FCC RF Test Report

APPLICANT	:	Askey Computer Corp.
EQUIPMENT	:	Multi - Sensor Camera
BRAND NAME	:	Askey
MODEL NAME	:	QB-MSC-FXL
FCC ID	:	H8N-QBMSCFXL
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System

The product was received on Dec. 11, 2015 and testing was completed on Jan. 22, 2016. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR5D1117A	Rev. 01	Initial issue of report	Mar. 01, 2016
FR5D1117A	Rev. 02	Updating the applicable standard	Mar. 02, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass	-
3.1	-	99% Bandwidth	-	Pass	-
3.2	15.247(b)	Power Output Measurement	≤ 30dBm	Pass	-
3.3	15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
3.4	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass	-
		Conducted Spurious Emission		Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.00 dB at 2483.52 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 22.00 dB at 0.326 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Askey Computer Corp.
10F, No. 119, Jiankang RD., Zhonghe Dist., New Taipei City 23585, Taiwan, R.O.C.

1.2 Manufacturer

Askey Technology (Jiangsu) Corporation
No. 1388, JiaoTong Road
Wujiang Economic-Technological Development Area
Wujiang, 215200
China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Multi - Sensor Camera
Brand Name	Askey
Model Name	QB-MSC-FXL
FCC ID	H8N-QBMSCFXL
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80
HW Version	REV04
SW Version	0.1.o.111
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>802.11b/g/n : 2412 MHz ~ 2462 MHz</td></tr>
<tr><td>Maximum (Peak) Output Power to antenna</td><td><Ant. 1>
802.11b : 22.20 dBm (0.1660 W)
802.11g : 24.62 dBm (0.2897 W)
802.11n HT20 : 24.60 dBm (0.2884 W)
802.11n HT40 : 23.78 dBm (0.2388 W)
<Ant. 2>
802.11b : 22.24 dBm (0.1675 W)
802.11g : 24.63 dBm (0.2904 W)
802.11n HT20 : 24.62 dBm (0.2897 W)
802.11n HT40 : 23.82 dBm (0.2410 W)
MIMO<Ant. 1 + 2>
802.11n HT20 : 26.33 dBm (0.4295 W)
802.11n HT40 : 26.31 dBm (0.4276 W)</td></tr>
<tr><td>99% Occupied Bandwidth</td><td>802.11b : 12.45MHz
802.11g : 17.90MHz
802.11n HT20 : 18.75MHz
802.11n HT40 : 36.50MHz</td></tr>
<tr><td>Antenna Type</td><td><Ant 1>
802.11b/g/n : PCB Antenna type with gain 2.80 dBi
<Ant 2>
802.11b/g/n : PCB Antenna type with gain 3.10 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11b : DSSS (DBPSK / DQPSK / CCK)
802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)</td></tr>
<tr><td>Antenna Function for Transmitter</td><td>
<table>
<tr><th></th><th>Chain
Port 0
Ant. 1</th><th>Chain
Port 1
Ant. 2</th></tr>
<tr><td>802.11 b/g</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n
SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n
MIMO</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH02-HY	CO05-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH11-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r04
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test shown in the following tables.

<Ant. 1>

802.11b				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	22.20	21.99	21.98	21.99

802.11g								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	24.62	24.60	24.59	24.53	24.61	24.56	24.61	24.50

2.4GHz 802.11n HT20								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	24.60	24.56	24.51	24.47	24.51	24.55	24.58	24.59

2.4GHz 802.11n HT40								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	23.78	23.72	23.13	23.10	22.69	22.72	22.84	22.86

<Ant. 2>

802.11b				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	22.24	22.14	22.19	21.91

802.11g								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	24.63	24.47	24.51	24.55	24.58	24.56	24.58	24.55

2.4GHz 802.11n HT20								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	24.62	24.60	24.19	24.29	24.55	24.51	24.49	24.56

2.4GHz 802.11n HT40								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	23.82	23.80	23.20	23.05	22.92	23.24	22.94	22.75

MIMO <Ant. 1+2>

2.4GHz 802.11n HT20								
Data Rate (MHz)	**MCS0**	**MCS1**	**MCS2**	**MCS3**	**MCS4**	**MCS5**	**MCS6**	**MCS7**
Peak Power (dBm)	**26.33**	26.19	25.87	25.96	25.85	25.92	25.19	25.42

2.4GHz 802.11n HT40								
Data Rate (MHz)	**MCS0**	**MCS1**	**MCS2**	**MCS3**	**MCS4**	**MCS5**	**MCS6**	**MCS7**
Peak Power (dBm)	**26.31**	26.03	25.41	25.34	25.12	25.04	25.22	24.61

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

2.3 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates from the power table described in section 2.2.

Single Antenna

<2.4GHz>

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

MIMO Antenna

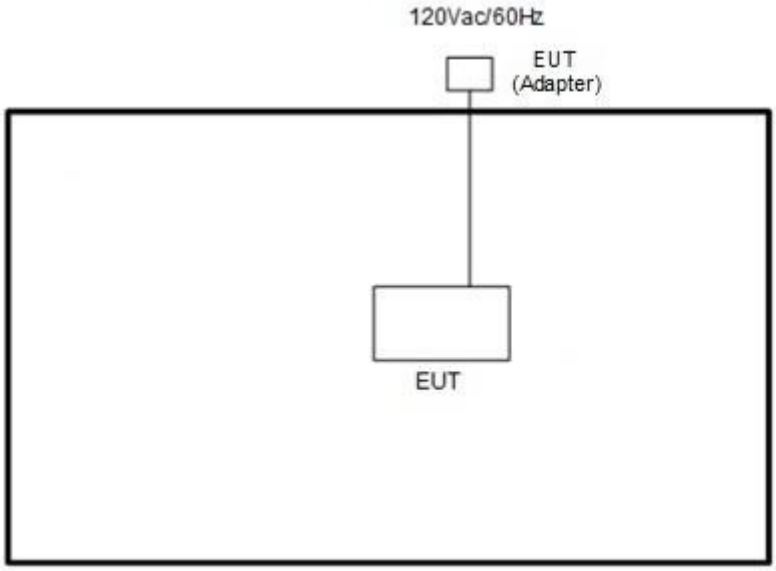
<2.4GHz>

Modulation	Data Rate
802.11n HT20	MCS8
802.11n HT40	MCS8

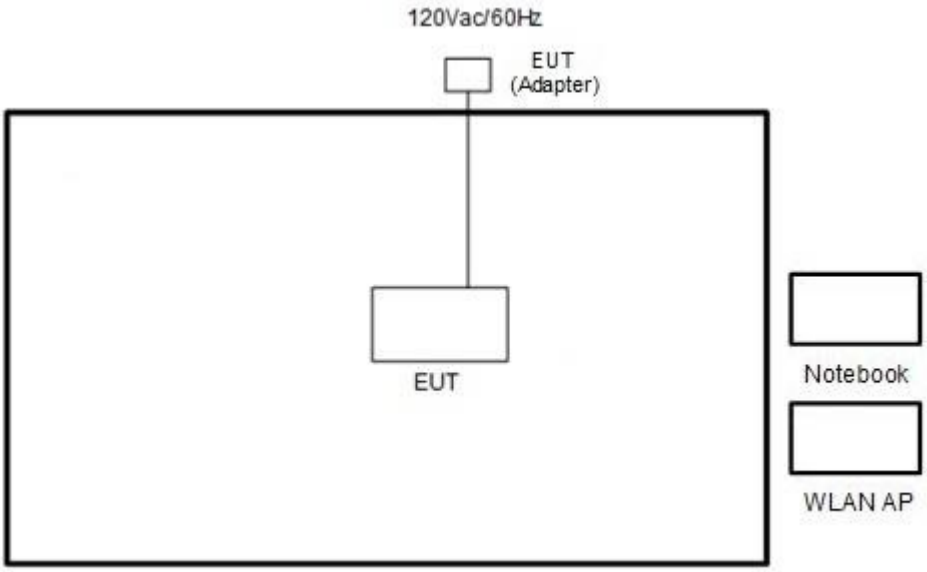
Test Cases	
AC Conducted Emission	Mode 1 : WLAN (2.4GHz) Link

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.6 EUT Operation Test Setup

For WLAN function, programmed RF utility, “Putty.exe” installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

2.7 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

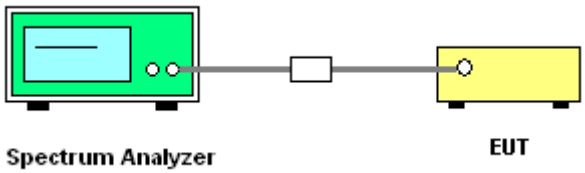
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v03r04.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 1MHz and set the Video bandwidth (VBW) = 3MHz.
6. Measure and record the results in the test report.

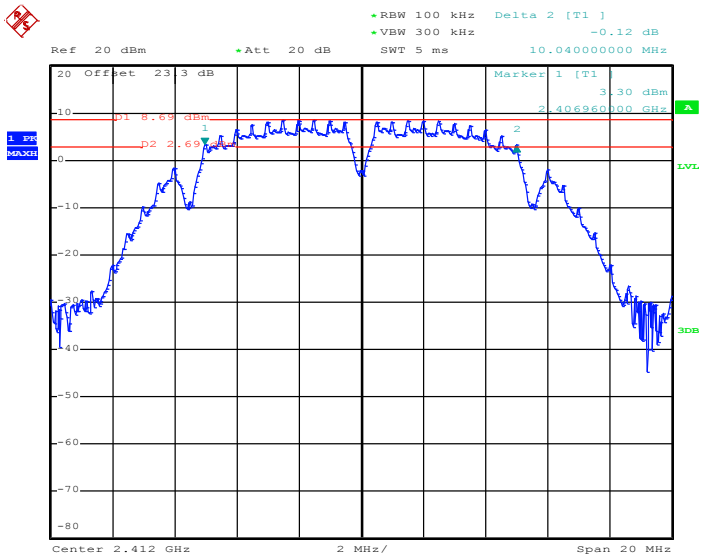
3.1.4 Test Setup



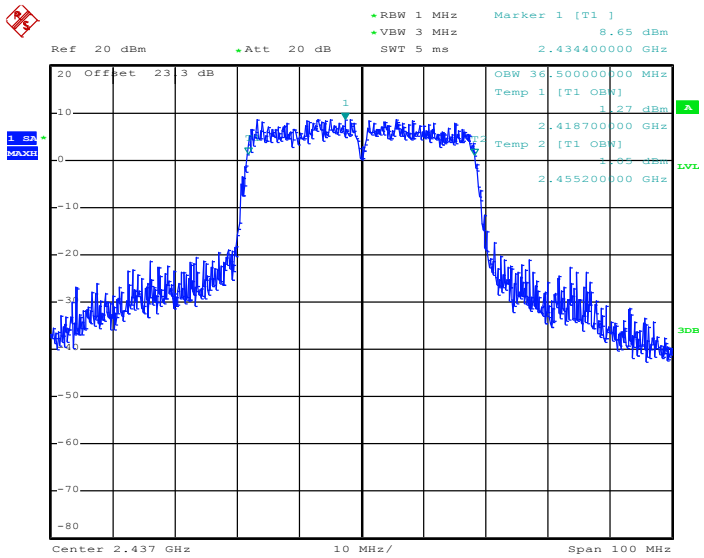
3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Please refer to Appendix A of this report.

Minimum 6dB Bandwidth



Maximum 99% Occupied Bandwidth



Note : The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Peak Output Power Measurement

3.2.1 Limit of Peak Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

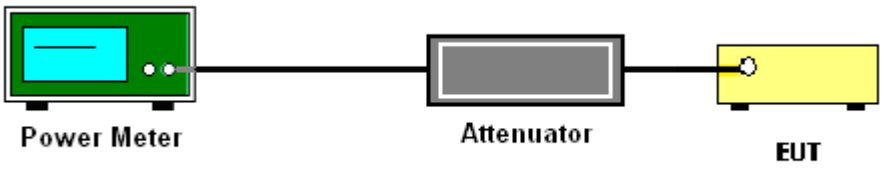
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r04 section 9.1.2 PKPM1 Peak power meter method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Please refer to Appendix A of this report.

3.2.6 Test Result of Average output Power (Reporting Only)

Please refer to Appendix A of this report.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

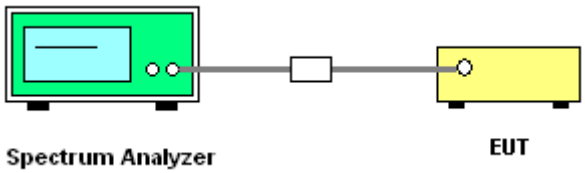
3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The testing follows Measurement Procedure 10.2 Method PKPSD of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r04
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.

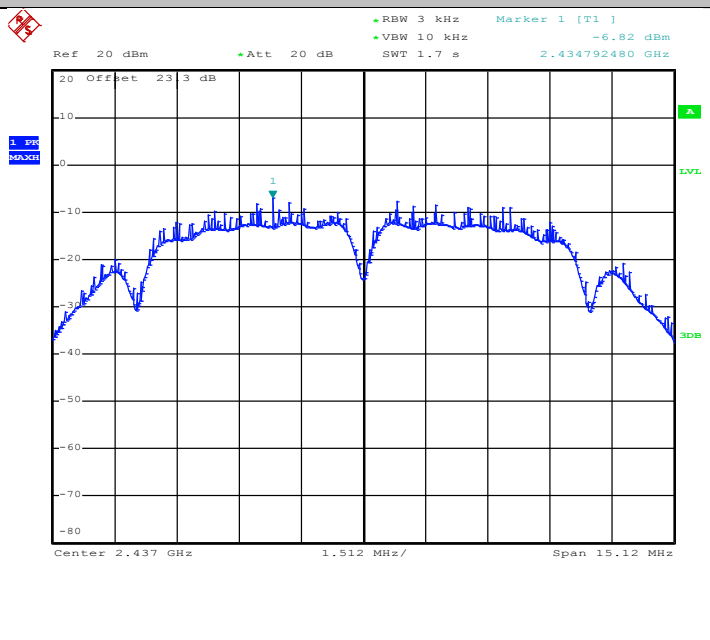
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A of this report.

Worst Case Power Density (dBm/3kHz)



3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and 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).

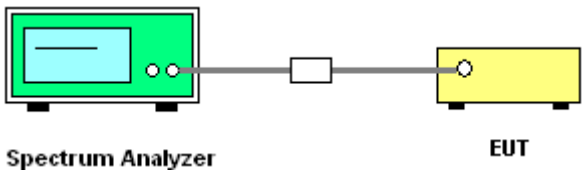
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r04.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



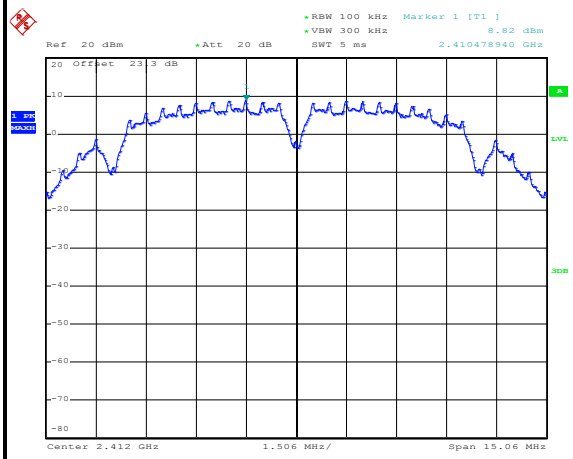
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Number of TX = 1, Ant. 2 (Measured)

Number of TX	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	AC Chang

WLAN 802.11b Channel 01

100kHz PSD reference Level



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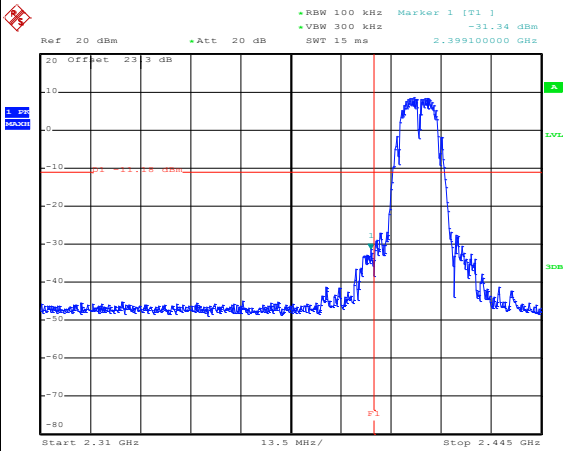
Low Channel Plot



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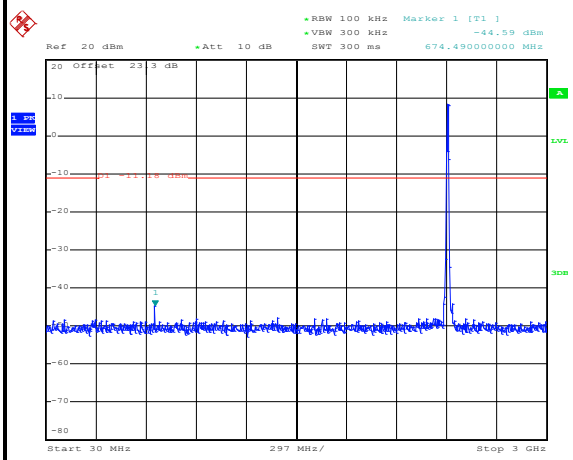
Spurious Emission 30MHz~3GHz



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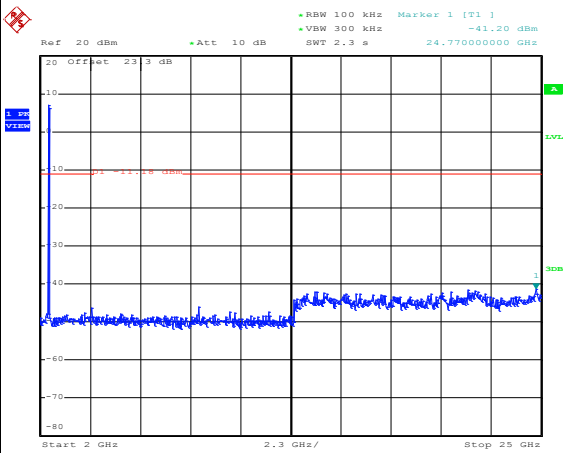
Spurious Emission 2GHz~25GHz



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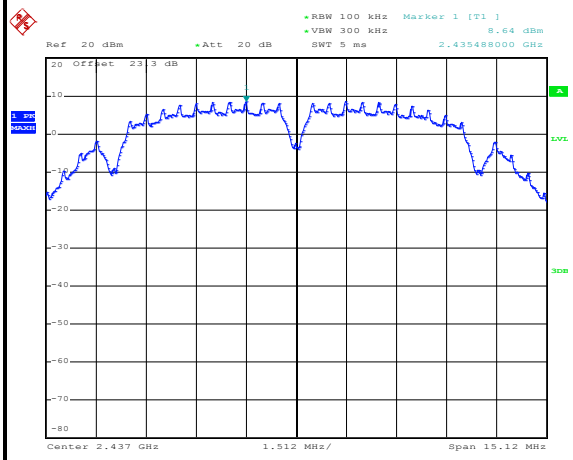
Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

WLAN 802.11b Channel 06

100kHz PSD reference Level



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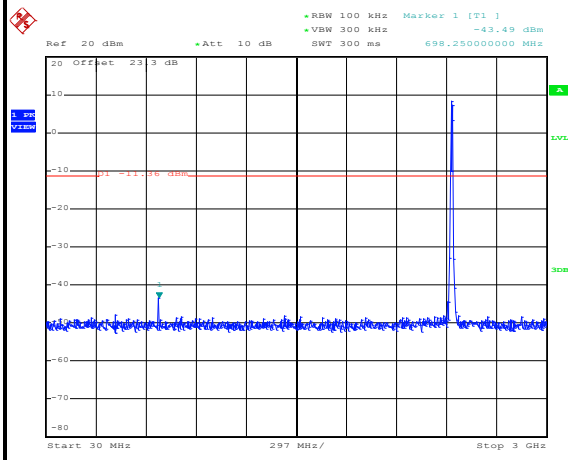
Spurious Emission 30MHz~3GHz



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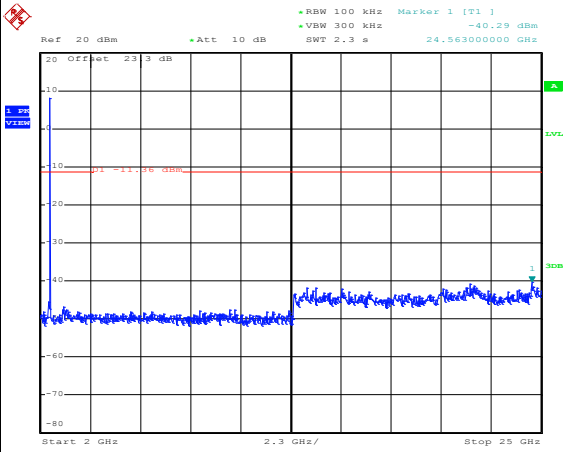
Spurious Emission 2GHz~25GHz

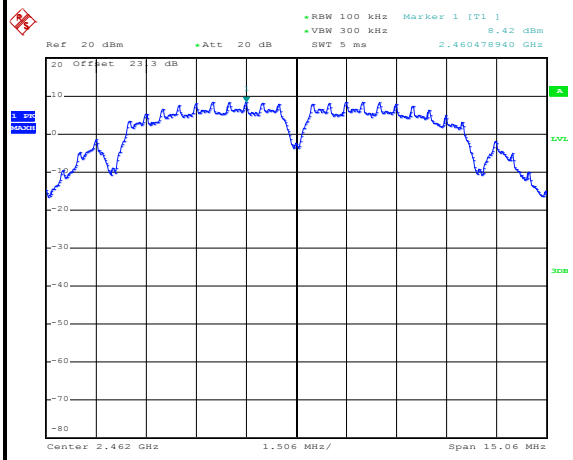


Date: 7.JAN.2016 15:59:55

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11b	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	AC Chang

