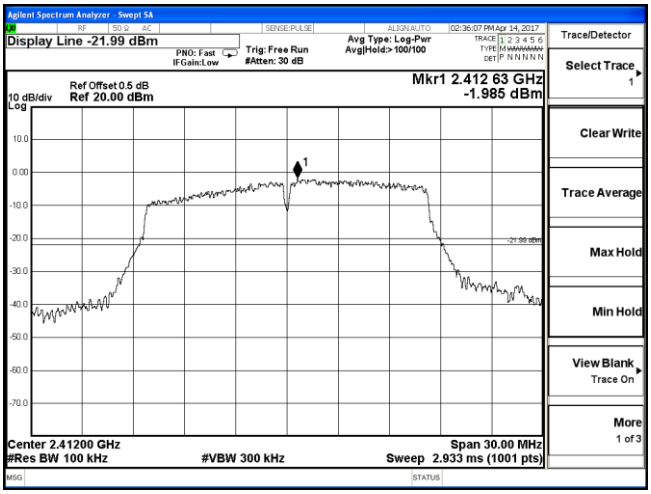
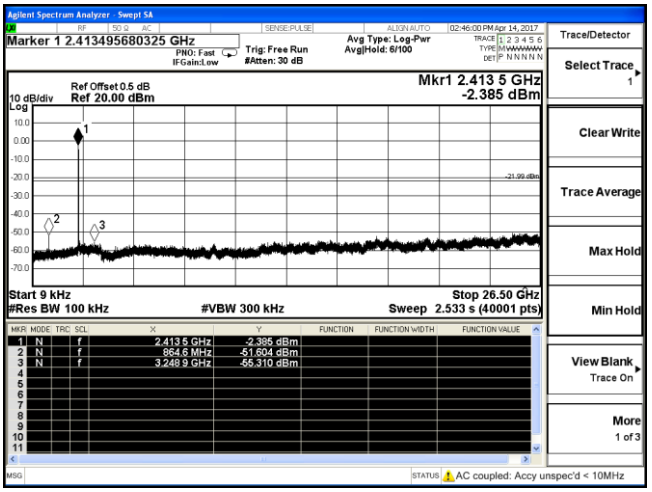
RF Conducted Spurious Emissions

