TEST RESULTS

IEEE 802.11 b											
Frequency (MHz)		Conducted Power (dBm)		Antenna Gain (dBi)		Ground Reflection Factor	Covert Radiated E Level At 3m (dBuV/m)		Detector	Limit (dBuV/m)	Verdict
Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1		Antenna 0	Antenna 1			
2310.000	2310.000	-49.596	-49.452	5.0	5.0	0	50.664	50.808	Peak	74.00	PASS
2310.000	2310.000	-60.883	-60.451	5.0	5.0	0	39.377	39.809	Average	54.00	PASS
2390.000	2387.602	-48.136	-41.913	5.0	5.0	0	52.124	58.347	Peak	74.00	PASS
2390.000	2387.602	-59.937	-53.104	5.0	5.0	0	40.323	47.156	Average	54.00	PASS
2413.190	2403.173	3.557	4.744	5.0	5.0	0	103.817	105.004	Peak	---	PASS
2414.190	2403.173	-4.454	-3.398	5.0	5.0	0	95.806	96.862	Average	---	PASS
2463.080	2463.040	3.800	5.539	5.0	5.0	0	104.060	105.799	Peak	---	PASS
2463.080	2464.200	-4.450	-2.459	5.0	5.0	0	95.810	97.801	Average	---	PASS
2483.500	2483.500	-48.693	-48.291	5.0	5.0	0	51.567	51.969	Peak	74.00	PASS
2483.500	2483.500	-59.658	-59.253	5.0	5.0	0	40.602	41.007	Average	54.00	PASS
2500.000	2500.000	-48.990	-45.959	5.0	5.0	0	51.270	54.301	Peak	74.00	PASS
2500.000	2500.000	-60.371	-60.171	5.0	5.0	0	39.889	40.089	Average	54.00	PASS

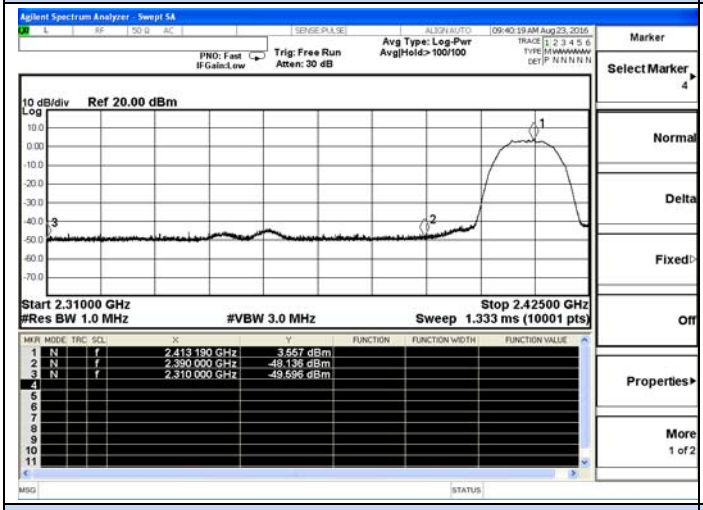
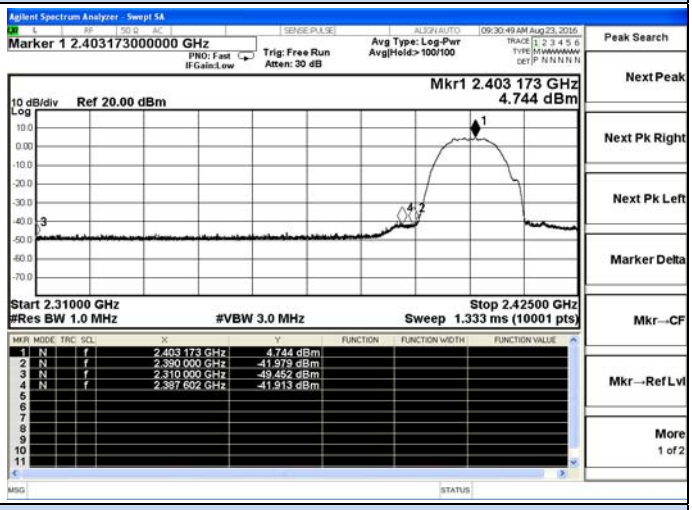
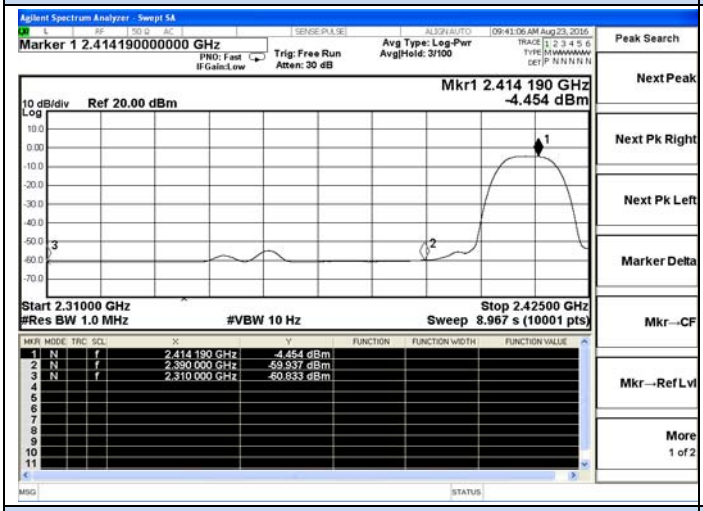
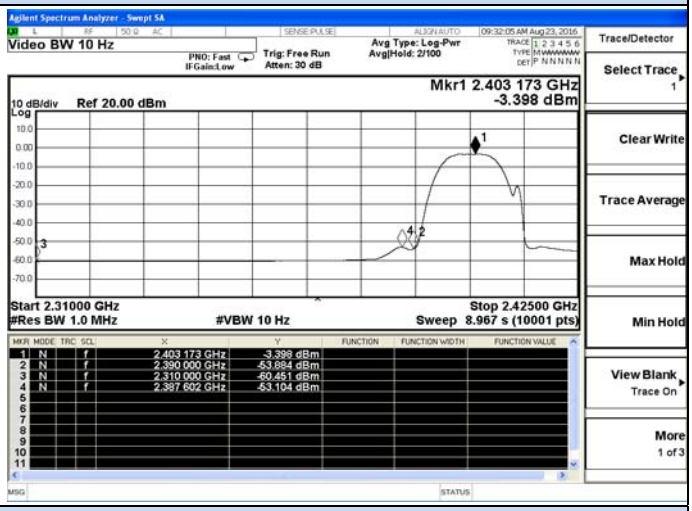
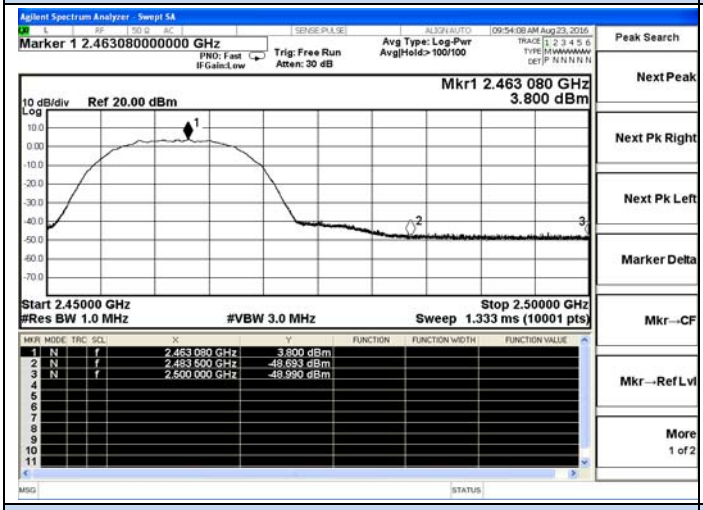
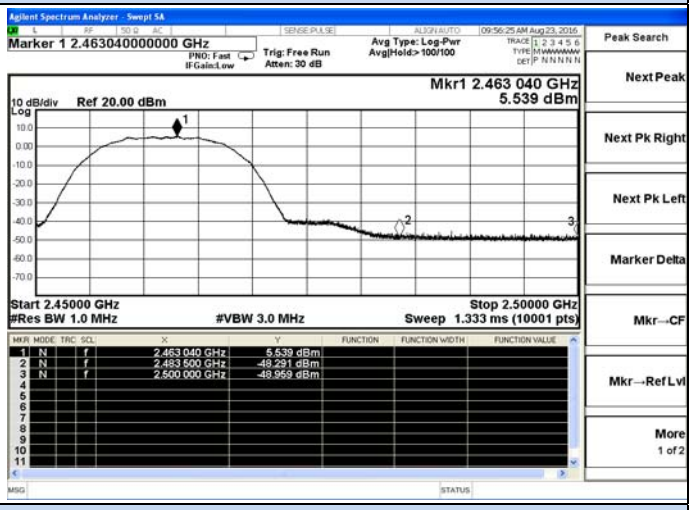
IEEE 802.11 g											
Frequency (MHz)		Conducted Power (dBm)		Antenna Gain (dBi)		Ground Reflection Factor	Covert Radiated E Level At 3m (dBuV/m)		Detector	Limit (dBuV/m)	Verdict
Antenna 0	Antenna 1	Antenna 0	Antenna 1	Antenna 0	Antenna 1		Antenna 0	Antenna 1			
2310.000	2310.000	-49.343	-47.901	5.0	5.0	0	50.917	52.359	Peak	74.00	PASS
2310.000	2310.000	-61.168	-60.668	5.0	5.0	0	39.092	39.592	Average	54.00	PASS
2390.000	2387.602	-46.724	-34.031	5.0	5.0	0	53.536	66.229	Peak	74.00	PASS
2390.000	2387.602	-58.837	-47.838	5.0	5.0	0	41.423	52.422	Average	54.00	PASS
2417.180	2407.244	1.871	3.577	5.0	5.0	0	102.131	103.837	Peak	---	PASS
2413.995	2408.636	-9.519	-8.238	5.0	5.0	0	90.741	92.022	Average	---	PASS
2467.165	2467.185	2.665	4.210	5.0	5.0	0	102.925	104.470	Peak	---	PASS
2463.935	2457.510	-8.661	-7.333	5.0	5.0	0	91.599	92.927	Average	---	PASS
2483.500	2483.500	-46.128	-38.485	5.0	5.0	0	54.132	61.775	Peak	74.00	PASS
2483.500	2483.500	-57.939	-57.252	5.0	5.0	0	42.321	43.008	Average	54.00	PASS
2500.000	2500.000	-49.451	-48.153	5.0	5.0	0	50.809	52.107	Peak	74.00	PASS
2500.000	2500.000	-60.029	-59.877	5.0	5.0	0	40.231	40.383	Average	54.00	PASS

IEEE 802.11 n HT20											
Frequency (MHz)		Conducted Power (dBm)			Antenna Gain (dBi)		Ground Reflection Factor	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
Antenna 0	Antenna 1	Antenna 0	Antenna 1	Sum	Antenna 0	Antenna 1					
2310.000	2310.000	-48.901	-49.388	-46.127	5.0	5.0	0	54.133	Peak	74.00	PASS
2310.000	2310.000	-61.155	-60.538	-57.825	5.0	5.0	0	42.435	Average	54.00	PASS
2390.000	2390.000	-48.134	-41.641	-40.762	5.0	5.0	0	59.498	Peak	74.00	PASS
2390.000	2390.000	-58.800	-57.721	-55.217	5.0	5.0	0	45.043	Average	54.00	PASS
2413.546	2413.500	1.055	3.398	5.393	5.0	5.0	0	105.653	Peak	---	PASS
2410.637	2413.500	-9.861	-7.622	-5.588	5.0	5.0	0	94.672	Average	---	PASS
2466.140	2466.185	2.906	3.638	6.298	5.0	5.0	0	106.558	Peak	---	PASS
2466.915	2466.185	-9.099	-7.688	-5.326	5.0	5.0	0	94.934	Average	---	PASS
2483.500	2483.500	-46.877	-45.760	-43.272	5.0	5.0	0	56.988	Peak	74.00	PASS
2483.500	2483.500	-57.925	-57.224	-54.550	5.0	5.0	0	45.710	Average	54.00	PASS
2500.000	2500.000	-48.932	-49.206	-46.057	5.0	5.0	0	54.203	Peak	74.00	PASS
2500.000	2500.000	-60.056	-59.894	-56.964	5.0	5.0	0	43.296	Average	54.00	PASS

IEEE 802.11 n HT40											
Frequency (MHz)		Conducted Power (dBm)			Antenna Gain (dBi)		Ground Reflection Factor	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
Antenna 0	Antenna 1	Antenna 0	Antenna 1	Sum	Antenna 0	Antenna 1					
2310.000	2310.000	-50.610	-49.453	-46.983	5.0	5.0	0	53.277	Peak	74.00	PASS
2310.000	2310.000	-60.863	-60.138	-57.475	5.0	5.0	0	42.785	Average	54.00	PASS
2390.000	2390.000	-46.534	-41.618	-40.404	5.0	5.0	0	59.856	Peak	74.00	PASS
2390.000	2390.000	-58.112	-54.391	-52.854	5.0	5.0	0	47.406	Average	54.00	PASS
2411.547	2411.696	-2.186	0.317	2.254	5.0	5.0	0	102.514	Peak	---	PASS
2433.039	2416.029	-12.893	-10.542	-8.550	5.0	5.0	0	91.710	Average	---	PASS
2460.401	2477.773	-1.741	0.323	2.423	5.0	5.0	0	102.683	Peak	---	PASS
2463.468	2446.065	-12.278	-10.624	-8.362	5.0	5.0	0	91.898	Average	---	PASS
2483.500	2483.500	-44.568	-42.302	-40.279	5.0	5.0	0	59.981	Peak	74.00	PASS
2483.500	2483.500	-57.379	-56.238	-53.761	5.0	5.0	0	46.499	Average	54.00	PASS
2500.000	2500.000	-48.179	-48.332	-45.245	5.0	5.0	0	55.015	Peak	74.00	PASS
2500.000	2500.000	-59.728	-59.359	-56.529	5.0	5.0	0	43.731	Average	54.00	PASS

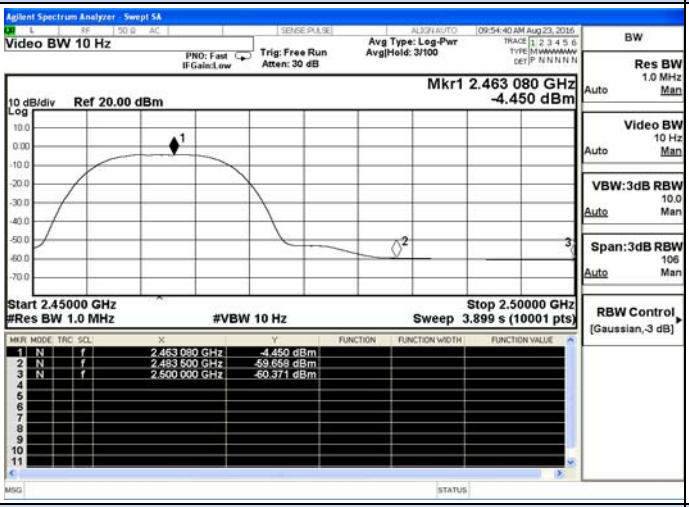
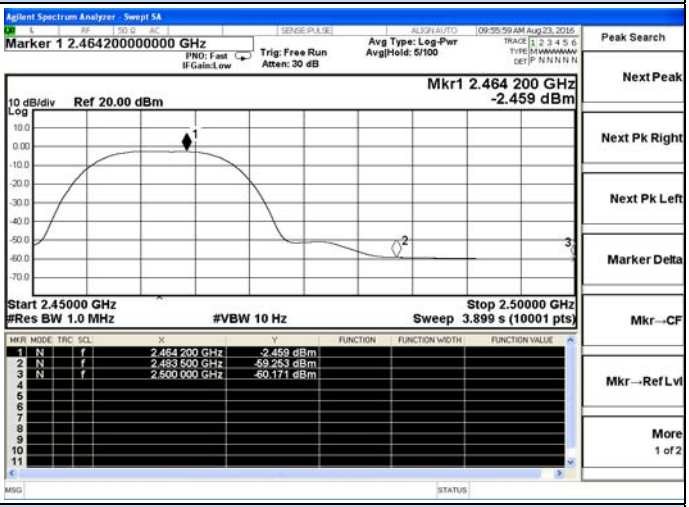
Remark:

1. *Measured output power 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 802.11 b; 6Mbps at IEEE 802.11 g; 6.5Mbps at IEEE 802.11 n HT20; 13.5Mbps at IEEE 802.11 n HT20*
4. *"---"means that the fundamental frequency not for 15.209 limits requirement.*
5. *please refer to following plots;*

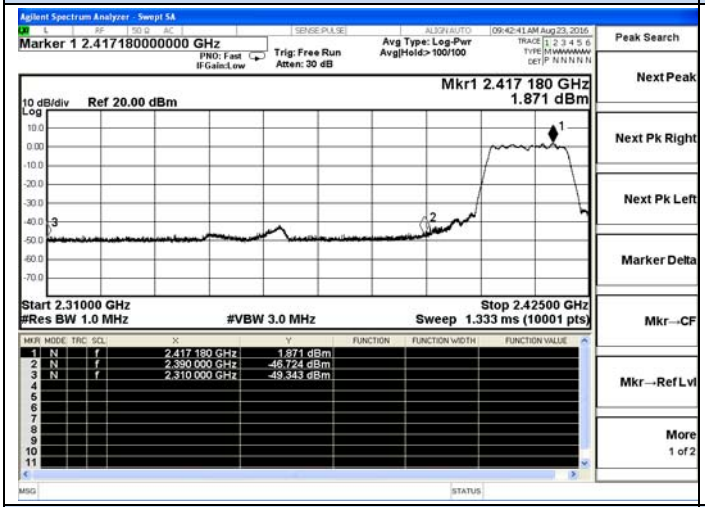
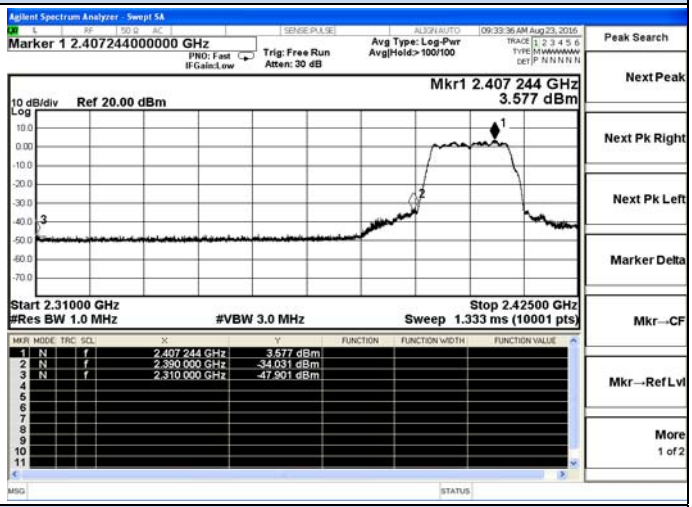
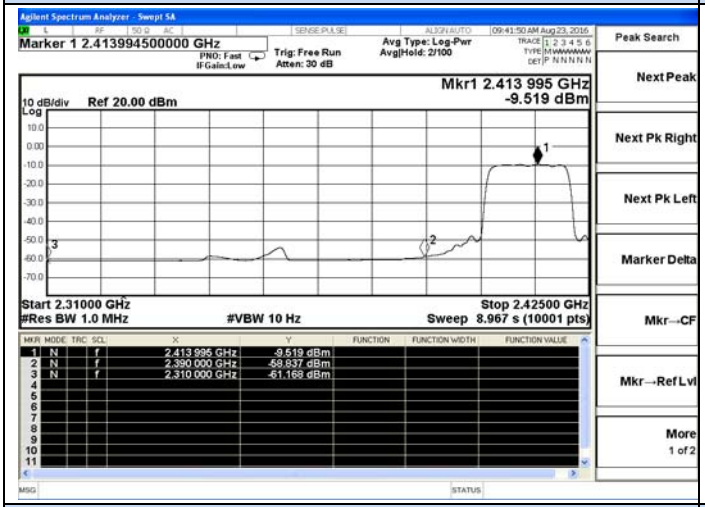
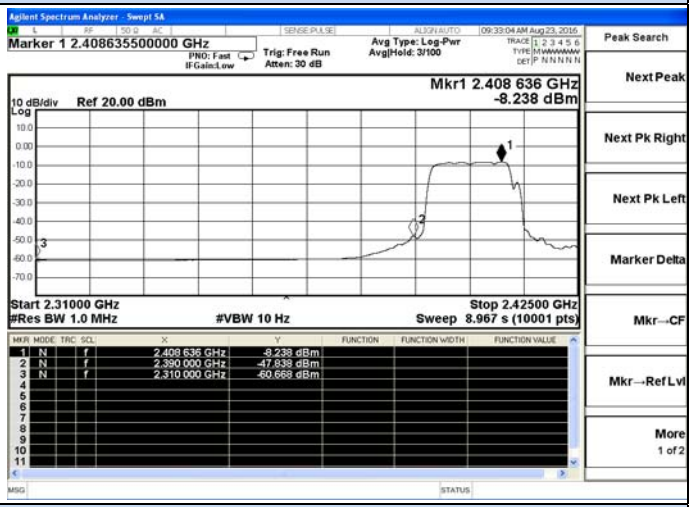
Band-edge Measurements for Radiated Emissions	
IEEE 802.11 b	
Antenna 0	Antenna 1
	
