



FCC RF Test Report

APPLICANT : TP-LINK TECHNOLOGIES CO., LTD.
EQUIPMENT : AC1200 Wi-Fi Range Extender
BRAND NAME : TP-LINK
MODEL NAME : RE350
FCC ID : TE7RE350
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

The product was received on Apr. 18, 2016 and testing was completed on Jun. 29, 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



SPORTON INTERNATIONAL INC.

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



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR641813A	Rev. 01	Initial issue of report	Jul. 21, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
3.1	-	99% Bandwidth	-	Pass	-
3.2	15.247(b)	Power Output Measurement	$\leq 30\text{dBm}$	Pass	-
3.3	15.247(e)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$	Pass	-
3.4	15.247(d)	Conducted Band Edges	$\leq 20\text{dBc}$	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 0.30 dB at 2389.650 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 5.60 dB at 0.742 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

TP-LINK TECHNOLOGIES CO., LTD.

Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd,
Nanshan, Shenzhen, China

1.2 Manufacturer

TP-LINK TECHNOLOGIES CO., LTD.

Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd,
Nanshan, Shenzhen, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	AC1200 Wi-Fi Range Extender
Brand Name	TP-LINK
Model Name	RE350
FCC ID	TE7RE350
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80
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

Standards-related Product Specification			
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz		
Maximum (Average) Output Power to antenna	<MIMO Ant. 1+2> 802.11b : 24.72 dBm (0.2965 W) 802.11g : 24.75 dBm (0.2985 W) 802.11n HT20 : 24.60 dBm (0.2884 W) 802.11n HT40 : 22.77 dBm (0.1892 W)		
99% Occupied Bandwidth	802.11b : 14.55MHz 802.11g : 17.60MHz 802.11n HT20 : 18.40MHz 802.11n HT40 : 36.20MHz		
Antenna Type	<Ant 1>: Dipole Antenna type with gain 2.04 dBi <Ant 2>: Dipole Antenna type with gain 2.04 dBi		
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)		
Antenna Function for Transmitter		Ant. 1	Ant. 2
	802.11 b/g/n MIMO	V	V

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 1 st 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	03CH06-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 v03r05
- ♦ 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 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

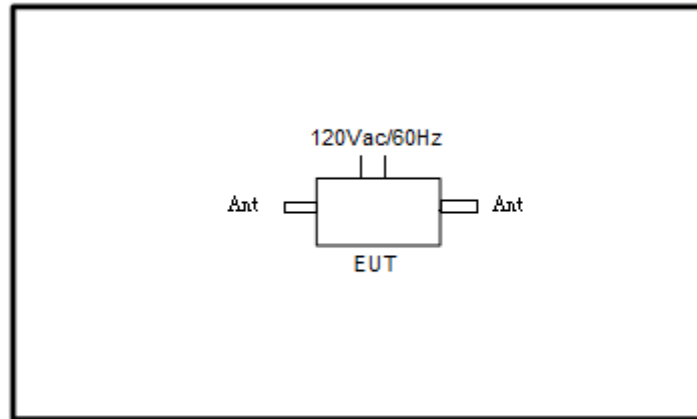
MIMO Antenna

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

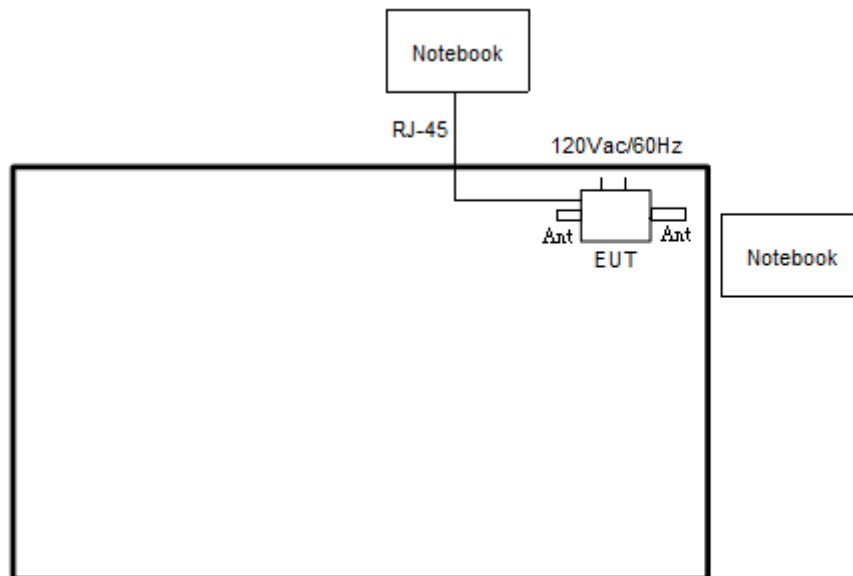
Test Cases	
AC Conducted Emission	Mode 1 : WLAN (2.4GHz) Link 11n HT40 CH06 MCS0 + LAN Link

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>





2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	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.	Notebook	DELL	P20G	FCC DoC/ Contains FCC ID: QDS-BRCM1051	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

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

2.6 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

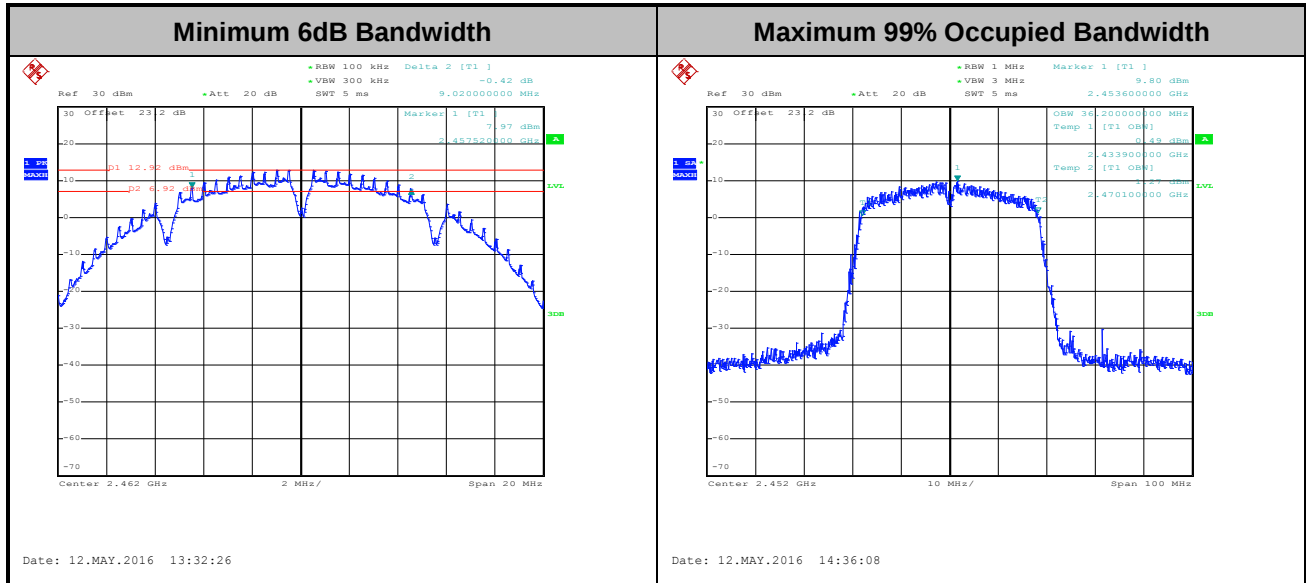
1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v03r05.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit 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.



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

3.2 Average Output Power Measurement

3.2.1 Limit of Average Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for average output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the average 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.

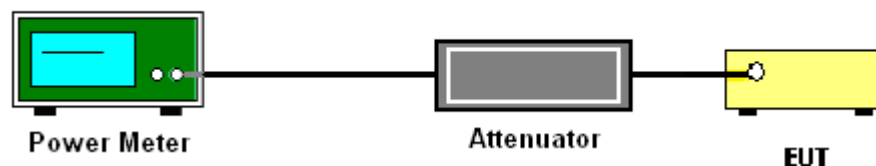
3.2.2 Measuring Instruments

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 v03r05 section 9.2.3.1 Method AVGPM
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.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Average output Power

Please refer to Appendix A of this test report.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The 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 10.5 Method AVGPDS-2 of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
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) = 10 kHz. Video bandwidth VBW = 30 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Number of points in sweep $\geq 2 \text{ Span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins).
6. Detector = RMS, Sweep time = auto couple.
7. Trace average at least 100 traces in power averaging mode.
8. Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6 \text{ dB}$ if the duty cycle is 25 percent. Measure and record the results in the test report.
9. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

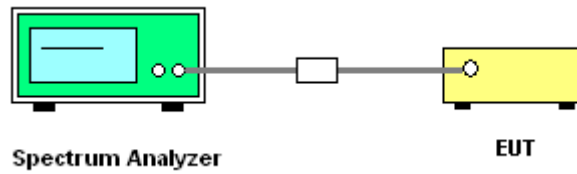
If measurements performed using method (2) plus $10 \log(N)$ exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

Method (2): Measure and add $10 \log(N) \text{ dB}$, where N is the number of outputs. (N=2)

3.3.4 Test Setup

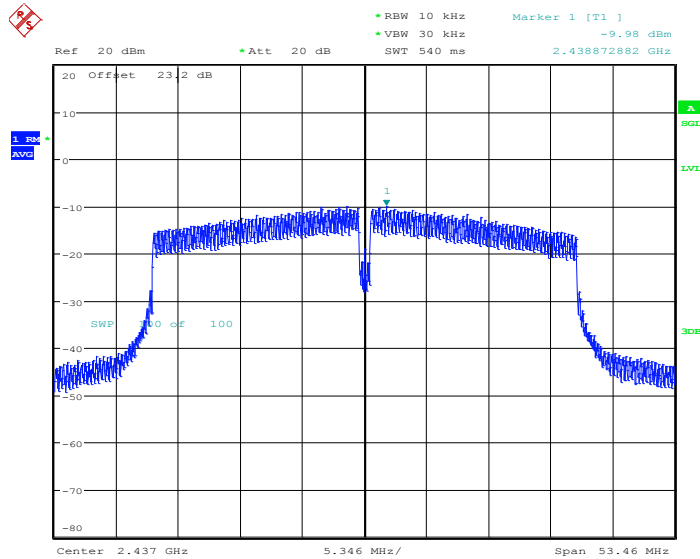


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A of this test report.

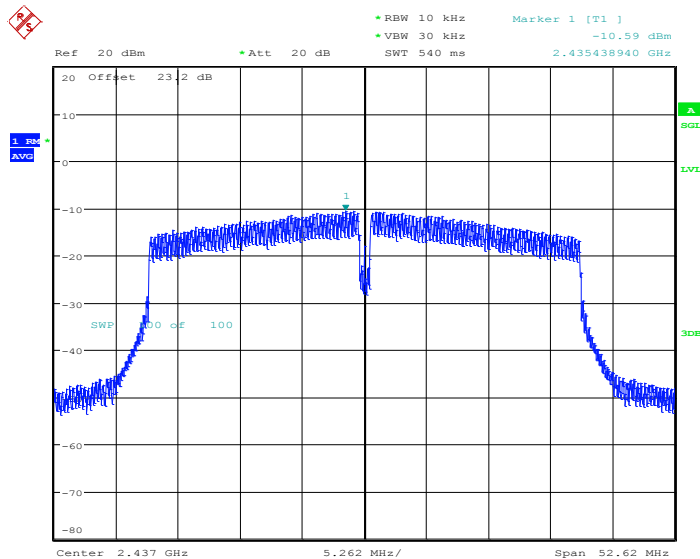


Worst Case Power Density (dBm/3kHz) for MIMO Ant. 1



Date: 29.JUN.2016 10:59:21

Worst Case Power Density (dBm/3kHz) for MIMO Ant. 2



Date: 29.JUN.2016 10:56:51

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).

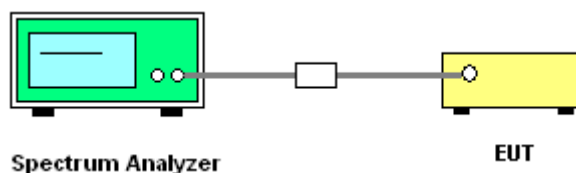
3.4.2 Measuring Instruments

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 v03r05.
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 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

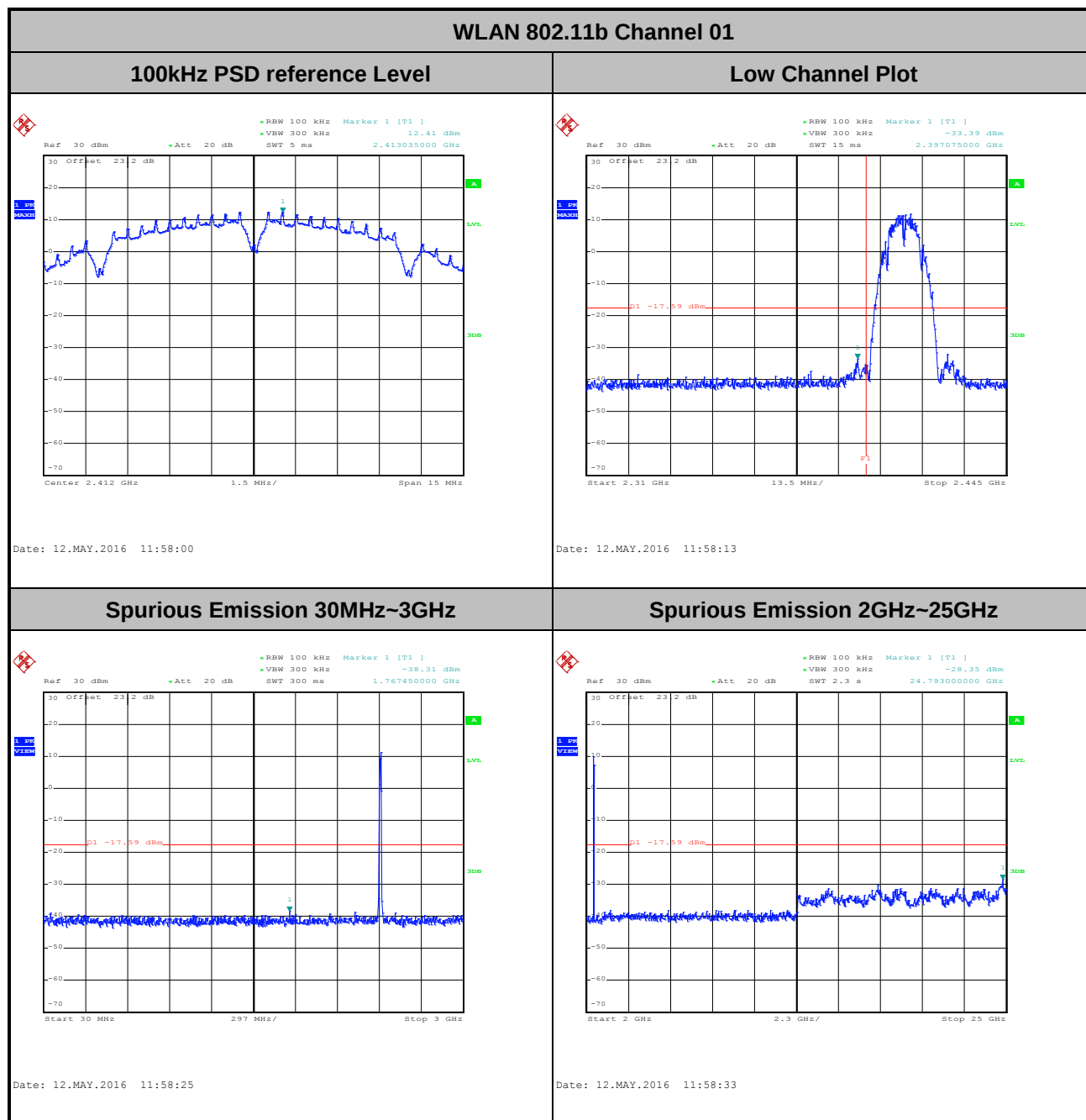




3.4.5 Test Result of Conducted Band Edges and Spurious Emission

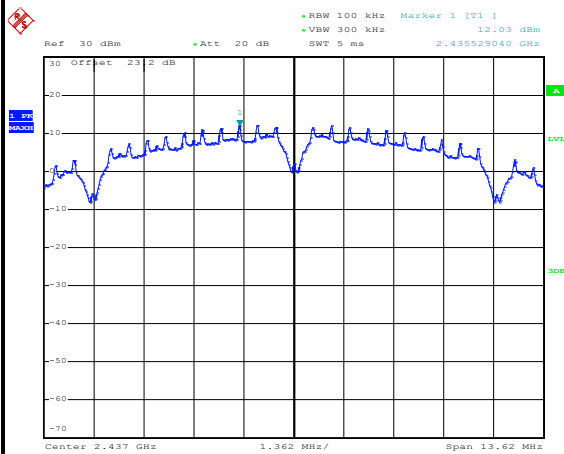
Number of TX = 2, Ant. 1 (Measured)

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

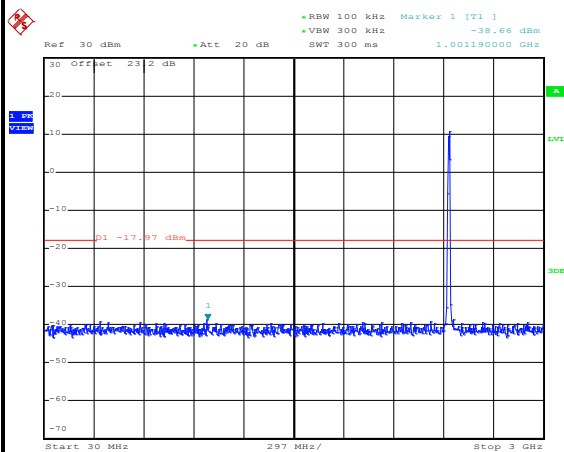




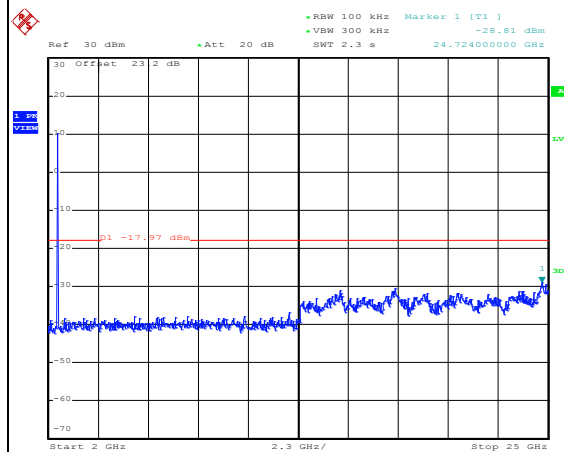
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Test Mode :	802.11b	Temperature :	21~25°C
Test Band :	2.4GHz Mid	Relative Humidity :	51~54%
Test Channel :	06	Test Engineer :	AC Chang

WLAN 802.11b Channel 06**100kHz PSD reference Level**

Date: 12.MAY.2016 12:01:34

Spurious Emission 30MHz~3GHz

Date: 12.MAY.2016 12:01:58

Spurious Emission 2GHz~25GHz

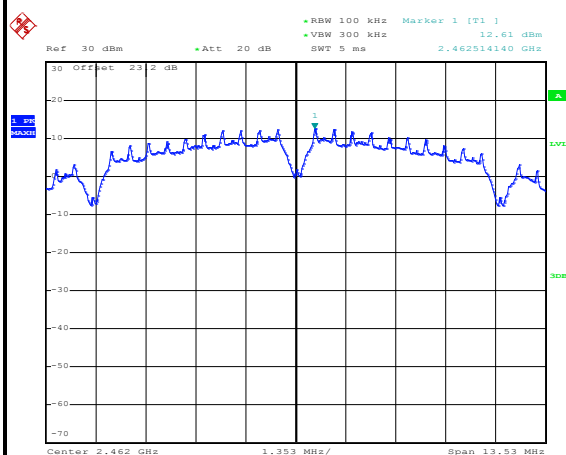
Date: 12.MAY.2016 12:02:06



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

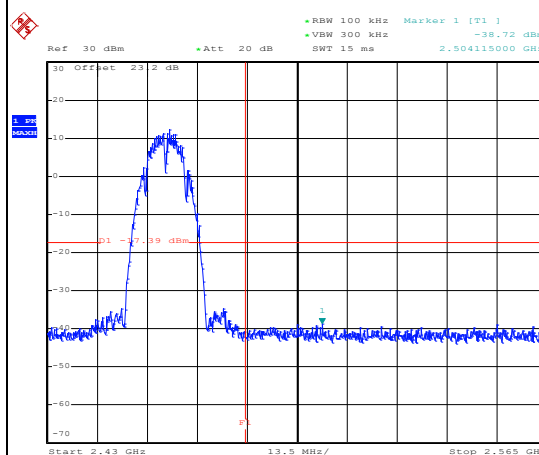
WLAN 802.11b Channel 11

100kHz PSD reference Level



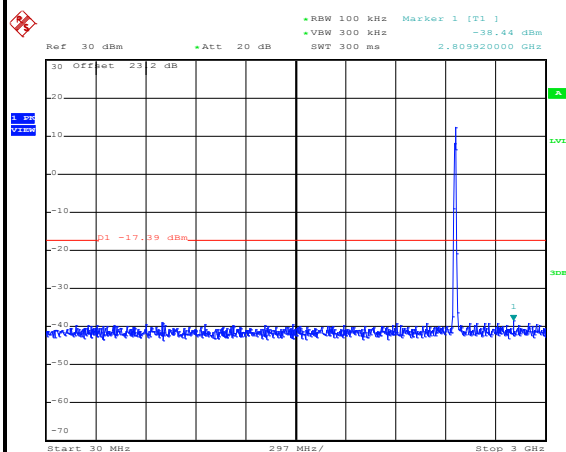
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High Channel Plot



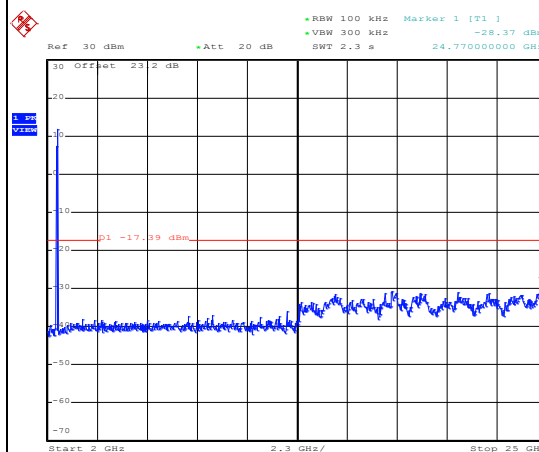
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Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:33:34