IEEE 802.11g

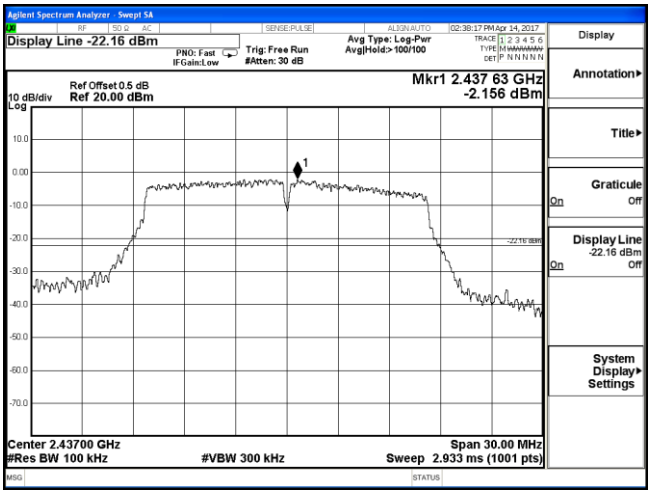
Chain 0



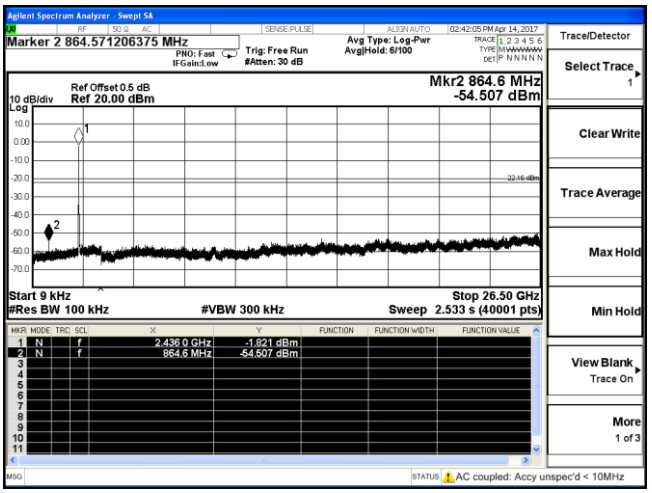
2397 MHz – 2427 MHz



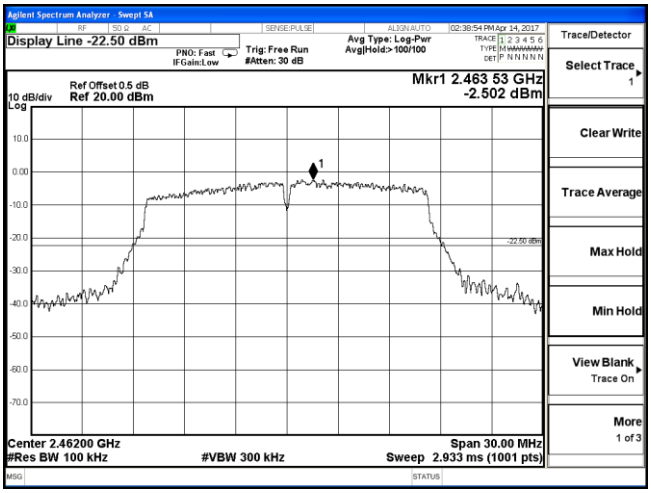
9 KHz – 26.5 GHz



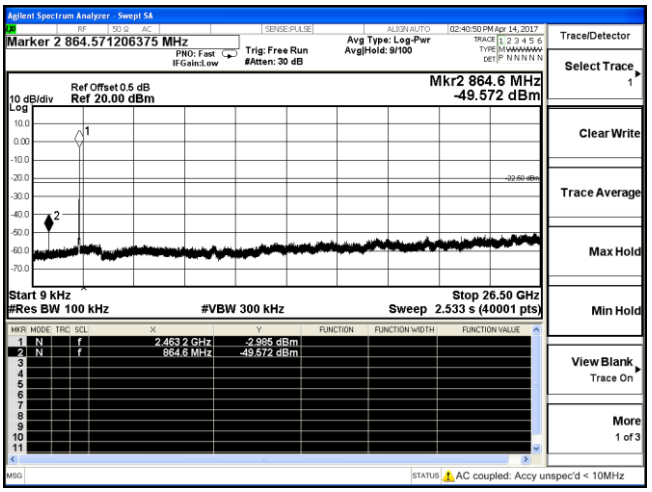
2422 MHz – 2452 MHz



9 KHz – 26.5 GHz



2447 MHz – 2477 MHz

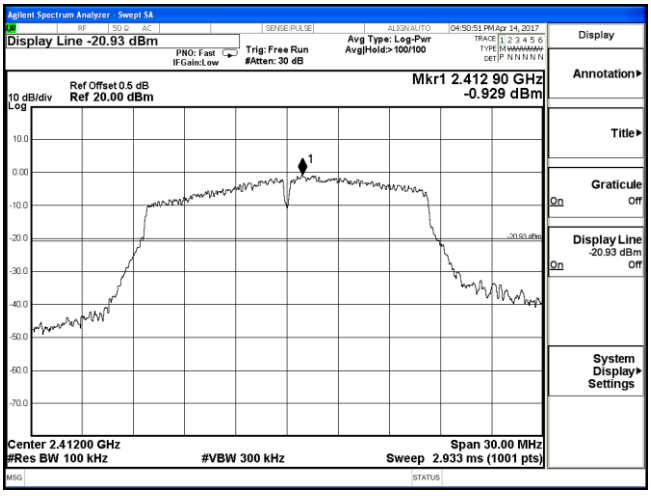


9 KHz – 26.5 GHz

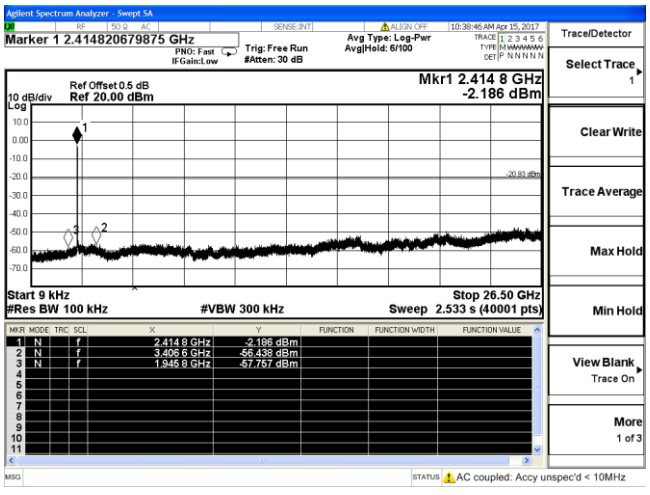
RF Conducted Spurious Emissions

IEEE 802.11g

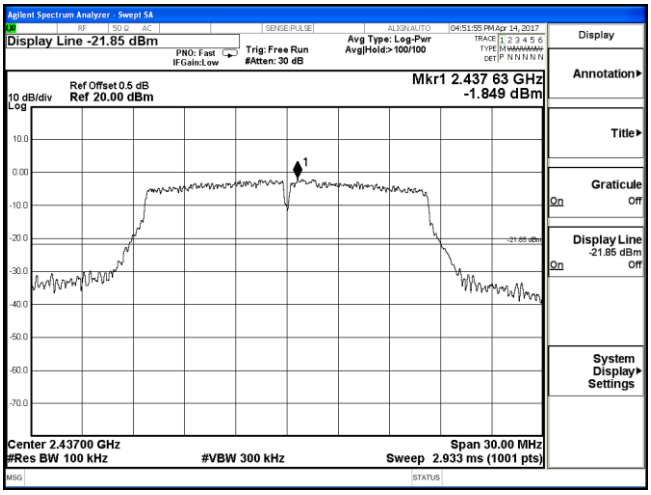
Chain 1



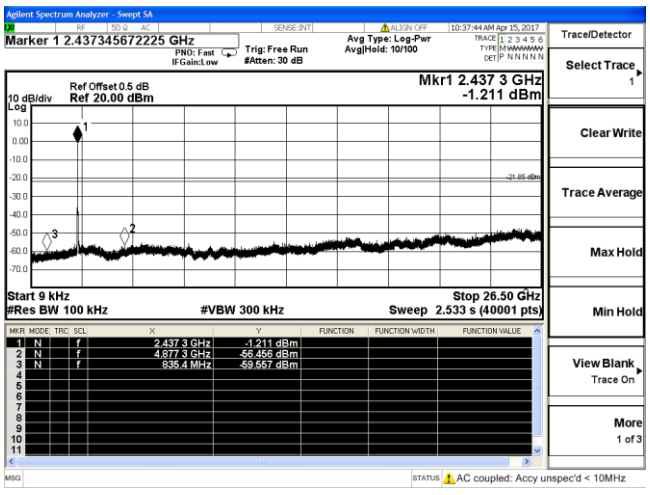
2397 MHz – 2427 MHz



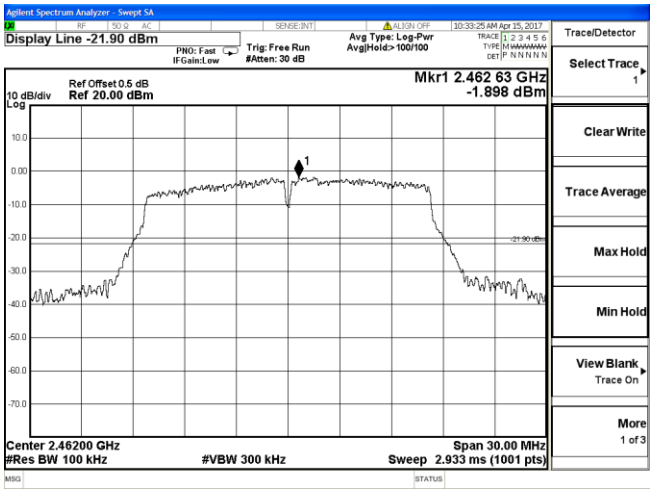
9 KHz – 26.5 GHz



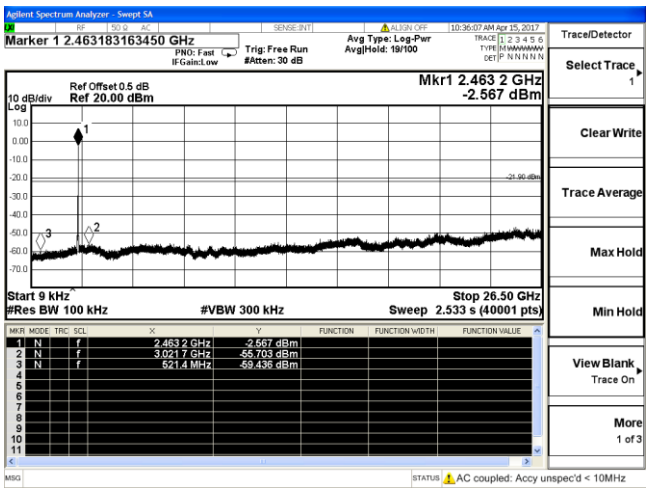
2422 MHz – 2452 MHz



9 KHz – 26.5 GHz



2447 MHz – 2477 MHz

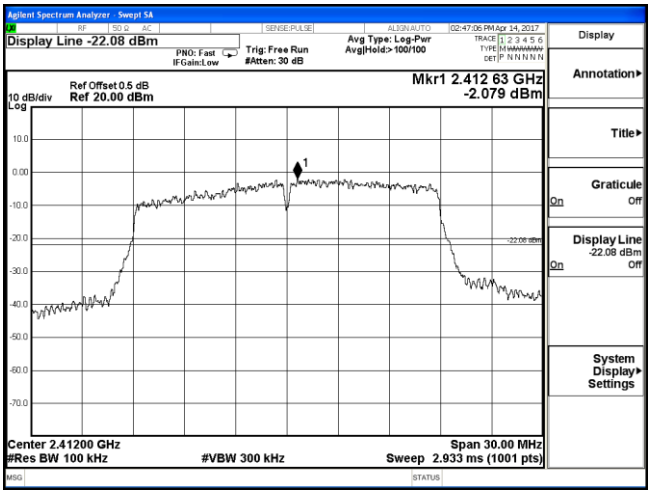


9 KHz – 26.5 GHz

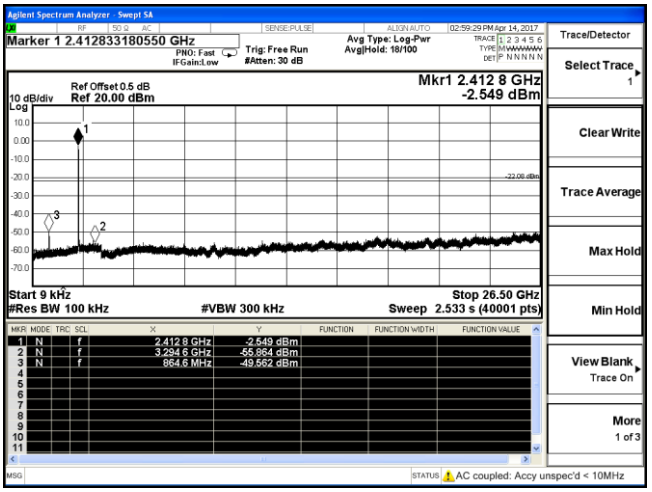
RF Conducted Spurious Emissions

IEEE 802.11n HT20

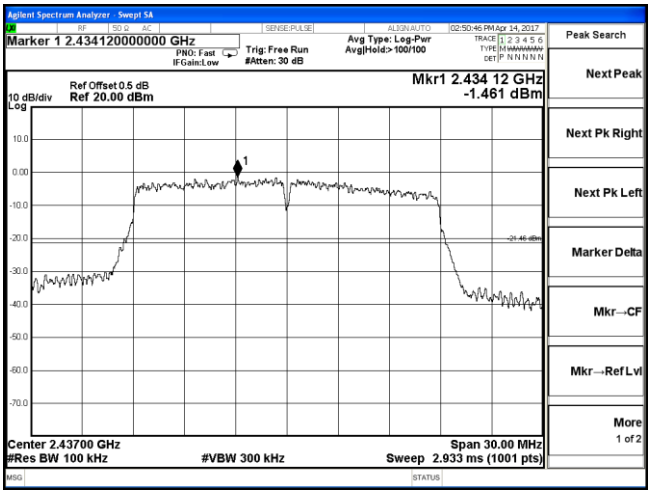
Chain 0



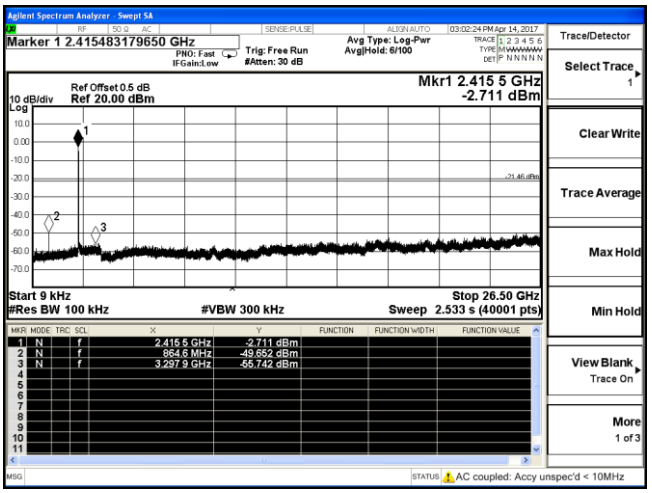
2397 MHz – 2427 MHz



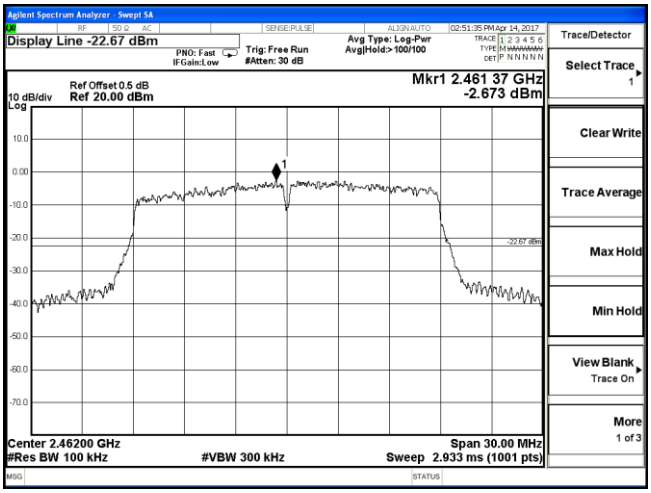
9 KHz – 26.5 GHz



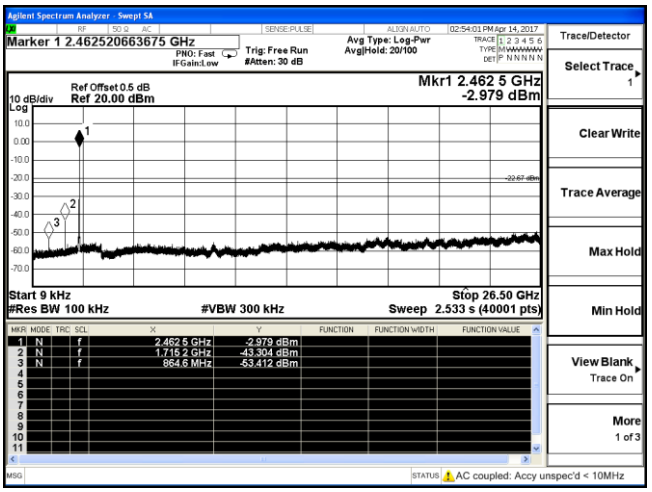
2422 MHz – 2452 MHz



9 KHz – 26.5 GHz



2447 MHz – 2477 MHz

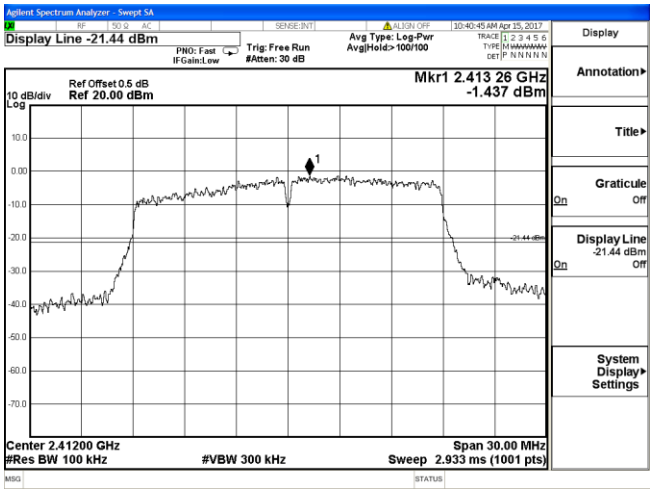


9 KHz – 26.5 GHz

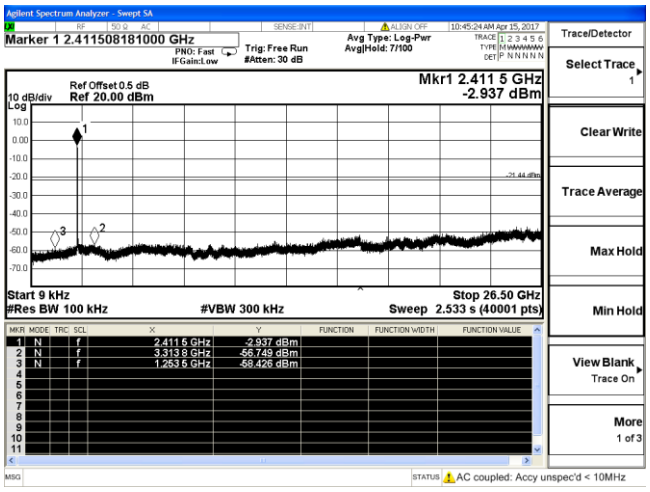
RF Conducted Spurious Emissions

