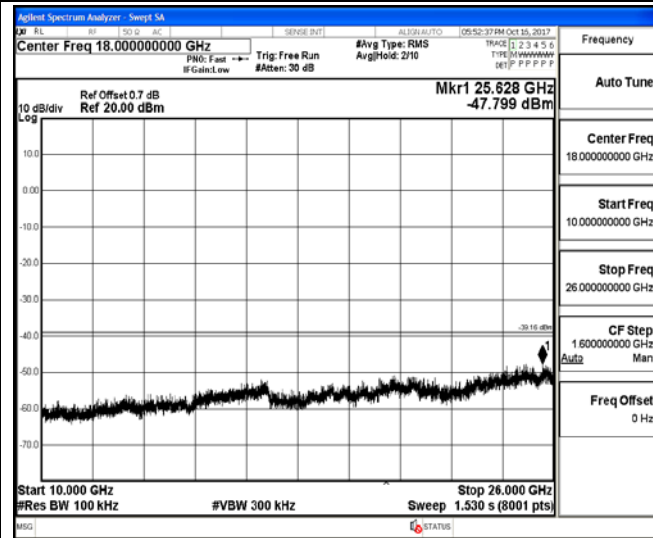
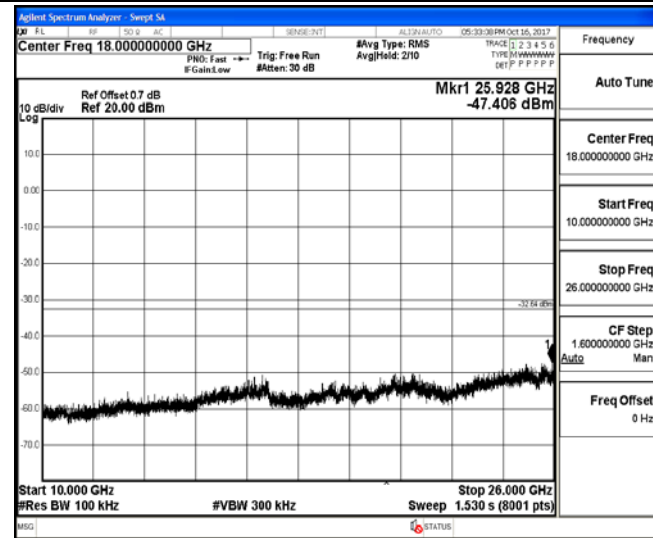
2417 MHz – 2457 MHz

2417 MHz – 2457 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 0

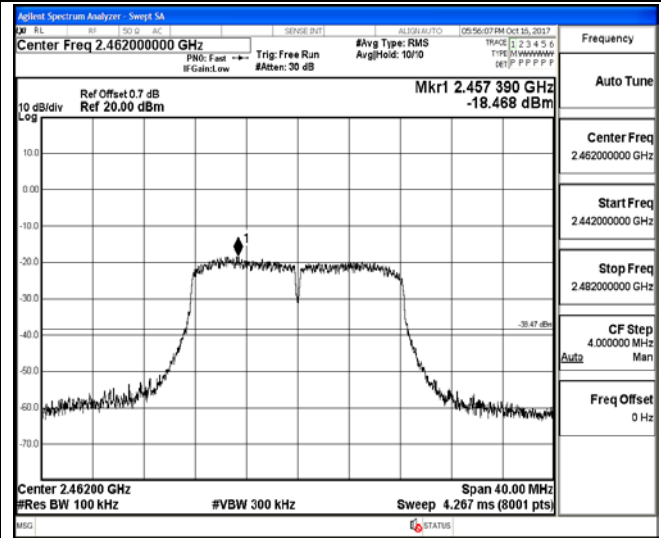
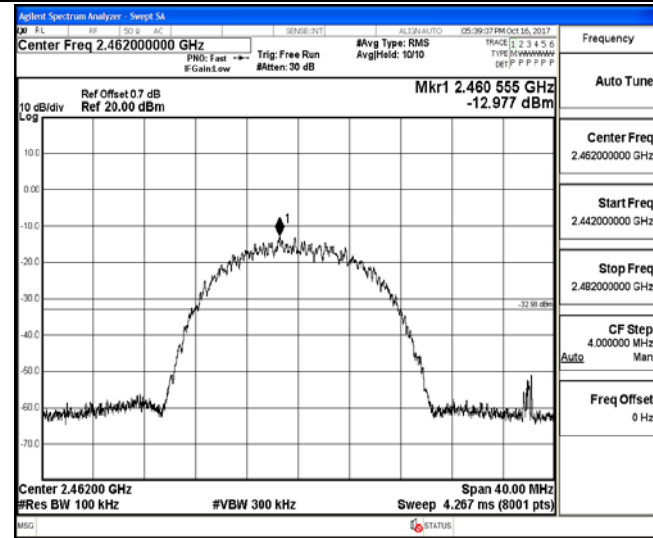
IEEE 802.11b

Channel 11 / 2462 MHz

Antenna 0

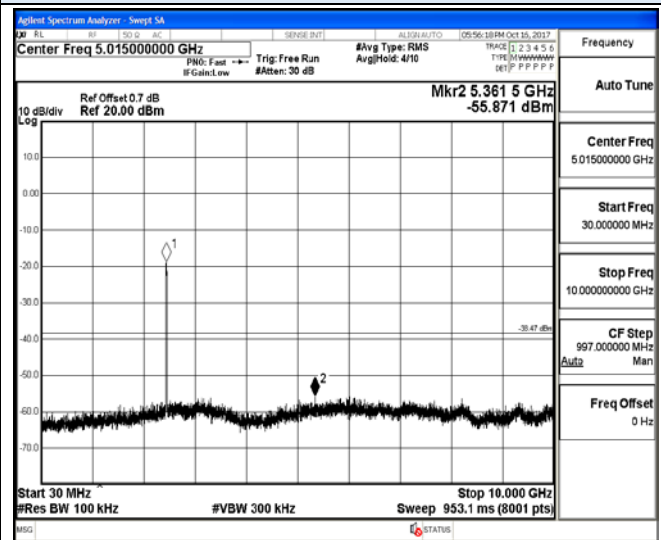
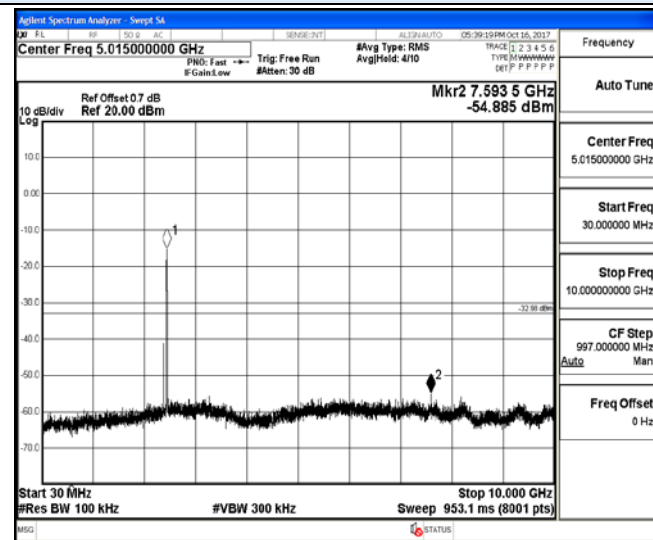
IEEE 802.11g

Channel 11 / 2462 MHz



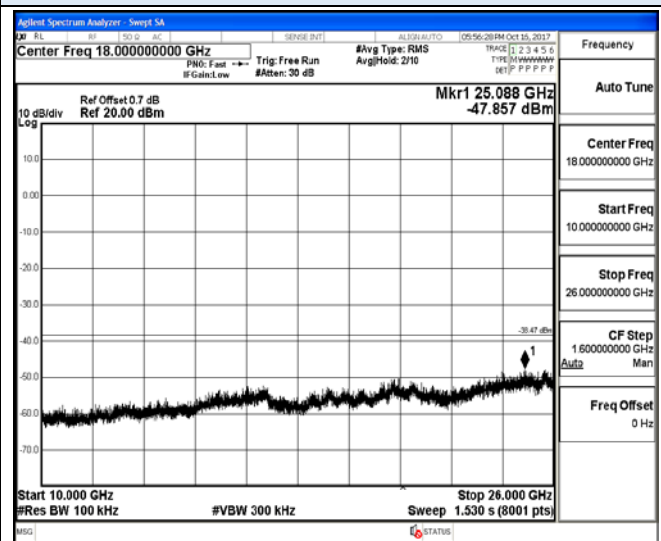
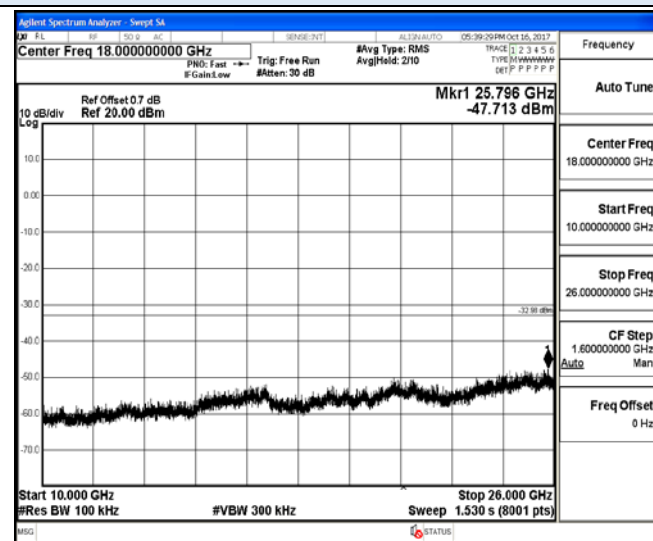
2442 MHz – 2482 MHz

2442 MHz – 2482 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 0

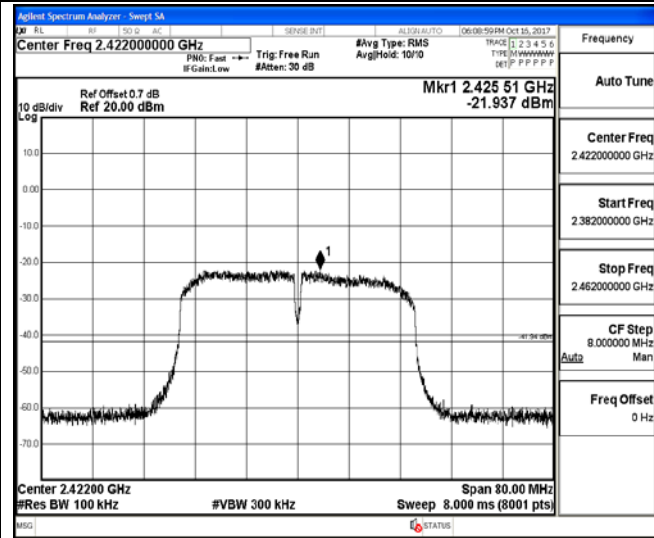
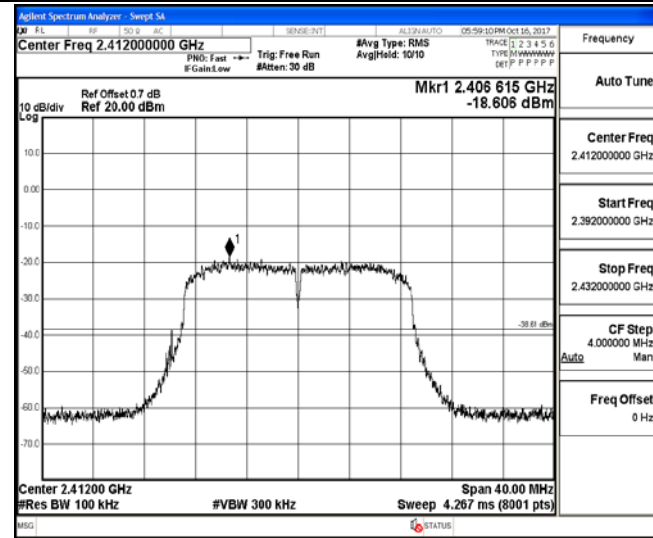
Antenna 0