2412 MHz – Peak	2412 MHz – Peak
	
2412 MHz – Average	2412 MHz – Average
	
2462 MHz – Peak	2462 MHz – Peak

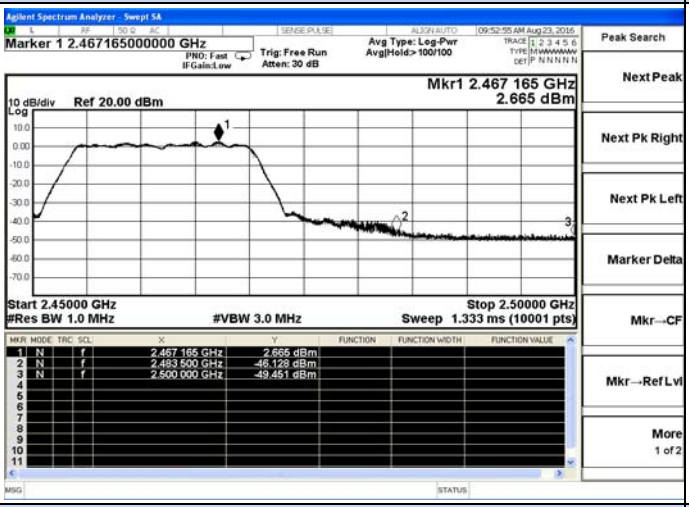
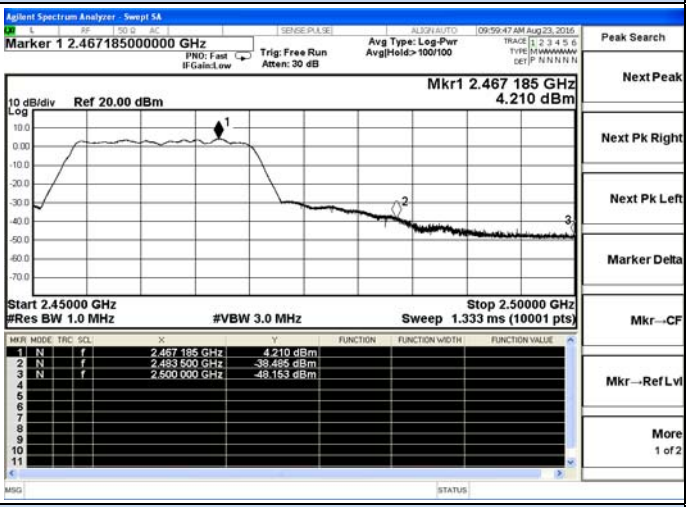
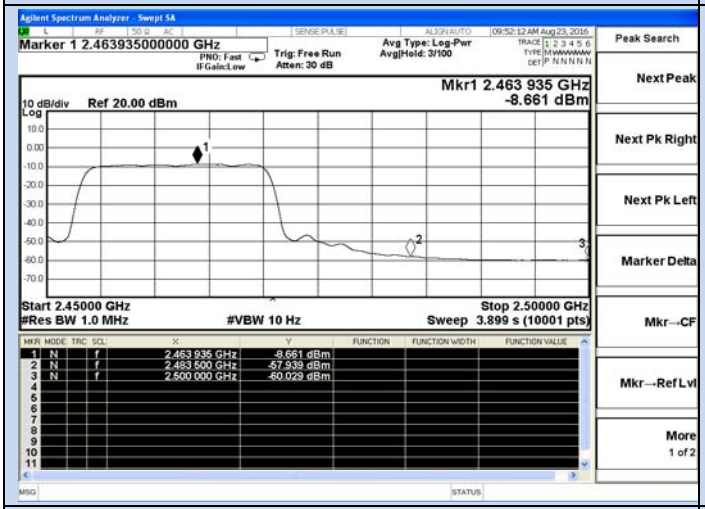
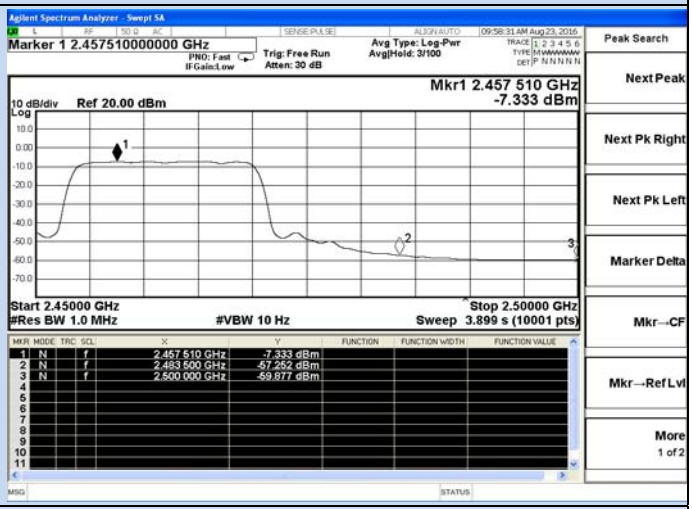
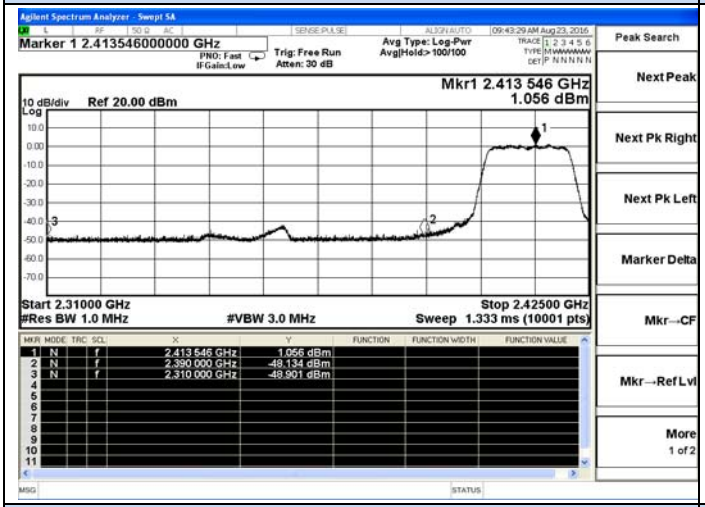
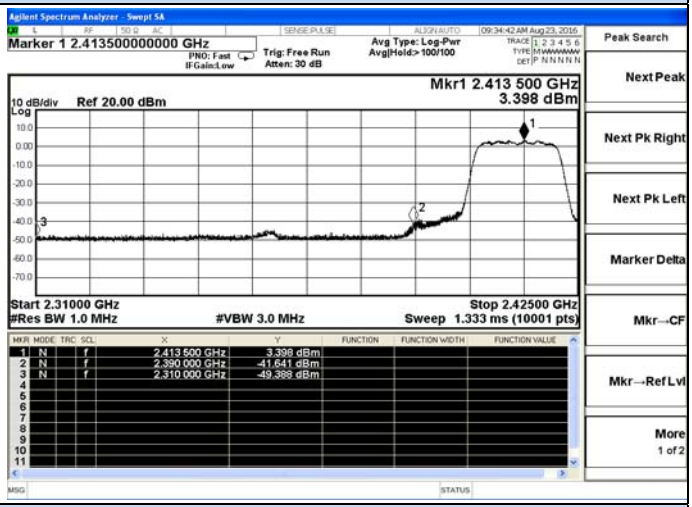
Band-edge Measurements for Radiated Emissions

IEEE 802.11 b

Antenna 0	Antenna 1
	
2462 MHz – Average	2462 MHz – Average

IEEE 802.11 g

Antenna 0	Antenna 1
	
2412 MHz – Peak	2412 MHz – Peak
	
2412 MHz – Average	2412 MHz – Average

Band-edge Measurements for Radiated Emissions	
IEEE 802.11 g	
Antenna 0	Antenna 1
	
2462 MHz – Peak	2462 MHz – Peak
	
2462 MHz – Average	2462 MHz – Average
IEEE 802.11 n HT20	
Antenna 0	Antenna 1
	
2412 MHz – Peak	2412 MHz – Peak

Band-edge Measurements for Radiated Emissions	
IEEE 802.11 n HT20	
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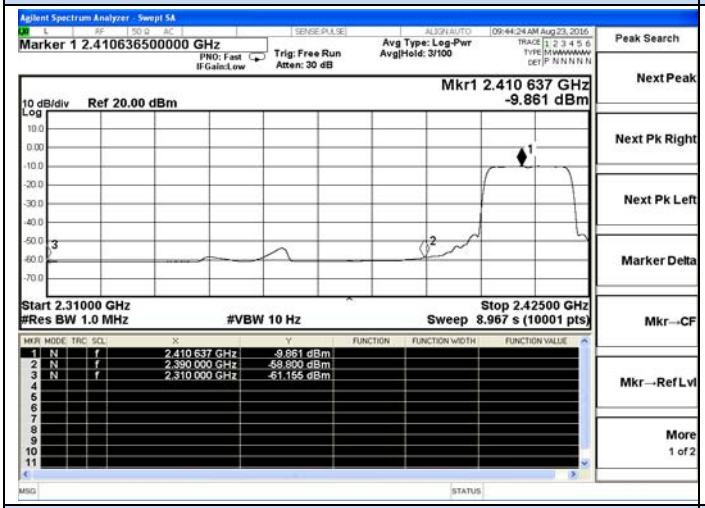
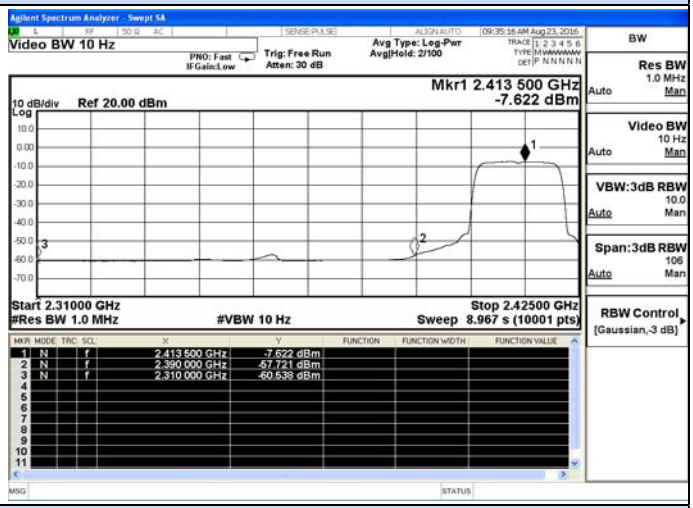
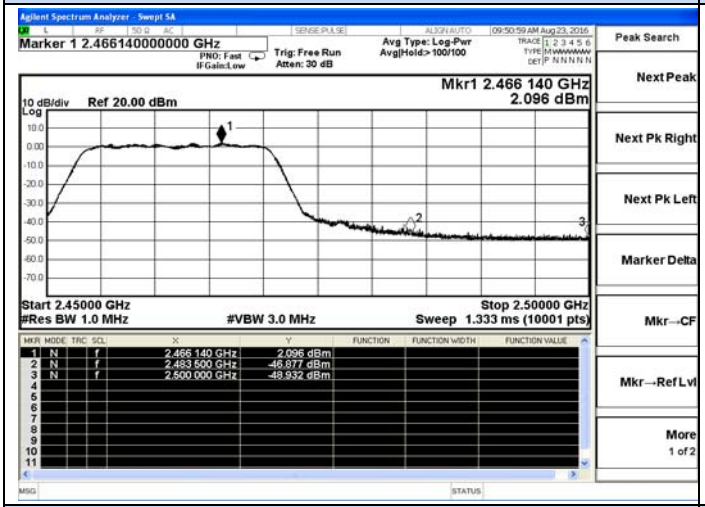
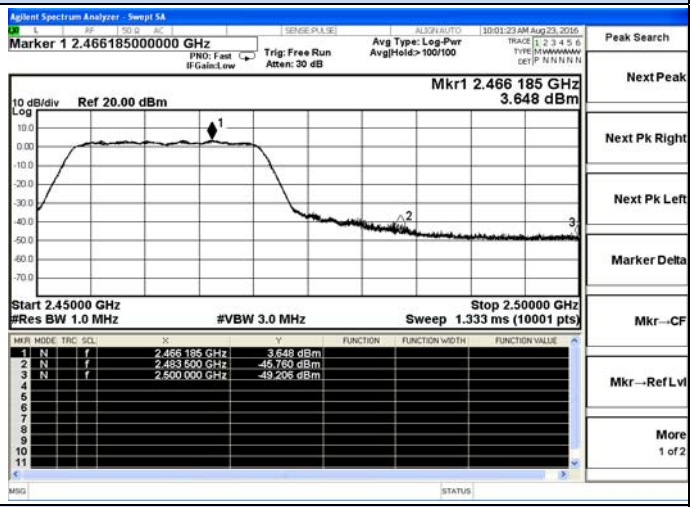
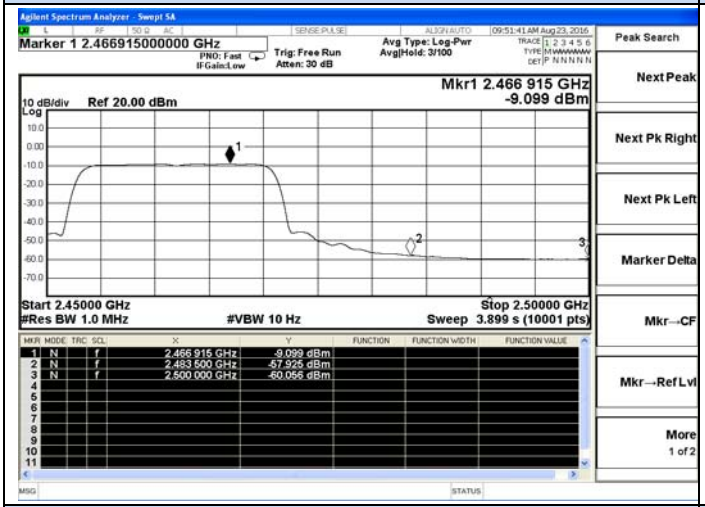
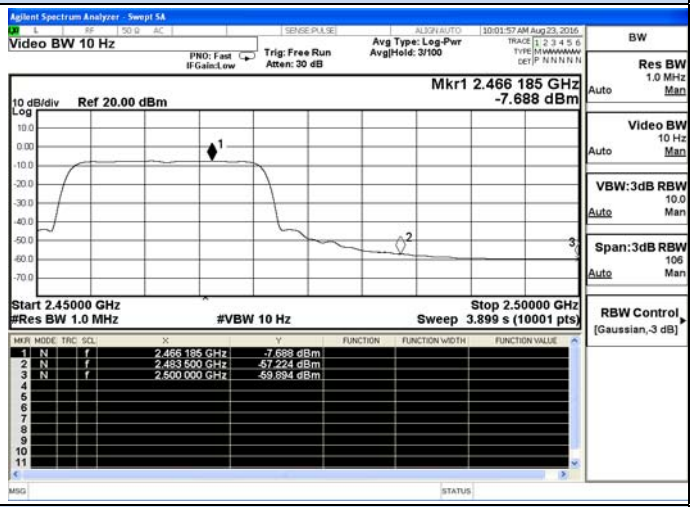
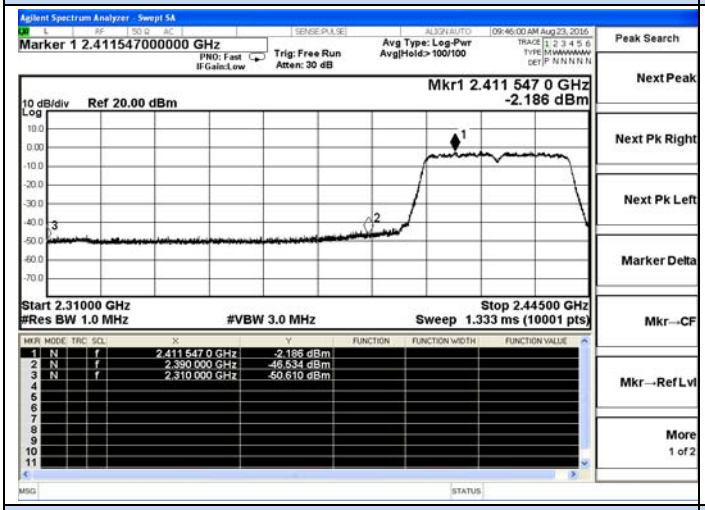
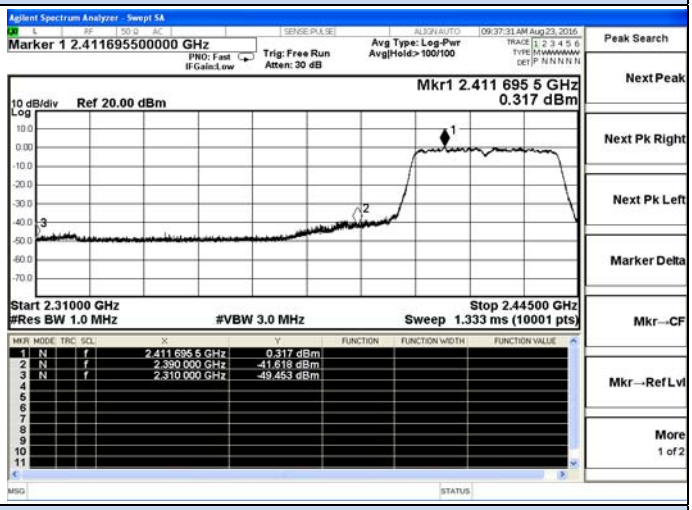
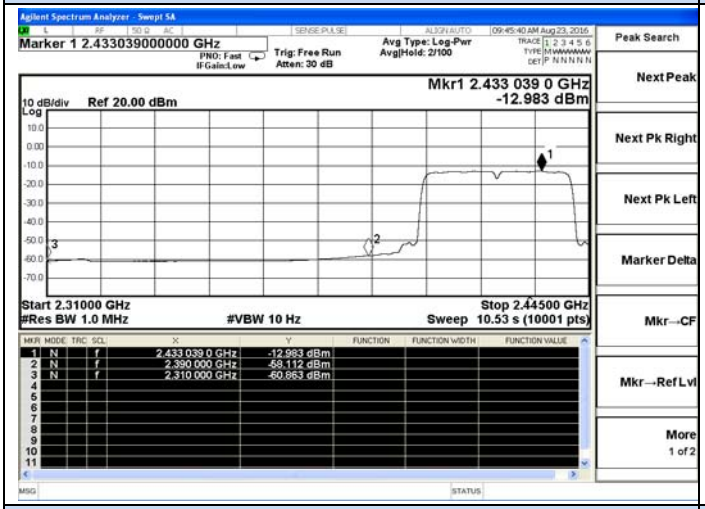
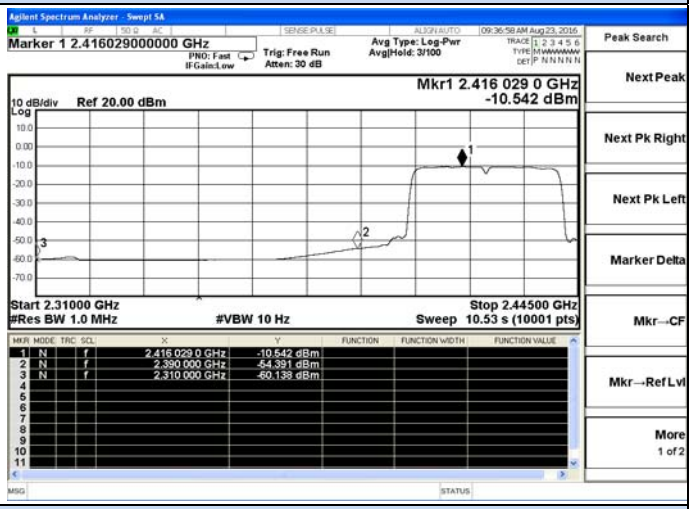
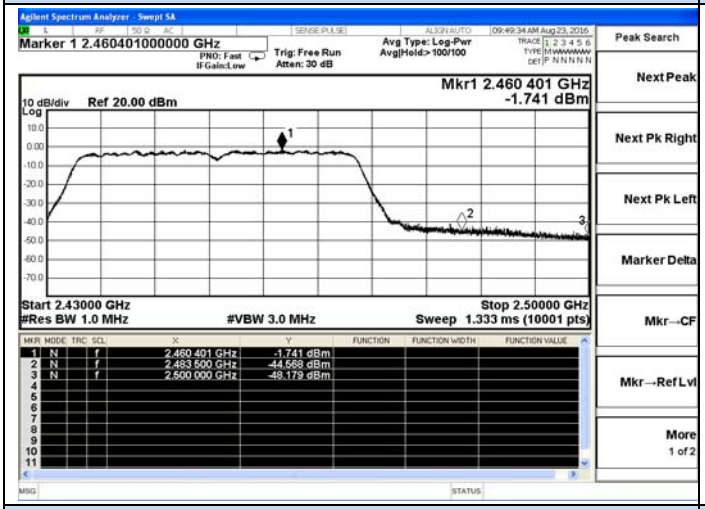
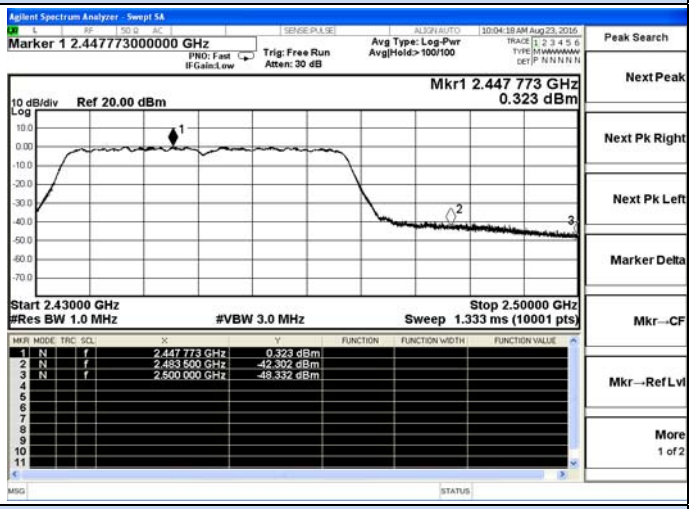
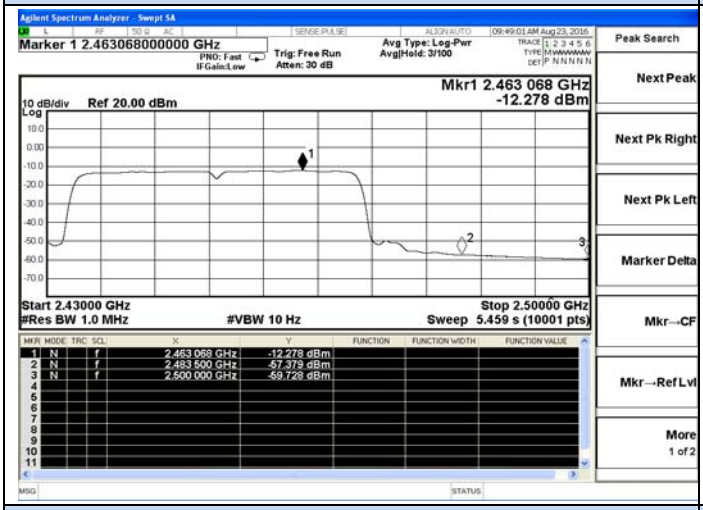
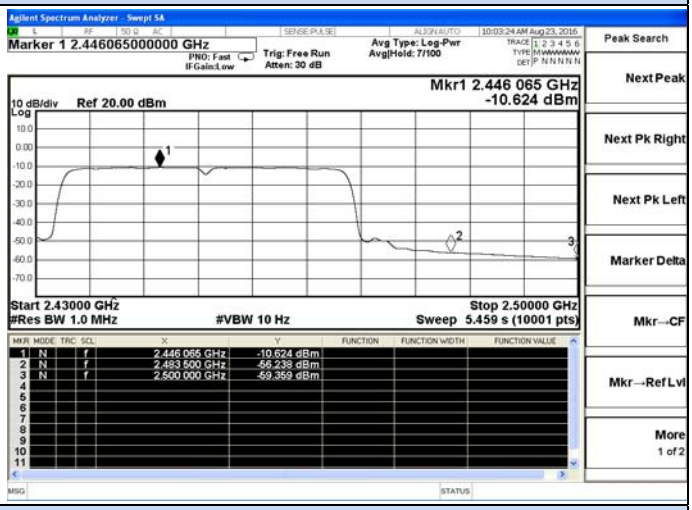
	