IEEE 802.11n HT20

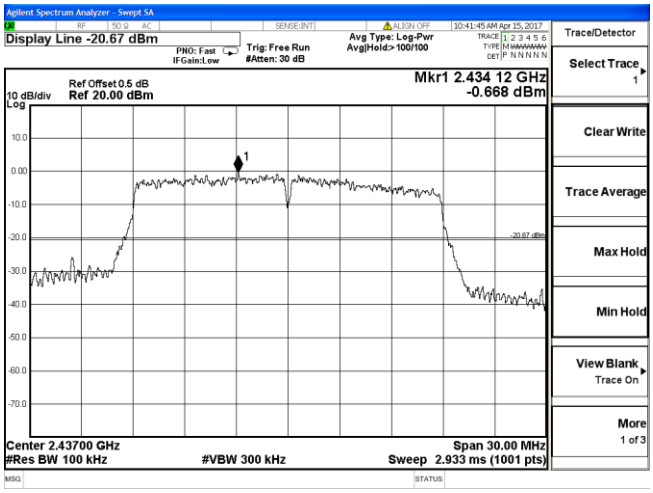
Chain 1



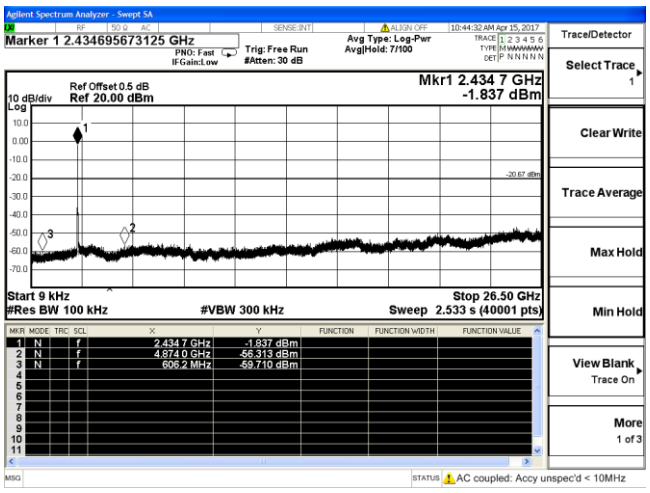
2397 MHz – 2427 MHz



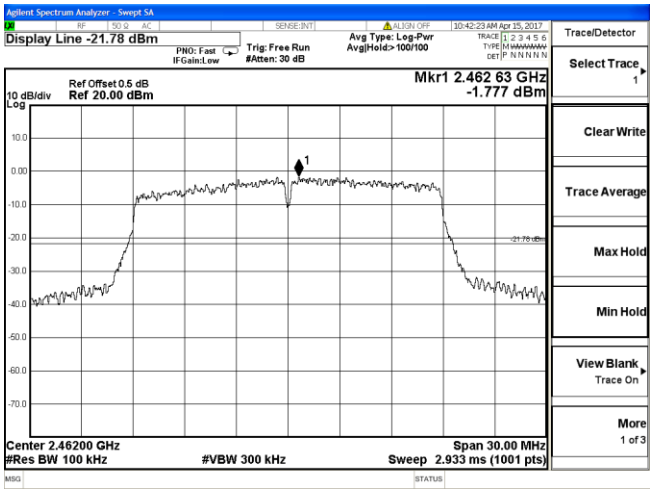
9 KHz – 26.5 GHz



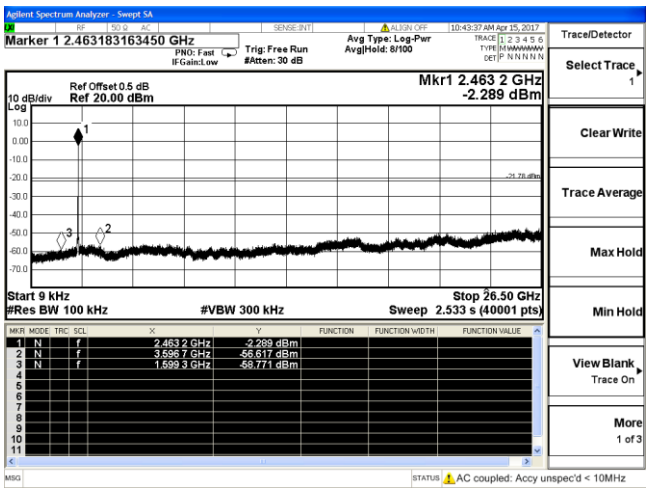
2422 MHz – 2452 MHz



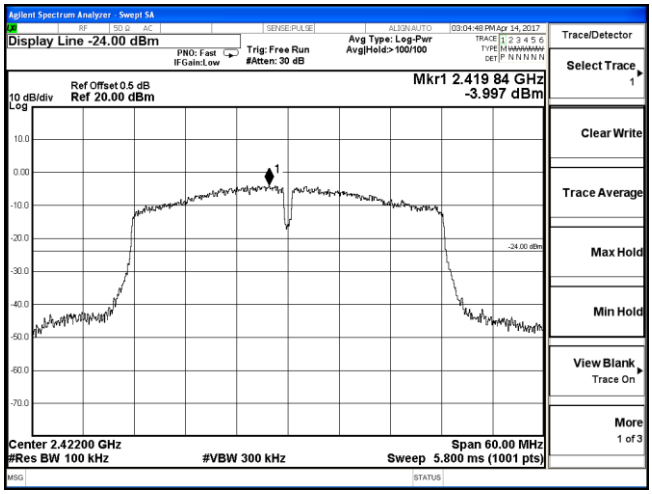
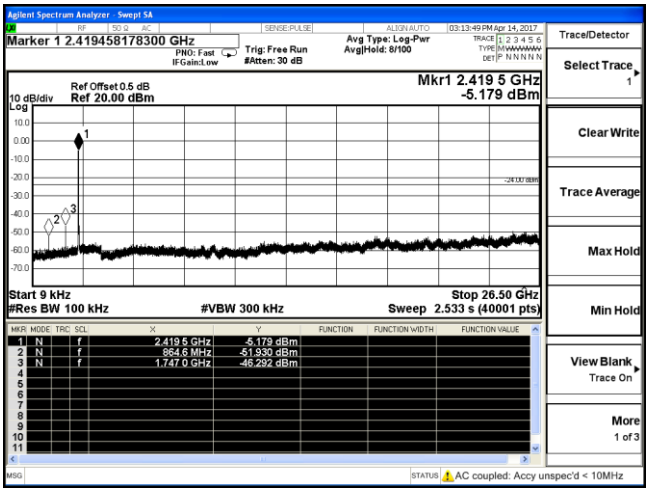
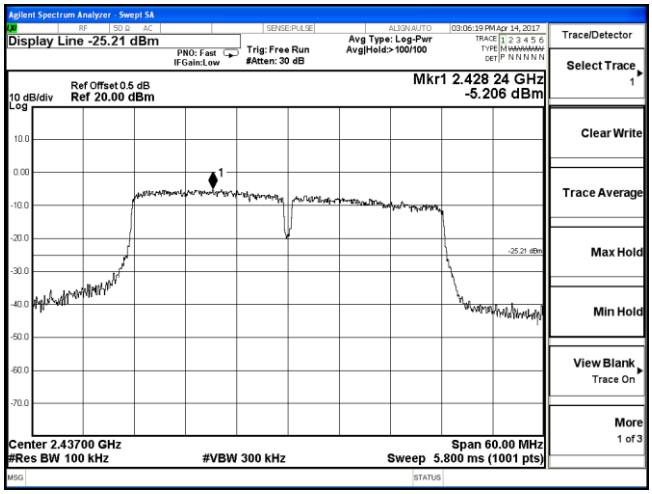
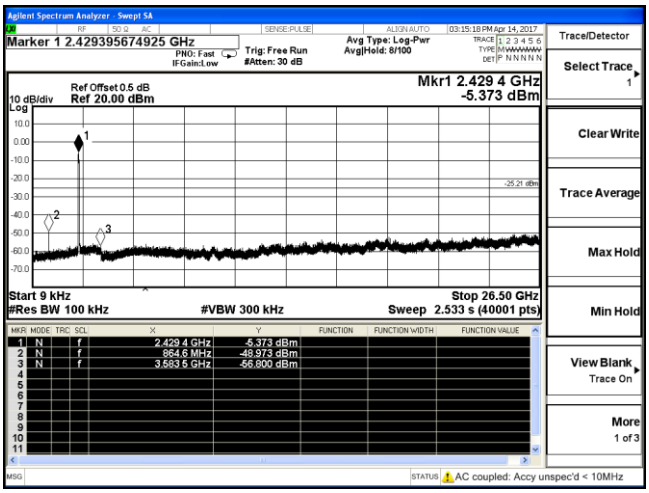
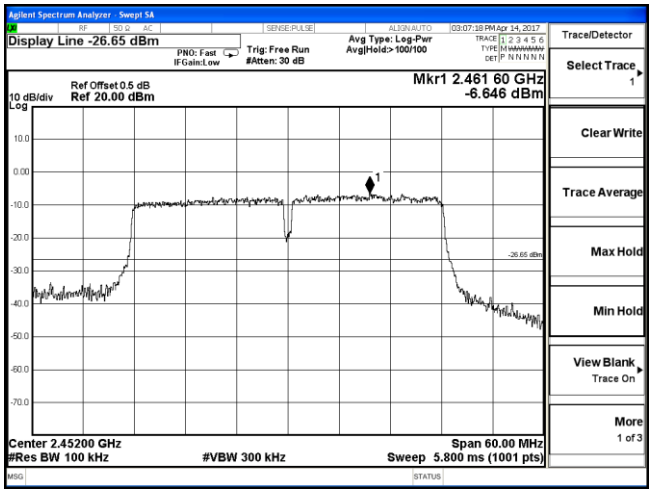
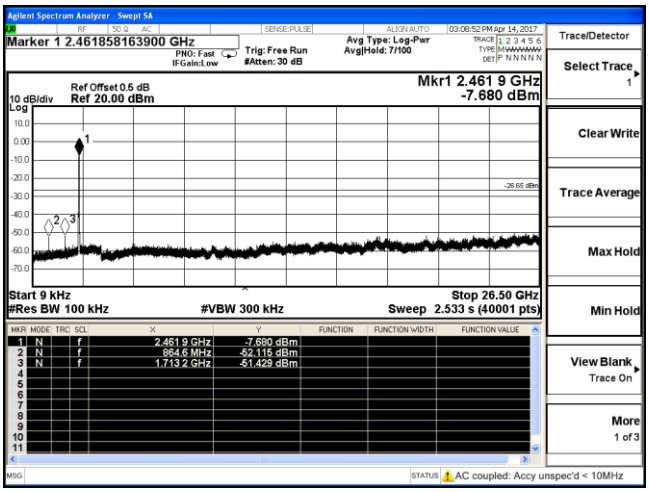
9 KHz – 26.5 GHz



2447 MHz – 2477 MHz



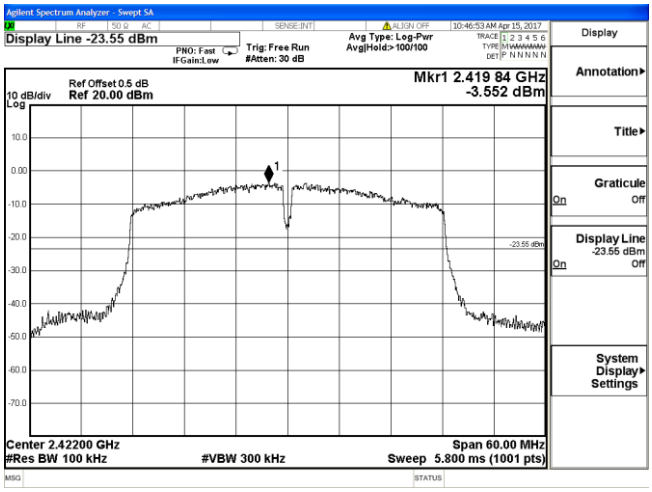
9 KHz – 26.5 GHz

RF Conducted Spurious Emissions	
IEEE 802.11n HT40	
Chain 0	
	
2392 MHz – 2452 MHz	9 KHz – 26.5 GHz
	
2407 MHz – 2467 MHz	9 KHz – 26.5 GHz
	
2422 MHz – 2482 MHz	9 KHz – 26.5 GHz

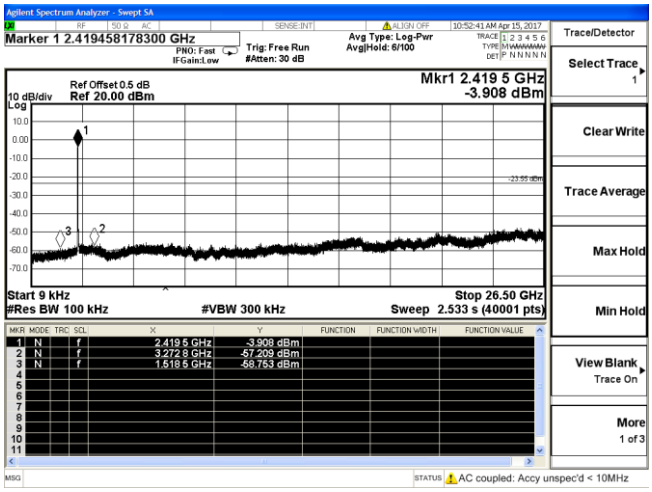
RF Conducted Spurious Emissions

IEEE 802.11n HT40

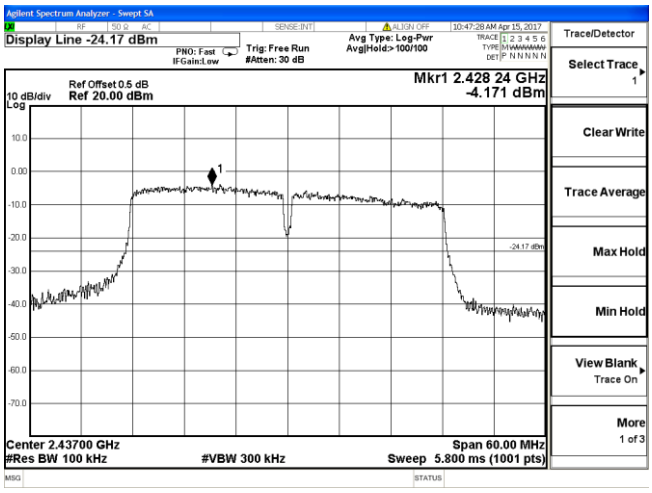
Chain 1



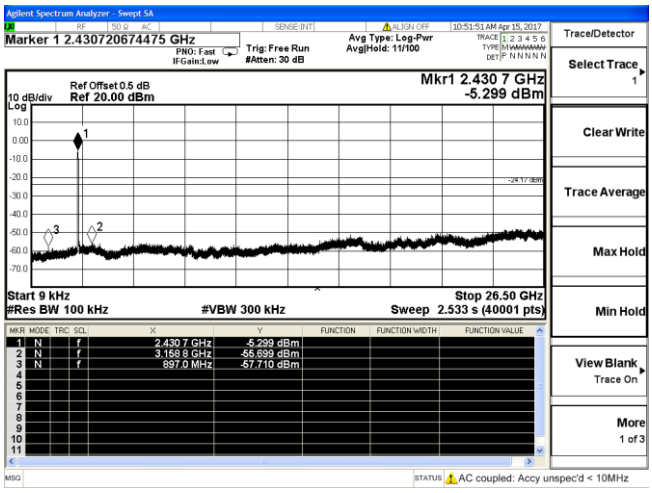
2392 MHz – 2452 MHz



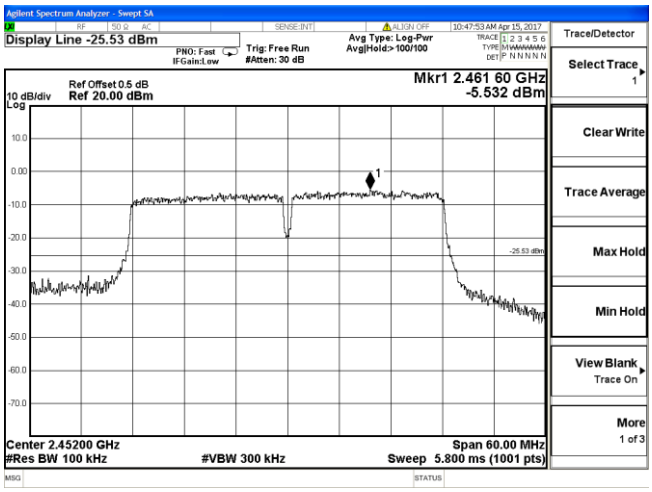
9 KHz – 26.5 GHz



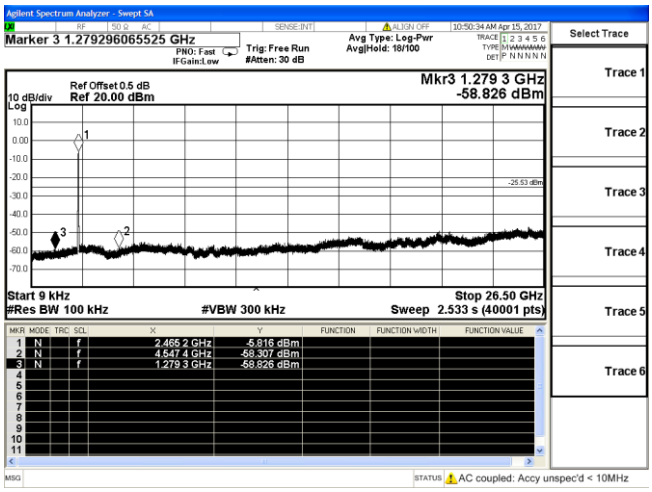
2407 MHz – 2467 MHz



9 KHz – 26.5 GHz

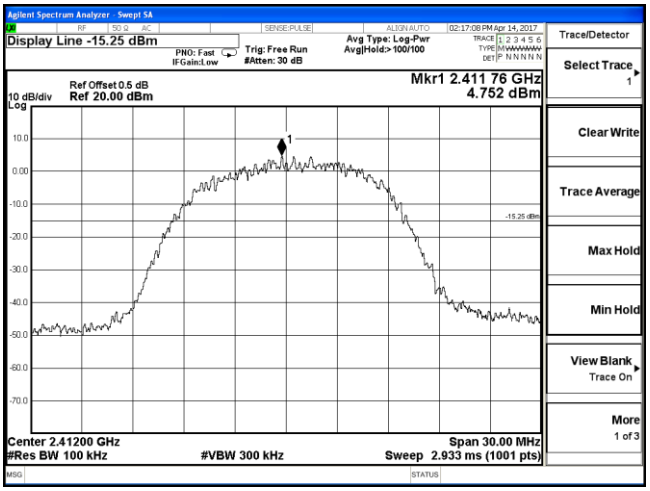
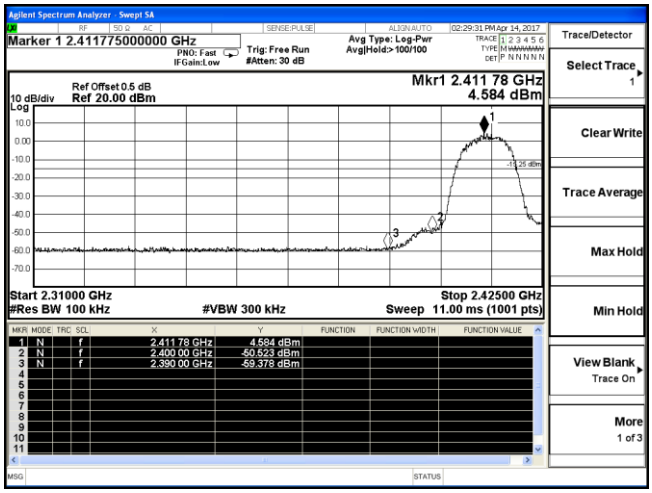
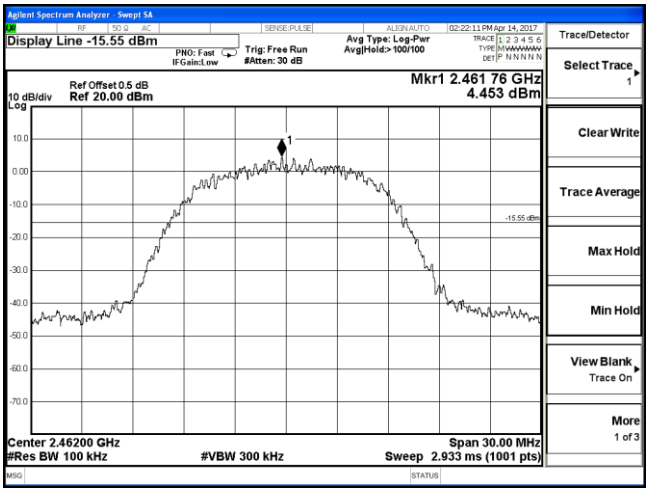
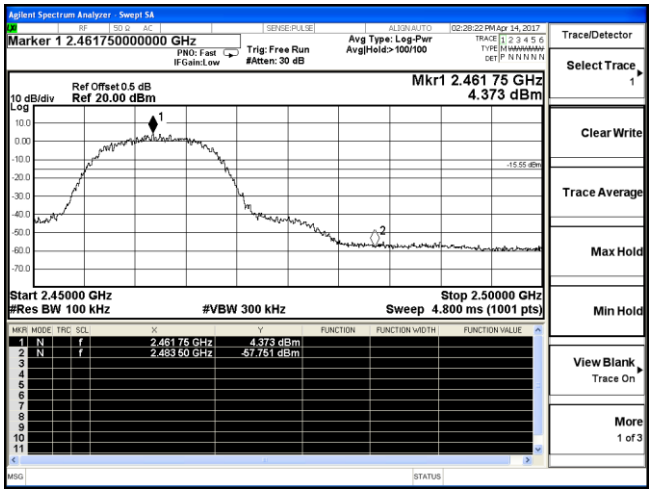