IEEE 802.11n HT20

IEEE 802.11n HT40

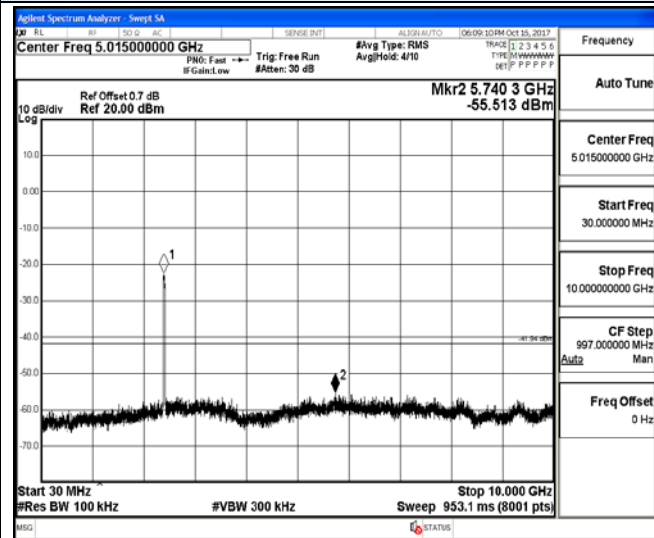
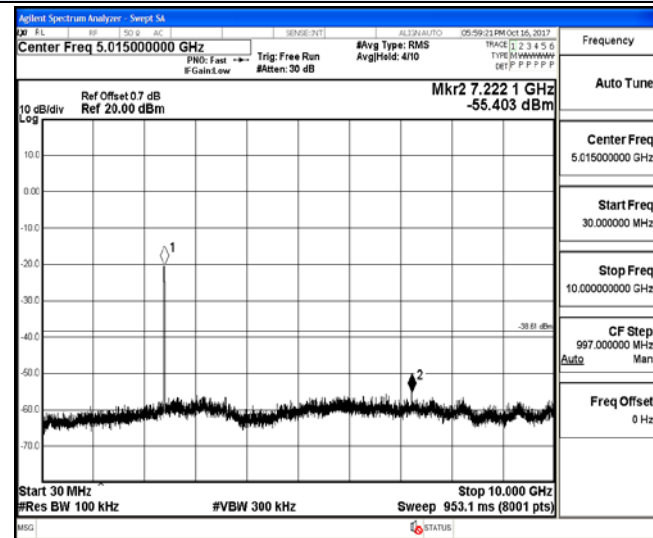
Channel 1 / 2412 MHz

Channel 3 / 2422 MHz



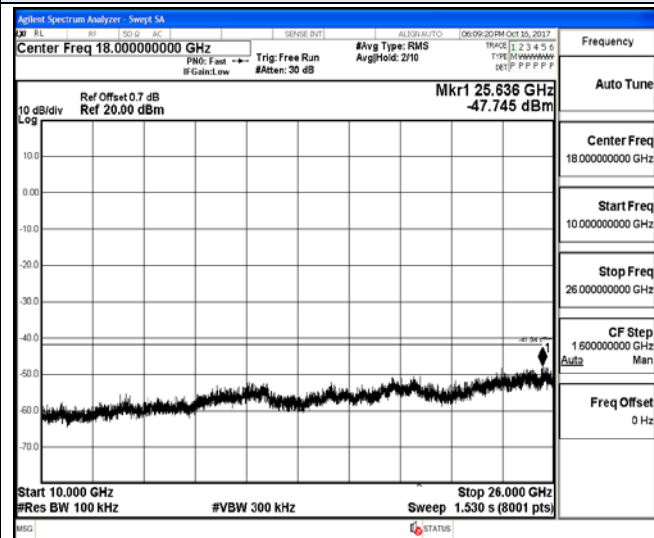
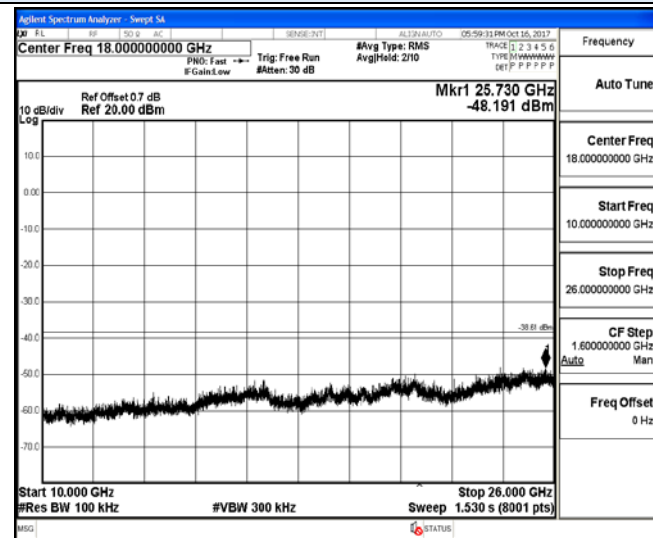
2392 MHz – 2432 MHz

2382 MHz – 2462 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 0

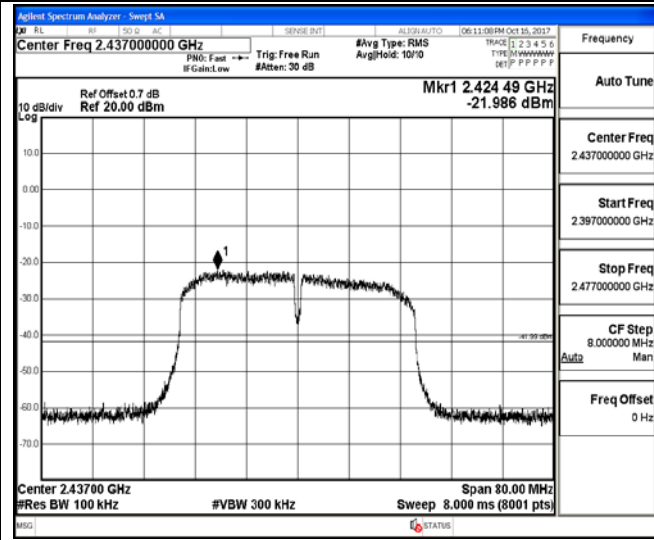
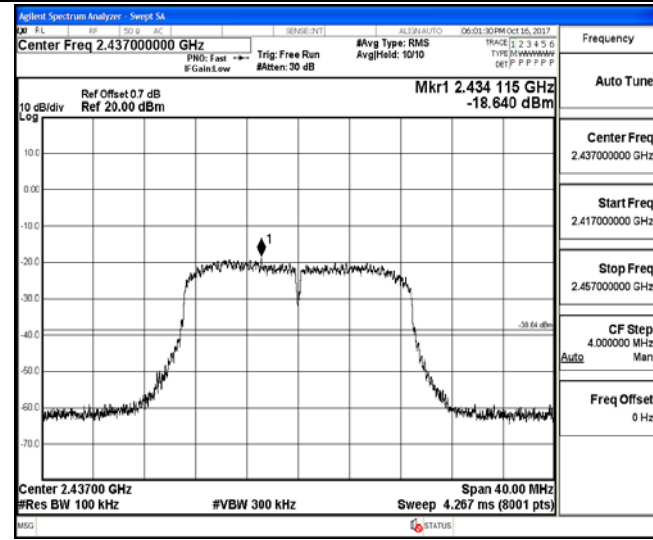
Antenna 0

IEEE 802.11n HT20

IEEE 802.11n HT40

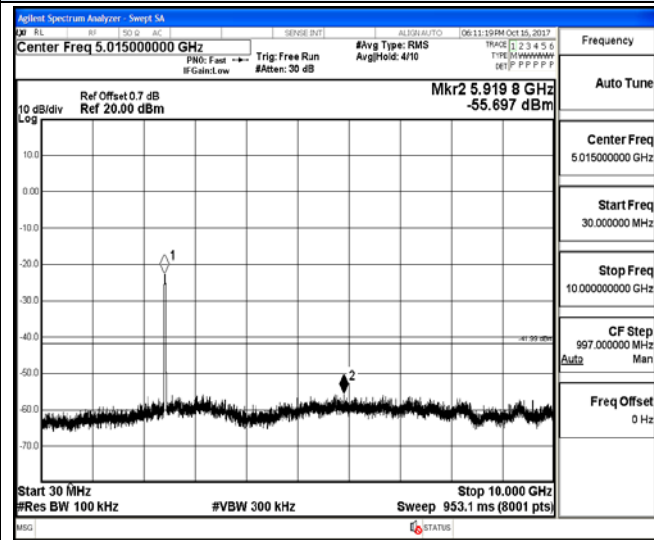
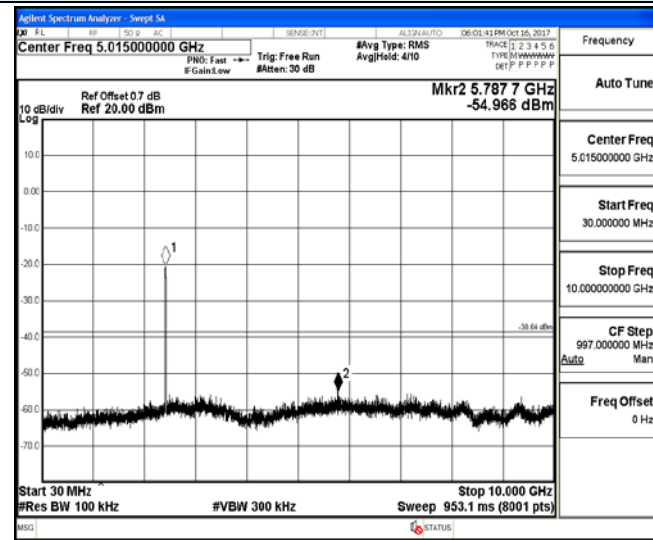
Channel 6 / 2437 MHz

Channel 6 / 2437 MHz



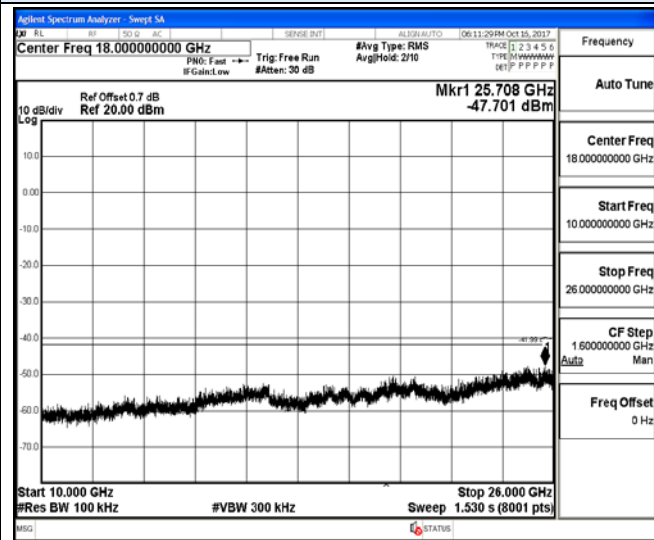
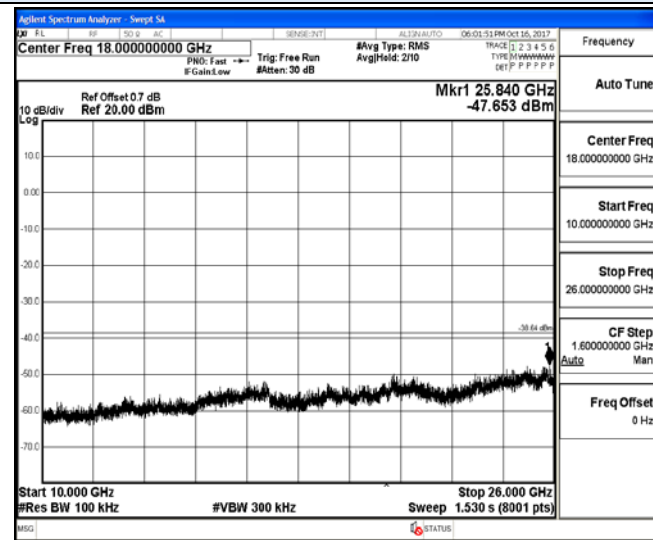
2417 MHz – 2457 MHz

