

# FCC RF Test Report

APPLICANT : Polebridge Port Hole Limited Liability Company  
EQUIPMENT : Tablet  
MODEL NAME : PR53DC  
FCC ID : 2AETH-1210  
STANDARD : FCC Part 15 Subpart C §15.247  
CLASSIFICATION : (DTS) Digital Transmission System

The testing was completed on Apr. 08, 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.



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Reviewed by: Joseph Lin / Supervisor



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Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

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SPORTON INTERNATIONAL INC.

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FCC ID : 2AETH-1210

Page Number : 1 of 37

Report Issued Date : Apr. 26, 2016

Report Version : Rev. 01

Report Template No.: BU5-FR15CWL Version 1.3



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## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR5D3034-01C	Rev. 01	Initial issue of report	Apr. 26, 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	-
3.2	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 0.87 dB at 2483.680 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 16.70 dB at 2.718 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-



# 1 General Description

## 1.1 Applicant

**Polebridge Port Hole Limited Liability Company**

Three Sugar Creek Center, Suite 100

Sugar Land, Texas, 77478

## 1.2 Product Feature of Equipment Under Test

Product Feature	
<b>Equipment</b>	Tablet
<b>Model Name</b>	PR53DC
<b>FCC ID</b>	2AETH-1210
<b>EUT supports Radios application</b>	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth v4.1 EDR/LE

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

## 1.3 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx/Rx Channel Frequency Range</b>	802.11b/g/n : 2412 MHz ~ 2462 MHz
<b>Maximum (Peak) Output Power to Antenna</b>	802.11b : 14.34 dBm (0.0272 W) 802.11g : 22.19 dBm (0.1656 W) 802.11n HT20 : 21.97 dBm (0.1574 W)
<b>Antenna Type</b>	802.11b/g/n : Fixed Internal Antenna with gain 2.60 dBi
<b>Type of Modulation</b>	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

## 1.4 Modification of EUT

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

## 1.5 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.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> 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	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	TH02-HY	CO05-HY

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

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	03CH12-HY	

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

## 1.6 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
- ♦ 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 (Z 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 Channel

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



## 2.2 Pre-Scanned RF Power

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

2.4GHz 802.11b mode				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	14.34	14.32	14.23	14.30

2.4GHz 802.11g mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	22.14	22.11	22.13	22.10	22.08	21.90	22.05	22.13

2.4GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	21.94	21.80	21.66	21.83	21.81	21.92	21.93	21.90



## 2.3 Test Mode

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

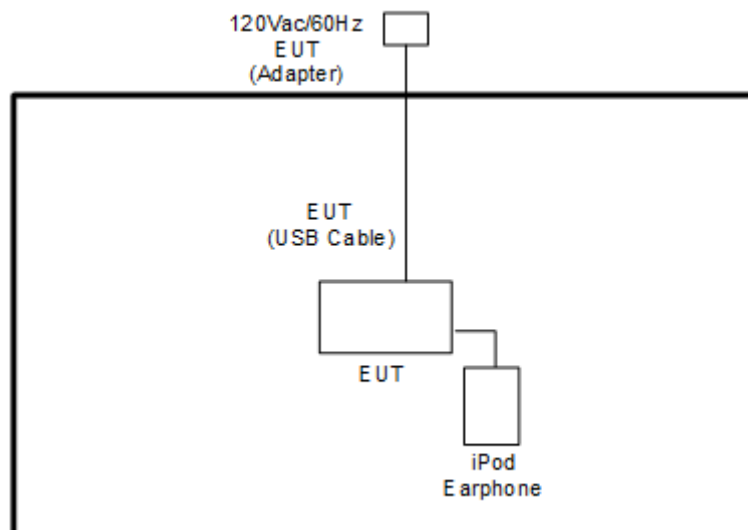
<2.4GHz>

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

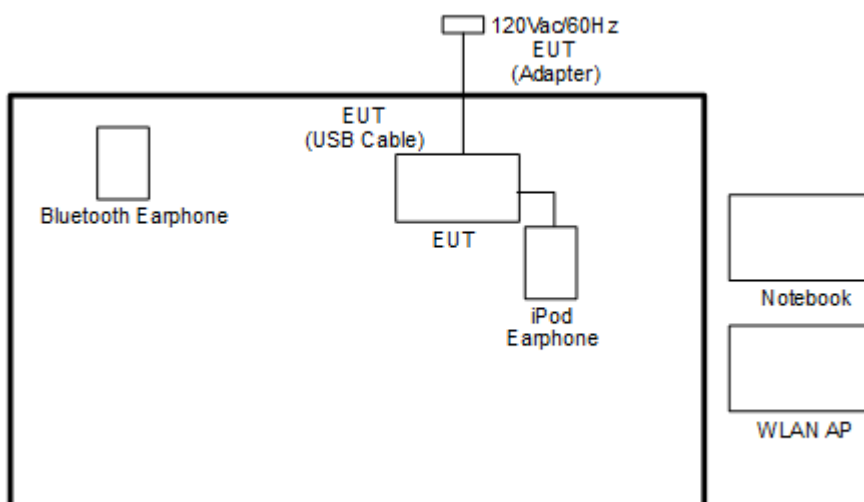
Test Cases	
AC Conducted Emission	Mode 1: WLAN (2.4GHz) Link + Bluetooth Link + Camera (Rear) + Earphone + USB Cable (Charging from Adapter)

## 2.4 Connection Diagram of Test System

### <WLAN Tx Mode>



### <AC Conducted Emission Mode>



## 2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
5.	Micro SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

## 2.6 EUT Operation Test Setup

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

## 2.7 Measurement Results Explanation Example

**For all conducted test items:**

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

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$

### 3 Test Result

#### 3.1 6dB Bandwidth Measurement

##### 3.1.1 Limit of 6dB Bandwidth

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

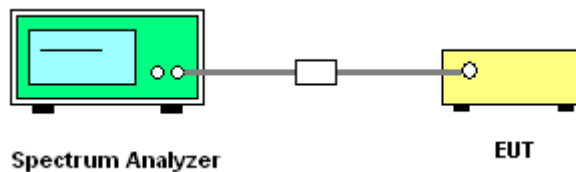
##### 3.1.2 Measuring Instruments

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. Measure and record the results in the test report.

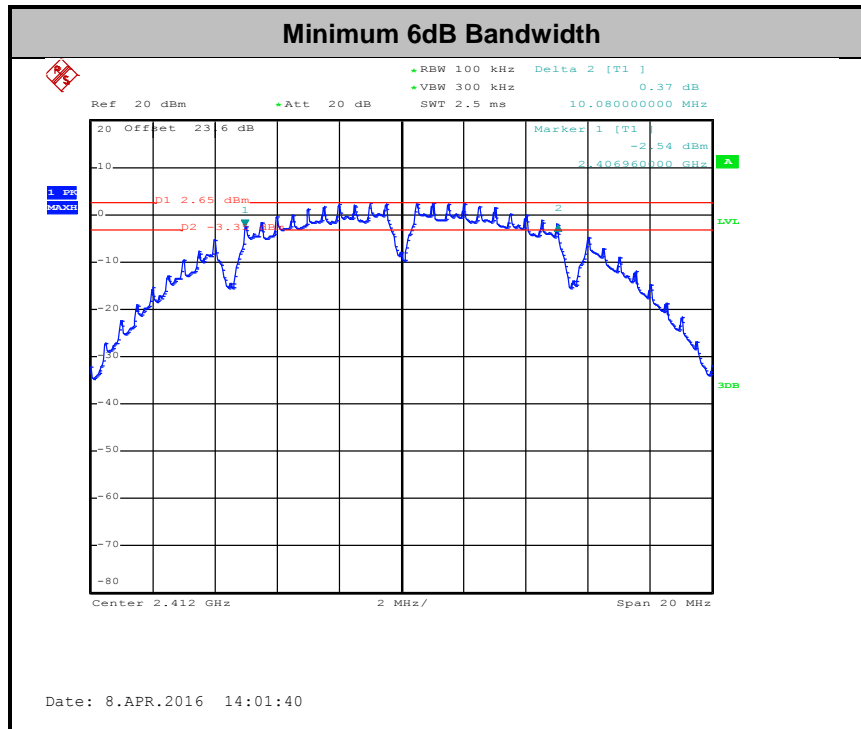
##### 3.1.4 Test Setup





### 3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Please refer to Appendix A of this test report.



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

## 3.2 Output Power Measurement

### 3.2.1 Limit of Output Power

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

### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r05 section 9.1.2 PKPM1 Peak power meter method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Peak Output Power

Please refer to Appendix A of this test report.

### 3.2.6 Test Result of Average output Power (Reporting Only)

Please refer to Appendix A of this test report.

### 3.3 Power Spectral Density Measurement

#### 3.3.1 Limit of Power Spectral Density

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

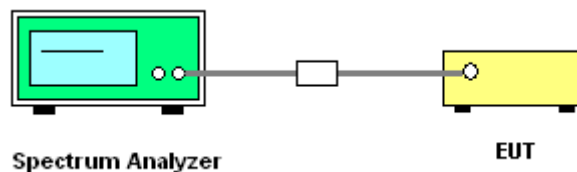
#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

1. The testing follows Measurement Procedure 10.2 Method PKPSD of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance 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) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.

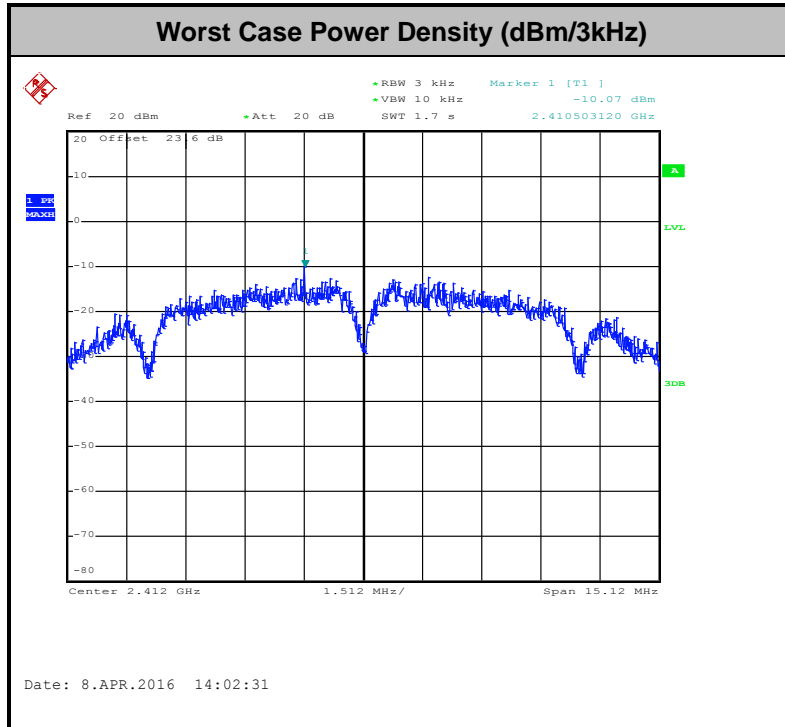
#### 3.3.4 Test Setup





### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A of this test report.





### 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).

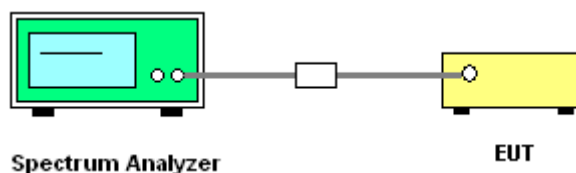
#### 3.4.2 Measuring Instruments

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 peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

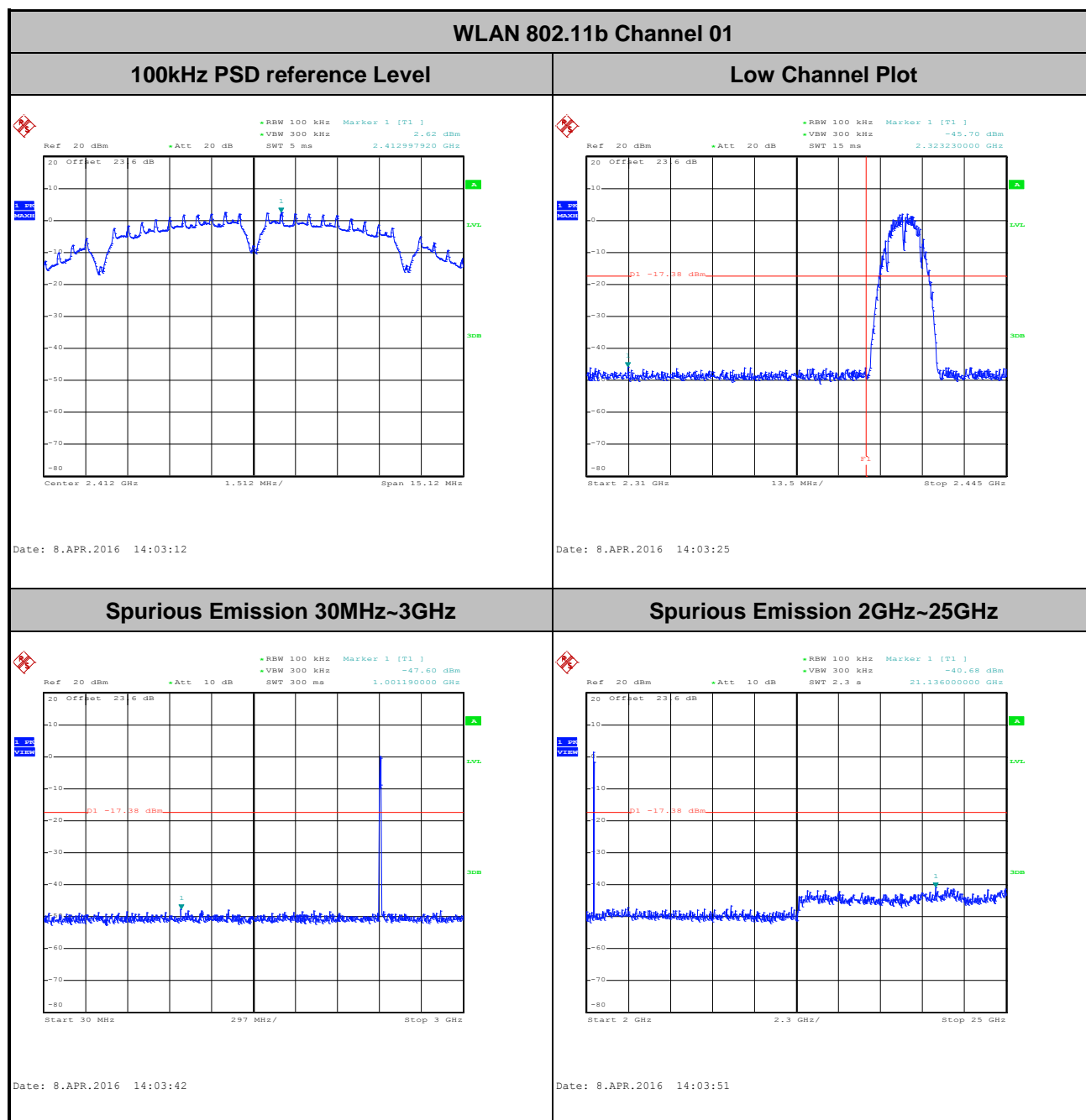
#### 3.4.4 Test Setup





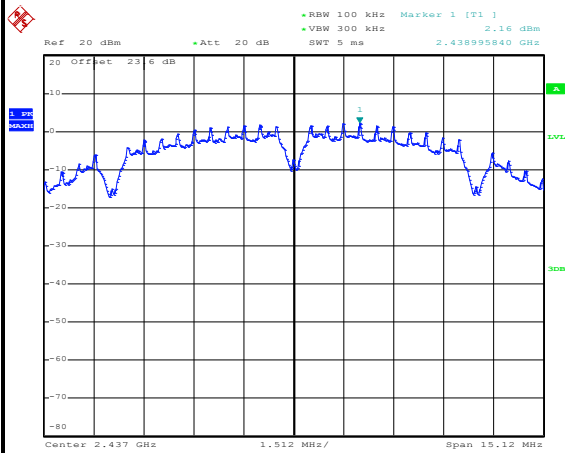
## 3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Mode :	802.11b	Temperature :	21~25℃
Test Band :	2.4GHz Low	Relative Humidity :	51~54%
Test Channel :	01	Test Engineer :	An Wu

