



# FCC RADIO TEST REPORT

**FCC ID** : UZ7TM2000  
**Equipment** : Trailer Monitoring Unit  
**Brand Name** : ZEBRA  
**Model name** : TM2000  
**Applicant** : Zebra Technologies Corporation  
1 Zebra Plaza Holtsville, NY 11742  
**Manufacturer** : Zebra Technologies Corporation  
1 Zebra Plaza Holtsville, NY 11742  
**Standard** : FCC Part 15 Subpart C §15.247

The product was received on May 08, 2018 and testing was started from May 08, 2018 and completed on Jun. 03, 2018. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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### History of this test report

Report No.	Version	Description	Issued Date
FR850206A	01	Initial issue of report	Jun. 19, 2018



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.247(b)	Power Output Measurement	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges	Pass	-
		Conducted Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	Under limit 1.06 dB at 2389.800 MHz
3.6	15.207	AC Conducted Emission	Pass	Under limit 9.64 dB at 0.602 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass	-

**Reviewed by: Joseph Lin**

**Report Producer: Maggie Chiang**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Trailer Monitoring Unit
Brand Name	ZEBRA
Model Name	TM2000
FCC ID	UZ7TM2000
EUT supports Radios application	WLAN 11a/b/g/n HT20
HW Version	EV 3.0
SW Version	2.0.14
FW Version	2.0.14
MFD	15APR2018
EUT Stage	Engineering sample

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

## 1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz
Maximum (Peak) Output Power to antenna	802.11b : 21.02 dBm (0.1265 W) 802.11g : 23.32 dBm (0.2148 W) 802.11n HT20 : 23.40 dBm (0.2188 W)
99% Occupied Bandwidth	802.11b : 14.25MHz 802.11g : 18.75MHz 802.11n HT20 : 19.95MHz
Antenna Type / Gain	Omni-directional Antenna type with gain 2.95 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

## 1.3 Modification of EUT

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



### 1.4 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 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>		
	TH05-HY	CO05-HY	03CH07-HY

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

### 1.5 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 v04
- ♦ 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

- a. 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: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
- b. AC power line Conducted Emission was tested under maximum output power.

### 2.1 Carrier Frequency and Channel

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

### 2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

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 + 3D Camera + RGB Camera + RJ-45 Link with Notebook + TEC Cooling



802.11b RF Peak Output Power (dBm)						
Power vs. Channel			Power vs Data Rate			
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)		
		1M		2M	5.5M	11M
CH 01	2412	20.54	CH 06	21.00	20.94	20.80
CH 06	2437	21.02				
CH 11	2462	20.26				

802.11g RF Peak Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)						
		6M		9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
CH 01	2412	23.15	CH 06	23.30	23.30	23.29	23.29	23.29	23.30	23.28
CH 06	2437	23.32								
CH 11	2462	22.74								

802.11n HT20 RF Peak Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2412	22.77	CH 06	23.31	23.28	23.29	23.28	23.23	23.21	23.22
CH 06	2437	23.40								
CH 11	2462	22.06								





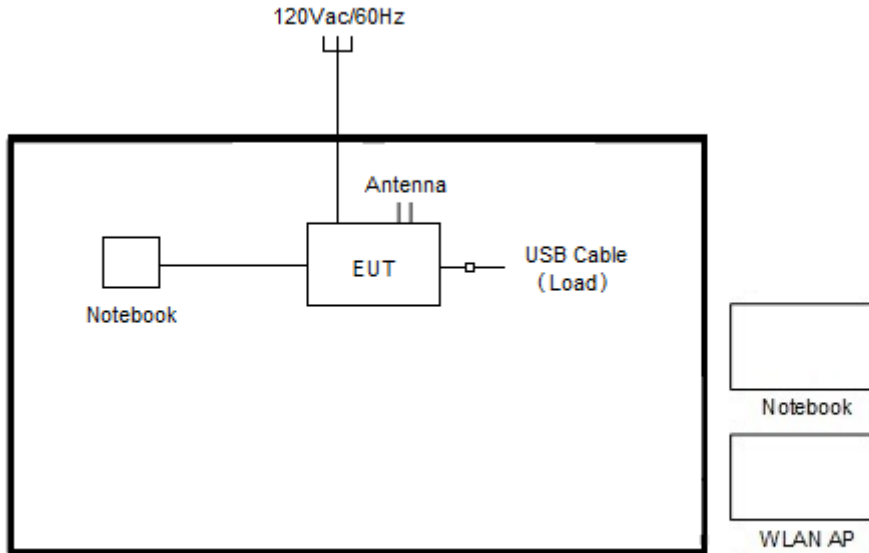
802.11b RF Avg. Output Power (dBm)						
Power vs. Channel			Power vs Data Rate			
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)		
		1M		2M	5.5M	11M
Duty Cycle (%)		92.54		86.07	70.31	56.22
CH 01	2412	18.37	CH 06	18.71	18.67	18.71
CH 06	2437	18.60				
CH 11	2462	18.06				

802.11g RF Avg. Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)						
		6M		9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Duty Cycle (%)		66.88		57.50	50.49	40.70	34.19	26.09	20.77	19.05
CH 01	2412	15.15	CH 06	16.15	16.12	16.00	16.22	16.34	16.32	16.30
CH 06	2437	16.36								
CH 11	2462	13.78								

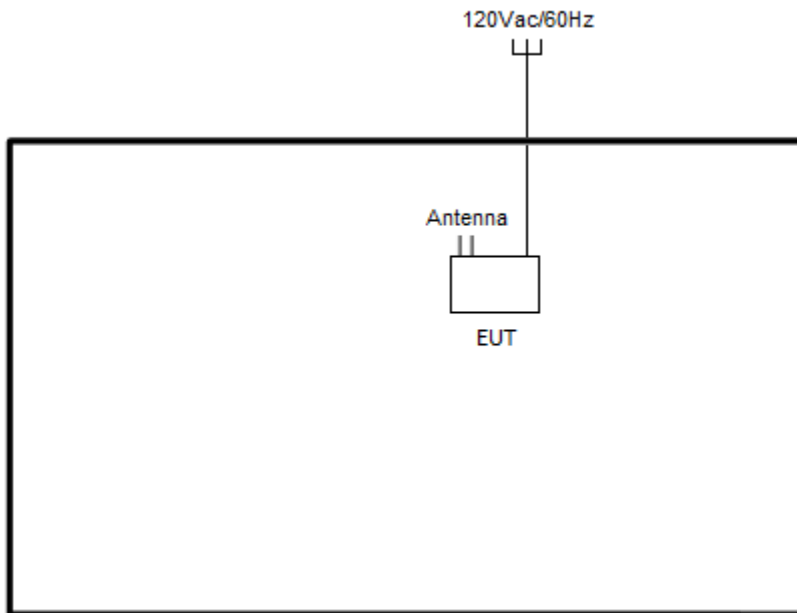
802.11n HT20 RF Avg. Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
Duty Cycle (%)		65.31		48.00	39.29	33.33	25.55	20.16	18.90	18.16
CH 01	2412	14.80	CH 06	16.07	16.11	16.27	16.21	16.09	16.08	15.94
CH 06	2437	16.28								
CH 11	2462	13.08								

## 2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<Radiation Emission Mode>





## 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

## 2.5 EUT Operation Test Setup

The RF test items, utility “Putty” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

## 2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example:

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

*Offset = RF cable loss + attenuator factor.*

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

*Offset(dB) = RF cable loss(dB) + attenuator factor(dB).*

*= 4.2 + 10 = 14.2 (dB)*

### 3 Test Result

#### 3.1 6dB and 99% Bandwidth Measurement

##### 3.1.1 Limit of 6dB and 99% Bandwidth

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

##### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

##### 3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v04.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 1MHz and set the Video bandwidth (VBW) = 3MHz.
6. Measure and record the results in the test report.

##### 3.1.4 Test Setup

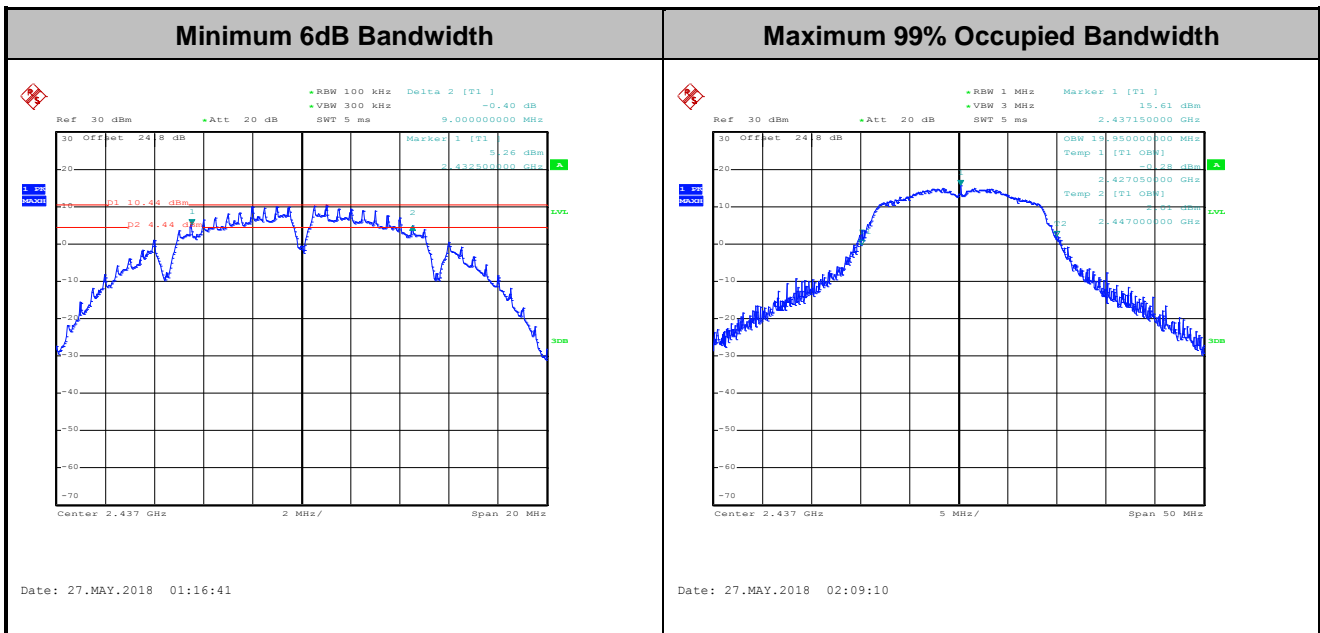




3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

2.4GHz Band								
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
					Ant. 1	Ant. 1		
11b	1Mbps	1	1	2412	14.20	9.04	0.50	Pass
11b	1Mbps	1	6	2437	14.25	<b>9.00</b>	0.50	Pass
11b	1Mbps	1	11	2462	14.20	<b>9.00</b>	0.50	Pass
11g	6Mbps	1	1	2412	18.60	15.08	0.50	Pass
11g	6Mbps	1	6	2437	18.75	15.10	0.50	Pass
11g	6Mbps	1	11	2462	18.30	15.06	0.50	Pass
HT20	MCS0	1	1	2412	19.70	15.04	0.50	Pass
HT20	MCS0	1	6	2437	<b>19.95</b>	15.08	0.50	Pass
HT20	MCS0	1	11	2462	19.50	15.00	0.50	Pass



**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 with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

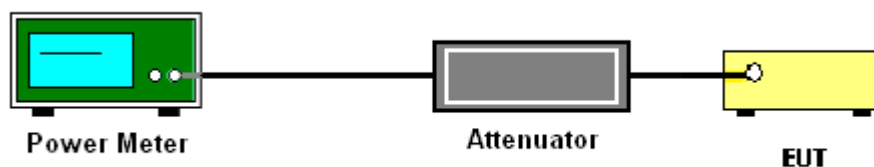
### 3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.2.3 Test Procedures

1. For Peak Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v04 section 9.1.3 PKPM1 Peak power meter method.
2. For Average Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v04 section 9.2.3.2 Method AVGPM-G.
3. 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.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. 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

Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
					Ant. 1	Ant. 1	Ant. 1	Ant. 1	Ant. 1	
11b	1Mbps	1	1	2412	20.54	30.00	2.95	23.49	36.00	Pass
11b	1Mbps	1	6	2437	21.02	30.00	2.95	23.97	36.00	Pass
11b	1Mbps	1	11	2462	20.26	30.00	2.95	23.21	36.00	Pass
11g	6Mbps	1	1	2412	23.15	30.00	2.95	26.10	36.00	Pass
11g	6Mbps	1	6	2437	23.32	30.00	2.95	26.27	36.00	Pass
11g	6Mbps	1	11	2462	22.74	30.00	2.95	25.69	36.00	Pass
HT20	MCS0	1	1	2412	22.77	30.00	2.95	25.72	36.00	Pass
HT20	MCS0	1	6	2437	23.40	30.00	2.95	26.35	36.00	Pass
HT20	MCS0	1	11	2462	22.06	30.00	2.95	25.01	36.00	Pass



3.2.6 Test Result of Average output Power

Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

2.4GHz Band						
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
					Ant. 1	Ant. 1
11b	1Mbps	1	1	2412	0.34	18.37
11b	1Mbps	1	6	2437	0.34	<b>18.60</b>
11b	1Mbps	1	11	2462	0.34	18.06
11g	6Mbps	1	1	2412	1.75	15.15
11g	6Mbps	1	6	2437	1.75	16.36
11g	6Mbps	1	11	2462	1.75	13.78
HT20	MCS0	1	1	2412	1.85	14.80
HT20	MCS0	1	6	2437	1.85	16.28
HT20	MCS0	1	11	2462	1.85	13.08



### 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.

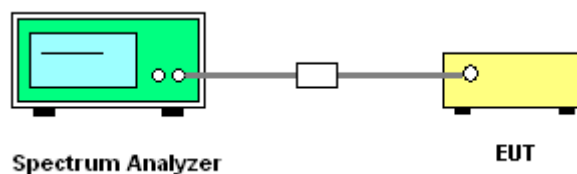
#### 3.3.2 Measuring Instruments

See list of measuring equipment 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 v04
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

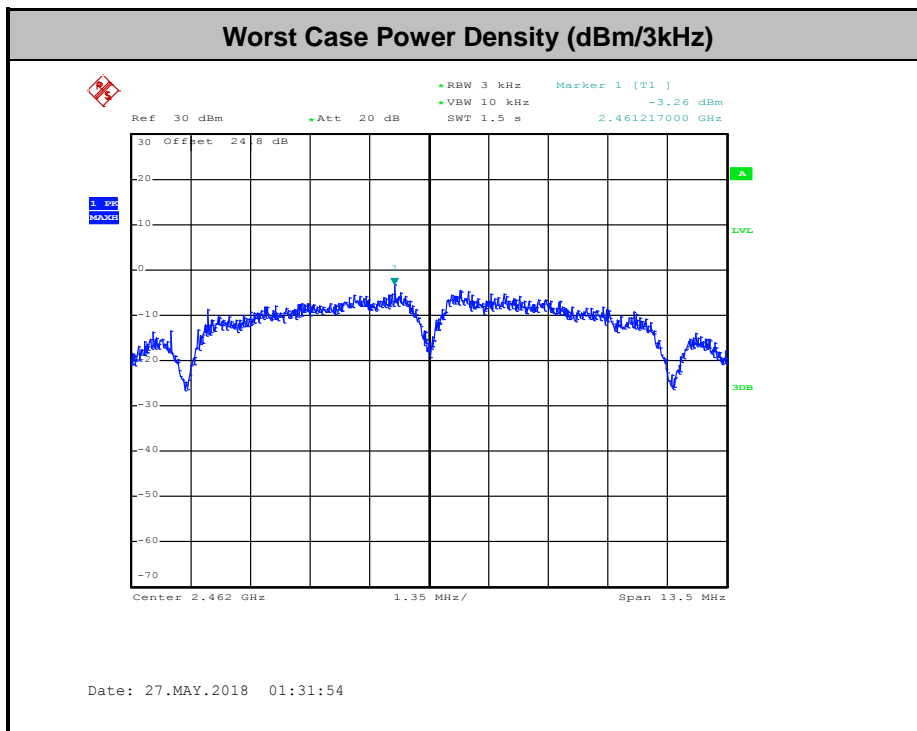




3.3.5 Test Result of Power Spectral Density

Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

2.4GHz Band								
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)	DG (dBi)	Peak PSD Limit (dBm/3kHz)	Pass/Fail
					Ant. 1	Ant. 1	Ant. 1	
11b	1Mbps	1	1	2412	-3.47	2.95	8.00	Pass
11b	1Mbps	1	6	2437	-3.87	2.95	8.00	Pass
11b	1Mbps	1	11	2462	<b>-3.26</b>	2.95	8.00	Pass
11g	6Mbps	1	1	2412	-8.93	2.95	8.00	Pass
11g	6Mbps	1	6	2437	-7.17	2.95	8.00	Pass
11g	6Mbps	1	11	2462	-11.30	2.95	8.00	Pass
HT20	MCS0	1	1	2412	-10.58	2.95	8.00	Pass
HT20	MCS0	1	6	2437	-8.62	2.95	8.00	Pass
HT20	MCS0	1	11	2462	-11.03	2.95	8.00	Pass



## 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.

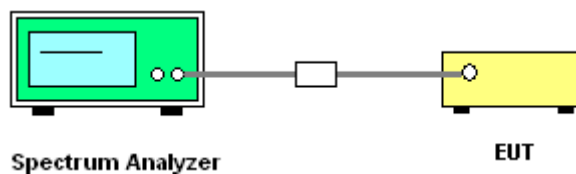
### 3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.4.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
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