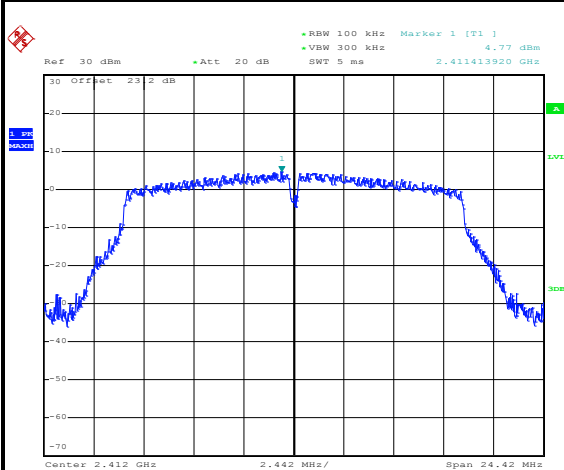
Spurious Emission 2GHz~25GHz



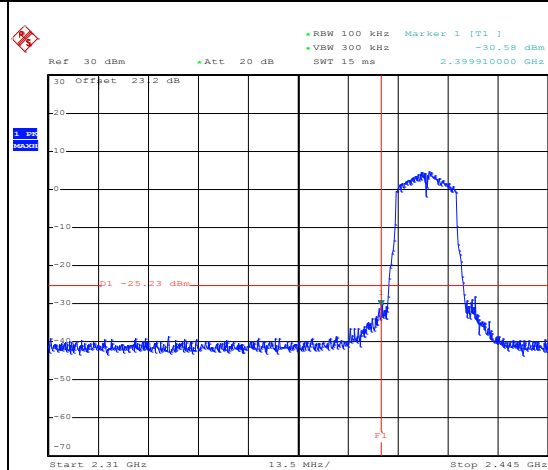
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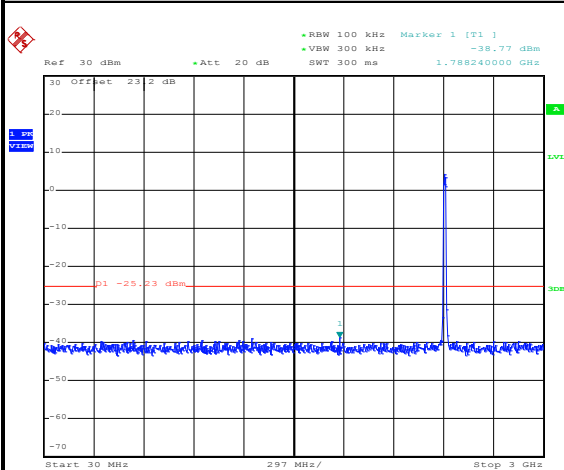
Number of TX :	2	Ant. :	1
Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz Low	Relative Humidity :	51~54%
Test Channel :	01	Test Engineer :	AC Chang

WLAN 802.11g Channel 01**100kHz PSD reference Level**

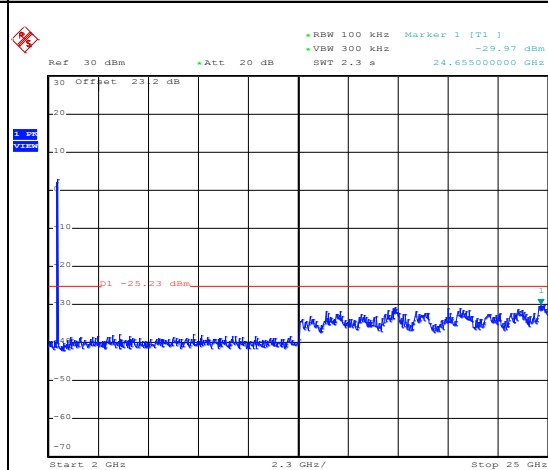
Date: 12.MAY.2016 13:46:52

Low Channel Plot

Date: 12.MAY.2016 13:47:07

Spurious Emission 30MHz~3GHz

Date: 12.MAY.2016 13:47:22

Spurious Emission 2GHz~25GHz

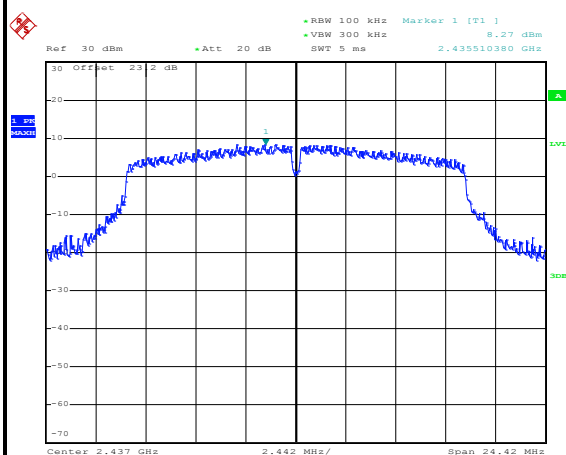
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Number of TX :	2	Ant. :	1
Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz Mid	Relative Humidity :	51~54%
Test Channel :	06	Test Engineer :	AC Chang

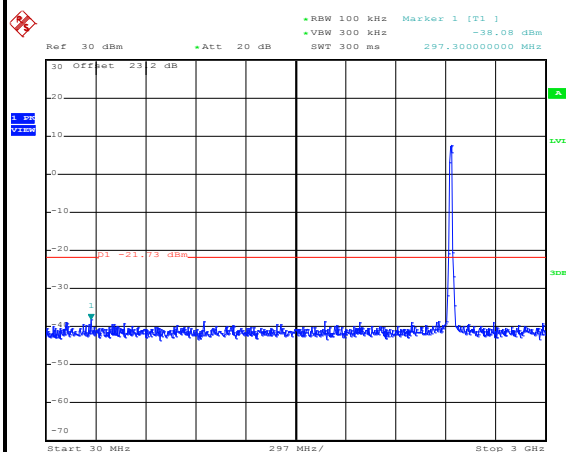
WLAN 802.11g Channel 06

100kHz PSD reference Level



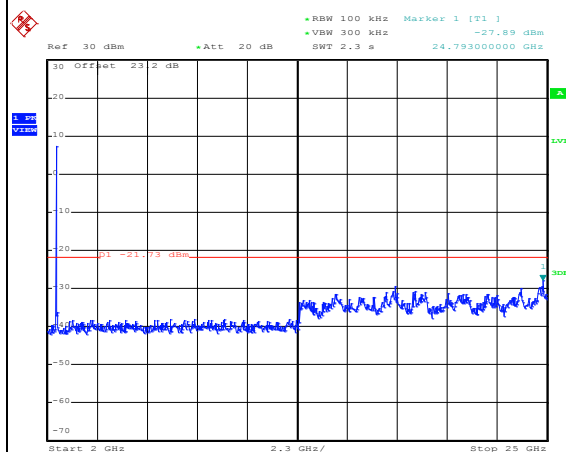
Date: 12.MAY.2016 13:50:30

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:50:50

Spurious Emission 2GHz~25GHz



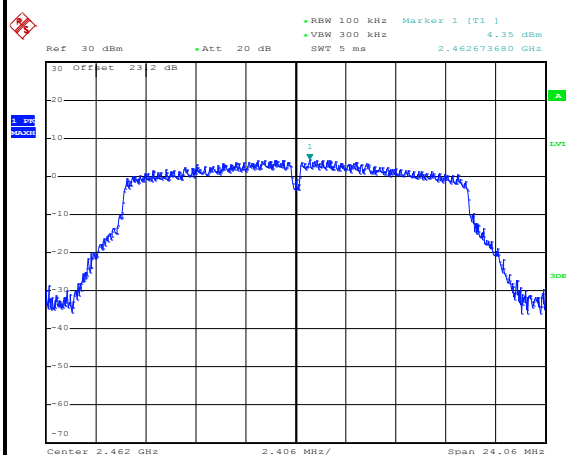
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Number of TX :	2	Ant. :	1
Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz High	Relative Humidity :	51~54%
Test Channel :	11	Test Engineer :	AC Chang

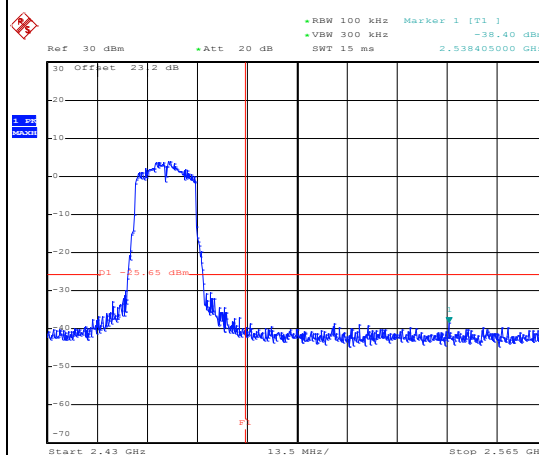
WLAN 802.11g Channel 11

100kHz PSD reference Level



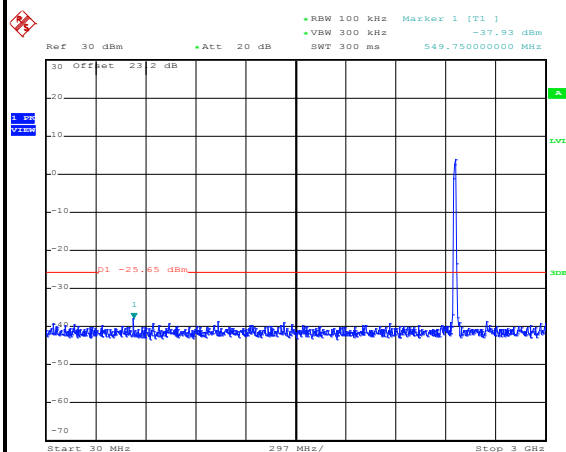
Date: 16.MAY.2016 09:10:38

High Channel Plot



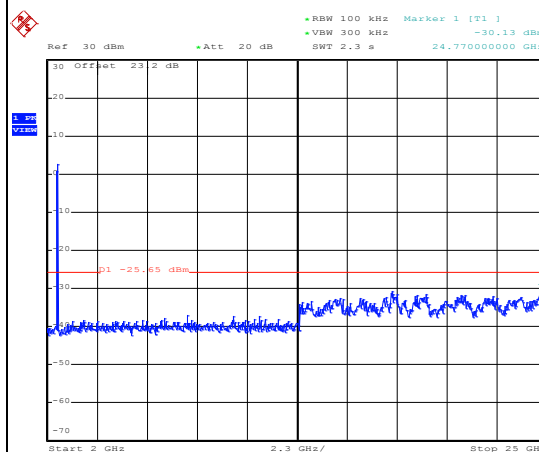
Date: 16.MAY.2016 09:10:50

Spurious Emission 30MHz~3GHz



Date: 16.MAY.2016 09:12:01

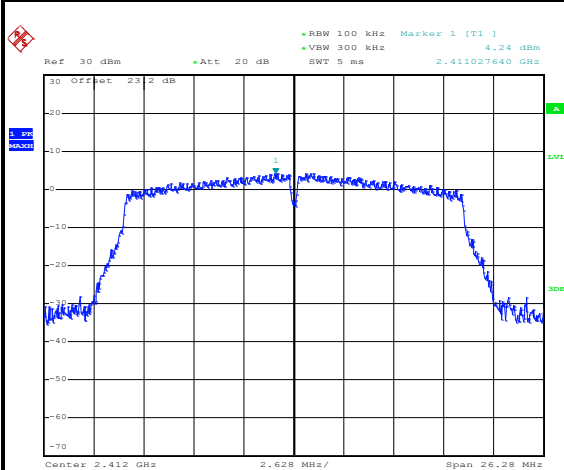
Spurious Emission 2GHz~25GHz



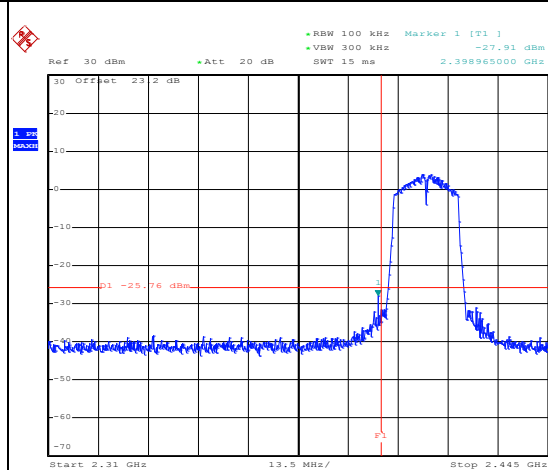
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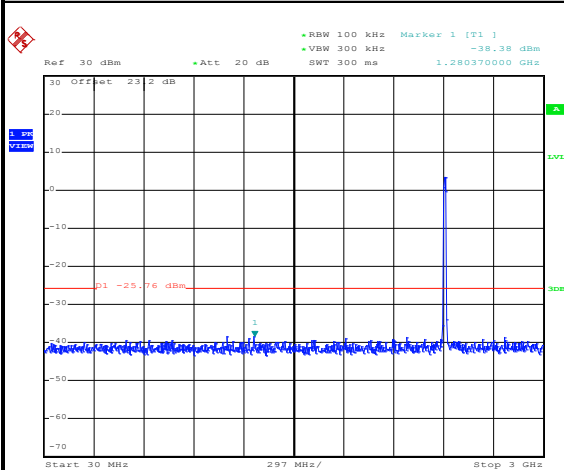
Number of TX :	2	Ant. :	1
Test Mode :	802.11n HT20	Temperature :	21~25°C
Test Band :	2.4GHz Low	Relative Humidity :	51~54%
Test Channel :	01	Test Engineer :	AC Chang

WLAN 802.11n HT20 Channel 01**100kHz PSD reference Level**

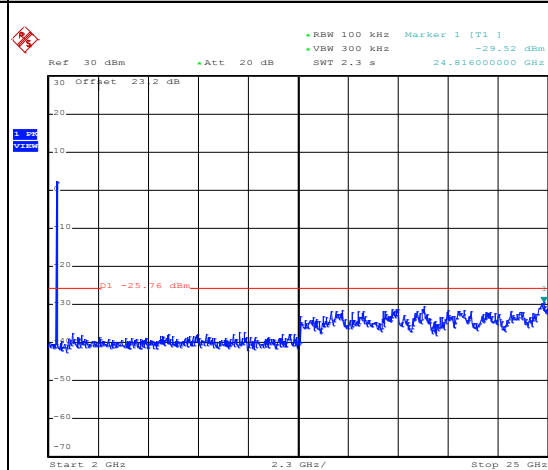
Date: 12.MAY.2016 14:05:59

Low Channel Plot

Date: 12.MAY.2016 14:06:22

Spurious Emission 30MHz~3GHz

Date: 12.MAY.2016 14:06:38

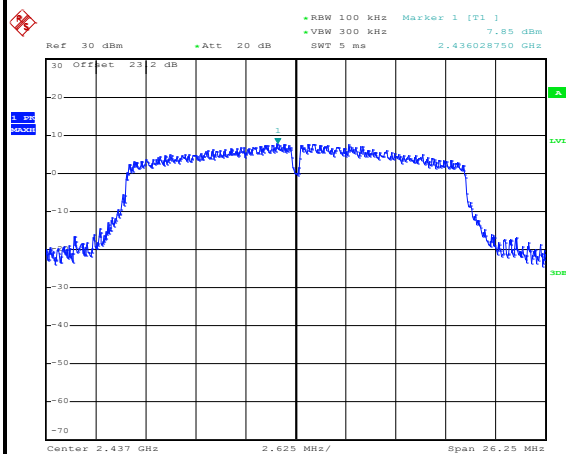
Spurious Emission 2GHz~25GHz

Date: 12.MAY.2016 14:06:46

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

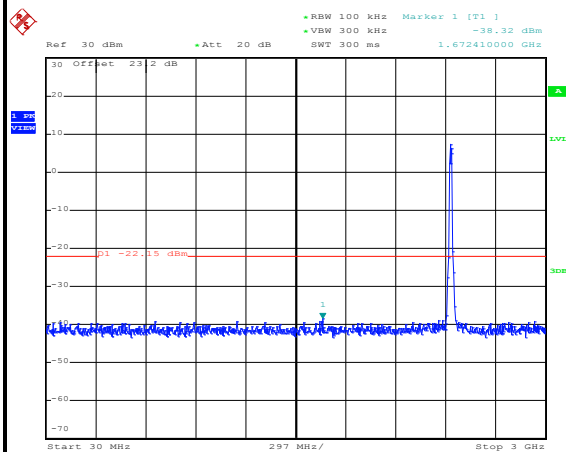
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



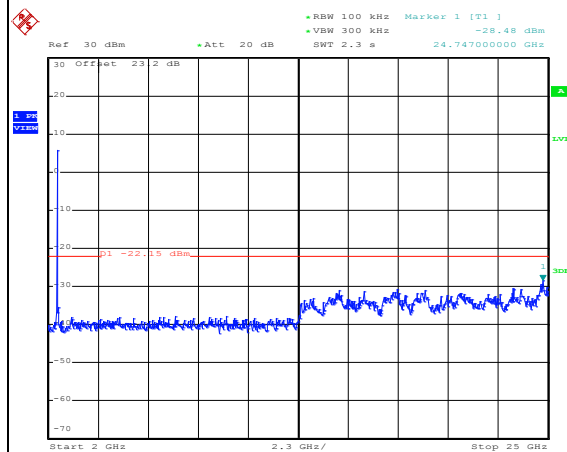
Date: 12.MAY.2016 14:09:01

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:09:16

Spurious Emission 2GHz~25GHz



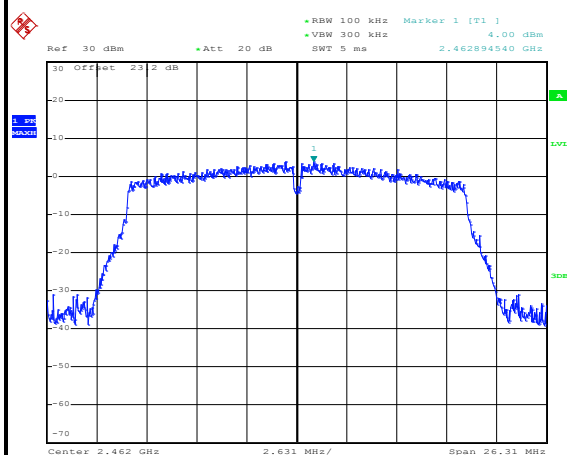
Date: 12.MAY.2016 14:09:25



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

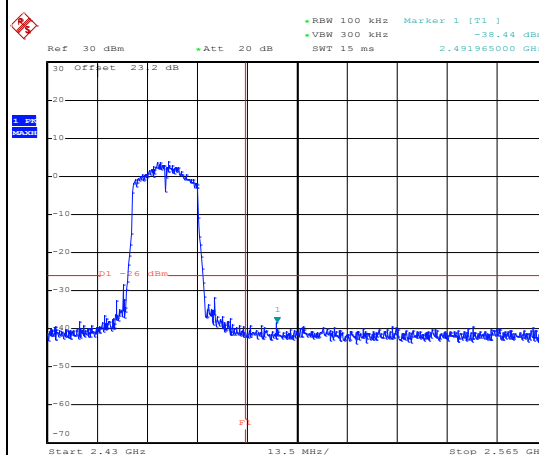
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