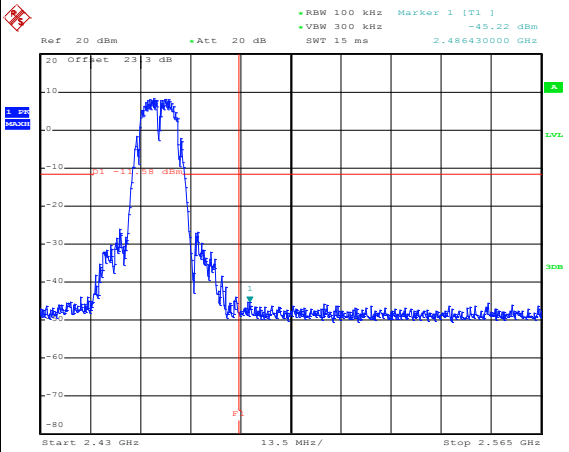
WLAN 802.11b Channel 11

100kHz PSD reference Level



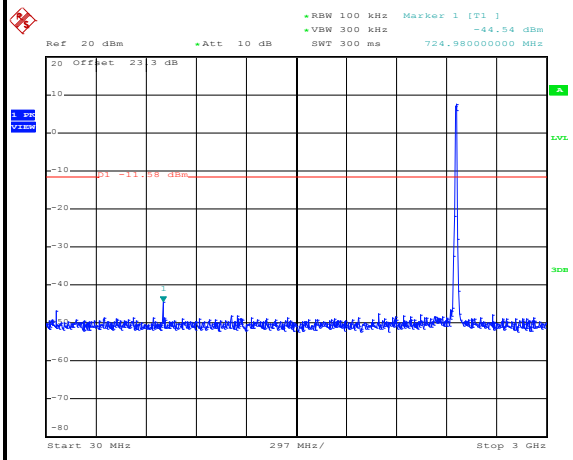
Date: 7.JAN.2016 16:02:11

High Channel Plot



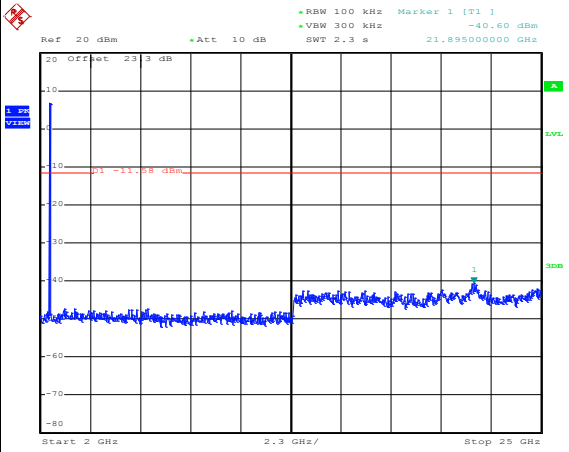
Date: 7.JAN.2016 16:02:23

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 16:02:38

Spurious Emission 2GHz~25GHz

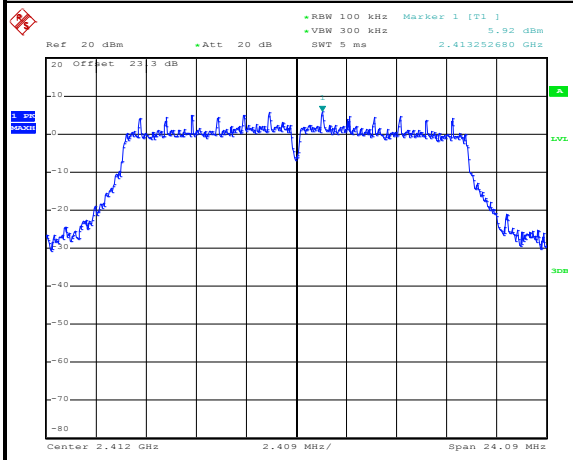


Date: 7.JAN.2016 16:02:46

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	AC Chang

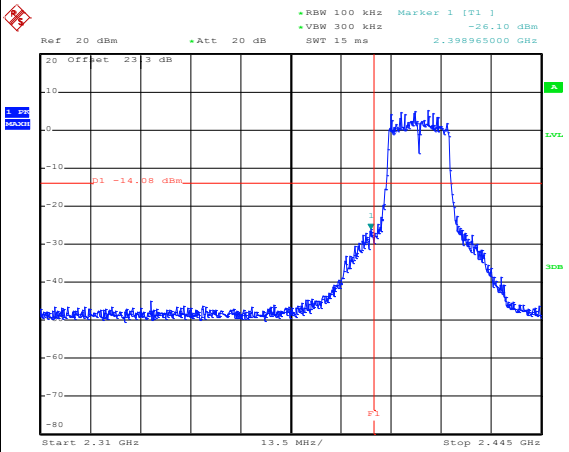
WLAN 802.11g Channel 01

100kHz PSD reference Level



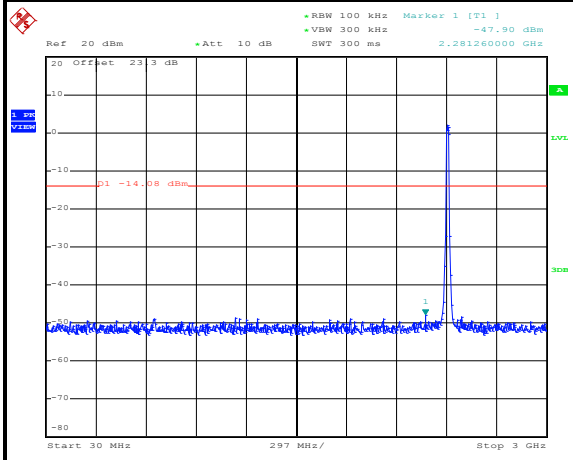
Date: 25.JAN.2016 13:59:36

Low Channel Plot



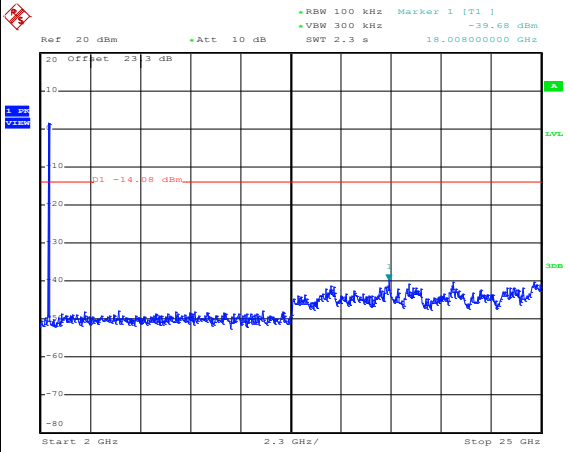
Date: 25.JAN.2016 13:59:48

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:00:09

Spurious Emission 2GHz~25GHz

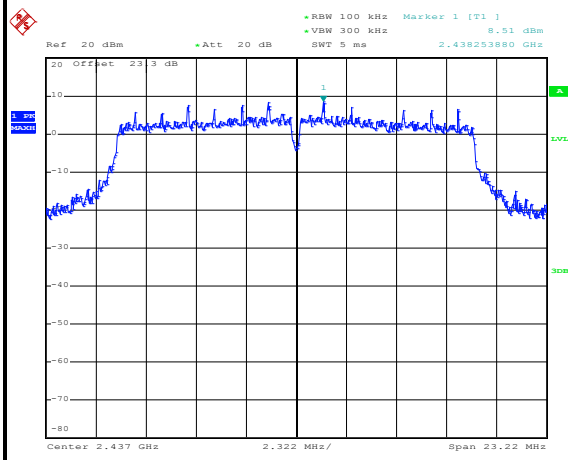


Date: 25.JAN.2016 14:00:18

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

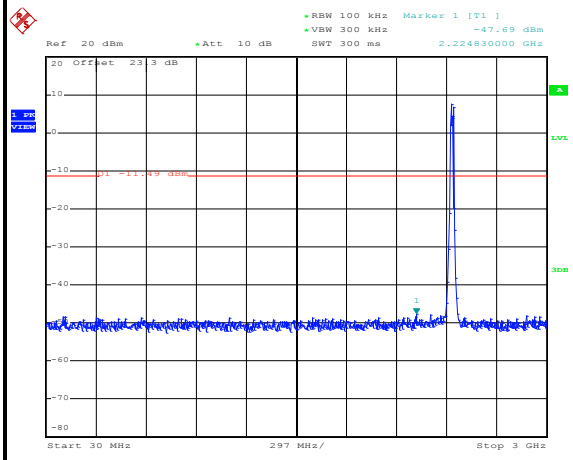
WLAN 802.11g Channel 06

100kHz PSD reference Level



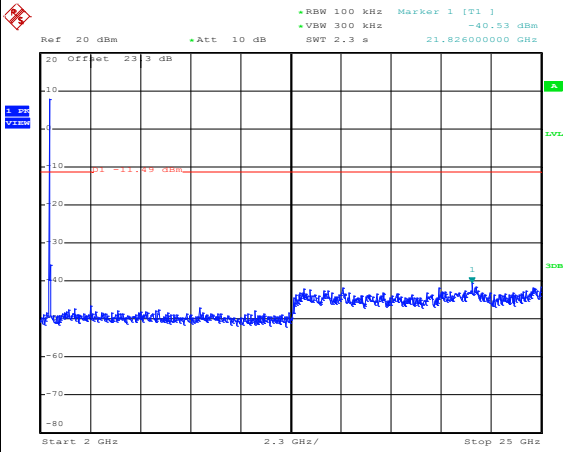
Date: 7.JAN.2016 16:13:44

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 16:13:57

Spurious Emission 2GHz~25GHz

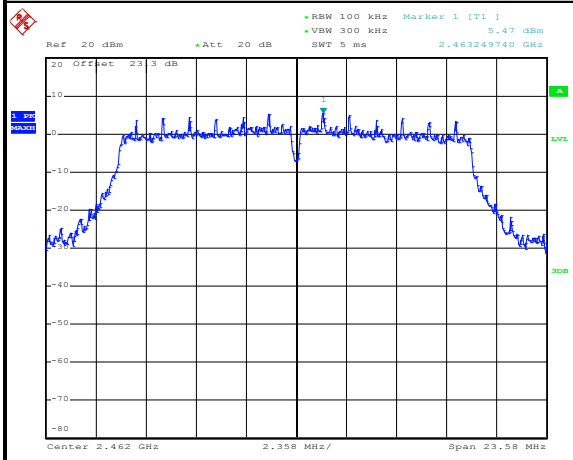


Date: 7.JAN.2016 16:14:05

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11g	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	AC Chang

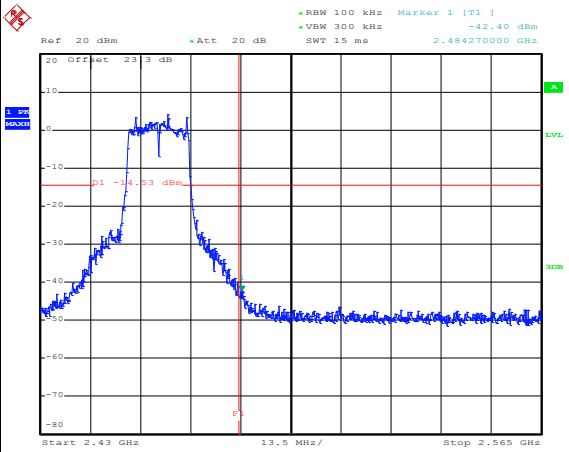
WLAN 802.11g Channel 11

100kHz PSD reference Level



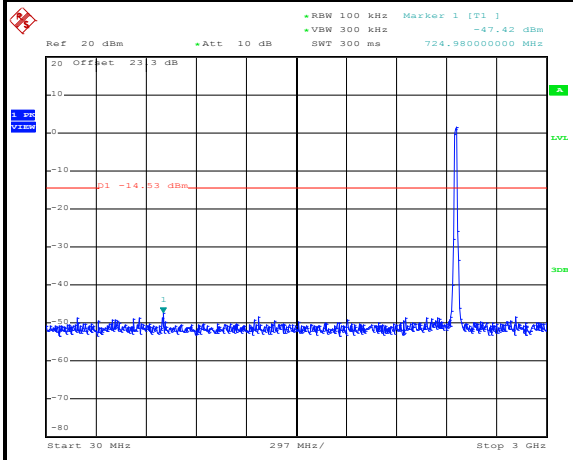
Date: 25.JAN.2016 14:04:17

High Channel Plot



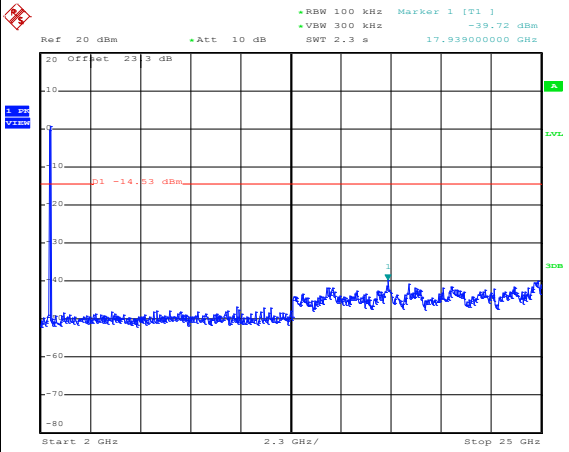
Date: 25.JAN.2016 14:04:27

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:05:02

Spurious Emission 2GHz~25GHz

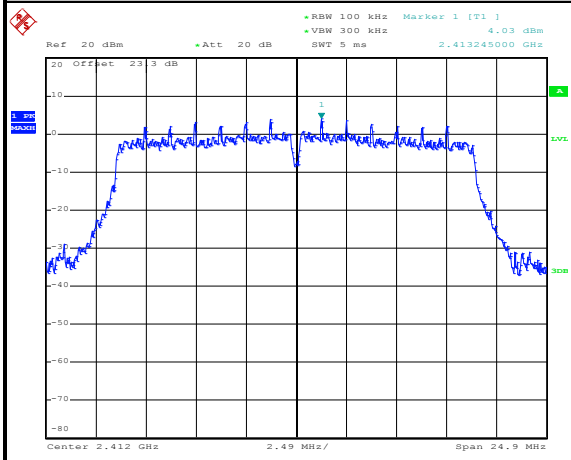


Date: 25.JAN.2016 14:05:10

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	AC Chang

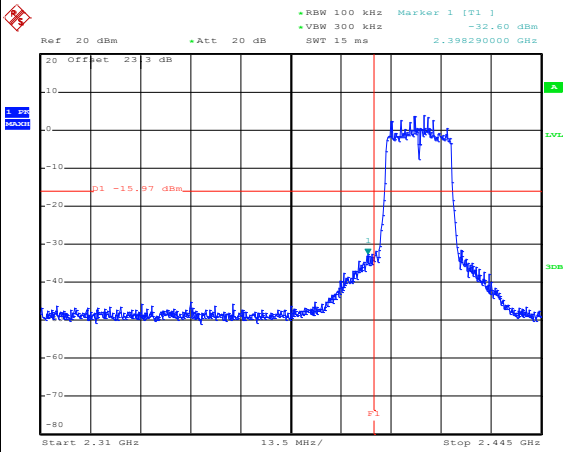
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



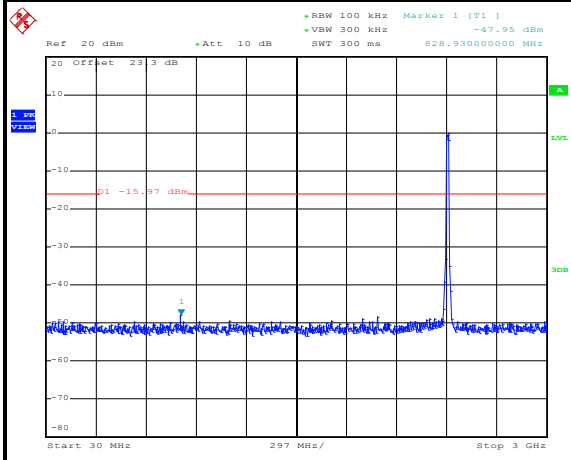
Date: 25.JAN.2016 14:33:57

Low Channel Plot



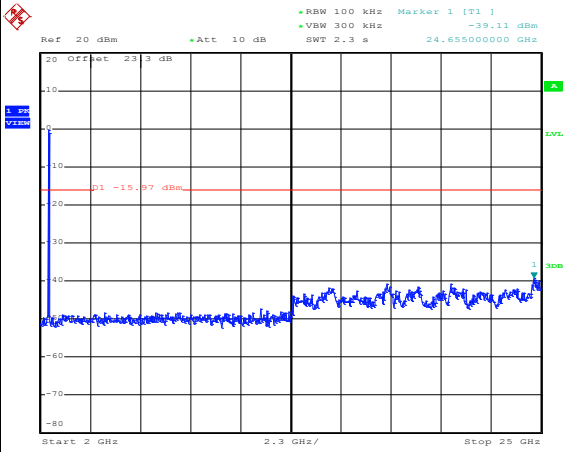
Date: 25.JAN.2016 14:34:09

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:34:21

Spurious Emission 2GHz~25GHz

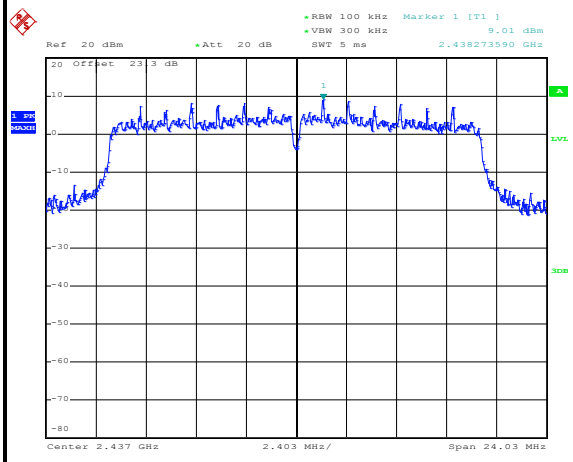


Date: 25.JAN.2016 14:34:29

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

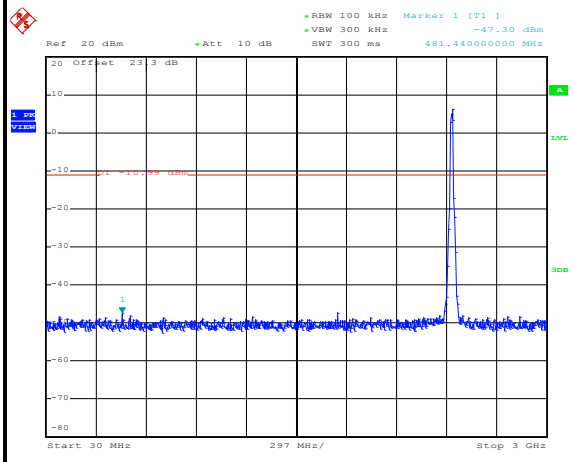
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



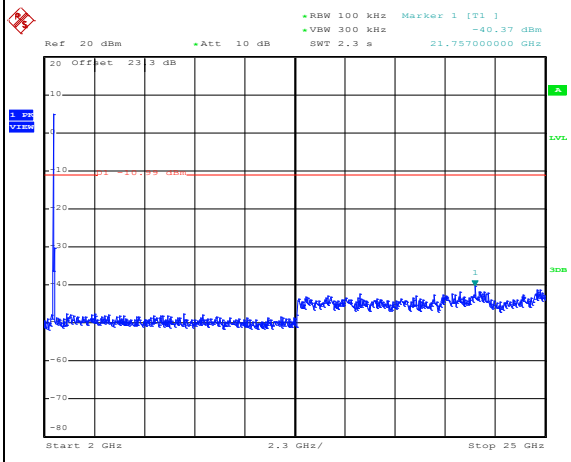
Date: 7.JAN.2016 16:24:13

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 16:24:26

Spurious Emission 2GHz~25GHz

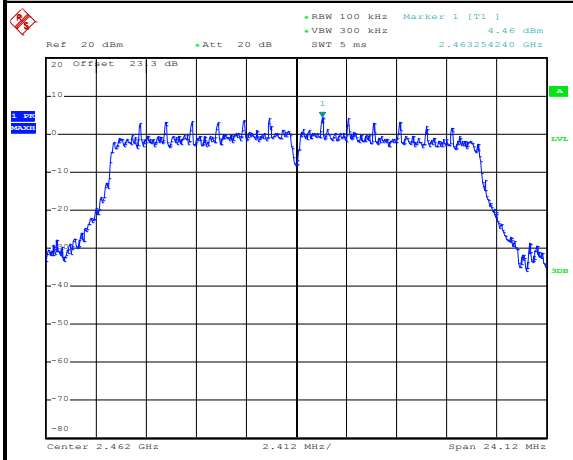


Date: 7.JAN.2016 16:24:34

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	AC Chang

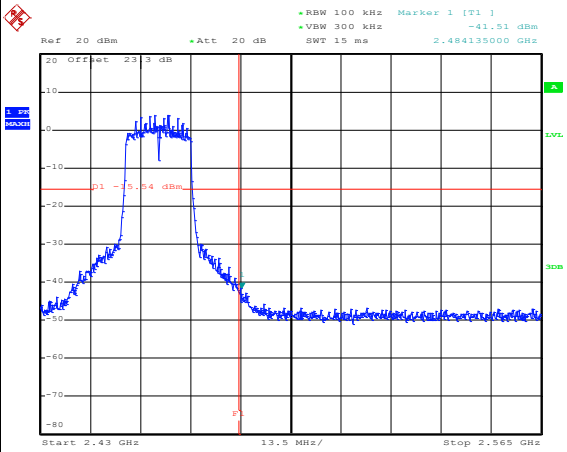
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



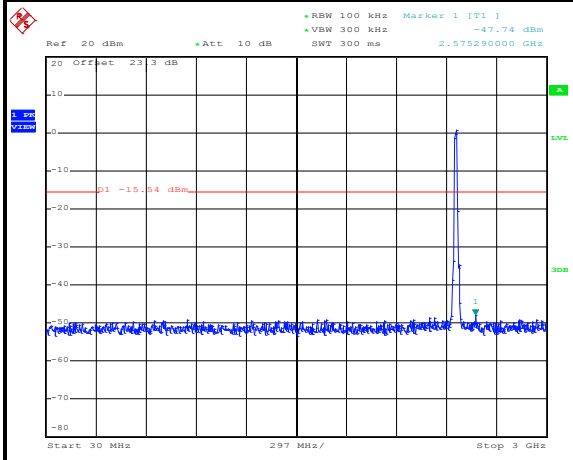
Date: 25.JAN.2016 14:37:20

High Channel Plot



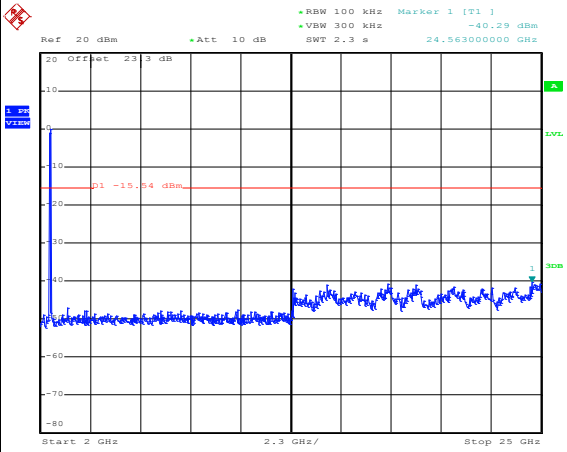
Date: 25.JAN.2016 14:37:35

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:37:48

Spurious Emission 2GHz~25GHz

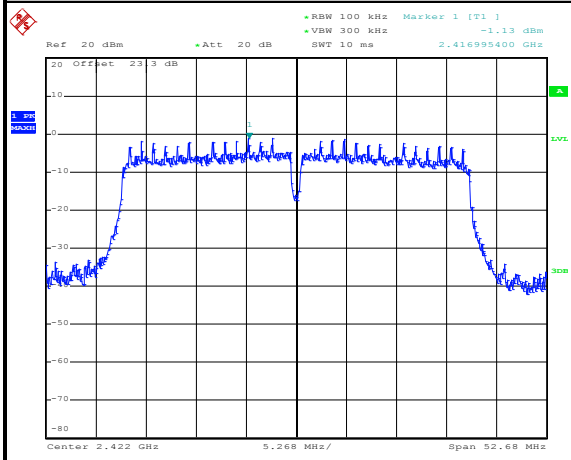


Date: 25.JAN.2016 14:37:56

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	03	**Test Engineer :**	AC Chang

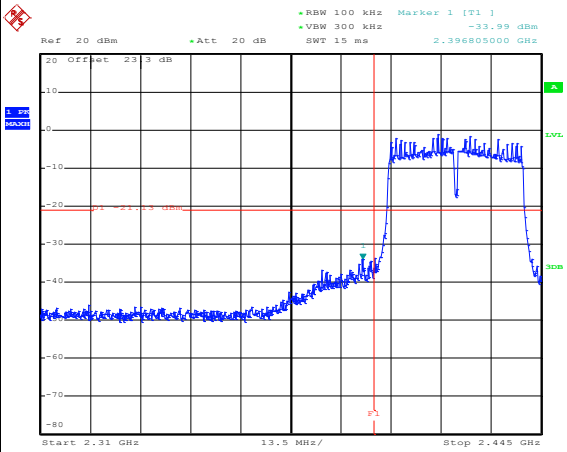
WLAN 802.11n HT40 Channel 03

100kHz PSD reference Level



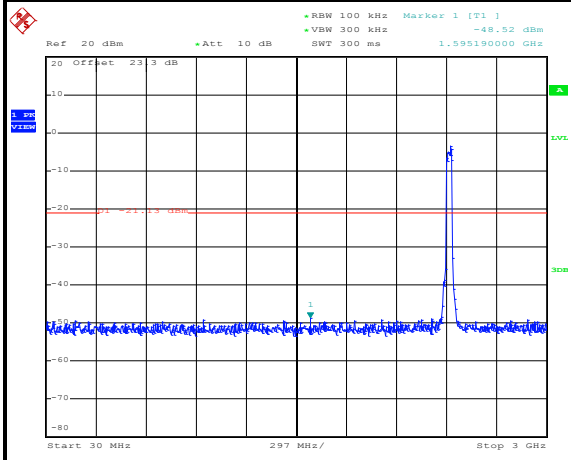
Date: 25.JAN.2016 14:50:27

Low Channel Plot



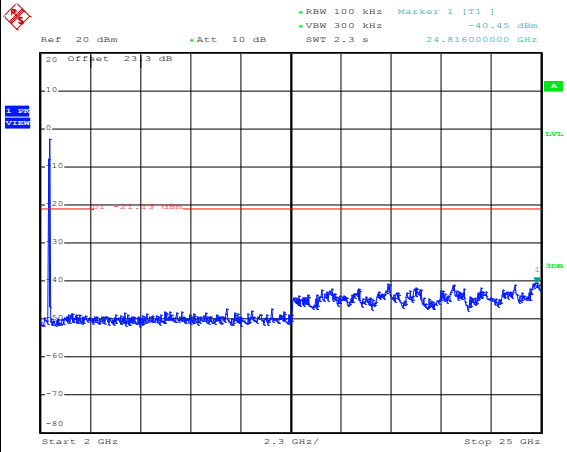
Date: 25.JAN.2016 14:50:41

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:52:16

Spurious Emission 2GHz~25GHz

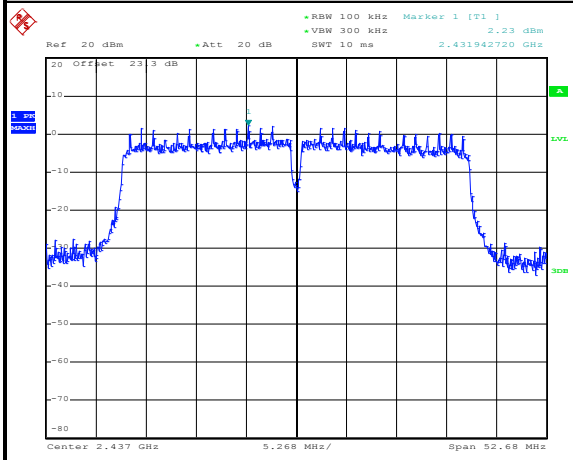


Date: 25.JAN.2016 14:52:25

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

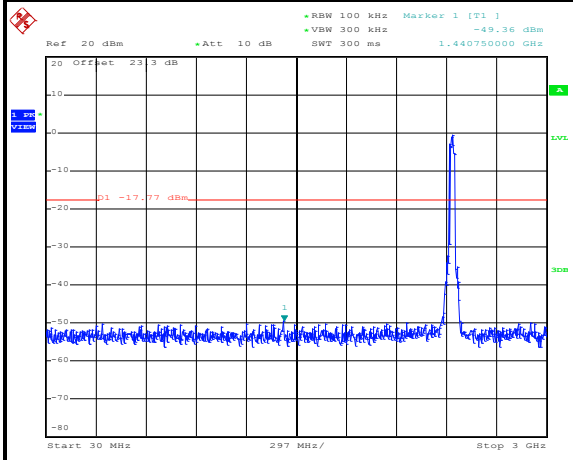
WLAN 802.11n HT40 Channel 06

100kHz PSD reference Level



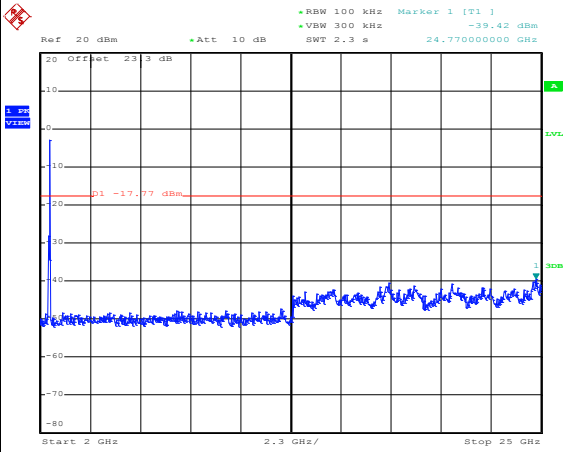
Date: 25.JAN.2016 14:56:49

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 14:59:15

Spurious Emission 2GHz~25GHz

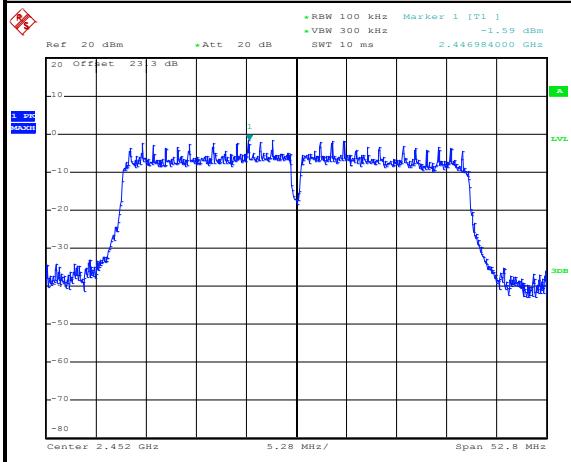


Date: 25.JAN.2016 14:58:08

Number of TX :	1	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	09	**Test Engineer :**	AC Chang

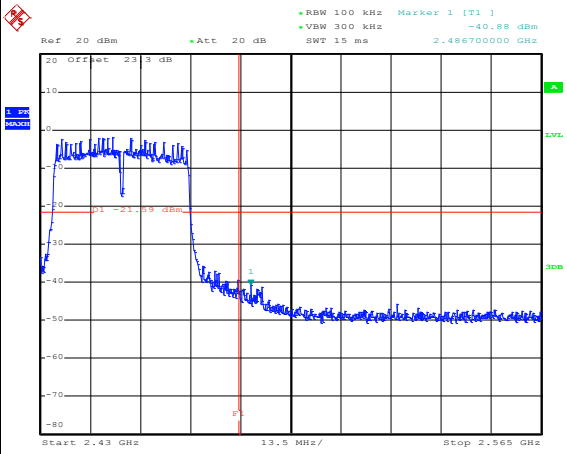
WLAN 802.11n HT40 Channel 09

100kHz PSD reference Level



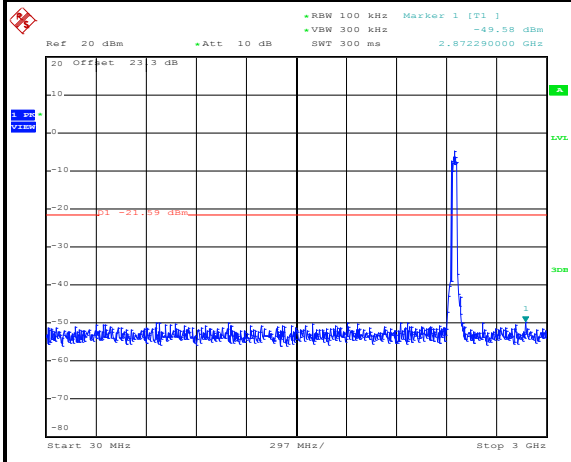
Date: 25.JAN.2016 15:02:28

High Channel Plot



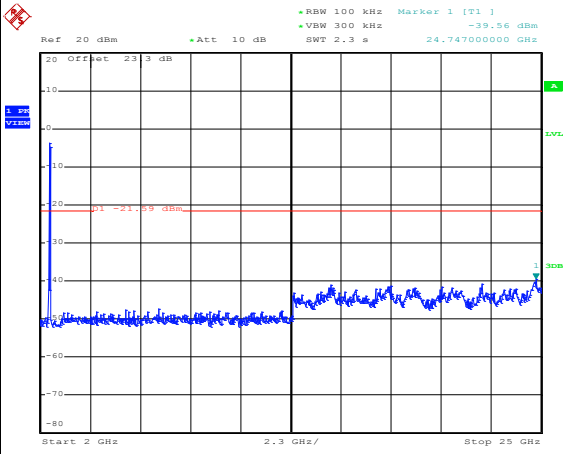
Date: 25.JAN.2016 15:02:42

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:03:42

Spurious Emission 2GHz~25GHz



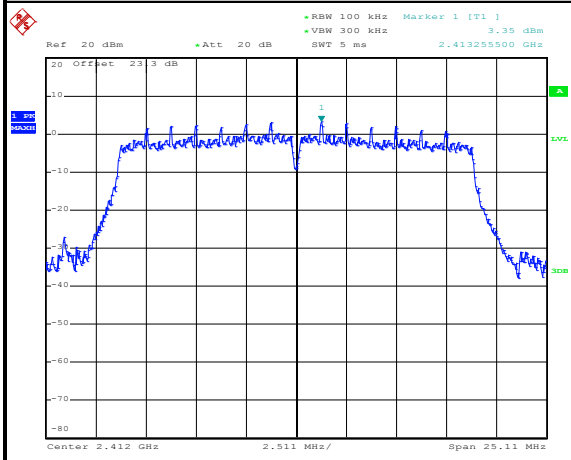
Date: 25.JAN.2016 15:03:02

Number of TX = 2, Ant. 1 (Measured)