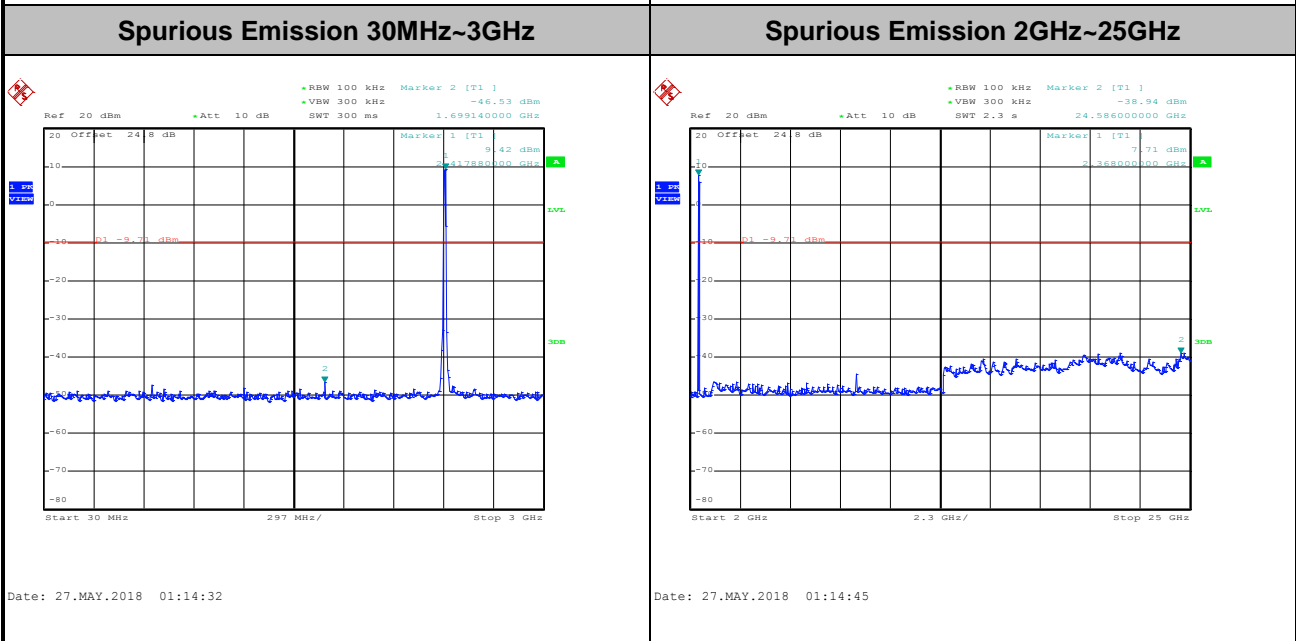
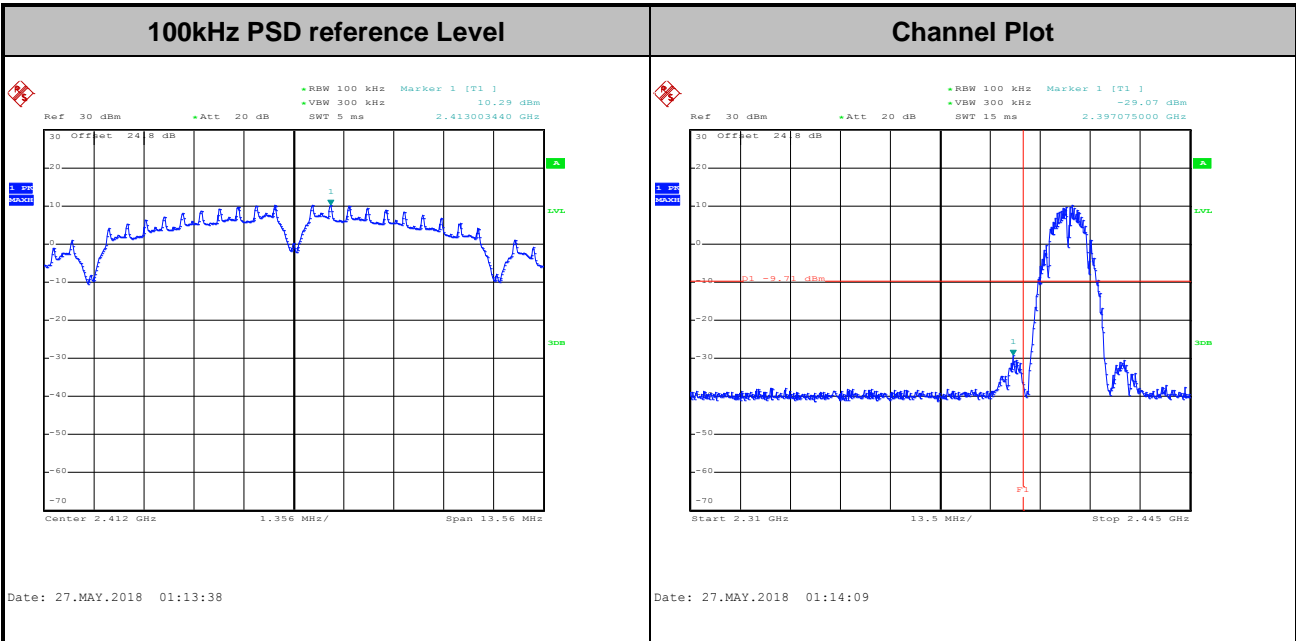




3.4.5 Test Result of Conducted Band Edges and Spurious Emission

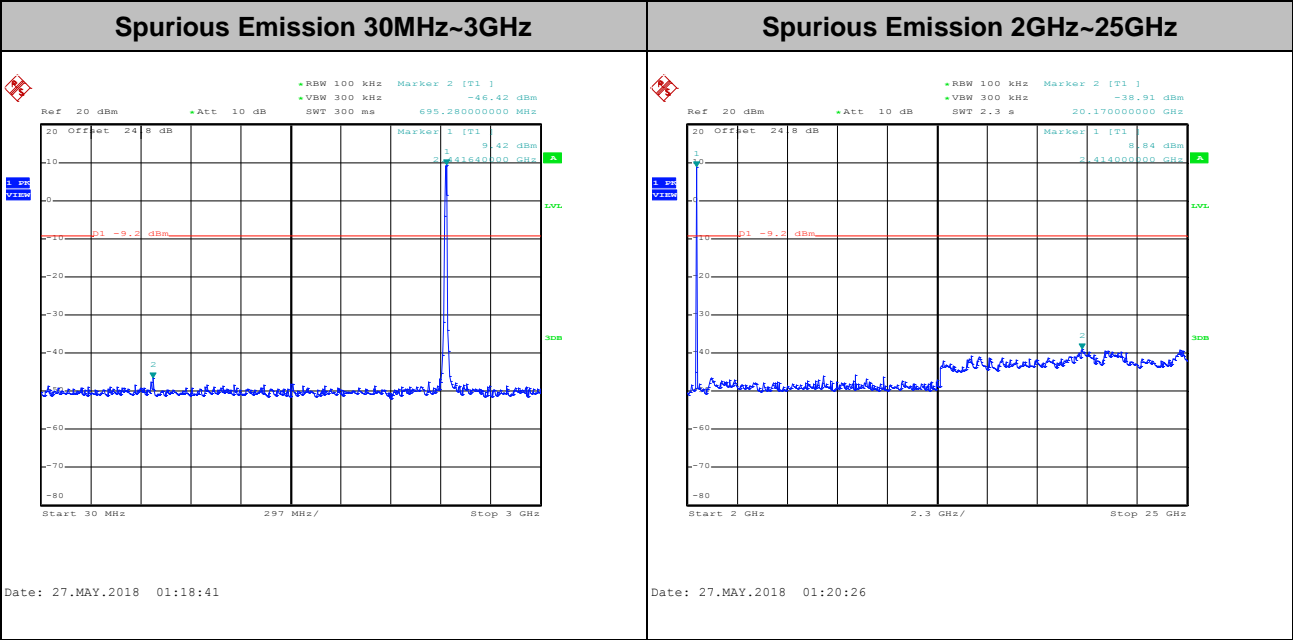
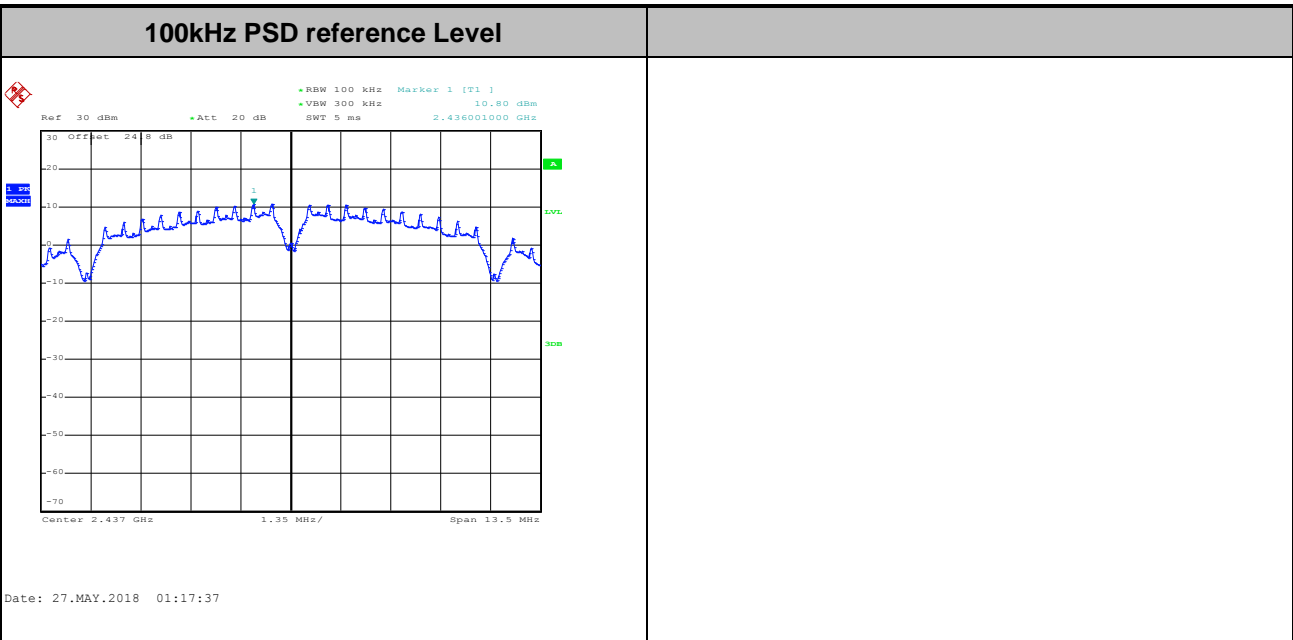
Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

Test Mode :	802.11b	Test Channel :	01
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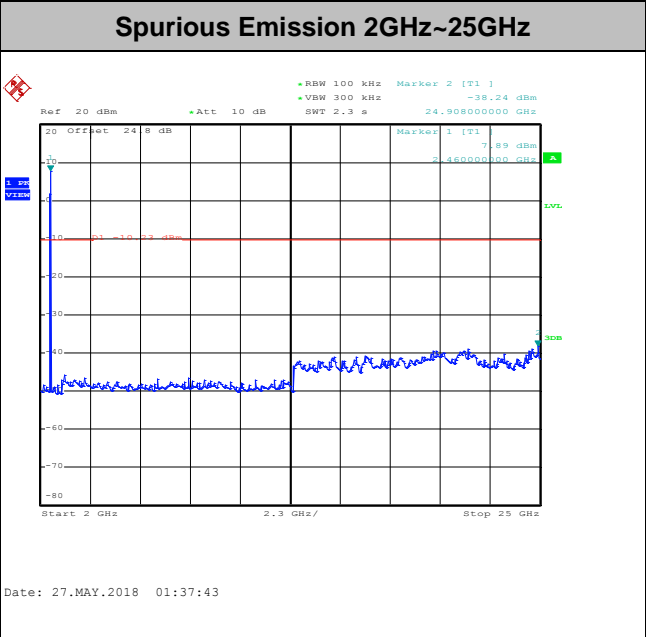
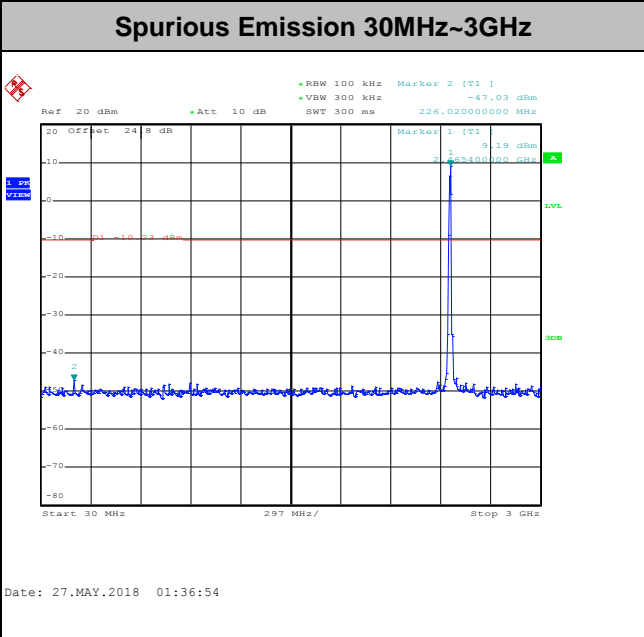
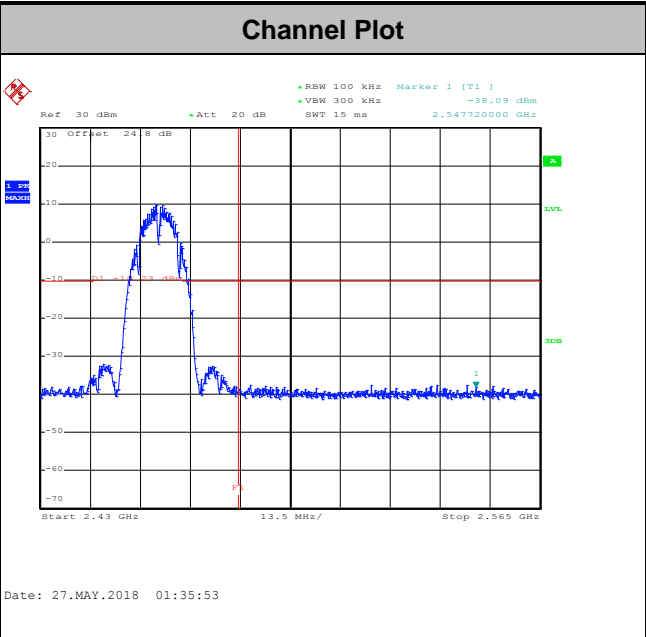
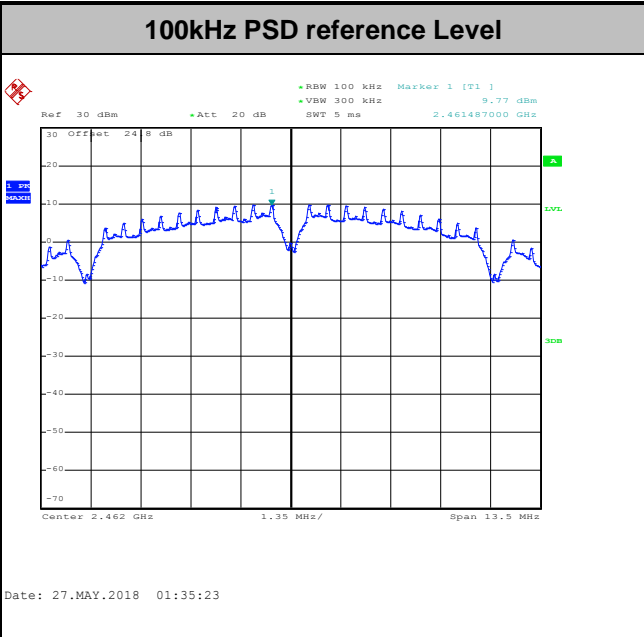


