FCC Test Report

Product Name	TABLET PC
Model No	PM-521
FCC ID.	2ABTU-PM-521

Applicant	RuggON Corporation
Address	3F., No.10, Ln. 181, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City, Taiwan

Date of Receipt	Jan. 06, 2015
Issue Date	Feb. 16, 2015
Report No.	1510151R-RFUSP27V00
Report Version	V1.0

Testing Laboratory
3023

Test Report

Issue Date: Feb. 16, 2015
Report No.: 1510151R-RFUSP27V00

QuieTek

Product Name	TABLET PC
Applicant	RuggON Corporation
Address	3F., No.10, Ln. 181, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City, Taiwan
Manufacturer	Ubiqconn Technology,Inc.
Model No.	PM-521
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	RuggON
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2014 ANSI C63.4: 2014, ANSI C63.10: 2009 KDB 558074 D01 DTS Meas Guidance v03r02
Test Result	Complied

Documented By : Joanne Lin

(Senior Adm. Specialist / Joanne Lin)

Tested By : Alan Chen

(Engineer / Alan Chen)

Approved By :

(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	TABLET PC
Trade Name	RuggON
Model No.	PM-521
FCC ID.	2ABTU-PM-521
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz,802.11n-40MHz:2422-2452MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 300Mbps
Type of Modulation	802.11b:DSSS, DBPSK, DQPSK, CCK 802.11g/n: OFDM, BPSK, QPSK, 16QAM, 64QAM
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Power Adapter	MFR: FSP, M/N: FSP065-REB Input: AC 100-240V~1.5A, 50-60Hz Output: 19V⎓3.42A Cable Out: Shielded, 1.5m, with one ferrite core bonded.
Contain Module	Intel / 7260HMW

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ethertronics	5001791 (Main) 5001799 (Aux)	PIFA Antenna	3.8dBi for 2.4GHz

Note: The antenna of EUT is conform to FCC 15.203

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2422 MHz	Channel 2:	2427 MHz	Channel 3:	2432 MHz	Channel 4:	2437 MHz
Channel 5:	2442 MHz	Channel 6:	2447 MHz	Channel 7:	2452 MHz		

Note:

1. This device is a TABLET PC with a built-in WLAN transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11g is 6Mbps、802.11n(20M-BW) is 14.4Mbps and, 802.11n(40M-BW) is 30Mbps).
4. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report. (802.11b is chain A, 802.11g is chain B, 802.11n is chain A + chain B)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)

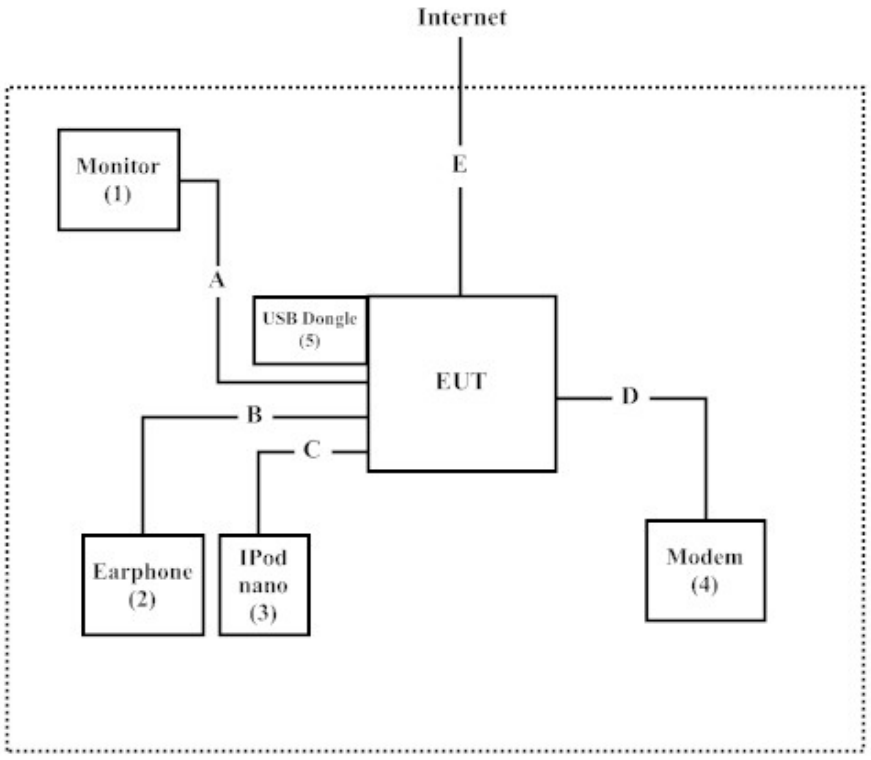
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Monitor	DELL	ST2320L	N/A	Non-Shielded, 1.8m
2	Earphone	AIWA	N/A	N/A	N/A
3	IPod nano	Apple	A1199	YM708A72VQ5	N/A
4	Modem	ACEEX	DM-1414	0102027553	N/A
5	USB Dongle	Transcend	JF V30	N/A	Non-Shielded, 1.8m

Signal Cable Type		Signal cable Description
A	HDMI Cable	Shielded, 1.8m
B	Earphone Cable	Shielded, 1.8m
C	IPod Cable	Shielded, 1.2m
D	RS-232 Cable	Shielded, 1.8m
E	RJ45 Cable	Shielded, 2.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4
(2) Execute software “DRTU-v1.7.3.859” on the Notebook PC.
(3) Configure the test mode, the test channel, and the data rate.
(4) Press “OK” to start the continuous Transmit.
(5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195

Site Name: Quietek Corporation
Site Address: No.5-22, Ruishukeng,
Linkou Dist. New Taipei City 24451,
Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Conducted Emission

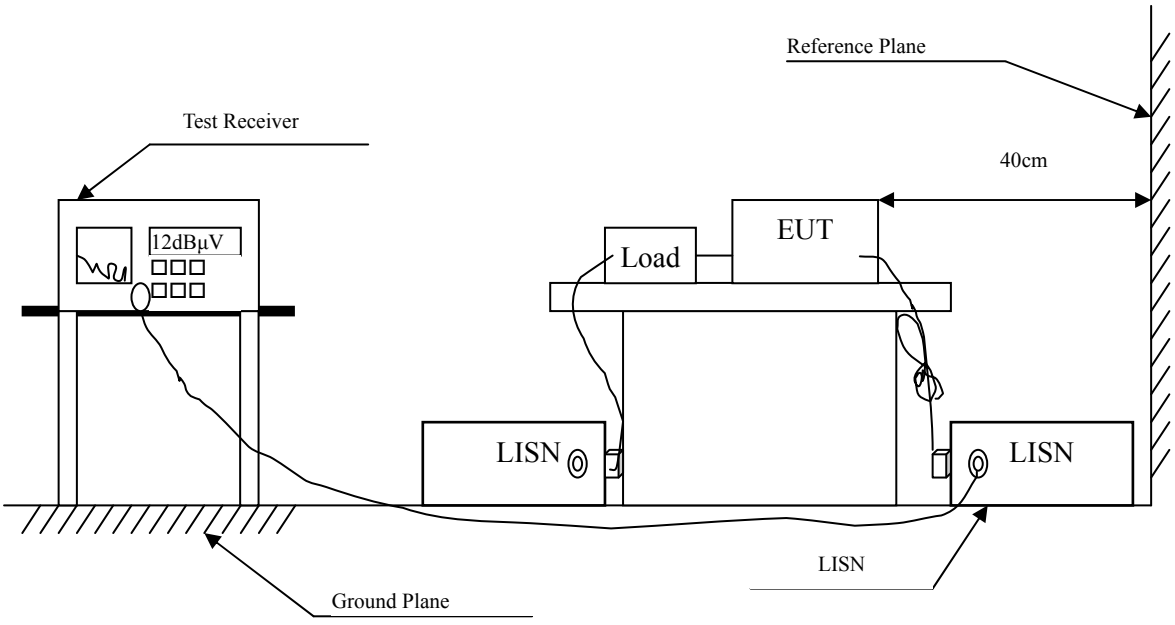
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2014	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2015	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2015	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2014	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2015	
	No.1 Shielded Room				

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2009 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.170	9.743	34.220	43.964	-21.465	65.429
0.216	9.739	30.030	39.769	-24.345	64.114
0.334	9.745	27.380	37.125	-23.618	60.743
0.490	9.752	32.180	41.932	-14.354	56.286
0.779	9.765	28.600	38.365	-17.635	56.000
7.920	9.910	27.320	37.230	-22.770	60.000
Average					
0.170	9.743	18.800	28.544	-26.885	55.429
0.216	9.739	22.700	32.439	-21.675	54.114
0.334	9.745	24.340	34.085	-16.658	50.743
0.490	9.752	24.580	34.332	-11.954	46.286
0.779	9.765	20.320	30.085	-15.915	46.000
7.920	9.910	21.530	31.440	-18.560	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : TABLET PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 2					
Quasi-Peak					
0.173	9.747	31.650	41.397	-23.946	65.343
0.509	9.753	33.100	42.853	-13.147	56.000
0.771	9.775	28.660	38.435	-17.565	56.000
1.974	9.839	19.840	29.679	-26.321	56.000
6.685	9.900	23.990	33.890	-26.110	60.000
20.920	10.100	24.460	34.560	-25.440	60.000
Average					
0.173	9.747	12.100	21.847	-33.496	55.343
0.509	9.753	21.120	30.873	-15.127	46.000
0.771	9.775	18.660	28.435	-17.565	46.000
1.974	9.839	6.030	15.869	-30.131	46.000
6.685	9.900	16.290	26.190	-23.810	50.000
20.920	10.100	19.050	29.150	-20.850	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Maximum Conducted Power

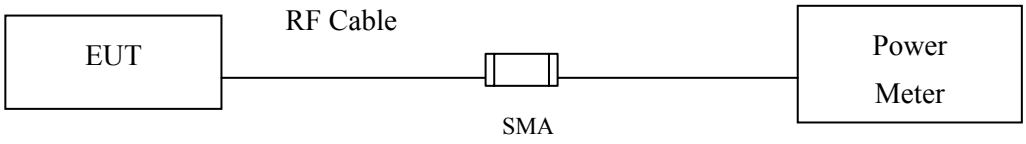
3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2014
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2014
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup



3.3. Limits

The maximum average power shall be less 1 Watt. (Section 15.247 (b)(3))

3.4. Test Procedure

The EUT was tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 D01 DTS Meas Guidance v03r02 section 9.1.2 PKPM1 Peak power meter method.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Maximum Conducted Power

Product : TABLET PC
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Chain A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	16.04	--	--	--	18.68	<30dBm	Pass
06	2437	16.38	16.35	16.32	16.29	18.88	<30dBm	Pass
11	2462	16.67	--	--	--	19.09	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	13.74	--	--	--	17.66	<30dBm	Pass
06	2437	13.38	13.32	13.26	13.2	17.68	<30dBm	Pass
11	2462	13.69	--	--	--	17.77	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : TABLET PC
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Chain A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	14.44	--	--	--	--	--	--	--	22.08	<30dBm	Pass
06	2437	18.39	18.35	18.31	18.27	18.23	18.19	18.15	18.11	25.76	<30dBm	Pass
11	2462	15.77	--	--	--	--	--	--	--	23.27	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	12.34	--	--	--	--	--	--	--	21.37	<30dBm	Pass
06	2437	16.06	15.99	15.92	15.85	15.78	15.71	15.64	15.57	24.69	<30dBm	Pass
11	2462	14.76	--	--	--	--	--	--	--	23.47	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : TABLET PC
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

Chain A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4
		Measurement Level (dBm)								
01	2412	14.78	--	--	--	--	--	--	--	22.79
06	2437	15.59	15.51	15.43	15.35	15.27	15.19	15.11	15.03	23.23
11	2462	15.28	--	--	--	--	--	--	--	23.65

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4
		Measurement Level (dBm)								
01	2412	10.07	--	--	--	--	--	--	--	21.58
06	2437	12.36	12.29	12.22	12.15	12.08	12.01	11.94	11.87	22.77
11	2462	12.26	--	--	--	--	--	--	--	22.66

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412	14.4	22.79	21.58	25.24	<30dBm	Pass
6	2437	14.4	23.23	22.77	26.02	<30dBm	Pass
11	2462	14.4	23.65	22.66	26.19	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW) + Chain B (mW))

Product : TABLET PC
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)

Chain A

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power
		30	60	90	120	180	240	270	300	30
		Measurement Level (dBm)								
3	2422	10.85	--	--	--	--	--	--	--	18.77
6	2437	15.15	15.09	15.03	14.97	14.91	14.85	14.79	14.73	23.47
9	2452	14.45	--	--	--	--	--	--	--	22.42

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain B

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power
		30	60	90	120	180	240	270	300	30
		Measurement Level (dBm)								
3	2422	8.67	--	--	--	--	--	--	--	18.79
6	2437	12.36	12.31	12.26	12.21	12.16	12.11	12.06	12.01	22.85
9	2452	10.93	--	--	--	--	--	--	--	21.96

Note: Peak Power Output Value =Reading value on power meter + cable loss

Chain A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
3	2422	30	18.77	18.79	21.79	<30dBm	Pass
6	2437	30	23.47	22.85	26.18	<30dBm	Pass
9	2452	30	22.42	21.96	25.21	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW) + Chain B (mW))

4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the radiated emission test:

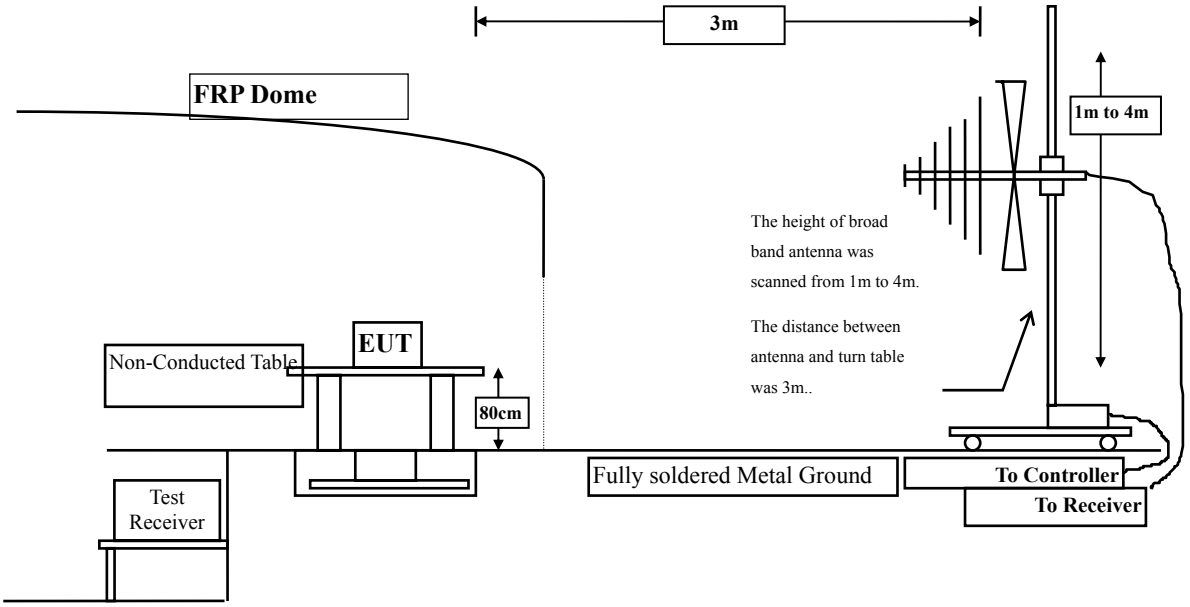
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2014
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct, 2014
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar, 2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan, 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug, 2014
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan, 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul, 2014
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul, 2014

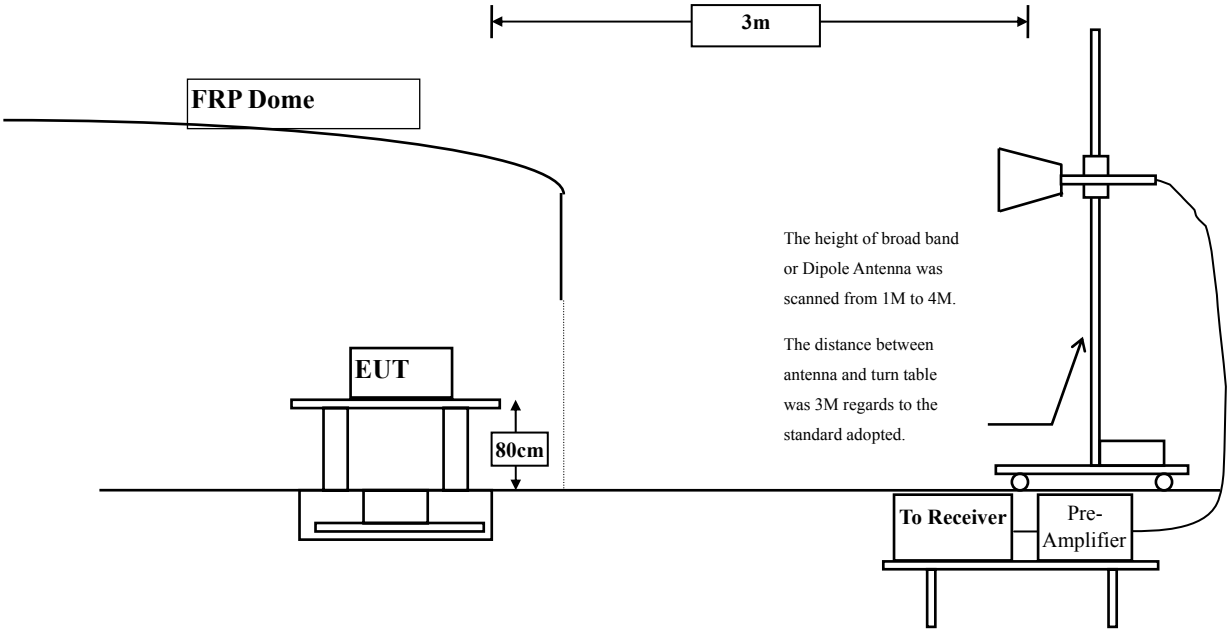
Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9KHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	3.261	37.590	40.851	-33.149	74.000
7236.000	10.650	36.590	47.240	-26.760	74.000
9648.000	13.337	37.450	50.786	-23.214	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	42.090	48.511	-25.489	74.000
7236.000	11.495	37.010	48.505	-25.495	74.000
9648.000	13.807	36.590	50.396	-23.604	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.590	40.627	-33.373	74.000
7311.000	11.795	37.150	48.944	-25.056	74.000
9748.000	12.635	36.150	48.785	-25.215	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	43.260	49.071	-24.929	74.000
7311.000	12.630	37.150	49.779	-24.221	74.000
9748.000	13.126	36.590	49.716	-24.284	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4924.000	2.858	37.590	40.447	-33.553	74.000
7386.000	12.127	36.150	48.278	-25.722	74.000
9848.000	12.852	36.980	49.833	-24.167	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4924.000	5.521	44.150	49.670	-24.330	74.000
7386.000	13.254	37.180	50.434	-23.566	74.000
9848.000	13.367	36.590	49.957	-24.043	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.590	41.851	-32.149	74.000
7236.000	10.650	37.140	47.790	-26.210	74.000
9648.000	13.337	36.590	49.926	-24.074	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	44.150	50.571	-23.429	74.000
7236.000	11.495	36.590	48.085	-25.915	74.000
9648.000	13.807	37.150	50.956	-23.044	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.590	40.627	-33.373	74.000
7311.000	11.795	36.540	48.334	-25.666	74.000
9748.000	12.635	36.580	49.215	-24.785	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	43.570	49.381	-24.619	74.000
7311.000	12.630	36.980	49.609	-24.391	74.000
9748.000	13.126	37.540	50.666	-23.334	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.858	38.150	41.007	-32.993	74.000
7386.000	12.127	36.580	48.708	-25.292	74.000
9848.000	12.852	36.980	49.833	-24.167	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	44.590	50.110	-23.890	74.000
7386.000	13.254	36.570	49.824	-24.176	74.000
9848.000	13.367	37.140	50.507	-23.493	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	3.261	37.150	40.411	-33.589	74.000
7236.000	10.650	36.480	47.130	-26.870	74.000
9648.000	13.337	37.150	50.486	-23.514	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	38.150	44.571	-29.429	74.000
7236.000	11.495	36.590	48.085	-25.915	74.000
9648.000	13.807	37.010	50.816	-23.184	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.150	40.187	-33.813	74.000
7311.000	11.795	36.590	48.384	-25.616	74.000
9748.000	12.635	36.590	49.225	-24.775	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	38.150	43.961	-30.039	74.000
7311.000	12.630	36.590	49.219	-24.781	74.000
9748.000	13.126	36.980	50.106	-23.894	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.858	37.590	40.447	-33.553	74.000
7386.000	12.127	36.570	48.698	-25.302	74.000
9848.000	12.852	36.840	49.693	-24.307	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	38.150	43.670	-30.330	74.000
7386.000	13.254	36.580	49.834	-24.166	74.000
9848.000	13.367	36.590	49.957	-24.043	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4844.000	3.171	37.590	40.761	-33.239	74.000
7266.000	11.162	36.580	47.742	-26.258	74.000
9688.000	12.964	36.590	49.555	-24.445	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	6.178	38.580	44.758	-29.242	74.000
7266.000	11.982	36.470	48.452	-25.548	74.000
9688.000	13.507	36.570	50.078	-23.922	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.440	40.477	-33.523	74.000
7311.000	11.795	36.520	48.314	-25.686	74.000
9748.000	12.635	36.980	49.615	-24.385	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	38.690	44.501	-29.499	74.000
7311.000	12.630	36.850	49.479	-24.521	74.000
9748.000	13.126	36.980	50.106	-23.894	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4904.000	2.914	38.150	41.065	-32.935	74.000
7356.000	11.995	36.580	48.574	-25.426	74.000
9808.000	12.475	36.540	49.015	-24.985	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	5.530	37.850	43.381	-30.619	74.000
7356.000	13.005	36.580	49.584	-24.416	74.000
9808.000	12.901	37.050	49.951	-24.049	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : TABLET PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
94.020	-8.189	43.191	35.001	-8.499	43.500
330.700	-4.492	42.056	37.564	-8.436	46.000
468.440	1.195	34.784	35.979	-10.021	46.000
606.180	4.666	30.836	35.502	-10.498	46.000
728.400	3.452	32.159	35.611	-10.389	46.000
920.460	6.467	29.637	36.104	-9.896	46.000
Vertical					
82.380	-5.215	40.563	35.348	-4.652	40.000
202.660	-7.739	46.555	38.816	-4.684	43.500
338.460	-4.265	41.347	37.082	-8.918	46.000
507.240	-0.471	38.506	38.035	-7.965	46.000
703.180	0.139	33.146	33.284	-12.716	46.000
965.080	7.932	27.965	35.897	-18.103	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : TABLET PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
142.520	-10.427	48.202	37.775	-5.725	43.500
330.700	-4.492	42.056	37.564	-8.436	46.000
468.440	1.195	34.784	35.979	-10.021	46.000
606.180	4.666	30.836	35.502	-10.498	46.000
728.400	3.452	32.159	35.611	-10.389	46.000
920.460	6.467	29.637	36.104	-9.896	46.000
Vertical					
132.820	-4.440	40.375	35.935	-7.565	43.500
330.700	-4.912	42.056	37.144	-8.856	46.000
507.240	-0.471	38.506	38.035	-7.965	46.000
703.180	0.139	33.146	33.284	-12.716	46.000
815.700	3.221	28.812	32.033	-13.967	46.000
943.740	6.592	28.263	34.856	-11.144	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : TABLET PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
175.500	-10.017	49.342	39.324	-4.176	43.500
338.460	-3.925	41.347	37.422	-8.578	46.000
507.240	0.759	38.506	39.265	-6.735	46.000
606.180	4.666	30.836	35.502	-10.498	46.000
728.400	3.452	32.159	35.611	-10.389	46.000
901.060	5.591	32.854	38.445	-7.555	46.000
Vertical					
105.660	-0.253	39.151	38.898	-4.602	43.500
202.660	-7.739	46.555	38.816	-4.684	43.500
406.360	-6.660	39.695	33.035	-12.965	46.000
507.240	-0.471	38.506	38.035	-7.965	46.000
749.740	2.510	39.396	41.906	-4.094	46.000
965.080	7.932	27.965	35.897	-18.103	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : TABLET PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
117.300	-9.196	47.333	38.137	-5.363	43.500
272.500	-5.359	42.144	36.785	-9.215	46.000
330.700	-4.492	42.056	37.564	-8.436	46.000
507.240	0.759	38.506	39.265	-6.735	46.000
728.400	3.452	32.159	35.611	-10.389	46.000
901.060	5.591	32.854	38.445	-7.555	46.000
Vertical					
107.600	-0.318	39.374	39.056	-4.444	43.500
202.660	-7.739	46.555	38.816	-4.684	43.500
338.460	-4.265	41.347	37.082	-8.918	46.000
507.240	-0.471	38.506	38.035	-7.965	46.000
728.400	-0.188	32.159	31.971	-14.029	46.000
965.080	7.932	27.965	35.897	-18.103	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF Antenna conducted test

5.1. Test Equipment

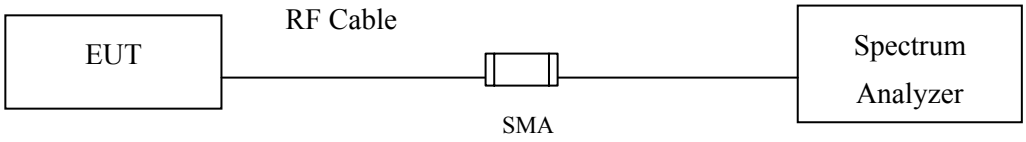
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with "X" are used to measure the final test results.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 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)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

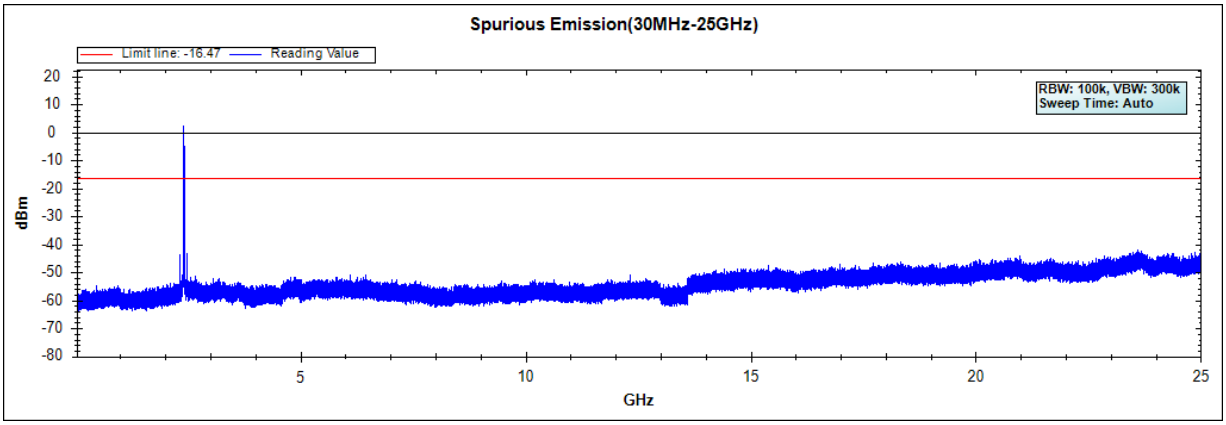
5.5. Uncertainty

The measurement uncertainty
Conducted is defined as ± 1.27dB

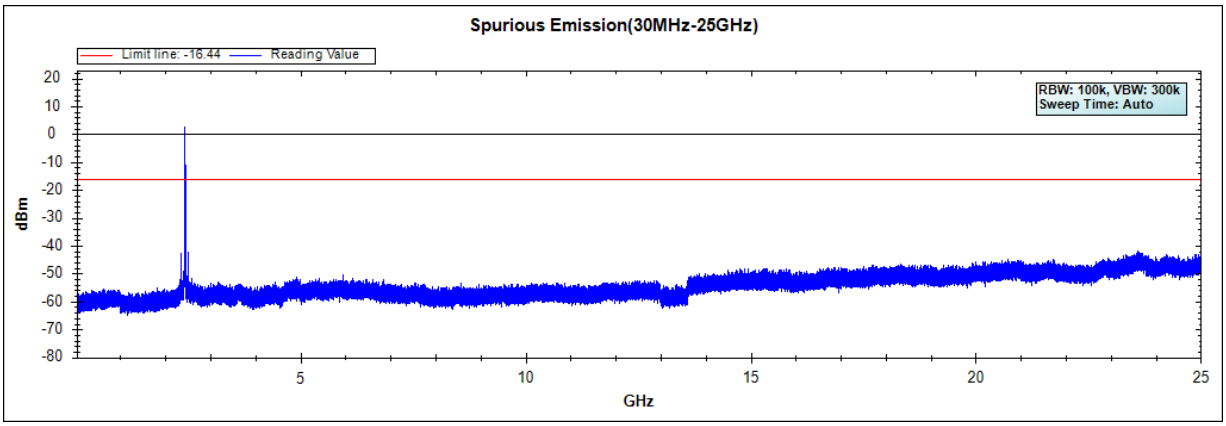
5.6. Test Result of RF antenna conducted test