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	AC Chang

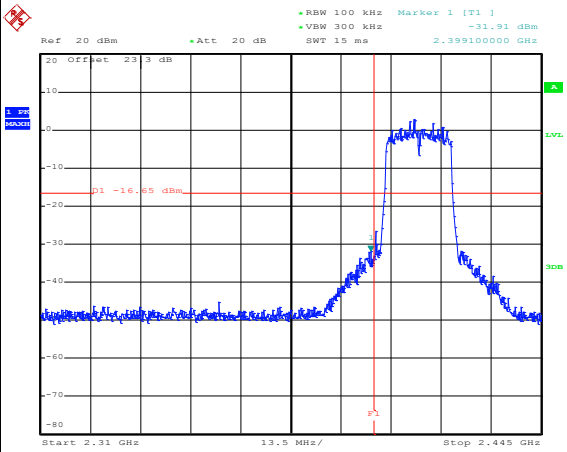
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



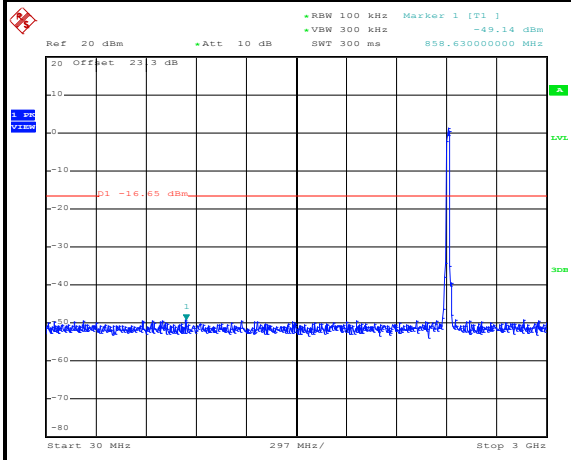
Date: 25.JAN.2016 15:16:35

Low Channel Plot



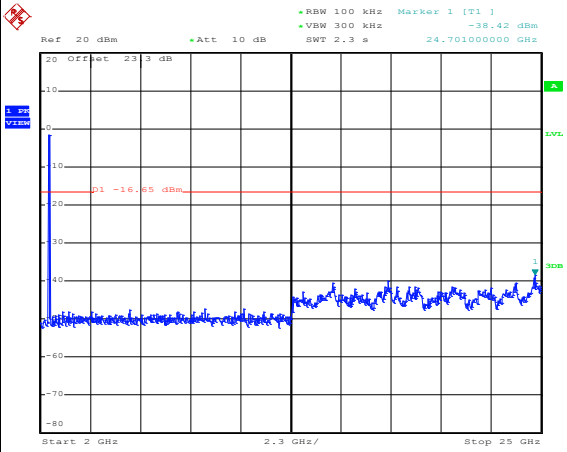
Date: 25.JAN.2016 15:16:51

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:17:04

Spurious Emission 2GHz~25GHz

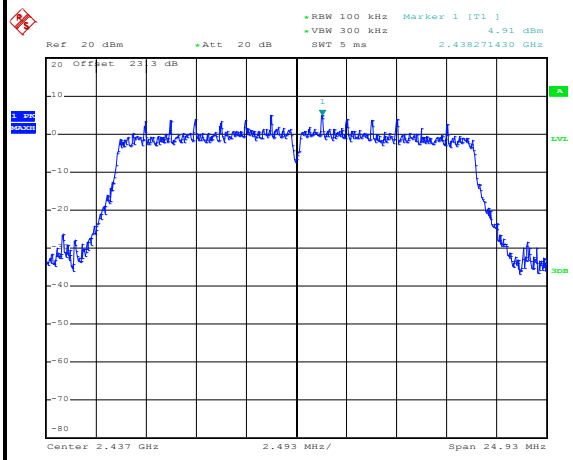


Date: 25.JAN.2016 15:17:13

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

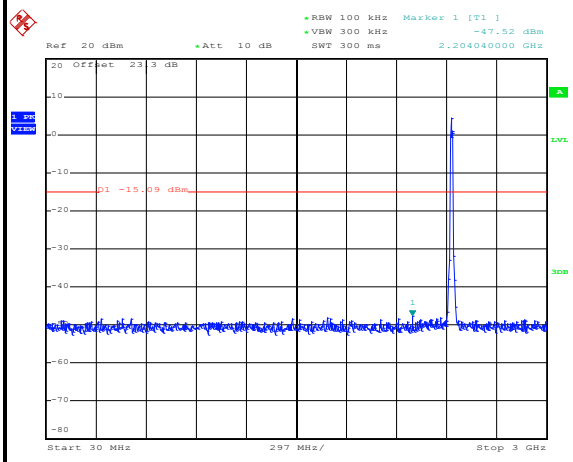
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



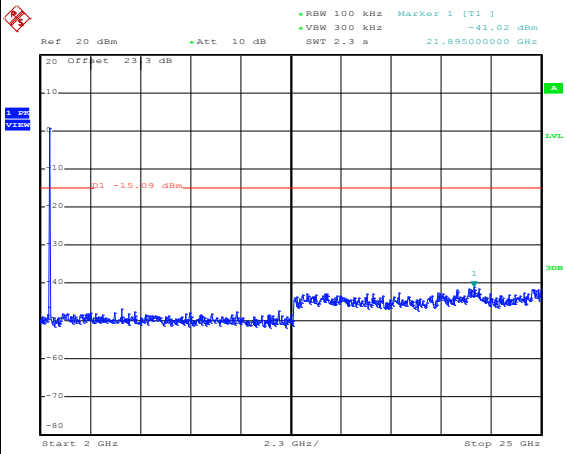
Date: 7.JAN.2016 16:40:40

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 16:40:53

Spurious Emission 2GHz~25GHz

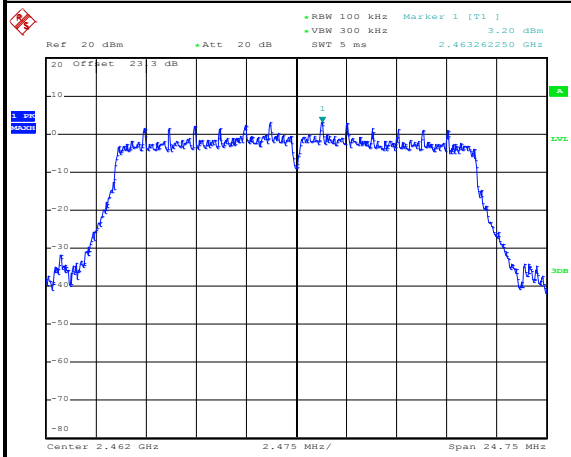


Date: 7.JAN.2016 16:41:02

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	AC Chang

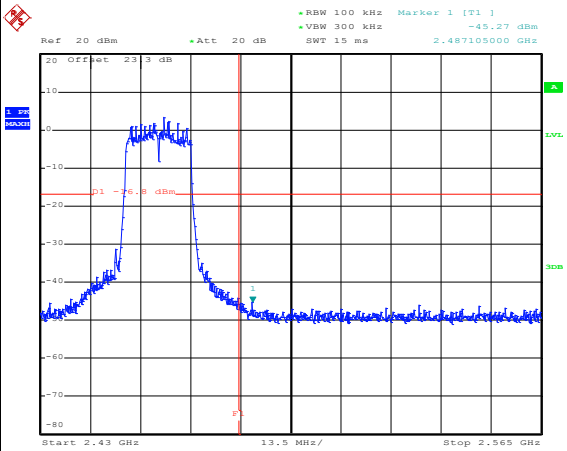
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



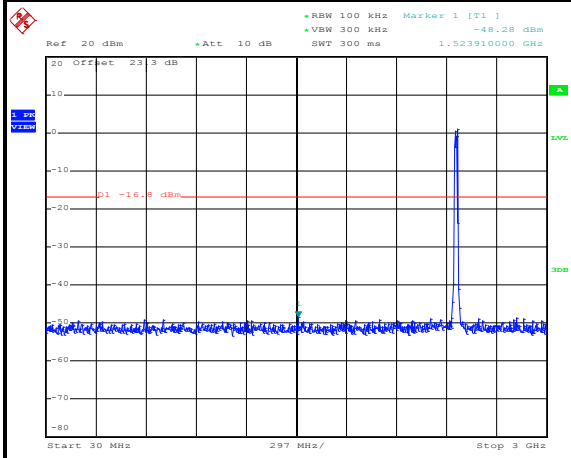
Date: 25.JAN.2016 15:30:30

High Channel Plot



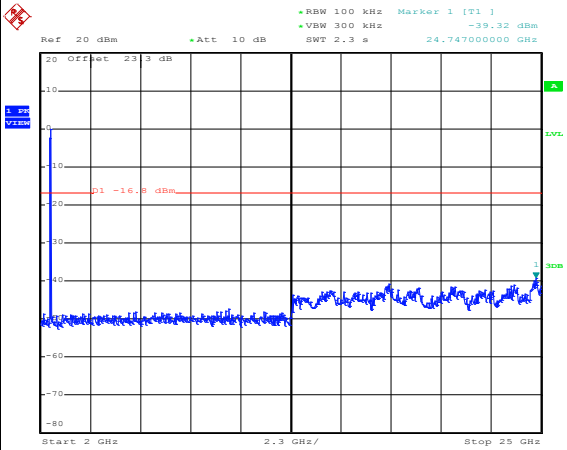
Date: 25.JAN.2016 15:30:42

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:30:53

Spurious Emission 2GHz~25GHz

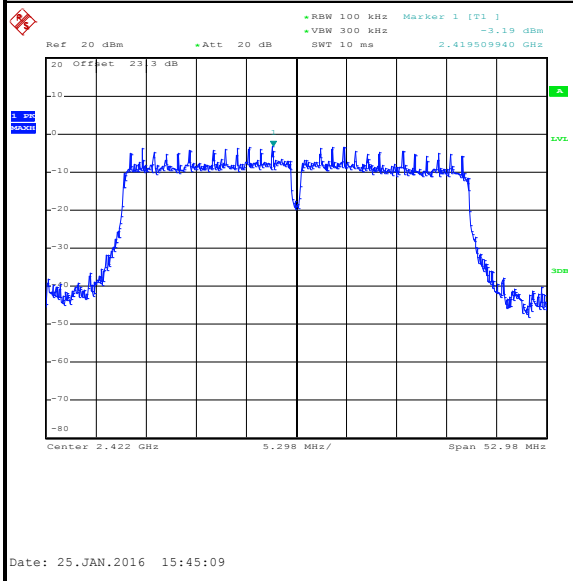


Date: 25.JAN.2016 15:31:02

Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	03	**Test Engineer :**	AC Chang

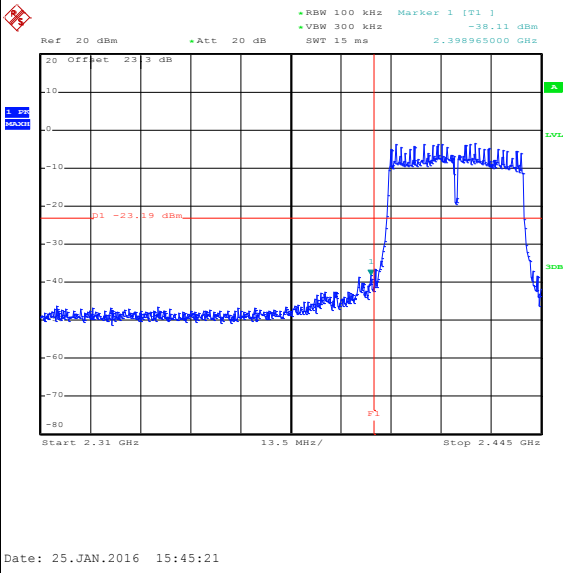
WLAN 802.11n HT40 Channel 03

100kHz PSD reference Level



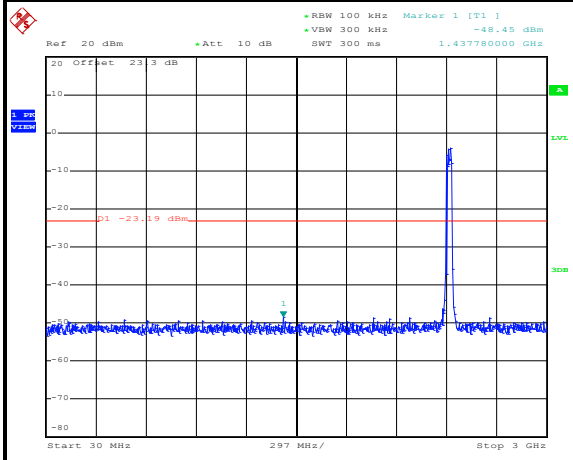
Date: 25.JAN.2016 15:45:09

Low Channel Plot



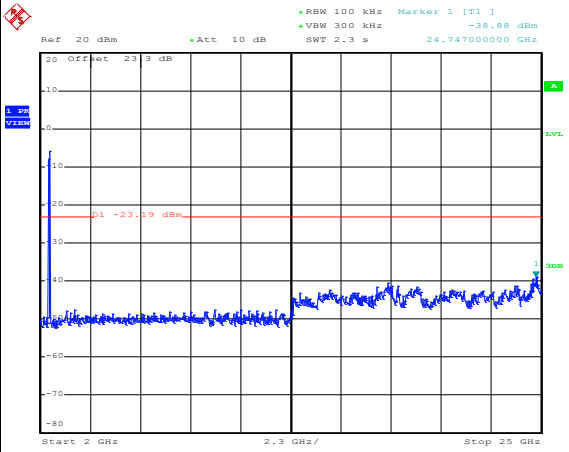
Date: 25.JAN.2016 15:45:21

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:45:32

Spurious Emission 2GHz~25GHz

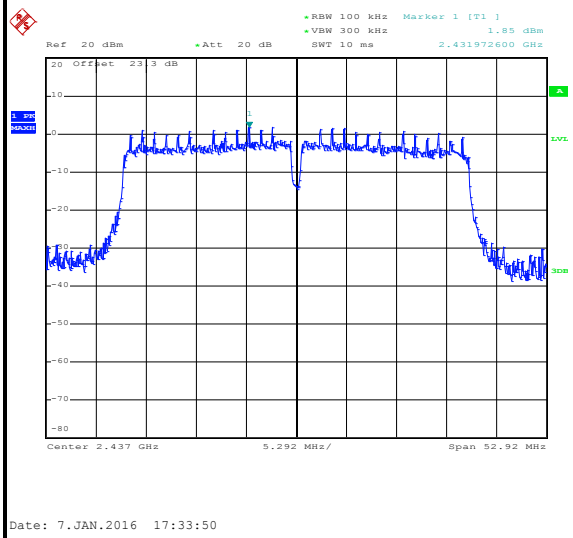


Date: 25.JAN.2016 15:45:41

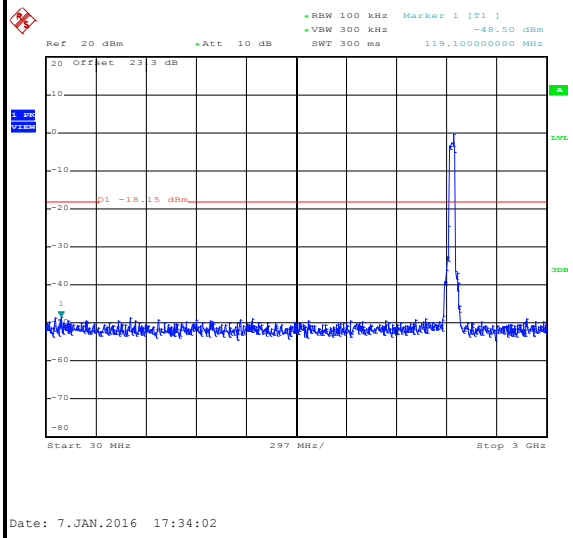
Number of TX :	2	**Ant. :**	1
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

WLAN 802.11n HT40 Channel 06

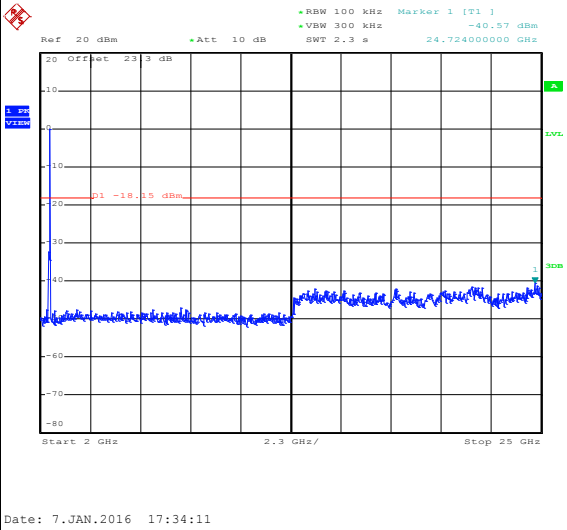
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



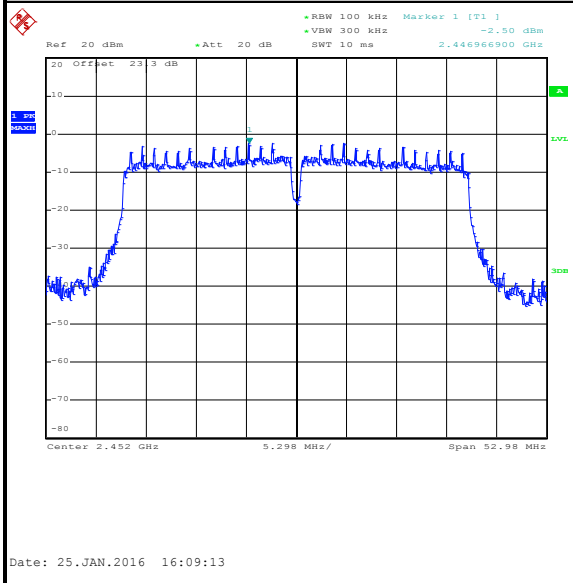
Spurious Emission 2GHz~25GHz



Number of TX :	2	Ant. :	1
Test Mode :	802.11n HT40	Temperature :	21~25℃
Test Band :	2.4GHz High	Relative Humidity :	51~54%
Test Channel :	09	Test Engineer :	AC Chang

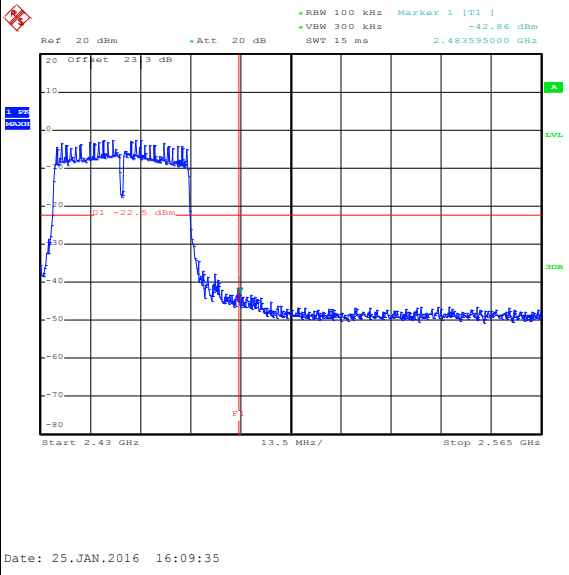
WLAN 802.11n HT40 Channel 09

100kHz PSD reference Level



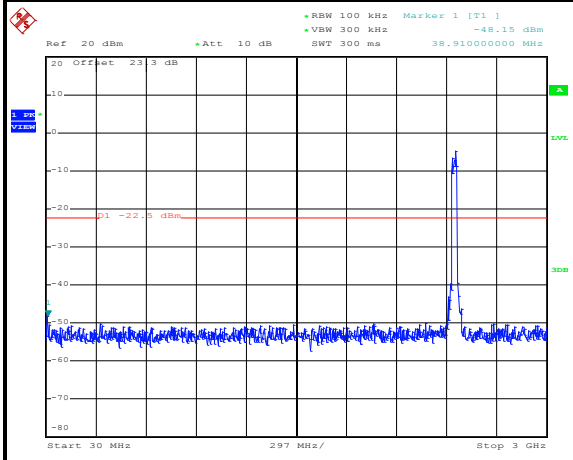
Date: 25.JAN.2016 16:09:13

High Channel Plot



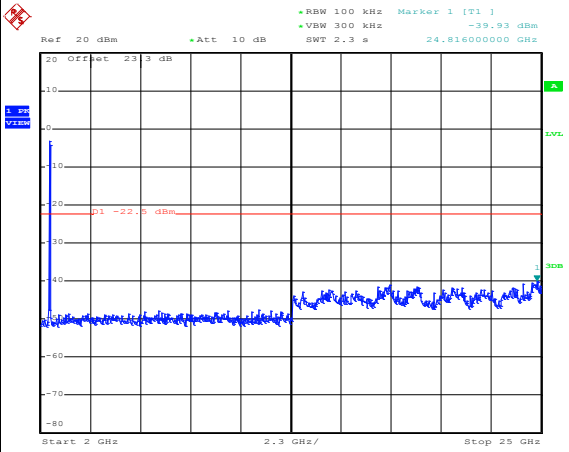
Date: 25.JAN.2016 16:09:35

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 16:11:06

Spurious Emission 2GHz~25GHz



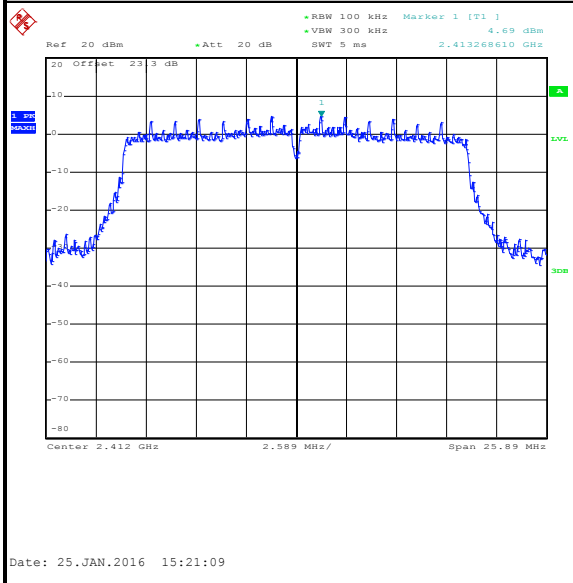
Date: 25.JAN.2016 16:10:16

Number of TX = 2, Ant. 2 (Measured)

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	01	**Test Engineer :**	AC Chang

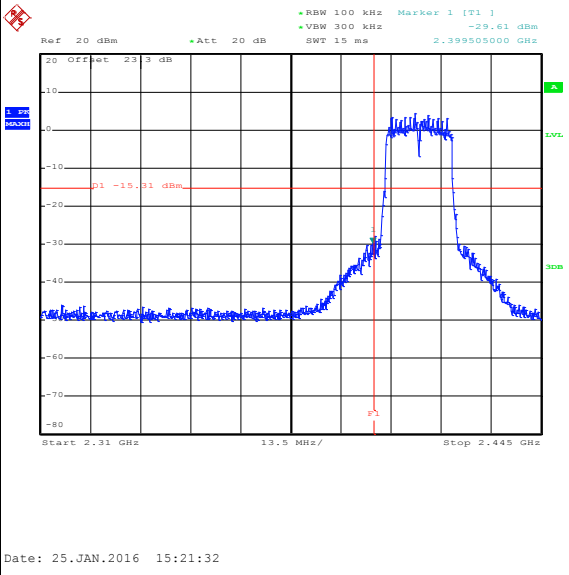
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



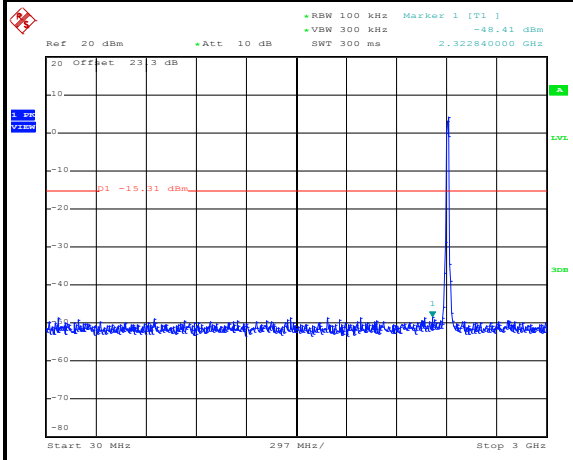
Date: 25.JAN.2016 15:21:09

Low Channel Plot



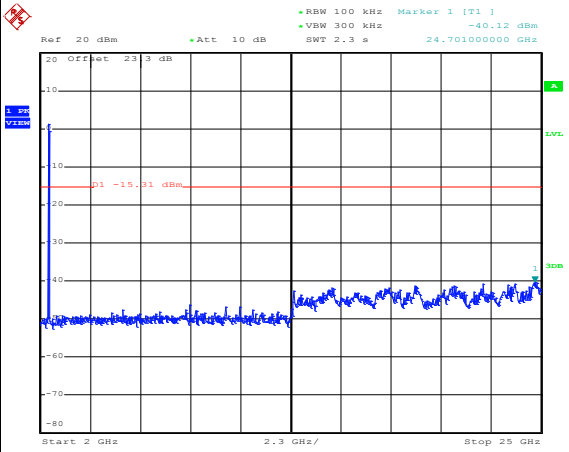
Date: 25.JAN.2016 15:21:32

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:21:45

Spurious Emission 2GHz~25GHz

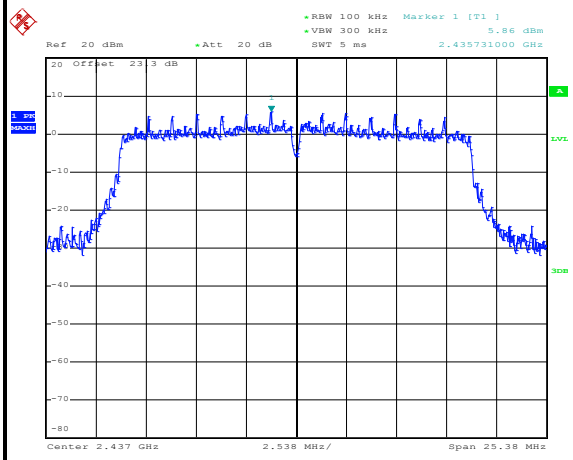


Date: 25.JAN.2016 15:21:53

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

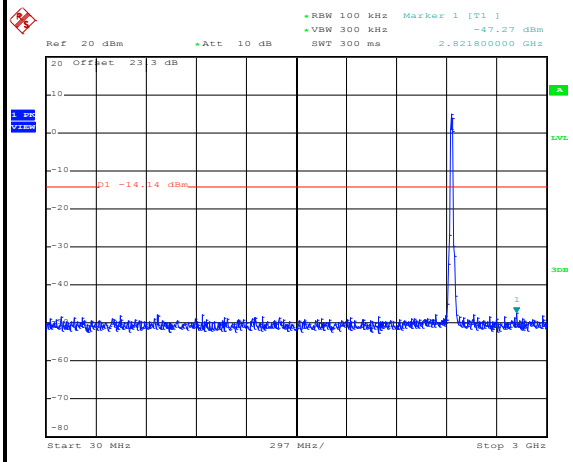
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