2397 MHz – 2477 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 0

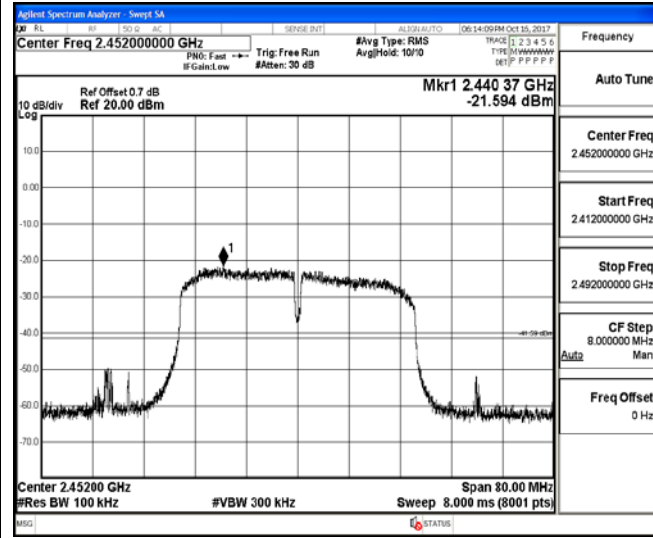
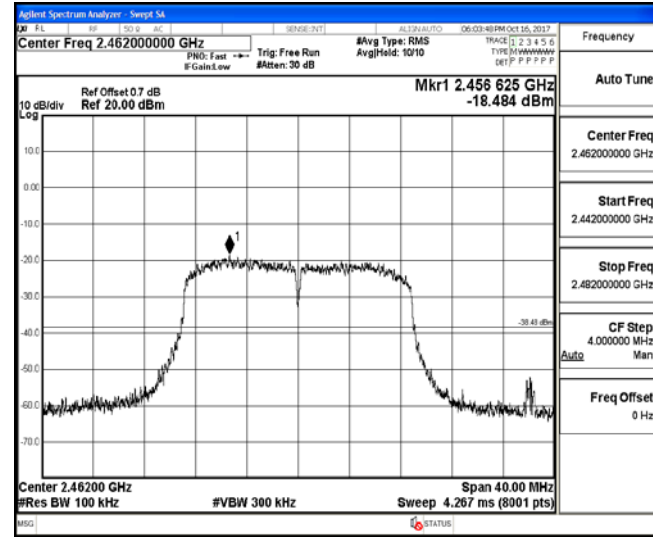
Antenna 0

IEEE 802.11n HT20

IEEE 802.11n HT40

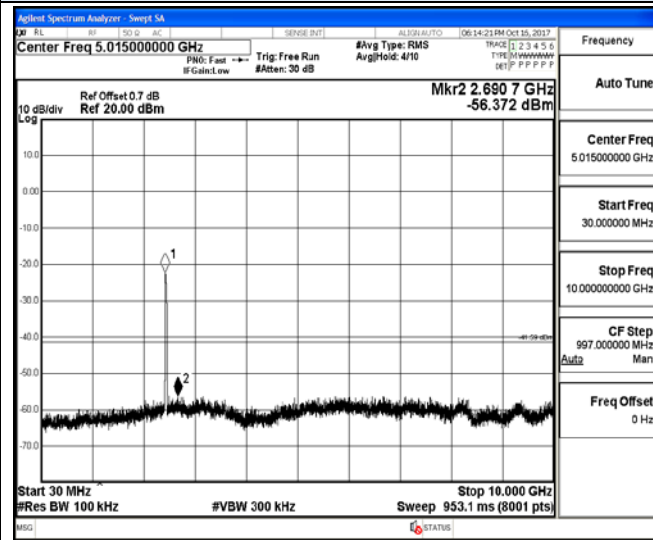
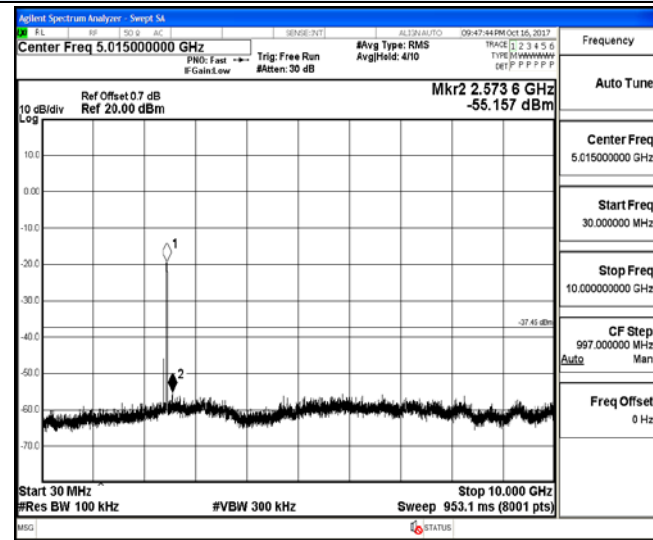
Channel 11 / 2462 MHz

Channel 9 / 2452 MHz



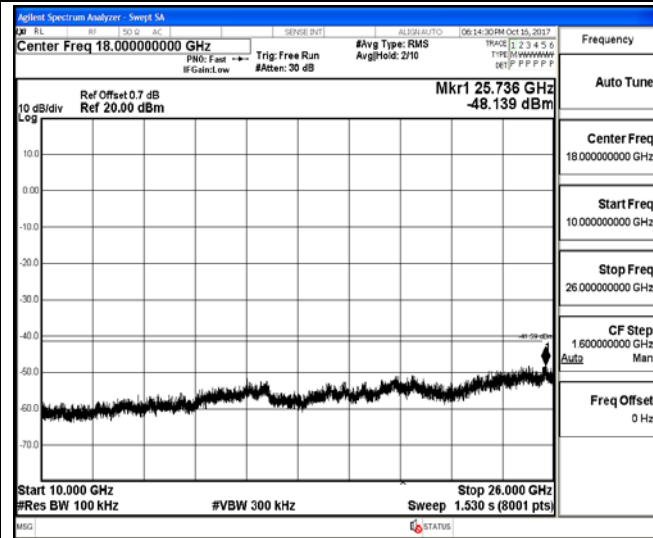
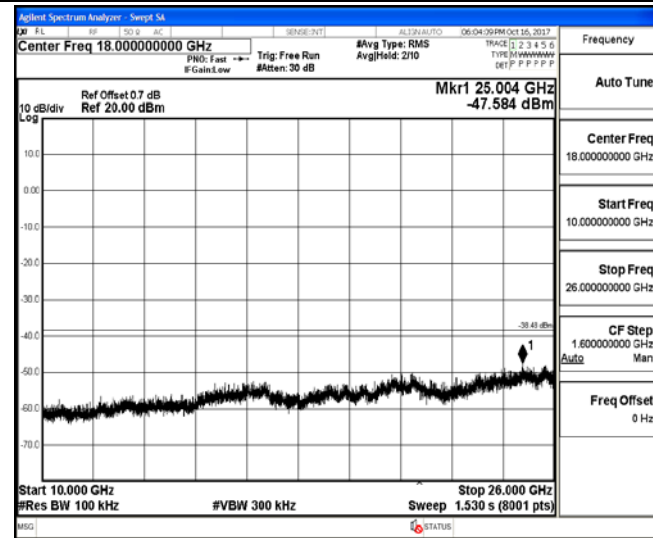
2442 MHz - 2482 MHz

2412 MHz - 2492 MHz



30 MHz - 10 GHz

30 MHz - 10 GHz



10 GHz - 26 GHz

10 GHz - 26 GHz

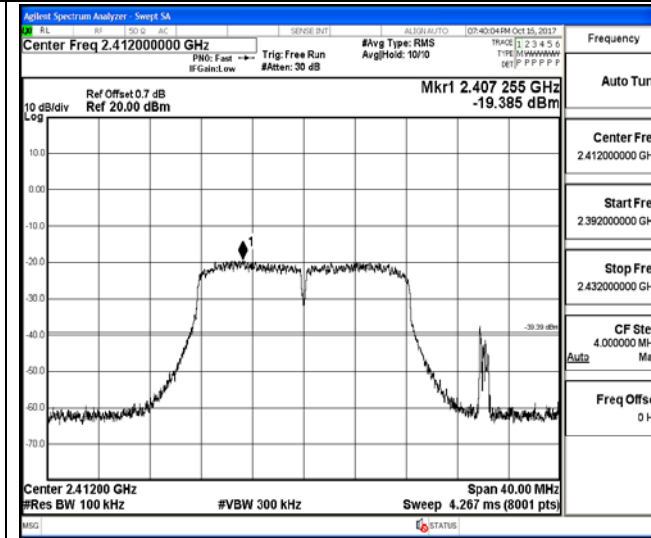
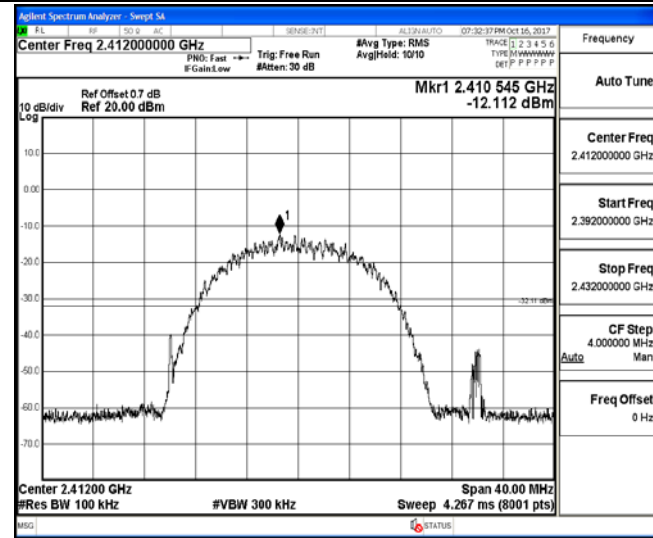
RF Conducted Spurious Emissions

Antenna 1
IEEE 802.11b

Channel 1 / 2412 MHz

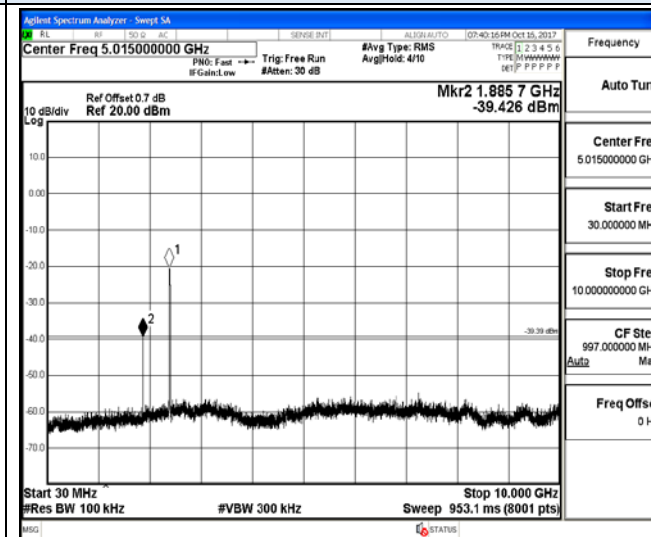
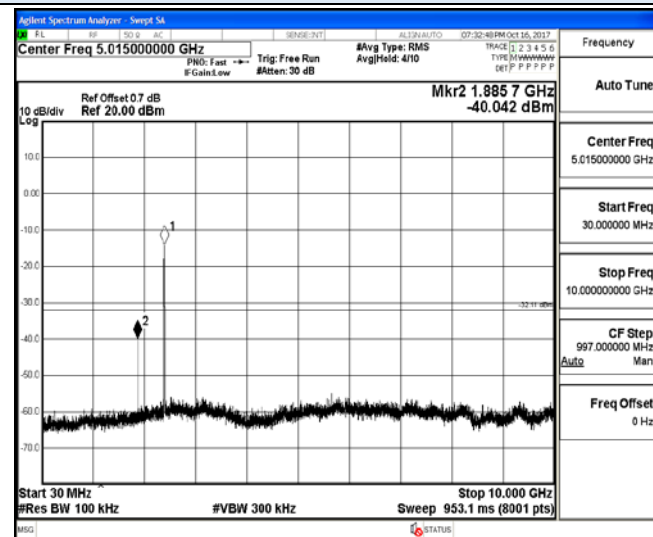
Antenna 1
IEEE 802.11g