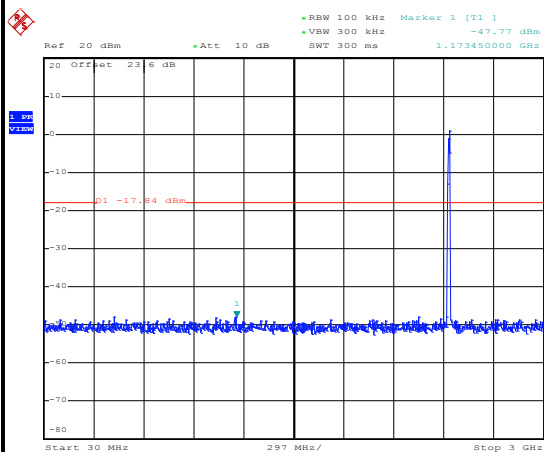




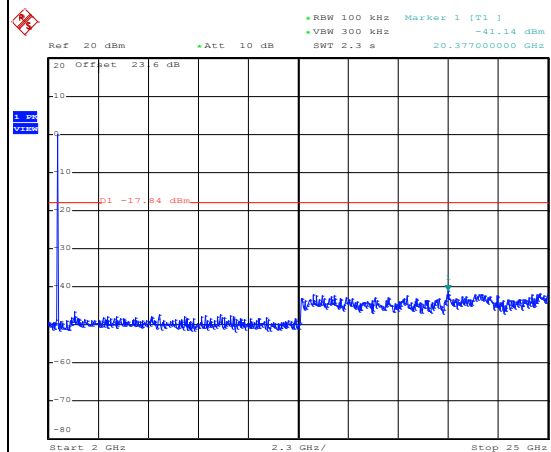
Test Mode :	802.11b	Temperature :	21~25°C
Test Band :	2.4GHz Mid	Relative Humidity :	51~54%
Test Channel :	06	Test Engineer :	An Wu

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

Date: 8.APR.2016 14:07:43

**Spurious Emission 30MHz~3GHz**

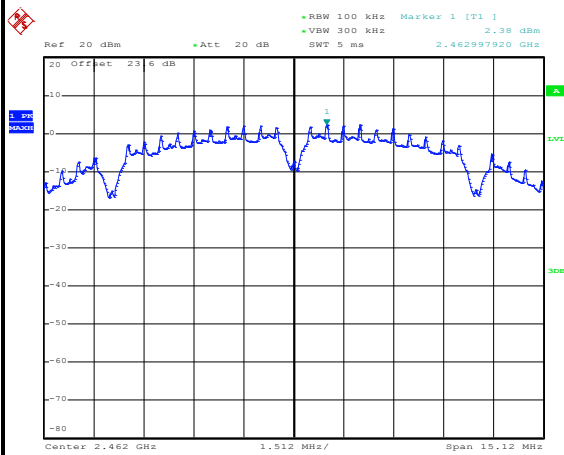
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**Spurious Emission 2GHz~25GHz**

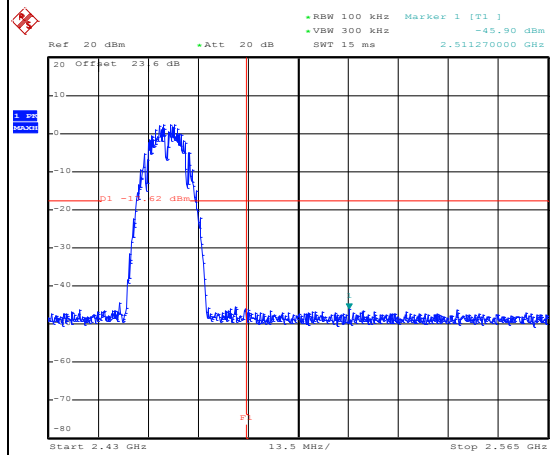
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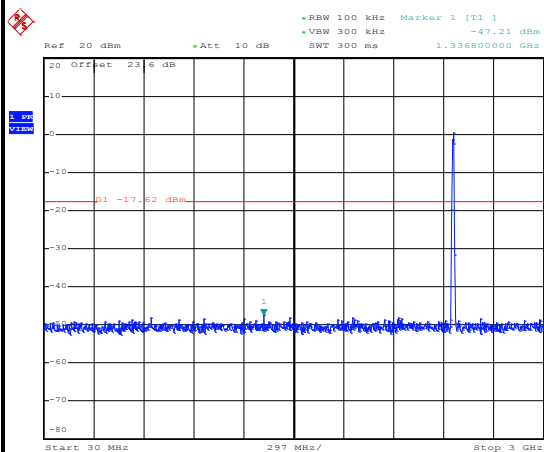
Test Mode :	802.11b	Temperature :	21~25°C
Test Band :	2.4GHz High	Relative Humidity :	51~54%
Test Channel :	11	Test Engineer :	An Wu

**WLAN 802.11b Channel 11****100kHz PSD reference Level**

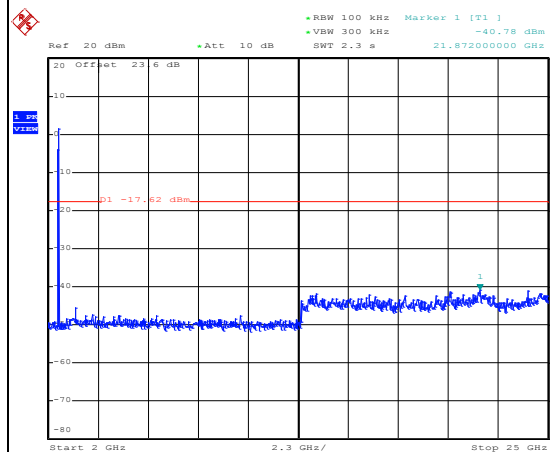
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**High Channel Plot**

Date: 8.APR.2016 14:13:03

**Spurious Emission 30MHz~3GHz**

Date: 8.APR.2016 14:13:16

**Spurious Emission 2GHz~25GHz**

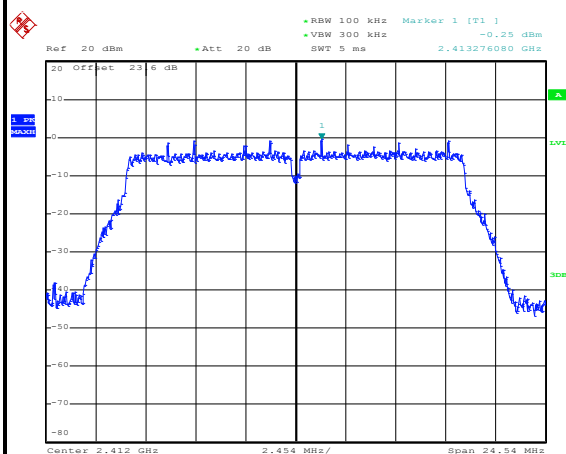
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Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz Low	Relative Humidity :	51~54%
Test Channel :	01	Test Engineer :	An Wu

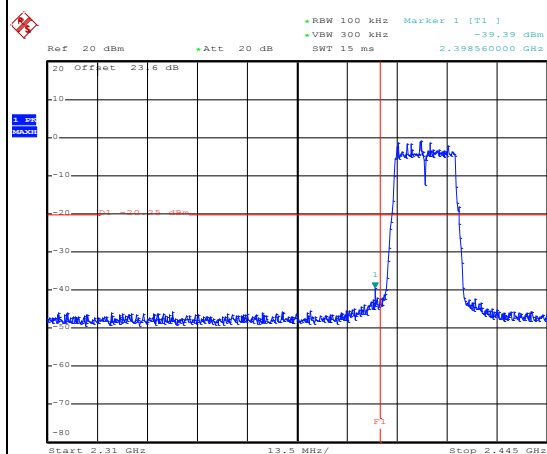
## WLAN 802.11g Channel 01

## 100kHz PSD reference Level



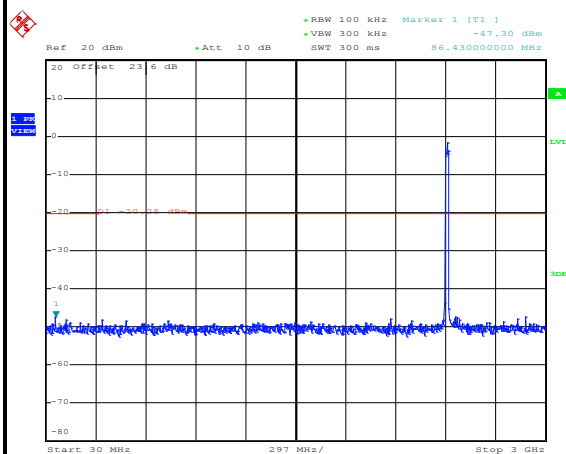
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## Low Channel Plot



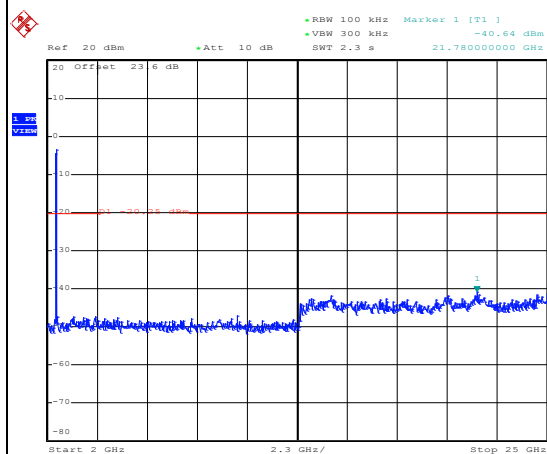
Date: 8.APR.2016 14:21:23

## Spurious Emission 30MHz~3GHz



Date: 8.APR.2016 19:15:38

## Spurious Emission 2GHz~25GHz



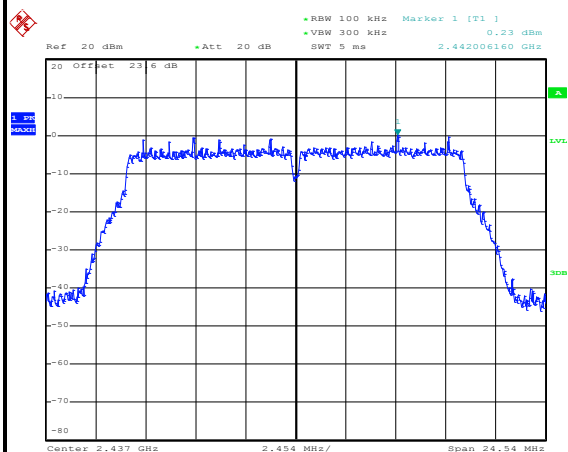
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Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz Mid	Relative Humidity :	51~54%
Test Channel :	06	Test Engineer :	An Wu

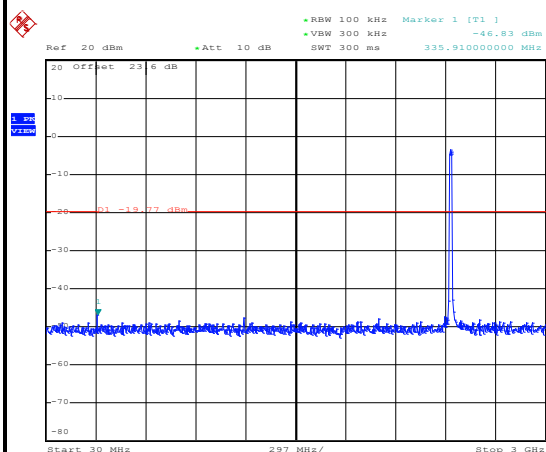
## WLAN 802.11g Channel 06

## 100kHz PSD reference Level



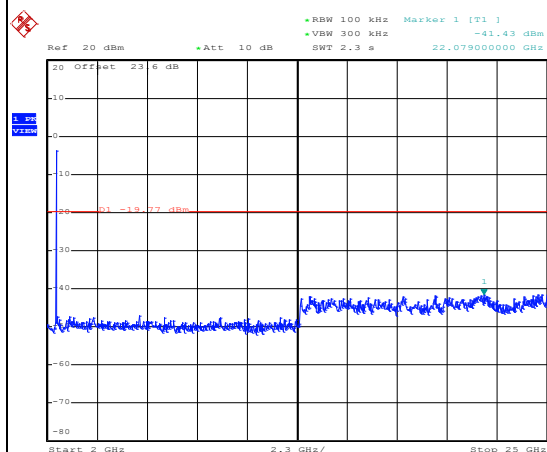
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## Spurious Emission 30MHz~3GHz