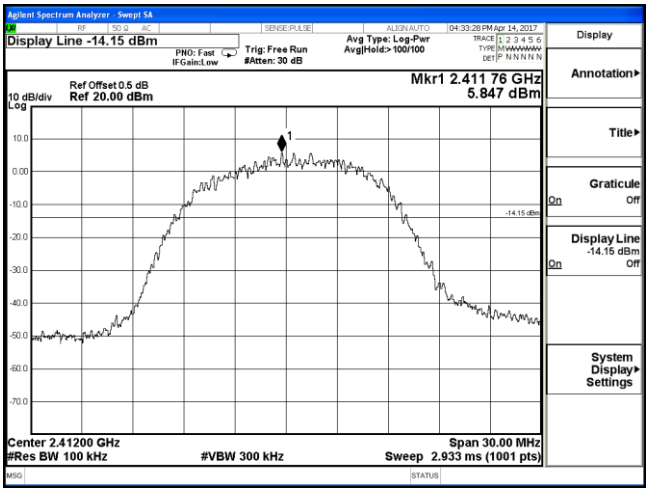
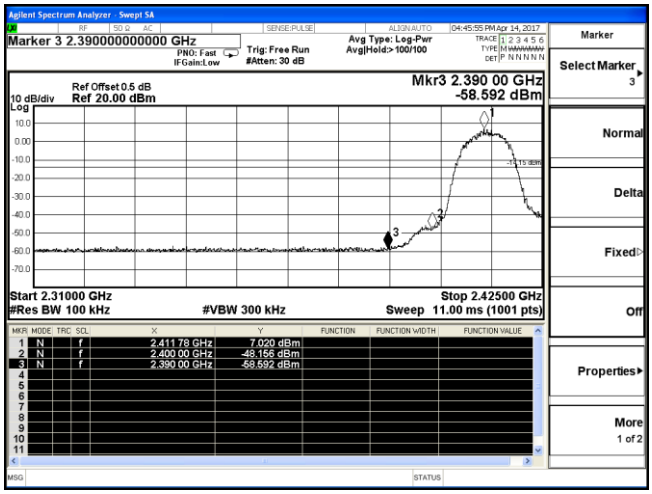
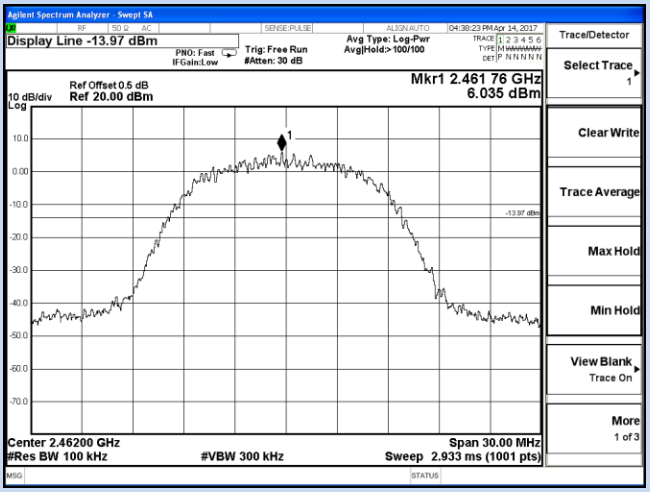
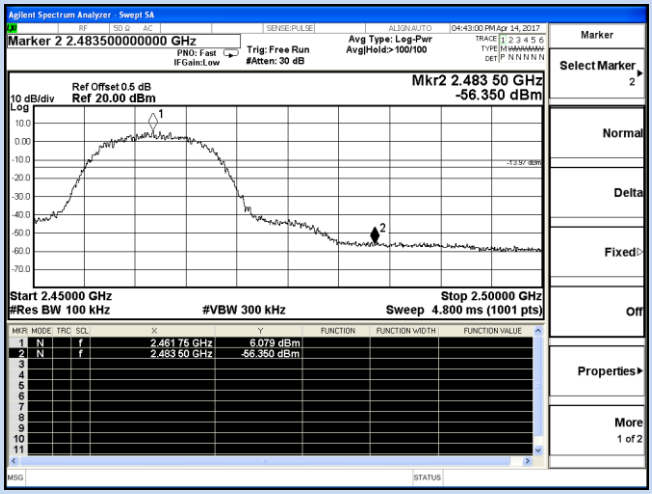
2422 MHz – 2482 MHz

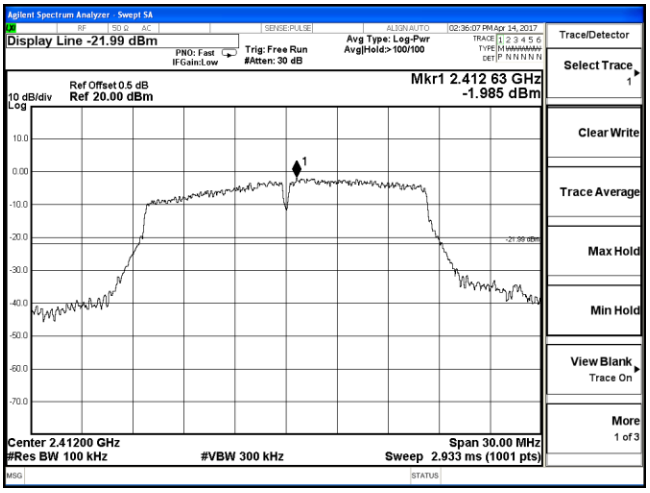
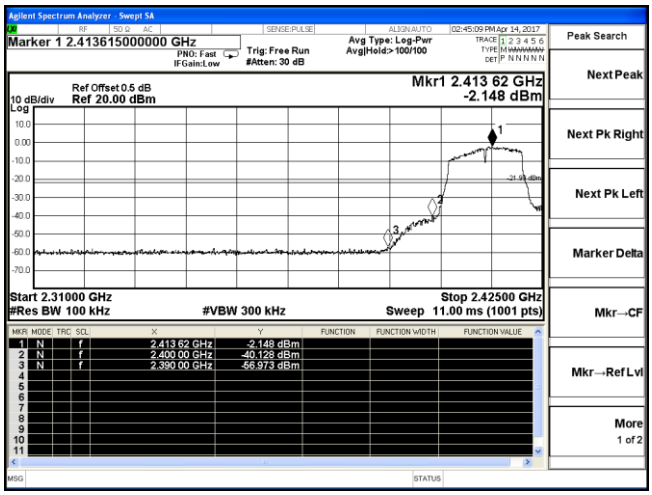
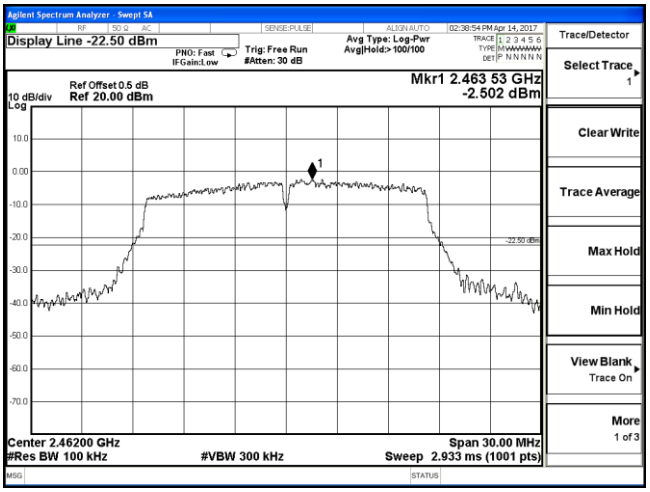
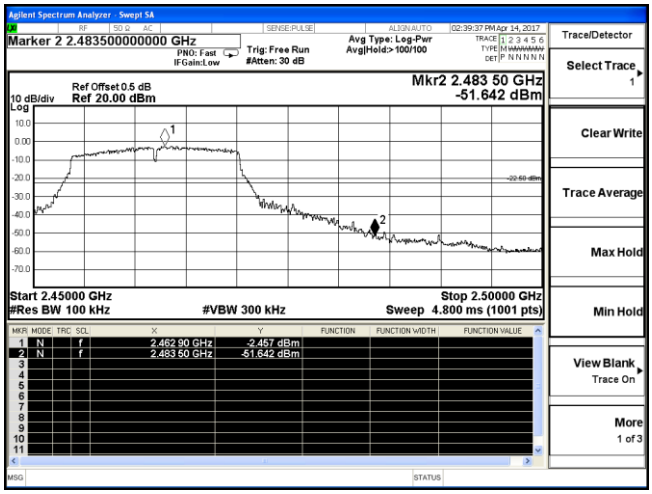


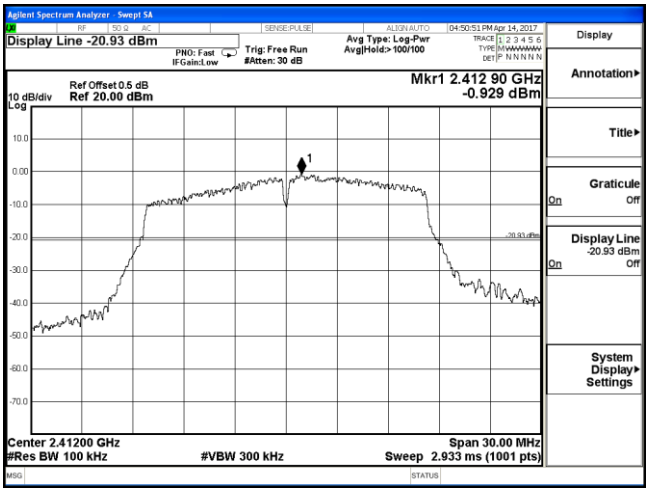
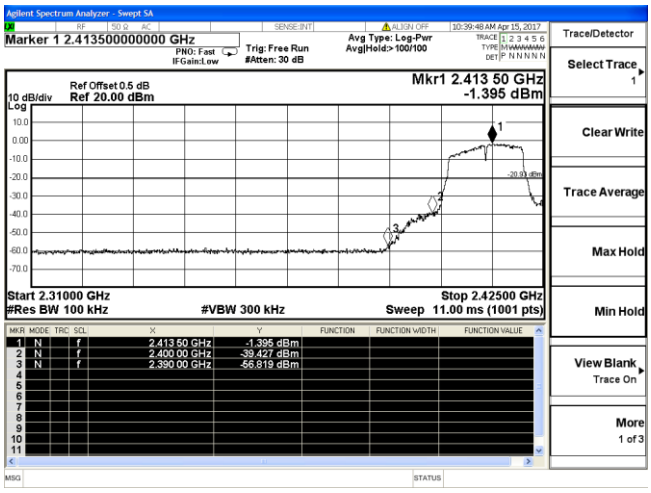
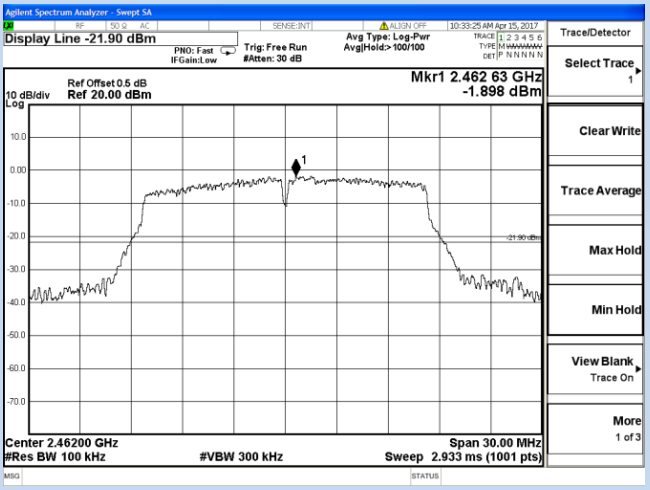
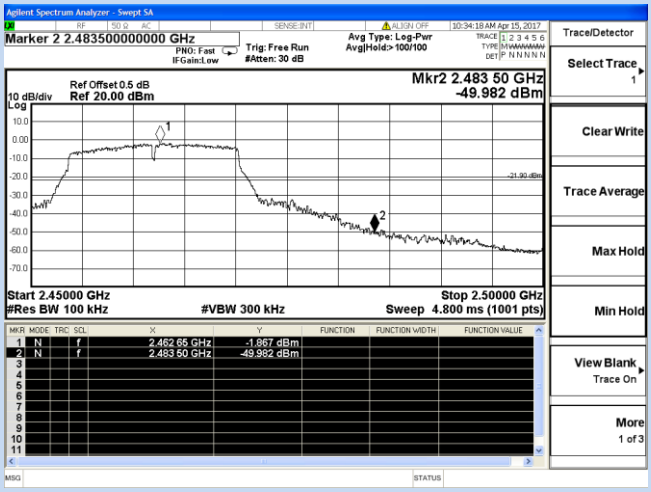
9 KHz – 26.5 GHz