Channel 1 / 2412 MHz



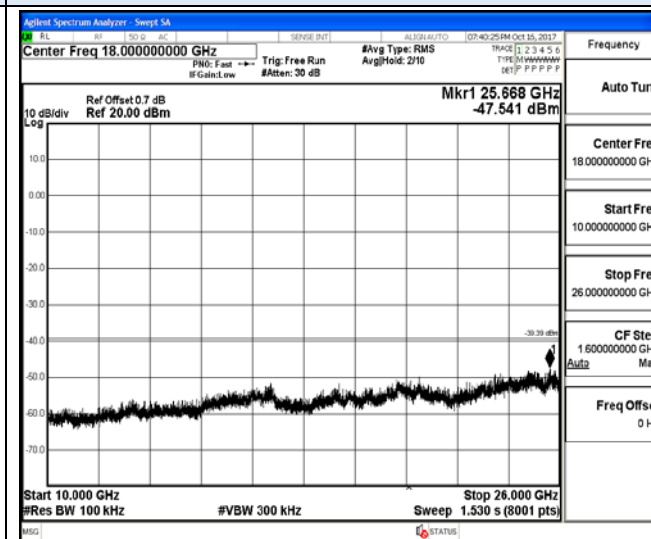
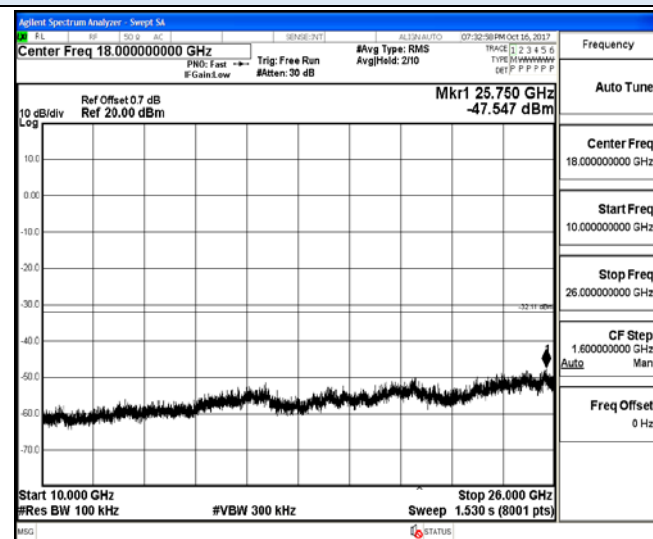
2392 MHz – 2432 MHz

2392 MHz – 2432 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



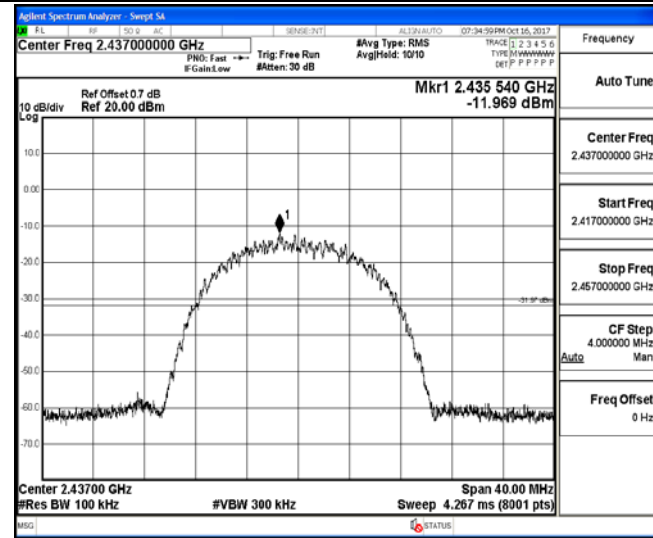
10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

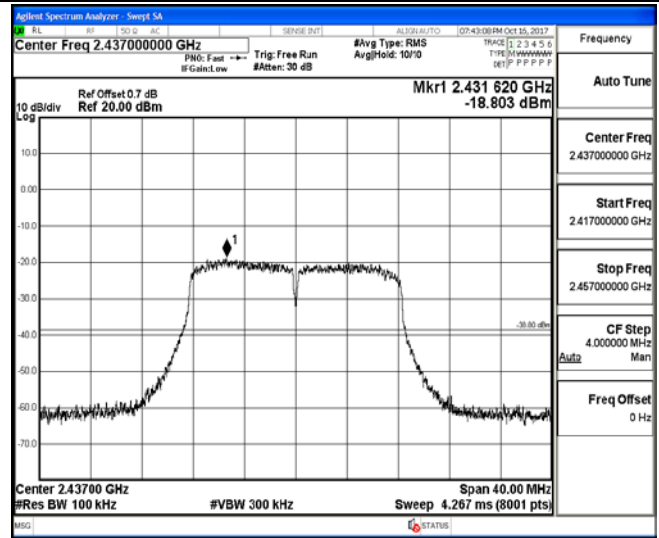
Antenna 1
IEEE 802.11b

Channel 6 / 2437 MHz



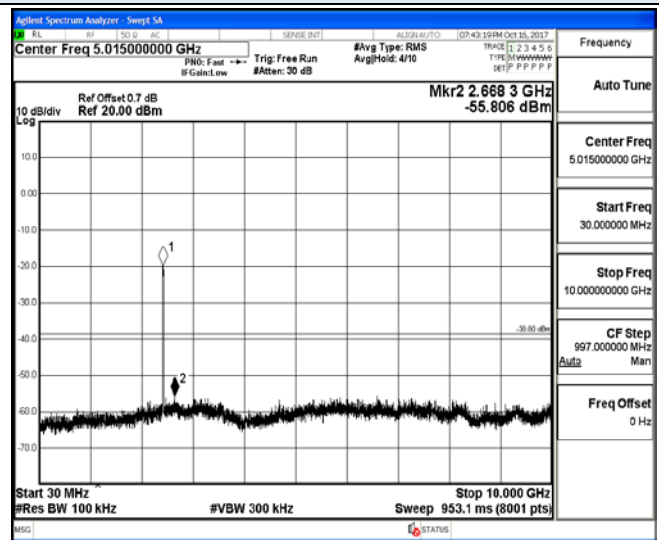
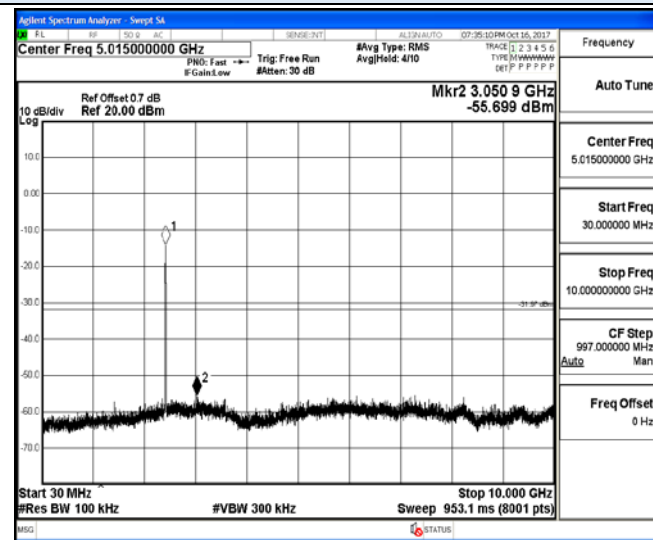
Antenna 1
IEEE 802.11g

Channel 6 / 2437 MHz



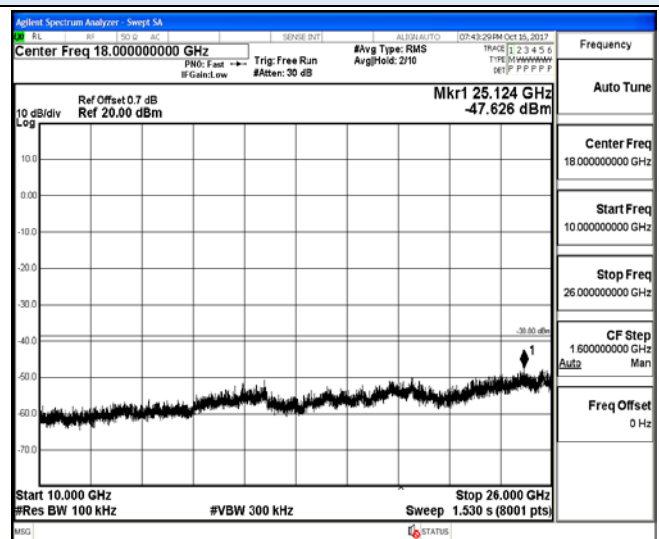
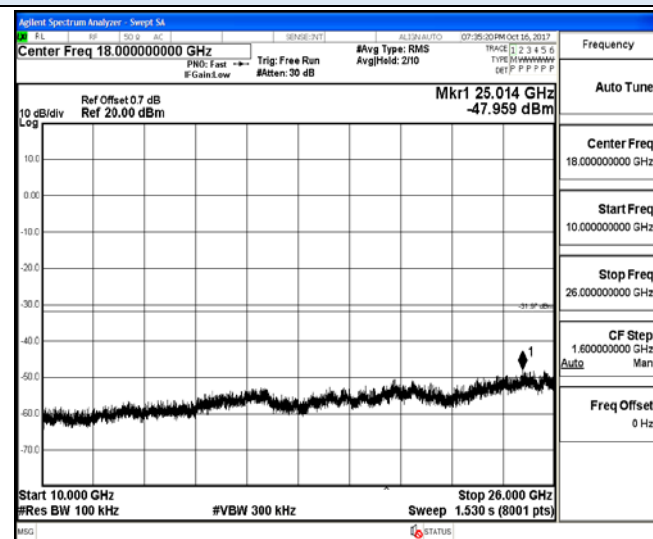
2417 MHz – 2457 MHz

2417 MHz – 2457 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 1

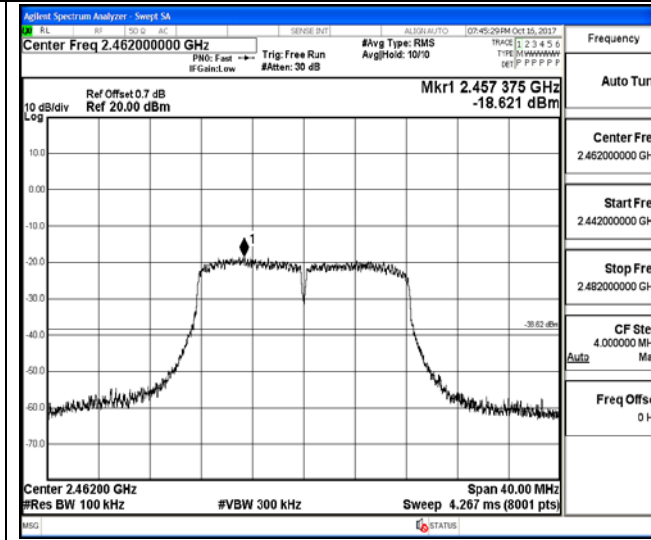
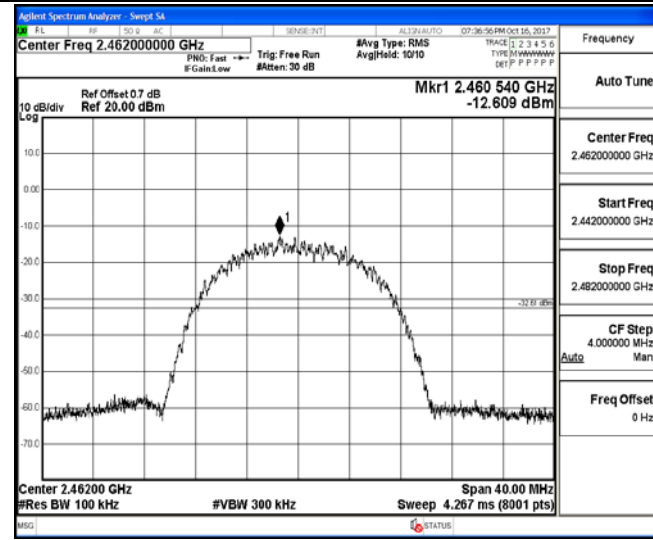
Antenna 1