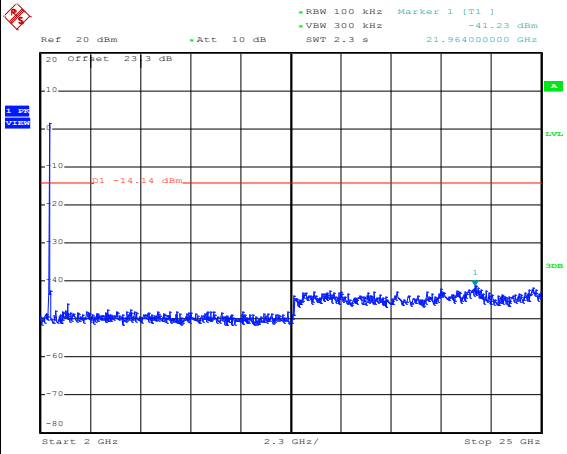
Date: 7.JAN.2016 16:44:53

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 16:45:06

Spurious Emission 2GHz~25GHz

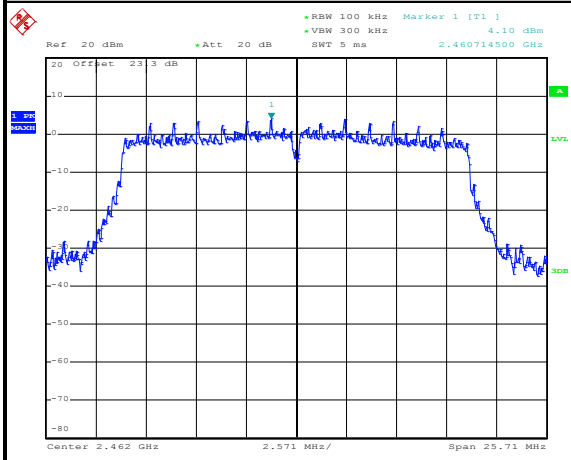


Date: 7.JAN.2016 16:45:14

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT20	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	11	**Test Engineer :**	AC Chang

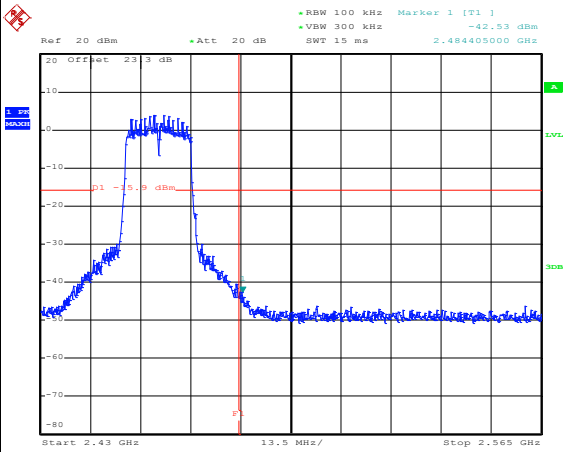
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



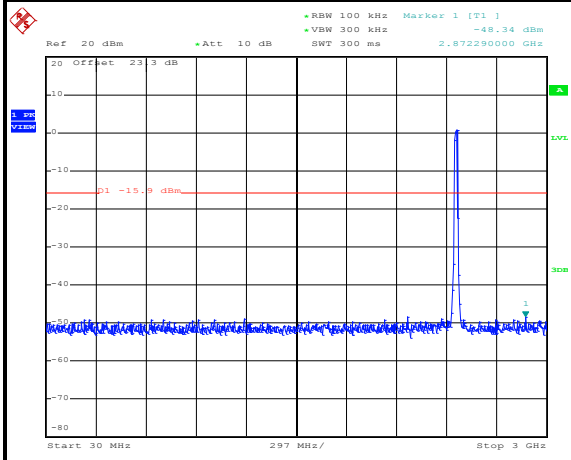
Date: 25.JAN.2016 15:26:51

High Channel Plot



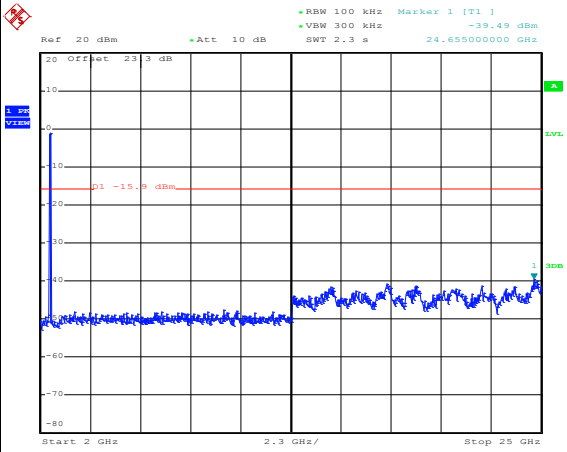
Date: 25.JAN.2016 15:27:04

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:27:18

Spurious Emission 2GHz~25GHz

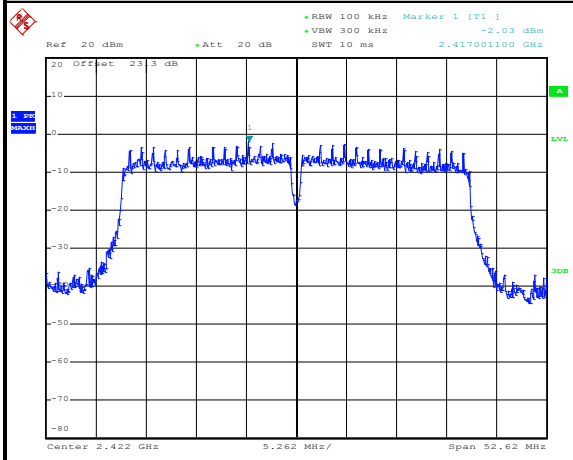


Date: 25.JAN.2016 15:27:26

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Low	**Relative Humidity :**	51~54%
Test Channel :	03	**Test Engineer :**	AC Chang

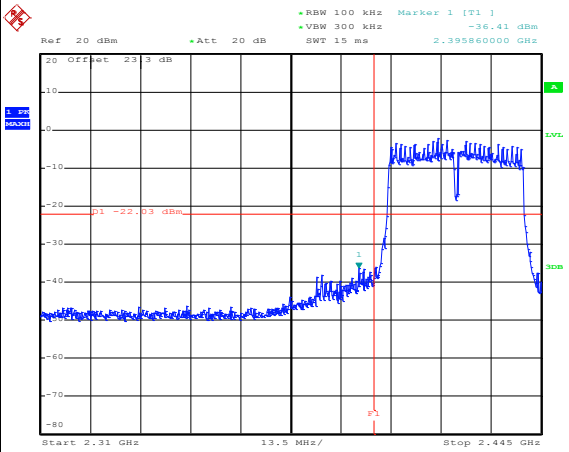
WLAN 802.11n HT40 Channel 03

100kHz PSD reference Level



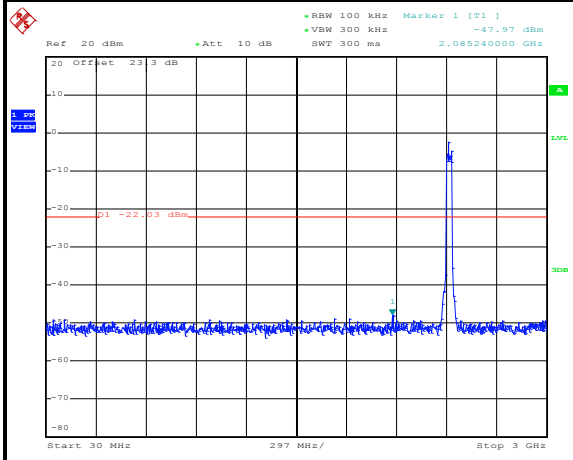
Date: 25.JAN.2016 15:49:03

Low Channel Plot



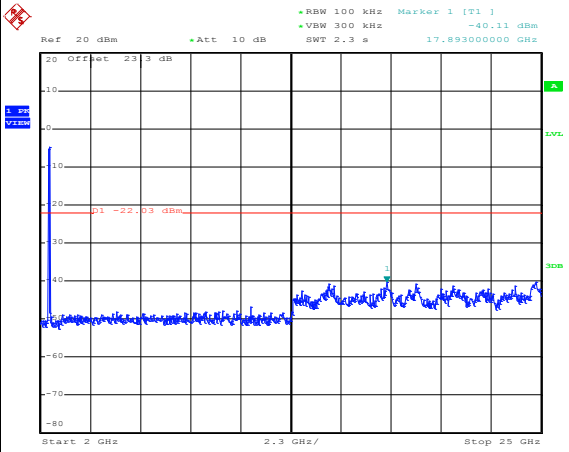
Date: 25.JAN.2016 15:49:33

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:49:52

Spurious Emission 2GHz~25GHz

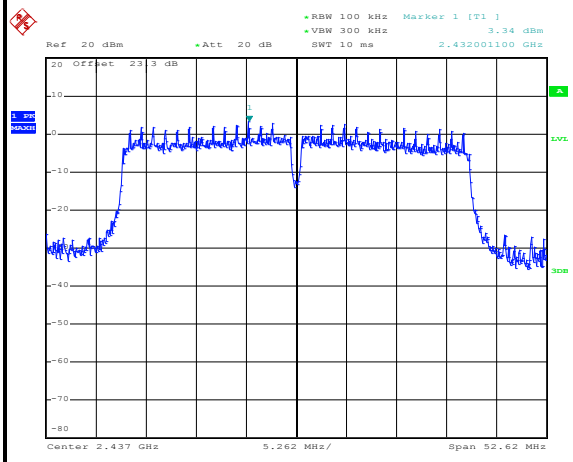


Date: 25.JAN.2016 15:50:00

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	51~54%
Test Channel :	06	**Test Engineer :**	AC Chang

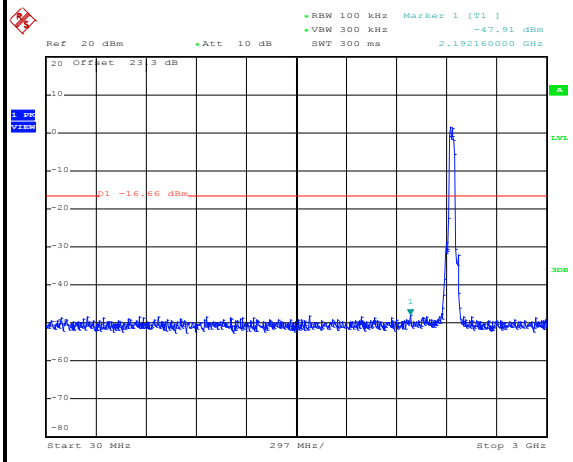
WLAN 802.11n HT40 Channel 06

100kHz PSD reference Level



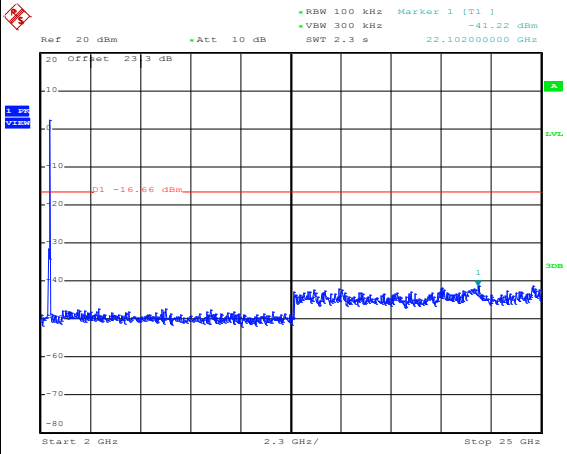
Date: 7.JAN.2016 17:31:30

Spurious Emission 30MHz~3GHz



Date: 7.JAN.2016 17:31:42

Spurious Emission 2GHz~25GHz

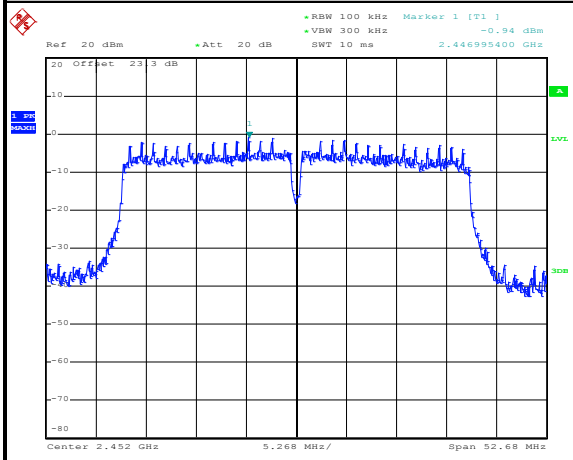


Date: 7.JAN.2016 17:31:50

Number of TX :	2	**Ant. :**	2
Test Mode :	802.11n HT40	**Temperature :**	21~25℃
Test Band :	2.4GHz High	**Relative Humidity :**	51~54%
Test Channel :	09	**Test Engineer :**	AC Chang

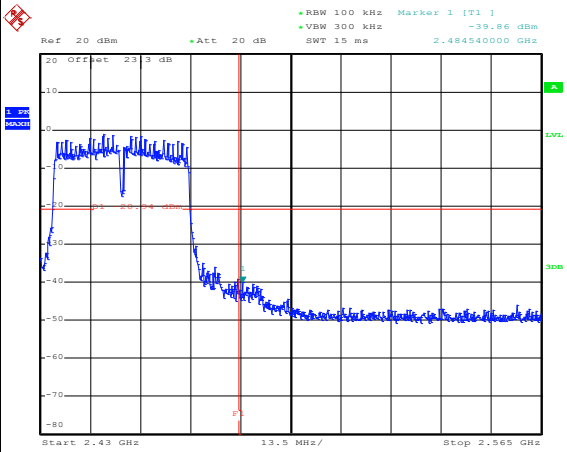
WLAN 802.11n HT40 Channel 09

100kHz PSD reference Level



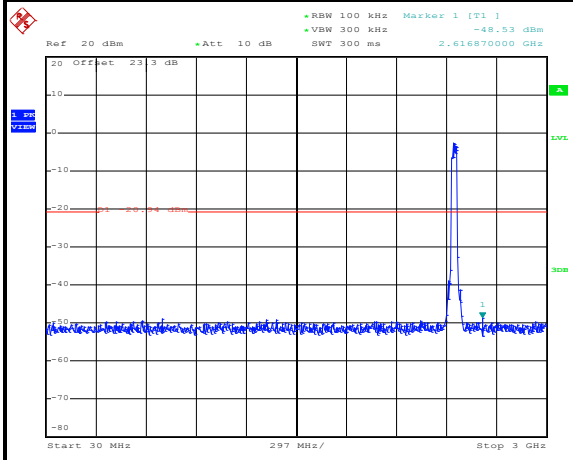
Date: 25.JAN.2016 15:57:59

High Channel Plot



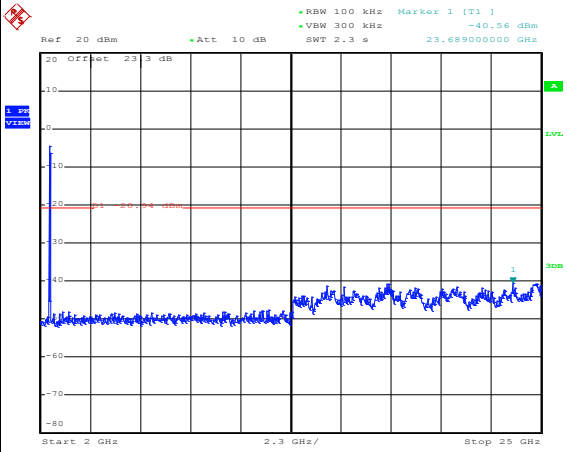
Date: 25.JAN.2016 15:58:15

Spurious Emission 30MHz~3GHz



Date: 25.JAN.2016 15:58:30

Spurious Emission 2GHz~25GHz



Date: 25.JAN.2016 15:58:38

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

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

3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

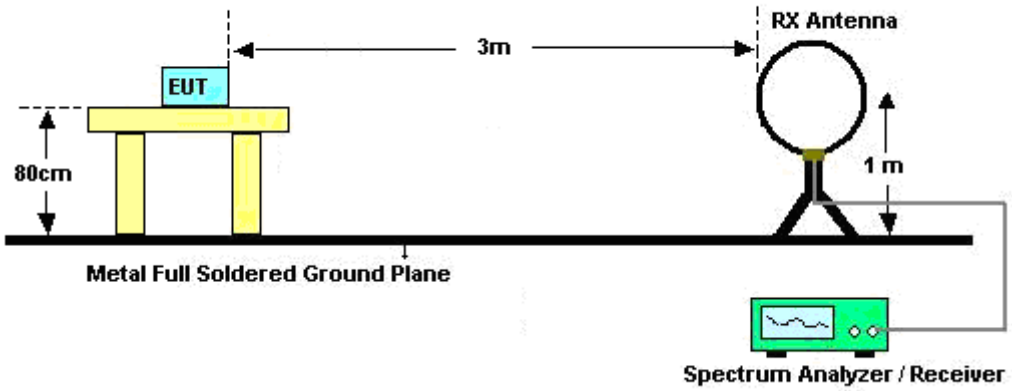
3.5.3 Test Procedure

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r04.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

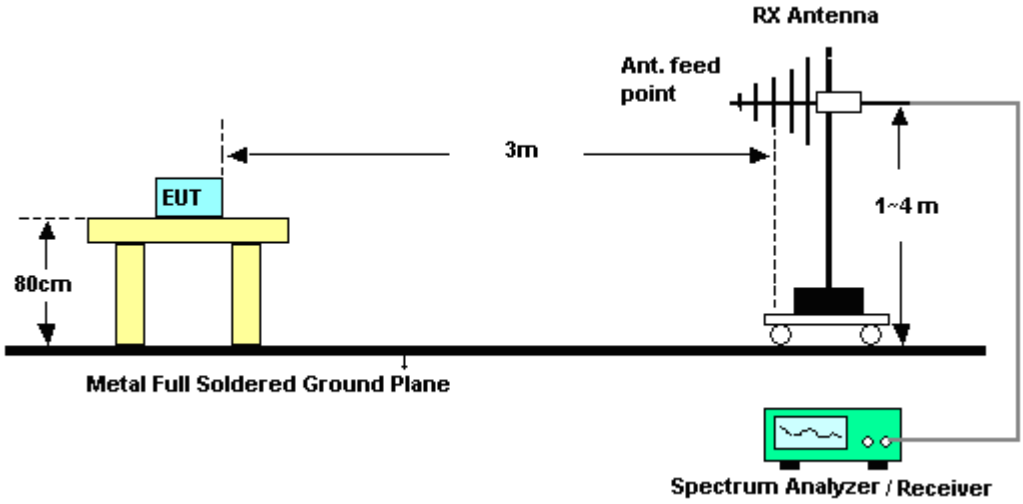
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11b	97.31	8680	0.12	1kHz
2	802.11b	97.32	8700	0.11	1kHz
1	802.11g	87.81	1440	0.69	1kHz
2	802.11g	86.75	1440	0.69	1kHz
1	2.4GHz 802.11n HT20	87.01	1340	0.75	1kHz
2	2.4GHz 802.11n HT20	85.9	1340	0.75	1kHz
1+2	2.4GHz 802.11n HT20 for Ant 1	76.99	696	1.44	3kHz
1+2	2.4GHz 802.11n HT20 for Ant 1	76.89	692	1.45	3kHz
1	2.4GHz 802.11n HT40	76.15	664	1.51	3kHz
2	2.4GHz 802.11n HT40	76.61	668	1.50	3kHz
1+2	2.4GHz 802.11n HT40 for Ant 1	62.12	356	2.81	3kHz
1+2	2.4GHz 802.11n HT40 for Ant 2	62.86	352	2.84	3kHz

3.5.4 Test Setup

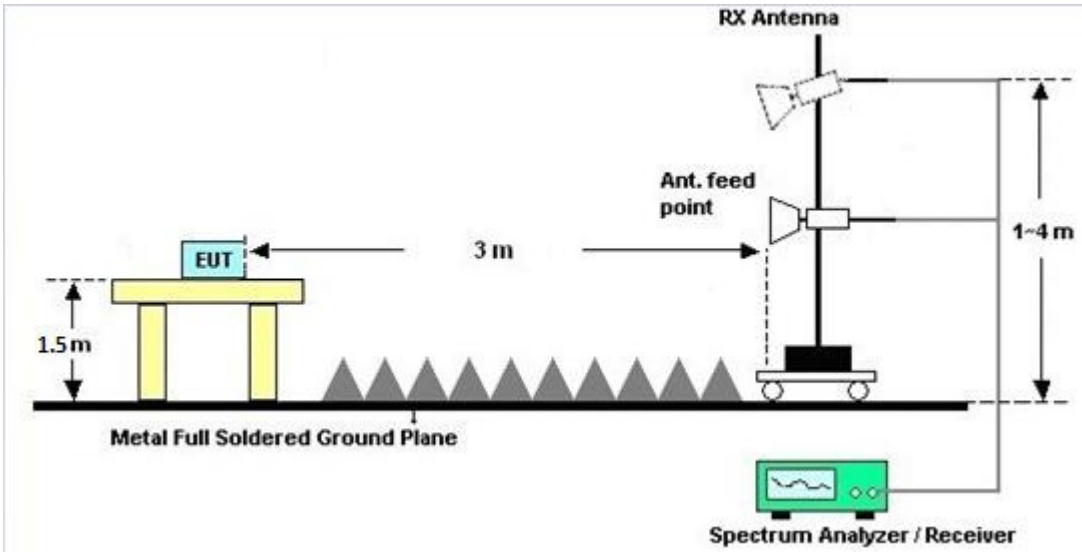
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B of this report.

3.5.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B of this report.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

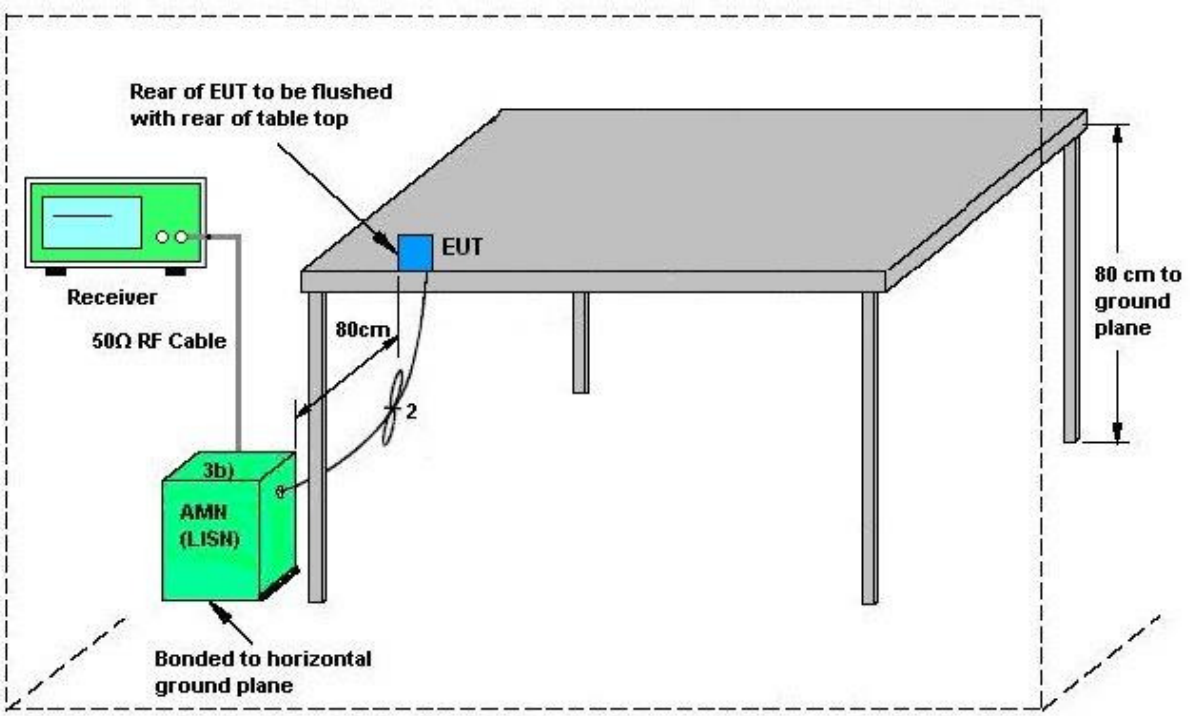
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

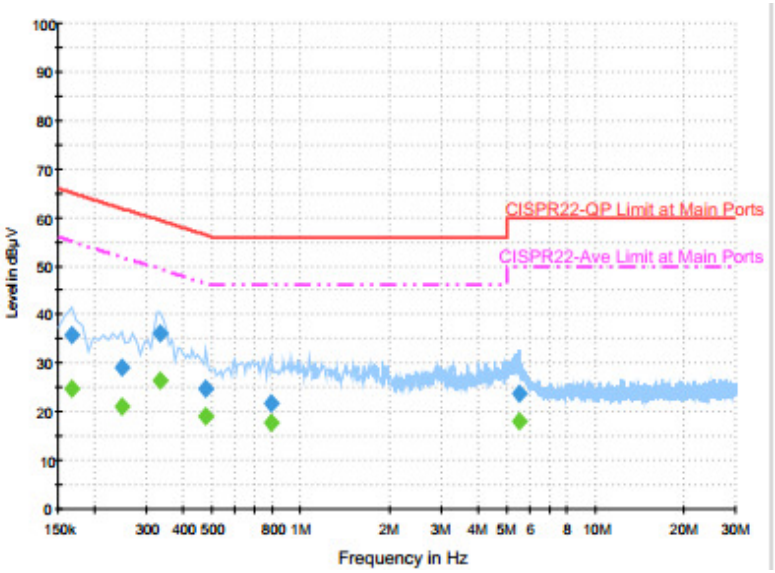
3.6.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	49~51%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (2.4GHz) Link		



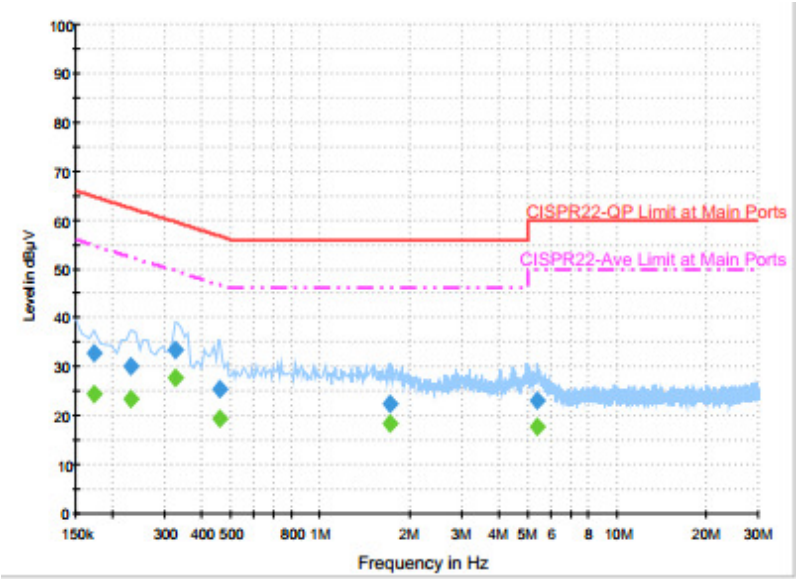
Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	35.8	Off	L1	19.7	29.4	65.2
0.246000	29.1	Off	L1	19.7	32.8	61.9
0.334000	36.3	Off	L1	19.7	23.1	59.4
0.478000	24.9	Off	L1	19.7	31.5	56.4
0.790000	21.6	Off	L1	19.6	34.4	56.0
5.526000	23.8	Off	L1	19.7	36.2	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.166000	24.7	Off	L1	19.7	30.5	55.2
0.246000	21.2	Off	L1	19.7	30.7	51.9
0.334000	26.4	Off	L1	19.7	23.0	49.4
0.478000	19.0	Off	L1	19.7	27.4	46.4
0.790000	17.6	Off	L1	19.6	28.4	46.0
5.526000	18.0	Off	L1	19.7	32.0	50.0