Date: 8.APR.2016 14:25:23

## Spurious Emission 2GHz~25GHz



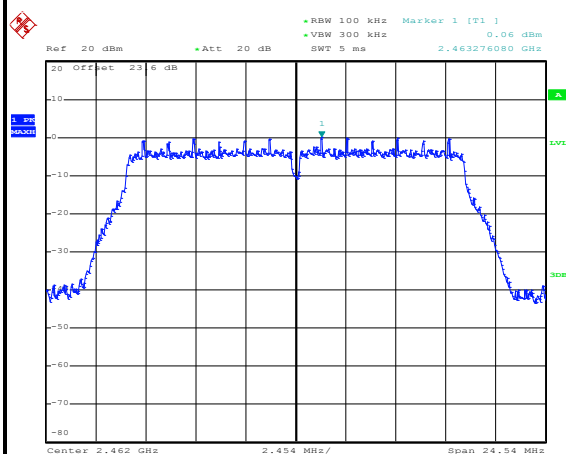
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Test Mode :	802.11g	Temperature :	21~25°C
Test Band :	2.4GHz High	Relative Humidity :	51~54%
Test Channel :	11	Test Engineer :	An Wu

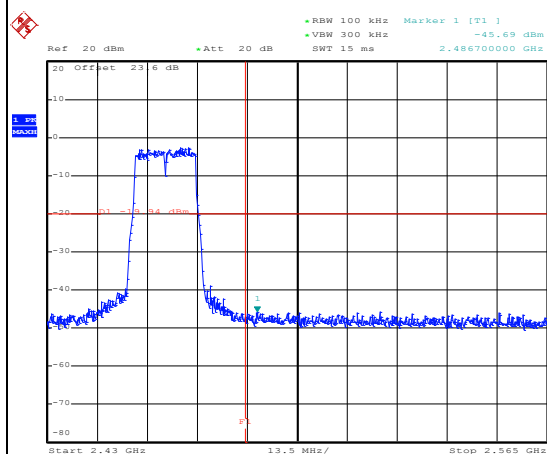
## WLAN 802.11g Channel 11

## 100kHz PSD reference Level



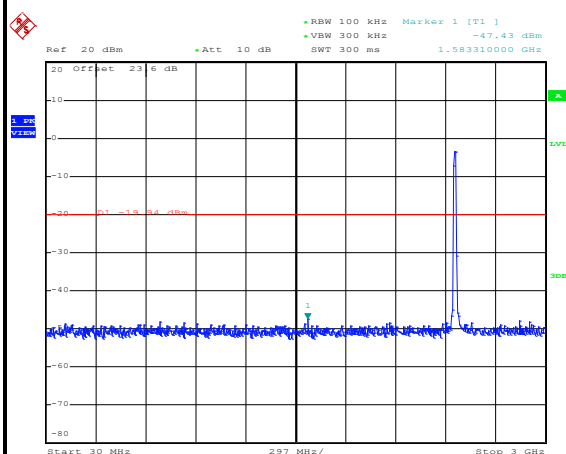
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## High Channel Plot



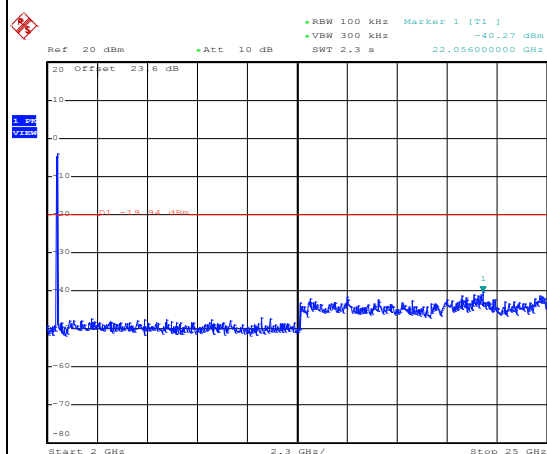
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## Spurious Emission 30MHz~3GHz



Date: 8.APR.2016 14:30:08

## Spurious Emission 2GHz~25GHz



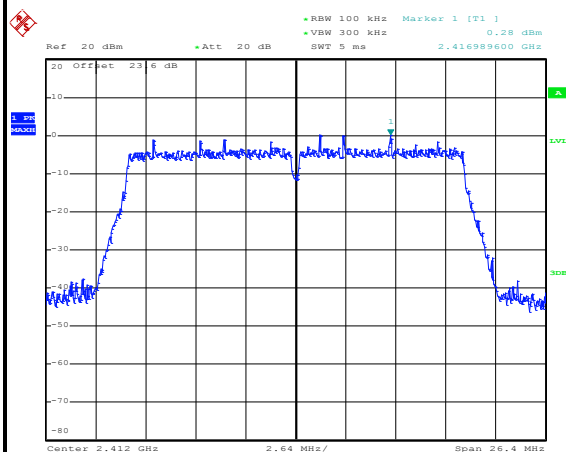
Date: 8.APR.2016 14:30:16



Test Mode :	802.11n HT20	Temperature :	21~25°C
Test Band :	2.4GHz Low	Relative Humidity :	51~54%
Test Channel :	01	Test Engineer :	An Wu

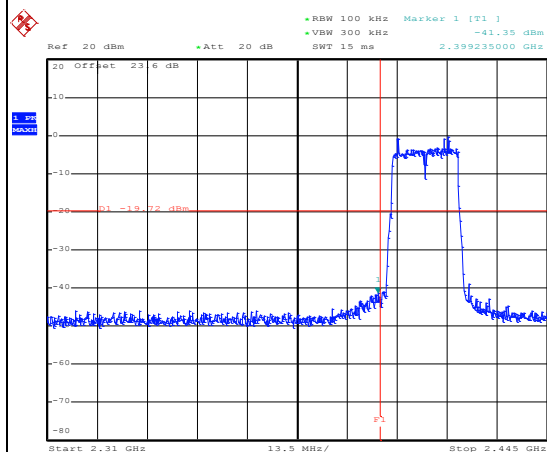
## WLAN 802.11n HT20 Channel 01

## 100kHz PSD reference Level



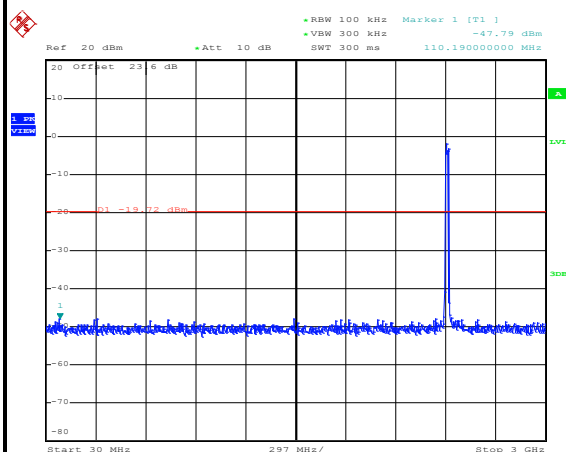
Date: 8.APR.2016 14:33:43

## Low Channel Plot



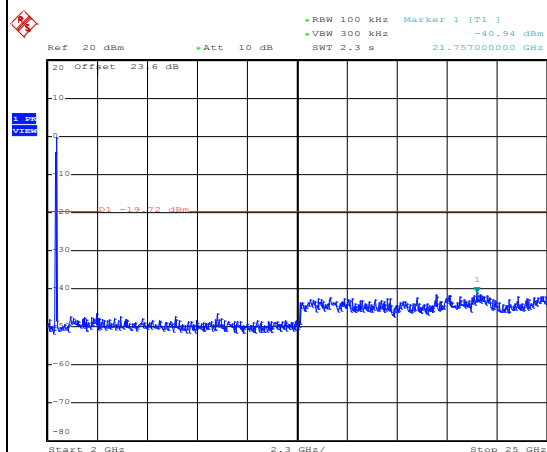
Date: 8.APR.2016 14:33:58

## Spurious Emission 30MHz~3GHz



Date: 8.APR.2016 14:34:39

## Spurious Emission 2GHz~25GHz



Date: 8.APR.2016 14:34:47

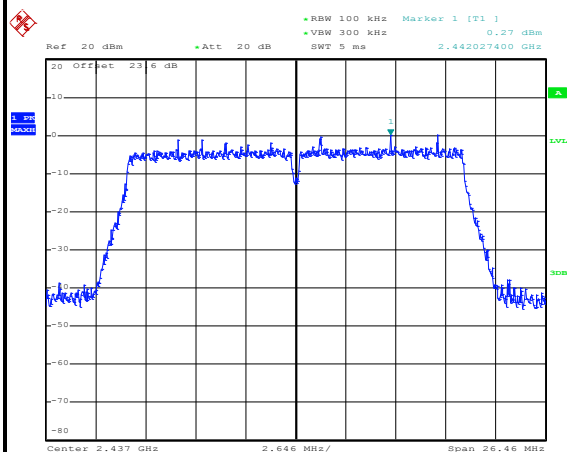




Test Mode :	802.11n HT20	Temperature :	21~25°C
Test Band :	2.4GHz Mid	Relative Humidity :	51~54%
Test Channel :	06	Test Engineer :	An Wu

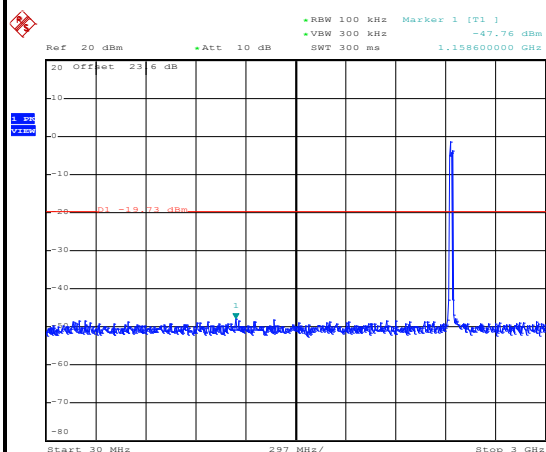
## WLAN 802.11n HT20 Channel 06

## 100kHz PSD reference Level



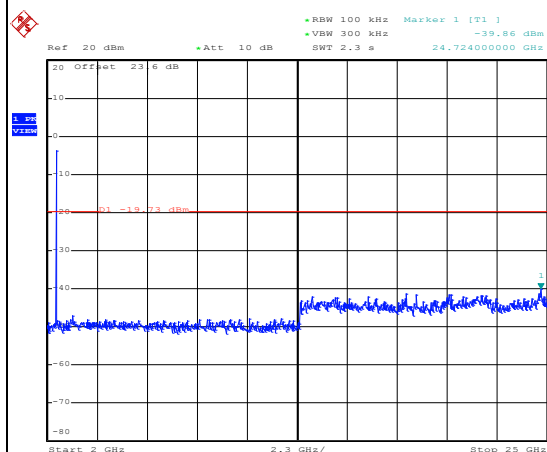
Date: 8.APR.2016 14:38:59

## Spurious Emission 30MHz~3GHz



Date: 8.APR.2016 14:39:13

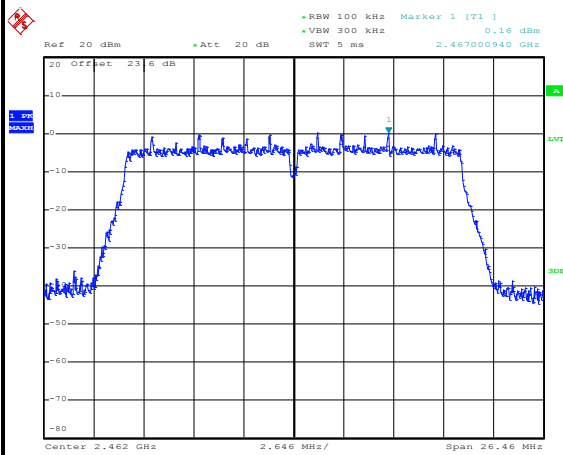
## Spurious Emission 2GHz~25GHz



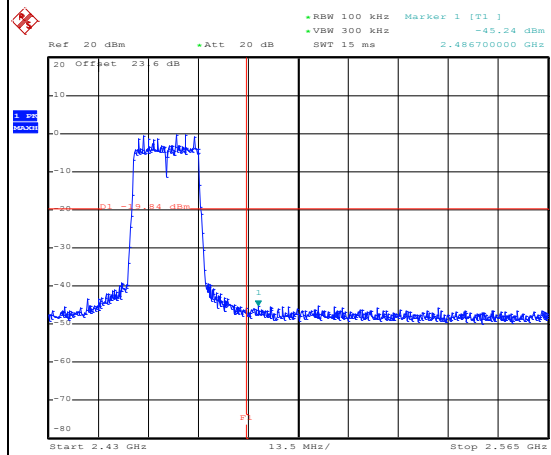
Date: 8.APR.2016 14:39:22



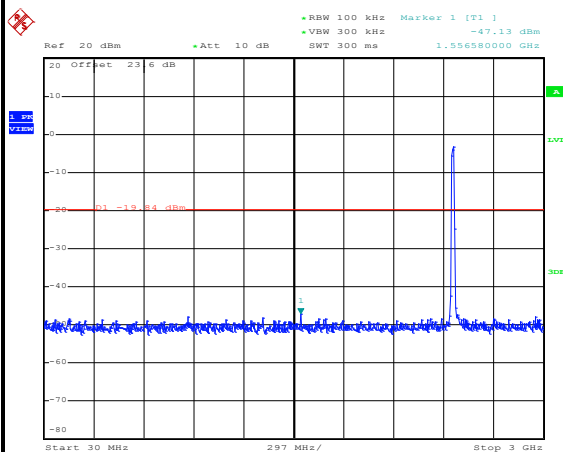
Test Mode :	802.11n HT20	Temperature :	21~25°C
Test Band :	2.4GHz High	Relative Humidity :	51~54%
Test Channel :	11	Test Engineer :	An Wu

**WLAN 802.11n HT20 Channel 11****100kHz PSD reference Level**

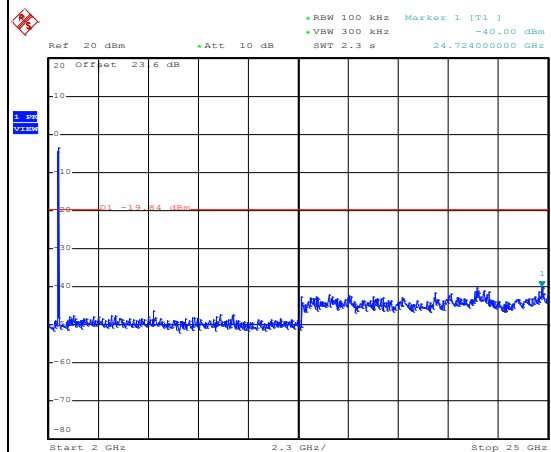
Date: 8.APR.2016 14:45:50

**High Channel Plot**

Date: 8.APR.2016 14:46:14

**Spurious Emission 30MHz~3GHz**

Date: 8.APR.2016 14:46:33

**Spurious Emission 2GHz~25GHz**

Date: 8.APR.2016 14:46:42



### 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 Procedures

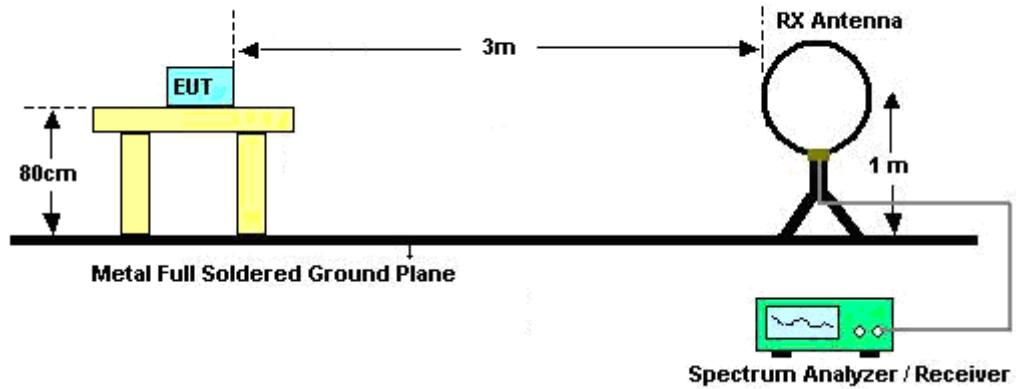
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the 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:

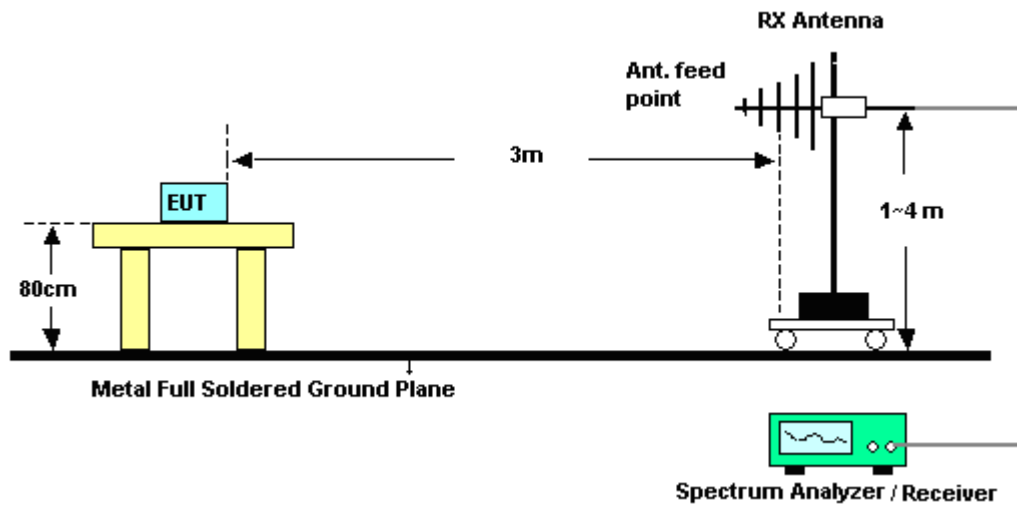
    - VBW = 10 Hz, when duty cycle is no less than 98 percent.
    - VBW  $\geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 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 Spurious 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 C.

### 3.5.7 Duty Cycle

Please refer to Appendix D.

### 3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10<sup>th</sup> Harmonic)

Please refer to Appendix B and C.

## 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 $\mu$ 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.

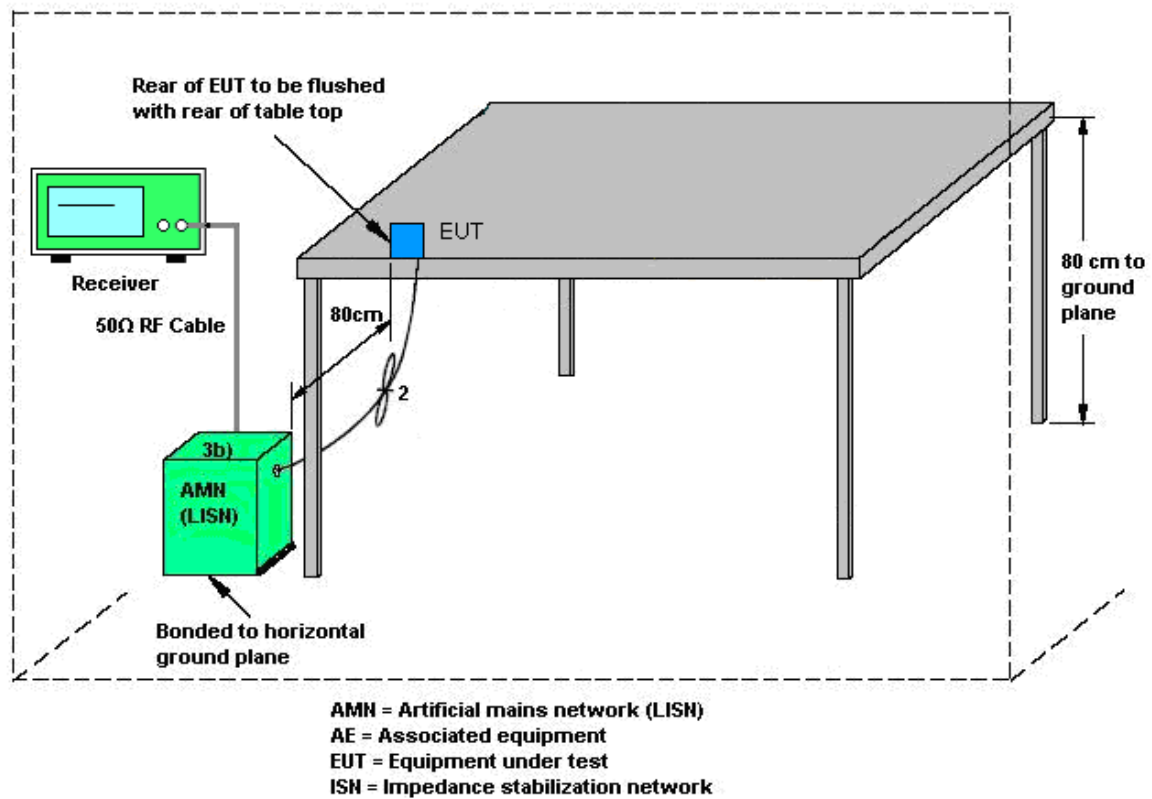
### 3.6.2 Measuring Instruments

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.

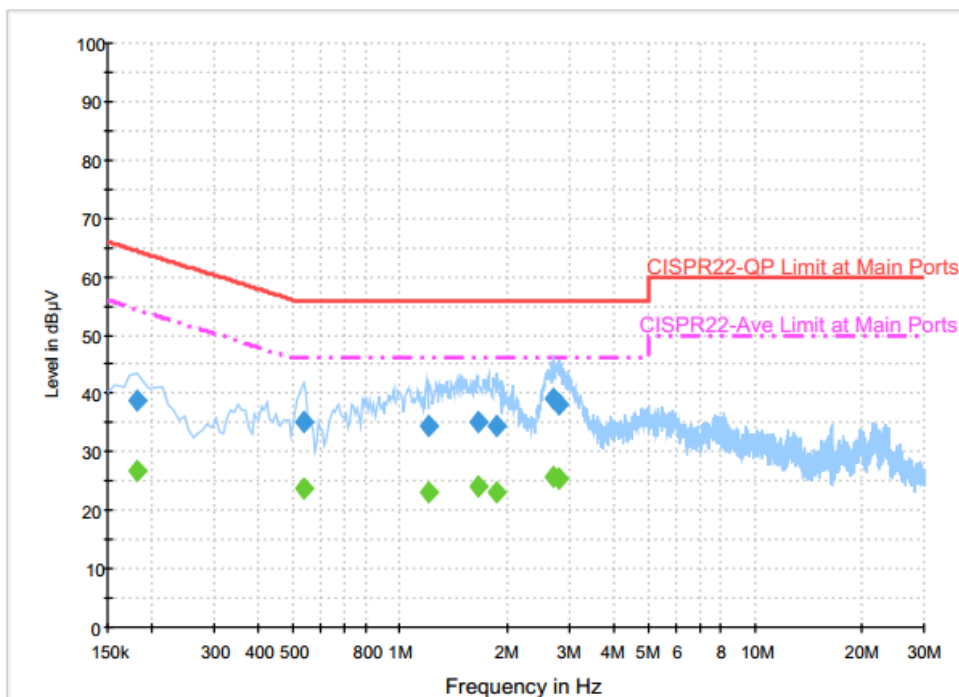
### 3.6.4 Test Setup





### 3.6.5 Test Result of AC Conducted Emission

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	23~24℃
<b>Test Engineer :</b>	Derreck Chen	<b>Relative Humidity :</b>	50~52%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Line
<b>Function Type :</b>	WLAN (2.4GHz) Link + Bluetooth Link + Camera (Rear) + Earphone + USB Cable (Charging from Adapter)		



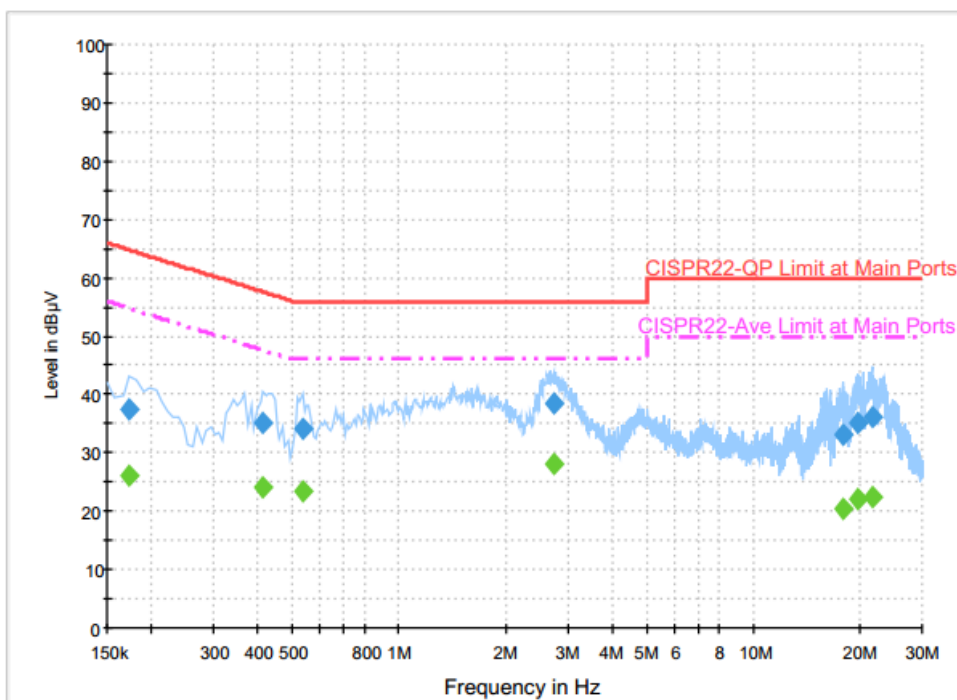
#### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	38.8	Off	L1	19.6	25.6	64.4
0.534000	35.0	Off	L1	19.6	21.0	56.0
1.206000	34.5	Off	L1	19.6	21.5	56.0
1.654000	35.0	Off	L1	19.6	21.0	56.0
1.878000	34.3	Off	L1	19.6	21.7	56.0
2.718000	39.3	Off	L1	19.6	16.7	56.0
2.798000	38.2	Off	L1	19.6	17.8	56.0

#### Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	26.6	Off	L1	19.6	27.8	54.4
0.534000	23.7	Off	L1	19.6	22.3	46.0
1.206000	23.0	Off	L1	19.6	23.0	46.0
1.654000	24.1	Off	L1	19.6	21.9	46.0
1.878000	23.0	Off	L1	19.6	23.0	46.0
2.718000	25.9	Off	L1	19.6	20.1	46.0
2.798000	25.6	Off	L1	19.6	20.4	46.0

<b>Test Mode :</b>	Mode 1	<b>Temperature :</b>	23~24°C
<b>Test Engineer :</b>	Derreck Chen	<b>Relative Humidity :</b>	50~52%
<b>Test Voltage :</b>	120Vac / 60Hz	<b>Phase :</b>	Neutral
<b>Function Type :</b>	WLAN (2.4GHz) Link + Bluetooth Link + Camera (Rear) + Earphone + USB Cable (Charging from Adapter)		


**Final Result : Quasi-Peak**

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	37.4	Off	N	19.6	27.4	64.8
0.414000	35.2	Off	N	19.6	22.4	57.6
0.534000	34.2	Off	N	19.6	21.8	56.0
2.726000	38.5	Off	N	19.6	17.5	56.0
17.878000	33.0	Off	N	19.9	27.0	60.0
19.750000	35.2	Off	N	19.9	24.8	60.0
21.630000	36.0	Off	N	20.0	24.0	60.0

**Final Result : Average**

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	26.0	Off	N	19.6	28.8	54.8
0.414000	24.2	Off	N	19.6	23.4	47.6
0.534000	23.4	Off	N	19.6	22.6	46.0
2.726000	28.2	Off	N	19.6	17.8	46.0
17.878000	20.3	Off	N	19.9	29.7	50.0
19.750000	21.9	Off	N	19.9	28.1	50.0
21.630000	22.5	Off	N	20.0	27.5	50.0



## **3.7 Antenna Requirements**

### **3.7.1 Standard Applicable**

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

### **3.7.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### **3.7.3 Antenna Gain**

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Jul. 29, 2015	Mar. 28, 2016 ~ Apr. 08, 2016	Jul. 28, 2016	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Jul. 29, 2015	Mar. 28, 2016 ~ Apr. 08, 2016	Jul. 28, 2016	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 18, 2015	Mar. 28, 2016 ~ Apr. 08, 2016	Jun. 17, 2016	Conducted (TH02-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Sep. 02, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Sep. 01, 2016	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D	37059	30MHz~1GHz	Dec. 29, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Dec. 28, 2016	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 21, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Dec. 20, 2016	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 02, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Nov. 01, 2016	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 02, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Nov. 01, 2016	Radiation (03CH12-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 20, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Nov. 19, 2016	Radiation (03CH12-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1815698	1GHz~18GHz	Dec. 14, 2015	Mar. 30, 2016 ~ Mar. 31, 2016	Dec. 13, 2016	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	Jan. 05, 2016	Mar. 30, 2016 ~ Mar. 31, 2016	Jan. 04, 2017	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Mar. 30, 2016 ~ Mar. 31, 2016	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0-360 degree	N/A	Mar. 30, 2016 ~ Mar. 31, 2016	N/A	Radiation (03CH12-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Mar. 21, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	Mar. 21, 2016	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Mar. 21, 2016	Dec. 01, 2016	Conduction (CO05-HY)