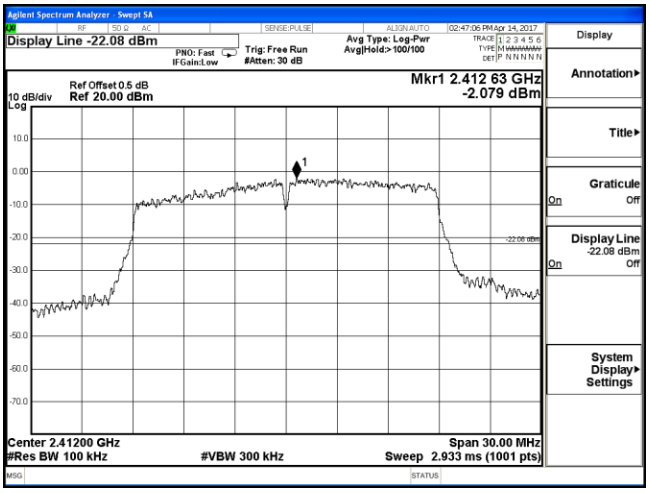
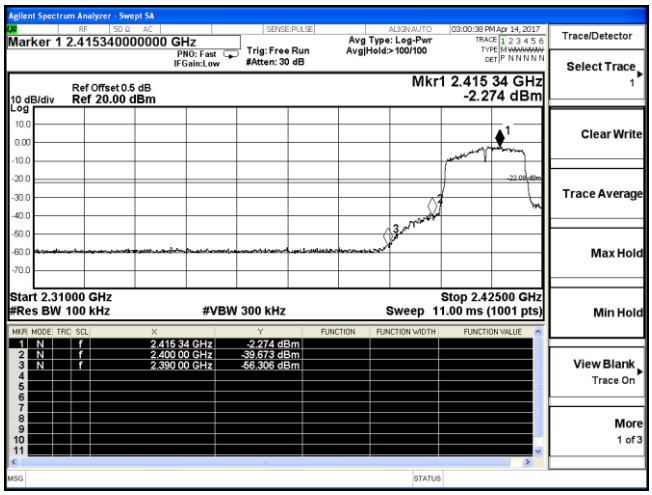
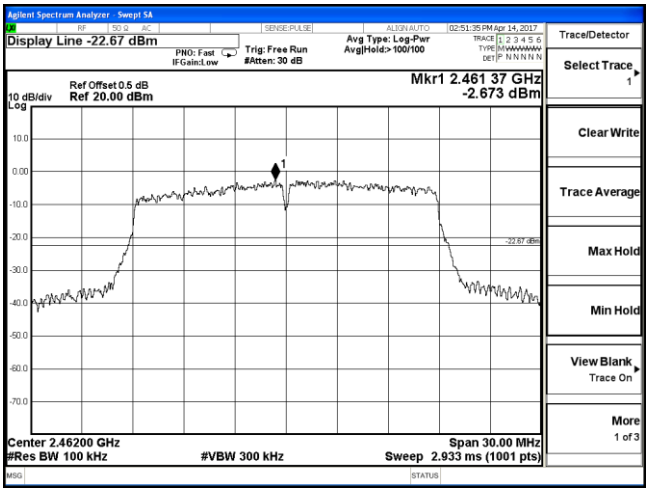
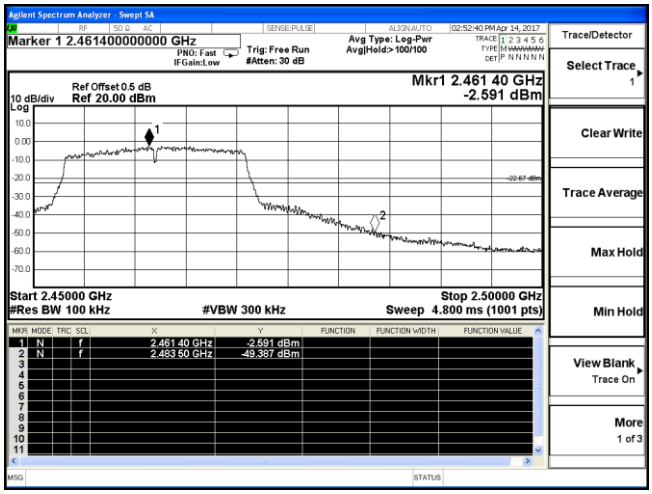
5.6.7. Test Results of Band Edges Test

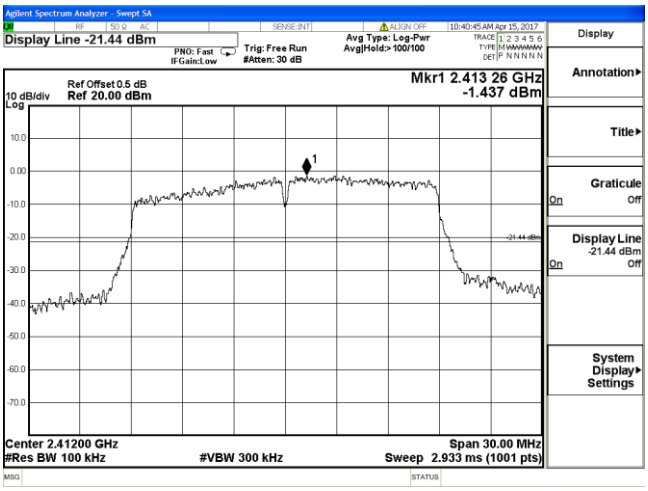
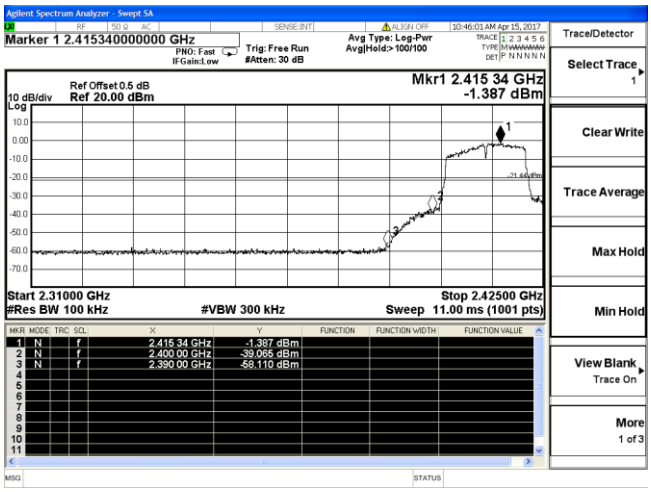
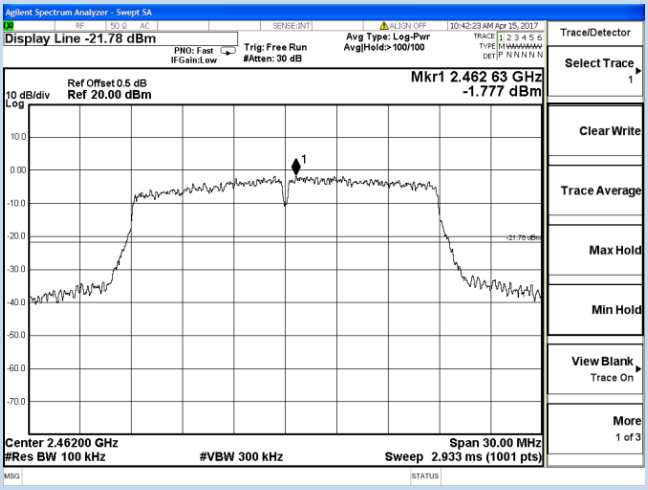
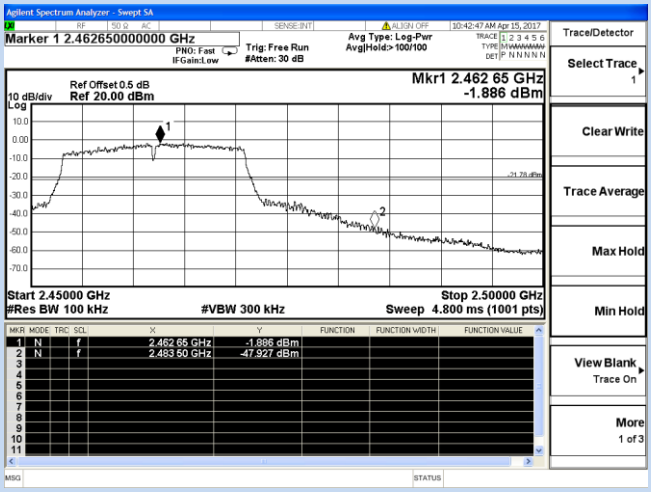
Band-edge measurements for conducted emissions	
IEEE 802.11b	
Chain 0	
	
2397 MHz – 2427 MHz	*Channel 1 / 2412 MHz*
	
2447 MHz – 2477 MHz	*Channel 11 / 2462 MHz*

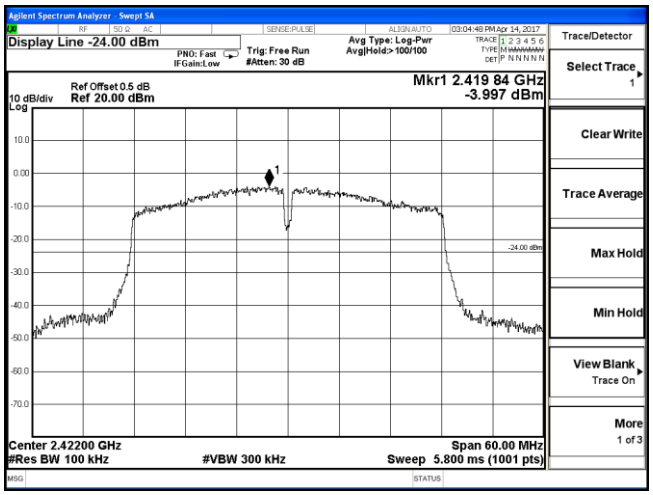
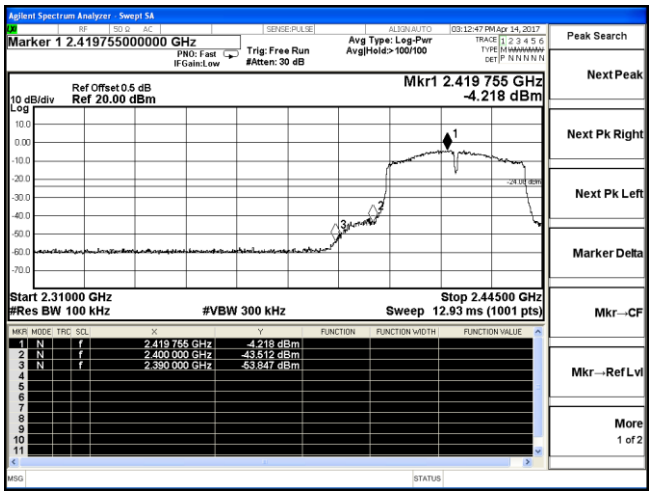
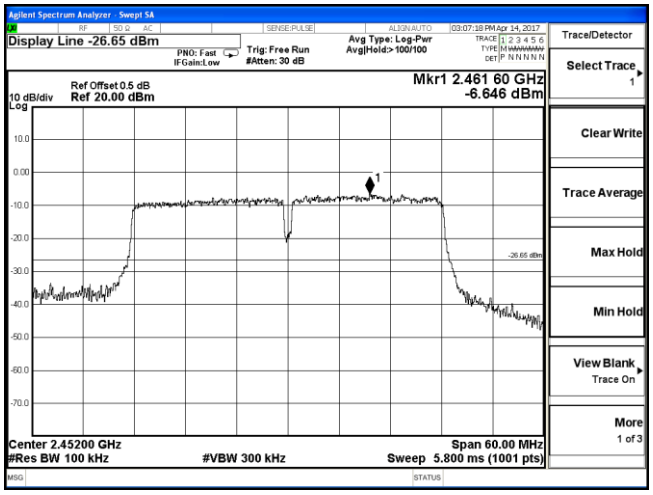
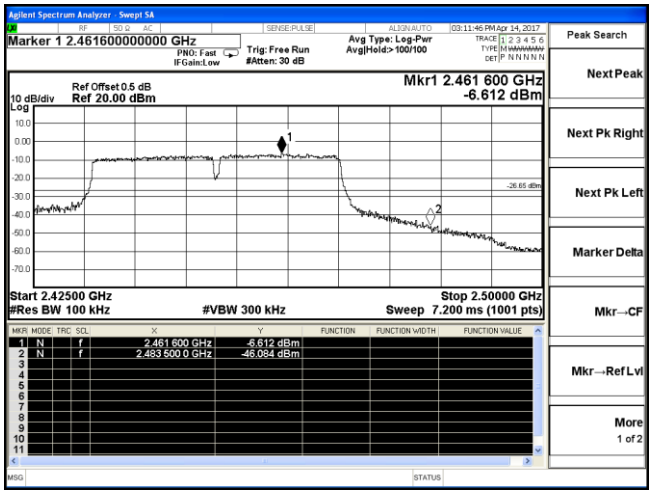
IEEE 802.11b	
Chain 1	
	