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	49~51%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (2.4GHz) Link		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	32.8	Off	N	19.7	32.0	64.8
0.230000	30.1	Off	N	19.7	32.3	62.4
0.326000	33.5	Off	N	19.7	26.1	59.6
0.462000	25.4	Off	N	19.7	31.3	56.7
1.718000	22.4	Off	N	19.7	33.6	56.0
5.422000	23.1	Off	N	19.7	36.9	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.174000	24.3	Off	N	19.7	30.5	54.8
0.230000	23.3	Off	N	19.7	29.1	52.4
0.326000	27.6	Off	N	19.7	22.0	49.6
0.462000	19.5	Off	N	19.7	27.2	46.7
1.718000	18.3	Off	N	19.7	27.7	46.0
5.422000	17.8	Off	N	19.7	32.2	50.0

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the Antenna exceeds 6 dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant. 1 (dBi)	Ant. 2 (dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	2.80	3.10	5.96	5.96	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Jul. 29, 2015	Dec. 28, 2015 ~ Jan. 07, 2016	Jul. 28, 2016	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Jul. 29, 2015	Dec. 28, 2015 ~ Jan. 07, 2016	Jul. 28, 2016	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 18, 2015	Dec. 28, 2015 ~ Jan. 07, 2016	Jun. 17, 2016	Conducted (TH02-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2015	Jan. 12, 2016~ Jan. 22, 2016	Sep. 01, 2016	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 20, 2015	Jan. 12, 2016~ Jan. 22, 2016	Nov. 19, 2016	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 08, 2015	Jan. 12, 2016~ Jan. 22, 2016	Oct. 07, 2016	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 19, 2015	Jan. 12, 2016~ Jan. 22, 2016	Nov. 18, 2016	Radiation (03CH11-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1902247	1GHz~18GHz	Jul. 01, 2015	Jan. 12, 2016~ Jan. 22, 2016	Jun. 30, 2016	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHZ	Sep. 24, 2015	Jan. 12, 2016~ Jan. 22, 2016	Sep. 23, 2016	Radiation (03CH11-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Feb. 02, 2015	Jan. 12, 2016~ Jan. 22, 2016	Feb. 01, 2016	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 12, 2016~ Jan. 22, 2016	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jan. 12, 2016~ Jan. 22, 2016	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0-360 degree	N/A	Jan. 12, 2016~ Jan. 22, 2016	N/A	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D	37059	30MHz to 1GHz	Dec. 29, 2015	Jan. 12, 2016~ Jan. 22, 2016	Dec. 28, 2016	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 20, 2015	Jan. 12, 2016~ Jan. 22, 2016	Apr. 19, 2016	Radiation (03CH11-HY)
Preamplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	Jun. 02, 2015	Jan. 12, 2016~ Jan. 22, 2016	Jun. 01, 2016	Radiation (03CH11-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 23, 2015	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	Dec. 23, 2015	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Dec. 23, 2015	Dec. 01, 2016	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 07, 2015	Dec. 23, 2015	Jan. 06, 2016	Conduction (CO05-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.70**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.90**

Appendix A. Conducted Test Results

Report Number : FR5D1117A

Test Engineer:	AC Chang	Temperature:	24~26	°C
Test Date:	104/12/28 ~ 105/01/07	Relative Humidity:	45~49	%

Report Number : FR5D1117A

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2		
11b	1Mbps	1	1	2412		12.35		10.04	0.50	Pass
11b	1Mbps	1	6	2437		12.40		10.08	0.50	Pass
11b	1Mbps	1	11	2462		12.45		10.04	0.50	Pass
11g	6Mbps	1	1	2412		17.60		16.06	0.50	Pass
11g	6Mbps	1	6	2437		17.90		15.48	0.50	Pass
11g	6Mbps	1	11	2462		17.60		15.72	0.50	Pass
HT20	MCS0	1	1	2412		18.20		16.60	0.50	Pass
HT20	MCS0	1	6	2437		18.75		16.02	0.50	Pass
HT20	MCS0	1	11	2462		18.25		16.08	0.50	Pass
HT40	MCS0	1	3	2422		36.40		35.12	0.50	Pass
HT40	MCS0	1	6	2437		36.40		35.12	0.50	Pass
HT40	MCS0	1	9	2452		36.40		35.20	0.50	Pass
HT20	MCS8	2	1	2412	18.30	18.25	16.74	17.26	0.50	Pass
HT20	MCS8	2	6	2437	18.20	18.30	16.62	16.92	0.50	Pass
HT20	MCS8	2	11	2462	18.20	18.25	16.50	17.14	0.50	Pass
HT40	MCS8	2	3	2422	36.30	36.40	35.32	35.12	0.50	Pass
HT40	MCS8	2	6	2437	36.50	36.30	35.28	35.08	0.50	Pass
HT40	MCS8	2	9	2452	36.30	36.20	35.32	35.08	0.50	Pass

Report Number : FR5D1117A

TEST RESULTS DATA
Peak Output Power

2.4GHz Band																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	21.97	22.24		30.00	30.00	2.80	3.10	24.77	25.34	36.00	36.00	Pass
11b	1Mbps	1	6	2437	22.20	22.21		30.00	30.00	2.80	3.10	25.00	25.31	36.00	36.00	Pass
11b	1Mbps	1	11	2462	22.19	22.23		30.00	30.00	2.80	3.10	24.99	25.33	36.00	36.00	Pass
11g	6Mbps	1	1	2412	23.51	24.40		30.00	30.00	2.80	3.10	26.31	27.50	36.00	36.00	Pass
11g	6Mbps	1	6	2437	24.62	24.63		30.00	30.00	2.80	3.10	27.42	27.73	36.00	36.00	Pass
11g	6Mbps	1	11	2462	24.10	24.11		30.00	30.00	2.80	3.10	26.90	27.21	36.00	36.00	Pass
HT20	MCS0	1	1	2412	22.78	23.49		30.00	30.00	2.80	3.10	25.58	26.59	36.00	36.00	Pass
HT20	MCS0	1	6	2437	24.60	24.62		30.00	30.00	2.80	3.10	27.40	27.72	36.00	36.00	Pass
HT20	MCS0	1	11	2462	23.60	23.65		30.00	30.00	2.80	3.10	26.40	26.75	36.00	36.00	Pass
HT40	MCS0	1	3	2422	21.60	21.70		30.00	30.00	2.80	3.10	24.40	24.80	36.00	36.00	Pass
HT40	MCS0	1	6	2437	23.78	23.82		30.00	30.00	2.80	3.10	26.58	26.92	36.00	36.00	Pass
HT40	MCS0	1	9	2452	21.51	21.56		30.00	30.00	2.80	3.10	24.31	24.66	36.00	36.00	Pass
HT20	MCS8	2	1	2412	22.12	23.29	25.75	30.00		5.96		31.72		36.00		Pass
HT20	MCS8	2	6	2437	23.13	23.50	26.33	30.00		5.96		32.29		36.00		Pass
HT20	MCS8	2	11	2462	22.47	22.81	25.65	30.00		5.96		31.62		36.00		Pass
HT40	MCS8	2	3	2422	20.14	20.89	23.54	30.00		5.96		29.50		36.00		Pass
HT40	MCS8	2	6	2437	23.30	23.30	26.31	30.00		5.96		32.27		36.00		Pass
HT40	MCS8	2	9	2452	20.66	21.37	24.04	30.00		5.96		30.00		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Average Output Power

2.4GHz Band									
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Ant 1	Ant 2	Ant 1	Ant 2	SUM
11b	1Mbps	1	1	2412	0.12	0.12	18.83	18.96	
11b	1Mbps	1	6	2437	0.12	0.12	18.93	18.94	
11b	1Mbps	1	11	2462	0.12	0.12	18.87	18.88	
11g	6Mbps	1	1	2412	0.56	0.62	15.51	16.76	
11g	6Mbps	1	6	2437	0.56	0.62	18.75	18.76	
11g	6Mbps	1	11	2462	0.56	0.62	16.24	16.48	
HT20	MCS0	1	1	2412	0.60	0.66	14.42	14.84	
HT20	MCS0	1	6	2437	0.60	0.66	18.77	18.86	
HT20	MCS0	1	11	2462	0.60	0.66	14.99	15.31	
HT40	MCS0	1	3	2422	1.18	1.16	12.78	12.81	
HT40	MCS0	1	6	2437	1.18	1.16	15.62	16.13	
HT40	MCS0	1	9	2452	1.18	1.16	12.68	12.69	
HT20	MCS8	2	1	2412	1.14	1.14	14.50	15.66	18.13
HT20	MCS8	2	6	2437	1.14	1.14	15.47	16.43	18.99
HT20	MCS8	2	11	2462	1.14	1.14	14.31	15.09	17.73
HT40	MCS8	2	3	2422	2.00	2.02	10.80	12.03	14.47
HT40	MCS8	2	6	2437	2.00	2.02	15.00	16.21	18.65
HT40	MCS8	2	9	2452	2.00	2.02	11.77	12.86	15.36

Note: Measured power (dBm) has offset with cable loss.

Report Number : FR5D1117A

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412		-7.30	-	2.80	3.10	8.00	8.00	Pass
11b	1Mbps	1	6	2437		-6.82		2.80	3.10	8.00	8.00	Pass
11b	1Mbps	1	11	2462		-7.95		2.80	3.10	8.00	8.00	Pass
11g	6Mbps	1	1	2412		-10.85		2.80	3.10	8.00	8.00	Pass
11g	6Mbps	1	6	2437		-9.00		2.80	3.10	8.00	8.00	Pass
11g	6Mbps	1	11	2462		-10.74		2.80	3.10	8.00	8.00	Pass
HT20	MCS0	1	1	2412		-13.23		2.80	3.10	8.00	8.00	Pass
HT20	MCS0	1	6	2437		-8.94		2.80	3.10	8.00	8.00	Pass
HT20	MCS0	1	11	2462		-11.61		2.80	3.10	8.00	8.00	Pass
HT40	MCS0	1	3	2422		-17.32		2.80	3.10	8.00	8.00	Pass
HT40	MCS0	1	6	2437		-13.75		2.80	3.10	8.00	8.00	Pass
HT40	MCS0	1	9	2452		-17.63		2.80	3.10	8.00	8.00	Pass
HT20	MCS8	2	1	2412	-13.29	-10.61	-7.60	5.96		8.00		Pass
HT20	MCS8	2	6	2437	-12.13	-9.36	-6.35	5.96		8.00		Pass
HT20	MCS8	2	11	2462	-13.40	-11.07	-8.06	5.96		8.00		Pass
HT40	MCS8	2	3	2422	-18.95	-18.44	-15.43	5.96		8.00		Pass
HT40	MCS8	2	6	2437	-14.62	-12.65	-9.64	5.96		8.00		Pass
HT40	MCS8	2	9	2452	-19.22	-17.28	-14.27	5.96		8.00		Pass

Measured power density (dBm) has offset with cable loss.

Appendix B. Radiated Spurious Emission

Test Engineer :	J.C. Liang, Bill Chang and Ken Wu	Temperature :	20~22°C
		Relative Humidity :	54~56%

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
	*	2462	103.22	-	-	103.91	27.2	6.07	33.96	114	311	P	H
	*	2462	96.14	-	-	96.83	27.2	6.07	33.96	114	311	A	H
		2483.76	66.03	-7.97	74	66.64	27.25	6.09	33.95	114	311	P	H
		2483.6	52.93	-1.07	54	53.54	27.25	6.09	33.95	114	311	A	H
802.11n													H
HT20													H
CH 11	*	2462	106.18	-	-	106.87	27.2	6.07	33.96	193	344	P	V
2462MHz	*	2462	99.1	-	-	99.79	27.2	6.07	33.96	193	344	A	V
		2485.28	66.3	-7.7	74	66.91	27.25	6.09	33.95	193	344	P	V
		2483.56	52.95	-1.05	54	53.56	27.25	6.09	33.95	193	344	A	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	48.34	-25.66	74	71.63	31.29	10.39	64.97	100	0	P	H
		7386	38.78	-35.22	74	55.1	36.27	12.49	65.08	100	0	P	H
802.11n													H
HT20													H
CH 11		4924	48.07	-25.93	74	71.36	31.29	10.39	64.97	100	0	P	V
2462MHz		7386	39.52	-34.48	74	55.84	36.27	12.49	65.08	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		35.94	30.83	-9.17	40	39.18	22.54	0.93	31.82			P	H
		87.24	29.99	-10.01	40	46.07	14.54	1.17	31.79			P	H
		250.05	38.4	-7.6	46	49.49	18.7	1.98	31.77			P	H
		549.9	40.73	-5.27	46	44.87	24.8	3.03	31.97			P	H
		720	41.96	-4.04	46	43.35	27.09	3.54	32.02	193	245	P	H
		839.7	41.78	-4.22	46	40.95	28.78	3.77	31.72			P	H
													H
													H
													H
													H
2.4GHz													H
802.11n													H
HT20		35.13	38.46	-1.54	40	46.26	23.1	0.93	31.83	108	348	P	V
LF		87.78	31.41	-8.59	40	47.36	14.66	1.17	31.78			P	V
		250.05	33.76	-12.24	46	44.85	18.7	1.98	31.77			P	V
		500.2	41.35	-4.65	46	46.19	24.1	2.95	31.89			P	V
		720	37.24	-8.76	46	38.63	27.09	3.54	32.02			P	V
		839.7	36.28	-9.72	46	35.45	28.78	3.77	31.72			P	V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against limit line.

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2389.02	61.64	-12.36	74	62.61	27.01	6.01	33.99	153	0	P	H
		2387.22	47.8	-6.2	54	48.77	27.01	6.01	33.99	153	0	A	H
	*	2410.271	107.49	-	-	108.37	27.06	6.04	33.98	153	0	P	H
	*	2410.187	104.36	-	-	105.24	27.06	6.04	33.98	153	0	A	H
													H
													H
		2389.29	58.2	-15.8	74	59.17	27.01	6.01	33.99	119	341	P	V
		2386.23	45.84	-8.16	54	46.81	27.01	6.01	33.99	119	341	A	V
	*	2410.271	107.11	-	-	107.99	27.06	6.04	33.98	119	341	P	V
	*	2410.271	104.02	-	-	104.9	27.06	6.04	33.98	119	341	A	V
													V
													V
802.11b CH 06 2437MHz		2376.15	51.36	-22.64	74	52.38	26.96	6.01	33.99	127	360	P	H
		2387.67	42.41	-11.59	54	43.38	27.01	6.01	33.99	127	360	A	H
	*	2437	106.36	-	-	107.13	27.16	6.04	33.97	127	360	P	H
	*	2437	103.17	-	-	103.94	27.16	6.04	33.97	127	360	A	H
		2484.4	50.97	-23.03	74	51.58	27.25	6.09	33.95	127	360	P	H
		2491.92	41.49	-12.51	54	42.04	27.3	6.09	33.94	127	360	A	H
		2377.77	50.83	-23.17	74	51.85	26.96	6.01	33.99	128	11	P	V
		2372.01	41.27	-12.73	54	42.29	26.96	6.01	33.99	128	11	A	V
	*	2437	105.02	-	-	105.79	27.16	6.04	33.97	128	11	P	V
	*	2437	102.24	-	-	103.01	27.16	6.04	33.97	128	11	A	V
		2499.76	51.05	-22.95	74	51.6	27.3	6.09	33.94	128	11	P	V
		2486.56	41.41	-12.59	54	42.02	27.25	6.09	33.95	128	11	A	V

802.11b CH 11 2462MHz	*	2462	106.71	-	-	107.4	27.2	6.07	33.96	152	360	P	H
	*	2462	103.63	-	-	104.32	27.2	6.07	33.96	152	360	A	H
		2483.52	60.67	-13.33	74	61.28	27.25	6.09	33.95	152	360	P	H
		2486.88	46.14	-7.86	54	46.75	27.25	6.09	33.95	152	360	A	H
													H
													H
	*	2462	104.53	-	-	105.22	27.2	6.07	33.96	104	298	P	V
	*	2462	101.28	-	-	101.97	27.2	6.07	33.96	104	298	A	V
		2483.68	59.24	-14.76	74	59.85	27.25	6.09	33.95	104	298	P	V
		2485.92	43.63	-10.37	54	44.24	27.25	6.09	33.95	104	298	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	44.27	-29.73	74	69.57	31.12	8.65	65.07	100	0	P	H
													H
													H
													H
		4824	45.09	-28.91	74	70.39	31.12	8.65	65.07	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4872	47.89	-26.11	74	73.01	31.21	8.69	65.02	100	0	P	H
		7311	39.11	-34.89	74	57.7	36.08	10.39	65.06	100	0	P	H
													H
													H
		4872	48.68	-25.32	74	73.8	31.21	8.69	65.02	100	0	P	V
		7311	38.55	-35.45	74	57.14	36.08	10.39	65.06	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4924	50.72	-23.28	74	75.61	31.29	8.79	64.97	100	0	P	H
		7386	40.11	-33.89	74	58.44	36.27	10.48	65.08	100	0	P	H
													H
													H
		4924	54.08	-19.92	74	78.97	31.29	8.79	64.97	245	20	P	V
		4924	52.79	-1.21	54	77.68	31.29	8.79	64.97	245	20	A	V
		7386	39.46	-34.54	74	57.79	36.27	10.48	65.08	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.83	63.54	-10.46	74	64.5	27.01	6.01	33.98	155	1	P	H
		2390	52.75	-1.25	54	53.71	27.01	6.01	33.98	155	1	P	H
	*	2412	106.18	-	-	107.06	27.06	6.04	33.98	155	1	P	H
	*	2412	99.54	-	-	100.42	27.06	6.04	33.98	155	1	A	H
													H
													H
		2389.02	60.53	-13.47	74	61.5	27.01	6.01	33.99	120	339	P	V
		2390	49.62	-4.38	54	50.58	27.01	6.01	33.98	120	339	A	V
	*	2412	106.03	-	-	106.91	27.06	6.04	33.98	120	339	P	V
	*	2412	98.17	-	-	99.05	27.06	6.04	33.98	120	339	A	V
													V
													V
802.11g CH 06 2437MHz		2389.02	52.74	-21.26	74	53.71	27.01	6.01	33.99	132	360	P	H
		2389.92	43.21	-10.79	54	44.17	27.01	6.01	33.98	132	360	A	H
	*	2437	108.11	-	-	108.88	27.16	6.04	33.97	132	360	P	H
	*	2437	100.34	-	-	101.11	27.16	6.04	33.97	132	360	A	H
		2496.4	52.02	-21.98	74	52.57	27.3	6.09	33.94	132	360	P	H
		2494.84	41.74	-12.26	54	42.29	27.3	6.09	33.94	132	360	A	H
		2387.67	51.57	-22.43	74	52.54	27.01	6.01	33.99	134	0	P	V
		2386.86	41.64	-12.36	54	42.61	27.01	6.01	33.99	134	0	A	V
	*	2437	106.22	-	-	106.99	27.16	6.04	33.97	134	0	P	V
	*	2437	98.88	-	-	99.65	27.16	6.04	33.97	134	0	A	V
		2486.68	51.59	-22.41	74	52.2	27.25	6.09	33.95	134	0	P	V
		2486.12	41.54	-12.46	54	42.15	27.25	6.09	33.95	134	0	A	V

802.11g CH 11 2462MHz	*	2462	105.95	-	-	106.64	27.2	6.07	33.96	202	31	P	H
	*	2462	98.01	-	-	98.7	27.2	6.07	33.96	202	31	A	H
		2484.24	62.08	-11.92	74	62.69	27.25	6.09	33.95	202	31	P	H
		2483.52	50.68	-3.32	54	51.29	27.25	6.09	33.95	202	31	A	H
													H
													H
	*	2462	106.43	-	-	107.12	27.2	6.07	33.96	136	266	P	V
	*	2462	98.53	-	-	99.22	27.2	6.07	33.96	136	266	A	V
		2483.96	64.97	-9.03	74	65.58	27.25	6.09	33.95	136	266	P	V
		2483.52	51.21	-2.79	54	51.82	27.25	6.09	33.95	136	266	A	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	41.49	-32.51	74	66.79	31.12	8.65	65.07	100	0	P	H
													H
													H
													H
		4824	42.07	-31.93	74	67.37	31.12	8.65	65.07	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	44.57	-29.43	74	69.69	31.21	8.69	65.02	100	0	P	H
		7311	38.22	-35.78	74	56.81	36.08	10.39	65.06	100	0	P	H
													H
													H
		4874	45.74	-28.26	74	70.86	31.21	8.69	65.02	100	0	P	V
		7311	37.46	-36.54	74	56.05	36.08	10.39	65.06	100	0	P	V
													V
													V
802.11g CH 11 2462MHz		4926	45.77	-28.23	74	70.66	31.29	8.79	64.97	100	0	P	H
		7386	39.64	-34.36	74	57.97	36.27	10.48	65.08	100	0	P	H
													H
													H
		4926	48.99	-25.01	74	73.88	31.29	8.79	64.97	100	0	P	V
		7386	38.23	-35.77	74	56.56	36.27	10.48	65.08	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2390	61.68	-12.32	74	62.64	27.01	6.01	33.98	154	0	P	H
		2390	50.35	-3.65	54	51.31	27.01	6.01	33.98	154	0	A	H
	*	2410.855	104.7	-	-	105.58	27.06	6.04	33.98	154	0	P	H
	*	2411.022	97.45	-	-	98.33	27.06	6.04	33.98	154	0	A	H
802.11n													H
HT20													H
CH 01		2389.83	64.38	-9.62	74	65.34	27.01	6.01	33.98	120	254	P	V
2412MHz		2390	52.52	-1.48	54	53.48	27.01	6.01	33.98	120	254	A	V
	*	2412	107.47	-	-	108.35	27.06	6.04	33.98	120	254	P	V
	*	2412	100.41	-	-	101.29	27.06	6.04	33.98	120	254	A	V
													V
													V
		2386.5	54.26	-19.74	74	55.23	27.01	6.01	33.99	128	360	P	H
		2389.83	43.75	-10.25	54	44.71	27.01	6.01	33.98	128	360	A	H
	*	2435.989	108.28	-	-	109.1	27.11	6.04	33.97	128	360	P	H
	*	2435.989	100.9	-	-	101.72	27.11	6.04	33.97	128	360	A	H
802.11n		2494.12	51.73	-22.27	74	52.28	27.3	6.09	33.94	128	360	P	H
HT20		2488.64	41.83	-12.17	54	42.39	27.3	6.09	33.95	128	360	A	H
CH 06		2389.11	53.93	-20.07	74	54.9	27.01	6.01	33.99	126	251	P	V
2437MHz		2389.47	44.14	-9.86	54	45.11	27.01	6.01	33.99	126	251	A	V
	*	2435.905	111.76	-	-	112.58	27.11	6.04	33.97	126	251	P	V
	*	2435.822	104.44	-	-	105.26	27.11	6.04	33.97	126	251	A	V
		2494.8	52.37	-21.63	74	52.92	27.3	6.09	33.94	126	251	P	V
		2483.56	42.43	-11.57	54	43.04	27.25	6.09	33.95	126	251	A	V

	*	2460.037	104.71	-	-	105.4	27.2	6.07	33.96	150	0	P	H
	*	2461.039	97.44	-	-	98.13	27.2	6.07	33.96	150	0	A	H
		2484.4	63.99	-10.01	74	64.6	27.25	6.09	33.95	150	0	P	H
		2483.52	50.75	-3.25	54	51.36	27.25	6.09	33.95	150	0	A	H
802.11n													H
HT20													H
CH 11	*	2460.705	107.64	-	-	108.33	27.2	6.07	33.96	138	250	P	V
2462MHz	*	2460.872	100.55	-	-	101.24	27.2	6.07	33.96	138	250	A	V
		2483.76	65.94	-8.06	74	66.55	27.25	6.09	33.95	138	250	P	V
		2483.52	53	-1	54	53.61	27.25	6.09	33.95	138	250	A	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	40.67	-33.33	74	65.97	31.12	8.65	65.07	100	0	P	H
													H
802.11n													H
HT20													H
CH 01		4824	41.27	-32.73	74	66.57	31.12	8.65	65.07	100	0	P	V
2412MHz													V
													V
													V
		4872	46.34	-27.66	74	71.46	31.21	8.69	65.02	100	0	P	H
		7311	40.75	-33.25	74	59.34	36.08	10.39	65.06	100	0	P	H
802.11n													H
HT20													H
CH 06		4872	46.6	-27.4	74	71.72	31.21	8.69	65.02	100	0	P	V
2437MHz		7311	40.17	-33.83	74	58.76	36.08	10.39	65.06	100	0	P	V
													V
													V
		4924	43.66	-30.34	74	68.55	31.29	8.79	64.97	100	0	P	H
		7386	40.57	-33.43	74	58.9	36.27	10.48	65.08	100	0	P	H
802.11n													H
HT20													H
CH 11		4924	47.45	-26.55	74	72.34	31.29	8.79	64.97	100	0	P	V
2462MHz		7386	41.33	-32.67	74	59.66	36.27	10.48	65.08	100	0	P	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2390	63.91	-10.09	74	64.87	27.01	6.01	33.98	105	0	P	H
		2385.69	52.42	-1.58	54	53.39	27.01	6.01	33.99	105	0	A	H
	*	2420.458	99.5	-	-	100.32	27.11	6.04	33.97	105	0	P	H
	*	2420.374	92.42	-	-	93.24	27.11	6.04	33.97	105	0	A	H
802.11n		2489.32	50.87	-23.13	74	51.43	27.3	6.09	33.95	105	0	P	H
HT40		2492.36	41.93	-12.07	54	42.48	27.3	6.09	33.94	105	0	A	H
CH 03		2387.31	63.55	-10.45	74	64.52	27.01	6.01	33.99	147	252	P	V
2422MHz		2389.65	52.15	-1.85	54	53.12	27.01	6.01	33.99	147	252	A	V
	*	2423.714	102.73	-	-	103.55	27.11	6.04	33.97	147	252	P	V
	*	2423.798	95.78	-	-	96.6	27.11	6.04	33.97	147	252	A	V
		2486.16	51.02	-22.98	74	51.63	27.25	6.09	33.95	147	252	P	V
		2489.88	41.93	-12.07	54	42.49	27.3	6.09	33.95	147	252	A	V
		2390	60.64	-13.36	74	61.6	27.01	6.01	33.98	179	27	P	H
		2389.74	50.56	-3.44	54	51.53	27.01	6.01	33.99	179	27	A	H
	*	2437	102.51	-	-	103.28	27.16	6.04	33.97	179	27	P	H
	*	2437	95.46	-	-	96.23	27.16	6.04	33.97	179	27	A	H
802.11n		2484.24	58.6	-15.4	74	59.21	27.25	6.09	33.95	179	27	P	H
HT40		2483.72	47.23	-6.77	54	47.84	27.25	6.09	33.95	179	27	A	H
CH 06		2389.56	60.44	-13.56	74	61.41	27.01	6.01	33.99	117	252	P	V
2437MHz		2389.74	52.09	-1.91	54	53.06	27.01	6.01	33.99	117	252	A	V
	*	2437	105.54	-	-	106.31	27.16	6.04	33.97	117	252	P	V
	*	2437	98.43	-	-	99.2	27.16	6.04	33.97	117	252	A	V
		2485.64	60.63	-13.37	74	61.24	27.25	6.09	33.95	117	252	P	V
		2483.6	49.64	-4.36	54	50.25	27.25	6.09	33.95	117	252	A	V

		2384.07	51.22	-22.78	74	52.24	26.96	6.01	33.99	100	0	P	H
		2389.47	42.41	-11.59	54	43.38	27.01	6.01	33.99	100	0	A	H
	*	2452	98.53	-	-	99.26	27.16	6.07	33.96	100	0	P	H
	*	2452	91.45	-	-	92.18	27.16	6.07	33.96	100	0	A	H
802.11n		2484.44	59.98	-14.02	74	60.59	27.25	6.09	33.95	100	0	P	H
HT40		2483.52	49.76	-4.24	54	50.37	27.25	6.09	33.95	100	0	A	H
CH 09		2365.62	51.65	-22.35	74	52.72	26.91	6.01	33.99	106	252	P	V
2452MHz		2389.83	42.12	-11.88	54	43.08	27.01	6.01	33.98	106	252	A	V
	*	2452	100.08	-	-	100.81	27.16	6.07	33.96	106	252	P	V
	*	2452	93.99	-	-	94.72	27.16	6.07	33.96	106	252	A	V
		2484.56	62.49	-11.51	74	63.1	27.25	6.09	33.95	106	252	P	V
		2483.56	52.42	-1.58	54	53.03	27.25	6.09	33.95	106	252	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4842	40.03	-33.97	74	65.25	31.15	8.69	65.06	100	0	P	H
		7320	41.15	-32.85	74	59.71	36.12	10.39	65.07	100	0	P	H
802.11n													H
HT40													H
CH 03		4842	40.09	-33.91	74	65.31	31.15	8.69	65.06	100	0	P	V
2422MHz		7266	40.84	-33.16	74	59.55	36.01	10.34	65.06	100	0	P	V
													V
													V
		4874	41.94	-32.06	74	67.06	31.21	8.69	65.02	100	0	P	H
		7311	38.64	-35.36	74	57.23	36.08	10.39	65.06	100	0	P	H
802.11n													H
HT40													H
CH 06		4874	41.35	-32.65	74	66.47	31.21	8.69	65.02	100	0	P	V
2437MHz		7311	38.47	-35.53	74	57.06	36.08	10.39	65.06	100	0	P	V
													V
													V
		4902	38.44	-35.56	74	63.43	31.26	8.74	64.99	100	0	P	H
		7356	38.73	-35.27	74	57.16	36.2	10.44	65.07	100	0	P	H
802.11n													H
HT40													H
CH 09		4902	38.74	-35.26	74	63.73	31.26	8.74	64.99	100	0	P	V
2452MHz		7356	38.87	-35.13	74	57.3	36.2	10.44	65.07	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		98.31	32.46	-11.04	43.5	47.21	15.86	1.17	31.78			P	H
		250.05	39.68	-6.32	46	50.77	18.7	1.98	31.77			P	H
		274.89	43.33	-2.67	46	53.71	19.25	2.13	31.76	325	58	P	H
		400.1	37.83	-8.17	46	44.63	22.42	2.58	31.8			P	H
		624.8	38.15	-7.85	46	40.88	25.95	3.36	32.04			P	H
		720	35.31	-10.69	46	36.7	27.09	3.54	32.02			P	H
													H
													H
													H
													H
2.4GHz													H
802.11n													H
HT20		36.75	38.32	-1.68	40	47.23	21.98	0.93	31.82	118	154	P	V
LF		200.1	31.56	-11.94	43.5	45.6	16	1.74	31.78			P	V
		274.89	40.35	-5.65	46	50.73	19.25	2.13	31.76			P	V
		400.1	34.98	-11.02	46	41.78	22.42	2.58	31.8			P	V
		624.8	34.64	-11.36	46	37.37	25.95	3.36	32.04			P	V
		874.7	34.43	-11.57	46	33.09	29.05	3.84	31.55			P	V
													V
													V
													V
													V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against limit line.