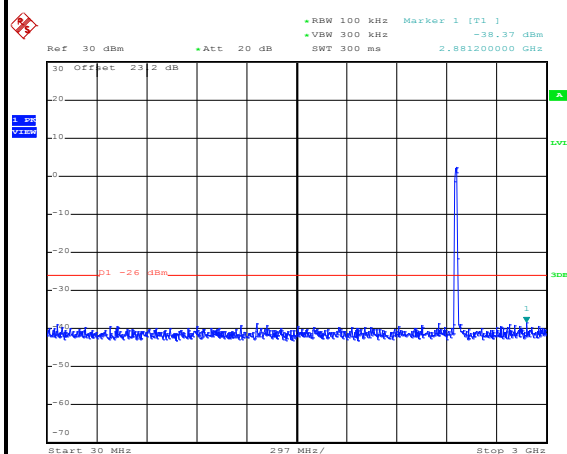
Date: 12.MAY.2016 14:11:10

High Channel Plot



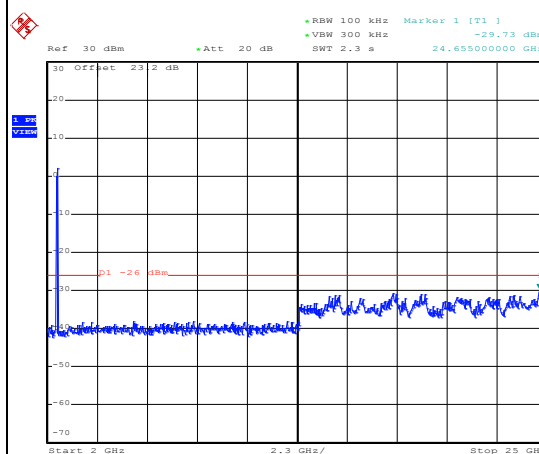
Date: 12.MAY.2016 14:12:00

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:12:17

Spurious Emission 2GHz~25GHz



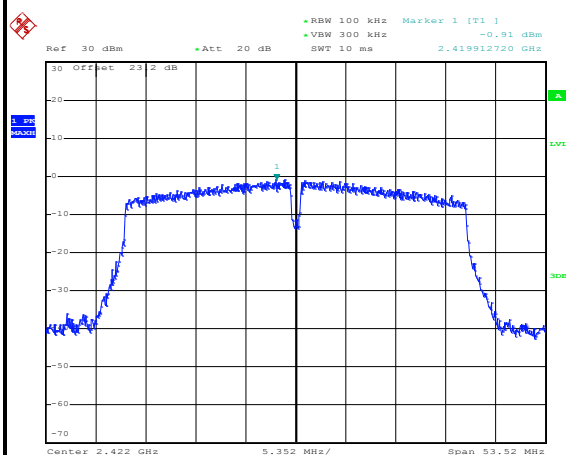
Date: 12.MAY.2016 14:12:25



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

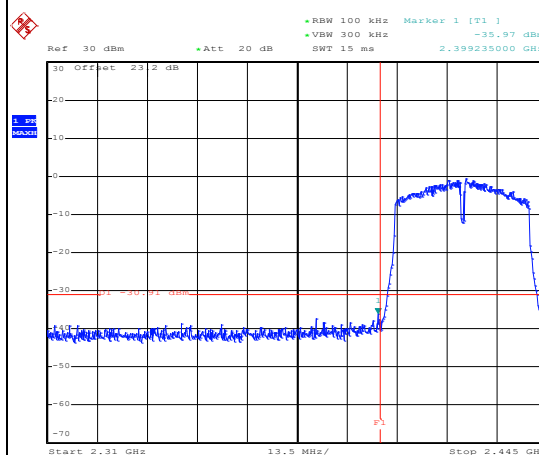
WLAN 802.11n HT40 Channel 03

100kHz PSD reference Level



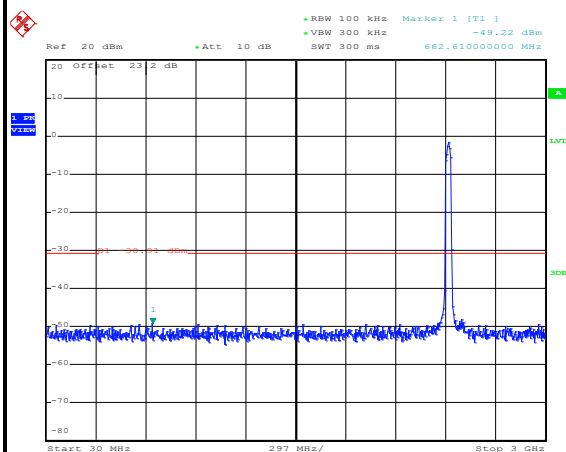
Date: 12.MAY.2016 14:26:10

Low Channel Plot



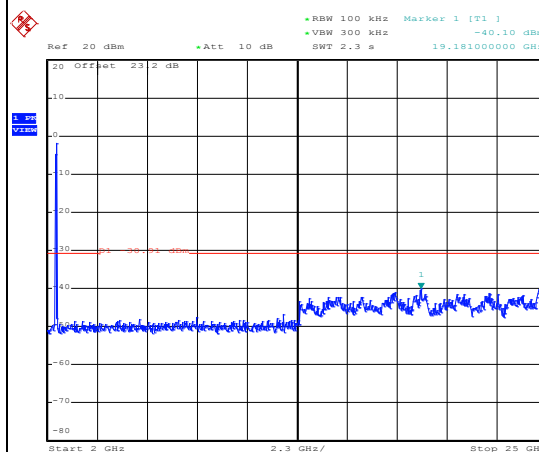
Date: 12.MAY.2016 14:26:23

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:31:16

Spurious Emission 2GHz~25GHz



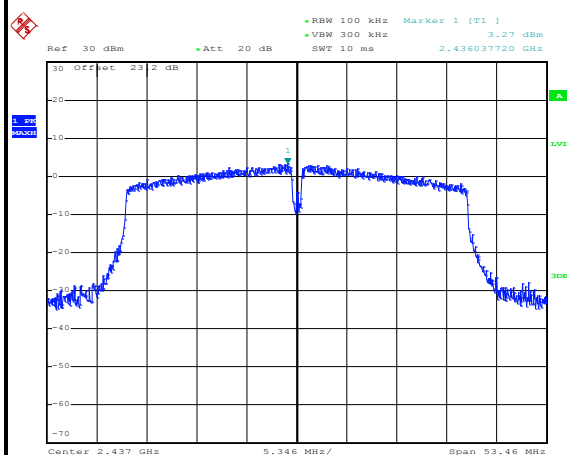
Date: 12.MAY.2016 14:31:24



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

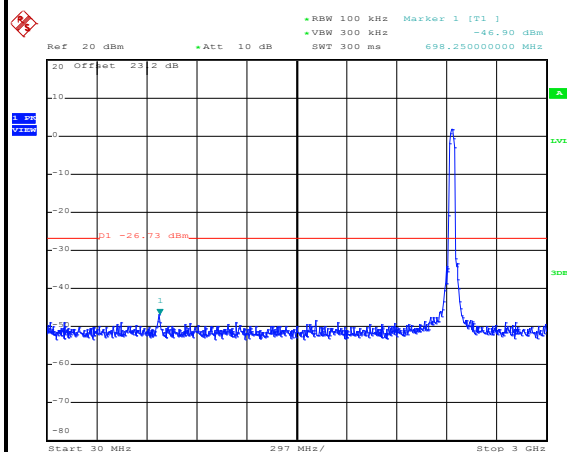
WLAN 802.11n HT40 Channel 06

100kHz PSD reference Level



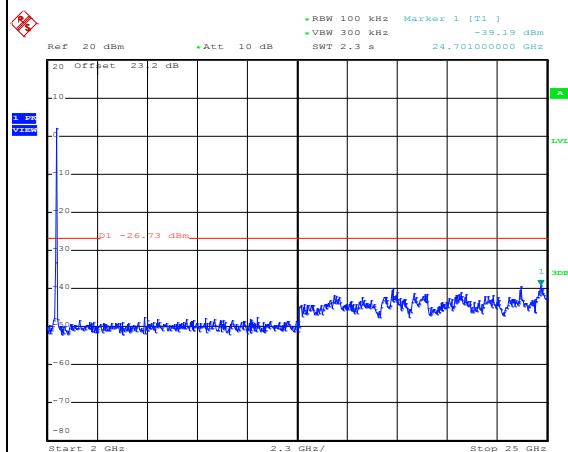
Date: 12.MAY.2016 14:33:40

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:34:11

Spurious Emission 2GHz~25GHz



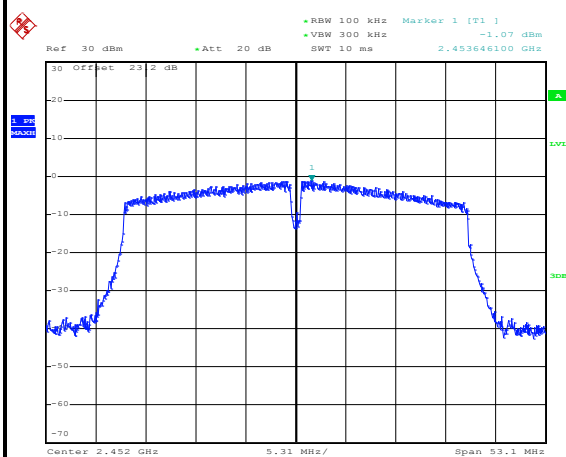
Date: 12.MAY.2016 14:34:19



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

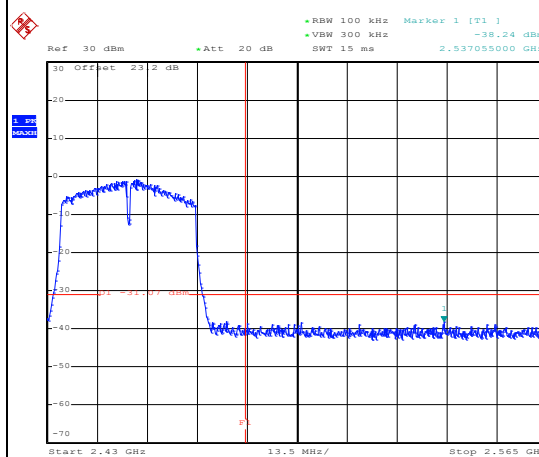
WLAN 802.11n HT40 Channel 09

100kHz PSD reference Level



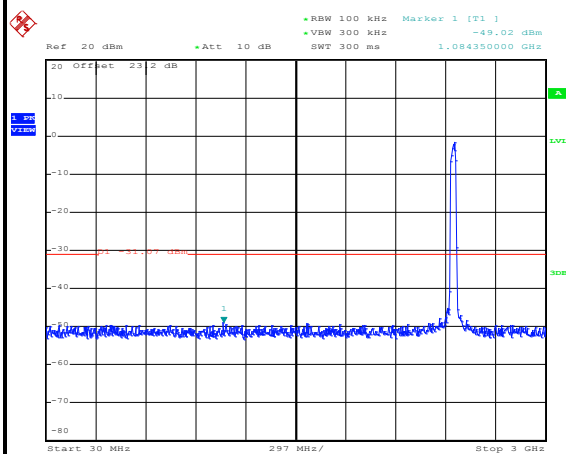
Date: 12.MAY.2016 14:36:31

High Channel Plot



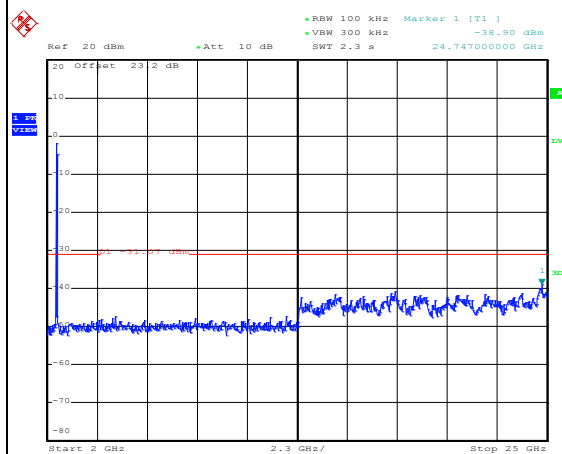
Date: 12.MAY.2016 14:36:52

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:37:08

Spurious Emission 2GHz~25GHz



Date: 12.MAY.2016 14:37:16

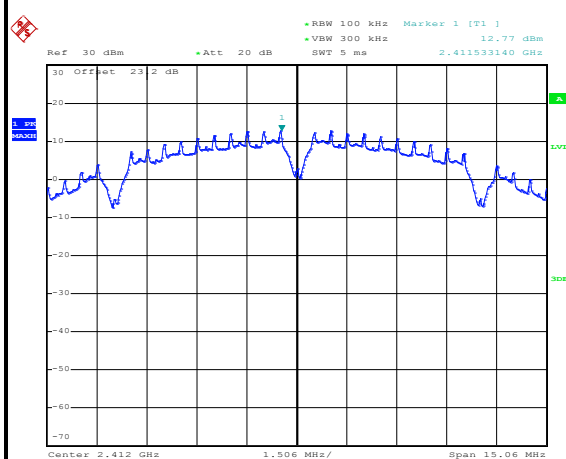


Number of TX = 2, Ant. 2 (Measured)