IEEE 802.11b

IEEE 802.11g

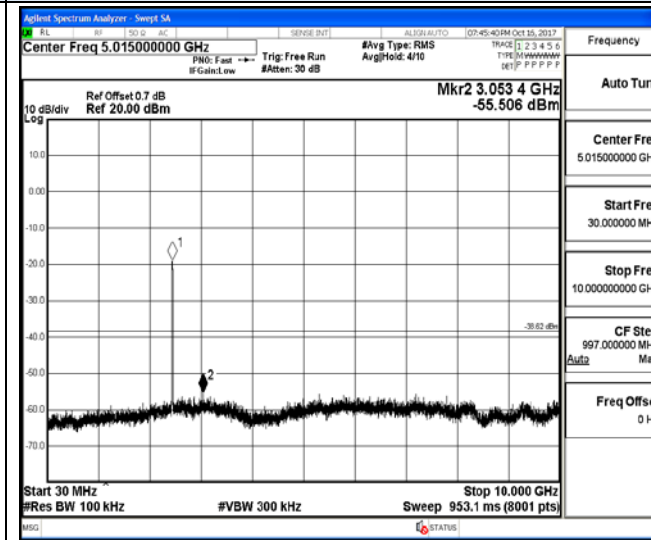
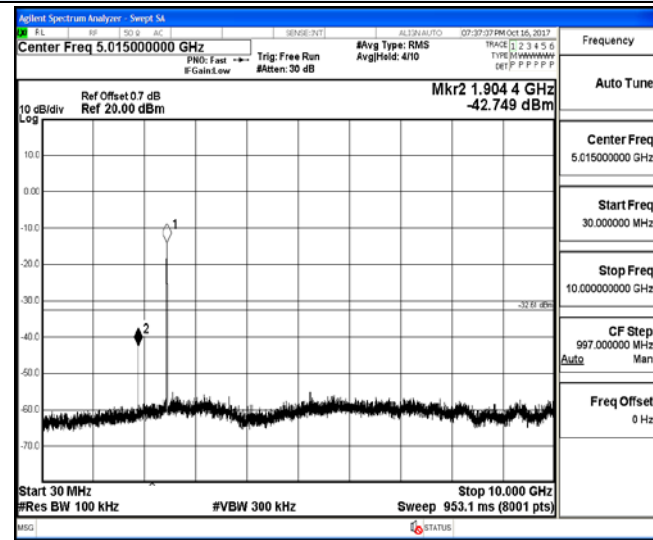
Channel 11 / 2462 MHz

Channel 11 / 2462 MHz



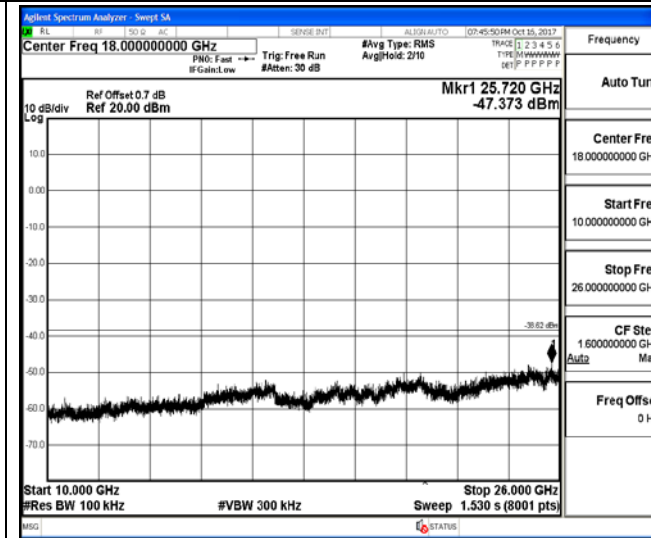
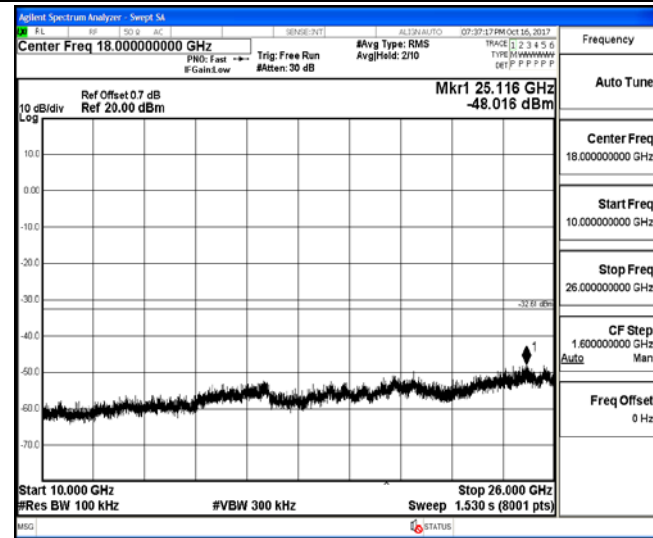
2442 MHz – 2482 MHz

2442 MHz – 2482 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 1

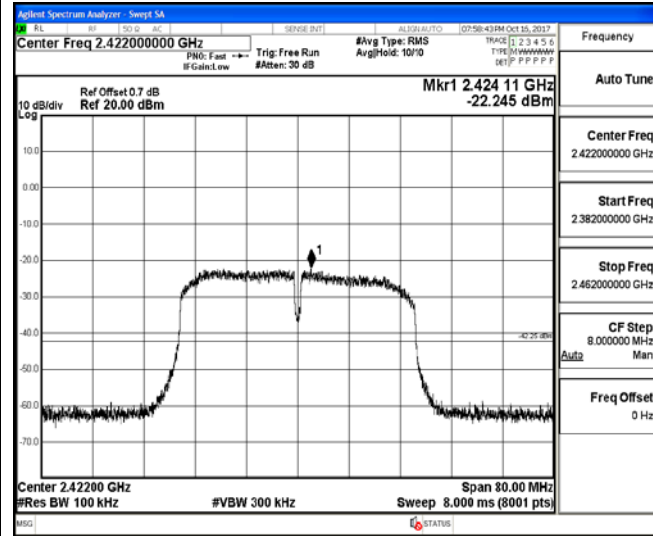
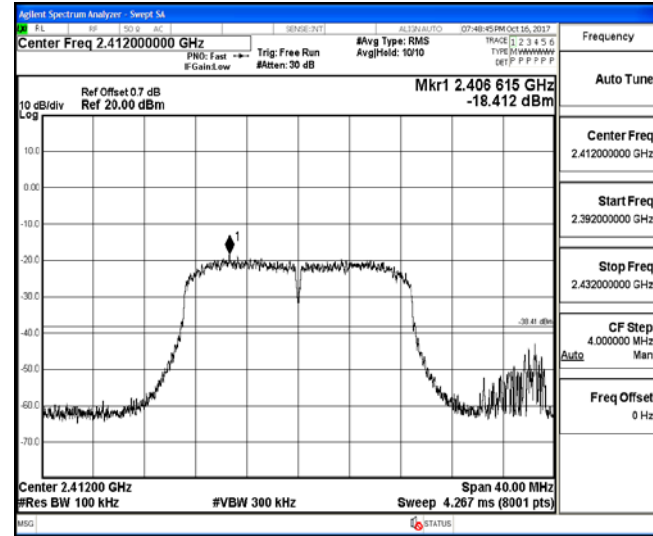
IEEE 802.11n HT20

Channel 1 / 2412 MHz

Antenna 1

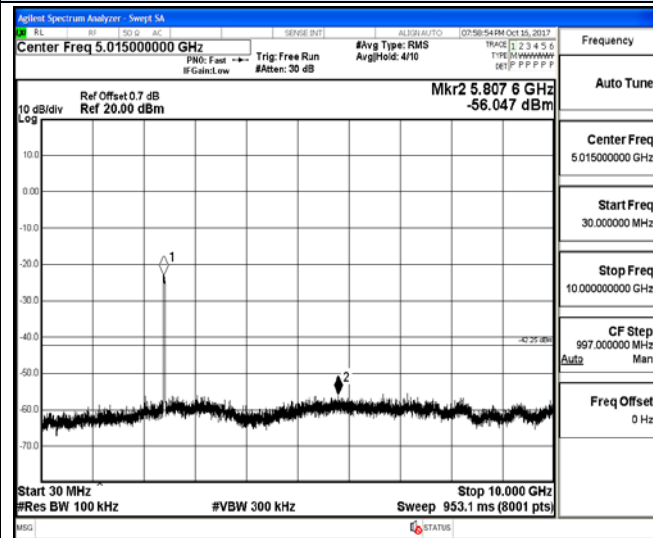
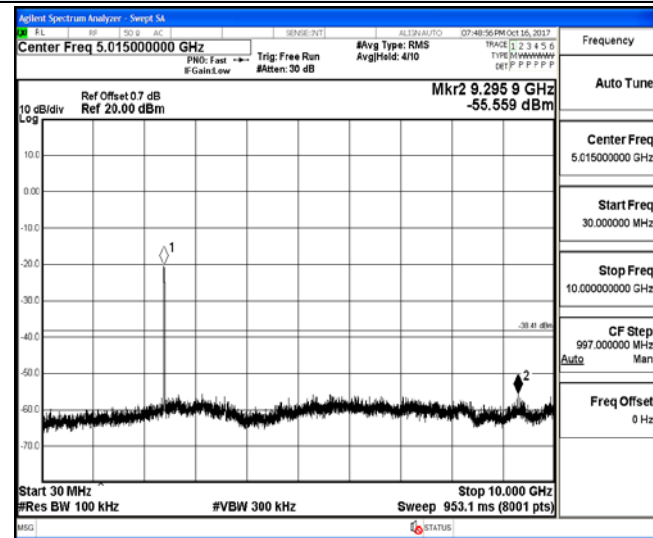
IEEE 802.11n HT40

Channel 3 / 2422 MHz



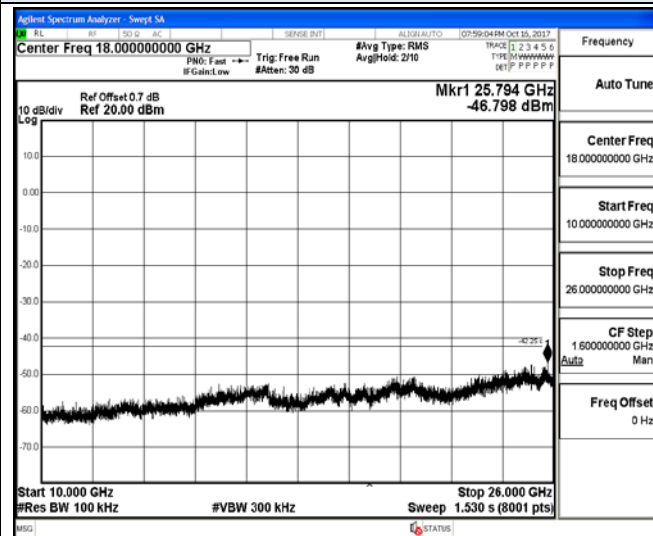
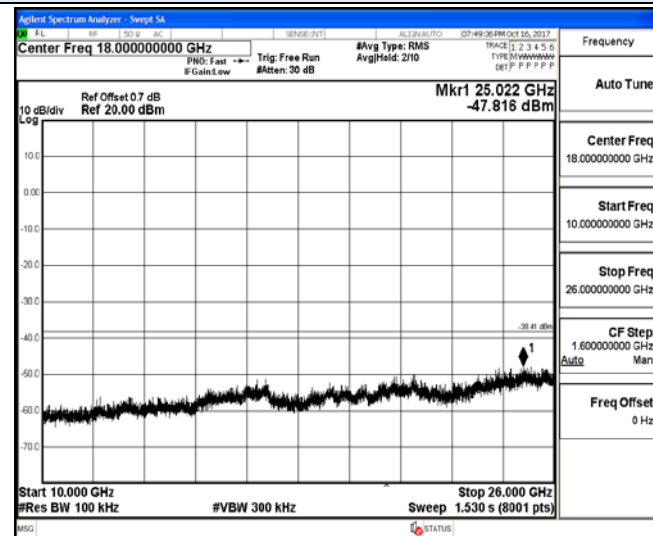
2392 MHz – 2432 MHz