## 5 Uncertainty of Evaluation

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

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

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

**A1 - DTS Part**

Test Engineer:	An Wu	Temperature:	21~25	°C
Test Date:	2016/03/28~2016/04/08	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
11b	1Mbps	1	1	2412	14.45	10.08	0.50	Pass
11b	1Mbps	1	6	2437	14.45	10.08	0.50	Pass
11b	1Mbps	1	11	2462	14.50	10.08	0.50	Pass
11g	6Mbps	1	1	2412	17.70	16.36	0.50	Pass
11g	6Mbps	1	6	2437	17.65	16.36	0.50	Pass
11g	6Mbps	1	11	2462	17.70	16.36	0.50	Pass
HT20	MCS0	1	1	2412	18.50	17.60	0.50	Pass
HT20	MCS0	1	6	2437	18.50	17.64	0.50	Pass
HT20	MCS0	1	11	2462	18.50	17.64	0.50	Pass



**TEST RESULTS DATA**  
**Peak Power Table**

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
11b	1Mbps	1	1	2412	14.12	30.00	2.60	16.72	36.00	Pass
11b	1Mbps	1	6	2437	14.34	30.00	2.60	16.94	36.00	Pass
11b	1Mbps	1	11	2462	14.25	30.00	2.60	16.85	36.00	Pass
11g	6Mbps	1	1	2412	22.14	30.00	2.60	24.74	36.00	Pass
11g	6Mbps	1	6	2437	22.19	30.00	2.60	24.79	36.00	Pass
11g	6Mbps	1	11	2462	21.87	30.00	2.60	24.47	36.00	Pass
HT20	MCS0	1	1	2412	21.94	30.00	2.60	24.54	36.00	Pass
HT20	MCS0	1	6	2437	21.97	30.00	2.60	24.57	36.00	Pass
HT20	MCS0	1	11	2462	21.80	30.00	2.60	24.40	36.00	Pass

**TEST RESULTS DATA**  
**Average Power Table**  
**(Reporting Only)**

2.4GHz Band						
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
11b	1Mbps	1	1	2412	0.05	12.23
11b	1Mbps	1	6	2437	0.05	12.38
11b	1Mbps	1	11	2462	0.05	11.97
11g	6Mbps	1	1	2412	0.23	12.05
11g	6Mbps	1	6	2437	0.23	11.92
11g	6Mbps	1	11	2462	0.23	11.89
HT20	MCS0	1	1	2412	0.25	12.04
HT20	MCS0	1	6	2437	0.25	11.91
HT20	MCS0	1	11	2462	0.25	11.88

**TEST RESULTS DATA**  
**Peak Power Density**

2.4GHz Band								
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
11b	1Mbps	1	1	2412	-10.07	2.60	8.00	Pass
11b	1Mbps	1	6	2437	-11.75	2.60	8.00	Pass
11b	1Mbps	1	11	2462	-12.67	2.60	8.00	Pass
11g	6Mbps	1	1	2412	-15.48	2.60	8.00	Pass
11g	6Mbps	1	6	2437	-13.48	2.60	8.00	Pass
11g	6Mbps	1	11	2462	-12.89	2.60	8.00	Pass
HT20	MCS0	1	1	2412	-13.53	2.60	8.00	Pass
HT20	MCS0	1	6	2437	-13.17	2.60	8.00	Pass
HT20	MCS0	1	11	2462	-13.88	2.60	8.00	Pass



## Appendix B. Radiated Spurious Emission

Test Engineer :	Citta Ke, Ricky Su, and Nick Yu	Temperature :	21~23°C
		Relative Humidity :	51~53%

### 2.4GHz 2400~2483.5MHz

#### WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11b CH 01 2412MHz		2388.75	55.76	-18.24	74	55.26	27.05	7.45	34	100	35	P	H
		2376.96	43.08	-10.92	54	42.68	27.01	7.37	33.98	100	35	A	H
	*	2412	102.29	-	-	101.76	27.09	7.45	34.01	100	35	P	H
	*	2412	96.77	-	-	96.24	27.09	7.45	34.01	100	35	A	H
													H
													H
		2385.87	55.56	-18.44	74	55.06	27.05	7.45	34	170	353	P	V
		2376.78	44.05	-9.95	54	43.65	27.01	7.37	33.98	170	353	A	V
	*	2412	108.5	-	-	107.97	27.09	7.45	34.01	170	353	P	V
	*	2412	103.68	-	-	103.15	27.09	7.45	34.01	170	353	A	V
													V
													V
802.11b CH 06 2437MHz		2383.35	55.47	-18.53	74	54.99	27.01	7.45	33.98	129	34	P	H
		2389.92	42.97	-11.03	54	42.47	27.05	7.45	34	129	34	A	H
	*	2437	101.36	-	-	100.74	27.18	7.49	34.05	129	34	P	H
	*	2437	96.31	-	-	95.69	27.18	7.49	34.05	129	34	A	H
		2491.4	55.52	-18.48	74	54.79	27.3	7.53	34.1	129	34	P	H
		2491.2	43.33	-10.67	54	42.6	27.3	7.53	34.1	129	34	A	H
		2382.18	55.18	-18.82	74	54.7	27.01	7.45	33.98	109	348	P	V
		2384.7	43.41	-10.59	54	42.93	27.01	7.45	33.98	109	348	A	V
	*	2437	108.28	-	-	107.66	27.18	7.49	34.05	109	348	P	V
	*	2437	103.12	-	-	102.5	27.18	7.49	34.05	109	348	A	V
		2493.04	55.68	-18.32	74	54.95	27.3	7.53	34.1	109	348	P	V
		2491.56	44.94	-9.06	54	44.21	27.3	7.53	34.1	109	348	A	V



<b>802.11b CH 11 2462MHz</b>	*	2462	101.98	-	-	101.3	27.22	7.53	34.07	100	36	P	H
	*	2462	97.11	-	-	96.43	27.22	7.53	34.07	100	36	A	H
		2495.28	55.03	-18.97	74	54.3	27.3	7.53	34.1	100	36	P	H
		2483.84	43.38	-10.62	54	42.67	27.26	7.53	34.08	100	36	A	H
													H
													H
	*	2462	108.88	-	-	108.2	27.22	7.53	34.07	100	351	P	V
	*	2462	104	-	-	103.32	27.22	7.53	34.07	100	351	A	V
		2493.88	56	-18	74	55.27	27.3	7.53	34.1	100	351	P	V
		2483.84	44.65	-9.35	54	43.94	27.26	7.53	34.08	100	351	A	V
													V
													V
<b>Remark</b>	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	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	45.95	-28.05	74	62.09	31.26	10.74	58.14	100	0	P	H
													H
													H
													H
		4824	45.41	-28.59	74	61.55	31.26	10.74	58.14	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4872	46.01	-27.99	74	61.89	31.33	10.89	58.1	100	0	P	H
		7311	42.05	-31.95	74	50.89	36.07	14.18	59.09	100	0	P	H
													H
													H
		4872	45.63	-28.37	74	61.51	31.33	10.89	58.1	100	0	P	V
		7311	41.86	-32.14	74	50.7	36.07	14.18	59.09	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4926	45.96	-28.04	74	61.58	31.4	11.04	58.06	100	0	P	H
		7386	43.06	-30.94	74	51.62	36.31	14.27	59.14	100	0	P	H
													H
													H
		4926	45.26	-28.74	74	60.88	31.4	11.04	58.06	100	0	P	V
		7386	42.17	-31.83	74	50.73	36.31	14.27	59.14	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
<b>802.11g CH 01 2412MHz</b>		2389.92	58.69	-15.31	74	58.19	27.05	7.45	34	100	34	P	H
		2390	46.4	-7.6	54	45.9	27.05	7.45	34	100	34	A	H
	*	2412	103.98	-	-	103.45	27.09	7.45	34.01	100	34	P	H
	*	2412	93.87	-	-	93.34	27.09	7.45	34.01	100	34	A	H
													H
													H
		2389.92	65.69	-8.31	74	65.19	27.05	7.45	34	173	356	P	V
		2389.92	51.14	-2.86	54	50.64	27.05	7.45	34	173	356	A	V
	*	2412	110.84	-	-	110.31	27.09	7.45	34.01	173	356	P	V
	*	2412	100.78	-	-	100.25	27.09	7.45	34.01	173	356	A	V
													V
													V
<b>802.11g CH 06 2437MHz</b>		2371.65	55.14	-18.86	74	54.74	27.01	7.37	33.98	110	27	P	H
		2374.35	43.39	-10.61	54	42.99	27.01	7.37	33.98	110	27	A	H
	*	2437	104.21	-	-	103.59	27.18	7.49	34.05	110	27	P	H
	*	2437	93.75	-	-	93.13	27.18	7.49	34.05	110	27	A	H
		2488.04	57.26	-16.74	74	56.53	27.3	7.53	34.1	110	27	P	H
		2485.12	44.34	-9.66	54	43.63	27.26	7.53	34.08	110	27	A	H
		2388.48	56.22	-17.78	74	55.72	27.05	7.45	34	111	348	P	V
		2388.39	44.41	-9.59	54	43.91	27.05	7.45	34	111	348	A	V
	*	2437	110.7	-	-	110.08	27.18	7.49	34.05	111	348	P	V
	*	2437	100.69	-	-	100.07	27.18	7.49	34.05	111	348	A	V
		2484.12	58.61	-15.39	74	57.9	27.26	7.53	34.08	111	348	P	V
		2484.48	46.73	-7.27	54	46.02	27.26	7.53	34.08	111	348	A	V



<b>802.11g CH 11 2462MHz</b>	*	2462	103.02	-	-	102.34	27.22	7.53	34.07	100	37	P	H
	*	2462	92.64	-	-	91.96	27.22	7.53	34.07	100	37	A	H
		2483.96	62.22	-11.78	74	61.51	27.26	7.53	34.08	100	37	P	H
		2483.6	47.22	-6.78	54	46.51	27.26	7.53	34.08	100	37	A	H
													H
													H
	*	2462	109.84	-	-	109.16	27.22	7.53	34.07	100	350	P	V
	*	2462	99.78	-	-	99.1	27.22	7.53	34.07	100	350	A	V
		2483.56	72.6	-1.4	74	71.89	27.26	7.53	34.08	100	350	P	V
		2483.52	52.47	-1.53	54	51.76	27.26	7.53	34.08	100	350	A	V
													V
													V
<b>Remark</b>	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	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	44.59	-29.41	74	60.73	31.26	10.74	58.14	100	0	P	H
													H
													H
													H
		4824	45.56	-28.44	74	61.7	31.26	10.74	58.14	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	45.76	-28.24	74	61.64	31.33	10.89	58.1	100	0	P	H
		7311	43.93	-30.07	74	52.77	36.07	14.18	59.09	100	0	P	H
													H
													H
		4874	45.65	-28.35	74	61.53	31.33	10.89	58.1	100	0	P	V
		7311	41.93	-32.07	74	50.77	36.07	14.18	59.09	100	0	P	V
													V
													V
802.11g CH 11 2462MHz		4926	48.09	-25.91	74	63.71	31.4	11.04	58.06	100	0	P	H
		7386	43.64	-30.36	74	52.2	36.31	14.27	59.14	100	0	P	H
													H
													H
		4920	45.35	-28.65	74	60.97	31.4	11.04	58.06	100	0	P	V
		7386	42.51	-31.49	74	51.07	36.31	14.27	59.14	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT20 CH 01 2412MHz		2387.85	58.11	-15.89	74	57.61	27.05	7.45	34	100	34	P	H
		2390	45.19	-8.81	54	44.69	27.05	7.45	34	100	34	A	H
	*	2412	101.95	-	-	101.42	27.09	7.45	34.01	100	34	P	H
	*	2412	91.87	-	-	91.34	27.09	7.45	34.01	100	34	A	H
													H
													H
		2389.65	63.69	-10.31	74	63.19	27.05	7.45	34	171	352	P	V
		2389.92	49	-5	54	48.5	27.05	7.45	34	171	352	A	V
	*	2412	108.85	-	-	108.32	27.09	7.45	34.01	171	352	P	V
	*	2412	98.79	-	-	98.26	27.09	7.45	34.01	171	352	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2364.99	55.72	-18.28	74	55.34	26.97	7.37	33.96	384	355	P	H
		2390	43.51	-10.49	54	43.01	27.05	7.45	34	384	355	A	H
	*	2437	103.51	-	-	102.89	27.18	7.49	34.05	384	355	P	H
	*	2437	93.26	-	-	92.64	27.18	7.49	34.05	384	355	A	H
		2485.52	56.32	-17.68	74	55.61	27.26	7.53	34.08	384	355	P	H
		2483.88	43.99	-10.01	54	43.28	27.26	7.53	34.08	384	355	A	H
		2388.3	55.67	-18.33	74	55.17	27.05	7.45	34	113	348	P	V
		2386.59	44.12	-9.88	54	43.62	27.05	7.45	34	113	348	A	V
	*	2437	109.61	-	-	108.99	27.18	7.49	34.05	113	348	P	V
	*	2437	98.43	-	-	97.81	27.18	7.49	34.05	113	348	A	V
		2499.72	57.23	-16.77	74	56.5	27.3	7.53	34.1	113	348	P	V
		2483.76	46.11	-7.89	54	45.4	27.26	7.53	34.08	113	348	A	V



<b>802.11n</b> <b>HT20</b> <b>CH 11</b> <b>2462MHz</b>	*	2462	103.39	-	-	102.71	27.22	7.53	34.07	334	356	P	H
	*	2462	93.44	-	-	92.76	27.22	7.53	34.07	334	356	A	H
		2484.16	64.75	-9.25	74	64.04	27.26	7.53	34.08	334	356	P	H
		2483.52	48.46	-5.54	54	47.75	27.26	7.53	34.08	334	356	A	H
													H
													H
	*	2462	108.98	-	-	108.3	27.22	7.53	34.07	100	351	P	V
	*	2462	98.8	-	-	98.12	27.22	7.53	34.07	100	351	A	V
		2483.52	71.79	-2.21	74	71.08	27.26	7.53	34.08	100	351	P	V
		2483.68	53.13	-0.87	54	52.42	27.26	7.53	34.08	100	351	A	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT20 CH 01 2412MHz		4824	43.35	-30.65	74	59.49	31.26	10.74	58.14	100	0	P	H
													H
													H
													H
		4824	41.97	-32.03	74	58.11	31.26	10.74	58.14	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4872	43.23	-30.77	74	59.11	31.33	10.89	58.1	100	0	P	H
		7311	42.16	-31.84	74	51	36.07	14.18	59.09	100	0	P	H
													H
													H
		4872	43.37	-30.63	74	59.25	31.33	10.89	58.1	100	0	P	V
		7311	41.85	-32.15	74	50.69	36.07	14.18	59.09	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4926	43.86	-30.14	74	59.48	31.4	11.04	58.06	100	0	P	H
		7386	42.44	-31.56	74	51	36.31	14.27	59.14	100	0	P	H
													H
													H
		4926	42.82	-31.18	74	58.44	31.4	11.04	58.06	100	0	P	V
		7386	42	-32	74	50.56	36.31	14.27	59.14	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