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

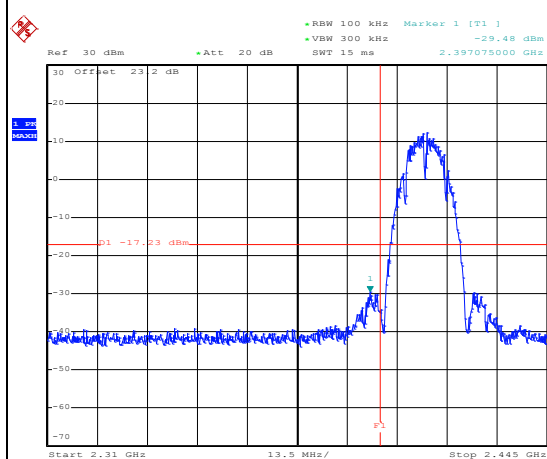
WLAN 802.11b Channel 01

100kHz PSD reference Level



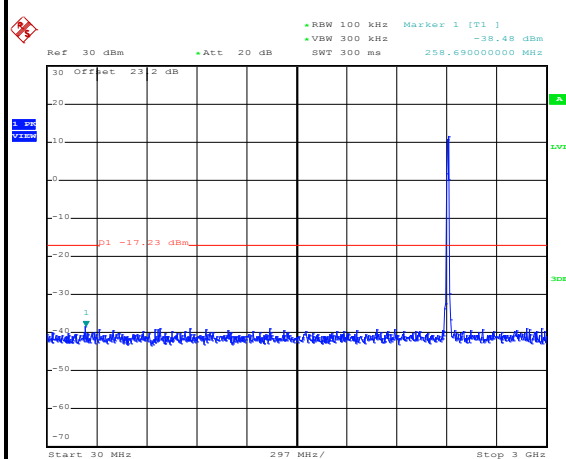
Date: 12.MAY.2016 13:42:28

Low Channel Plot



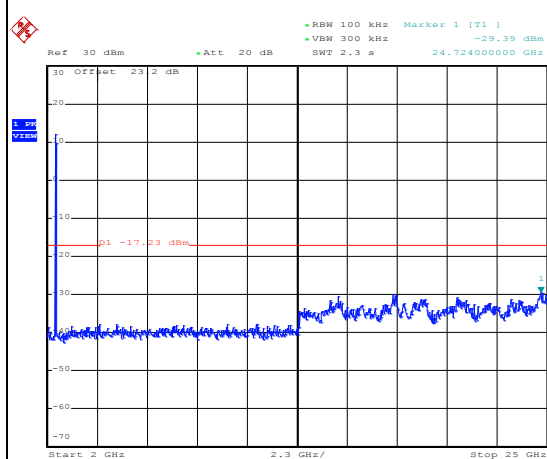
Date: 12.MAY.2016 13:42:44

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:42:57

Spurious Emission 2GHz~25GHz



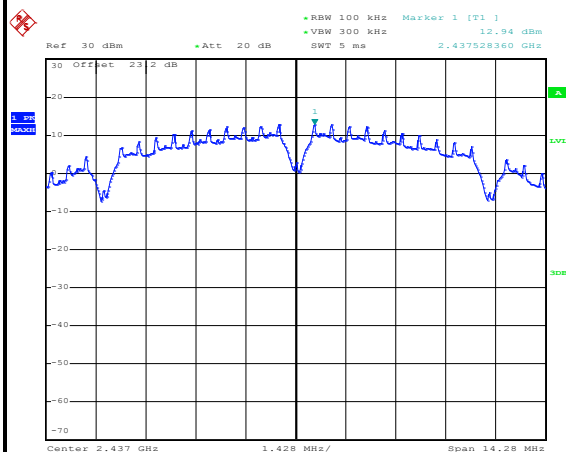
Date: 12.MAY.2016 13:43:06



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

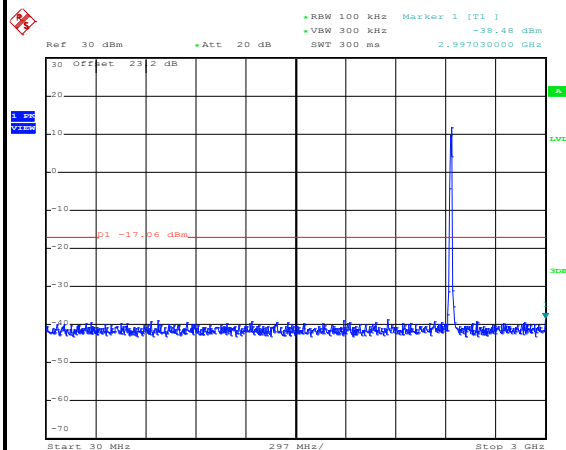
WLAN 802.11b Channel 06

100kHz PSD reference Level



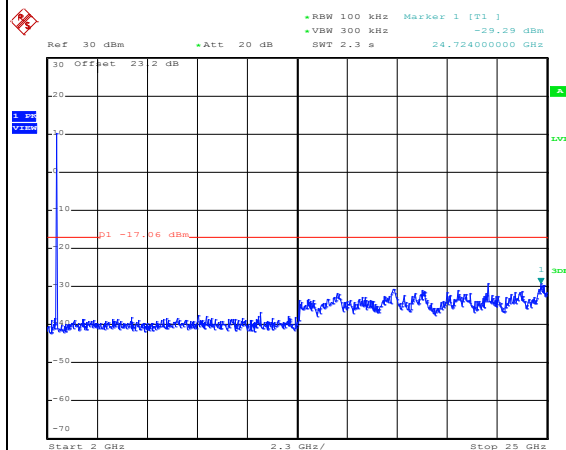
Date: 12.MAY.2016 13:39:45

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:40:25

Spurious Emission 2GHz~25GHz



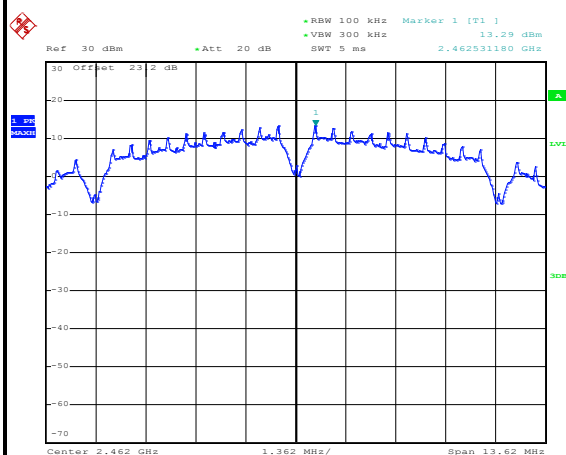
Date: 12.MAY.2016 13:40:33



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

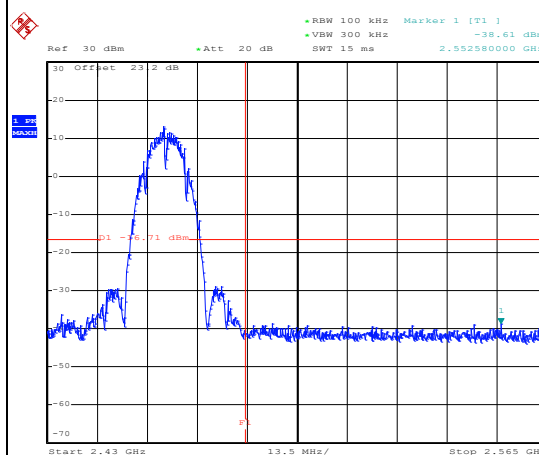
WLAN 802.11b Channel 11

100kHz PSD reference Level



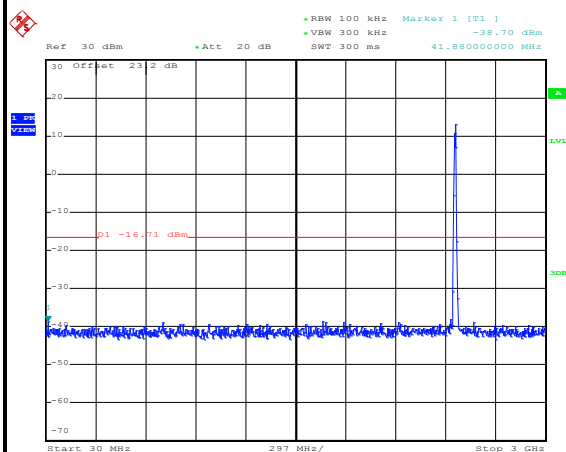
Date: 12.MAY.2016 13:37:38

High Channel Plot



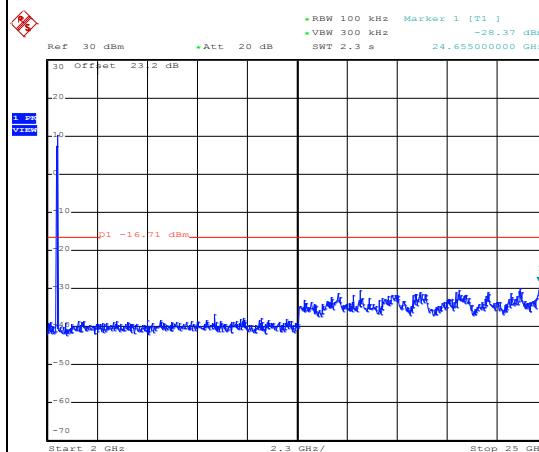
Date: 12.MAY.2016 13:37:51

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:38:03

Spurious Emission 2GHz~25GHz



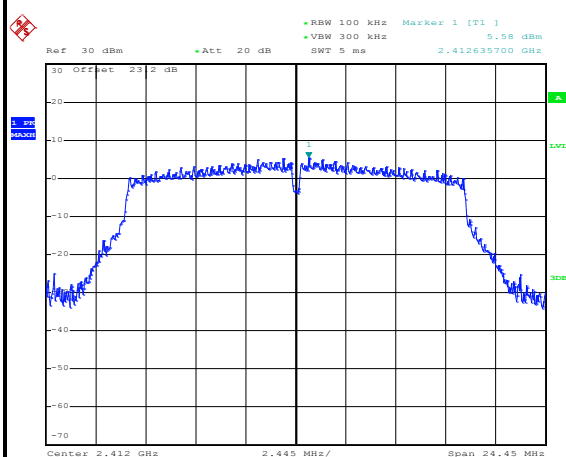
Date: 12.MAY.2016 13:38:11



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

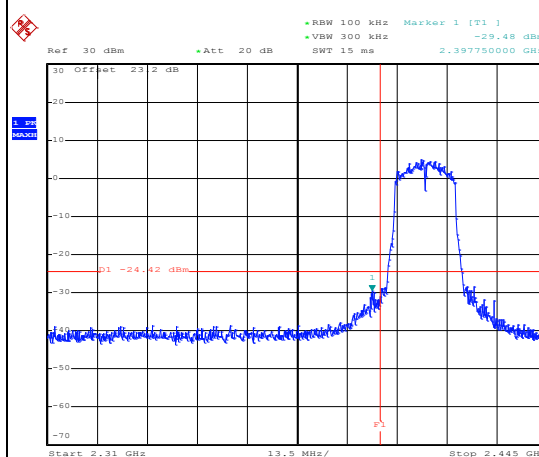
WLAN 802.11g Channel 01

100kHz PSD reference Level



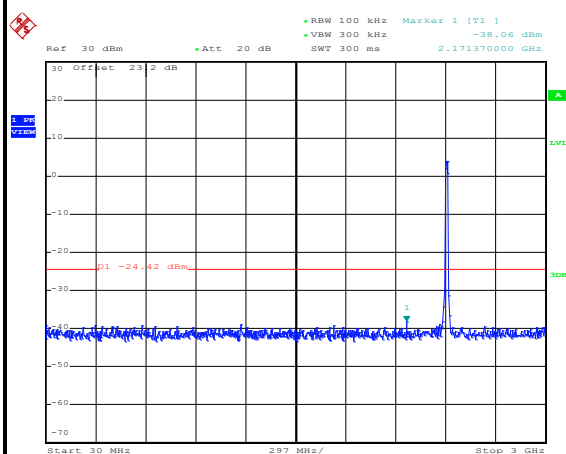
Date: 12.MAY.2016 14:02:32

Low Channel Plot



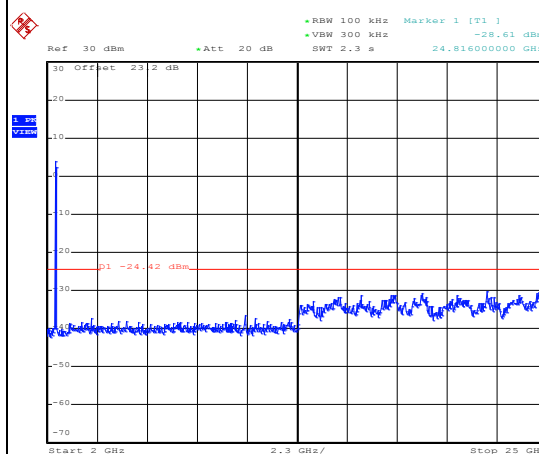
Date: 12.MAY.2016 14:02:50

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:03:02

Spurious Emission 2GHz~25GHz



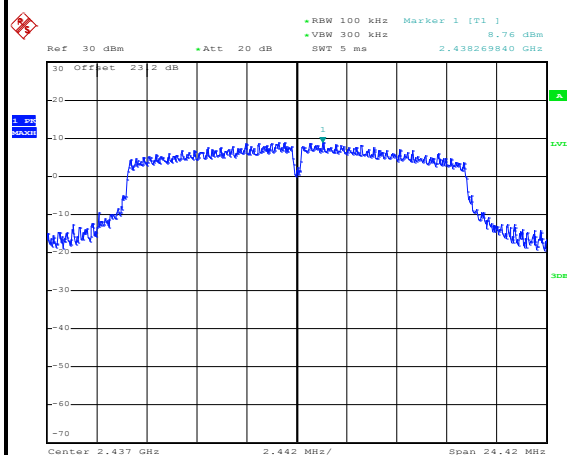
Date: 12.MAY.2016 14:03:10



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

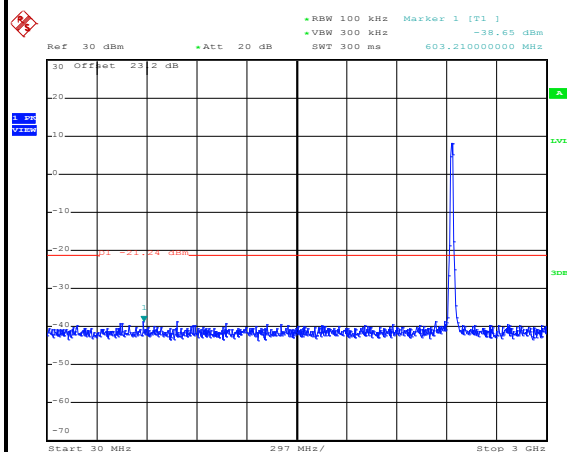
WLAN 802.11g Channel 06

100kHz PSD reference Level



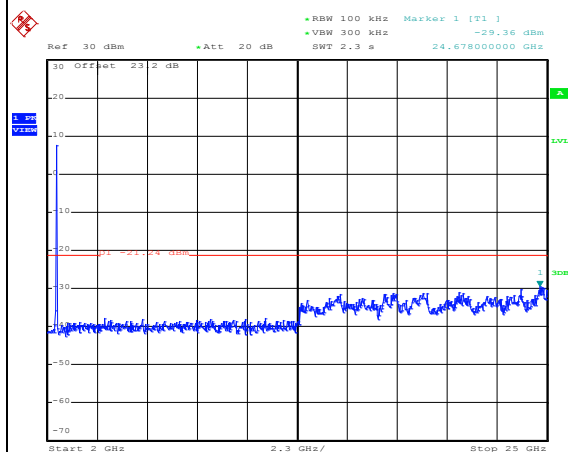
Date: 12.MAY.2016 13:59:51

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:00:08

Spurious Emission 2GHz~25GHz

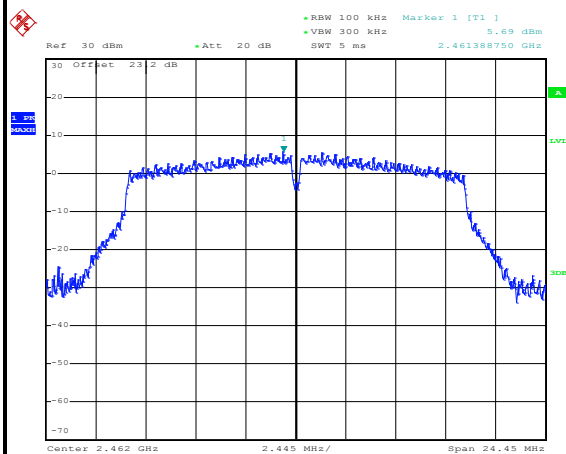


Date: 12.MAY.2016 14:00:17

Number of TX :	2	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

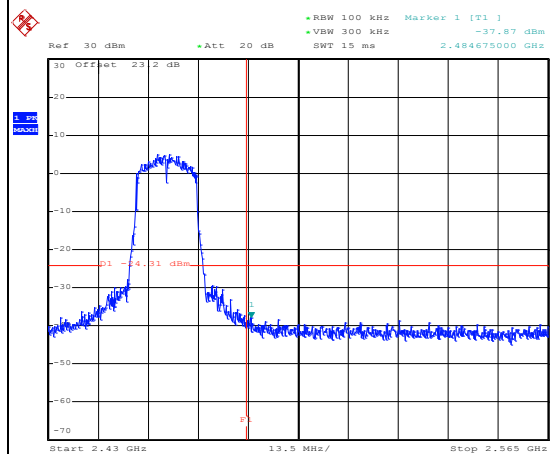
WLAN 802.11g Channel 11

100kHz PSD reference Level



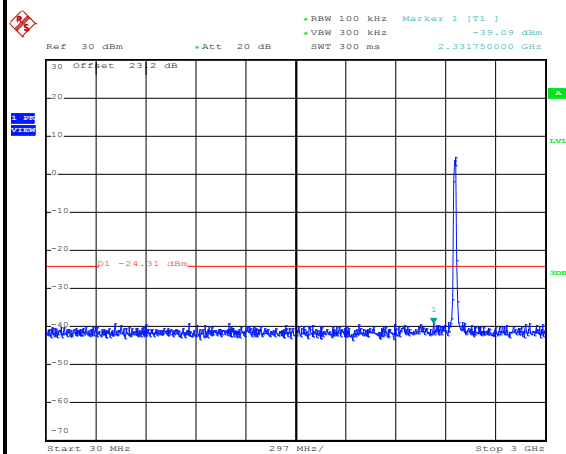
Date: 12.MAY.2016 13:56:19

High Channel Plot



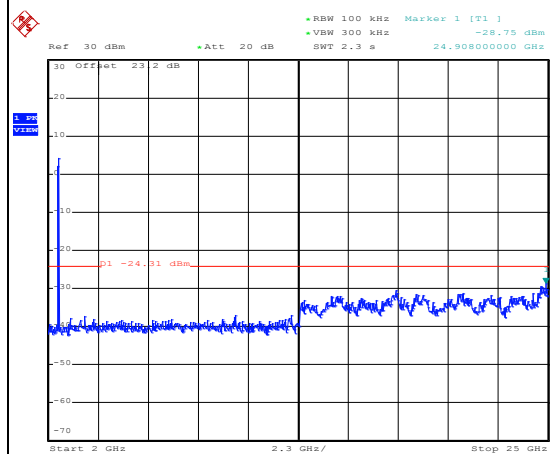
Date: 12.MAY.2016 13:56:31

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 13:56:42

Spurious Emission 2GHz~25GHz



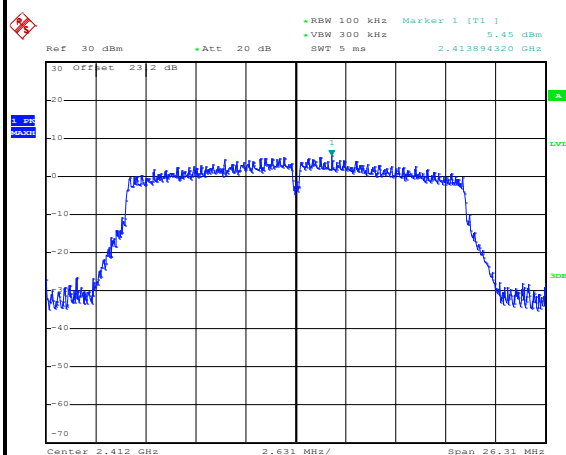
Date: 12.MAY.2016 13:56:51



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

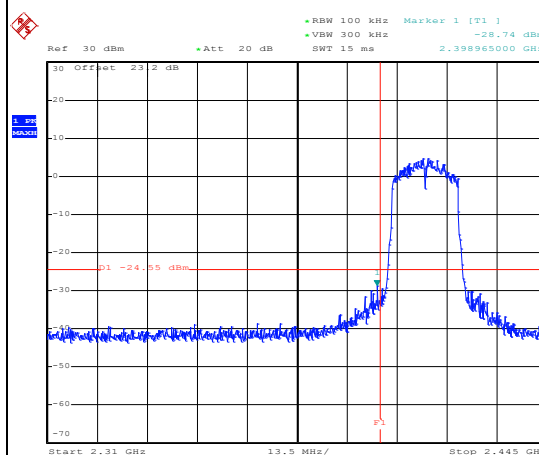
WLAN 802.11n HT20 Channel 01

100kHz PSD reference Level



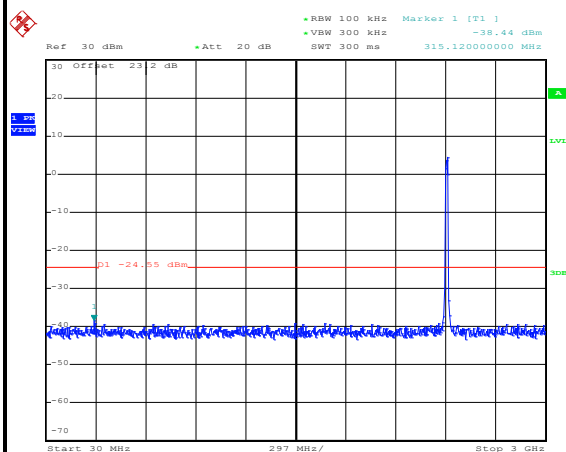
Date: 12.MAY.2016 14:22:26

Low Channel Plot



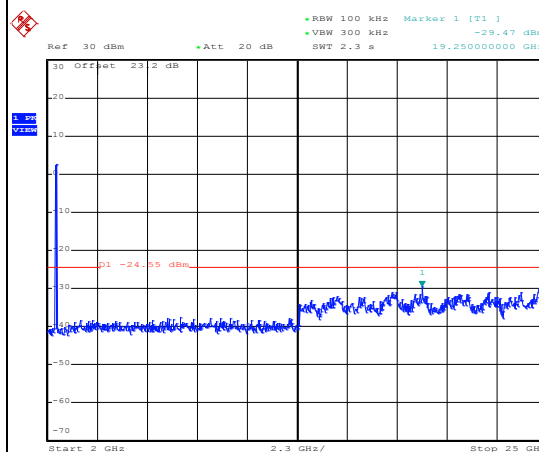
Date: 12.MAY.2016 14:22:48

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:22:59

Spurious Emission 2GHz~25GHz



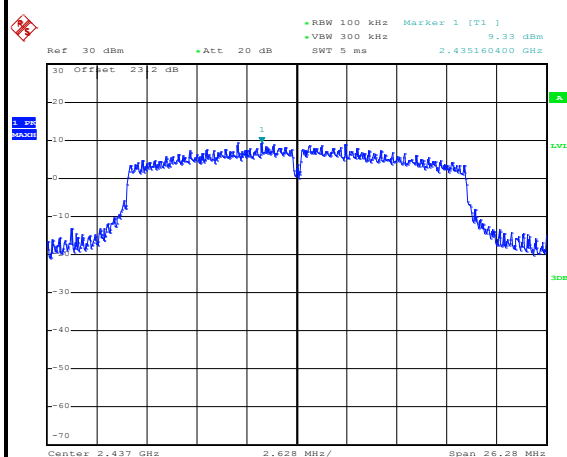
Date: 12.MAY.2016 14:23:08



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

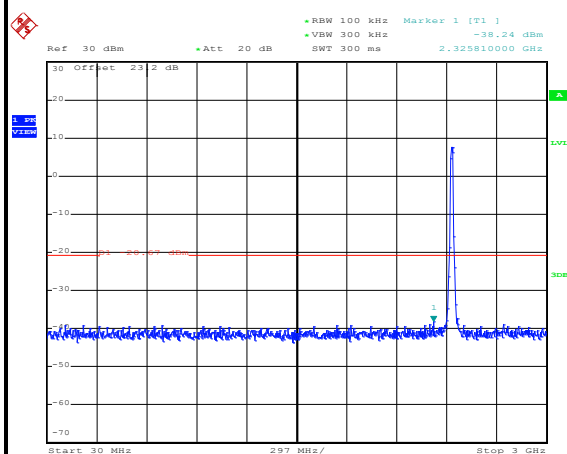
WLAN 802.11n HT20 Channel 06

100kHz PSD reference Level



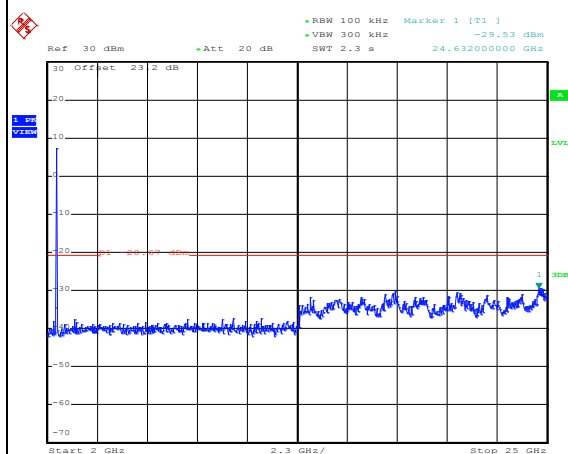
Date: 12.MAY.2016 14:20:01

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:20:17

Spurious Emission 2GHz~25GHz



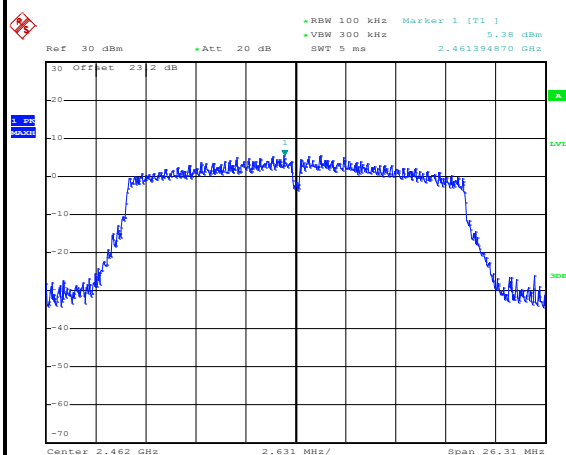
Date: 12.MAY.2016 14:20:25



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

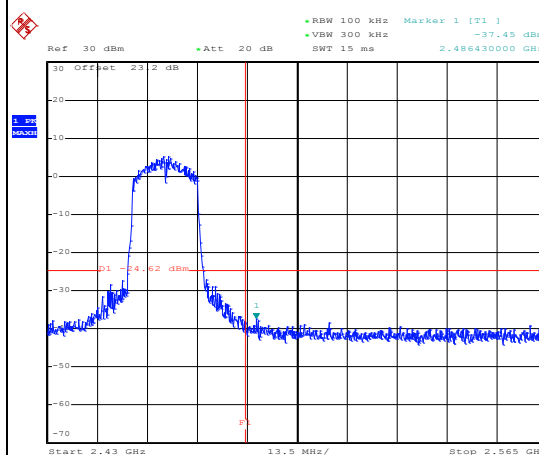
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