Product : TABLET PC
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

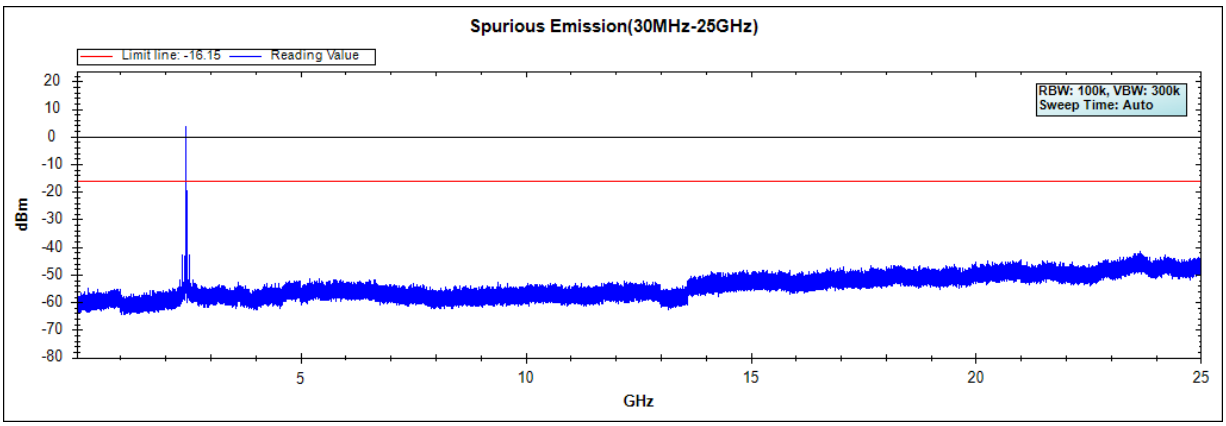
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



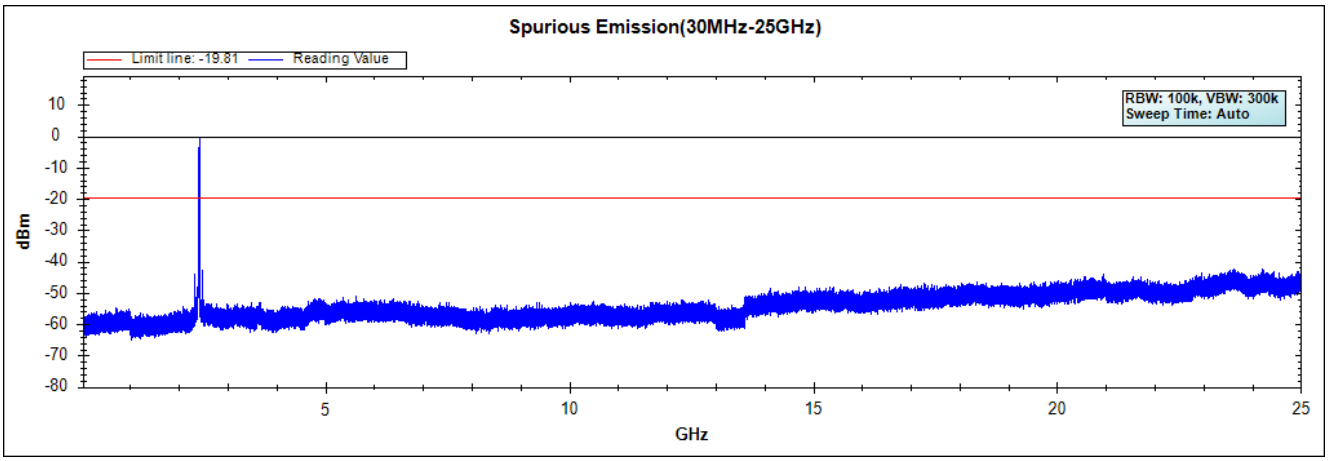
Channel 11 (2462MHz) 30MHz -25GHz



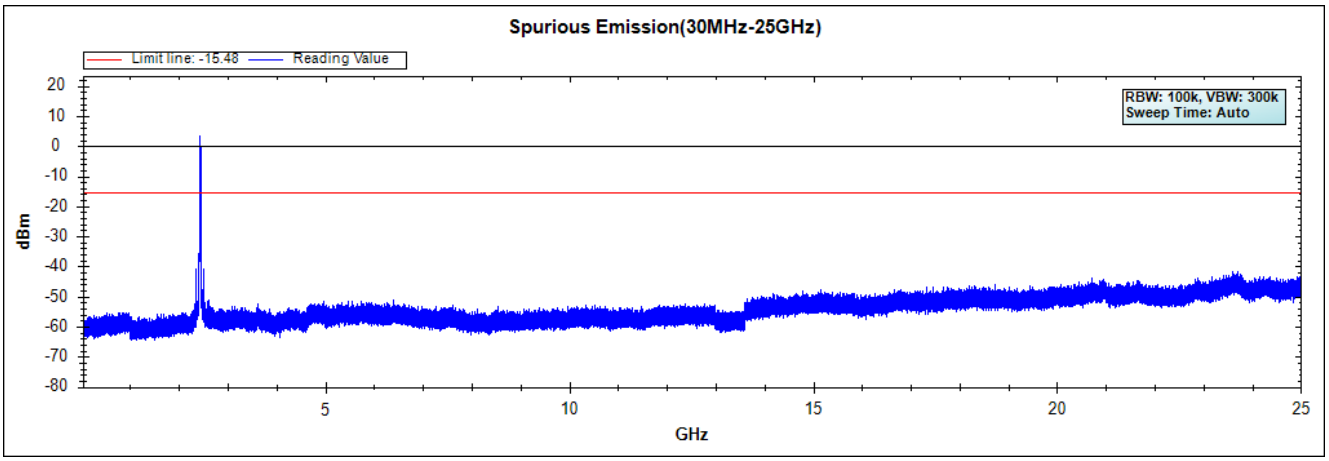
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : TABLET PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

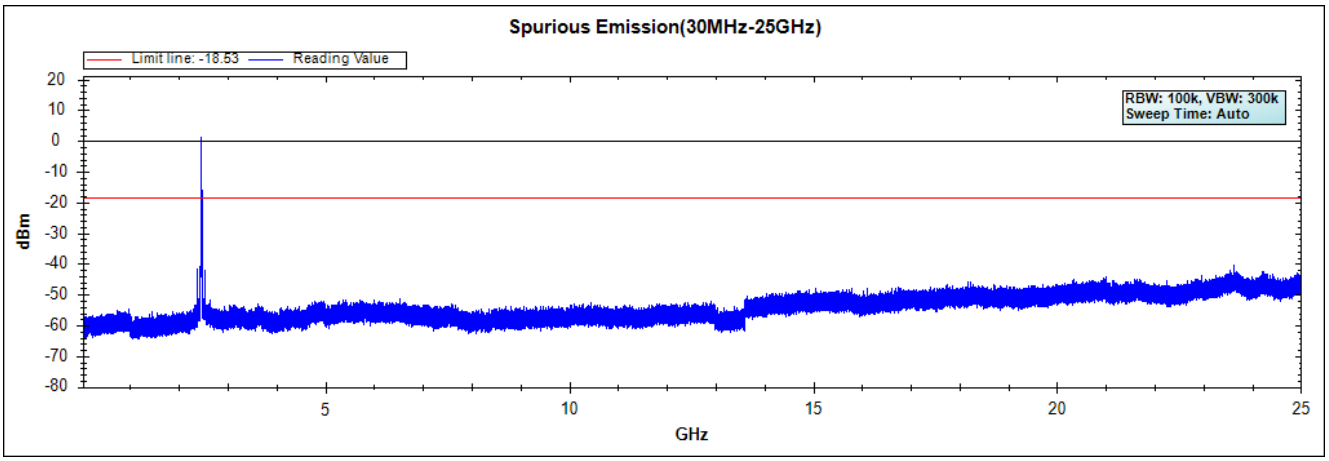
Channel 01 (2412MHz) 30MHz -25GHz



Channel 06 (2437MHz) 30MHz -25GHz



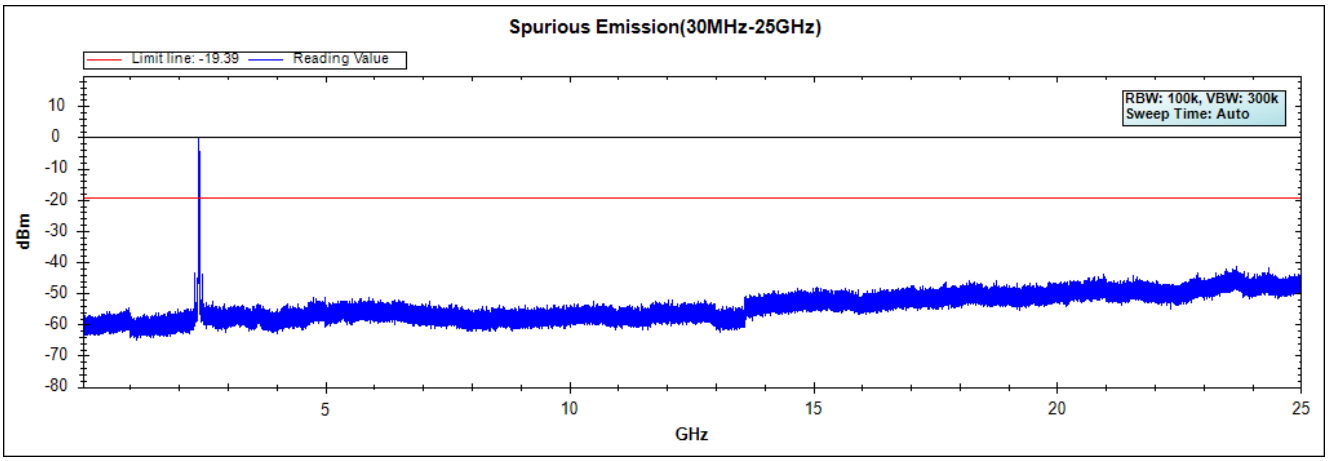
Channel 11 (2462MHz) 30MHz -25GHz



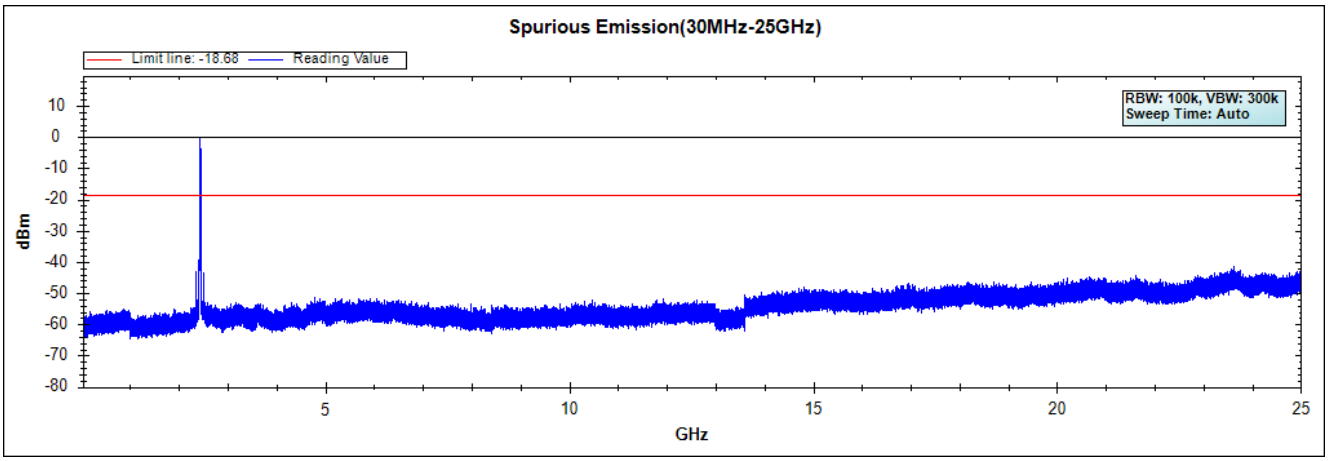
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : TABLET PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

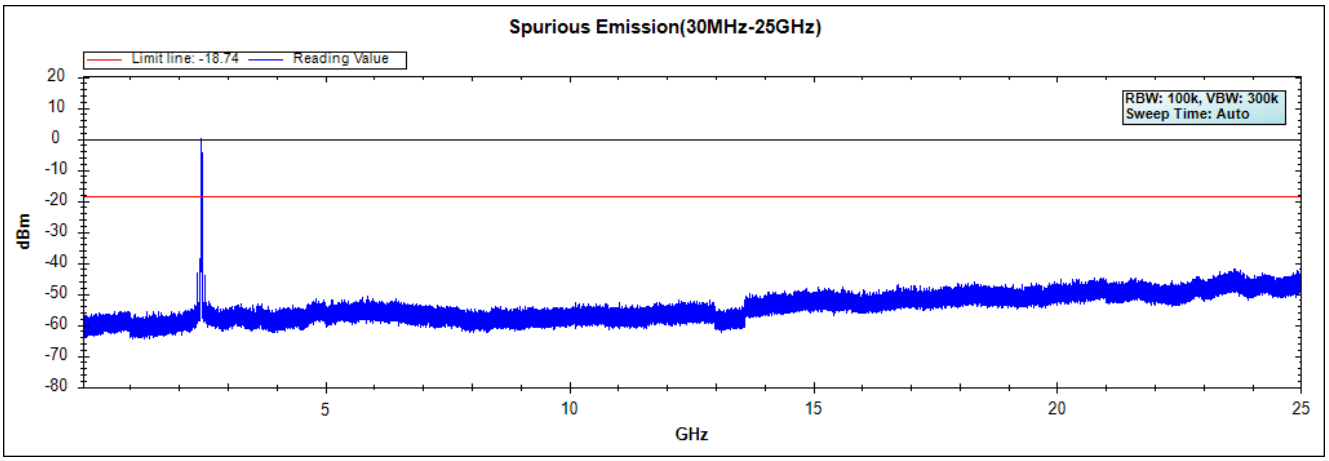
Channel 01 (2412MHz) 30MHz -25GHz-Chain A



Channel 06 (2437MHz) 30MHz -25GHz-Chain A

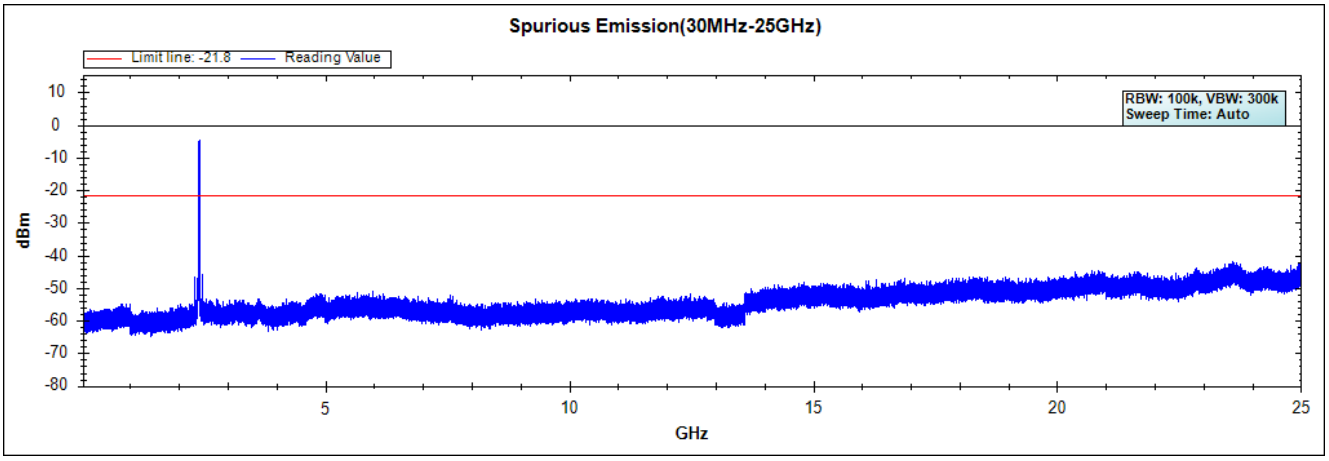


Channel 11 (2462MHz) 30MHz -25GHz-Chain A

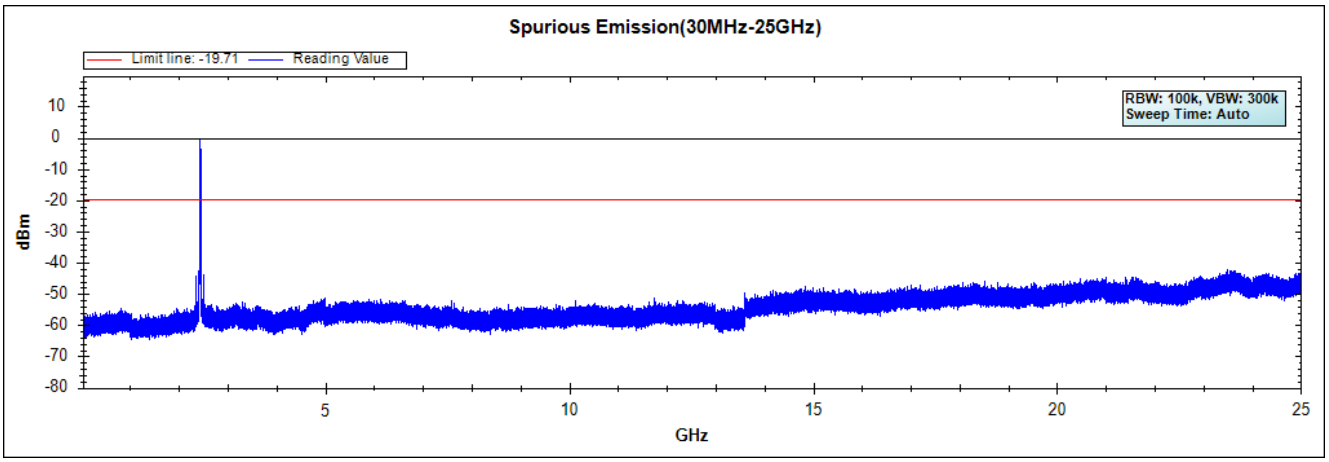


Note: The above test pattern is synthesized by multiple of the frequency range.

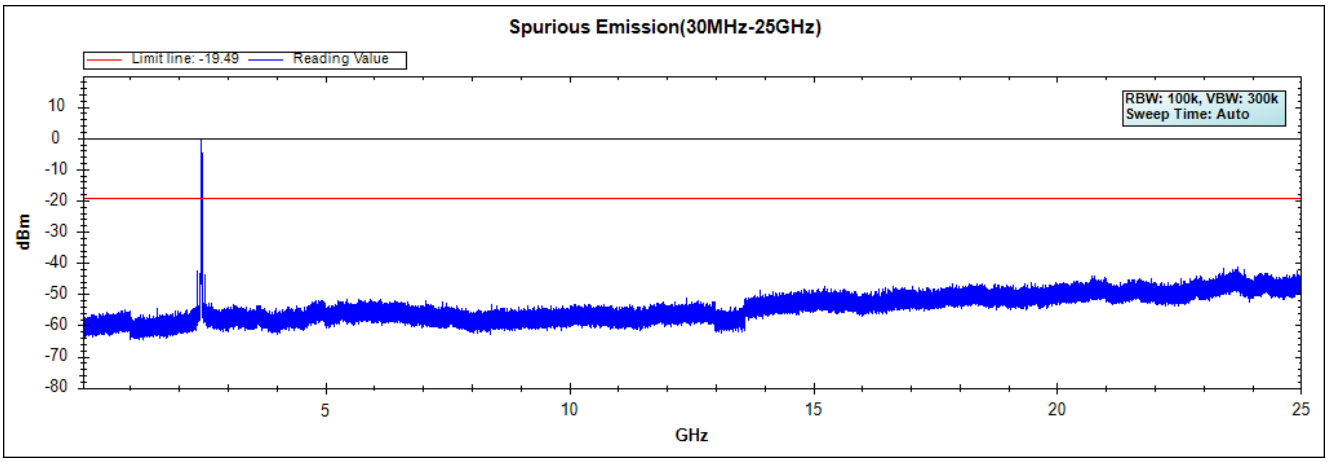
Channel 01 (2412MHz) 30MHz -25GHz-Chain B



Channel 06 (2437MHz) 30MHz -25GHz-Chain B



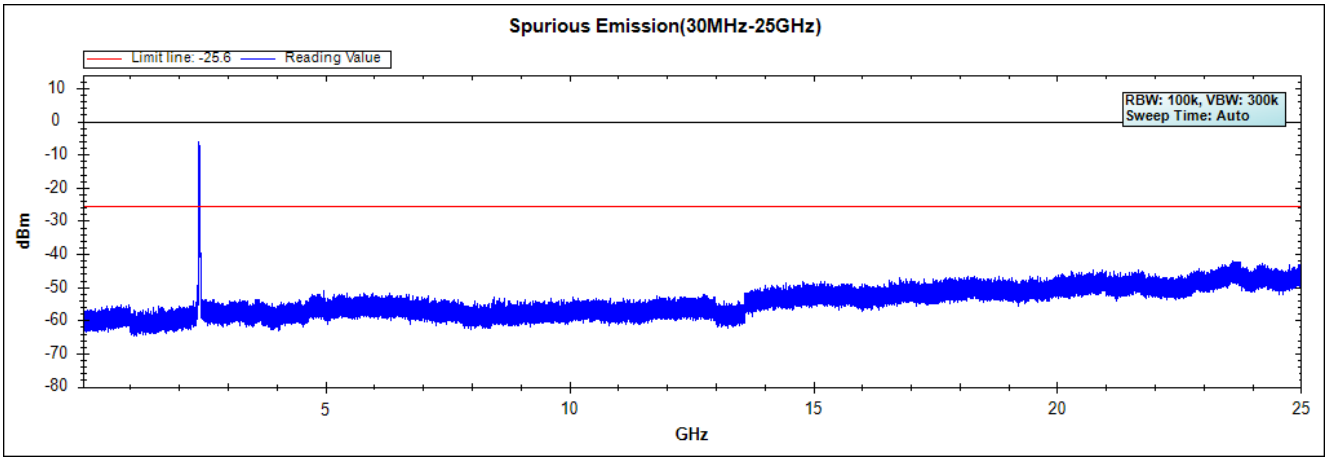
Channel 11 (2462MHz) 30MHz -25GHz-Chain B



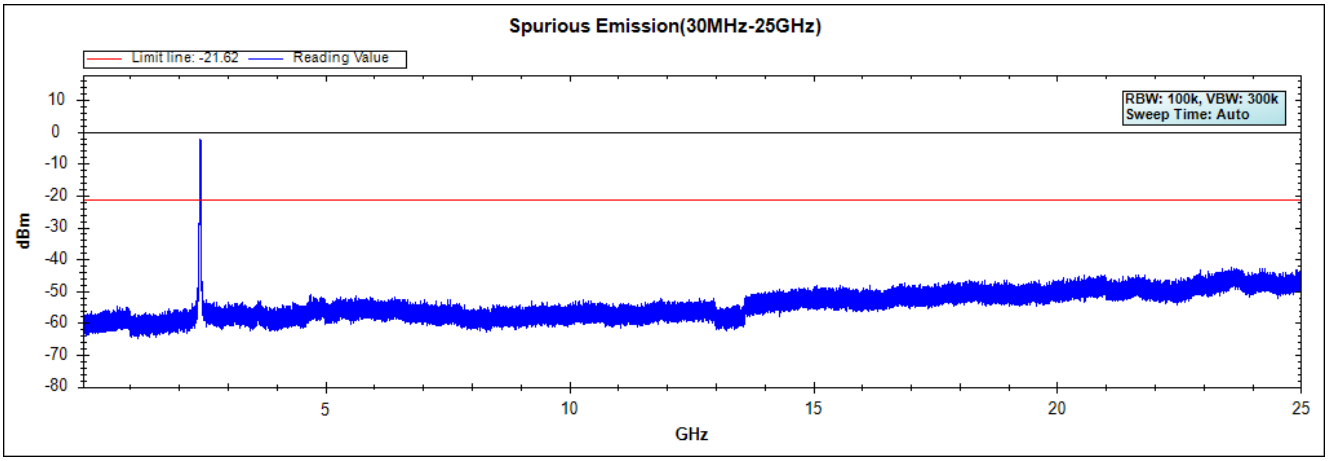
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : TABLET PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)

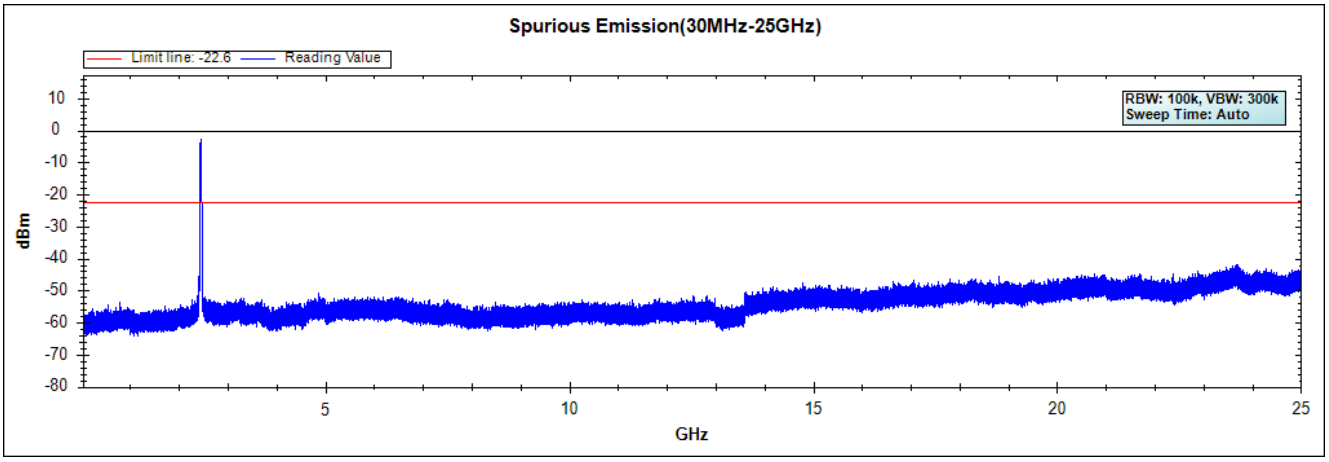
Channel 03 (2422MHz) 30MHz -25GHz-Chain A