2412 MHz – Average	2412 MHz – Average
	
2462 MHz – Peak	2462 MHz – Peak
	
2462 MHz – Average	2462 MHz – Average

Band-edge Measurements for Radiated Emissions	
IEEE 802.11 n HT40	
Antenna 0	Antenna 1
	
2422 MHz – Peak	2422 MHz – Peak
	
2422 MHz – Average	2422 MHz – Average
	
2452 MHz – Peak	2452 MHz – Peak

Band-edge Measurements for Radiated Emissions	
IEEE 802.11 n HT40	
Antenna 0	Antenna 1
	
2452 MHz – Average	2452 MHz – Average

5.7. Conducted Spurious Emissions and Band Edges Test

5.7.1. 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)).

5.7.2. Measuring Instruments and Setting

Please refer to section 6 of equipments 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

5.7.3. 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.

5.7.4. Test Setup Layout

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

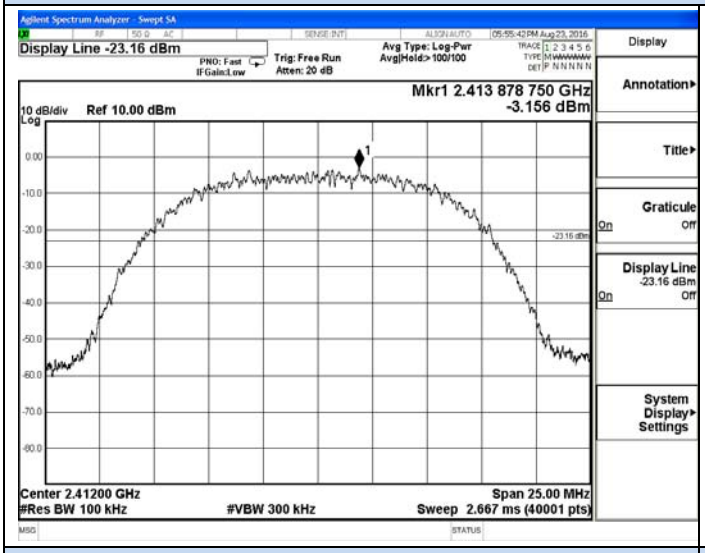
5.7.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

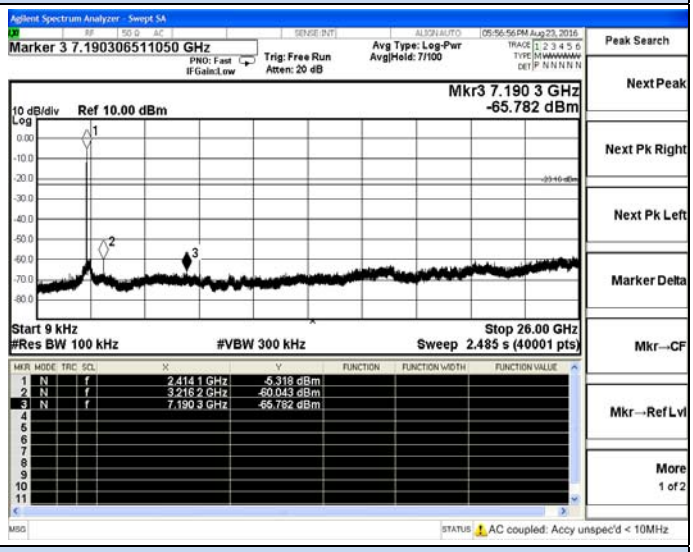
5.7.6. Test Results of Conducted Spurious Emissions

Test plot of Conducted Spurious Emission

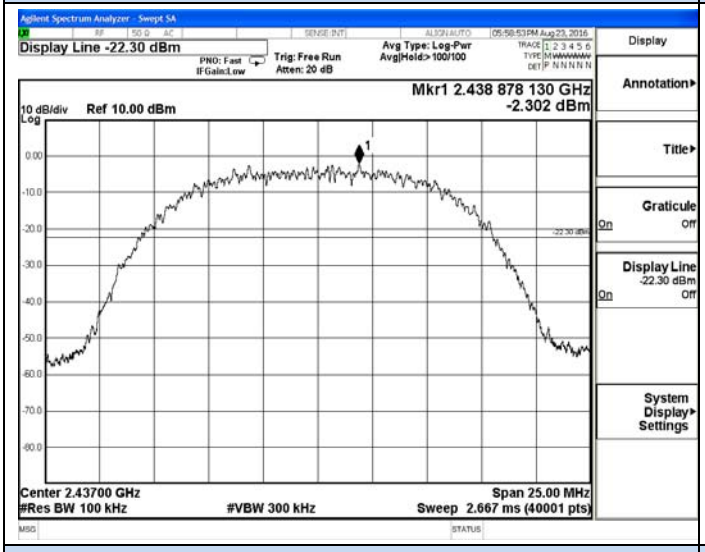
IEEE 802.11b-Chain 0



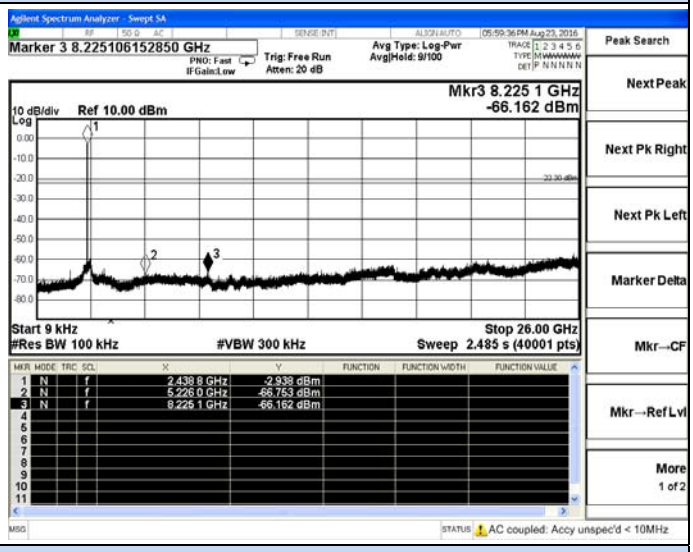
Low channel Reference



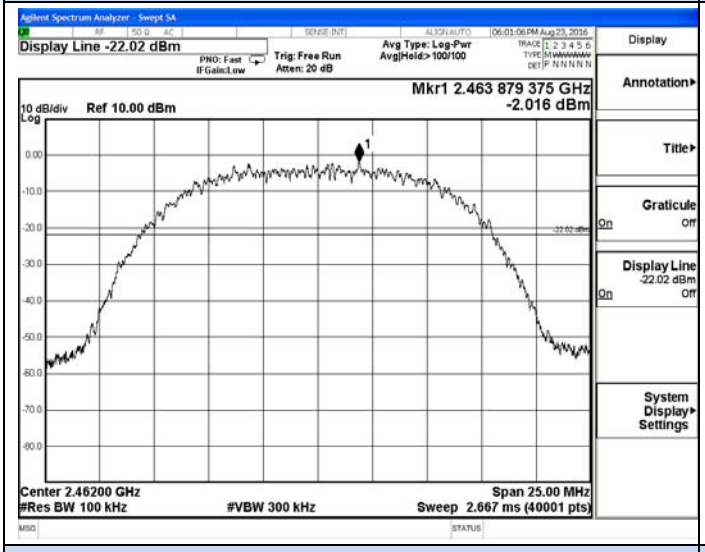
Low channel



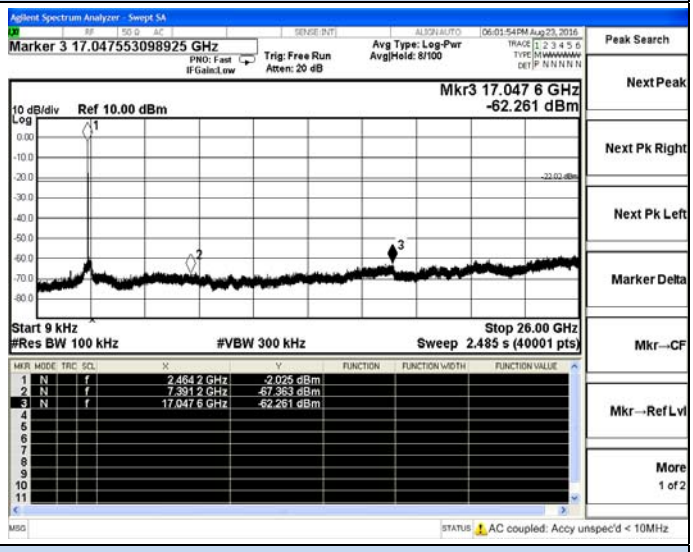
Middle channel Reference



Middle channel



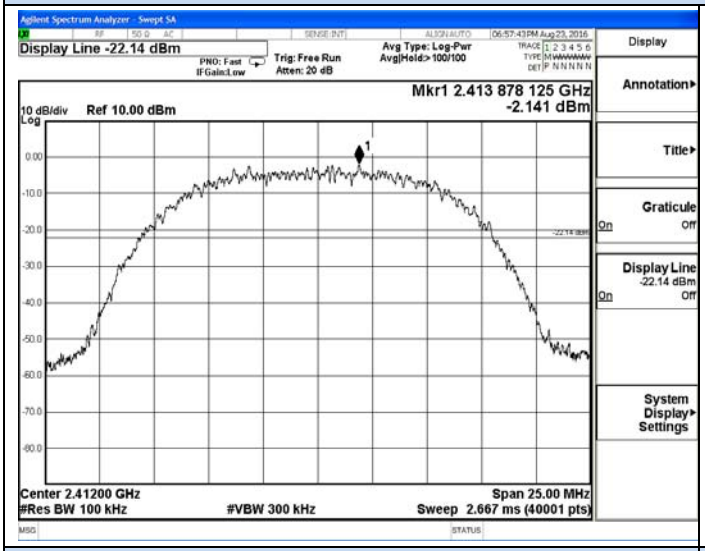
High channel Reference



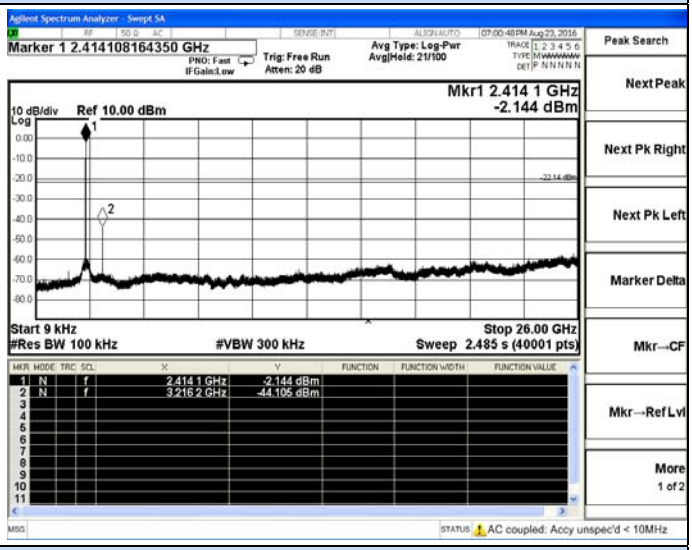
High channel

Test plot of Conducted Spurious Emission

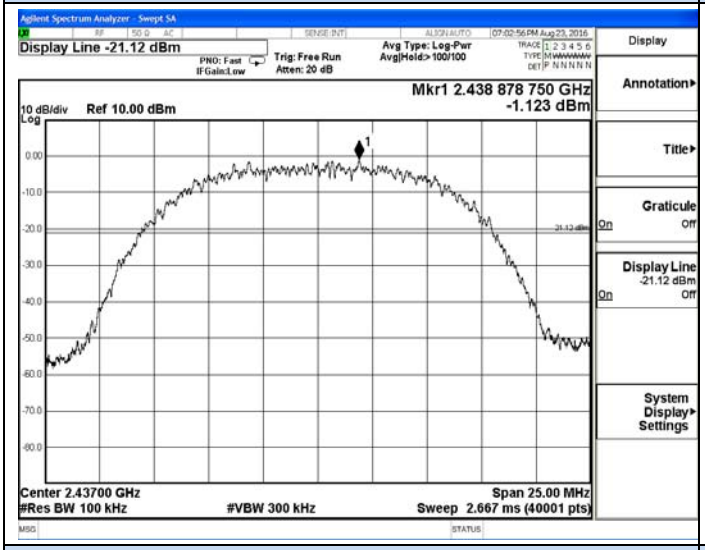
IEEE 802.11b-Chain 1



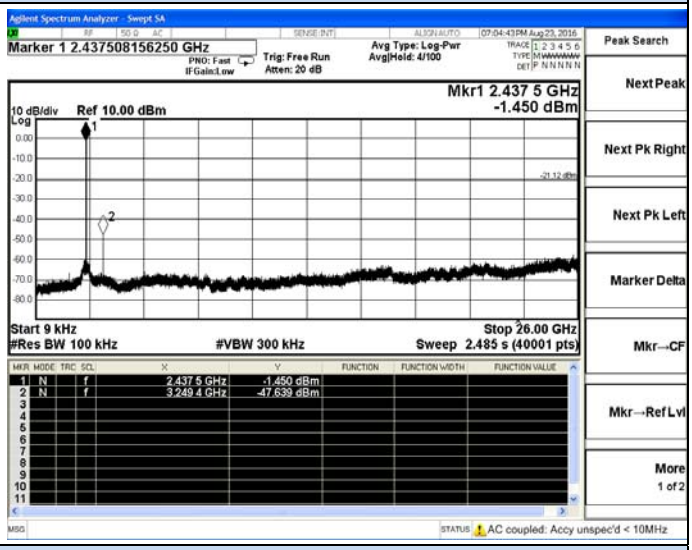
Low channel Reference



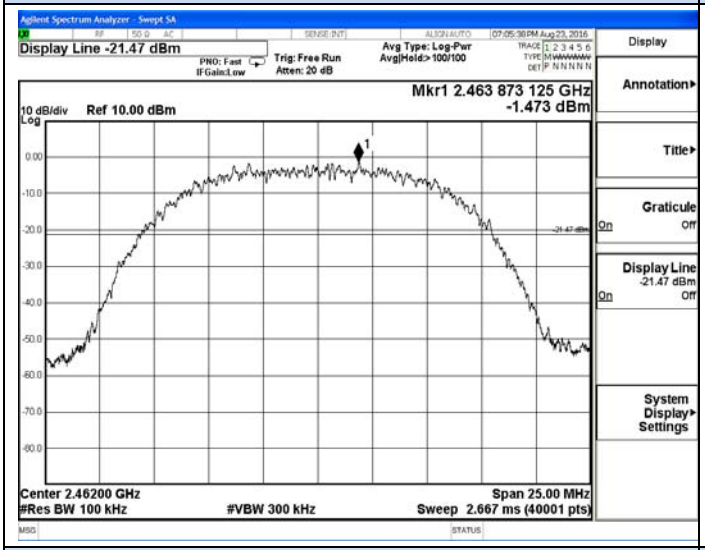
Low channel



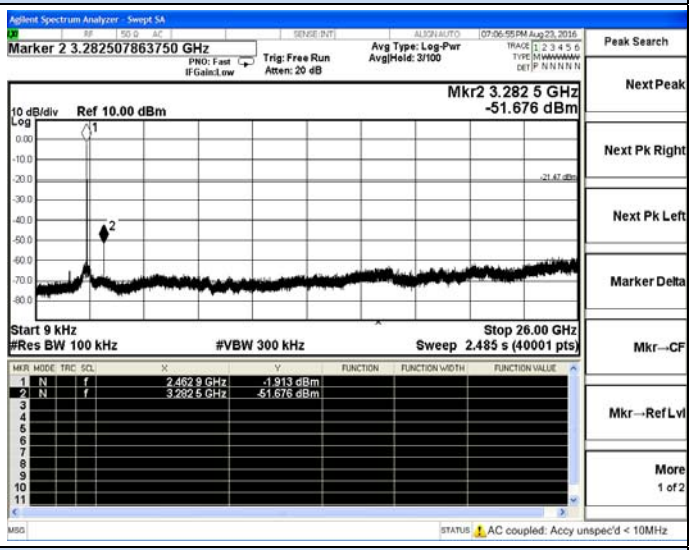
Middle channel Reference



Middle channel



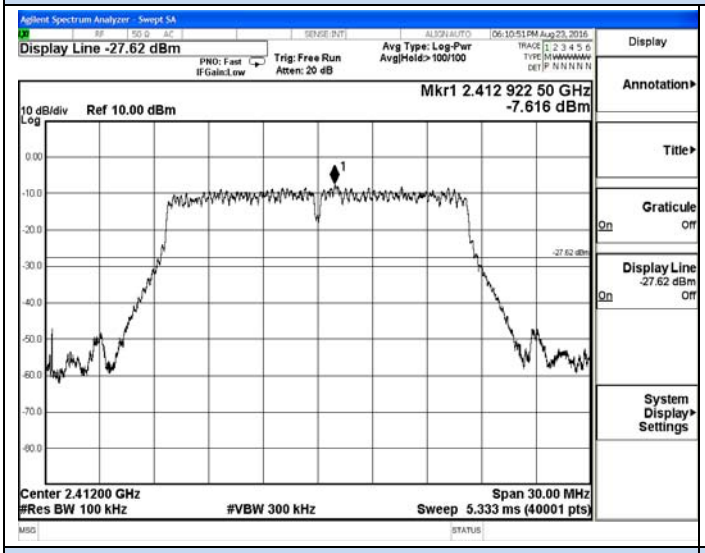
High channel Reference



High channel

Test plot of Conducted Spurious Emission

IEEE 802.11g-Chain 0



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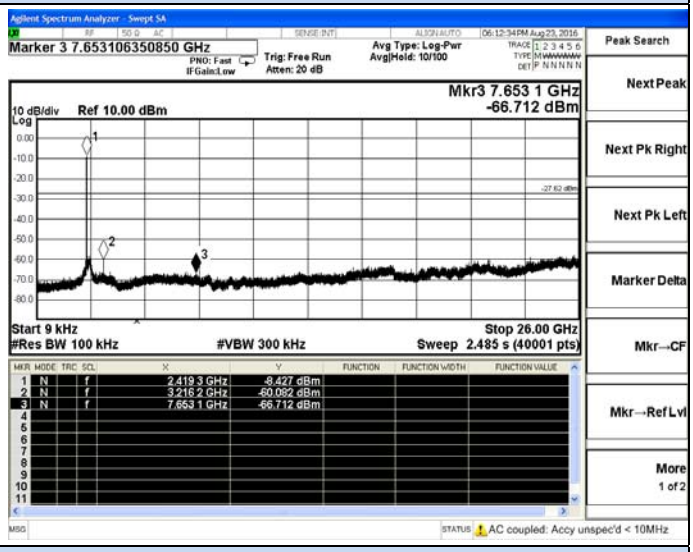