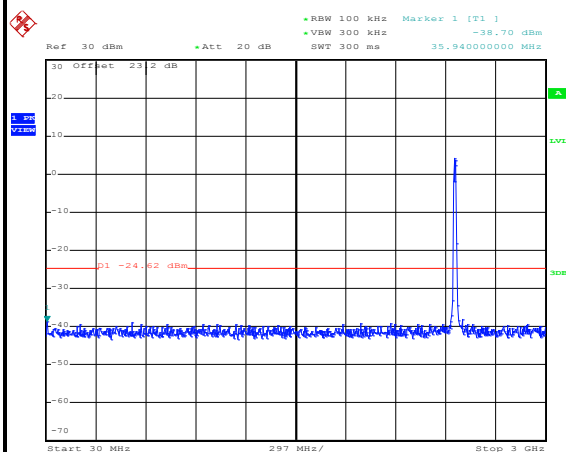
Date: 12.MAY.2016 14:14:18

High Channel Plot



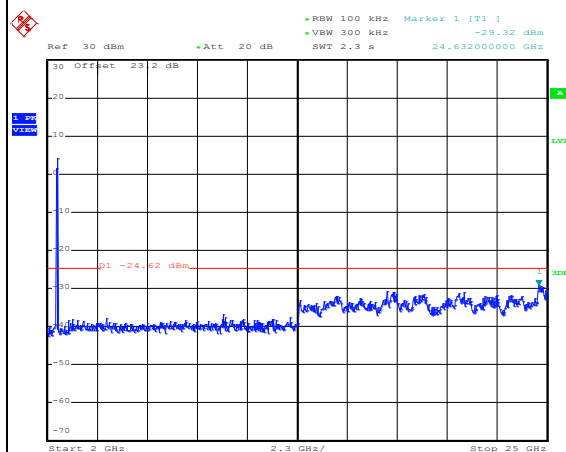
Date: 12.MAY.2016 14:14:31

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:14:50

Spurious Emission 2GHz~25GHz



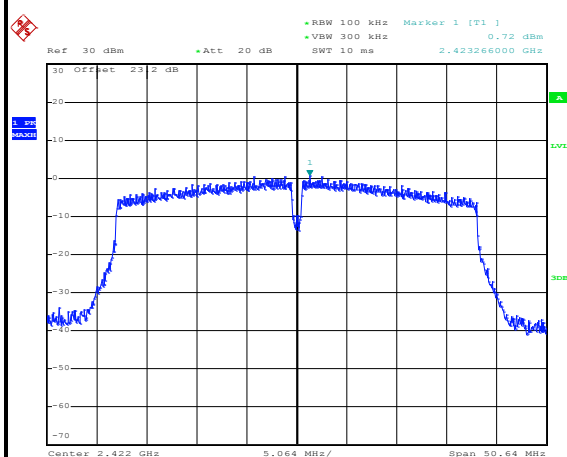
Date: 12.MAY.2016 14:14:58



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

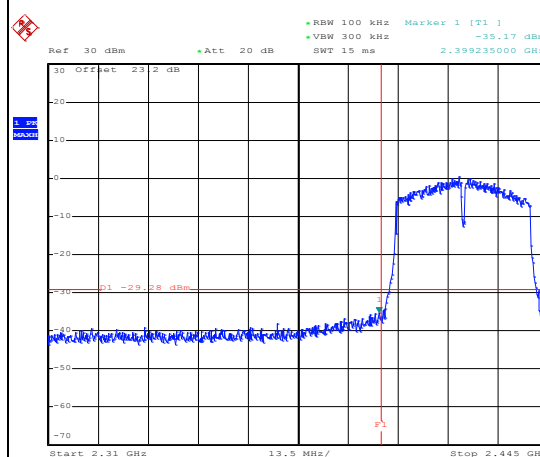
WLAN 802.11n HT40 Channel 03

100kHz PSD reference Level



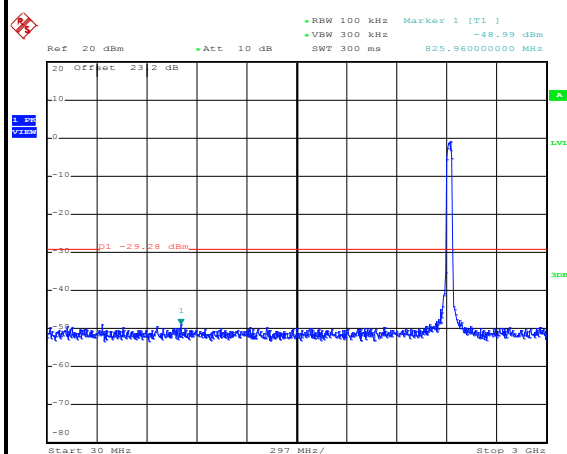
Date: 12.MAY.2016 14:47:52

Low Channel Plot



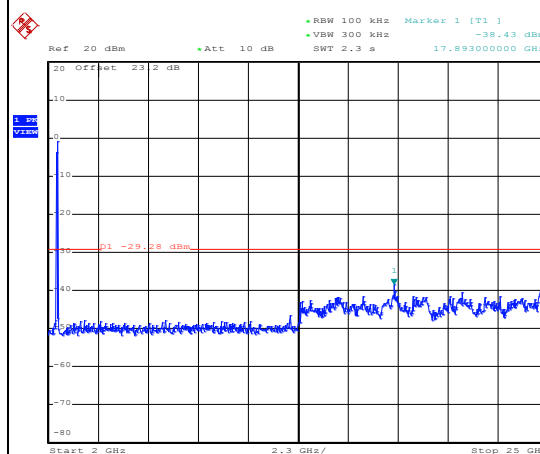
Date: 12.MAY.2016 14:48:08

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:48:48

Spurious Emission 2GHz~25GHz



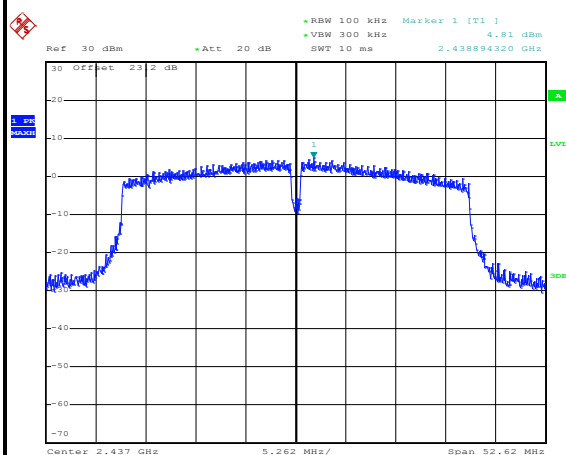
Date: 12.MAY.2016 14:48:56



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

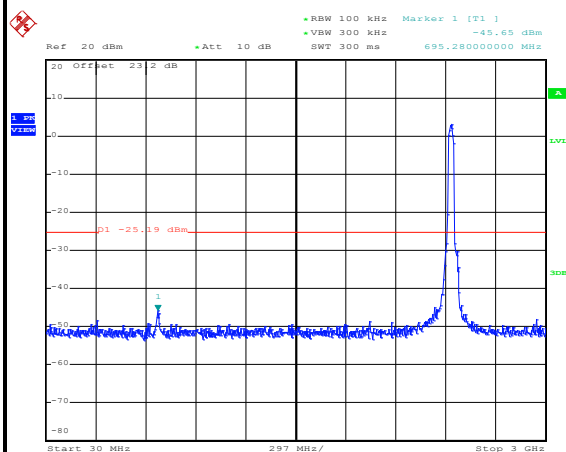
WLAN 802.11n HT40 Channel 06

100kHz PSD reference Level



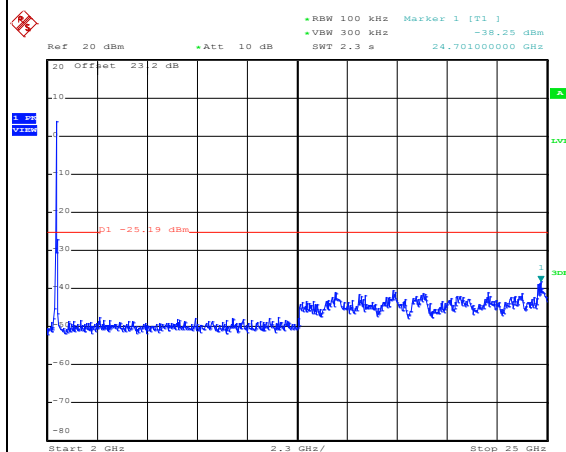
Date: 12.MAY.2016 14:44:48

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:45:14

Spurious Emission 2GHz~25GHz



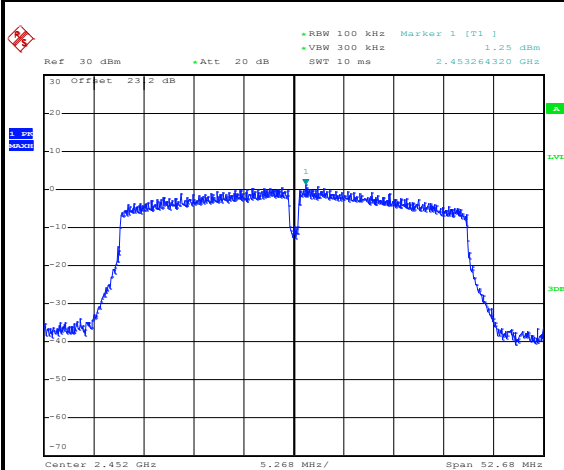
Date: 12.MAY.2016 14:45:22



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

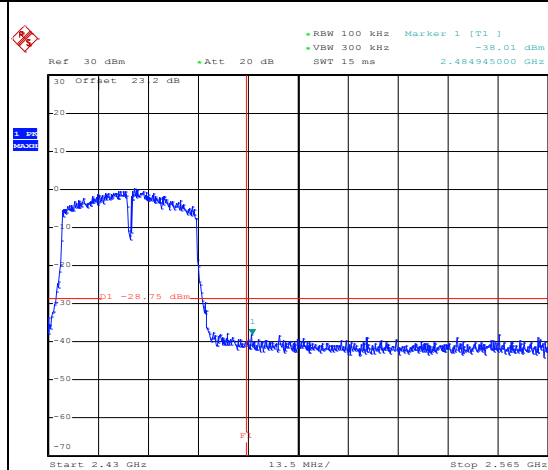
WLAN 802.11n HT40 Channel 09

100kHz PSD reference Level



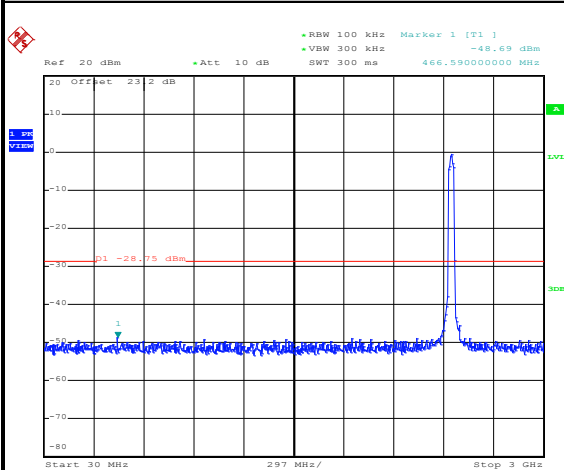
Date: 12.MAY.2016 14:40:54

High Channel Plot



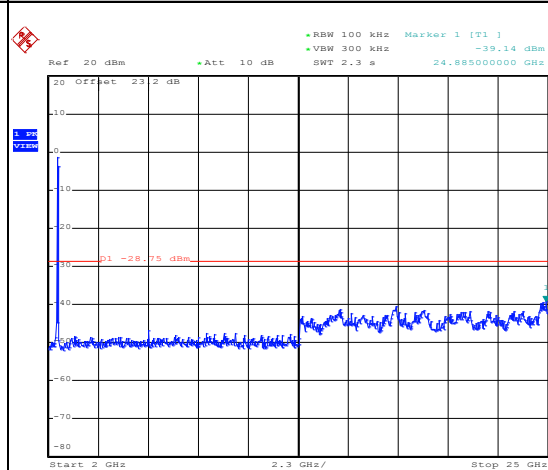
Date: 12.MAY.2016 14:41:14

Spurious Emission 30MHz~3GHz



Date: 12.MAY.2016 14:41:58

Spurious Emission 2GHz~25GHz



Date: 12.MAY.2016 14:42:06



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

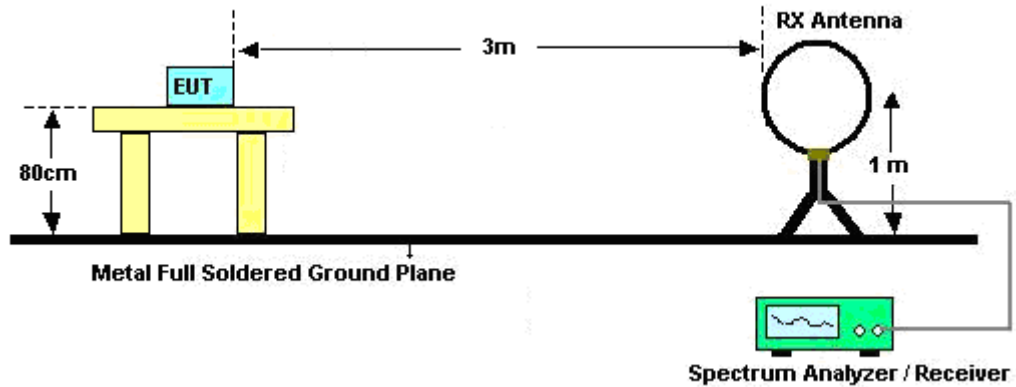
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the 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 $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

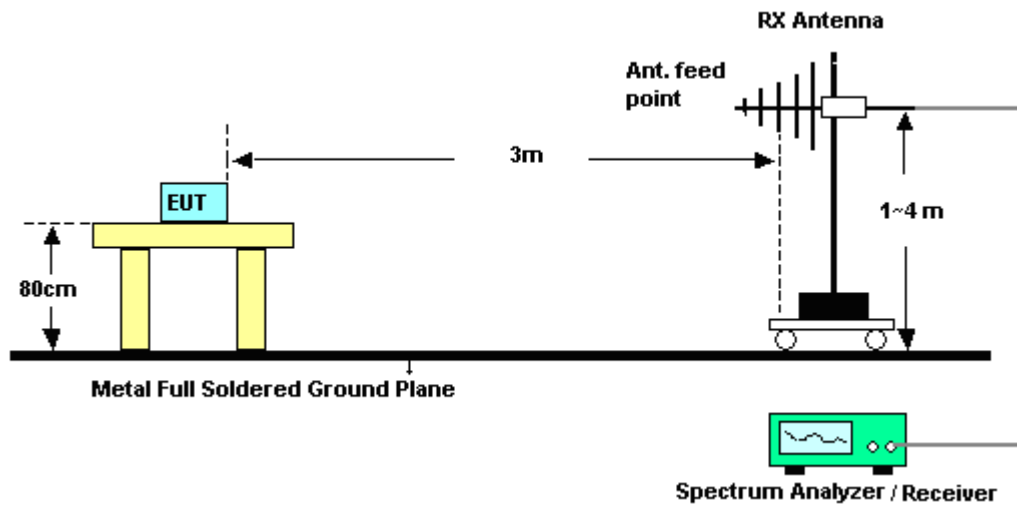
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

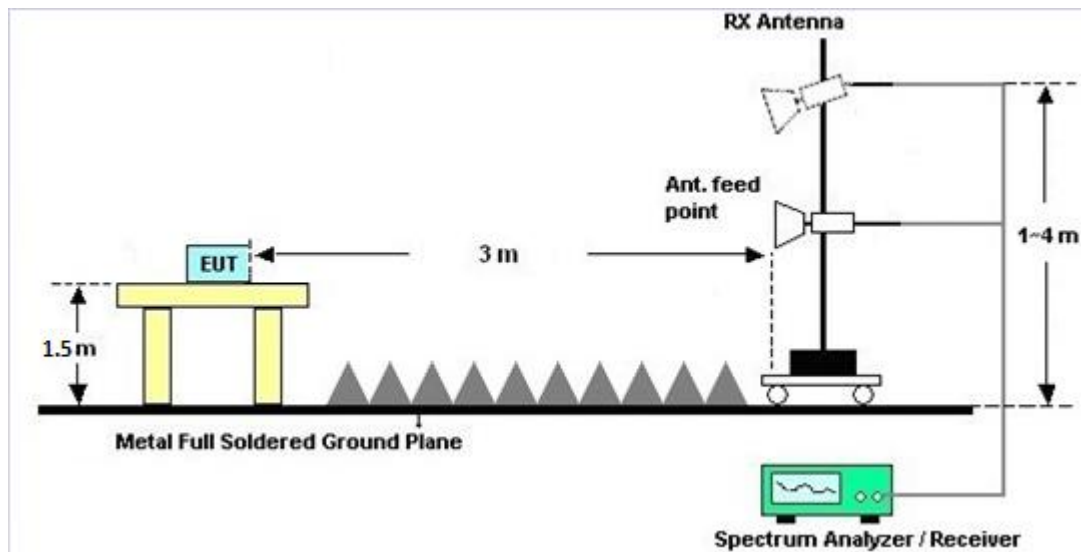
For radiated emissions below 30MHz



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 and Appendix C of this test report.

3.5.7 Duty Cycle

Please refer to Appendix D of this test report.

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

Please refer to Appendix B and Appendix C of this test 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 (dB μ V)	
	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.

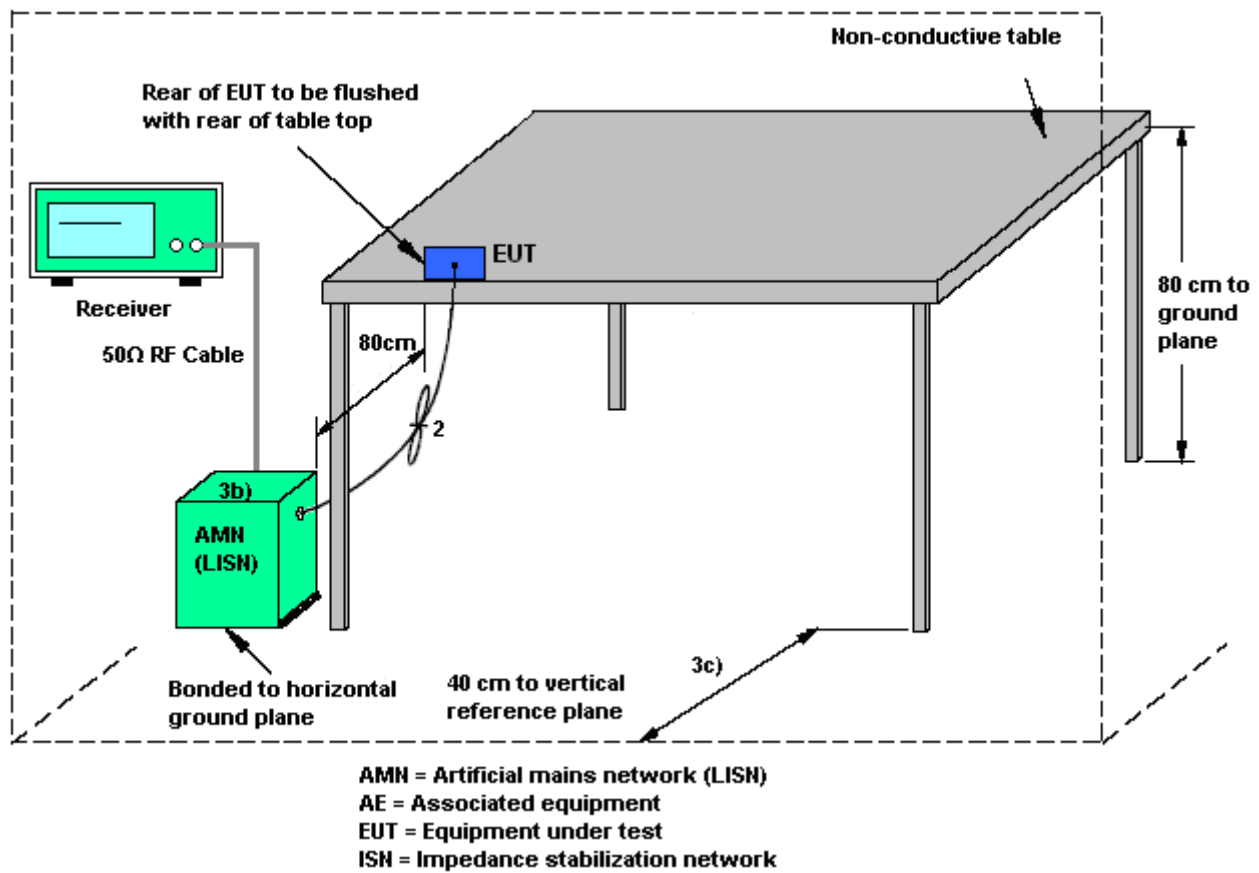
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

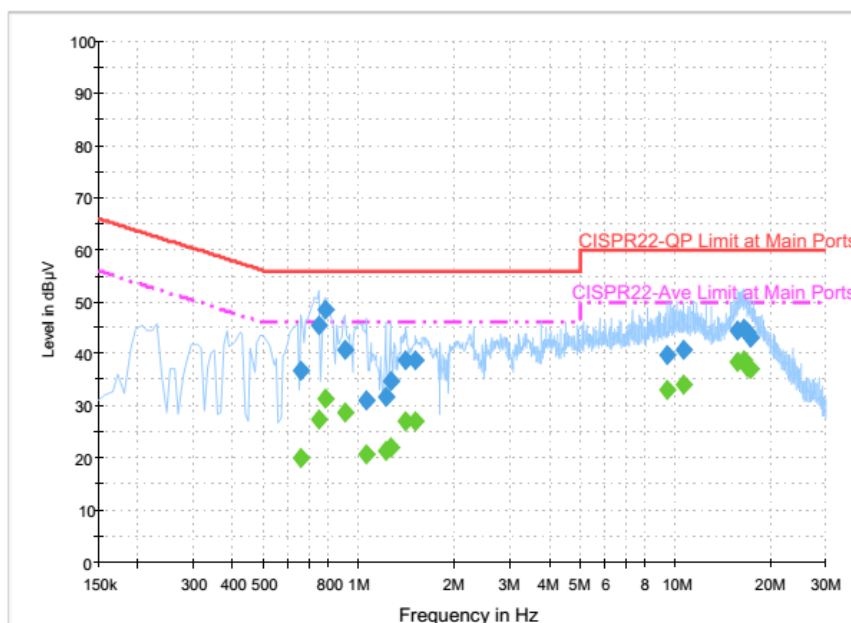
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other 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



3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~51%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (2.4GHz) Link 11n HT40 CH06 MCS0 + LAN Link		

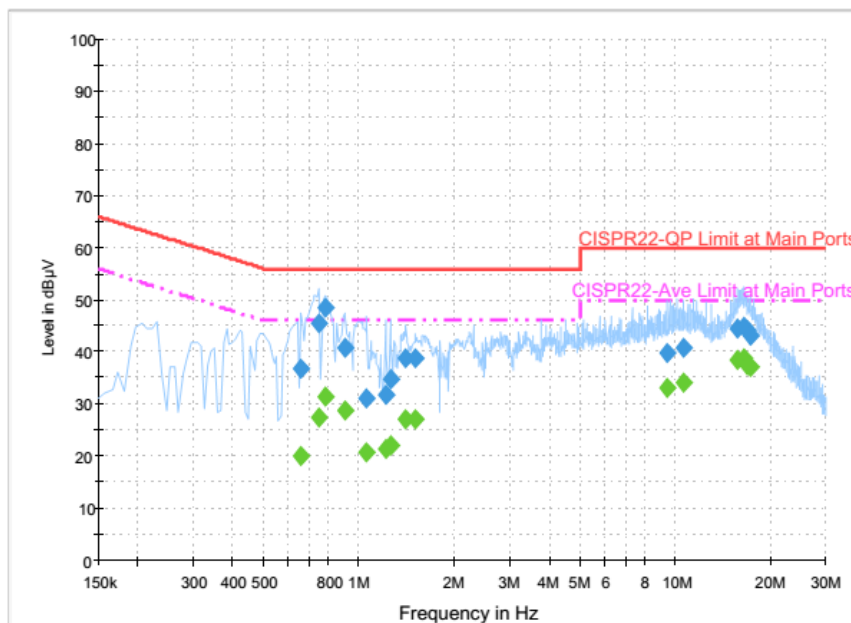


Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.654000	36.7	Off	L1	19.6	19.3	56.0
0.750000	45.4	Off	L1	19.6	10.6	56.0
0.782000	48.5	Off	L1	19.6	7.5	56.0
0.902000	40.9	Off	L1	19.6	15.1	56.0
1.062000	31.2	Off	L1	19.6	24.8	56.0
1.214000	31.6	Off	L1	19.6	24.4	56.0
1.262000	34.9	Off	L1	19.6	21.1	56.0
1.414000	38.9	Off	L1	19.6	17.1	56.0
1.510000	38.7	Off	L1	19.6	17.3	56.0
9.446000	39.9	Off	L1	19.7	20.1	60.0
10.654000	40.8	Off	L1	19.7	19.2	60.0
15.798000	44.5	Off	L1	19.8	15.5	60.0
16.454000	45.0	Off	L1	19.8	15.0	60.0
16.950000	44.0	Off	L1	19.8	16.0	60.0
17.358000	43.1	Off	L1	19.8	16.9	60.0



Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~51%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (2.4GHz) Link 11n HT40 CH06 MCS0 + LAN Link		

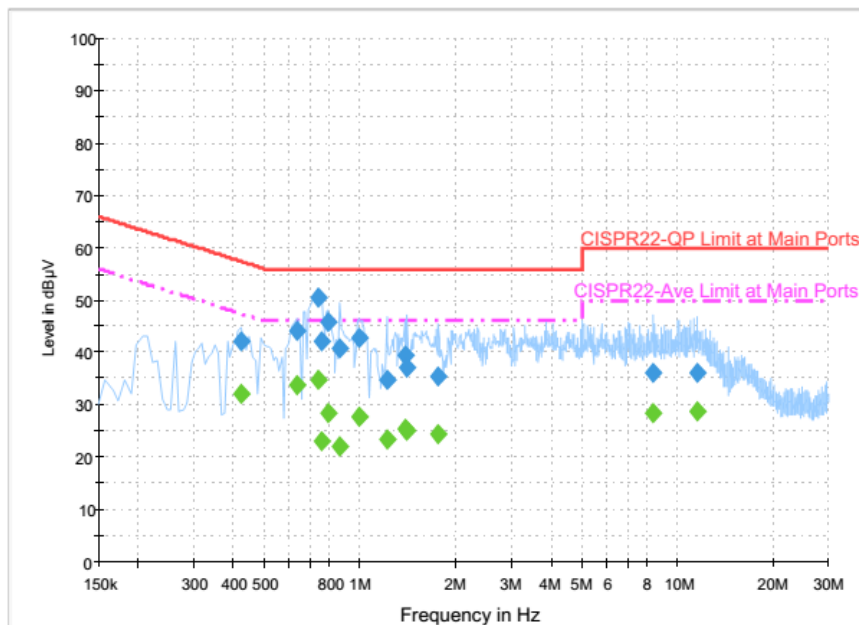


Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.654000	20.1	Off	L1	19.6	25.9	46.0
0.750000	27.5	Off	L1	19.6	18.5	46.0
0.782000	31.4	Off	L1	19.6	14.6	46.0
0.902000	28.7	Off	L1	19.6	17.3	46.0
1.062000	20.7	Off	L1	19.6	25.3	46.0
1.214000	21.5	Off	L1	19.6	24.5	46.0
1.262000	22.0	Off	L1	19.6	24.0	46.0
1.414000	27.1	Off	L1	19.6	18.9	46.0
1.510000	26.9	Off	L1	19.6	19.1	46.0
9.446000	33.0	Off	L1	19.7	17.0	50.0
10.654000	34.1	Off	L1	19.7	15.9	50.0
15.798000	38.5	Off	L1	19.8	11.5	50.0
16.454000	38.8	Off	L1	19.8	11.2	50.0
16.950000	37.6	Off	L1	19.8	12.4	50.0
17.358000	37.0	Off	L1	19.8	13.0	50.0



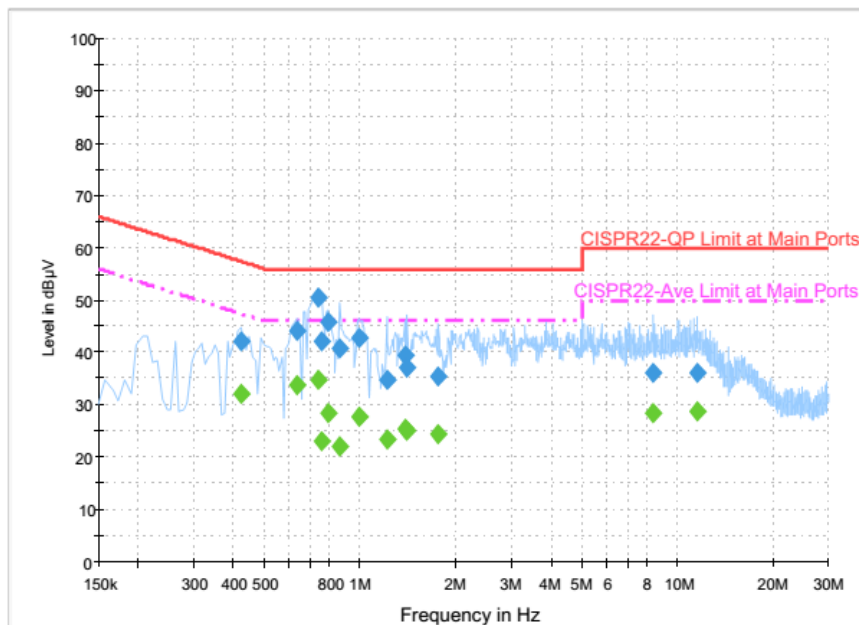
Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~51%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (2.4GHz) Link 11n HT40 CH06 MCS0 + LAN Link		

**Final Result : QuasiPeak**

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.422000	42.2	Off	N	19.6	15.2	57.4
0.630000	44.2	Off	N	19.6	11.8	56.0
0.742000	50.4	Off	N	19.6	5.6	56.0
0.758000	42.0	Off	N	19.6	14.0	56.0
0.790000	45.9	Off	N	19.6	10.1	56.0
0.862000	40.7	Off	N	19.6	15.3	56.0
0.998000	42.8	Off	N	19.6	13.2	56.0
1.214000	34.7	Off	N	19.6	21.3	56.0
1.382000	39.5	Off	N	19.6	16.5	56.0
1.414000	37.1	Off	N	19.6	18.9	56.0
1.774000	35.4	Off	N	19.6	20.6	56.0
8.374000	36.0	Off	N	19.7	24.0	60.0
11.534000	36.3	Off	N	19.8	23.7	60.0



Test Mode :	Mode 1	Temperature :	22~23°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	50~51%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (2.4GHz) Link 11n HT40 CH06 MCS0 + LAN Link		



Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.422000	32.1	Off	N	19.6	15.3	47.4
0.630000	33.9	Off	N	19.6	12.1	46.0
0.742000	34.7	Off	N	19.6	11.3	46.0
0.758000	23.1	Off	N	19.6	22.9	46.0
0.790000	28.5	Off	N	19.6	17.5	46.0
0.862000	22.2	Off	N	19.6	23.8	46.0
0.998000	27.8	Off	N	19.6	18.2	46.0
1.214000	23.6	Off	N	19.6	22.4	46.0
1.382000	25.5	Off	N	19.6	20.5	46.0
1.414000	25.2	Off	N	19.6	20.8	46.0
1.774000	24.6	Off	N	19.6	21.4	46.0
8.374000	28.5	Off	N	19.7	21.5	50.0
11.534000	28.9	Off	N	19.8	21.1	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

Non-standard antenna connector is used.

3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Unequal antenna gains, with equal transmit powers.

For antenna gains given by $G_1, G_2, \dots, G_N$ dBi

If transmit signals are correlated, then

$$\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}] \text{ dBi}$$

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 = $10 \log(N_{\text{ANT}}/N_{\text{SS}}=1)$ dB.