Channel 06 (2437MHz) 30MHz -25GHz-Chain A

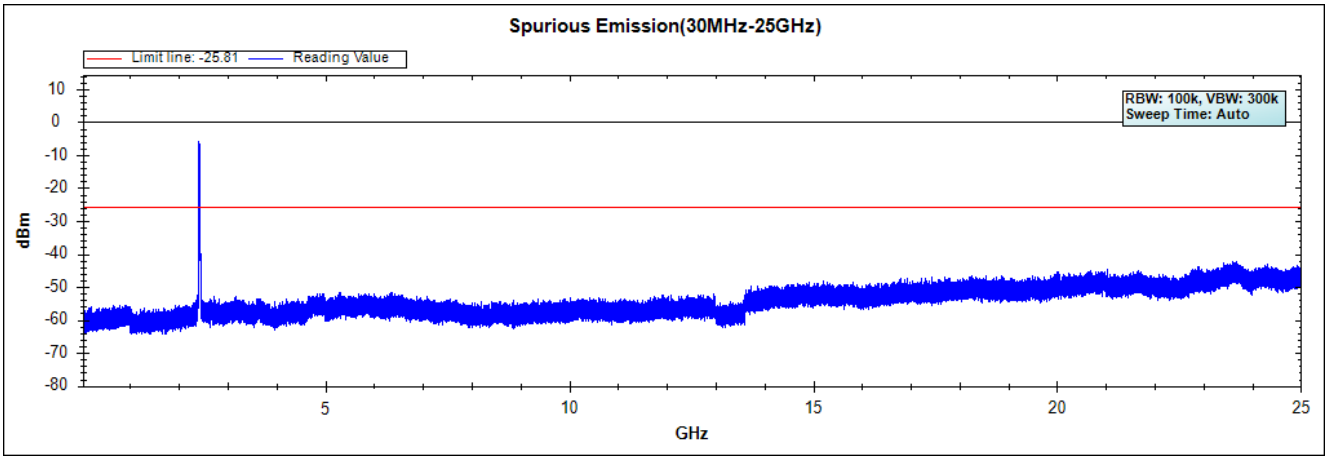


Channel 09 (2452MHz) 30MHz -25GHz-Chain A

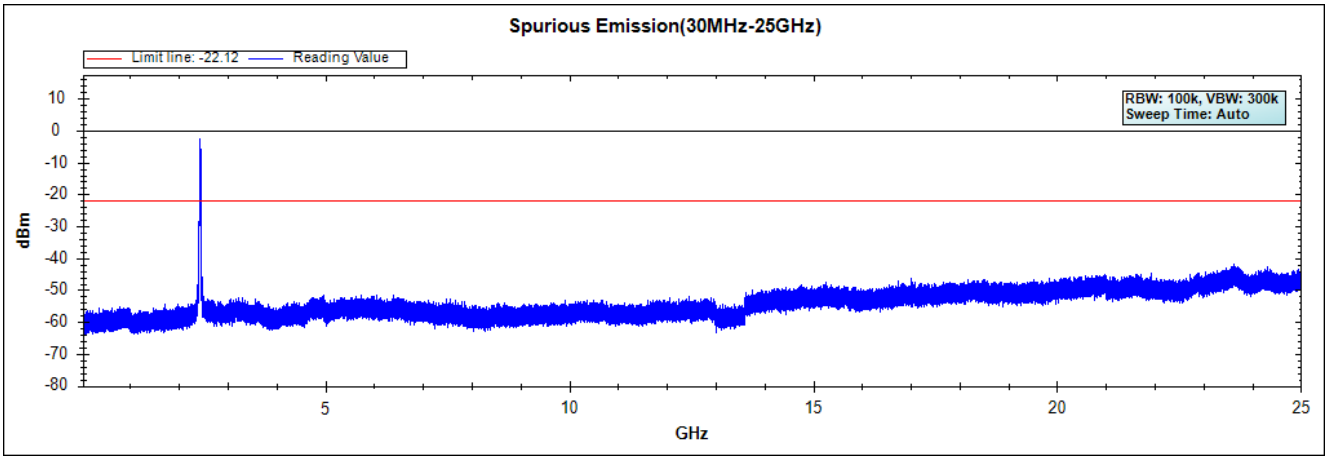


Note: The above test pattern is synthesized by multiple of the frequency range.

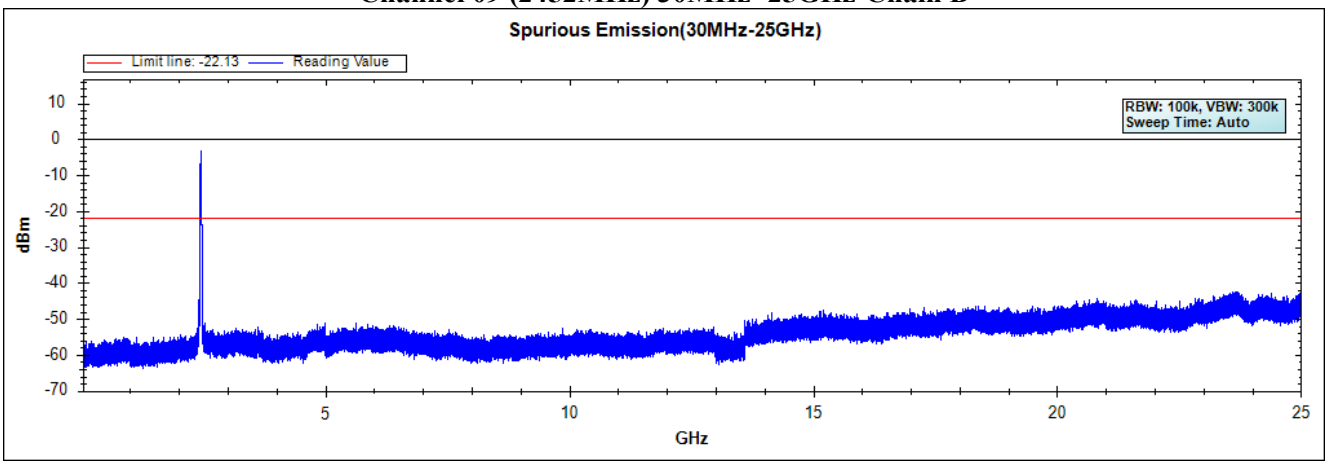
Channel 03 (2422MHz) 30MHz -25GHz-Chain B



Channel 06 (2437MHz) 30MHz -25GHz-Chain B



Channel 09 (2452MHz) 30MHz -25GHz-Chain B



Note: The above test pattern is synthesized by multiple of the frequency range.

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

RF Radiated Measurement:

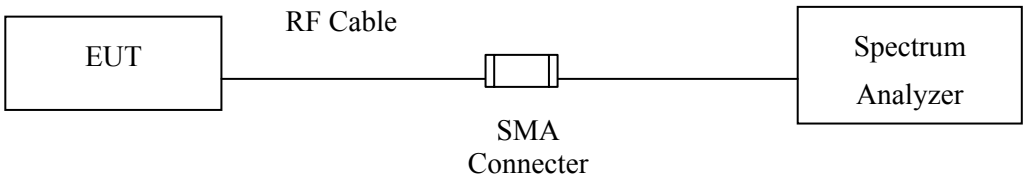
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2014
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2015
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

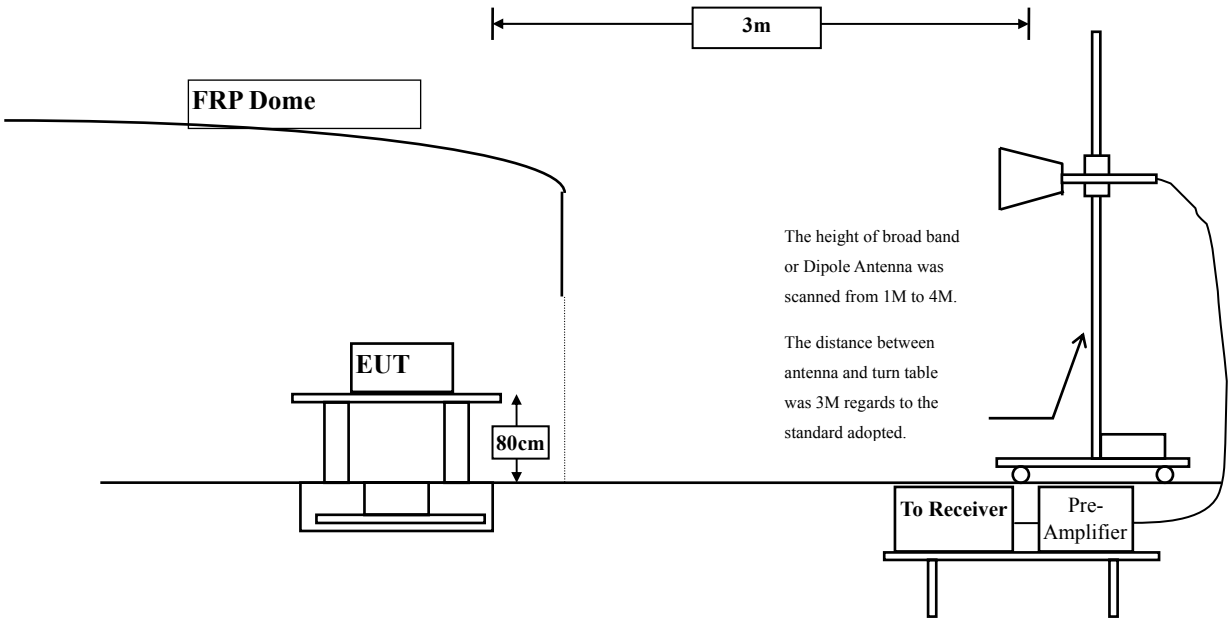
Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2009 on radiated measurement.

6.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	31.509	24.907	56.416	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	29.868	61.429	--	--	--
01 (Peak)	2413.000	31.646	70.477	102.123	--	--	--
01 (Average)	2390.000	31.509	13.663	45.172	74.00	54.00	Pass
01 (Average)	2400.000	31.561	22.040	53.601	--	--	--
01 (Average)	2411.200	31.632	67.665	99.297	--	--	--

Figure Channel 01: Horizontal (Peak)

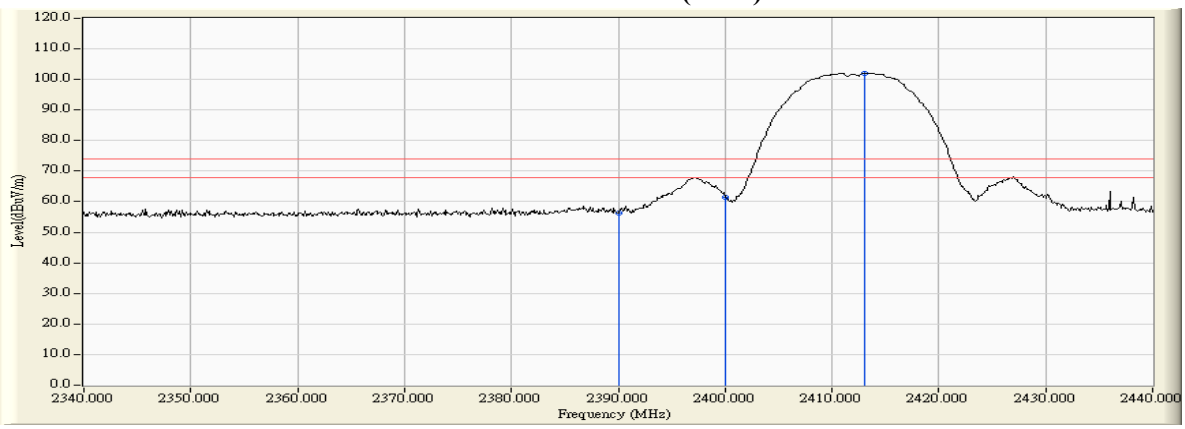
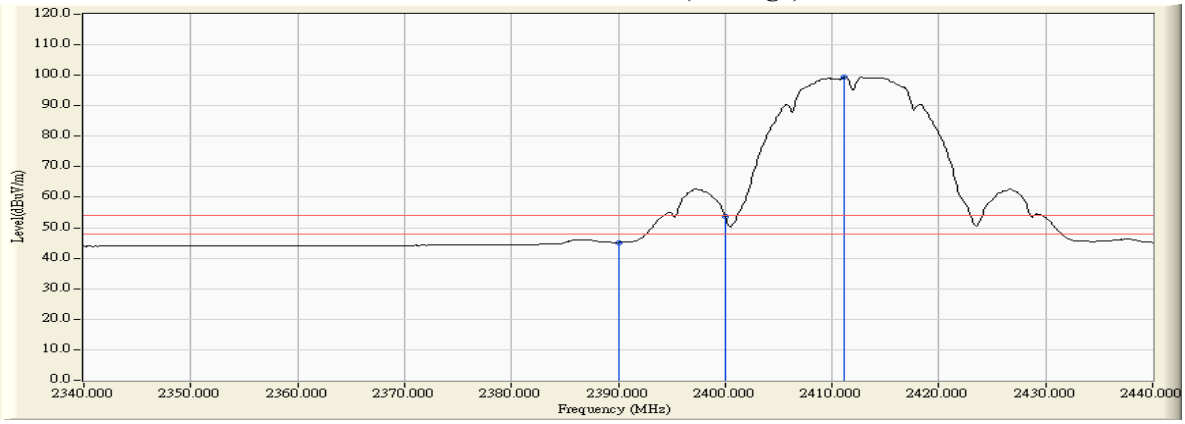


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	30.915	25.073	55.988	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	31.325	62.237	--	--	--
01 (Peak)	2413.100	30.957	71.576	102.533	--	--	--
01 (Average)	2390.000	30.915	13.939	44.854	74.00	54.00	Pass
01 (Average)	2400.000	30.912	23.284	54.196	--	--	--
01 (Average)	2411.200	30.944	68.804	99.748	--	--	--

Figure Channel 01: Vertical (Peak)

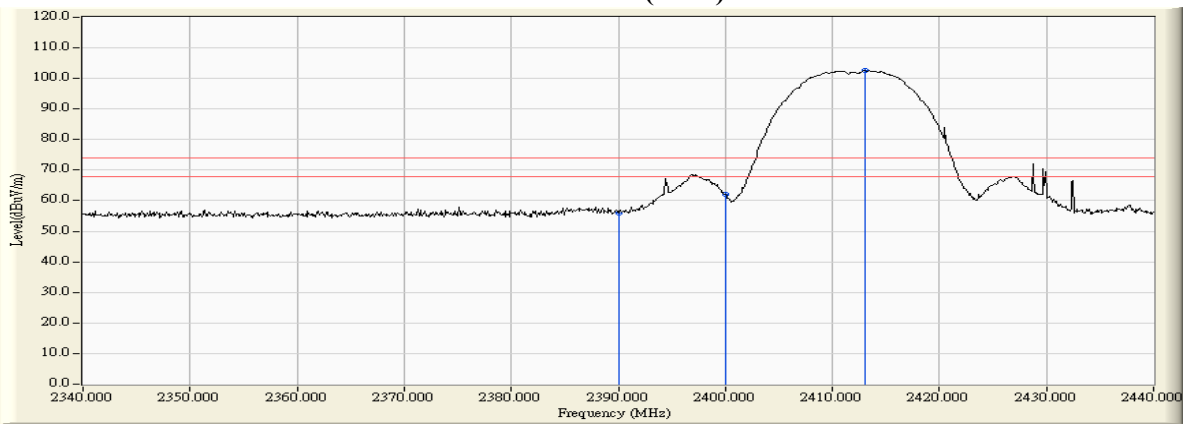
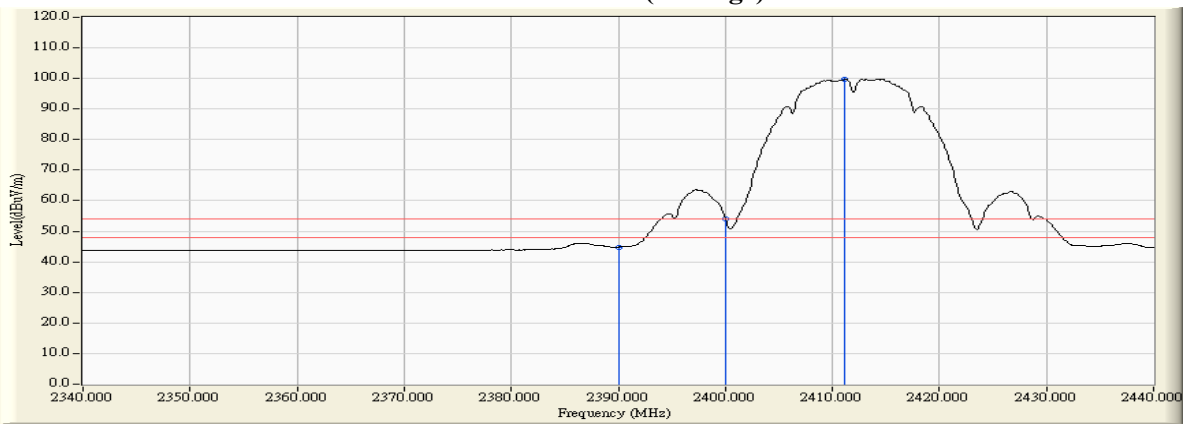


Figure Channel 01: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2463.000	32.027	69.443	101.470	--	--	--
11 (Peak)	2483.500	32.182	26.370	58.552	74.00	54.00	Pass
11 (Peak)	2484.400	32.189	32.309	64.498	74.00	54.00	Pass
11 (Average)	2461.200	32.014	66.377	98.390	--	--	--
11 (Average)	2483.500	32.182	13.804	45.986	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

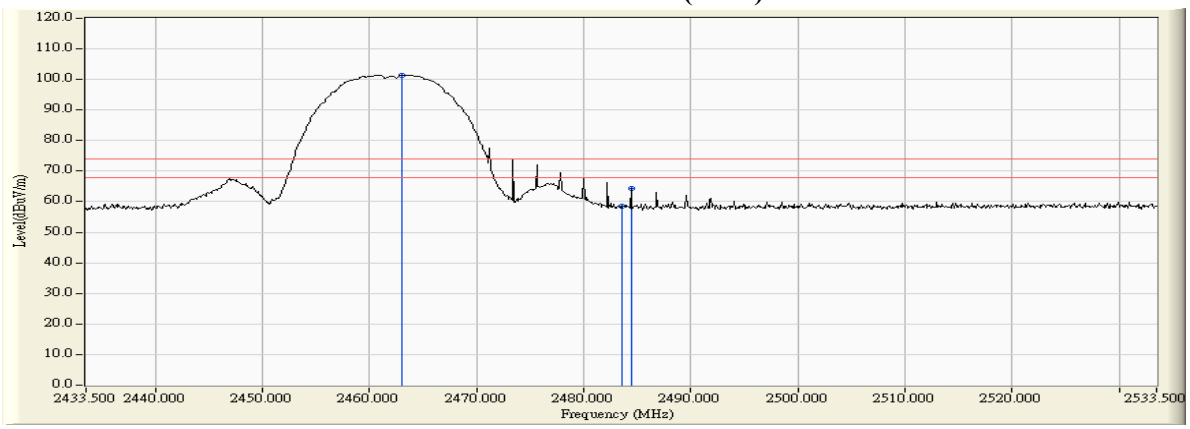
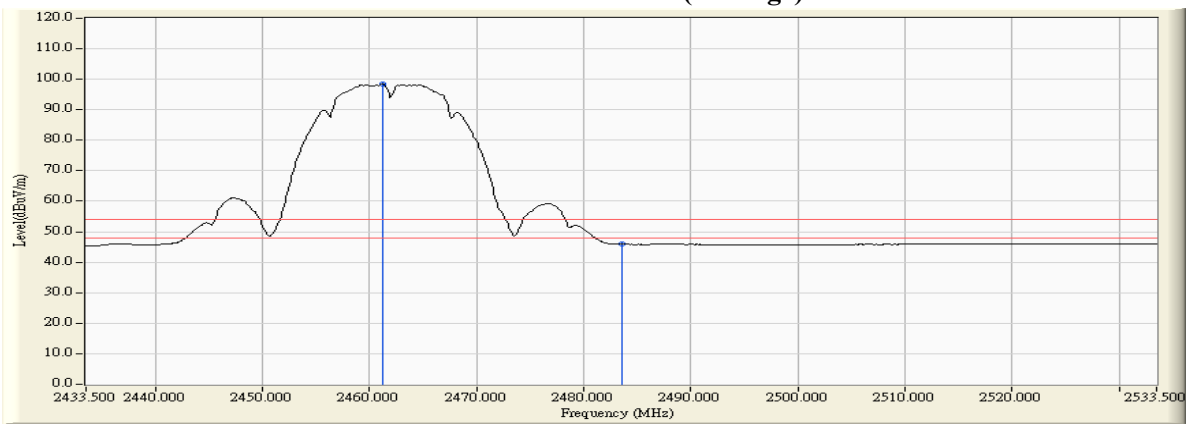


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2463.000	31.298	69.998	101.295	--	--	--
11 (Peak)	2483.500	31.435	33.125	64.560	74.00	54.00	Pass
11 (Average)	2461.200	31.285	67.095	98.380	--	--	--
11 (Average)	2483.500	31.435	13.886	45.321	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

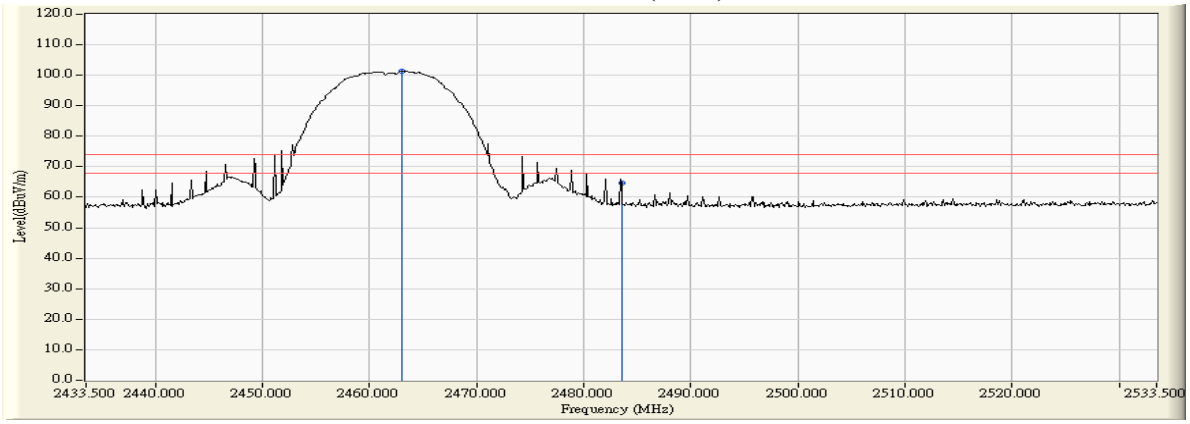
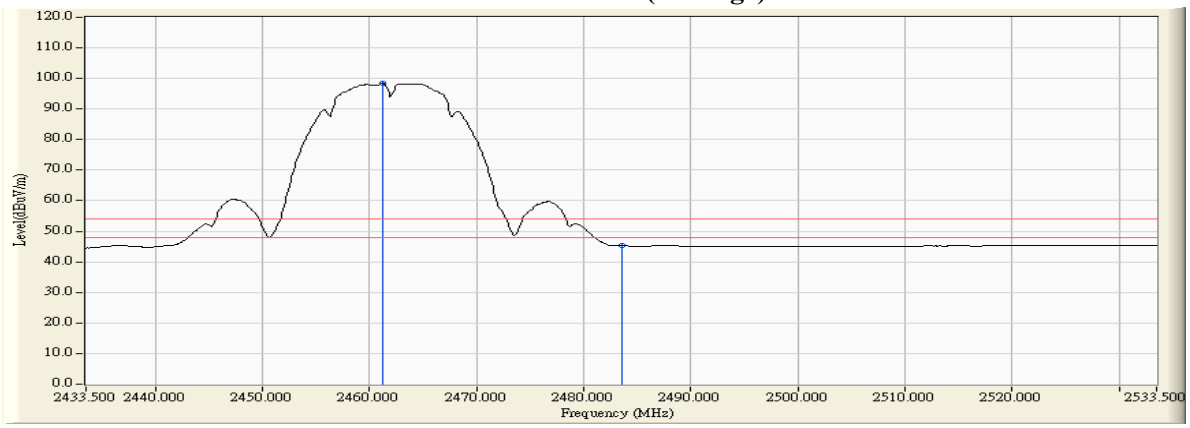


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	31.509	35.172	66.681	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	41.240	72.801	--	--	--
01 (Peak)	2415.100	31.662	71.497	103.159	--	--	--
01(Average)	2390.000	31.509	20.090	51.599	74.00	54.00	Pass
01(Average)	2400.000	31.561	26.292	57.853	--	--	--
01(Average)	2414.000	31.654	62.819	94.472	--	--	--

Figure Channel 01: Horizontal (Peak)

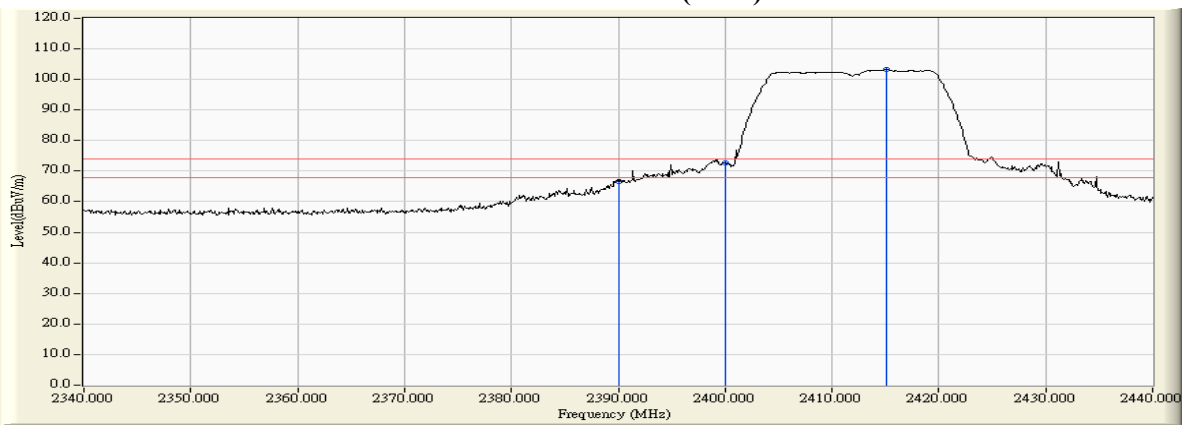
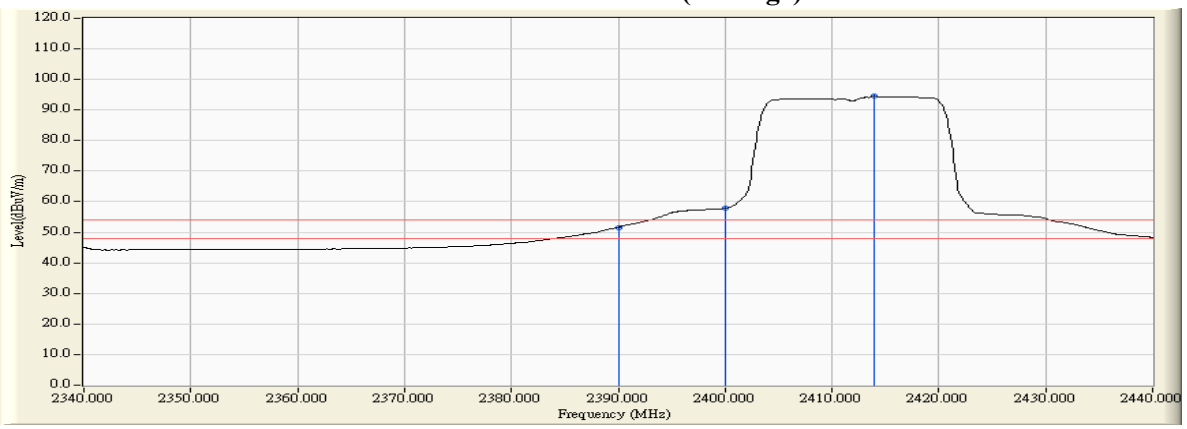