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

3. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

4. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

3. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

4. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

3. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

4. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2389.38	63.82	-10.18	74	64.79	27.01	6.01	33.99	147	33	P	H
		2389.74	51	-3	54	51.97	27.01	6.01	33.99	147	33	A	H
	*	2412	105.01	-	-	105.89	27.06	6.04	33.98	147	33	P	H
	*	2412	96.51	-	-	97.39	27.06	6.04	33.98	147	33	A	H
802.11n													H
HT20													H
CH 01		2388.75	62.2	-11.8	74	63.17	27.01	6.01	33.99	100	25	P	V
2412MHz		2390	52.94	-1.06	54	53.9	27.01	6.01	33.98	100	25	A	V
	*	2412	107.13	-	-	108.01	27.06	6.04	33.98	100	25	P	V
	*	2412	99.39	-	-	100.27	27.06	6.04	33.98	100	25	A	V
													V
													V
		2377.86	51.14	-22.86	74	52.16	26.96	6.01	33.99	137	16	P	H
		2386.23	42.51	-11.49	54	43.48	27.01	6.01	33.99	137	16	A	H
	*	2437	108.24	-	-	109.01	27.16	6.04	33.97	137	16	P	H
	*	2437	99.89	-	-	100.66	27.16	6.04	33.97	137	16	A	H
802.11n		2485.2	51.54	-22.46	74	52.15	27.25	6.09	33.95	137	16	P	H
HT20		2483.76	42.61	-11.39	54	43.22	27.25	6.09	33.95	137	16	A	H
CH 06		2366.61	51.51	-22.49	74	52.58	26.91	6.01	33.99	150	27	P	V
2437MHz		2387.4	42.9	-11.1	54	43.87	27.01	6.01	33.99	150	27	A	V
	*	2437	108.63	-	-	109.4	27.16	6.04	33.97	150	27	P	V
	*	2437	100.49	-	-	101.26	27.16	6.04	33.97	150	27	A	V
		2490.84	51.64	-22.36	74	52.2	27.3	6.09	33.95	150	27	P	V
		2497.52	42.7	-11.3	54	43.25	27.3	6.09	33.94	150	27	A	V

	*	2462	106.99	-	-	107.68	27.2	6.07	33.96	136	17	P	H
	*	2462	98.49	-	-	99.18	27.2	6.07	33.96	136	17	A	H
		2484.64	64.23	-9.77	74	64.84	27.25	6.09	33.95	136	17	P	H
		2483.52	51.53	-2.47	54	52.14	27.25	6.09	33.95	136	17	A	H
802.11n													H
HT20													H
CH 11	*	2462	108.28	-	-	108.97	27.2	6.07	33.96	108	27	P	V
2462MHz	*	2462	100.19	-	-	100.88	27.2	6.07	33.96	108	27	A	V
		2484	64.2	-9.8	74	64.81	27.25	6.09	33.95	108	27	P	V
		2483.52	52.03	-1.97	54	52.64	27.25	6.09	33.95	108	27	A	V
													V
													V

Remark

5. No other spurious found.
6. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	55.12	-18.88	74	80.42	31.12	8.65	65.07	226	245	P	H
		4824	46.68	-7.32	54	71.98	31.12	8.65	65.07	226	245	A	H
802.11n													H
HT20													H
CH 01		4824	53.13	-20.87	74	78.43	31.12	8.65	65.07	370	352	P	V
2412MHz		4824	42.83	-11.17	54	68.13	31.12	8.65	65.07	370	352	A	V
													V
													V
		4874	53.1	-20.9	74	78.22	31.21	8.69	65.02	380	355	P	H
		4874	42.16	-11.84	54	67.28	31.21	8.69	65.02	380	355	A	H
802.11n		7311	39.01	-34.99	74	57.6	36.08	10.39	65.06	100	0	P	H
HT20													H
CH 06		4874	51.04	-22.96	74	76.16	31.21	8.69	65.02	100	0	P	V
2437MHz		7311	38.23	-35.77	74	56.82	36.08	10.39	65.06	100	0	P	V
													V
													V
		4926	50.54	-23.46	74	75.43	31.29	8.79	64.97	100	0	P	H
		7386	38.92	-35.08	74	57.25	36.27	10.48	65.08	100	0	P	H
802.11n													H
HT20													H
CH 11		4926	48.63	-25.37	74	73.52	31.29	8.79	64.97	100	0	P	V
2462MHz		7386	39.12	-34.88	74	57.45	36.27	10.48	65.08	100	0	P	V
													V
													V

Remark

5. No other spurious found.
6. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2387.04	60.93	-13.07	74	61.9	27.01	6.01	33.99	132	13	P	H
		2385.6	52.24	-1.76	54	53.21	27.01	6.01	33.99	132	13	A	H
	*	2422	100.35	-	-	101.17	27.11	6.04	33.97	132	13	P	H
	*	2422	92.49	-	-	93.31	27.11	6.04	33.97	132	13	A	H
802.11n		2497.76	50.93	-23.07	74	51.48	27.3	6.09	33.94	132	13	P	H
HT40		2484.32	42.12	-11.88	54	42.73	27.25	6.09	33.95	132	13	A	H
CH 03		2389.11	61.13	-12.87	74	62.1	27.01	6.01	33.99	100	25	P	V
2422MHz		2385.24	50.33	-3.67	54	51.35	26.96	6.01	33.99	100	25	A	V
	*	2422	99.56	-	-	100.38	27.11	6.04	33.97	100	25	P	V
	*	2422	91.87	-	-	92.69	27.11	6.04	33.97	100	25	A	V
		2498.28	51.16	-22.84	74	51.71	27.3	6.09	33.94	100	25	P	V
		2485.84	41.9	-12.1	54	42.51	27.25	6.09	33.95	100	25	A	V
		2387.76	62.7	-11.3	74	63.67	27.01	6.01	33.99	125	32	P	H
		2390	51.81	-2.19	54	52.77	27.01	6.01	33.98	125	32	A	H
	*	2437	105.71	-	-	106.48	27.16	6.04	33.97	125	32	P	H
	*	2437	97.34	-	-	98.11	27.16	6.04	33.97	125	32	A	H
802.11n		2486.76	62.03	-11.97	74	62.64	27.25	6.09	33.95	125	32	P	H
HT40		2484.44	49.22	-4.78	54	49.83	27.25	6.09	33.95	125	32	A	H
CH 06		2389.56	62.02	-11.98	74	62.99	27.01	6.01	33.99	100	27	P	V
2437MHz		2390	50.99	-3.01	54	51.95	27.01	6.01	33.98	100	27	A	V
	*	2437	104.96	-	-	105.73	27.16	6.04	33.97	100	27	P	V
	*	2437	96.89	-	-	97.66	27.16	6.04	33.97	100	27	A	V
		2486.76	60.93	-13.07	74	61.54	27.25	6.09	33.95	100	27	P	V
		2483.52	49.65	-4.35	54	50.26	27.25	6.09	33.95	100	27	A	V

		2373.54	50.91	-23.09	74	51.93	26.96	6.01	33.99	112	26	P	H
		2367.6	41.97	-12.03	54	43.04	26.91	6.01	33.99	112	26	A	H
	*	2452	101.5	-	-	102.23	27.16	6.07	33.96	112	26	P	H
	*	2452	93.61	-	-	94.34	27.16	6.07	33.96	112	26	A	H
802.11n		2486.04	63.05	-10.95	74	63.66	27.25	6.09	33.95	112	26	P	H
HT40		2488.24	51.59	-2.41	54	52.15	27.3	6.09	33.95	112	26	A	H
CH 09		2369.76	51.36	-22.64	74	52.38	26.96	6.01	33.99	145	28	P	V
2452MHz		2388.75	42.17	-11.83	54	43.14	27.01	6.01	33.99	145	28	A	V
	*	2452	102.41	-	-	103.14	27.16	6.07	33.96	145	28	P	V
	*	2452	93.7	-	-	94.43	27.16	6.07	33.96	145	28	A	V
		2485.6	62.2	-11.8	74	62.81	27.25	6.09	33.95	145	28	P	V
		2485.68	52.34	-1.66	54	52.95	27.25	6.09	33.95	145	28	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4842	46.1	-27.9	74	71.32	31.15	8.69	65.06	100	0	P	H
		7266	38.86	-35.14	74	57.57	36.01	10.34	65.06	100	0	P	H
802.11n													H
HT40													H
CH 03		4842	39.88	-34.12	74	65.1	31.15	8.69	65.06	100	0	P	V
2422MHz		7266	38.23	-35.77	74	56.94	36.01	10.34	65.06	100	0	P	V
													V
													V
		4872	50.77	-23.23	74	75.89	31.21	8.69	65.02	100	0	P	H
		7311	38.65	-35.35	74	57.24	36.08	10.39	65.06	100	0	P	H
802.11n													H
HT40													H
CH 06		4872	46.12	-27.88	74	71.24	31.21	8.69	65.02	100	0	P	V
2437MHz		7311	38.11	-35.89	74	56.7	36.08	10.39	65.06	100	0	P	V
													V
													V
		4902	46.52	-27.48	74	71.51	31.26	8.74	64.99	100	0	P	H
		7356	38.79	-35.21	74	57.22	36.2	10.44	65.07	100	0	P	H
802.11n													H
HT40													H
CH 09		4902	42.53	-31.47	74	67.52	31.26	8.74	64.99	100	0	P	V
2452MHz		7356	39.01	-34.99	74	57.44	36.2	10.44	65.07	100	0	P	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		90.75	31.35	-12.15	43.5	46.83	15.02	1.28	31.78			P	H
		250.05	39.3	-6.7	46	50.43	18.7	1.94	31.77			P	H
		274.89	38.44	-7.56	46	49.01	19.25	1.94	31.76			P	H
		600.3	41.03	-4.97	46	44.48	25.7	2.89	32.04			P	H
		720	44.93	-1.07	46	46.72	27.09	3.14	32.02	291	54	P	H
		799.8	43.77	-2.23	46	44.04	28.3	3.35	31.92			P	H
													H
													H
													H
													H
2.4GHz													H
802.11n													H
HT20		30.54	36.87	-3.13	40	42.85	25.18	0.67	31.83			P	V
LF		112.62	38.05	-5.45	43.5	51.21	17.34	1.28	31.78			P	V
		149.61	34.63	-8.87	43.5	47.5	17.45	1.46	31.78			P	V
		600.3	44.03	-1.97	46	47.48	25.7	2.89	32.04	115	93	P	V
		720	39.16	-6.84	46	40.95	27.09	3.14	32.02			P	V
		799.8	41.44	-4.56	46	41.71	28.3	3.35	31.92			P	V
													V
													V
													V
													V
													V
													V
Remark	5. No other spurious found. 6. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

5. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

6. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

5. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

6. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

5. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

6. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix C. Radiated Spurious Emission Plots

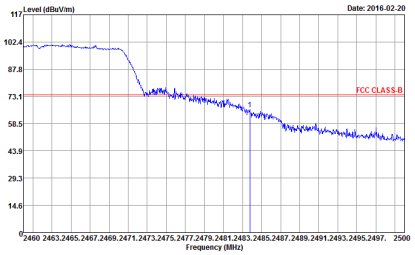
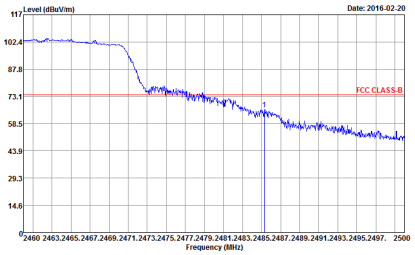
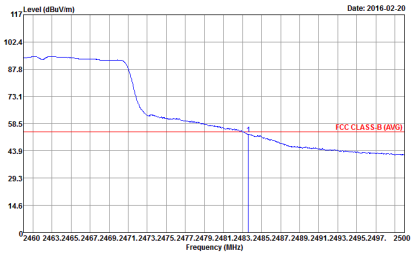
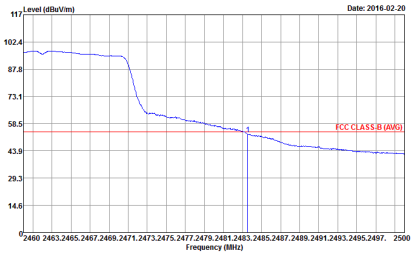
Test Engineer :	J.C. Liang, Bill Chang and Ken Wu	**Temperature :**	20~22°C
		Relative Humidity :	54~56%

Note symbol

-L	**Low channel location**
-R	**High channel location**

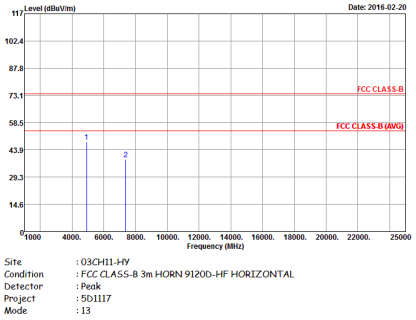
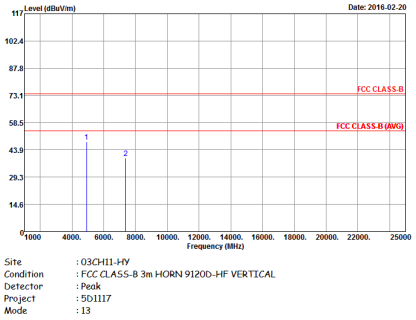
2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 13 Setting : 31	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 13 Setting : 31
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 13 Setting : 31	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 13 Setting : 31

2.4GHz 2400~2483.5MHz

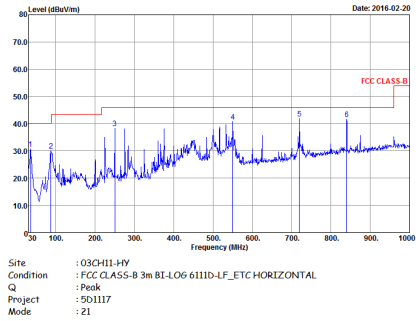
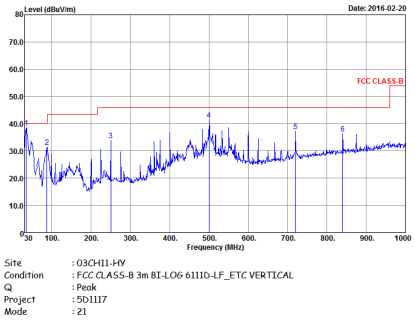
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 5D1117 Mode : 13	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 5D1117 Mode : 13

2.4GHz 2400~2483.5MHz

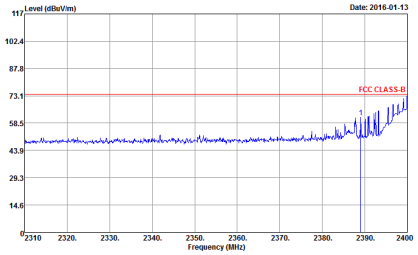
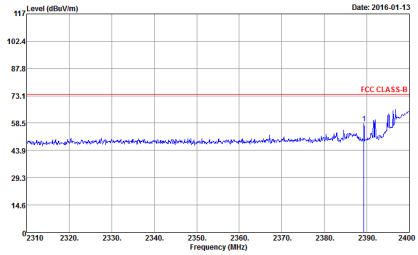
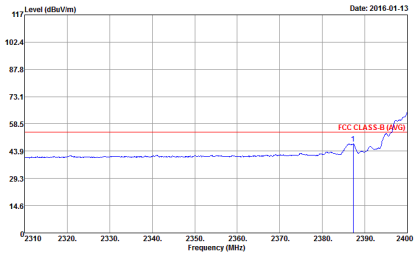
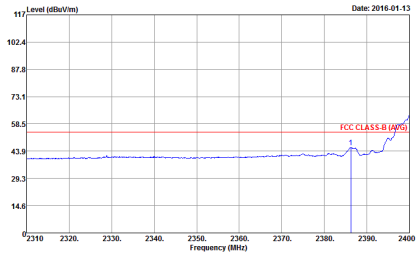
Emission below 1GHz

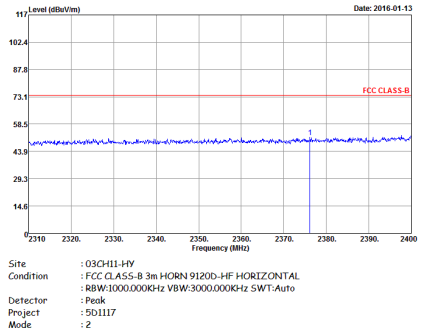
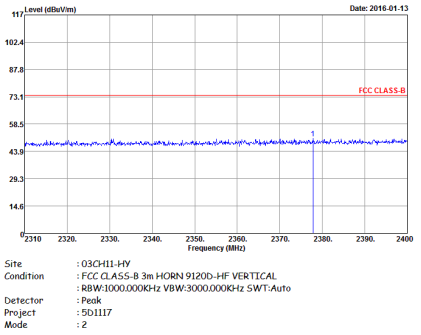
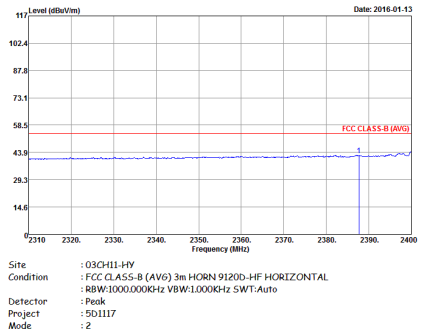
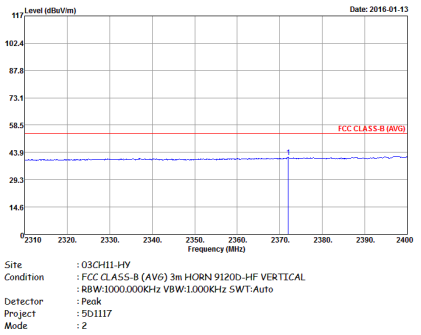
2.4GHz WIFI 802.11n HT20 (LF)

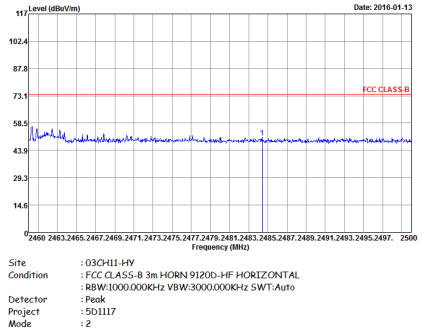
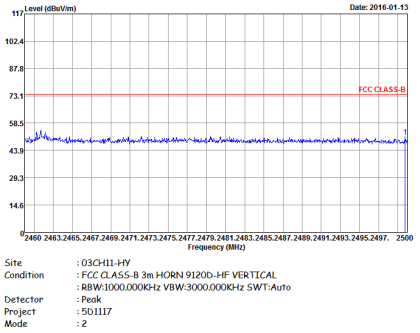
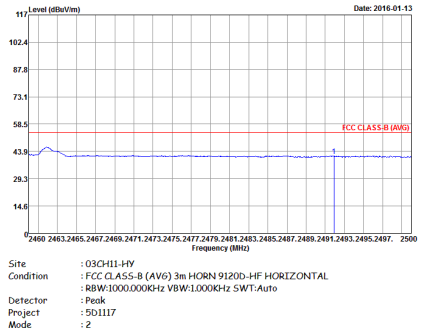
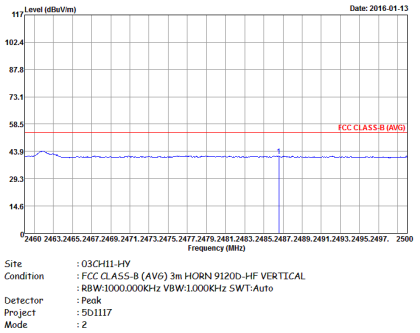
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak		

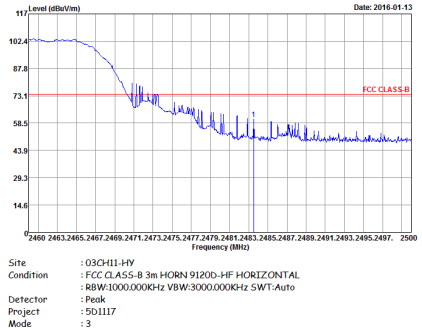
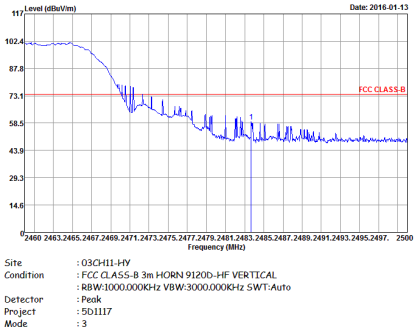
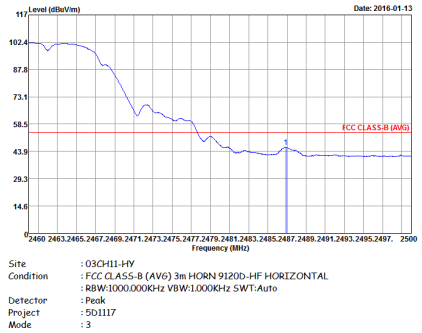
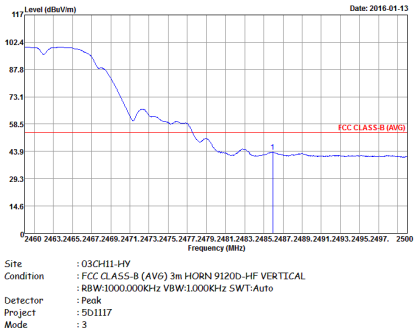
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 1	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 1
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 1	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 1

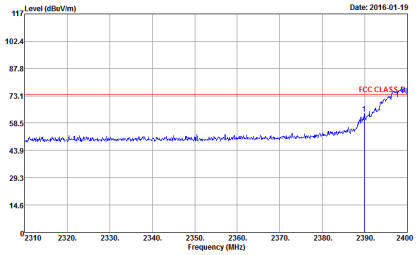
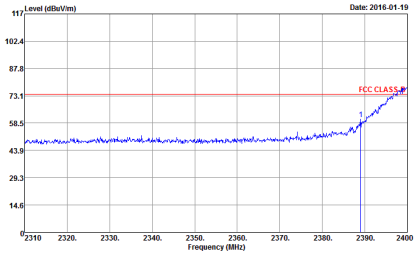
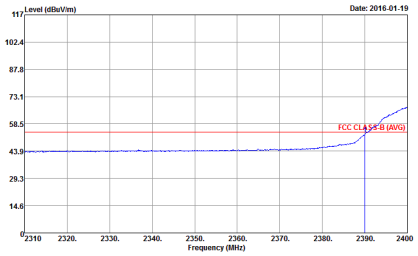
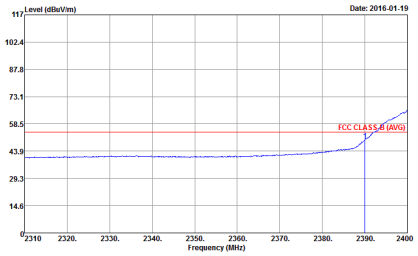
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2

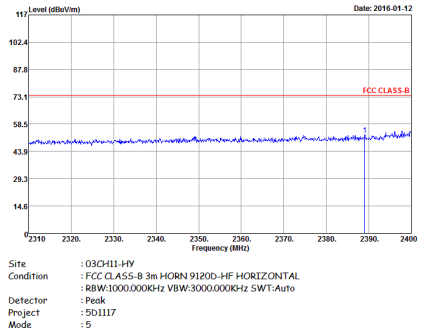
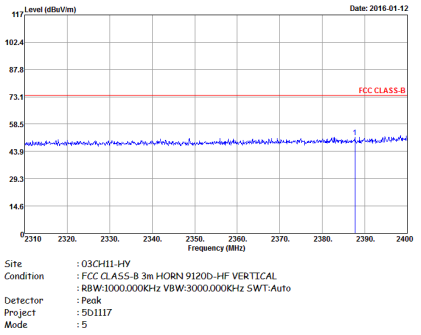
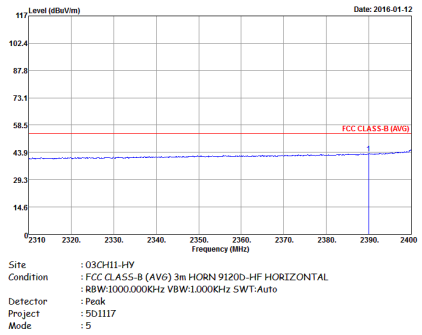
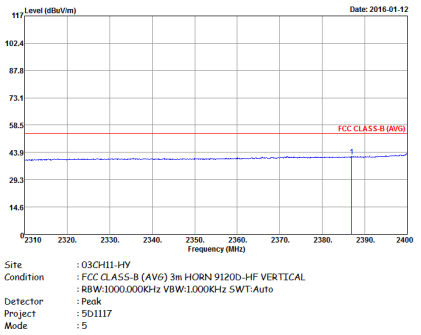
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 2