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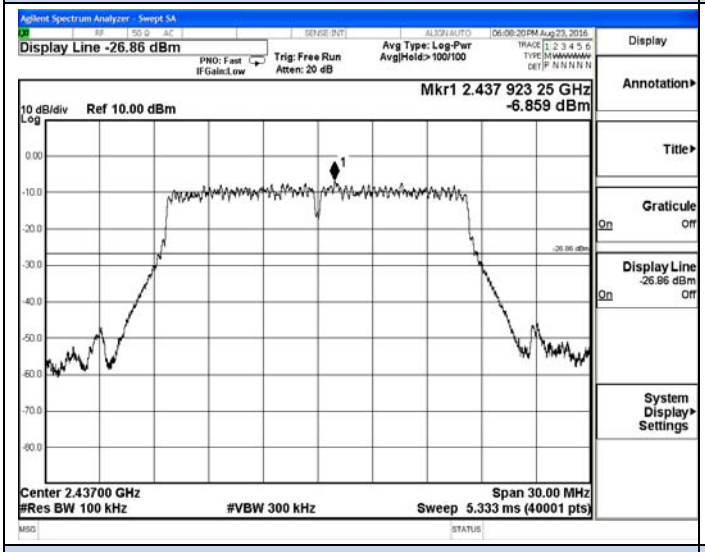
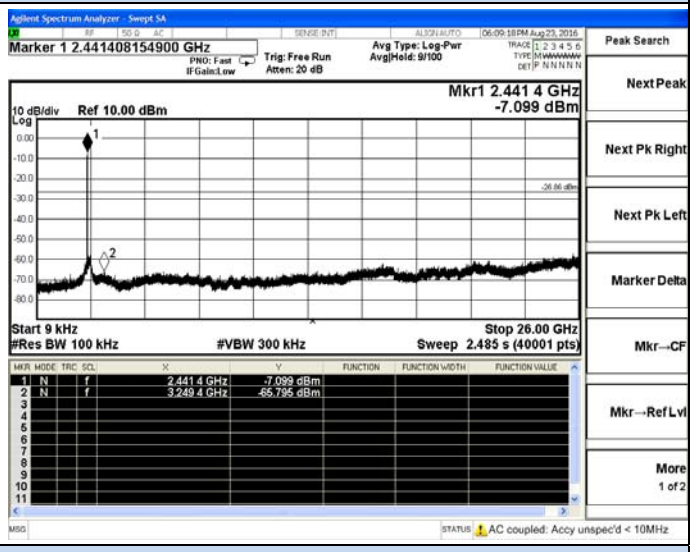
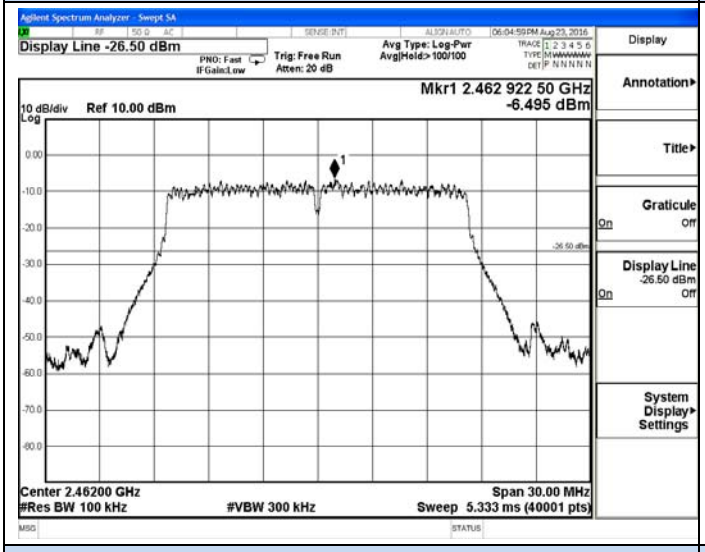


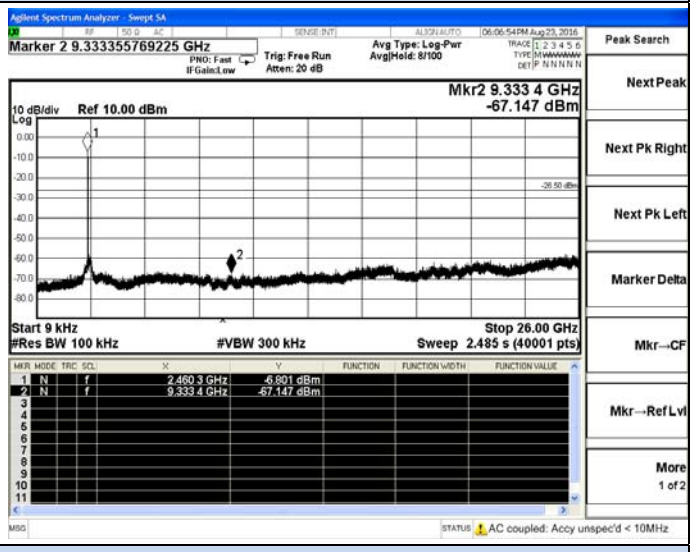
Middle channel Reference



Middle channel



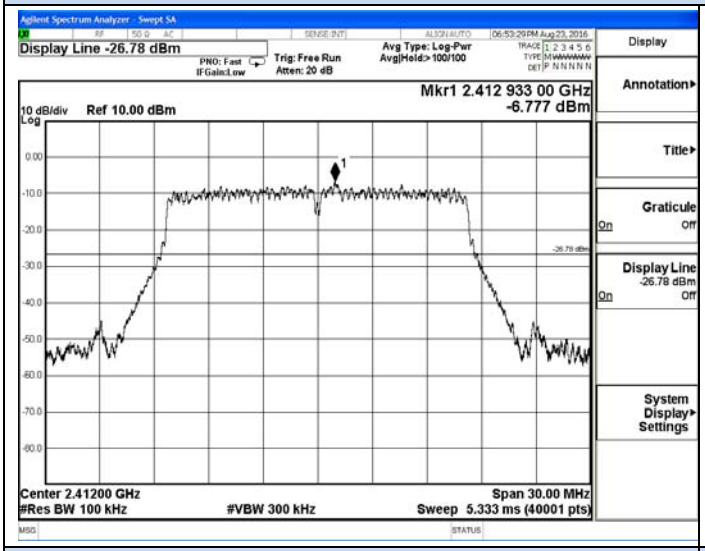
High channel Reference



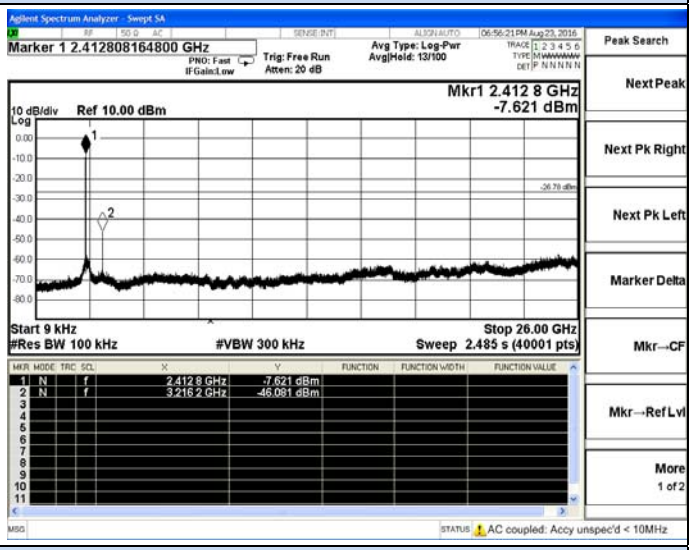
High channel

Test plot of Conducted Spurious Emission

IEEE 802.11g-Chain 1



Low channel Reference



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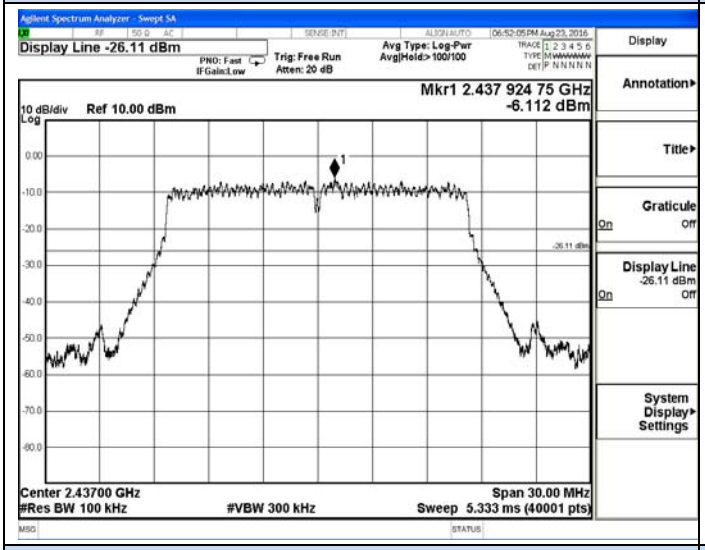
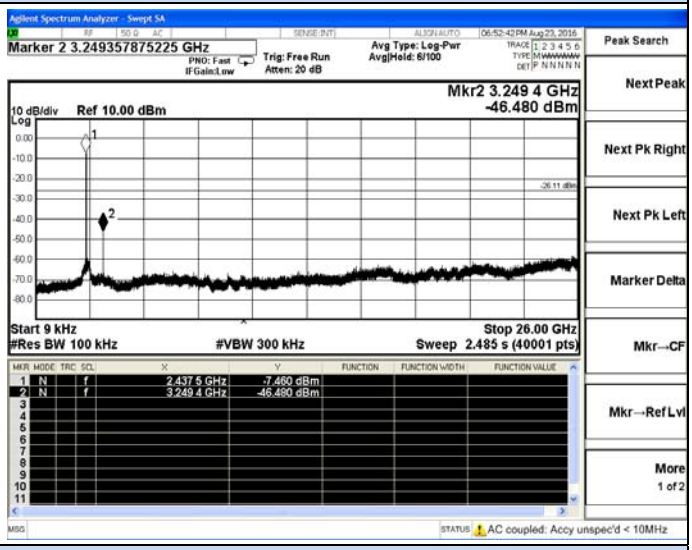


Middle channel Reference



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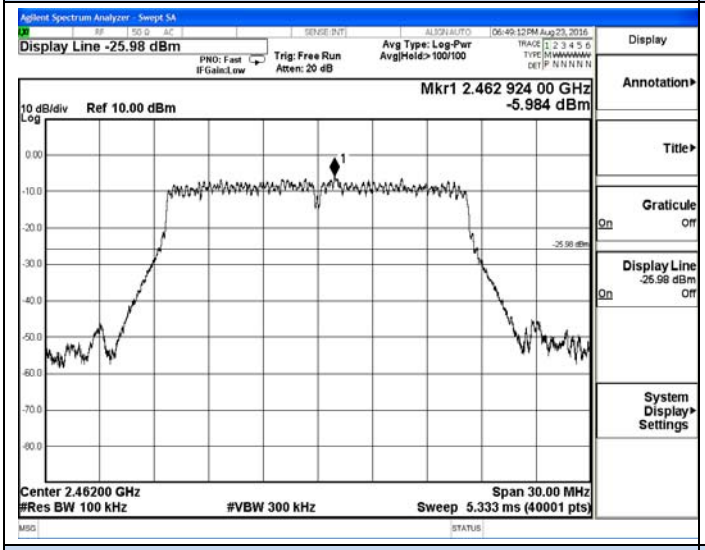
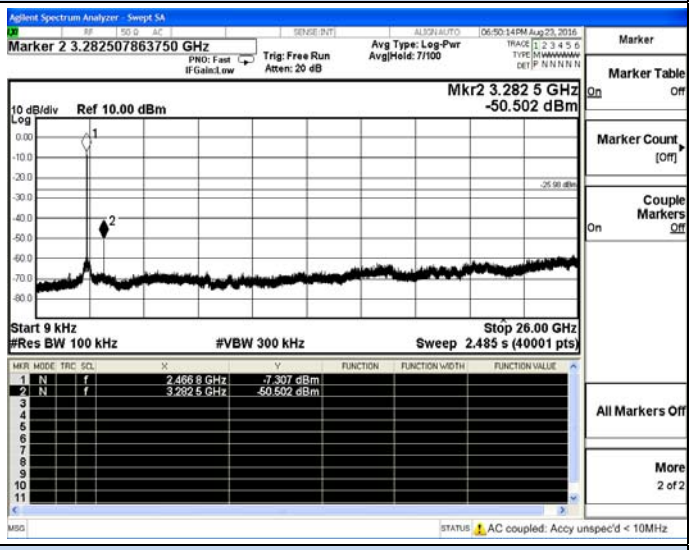


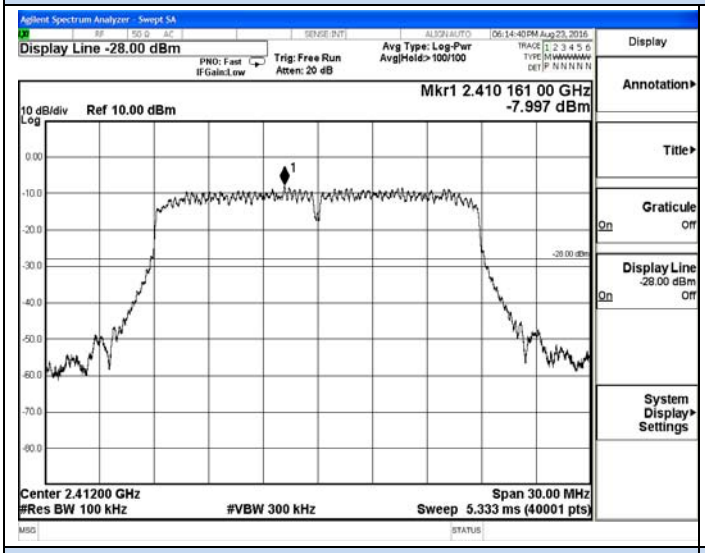
High channel Reference



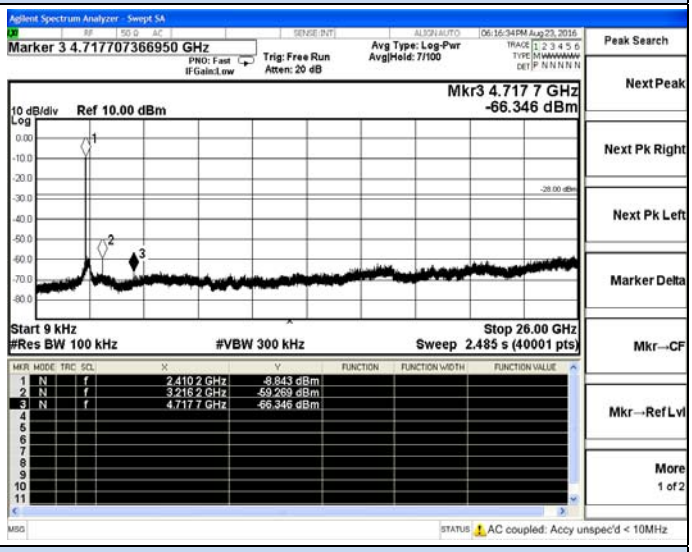
High channel

Test plot of Conducted Spurious Emission

IEEE 802.11n-HT20-Chain 0



Low channel Reference



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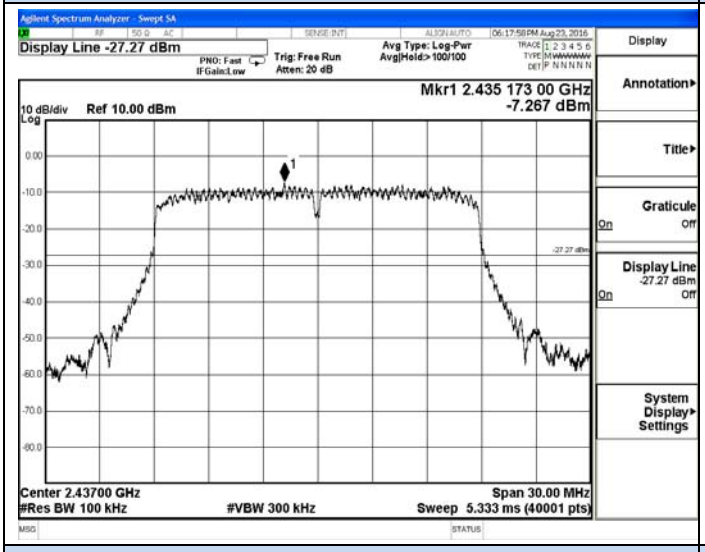
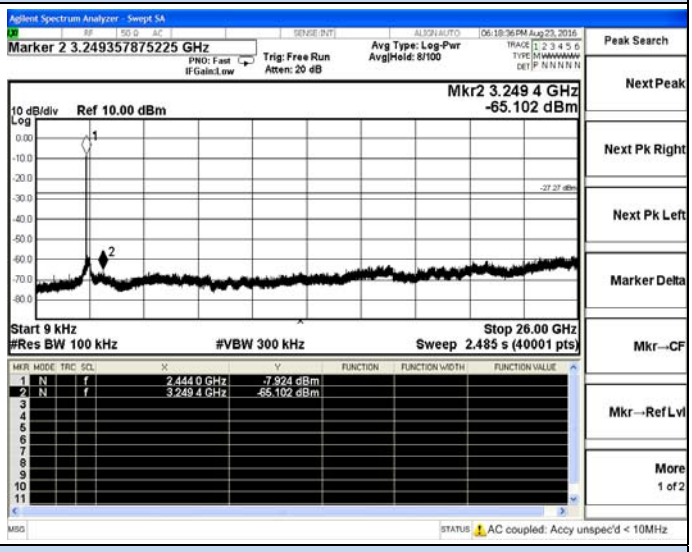
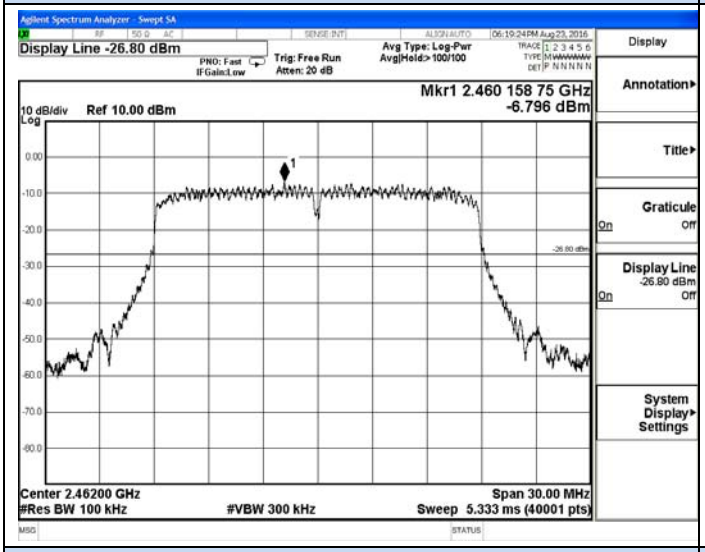