2382 MHz – 2462 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 1

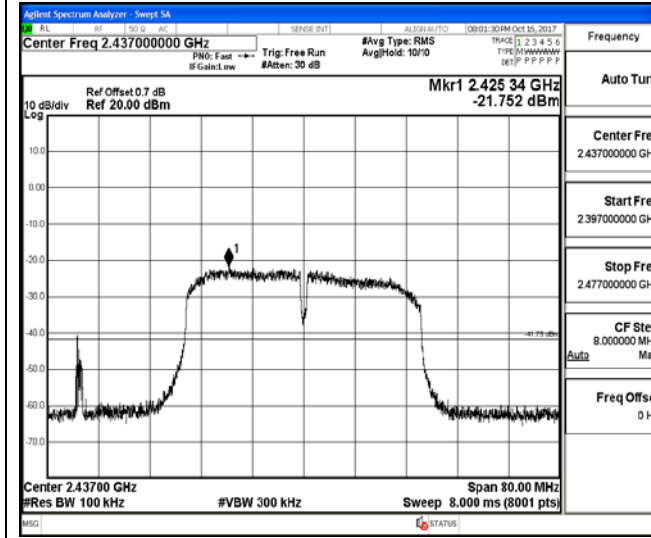
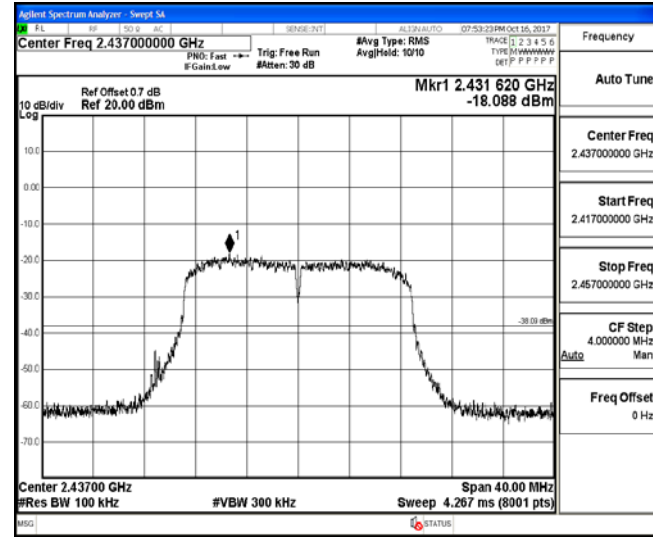
IEEE 802.11n HT20

Channel 6 / 2437 MHz

Antenna 1

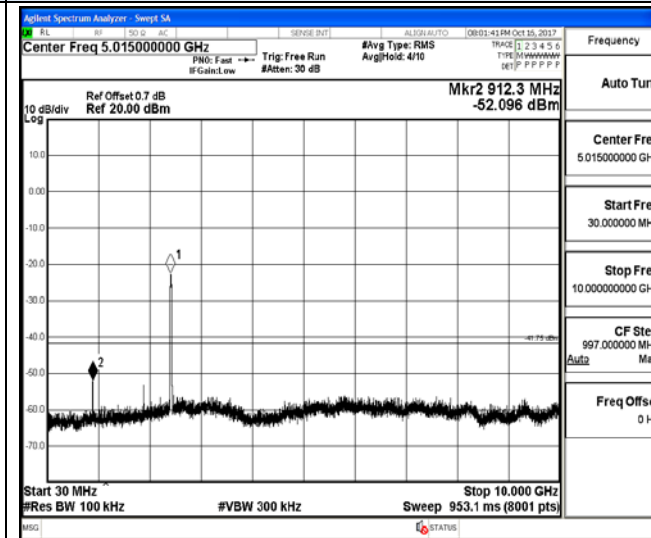
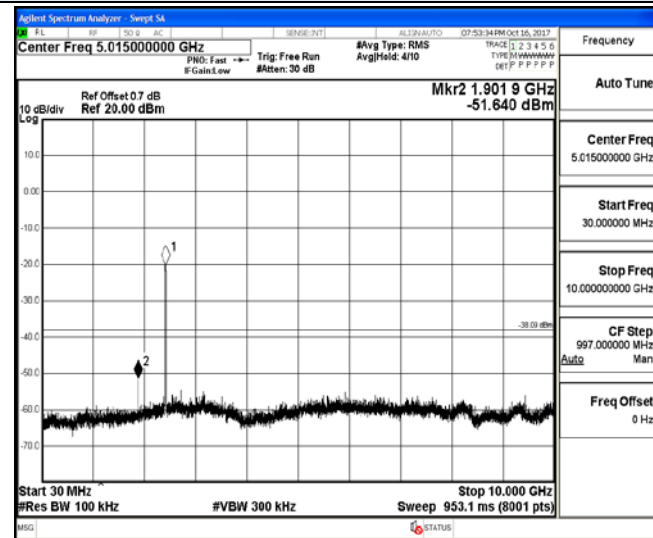
IEEE 802.11n HT40

Channel 6 / 2437 MHz



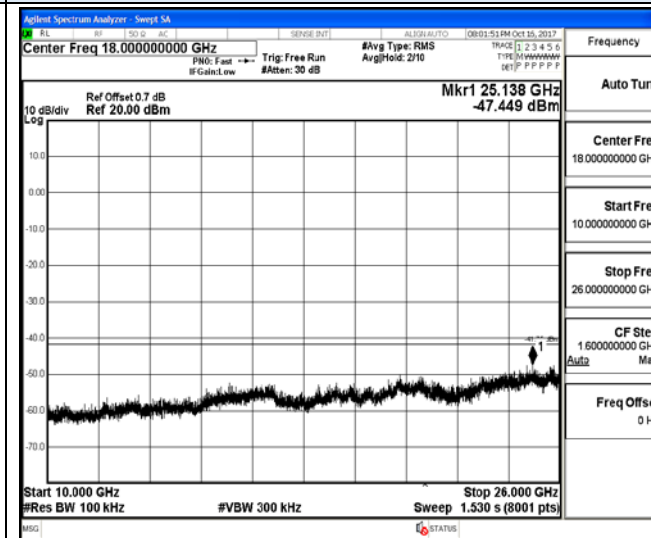
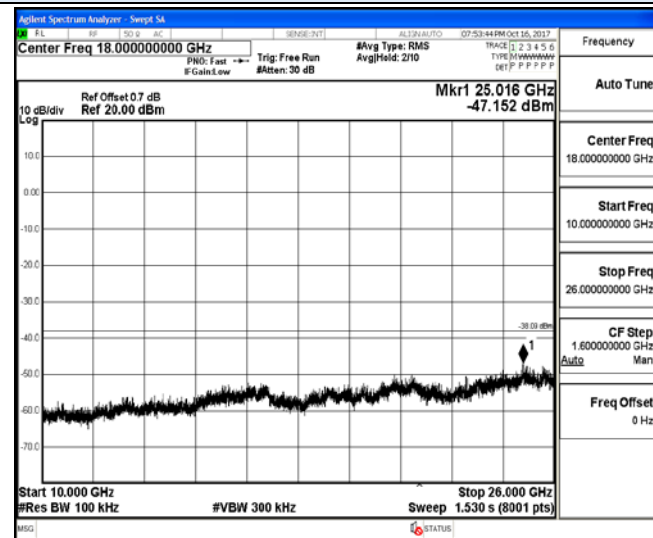
2417 MHz – 2457 MHz

2397 MHz – 2477 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 1

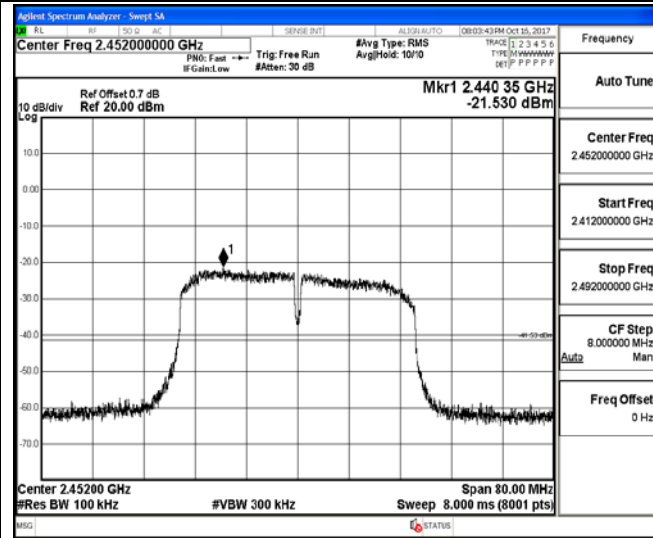
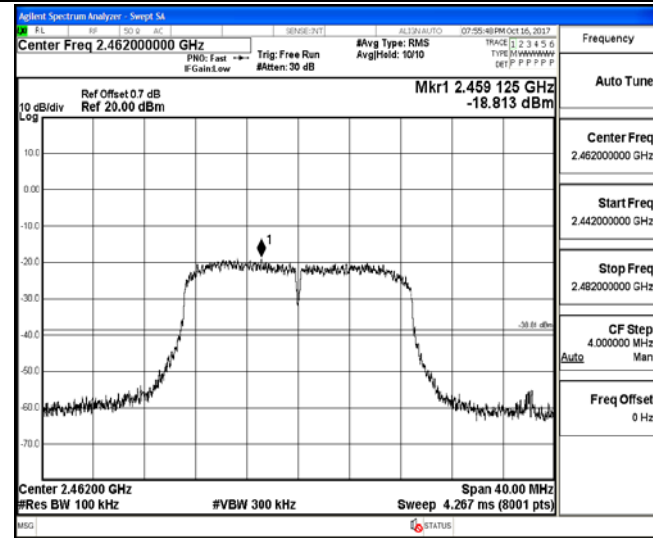
IEEE 802.11n HT20

Channel 11 / 2462 MHz

Antenna 1

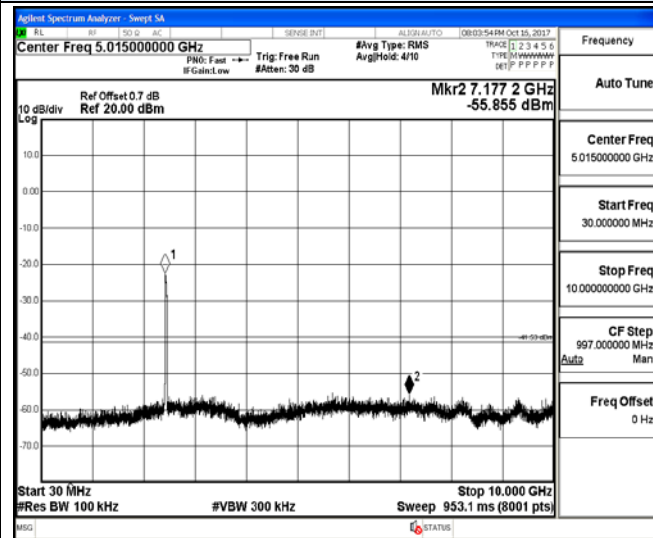
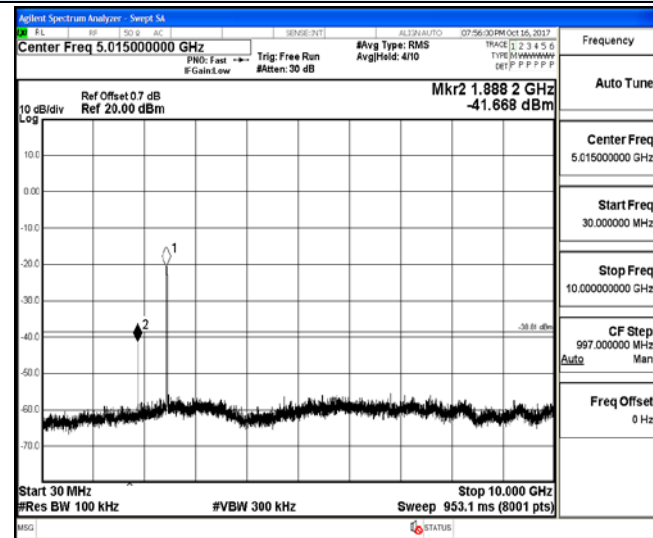
IEEE 802.11n HT40