## Emission below 1GHz

**2.4GHz WIFI 802.11n HT20 (LF)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	(dBμV)	( dB/m )	( dB )	( dB )	( cm )	( deg )	(P/A)	(H/V)
2.4GHz 802.11n HT20 LF		30	23.74	-16.26	40	29.62	25.8	0.78	32.46			P	H
		51.06	21.3	-18.7	40	38.39	14.59	0.78	32.46			P	H
		97.77	20.95	-22.55	43.5	36.56	15.76	1.06	32.43			P	H
		748.7	30.11	-15.89	46	30.87	27.58	3.97	32.31			P	H
		820.8	31.13	-14.87	46	30.79	28.13	4.28	32.07			P	H
		938.4	33.29	-12.71	46	29.96	29.97	4.6	31.24	100	85	P	H
													H
													H
													H
													H
													H
													H
		42.42	27.3	-12.7	40	40.36	18.62	0.78	32.46			P	V
		78.6	28.75	-11.25	40	46.68	13.45	1.06	32.44	100	231	P	V
		210.36	24.62	-18.88	43.5	39.21	16.1	1.7	32.39			P	V
		608.7	27.61	-18.39	46	31	25.51	3.5	32.4			P	V
		755.7	29.67	-16.33	46	30.37	27.62	3.97	32.29			P	V
		932.1	33.43	-12.57	46	30.31	29.81	4.6	31.29			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**

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>

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

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

<b>Test Engineer :</b>	Citta Ke, Ricky Su, and Nick Yu	<b>Temperature :</b>	21~23°C
		<b>Relative Humidity :</b>	51~53%

### Note symbol

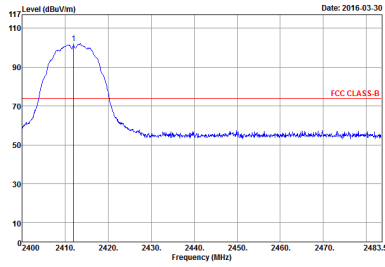
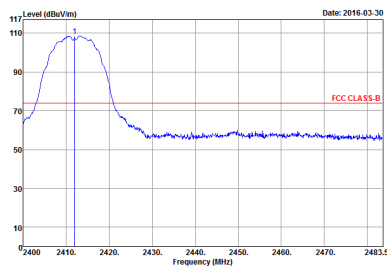
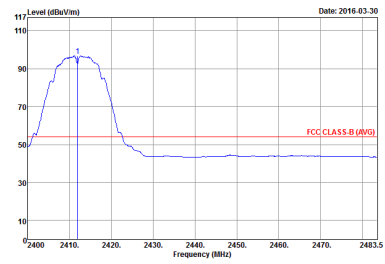
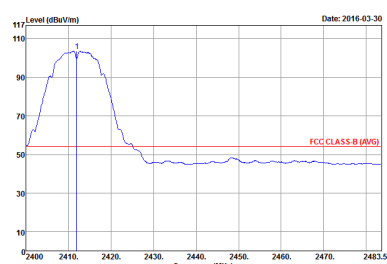
-L	Low channel location
-R	High channel location



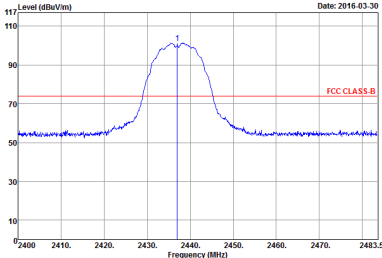
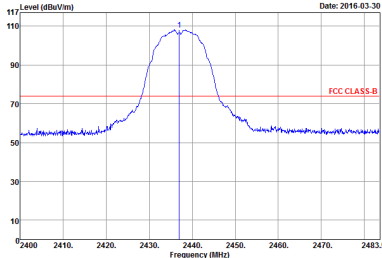
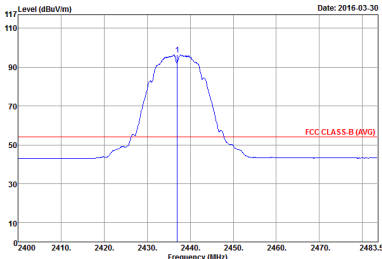
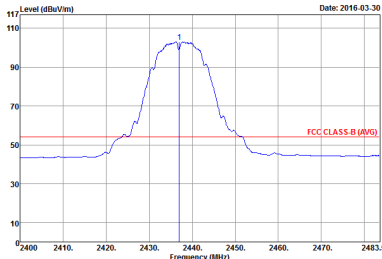


## 2.4GHz 2400~2483.5MHz

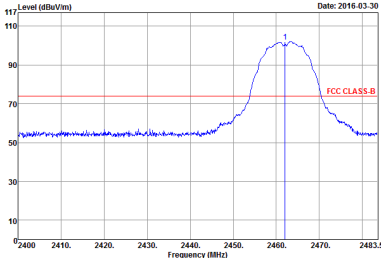
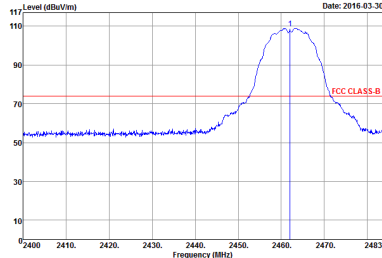
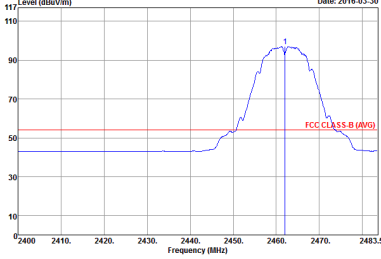
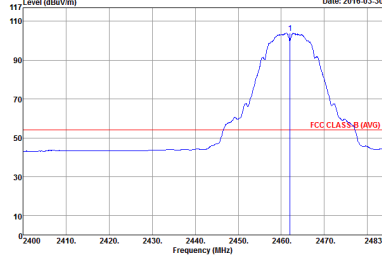
## WIFI 802.11b (Fundamental @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 503034-01 7</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 503034-01 7</p>
Avg.	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : Peak Mode : 503034-01 7</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : Peak Mode : 503034-01 7</p>

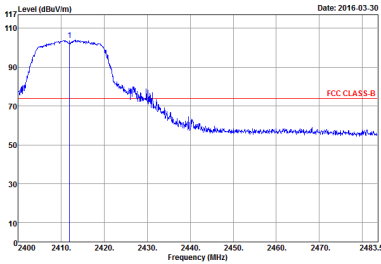
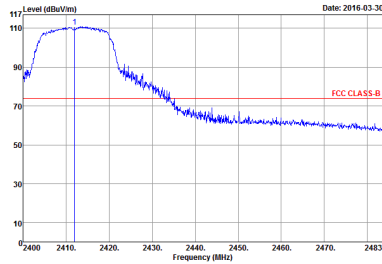
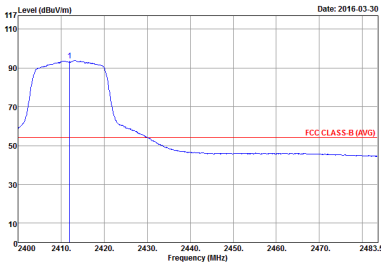
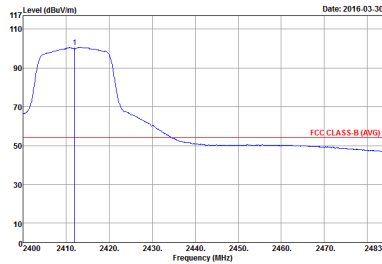


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a peak at approximately 2437 MHz. A red line indicates the FCC CLASS B limit at 70 dBuV/m. The date is 2016-03-30.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 8</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a peak at approximately 2437 MHz. A red line indicates the FCC CLASS B limit at 70 dBuV/m. The date is 2016-03-30.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 8</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a peak at approximately 2437 MHz. A red line indicates the FCC CLASS B (AVG) limit at 50 dBuV/m. The date is 2016-03-30.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 8</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a peak at approximately 2437 MHz. A red line indicates the FCC CLASS B (AVG) limit at 50 dBuV/m. The date is 2016-03-30.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 8</p></div>

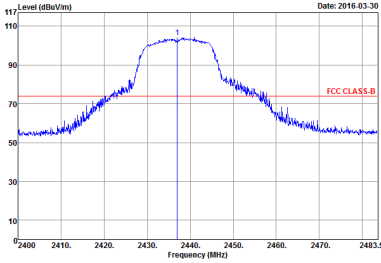
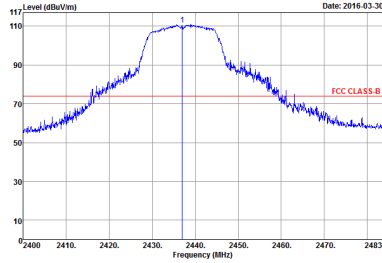
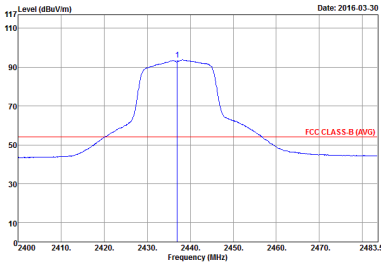
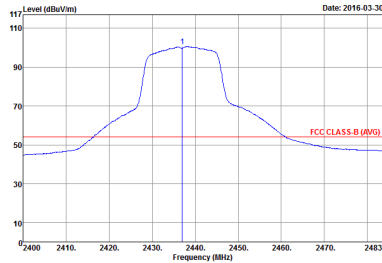


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit at approximately 72 dBuV/m. The peak level is slightly above this limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 9</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit at approximately 72 dBuV/m. The peak level is slightly above this limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 9</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The peak level is significantly above this limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 9</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The peak level is significantly above this limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 9</p></div>

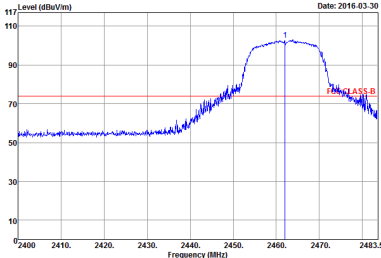
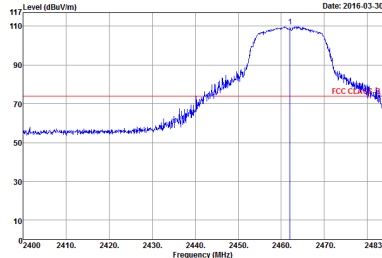
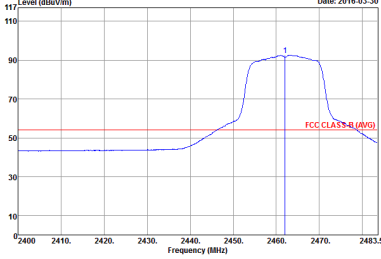
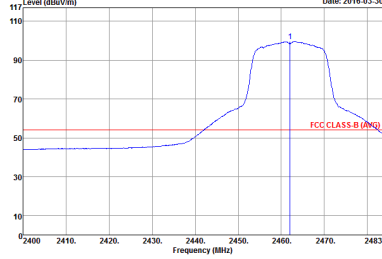
**2.4GHz 2400~2483.5MHz**
**WIFI 802.11g (Fundamental @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 10</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 10</p>
Avg.	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 10</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 10</p>

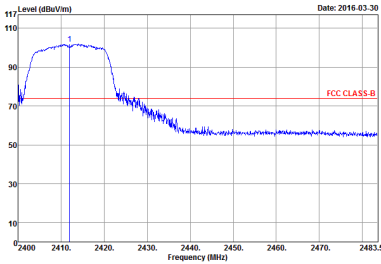
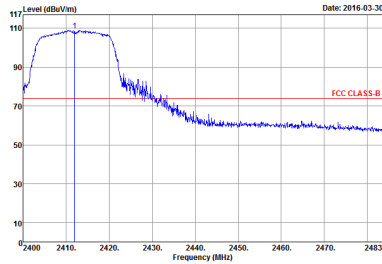
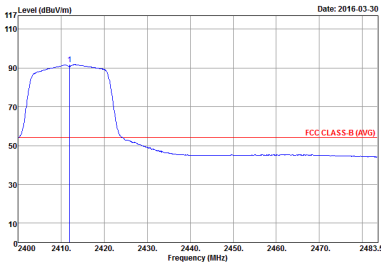
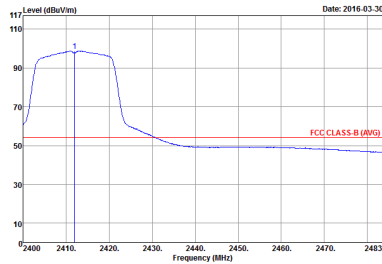


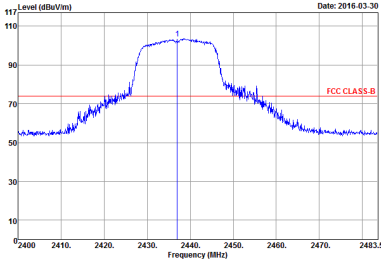
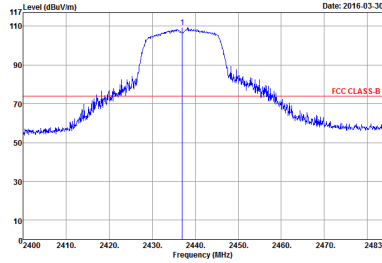
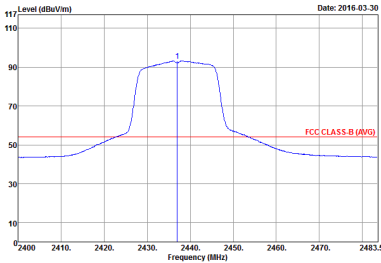
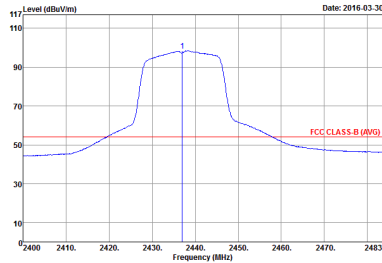
WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) for Horizontal orientation. The plot shows a peak at 2437 MHz. A red line indicates the FCC CLASS-B limit at approximately 74 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 11</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) for Vertical orientation. The plot shows a peak at 2437 MHz. A red line indicates the FCC CLASS-B limit at approximately 74 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 11</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) for Horizontal orientation. The plot shows the average spectrum. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 11</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) for Vertical orientation. The plot shows the average spectrum. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 11</p></div>