Test Mode :	802.11b	Test Channel :	06
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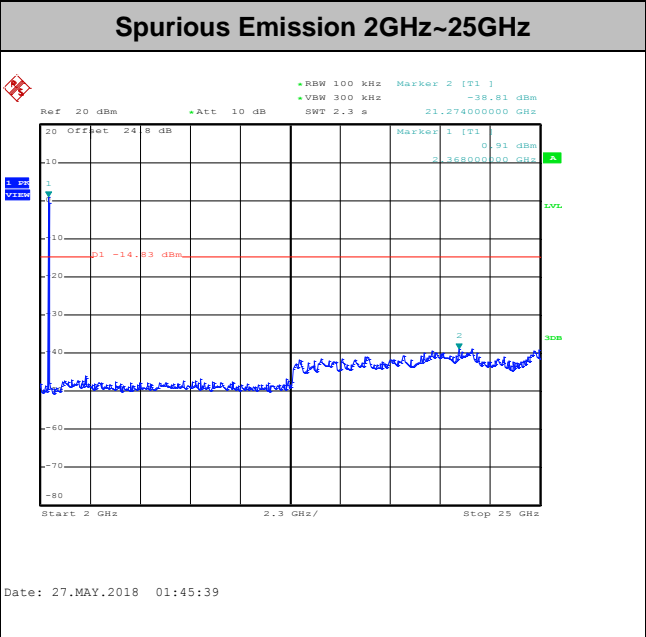
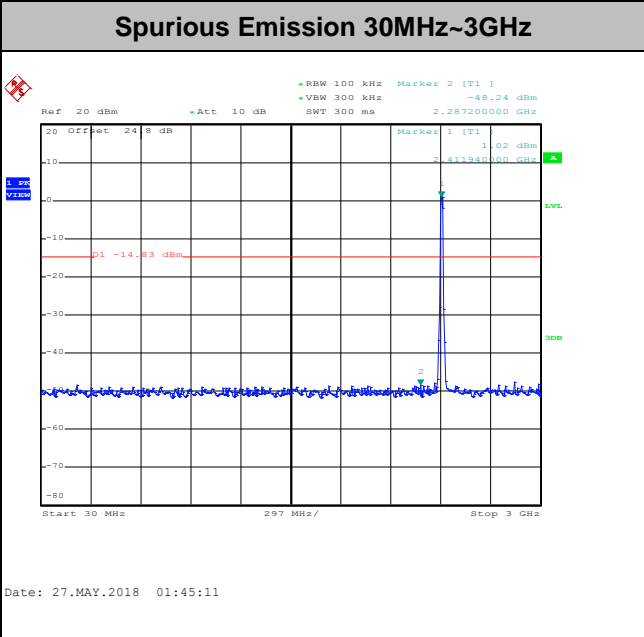
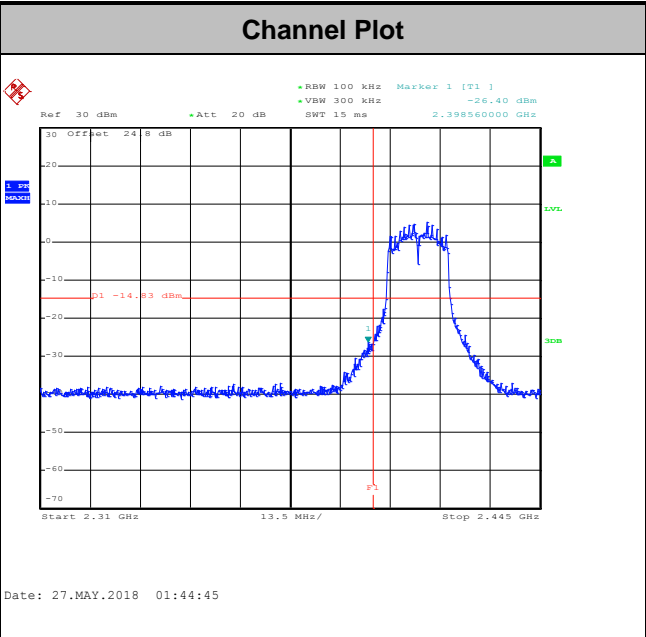
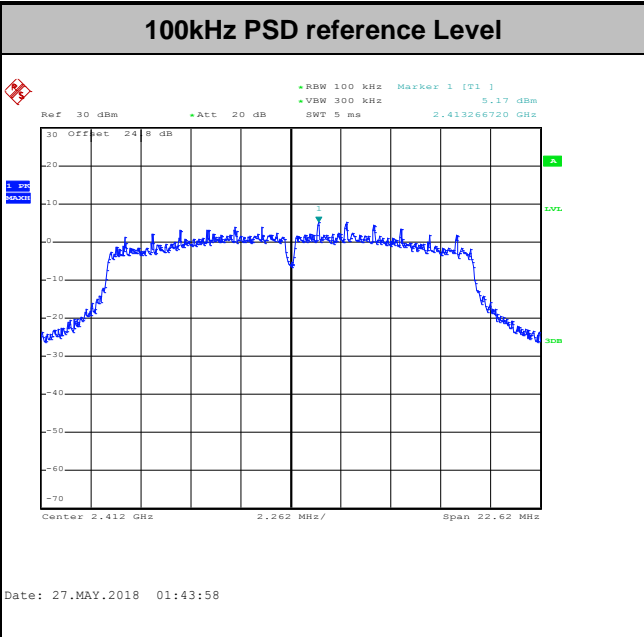


Test Mode :	802.11b	Test Channel :	11
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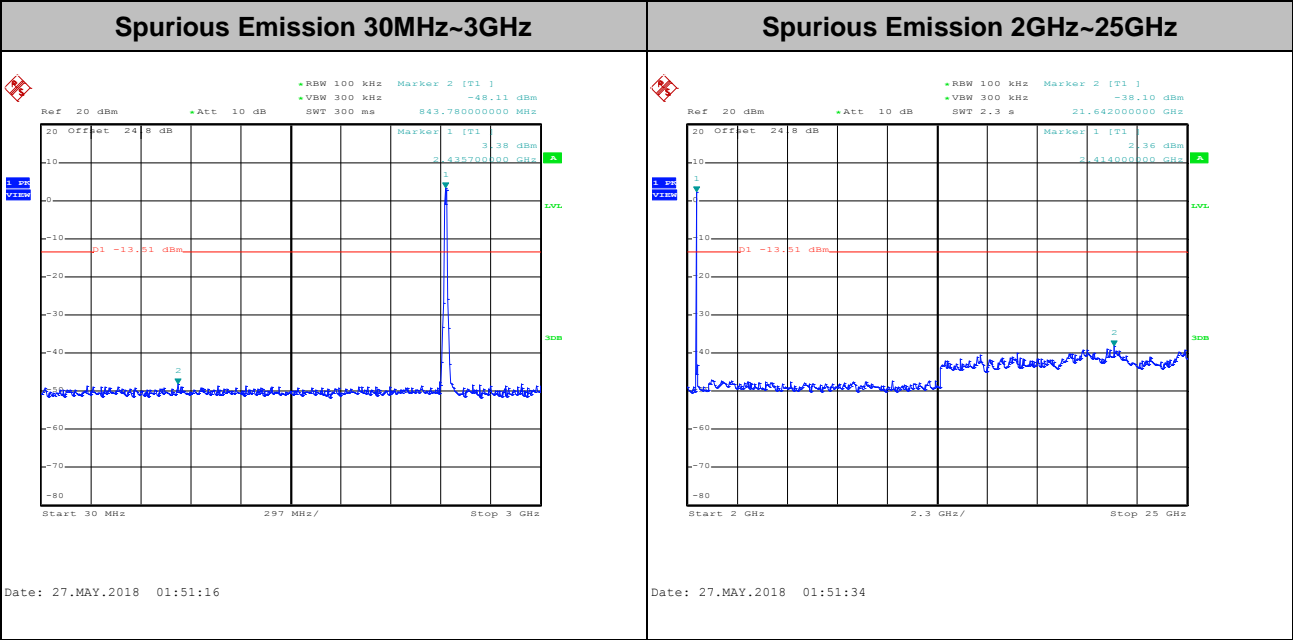
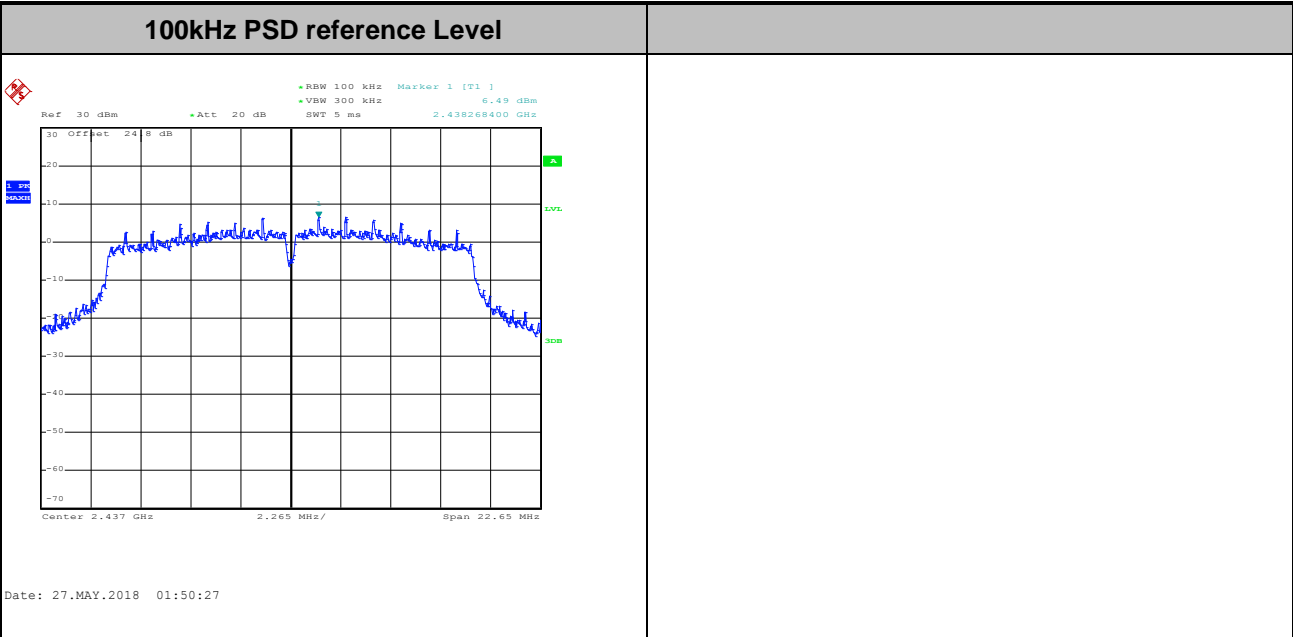


Test Mode : 802.11g Test Channel : 01





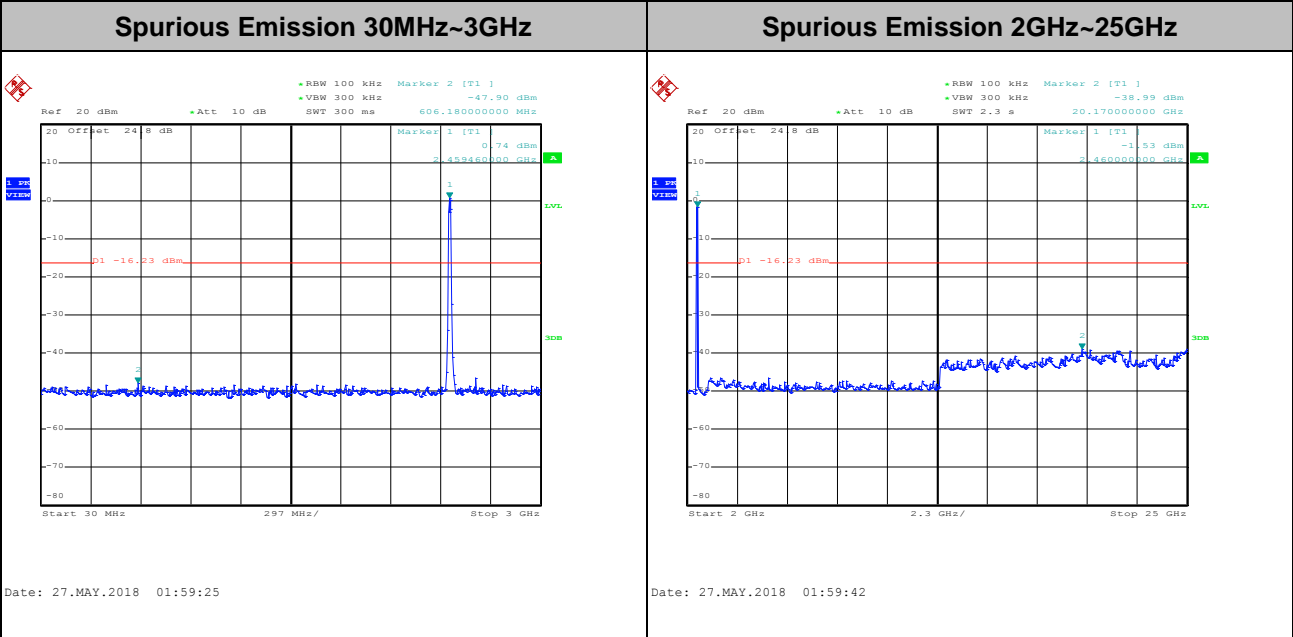
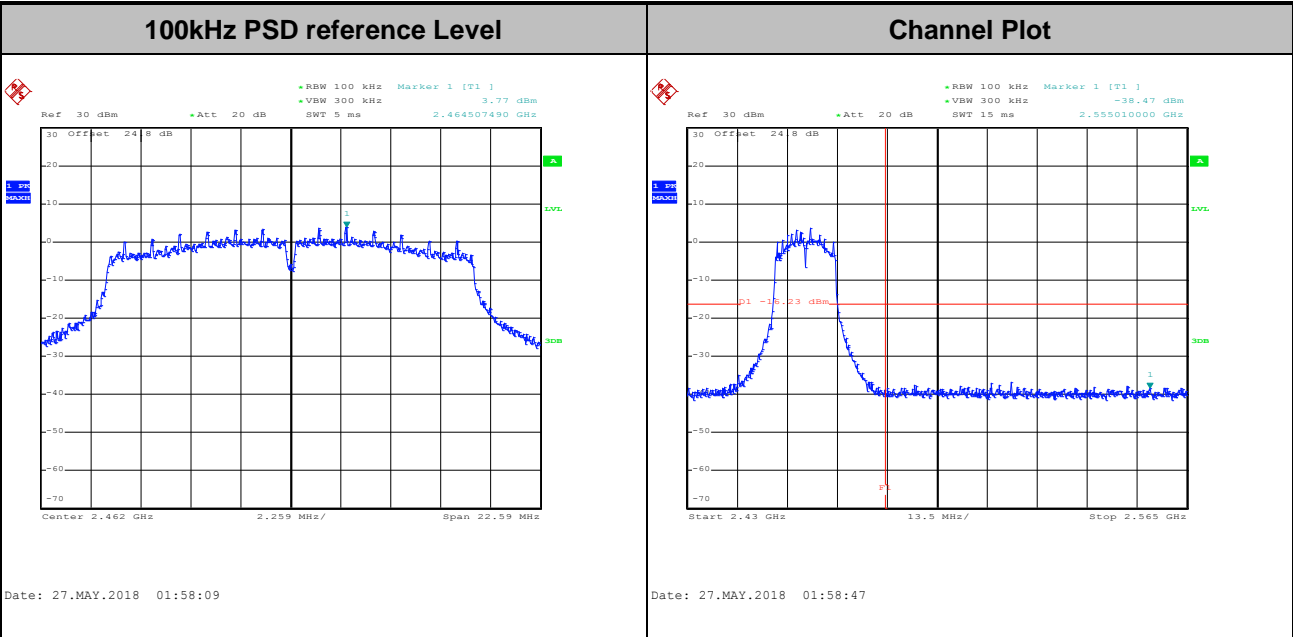
Test Mode :	802.11g	Test Channel :	06
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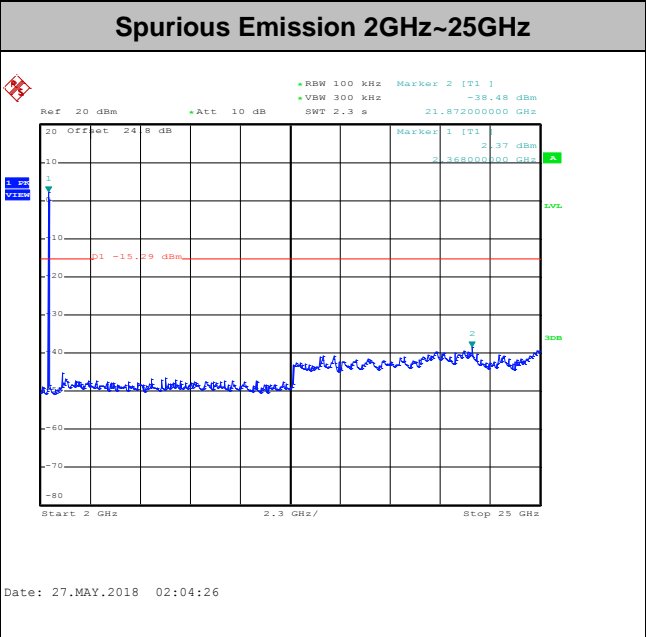
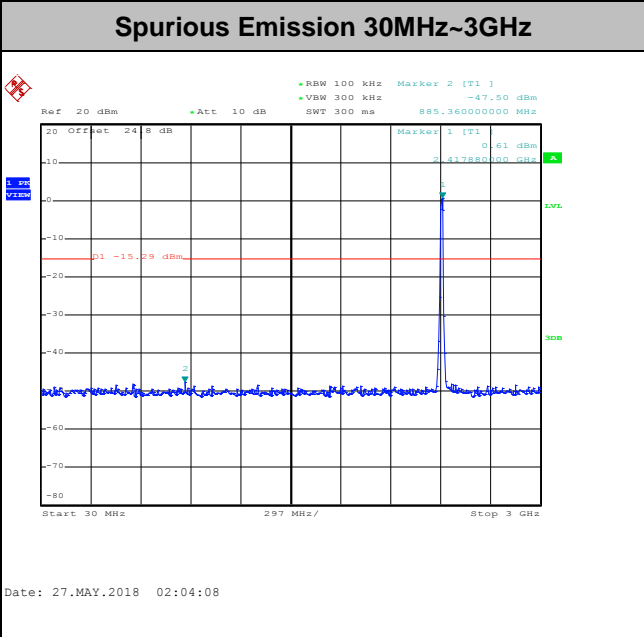
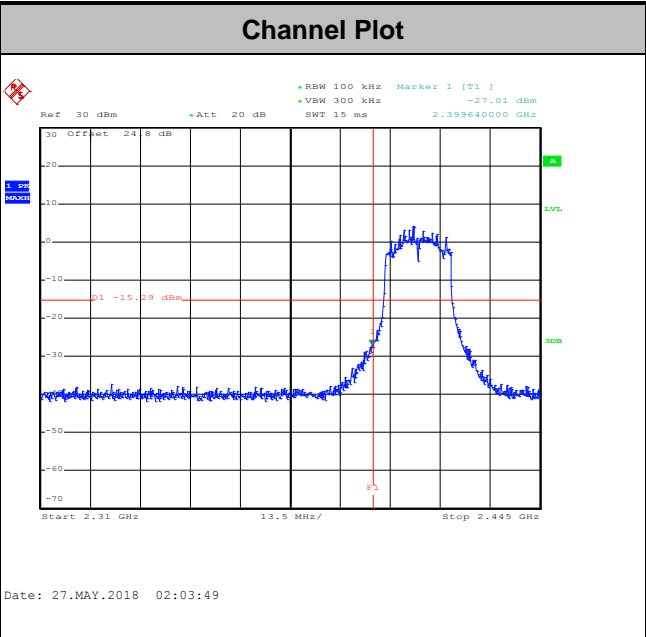
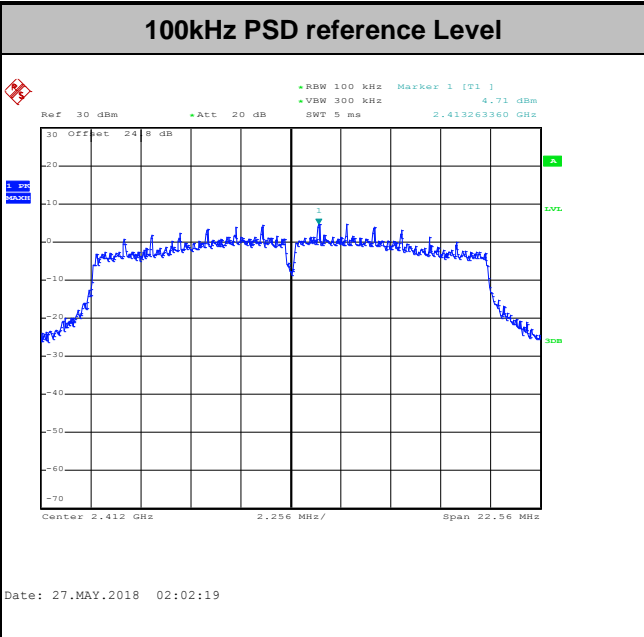