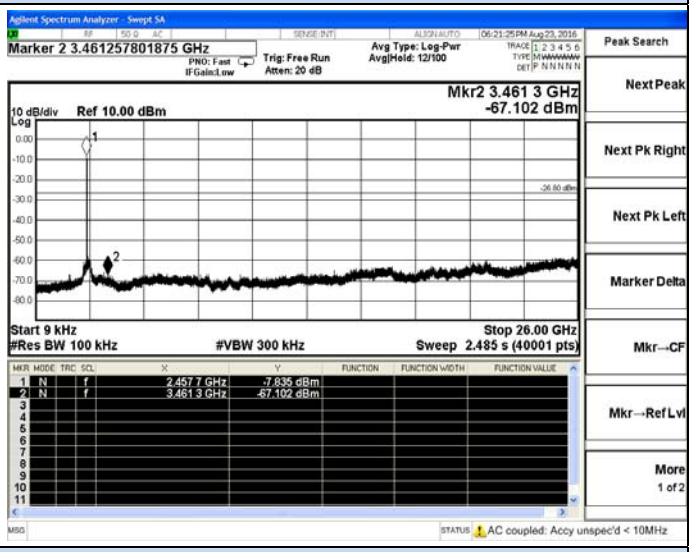
Middle channel Reference



Middle channel



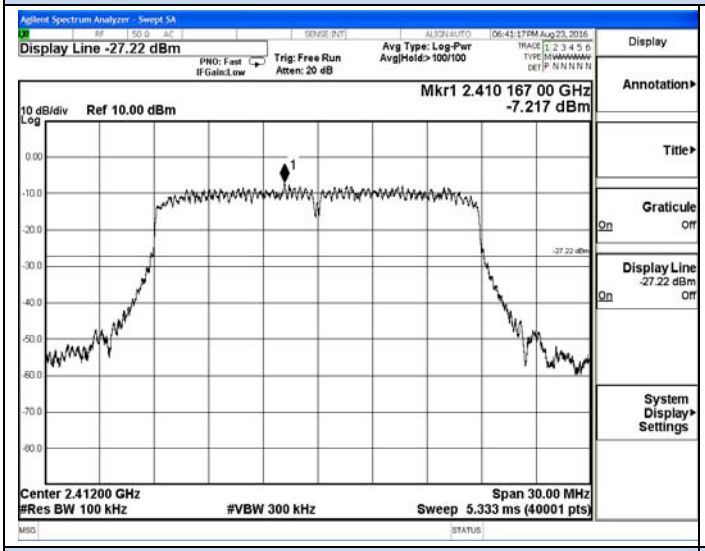
High channel Reference



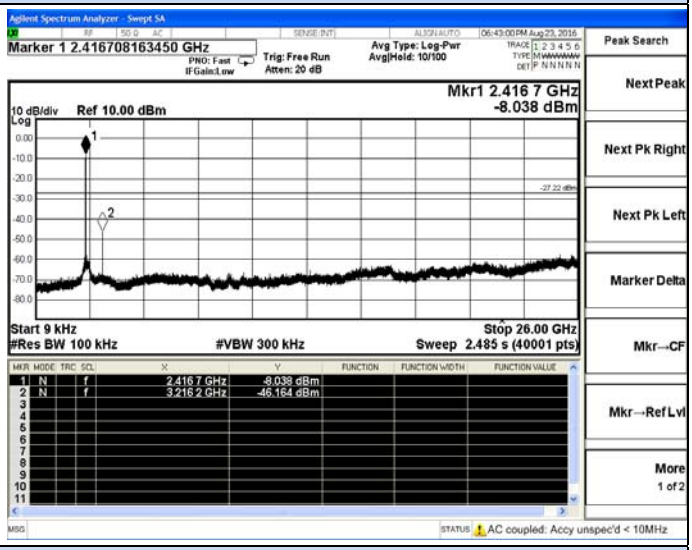
High channel

Test plot of Conducted Spurious Emission

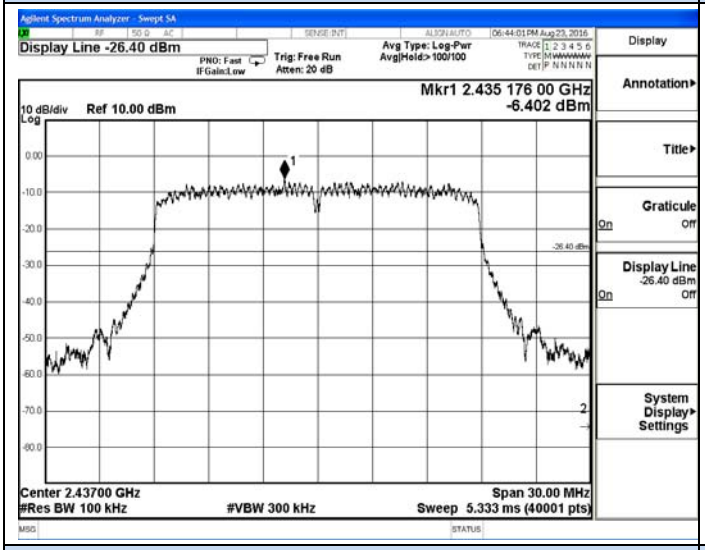
IEEE 802.11n-HT20-Chain 1



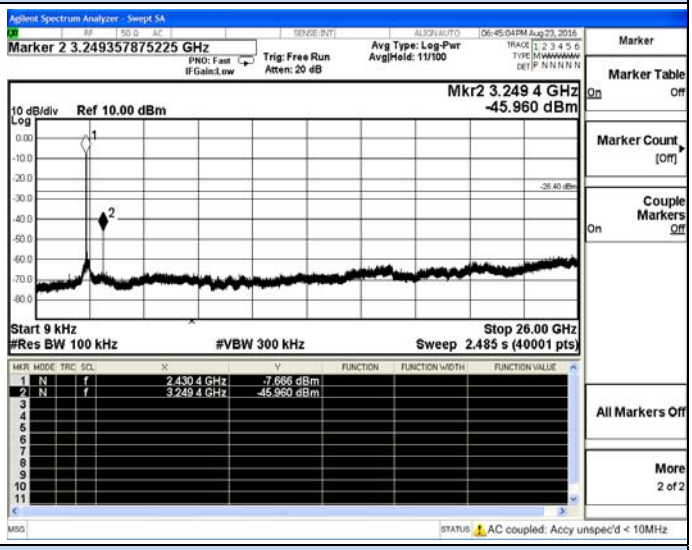
Low channel Reference



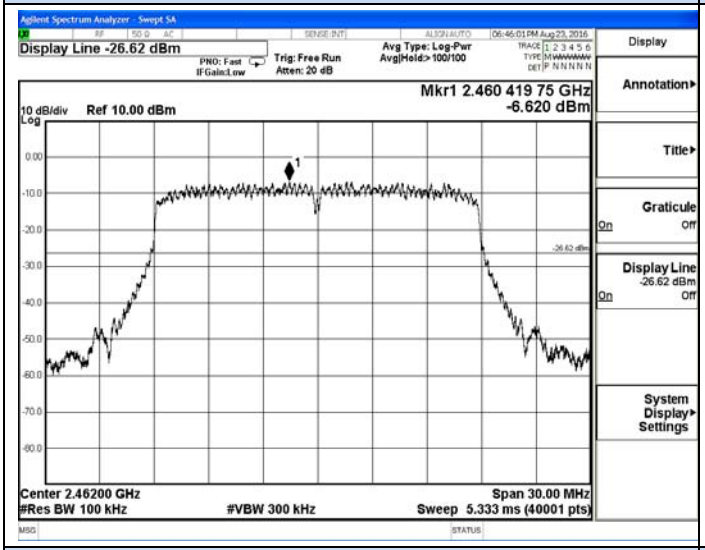
Low channel



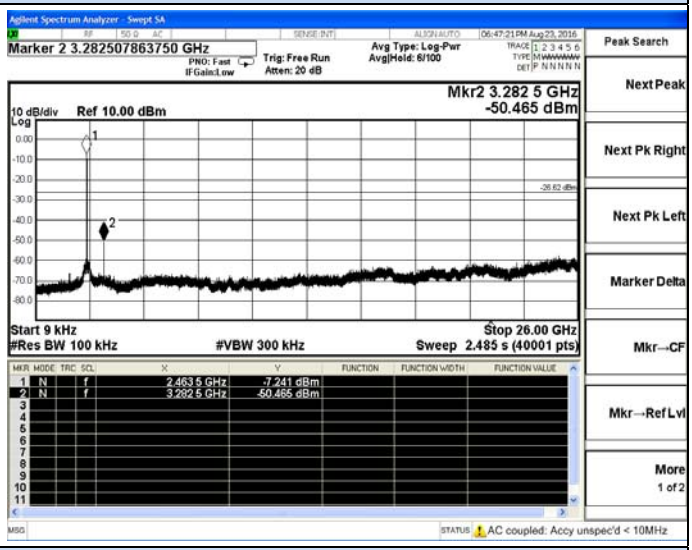
Middle channel Reference



Middle channel



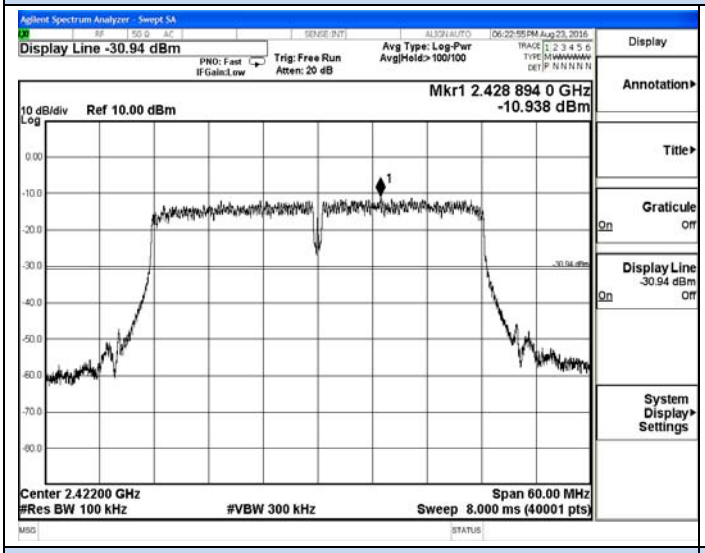
High channel Reference



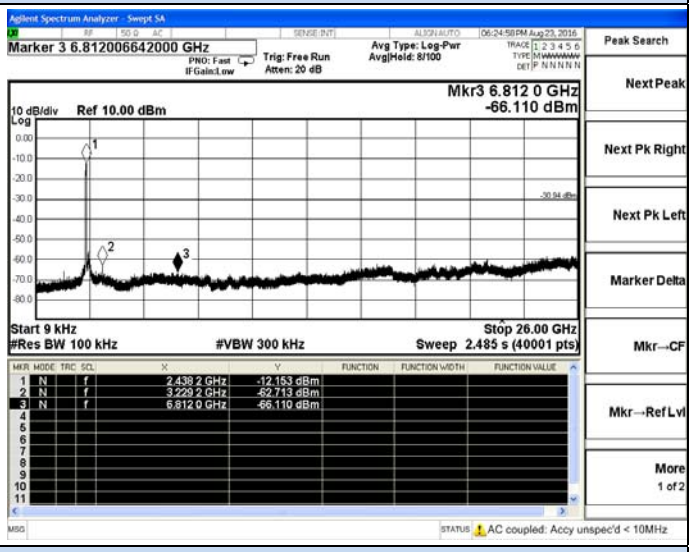
High channel

Test plot of Conducted Spurious Emission

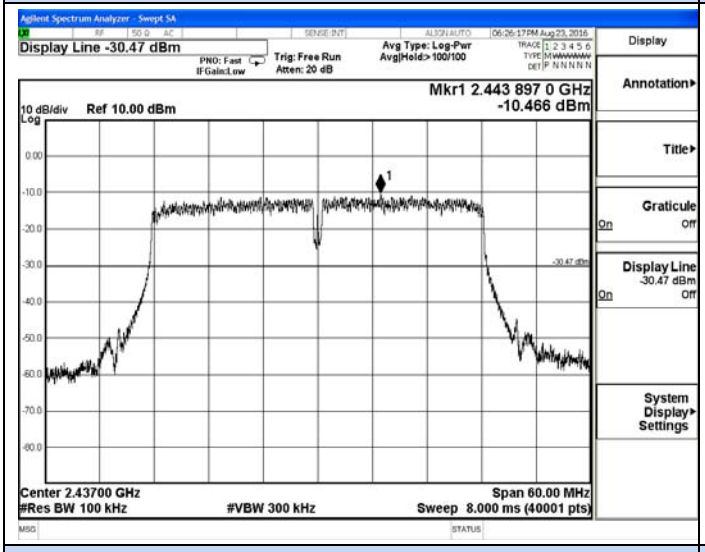
IEEE 802.11n-HT40-Chain 0



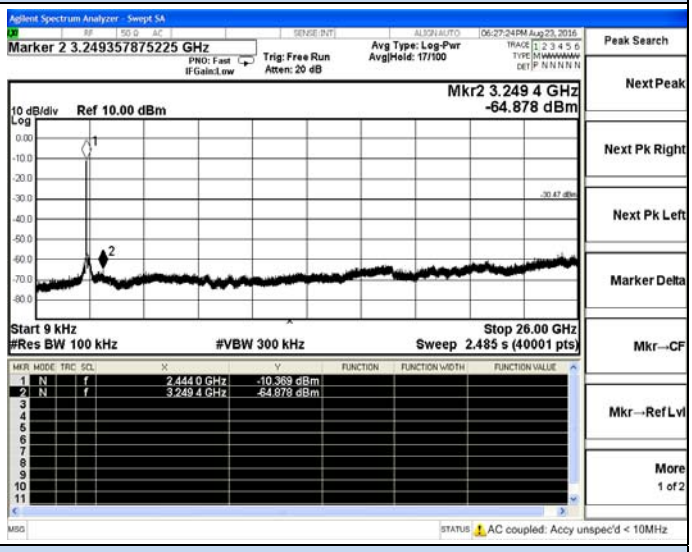
Low channel Reference



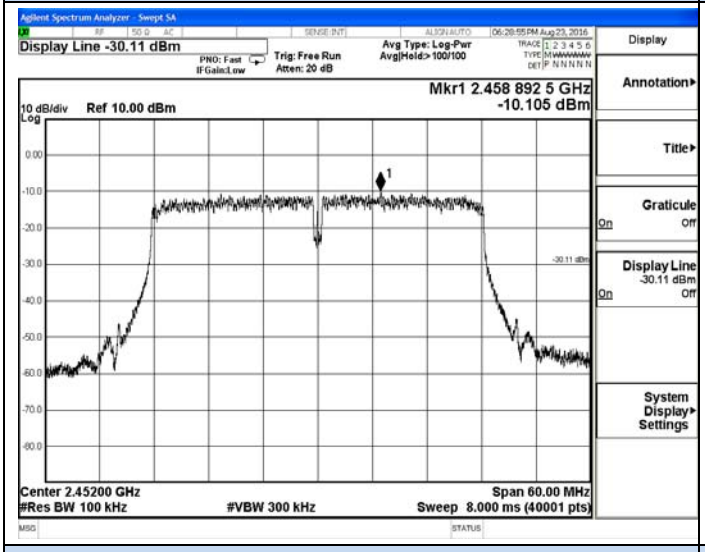
Low channel



Middle channel Reference



Middle channel



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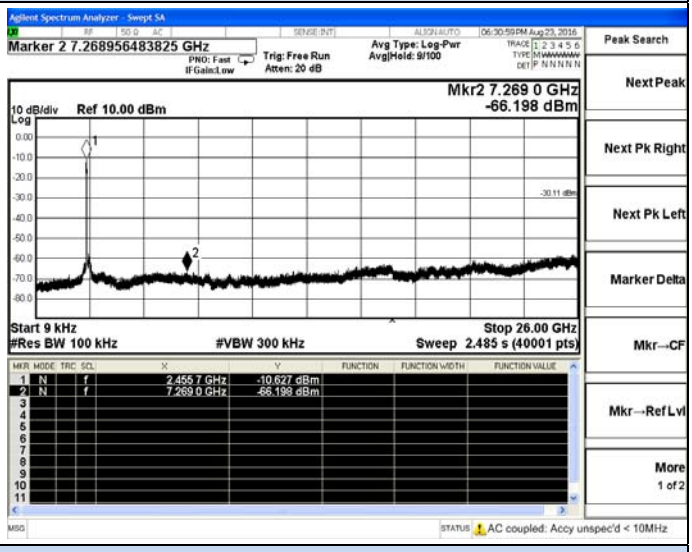
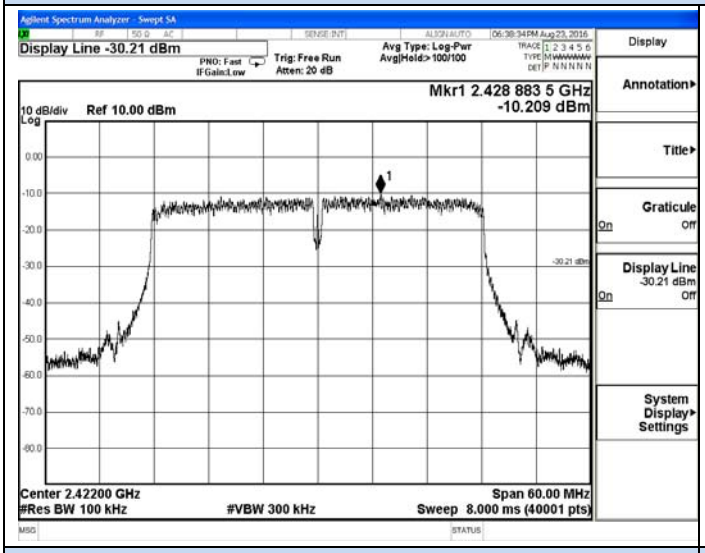