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	30.915	36.007	66.922	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	44.241	75.153	--	--	--
01 (Peak)	2415.100	30.970	72.471	103.441	--	--	--
01 (Average)	2390.000	30.915	21.017	51.932	74.00	54.00	Pass
01 (Average)	2400.000	30.912	27.618	58.530	--	--	--
01 (Average)	2413.900	30.962	63.786	94.748	--	--	--

Figure Channel 01: Vertical (Peak)

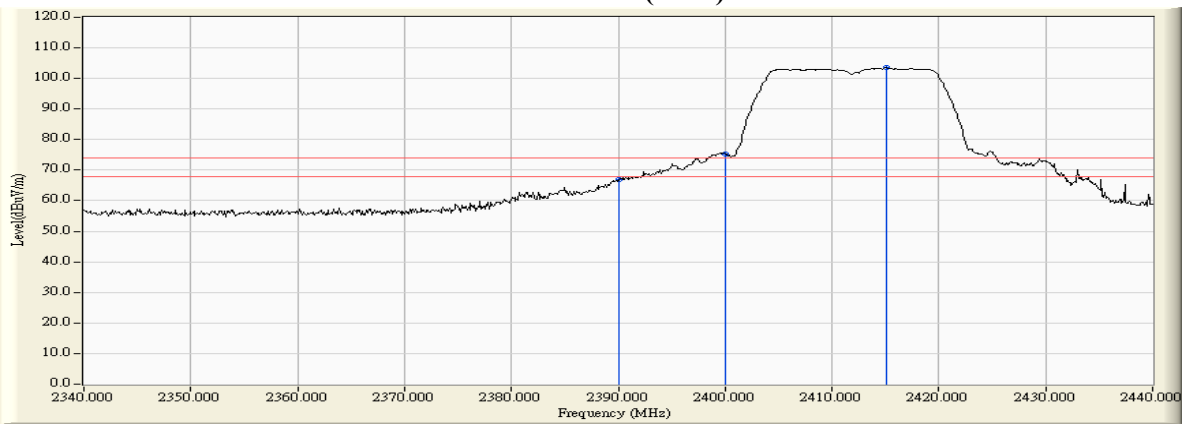
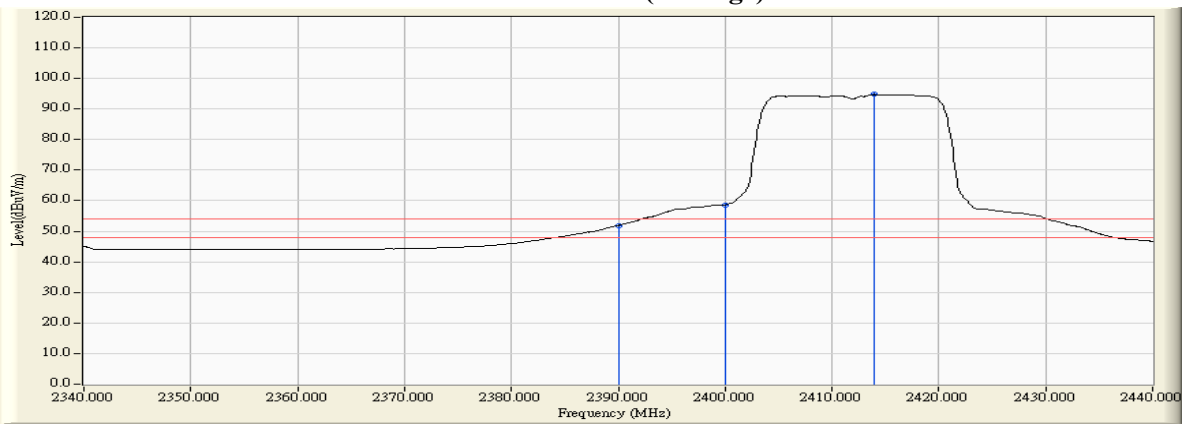


Figure Channel 01: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2455.200	31.969	71.230	103.198	--	--	--
11 (Peak)	2483.500	32.182	33.783	65.965	74.00	54.00	Pass
11 (Peak)	2484.000	32.185	35.165	67.351	74.00	54.00	Pass
11 (Average)	2456.100	31.974	62.355	94.330	--	--	--
11 (Average)	2483.500	32.182	18.655	50.837	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

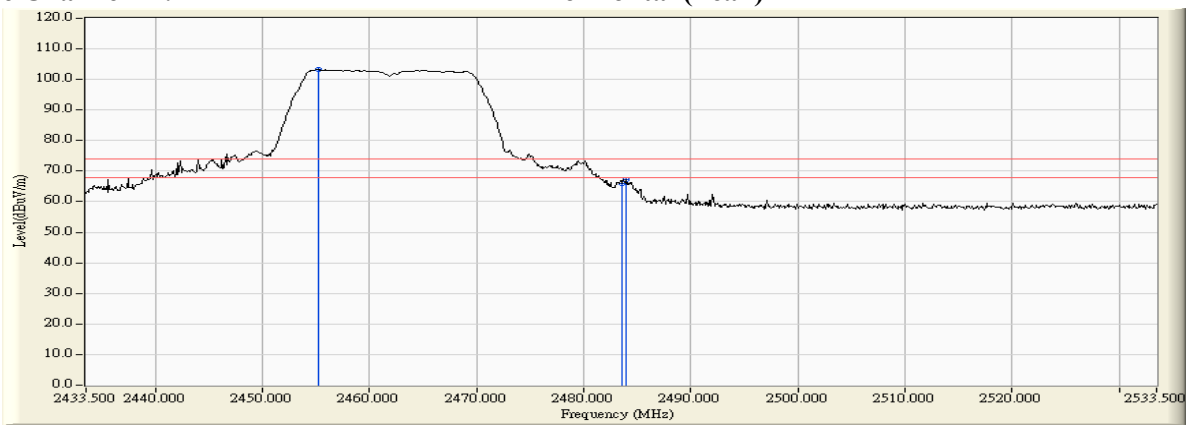
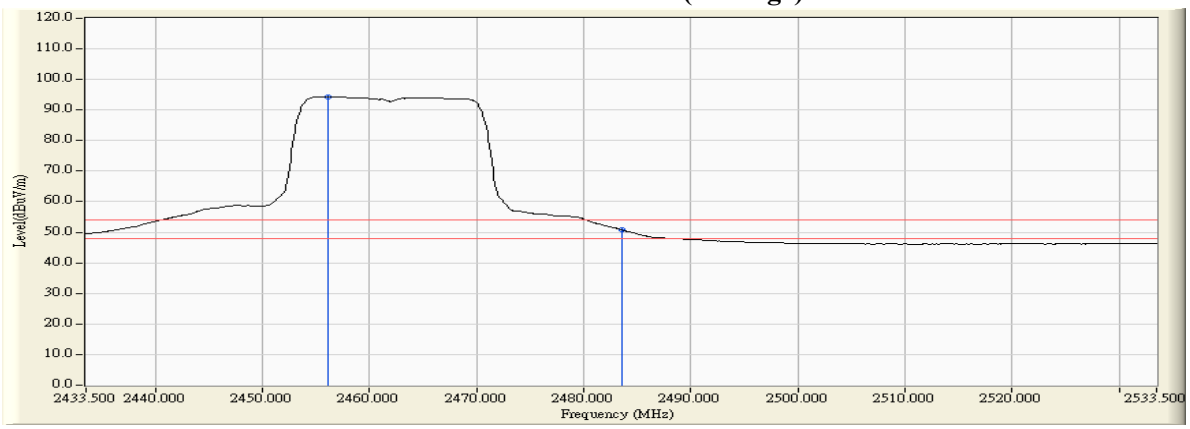


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2456.500	31.252	61.792	93.045	--	--	--
11 (Peak)	2483.500	31.435	25.807	57.242	74.00	54.00	Pass
11 (Average)	2456.800	31.255	52.968	84.223	--	--	--
11 (Average)	2483.500	31.435	13.658	45.093	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

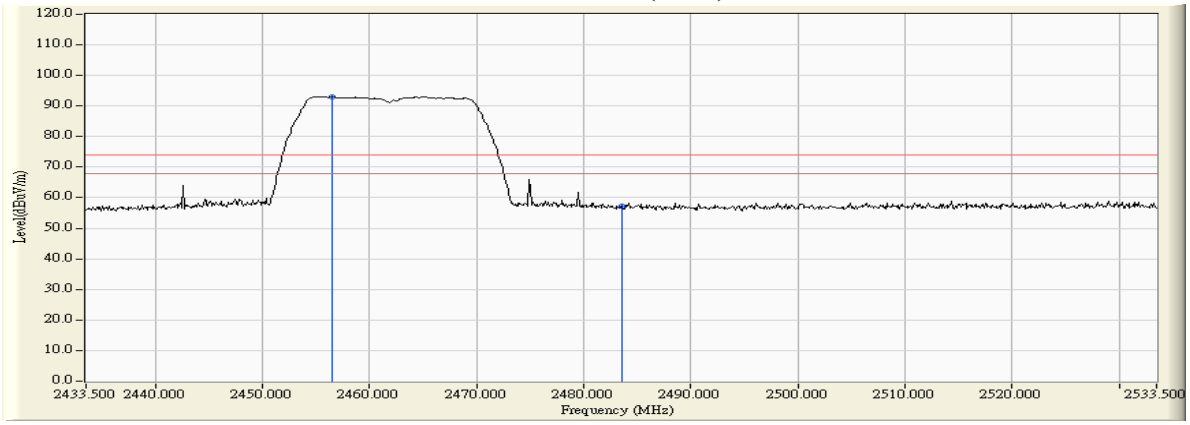
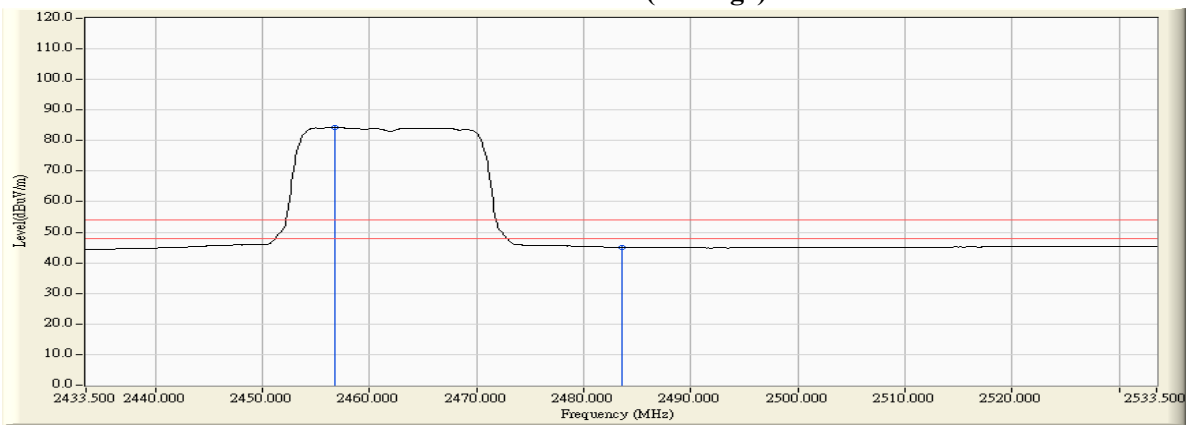


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	31.509	35.887	67.396	74.00	54.00	Pass
01 (Peak)	2400.000	31.561	38.804	70.365	--	--	--
01 (Peak)	2415.200	31.662	70.189	101.852	--	--	--
01 (Average)	2390.000	31.509	19.842	51.351	74.00	54.00	Pass
01 (Average)	2400.000	31.561	24.441	56.002	--	--	--
01 (Average)	2415.100	31.662	61.368	93.030	--	--	--

Figure Channel 01: Horizontal (Peak)

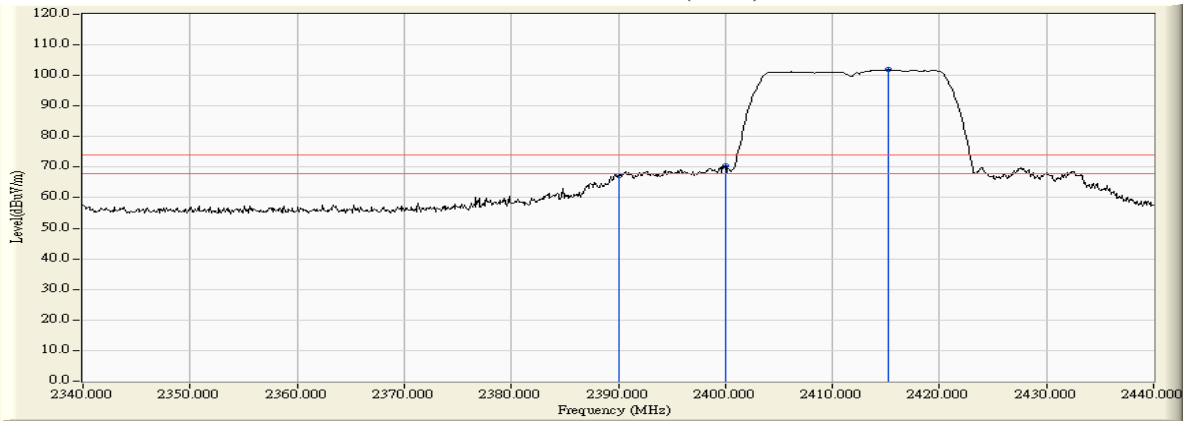
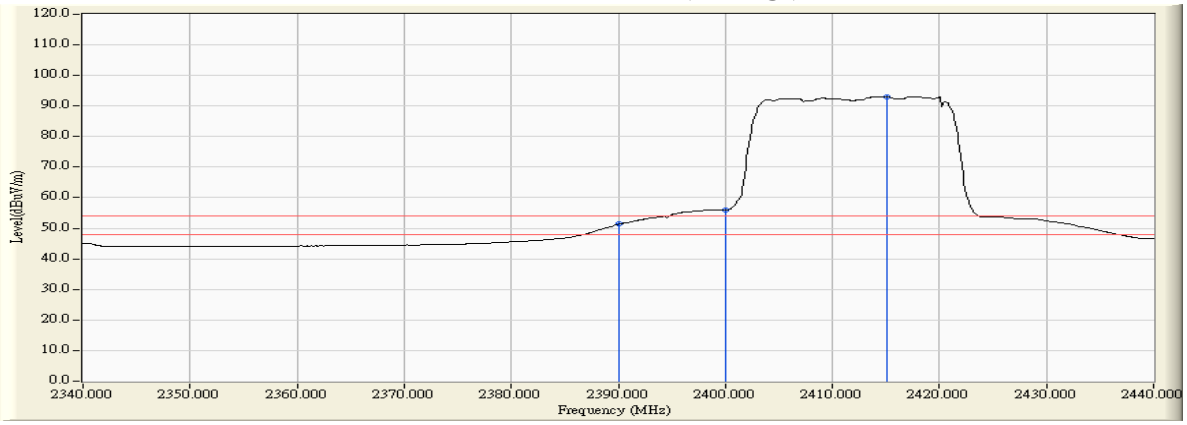


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	30.915	38.578	69.493	74.00	54.00	Pass
01 (Peak)	2400.000	30.912	41.839	72.751	--	--	--
01 (Peak)	2415.100	30.970	71.800	102.770	--	--	--
01 (Average)	2390.000	30.915	21.988	52.903	74.00	54.00	Pass
01 (Average)	2400.000	30.912	26.713	57.625	--	--	--
01 (Average)	2415.000	30.970	62.638	93.608	--	--	--

Figure Channel 01: Vertical (Peak)

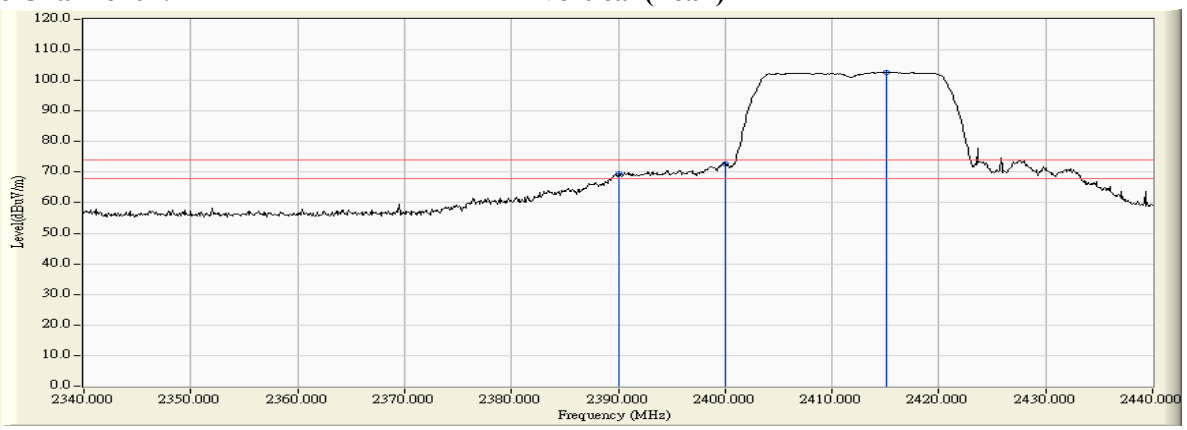
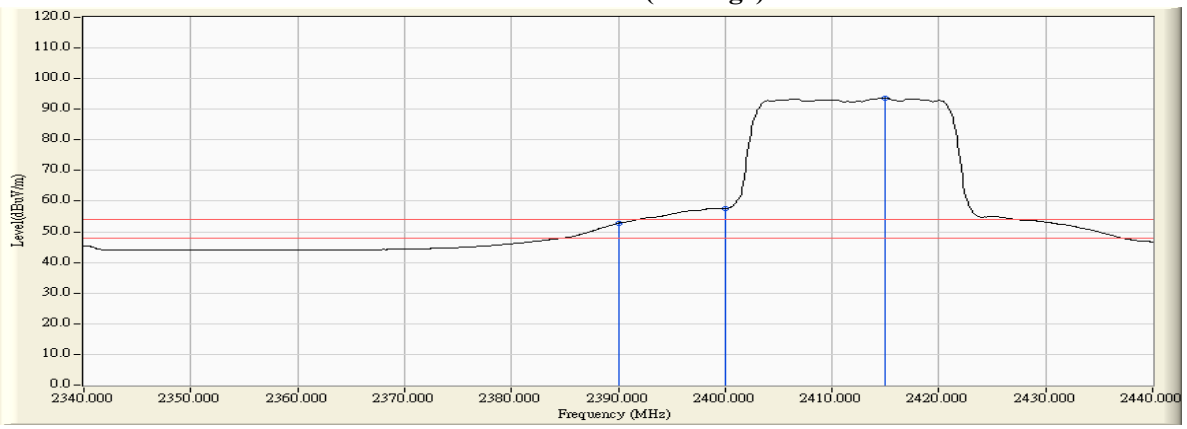


Figure Channel 01: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2454.800	31.965	71.187	103.152	--	--	--
11 (Peak)	2483.500	32.182	37.255	69.437	74.00	54.00	Pass
11 (Average)	2456.100	31.974	62.041	94.016	--	--	--
11 (Average)	2483.500	32.182	19.964	52.146	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

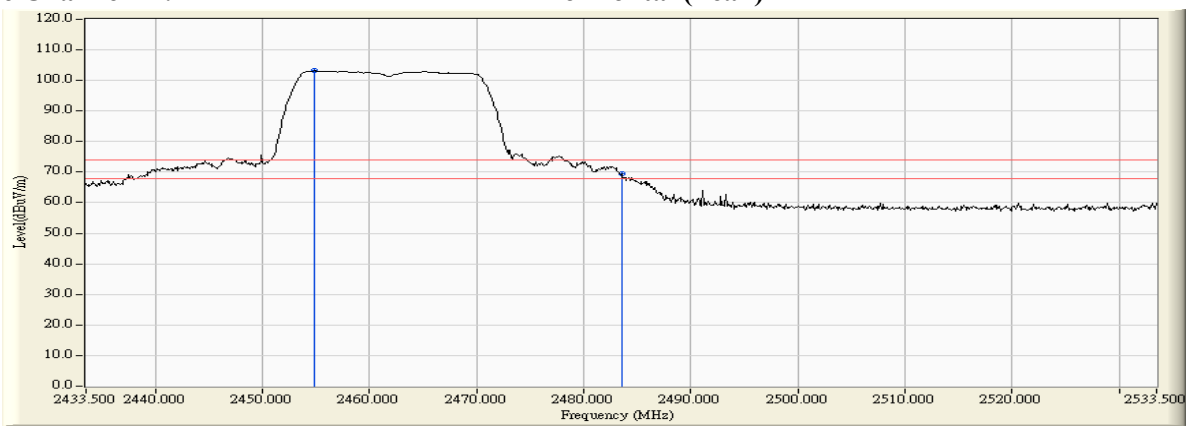
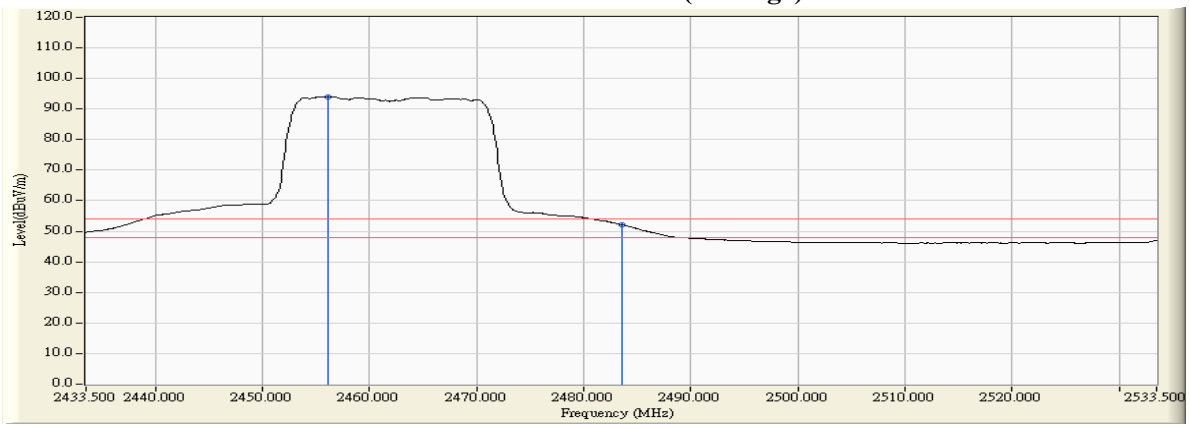


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2456.400	31.251	70.170	101.422	--	--	--
11 (Peak)	2483.500	31.435	32.387	63.822	74.00	54.00	Pass
11 (Peak)	2484.300	31.440	36.288	67.729	74.00	54.00	Pass
11 (Average)	2456.300	31.251	61.077	92.328	--	--	--
11 (Average)	2483.500	31.435	17.546	48.981	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

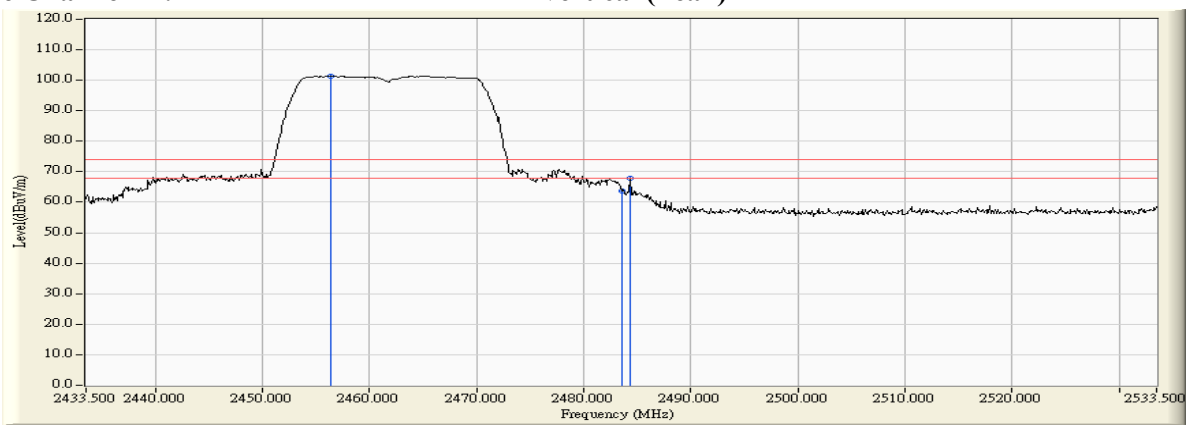
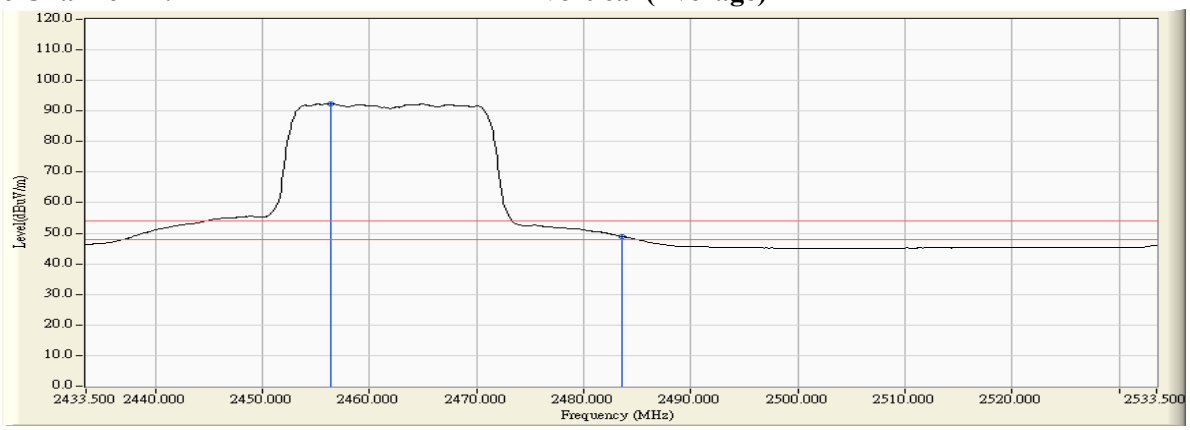