Test Mode :	802.11g	Test Channel :	11
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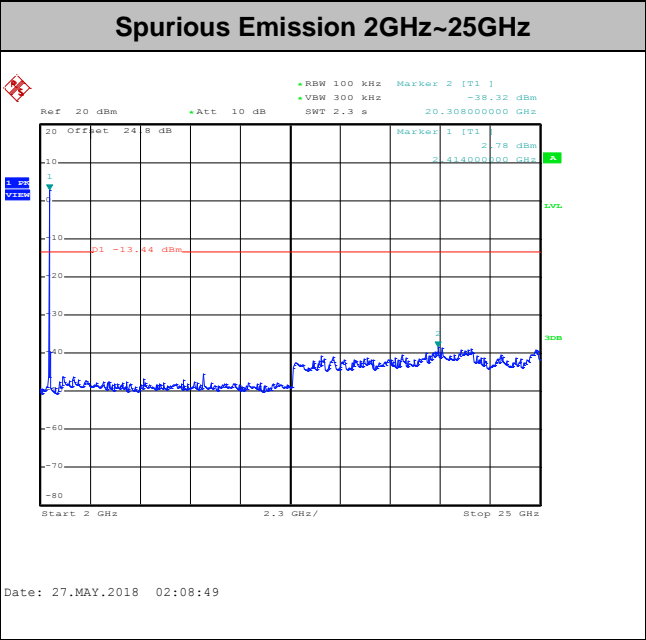
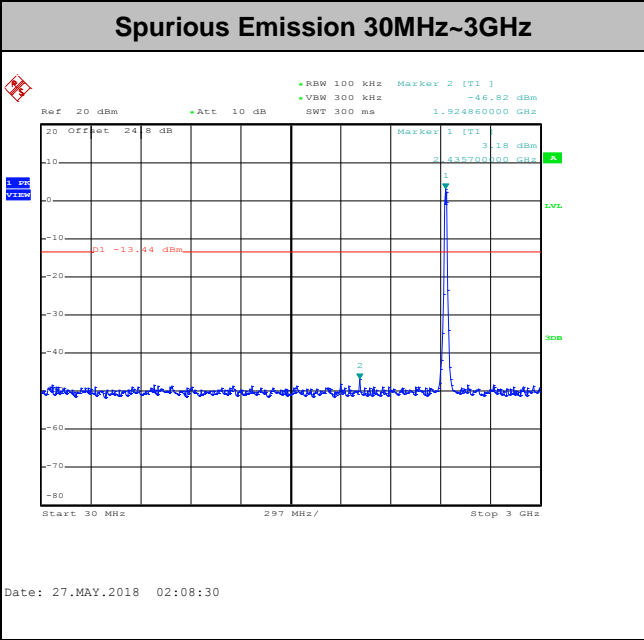
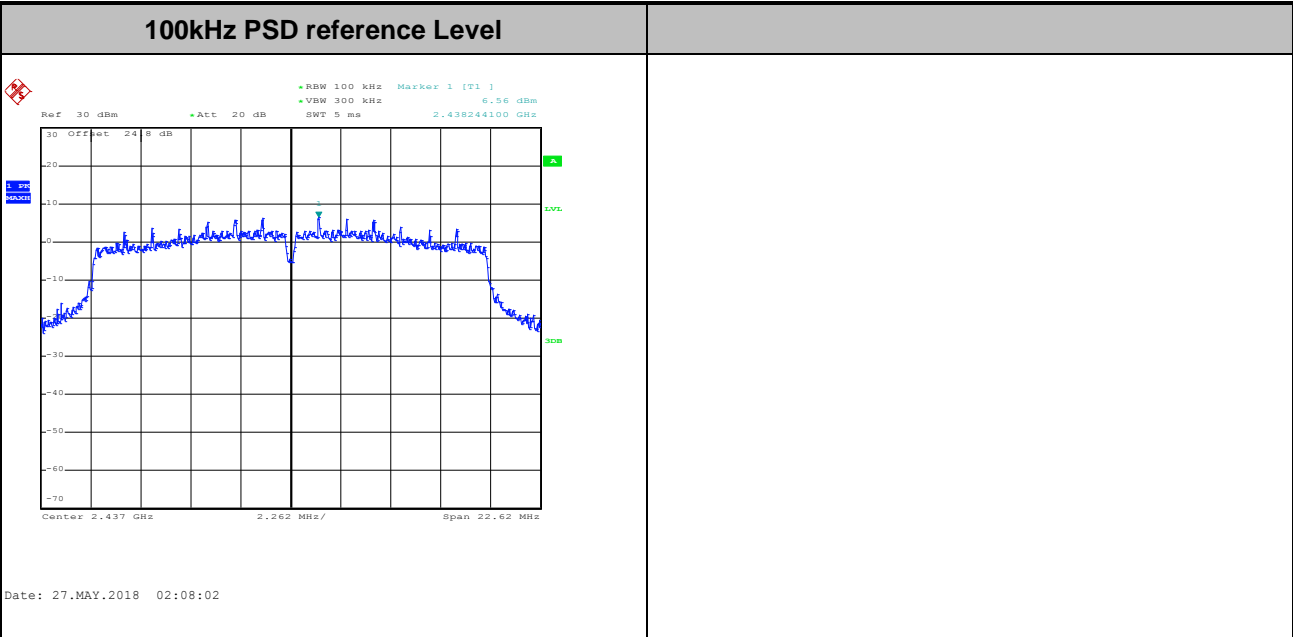


Test Mode :	802.11n HT20	Test Channel :	01
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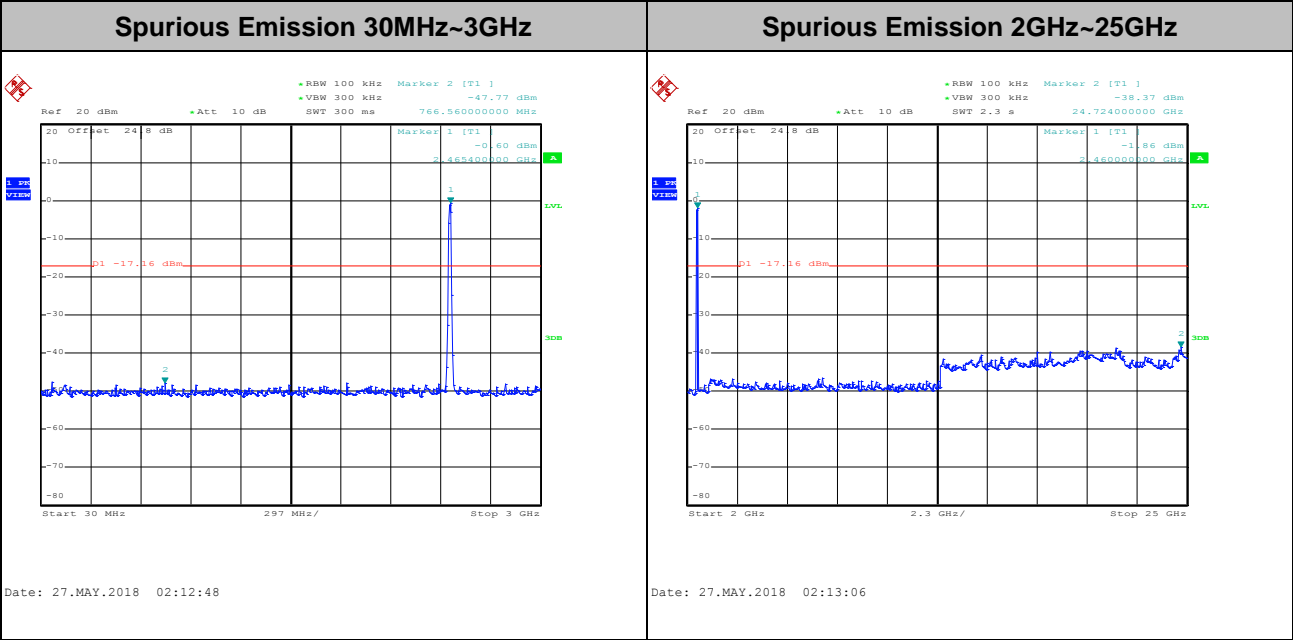
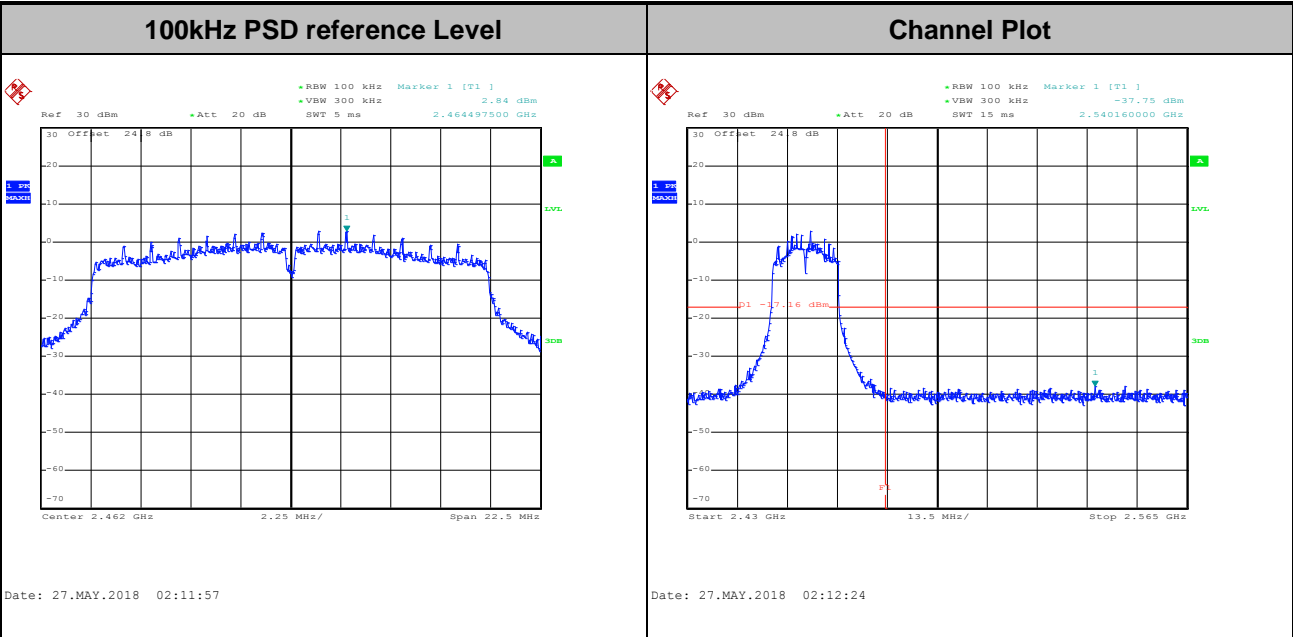


Test Mode :	802.11n HT20	Test Channel :	06
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Test Mode :	802.11n HT20	Test Channel :	11
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### 3.5 Radiated Band Edges and Spurious Emission Measurement

#### 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 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

See list of measuring equipment of this test report.

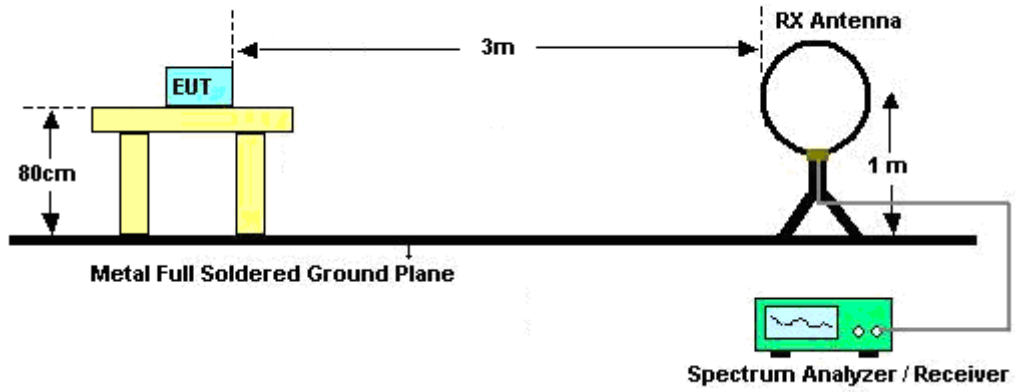


### 3.5.3 Test Procedures

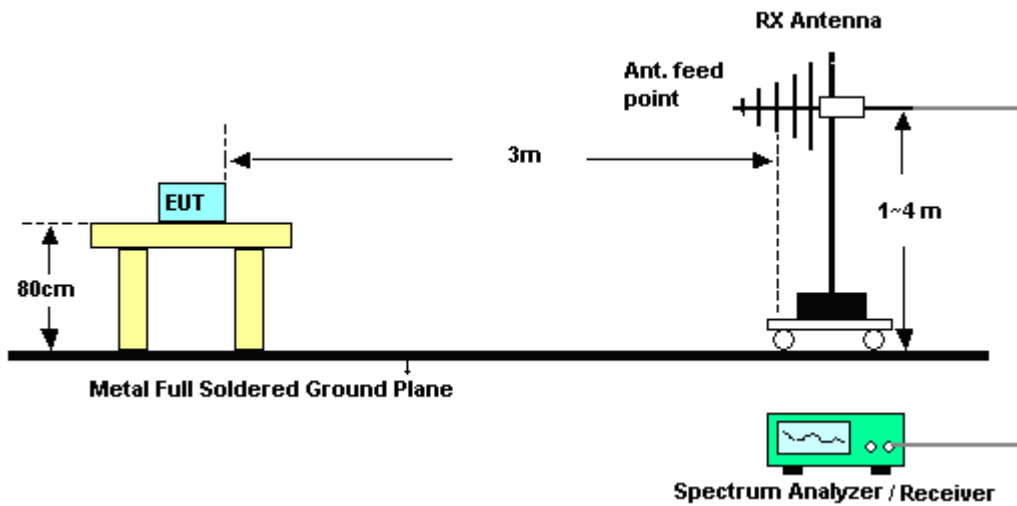
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v04.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test 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 testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. 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

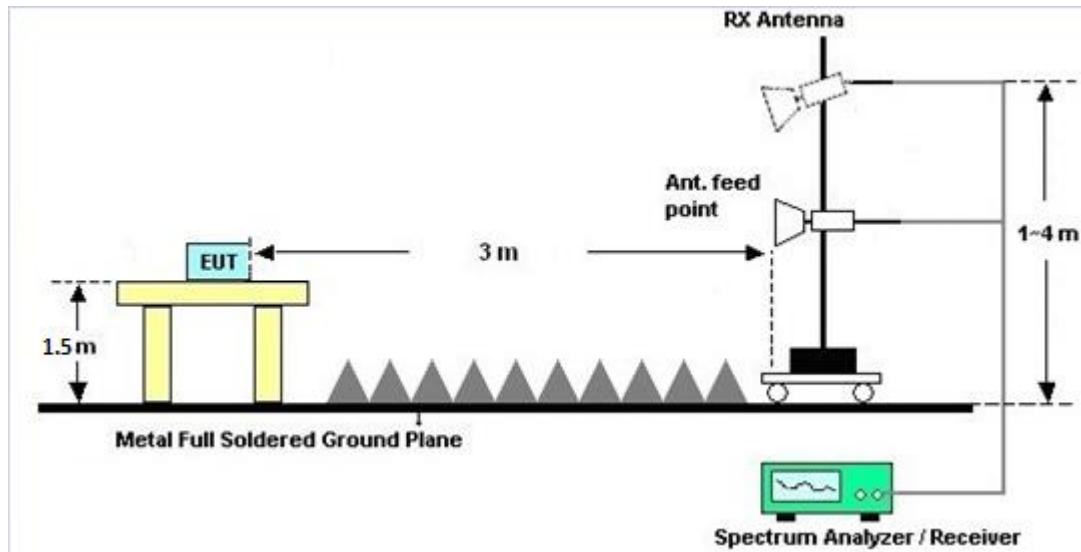
For radiated emissions below 30MHz



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 was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### 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 (dBµV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

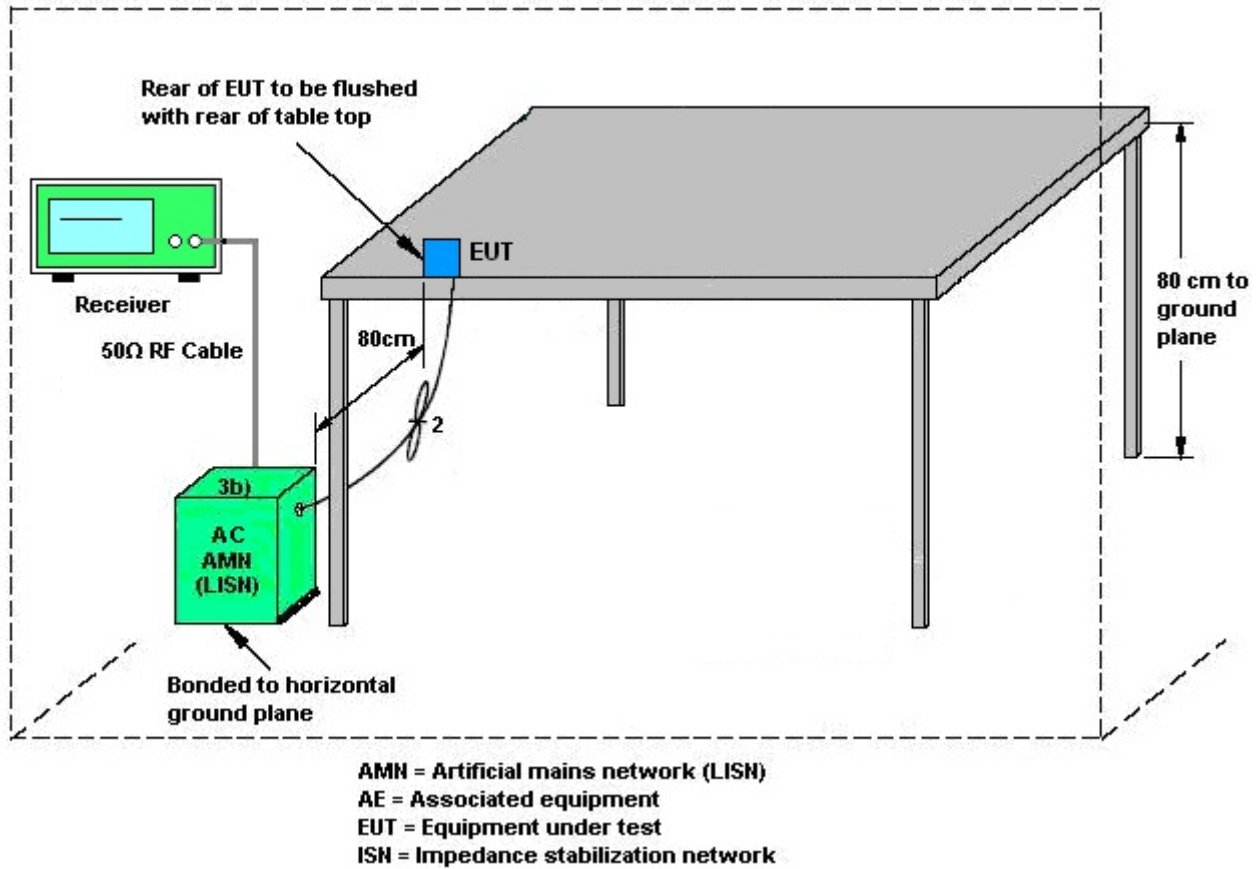
#### 3.6.2 Measuring Instruments

See list of measuring equipment 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

Please refer to Appendix A.



## **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. 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 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	1240001	N/A	Sep. 07, 2017	May 08, 2018~ May 27, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207349	300MHz~ 40GHz	Sep. 07, 2017	May 08, 2018~ May 27, 2018	Sep. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 20, 2017	May 08, 2018~ May 27, 2018	Jun. 19, 2018	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 11, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	May 11, 2018	Dec. 07, 2018	Conduction (CO05-HY)
ISN	TESEQ	ISN T8-Cat6	38909	N/A	Jan. 29, 2018	May 11, 2018	Jan. 28, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	May 11, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	May 11, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	May 11, 2018	Jan. 02, 2019	Conduction (CO05-HY)
ISN Cable	Woken	RG-400	N/A	N/A	Jan. 05, 2018	May 11, 2018	Jan. 04, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	May 11, 2018	Jan. 02, 2019	Conduction (CO05-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D&0080 0N1D01N-06	35419&03	30MHz to 1GHz	Dec. 18, 2017	May 31, 2018 ~ Jun. 03, 2018	Dec. 17, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	May 31, 2018 ~ Jun. 03, 2018	Aug. 22, 2018	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	May 31, 2018 ~ Jun. 03, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-001 01800-30-10 P	1590075	1GHz ~ 18GHz	Apr. 25, 2018	May 31, 2018 ~ Jun. 03, 2018	Apr. 24, 2019	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	May 21, 2018	May 31, 2018 ~ Jun. 03, 2018	May 20, 2019	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Oct. 30, 2017	May 31, 2018 ~ Jun. 03, 2018	Oct. 29, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2018	May 31, 2018 ~ Jun. 03, 2018	Apr. 16, 2019	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	May 31, 2018 ~ Jun. 03, 2018	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	May 31, 2018 ~ Jun. 03, 2018	N/A	Radiation (03CH07-HY)
Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	May 31, 2018 ~ Jun. 03, 2018	Jul. 17, 2018	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Nov. 10, 2017	May 31, 2018 ~ Jun. 03, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY53290053	20Hz to 26.5GHz	Jan. 16, 2018	May 31, 2018 ~ Jun. 03, 2018	Jan. 15, 2019	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8- 24	80504004656H	N/A	N/A	May 31, 2018 ~ Jun. 03, 2018	N/A	Radiation (03CH07-HY)
Filter	Microwave	H1G013G1	SN477215	1.0G High Pass	Dec. 07, 2017	May 31, 2018 ~ Jun. 03, 2018	Dec. 06, 2018	Radiation (03CH07-HY)
Filter	Wainwright	WLKS1200-8 SS	SN3	1.2G Low Pass	Nov. 21, 2017	May 31, 2018 ~ Jun. 03, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
Filter	Microwave	H3G018G1	SN477220	3.0G High Pass	Nov. 21, 2017	May 31, 2018 ~ Jun. 03, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
Filter	Microwave	WHKX7.0/26. 5G-6SS	SN4	7G High Pass	Nov. 21, 2017	May 31, 2018 ~ Jun. 03, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4,MY 28655/4	9KHz~30MHz	Jan. 02, 2018	May 31, 2018 ~ Jun. 03, 2018	Jan. 01, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 27, 2018	May 31, 2018 ~ Jun. 03, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 27, 2018	May 31, 2018 ~ Jun. 03, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 27, 2018	May 31, 2018 ~ Jun. 03, 2018	Feb. 26, 2019	Radiation (03CH07-HY)



## 5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.7
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.7
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.5
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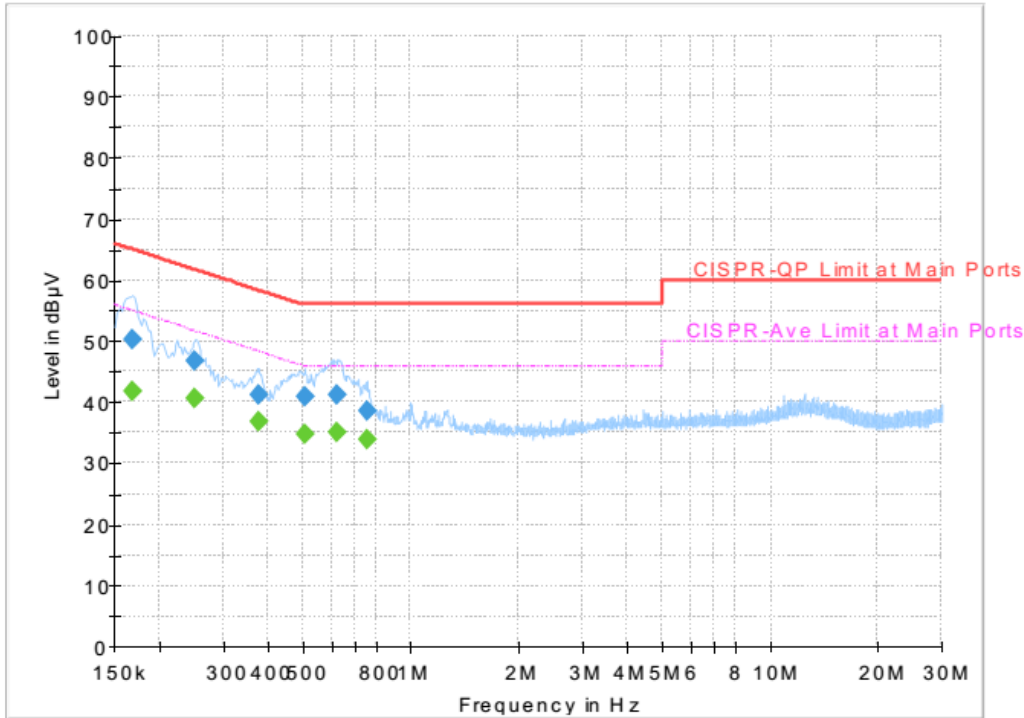
### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.2
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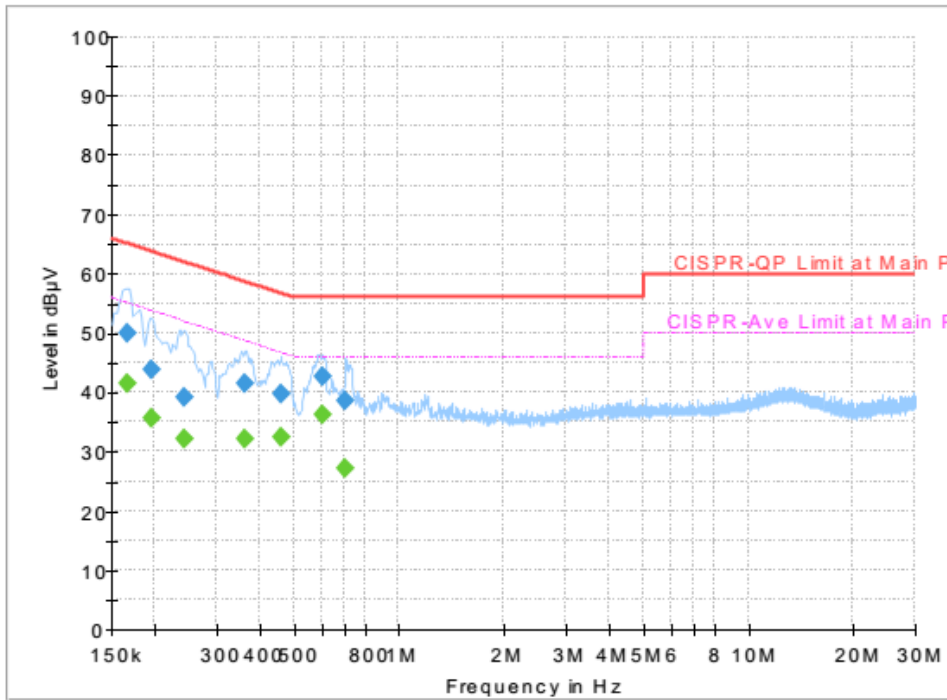
## Appendix A. AC Conducted Emission Test Results

Test Engineer :	Kai-Chun Chu	Temperature :	25~27°C
		Relative Humidity :	50~52%



### Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.168000	---	41.78	55.06	13.28	L1	OFF	19.5
0.168000	50.34	---	65.06	14.72	L1	OFF	19.5
0.251250	---	40.67	51.72	11.05	L1	OFF	19.5
0.251250	46.65	---	61.72	15.07	L1	OFF	19.5
0.377250	---	36.85	48.34	11.49	L1	OFF	19.5
0.377250	41.27	---	58.34	17.07	L1	OFF	19.5
0.507750	---	34.75	46.00	11.25	L1	OFF	19.5
0.507750	40.95	---	56.00	15.05	L1	OFF	19.5
0.622500	---	35.07	46.00	10.93	L1	OFF	19.5
0.622500	41.28	---	56.00	14.72	L1	OFF	19.5
0.753000	---	33.90	46.00	12.10	L1	OFF	19.5
0.753000	38.51	---	56.00	17.49	L1	OFF	19.5



**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.165750	---	41.53	55.17	13.64	N	OFF	19.5
0.165750	50.00	---	65.17	15.17	N	OFF	19.5
0.195000	---	35.55	53.82	18.27	N	OFF	19.5
0.195000	43.83	---	63.82	19.99	N	OFF	19.5
0.242250	---	32.06	52.02	19.96	N	OFF	19.5
0.242250	39.18	---	62.02	22.84	N	OFF	19.5
0.361500	---	32.28	48.69	16.41	N	OFF	19.5
0.361500	41.40	---	58.69	17.29	N	OFF	19.5
0.458250	---	32.31	46.72	14.41	N	OFF	19.5
0.458250	39.70	---	56.72	17.02	N	OFF	19.5
0.602250	---	36.36	46.00	9.64	N	OFF	19.5
0.602250	42.80	---	56.00	13.20	N	OFF	19.5
0.701250	---	27.32	46.00	18.68	N	OFF	19.5
0.701250	38.71	---	56.00	17.29	N	OFF	19.5





## Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang and Stan Hsieh	Temperature :	21~23°C
		Relative Humidity :	51~54%

### 2.4GHz 2400~2483.5MHz

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11b CH 01 2412MHz		2373.315	55.04	-18.96	74	40.8	31.91	17.37	35.04	173	336	P	H	
		2386.23	46.42	-7.58	54	32.08	31.95	17.43	35.04	173	336	A	H	
	*	2412	103.73	-	-	89.36	31.99	17.43	35.05	173	336	P	H	
	*	2412	100.62	-	-	86.25	31.99	17.43	35.05	173	336	A	H	
													H	
													H	
			2386.02	57.65	-16.35	74	43.31	31.95	17.43	35.04	268	330	P	V
			2386.23	50.79	-3.21	54	36.45	31.95	17.43	35.04	268	330	A	V
	*		2412	111.82	-	-	97.45	31.99	17.43	35.05	268	330	P	V
	*		2412	108.86	-	-	94.49	31.99	17.43	35.05	268	330	A	V
													V	
													V	
802.11b CH 02 2417MHz		2380	55.28	-18.72	74	41.04	31.91	17.37	35.04	176	337	P	H	
		2388.82	46.11	-7.89	54	31.77	31.95	17.43	35.04	176	337	A	H	
	*	2417	105.13	-	-	90.77	31.99	17.43	35.06	176	337	P	H	
	*	2417	101.99	-	-	87.63	31.99	17.43	35.06	176	337	A	H	
													H	
													H	
			2387	57.3	-16.7	74	42.96	31.95	17.43	35.04	272	333	P	V
			2388.68	49.19	-4.81	54	34.85	31.95	17.43	35.04	272	333	A	V
	*		2417	112.41	-	-	98.05	31.99	17.43	35.06	272	333	P	V
	*		2417	109.16	-	-	94.8	31.99	17.43	35.06	272	333	A	V
													V	
													V	



<b>802.11b CH 06 2437MHz</b>		2324.28	54.2	-19.8	74	40.12	31.79	17.31	35.02	198	341	P	H
		2388.82	45.04	-8.96	54	30.7	31.95	17.43	35.04	198	341	A	H
	*	2437	106.02	-	-	91.51	32.08	17.49	35.06	198	341	P	H
	*	2437	102.78	-	-	88.27	32.08	17.49	35.06	198	341	A	H
		2495.59	55.31	-18.69	74	40.64	32.2	17.55	35.08	198	341	P	H
		2484.39	45.3	-8.7	54	30.66	32.16	17.55	35.07	198	341	A	H
		2386.72	54.53	-19.47	74	40.19	31.95	17.43	35.04	292	337	P	V
		2389.8	45.44	-8.56	54	31.11	31.95	17.43	35.05	292	337	A	V
	*	2437	111.9	-	-	97.39	32.08	17.49	35.06	292	337	P	V
	*	2437	108.76	-	-	94.25	32.08	17.49	35.06	292	337	A	V
		2496.01	55.3	-18.7	74	40.63	32.2	17.55	35.08	292	337	P	V
		2485.65	45.79	-8.21	54	31.15	32.16	17.55	35.07	292	337	A	V
	<b>802.11b CH 10 2457MHz</b>	*	2457	105.99	-	-	91.44	32.12	17.49	35.06	176	338	P
*		2457	102.78	-	-	88.23	32.12	17.49	35.06	176	338	A	H
		2492.44	55.25	-18.75	74	40.58	32.2	17.55	35.08	176	338	P	H
		2483.68	46.74	-7.26	54	32.1	32.16	17.55	35.07	176	338	A	H
													H
													H
*		2457	112.09	-	-	97.54	32.12	17.49	35.06	354	332	P	V
*		2457	108.96	-	-	94.41	32.12	17.49	35.06	354	332	A	V
		2485.9	57.5	-16.5	74	42.86	32.16	17.55	35.07	354	332	P	V
		2483.68	50.83	-3.17	54	36.19	32.16	17.55	35.07	354	332	A	V
													V
												V	



<b>802.11b</b> <b>CH 11</b> <b>2462MHz</b>	*	2462	105.27	-	-	90.66	32.12	17.55	35.06	149	336	P	H
	*	2462	102.22	-	-	87.61	32.12	17.55	35.06	149	336	A	H
		2499.32	55.02	-18.98	74	40.35	32.2	17.55	35.08	149	336	P	H
		2488	46.19	-7.81	54	31.51	32.2	17.55	35.07	149	336	A	H
													H
													H
	*	2462	111.71	-	-	97.1	32.12	17.55	35.06	353	330	P	V
	*	2462	108.35	-	-	93.74	32.12	17.55	35.06	353	330	A	V
		2488.96	57.89	-16.11	74	43.21	32.2	17.55	35.07	353	330	P	V
		2488.44	50.51	-3.49	54	35.83	32.2	17.55	35.07	353	330	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH 01 2412MHz		4824	42.93	-31.07	74	56.92	34.23	11.12	59.34	100	0	P	H
		12060	54.16	-19.84	74	53.28	38.83	18.71	56.66	100	181	P	H
		12060	47.6	-6.4	54	46.72	38.83	18.71	56.66	100	181	A	H
													H
		4824	44.49	-29.51	74	58.48	34.23	11.12	59.34	100	0	P	V
		12060	56.67	-17.33	74	55.79	38.83	18.71	56.66	295	351	P	V
		12060	50.12	-3.88	54	49.24	38.83	18.71	56.66	295	351	A	V
802.11b CH 06 2437MHz		4874	42.59	-31.41	74	56.45	34.22	11.16	59.24	100	0	P	H
		7311	42.09	-31.91	74	50.9	35.71	13.61	58.13	100	0	P	H
		12185	49.9	-24.1	74	48.95	38.88	18.82	56.75	100	0	P	H
													H
		4874	45.15	-28.85	74	59.01	34.22	11.16	59.24	100	0	P	V
		7311	43.76	-30.24	74	52.57	35.71	13.61	58.13	100	0	P	V
		12185	53.95	-20.05	74	53	38.88	18.82	56.75	309	145	P	V
		12185	47.35	-6.65	54	46.4	38.88	18.82	56.75	309	145	A	V
802.11b CH 11 2462MHz		4924	43.55	-30.45	74	57.26	34.21	11.22	59.14	100	0	P	H
		7386	42.61	-31.39	74	51.52	35.66	13.69	58.26	100	0	P	H
		12310	49.63	-24.37	74	48.66	38.92	18.9	56.85	100	0	P	H
													H
		4924	47.03	-26.97	74	60.74	34.21	11.22	59.14	100	0	P	V
		7386	44.49	-29.51	74	53.4	35.66	13.69	58.26	100	0	P	V
		12310	49.82	-24.18	74	48.85	38.92	18.9	56.85	100	0	P	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 (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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11g CH 01 2412MHz		2389.695	57.86	-16.14	74	43.52	31.95	17.43	35.04	173	336	P	H	
		2390	46.81	-7.19	54	32.48	31.95	17.43	35.05	173	336	A	H	
	*	2412	102.94	-	-	88.57	31.99	17.43	35.05	173	336	P	H	
	*	2412	95.56	-	-	81.19	31.99	17.43	35.05	173	336	A	H	
													H	
													H	
			2389.905	67.41	-6.59	74	53.08	31.95	17.43	35.05	269	330	P	V
			2390	52.24	-1.76	54	37.91	31.95	17.43	35.05	269	330	A	V
	*		2412	111.19	-	-	96.82	31.99	17.43	35.05	269	330	P	V
	*		2412	103.76	-	-	89.39	31.99	17.43	35.05	269	330	A	V
													V	
													V	
802.11g CH 02 2417MHz		2387.56	57.89	-16.11	74	43.55	31.95	17.43	35.04	176	338	P	H	
		2389.66	46.43	-7.57	54	32.09	31.95	17.43	35.04	176	338	A	H	
	*	2417	104.96	-	-	90.6	31.99	17.43	35.06	176	338	P	H	
	*	2417	97.07	-	-	82.71	31.99	17.43	35.06	176	338	A	H	
													H	
													H	
			2389.24	63.25	-10.75	74	48.91	31.95	17.43	35.04	268	331	P	V
			2389.94	51.04	-2.96	54	36.71	31.95	17.43	35.05	268	331	A	V
	*		2417	112.42	-	-	98.06	31.99	17.43	35.06	268	331	P	V
	*		2417	104.76	-	-	90.4	31.99	17.43	35.06	268	331	A	V
													V	
													V	



<b>802.11g CH 06 2437MHz</b>		2385.46	55.03	-18.97	74	40.73	31.91	17.43	35.04	197	341	P	H
		2388.96	44.89	-9.11	54	30.55	31.95	17.43	35.04	197	341	A	H
	*	2437	105.67	-	-	91.16	32.08	17.49	35.06	197	341	P	H
	*	2437	97.78	-	-	83.27	32.08	17.49	35.06	197	341	A	H
		2487.68	55.31	-18.69	74	40.63	32.2	17.55	35.07	197	341	P	H
		2488.31	45.4	-8.6	54	30.72	32.2	17.55	35.07	197	341	A	H
		2366.56	54.61	-19.39	74	40.41	31.87	17.37	35.04	290	336	P	V
		2389.52	45.18	-8.82	54	30.84	31.95	17.43	35.04	290	336	A	V
	*	2437	111.59	-	-	97.08	32.08	17.49	35.06	290	336	P	V
	*	2437	104	-	-	89.49	32.08	17.49	35.06	290	336	A	V
		2484.25	55.99	-18.01	74	41.35	32.16	17.55	35.07	290	336	P	V
		2484.25	45.86	-8.14	54	31.22	32.16	17.55	35.07	290	336	A	V
	<b>802.11g CH 10 2457MHz</b>	*	2457	105.89	-	-	91.34	32.12	17.49	35.06	175	339	P
*		2457	97.86	-	-	83.31	32.12	17.49	35.06	175	339	A	H
		2486.44	58.42	-15.58	74	43.78	32.16	17.55	35.07	175	339	P	H
		2483.5	47.2	-6.8	54	32.56	32.16	17.55	35.07	175	339	A	H
													H
													H
*		2457	111.76	-	-	97.21	32.12	17.49	35.06	353	332	P	V
*		2457	104.05	-	-	89.5	32.12	17.49	35.06	353	332	A	V
		2484.76	62.91	-11.09	74	48.27	32.16	17.55	35.07	353	332	P	V
		2483.74	51.32	-2.68	54	36.68	32.16	17.55	35.07	353	332	A	V
													V
												V	



<b>802.11g CH 11 2462MHz</b>	*	2462	104.07	-	-	89.46	32.12	17.55	35.06	147	336	P	H
	*	2462	96.39	-	-	81.78	32.12	17.55	35.06	147	336	A	H
		2483.64	56.54	-17.46	74	41.9	32.16	17.55	35.07	147	336	P	H
		2483.56	46.02	-7.98	54	31.38	32.16	17.55	35.07	147	336	A	H
													H
													H
	*	2462	109.46	-	-	94.85	32.12	17.55	35.06	354	342	P	V
	*	2462	102.11	-	-	87.5	32.12	17.55	35.06	354	342	A	V
		2484.64	62.84	-11.16	74	48.2	32.16	17.55	35.07	354	342	P	V
		2483.52	50.71	-3.29	54	36.07	32.16	17.55	35.07	354	342	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11g CH 01 2412MHz		4824	41.75	-32.25	74	55.74	34.23	11.12	59.34	100	0	P	H	
													H	
													H	
													H	
			4824	41.68	-32.32	74	55.67	34.23	11.12	59.34	100	0	P	V
														V
														V
802.11g CH 06 2437MHz		4874	41.22	-32.78	74	55.08	34.22	11.16	59.24	100	0	P	H	
		7311	41.87	-32.13	74	50.68	35.71	13.61	58.13	100	0	P	H	
													H	
													H	
			4874	41.66	-32.34	74	55.52	34.22	11.16	59.24	100	0	P	V
			7311	42.88	-31.12	74	51.69	35.71	13.61	58.13	100	0	P	V
														V
802.11g CH 11 2462MHz		4924	41.25	-32.75	74	54.96	34.21	11.22	59.14	100	0	P	H	
		7386	42.63	-31.37	74	51.54	35.66	13.69	58.26	100	0	P	H	
													H	
													H	
			4924	43.39	-30.61	74	57.1	34.21	11.22	59.14	100	0	P	V
			7386	43.26	-30.74	74	52.17	35.66	13.69	58.26	100	0	P	V
														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													





**2.4GHz 2400~2483.5MHz  
WIFI 802.11n 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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11n HT20 CH 01 2412MHz		2389.17	57.91	-16.09	74	43.57	31.95	17.43	35.04	173	338	P	H	
		2390	46.79	-7.21	54	32.46	31.95	17.43	35.05	173	338	A	H	
	*	2412	102.34	-	-	87.97	31.99	17.43	35.05	173	338	P	H	
	*	2412	94.6	-	-	80.23	31.99	17.43	35.05	173	338	A	H	
													H	
														H
			2389.59	66.48	-7.52	74	52.14	31.95	17.43	35.04	268	330	P	V
			2389.8	52.94	-1.06	54	38.61	31.95	17.43	35.05	268	330	A	V
		*	2412	110.43	-	-	96.06	31.99	17.43	35.05	268	330	P	V
		*	2412	102.8	-	-	88.43	31.99	17.43	35.05	268	330	A	V
													V	
													V	
802.11n HT20 CH 02 2417MHz		2389.52	58.38	-15.62	74	44.04	31.95	7.44	35.04	175	337	P	H	
		2389.52	47.19	-6.81	54	32.85	31.95	7.44	35.04	175	337	A	H	
		*	2417	104.34	-	-	89.98	31.99	7.44	35.06	175	337	P	H
		*	2417	96.9	-	-	82.54	31.99	7.44	35.06	175	337	A	H
														H
														H
			2389.94	65.4	-8.6	74	51.07	31.95	7.44	35.05	270	331	P	V
			2389.94	51.55	-2.45	54	37.22	31.95	7.44	35.05	270	331	A	V
		*	2417	111.28	-	-	96.92	31.99	7.44	35.06	270	331	P	V
		*	2417	104.33	-	-	89.97	31.99	7.44	35.06	270	331	A	V
													V	
													V	



<b>802.11n</b> <b>HT20</b> <b>CH 06</b> <b>2437MHz</b>		2311.54	54.5	-19.5	74	40.47	31.74	17.31	35.02	200	340	P	H
		2388.26	44.75	-9.25	54	30.41	31.95	17.43	35.04	200	340	A	H
	*	2437	104.98	-	-	90.47	32.08	17.49	35.06	200	340	P	H
	*	2437	97.45	-	-	82.94	32.08	17.49	35.06	200	340	A	H
		2483.97	54.71	-19.29	74	40.07	32.16	17.55	35.07	200	340	P	H
		2485.93	45.27	-8.73	54	30.63	32.16	17.55	35.07	200	340	A	H
		2331.98	54.47	-19.53	74	40.39	31.79	17.31	35.02	290	336	P	V
		2388.12	45.01	-8.99	54	30.67	31.95	17.43	35.04	290	336	A	V
	*	2437	111.18	-	-	96.67	32.08	17.49	35.06	290	336	P	V
	*	2437	103.62	-	-	89.11	32.08	17.49	35.06	290	336	A	V
		2484.74	60.39	-13.61	74	45.75	32.16	17.55	35.07	290	336	P	V
		2484.04	48.97	-5.03	54	34.33	32.16	17.55	35.07	290	336	A	V
<b>802.11n</b> <b>HT20</b> <b>CH 10</b> <b>2457MHz</b>	*	2457	105.34	-	-	90.79	32.12	17.49	35.06	174	338	P	H
	*	2457	97.76	-	-	83.21	32.12	17.49	35.06	174	338	A	H
		2484.88	58.99	-15.01	74	44.35	32.16	17.55	35.07	174	338	P	H
		2483.56	47.84	-6.16	54	33.2	32.16	17.55	35.07	174	338	A	H
													H
													H
	*	2457	111.34	-	-	96.79	32.12	17.49	35.06	354	333	P	V
	*	2457	103.78	-	-	89.23	32.12	17.49	35.06	354	333	A	V
		2484.22	63.47	-10.53	74	48.83	32.16	17.55	35.07	354	333	P	V
		2484.04	50.96	-3.04	54	36.32	32.16	17.55	35.07	354	333	A	V
												V	
												V	



<b>802.11n</b> <b>HT20</b> <b>CH 11</b> <b>2462MHz</b>	*	2462	102.74	-	-	88.13	32.12	17.55	35.06	148	336	P	H
	*	2462	94.89	-	-	80.28	32.12	17.55	35.06	148	336	A	H
		2485.12	55.06	-18.94	74	40.42	32.16	17.55	35.07	148	336	P	H
		2483.52	45.93	-8.07	54	31.29	32.16	17.55	35.07	148	336	A	H
													H
													H
	*	2462	108.42	-	-	93.81	32.12	17.55	35.06	354	332	P	V
	*	2462	100.88	-	-	86.27	32.12	17.55	35.06	354	332	A	V
		2483.68	61.17	-12.83	74	46.53	32.16	17.55	35.07	354	332	P	V
		2483.6	50.42	-3.58	54	35.78	32.16	17.55	35.07	354	332	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 )	Path 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	42.05	-31.95	74	56.04	34.23	11.12	59.34	100	0	P	H	
													H	
													H	
													H	
			4824	42.77	-31.23	74	56.76	34.23	11.12	59.34	100	0	P	V
														V
														V
802.11n HT20 CH 06 2437MHz		4874	41.95	-32.05	74	55.81	34.22	11.16	59.24	100	0	P	H	
													H	
			7311	42.38	-31.62	74	51.19	35.71	13.61	58.13	100	0	P	H
														H
			4874	42.06	-31.94	74	55.92	34.22	11.16	59.24	100	0	P	V
			7311	42.39	-31.61	74	51.2	35.71	13.61	58.13	100	0	P	V
														V
802.11n HT20 CH 11 2462MHz		4924	41.54	-32.46	74	55.25	34.21	11.22	59.14	100	0	P	H	
													H	
			7386	42.24	-31.76	74	51.15	35.66	13.69	58.26	100	0	P	H
														H
			4924	42.1	-31.9	74	55.81	34.21	11.22	59.14	100	0	P	V
			7386	42.42	-31.58	74	51.33	35.66	13.69	58.26	100	0	P	V
														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
2.4GHz 802.11n HT20 LF		30.27	22.15	-17.85	40	26.53	24.6	1.2	30.18	-	-	P	H	
		199.83	29.48	-14.02	43.5	42.26	14.91	2.27	29.96	-	-	P	H	
		289.2	29.6	-16.4	46	37.86	18.93	2.75	29.94	-	-	P	H	
		360.9	32.46	-13.54	46	38.74	20.65	3	29.93	-	-	P	H	
		481.3	30.75	-15.25	46	33.54	23.55	3.56	29.9	-	-	P	H	
		943.3	33.91	-12.09	46	27.46	30.03	5.02	28.6	100	0	P	H	
														H
														H
														H
														H
														H
														H
														H
			30	30.04	-9.96	40	34.42	24.6	1.2	30.18	-	-	P	V
			123.15	22.08	-21.42	43.5	32.6	17.59	1.94	30.05	-	-	P	V
			200.1	27.46	-16.04	43.5	40.24	14.91	2.27	29.96	-	-	P	V
			372.1	34.97	-11.03	46	41.05	20.83	3.02	29.93	-	-	P	V
		475	36.98	-9.02	46	39.88	23.44	3.56	29.9	100	0	P	V	
		600.3	32.26	-13.74	46	32.79	25.46	3.86	29.85	-	-	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	Path	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. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =  
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path 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) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
2. Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 43.54(dBμV/m) – 54(dBμV/m)  
= -10.46(dB)

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



## Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang and Stan Hsieh	Temperature :	21~23°C
		Relative Humidity :	51~54%

Note symbol

-L	Low channel location
-R	High channel location





2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW1000.000KHz VBW3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW1000.000KHz VBW3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>
Avg.	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW1000.000KHz VBW1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW1000.000KHz VBW1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-4HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>	<p>Site : 03CH07-4HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>
	<p>Site : 03CH07-4HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>	<p>Site : 03CH07-4HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 1</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH02 2417MHz	
1	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>
<b>Avg.</b>	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>

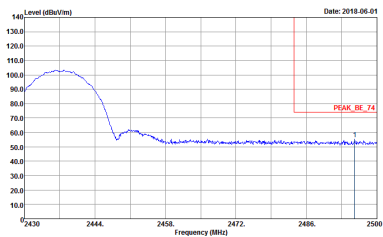
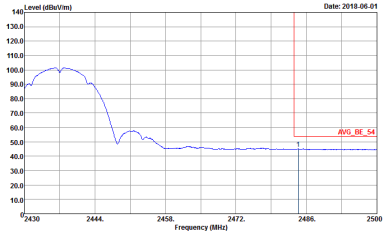


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2417MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>
	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 2</p>

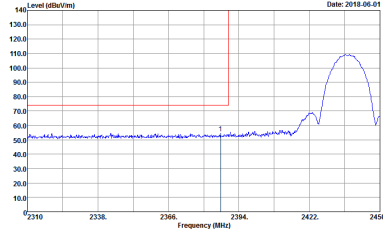
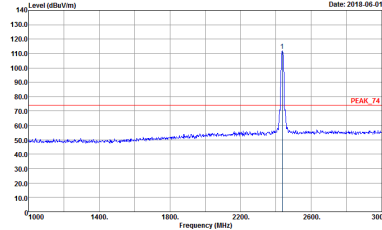
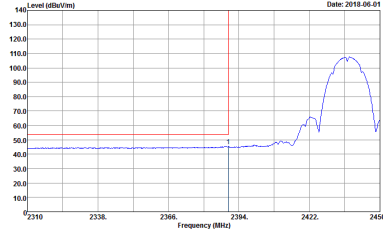
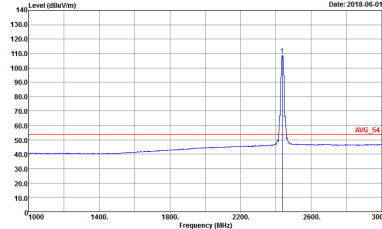


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>
<b>Avg.</b>	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>

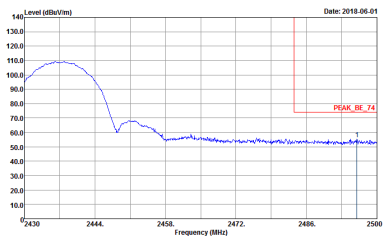
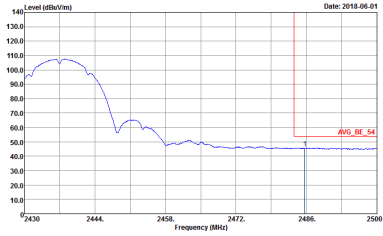


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Left blank</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>



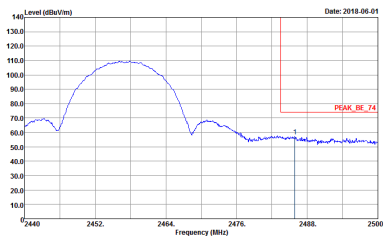
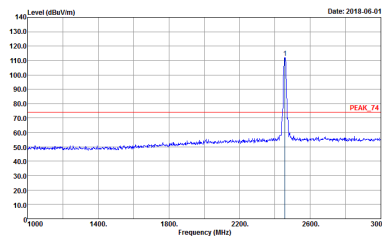
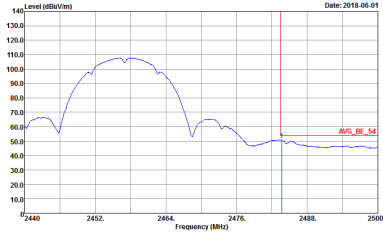
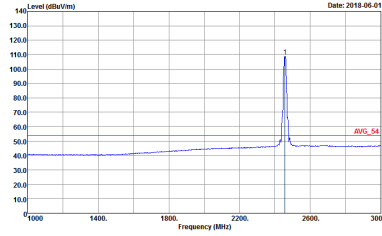
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 3</p>	<p>Left blank</p>



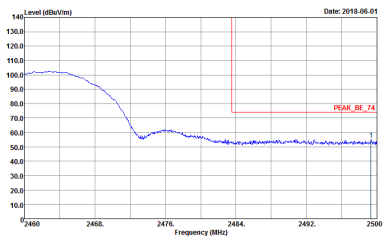
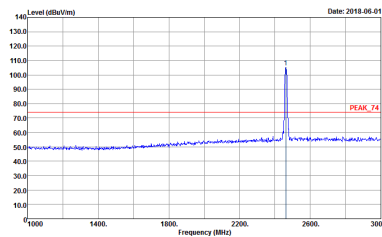
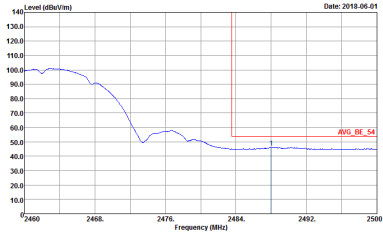
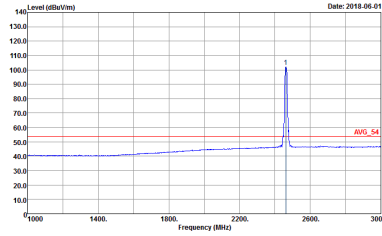


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH10 2457MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 4</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 4</p>
	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 4</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 4</p>

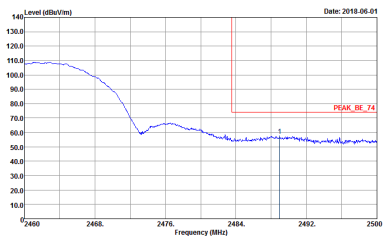
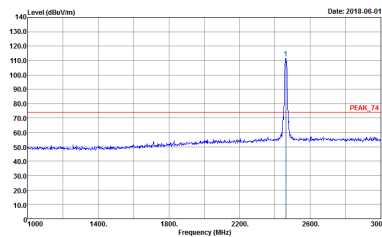
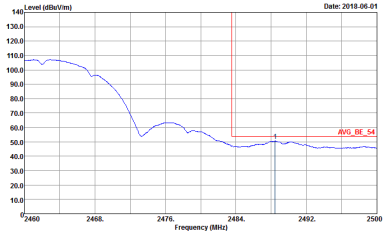
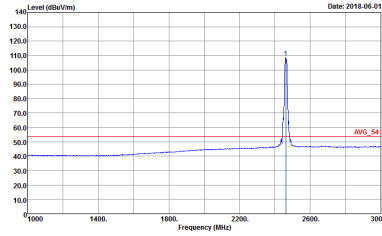


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH10 2457MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 4</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 4</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 4</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 4</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 5</p>

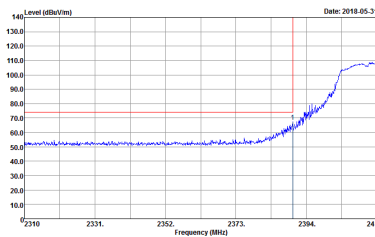
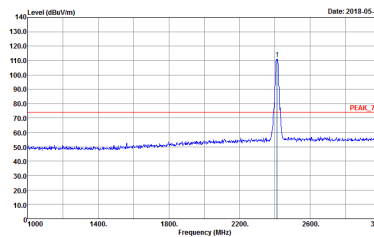
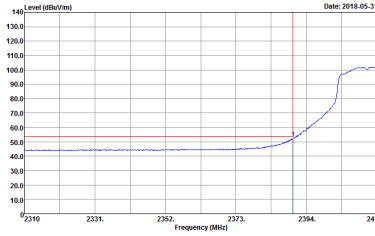
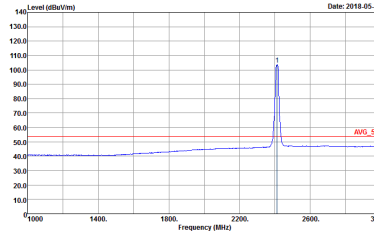


2.4GHz 2400~2483.5MHz

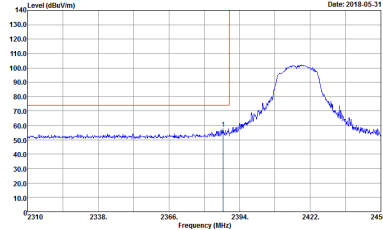
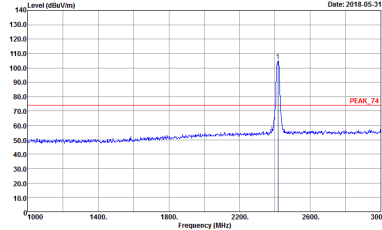
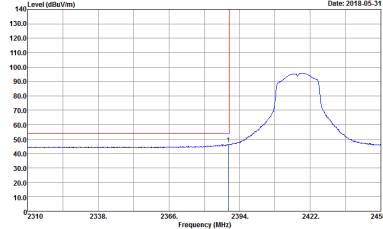
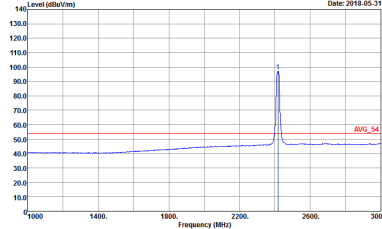
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
<b>Peak</b>	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 6</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 6</p>
<b>Avg.</b>	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 6</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 6</p>

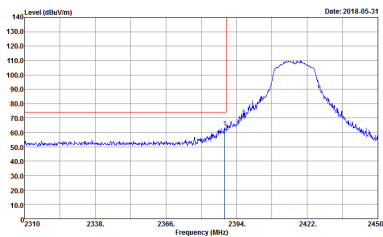
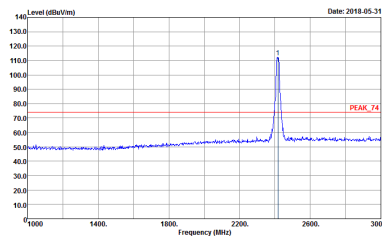
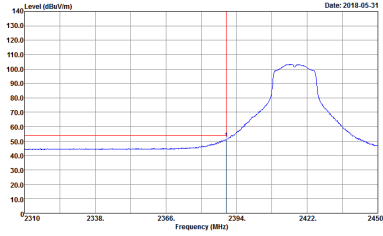
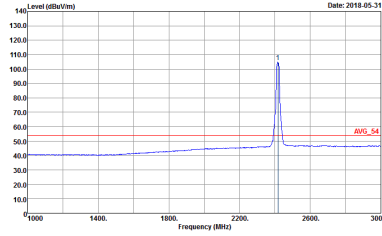


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-4HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 6</p>	 <p>Site : 03CH07-4HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 6</p>
Avg.	 <p>Site : 03CH07-4HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 6</p>	 <p>Site : 03CH07-4HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 6</p>



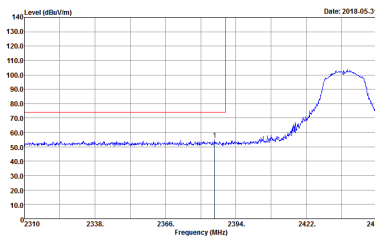
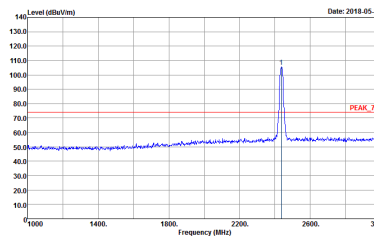
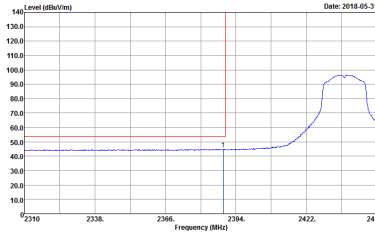
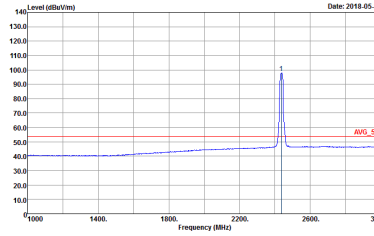
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH02 2417MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>



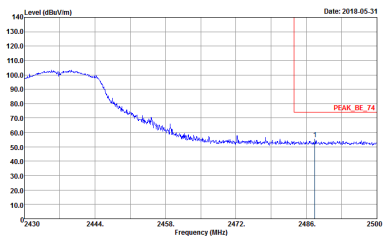
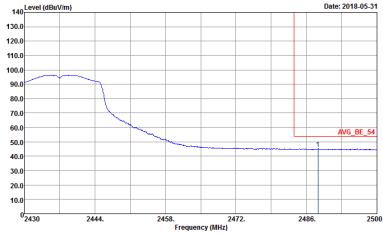
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH02 2417MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 7</p>



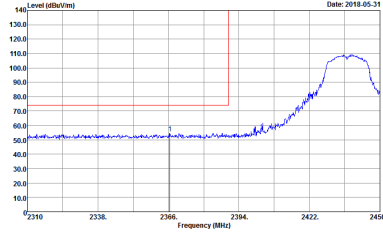
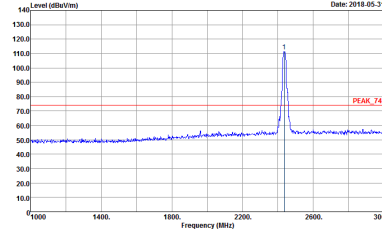
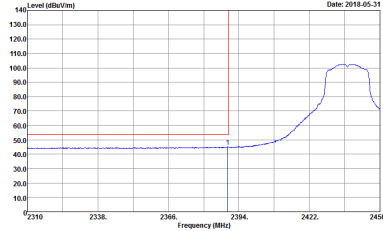
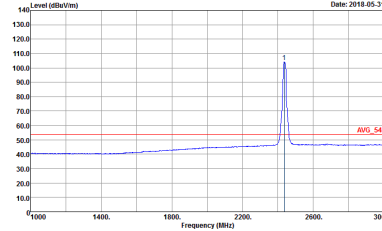


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>

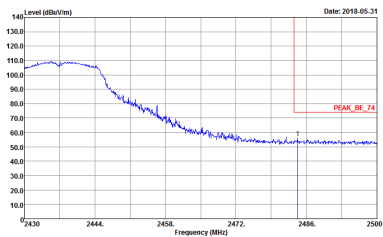
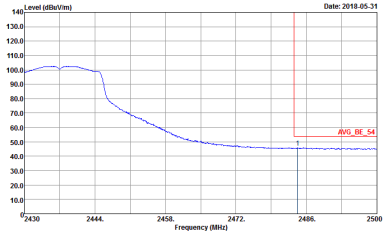


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	<p>Left blank</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : B</p>

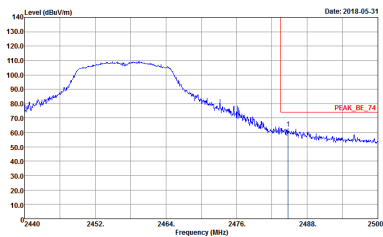
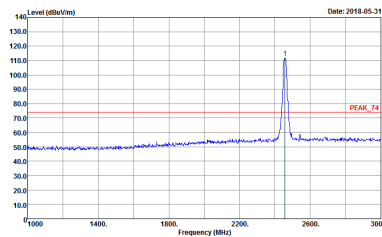
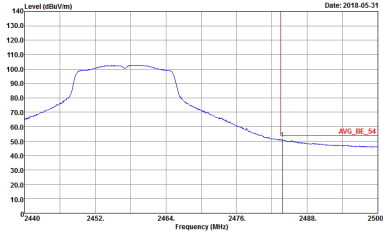
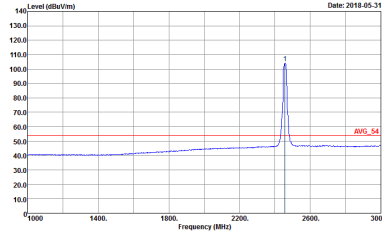


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY  Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL  : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto  Detector : Peak  Project : 850206  Mode : B</p>	Left Blank
Avg.	 <p>Site : 03CH07-HY  Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL  : RBW:1000.000KHz VBW:1000KHz SWT:Auto  Detector : Peak  Project : 850206  Mode : B</p>	Left Blank

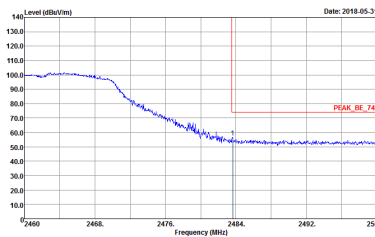
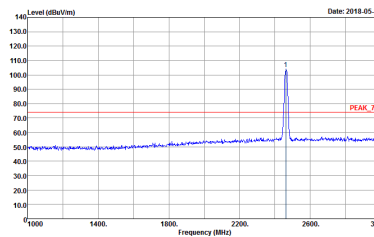
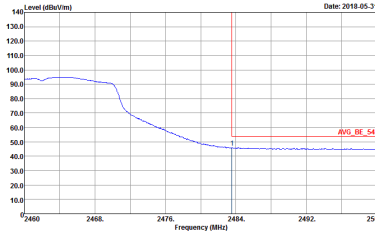
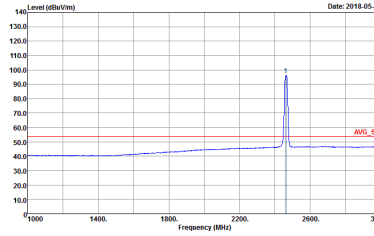


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH10 2457MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 9</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 9</p>
Avg.	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 9</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 9</p>

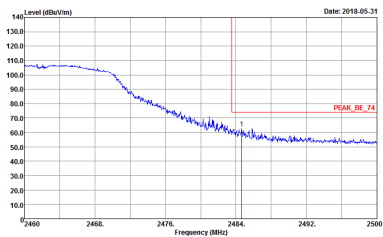
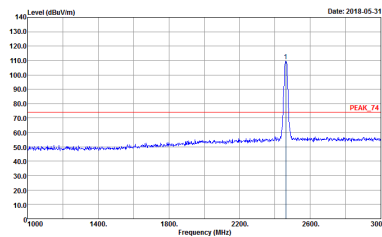
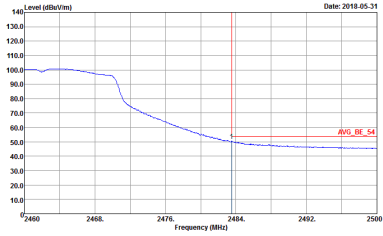
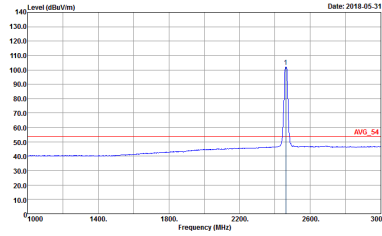


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH10 2457MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 9</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 9</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 9</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 9</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 10</p>





2.4GHz 2400~2483.5MHz

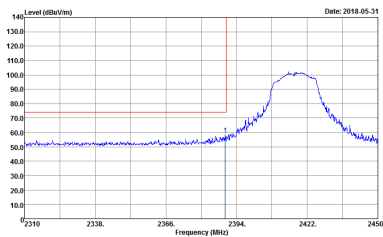
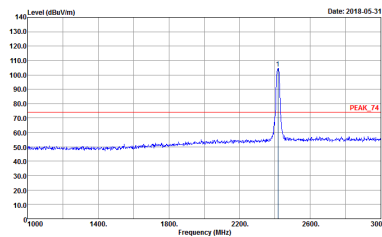
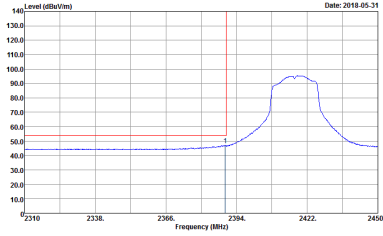
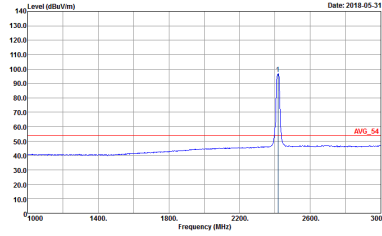
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 11</p>	<p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 11</p>
Avg.	<p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 11</p>	<p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 11</p>

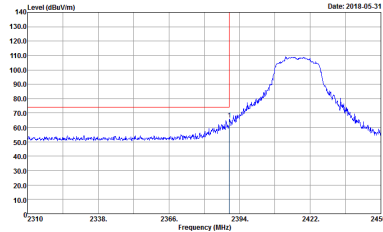
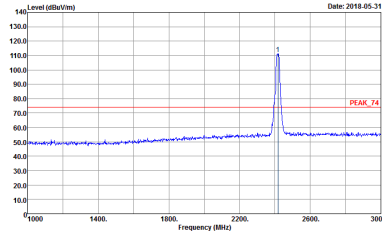
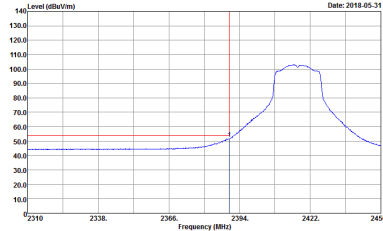
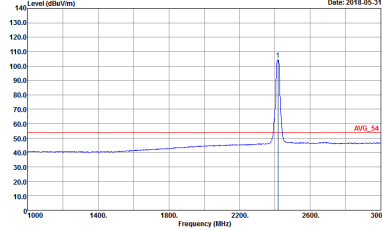


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-4HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 11</p>	<p>Site : 03CH07-4HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 11</p>
	<p>Site : 03CH07-4HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 11</p>	<p>Site : 03CH07-4HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 11</p>