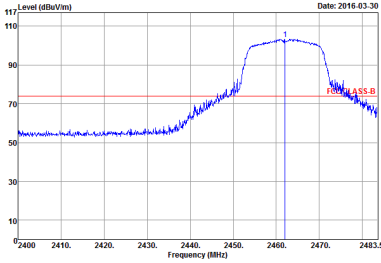
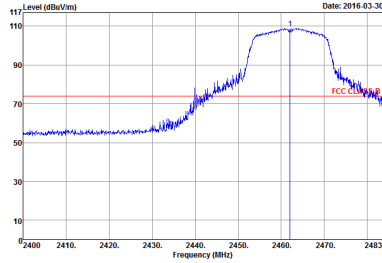
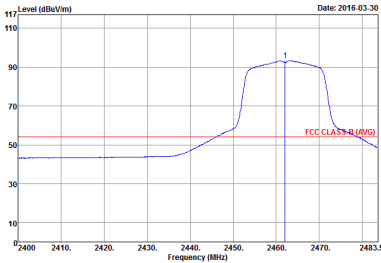
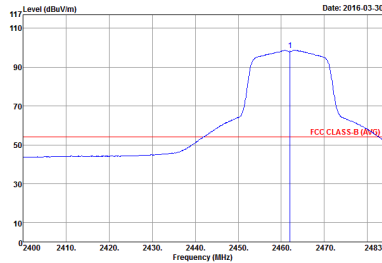
WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) for Horizontal polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit at approximately 75 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) for Vertical polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit at approximately 75 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) for Horizontal polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) for Vertical polarization. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p></div>

**2.4GHz 2400~2483.5MHz**
**WIFI 802.11n HT20 (Fundamental @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 13</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 13</p>
Avg.	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 13</p>	 <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 13</p>

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a peak at 2437 MHz. A red line indicates the FCC CLASS B limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 14</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a peak at 2437 MHz. A red line indicates the FCC CLASS B limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 14</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows the average spectrum. A red line indicates the FCC CLASS B (AVG) limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 14</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows the average spectrum. A red line indicates the FCC CLASS B (AVG) limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 14</p>



WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 15</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a peak at 2462 MHz. A red line indicates the FCC CLASS-B limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 15</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows an average spectrum with a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 15</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows an average spectrum with a peak at 2462 MHz. A red line indicates the FCC CLASS-B (AVG) limit. The date is 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000KHz VBW:0.300KHz SWT:Auto Detector : Peak Project : S03034-01 Mode : 15</p>

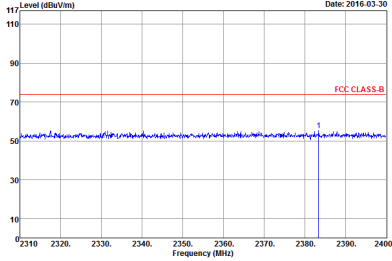
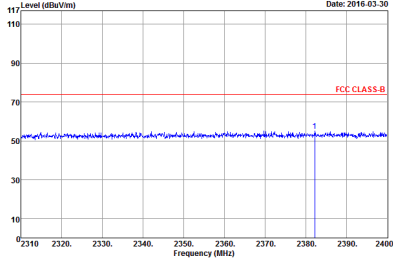
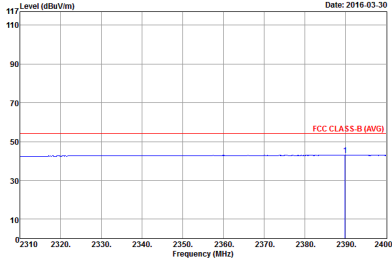
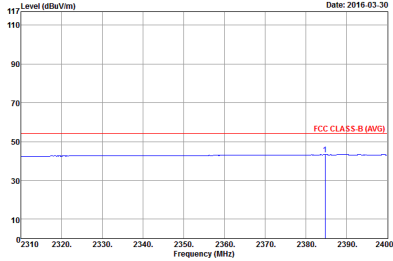


2.4GHz 2400~2483.5MHz

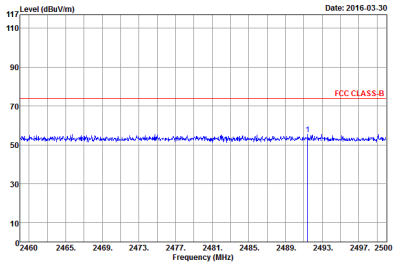
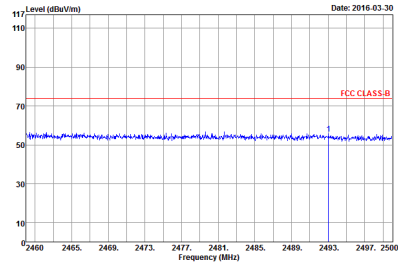
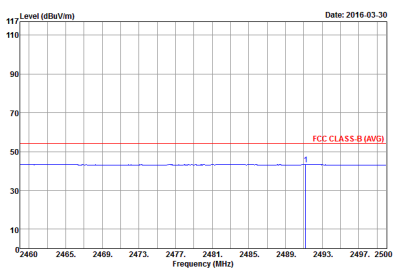
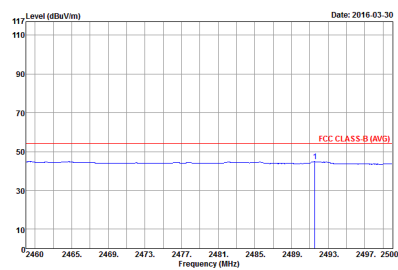
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 7</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 7</p></div>
Avg.	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 7</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 7</p></div>

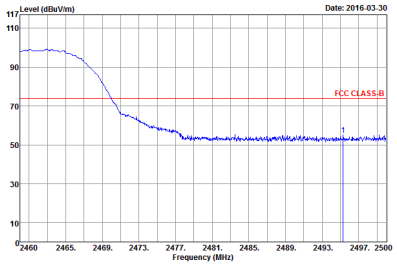
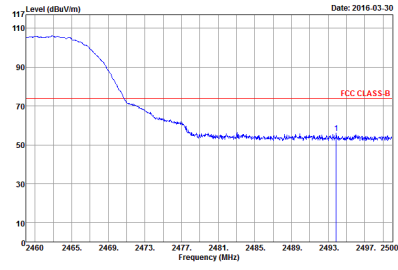
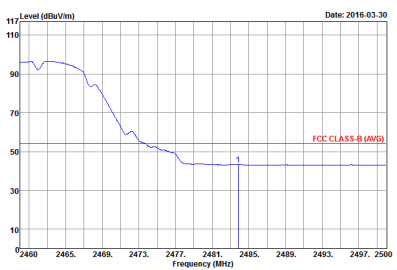
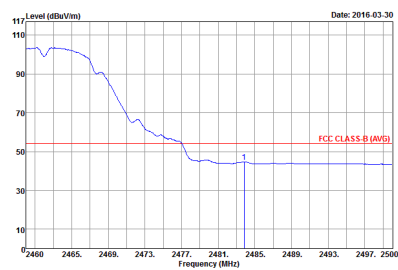


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Vertical
Peak	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>
Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>
Avg.	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B (AVG)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B (AVG)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 8</p></div>

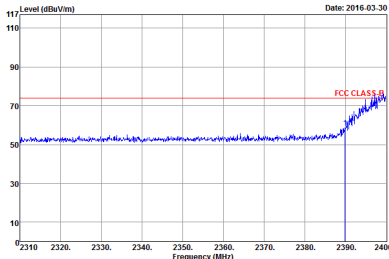
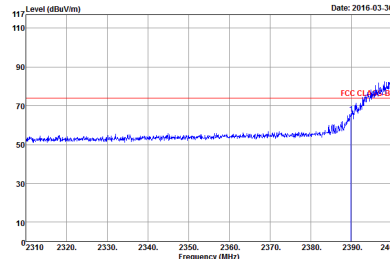
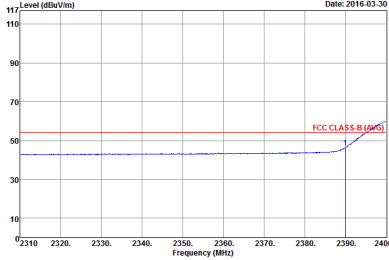
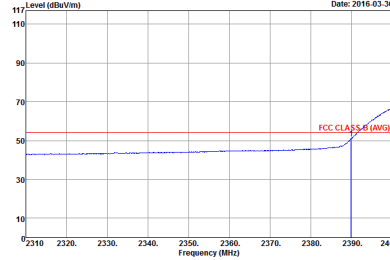


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a signal level starting around 100 dBuV/m at 2400 MHz, dropping to approximately 55 dBuV/m by 2462 MHz, and then remaining relatively flat. A red horizontal line indicates the FCC CLASS-B limit at approximately 75 dBuV/m. A sharp peak is visible at 2462 MHz.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 9</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a signal level starting around 100 dBuV/m at 2400 MHz, dropping to approximately 55 dBuV/m by 2462 MHz, and then remaining relatively flat. A red horizontal line indicates the FCC CLASS-B limit at approximately 75 dBuV/m. A sharp peak is visible at 2462 MHz.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 9</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a signal level starting around 100 dBuV/m at 2400 MHz, dropping to approximately 55 dBuV/m by 2462 MHz, and then remaining relatively flat. A red horizontal line indicates the FCC CLASS-B (AVG) limit at approximately 75 dBuV/m. A sharp peak is visible at 2462 MHz.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 9</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a signal level starting around 100 dBuV/m at 2400 MHz, dropping to approximately 55 dBuV/m by 2462 MHz, and then remaining relatively flat. A red horizontal line indicates the FCC CLASS-B (AVG) limit at approximately 75 dBuV/m. A sharp peak is visible at 2462 MHz.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 9</p></div>

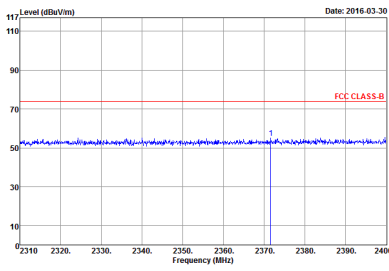
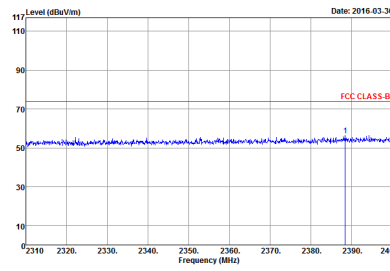
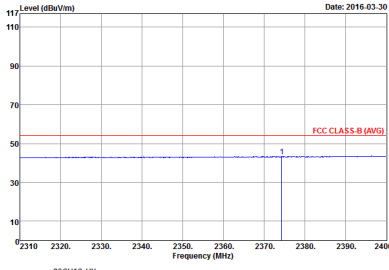
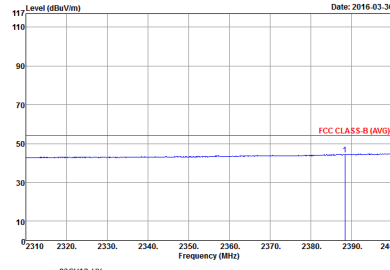


2.4GHz 2400~2483.5MHz

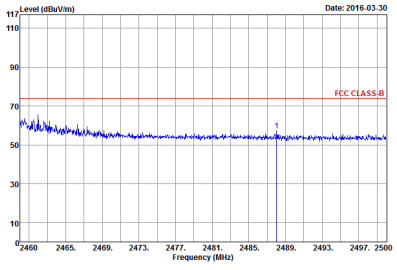
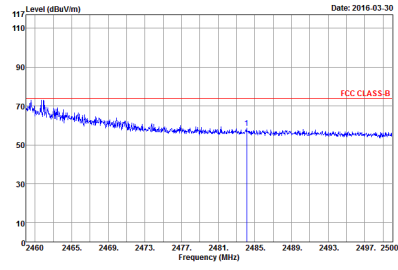
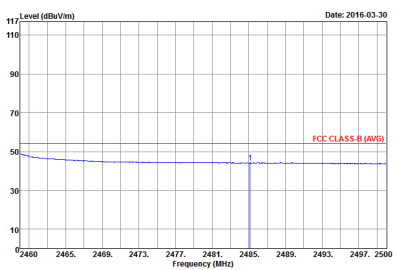
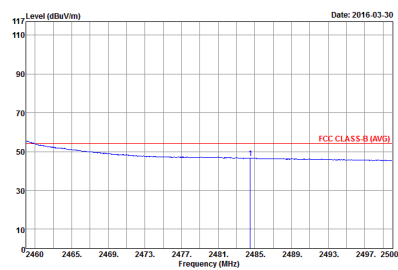
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 10</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 10</p></div>
Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000kHz VBW:0.300kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 10</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000kHz VBW:0.300kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 10</p></div>



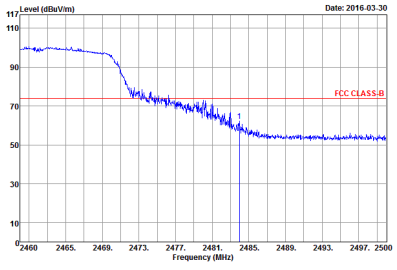
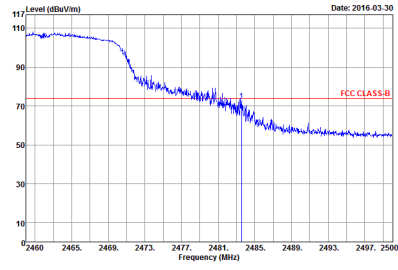
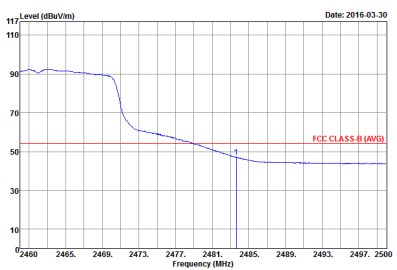
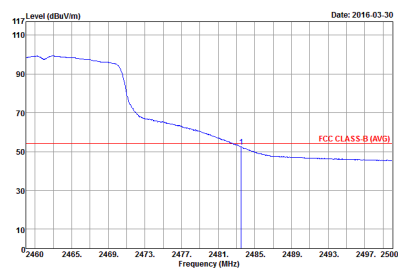
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Vertical
Peak	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : S03034-01 Mode : 11</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : S03034-01 Mode : 11</p></div>
Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : S03034-01 Mode : 11</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : S03034-01 Mode : 11</p></div>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B limit at approximately 70 dBuV/m. The blue trace shows the measured signal, with a peak at 2437 MHz reaching approximately 65 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 11</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B limit at approximately 70 dBuV/m. The blue trace shows the measured signal, with a peak at 2437 MHz reaching approximately 65 dBuV/m.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 11</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The blue trace shows the average signal, which is below the limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 11</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The blue trace shows the average signal, which is below the limit.</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 11</p></div>





WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a blue line representing the signal level, which starts at approximately 100 dBuV/m at 2400 MHz and decreases to about 50 dBuV/m at 2483.5 MHz. A red horizontal line indicates the FCC CLASS-B limit at 70 dBuV/m. The plot is dated 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a blue line representing the signal level, which starts at approximately 100 dBuV/m at 2400 MHz and decreases to about 50 dBuV/m at 2483.5 MHz. A red horizontal line indicates the FCC CLASS-B limit at 70 dBuV/m. The plot is dated 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The plot shows a blue line representing the average signal level, which starts at approximately 100 dBuV/m at 2400 MHz and decreases to about 50 dBuV/m at 2483.5 MHz. A red horizontal line indicates the FCC CLASS-B (AVG) limit at 70 dBuV/m. The plot is dated 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p>	 <p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The plot shows a blue line representing the average signal level, which starts at approximately 100 dBuV/m at 2400 MHz and decreases to about 50 dBuV/m at 2483.5 MHz. A red horizontal line indicates the FCC CLASS-B (AVG) limit at 70 dBuV/m. The plot is dated 2016-03-30.</p> <p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : S03034-01 Mode : 12 Power : 17.5</p>

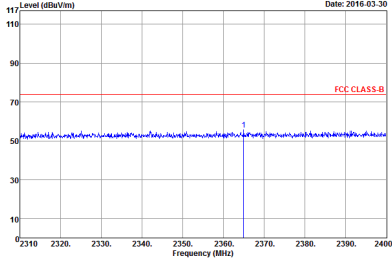
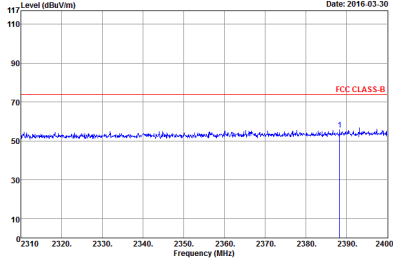
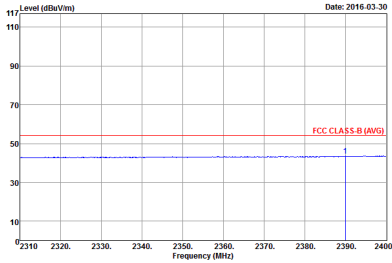
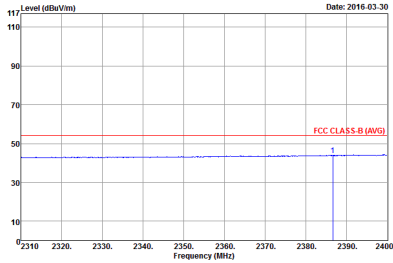


2.4GHz 2400~2483.5MHz

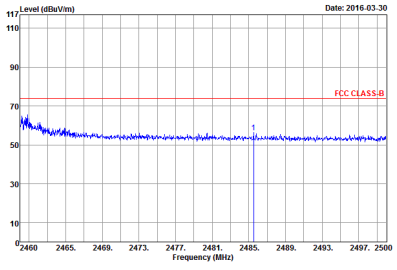
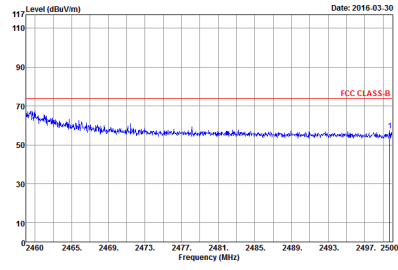
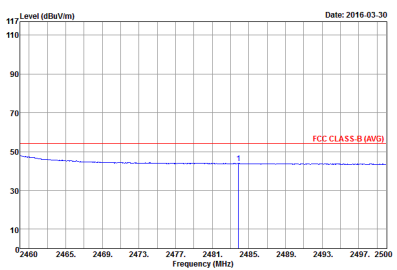
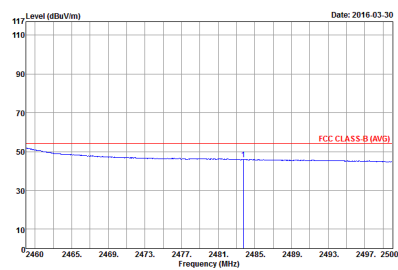
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 13</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 13</p></div>
Avg.	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000kHz VBW:0.300kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 13</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL RBW:1000.000kHz VBW:0.300kHz SWT:Auto Detector : Peak Project : SD3034-01 Mode : 13</p></div>

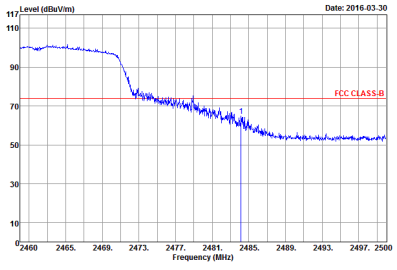
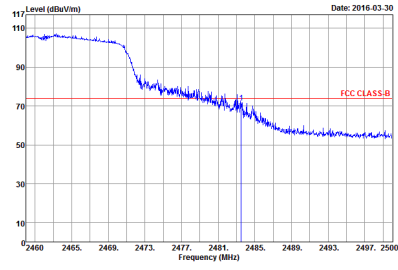
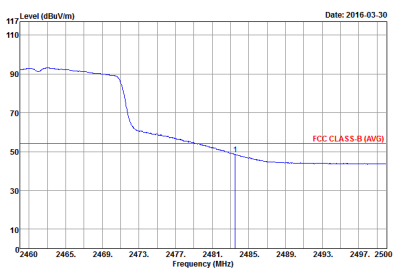
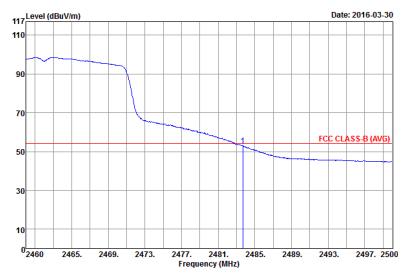


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Vertical
Peak	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>
Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B limit at approximately 70 dBuV/m. The blue trace shows the measured signal, which is mostly below the limit with a small peak around 2485 MHz.</p><p>Date: 2016-03-30</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B limit at approximately 70 dBuV/m. The blue trace shows the measured signal, which is mostly below the limit with a small peak around 2485 MHz.</p><p>Date: 2016-03-30</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>
Avg.	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Horizontal orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The blue trace shows the average measured signal, which is mostly below the limit.</p><p>Date: 2016-03-30</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>	<div><p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical orientation. The y-axis ranges from 10 to 117 dBuV/m, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the FCC CLASS-B (AVG) limit at approximately 55 dBuV/m. The blue trace shows the average measured signal, which is mostly below the limit.</p><p>Date: 2016-03-30</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 14</p></div>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 15</p></div>	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B</p><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 15</p></div>
Avg.	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B (AVG)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : SD3034-01 Mode : 15</p></div>	<div><p>Level (dBuV/m)</p><p>Frequency (MHz)</p><p>Date: 2016-03-30</p><p>FCC CLASS-B (AVG)</p><p>Site : 03CH12-HY Condition : FCC CLASS-B (AVG) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : SD3034-01 Mode : 15</p></div>



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>117 90 70 50 30 10 0</p><p>0 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 25000</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 7</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>117 90 70 50 30 10 0</p><p>0 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 25000</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 7</p></div>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 8</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 8</p></div>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 9</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 9</p></div>





2.4GHz 2400~2483.5MHz  
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 10</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 10</p></div>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 11</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 11</p></div>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 12 Power : 17.5</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 12 Power : 17.5</p></div>



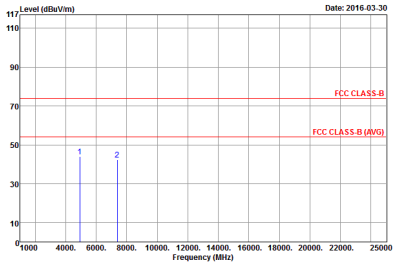
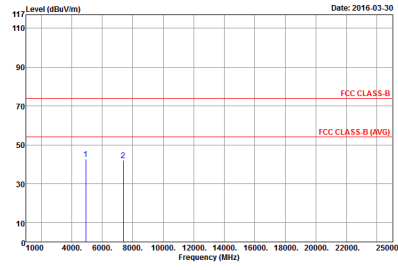
2.4GHz 2400~2483.5MHz  
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>117 90 70 50 30 10 0</p><p>0 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 25000</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 13</p></div>	<div><p>117 Level (dBuV/m)</p><p>Date: 2016-03-30</p><p>117 90 70 50 30 10 0</p><p>0 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 25000</p><p>Frequency (MHz)</p><p>Site : 08CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 13</p></div>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 14</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 14</p></div>



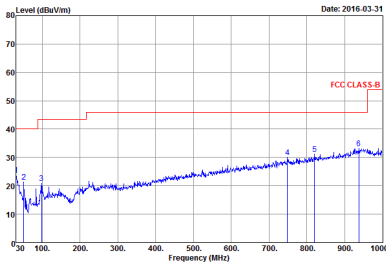
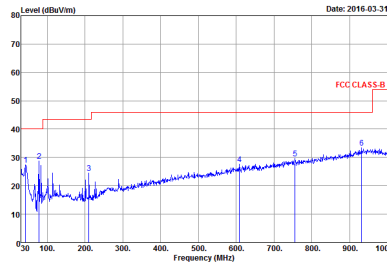
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 503034-01 Mode : 15</p></div>	<div><p>Site : 03CH12-HY Condition : FCC CLASS-B 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 503034-01 Mode : 15</p></div>



2.4GHz 2400~2483.5MHz

Emission below 1GHz

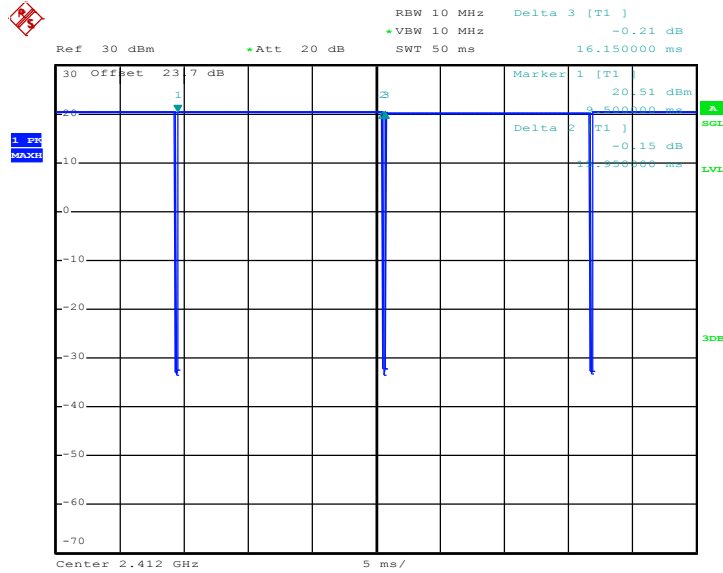
2.4GHz WIFI 802.11n HT20 (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak	 <p>Site : 08CH12-HY Condition : FCC CLASS-B 3m BILOG_6111D_37059 HORIZONTAL Detector : Peak Project : 5D3034-01 Mode : 18</p>	 <p>Site : 08CH12-HY Condition : FCC CLASS-B 3m BILOG_6111D_37059 VERTICAL Detector : Peak Project : 5D3034-01 Mode : 18</p>

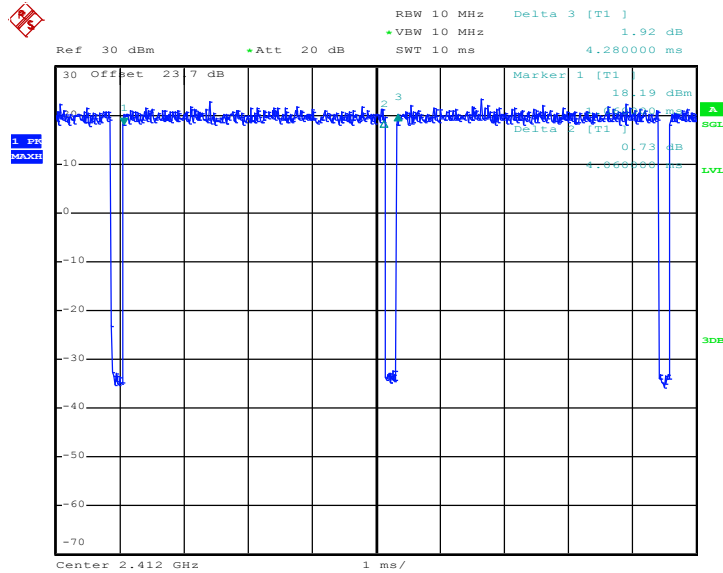
## Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1	802.11b	98.76	-	-	10Hz
1	802.11g	94.86	4060	0.25	300Hz
1	2.4GHz 802.11n HT20	94.5	3780	0.26	300Hz



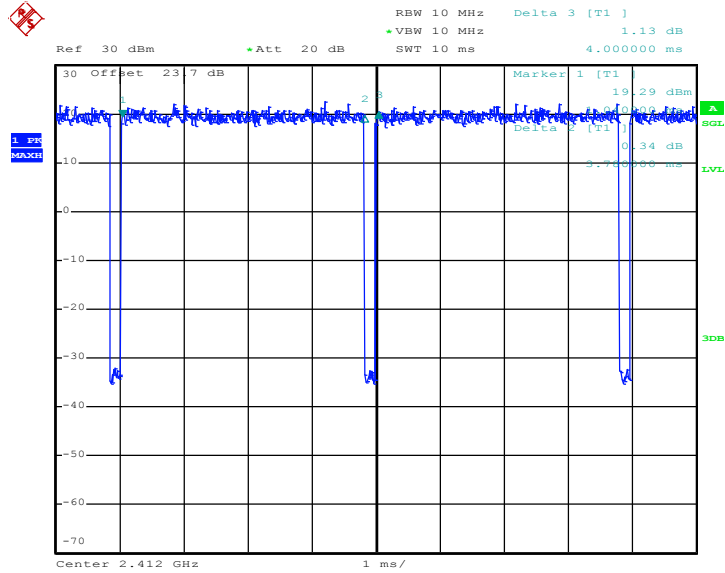
**<Ant. 1>**
**802.11b**


Date: 28.MAR.2016 12:31:32

**802.11g**


Date: 28.MAR.2016 12:38:31

**802.11n HT20**



Date: 28.MAR.2016 12:42:56