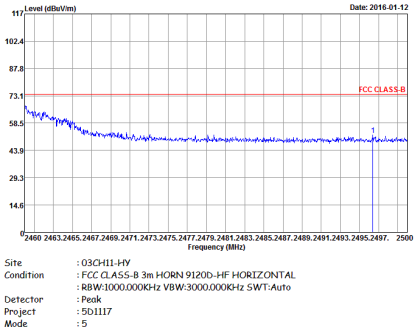
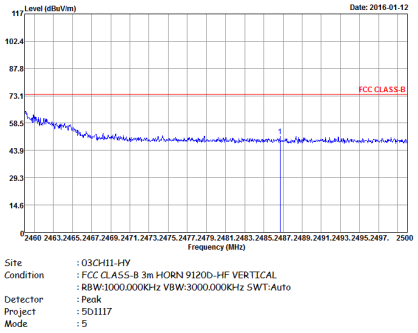
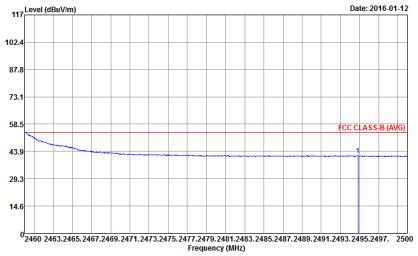
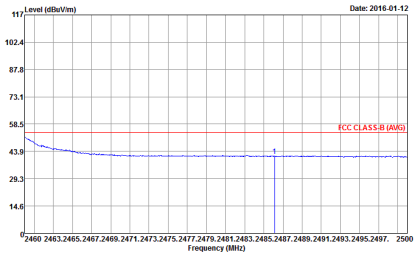
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 3	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 3
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 3	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 3

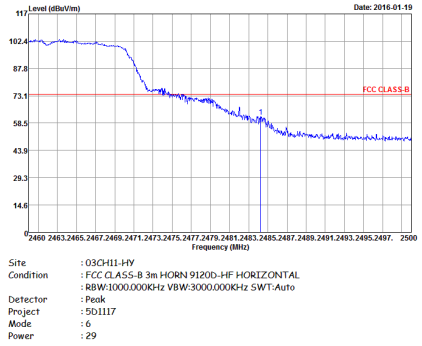
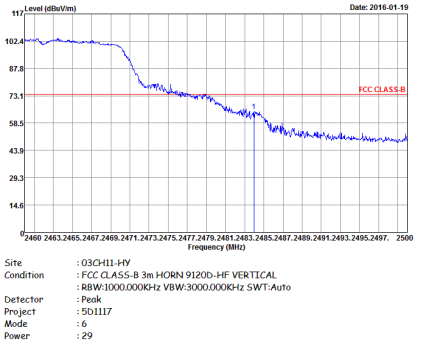
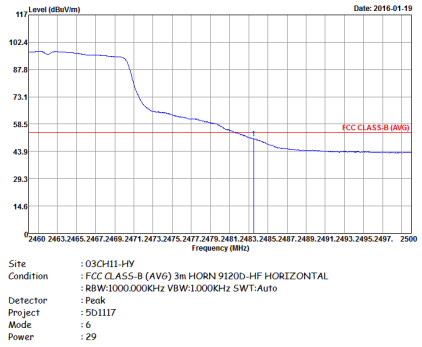
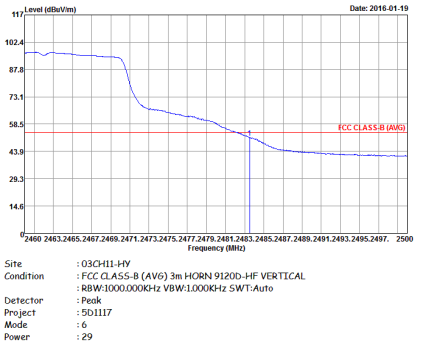
2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 4 Power : 30	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 4 Power : 30
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 4 Power : 30	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 4 Power : 30

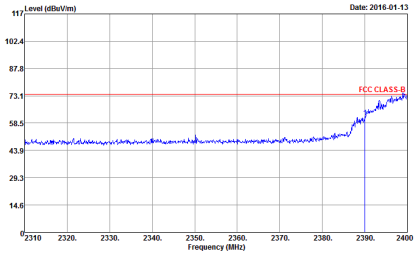
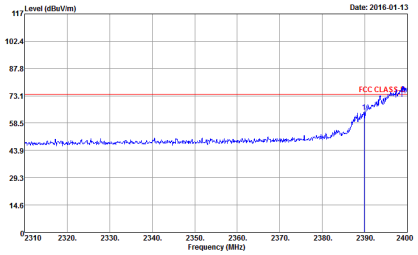
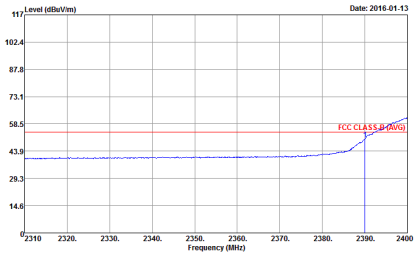
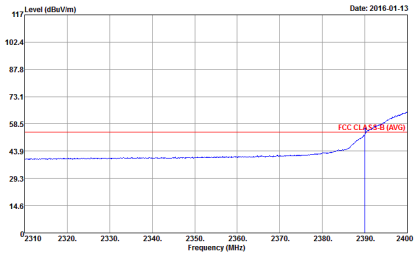
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5

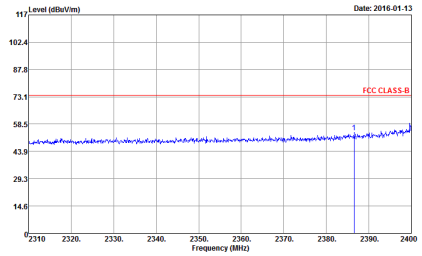
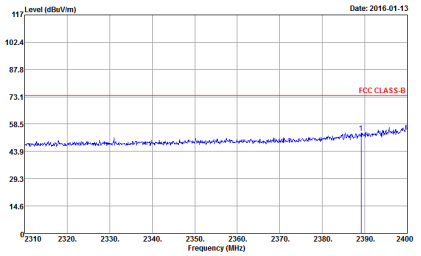
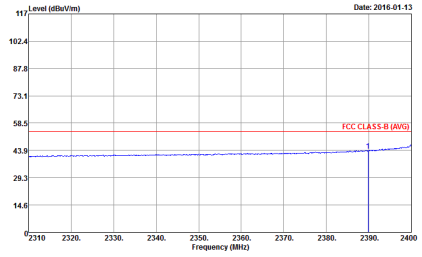
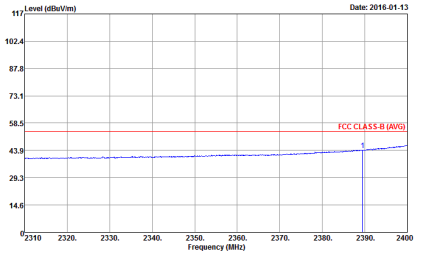
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 5

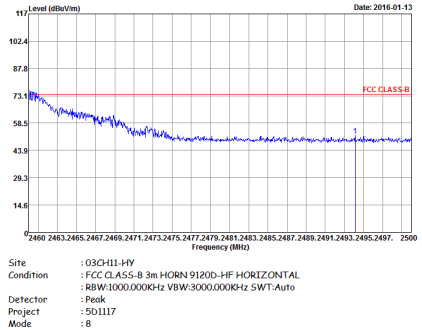
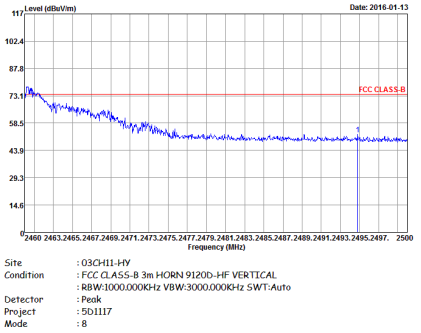
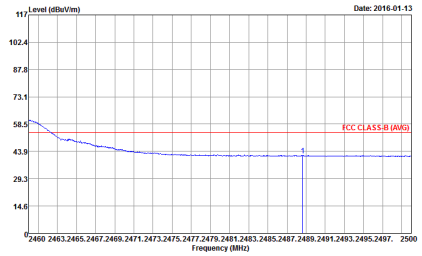
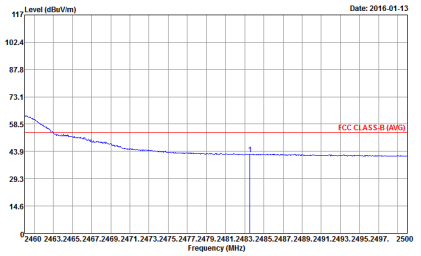
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 6 Power : 29	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 6 Power : 29
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AV6) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 6 Power : 29	 Site : 03CH11-HY Condition : FCC CLASS-B (AV6) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 6 Power : 29

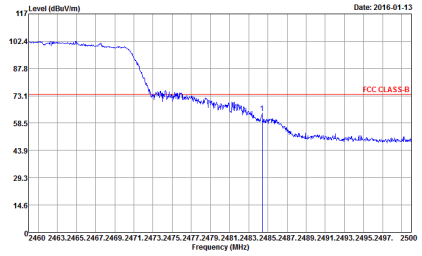
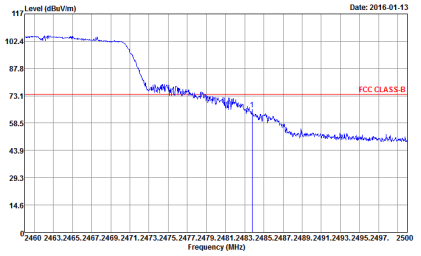
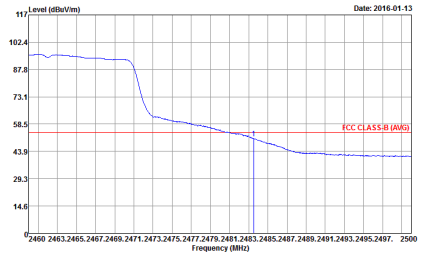
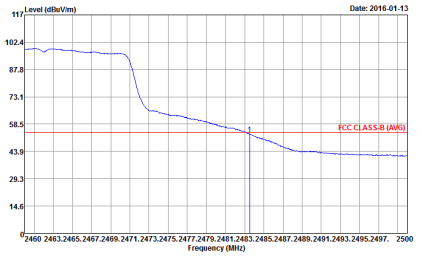
2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 7 Setting : 26	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 7 Setting : 26
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 7 Setting : 26	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 7 Setting : 26

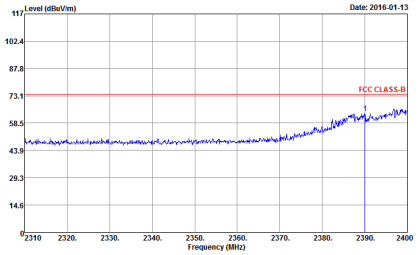
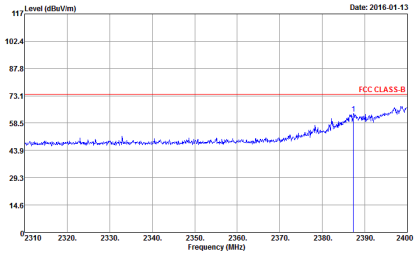
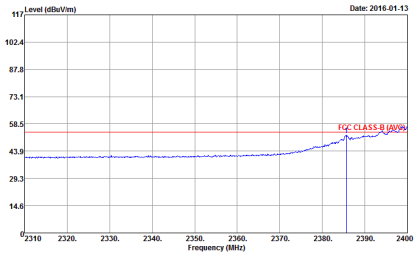
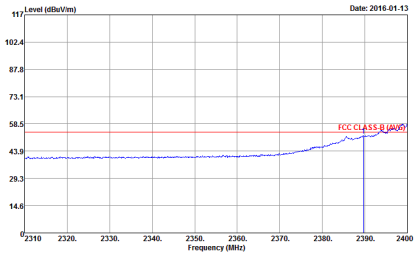
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8

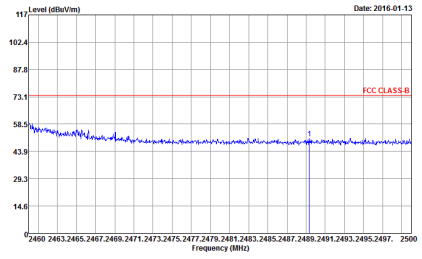
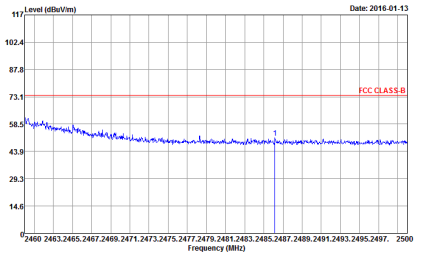
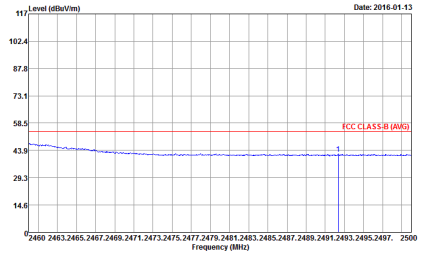
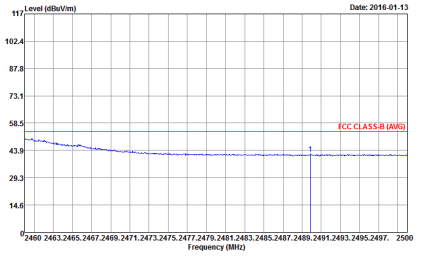
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 8

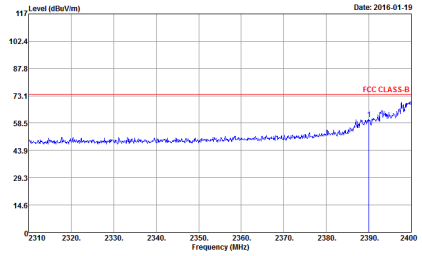
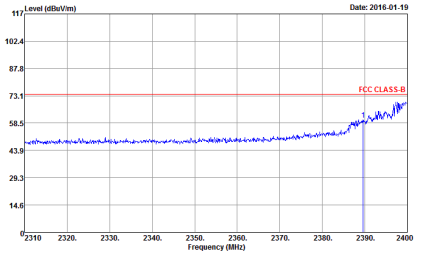
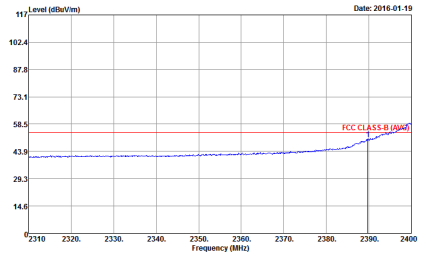
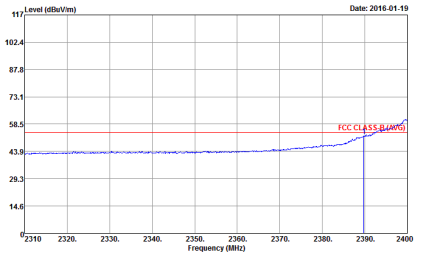
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 9 Setting : 27	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 9 Setting : 27
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 9 Setting : 27	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 9 Setting : 27

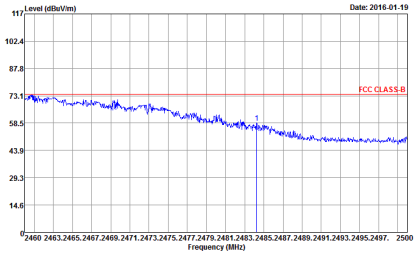
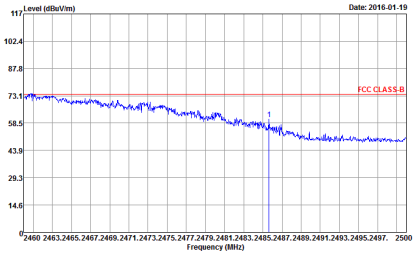
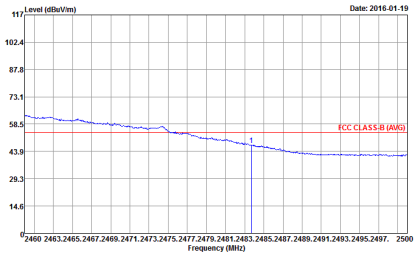
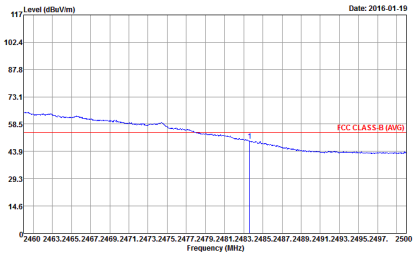
2.4GHz 2400~2483.5MHz

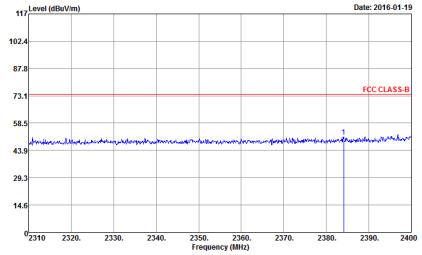
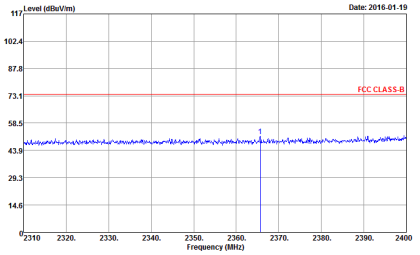
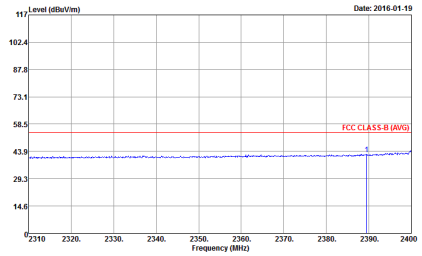
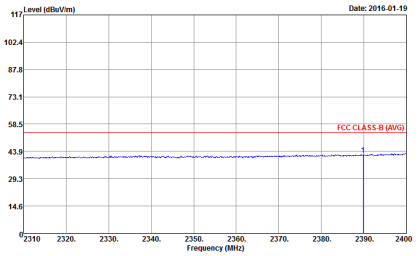
WIFI 802.11n HT40 (Band Edge @ 3m)

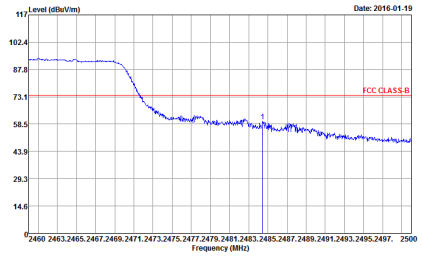
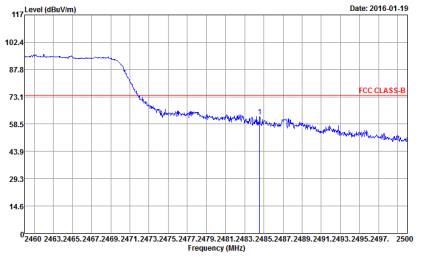
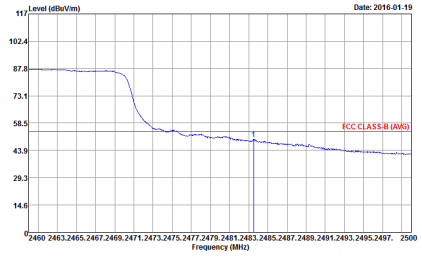
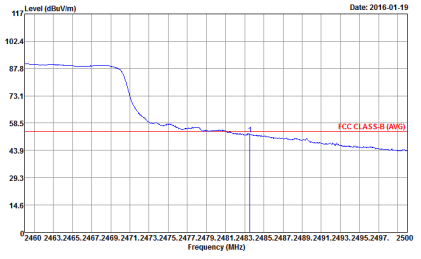
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 10 Setting : 21

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28

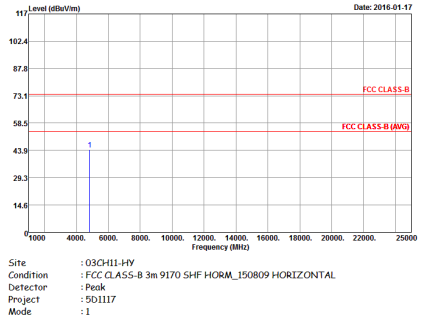
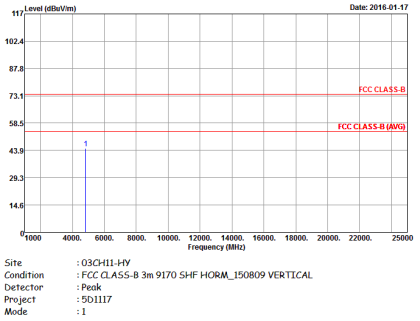
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 11 Setting : 28

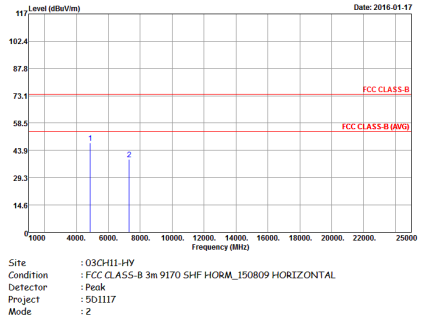
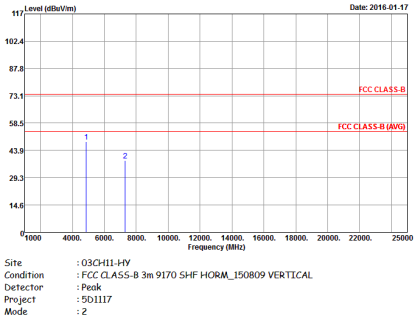
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21

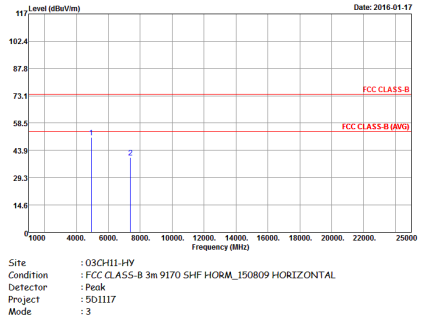
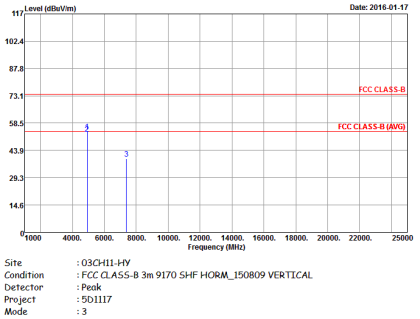
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 12 Setting : 21

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

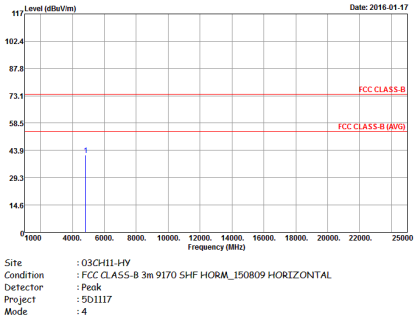
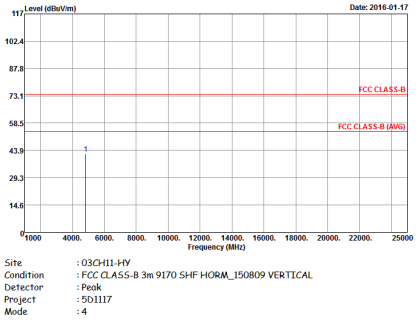
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
2	Horizontal	Vertical
Peak Avg.		

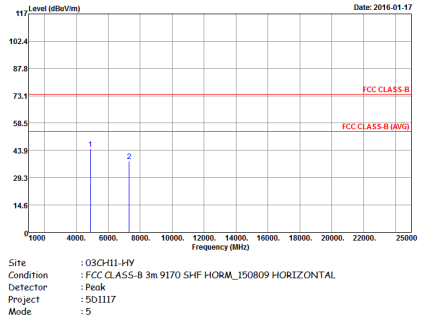
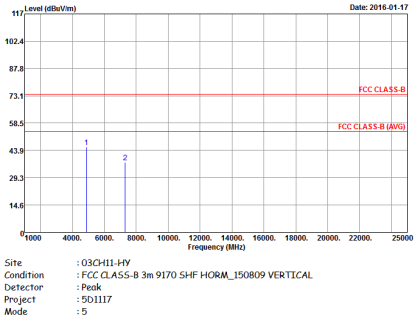
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 2	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 2

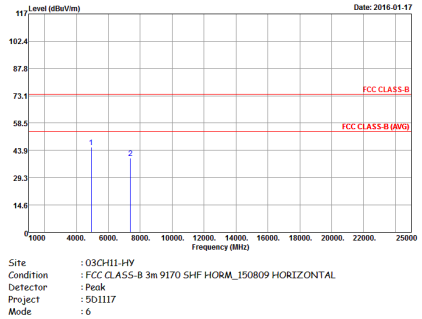
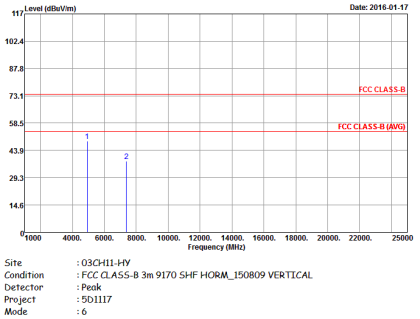
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
2	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

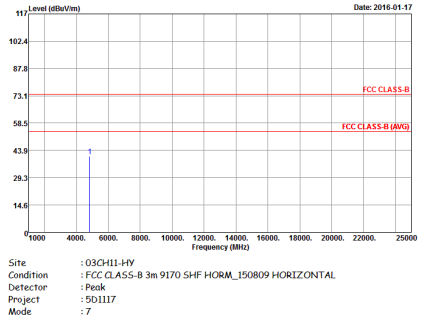
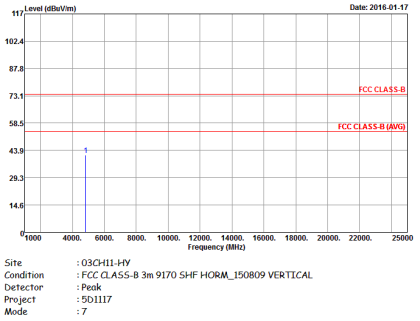
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
2	Horizontal	Vertical
Peak Avg.		

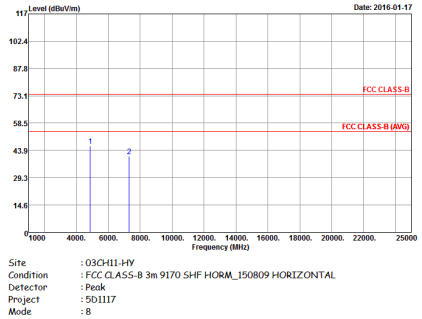
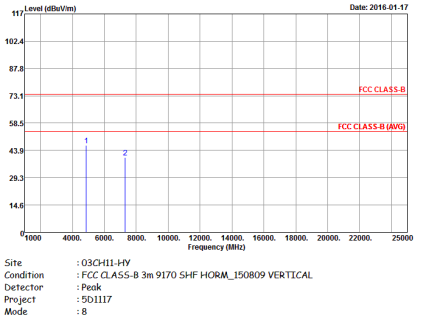
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 5	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 5

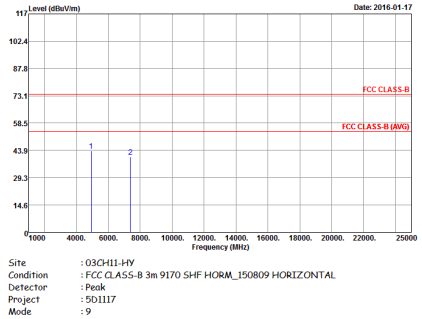
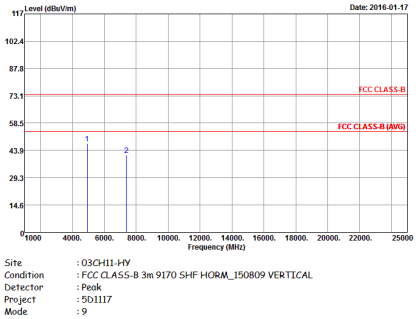
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 6	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 6

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

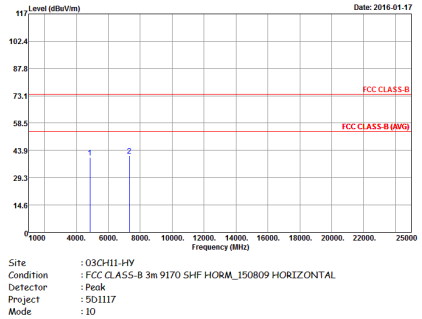
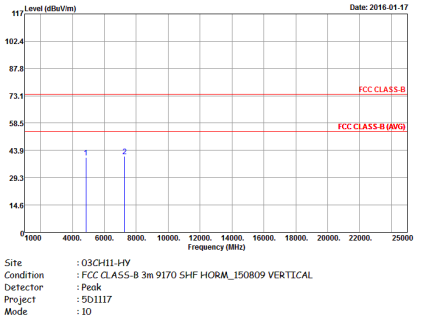
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
2	Horizontal	Vertical
Peak Avg.		

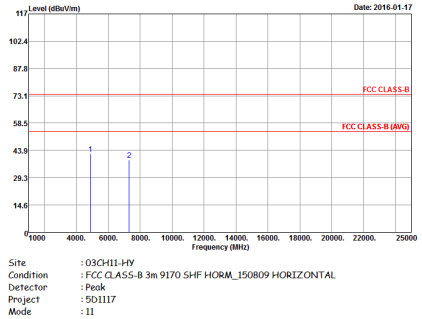
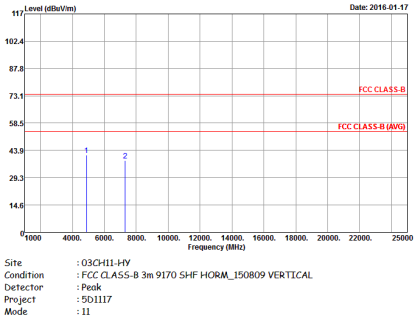
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
2	Horizontal	Vertical
Peak Avg.		

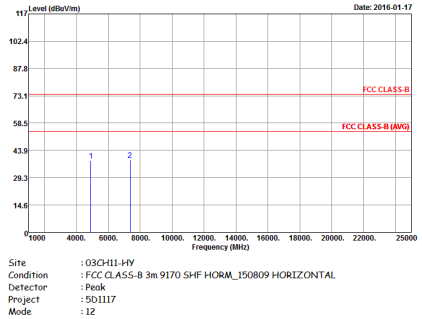
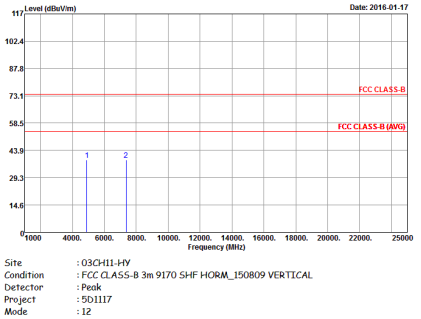
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 9	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 9

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
2	Horizontal	Vertical
Peak Avg.		

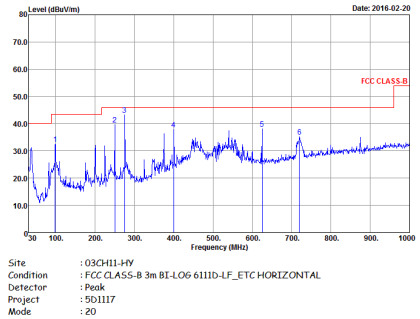
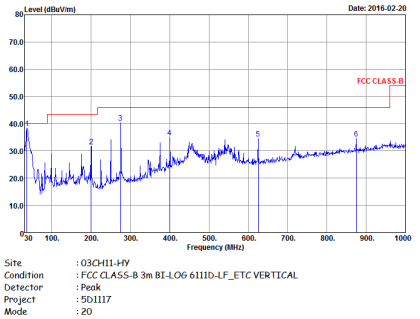
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 11	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 11

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
2	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

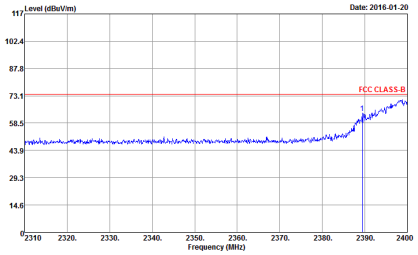
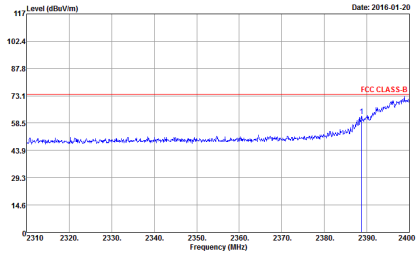
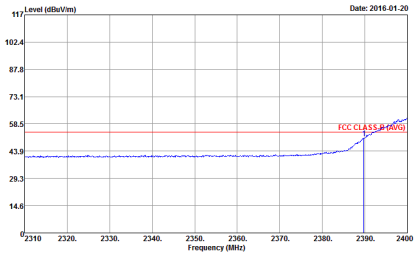
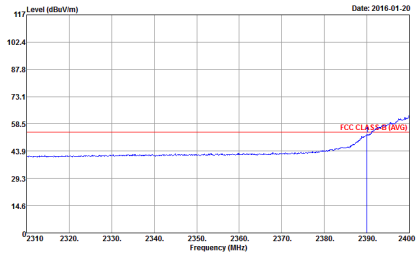
Emission below 1GHz

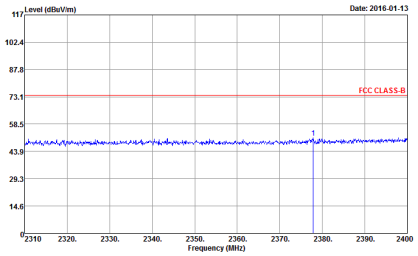
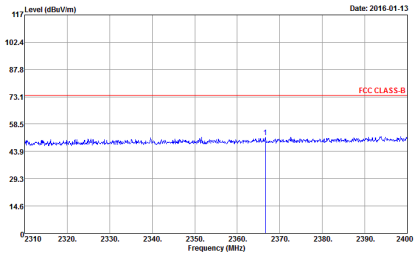
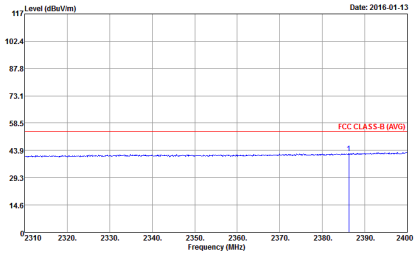
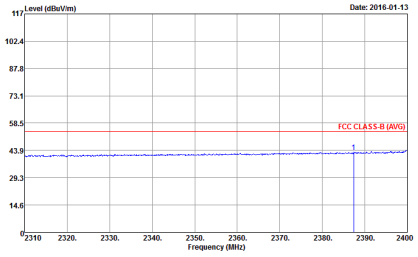
2.4GHz WIFI 802.11n HT20 (LF)

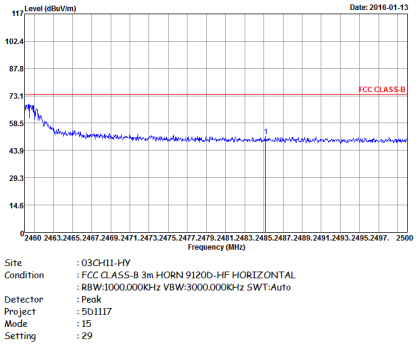
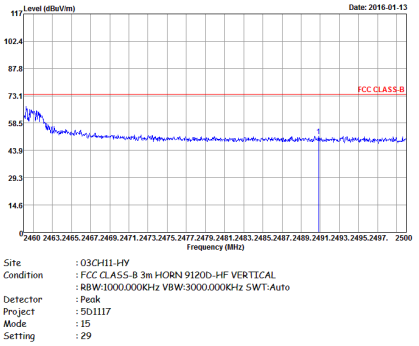
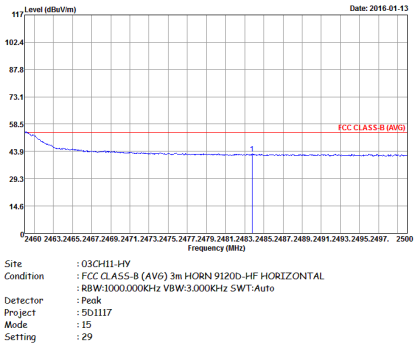
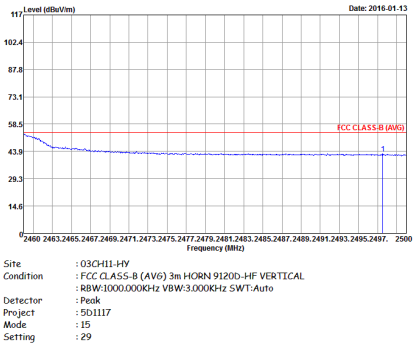
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
2	Horizontal	Vertical
QP / Peak		

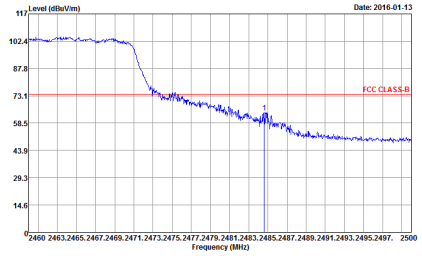
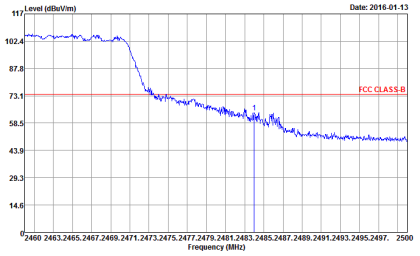
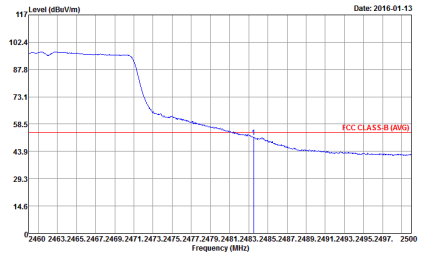
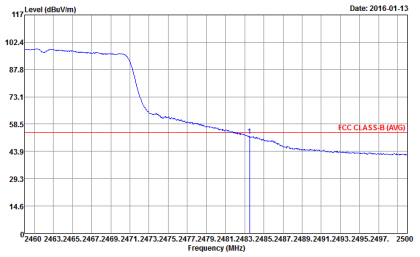
2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 14 Setting : 27	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 14 Setting : 27
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 14 Setting : 27	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 14 Setting : 27

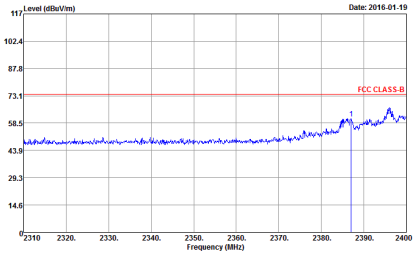
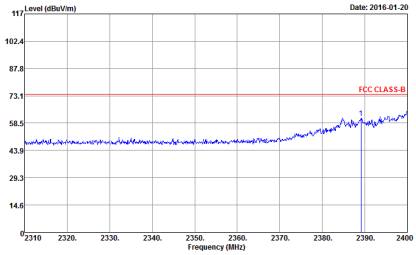
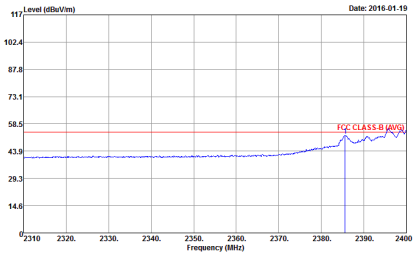
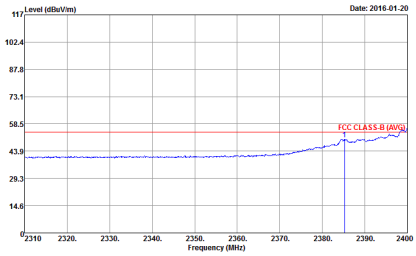
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29

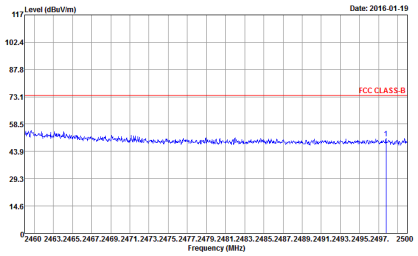
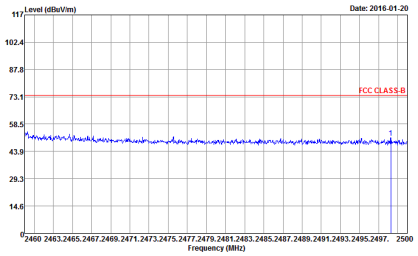
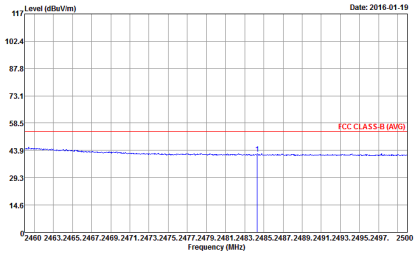
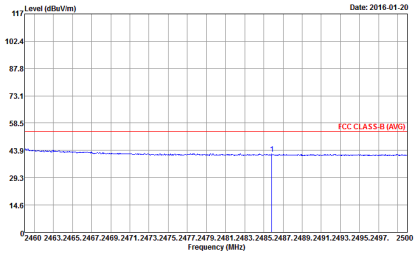
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 15 Setting : 29

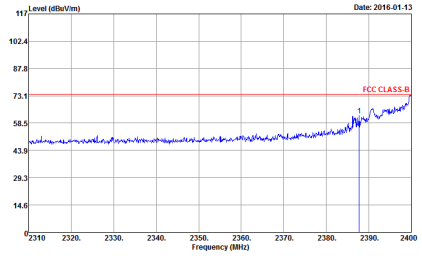
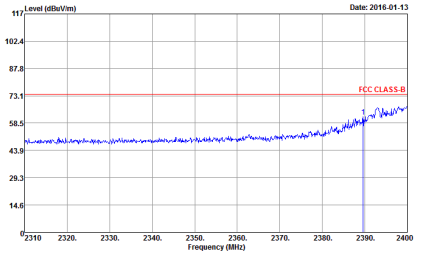
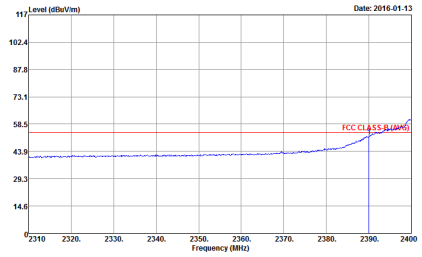
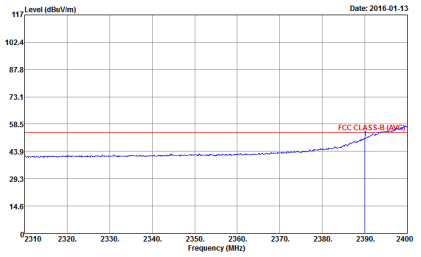
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 16 Setting : 26.5	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 16 Setting : 26.5
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 16 Setting : 26.5	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 16 Setting : 26.5

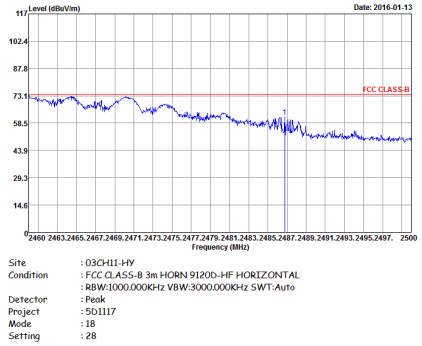
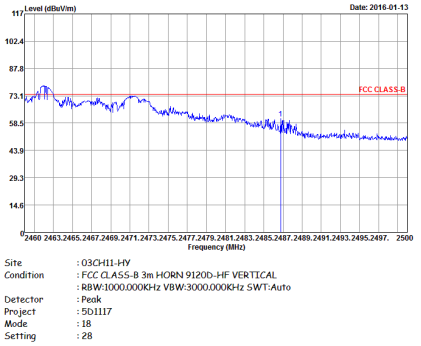
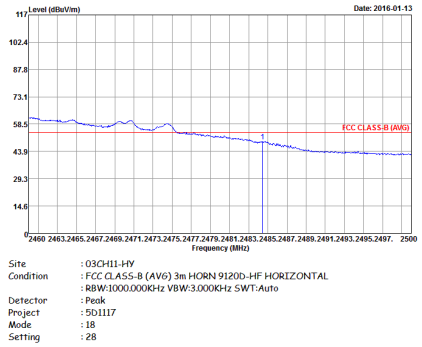
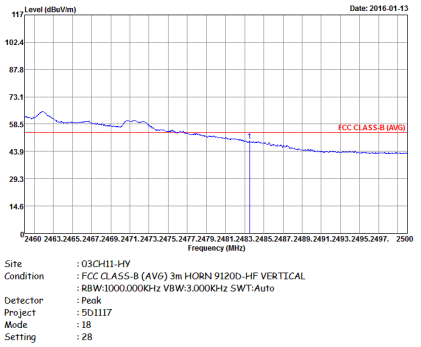
2.4GHz 2400~2483.5MHz

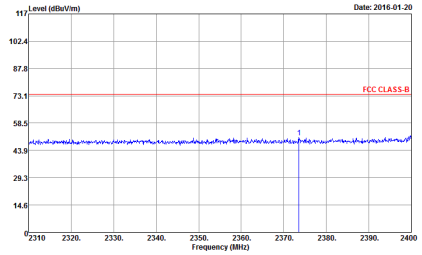
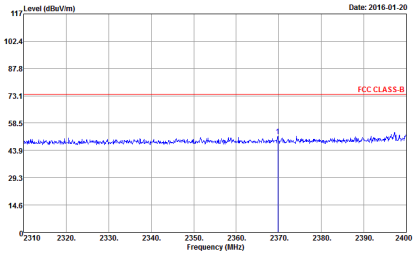
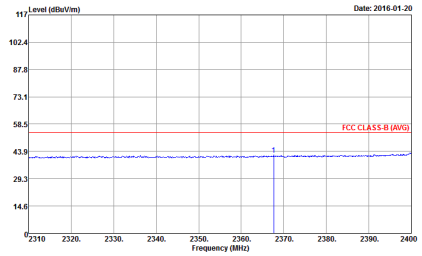
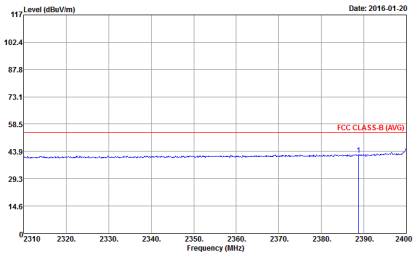
WIFI 802.11n HT40 (Band Edge @ 3m)

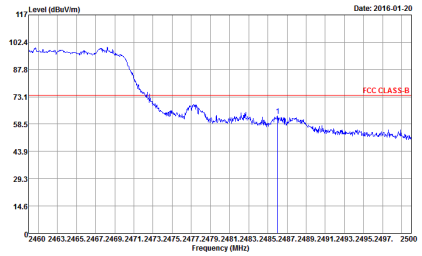
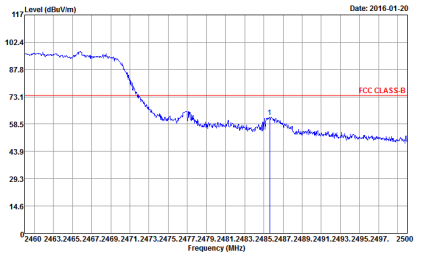
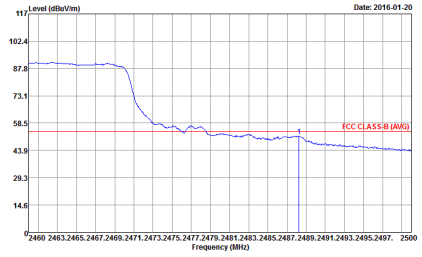
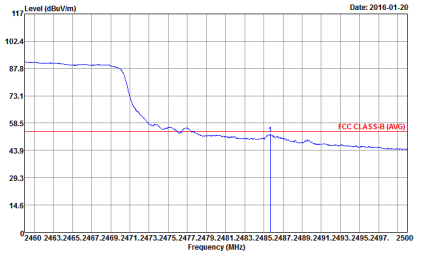
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 17 Setting : 19

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28

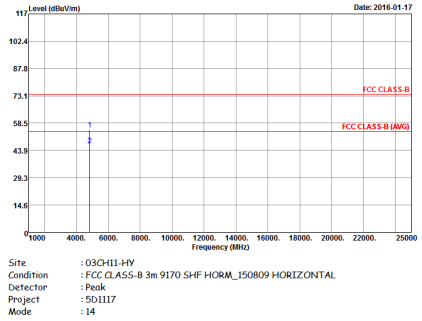
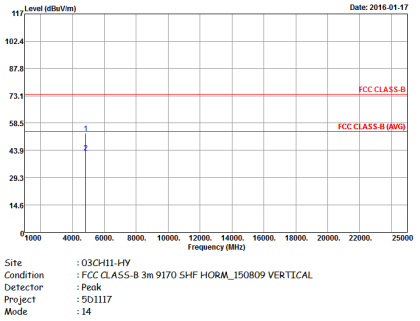
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 18 Setting : 28

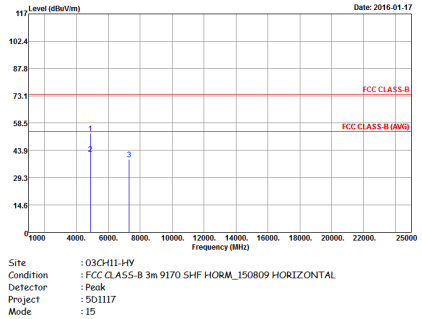
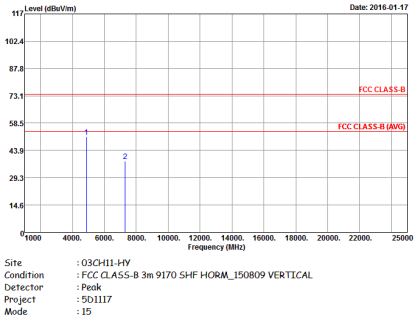
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21

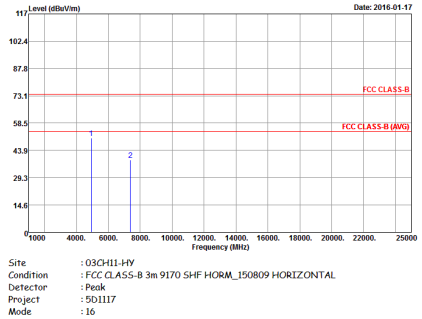
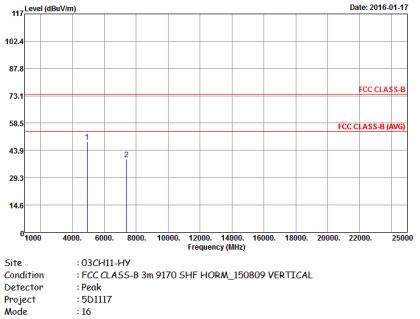
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1+2	Horizontal	Vertical
Peak	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21
Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21	 Site : 03CH11-HY Condition : FCC CLASS-B (AVG) 3m HORN 9120D-HF VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 5D1117 Mode : 19 Setting : 21

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

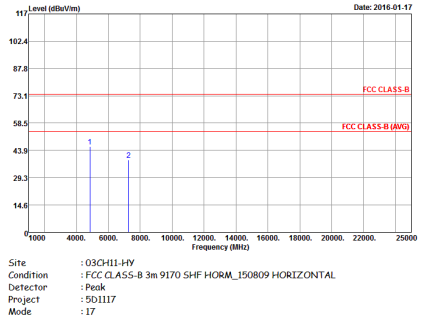
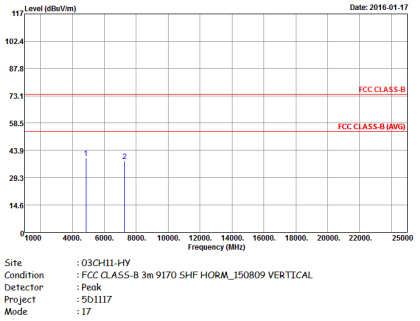
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.		

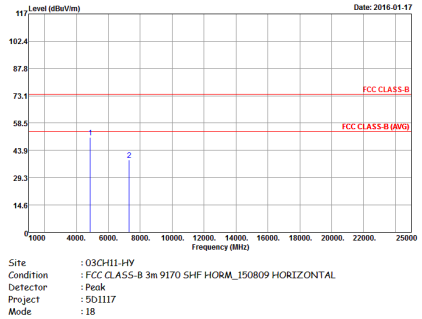
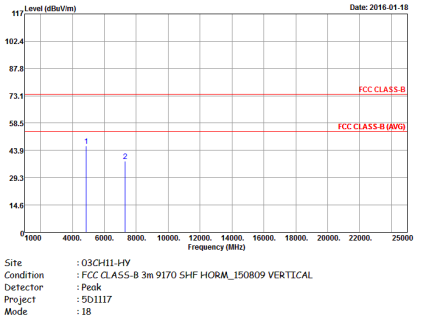
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 15	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 15

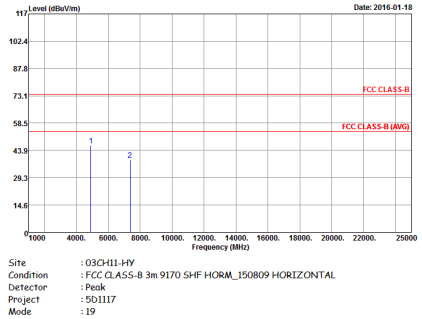
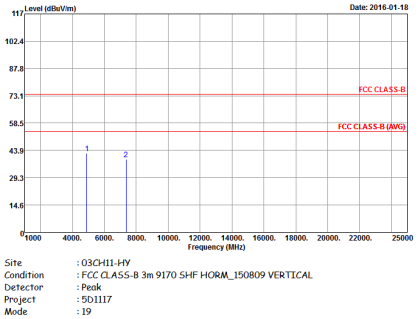
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 16	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 16

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 HORIZONTAL Detector : Peak Project : 5D1117 Mode : 19	 Site : 03CH11-HY Condition : FCC CLASS-B 3m 9170 SHF HORM_150809 VERTICAL Detector : Peak Project : 5D1117 Mode : 19

2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
1+2	Horizontal	Vertical
QP / Peak