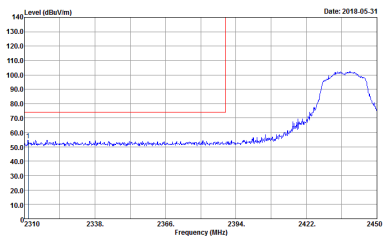
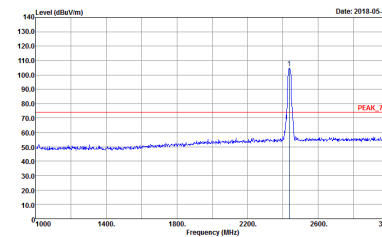
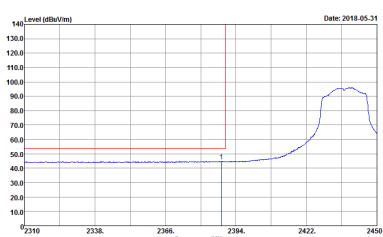
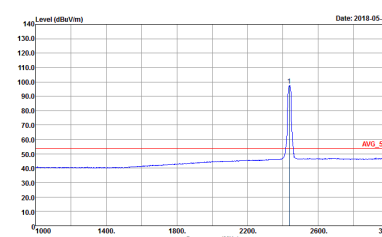


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH02 2417MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>

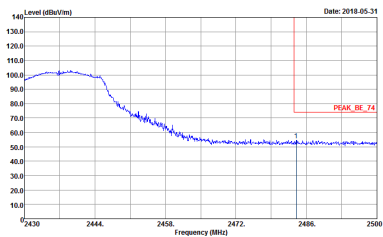
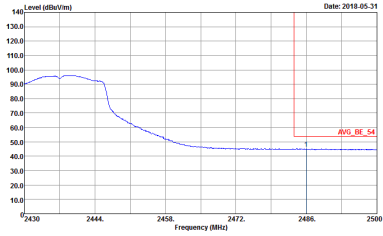


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH02 2417MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2018-05-31</p> <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>	 <p>Date: 2018-05-31</p> <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>
Avg.	 <p>Date: 2018-05-31</p> <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>	 <p>Date: 2018-05-31</p> <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 12</p>

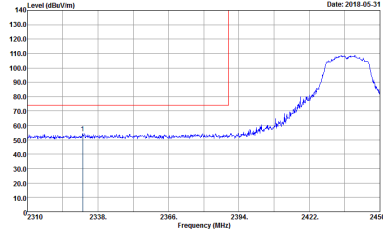
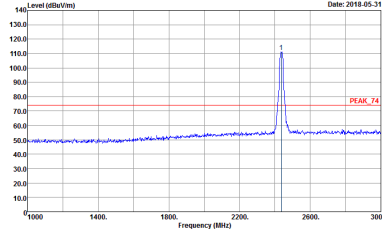
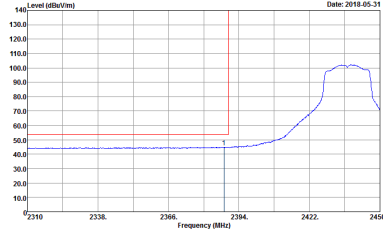
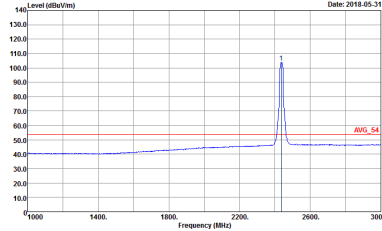


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
<b>Peak</b>	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>
<b>Avg.</b>	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	<p>Left blank</p>



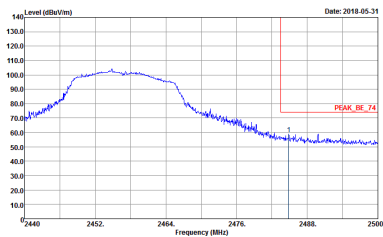
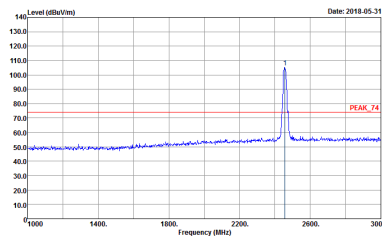
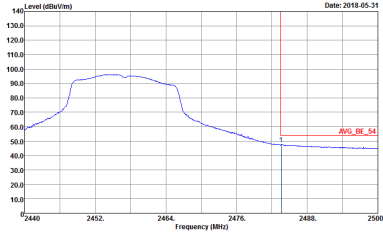
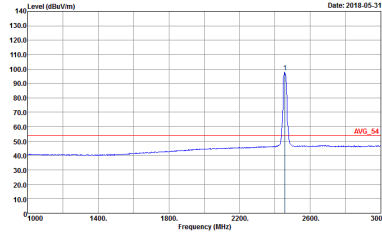
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 13</p>



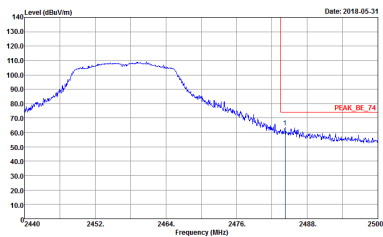
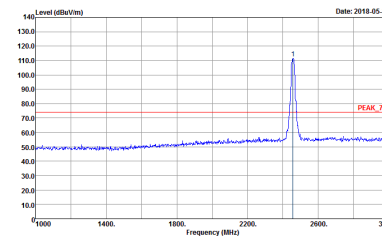
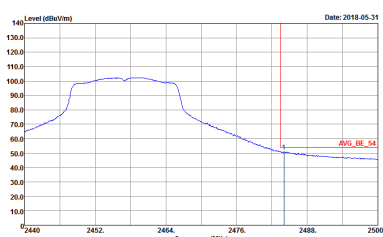
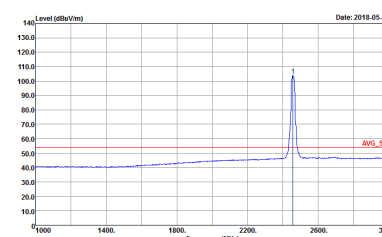
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
<p><b>Peak</b></p>		<p>Left Blank</p>
<p><b>Avg.</b></p>		<p>Left Blank</p>



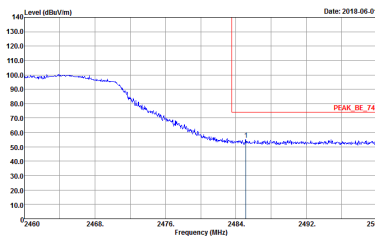
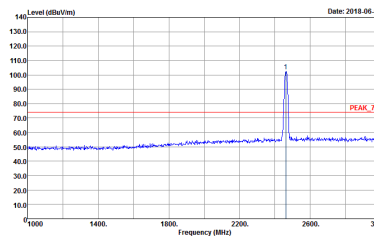
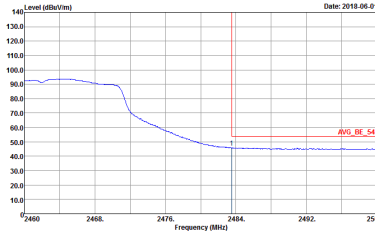
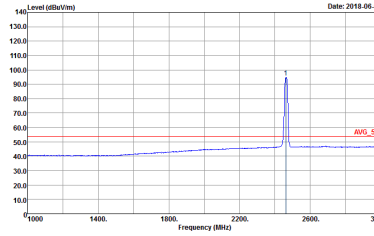


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH10 2457MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 14</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 14</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 14</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 HORIZONTAL            Detector : Peak            Project : 850206            Mode : 14</p>

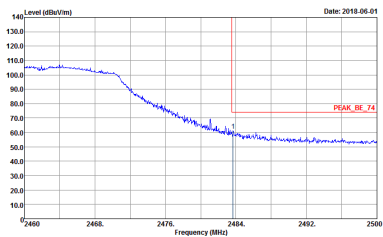
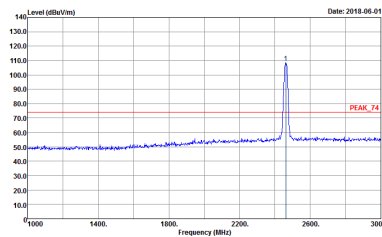
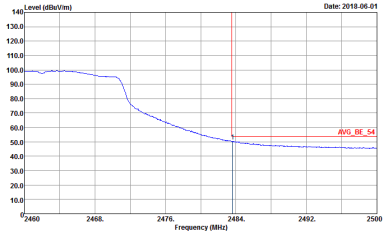
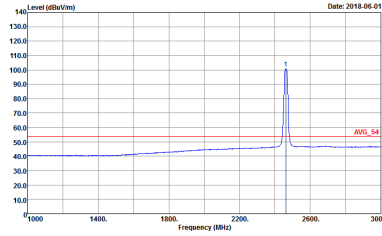


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH10 2457MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 14</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 14</p>
	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 14</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ ANT_00075962 VERTICAL            Detector : Peak            Project : 850206            Mode : 14</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY            Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>	 <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>
Avg.	 <p>Site : 03CH07-HY            Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>	 <p>Site : 03CH07-HY            Condition : AVG_54 3m HF_ANT_00075962 VERTICAL            : RBW:1000.000KHz VBW:1000KHz SWT:Auto            Detector : Peak            Project : 850206            Mode : 15</p>

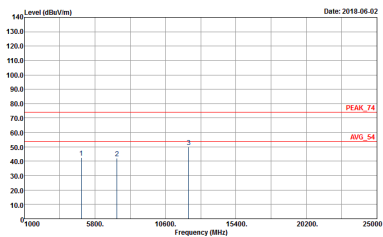
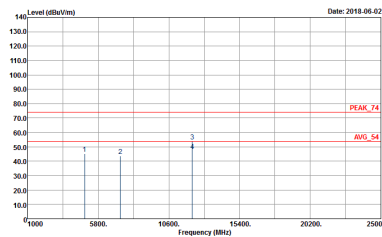


2.4GHz 2400~2483.5MHz

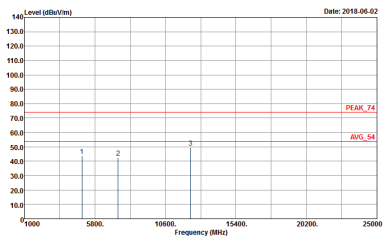
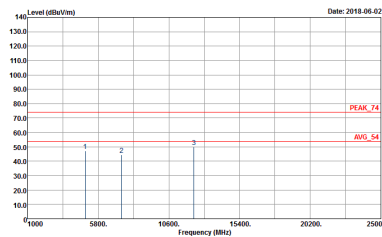
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-4Y          Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL          Detector : Peak          Project : 850206          Mode : 1</p>	<p>Site : 03CH07-4Y          Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL          Detector : Peak          Project : 850206          Mode : 1</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
<p><b>Peak</b> <b>Avg.</b></p>	 <p>Site : 03C407-11Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : 3</p>	 <p>Site : 03C407-11Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : 3</p>

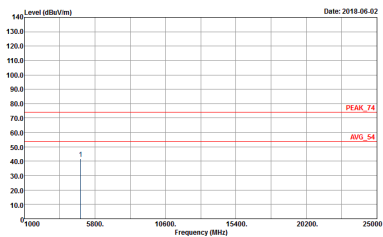
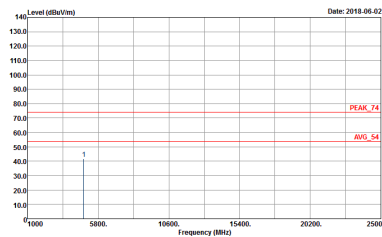


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03C407-4M Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : 5</p>	 <p>Site : 03C407-4M Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : 5</p>



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.	 <p>Site : 03CH07-4Y          Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL          Detector : Peak          Project : 850206          Mode : 6</p>	 <p>Site : 03CH07-4Y          Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL          Detector : Peak          Project : 850206          Mode : 6</p>





WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03C407-44Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : S</p>	<p>Site : 03C407-44Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : S</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03C407-4M Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : 10</p>	<p>Site : 03C407-4M Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : 10</p>

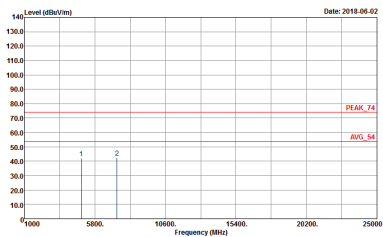
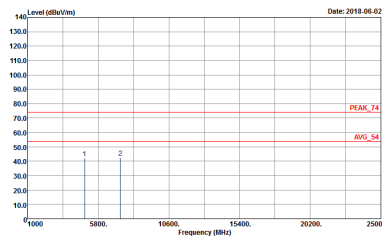


**2.4GHz 2400~2483.5MHz**

**WIFI 802.11n HT20 (Harmonic @ 3m)**

<b>WIFI</b>	<b>2.4GHz 2400~2483.5MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11n HT20 CH01 2412MHz</b>	
<b>1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak Avg.</b>	<p>Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : 11</p>	<p>Site : 03CH07-4Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : 11</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03C407-4M          Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL          Detector : Peak          Project : 850206          Mode : 13</p>	 <p>Site : 03C407-4M          Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL          Detector : Peak          Project : 850206          Mode : 13</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03C407-11Y Condition : PEAK_74 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 850206 Mode : IS</p>	<p>Site : 03C407-11Y Condition : PEAK_74 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 850206 Mode : IS</p>



Emission below 1GHz  
2.4GHz WIFI 802.11n HT20 (LF)

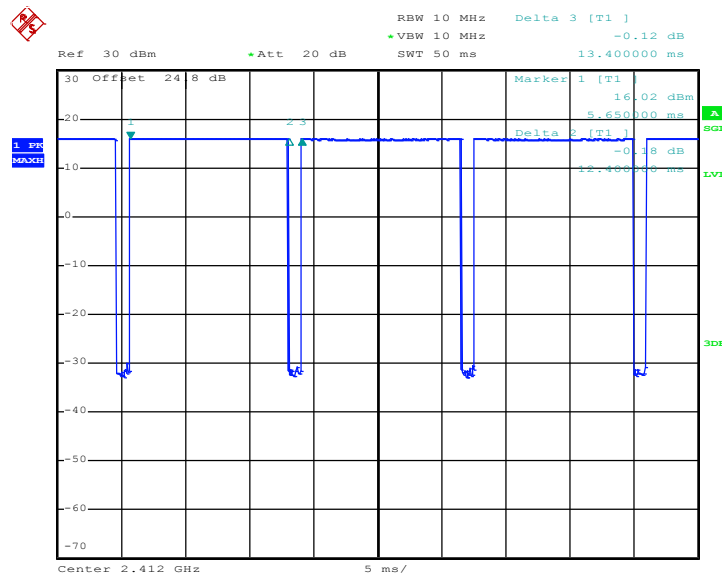
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
1	Horizontal	Vertical
QP / Peak	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(s) HORIZONTAL Detector : Peak Project : 850206 Mode : 17</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(s) VERTICAL Detector : Peak Project : 850206 Mode : 17</p>



### Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
802.11b	92.54	1240	0.81	1kHz	0.34
802.11g	66.88	2060	0.49	1kHz	1.75
2.4GHz 802.11n HT20	65.31	1920	0.52	1kHz	1.85

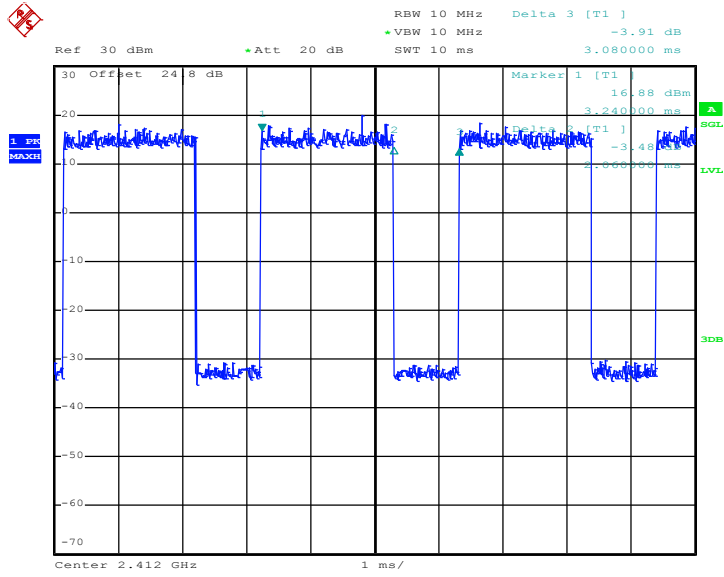
#### 802.11b



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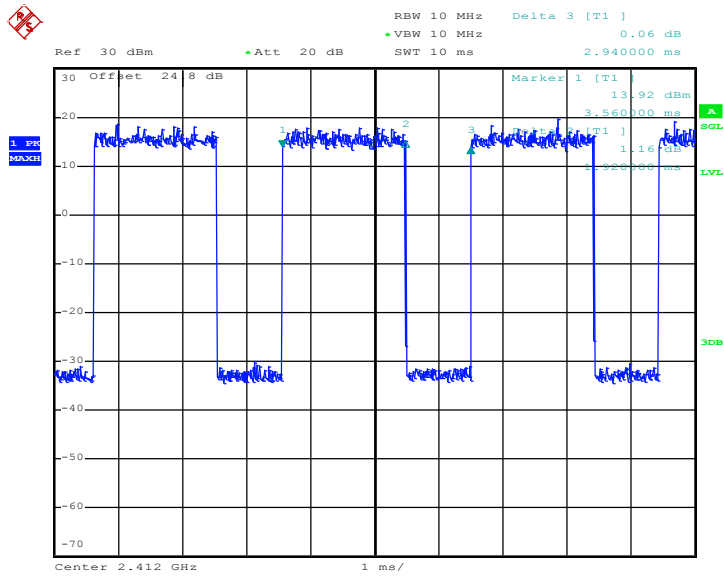


802.11g



Date: 8.MAY.2018 04:57:29

802.11n HT20



Date: 8.MAY.2018 05:12:53