2397 MHz – 2427 MHz	Channel 1 / 2412 MHz
	
2447 MHz – 2477 MHz	Channel 11 / 2462 MHz

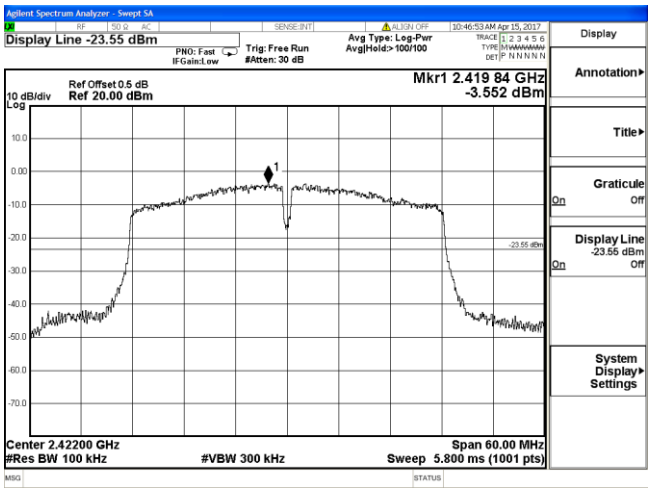
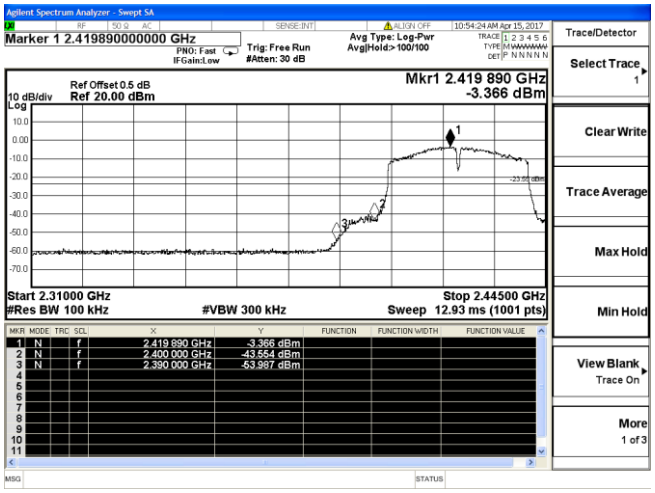
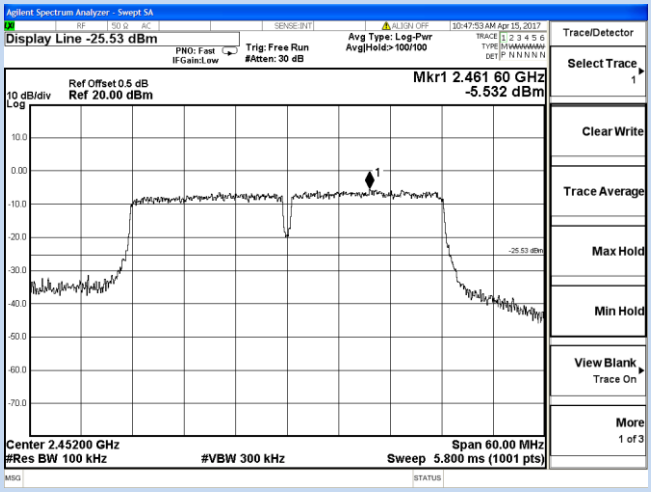
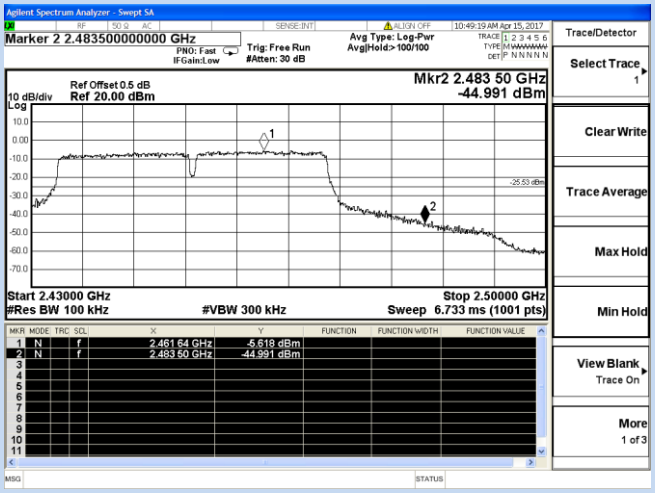
IEEE 802.11g	
Chain 0	
	
2397 MHz – 2427 MHz	Channel 1 / 2412 MHz
	
2447 MHz – 2477 MHz	Channel 11 / 2462 MHz

IEEE 802.11g	
Chain 1	
	
2397 MHz – 2427 MHz	Channel 1 / 2412 MHz
	
2447 MHz – 2477 MHz	Channel 11 / 2462 MHz

IEEE 802.11n HT20	
Chain 0	
	
2397 MHz – 2427 MHz	Channel 1 / 2412 MHz
	
2447 MHz – 2477 MHz	Channel 11 / 2462 MHz

IEEE 802.11n HT20	
Chain 1	
	
2397 MHz – 2427 MHz	Channel 1 / 2412 MHz
	
2447 MHz – 2477 MHz	Channel 11 / 2462 MHz

IEEE 802.11n HT40	
Chain 0	
	
2392 MHz – 2452 MHz	Channel 3 / 2422 MHz
	
2422 MHz – 2482 MHz	Channel 9 / 2452 MHz

IEEE 802.11n HT40	
Chain 1	
	
2392 MHz – 2452 MHz	Channel 3 / 2422 MHz
	
2422 MHz – 2482 MHz	Channel 9 / 2452 MHz

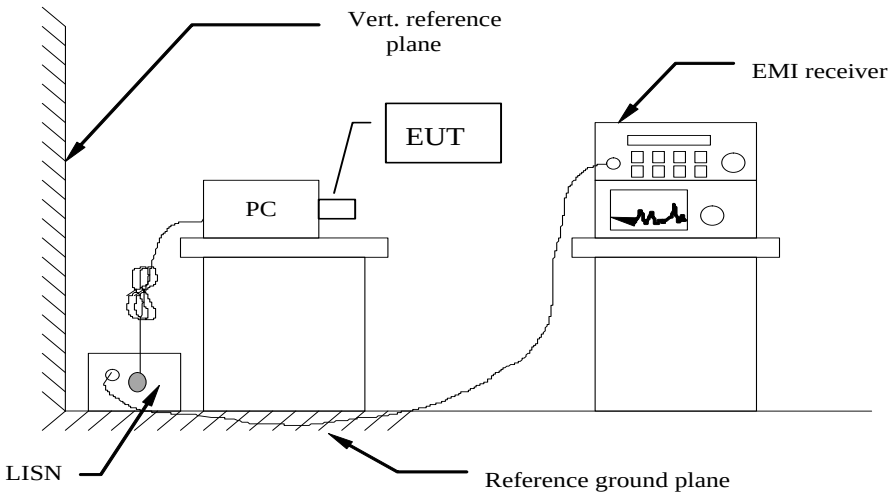
5.7. Power line conducted emissions

5.7.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

5.7.2 Block Diagram of Test Setup

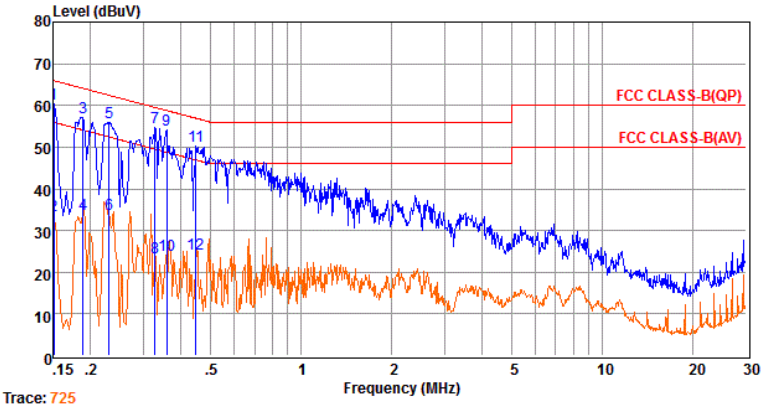


5.7.3 Test Results

PASS.

The test data please refer to following page.

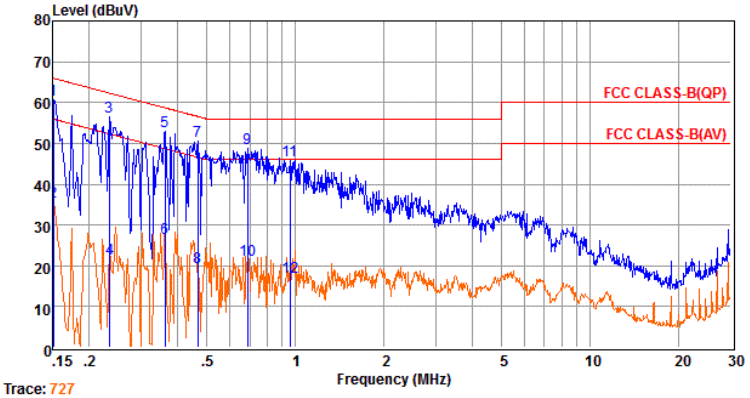
Temperature	24.5℃	Humidty	56.2%
Test Engineer	Jayden Zhuo	Test Date	March 30, 2017
Test result for 802.11b (AC 120V)			



Trace: 725
Pol: NEUTRAL

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB
1	0.15	40.68	9.70	0.02	10.00	60.40	65.96	-5.56	QP
2	0.15	13.79	9.70	0.02	10.00	33.51	55.95	-22.44	Average
3	0.19	37.47	9.61	0.02	10.00	57.10	64.11	-7.01	QP
4	0.19	14.31	9.61	0.02	10.00	33.94	54.10	-20.16	Average
5	0.23	36.35	9.59	0.03	10.00	55.97	62.44	-6.47	QP
6	0.23	14.23	9.59	0.03	10.00	33.85	52.43	-18.58	Average
7	0.33	35.04	9.61	0.03	10.00	54.68	59.53	-4.85	QP
8	0.33	3.94	9.61	0.03	10.00	23.58	49.53	-25.95	Average
9	0.36	34.54	9.61	0.03	10.00	54.18	58.78	-4.60	QP
10	0.36	4.33	9.61	0.03	10.00	23.97	48.78	-24.81	Average
11	0.45	30.73	9.62	0.04	10.00	50.39	56.93	-6.54	QP
12	0.45	4.80	9.62	0.04	10.00	24.46	46.93	-22.47	Average

Remarks: 1. Measured = Reading +Cable Loss +Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.

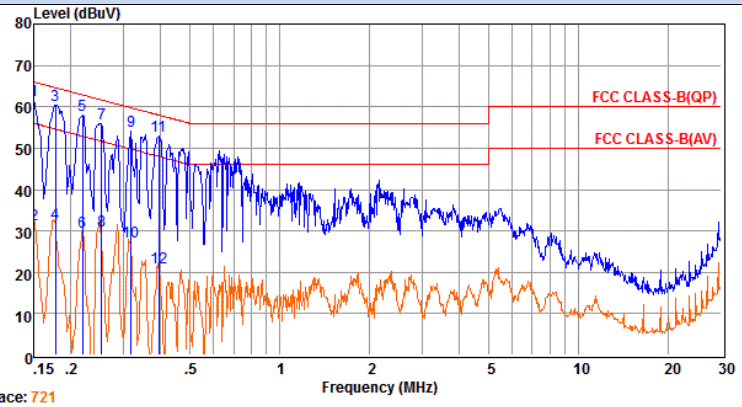


Trace: 727
Pol: LINE

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB
1	0.15	40.95	9.57	0.02	10.00	60.54	65.96	-5.42	QP
2	0.15	16.08	9.57	0.02	10.00	35.67	55.95	-20.28	Average
3	0.23	36.88	9.63	0.03	10.00	56.54	62.30	-5.76	QP
4	0.23	1.96	9.63	0.03	10.00	21.62	52.30	-30.68	Average
5	0.36	33.34	9.62	0.03	10.00	52.99	58.69	-5.70	QP
6	0.36	7.00	9.62	0.03	10.00	26.65	48.69	-22.04	Average
7	0.47	30.86	9.62	0.04	10.00	50.52	56.58	-6.06	QP
8	0.47	-0.13	9.62	0.04	10.00	19.53	46.58	-27.05	Average
9	0.69	29.18	9.64	0.04	10.00	48.86	56.00	-7.14	QP
10	0.69	1.66	9.64	0.04	10.00	21.34	46.00	-24.66	Average
11	0.96	26.10	9.63	0.05	10.00	45.78	56.00	-10.22	QP
12	0.96	-2.38	9.63	0.05	10.00	17.30	46.00	-28.70	Average

Remarks: 1. Measured = Reading +Cable Loss +Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.

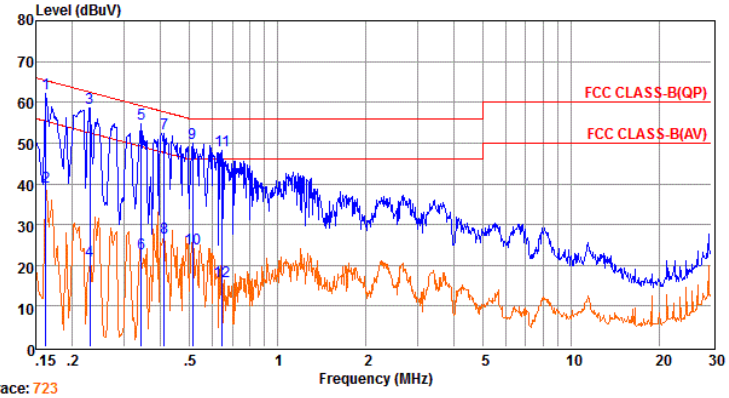
Temperature	24.5℃	Humidty	56.2%
Test Engineer	Jayden Zhuo	Test Date	March 30, 2017
Test result for 802.11b (AC 240V)			



Trace: 721
Pol: LINE

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB
1	0.15	41.87	9.57	0.02	10.00	61.46	66.00	-4.54	QP
2	0.15	11.95	9.57	0.02	10.00	31.54	55.99	-24.45	Average
3	0.18	40.88	9.61	0.02	10.00	60.51	64.59	-4.08	QP
4	0.18	12.13	9.61	0.02	10.00	31.76	54.59	-22.83	Average
5	0.22	38.37	9.63	0.03	10.00	58.03	62.88	-4.85	QP
6	0.22	10.01	9.63	0.03	10.00	29.67	52.87	-23.20	Average
7	0.25	36.24	9.63	0.03	10.00	55.90	61.64	-5.74	QP
8	0.25	10.40	9.63	0.03	10.00	30.06	51.64	-21.58	Average
9	0.32	34.55	9.62	0.03	10.00	54.20	59.75	-5.55	QP
10	0.32	7.60	9.62	0.03	10.00	27.25	49.75	-22.50	Average
11	0.39	33.19	9.62	0.04	10.00	52.85	57.99	-5.14	QP
12	0.39	1.59	9.62	0.04	10.00	21.25	47.99	-26.74	Average

Remarks: 1. Measured = Reading +Cable Loss +Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.