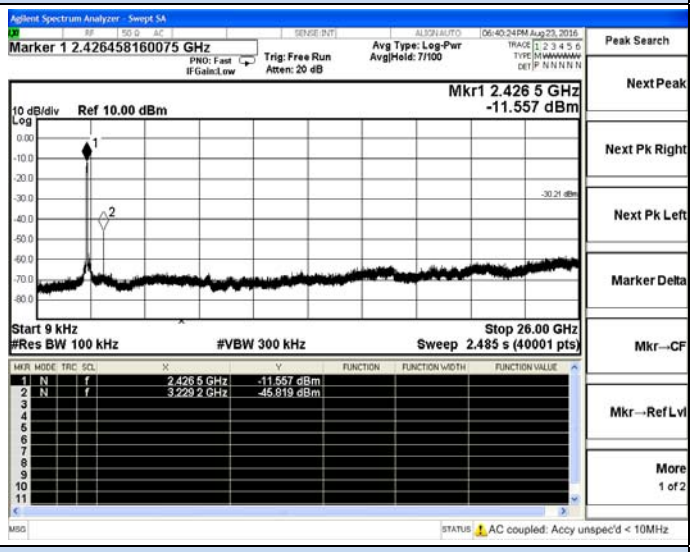
High channel

Test plot of Conducted Spurious Emission

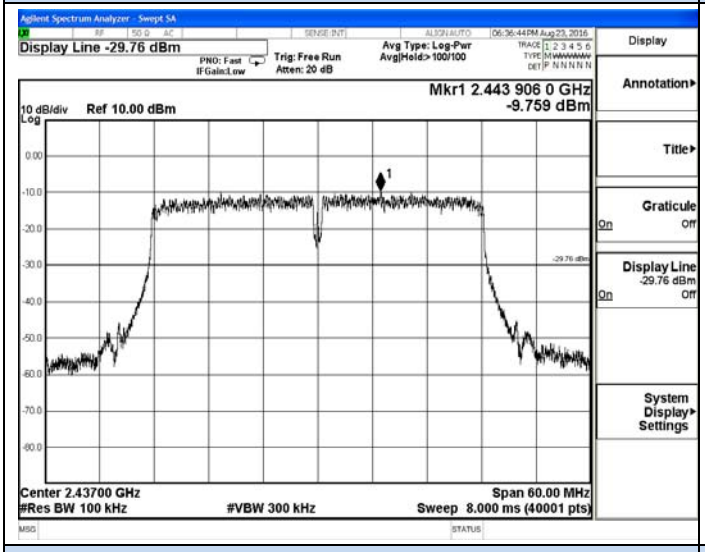
IEEE 802.11n-HT40-Chain 1



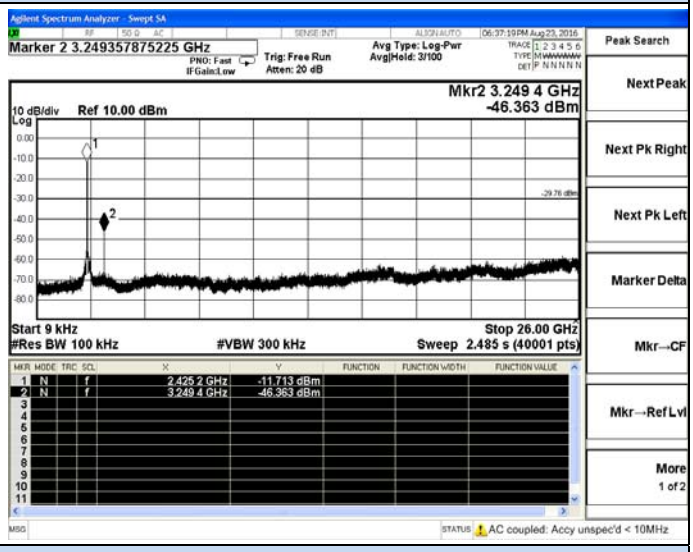
Low channel Reference



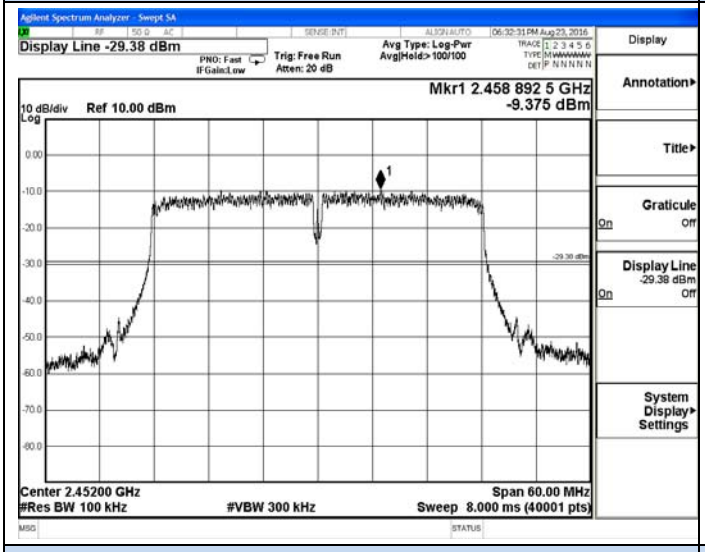
Low channel



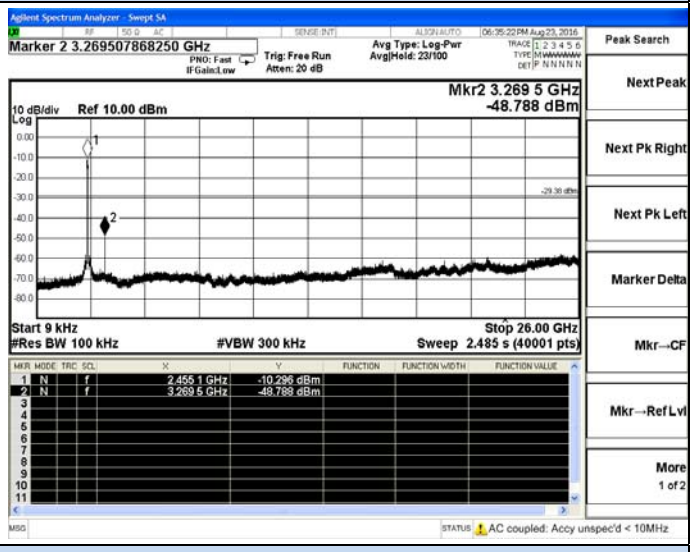
Middle channel Reference



Middle channel

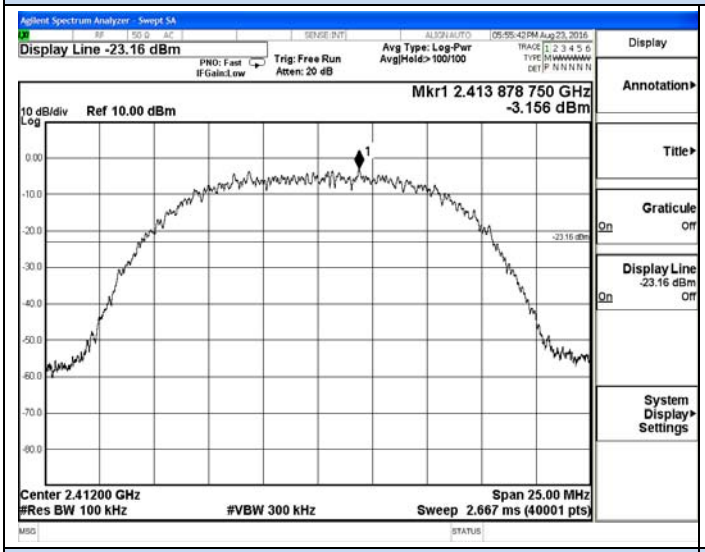
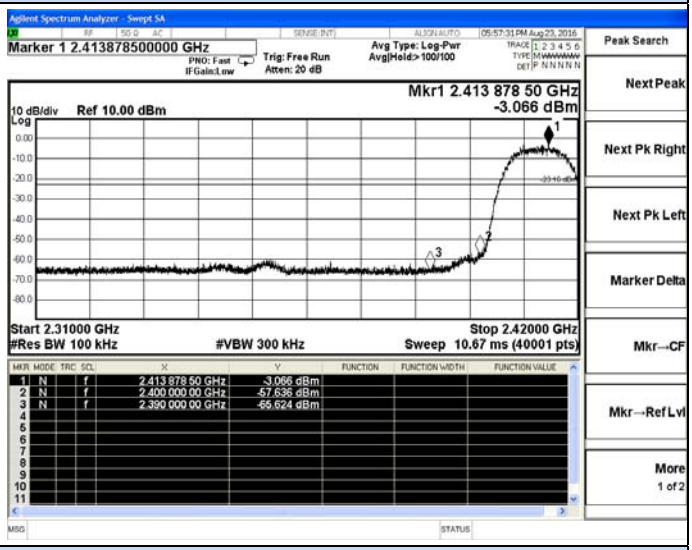
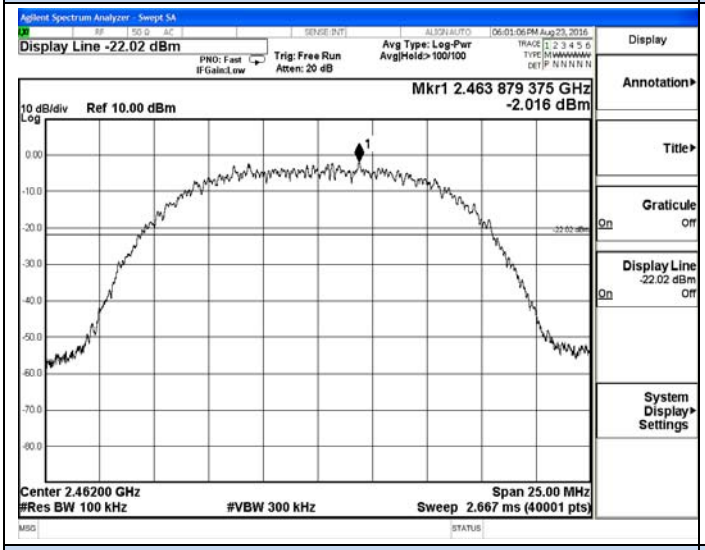
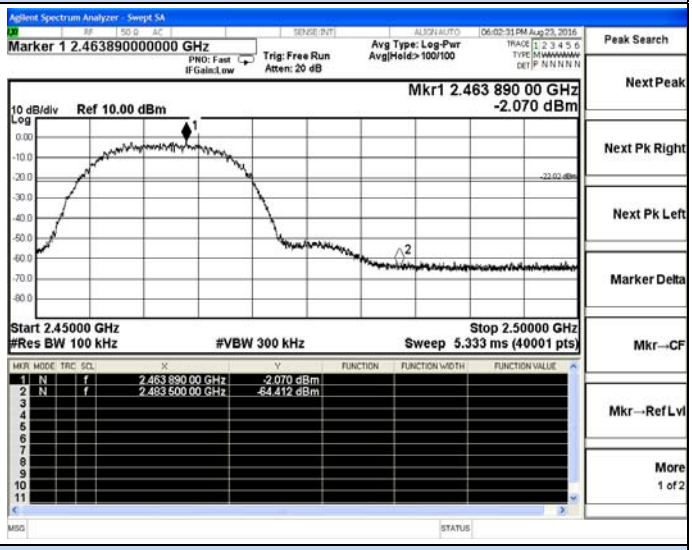
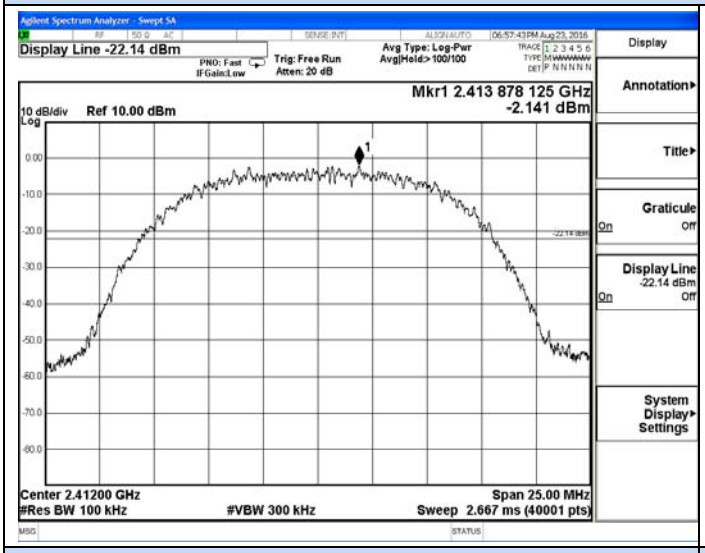
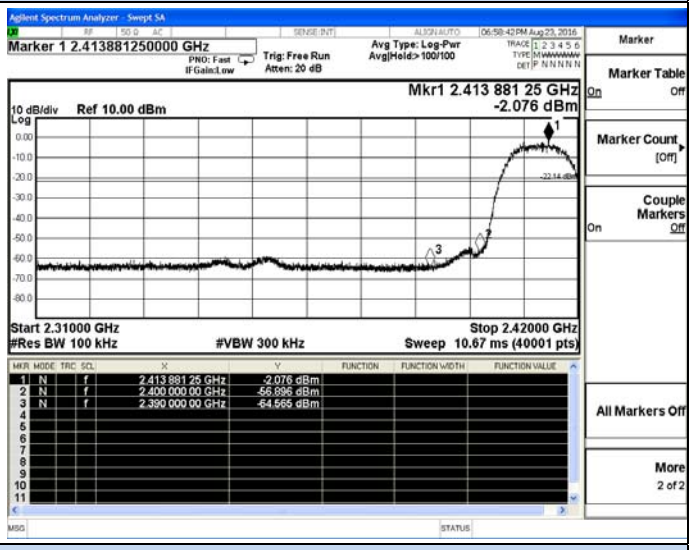