Channel 9 / 2452 MHz



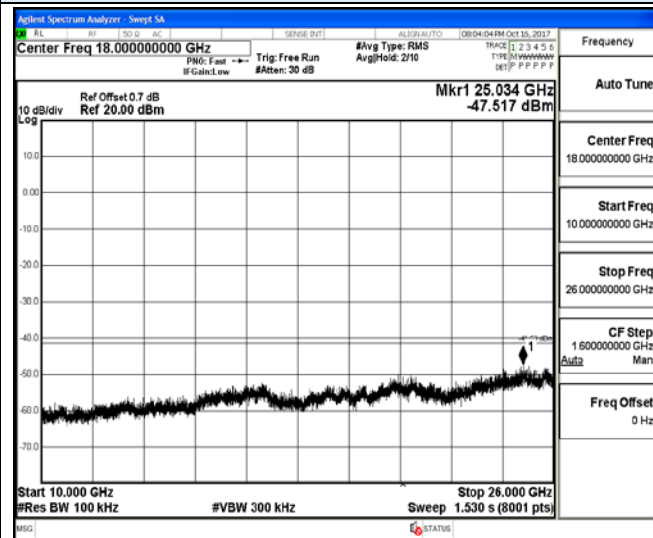
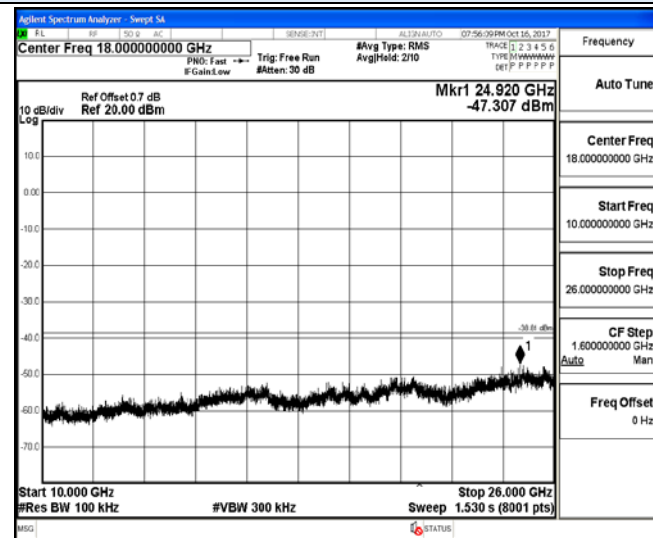
2442 MHz - 2482 MHz

2412 MHz - 2492 MHz



30 MHz - 10 GHz

30 MHz - 10 GHz



10 GHz - 26 GHz

10 GHz - 26 GHz

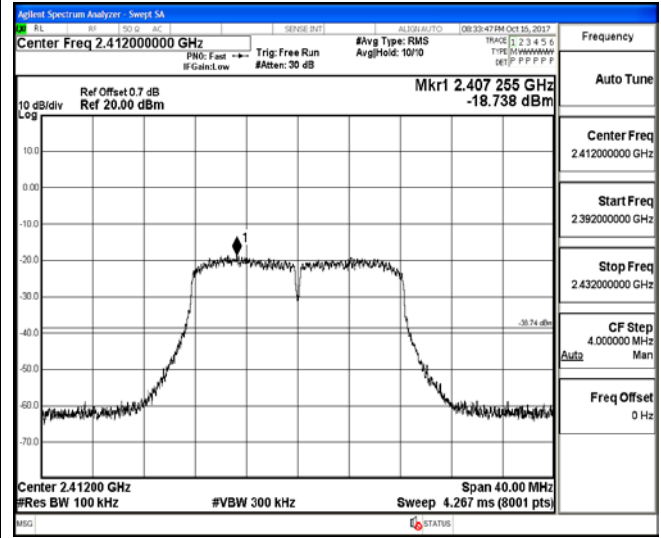
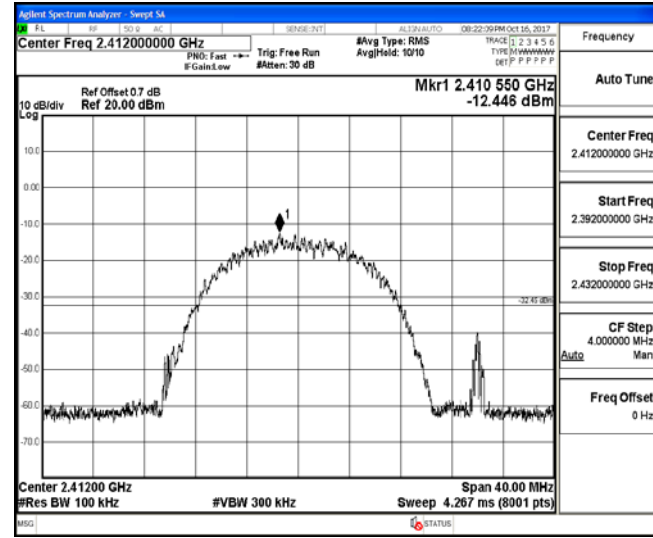
RF Conducted Spurious Emissions

Antenna 2
IEEE 802.11b

Antenna 2
IEEE 802.11g

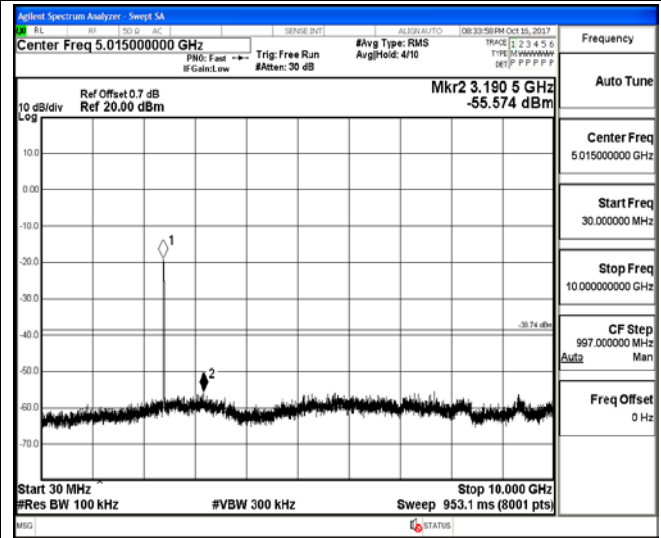
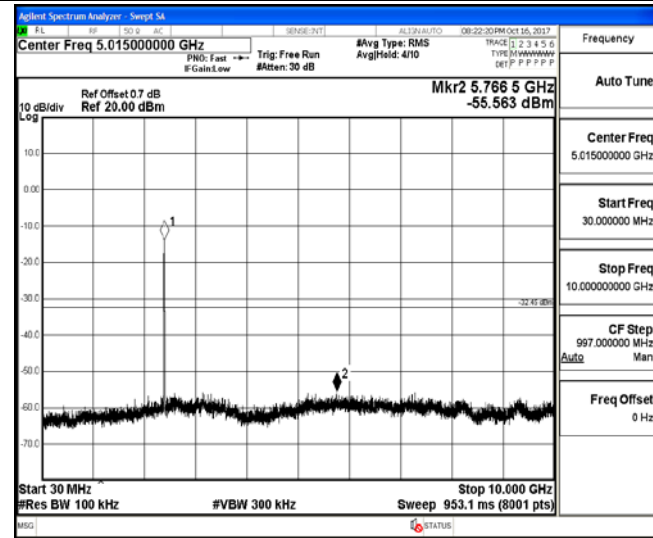
Channel 1 / 2412 MHz

Channel 1 / 2412 MHz



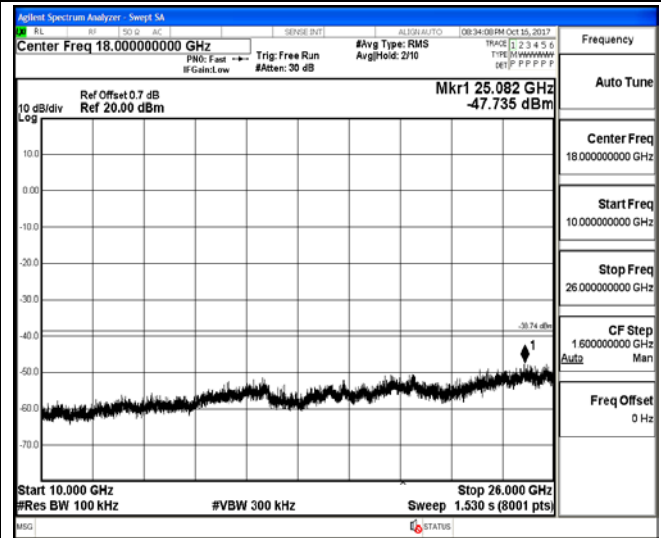
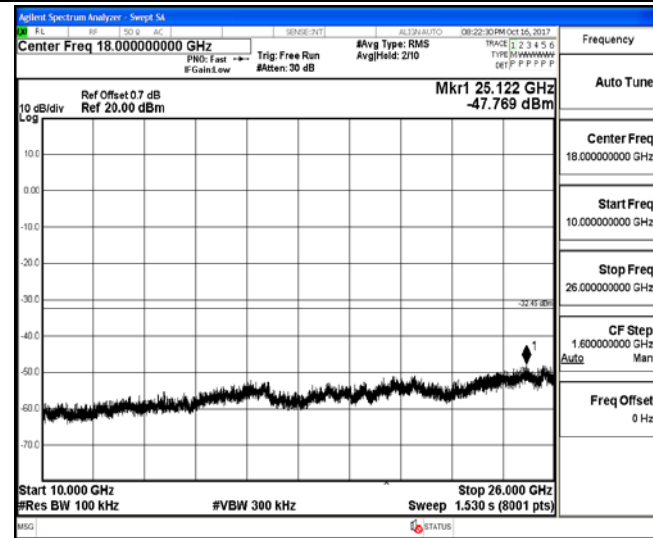
2392 MHz – 2432 MHz

2392 MHz – 2432 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz

RF Conducted Spurious Emissions

Antenna 2

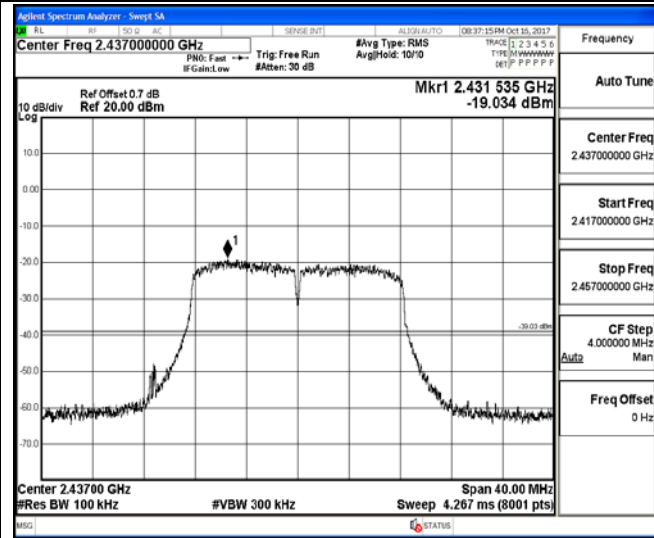
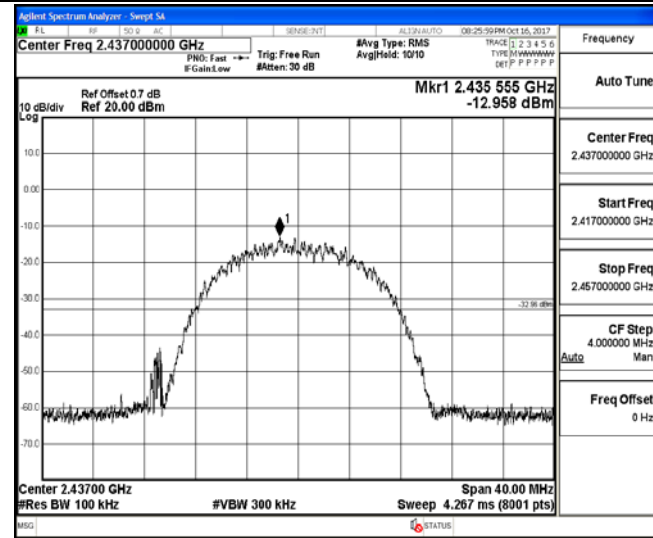
Antenna 2