Trace: 723
Pol: NEUTRAL

	Freq	Reading	LISNFac	CabLos	Aux2Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dB	dBuV	dBuV	dB
1	0.16	42.58	9.67	0.02	10.00	62.27	65.34	-3.07	QP
2	0.16	19.54	9.67	0.02	10.00	39.23	55.33	-16.10	Average
3	0.23	39.11	9.59	0.03	10.00	58.73	62.48	-3.75	QP
4	0.23	1.46	9.59	0.03	10.00	21.08	52.48	-31.40	Average
5	0.34	35.06	9.61	0.03	10.00	54.70	59.13	-4.43	QP
6	0.34	3.14	9.61	0.03	10.00	22.78	49.13	-26.35	Average
7	0.41	32.78	9.61	0.04	10.00	52.43	57.64	-5.21	QP
8	0.41	7.26	9.61	0.04	10.00	26.91	47.64	-20.73	Average
9	0.51	30.36	9.62	0.04	10.00	50.02	56.00	-5.98	QP
10	0.51	4.36	9.62	0.04	10.00	24.02	46.00	-21.98	Average
11	0.65	28.42	9.63	0.04	10.00	48.09	56.00	-7.91	QP
12	0.65	-3.61	9.63	0.04	10.00	16.06	46.00	-29.94	Average

Remarks: 1. Measured = Reading +Cable Loss +Aux2 Fac.
2. The emission levels that are 20dB below the official limit are not reported.

****Note: Pre-scan all modes and recorded the worst case results in this report (802.11b).*

5.8. Band-edge measurements for radiated emissions

5.8.1 Standard Applicable

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

5.8.2 Test Setup Layout

5.8.3. Measuring Instruments and Setting

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

5.8.4. Test Procedures

According to KDB 558074 D01 V03 for Antenna-port conducted measurement. Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz for peak detector and RBW=1MHz, VBW=1/B for Peak detector.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.
6. Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 12.2.2, 12.2.3, and 12.2.4 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
7. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see 12.2.5 for guidance on determining the applicable antenna gain)
8. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

9. For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
10. Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:
    E = EIRP – 20log D + 104.8

Where:
E = electric field strength in dBμV/m,
EIRP = equivalent isotropic radiated power in dBm
D = specified measurement distance in meters.

11. Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.
12. Compare the resultant electric field strength level to the applicable regulatory limit.
13. Perform radiated spurious emission test duress until all measured frequencies were complete.

5.8.5 Test Results

For Antenna Chain 0

IEEE 802.11b								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-49.737	3.0	0.000	48.523	Peak	74.00	-25.477	PASS
2310.000	-59.799	3.0	0.000	38.461	AV	54.00	-15.539	PASS
2390.000	-48.547	3.0	0.000	49.713	Peak	74.00	-24.287	PASS
2390.000	-58.871	3.0	0.000	39.389	AV	54.00	-14.611	PASS
2483.500	-47.849	3.0	0.000	50.411	Peak	74.00	-23.589	PASS
2483.500	-56.858	3.0	0.000	41.402	AV	54.00	-12.598	PASS
2500.000	-49.978	3.0	0.000	48.282	Peak	74.00	-25.718	PASS
2500.000	-59.248	3.0	0.000	39.012	AV	54.00	-14.988	PASS

IEEE 802.11g								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Limit (dBuV/m)	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-50.004	3.0	0.000	48.256	Peak	74.00	-25.744	PASS
2310.000	-59.927	3.0	0.000	38.333	AV	54.00	-15.667	PASS
2390.000	-48.368	3.0	0.000	49.892	Peak	74.00	-24.108	PASS
2390.000	-57.796	3.0	0.000	40.464	AV	54.00	-13.536	PASS
2483.500	-38.862	3.0	0.000	59.398	Peak	74.00	-14.602	PASS
2483.500	-51.611	3.0	0.000	46.649	AV	54.00	-7.351	PASS
2500.000	-49.725	3.0	0.000	48.535	Peak	74.00	-25.465	PASS
2500.000	-59.067	3.0	0.000	39.193	AV	54.00	-14.807	PASS

IEEE 802.11 n HT20								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-49.144	3.0	0.000	49.116	Peak	74.00	-24.884	PASS
2310.000	-59.240	3.0	0.000	39.02	AV	54.00	-14.98	PASS
2390.000	-40.007	3.0	0.000	58.253	Peak	74.00	-15.747	PASS
2390.000	-56.256	3.0	0.000	42.004	AV	54.00	-11.996	PASS
2483.500	-35.584	3.0	0.000	62.676	Peak	74.00	-11.324	PASS
2483.500	-56.217	3.0	0.000	42.043	AV	54.00	-11.957	PASS
2500.000	-49.263	3.0	0.000	48.997	Peak	74.00	-25.003	PASS
2500.000	-58.983	3.0	0.000	39.277	AV	54.00	-14.723	PASS

IEEE 802.11n HT40								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-49.542	3.0	0.000	48.718	Peak	74.00	-25.282	PASS
2310.000	-59.891	3.0	0.000	38.369	AV	54.00	-15.631	PASS
2390.000	-45.629	3.0	0.000	52.631	Peak	74.00	-21.369	PASS
2390.000	-56.827	3.0	0.000	41.433	AV	54.00	-12.567	PASS
2483.500	-35.253	3.0	0.000	63.007	Peak	74.00	-10.993	PASS
2483.500	-58.033	3.0	0.000	40.227	AV	54.00	-13.773	PASS
2500.000	-49.175	3.0	0.000	49.085	Peak	74.00	-24.915	PASS
2500.000	-58.893	3.0	0.000	39.367	AV	54.00	-14.633	PASS

For Antenna Chain 1

IEEE 802.11b								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-50.696	3.0	0.000	47.564	Peak	74.00	-26.436	PASS
2310.000	-60.976	3.0	0.000	37.284	AV	54.00	-16.716	PASS
2390.000	-50.242	3.0	0.000	48.018	Peak	74.00	-25.982	PASS
2390.000	-59.763	3.0	0.000	38.497	AV	54.00	-15.503	PASS
2483.500	-47.822	3.0	0.000	50.438	Peak	74.00	-23.562	PASS
2483.500	-58.555	3.0	0.000	39.705	AV	54.00	-14.295	PASS
2500.000	-50.464	3.0	0.000	47.796	Peak	74.00	-26.204	PASS
2500.000	-60.679	3.0	0.000	37.581	AV	54.00	-16.419	PASS

IEEE 802.11g								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-50.191	3.0	0.000	48.069	Peak	74.00	-25.931	PASS
2310.000	-61.019	3.0	0.000	37.241	AV	54.00	-16.759	PASS
2390.000	-48.618	3.0	0.000	49.642	Peak	74.00	-24.358	PASS
2390.000	-59.703	3.0	0.000	38.557	AV	54.00	-15.443	PASS
2483.500	-41.683	3.0	0.000	56.577	Peak	74.00	-17.423	PASS
2483.500	-53.889	3.0	0.000	44.371	AV	54.00	-9.629	PASS
2500.000	-51.123	3.0	0.000	47.137	Peak	74.00	-26.863	PASS
2500.000	-60.634	3.0	0.000	37.626	AV	54.00	-16.374	PASS

IEEE 802.11 n HT20								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-51.054	3.0	0.000	47.206	Peak	74.00	-26.794	PASS
2310.000	-60.947	3.0	0.000	37.313	AV	54.00	-16.687	PASS
2390.000	-46.139	3.0	0.000	52.121	Peak	74.00	-21.879	PASS
2390.000	-59.030	3.0	0.000	39.230	AV	54.00	-14.77	PASS
2483.500	-38.831	3.0	0.000	59.429	Peak	74.00	-14.571	PASS
2483.500	-56.583	3.0	0.000	41.677	AV	54.00	-12.323	PASS
2500.000	-50.918	3.0	0.000	47.342	Peak	74.00	-26.658	PASS
2500.000	-58.670	3.0	0.000	39.59	AV	54.00	-14.41	PASS

IEEE 802.11 n HT40								
Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
2310.000	-51.045	3.0	0.000	47.215	Peak	74.00	-26.785	PASS
2310.000	-60.665	3.0	0.000	37.595	AV	54.00	-16.405	PASS
2390.000	-45.723	3.0	0.000	52.537	Peak	74.00	-21.463	PASS
2390.000	-56.905	3.0	0.000	41.355	AV	54.00	-12.645	PASS
2483.500	-38.470	3.0	0.000	59.79	Peak	74.00	-14.21	PASS
2483.500	-57.502	3.0	0.000	40.758	AV	54.00	-13.242	PASS
2500.000	-50.895	3.0	0.000	47.365	Peak	74.00	-26.635	PASS
2500.000	-59.322	3.0	0.000	38.938	AV	54.00	-15.062	PASS

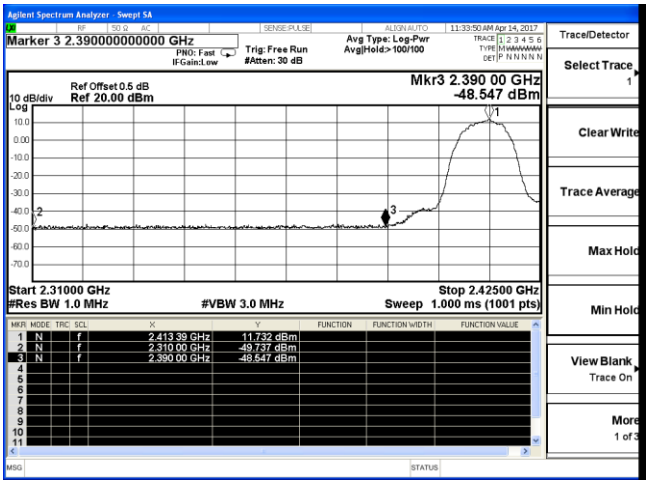
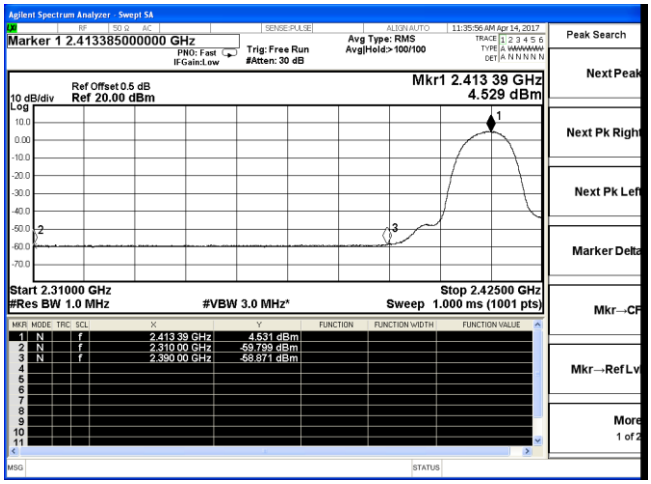
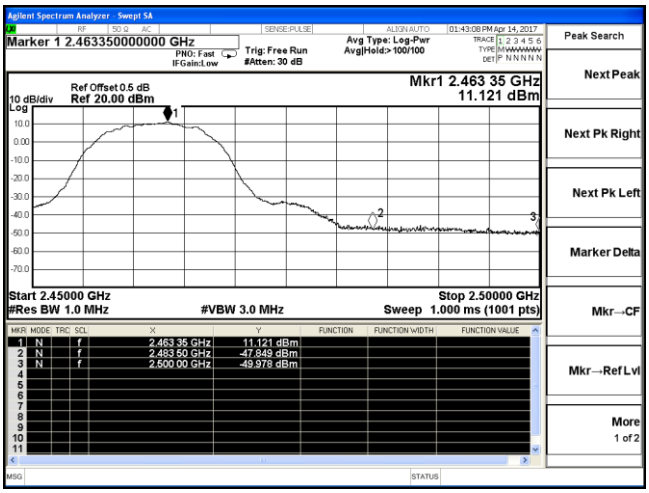
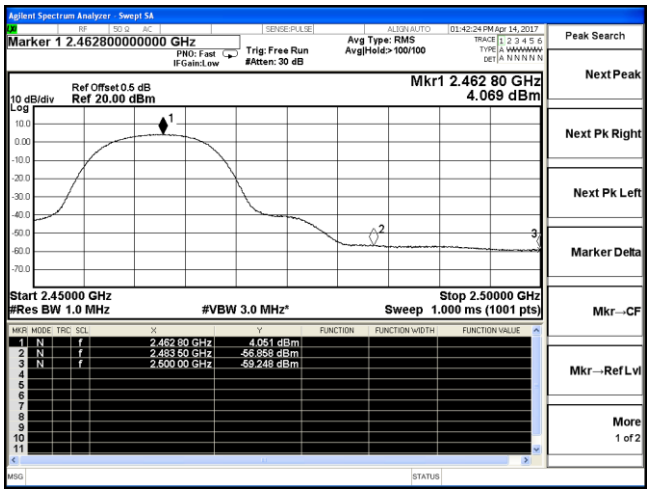
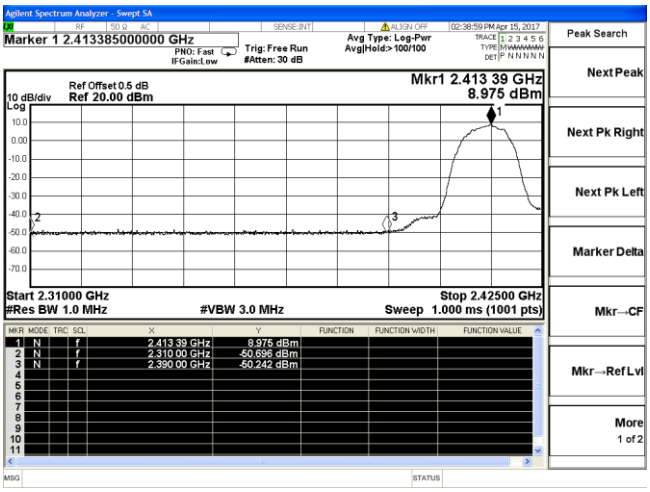
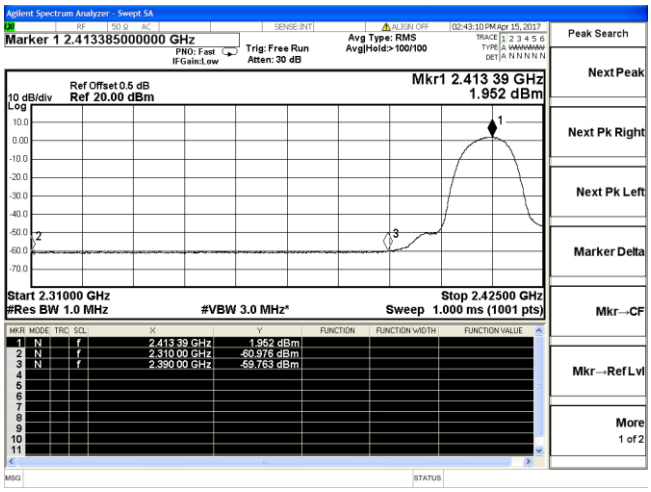
For Combined Antenna Chain 0 and Antenna Chain 1