High channel Reference

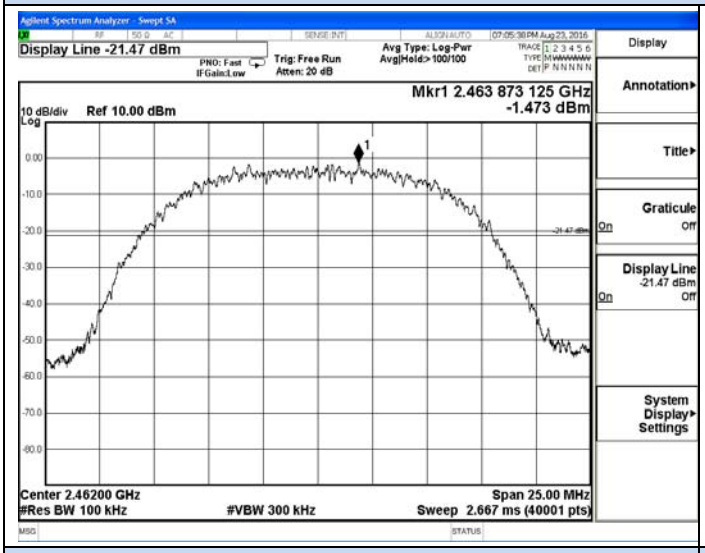


High channel

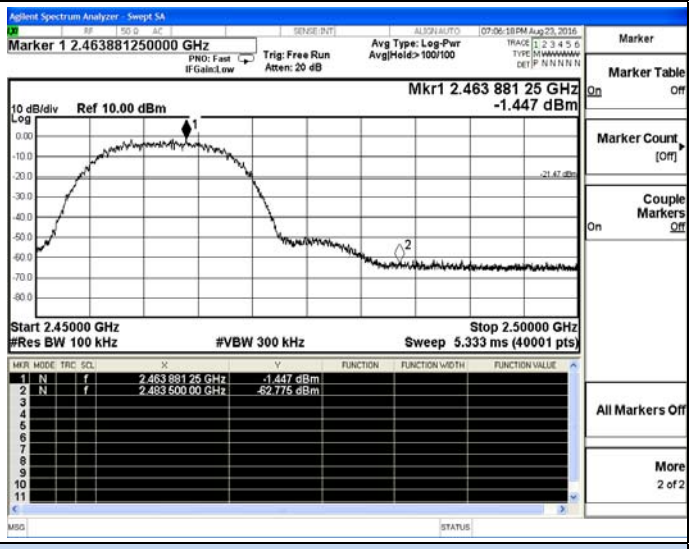
5.7.7. Test Results of Band Edges Test

Test plot of Band Edges Test	
IEEE 802.11b-Chain 0	
	
Low channel Reference	Low channel
	
High channel Reference	High channel
IEEE 802.11b-Chain 1	
	
Low channel Reference	Low channel

Test plot of Band Edges Test

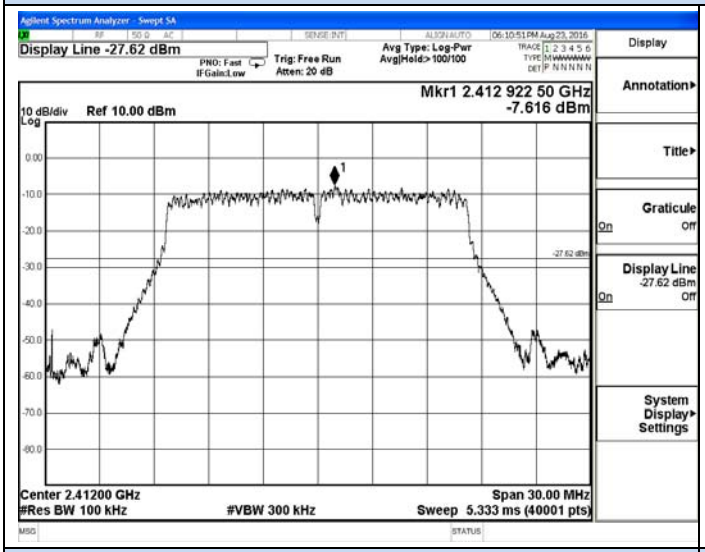


High channel Reference

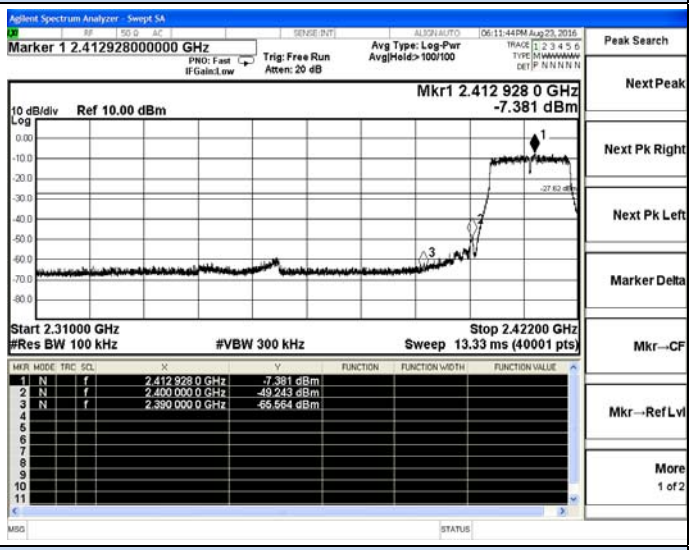


High channel

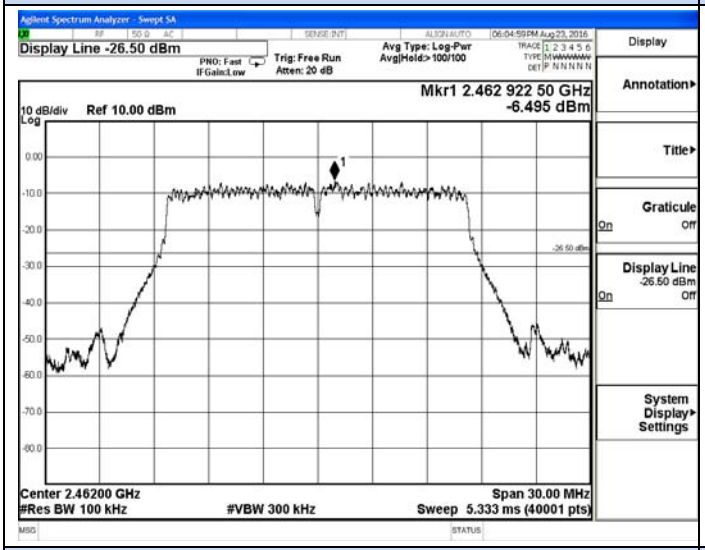
IEEE 802.11g-Chain 0



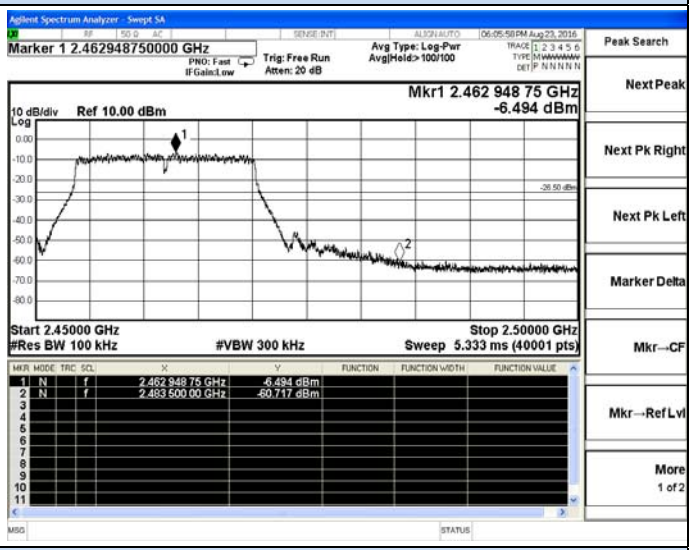
Low channel Reference



Low channel



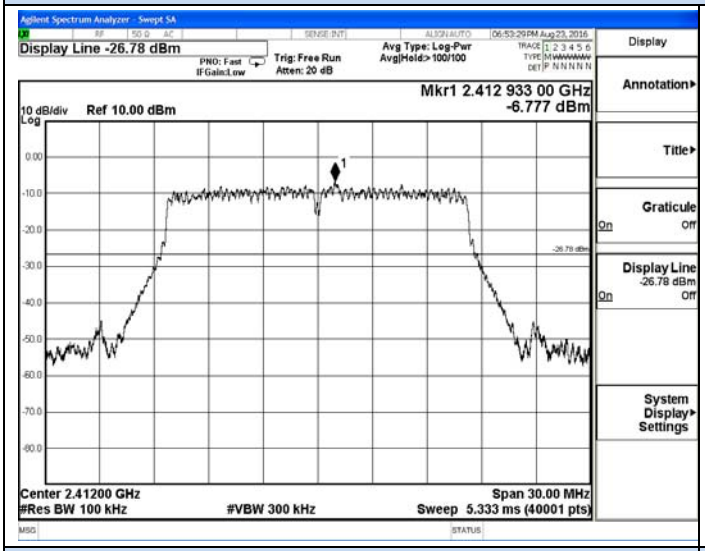
High channel Reference



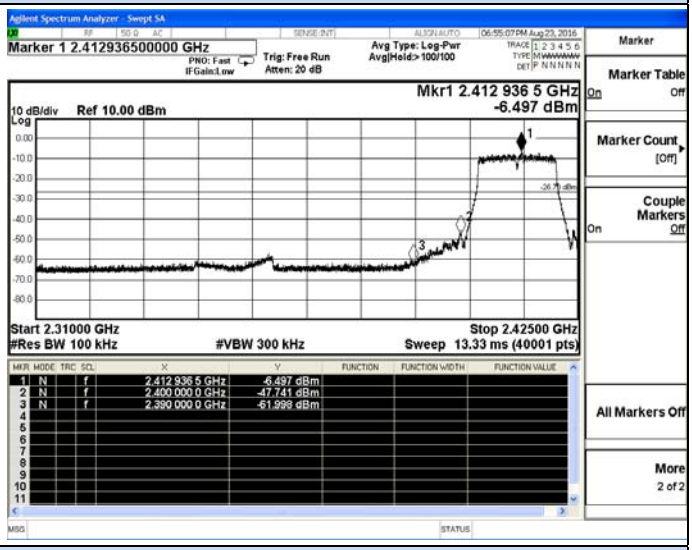
High channel

Test plot of Band Edges Test

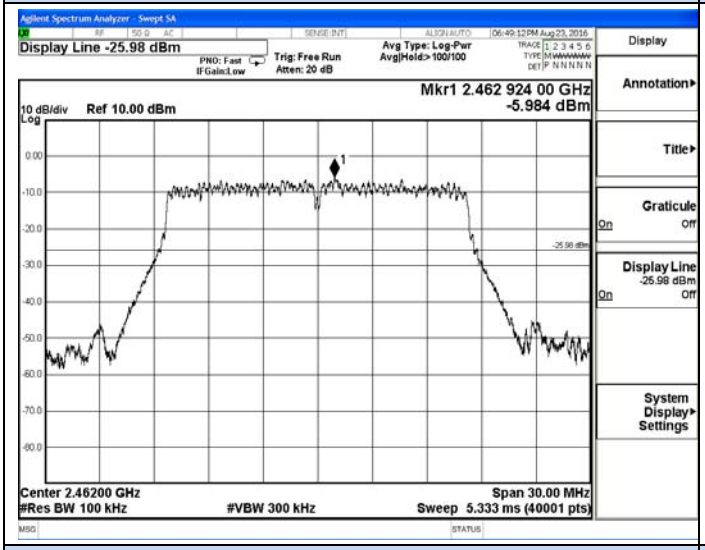
IEEE 802.11g-Chain 1



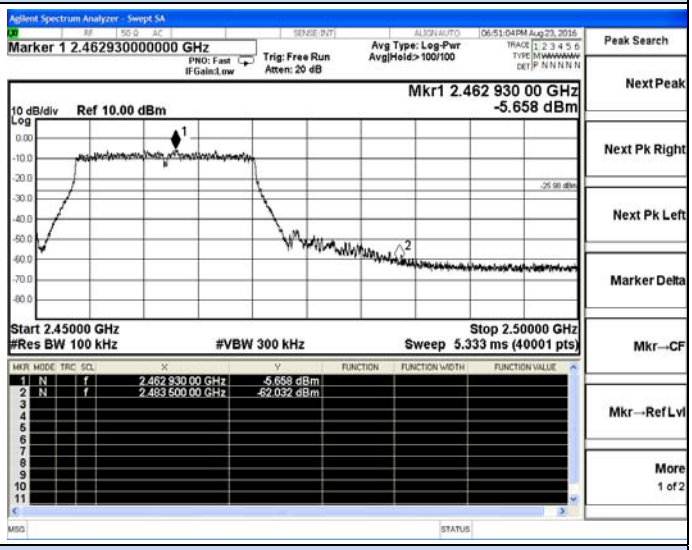
Low channel Reference



Low channel

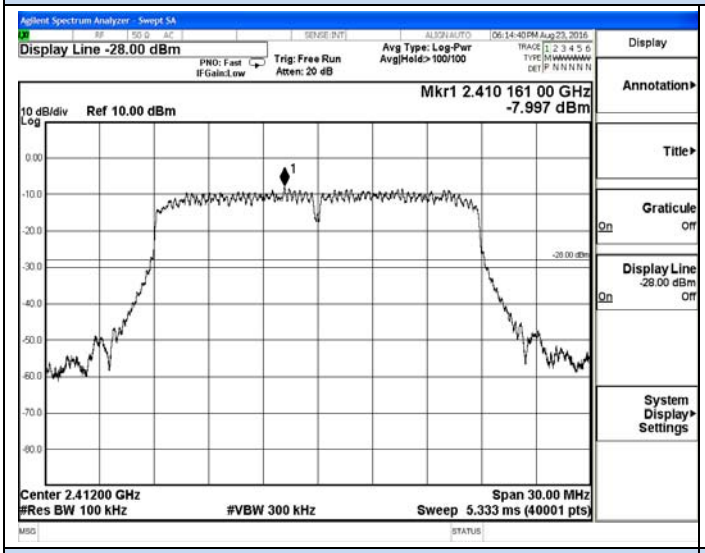


High channel Reference

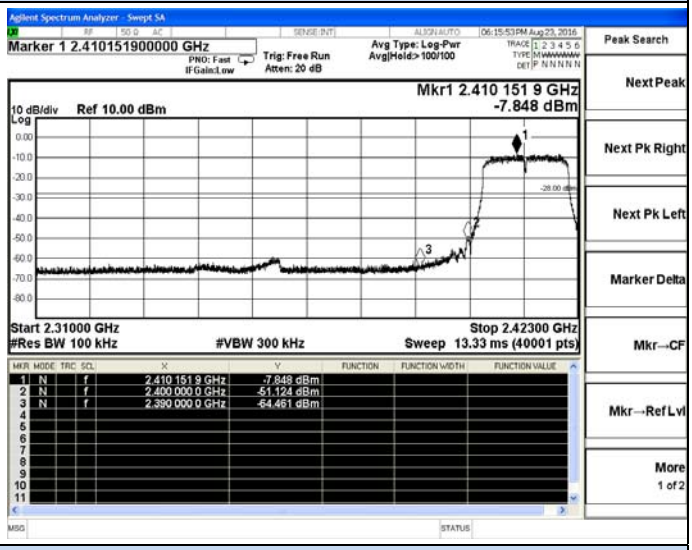


High channel

IEEE 802.11n-HT20-Chain 0

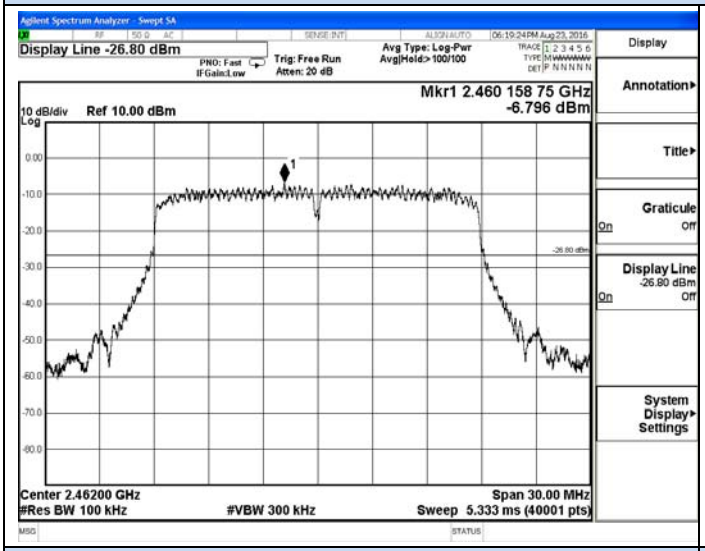


Low channel Reference

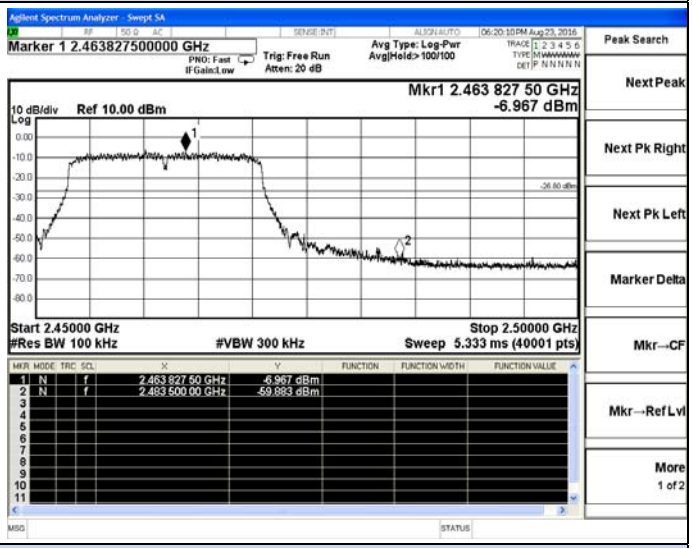


Low channel

Test plot of Band Edges Test

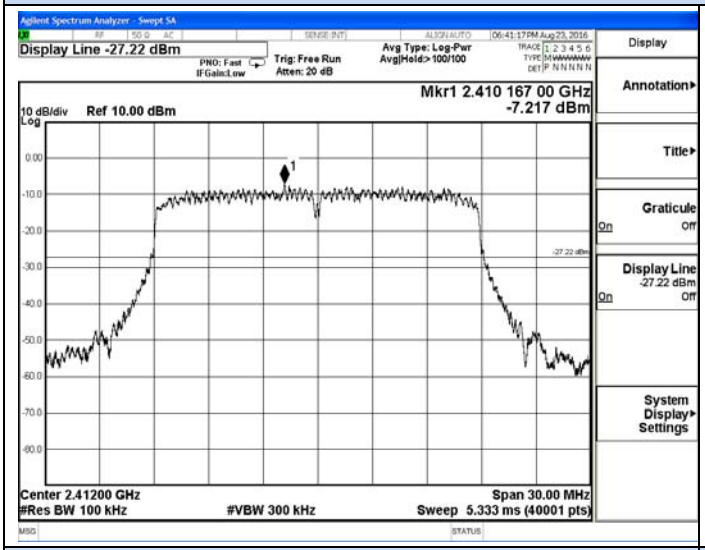


High channel Reference

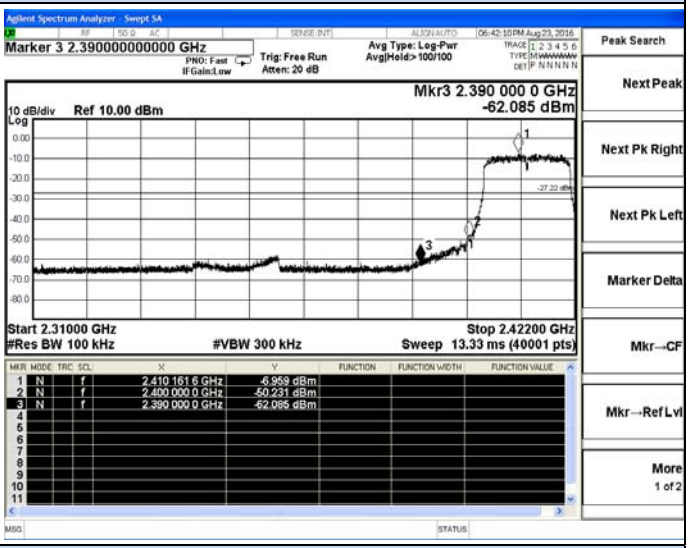


High channel

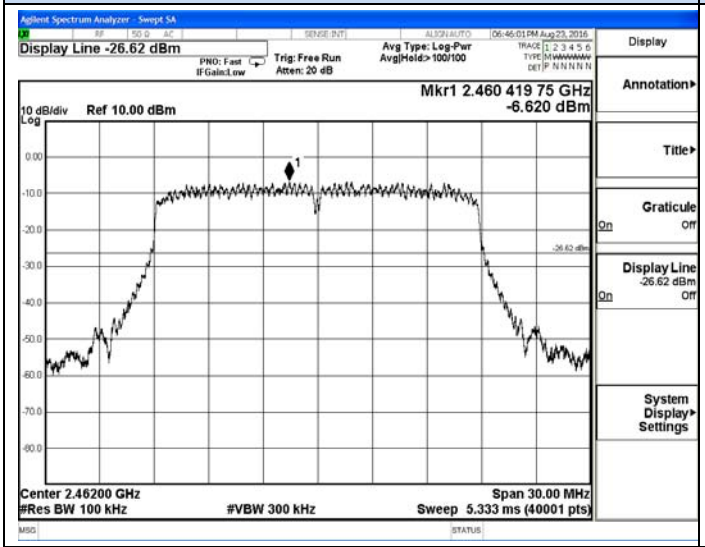
IEEE 802.11n-HT20-Chain 1



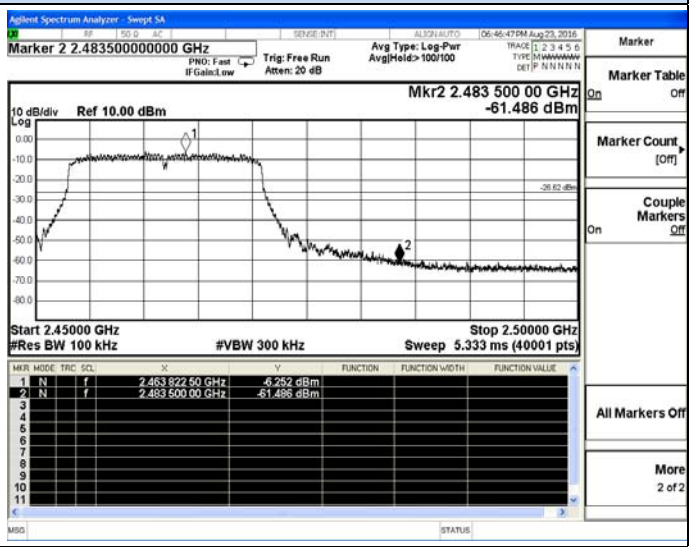
Low channel Reference



Low channel



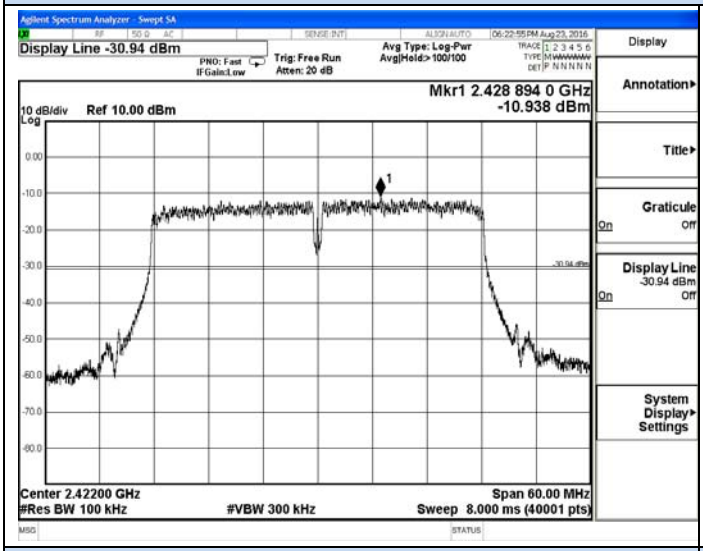
High channel Reference



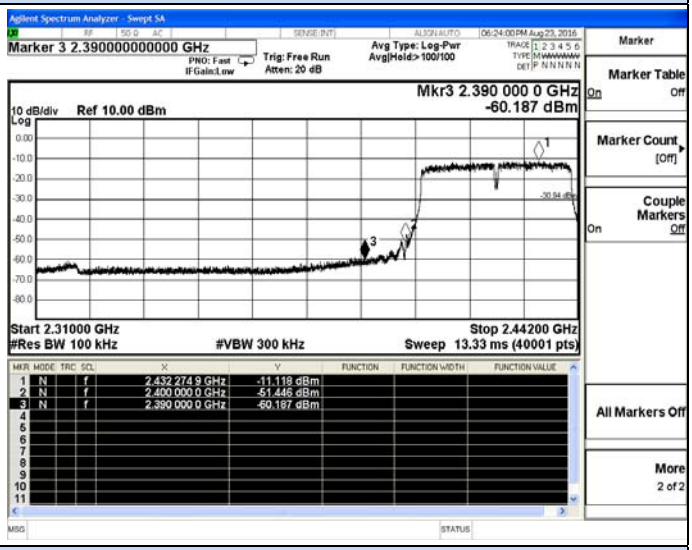
High channel

Test plot of Band Edges Test

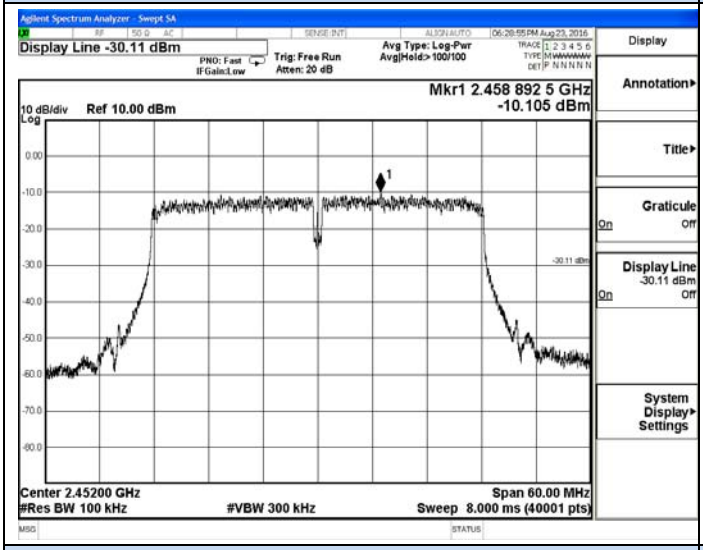
IEEE 802.11n-HT40-Chain 0



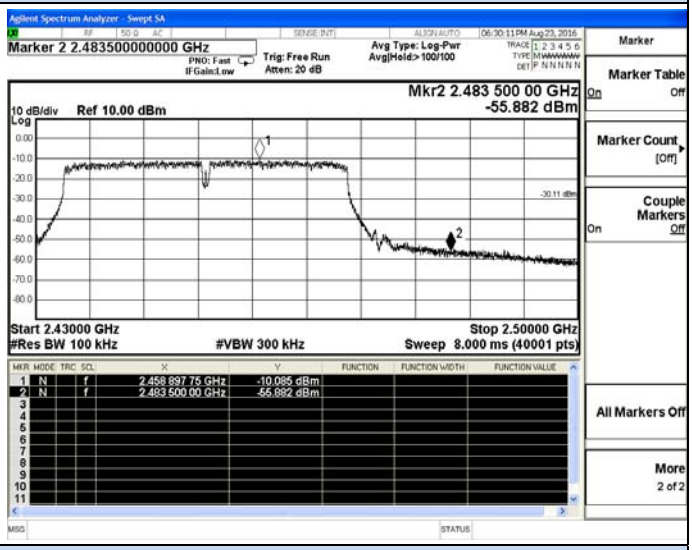
Low channel Reference



Low channel

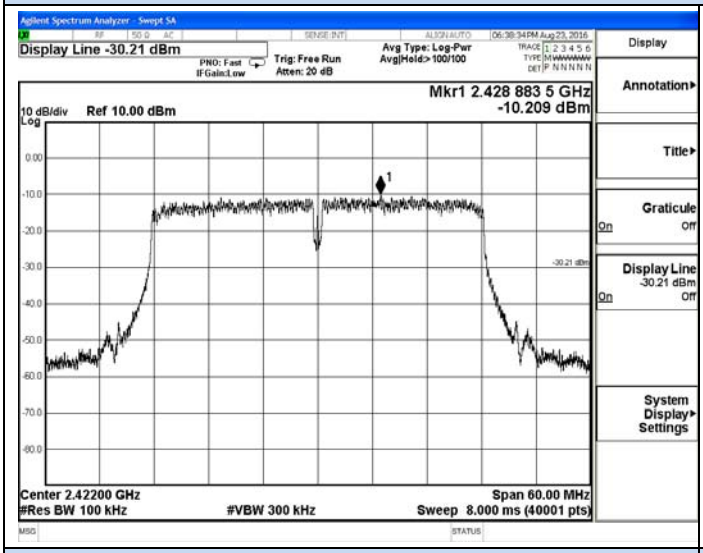


High channel Reference

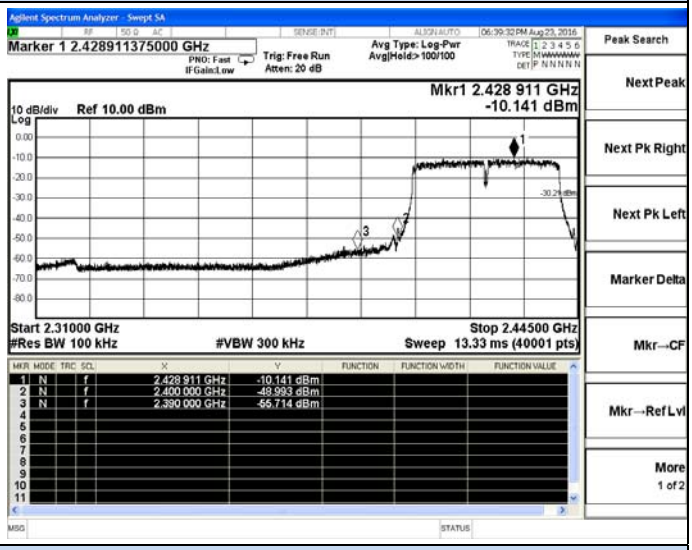


High channel

IEEE 802.11n-HT40-Chain 1

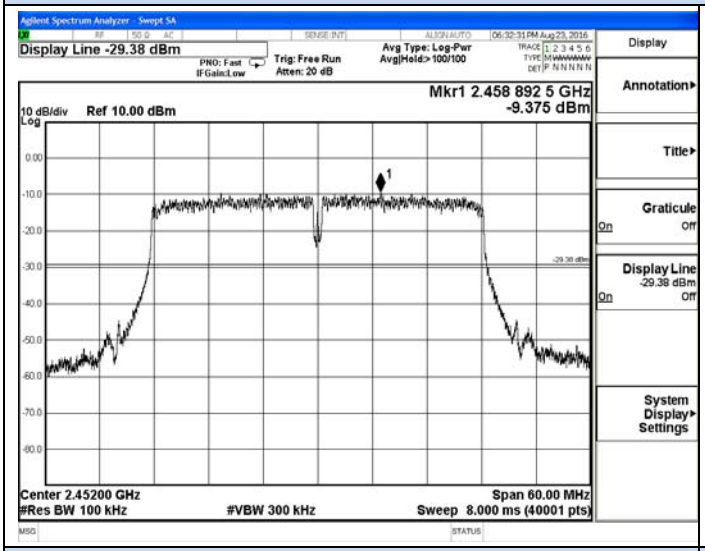


Low channel Reference

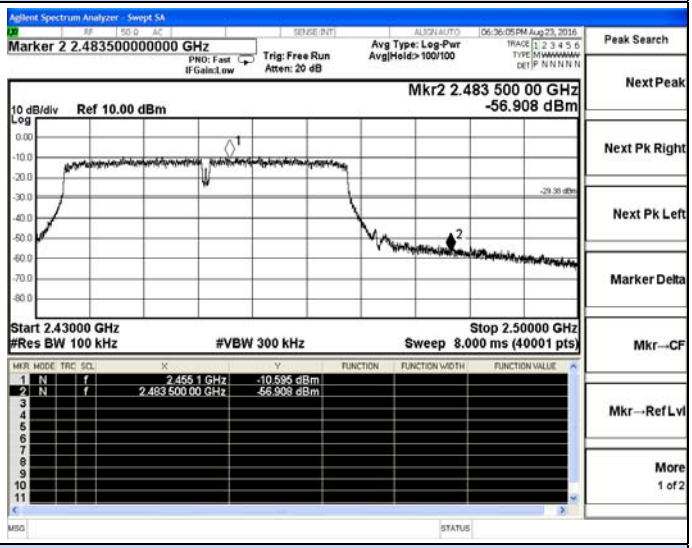


Low channel

Test plot of Band Edges Test



High channel Reference



High channel

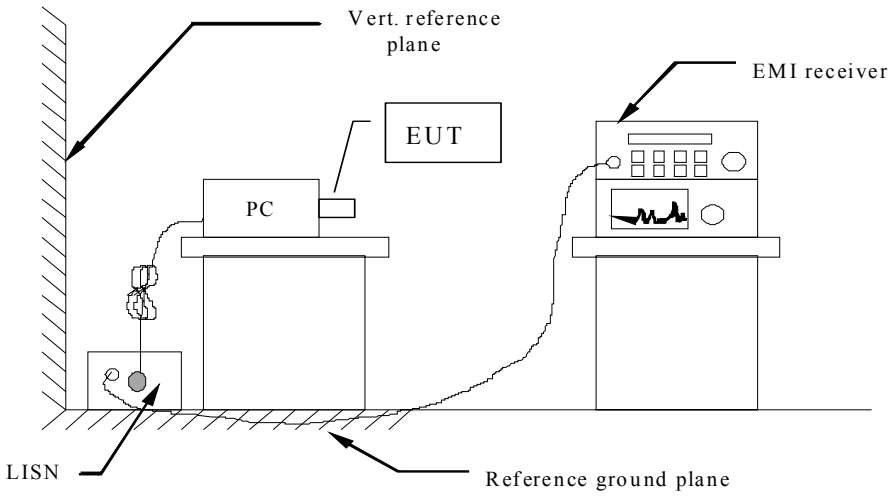
5.8. Power line conducted emissions

5.8.1 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

5.8.2 Block Diagram of Test Setup

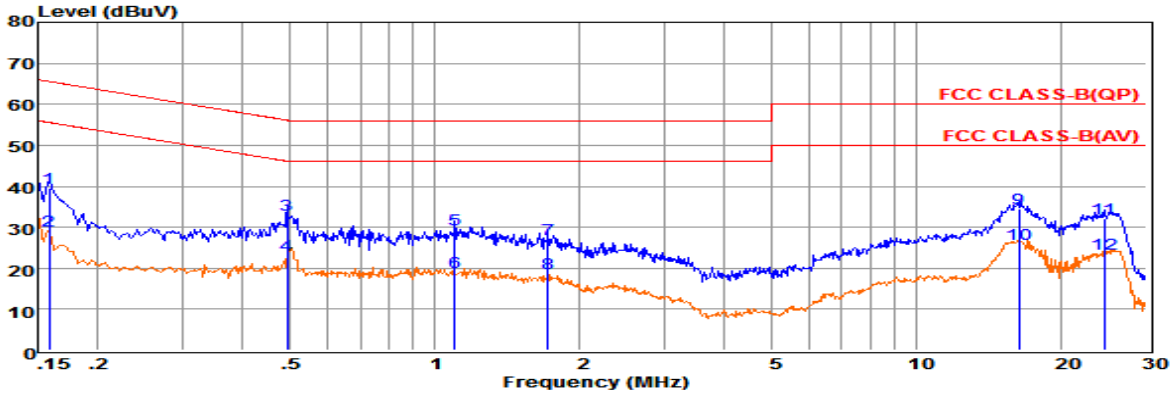


5.8.3 Test Results

PASS.

The test data please refer to following page.

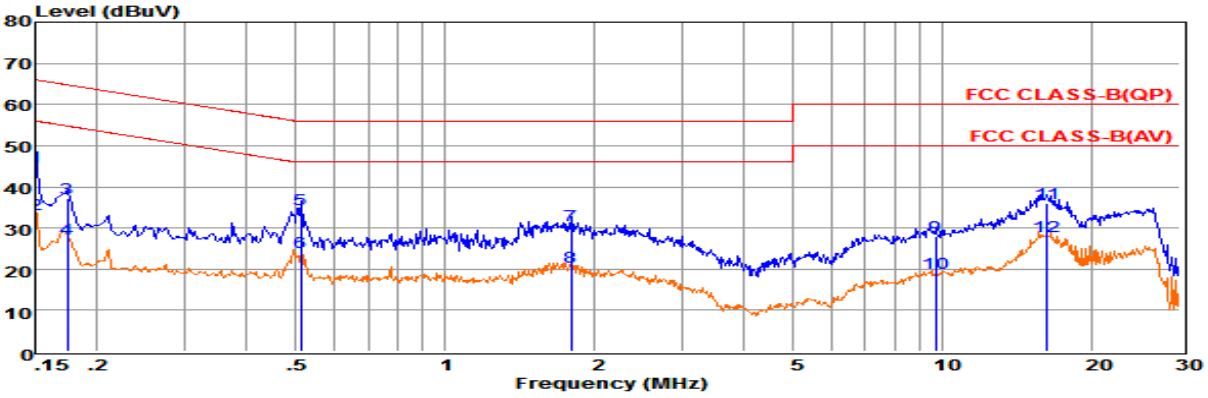
Test result for IEEE 802.11b (AC 120V/60Hz)



Env. Ins: 24*/56%
Pol: LINE

	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15816	20.06	9.58	0.02	10.00	39.66	65.56	-25.90	QP
2	0.15826	9.65	9.58	0.02	10.00	29.25	55.55	-26.30	Average
3	0.49411	13.33	9.62	0.04	10.00	32.99	56.10	-23.11	QP
4	0.49421	3.57	9.62	0.04	10.00	23.23	46.10	-22.87	Average
5	1.09971	9.74	9.63	0.05	10.00	29.42	56.00	-26.58	QP
6	1.10071	-0.58	9.63	0.05	10.00	19.10	46.00	-26.90	Average
7	1.71619	7.39	9.64	0.05	10.00	27.08	56.00	-28.92	QP
8	1.71719	-0.95	9.64	0.05	10.00	18.74	46.00	-27.26	Average
9	16.31183	14.52	9.72	0.11	10.00	34.35	60.00	-25.65	QP
10	16.31283	6.16	9.72	0.11	10.00	25.99	50.00	-24.01	Average
11	24.52913	12.23	9.71	0.13	10.00	32.07	60.00	-27.93	QP
12	24.53013	3.69	9.71	0.13	10.00	23.53	50.00	-26.47	Average

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

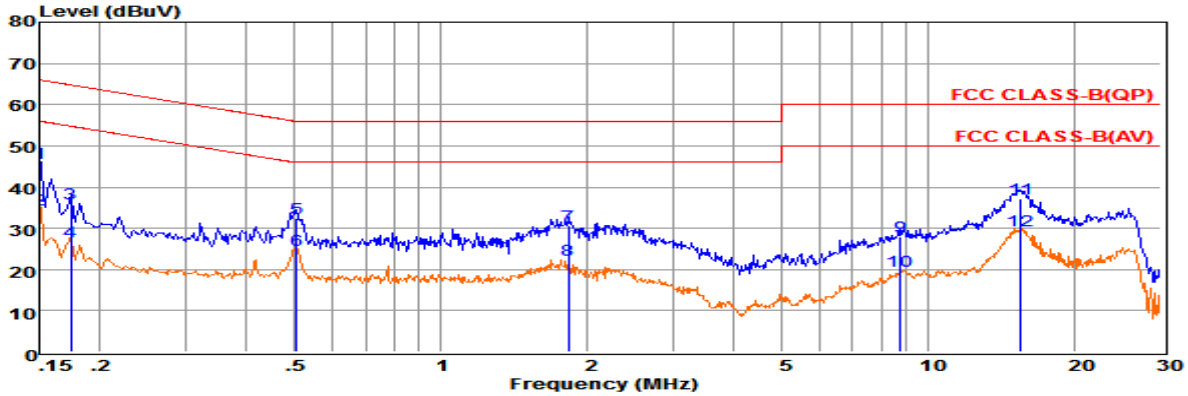


Env. Ins: 24*/56%
Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15000	25.13	9.70	0.02	10.00	44.85	66.00	-21.15	QP
2	0.15010	13.50	9.70	0.02	10.00	33.22	55.99	-22.77	Average
3	0.17399	17.45	9.64	0.02	10.00	37.11	64.77	-27.66	QP
4	0.17409	7.81	9.64	0.02	10.00	27.47	54.76	-27.29	Average
5	0.51278	14.77	9.62	0.04	10.00	34.43	56.00	-21.57	QP
6	0.51288	4.29	9.62	0.04	10.00	23.95	46.00	-22.05	Average
7	1.79050	10.90	9.63	0.05	10.00	30.58	56.00	-25.42	QP
8	1.79150	0.92	9.63	0.05	10.00	20.60	46.00	-25.40	Average
9	9.70514	8.15	9.72	0.08	10.00	27.95	60.00	-32.05	QP
10	9.70614	-0.77	9.72	0.08	10.00	19.03	50.00	-30.97	Average
11	16.22564	16.23	9.75	0.11	10.00	36.09	60.00	-23.91	QP
12	16.22664	7.99	9.75	0.11	10.00	27.85	50.00	-22.15	Average

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

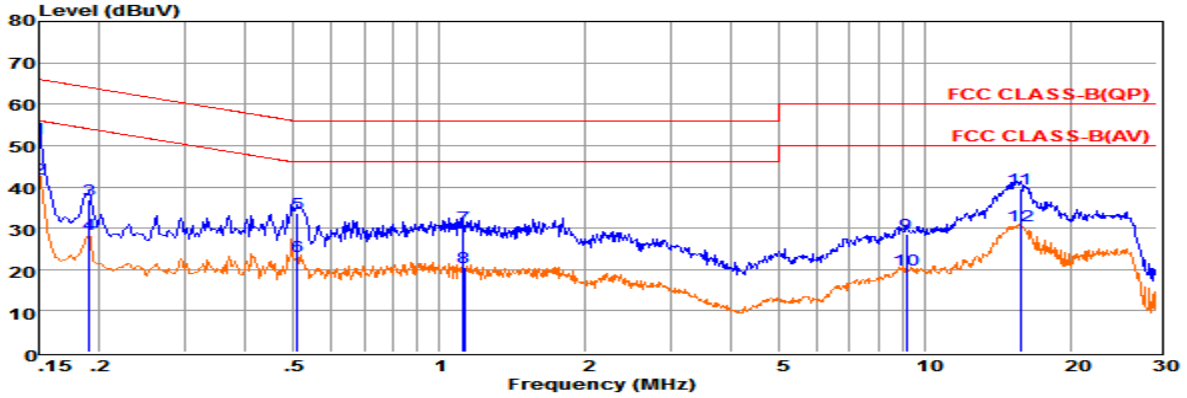
Test result for IEEE 802.11b (AC 240V/50Hz)



Env. Ins: 24*/56%
Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15000	26.00	9.70	0.02	10.00	45.72	66.00	-20.28	QP
2	0.15010	14.80	9.70	0.02	10.00	34.52	55.99	-21.47	Average
3	0.17399	16.39	9.64	0.02	10.00	36.05	64.77	-28.72	QP
4	0.17409	7.19	9.64	0.02	10.00	26.85	54.76	-27.91	Average
5	0.50469	12.79	9.62	0.04	10.00	32.45	56.00	-23.55	QP
6	0.50479	5.13	9.62	0.04	10.00	24.79	46.00	-21.21	Average
7	1.82885	10.91	9.63	0.05	10.00	30.59	56.00	-25.41	QP
8	1.82985	2.58	9.63	0.05	10.00	22.26	46.00	-23.74	Average
9	8.77571	8.14	9.71	0.08	10.00	27.93	60.00	-32.07	QP
10	8.77671	-0.29	9.71	0.08	10.00	19.50	50.00	-30.50	Average