IEEE 802.11b

IEEE 802.11g

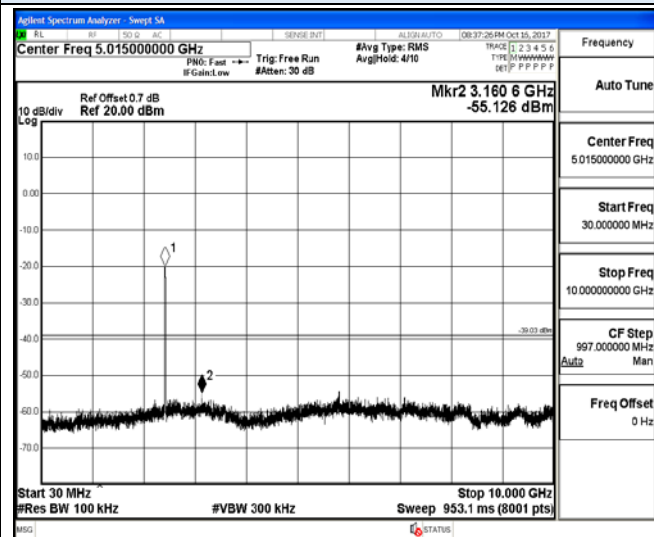
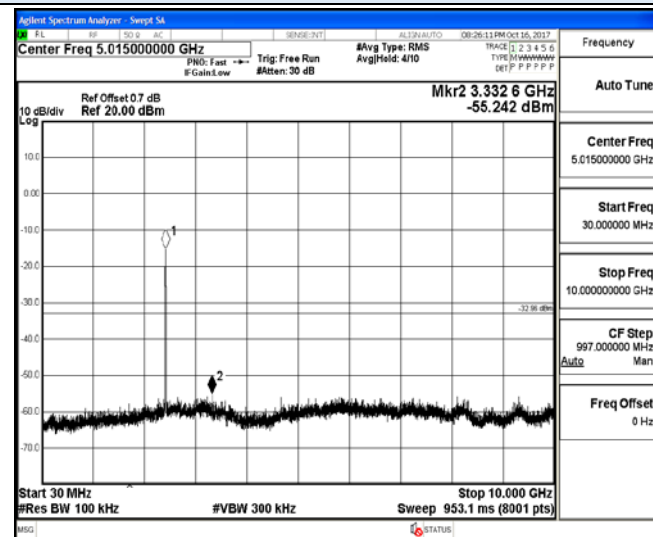
Channel 6 / 2437 MHz

Channel 6 / 2437 MHz



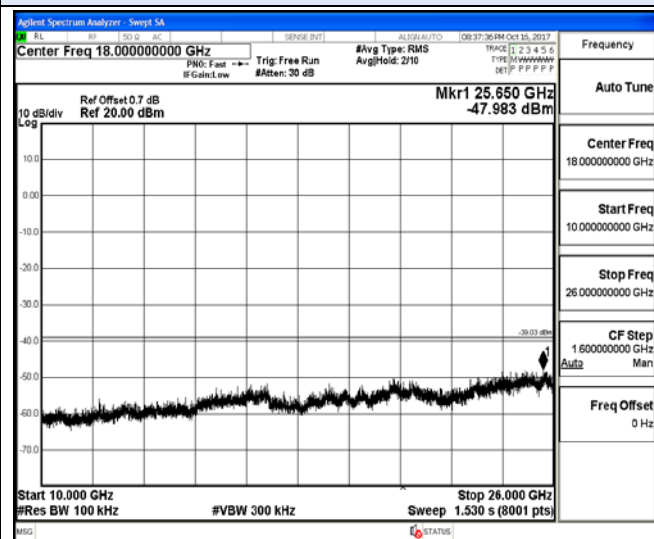
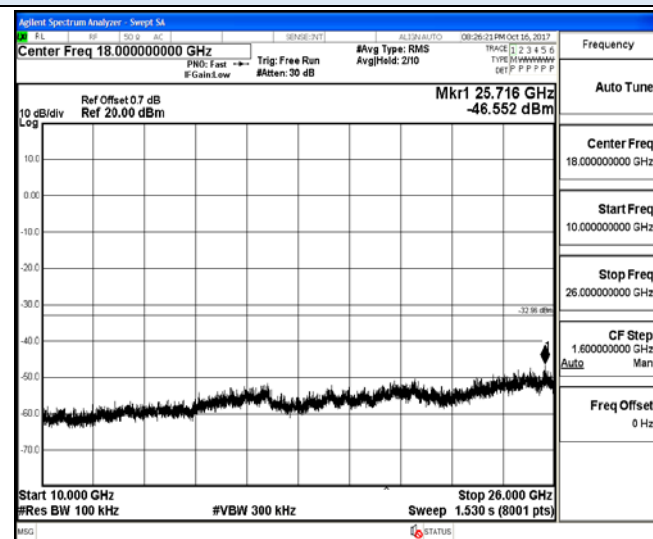
2417 MHz - 2457 MHz

2417 MHz - 2457 MHz



30 MHz - 10 GHz

30 MHz - 10 GHz



10 GHz - 26 GHz

10 GHz - 26 GHz

RF Conducted Spurious Emissions

Antenna 2

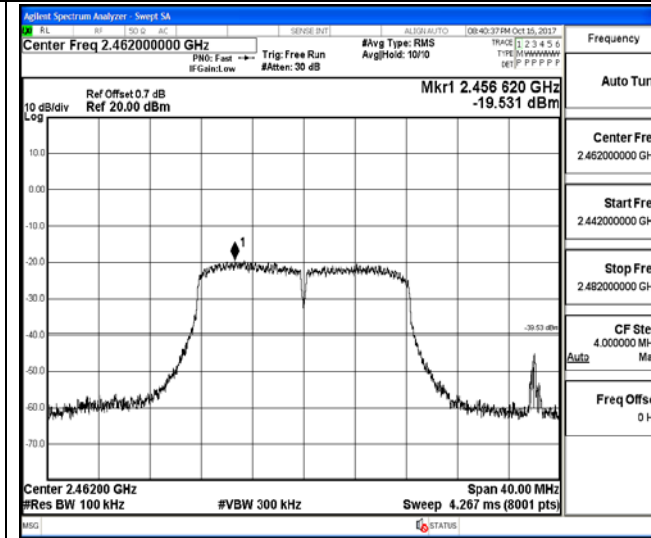
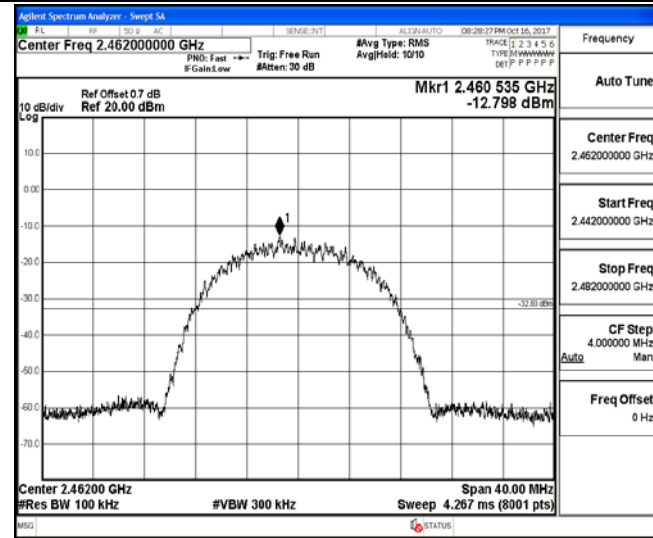
IEEE 802.11b

Channel 11 / 2462 MHz

Antenna 2

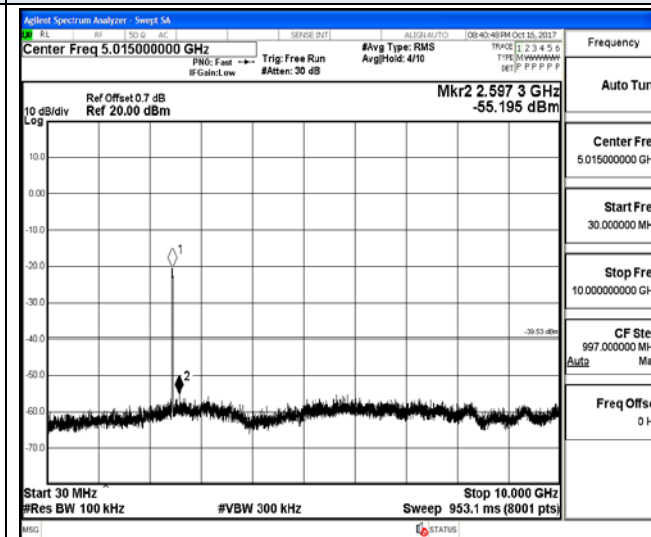
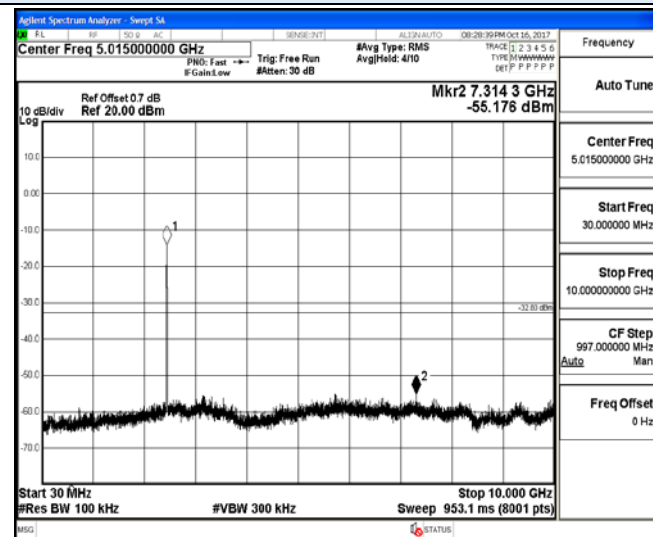
IEEE 802.11g

Channel 11 / 2462 MHz



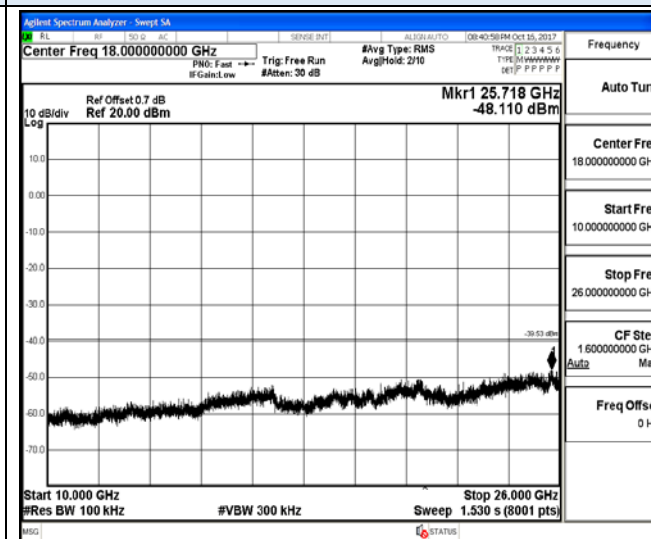
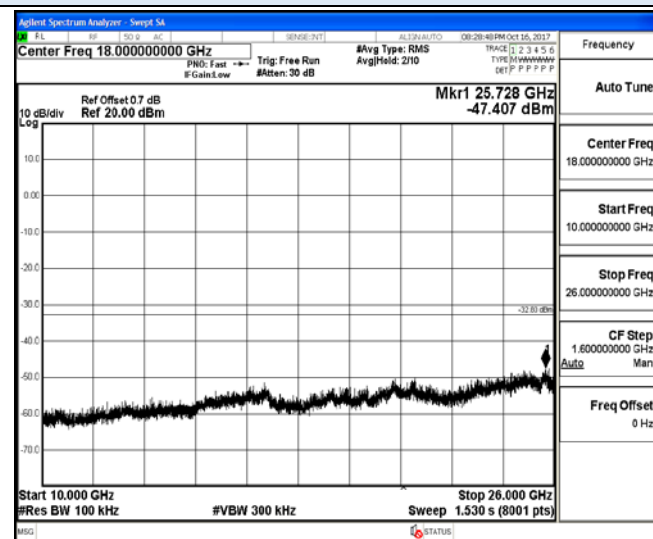
2442 MHz – 2482 MHz

2442 MHz – 2482 MHz



30 MHz – 10 GHz

30 MHz – 10 GHz



10 GHz – 26 GHz

10 GHz – 26 GHz