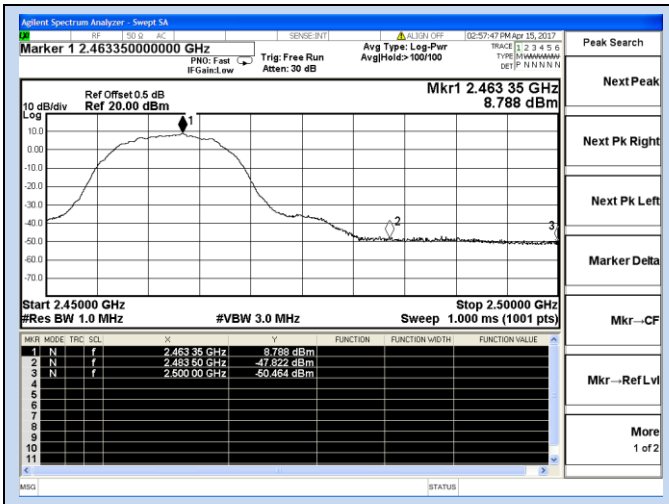
IEEE 802.11n HT20										
Frequency (MHz)	Conducted Power (dBm)			Directional Gain (dB)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
	Chain 0	Chain 1	Sum							
2310.000*	-49.144	-51.054	-46.985	6.010*	0.000	54.285	Peak	74.00	-15.446	PASS
2310.000	-59.240	-60.947	-57.000	6.010*	0.000	44.270	AV	54.00	-5.461	PASS
2390.000	-40.007	-46.139	-39.060	6.010*	0.000	62.210	Peak	74.00	-7.521	PASS
2390.000	-56.256	-59.030	-54.415	6.010*	0.000	46.855	AV	54.00	-2.876	PASS
2483.500*	-35.584	-38.831	-33.901	6.010*	0.000	67.369	Peak	74.00	-2.362	PASS
2483.500	-56.217	-56.583	-53.386	6.010*	0.000	47.884	AV	54.00	-1.846	PASS
2500.000	-49.263	-50.918	-47.002	6.010*	0.000	54.268	Peak	74.00	-15.462	PASS
2500.000	-58.983	-58.670	-55.813	6.010*	0.000	45.457	AV	54.00	-4.274	PASS

IEEE 802.11n HT40										
Frequency (MHz)	Conducted Power (dBm)			Directional Gain (dB)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Over limit dB	Verdict
	Chain 0	Chain 1	Sum							
2310.000*	-49.542	-51.045	-47.219	6.010*	0.000	54.051	Peak	74.00	-15.680	PASS
2310.000	-59.891	-60.665	-57.250	6.010*	0.000	44.020	AV	54.00	-5.711	PASS
2390.000	-45.629	-45.723	-42.665	6.010*	0.000	58.605	Peak	74.00	-11.126	PASS
2390.000	-56.827	-56.905	-53.856	6.010*	0.000	47.414	AV	54.00	-2.317	PASS
2483.500*	-35.253	-38.470	-33.560	6.010*	0.000	67.710	Peak	74.00	-2.021	PASS
2483.500	-58.033	-57.502	-54.749	6.010*	0.000	46.521	AV	54.00	-3.209	PASS
2500.000	-49.175	-50.895	-46.940	6.010*	0.000	54.330	Peak	74.00	-15.400	PASS
2500.000	-58.893	-59.322	-56.092	6.010*	0.000	45.178	AV	54.00	-4.552	PASS

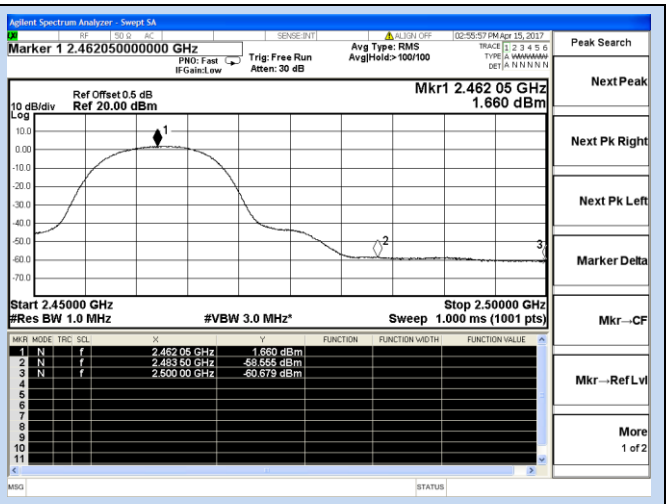
Remark:

1. *Measured Band-edge measurements for radiated emissions 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. *No need measure Average values if Peak values meets Average limits;*
6. ** means maximum values of frequency band 2310 – 2390 MHz, 2483.5 – 2500 MHz;*
7. *For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;*
   Array gain = 10 log (N_{ant}), where N_{ant} is the number of transmit antennas.
8. **6.790=3.780+10*log(2).*
9. *Covert Radiated E Level At 3m = Conducted average power + Directional Gain + 104.77-20*log(2);*
10. *Please refer to following plots;*

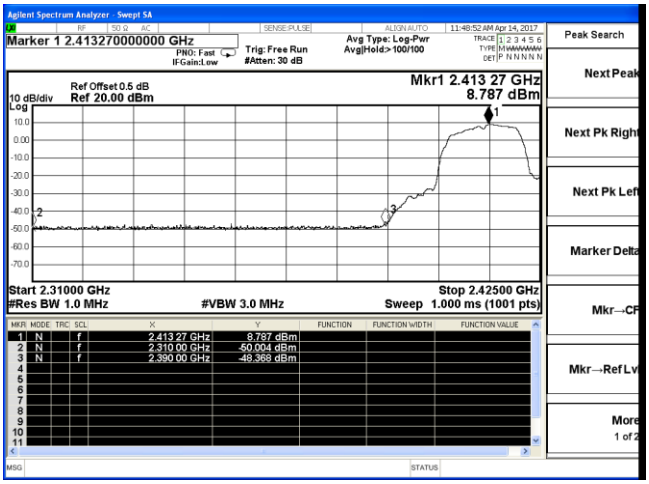
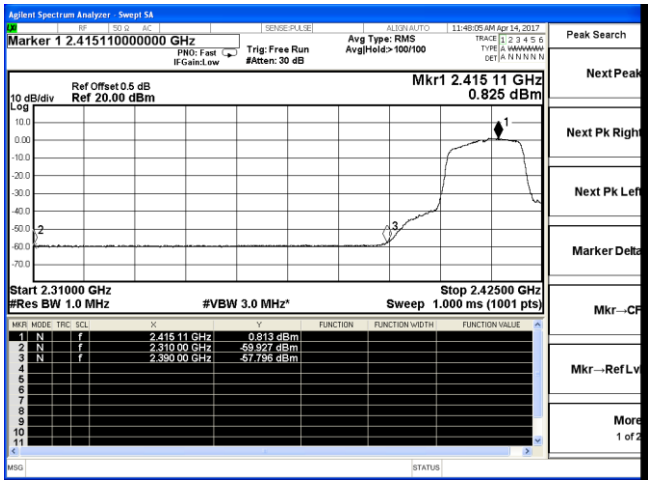
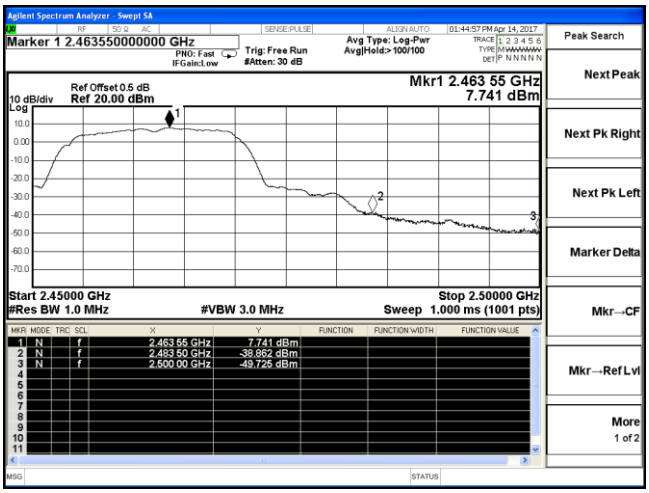
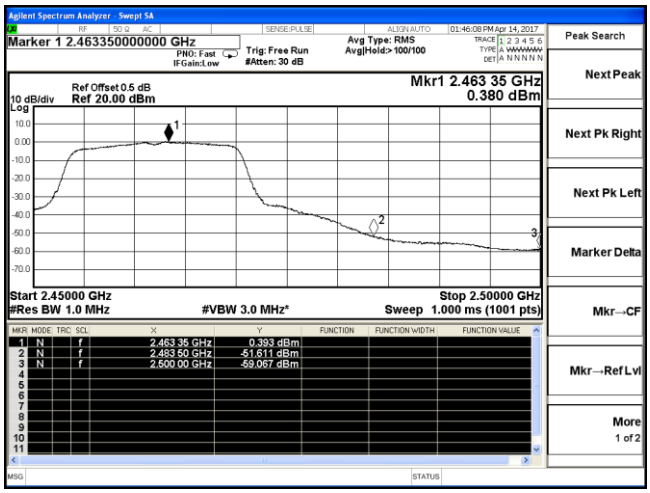
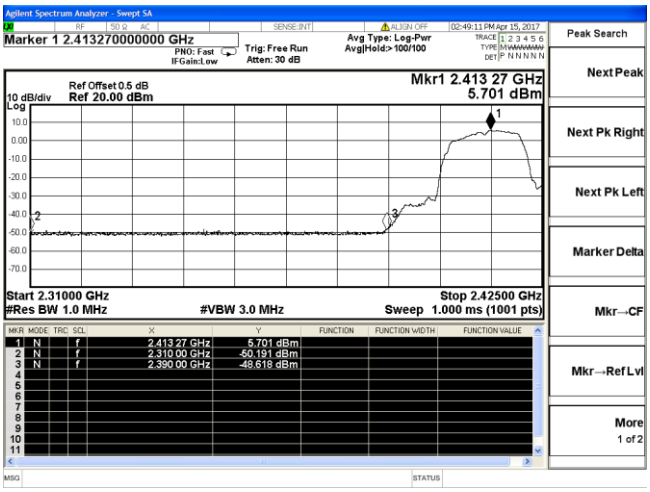
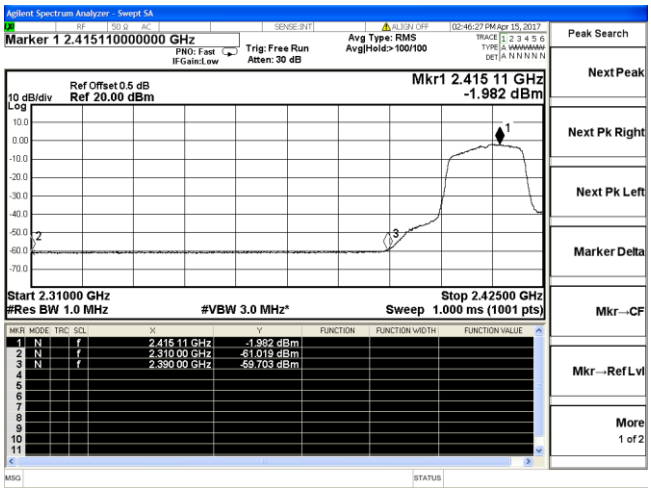
Band-edge measurements for radiated emissions	
IEEE 802.11b	
Chain 0	
	
Channel 1 / 2412 MHz – Peak	Channel 1 / 2412 MHz – Average
	
Channel 11 / 2462 MHz – Peak	Channel 11 / 2462 MHz – Average
Chain 1	
	
Channel 1 / 2412 MHz – Peak	Channel 1 / 2412 MHz – Average



Channel 11 / 2462 MHz – Peak



Channel 11 / 2462 MHz – Average

Band-edge measurements for radiated emissions	
IEEE 802.11g	
Chain 0	
	
Channel 1 / 2412 MHz – Peak	Channel 1 / 2412 MHz – Average
	
Channel 11 / 2462 MHz – Peak	Channel 11 / 2462 MHz – Average
Chain 1	
	
Channel 1 / 2412 MHz – Peak	Channel 1 / 2412 MHz – Average