11	15.47008	17.46	9.74	0.10	10.00	37.30	60.00	-22.70	QP
12	15.47108	9.51	9.74	0.10	10.00	29.35	50.00	-20.65	Average

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



Env. Ins: 24*/56%
Pol: LINE

	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15000	32.08	9.57	0.02	10.00	51.67	66.00	-14.33	QP
2	0.15010	22.47	9.57	0.02	10.00	42.06	55.99	-13.93	Average
3	0.19039	17.36	9.62	0.02	10.00	37.00	64.02	-27.02	QP
4	0.19049	8.88	9.62	0.02	10.00	28.52	54.02	-25.50	Average
5	0.51007	13.99	9.62	0.04	10.00	33.65	56.00	-22.35	QP
6	0.51017	3.51	9.62	0.04	10.00	23.17	46.00	-22.83	Average
7	1.12327	10.78	9.63	0.05	10.00	30.46	56.00	-25.54	QP
8	1.12427	0.95	9.63	0.05	10.00	20.63	46.00	-25.37	Average
9	9.15568	8.82	9.69	0.08	10.00	28.59	60.00	-31.41	QP
10	9.15668	0.02	9.69	0.08	10.00	19.79	50.00	-30.21	Average
11	15.71794	19.60	9.72	0.10	10.00	39.42	60.00	-20.58	QP
12	15.71894	10.81	9.72	0.10	10.00	30.63	50.00	-19.37	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_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).*

5.9. Antenna Requirements

5.9.1. Standard Applicable

According to § 15.203 & RSS-Gen, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

5.9.2. Antenna Connector Construction

The directional gains of antenna used for transmitting is 5.0 which is an R-SMA antenna and no consideration of replacement. Please see EUT photo for details.

5.9.3. Results: Compliance.

Measurement

The antenna gain of the complete system is calculated by the difference of radiated power in EIRP and the conducted power of the module.

Conducted power refers ANSI C63.10:2013 Output power test procedure for DTS devices.
Radiated power refers to ANSI C63.10:2013 Radiated emissions tests.

Measurement parameters

Measurement parameter	
Detector:	Peak
Sweep Time:	Auto
Resolution bandwidth:	1MHz
Video bandwidth:	3MHz
Trace-Mode:	Max hold

Limits

FCC	IC
Antenna Gain	
6 dBi	

Note: The antenna gain of the complete system is calculated by the difference of radiated power in EIRP and the conducted power of the module. For WLAN devices, the DSSS mode is used;

Antenna 0

T_{nom}	V_{nom}	Lowest Channel 2412 MHz	Middle Channel 2437 MHz	Highest Channel 2462 MHz
Conducted power [dBm] Measured with DSSS modulation		8.19	8.14	8.22
Radiated power [dBm] Measured with DSSS modulation		11.97	12.86	12.41
Gain [dBi] Calculated		3.78	4.72	4.19
Measurement uncertainty			± 1.6 dB (cond.) / ± 3.8 dB (rad.)	

Antenna 1

T_{nom}	V_{nom}	Lowest Channel 2412 MHz	Middle Channel 2437 MHz	Highest Channel 2462 MHz
Conducted power [dBm] Measured with DSSS modulation		9.55	9.02	8.78
Radiated power [dBm] Measured with DSSS modulation		13.49	13.80	12.83
Gain [dBi] Calculated		3.94	4.78	4.05
Measurement uncertainty			± 1.6 dB (cond.) / ± 3.8 dB (rad.)	

6. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal Date	Due Date
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	June 18, 2016	June 17, 2017
Signal analyzer	Agilent	E4448A(External mixers to 40GHz)	US44300469	9kHz~40GHz	July 16, 2016	July 15, 2017
Signal analyzer	Agilent	N9020A	MY50510140	9kHz~26.5GHz	October 27, 2015	October 27, 2016
LISN	MESS Tec	NNB-2/16Z	99079	9KHz-30MHz	June 18, 2016	June 17, 2017
LISN (Support Unit)	EMCO	3819/2NM	9703-1839	9KHz-30MHz	June 18, 2016	June 17, 2017
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9KHz-30MHz	June 18, 2016	June 17, 2017
ISN	SCHAFFNER	ISN ST08	21653	9KHz-30MHz	June 18, 2016	June 17, 2017
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30M-18GHz 3m	June 18, 2016	June 17, 2017
Amplifier	SCHAFFNER	COA9231A	18667	9kHz-2GHzz	June 18, 2016	June 17, 2017
Amplifier	Agilent	8449B	3008A02120	1GHz-26.5GHz	July 16, 2016	July 15, 2017
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5GHz-40GHz	July 16, 2016	July 15, 2017
Loop Antenna	R&S	HFH2-Z2	860004/001	9k-30MHz	June 18, 2016	June 17, 2017
By-log Antenna	SCHWARZBECK	VULB9163	9163-470	30MHz-1GHz	June 10, 2016	June 09, 2017
Horn Antenna	EMCO	3115	6741	1GHz-18GHz	June 10, 2016	June 09, 2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	June 10, 2016	June 09, 2017
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz-1GHz	June 18, 2016	June 17, 2017
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz-40GHz	June 18, 2016	June 17, 2017
Power Meter	R&S	NRVS	100444	DC-40GHz	June 18, 2016	June 17, 2017
Power Sensor	R&S	NRV-Z51	100458	DC-30GHz	June 18, 2016	June 17, 2017
Power Sensor	R&S	NRV-Z32	10057	30MHz-6GHz	June 18, 2016	June 17, 2017
AC Power Source	HPC	HPA-500E	HPA-9100024	AC 0~300V	June 18, 2016	June 17, 2017
DC power Soure	GW	GPC-6030D	C671845	DC 1V-60V	June 18, 2016	June 17, 2017
Temp. and Humidigy	Giant Force	GTH-225-20-S	MAB0103-00	N/A	June 18, 2016	June 17, 2017
RF CABLE-1m	JYE Bao	RG142	CB034-1m	20MHz-7GHz	June 18, 2016	June 17, 2017
RF CABLE-2m	JYE Bao	RG142	CB)35-2m	20MHz-1GHz	June 18, 2016	June 17, 2017
Note: All equipment through GRGT EST calibration						

----------THE END OF REPORT----------