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2388.800	31.505	35.442	66.946	74.00	54.00	Pass
03 (Peak)	2390.000	31.509	34.292	65.801	74.00	54.00	Pass
03 (Peak)	2400.000	31.561	35.602	67.163	--	--	--
03 (Peak)	2428.900	31.767	66.356	98.124	--	--	--
03 (Average)	2390.000	31.509	21.790	53.299	74.00	54.00	Pass
03 (Average)	2400.000	31.561	22.903	54.464	--	--	--
03 (Average)	2430.100	31.777	57.311	89.088	--	--	--

Figure Channel 01: Horizontal (Peak)

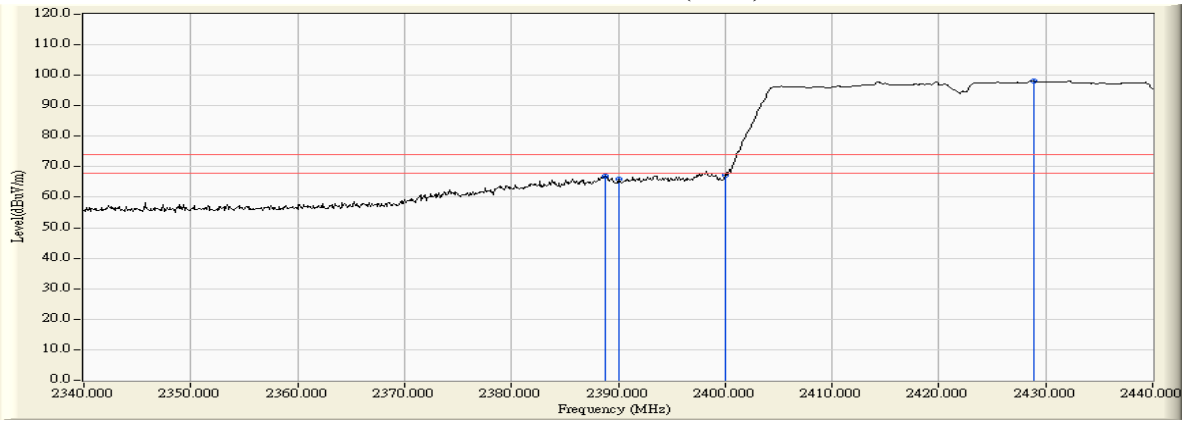
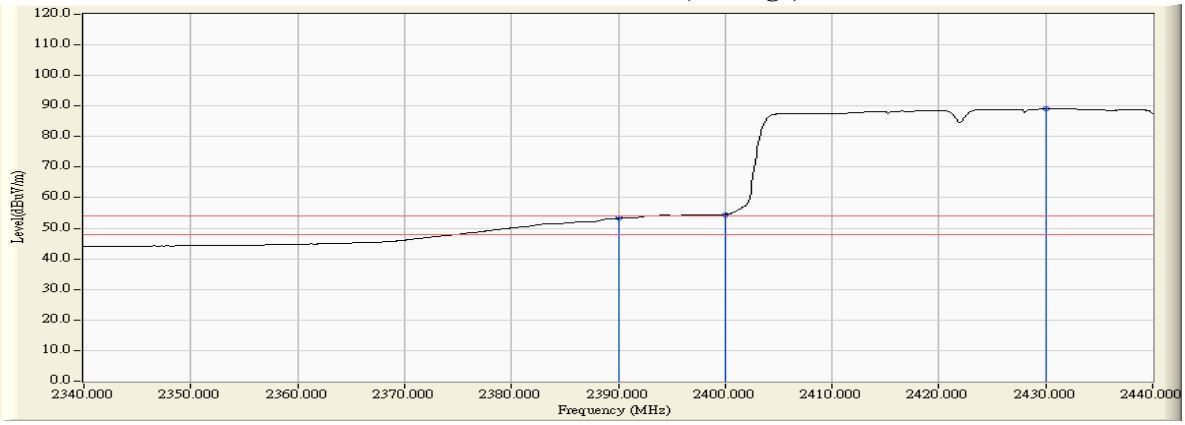


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	30.915	35.667	66.582	74.00	54.00	Pass
03 (Peak)	2400.000	30.912	38.053	68.965	--	--	--
03 (Peak)	2414.300	30.966	67.718	98.683	--	--	--
03 (Average)	2390.000	30.915	22.202	53.117	74.00	54.00	Pass
03 (Average)	2400.000	30.912	22.977	53.889	--	--	--
03 (Average)	2415.800	30.975	55.530	86.505	--	--	--

Figure Channel 01: Vertical (Peak)

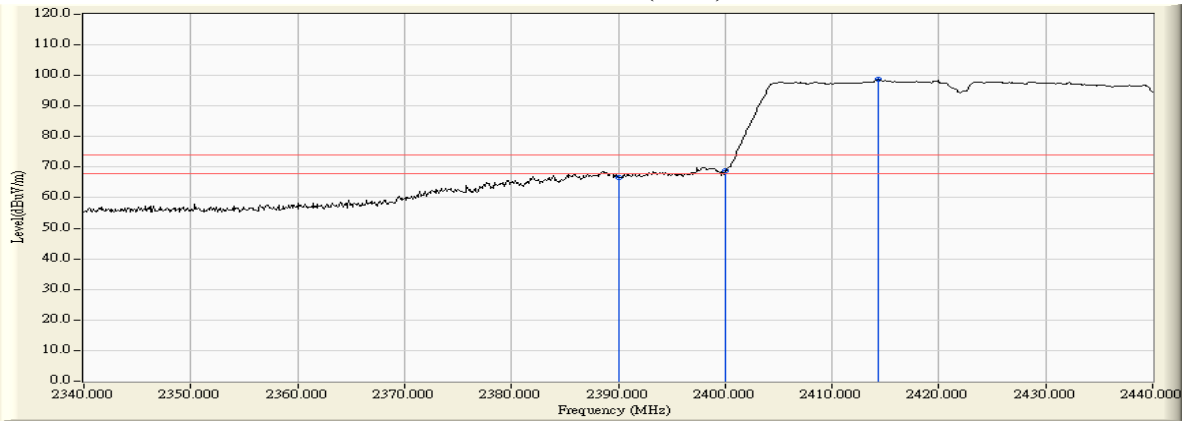
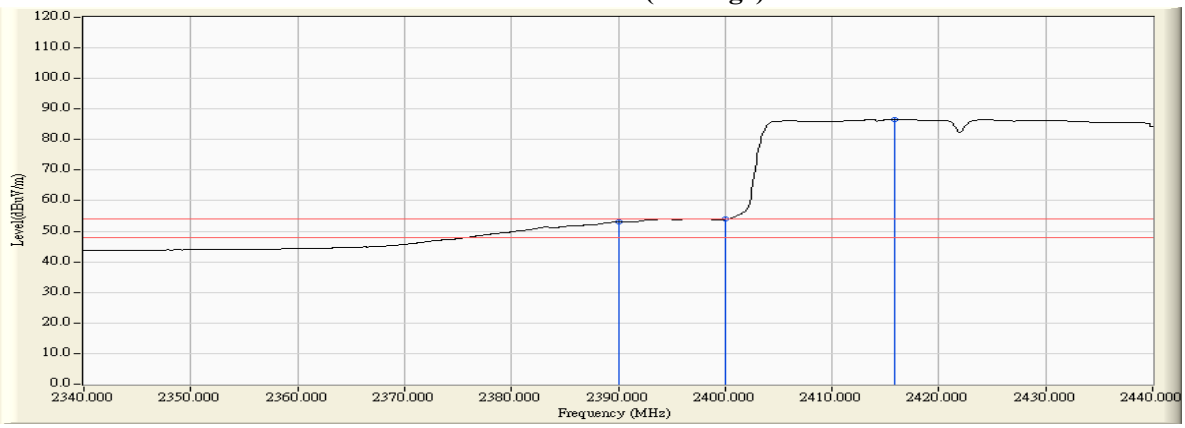


Figure Channel 01: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2444.400	31.886	65.829	97.715	--	--	--
09 (Peak)	2483.500	32.182	29.940	62.122	74.00	54.00	Pass
09 (Peak)	2487.700	32.213	32.952	65.166	74.00	54.00	Pass
09 (Average)	2438.200	31.838	56.939	88.778	--	--	--
09 (Average)	2483.500	32.182	18.423	50.605	74.00	54.00	Pass

Figure Channel 07: Horizontal (Peak)

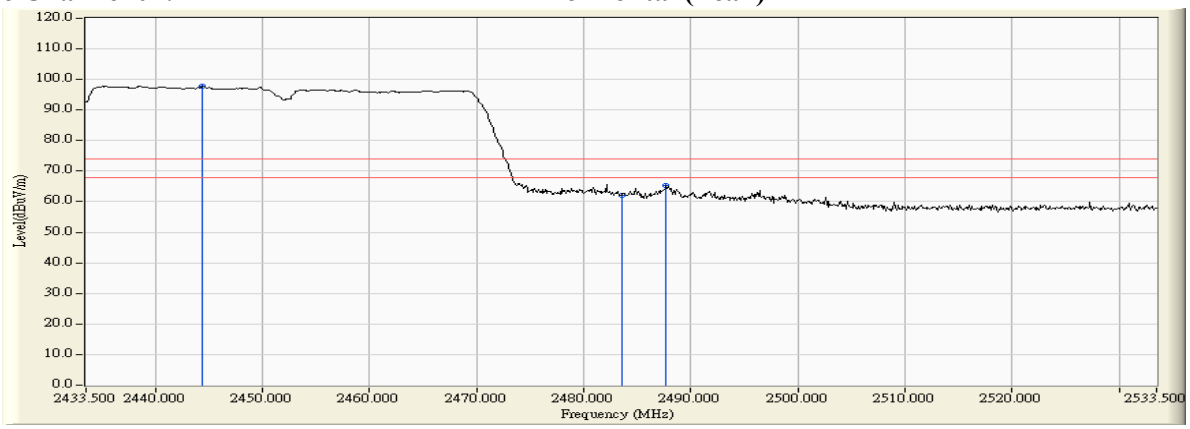
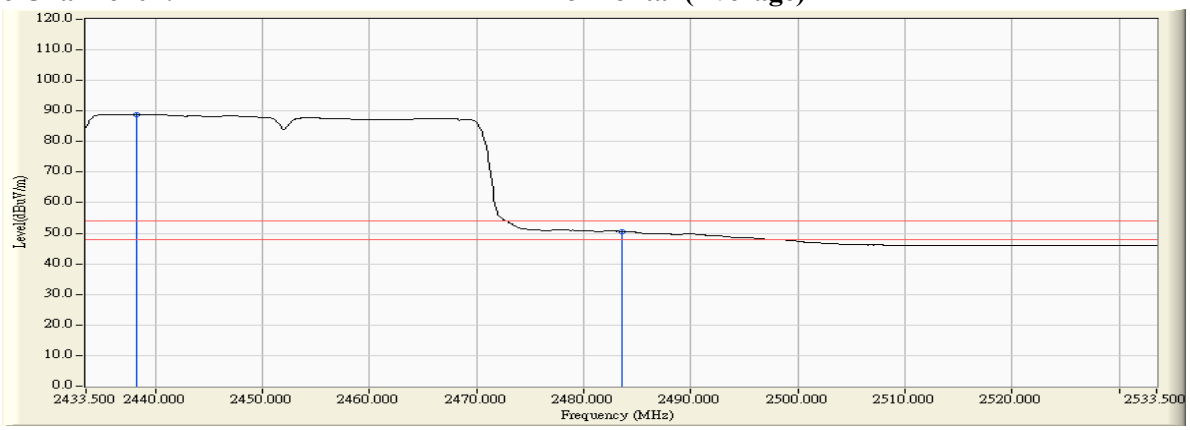


Figure Channel 07: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : TABLET PC
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2444.300	31.169	65.577	96.746	--	--	--
09 (Peak)	2483.500	31.435	30.590	62.025	74.00	54.00	Pass
09 (Peak)	2488.100	31.466	32.533	63.999	74.00	54.00	Pass
09 (Average)	2439.800	31.138	56.202	87.340	--	--	--
09 (Average)	2483.500	31.435	18.541	49.976	74.00	54.00	Pass

Figure Channel 07: Vertical (Peak)

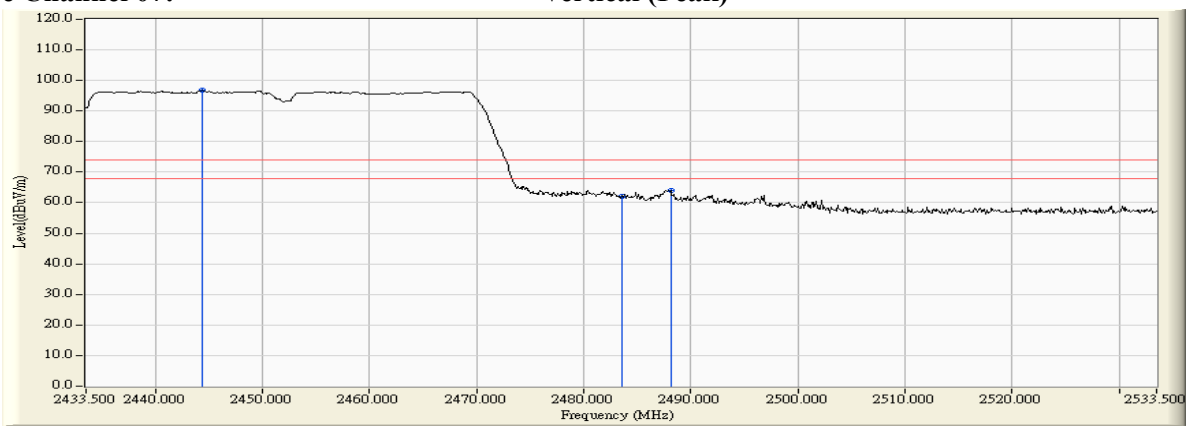
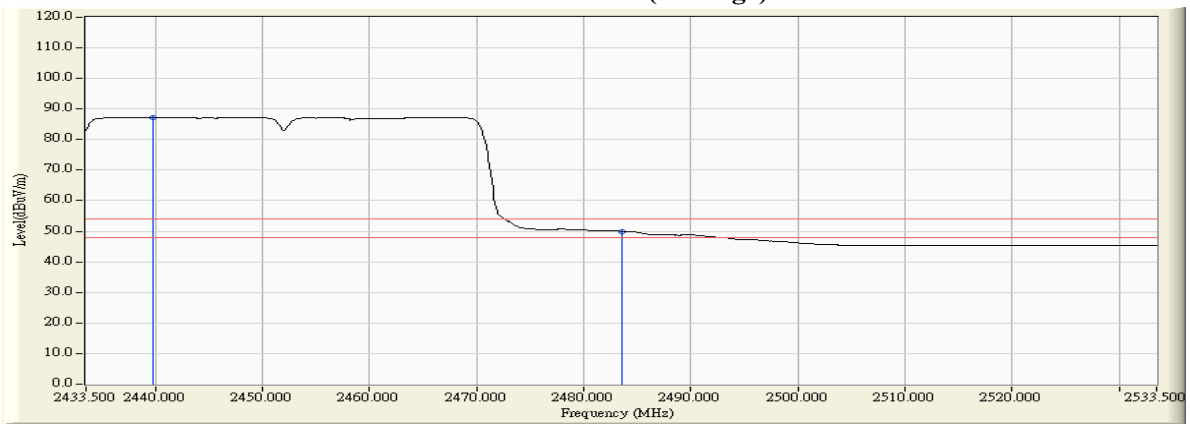


Figure Channel 07: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

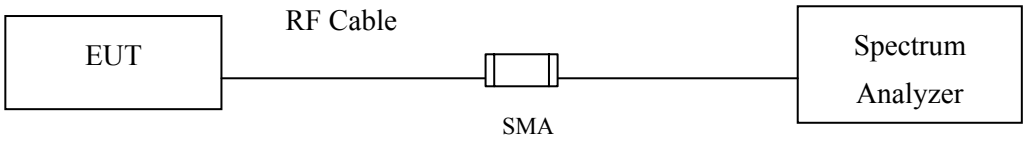
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009; tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 1-5% of the emission bandwidth, VBW≥3*RBW

7.5. Uncertainty

± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : TABLET PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	12150	>500	Pass
6	2437.00	12150	>500	Pass
11	2462.00	12150	>500	Pass

Figure Channel 1:

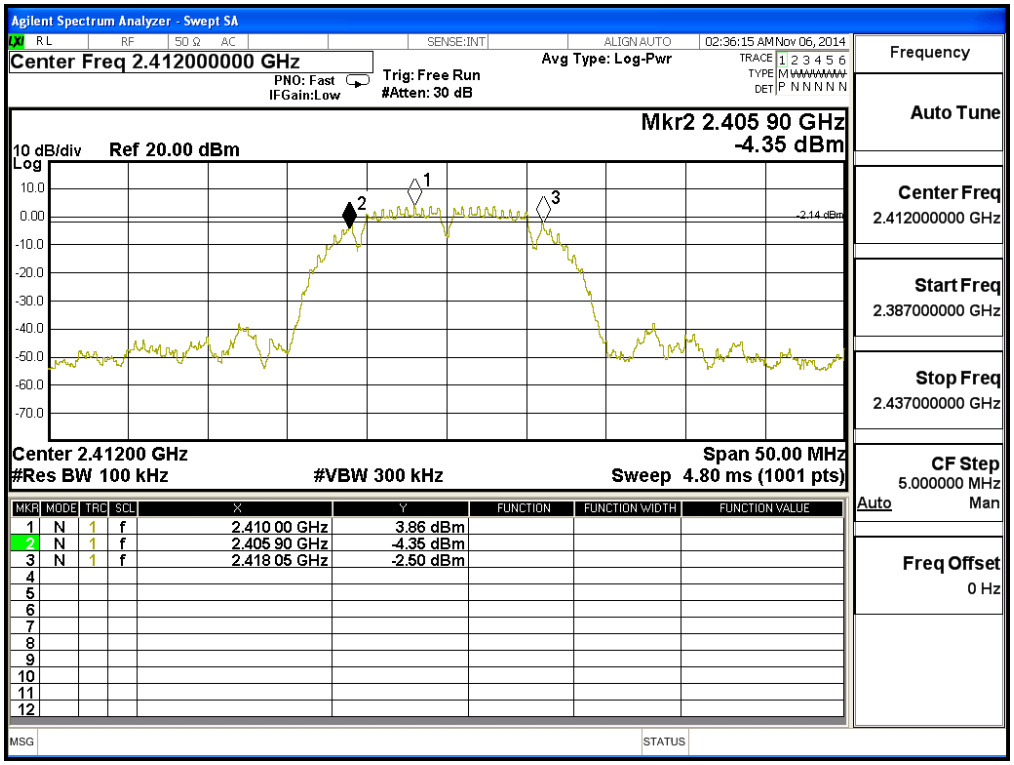


Figure Channel 6:

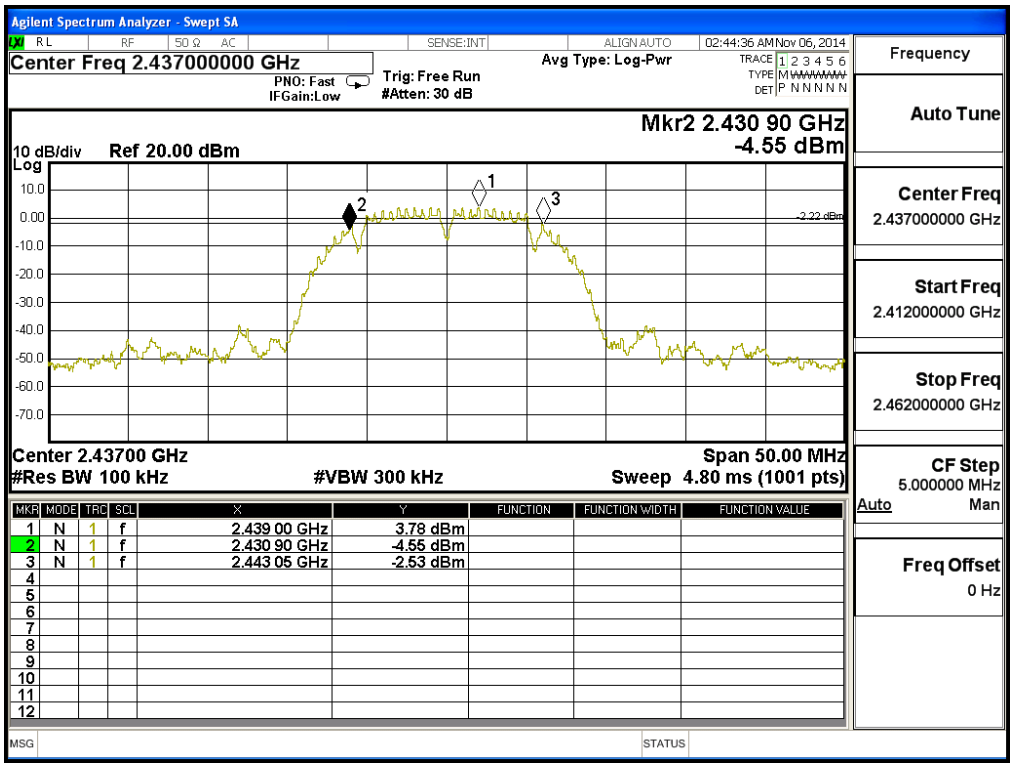
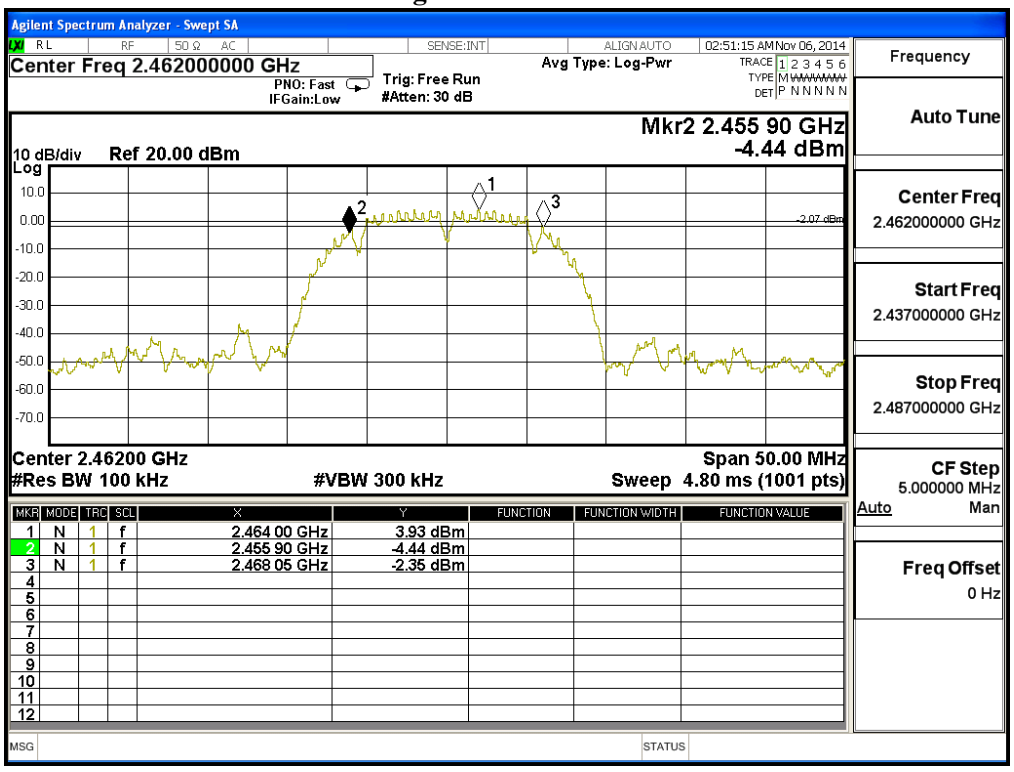


Figure Channel 11:



Product : TABLET PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16400	>500	Pass
6	2437.00	16400	>500	Pass
11	2462.00	16450	>500	Pass

Figure Channel 1:

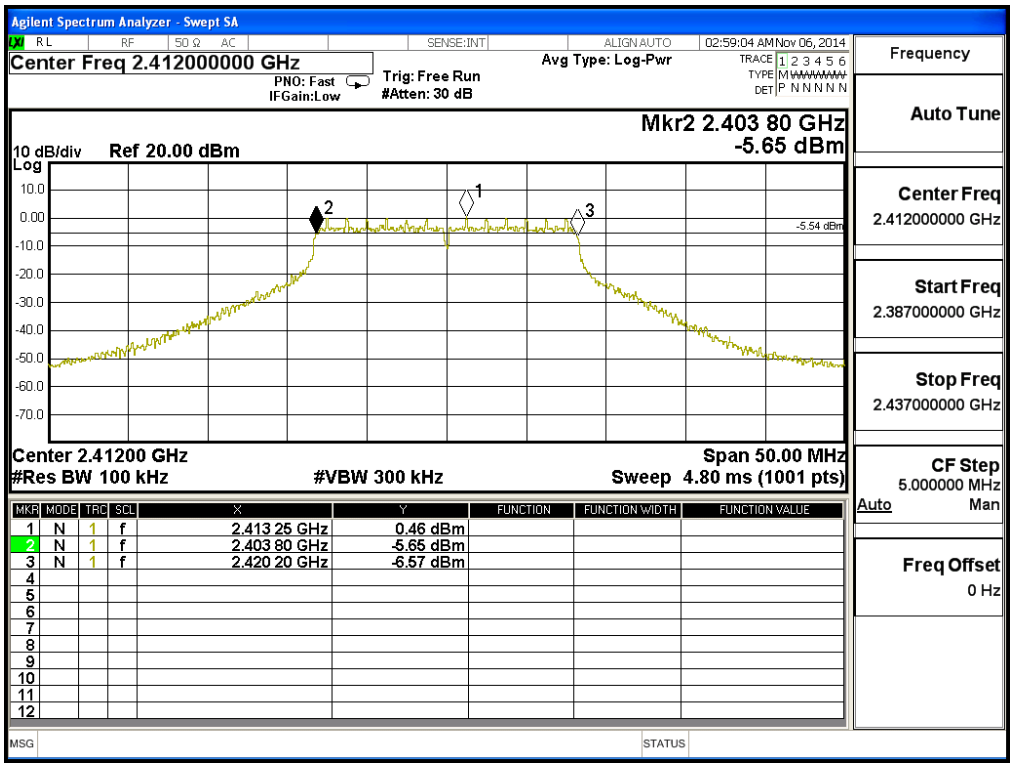


Figure Channel 6:

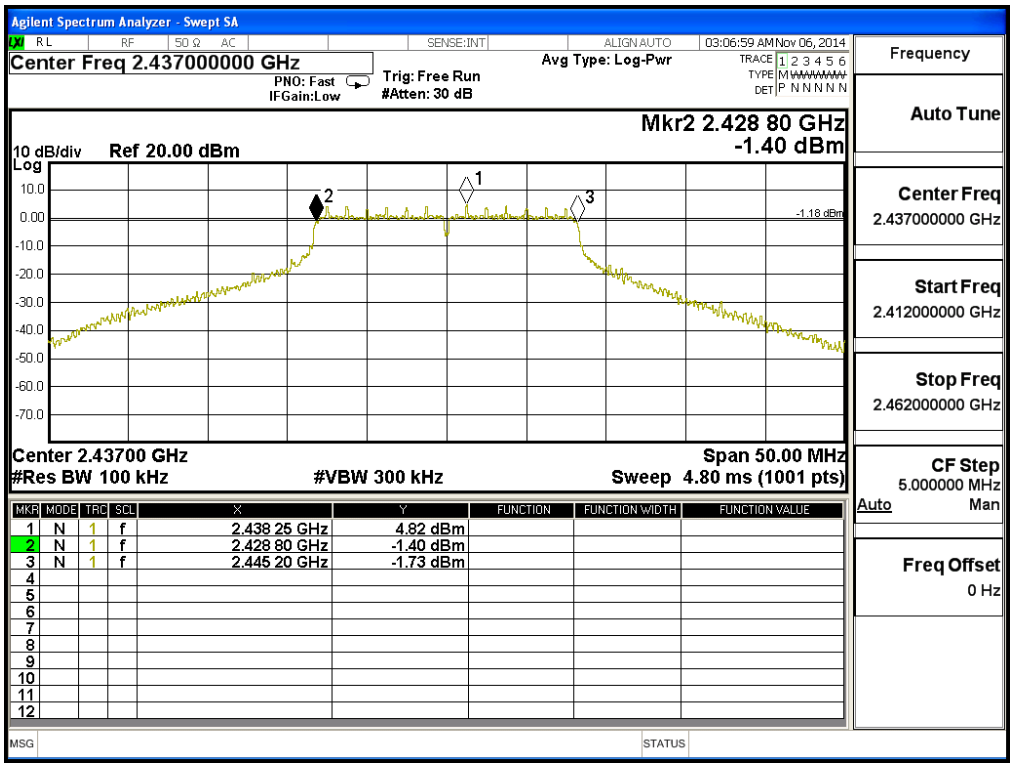
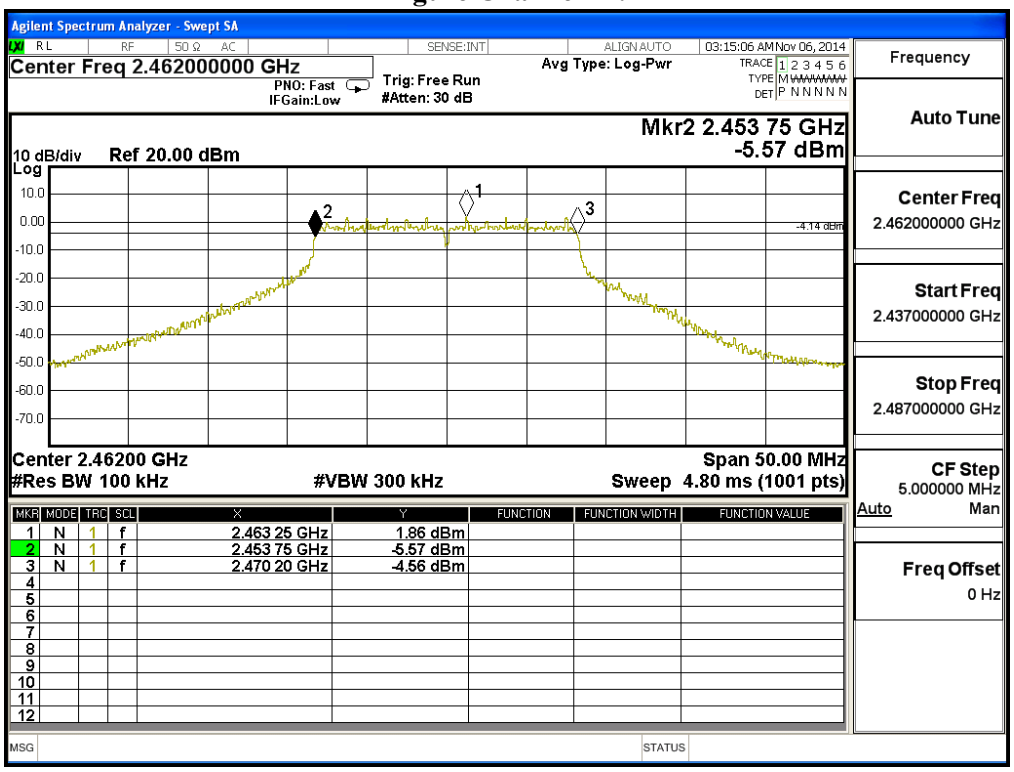


Figure Channel 11:



Product : TABLET PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17650	>500	Pass
6	2437.00	17700	>500	Pass
11	2462.00	17700	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17700	>500	Pass
6	2437.00	17750	>500	Pass
11	2462.00	17700	>500	Pass

Figure Channel 1: (Chain A)

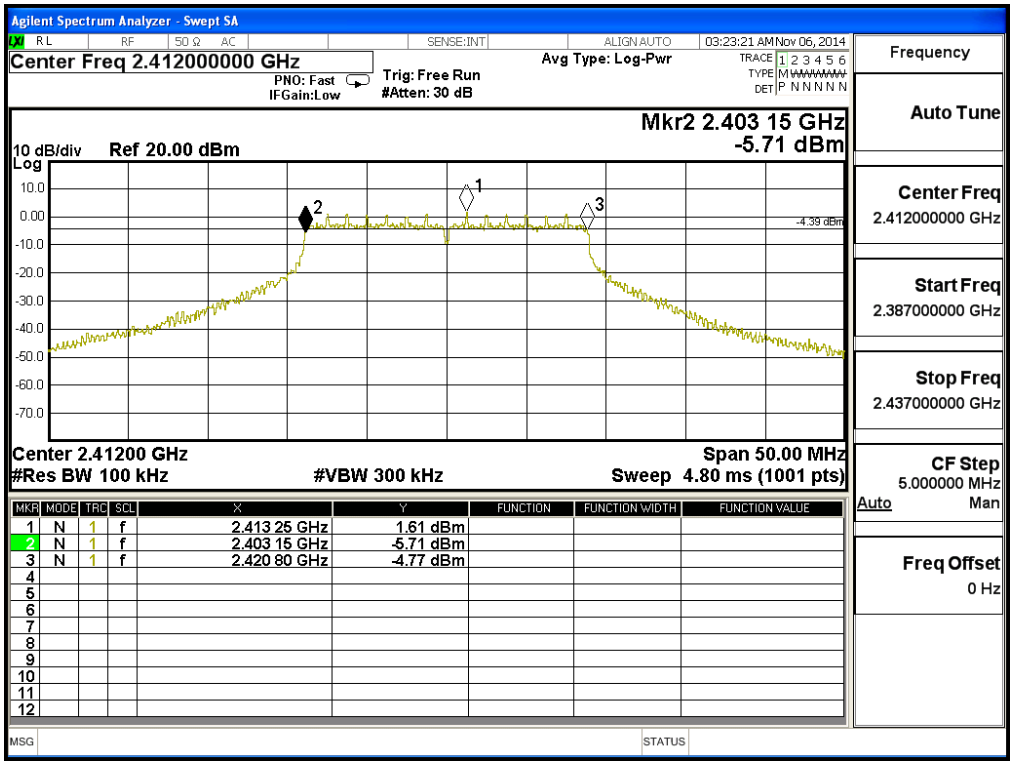


Figure Channel 1: (Chain B)

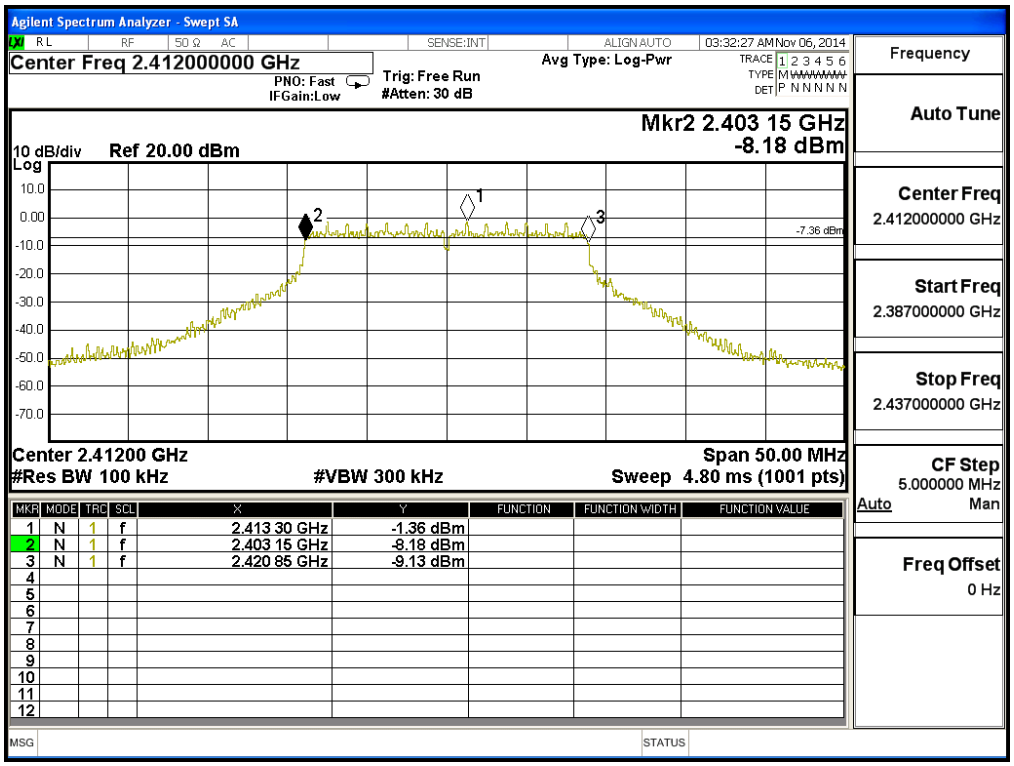


Figure Channel 6: (Chain A)

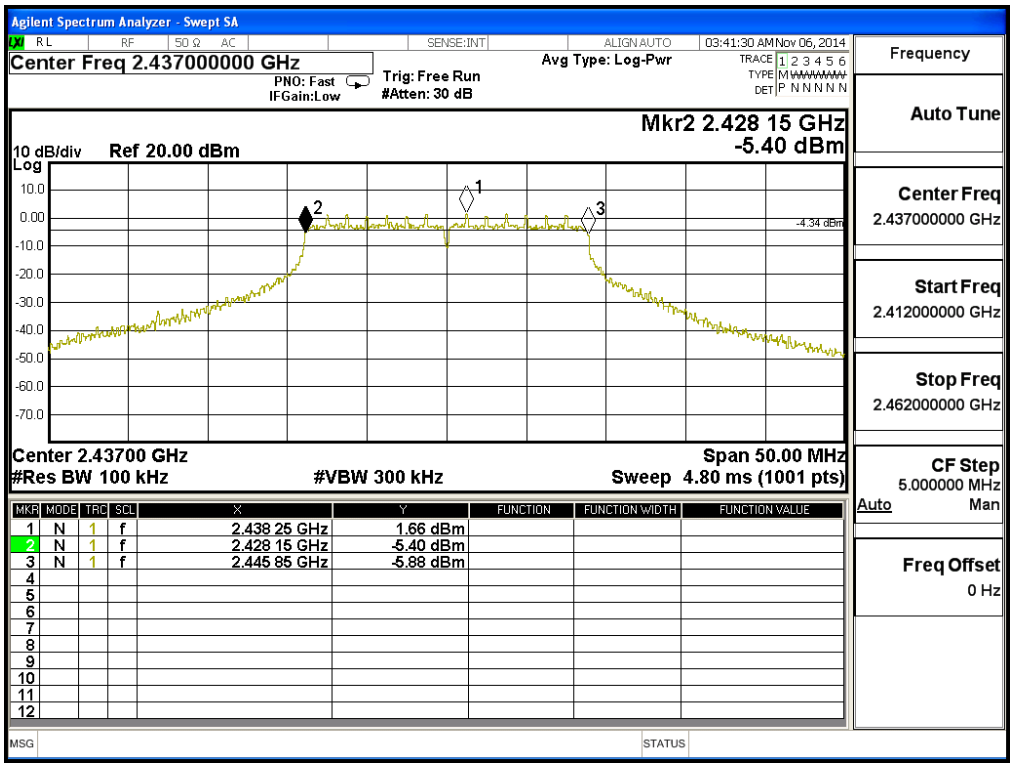


Figure Channel 6: (Chain B)

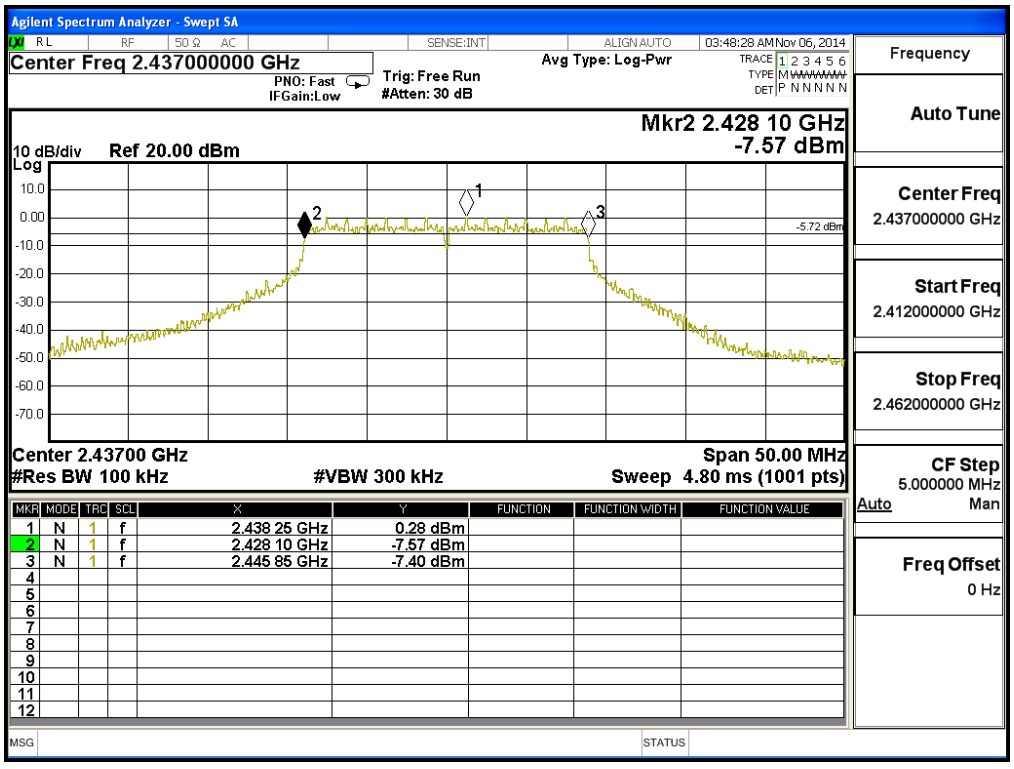


Figure Channel 11: (Chain A)

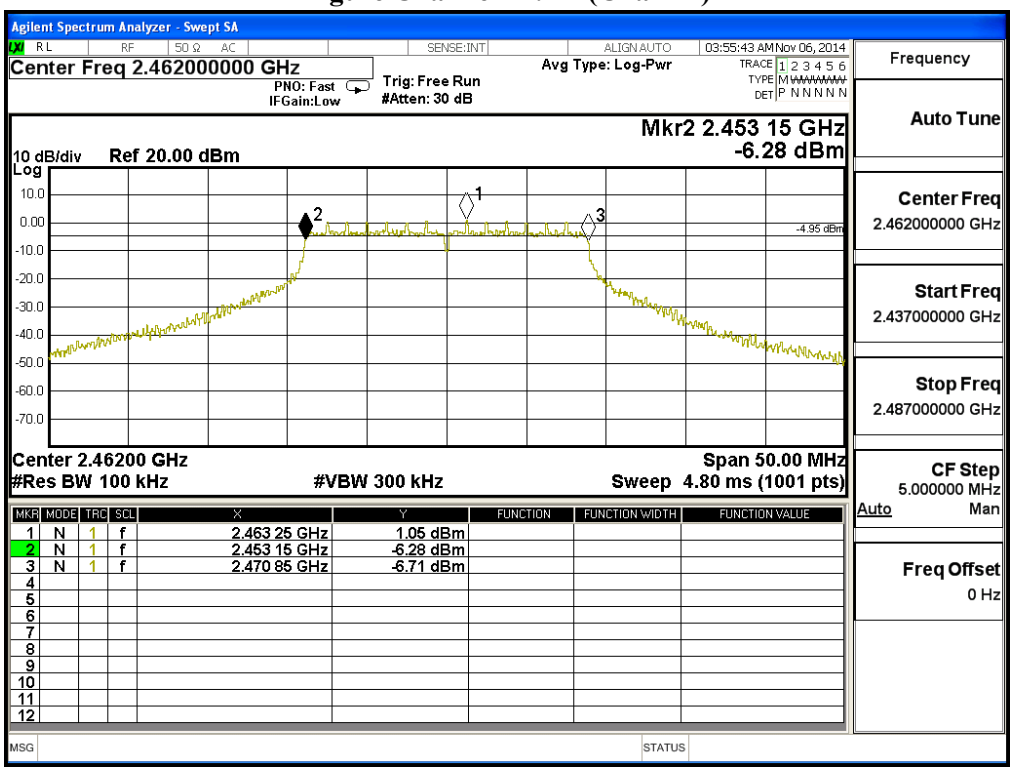
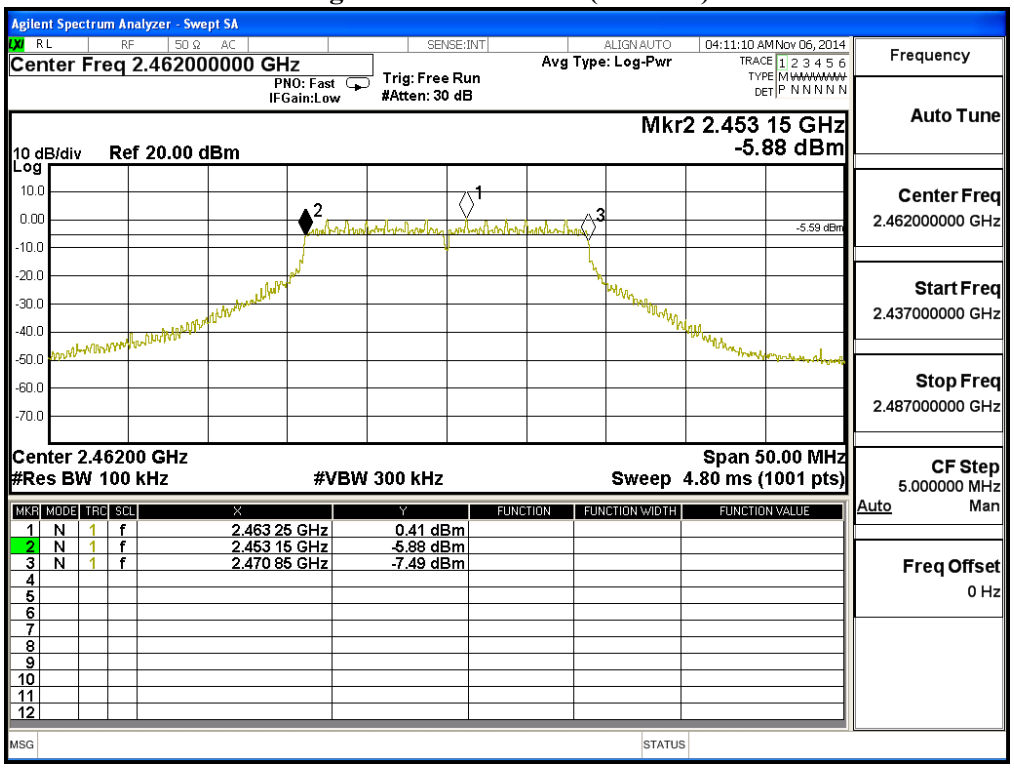


Figure Channel 11: (Chain B)



Product : TABLET PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
3	2422.00	35200	>500	Pass
6	2437.00	35300	>500	Pass
9	2452.00	35300	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
3	2422.00	35200	>500	Pass
6	2437.00	35300	>500	Pass
9	2452.00	35300	>500	Pass

Figure Channel 1: (Chain A)

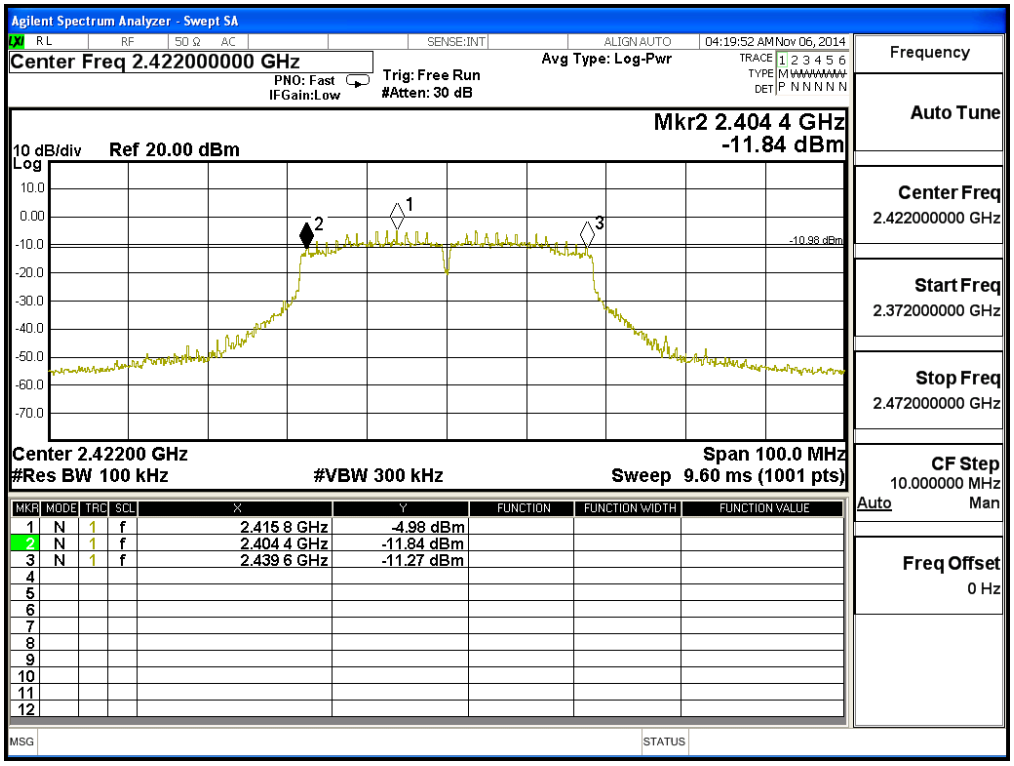


Figure Channel 1: (Chain B)

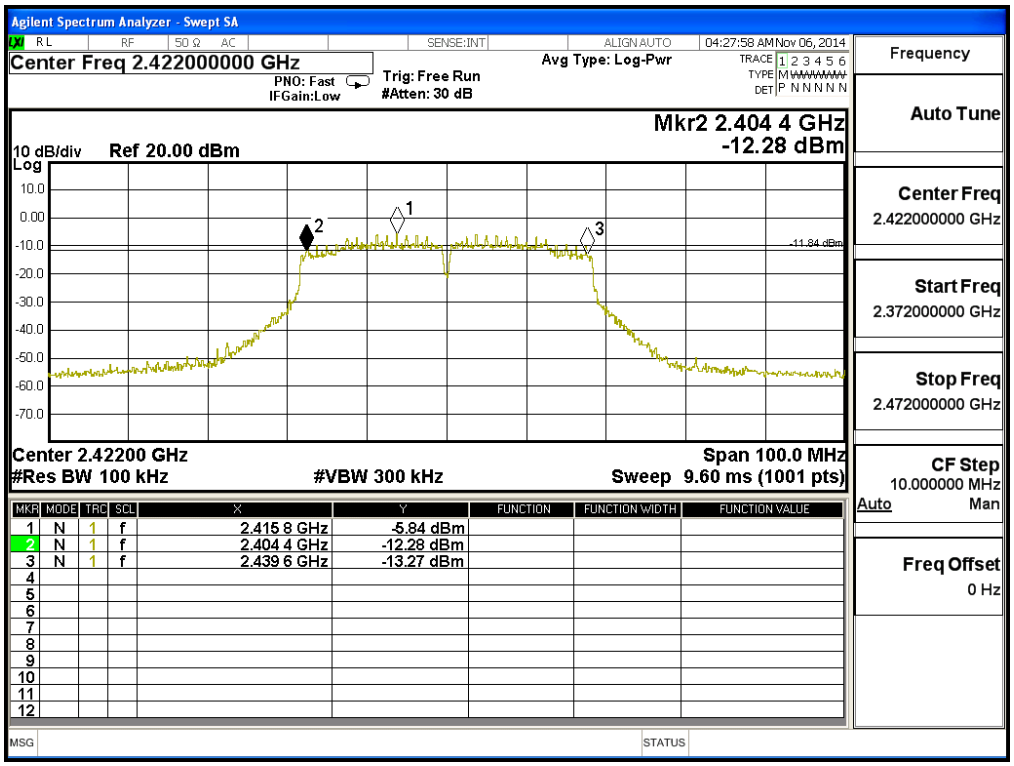


Figure Channel 4: (Chain A)

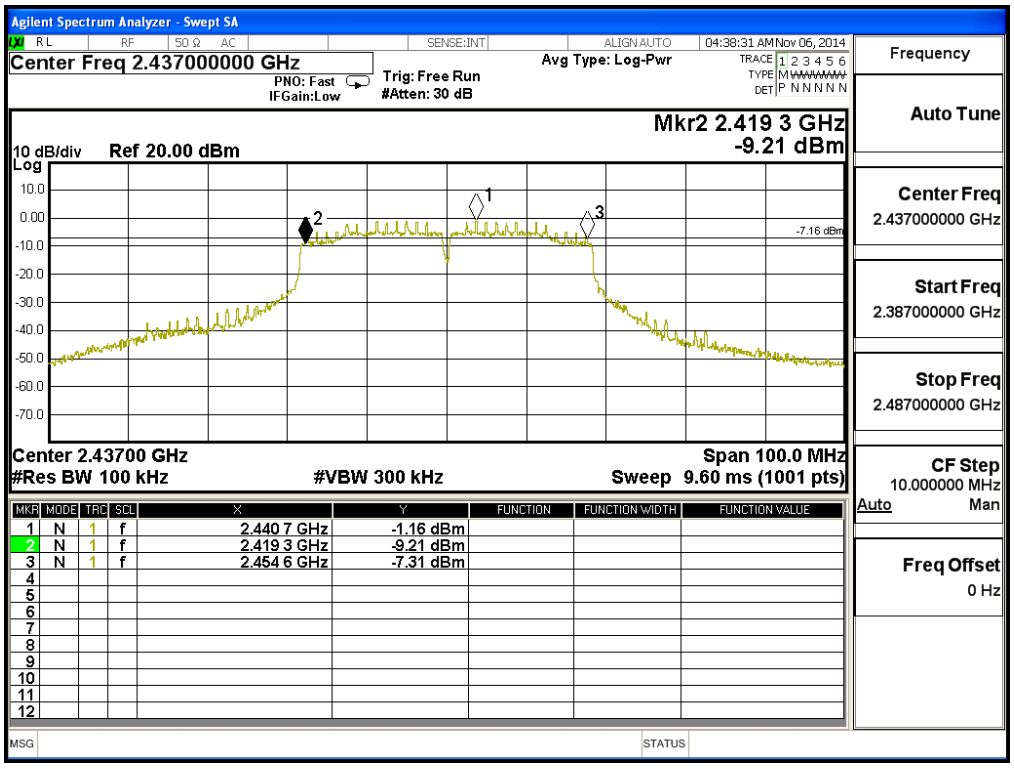


Figure Channel 4: (Chain B)