For power measurements on IEEE 802.11 devices,

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

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	DG	Power	PSD
	Ant. 1	Ant. 2	for	for	Limit	Limit
	(dBi)	(dBi)	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	2.04	2.04	2.04	5.05	0.00	0.00

Power Limit Reduction = $DG(\text{Power}) - 6\text{dBi}$, (min = 0)

PSD Limit Reduction = $DG(\text{PSD}) - 6\text{dBi}$, (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	1132003	300MHz~40GHz	Aug. 12, 2015	May 05, 2016 ~ Jun. 29, 2016	Aug. 11, 2016	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1126017	300MHz~40GHz	Aug. 12, 2015	May 05, 2016 ~ Jun. 29, 2016	Aug. 11, 2016	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	May. 19, 2015	May 05, 2016 ~ May. 17, 2016	May. 18, 2016	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	May. 20, 2016	May 20, 2016 ~ Jun. 29, 2016	May. 19, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz~40GHz	Nov. 23, 2015	May. 05, 2016 ~ Jun. 29, 2016	Nov. 22, 2016	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 02, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	May 02, 2016	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	May 02, 2016	Dec. 01, 2016	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C	2725	30MHz~1GHz	Nov. 17, 2015	May 14, 2016 ~ May 30, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	May 14, 2016 ~ May 30, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 21, 2015	May 14, 2016 ~ May 30, 2016	Aug. 20, 2016	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz~26.5GHz	Apr. 18, 2016	May 14, 2016 ~ May 30, 2016	Apr. 17, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	May 14, 2016 ~ May 30, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jul. 01, 2015	May 14, 2016 ~ May 30, 2016	Jun. 30, 2016	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	May 14, 2016 ~ May 30, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	May 14, 2016 ~ May 30, 2016	N/A	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Oct. 12, 2015	May 14, 2016 ~ May 30, 2016	Oct. 11, 2016	Radiation (03CH06-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.0
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Uncertainty of Radiated Emission Measurement (1GHz ~ 26.5GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9
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Appendix A. Conducted Test Results

Report Number : FR641813A

Test Engineer:	AC Chang	Temperature:	21~25	°C
Test Date:	2016/05/05~2016/06/29	Relative Humidity:	51~54	%

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	2	1	2412	14.35	14.50	10.00	10.04	0.50	Pass
11b	1Mbps	2	6	2437	14.30	14.50	9.08	9.52	0.50	Pass
11b	1Mbps	2	11	2462	14.30	14.55	9.02	9.08	0.50	Pass
11g	6Mbps	2	1	2412	17.30	17.20	16.28	16.30	0.50	Pass
11g	6Mbps	2	6	2437	17.60	17.55	16.28	16.28	0.50	Pass
11g	6Mbps	2	11	2462	17.20	17.15	16.04	16.30	0.50	Pass
HT20	MCS0	2	1	2412	18.10	18.15	17.52	17.54	0.50	Pass
HT20	MCS0	2	6	2437	18.30	18.40	17.50	17.52	0.50	Pass
HT20	MCS0	2	11	2462	18.15	18.10	17.54	17.54	0.50	Pass
HT40	MCS0	2	3	2422	36.00	36.20	35.68	33.76	0.50	Pass
HT40	MCS0	2	6	2437	36.10	36.10	35.64	35.08	0.50	Pass
HT40	MCS0	2	9	2452	36.20	36.10	35.40	35.12	0.50	Pass

TEST RESULTS DATA
Average Power Spectral Density

2.4GHz Band												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average PSD (dBm/3kHz)			DG (dBi)		Average PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	2	1	2412	-10.01	-10.32	-7.00	5.05		8.00		Pass
11b	1Mbps	2	6	2437	-10.57	-10.13	-7.12	5.05		8.00		Pass
11b	1Mbps	2	11	2462	-11.14	-10.29	-7.28	5.05		8.00		Pass
11g	6Mbps	2	1	2412	-15.18	-14.67	-11.66	5.05		8.00		Pass
11g	6Mbps	2	6	2437	-11.19	-10.62	-7.61	5.05		8.00		Pass
11g	6Mbps	2	11	2462	-15.50	-14.82	-11.81	5.05		8.00		Pass
HT20	MCS0	2	1	2412	-15.27	-15.08	-12.07	5.05		8.00		Pass
HT20	MCS0	2	6	2437	-11.41	-11.23	-8.22	5.05		8.00		Pass
HT20	MCS0	2	11	2462	-15.39	-15.35	-12.34	5.05		8.00		Pass
HT40	MCS0	2	3	2422	-13.53	-13.94	-10.52	5.05		8.00		Pass
HT40	MCS0	2	6	2437	-9.98	-10.59	-6.97	5.05		8.00		Pass
HT40	MCS0	2	9	2452	-14.16	-14.96	-11.15	5.05		8.00		Pass

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

TEST RESULTS DATA
Average Output Power

2.4GHz Band																		
Mod.	Data Rate	N _{Tx}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	2	1	2412	0.00	0.00	21.53	21.87	24.71	30.00		2.04		26.75		36.00	Pass	
11b	1Mbps	2	6	2437	0.00	0.00	21.16	21.81	24.51	30.00		2.04		26.55		36.00	Pass	
11b	1Mbps	2	11	2462	0.00	0.00	21.36	22.03	24.72	30.00		2.04		26.76		36.00	Pass	
11g	6Mbps	2	1	2412	0.00	0.00	17.74	18.21	20.99	30.00		2.04		23.03		36.00	Pass	
11g	6Mbps	2	6	2437	0.00	0.00	21.48	21.99	24.75	30.00		2.04		26.79		36.00	Pass	
11g	6Mbps	2	11	2462	0.00	0.00	17.81	18.14	20.99	30.00		2.04		23.03		36.00	Pass	
HT20	MCS0	2	1	2412	0.00	0.00	17.63	18.18	20.92	30.00		2.04		22.96		36.00	Pass	
HT20	MCS0	2	6	2437	0.00	0.00	21.34	21.82	24.60	30.00		2.04		26.64		36.00	Pass	
HT20	MCS0	2	11	2462	0.00	0.00	17.85	18.09	20.98	30.00		2.04		23.02		36.00	Pass	
HT40	MCS0	2	3	2422	0.00	0.00	15.77	16.18	18.99	30.00		2.04		21.03		36.00	Pass	
HT40	MCS0	2	6	2437	0.00	0.00	19.41	20.09	22.77	30.00		2.04		24.81		36.00	Pass	
HT40	MCS0	2	9	2452	0.00	0.00	15.47	16.40	18.97	30.00		2.04		21.01		36.00	Pass	

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



Appendix B. Radiated Spurious Emission

Test Engineer :	Hayden Wu	Temperature :	19~23C
		Relative Humidity :	55~60%

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.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2384.88	55.21	-18.79	74	55.89	27.13	6.75	34.56	174	229	P	H
		2385.33	48.9	-5.1	54	49.58	27.13	6.75	34.56	174	229	A	H
	*	2412	111.51	-	-	112.11	27.21	6.75	34.56	174	229	P	H
	*	2412	106.97	-	-	107.57	27.21	6.75	34.56	174	229	A	H
													H
													H
		2385.42	57.72	-16.28	74	58.4	27.13	6.75	34.56	207	343	P	V
		2385.24	50.53	-3.47	54	51.21	27.13	6.75	34.56	207	343	A	V
	*	2414	115.16	-	-	115.76	27.21	6.75	34.56	207	343	P	V
	*	2412	110.85	-	-	111.45	27.21	6.75	34.56	207	343	A	V
													V
													V
802.11b CH 06 2437MHz		2379.3	50.01	-23.99	74	50.73	27.13	6.71	34.56	221	228	P	H
		2376.42	39.29	-14.71	54	40.01	27.13	6.71	34.56	221	228	A	H
	*	2437	112.21	-	-	112.63	27.29	6.84	34.55	221	228	P	H
	*	2437	107.88	-	-	108.3	27.29	6.84	34.55	221	228	A	H
		2489	53.66	-20.34	74	53.87	27.4	6.94	34.55	221	228	P	H
		2497.6	40.27	-13.73	54	40.48	27.4	6.94	34.55	221	228	A	H
		2387.76	52.78	-21.22	74	53.42	27.17	6.75	34.56	139	342	P	V
		2382.09	42.52	-11.48	54	43.24	27.13	6.71	34.56	139	342	A	V
	*	2437	115.11	-	-	115.53	27.29	6.84	34.55	139	342	P	V
	*	2437	110.84	-	-	111.26	27.29	6.84	34.55	139	342	A	V
		2498.2	54.48	-19.52	74	54.69	27.4	6.94	34.55	139	342	P	V
		2491.96	41	-13	54	41.21	27.4	6.94	34.55	139	342	A	V



802.11b CH 11 2462MHz	*	2462	112.91	-	-	113.3	27.32	6.84	34.55	170	227	P	H
	*	2462	108.64	-	-	109.03	27.32	6.84	34.55	170	227	A	H
		2491.2	58.46	-15.54	74	58.67	27.4	6.94	34.55	170	227	P	H
		2488.28	50.67	-3.33	54	50.88	27.4	6.94	34.55	170	227	A	H
													H
													H
	*	2462	115.15	-	-	115.54	27.32	6.84	34.55	163	344	P	V
	*	2462	110.89	-	-	111.28	27.32	6.84	34.55	163	344	A	V
		2489.8	57.91	-16.09	74	58.12	27.4	6.94	34.55	163	344	P	V
		2488.2	49.59	-4.41	54	49.8	27.4	6.94	34.55	163	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 802.11b (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)
802.11b CH 01 2412MHz		4824	55.25	-18.75	74	72.71	31.22	11.01	59.69	316	314	P	H
		4824	51.94	-2.06	54	69.4	31.22	11.01	59.69	316	314	A	H
													H
													H
		4824	48.92	-25.08	74	66.38	31.22	11.01	59.69	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	51.67	-22.33	74	68.76	31.31	11.06	59.46	101	9	P	H
		4874	50.29	-3.71	54	67.38	31.31	11.06	59.46	101	9	A	H
		7311	58.37	-15.63	74	71.1	35.98	11.71	60.42	103	347	P	H
		7311	53.42	-0.58	54	66.15	35.98	11.71	60.42	103	347	A	H
		4874	49.94	-24.06	74	67.03	31.31	11.06	59.46	100	0	P	V
		7311	57.68	-16.32	74	70.41	35.98	11.71	60.42	116	21	P	V
		7311	53.12	-0.88	54	65.85	35.98	11.71	60.42	116	21	A	V
													V
802.11b CH 11 2462MHz		4924	54.18	-19.82	74	70.84	31.39	11.17	59.22	110	15	P	H
		4924	52.89	-1.11	54	69.55	31.39	11.17	59.22	110	15	A	H
		7386	58.76	-15.24	74	71.5	36.17	11.55	60.46	145	321	P	H
		7386	52.98	-1.02	54	65.72	36.17	11.55	60.46	145	321	A	H
		4924	50.83	-23.17	74	67.49	31.39	11.17	59.22	100	0	P	V
		7386	57.09	-16.91	74	69.83	36.17	11.55	60.46	131	22	P	V
		7386	53.61	-0.39	54	66.35	36.17	11.55	60.46	131	22	A	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. 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)
802.11g CH 01 2412MHz		2389.92	70.13	-3.87	74	70.77	27.17	6.75	34.56	100	193	P	H
		2390	52.53	-1.47	54	53.17	27.17	6.75	34.56	100	193	A	H
	*	2412	112.78	-	-	113.38	27.21	6.75	34.56	100	193	P	H
	*	2412	102.77	-	-	103.37	27.21	6.75	34.56	100	193	A	H
													H
													H
		2387.04	67.68	-6.32	74	68.32	27.17	6.75	34.56	210	350	P	V
		2390	50.22	-3.78	54	50.86	27.17	6.75	34.56	210	350	A	V
	*	2412	114.03	-	-	114.63	27.21	6.75	34.56	210	350	P	V
	*	2412	104.25	-	-	104.85	27.21	6.75	34.56	210	350	A	V
													V
													V
802.11g CH 06 2437MHz		2384.16	59.59	-14.41	74	60.31	27.13	6.71	34.56	121	194	P	H
		2390	47.4	-6.6	54	48.04	27.17	6.75	34.56	121	194	A	H
	*	2436	116.64	-	-	117.1	27.25	6.84	34.55	121	194	P	H
	*	2436	106.49	-	-	106.95	27.25	6.84	34.55	121	194	A	H
		2483.88	56.28	-17.72	74	56.53	27.36	6.94	34.55	121	194	P	H
		2483.52	44.87	-9.13	54	45.12	27.36	6.94	34.55	121	194	A	H
		2387.67	60.87	-13.13	74	61.51	27.17	6.75	34.56	141	348	P	V
		2390	48.98	-5.02	54	49.62	27.17	6.75	34.56	141	348	A	V
	*	2436	116.87	-	-	117.33	27.25	6.84	34.55	141	348	P	V
	*	2436	107.47	-	-	107.93	27.25	6.84	34.55	141	348	A	V
		2490.6	58.75	-15.25	74	58.96	27.4	6.94	34.55	141	348	P	V
		2483.52	45.94	-8.06	54	46.19	27.36	6.94	34.55	141	348	A	V



802.11g CH 11 2462MHz	*	2466	113.18	-	-	113.47	27.32	6.94	34.55	120	192	P	H
	*	2460	102.18	-	-	102.57	27.32	6.84	34.55	120	192	A	H
		2484.12	67.03	-6.97	74	67.28	27.36	6.94	34.55	120	192	P	H
		2484	49.08	-4.92	54	49.33	27.36	6.94	34.55	120	192	A	H
													H
													H
	*	2462	114.57	-	-	114.96	27.32	6.84	34.55	157	349	P	V
	*	2462	104.62	-	-	105.01	27.32	6.84	34.55	157	349	A	V
		2485.88	64.09	-9.91	74	64.34	27.36	6.94	34.55	157	349	P	V
		2483.52	48.96	-5.04	54	49.21	27.36	6.94	34.55	157	349	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. 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)
802.11g CH 01 2412MHz		4824	44.87	-29.13	74	62.33	31.22	11.01	59.69	100	0	P	H
													H
													H
													H
		4824	44.68	-29.32	74	62.14	31.22	11.01	59.69	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	52.23	-21.77	74	69.32	31.31	11.06	59.46	100	15	P	H
		4874	39.55	-14.45	54	56.64	31.31	11.06	59.46	100	15	A	H
		7311	60.73	-13.27	74	73.46	35.98	11.71	60.42	133	318	P	H
		7311	47.9	-6.1	54	60.63	35.98	11.71	60.42	133	318	A	H
		4874	49.62	-24.38	74	66.66	31.31	11.11	59.46	100	0	P	V
		7311	61.9	-12.1	74	74.63	35.98	11.71	60.42	100	19	P	V
		7311	49.65	-4.35	54	62.38	35.98	11.71	60.42	100	19	A	V
													V
802.11g CH 11 2462MHz		4924	48.58	-25.42	74	65.24	31.39	11.17	59.22	100	0	P	H
		7386	55.86	-18.14	74	68.6	36.17	11.55	60.46	126	319	P	H
		7386	43.06	-10.94	54	55.8	36.17	11.55	60.46	126	319	A	H
													H
		4924	46.04	-27.96	74	62.7	31.39	11.17	59.22	100	0	P	V
		7386	59.22	-14.78	74	71.96	36.17	11.55	60.46	147	18	P	V
		7386	44.31	-9.69	54	57.05	36.17	11.55	60.46	147	18	A	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. 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)
802.11n HT20 CH 01 2412MHz		2389.38	66.65	-7.35	74	67.29	27.17	6.75	34.56	100	194	P	H
		2388.84	50.77	-3.23	54	51.41	27.17	6.75	34.56	100	194	A	H
	*	2412	111.09	-	-	111.69	27.21	6.75	34.56	100	194	P	H
	*	2412	101.33	-	-	101.93	27.21	6.75	34.56	100	194	A	H
													H
													H
		2389.2	67.97	-6.03	74	68.61	27.17	6.75	34.56	209	352	P	V
		2389.56	51.92	-2.08	54	52.56	27.17	6.75	34.56	209	352	A	V
	*	2412	112.67	-	-	113.27	27.21	6.75	34.56	209	352	P	V
	*	2412	102.61	-	-	103.21	27.21	6.75	34.56	209	352	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2389.65	59.44	-14.56	74	60.08	27.17	6.75	34.56	122	194	P	H
		2388.84	47.57	-6.43	54	48.21	27.17	6.75	34.56	122	194	A	H
	*	2436	115.49	-	-	115.95	27.25	6.84	34.55	122	194	P	H
	*	2436	105.51	-	-	105.97	27.25	6.84	34.55	122	194	A	H
		2483.52	56.86	-17.14	74	57.11	27.36	6.94	34.55	122	194	P	H
		2483.52	45.08	-8.92	54	45.33	27.36	6.94	34.55	122	194	A	H
		2389.65	60.96	-13.04	74	61.6	27.17	6.75	34.56	180	360	P	V
		2389.56	48.82	-5.18	54	49.46	27.17	6.75	34.56	180	360	A	V
	*	2440	115.07	-	-	115.49	27.29	6.84	34.55	180	360	P	V
	*	2436	105.64	-	-	106.1	27.25	6.84	34.55	180	360	A	V
		2486.32	58.23	-15.77	74	58.48	27.36	6.94	34.55	180	360	P	V
		2483.8	46.07	-7.93	54	46.32	27.36	6.94	34.55	180	360	A	V



802.11n HT20 CH 11 2462MHz	*	2462	111.47	-	-	111.86	27.32	6.84	34.55	100	194	P	H
	*	2462	101.33	-	-	101.72	27.32	6.84	34.55	100	194	A	H
		2483.8	67.43	-6.57	74	67.68	27.36	6.94	34.55	100	194	P	H
		2483.52	51.28	-2.72	54	51.53	27.36	6.94	34.55	100	194	A	H
													H
													H
	*	2462	111.9	-	-	112.29	27.32	6.84	34.55	155	352	P	V
	*	2462	102.57	-	-	102.96	27.32	6.84	34.55	155	352	A	V
		2483.64	67.7	-6.3	74	67.95	27.36	6.94	34.55	155	352	P	V
		2484.12	50.72	-3.28	54	50.97	27.36	6.94	34.55	155	352	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+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)
802.11n HT20 CH 01 2412MHz		4824	43.38	-30.62	74	60.84	31.22	11.01	59.69	100	0	P	H
													H
													H
													H
		4824	43.94	-30.06	74	61.4	31.22	11.01	59.69	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	50.29	-23.71	74	67.38	31.31	11.06	59.46	100	0	P	H
		7311	58.57	-15.43	74	71.27	36.02	11.71	60.43	130	319	P	H
		7311	47.09	-6.91	54	59.79	36.02	11.71	60.43	130	319	A	H
													H
		4874	48.05	-25.95	74	65.24	31.28	11.06	59.53	100	0	P	V
		7311	59.66	-14.34	74	72.39	35.98	11.71	60.42	115	22	P	V
		7311	49	-5	54	61.73	35.98	11.71	60.42	115	22	A	V
													V
802.11n HT20 CH 11 2462MHz		4924	47.43	-26.57	74	64.26	31.36	11.11	59.3	100	0	P	H
		7386	55.51	-18.49	74	68.25	36.17	11.55	60.46	142	321	P	H
		7386	41.61	-12.39	54	54.35	36.17	11.55	60.46	142	321	A	H
													H
		4924	46.05	-27.95	74	62.71	31.39	11.17	59.22	100	0	P	V
		7386	55.06	-18.94	74	67.83	36.13	11.55	60.45	105	21	P	V
		7386	43.58	-10.42	54	56.35	36.13	11.55	60.45	105	21	A	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 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)
802.11n HT40 CH 03 2422MHz		2388.66	64.01	-9.99	74	64.65	27.17	6.75	34.56	118	193	P	H
		2388.66	51.15	-2.85	54	51.79	27.17	6.75	34.56	118	193	A	H
	*	2422	106.9	-	-	107.45	27.25	6.75	34.55	118	193	P	H
	*	2422	96.55	-	-	97.1	27.25	6.75	34.55	118	193	A	H
		2485.04	51.8	-22.2	74	52.05	27.36	6.94	34.55	118	193	P	H
		2483.56	40.19	-13.81	54	40.44	27.36	6.94	34.55	118	193	A	H
		2389.92	65.87	-8.13	74	66.51	27.17	6.75	34.56	209	342	P	V
		2389.74	53.47	-0.53	54	54.11	27.17	6.75	34.56	209	342	A	V
	*	2422	108.01	-	-	108.56	27.25	6.75	34.55	209	342	P	V
	*	2422	97.65	-	-	98.2	27.25	6.75	34.55	209	342	A	V
		2489.6	56.98	-17.02	74	57.19	27.4	6.94	34.55	209	342	P	V
		2489.84	42.34	-11.66	54	42.55	27.4	6.94	34.55	209	342	A	V
802.11n HT40 CH 06 2437MHz		2388.21	65.29	-8.71	74	65.93	27.17	6.75	34.56	102	195	P	H
		2388.48	52.18	-1.82	54	52.82	27.17	6.75	34.56	102	195	A	H
	*	2437	110.02	-	-	110.44	27.29	6.84	34.55	102	195	P	H
	*	2437	99.95	-	-	100.37	27.29	6.84	34.55	102	195	A	H
		2483.96	64.37	-9.63	74	64.62	27.36	6.94	34.55	102	195	P	H
		2483.52	50.35	-3.65	54	50.6	27.36	6.94	34.55	102	195	A	H
		2386.95	66.8	-7.2	74	67.44	27.17	6.75	34.56	139	343	P	V
		2389.65	53.7	-0.3	54	54.34	27.17	6.75	34.56	139	343	A	V
	*	2437	110.77	-	-	111.19	27.29	6.84	34.55	139	343	P	V
	*	2437	100.94	-	-	101.36	27.29	6.84	34.55	139	343	A	V
		2484.36	63.42	-10.58	74	63.67	27.36	6.94	34.55	139	343	P	V
		2484.4	49.47	-4.53	54	49.72	27.36	6.94	34.55	139	343	A	V



802.11n HT40 CH 09 2452MHz		2388.84	54.23	-19.77	74	54.87	27.17	6.75	34.56	100	192	P	H
		2388.84	42.55	-11.45	54	43.19	27.17	6.75	34.56	100	192	A	H
	*	2452	107.11	-	-	107.53	27.29	6.84	34.55	100	192	P	H
	*	2452	96.84	-	-	97.26	27.29	6.84	34.55	100	192	A	H
		2483.6	67.01	-6.99	74	67.26	27.36	6.94	34.55	100	192	P	H
		2483.72	49.41	-4.59	54	49.66	27.36	6.94	34.55	100	192	A	H
		2384.52	56.02	-17.98	74	56.7	27.13	6.75	34.56	167	345	P	V
		2389.74	43.34	-10.66	54	43.98	27.17	6.75	34.56	167	345	A	V
	*	2452	107.91	-	-	108.33	27.29	6.84	34.55	167	345	P	V
	*	2452	98.06	-	-	98.48	27.29	6.84	34.55	167	345	A	V
		2484.52	67.33	-6.67	74	67.58	27.36	6.94	34.55	167	345	P	V
		2484.48	50.77	-3.23	54	51.02	27.36	6.94	34.55	167	345	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. 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)
802.11n HT40 CH 03 2422MHz		4844	42.03	-31.97	74	59.33	31.25	11.06	59.61	100	0	P	H
		7266	46.17	-27.83	74	58.89	35.91	11.78	60.41	100	0	P	H
													H
													H
		4844	42.11	-31.89	74	59.41	31.25	11.06	59.61	100	0	P	V
		7266	47.66	-26.34	74	60.33	35.87	11.86	60.4	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	45.19	-28.81	74	62.38	31.28	11.06	59.53	100	0	P	H
		7311	52.33	-21.67	74	65.03	36.02	11.71	60.43	115	319	P	H
		7311	40.94	-13.06	54	53.64	36.02	11.71	60.43	115	319	A	H
													H
		4874	42.94	-31.06	74	60.03	31.31	11.06	59.46	100	0	P	V
		7311	55.05	-18.95	74	67.78	35.98	11.71	60.42	105	23	P	V
		7311	42.32	-11.68	54	55.05	35.98	11.71	60.42	105	23	A	V
													V
802.11n HT40 CH 09 2452MHz		4904	44.83	-29.17	74	61.66	31.36	11.11	59.3	100	0	P	H
		7356	49.4	-24.6	74	62.11	36.1	11.63	60.44	100	0	P	H
													H
													H
		4904	41.36	-32.64	74	58.19	31.36	11.11	59.3	100	0	P	V
		7356	48.67	-25.33	74	61.36	36.13	11.63	60.45	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 HT40 (LF)

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)
2.4GHz 802.11n HT40 LF		30.81	24.78	-15.22	40	29.54	25.14	1.9	31.8	-	-	P	H
		114.51	28.45	-15.05	43.5	40.71	17.43	2.02	31.71	-	-	P	H
		117.48	28.61	-14.89	43.5	40.73	17.56	2.03	31.71	-	-	P	H
		406.4	38.07	-7.93	46	44.87	22.41	2.55	31.76	-	-	P	H
		415.5	41.22	-4.78	46	47.84	22.55	2.6	31.77	112	238	P	H
		428.1	36.21	-9.79	46	42.58	22.75	2.67	31.79	-	-	P	H
													H
													H
													H
													H
													H
													H
		35.94	26.44	-13.56	40	34.02	22.32	1.89	31.79	-	-	P	V
		42.15	27.37	-12.63	40	39.08	18.32	1.75	31.78	-	-	P	V
		51.33	25.05	-14.95	40	40.3	14.42	2.1	31.77	-	-	P	V
		412.7	35.05	-10.95	46	41.71	22.52	2.59	31.77	-	-	P	V
		445.6	36.24	-9.76	46	42.26	23.02	2.77	31.81	100	325	P	V
		580	33.27	-12.73	46	36.74	25.36	3.14	31.97	-	-	P	V
													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	Peak or Average
H/V	H orizontal or V ertical

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

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)
802.11b CH 01		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
2412MHz		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”.



Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Hayden Wu	Temperature :	19~23C
		Relative Humidity :	55~60%

Note symbol

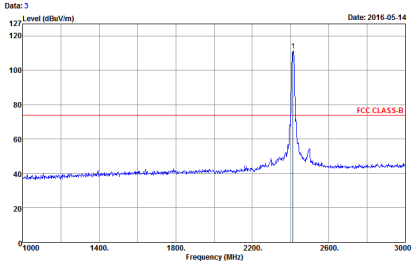
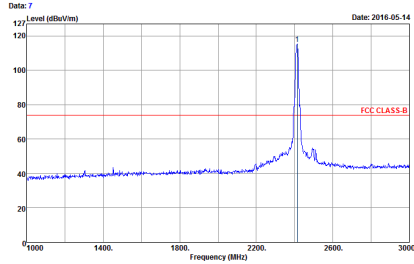
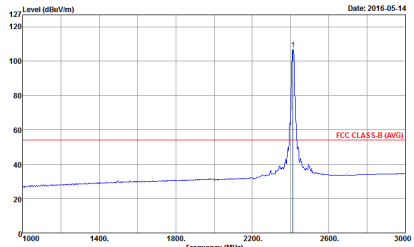
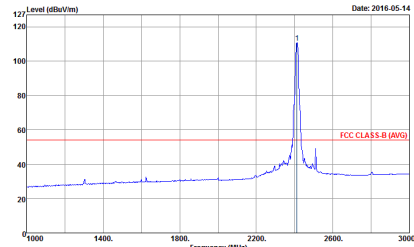
-L	Low channel location
-R	High channel location



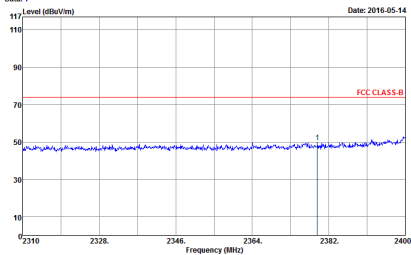
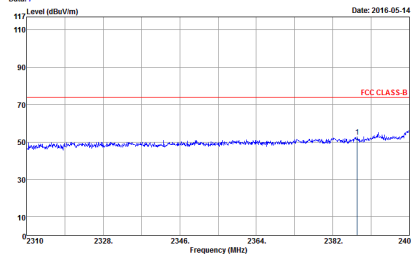
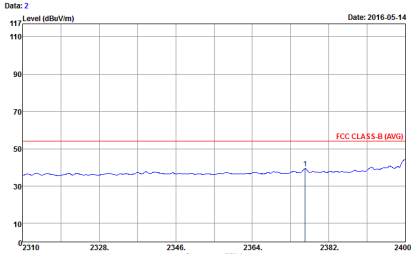
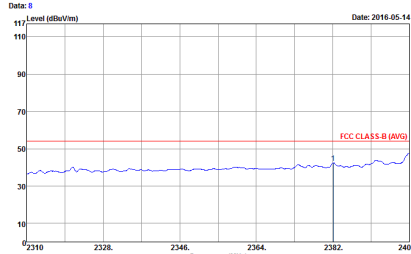
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Date: 1 Level (dBuV/m) 110 90 70 50 30 10 0 2310 2328 2346 2364 2382 2400 Frequency (MHz) Date: 2016-05-14 FCC CLASS-B Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1	Date: 5 Level (dBuV/m) 110 90 70 50 30 10 0 2310 2328 2346 2364 2382 2400 Frequency (MHz) Date: 2016-05-14 FCC CLASS-B Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1
Avg.	Date: 2 Level (dBuV/m) 110 90 70 50 30 10 0 2310 2328 2346 2364 2382 2400 Frequency (MHz) Date: 2016-05-14 FCC CLASS-B (AVG) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1	Date: 6 Level (dBuV/m) 110 90 70 50 30 10 0 2310 2328 2346 2364 2382 2400 Frequency (MHz) Date: 2016-05-14 FCC CLASS-B (AVG) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1

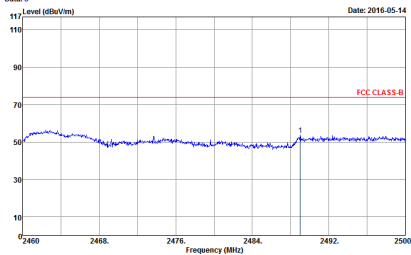
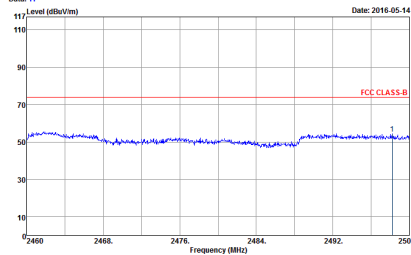
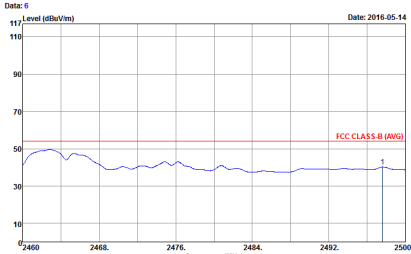
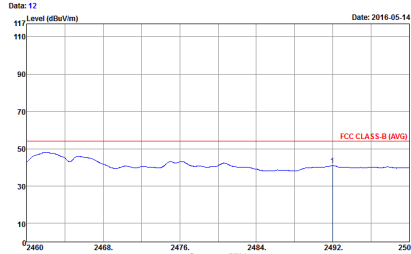


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Horizontal Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 1	Vertical Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 1
Avg.	Horizontal Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 1	Vertical Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 1

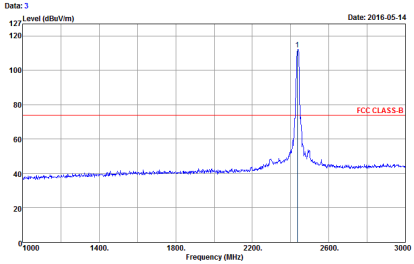
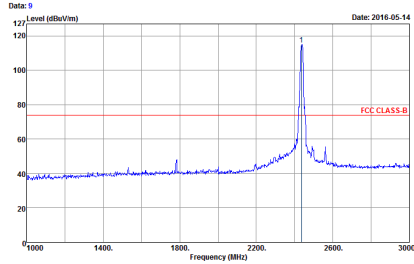
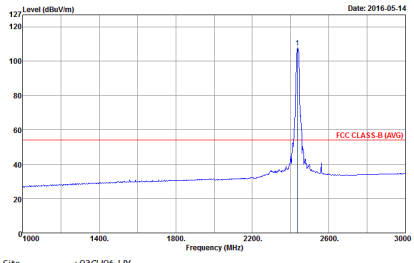
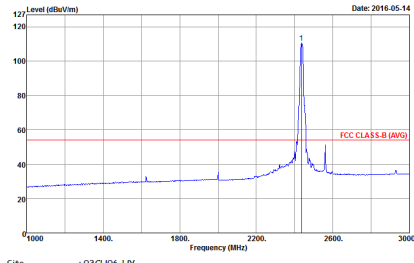


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2

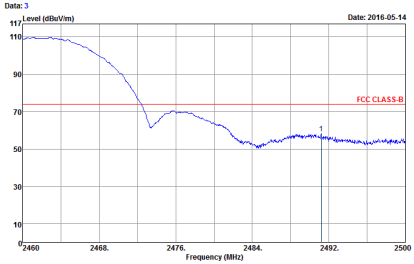
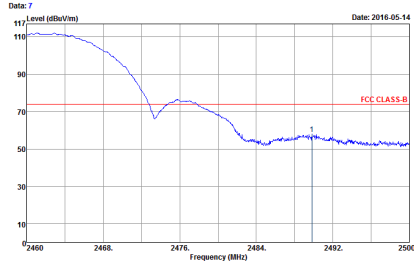
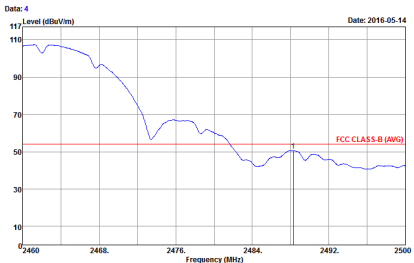
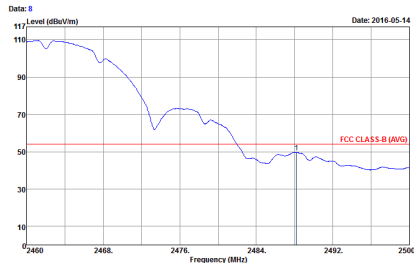


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Data: 11  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2
Avg.	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Data: 12  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2

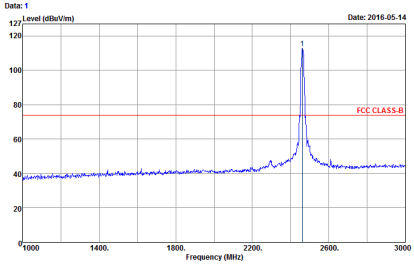
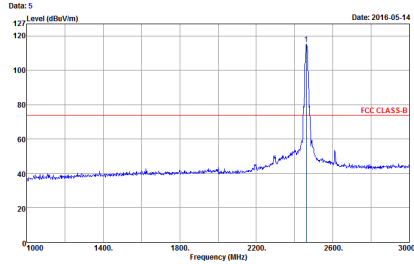
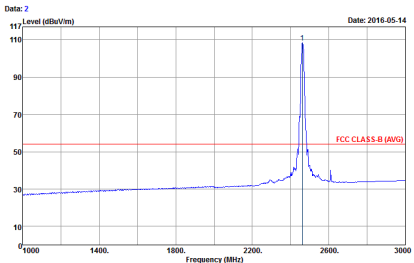
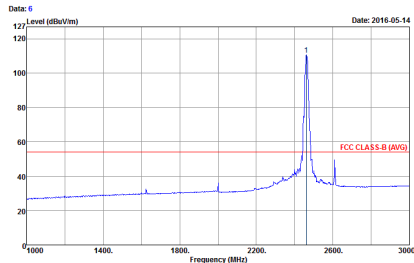


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH06 2437MHz	
1+2	Horizontal	Vertical
Peak	Horizontal Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Vertical Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2
Avg.	Horizontal Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Vertical Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Horizontal Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3	Vertical Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3
Avg.	Horizontal Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3	Vertical Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3

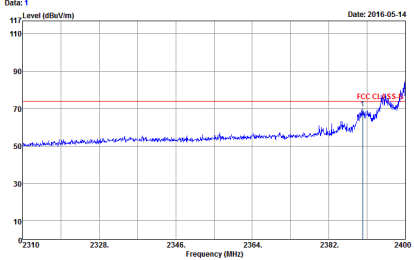
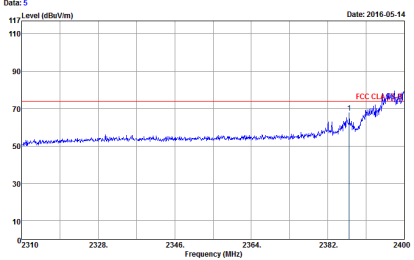
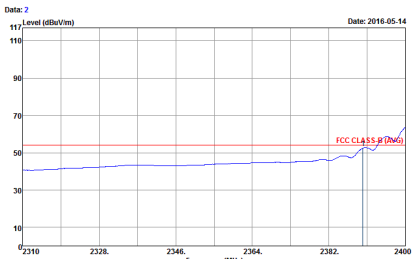
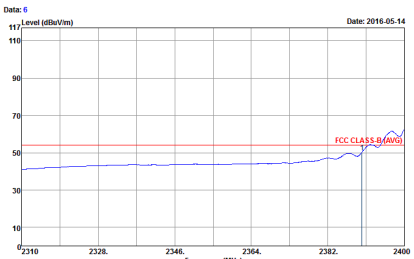


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3



2.4GHz 2400~2483.5MHz

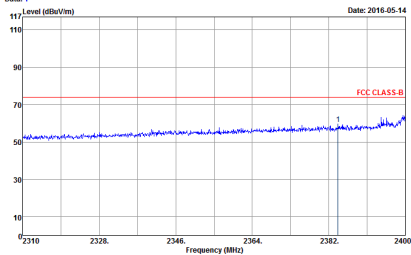
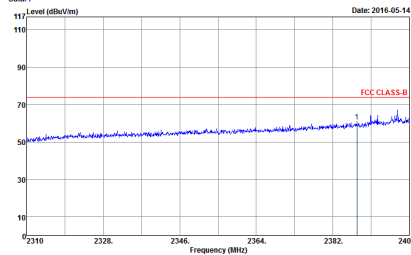
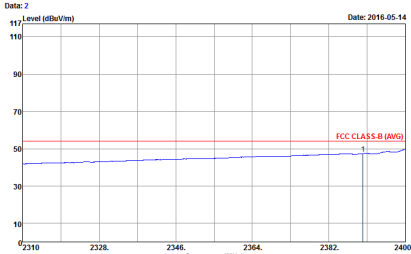
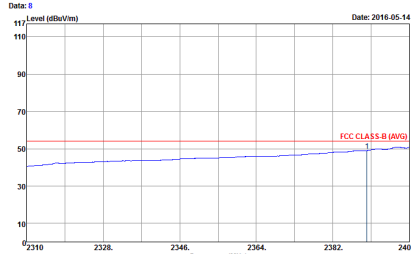
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4



WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 4	Date: 7 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 4
Avg.	Date: 4 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 4	Date: 8 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 4



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	Date: 5 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Date: 11 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5
Avg.	Date: 6 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Date: 12 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5

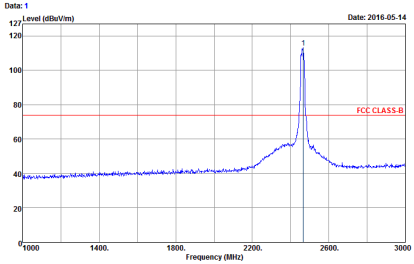
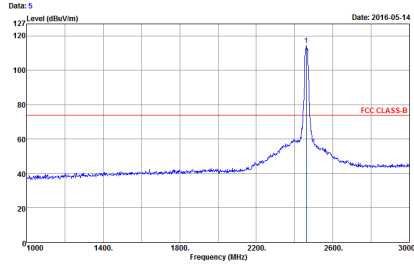
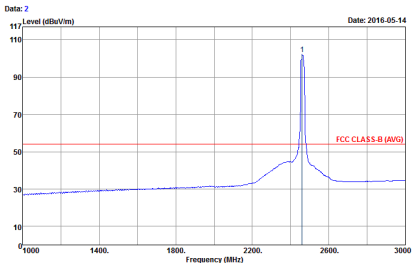
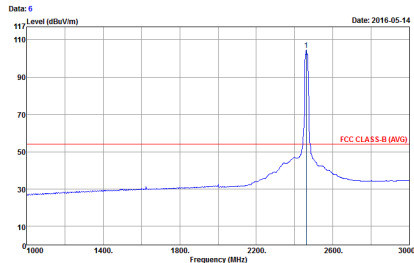


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH06 2437MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 130 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Date: 9 Level (dBuV/m) 120 100 80 60 40 20 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5
Avg.	Date: 4 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Date: 10 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 6 FCC CLASS-B	Date: 7 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 6 FCC CLASS-B
Avg.	Date: 4 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 6 FCC CLASS-B (AVG)	Date: 8 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 6 FCC CLASS-B (AVG)

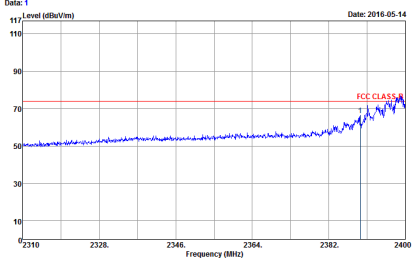
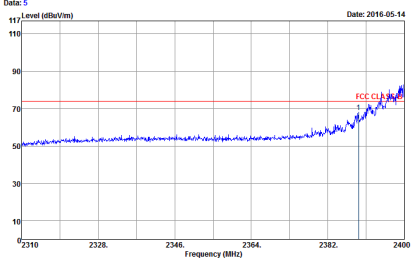
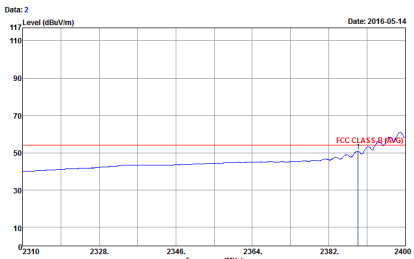
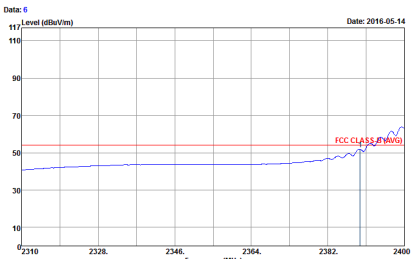


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 6	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 6
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 6	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 6



2.4GHz 2400~2483.5MHz

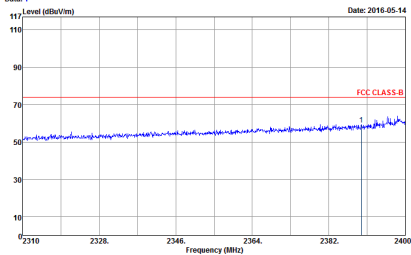
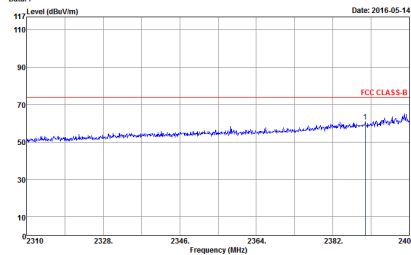
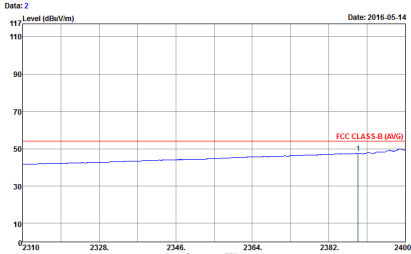
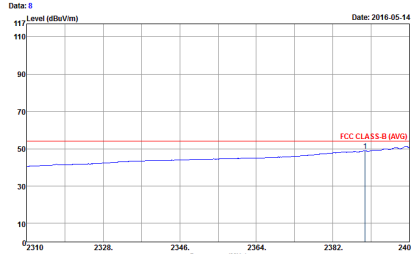
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7

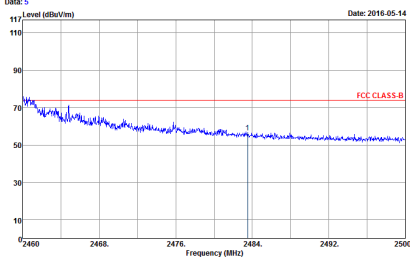
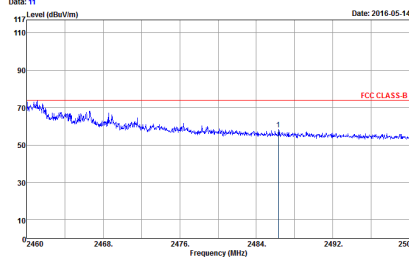
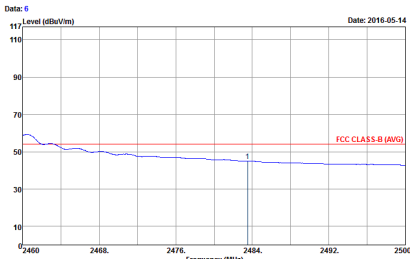
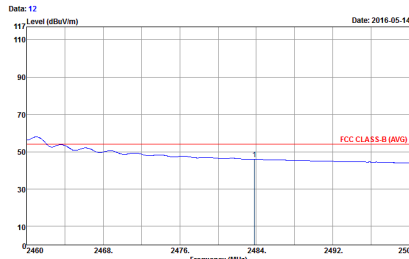


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 7	Date: 7 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 7
Avg.	Date: 4 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 7	Date: 8 Level (dBuV/m) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 7



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B	Data: 11  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B
Avg.	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B	Data: 12  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode B

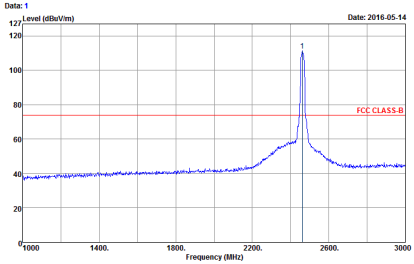
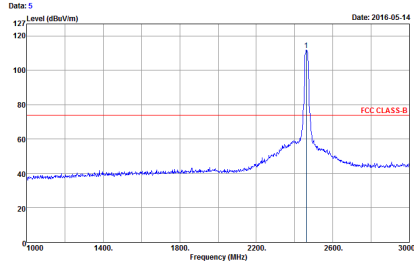
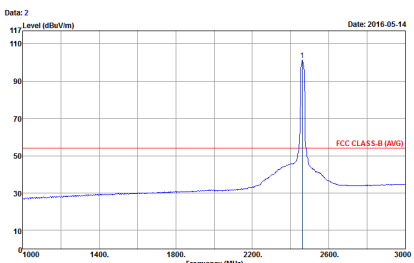
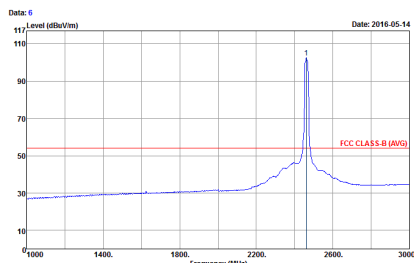


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 120 100 80 60 40 20 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 8	Date: 9 Level (dBuV/m) 120 100 80 60 40 20 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 8
Avg.	Date: 4 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 8	Date: 10 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Power : 641813 Mode : 120Vac/60Hz Mode 8



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9 FCC CLASS-B	Date: 7 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9 FCC CLASS-B
Avg.	Date: 4 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9 FCC CLASS-B (AVG)	Date: 8 Level (dBuV/m) 117 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9 FCC CLASS-B (AVG)

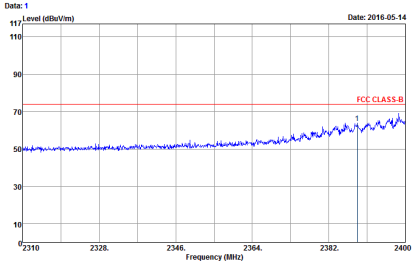
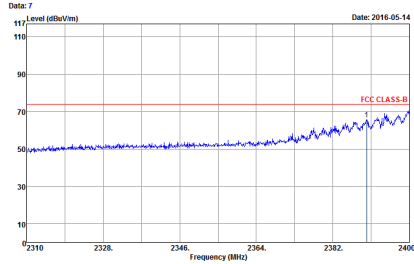
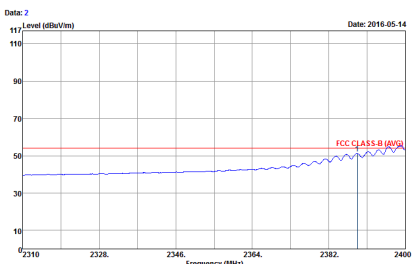
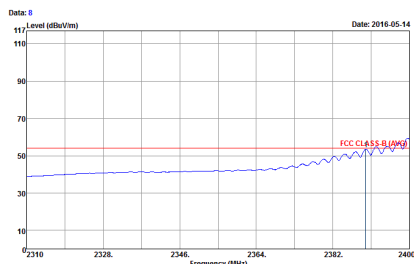


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9

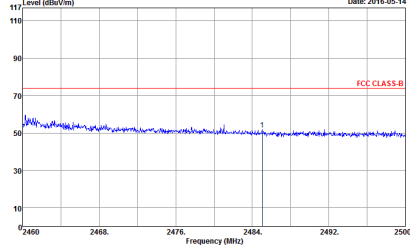
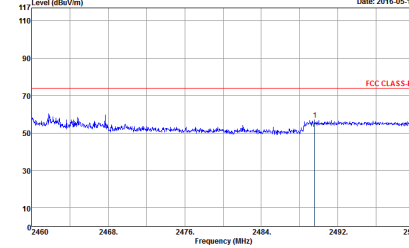
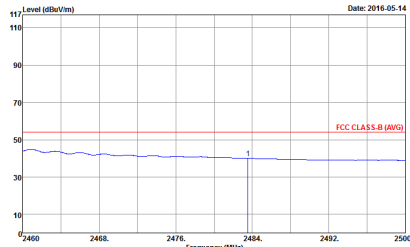
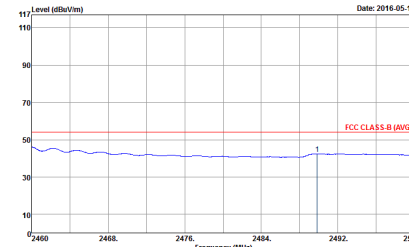


2.4GHz 2400~2483.5MHz

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	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10

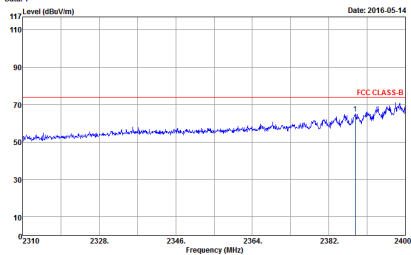
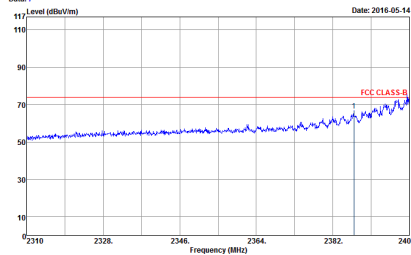
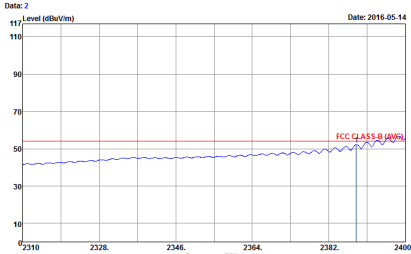
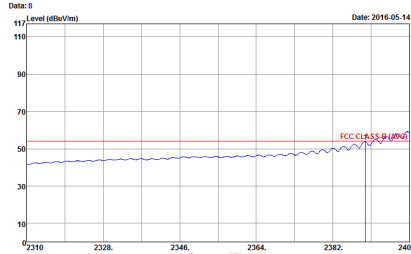


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Horizontal	Vertical
Peak	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Data: 11  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10
Avg.	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Data: 12  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10



WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Date: 9 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 10
Avg.	Date: 4 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Date: 10 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 10



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11

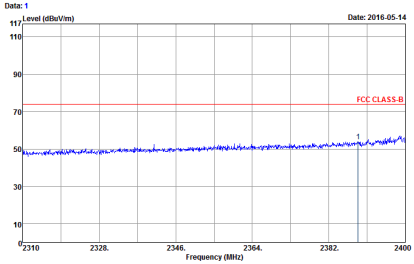
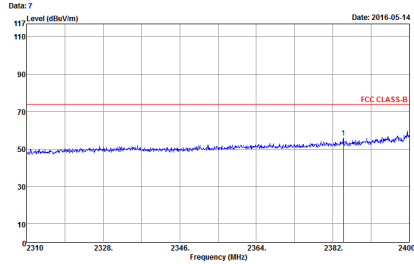
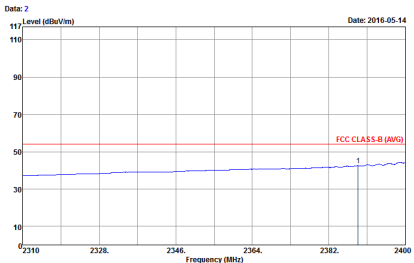
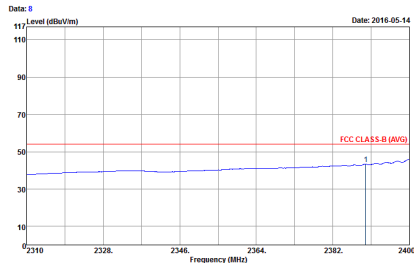


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1+2	Horizontal	Vertical
Peak	Date: 5 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Date: 11 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11
Avg.	Date: 6 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Date: 12 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11



WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak	Date: 3 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Date: 9 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 11
Avg.	Date: 4 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 11	Date: 10 Level (dBuV/m) 110 90 70 50 30 10 0 1000 1400 1800 2200 2600 3000 Frequency (MHz) Date: 2016-05-14 Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : 641813 Power : 120Vac/60Hz Mode : Mode 11

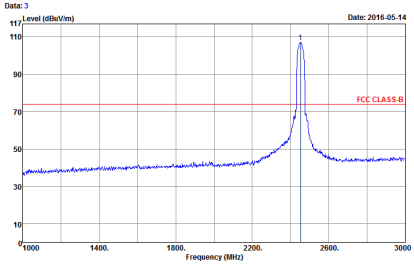
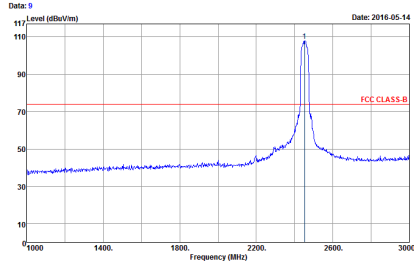
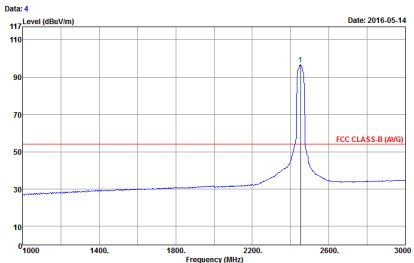
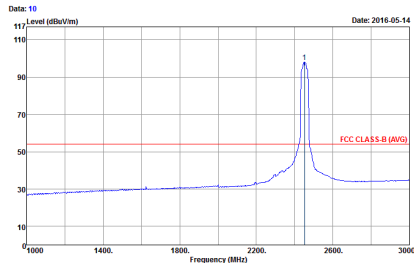


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1+2	Horizontal	Vertical
Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12	Data: 7  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12
Avg.	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12	Data: 8  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1+2	Horizontal	Vertical
Peak	Date: 5 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12 FCC CLASS-B	Date: 11 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12 FCC CLASS-B
Avg.	Date: 6 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12 FCC CLASS-B (AVG)	Date: 12 Level (dBuV/m) 110 90 70 50 30 10 0 2460 2468 2476 2484 2492 2500 Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12 FCC CLASS-B (AVG)

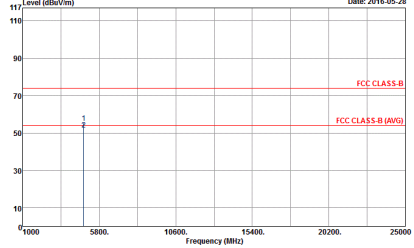
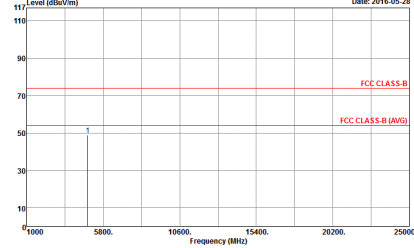


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1+2	Horizontal	Vertical
Peak	Horizontal Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12	Vertical Peak  Site : 03CH06-HY Condition : FCC CLASS-B 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12
Avg.	Horizontal Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12	Vertical Avg.  Site : 03CH06-HY Condition : FCC CLASS-B (AVG) 3m 91200_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.	Data: 5 Date: 2016-05-28  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1	Data: 6 Date: 2016-05-28  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 1



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	Horizontal Date: 5 Level (dBuV/m) Date: 2016-05-28 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2	Vertical Date: 6 Level (dBuV/m) Date: 2016-05-28 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 2

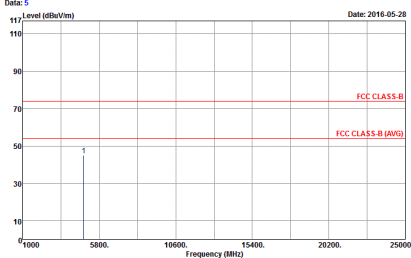
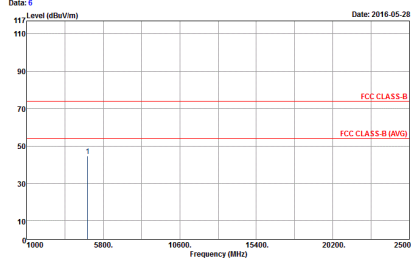


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3	Date: 6 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 3



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 4



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Date: 2016-05-28 Site : 03CH06-IHY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5	Date: 6 Date: 2016-05-28 Site : 03CH06-IHY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 5



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 6	Date: 6 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : 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	
1+2	Horizontal	Vertical
Peak Avg.	Data: 5 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7	Data: 6 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 7



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 8	Date: 6 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 8

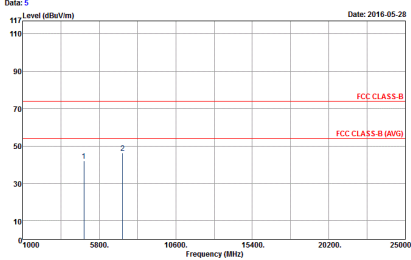
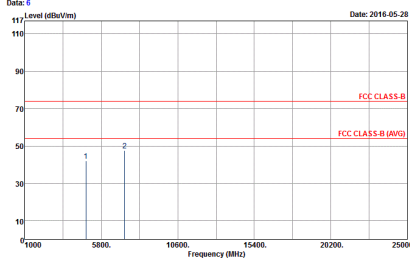


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 9	Date: 6 Level (dBuV/m) Frequency (MHz) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : 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	
1+2	Horizontal	Vertical
Peak Avg.	Data: 5  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10	Data: 6  Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 10



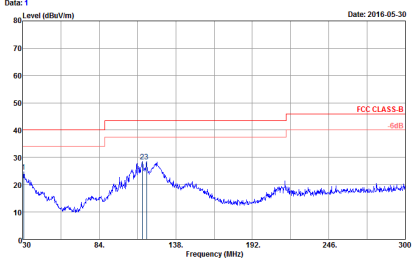
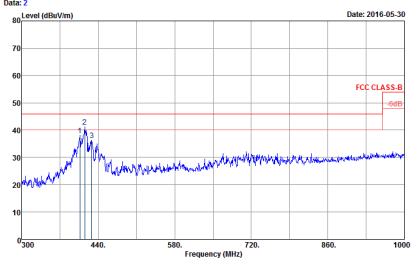
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Level (dBuV/m) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11 Frequency (MHz)	Date: 6 Level (dBuV/m) Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 11 Frequency (MHz)



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1+2	Horizontal	Vertical
Peak Avg.	Date: 5 Date: 2016-05-28 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12	Date: 6 Date: 2016-05-28 Site : 03CH06-HY Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL Detector : Peak Project : 641813 Power : 120Vac/60Hz Mode : Mode 12



Emission below 1GHz
2.4GHz WIFI 802.11n HT40 (LF)

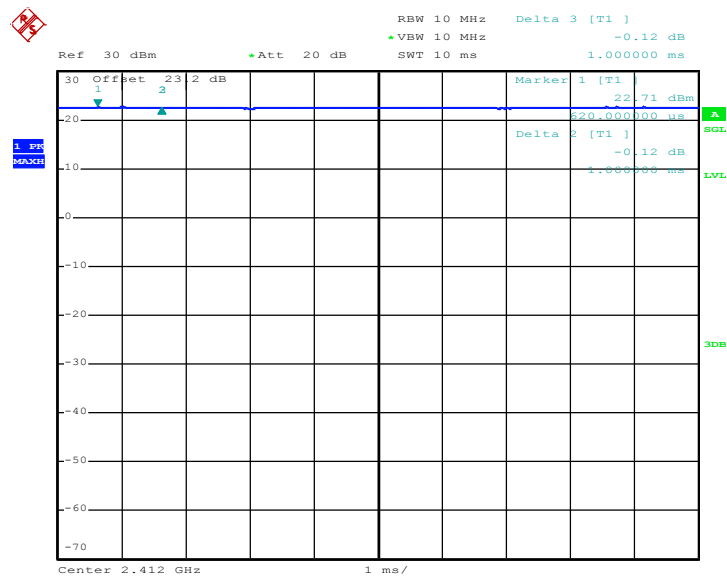
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT40 LF	
1+2	Horizontal	Vertical
QP / Peak	Data: 1  Site : 03CH06-HY Condition : FCC CLASS-B 3m LF_ANT_2725 HORIZONTAL Project : 641813 Power : 120Wac/60Hz Memo : Mode 13	Data: 2  Site : 03CH06-HY Condition : FCC CLASS-B 3m LF_ANT_2725 HORIZONTAL Project : 641813 Power : 120Wac/60Hz Memo : Mode 13

Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1+2	2.4GHz 802.11b for Ant. 1	100	-	-	10Hz
1+2	2.4GHz 802.11b for Ant. 2	100	-	-	10Hz
1+2	5GHz 802.11g for Ant. 1	100	-	-	10Hz
1+2	5GHz 802.11g for Ant. 2	100	-	-	10Hz
1+2	5GHz 802.11n HT20 for Ant. 1	100	-	-	10Hz
1+2	5GHz 802.11n HT20 for Ant. 2	100	-	-	10Hz
1+2	5GHz 802.11n HT40 for Ant. 1	100	-	-	10Hz
1+2	5GHz 802.11n HT40 for Ant. 2	100	-	-	10Hz

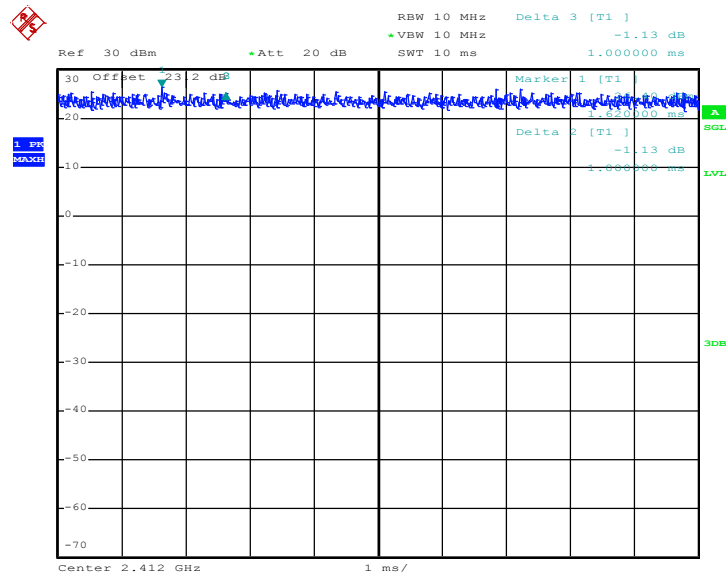
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802.11b

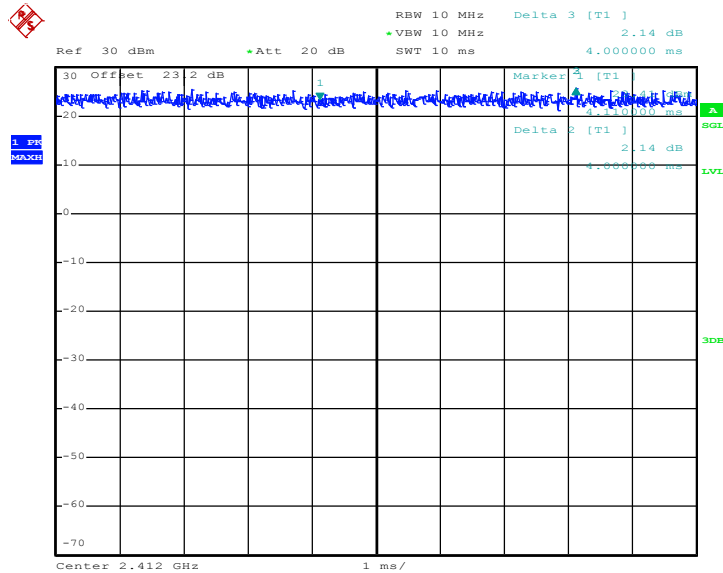


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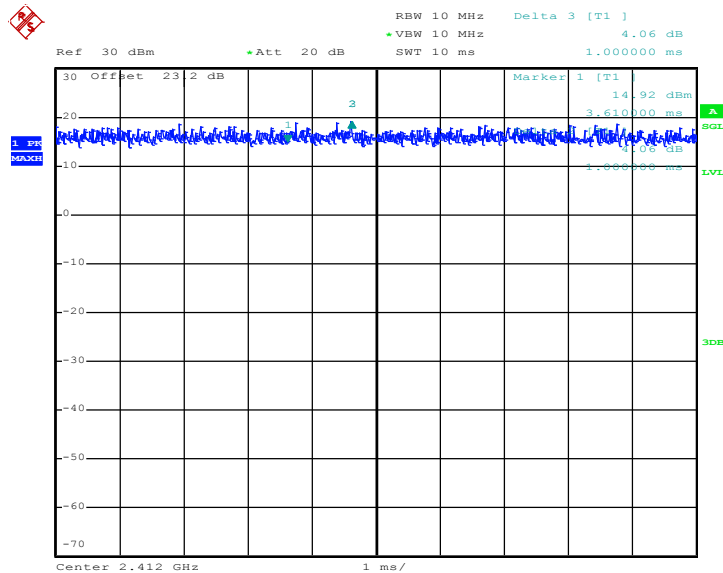
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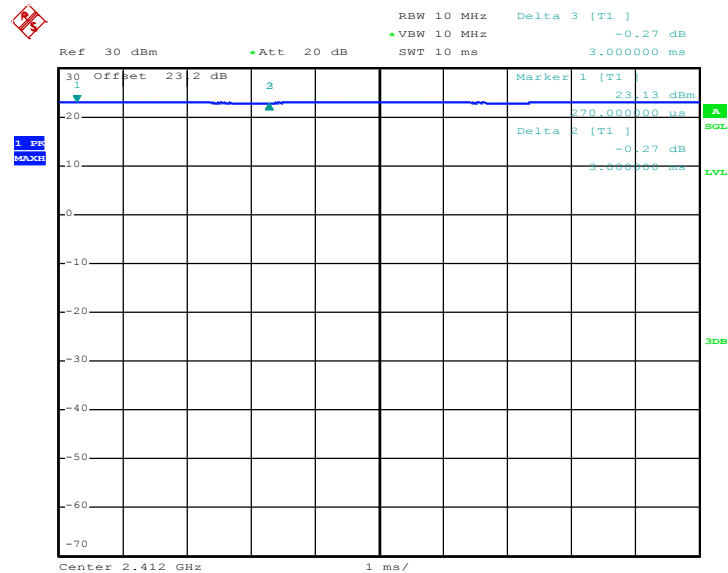
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802.11n HT20


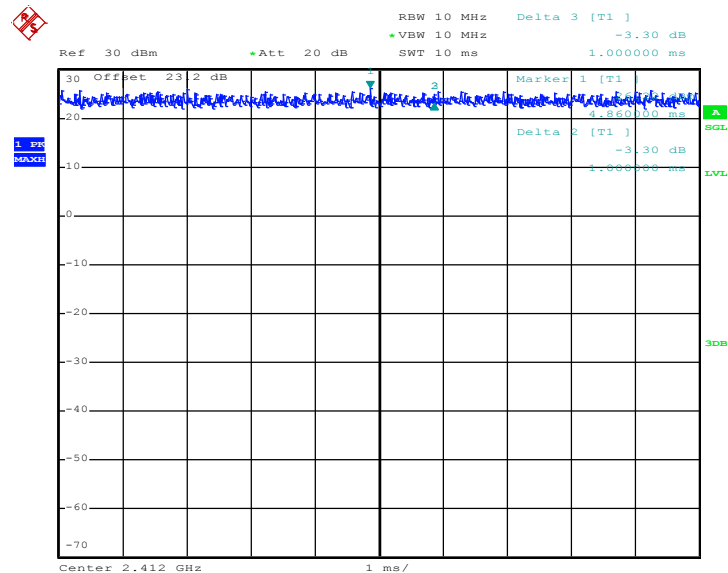
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802.11n HT40


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MIMO <Ant. 1+2(2)>
802.11b


Date: 5.MAY.2016 09:39:17

802.11g


Date: 5.MAY.2016 09:40:22



802.11n HT40