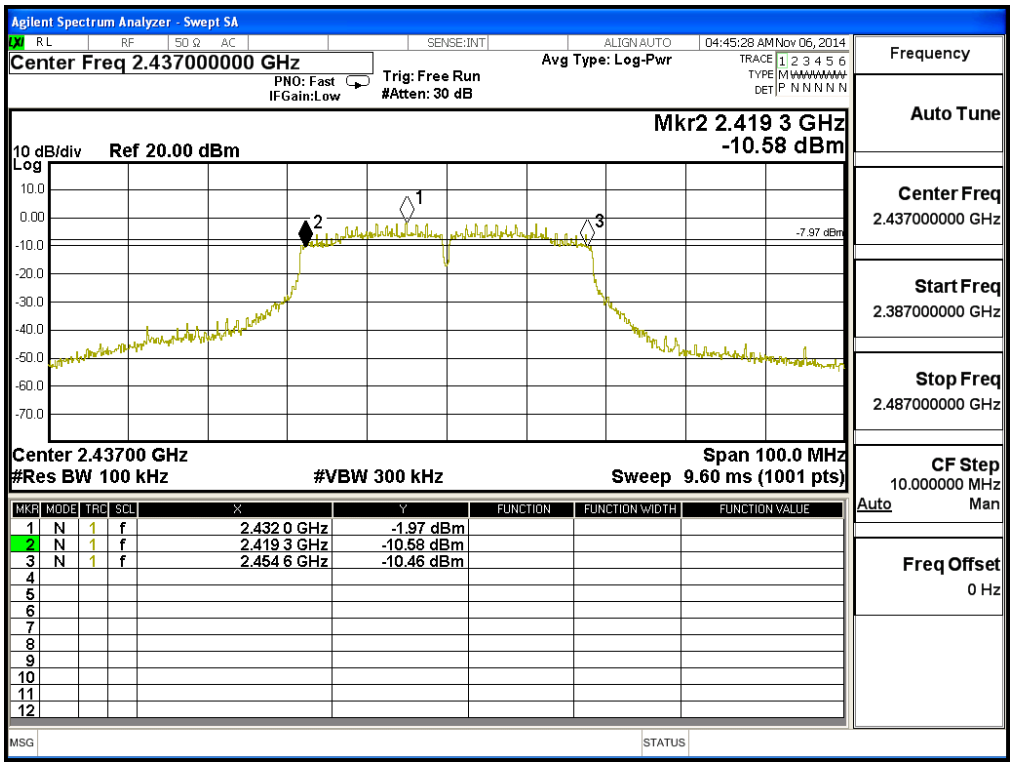


Figure Channel 7: (Chain A)

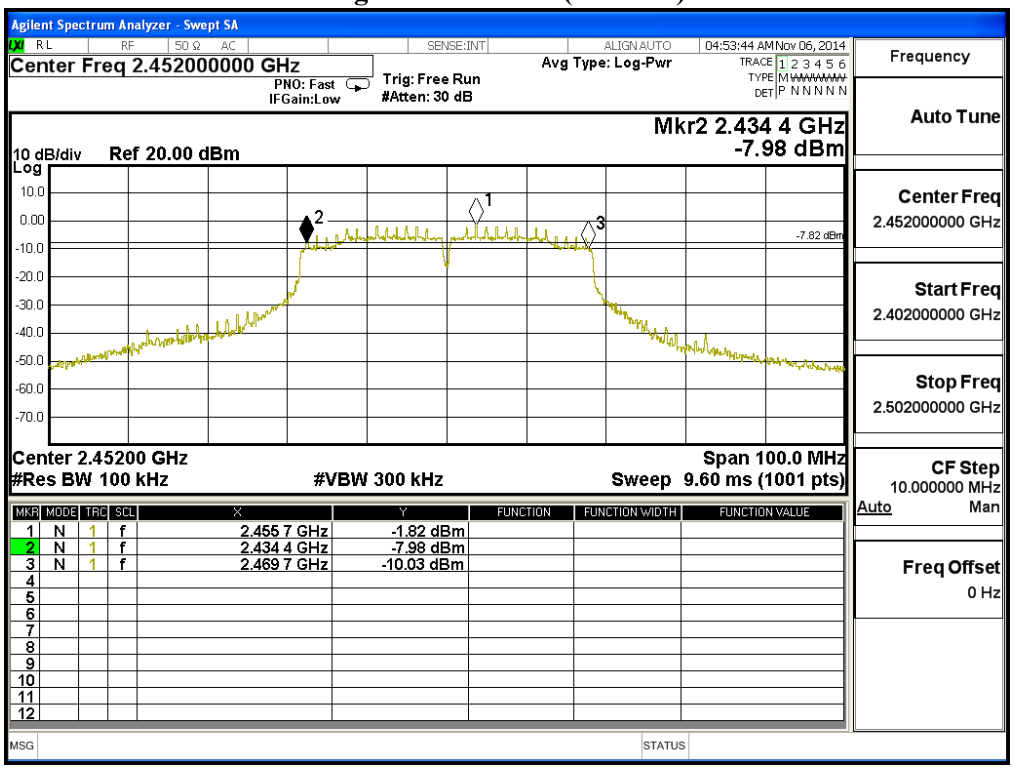
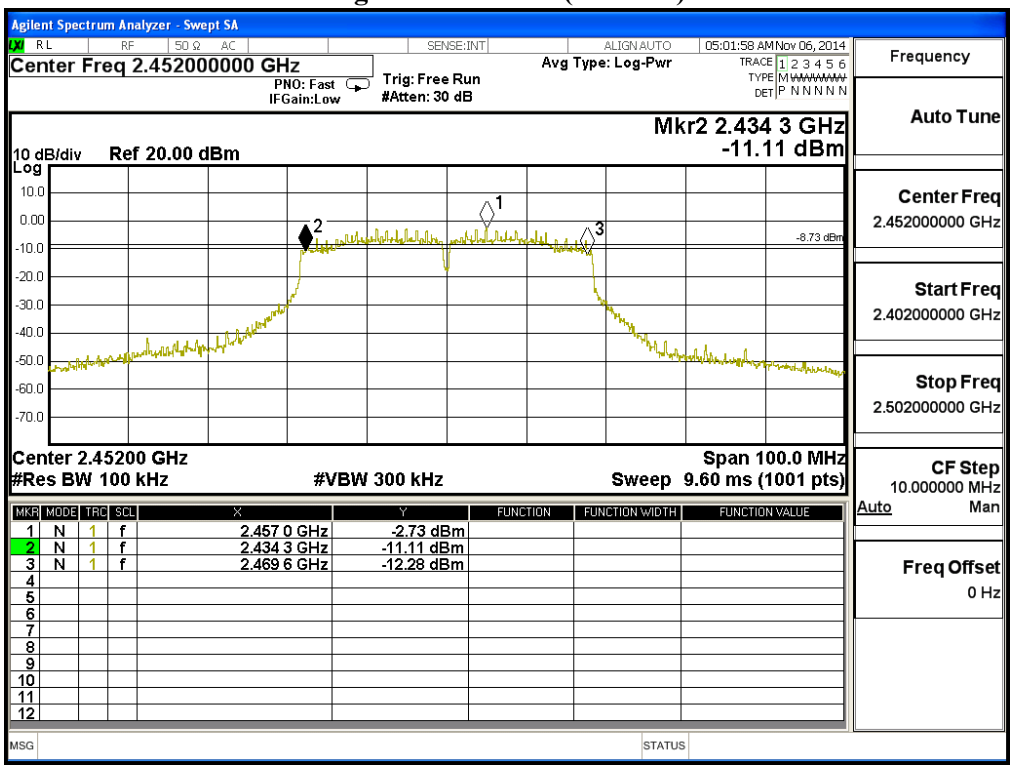


Figure Channel 7: (Chain B)



8. Power Density

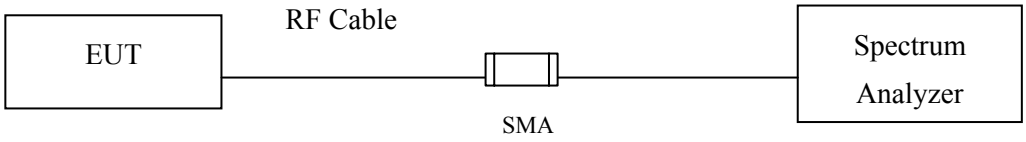
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

8.2. Test Setup



8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.5. Uncertainty

± 1.27 dB

8.6. Test Result of Power Density

Product : TABLET PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	3.530	< 8dBm	Pass
6	2437	3.560	< 8dBm	Pass
11	2462	3.850	< 8dBm	Pass

Figure Channel 1:

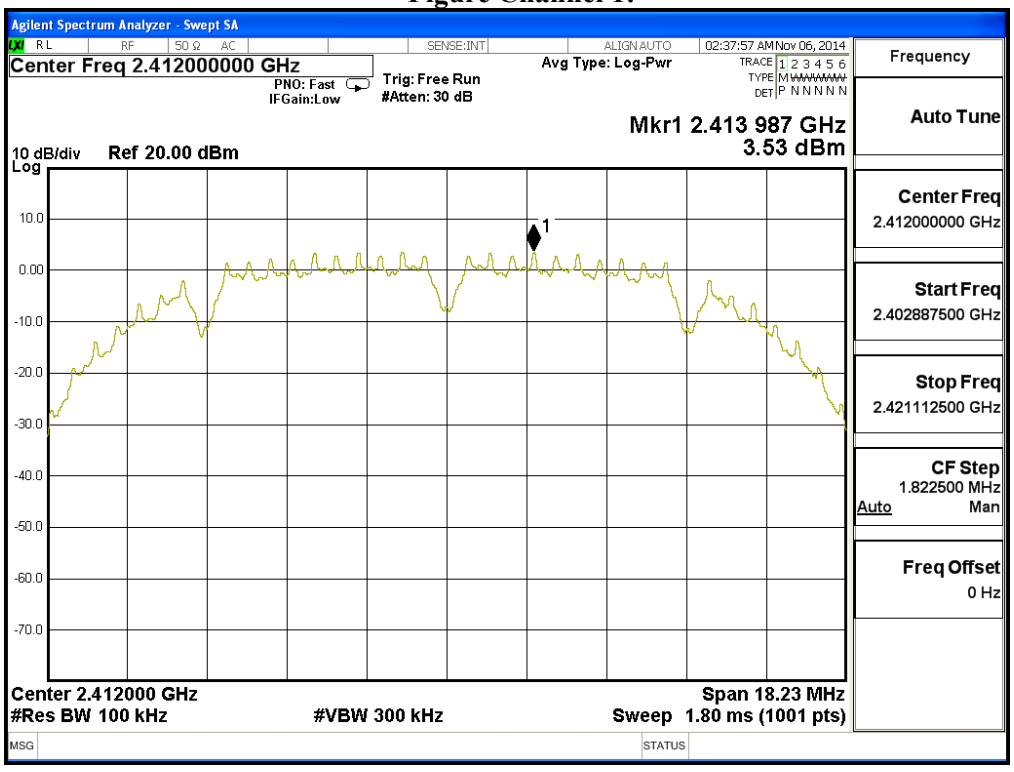


Figure Channel 6:

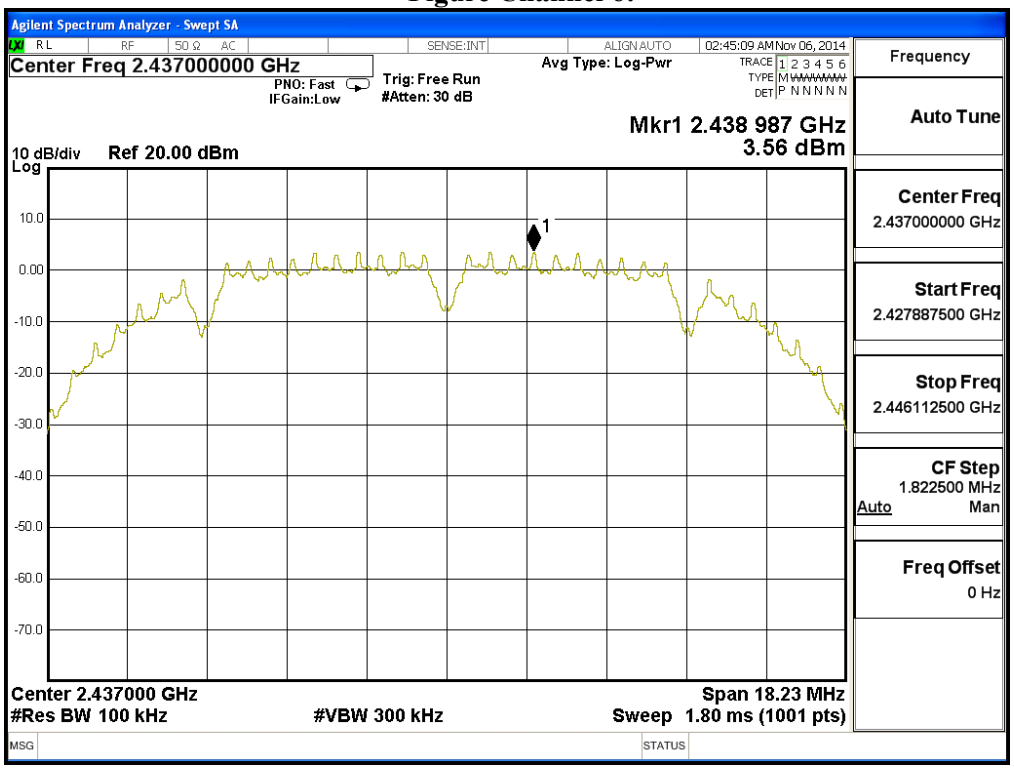
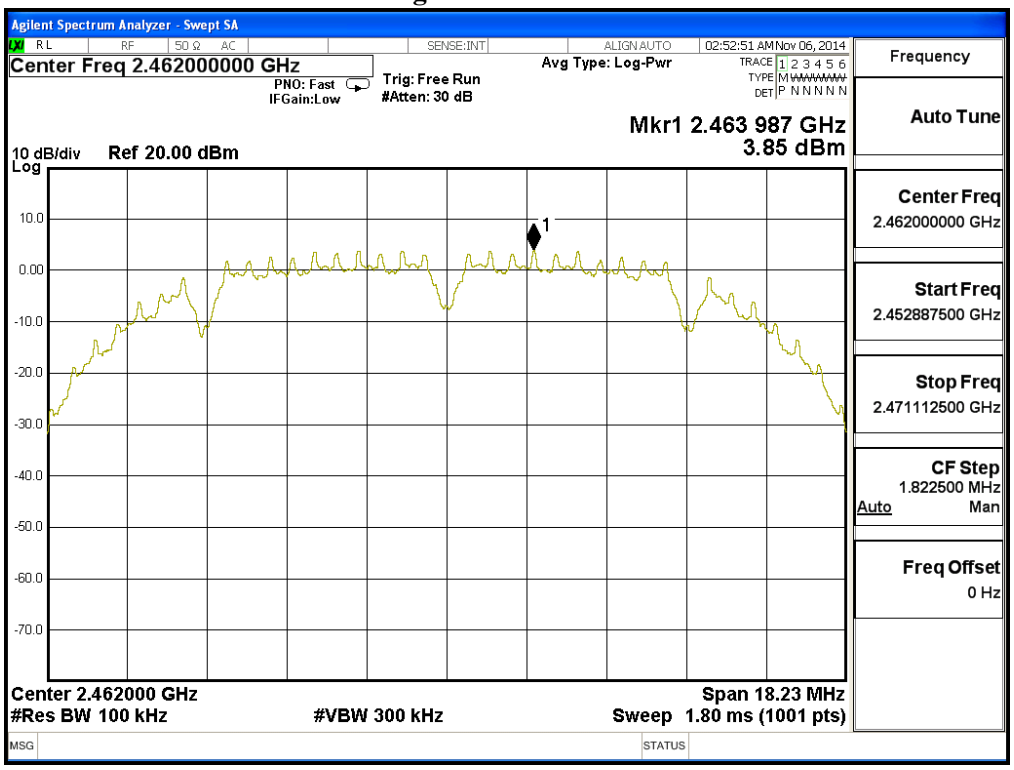


Figure Channel 11:



Product : TABLET PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	0.190	< 8dBm	Pass
6	2437	4.520	< 8dBm	Pass
11	2462	1.470	< 8dBm	Pass

Figure Channel 1:

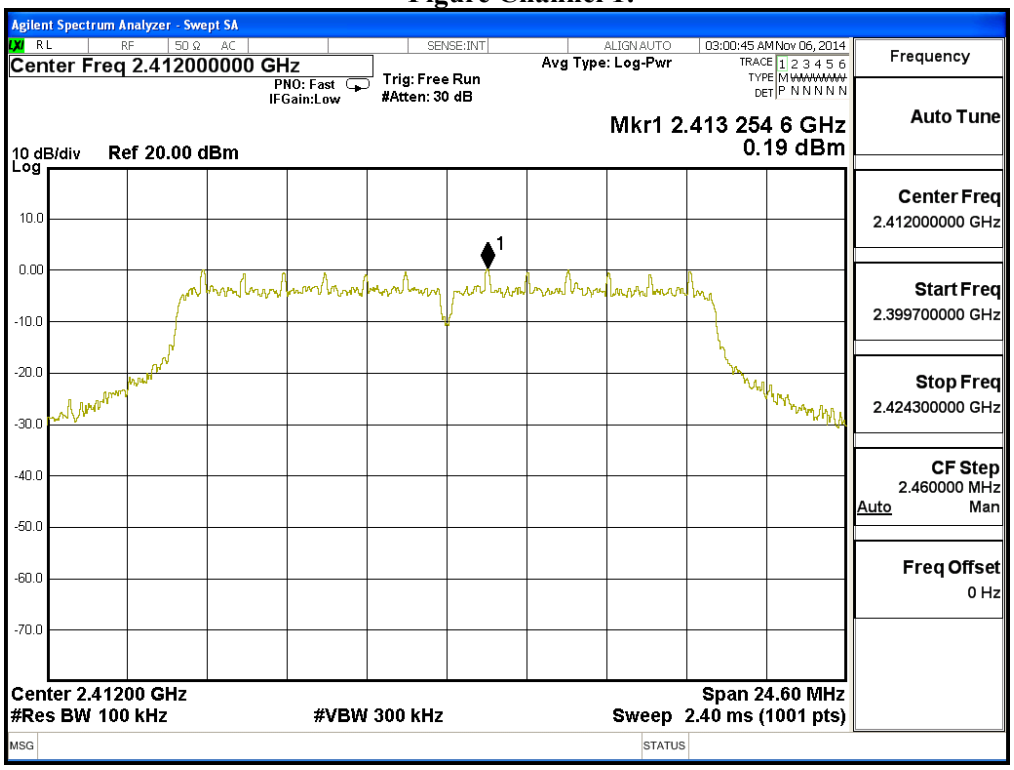


Figure Channel 6:

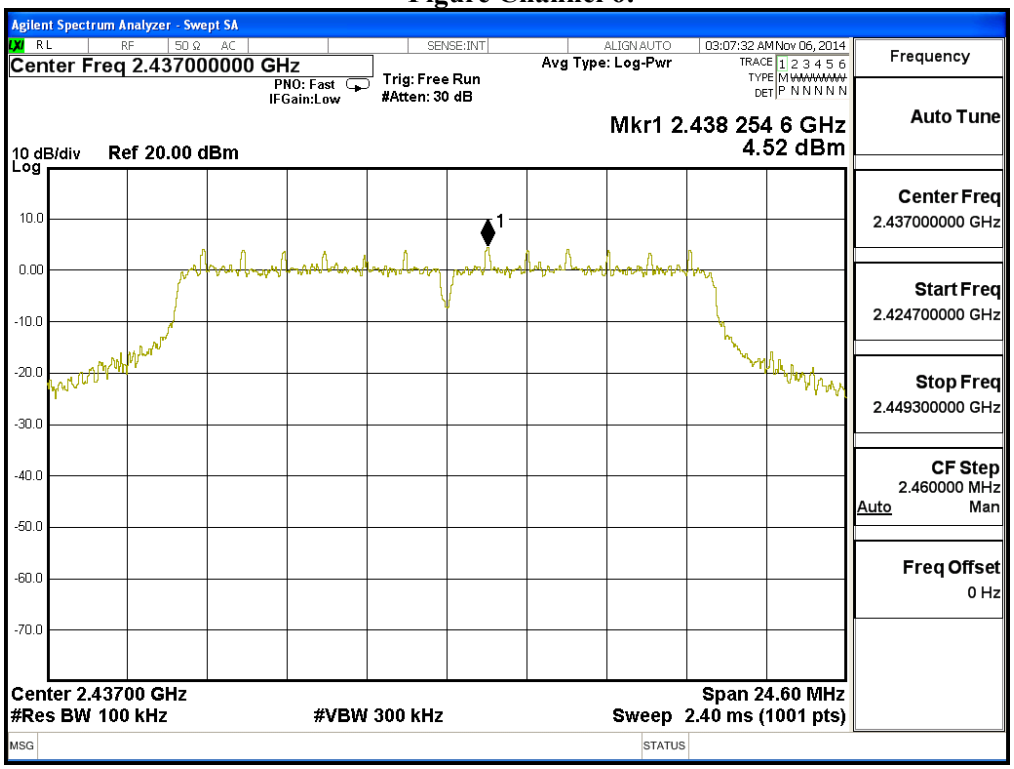
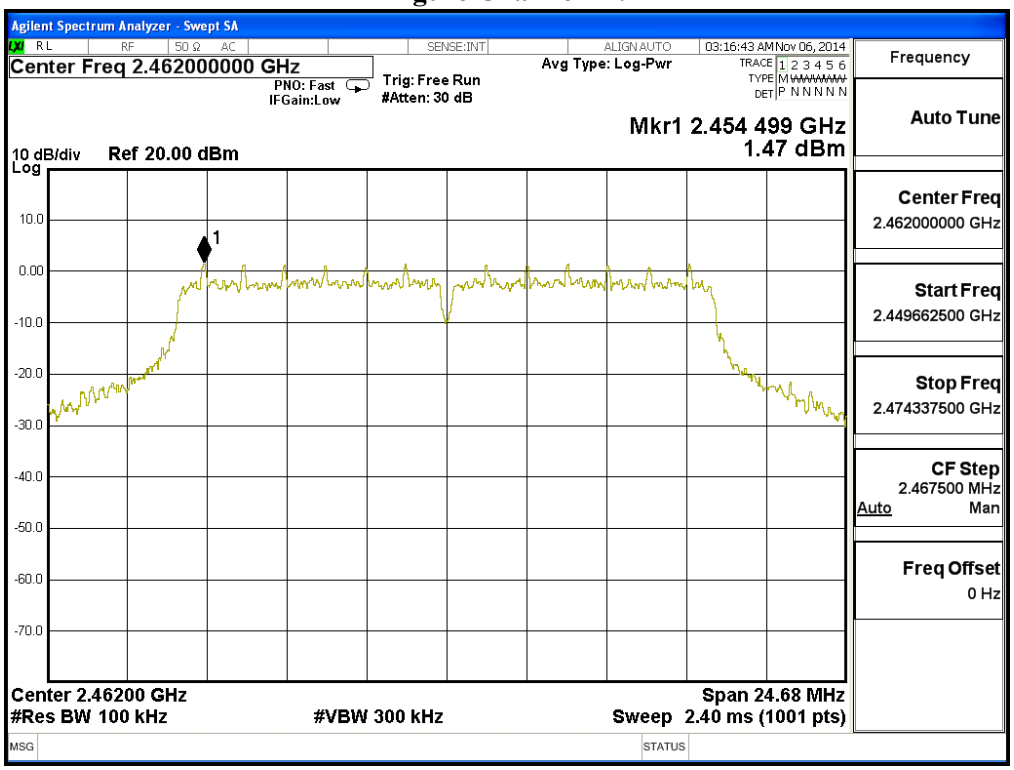


Figure Channel 11:



Product : TABLET PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
1	2412	A	0.610	3.620	< 8dBm	Pass
		B	-1.800	1.210	< 8dBm	Pass
6	2437	A	1.320	4.330	< 8dBm	Pass
		B	0.290	3.300	< 8dBm	Pass
11	2462	A	1.260	4.270	< 8dBm	Pass
		B	0.500	3.520	< 8dBm	Pass

Note : The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 1: (Chain A)

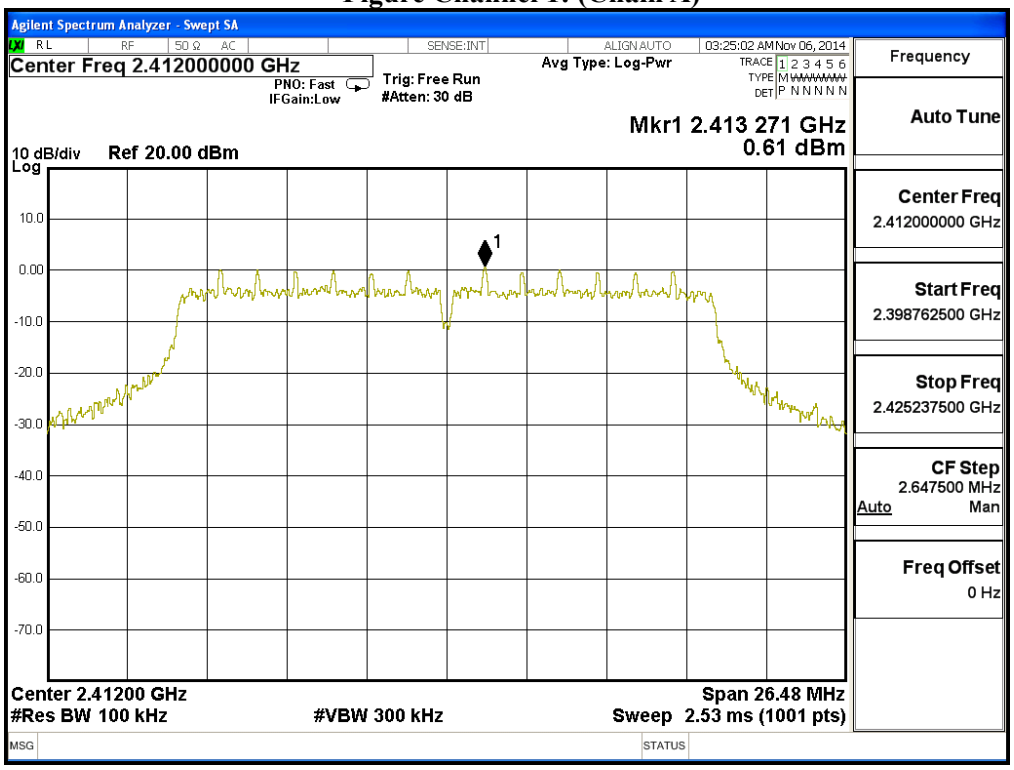


Figure Channel 1: (Chain B)

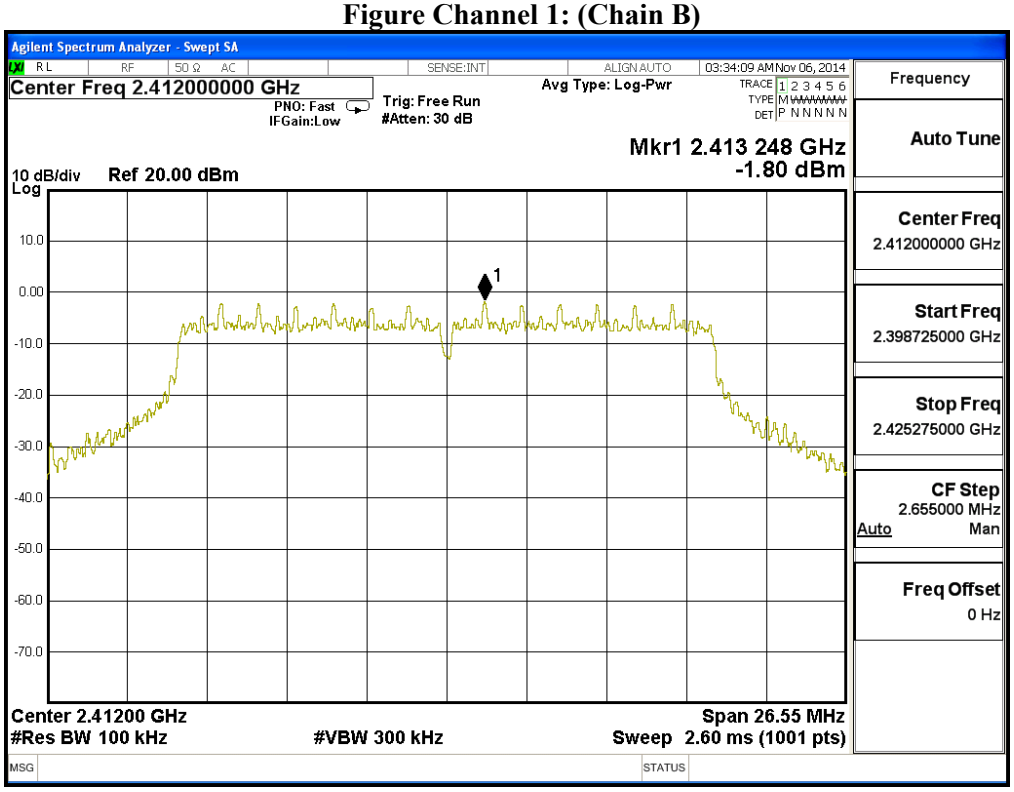


Figure Channel 6: (Chain A)

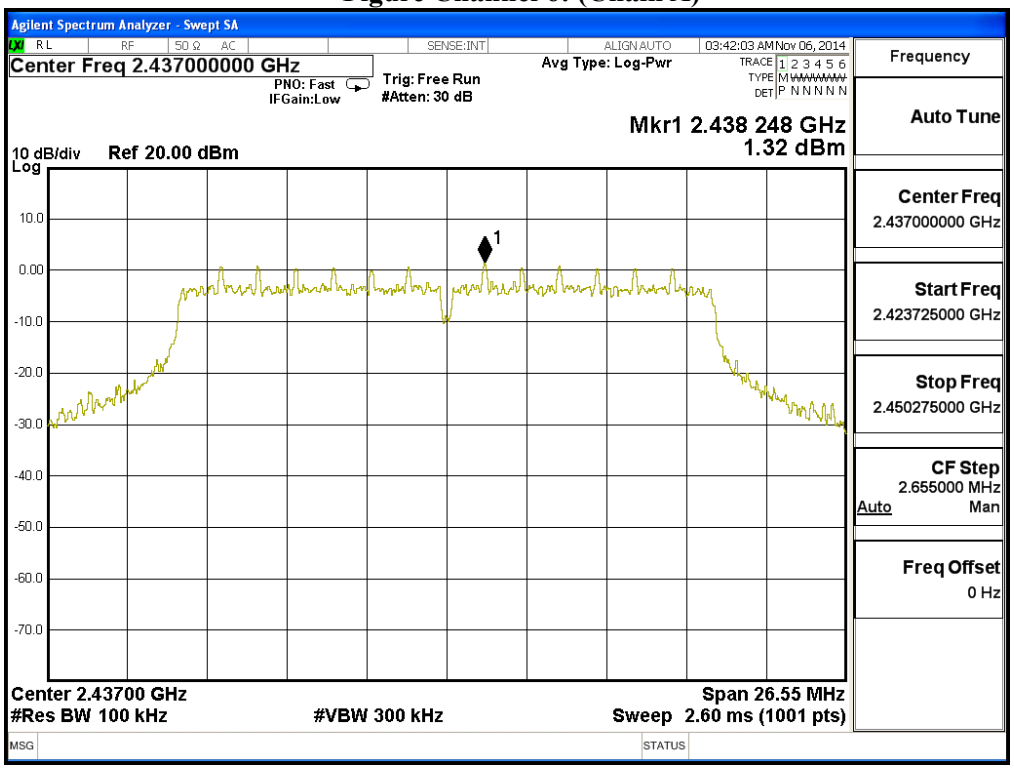


Figure Channel 6: (Chain B)

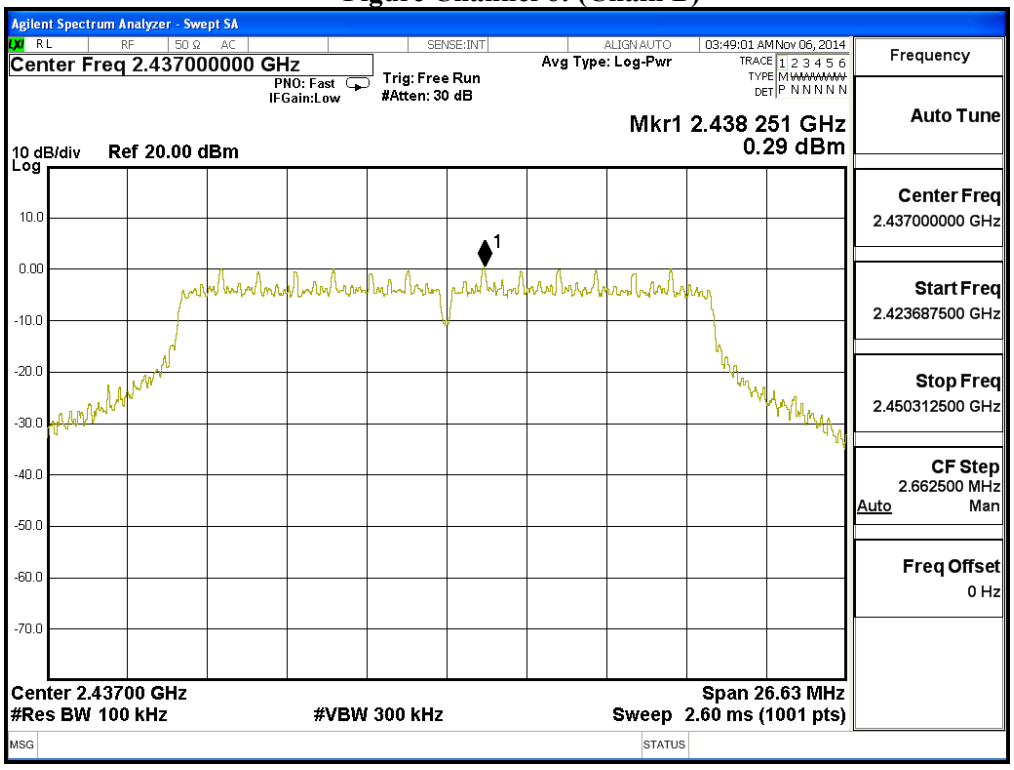


Figure Channel 11: (Chain A)

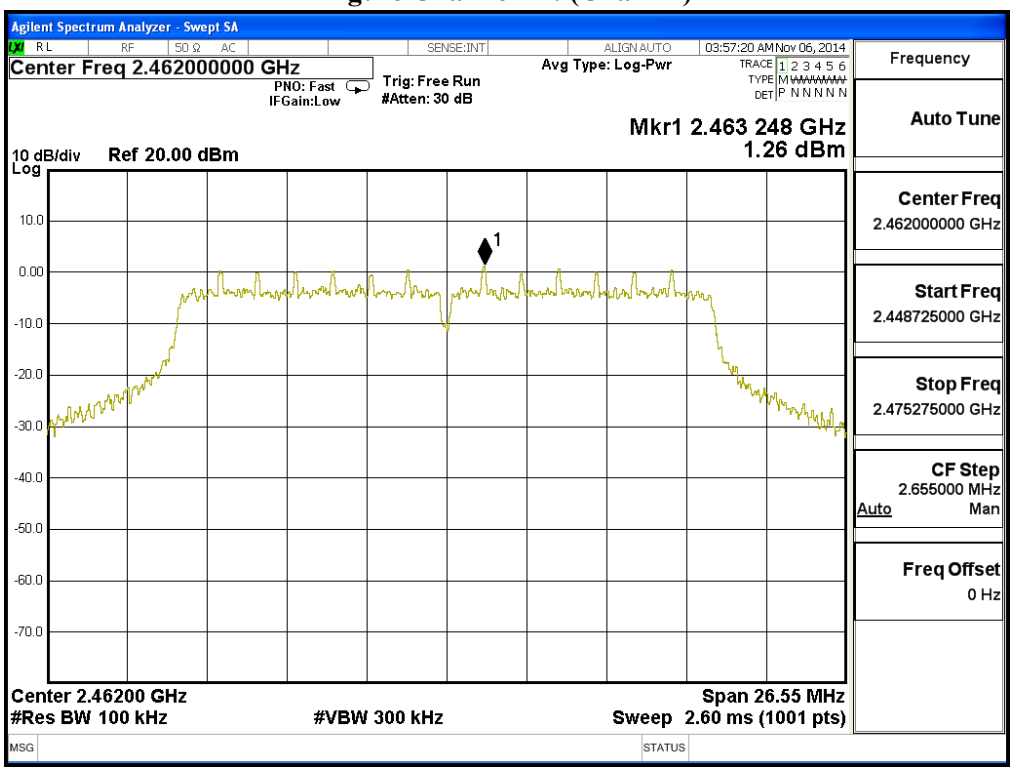
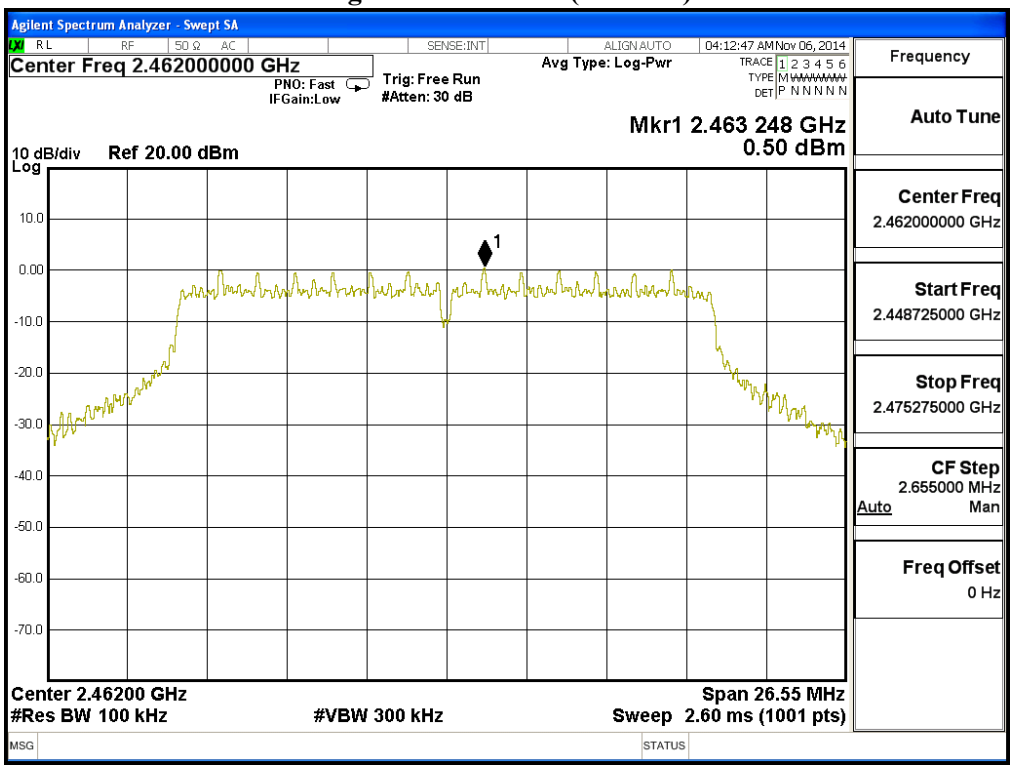


Figure Channel 11: (Chain B)



Product : TABLET PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz)

Channel No.	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
3	2422	A	-5.600	-2.590	< 8dBm	Pass
		B	-5.810	-2.800	< 8dBm	Pass
6	2437	A	-1.620	1.390	< 8dBm	Pass
		B	-2.120	0.890	< 8dBm	Pass
9	2452	A	-2.600	0.410	< 8dBm	Pass
		B	-2.130	0.880	< 8dBm	Pass

Note : The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 3: (Chain A)

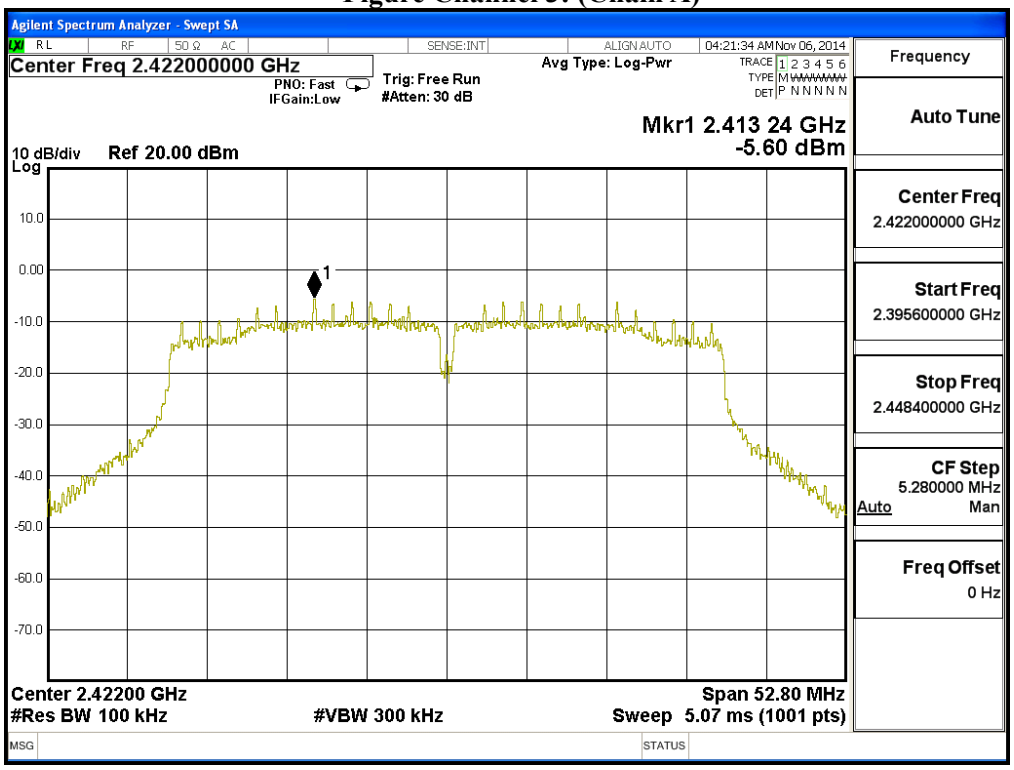


Figure Channel 3: (Chain B)

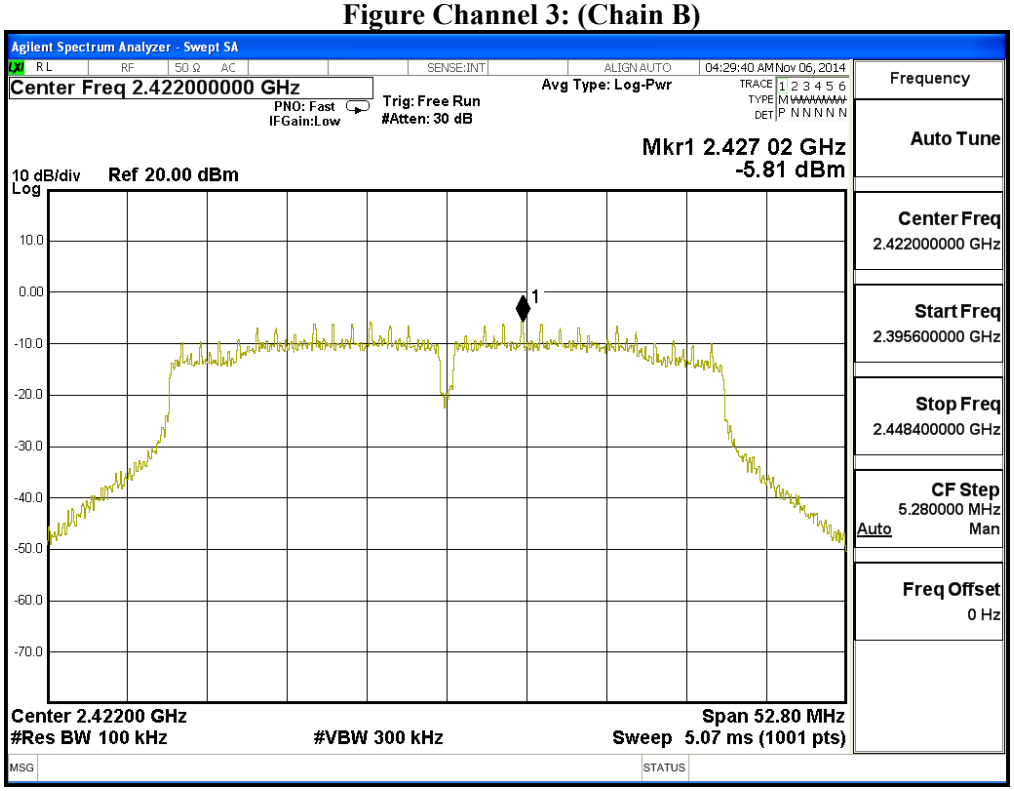


Figure Channel 6: (Chain A)

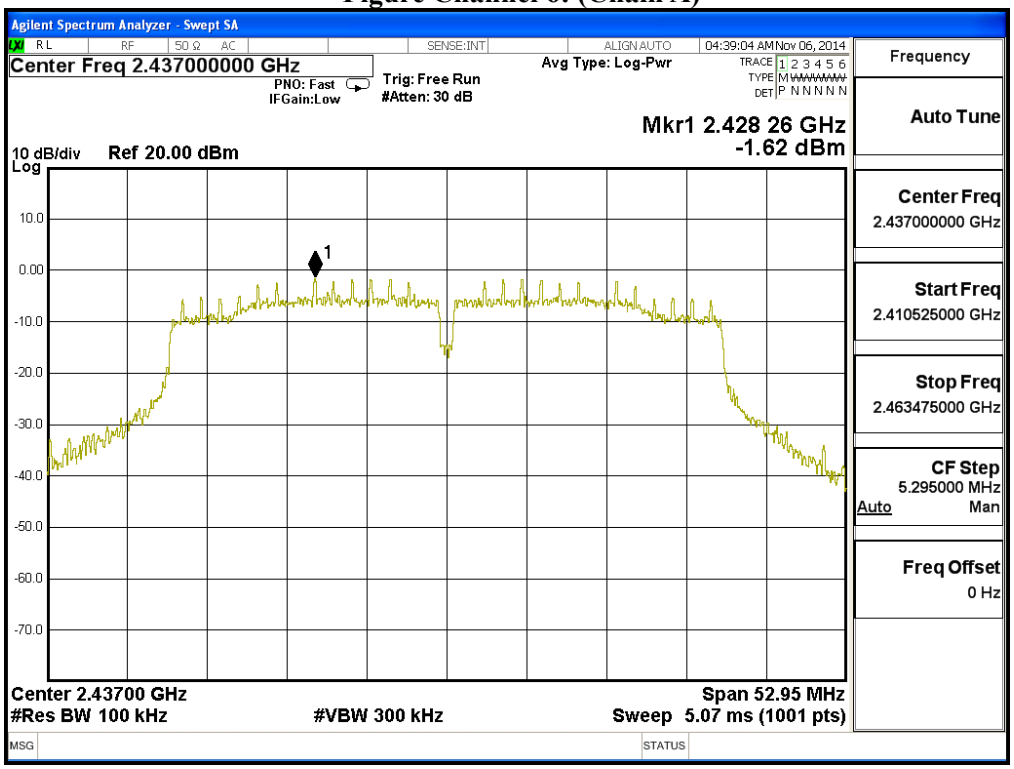


Figure Channel 6: (Chain B)

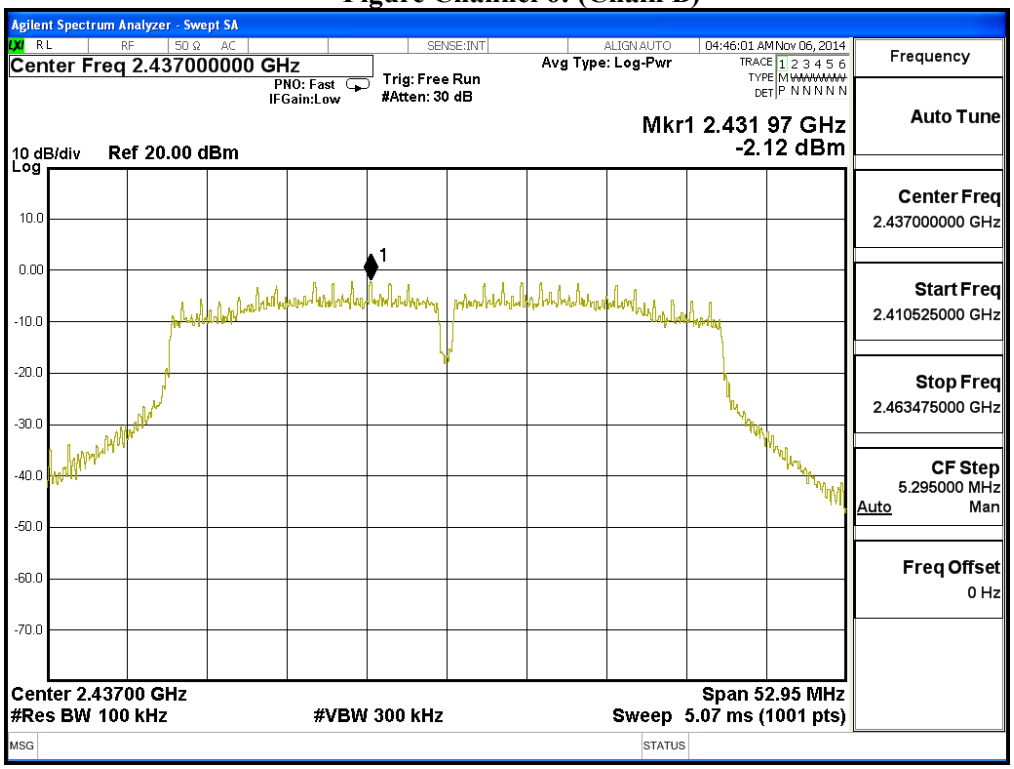


Figure Channel 9: (Chain A)

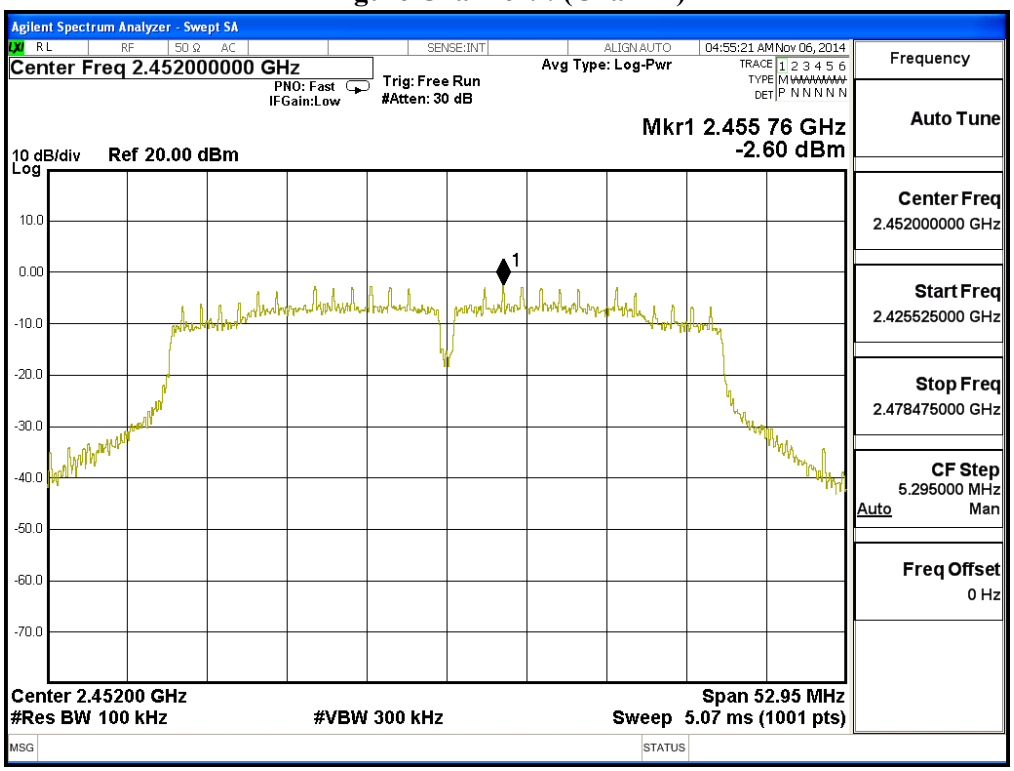
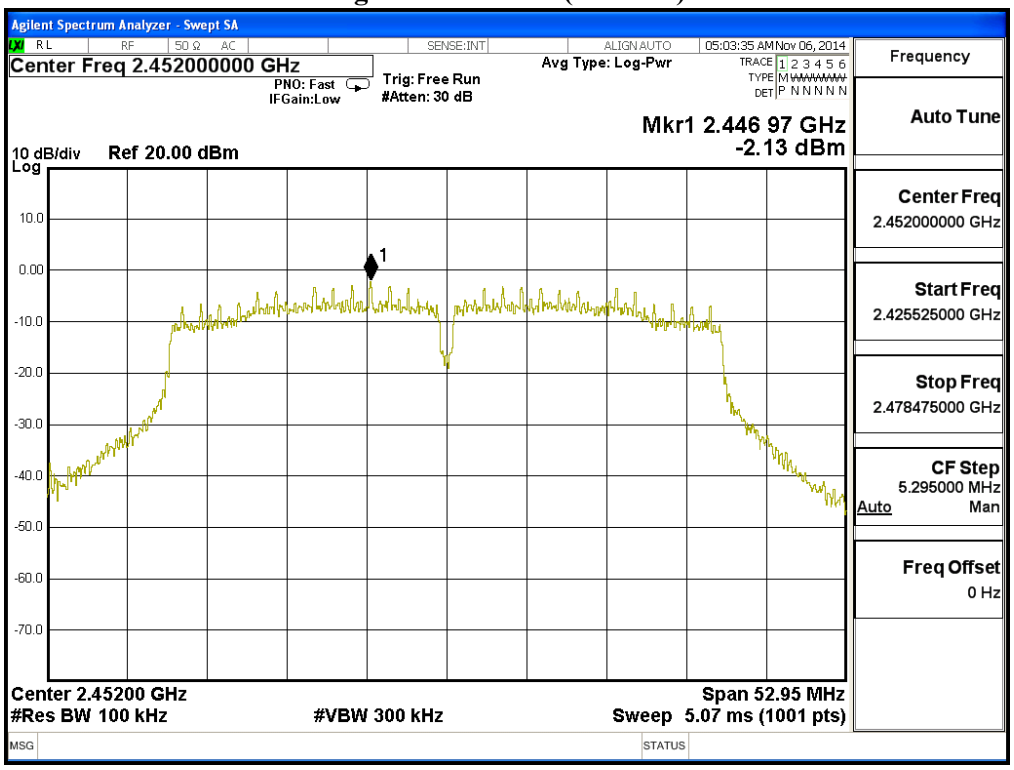


Figure Channel 9: (Chain B)



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs