



# FCC RF Test Report

**APPLICANT** : Ubiquiti Networks, Inc.  
**EQUIPMENT** : NanoBeam AC  
**BRAND NAME** : UBIQUITI  
**MODEL NAME** : NBE-5AC-Gen2  
**FCC ID** : SWX-NBE5ACG2W  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure

The product was received on May 30, 2017 and testing was completed on Aug. 23, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

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



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### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.403(i)	6dB, 26dB and 99% Occupied Bandwidth	> 500kHz	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 30 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 30 dBm/500kHz	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b)(4)(i) & 15.209(a)	Pass	Under limit 0.35 dB at 5416.000 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.80 dB at 0.150 MHz
0	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



# 1 General Description

## 1.1 Applicant

Ubiquiti Networks, Inc.  
685 Third Avenue, 27th Floor New York, New York 10017 USA

## 1.2 Manufacturer

Ubiquiti Networks, Inc.  
685 Third Avenue, 27th Floor New York, New York 10017 USA

## 1.3 Product Feature of Equipment Under Test

Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac

Product Specification subjective to this standard	
Antenna Type	WLAN: Internal Antenna

## 1.4 Modification of EUT

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



### 1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW0007 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

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

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	03CH13-HY	

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



## 1.6 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ♦ 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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

### 2.1 Carrier Frequency and Channel

5725-5850 MHz Band 4 (U-NII-3)											
Freq. (MHz)	5735	5740	5745	5750	5755	5760	5765	5770	5775	5780	5785
Channel	147	148	149	150	151*	152	153	154	155 <sup>#</sup>	156	157

5725-5850 MHz Band 4 (U-NII-3)											
Freq. (MHz)	5790	5795	5800	5805	5810	5815	5820	5825	5830	5835	5840
Channel	158	159*	160	161	162	163	164	165	166	167	168

**Note:**

1. The above Frequency and Channel in "\*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "<sup>#</sup>" were 802.11ac VHT80.





## 2.2 Test Mode

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

Modulation	Data Rate
802.11ac VHT10	vt0
802.11ac VHT20	vt0
802.11ac VHT30	vt0
802.11ac VHT40	vf0
802.11ac VHT50	vf0
802.11ac VHT60	vf0
802.11ac VHT80	ve0

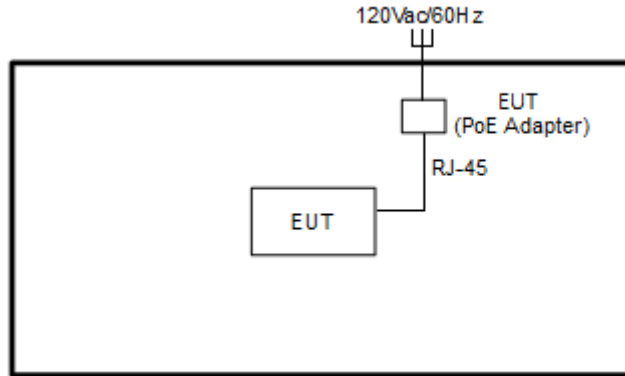
<b>AC Conducted Emission</b>	Mode 1 : WLAN (2.4GHz) Idle + WLAN (5GHz) Link + LAN Link + PoE 1
------------------------------	---

Ch. #		Band IV : 5725-5850 MHz			
		802.11ac VHT10	802.11ac VHT20	802.11ac VHT30	802.11ac VHT40
L	Low	147	148	149	150
M	Middle	158	158	158	158
H	High	168	167	166	165

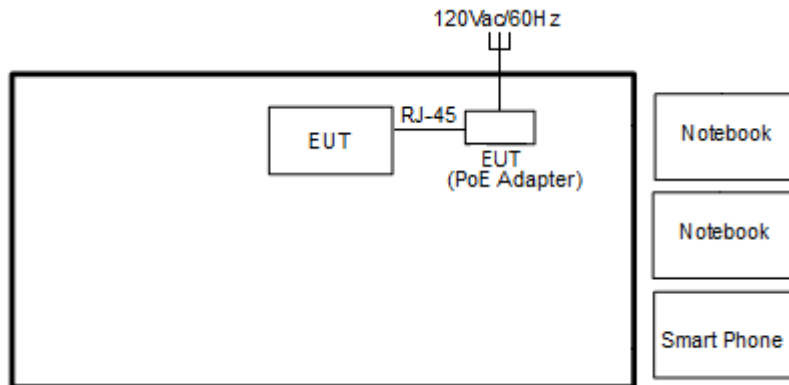
Ch. #		Band IV : 5725-5850 MHz			
		802.11ac VHT50	802.11ac VHT60	802.11ac VHT80	-
L	Low	151	152	154	-
M	Middle	158	158	158	-
H	High	164	163	161	-

## 2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission>





## 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude E3340	FCC DoC/ Contains FCC ID: PD97260NGU	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	Smart Phone	Apple	iPhone 6 Plus	FCC DoC	N/A	Smart Phone

## 2.5 EUT Operation Test Setup

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

## 2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

*Offset = RF cable loss + attenuator factor.*

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

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

### 3 Test Result

#### 3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

##### 3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

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

26dB and 99% Occupied bandwidth are reporting only.

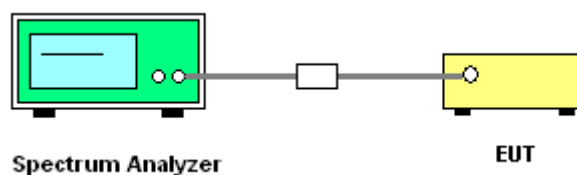
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.  
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW  $\geq 3 \times$  RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

##### 3.1.4 Test Setup

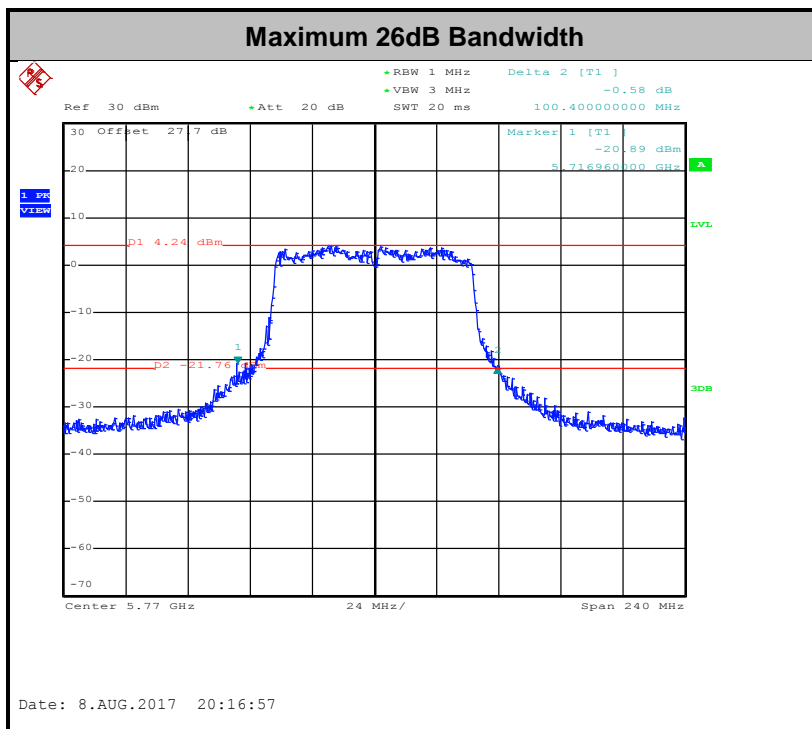
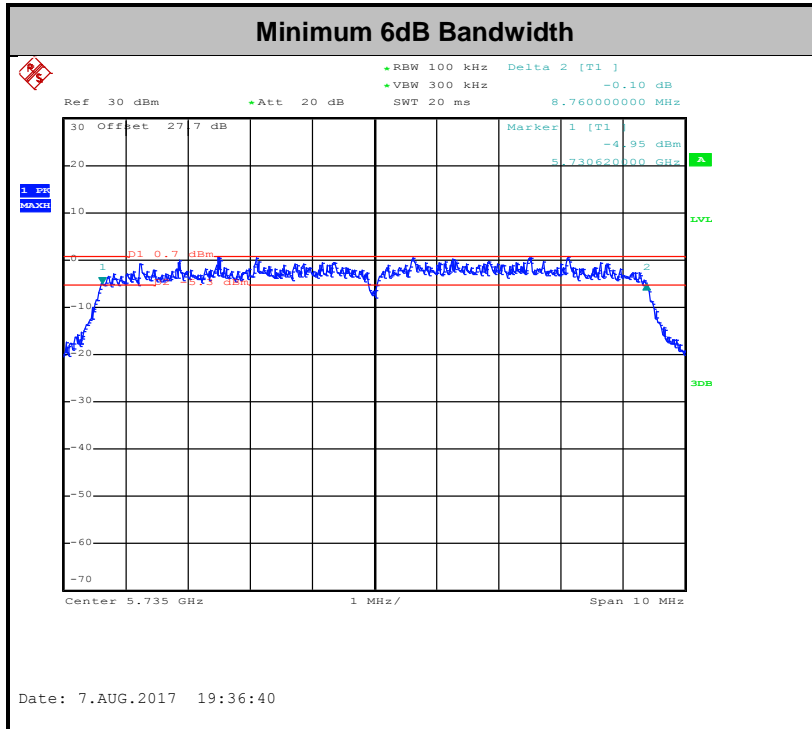


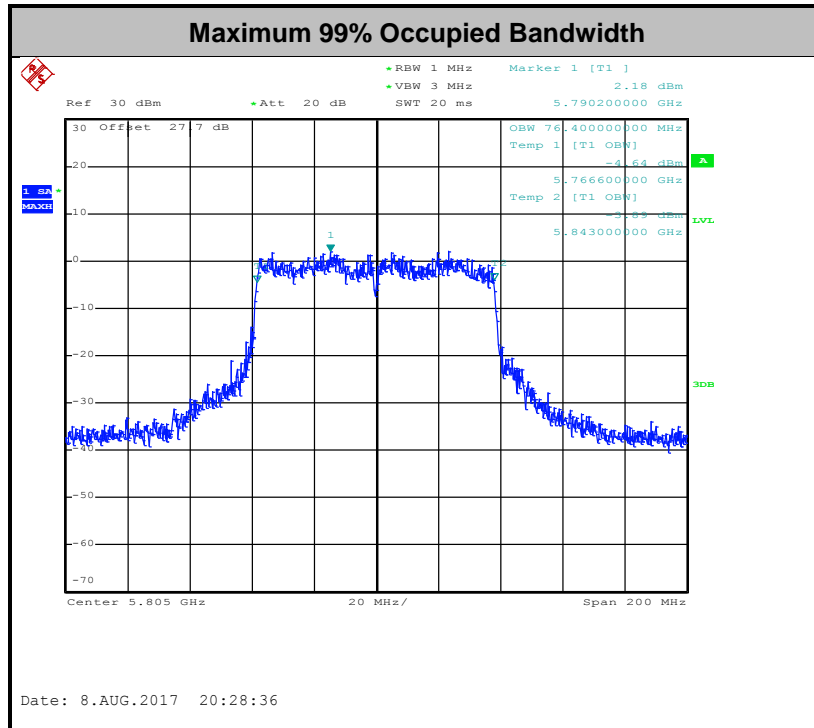


### 3.1.5 Test Result of 6dB Bandwidth

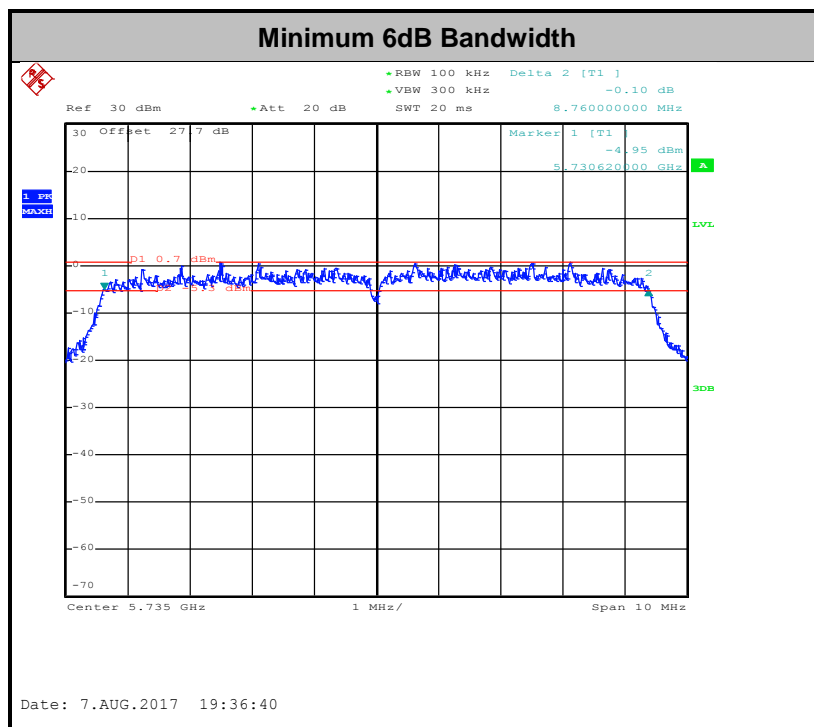
Please refer to Appendix A.

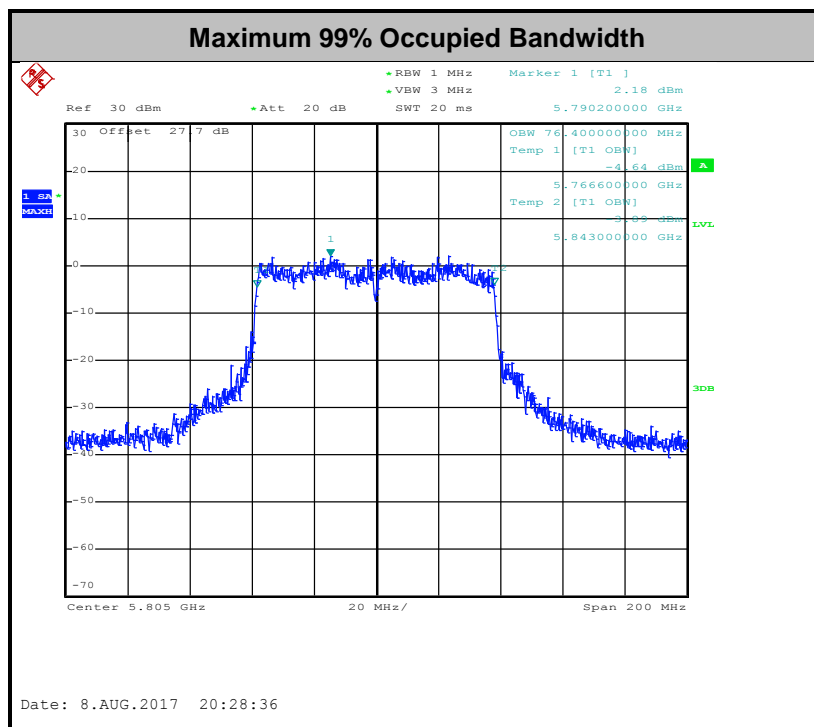
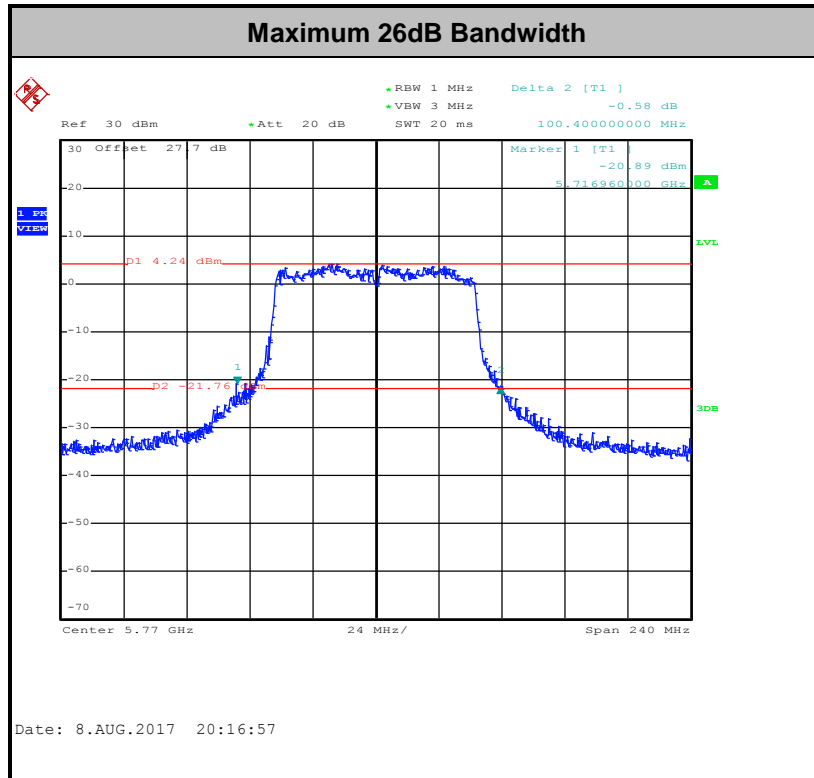
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<PTMP>





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

## 3.2 Maximum Conducted Output Power Measurement

### 3.2.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 3.2.2 Measuring Instruments

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

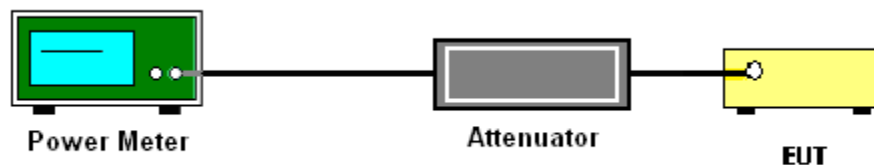
### 3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor,  $10 \log(1/x)$ , where  $x$  is the duty cycle.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.





### 3.3 Power Spectral Density Measurement

#### 3.3.1 Limit of Power Spectral Density

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section F) Maximum power spectral density.

##### # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

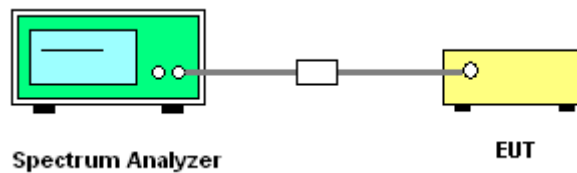
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW  $\geq$  1 MHz.
- Number of points in sweep  $\geq$  2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add  $10 \log(500\text{kHz}/\text{RBW})$  to the test result.
- Add  $10 \log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add  $10 \log(1/0.25) = 6$  dB if the duty cycle is 25 percent.

1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (c): Measure and add  $10 \log(N_{ANT})$  dB.

With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity  $10 \log(N_{ANT})$  dB is added to each spectrum value before comparing to the emission limit. The addition of  $10 \log(N_{ANT})$  dB serves to apportion the emission limit among the  $N_{ANT}$  outputs so that each output is permitted to contribute no more than  $1/N_{ANT}^{th}$  of the PSD limit.

### 3.3.4 Test Setup

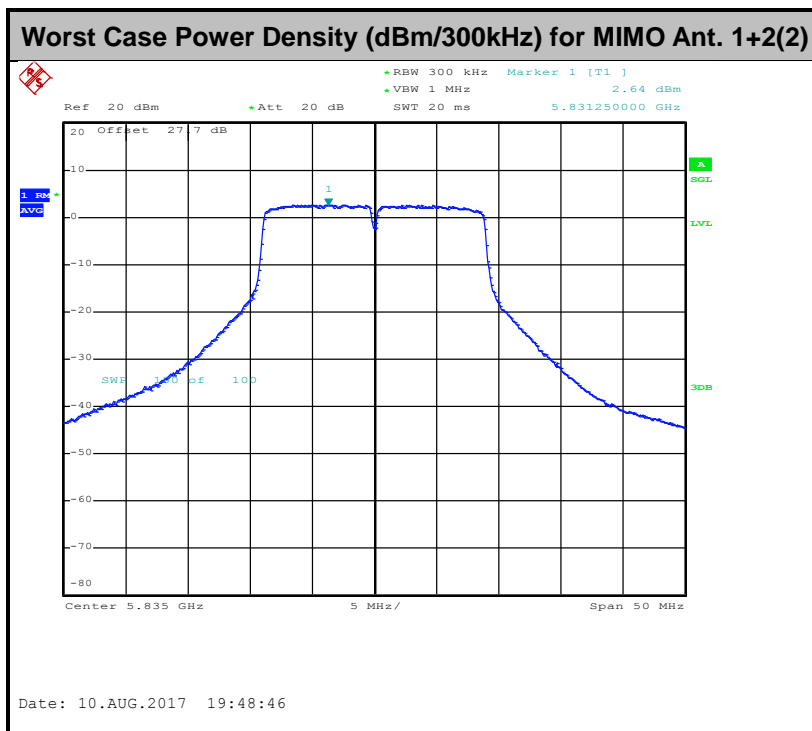
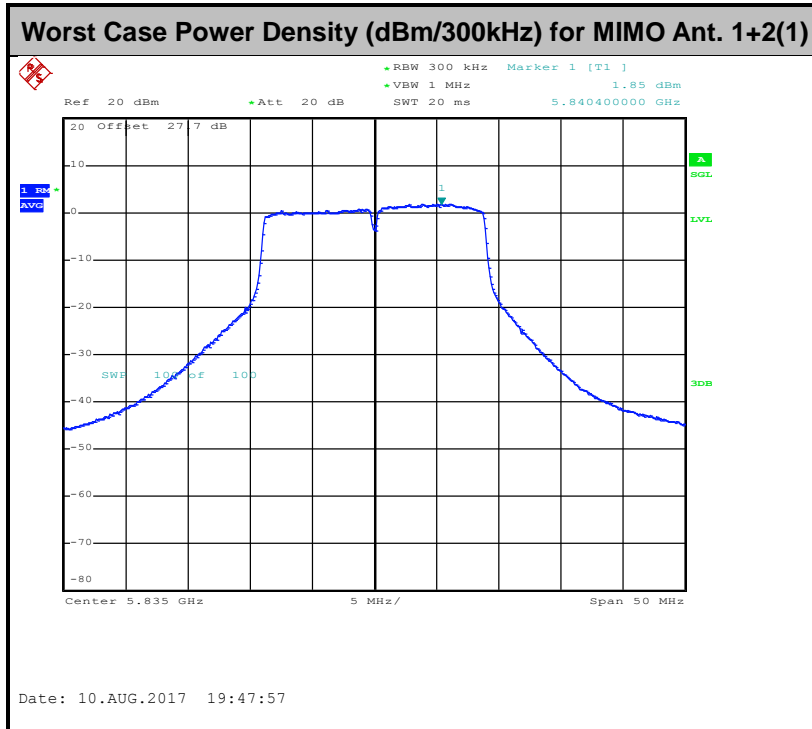




### 3.3.5 Test Result of Power Spectral Density

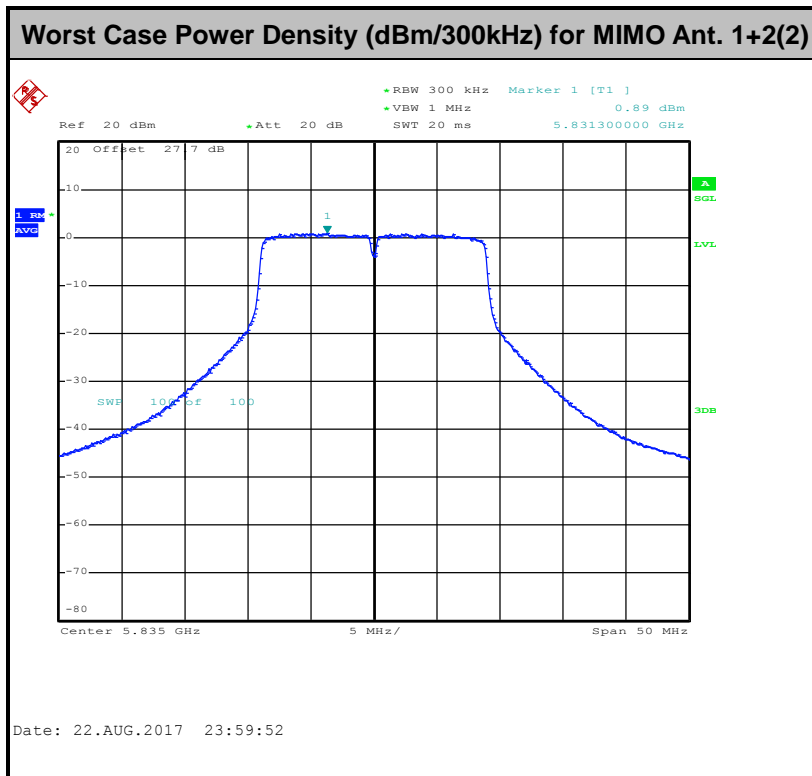
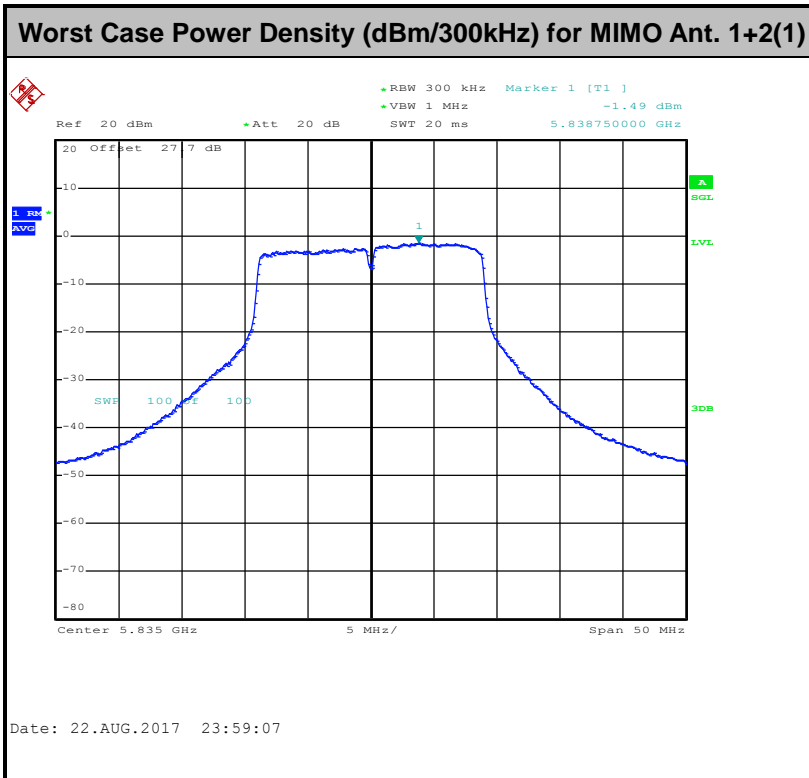
Please refer to Appendix A.

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### 3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

#### 3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

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

**Note:** The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$



EIRP (dBm)	Field Strength at 3m (dB $\mu$ V/m)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r04 G)2)c)

- (i) Section 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and 2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz. However, an out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz dBm/MHz peak emission limit.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

### 3.4.2 Measuring Instruments

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



### **3.4.3 Test Procedures**

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW  $\geq$  3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

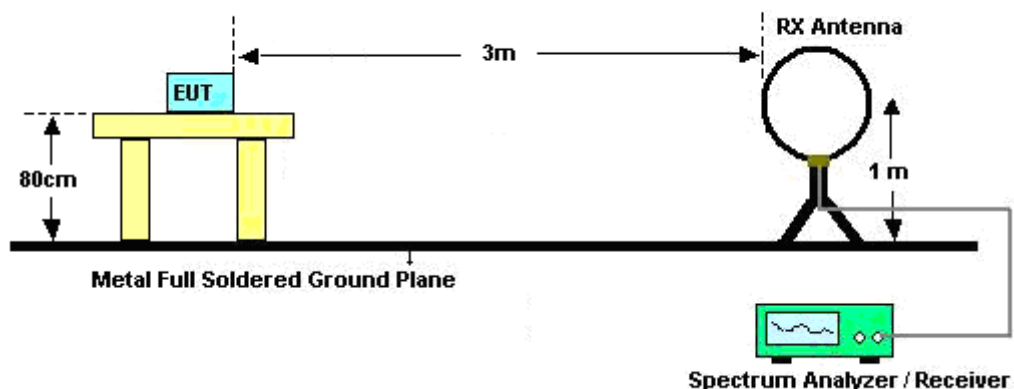
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- 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.

2. 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.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
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.

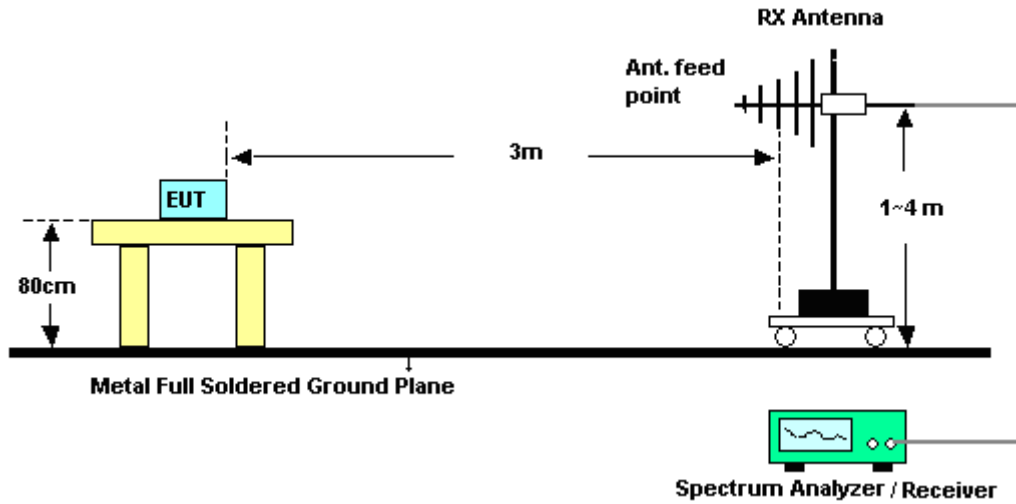
### 3.4.4 Test Setup

For radiated emissions below 30MHz

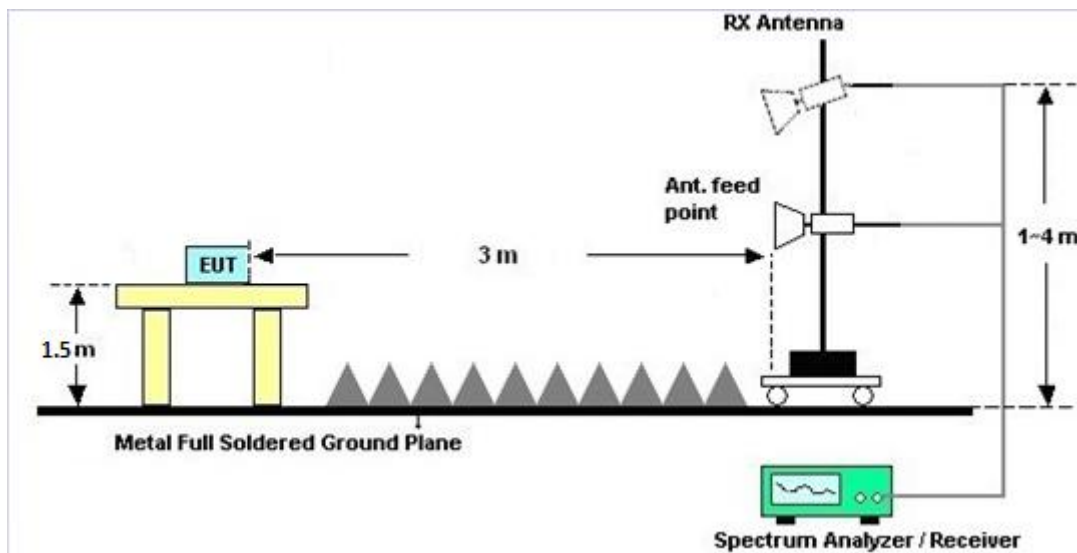




For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





### **3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

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.

### **3.4.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix C and D.

### **3.4.7 Duty Cycle**

Please refer to Appendix E.

### **3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)**

Please refer to Appendix C and D.



### 3.5 AC Conducted Emission Measurement

#### 3.5.1 Limit of AC Conducted Emission

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

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

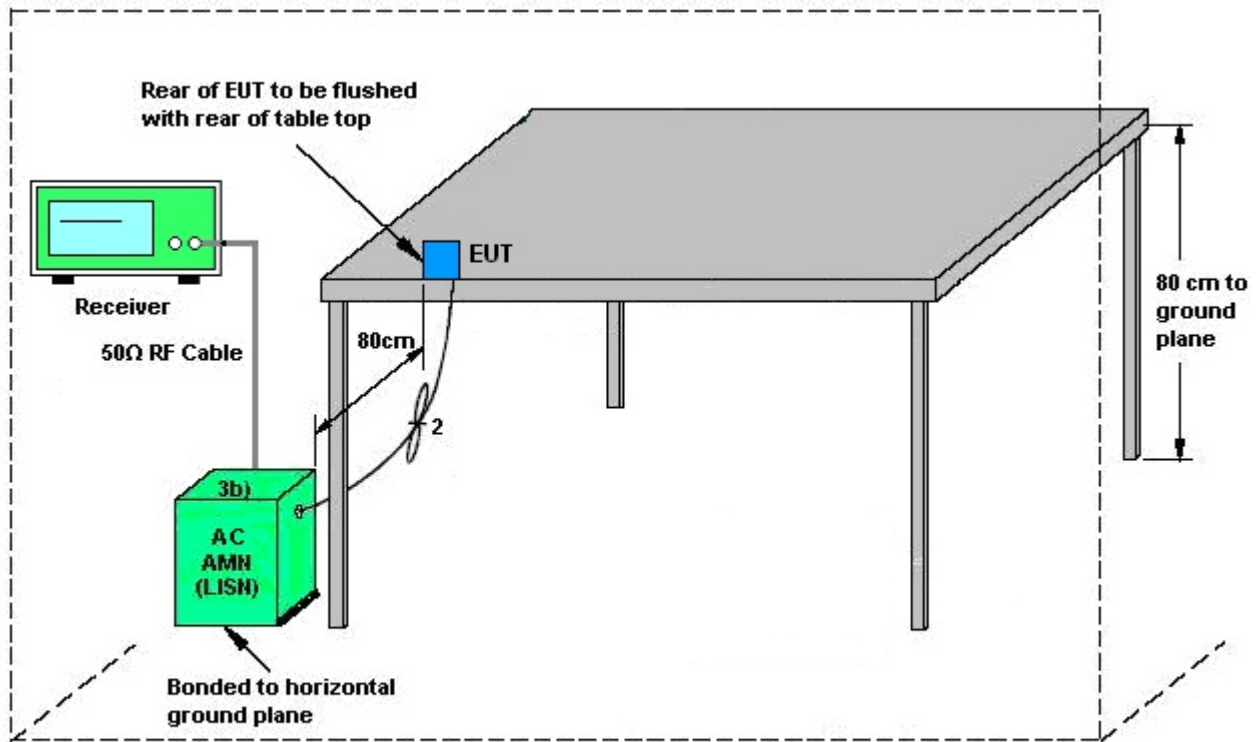
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room 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 with Maximum Hold Mode.

### 3.5.4 Test Setup



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

### 3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

## 3.6 Frequency Stability Measurement

### 3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

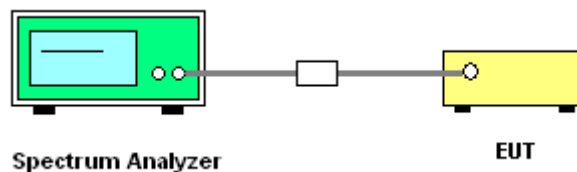
### 3.6.2 Measuring Instruments

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

### 3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

### 3.6.4 Test Setup



### 3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.



## **3.7 Automatically Discontinue Transmission**

### **3.7.1 Limit of Automatically Discontinue Transmission**

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

### **3.7.2 Measuring Instruments**

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

### **3.7.3 Test Result of Automatically Discontinue Transmission**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



### 3.8 Antenna Requirements

#### 3.8.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

#### 3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

The EUT supports CDD mode.

For power, the directional gain  $G_{ANT}$  is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

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

The directional gain "DG" is calculated as following table.

<PTP>

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 1	Ant 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	17.00	17.00	17.00	20.01	0.00	0.00

Power Limit Reduction = Floor [ (DG(Power) – 6) / 3 ] dBi, ( min = 0 )

PSD Limit Reduction = Floor [ (DG(PSD) – 6) / 3 ] dBi, ( min = 0 )



<PTMP>

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 1	Ant 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	17.00	17.00	17.00	20.01	11.00	14.01

Power limit reduction = Composite gain – 6dBi, ( min = 0 )

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, ( min = 0 )





## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 29, 2016	Aug. 04, 2017 ~ Aug. 23, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Aug. 04, 2017 ~ Aug. 23, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 25, 2016	Aug. 04, 2017 ~ Aug. 23, 2017	Nov. 24, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 01, 2016	Aug. 04, 2017 ~ Aug. 23, 2017	Aug. 31, 2017	Conducted (TH05-HY)
AC Power Source	AC POWER	AFC-500W	F104070011	50Hz~60Hz	Dec. 01, 2016	Aug. 04, 2017 ~ Aug. 23, 2017	Nov. 30, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Aug. 11, 2017	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Aug. 11, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Aug. 11, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Aug. 11, 2017	Dec. 05, 2017	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	May 15, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	May 14, 2019	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 21, 2016	Jul. 26, 2017 ~ Aug. 04, 2017	Dec. 20, 2017	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&04	30MHz to 1GHz	Jan. 07, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	Jan. 06, 2018	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	May 02, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	May 01, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 22, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	May 21, 2018	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Jan. 09, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	Jan. 08, 2018	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	N/A	Mar. 15, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	Mar. 14, 2018	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jul. 26, 2017 ~ Aug. 04, 2017	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jul. 26, 2017 ~ Aug. 04, 2017	N/A	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917058 4	18GHz- 40GHz	Nov. 08, 2016	Jul. 26, 2017 ~ Aug. 04, 2017	Nov. 07, 2017	Radiation (03CH13-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 12, 2017	Jul. 26, 2017 ~ Aug. 04, 2017	Jan. 11, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	TTA 1840-35-HG	1887435	18GHz ~ 40GHz	Oct. 13, 2016	Jul. 26, 2017 ~ Aug. 04, 2017	Oct. 12, 2017	Radiation (03CH13-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% ( $U = 2Uc(y)$ )	4.9
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.4
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.3
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## Appendix A. Conducted Test Results

<PTP>

Test Engineer:	Derek Hsu	Temperature:	21~25	°C
Test Date:	2017/8/4~2017/08/10	Relative Humidity:	51~54	%

**TEST RESULTS DATA**  
**6dB and 26dB EBW and 99% OBW**

Band IV													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	10.23	10.30	14.33	14.82	8.76	8.82	0.5		Pass
VHT10	MCS0	2	158	5790	10.28	10.38	15.18	14.79	8.80	8.79	0.5		Pass
VHT10	MCS0	2	168	5840	10.40	10.43	15.39	15.60	8.78	8.82	0.5		Pass
VHT20	MCS0	2	148	5740	18.55	18.75	25.20	26.58	16.52	17.18	0.5		Pass
VHT20	MCS0	2	158	5790	19.00	18.70	26.04	26.05	17.12	17.24	0.5		Pass
VHT20	MCS0	2	167	5835	18.80	18.80	26.52	27.18	16.88	17.52	0.5		Pass
VHT30	MCS0	2	149	5745	27.98	27.68	39.42	40.20	26.52	26.46	0.5		Pass
VHT30	MCS0	2	158	5790	27.75	27.90	39.33	39.42	26.52	26.49	0.5		Pass
VHT30	MCS0	2	166	5830	27.98	27.83	40.05	39.69	26.49	26.49	0.5		Pass
VHT40	MCS0	2	150	5750	37.00	36.80	48.72	50.88	35.64	35.68	0.5		Pass
VHT40	MCS0	2	158	5790	36.90	36.90	47.88	48.96	35.92	35.68	0.5		Pass
VHT40	MCS0	2	165	5825	36.90	36.70	48.90	49.20	35.68	35.68	0.5		Pass
VHT50	MCS0	2	151	5755	45.00	45.00	60.75	60.75	44.60	43.80	0.5		Pass
VHT50	MCS0	2	158	5790	45.13	44.88	59.55	58.80	44.50	43.75	0.5		Pass
VHT50	MCS0	2	164	5820	45.00	45.00	60.15	58.50	43.75	44.05	0.5		Pass
VHT60	MCS0	2	152	5760	54.90	55.20	73.08	72.54	54.36	53.94	0.5		Pass
VHT60	MCS0	2	158	5790	54.90	55.05	73.62	71.64	54.48	53.88	0.5		Pass
VHT60	MCS0	2	163	5815	55.20	55.05	73.92	72.36	53.88	53.76	0.5		Pass
VHT80	MCS0	2	154	5770	76.00	76.20	100.40	97.44	74.48	73.20	0.5		Pass
VHT80	MCS0	2	158	5790	76.00	75.80	96.00	95.04	72.64	73.20	0.5		Pass
VHT80	MCS0	2	161	5805	76.40	76.20	96.72	98.16	74.24	72.80	0.5		Pass

**TEST RESULTS DATA**  
**Average Power Table**

Band IV														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	0.13	0.13	10.18	10.73	13.48	30.00	17.00		Pass	
VHT10	MCS0	2	158	5790	0.13	0.13	13.35	12.96	16.17	30.00	17.00		Pass	
VHT10	MCS0	2	168	5840	0.13	0.13	13.13	14.31	16.77	30.00	17.00		Pass	
VHT20	MCS0	2	148	5740	0.20	0.20	14.41	15.28	17.88	30.00	17.00		Pass	
VHT20	MCS0	2	158	5790	0.20	0.20	17.05	17.25	20.16	30.00	17.00		Pass	
VHT20	MCS0	2	167	5835	0.20	0.20	17.71	19.13	21.49	30.00	17.00		Pass	
VHT30	MCS0	2	149	5745	0.30	0.35	13.40	14.46	16.97	30.00	17.00		Pass	
VHT30	MCS0	2	158	5790	0.30	0.35	17.10	17.80	20.48	30.00	17.00		Pass	
VHT30	MCS0	2	166	5830	0.30	0.35	18.55	19.46	22.04	30.00	17.00		Pass	
VHT40	MCS0	2	150	5750	0.39	0.46	12.95	14.03	16.53	30.00	17.00		Pass	
VHT40	MCS0	2	158	5790	0.39	0.46	14.09	16.18	18.27	30.00	17.00		Pass	
VHT40	MCS0	2	165	5825	0.39	0.46	15.72	17.14	19.50	30.00	17.00		Pass	
VHT50	MCS0	2	151	5755	0.45	0.45	13.08	13.86	16.50	30.00	17.00		Pass	
VHT50	MCS0	2	158	5790	0.45	0.45	15.05	16.95	19.11	30.00	17.00		Pass	
VHT50	MCS0	2	164	5820	0.45	0.45	15.83	18.25	20.21	30.00	17.00		Pass	
VHT60	MCS0	2	152	5760	0.51	0.59	13.41	14.17	16.81	30.00	17.00		Pass	
VHT60	MCS0	2	158	5790	0.51	0.59	15.27	17.25	19.38	30.00	17.00		Pass	
VHT60	MCS0	2	163	5815	0.51	0.59	15.87	18.50	20.39	30.00	17.00		Pass	
VHT80	MCS0	2	154	5770	0.76	0.76	15.01	15.69	18.38	30.00	17.00		Pass	
VHT80	MCS0	2	158	5790	0.76	0.76	17.48	16.08	19.85	30.00	17.00		Pass	
VHT80	MCS0	2	161	5805	0.76	0.76	16.61	15.81	19.24	30.00	17.00		Pass	

**TEST RESULTS DATA**  
**Power Spectral Density**

Band IV																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	0.13	0.13	2.22				1.48	30.00	20.01		Pass	
VHT10	MCS0	2	158	5790	0.13	0.13	2.22				4.62	30.00	20.01		Pass	
VHT10	MCS0	2	168	5840	0.13	0.13	2.22				5.40	30.00	20.01		Pass	
VHT20	MCS0	2	148	5740	0.20	0.20	2.22				4.03	30.00	20.01		Pass	
VHT20	MCS0	2	158	5790	0.20	0.20	2.22				6.50	30.00	20.01		Pass	
VHT20	MCS0	2	167	5835	0.20	0.20	2.22				8.07	30.00	20.01		Pass	
VHT30	MCS0	2	149	5745	0.30	0.35	2.22				2.16	30.00	20.01		Pass	
VHT30	MCS0	2	158	5790	0.30	0.35	2.22				5.64	30.00	20.01		Pass	
VHT30	MCS0	2	166	5830	0.30	0.35	2.22				6.93	30.00	20.01		Pass	
VHT40	MCS0	2	150	5750	0.39	0.46	2.22				0.13	30.00	20.01		Pass	
VHT40	MCS0	2	158	5790	0.39	0.46	2.22				2.05	30.00	20.01		Pass	
VHT40	MCS0	2	165	5825	0.39	0.46	2.22				3.23	30.00	20.01		Pass	
VHT50	MCS0	2	151	5755	0.45	0.45	2.22				-0.64	30.00	20.01		Pass	
VHT50	MCS0	2	158	5790	0.45	0.45	2.22				2.20	30.00	20.01		Pass	
VHT50	MCS0	2	164	5820	0.45	0.45	2.22				3.72	30.00	20.01		Pass	
VHT60	MCS0	2	152	5760	0.51	0.59	2.22				-0.94	30.00	20.01		Pass	
VHT60	MCS0	2	158	5790	0.51	0.59	2.22				2.13	30.00	20.01		Pass	
VHT60	MCS0	2	163	5815	0.51	0.59	2.22				3.32	30.00	20.01		Pass	
VHT80	MCS0	2	154	5770	0.76	0.76	2.22				-0.76	30.00	20.01		Pass	
VHT80	MCS0	2	158	5790	0.76	0.76	2.22				0.79	30.00	20.01		Pass	
VHT80	MCS0	2	161	5805	0.76	0.76	2.22				-0.03	30.00	20.01		Pass	

**TEST RESULTS DATA**  
**Frequency Stability**

Band IV										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
VHT10	MCS0	1	147	5735	5735.000	0.000	0.00	80	120	
VHT10	MCS0	1	147	5735	5735.013	0.012	2.18	-40	120	
VHT10	MCS0	1	147	5735	5734.950	-0.050	-8.72	20	132	
VHT10	MCS0	1	147	5735	5734.988	-0.012	-2.18	20	108	
VHT10	MCS0	1	147	5735	5735.000	0.000	0.00	20	120	





<PTMP>

Test Engineer:	Derek Hsu	Temperature:	21~25	°C
Test Date:	2017/8/4~2017/08/23	Relative Humidity:	51~54	%

**TEST RESULTS DATA**  
**6dB and 26dB EBW and 99% OBW**

Band IV													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	10.23	10.30	14.33	14.82	8.76	8.82	0.5		Pass
VHT10	MCS0	2	158	5790	10.28	10.38	15.18	14.79	8.80	8.79	0.5		Pass
VHT10	MCS0	2	168	5840	10.40	10.43	15.39	15.60	8.78	8.82	0.5		Pass
VHT20	MCS0	2	148	5740	18.55	18.75	25.20	26.58	16.52	17.18	0.5		Pass
VHT20	MCS0	2	158	5790	19.00	18.70	26.04	26.05	17.12	17.24	0.5		Pass
VHT20	MCS0	2	167	5835	18.80	18.80	26.52	27.18	16.88	17.52	0.5		Pass
VHT30	MCS0	2	149	5745	27.98	27.68	39.42	40.20	26.52	26.46	0.5		Pass
VHT30	MCS0	2	158	5790	27.75	27.90	39.33	39.42	26.52	26.49	0.5		Pass
VHT30	MCS0	2	166	5830	27.98	27.83	40.05	39.69	26.49	26.49	0.5		Pass
VHT40	MCS0	2	150	5750	37.00	36.80	48.72	50.88	35.64	35.68	0.5		Pass
VHT40	MCS0	2	158	5790	36.90	36.90	47.88	48.96	35.92	35.68	0.5		Pass
VHT40	MCS0	2	165	5825	36.90	36.70	48.90	49.20	35.68	35.68	0.5		Pass
VHT50	MCS0	2	151	5755	45.00	45.00	60.75	60.75	44.60	43.80	0.5		Pass
VHT50	MCS0	2	158	5790	45.13	44.88	59.55	58.80	44.50	43.75	0.5		Pass
VHT50	MCS0	2	164	5820	45.00	45.00	60.15	58.50	43.75	44.05	0.5		Pass
VHT60	MCS0	2	152	5760	54.90	55.20	73.08	72.54	54.36	53.94	0.5		Pass
VHT60	MCS0	2	158	5790	54.90	55.05	73.62	71.64	54.48	53.88	0.5		Pass
VHT60	MCS0	2	163	5815	55.20	55.05	73.92	72.36	53.88	53.76	0.5		Pass
VHT80	MCS0	2	154	5770	76.00	76.20	100.40	97.44	74.48	73.20	0.5		Pass
VHT80	MCS0	2	158	5790	76.00	75.80	96.00	95.04	72.64	73.20	0.5		Pass
VHT80	MCS0	2	161	5805	76.40	76.20	96.72	98.16	74.24	72.80	0.5		Pass

**TEST RESULTS DATA**  
**Average Power Table**

Band IV														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	0.13	0.13	10.18	10.73	13.48	19.00	17.00		Pass	
VHT10	MCS0	2	158	5790	0.13	0.13	13.35	12.96	16.17	19.00	17.00		Pass	
VHT10	MCS0	2	168	5840	0.13	0.13	13.13	14.31	16.77	19.00	17.00		Pass	
VHT20	MCS0	2	148	5740	0.20	0.20	14.41	15.28	17.88	19.00	17.00		Pass	
VHT20	MCS0	2	158	5790	0.20	0.20	14.50	16.36	18.54	19.00	17.00		Pass	
VHT20	MCS0	2	167	5835	0.20	0.20	14.21	17.10	18.90	19.00	17.00		Pass	
VHT30	MCS0	2	149	5745	0.30	0.35	13.40	14.46	16.97	19.00	17.00		Pass	
VHT30	MCS0	2	158	5790	0.30	0.35	14.62	16.57	18.71	19.00	17.00		Pass	
VHT30	MCS0	2	166	5830	0.30	0.35	13.52	15.91	17.89	19.00	17.00		Pass	
VHT40	MCS0	2	150	5750	0.39	0.46	12.95	14.03	16.53	19.00	17.00		Pass	
VHT40	MCS0	2	158	5790	0.39	0.46	14.09	16.18	18.27	19.00	17.00		Pass	
VHT40	MCS0	2	165	5825	0.39	0.46	14.81	16.26	18.60	19.00	17.00		Pass	
VHT50	MCS0	2	151	5755	0.45	0.45	13.08	13.86	16.50	19.00	17.00		Pass	
VHT50	MCS0	2	158	5790	0.45	0.45	14.44	16.36	18.51	19.00	17.00		Pass	
VHT50	MCS0	2	164	5820	0.45	0.45	14.11	16.60	18.54	19.00	17.00		Pass	
VHT60	MCS0	2	152	5760	0.51	0.59	13.41	14.17	16.81	19.00	17.00		Pass	
VHT60	MCS0	2	158	5790	0.51	0.59	14.57	16.39	18.58	19.00	17.00		Pass	
VHT60	MCS0	2	163	5815	0.51	0.59	14.21	16.60	18.57	19.00	17.00		Pass	
VHT80	MCS0	2	154	5770	0.76	0.76	15.01	15.69	18.38	19.00	17.00		Pass	
VHT80	MCS0	2	158	5790	0.76	0.76	14.40	16.42	18.54	19.00	17.00		Pass	
VHT80	MCS0	2	161	5805	0.76	0.76	14.20	16.47	18.50	19.00	17.00		Pass	

**TEST RESULTS DATA**  
**Power Spectral Density**

Band IV																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT10	MCS0	2	147	5735	0.13	0.13	2.22				1.48	15.99	20.01		Pass	
VHT10	MCS0	2	158	5790	0.13	0.13	2.22				4.62	15.99	20.01		Pass	
VHT10	MCS0	2	168	5840	0.13	0.13	2.22				5.40	15.99	20.01		Pass	
VHT20	MCS0	2	148	5740	0.20	0.20	2.22				4.35	15.99	20.01		Pass	
VHT20	MCS0	2	158	5790	0.20	0.20	2.22				5.49	15.99	20.01		Pass	
VHT20	MCS0	2	167	5835	0.20	0.20	2.22				6.32	15.99	20.01		Pass	
VHT30	MCS0	2	149	5745	0.30	0.35	2.22				2.16	15.99	20.01		Pass	
VHT30	MCS0	2	158	5790	0.30	0.35	2.22				4.17	15.99	20.01		Pass	
VHT30	MCS0	2	166	5830	0.30	0.35	2.22				3.53	15.99	20.01		Pass	
VHT40	MCS0	2	150	5750	0.39	0.46	2.22				0.13	15.99	20.01		Pass	
VHT40	MCS0	2	158	5790	0.39	0.46	2.22				2.22	15.99	20.01		Pass	
VHT40	MCS0	2	165	5825	0.39	0.46	2.22				2.78	15.99	20.01		Pass	
VHT50	MCS0	2	151	5755	0.45	0.45	2.22				-0.64	15.99	20.01		Pass	
VHT50	MCS0	2	158	5790	0.45	0.45	2.22				1.73	15.99	20.01		Pass	
VHT50	MCS0	2	164	5820	0.45	0.45	2.22				2.10	15.99	20.01		Pass	
VHT60	MCS0	2	152	5760	0.51	0.59	2.22				-0.94	15.99	20.01		Pass	
VHT60	MCS0	2	158	5790	0.51	0.59	2.22				1.34	15.99	20.01		Pass	
VHT60	MCS0	2	163	5815	0.51	0.59	2.22				1.52	15.99	20.01		Pass	
VHT80	MCS0	2	154	5770	0.76	0.76	2.22				-2.59	15.99	20.01		Pass	
VHT80	MCS0	2	158	5790	0.76	0.76	2.22				-0.29	15.99	20.01		Pass	
VHT80	MCS0	2	161	5805	0.76	0.76	2.22				-0.26	15.99	20.01		Pass	

**TEST RESULTS DATA**  
**Frequency Stability**

Band IV										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
VHT10	MCS0	1	147	5735	5735.000	0.000	0.00	80	120	
VHT10	MCS0	1	147	5735	5735.013	0.012	2.18	-40	120	
VHT10	MCS0	1	147	5735	5734.950	-0.050	-8.72	20	132	
VHT10	MCS0	1	147	5735	5734.988	-0.012	-2.18	20	108	
VHT10	MCS0	1	147	5735	5735.000	0.000	0.00	20	120	



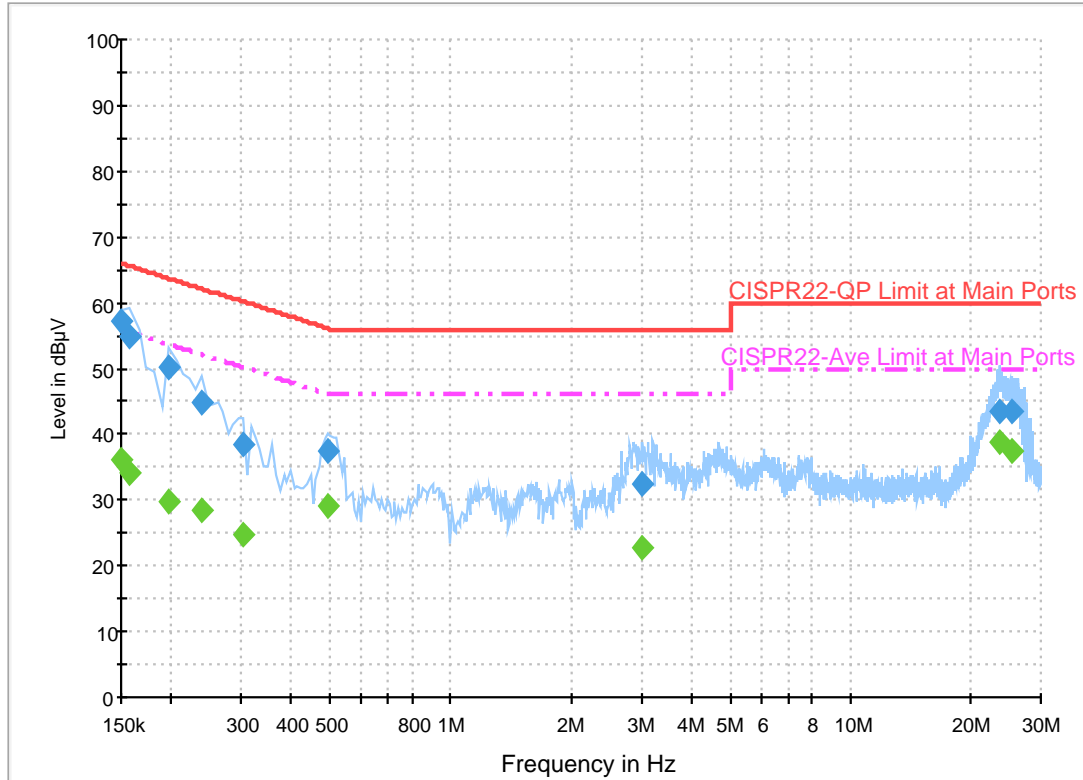
## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Eric Jeng	Temperature :	26~28°C
		Relative Humidity :	52~55%

# EUT Information

Report NO : 561115-03  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Line

ENV216 Auto Test FCC Power Bar - L



## Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	57.2	Off	L1	19.6	8.8	66.0
0.158000	54.7	Off	L1	19.6	10.9	65.6
0.198000	50.1	Off	L1	19.6	13.6	63.7
0.238000	44.8	Off	L1	19.6	17.4	62.2
0.302000	38.4	Off	L1	19.6	21.8	60.2
0.494000	37.3	Off	L1	19.6	18.8	56.1
3.006000	32.6	Off	L1	19.6	23.4	56.0
23.550000	43.5	Off	L1	20.7	16.5	60.0
25.318000	43.6	Off	L1	20.8	16.4	60.0

## Final Result 2

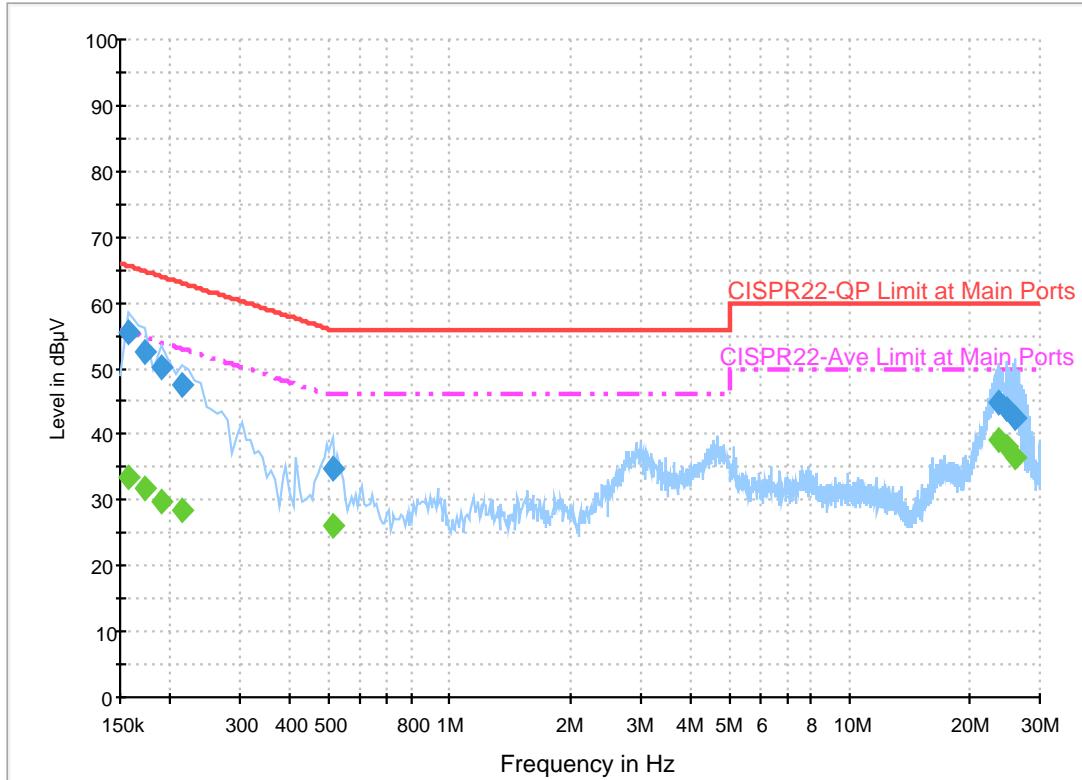
Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	36.0	Off	L1	19.6	20.0	56.0
0.158000	34.1	Off	L1	19.6	21.5	55.6
0.198000	29.7	Off	L1	19.6	24.0	53.7
0.238000	28.3	Off	L1	19.6	23.9	52.2
0.302000	24.6	Off	L1	19.6	25.6	50.2
0.494000	29.0	Off	L1	19.6	17.1	46.1
3.006000	22.7	Off	L1	19.6	23.3	46.0
23.550000	38.8	Off	L1	20.7	11.2	50.0
25.318000	37.6	Off	L1	20.8	12.4	50.0



# EUT Information

Report NO : 561115-03  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Neutral

ENV216 Auto Test FCC Power Bar - N



## Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	55.4	Off	N	19.5	10.2	65.6
0.174000	52.6	Off	N	19.5	12.2	64.8
0.190000	50.2	Off	N	19.5	13.8	64.0
0.214000	47.6	Off	N	19.5	15.4	63.0
0.510000	34.8	Off	N	19.5	21.2	56.0
23.710000	44.9	Off	N	20.9	15.1	60.0
24.926000	43.7	Off	N	21.0	16.3	60.0
26.062000	42.6	Off	N	21.0	17.4	60.0

## Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	33.6	Off	N	19.5	22.0	55.6
0.174000	31.8	Off	N	19.5	23.0	54.8
0.190000	29.9	Off	N	19.5	24.1	54.0
0.214000	28.6	Off	N	19.5	24.4	53.0
0.510000	26.2	Off	N	19.5	19.8	46.0
23.710000	39.1	Off	N	20.9	10.9	50.0
24.926000	38.3	Off	N	21.0	11.7	50.0
26.062000	36.3	Off	N	21.0	13.7	50.0



## Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jheng, Bill Chang, and Wilson Wu	Temperature :	24~26°C
		Relative Humidity :	47~50%

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT10 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ac VHT10 CH 147 5735MHz		5645	67.32	-0.88	68.2	57.74	32.54	7.72	30.68	198	1	P	H
		5696.4	72.65	-29.9	102.55	62.99	32.59	7.77	30.7	198	1	P	H
		5718.6	82.45	-27.96	110.41	72.73	32.62	7.81	30.71	198	1	P	H
		5725	84.18	-38.02	122.2	74.46	32.62	7.81	30.71	198	1	P	H
		5434	61.56	-12.44	74	52.32	32.32	7.52	30.6	198	0	P	H
		5434	49.98	-4.02	54	40.74	32.32	7.52	30.6	198	0	A	H
	*	5735	122.25	-	-	112.51	32.64	7.81	30.71	198	1	P	H
	*	5735	114.61	-	-	104.87	32.64	7.81	30.71	198	1	A	H
		5851.8	62.82	-55.28	118.1	52.97	32.74	7.88	30.77	198	1	P	H
		5872	61.76	-44.28	106.04	51.88	32.78	7.88	30.78	198	1	P	H
		5888	60.04	-35.51	95.55	50.15	32.8	7.88	30.79	198	1	P	H
		5932.4	57.04	-11.16	68.2	47.13	32.83	7.89	30.81	198	1	P	H
		5647.4	67.49	-0.71	68.2	57.9	32.54	7.73	30.68	194	3	P	V
		5698.4	72.78	-31.24	104.02	63.12	32.59	7.77	30.7	194	3	P	V
		5717.8	80.42	-29.76	110.18	70.7	32.62	7.81	30.71	194	3	P	V
		5723.4	81.35	-37.2	118.55	71.63	32.62	7.81	30.71	194	3	P	V
		5416	60.91	-13.09	74	51.7	32.3	7.51	30.6	207	0	P	V
		5416	48.92	-5.08	54	39.71	32.3	7.51	30.6	207	0	A	V
	*	5735	120.66	-	-	110.92	32.64	7.81	30.71	194	3	P	V
	*	5735	112.43	-	-	102.69	32.64	7.81	30.71	194	3	A	V
	5850.4	58.55	-62.74	121.29	48.7	32.74	7.88	30.77	194	3	P	V	
	5856.4	59.96	-50.45	110.41	50.09	32.76	7.88	30.77	194	3	P	V	
	5886.2	58.23	-38.65	96.88	48.35	32.78	7.88	30.78	194	3	P	V	
	5942.2	56.11	-12.09	68.2	46.19	32.85	7.89	30.82	194	3	P	V	



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5646	66.84	-1.36	68.2	57.25	32.54	7.73	30.68	190	0	P	H
		5692.4	70.47	-29.13	99.6	60.81	32.59	7.77	30.7	190	0	P	H
		5716.6	72.69	-37.16	109.85	63	32.61	7.79	30.71	190	0	P	H
		5725	70.69	-51.51	122.2	60.97	32.62	7.81	30.71	190	0	P	H
		5380	57.34	-16.66	74	48.19	32.26	7.48	30.59	229	0	P	H
		5380	50.78	-3.22	54	41.63	32.26	7.48	30.59	229	0	A	H
	*	5790	126.02	-	-	116.2	32.69	7.88	30.75	190	0	P	H
	*	5790	116.52	-	-	106.7	32.69	7.88	30.75	190	0	A	H
		5850	71.02	-51.18	122.2	61.17	32.74	7.88	30.77	190	0	P	H
		5857.4	69.77	-40.36	110.13	59.9	32.76	7.88	30.77	190	0	P	H
		5877.6	66.62	-36.65	103.27	56.74	32.78	7.88	30.78	190	0	P	H
802.11ac		5929.4	60.43	-7.77	68.2	50.52	32.83	7.89	30.81	190	0	P	H
VHT10		5645.4	66.43	-1.77	68.2	56.85	32.54	7.72	30.68	181	0	P	V
CH 158		5699.2	69.76	-34.85	104.61	60.1	32.59	7.77	30.7	181	0	P	V
5790MHz		5717.4	71.67	-38.4	110.07	61.98	32.61	7.79	30.71	181	0	P	V
		5720.2	71.42	-39.84	111.26	61.7	32.62	7.81	30.71	181	0	P	V
		5398	57.47	-16.53	74	48.3	32.28	7.49	30.6	207	0	P	V
		5398	50.94	-3.06	54	41.77	32.28	7.49	30.6	207	0	A	V
	*	5790	122.9	-	-	113.08	32.69	7.88	30.75	181	0	P	V
	*	5790	114.81	-	-	104.99	32.69	7.88	30.75	181	0	A	V
		5854.4	69.52	-42.65	112.17	59.65	32.76	7.88	30.77	181	0	P	V
		5864	67.4	-40.88	108.28	57.54	32.76	7.88	30.78	181	0	P	V
		5878.4	66.27	-36.4	102.67	56.39	32.78	7.88	30.78	181	0	P	V
		5933.8	61.23	-6.97	68.2	51.32	32.83	7.89	30.81	181	0	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5637.4	64.9	-3.3	68.2	55.31	32.54	7.72	30.67	194	2	P	H
		5699.8	67.62	-37.43	105.05	57.94	32.59	7.79	30.7	194	2	P	H
		5718.6	68.92	-41.49	110.41	59.2	32.62	7.81	30.71	194	2	P	H
		5722	69.5	-45.86	115.36	59.78	32.62	7.81	30.71	194	2	P	H
		5386	60.81	-13.19	74	51.66	32.26	7.48	30.59	199	360	P	H
		5386	48.59	-5.41	54	39.44	32.26	7.48	30.59	199	360	A	H
	*	5840	123.14	-	-	113.29	32.74	7.88	30.77	194	2	P	H
	*	5840	116.5	-	-	106.65	32.74	7.88	30.77	194	2	A	H
		5850.4	87.23	-34.06	121.29	77.38	32.74	7.88	30.77	194	2	P	H
		5855.6	83.96	-26.67	110.63	74.09	32.76	7.88	30.77	194	2	P	H
		5877.2	75.4	-28.17	103.57	65.52	32.78	7.88	30.78	194	2	P	H
802.11ac		5927.2	66.91	-1.29	68.2	57	32.83	7.89	30.81	194	2	P	H
VHT10		5641.4	65.85	-2.35	68.2	56.27	32.54	7.72	30.68	177	0	P	V
CH 168		5687.2	67.81	-27.95	95.76	58.14	32.59	7.77	30.69	177	0	P	V
5840MHz		5702.4	68.16	-37.71	105.87	58.46	32.61	7.79	30.7	177	0	P	V
		5722.4	68.03	-48.24	116.27	58.31	32.62	7.81	30.71	177	0	P	V
		5404	60.33	-13.67	74	51.16	32.28	7.49	30.6	200	360	P	V
		5404	48.37	-5.63	54	39.2	32.28	7.49	30.6	200	360	A	V
	*	5840	123.17	-	-	113.32	32.74	7.88	30.77	177	0	P	V
	*	5840	115.6	-	-	105.75	32.74	7.88	30.77	177	0	A	V
		5850	85.19	-37.01	122.2	75.34	32.74	7.88	30.77	177	0	P	V
		5857.2	82.81	-27.37	110.18	72.94	32.76	7.88	30.77	177	0	P	V
		5877.6	75.45	-27.82	103.27	65.57	32.78	7.88	30.78	177	0	P	V
		5925.6	66.02	-2.18	68.2	56.11	32.83	7.89	30.81	177	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT10 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT10 CH 147 5735MHz		11470	47.05	-26.95	74	51.75	39.91	11.29	56.41	100	0	P	H	
		17205	48.06	-20.14	68.2	49.73	40.48	13.43	56.22	100	0	P	H	
													H	
													H	
			11470	47.26	-26.74	74	51.96	39.91	11.29	56.41	100	0	P	V
			17205	47.07	-21.13	68.2	48.74	40.48	13.43	56.22	100	0	P	V
														V
802.11ac VHT10 CH 158 5790MHz		11580	49	-25	74	53.88	39.73	11.32	56.44	100	0	P	H	
		17370	47.71	-20.49	68.2	49.16	40.88	13.53	56.49	100	0	P	H	
													H	
													H	
			11580	51.45	-22.55	74	56.33	39.73	11.32	56.44	100	0	P	V
			17370	48.68	-19.52	68.2	50.13	40.88	13.53	56.49	100	0	P	V
														V
802.11ac VHT10 CH 168 5840MHz		11680	50.26	-23.74	74	55.42	39.49	11.34	56.5	100	0	P	H	
		17520	48.41	-19.79	68.2	49.42	41.45	13.62	56.7	100	0	P	H	
													H	
													H	
			11680	49.16	-24.84	74	54.32	39.49	11.34	56.5	100	0	P	V
			17520	47.49	-20.71	68.2	48.5	41.45	13.62	56.7	100	0	P	V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT20 CH 148 5740MHz		5634.4	67.68	-0.52	68.2	58.09	32.54	7.72	30.67	186	0	P	H
		5698.6	73.94	-30.23	104.17	64.28	32.59	7.77	30.7	186	0	P	H
		5720	82.18	-28.62	110.8	72.46	32.62	7.81	30.71	186	0	P	H
		5724.6	92.29	-29	121.29	82.57	32.62	7.81	30.71	186	0	P	H
		5422	61.29	-12.71	74	52.08	32.3	7.51	30.6	241	0	P	H
		5422	50.99	-3.01	54	41.78	32.3	7.51	30.6	241	0	A	H
	*	5740	124.44	-	-	114.7	32.64	7.83	30.73	186	0	P	H
	*	5740	116.96	-	-	107.22	32.64	7.83	30.73	186	0	A	H
		5853.6	63.17	-50.82	113.99	53.3	32.76	7.88	30.77	186	0	P	H
		5858	64.18	-45.78	109.96	54.31	32.76	7.88	30.77	186	0	P	H
		5881.4	61.41	-39.04	100.45	51.53	32.78	7.88	30.78	186	0	P	H
		5937.2	57.08	-11.12	68.2	47.17	32.83	7.89	30.81	186	0	P	H
		5634.8	66.46	-1.74	68.2	56.87	32.54	7.72	30.67	186	0	P	V
		5693.4	72.42	-27.91	100.33	62.76	32.59	7.77	30.7	186	0	P	V
		5718.2	82.64	-27.66	110.3	72.92	32.62	7.81	30.71	186	0	P	V
		5725	88.2	-34	122.2	78.48	32.62	7.81	30.71	186	0	P	V
		5422	59.19	-14.81	74	49.98	32.3	7.51	30.6	241	0	P	V
		5422	49.45	-4.55	54	40.24	32.3	7.51	30.6	241	0	A	V
	*	5740	123.04	-	-	113.3	32.64	7.83	30.73	186	0	P	V
	*	5740	114.86	-	-	105.12	32.64	7.83	30.73	186	0	A	V
	5853	61.91	-53.45	115.36	52.06	32.74	7.88	30.77	186	0	P	V	
	5856.4	61.96	-48.45	110.41	52.09	32.76	7.88	30.77	186	0	P	V	
	5889.4	60.78	-33.73	94.51	50.89	32.8	7.88	30.79	186	0	P	V	
	5926	56.88	-11.32	68.2	46.97	32.83	7.89	30.81	186	0	P	V	



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
		5649.4	67.24	-0.96	68.2	57.65	32.54	7.73	30.68	205	0	P	H
		5695.6	69.71	-32.25	101.96	60.05	32.59	7.77	30.7	205	0	P	H
		5719.8	72.74	-38	110.74	63.02	32.62	7.81	30.71	205	0	P	H
		5722.6	72.76	-43.97	116.73	63.04	32.62	7.81	30.71	205	0	P	H
		5440	60.75	-13.25	74	51.51	32.32	7.52	30.6	191	0	P	H
		5440	52.81	-1.19	54	43.57	32.32	7.52	30.6	191	0	A	H
	*	5790	126.5	-	-	116.68	32.69	7.88	30.75	205	0	P	H
	*	5790	118.33	-	-	108.51	32.69	7.88	30.75	205	0	A	H
		5854.2	70.42	-42.2	112.62	60.55	32.76	7.88	30.77	205	0	P	H
		5857.8	70.8	-39.21	110.01	60.93	32.76	7.88	30.77	205	0	P	H
		5889.2	66.54	-28.12	94.66	56.65	32.8	7.88	30.79	205	0	P	H
802.11ac		5928	60.99	-7.21	68.2	51.08	32.83	7.89	30.81	205	0	P	H
VHT20		5647	66.71	-1.49	68.2	57.12	32.54	7.73	30.68	189	0	P	V
CH 158		5682	68.96	-22.96	91.92	59.31	32.57	7.77	30.69	189	0	P	V
5790MHz		5718.8	70.69	-39.77	110.46	60.97	32.62	7.81	30.71	189	0	P	V
		5720.2	71.1	-40.16	111.26	61.38	32.62	7.81	30.71	189	0	P	V
		5440	58.99	-15.01	74	49.75	32.32	7.52	30.6	190	0	P	V
		5440	51.59	-2.41	54	42.35	32.32	7.52	30.6	190	0	A	V
	*	5790	124.09	-	-	114.27	32.69	7.88	30.75	189	0	P	V
	*	5790	116.29	-	-	106.47	32.69	7.88	30.75	189	0	A	V
		5850.2	69.73	-52.01	121.74	59.88	32.74	7.88	30.77	189	0	P	V
		5859.8	69.52	-39.93	109.45	59.65	32.76	7.88	30.77	189	0	P	V
		5875.8	67.41	-37.2	104.61	57.53	32.78	7.88	30.78	189	0	P	V
		5927	62.49	-5.71	68.2	52.58	32.83	7.89	30.81	189	0	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5635.4	65.36	-2.84	68.2	55.77	32.54	7.72	30.67	192	0	P	H
		5694.8	67.28	-34.09	101.37	57.62	32.59	7.77	30.7	192	0	P	H
		5710.8	68.84	-39.39	108.23	59.14	32.61	7.79	30.7	192	0	P	H
		5721.2	68.63	-44.91	113.54	58.91	32.62	7.81	30.71	192	0	P	H
		5416	60.42	-13.58	74	51.21	32.3	7.51	30.6	207	0	P	H
		5416	52.85	-1.15	54	43.64	32.3	7.51	30.6	207	0	A	H
	*	5835	126.77	-	-	116.92	32.73	7.88	30.76	192	0	P	H
	*	5835	118.96	-	-	109.11	32.73	7.88	30.76	192	0	A	H
		5850.4	96.06	-25.23	121.29	86.21	32.74	7.88	30.77	192	0	P	H
		5857.6	82.19	-27.88	110.07	72.32	32.76	7.88	30.77	192	0	P	H
802.11ac		5876.6	75.6	-28.41	104.01	65.72	32.78	7.88	30.78	192	0	P	H
VHT20		5928.6	66.72	-1.48	68.2	56.81	32.83	7.89	30.81	192	0	P	H
CH 167		5623.6	66.36	-1.84	68.2	56.81	32.52	7.7	30.67	191	0	P	V
5835MHz		5686.8	67.7	-27.76	95.46	58.03	32.59	7.77	30.69	191	0	P	V
		5714.6	68.56	-40.73	109.29	58.87	32.61	7.79	30.71	191	0	P	V
		5722.8	68.93	-48.25	117.18	59.21	32.62	7.81	30.71	191	0	P	V
		5446	59.28	-14.72	74	50.02	32.34	7.52	30.6	195	0	P	V
		5446	51.56	-2.44	54	42.3	32.34	7.52	30.6	195	0	A	V
	*	5835	125.31	-	-	115.46	32.73	7.88	30.76	191	0	P	V
	*	5835	117.41	-	-	107.56	32.73	7.88	30.76	191	0	A	V
		5850.2	91.38	-30.36	121.74	81.53	32.74	7.88	30.77	191	0	P	V
		5855.8	86.53	-24.05	110.58	76.66	32.76	7.88	30.77	191	0	P	V
		5878.2	73.17	-29.65	102.82	63.29	32.78	7.88	30.78	191	0	P	V
		5929.8	66.68	-1.52	68.2	56.77	32.83	7.89	30.81	191	0	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												





Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT20 CH 148 5740MHz		11480	56.53	-17.47	74	61.23	39.91	11.29	56.41	206	36	P	H
		11480	46.88	-7.12	54	51.58	39.91	11.29	56.41	206	36	A	H
		17220	48.84	-19.36	68.2	50.49	40.52	13.44	56.25	100	0	P	H
													H
		11480	57.42	-16.58	74	62.12	39.91	11.29	56.41	109	152	P	V
		11480	48.27	-5.73	54	52.97	39.91	11.29	56.41	109	152	A	V
		17220	47.33	-20.87	68.2	48.98	40.52	13.44	56.25	100	0	P	V
													V
802.11ac VHT20 CH 158 5790MHz		11580	59.01	-14.99	74	63.89	39.73	11.32	56.44	232	223	P	H
		11580	49.85	-4.15	54	54.73	39.73	11.32	56.44	232	223	A	H
		17370	49.9	-18.3	68.2	51.35	40.88	13.53	56.49	100	0	P	H
													H
		11580	58.35	-15.65	74	63.23	39.73	11.32	56.44	305	158	P	V
		11580	49.72	-4.28	54	54.6	39.73	11.32	56.44	305	158	A	V
		17370	47.49	-20.71	68.2	48.94	40.88	13.53	56.49	100	0	P	V
													V
802.11ac VHT20 CH 167 5835MHz		11670	59.33	-14.67	74	64.49	39.49	11.34	56.5	244	221	P	H
		11670	50.01	-3.99	54	55.17	39.49	11.34	56.5	244	221	A	H
		17505	50.8	-17.4	68.2	52.08	41.2	13.6	56.7	100	0	P	H
													H
		11670	59.54	-14.46	74	64.7	39.49	11.34	56.5	295	155	P	V
		11670	49.86	-4.14	54	55.02	39.49	11.34	56.5	295	155	A	V
		17505	48.13	-20.07	68.2	49.41	41.2	13.6	56.7	100	0	P	V
													V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



WIFI 802.11ac VHT30 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT30 CH 149 5745MHz		5648.6	66.93	-1.27	68.2	57.34	32.54	7.73	30.68	196	0	P	H
		5699.6	73.27	-31.64	104.91	63.59	32.59	7.79	30.7	196	0	P	H
		5716.4	80.93	-28.86	109.79	71.24	32.61	7.79	30.71	196	0	P	H
		5725	91.86	-30.34	122.2	82.14	32.62	7.81	30.71	196	0	P	H
		5416	60.58	-13.42	74	51.37	32.3	7.51	30.6	214	0	P	H
		5416	53.65	-0.35	54	44.44	32.3	7.51	30.6	214	0	A	H
	*	5745	121.13	-	-	111.39	32.64	7.83	30.73	196	0	P	H
	*	5745	115.09	-	-	105.35	32.64	7.83	30.73	196	0	A	H
		5851.4	63.83	-55.18	119.01	53.98	32.74	7.88	30.77	196	0	P	H
		5860.2	62.78	-46.56	109.34	52.91	32.76	7.88	30.77	196	0	P	H
		5895	61.54	-28.82	90.36	51.65	32.8	7.88	30.79	196	0	P	H
		5931.4	56.71	-11.49	68.2	46.8	32.83	7.89	30.81	196	0	P	H
		5649.6	66.08	-2.12	68.2	56.47	32.56	7.73	30.68	200	0	P	V
		5697	71.69	-31.3	102.99	62.03	32.59	7.77	30.7	200	0	P	V
		5719.2	85.77	-24.81	110.58	76.05	32.62	7.81	30.71	200	0	P	V
		5724.2	90.29	-30.09	120.38	80.57	32.62	7.81	30.71	200	0	P	V
		5422	60.41	-13.59	74	51.2	32.3	7.51	30.6	210	0	P	V
		5422	52.7	-1.3	54	43.49	32.3	7.51	30.6	210	0	A	V
	*	5745	119.14	-	-	109.4	32.64	7.83	30.73	200	0	P	V
	*	5745	112.83	-	-	103.09	32.64	7.83	30.73	200	0	A	V
	5851	61.16	-58.76	119.92	51.31	32.74	7.88	30.77	200	0	P	V	
	5859.8	61.15	-48.3	109.45	51.28	32.76	7.88	30.77	200	0	P	V	
	5878	60.01	-42.96	102.97	50.13	32.78	7.88	30.78	200	0	P	V	
	5935.2	56.58	-11.62	68.2	46.67	32.83	7.89	30.81	200	0	P	V	



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5649.2	67.03	-1.17	68.2	57.44	32.54	7.73	30.68	185	0	P	H
		5699.8	70.52	-34.53	105.05	60.84	32.59	7.79	30.7	185	0	P	H
		5716.8	72.97	-36.94	109.91	63.28	32.61	7.79	30.71	185	0	P	H
		5721.6	73.17	-41.28	114.45	63.45	32.62	7.81	30.71	185	0	P	H
		5434	60.1	-13.9	74	50.86	32.32	7.52	30.6	206	0	P	H
		5434	53.36	-0.64	54	44.12	32.32	7.52	30.6	206	0	A	H
	*	5790	124.21	-	-	114.39	32.69	7.88	30.75	185	0	P	H
	*	5790	117.25	-	-	107.43	32.69	7.88	30.75	185	0	A	H
		5850	72.69	-49.51	122.2	62.84	32.74	7.88	30.77	185	0	P	H
		5872.4	69.44	-36.49	105.93	59.56	32.78	7.88	30.78	185	0	P	H
		5875.2	68.25	-36.8	105.05	58.37	32.78	7.88	30.78	185	0	P	H
802.11ac		5925.6	63.11	-5.09	68.2	53.2	32.83	7.89	30.81	185	0	P	H
VHT30		5643.4	66.66	-1.54	68.2	57.08	32.54	7.72	30.68	192	0	P	V
CH 158		5697.2	68.89	-34.25	103.14	59.23	32.59	7.77	30.7	192	0	P	V
5790MHz		5715.6	70.52	-39.05	109.57	60.83	32.61	7.79	30.71	192	0	P	V
		5720.6	71.12	-41.05	112.17	61.4	32.62	7.81	30.71	192	0	P	V
		5404	59.3	-14.7	74	50.13	32.28	7.49	30.6	204	0	P	V
		5404	52.16	-1.84	54	42.99	32.28	7.49	30.6	204	0	A	V
	*	5790	121.6	-	-	111.78	32.69	7.88	30.75	192	0	P	V
	*	5790	114.61	-	-	104.79	32.69	7.88	30.75	192	0	A	V
		5850	69.12	-53.08	122.2	59.27	32.74	7.88	30.77	192	0	P	V
		5857.2	68.54	-41.64	110.18	58.67	32.76	7.88	30.77	192	0	P	V
		5879	66.63	-35.6	102.23	56.75	32.78	7.88	30.78	192	0	P	V
		5935	61.2	-7	68.2	51.29	32.83	7.89	30.81	192	0	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT30 CH 166 5830MHz		5642	65.73	-2.47	68.2	56.15	32.54	7.72	30.68	195	2	P	H
		5699.4	69.03	-35.73	104.76	59.37	32.59	7.77	30.7	195	2	P	H
		5716.2	69.72	-40.02	109.74	60.03	32.61	7.79	30.71	195	2	P	H
		5724.2	69.8	-50.58	120.38	60.08	32.62	7.81	30.71	195	2	P	H
		5422	61.03	-12.97	74	51.82	32.3	7.51	30.6	204	0	P	H
		5422	52.81	-1.19	54	43.6	32.3	7.51	30.6	204	0	A	H
	*	5830	124.33	-	-	114.48	32.73	7.88	30.76	195	2	P	H
	*	5830	117.94	-	-	108.09	32.73	7.88	30.76	195	2	A	H
		5850	89.21	-32.99	122.2	79.36	32.74	7.88	30.77	195	2	P	H
		5855	86.35	-24.45	110.8	76.48	32.76	7.88	30.77	195	2	P	H
		5875.6	74.58	-30.17	104.75	64.7	32.78	7.88	30.78	195	2	P	H
		5926.6	66.78	-1.42	68.2	56.87	32.83	7.89	30.81	195	2	P	H
		5640.4	66.31	-1.89	68.2	56.73	32.54	7.72	30.68	182	2	P	V
		5695.8	68.41	-33.69	102.1	58.75	32.59	7.77	30.7	182	2	P	V
		5718.8	69.61	-40.85	110.46	59.89	32.62	7.81	30.71	182	2	P	V
		5724.6	70.08	-51.21	121.29	60.36	32.62	7.81	30.71	182	2	P	V
		5446	60.84	-13.16	74	51.58	32.34	7.52	30.6	193	0	P	V
		5446	52.85	-1.15	54	43.59	32.34	7.52	30.6	193	0	A	V
	*	5830	123.16	-	-	113.31	32.73	7.88	30.76	182	2	P	V
	*	5830	116.85	-	-	107	32.73	7.88	30.76	182	2	A	V
	5851.2	95.72	-23.74	119.46	85.87	32.74	7.88	30.77	182	2	P	V	
	5855.4	87.88	-22.81	110.69	78.01	32.76	7.88	30.77	182	2	P	V	
	5878.2	75.96	-26.86	102.82	66.08	32.78	7.88	30.78	182	2	P	V	
	5926	66.76	-1.44	68.2	56.85	32.83	7.89	30.81	182	2	P	V	
Remark	5. No other spurious found. 6. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT30 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT30 CH 149 5745MHz		11490	49.97	-24.03	74	54.66	39.91	11.3	56.41	100	0	P	H	
		17235	46.96	-21.24	68.2	48.59	40.56	13.44	56.27	100	0	P	H	
													H	
													H	
			11490	54.13	-19.87	74	58.82	39.91	11.3	56.41	110	193	P	V
			11490	45.93	-8.07	54	50.62	39.91	11.3	56.41	110	193	A	V
			17235	47.16	-21.04	68.2	48.79	40.56	13.44	56.27	100	0	P	V
802.11ac VHT30 CH 158 5790MHz													V	
													V	
			11580	56.3	-17.7	74	61.18	39.73	11.32	56.44	213	30	P	H
			11580	48.43	-5.57	54	53.31	39.73	11.32	56.44	213	30	A	H
			17370	48.77	-19.43	68.2	50.22	40.88	13.53	56.49	100	0	P	H
														H
			11580	58.82	-15.18	74	63.7	39.73	11.32	56.44	297	158	P	V
802.11ac VHT30 CH 166 5830MHz													V	
													V	
			11660	58.41	-15.59	74	63.52	39.53	11.34	56.49	230	32	P	H
			11660	49.84	-4.16	54	54.95	39.53	11.34	56.49	230	32	A	H
			17490	48.61	-19.59	68.2	49.9	41.16	13.6	56.67	100	0	P	H
														H
			11660	59.44	-14.56	74	64.55	39.53	11.34	56.49	282	163	P	V
Remark	5. No other spurious found.													
	6. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT40 CH 150 5750MHz		5647.6	66.87	-1.33	68.2	57.28	32.54	7.73	30.68	198	0	P	H
		5693.4	72.22	-28.11	100.33	62.56	32.59	7.77	30.7	198	0	P	H
		5719.8	85.38	-25.36	110.74	75.66	32.62	7.81	30.71	198	0	P	H
		5725	91.98	-30.22	122.2	82.26	32.62	7.81	30.71	198	0	P	H
		5416	61.13	-12.87	74	51.92	32.3	7.51	30.6	206	360	P	H
		5416	49.87	-4.13	54	40.66	32.3	7.51	30.6	206	360	A	H
	*	5750	118.69	-	-	108.95	32.64	7.83	30.73	198	0	P	H
	*	5750	111.37	-	-	101.63	32.64	7.83	30.73	198	0	A	H
		5850.2	64.61	-57.13	121.74	54.76	32.74	7.88	30.77	198	0	P	H
		5855.6	64.36	-46.27	110.63	54.49	32.76	7.88	30.77	198	0	P	H
		5875.6	62.27	-42.48	104.75	52.39	32.78	7.88	30.78	198	0	P	H
		5929	59.06	-9.14	68.2	49.15	32.83	7.89	30.81	198	0	P	H
		5649	67.3	-0.9	68.2	57.71	32.54	7.73	30.68	198	0	P	V
		5686.8	71.19	-24.27	95.46	61.52	32.59	7.77	30.69	198	0	P	V
		5719.4	83.74	-26.89	110.63	74.02	32.62	7.81	30.71	198	0	P	V
		5724.6	89.83	-31.46	121.29	80.11	32.62	7.81	30.71	198	0	P	V
		5416	58.84	-15.16	74	49.63	32.3	7.51	30.6	213	0	P	V
		5416	48.39	-5.61	54	39.18	32.3	7.51	30.6	213	0	A	V
	*	5750	117.33	-	-	107.59	32.64	7.83	30.73	198	0	P	V
	*	5750	109.77	-	-	100.03	32.64	7.83	30.73	198	0	A	V
	5854.8	59.69	-51.57	111.26	49.82	32.76	7.88	30.77	198	0	P	V	
	5863.8	59.33	-49	108.33	49.47	32.76	7.88	30.78	198	0	P	V	
	5884.6	59.32	-38.75	98.07	49.44	32.78	7.88	30.78	198	0	P	V	
	5928.8	51.98	-16.22	68.2	42.07	32.83	7.89	30.81	198	0	P	V	



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5647	67.26	-0.94	68.2	57.67	32.54	7.73	30.68	195	0	P	H
		5684.6	70.1	-23.74	93.84	60.43	32.59	7.77	30.69	195	0	P	H
		5716.2	72.91	-36.83	109.74	63.22	32.61	7.79	30.71	195	0	P	H
		5722.4	73.79	-42.48	116.27	64.07	32.62	7.81	30.71	195	0	P	H
		5428	57.69	-16.31	74	48.48	32.3	7.51	30.6	188	0	P	H
		5428	50.69	-3.31	54	41.48	32.3	7.51	30.6	188	0	A	H
	*	5790	120.78	-	-	110.96	32.69	7.88	30.75	195	0	P	H
	*	5790	113.52	-	-	103.7	32.69	7.88	30.75	195	0	A	H
		5851.4	71.79	-47.22	119.01	61.94	32.74	7.88	30.77	195	0	P	H
		5860	71.67	-37.73	109.4	61.8	32.76	7.88	30.77	195	0	P	H
		5876	68.56	-35.9	104.46	58.68	32.78	7.88	30.78	195	0	P	H
<b>802.11ac</b>		5929.6	62.45	-5.75	68.2	52.54	32.83	7.89	30.81	195	0	P	H
<b>VHT40</b>		5631	67.06	-1.14	68.2	57.49	32.52	7.72	30.67	183	0	P	V
<b>CH 158</b>		5690	69.27	-28.56	97.83	59.61	32.59	7.77	30.7	183	0	P	V
<b>5790MHz</b>		5710.4	70.76	-37.35	108.11	61.06	32.61	7.79	30.7	183	0	P	V
		5720.4	71.82	-39.89	111.71	62.1	32.62	7.81	30.71	183	0	P	V
		5458	58.56	-15.44	74	49.28	32.34	7.54	30.6	198	0	P	V
		5458	51.98	-2.02	54	42.7	32.34	7.54	30.6	198	0	A	V
	*	5790	119	-	-	109.18	32.69	7.88	30.75	183	0	P	V
	*	5790	111.25	-	-	101.43	32.69	7.88	30.75	183	0	A	V
		5850.4	68.37	-52.92	121.29	58.52	32.74	7.88	30.77	183	0	P	V
		5856	68.78	-41.74	110.52	58.91	32.76	7.88	30.77	183	0	P	V
		5875	66.56	-38.64	105.2	56.68	32.78	7.88	30.78	183	0	P	V
		5934.4	61.13	-7.07	68.2	51.22	32.83	7.89	30.81	183	0	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5644.4	65.94	-2.26	68.2	56.36	32.54	7.72	30.68	209	1	P	H
		5696	67.99	-34.26	102.25	58.33	32.59	7.77	30.7	209	1	P	H
		5708.6	70.31	-37.3	107.61	60.61	32.61	7.79	30.7	209	1	P	H
		5723.2	69.97	-48.13	118.1	60.25	32.62	7.81	30.71	209	1	P	H
		5398	60.55	-13.45	74	51.38	32.28	7.49	30.6	216	1	P	H
		5398	50.7	-3.3	54	41.53	32.28	7.49	30.6	216	1	A	H
	*	5825	121.83	-	-	111.98	32.73	7.88	30.76	209	1	P	H
	*	5825	114.57	-	-	104.72	32.73	7.88	30.76	209	1	A	H
		5853.2	90.67	-24.23	114.9	80.82	32.74	7.88	30.77	209	1	P	H
		5855.8	86.89	-23.69	110.58	77.02	32.76	7.88	30.77	209	1	P	H
		5886.4	73.53	-23.21	96.74	63.65	32.78	7.88	30.78	209	1	P	H
802.11ac		5930.4	66.22	-1.98	68.2	56.31	32.83	7.89	30.81	209	1	P	H
VHT40		5646.2	66.92	-1.28	68.2	57.33	32.54	7.73	30.68	191	0	P	V
CH 165		5681.2	69.53	-21.8	91.33	59.9	32.57	7.75	30.69	191	0	P	V
5825MHz		5717.4	70.82	-39.25	110.07	61.13	32.61	7.79	30.71	191	0	P	V
		5722.2	70.03	-45.79	115.82	60.31	32.62	7.81	30.71	191	0	P	V
		5386	60.78	-13.22	74	51.63	32.26	7.48	30.59	216	0	P	V
		5386	50.34	-3.66	54	41.19	32.26	7.48	30.59	216	0	A	V
	*	5825	120.62	-	-	110.77	32.73	7.88	30.76	191	0	P	V
	*	5825	112.92	-	-	103.07	32.73	7.88	30.76	191	0	A	V
		5850.4	93.22	-28.07	121.29	83.37	32.74	7.88	30.77	191	0	P	V
		5855.8	84.75	-25.83	110.58	74.88	32.76	7.88	30.77	191	0	P	V
		5883.4	73.9	-25.06	98.96	64.02	32.78	7.88	30.78	191	0	P	V
		5927	65.62	-2.58	68.2	55.71	32.83	7.89	30.81	191	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT40 CH 150 5750MHz		11500	47.22	-26.78	74	51.91	39.9	11.3	56.4	100	0	P	H	
		17250	47.01	-21.19	68.2	48.62	40.6	13.45	56.3	100	0	P	H	
													H	
													H	
			11500	48.5	-25.5	74	53.19	39.9	11.3	56.4	100	0	P	V
			17250	47.55	-20.65	68.2	49.16	40.6	13.45	56.3	100	0	P	V
														V
802.11ac VHT40 CH 158 5790MHz		11580	49.86	-24.14	74	54.74	39.73	11.32	56.44	100	0	P	H	
		17370	47.37	-20.83	68.2	48.82	40.88	13.53	56.49	100	0	P	H	
													H	
													H	
			11580	49.95	-24.05	74	54.83	39.73	11.32	56.44	100	0	P	V
			17370	47.45	-20.75	68.2	48.9	40.88	13.53	56.49	100	0	P	V
														V
802.11ac VHT40 CH 165 5825MHz		11650	52.84	-21.16	74	57.9	39.57	11.34	56.48	216	34	P	H	
		11650	45.99	-8.01	54	51.05	39.57	11.34	56.48	216	34	A	H	
		17475	48.02	-20.18	68.2	49.34	41.12	13.59	56.65	100	0	P	H	
													H	
			11650	50.95	-23.05	74	56.01	39.57	11.34	56.48	100	0	P	V
			17475	48.07	-20.13	68.2	49.39	41.12	13.59	56.65	100	0	P	V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ac VHT50 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5649.6	67.35	-0.85	68.2	57.74	32.56	7.73	30.68	211	0	P	H
		5700	74.67	-30.53	105.2	64.99	32.59	7.79	30.7	211	0	P	H
		5719.8	85.52	-25.22	110.74	75.8	32.62	7.81	30.71	211	0	P	H
		5722.2	89.98	-25.84	115.82	80.26	32.62	7.81	30.71	211	0	P	H
		5404	60.04	-13.96	74	50.87	32.28	7.49	30.6	208	0	P	H
		5404	50.27	-3.73	54	41.1	32.28	7.49	30.6	208	0	A	H
	*	5755	118.95	-	-	109.18	32.66	7.84	30.73	211	0	P	H
	*	5755	111.86	-	-	102.09	32.66	7.84	30.73	211	0	A	H
		5851.6	62.1	-56.45	118.55	52.25	32.74	7.88	30.77	211	0	P	H
		5859	63.83	-45.85	109.68	53.96	32.76	7.88	30.77	211	0	P	H
802.11ac		5875.6	61.78	-42.97	104.75	51.9	32.78	7.88	30.78	211	0	P	H
VHT50		5927.4	57.55	-10.65	68.2	47.64	32.83	7.89	30.81	211	0	P	H
CH 151		5649.6	66.38	-1.82	68.2	56.77	32.56	7.73	30.68	189	2	P	V
5755MHz		5699.4	72.65	-32.11	104.76	62.99	32.59	7.77	30.7	189	2	P	V
		5719.2	83.68	-26.9	110.58	73.96	32.62	7.81	30.71	189	2	P	V
		5724.2	88.78	-31.6	120.38	79.06	32.62	7.81	30.71	189	2	P	V
		5416	57.73	-16.27	74	48.52	32.3	7.51	30.6	215	0	P	V
		5416	48.43	-5.57	54	39.22	32.3	7.51	30.6	215	0	A	V
	*	5755	115.9	-	-	106.13	32.66	7.84	30.73	189	2	P	V
	*	5755	108.8	-	-	99.03	32.66	7.84	30.73	189	2	A	V
		5851.4	61.5	-57.51	119.01	51.65	32.74	7.88	30.77	189	2	P	V
		5857.2	62.63	-47.55	110.18	52.76	32.76	7.88	30.77	189	2	P	V
		5876.4	61.47	-42.69	104.16	51.59	32.78	7.88	30.78	189	2	P	V
		5938.6	56.91	-11.29	68.2	46.99	32.85	7.89	30.82	189	2	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
		5646	67.5	-0.7	68.2	57.91	32.54	7.73	30.68	191	0	P	H
		5698.2	71.22	-32.65	103.87	61.56	32.59	7.77	30.7	191	0	P	H
		5716	72.79	-36.89	109.68	63.1	32.61	7.79	30.71	191	0	P	H
		5723.2	73.17	-44.93	118.1	63.45	32.62	7.81	30.71	191	0	P	H
		5380	58.53	-15.47	74	49.38	32.26	7.48	30.59	205	0	P	H
		5380	51.39	-2.61	54	42.24	32.26	7.48	30.59	205	0	A	H
	*	5790	120.05	-	-	110.23	32.69	7.88	30.75	191	0	P	H
	*	5790	113.16	-	-	103.34	32.69	7.88	30.75	191	0	A	H
		5850.2	75.07	-46.67	121.74	65.22	32.74	7.88	30.77	191	0	P	H
		5856.8	71.93	-38.37	110.3	62.06	32.76	7.88	30.77	191	0	P	H
		5876.6	67.89	-36.12	104.01	58.01	32.78	7.88	30.78	191	0	P	H
		5925.2	61.93	-6.27	68.2	52.02	32.83	7.89	30.81	191	0	P	H
<b>802.11ac</b>		5648.4	67.47	-0.73	68.2	57.88	32.54	7.73	30.68	185	0	P	V
<b>VHT50</b>		5698.6	70.46	-33.71	104.17	60.8	32.59	7.77	30.7	185	0	P	V
<b>CH 158</b>		5718	72.21	-38.03	110.24	62.49	32.62	7.81	30.71	185	0	P	V
<b>5790MHz</b>		5724.4	73.84	-46.99	120.83	64.12	32.62	7.81	30.71	185	0	P	V
		5446	59.32	-14.68	74	50.06	32.34	7.52	30.6	212	0	P	V
		5446	51.56	-2.44	54	42.3	32.34	7.52	30.6	212	0	A	V
	*	5790	118.61	-	-	108.79	32.69	7.88	30.75	185	0	P	V
	*	5790	111.14	-	-	101.32	32.69	7.88	30.75	185	0	A	V
		5852.2	69.63	-47.55	117.18	59.78	32.74	7.88	30.77	185	0	P	V
		5861.2	68.58	-40.48	109.06	58.71	32.76	7.88	30.77	185	0	P	V
		5879.6	66.17	-35.61	101.78	56.29	32.78	7.88	30.78	185	0	P	V
		5928.4	62.16	-6.04	68.2	52.25	32.83	7.89	30.81	185	0	P	V



WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
		5619.6	65.81	-2.39	68.2	56.26	32.52	7.7	30.67	186	0	P	H
		5692.4	69.29	-30.31	99.6	59.63	32.59	7.77	30.7	186	0	P	H
		5712.6	70.26	-38.47	108.73	60.57	32.61	7.79	30.71	186	0	P	H
		5722.2	68.46	-47.36	115.82	58.74	32.62	7.81	30.71	186	0	P	H
		5404	60.92	-13.08	74	51.75	32.28	7.49	30.6	204	0	P	H
		5404	50.94	-3.06	54	41.77	32.28	7.49	30.6	204	0	A	H
	*	5820	121.48	-	-	111.63	32.73	7.88	30.76	186	0	P	H
	*	5820	114.16	-	-	104.31	32.73	7.88	30.76	186	0	A	H
		5854.2	90.26	-22.36	112.62	80.39	32.76	7.88	30.77	186	0	P	H
		5855	89.66	-21.14	110.8	79.79	32.76	7.88	30.77	186	0	P	H
		5876.2	77.27	-27.04	104.31	67.39	32.78	7.88	30.78	186	0	P	H
802.11ac		5940.4	64.33	-3.87	68.2	54.41	32.85	7.89	30.82	186	0	P	H
VHT50		5646.8	67.58	-0.62	68.2	57.99	32.54	7.73	30.68	204	2	P	V
CH 164		5683.8	69.86	-23.39	93.25	60.19	32.59	7.77	30.69	204	2	P	V
5720MHz		5707.2	70.07	-37.15	107.22	60.37	32.61	7.79	30.7	204	2	P	V
		5721.2	70.96	-42.58	113.54	61.24	32.62	7.81	30.71	204	2	P	V
		5428	62.95	-11.05	74	53.74	32.3	7.51	30.6	200	0	P	V
		5428	52.14	-1.86	54	42.93	32.3	7.51	30.6	200	0	A	V
	*	5820	120.12	-	-	110.27	32.73	7.88	30.76	204	2	P	V
	*	5820	112.92	-	-	103.07	32.73	7.88	30.76	204	2	A	V
		5850	90.73	-31.47	122.2	80.88	32.74	7.88	30.77	204	2	P	V
		5855.8	86.3	-24.28	110.58	76.43	32.76	7.88	30.77	204	2	P	V
		5875	76.65	-28.55	105.2	66.77	32.78	7.88	30.78	204	2	P	V
		5927.6	65.74	-2.46	68.2	55.83	32.83	7.89	30.81	204	2	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT50 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT50 CH 151 5755MHz		11510	48.95	-25.05	74	53.64	39.9	11.3	56.4	100	0	P	H	
		17265	46.78	-21.42	68.2	48.37	40.64	13.46	56.33	100	0	P	H	
													H	
													H	
			11510	48.73	-25.27	74	53.42	39.9	11.3	56.4	100	0	P	V
			17265	46.99	-21.21	68.2	48.58	40.64	13.46	56.33	100	0	P	V
														V
802.11ac VHT50 CH 158 5790MHz		11580	48.73	-25.27	74	53.61	39.73	11.32	56.44	100	0	P	H	
		17370	48.21	-19.99	68.2	49.66	40.88	13.53	56.49	100	0	P	H	
													H	
													H	
			11580	52.15	-21.85	74	57.03	39.73	11.32	56.44	232	190	P	V
			11580	43.75	-10.25	54	48.63	39.73	11.32	56.44	232	190	A	V
			17370	46.97	-21.23	68.2	48.42	40.88	13.53	56.49	100	0	P	V
802.11ac VHT50 CH 164 5820MHz		11640	52.55	-21.45	74	57.62	39.57	11.33	56.48	226	32	P	H	
		11640	45.25	-8.75	54	50.32	39.57	11.33	56.48	226	32	A	H	
		17460	49.06	-19.14	68.2	50.39	41.08	13.58	56.62	100	0	P	H	
													H	
			11640	54.68	-19.32	74	59.75	39.57	11.33	56.48	100	140	P	V
			11640	46.17	-7.83	54	51.24	39.57	11.33	56.48	100	140	A	V
			17460	47.51	-20.69	68.2	48.84	41.08	13.58	56.62	100	0	P	V
Remark	3. No other spurious found.													
	4. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ac VHT60 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5649	67.33	-0.87	68.2	57.74	32.54	7.73	30.68	201	0	P	H
		5696.2	75.54	-26.86	102.4	65.88	32.59	7.77	30.7	201	0	P	H
		5719.6	87.54	-23.15	110.69	77.82	32.62	7.81	30.71	201	0	P	H
		5724.8	89.81	-31.93	121.74	80.09	32.62	7.81	30.71	201	0	P	H
		5404	58.63	-15.37	74	49.46	32.28	7.49	30.6	207	0	P	H
		5404	49.72	-4.28	54	40.55	32.28	7.49	30.6	207	0	A	H
	*	5760	117.67	-	-	107.9	32.66	7.84	30.73	201	0	P	H
	*	5760	111.2	-	-	101.43	32.66	7.84	30.73	201	0	A	H
		5853.8	65.69	-47.85	113.54	55.82	32.76	7.88	30.77	201	0	P	H
		5859.8	64.88	-44.57	109.45	55.01	32.76	7.88	30.77	201	0	P	H
802.11ac		5878.8	63.54	-38.84	102.38	53.66	32.78	7.88	30.78	201	0	P	H
VHT60		5928	58.13	-10.07	68.2	48.22	32.83	7.89	30.81	201	0	P	H
CH 152		5644.6	66.32	-1.88	68.2	56.74	32.54	7.72	30.68	207	0	P	V
5760MHz		5700	77.28	-27.92	105.2	67.6	32.59	7.79	30.7	207	0	P	V
		5720	83.3	-27.5	110.8	73.58	32.62	7.81	30.71	207	0	P	V
		5725	89.74	-32.46	122.2	80.02	32.62	7.81	30.71	207	0	P	V
		5434	57.8	-16.2	74	48.56	32.32	7.52	30.6	209	0	P	V
		5434	47.94	-6.06	54	38.7	32.32	7.52	30.6	209	0	A	V
	*	5760	114.18	-	-	104.41	32.66	7.84	30.73	207	0	P	V
	*	5760	108.3	-	-	98.53	32.66	7.84	30.73	207	0	A	V
		5851.4	63.69	-55.32	119.01	53.84	32.74	7.88	30.77	207	0	P	V
		5863.8	62.35	-45.98	108.33	52.49	32.76	7.88	30.78	207	0	P	V
		5888.2	61.26	-34.14	95.4	51.37	32.8	7.88	30.79	207	0	P	V
		5947	56.97	-11.23	68.2	47.05	32.85	7.89	30.82	207	0	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5647	67.1	-1.1	68.2	57.51	32.54	7.73	30.68	196	0	P	H
		5699.8	70.75	-34.3	105.05	61.07	32.59	7.79	30.7	196	0	P	H
		5719.2	79.08	-31.5	110.58	69.36	32.62	7.81	30.71	196	0	P	H
		5722.4	80.21	-36.06	116.27	70.49	32.62	7.81	30.71	196	0	P	H
		5446	58.75	-15.25	74	49.49	32.34	7.52	30.6	204	0	P	H
		5446	52.01	-1.99	54	42.75	32.34	7.52	30.6	204	0	A	H
	*	5790	119.37	-	-	109.55	32.69	7.88	30.75	196	0	P	H
	*	5790	112.35	-	-	102.53	32.69	7.88	30.75	196	0	A	H
		5850.2	77.62	-44.12	121.74	67.77	32.74	7.88	30.77	196	0	P	H
		5862.4	74.75	-33.98	108.73	64.88	32.76	7.88	30.77	196	0	P	H
		5877.6	68.71	-34.56	103.27	58.83	32.78	7.88	30.78	196	0	P	H
<b>802.11ac</b>		5939.8	60.99	-7.21	68.2	51.07	32.85	7.89	30.82	196	0	P	H
<b>VHT60</b>		5647	67.08	-1.12	68.2	57.49	32.54	7.73	30.68	187	0	P	V
<b>CH 158</b>		5695.6	71.78	-30.18	101.96	62.12	32.59	7.77	30.7	187	0	P	V
<b>5790MHz</b>		5719.2	77.5	-33.08	110.58	67.78	32.62	7.81	30.71	187	0	P	V
		5723.8	80.66	-38.8	119.46	70.94	32.62	7.81	30.71	187	0	P	V
		5458	58.94	-15.06	74	49.66	32.34	7.54	30.6	216	0	P	V
		5458	52.3	-1.7	54	43.02	32.34	7.54	30.6	216	0	A	V
	*	5790	118.3	-	-	108.48	32.69	7.88	30.75	187	0	P	V
	*	5790	110.21	-	-	100.39	32.69	7.88	30.75	187	0	A	V
		5854	79.33	-33.75	113.08	69.46	32.76	7.88	30.77	187	0	P	V
		5855.4	77.72	-32.97	110.69	67.85	32.76	7.88	30.77	187	0	P	V
		5881.6	68.07	-32.23	100.3	58.19	32.78	7.88	30.78	187	0	P	V
		5933.4	61.45	-6.75	68.2	51.54	32.83	7.89	30.81	187	0	P	V



WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5639.2	67.51	-0.69	68.2	57.93	32.54	7.72	30.68	205	0	P	H
		5687.4	68.83	-27.08	95.91	59.16	32.59	7.77	30.69	205	0	P	H
		5720	69.74	-41.06	110.8	60.02	32.62	7.81	30.71	205	0	P	H
		5725	72.61	-49.59	122.2	62.89	32.62	7.81	30.71	205	0	P	H
		5374	61.54	-12.46	74	52.42	32.24	7.47	30.59	202	0	P	H
		5374	50.59	-3.41	54	41.47	32.24	7.47	30.59	202	0	A	H
	*	5815	119.21	-	-	109.38	32.71	7.88	30.76	205	0	P	H
	*	5815	113.17	-	-	103.34	32.71	7.88	30.76	205	0	A	H
		5851	91.24	-28.68	119.92	81.39	32.74	7.88	30.77	205	0	P	H
		5857.6	88.77	-21.3	110.07	78.9	32.76	7.88	30.77	205	0	P	H
		5876	76.31	-28.15	104.46	66.43	32.78	7.88	30.78	205	0	P	H
802.11ac		5925.2	66.41	-1.79	68.2	56.5	32.83	7.89	30.81	205	0	P	H
VHT60		5640	67.4	-0.8	68.2	57.82	32.54	7.72	30.68	209	0	P	V
CH 163		5679.8	69.84	-20.45	90.29	60.21	32.57	7.75	30.69	209	0	P	V
5815MHz		5717.4	70.9	-39.17	110.07	61.21	32.61	7.79	30.71	209	0	P	V
		5724.6	71.13	-50.16	121.29	61.41	32.62	7.81	30.71	209	0	P	V
		5410	61.81	-12.19	74	52.64	32.28	7.49	30.6	202	0	P	V
		5410	51.34	-2.66	54	42.17	32.28	7.49	30.6	202	0	A	V
	*	5815	117.48	-	-	107.65	32.71	7.88	30.76	209	0	P	V
	*	5815	110.37	-	-	100.54	32.71	7.88	30.76	209	0	A	V
		5850.6	90.69	-30.14	120.83	80.84	32.74	7.88	30.77	209	0	P	V
		5855	85.74	-25.06	110.8	75.87	32.76	7.88	30.77	209	0	P	V
		5875	81.99	-23.21	105.2	72.11	32.78	7.88	30.78	209	0	P	V
		5933.2	65.19	-3.01	68.2	55.28	32.83	7.89	30.81	209	0	P	V
Remark	5. No other spurious found. 6. All results are PASS against Peak and Average limit line.												





Band 4 5725~5850MHz

WIFI 802.11ac VHT60 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT60 CH 152 5760MHz		11520	46.27	-27.73	74	51.01	39.86	11.3	56.41	100	0	P	H	
		17280	47.22	-20.98	68.2	48.78	40.68	13.47	56.35	100	0	P	H	
													H	
													H	
			11520	47.23	-26.77	74	51.97	39.86	11.3	56.41	100	0	P	V
			17280	46.71	-21.49	68.2	48.27	40.68	13.47	56.35	100	0	P	V
														V
802.11ac VHT60 CH 158 5790MHz		11580	49.61	-24.39	74	54.49	39.73	11.32	56.44	100	0	P	H	
		17370	47.95	-20.25	68.2	49.4	40.88	13.53	56.49	100	0	P	H	
													H	
													H	
			11580	50.35	-23.65	74	55.23	39.73	11.32	56.44	100	0	P	V
			17370	47.67	-20.53	68.2	49.12	40.88	13.53	56.49	100	0	P	V
														V
802.11ac VHT60 CH 163 5815MHz		11630	52.57	-21.43	74	57.59	39.61	11.33	56.47	227	32	P	H	
		11630	45.34	-8.66	54	50.36	39.61	11.33	56.47	227	32	A	H	
		17445	47.12	-21.08	68.2	48.47	41.04	13.57	56.59	100	0	P	H	
													H	
			11630	53.07	-20.93	74	58.09	39.61	11.33	56.47	102	141	P	V
			11630	45.96	-8.04	54	50.98	39.61	11.33	56.47	102	141	A	V
			17448	47.38	-20.82	68.2	48.72	41.08	13.57	56.62	100	0	P	V
													V	
Remark	5. No other spurious found. 6. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT80 CH 154 5770MHz		5641.8	67.01	-1.19	68.2	57.43	32.54	7.72	30.68	201	1	P	H
		5662.8	75.44	-2.26	77.7	65.84	32.56	7.73	30.69	201	1	P	H
		5718.6	92.51	-17.9	110.41	82.79	32.62	7.81	30.71	201	1	P	H
		5725	97.08	-25.12	122.2	87.36	32.62	7.81	30.71	201	1	P	H
		5446	59.63	-14.37	74	50.37	32.34	7.52	30.6	213	0	P	H
		5446	51.77	-2.23	54	42.51	32.34	7.52	30.6	213	0	A	H
	*	5770	119.7	-	-	109.92	32.68	7.84	30.74	201	1	P	H
	*	5770	111.37	-	-	101.59	32.68	7.84	30.74	201	1	A	H
		5850.4	77.97	-43.32	121.29	68.12	32.74	7.88	30.77	201	1	P	H
		5861.8	78.6	-30.29	108.89	68.73	32.76	7.88	30.77	201	1	P	H
		5878.6	69.41	-33.12	102.53	59.53	32.78	7.88	30.78	201	1	P	H
		5927.2	56.97	-11.23	68.2	47.06	32.83	7.89	30.81	201	1	P	H
		5647	67	-1.2	68.2	57.41	32.54	7.73	30.68	199	3	P	V
		5690	86.44	-11.39	97.83	76.78	32.59	7.77	30.7	199	3	P	V
		5719.4	92.26	-18.37	110.63	82.54	32.62	7.81	30.71	199	3	P	V
		5725	93.21	-28.99	122.2	83.49	32.62	7.81	30.71	199	3	P	V
		5368	57.31	-16.69	74	48.19	32.24	7.47	30.59	198	2	P	V
		5368	49.95	-4.05	54	40.83	32.24	7.47	30.59	198	2	A	V
	*	5770	116.62	-	-	106.84	32.68	7.84	30.74	199	3	P	V
	*	5770	108.87	-	-	99.09	32.68	7.84	30.74	199	3	A	V
	5850	79.89	-42.31	122.2	70.04	32.74	7.88	30.77	199	3	P	V	
	5855.4	76.49	-34.2	110.69	66.62	32.76	7.88	30.77	199	3	P	V	
	5875.6	68.72	-36.03	104.75	58.84	32.78	7.88	30.78	199	3	P	V	
	5928.6	55.93	-12.27	68.2	46.02	32.83	7.89	30.81	199	3	P	V	



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
		5643.4	66.43	-1.77	68.2	56.85	32.54	7.72	30.68	196	0	P	H
		5698.2	80.2	-23.67	103.87	70.54	32.59	7.77	30.7	196	0	P	H
		5720	83.96	-26.84	110.8	74.24	32.62	7.81	30.71	196	0	P	H
		5723.2	86.6	-31.5	118.1	76.88	32.62	7.81	30.71	196	0	P	H
		5458	62.22	-11.78	74	52.94	32.34	7.54	30.6	198	0	P	H
		5458	53.51	-0.49	54	44.23	32.34	7.54	30.6	198	0	A	H
	*	5790	120.92	-	-	111.1	32.69	7.88	30.75	196	0	P	H
	*	5790	112.11	-	-	102.29	32.69	7.88	30.75	196	0	A	H
		5850.2	81.9	-39.84	121.74	72.05	32.74	7.88	30.77	196	0	P	H
		5864.8	83.81	-24.24	108.05	73.95	32.76	7.88	30.78	196	0	P	H
		5883.4	78.35	-20.61	98.96	68.47	32.78	7.88	30.78	196	0	P	H
802.11ac		5928.4	63.98	-4.22	68.2	54.07	32.83	7.89	30.81	196	0	P	H
VHT80		5648.8	62.43	-5.77	68.2	52.84	32.54	7.73	30.68	203	1	P	V
CH 158		5695.4	76.97	-24.84	101.81	67.31	32.59	7.77	30.7	203	1	P	V
5790MHz		5712.2	80.82	-27.8	108.62	71.12	32.61	7.79	30.7	203	1	P	V
		5724.2	82.09	-38.29	120.38	72.37	32.62	7.81	30.71	203	1	P	V
		5434	59.45	-14.55	74	50.21	32.32	7.52	30.6	206	0	P	V
		5434	51.86	-2.14	54	42.62	32.32	7.52	30.6	206	0	A	V
	*	5790	118.06	-	-	108.24	32.69	7.88	30.75	203	1	P	V
	*	5790	109.64	-	-	99.82	32.69	7.88	30.75	203	1	A	V
		5850.2	83.21	-38.53	121.74	73.36	32.74	7.88	30.77	203	1	P	V
		5855.6	78.01	-32.62	110.63	68.14	32.76	7.88	30.77	203	1	P	V
		5875	74.41	-30.79	105.2	64.53	32.78	7.88	30.78	203	1	P	V
		5934.2	62.48	-5.72	68.2	52.57	32.83	7.89	30.81	203	1	P	V



WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		5647	62.88	-5.32	68.2	53.29	32.54	7.73	30.68	213	0	P	H
		5689	69.37	-27.72	97.09	59.71	32.59	7.77	30.7	213	0	P	H
		5709.8	79.53	-28.42	107.95	69.83	32.61	7.79	30.7	213	0	P	H
		5724.6	79.95	-41.34	121.29	70.23	32.62	7.81	30.71	213	0	P	H
		5440	60.7	-13.3	74	51.46	32.32	7.52	30.6	210	0	P	H
		5440	53.27	-0.73	54	44.03	32.32	7.52	30.6	210	0	A	H
	*	5805	118.81	-	-	108.97	32.71	7.88	30.75	213	0	P	H
	*	5805	111.53	-	-	101.69	32.71	7.88	30.75	213	0	A	H
		5850.2	93.36	-28.38	121.74	83.51	32.74	7.88	30.77	213	0	P	H
		5855.2	86.09	-24.65	110.74	76.22	32.76	7.88	30.77	213	0	P	H
		5887.4	79.44	-16.55	95.99	69.56	32.78	7.88	30.78	213	0	P	H
802.11ac		5927	66.86	-1.34	68.2	56.95	32.83	7.89	30.81	213	0	P	H
VHT80		5640.6	60.17	-8.03	68.2	50.59	32.54	7.72	30.68	202	0	P	V
CH 161		5700	70.79	-34.41	105.2	61.11	32.59	7.79	30.7	202	0	P	V
5805MHz		5718.4	79.19	-31.16	110.35	69.47	32.62	7.81	30.71	202	0	P	V
		5720.4	77.86	-33.85	111.71	68.14	32.62	7.81	30.71	202	0	P	V
		5458	60.34	-13.66	74	51.06	32.34	7.54	30.6	217	0	P	V
		5458	53.32	-0.68	54	44.04	32.34	7.54	30.6	217	0	A	V
	*	5805	117.08	-	-	107.24	32.71	7.88	30.75	202	0	P	V
	*	5805	109.38	-	-	99.54	32.71	7.88	30.75	202	0	A	V
		5851.2	89.11	-30.35	119.46	79.26	32.74	7.88	30.77	202	0	P	V
		5855.6	87.67	-22.96	110.63	77.8	32.76	7.88	30.77	202	0	P	V
		5877.2	79.18	-24.39	103.57	69.3	32.78	7.88	30.78	202	0	P	V
		5938	61.67	-6.53	68.2	51.77	32.83	7.89	30.82	202	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11ac VHT80 CH 154 5770MHz		11540	47.73	-26.27	74	52.51	39.82	11.31	56.42	100	0	P	H	
		17310	46.74	-21.46	68.2	48.27	40.72	13.5	56.38	100	0	P	H	
													H	
													H	
			11540	47.22	-26.78	74	52	39.82	11.31	56.42	100	0	P	V
			17310	47.64	-20.56	68.2	49.17	40.72	13.5	56.38	100	0	P	V
														V
802.11ac VHT80 CH 158 5790MHz		11580	50	-24	74	54.88	39.73	11.32	56.44	100	0	P	H	
		17370	47.72	-20.48	68.2	49.17	40.88	13.53	56.49	100	0	P	H	
													H	
													H	
			11580	49.95	-24.05	74	54.83	39.73	11.32	56.44	100	0	P	V
			17370	47.13	-21.07	68.2	48.58	40.88	13.53	56.49	100	0	P	V
														V
802.11ac VHT80 CH 161 5805MHz		11610	49.59	-24.41	74	54.57	39.65	11.32	56.46	100	0	P	H	
		17415	47.79	-20.41	68.2	49.18	41	13.55	56.57	100	0	P	H	
													H	
													H	
			11610	48.85	-25.15	74	53.83	39.65	11.32	56.46	100	0	P	V
			17415	47.11	-21.09	68.2	48.5	41	13.55	56.57	100	0	P	V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz

5GHz WIFI 802.11ac VHT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
5GHz 802.11ac VHT20 LF		30	33.58	-6.42	40	42.72	22.63	0.59	32.34	-	-	P	H	
		114.51	34.69	-8.81	43.5	51.66	14.14	1.09	32.29	-	-	P	H	
		250.05	35.21	-10.79	46	50.58	15.16	1.59	32.2	-	-	P	H	
		400.1	38.18	-7.82	46	49.57	18.7	1.97	32.15	-	-	P	H	
		624.8	37.06	-8.94	46	43.72	22.98	2.45	32.2	-	-	P	H	
		874.7	41.95	-4.05	46	44.42	26.14	2.9	31.63	100	0	P	H	
														H
														H
														H
														H
														H
														H
			30	36.42	-3.58	40	45.56	22.63	0.59	32.34	100	0	P	V
			131.25	29.2	-14.3	43.5	46.88	13.36	1.19	32.28	-	-	P	V
			250.05	30.4	-15.6	46	45.77	15.16	1.59	32.2	-	-	P	V
			500.2	35.88	-10.12	46	44.88	20.92	2.2	32.2	-	-	P	V
			624.8	35.12	-10.88	46	41.78	22.98	2.45	32.2	-	-	P	V
			874.7	37.62	-8.38	46	40.09	26.14	2.9	31.63	-	-	P	V
													V	
													V	
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



**Note symbol**

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		( 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

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

**For Peak Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)  
= 55.45 (dBμV/m)
- Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 55.45(dBμV/m) – 74(dBμV/m)  
= -18.55(dB)

**For Average Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
- 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 D. Radiated Spurious Emission Plots

Test Engineer :	Alex Jheng, Bill Chang, and Wilson Wu	Temperature :	24~26°C
		Relative Humidity :	47~50%

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT10 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH147 5735MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(FUNB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

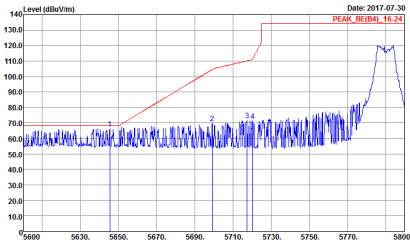
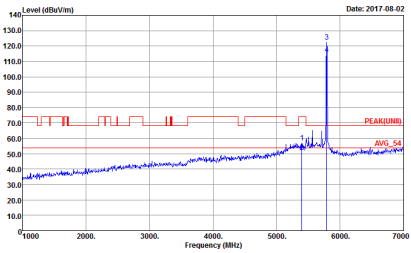
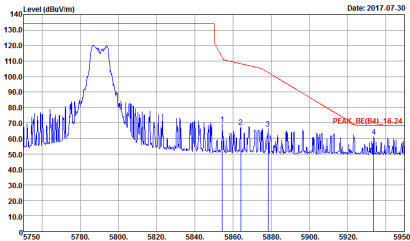


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH147 5735MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN 9120D 1241 VERTICAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank

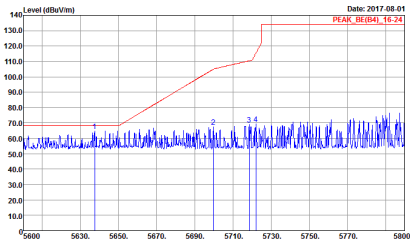
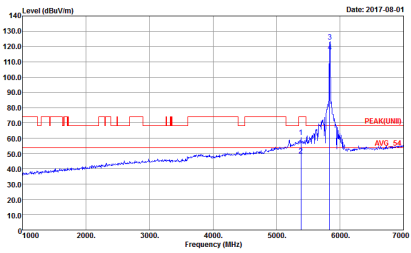
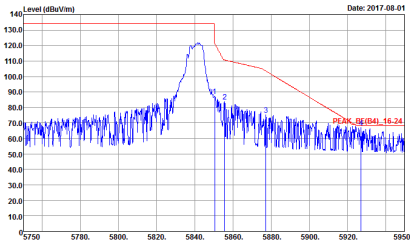


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH158 5790MHz	
1	Horizontal	Fundamental
<p><b>Peak</b></p>	<p>Date: 2017.07.30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Date: 2017.08.02 PEAK(UMB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 HORIZONTAL</p>
<p><b>Peak</b></p>	<p>Date: 2017.07.30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Left blank</p>

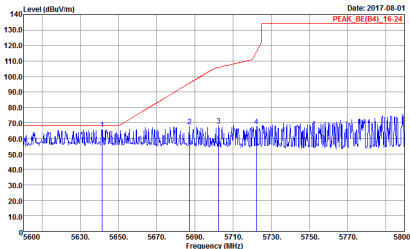
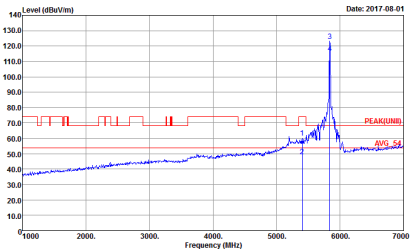
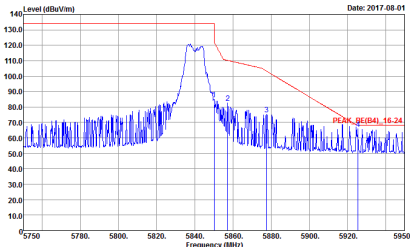


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH158 5790MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017.07.30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017.08.02</p> <p>Site : 03CH13-HY Condition : PEAK(UN)I 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017.07.30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH168 5840MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-08-01 PEAK BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-01 PEAK(UINB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UINB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-08-01 PEAK BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



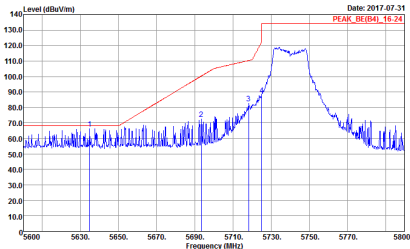
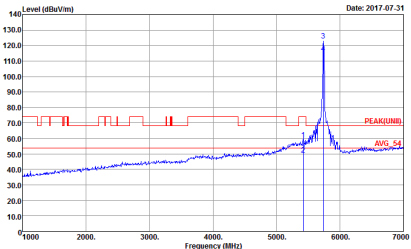
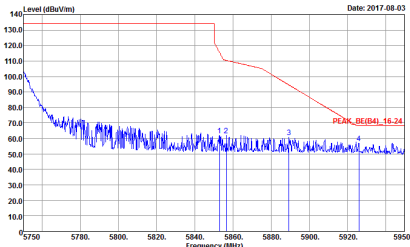
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT10 CH168 5840MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI 802.11ac VHT20 (Band Edge @ 3m)

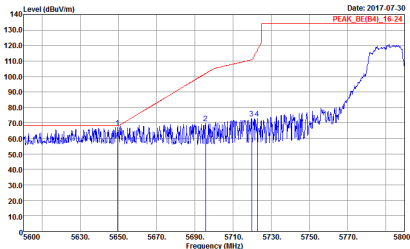
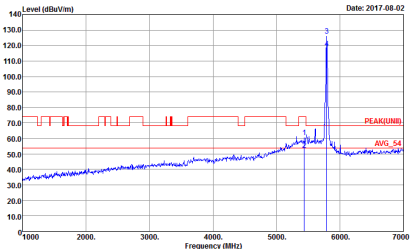
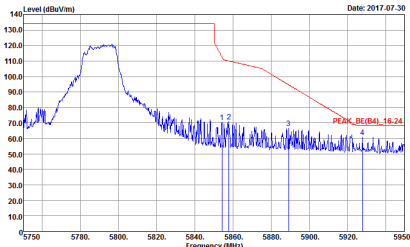
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH148 5740MHz	
1	Horizontal	Fundamental
Peak	<p>Date: 2017.07.31</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Date: 2017.07.31</p> <p>Site : 03CH13-HY Condition : PEAK(UWB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Date: 2017.08.03</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH148 5740MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



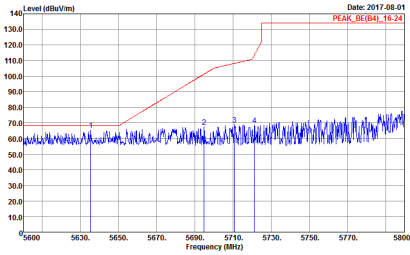
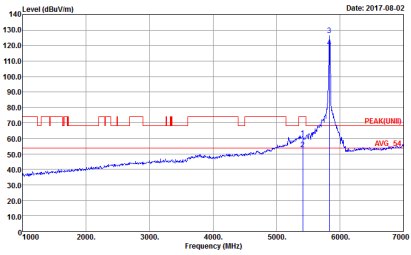
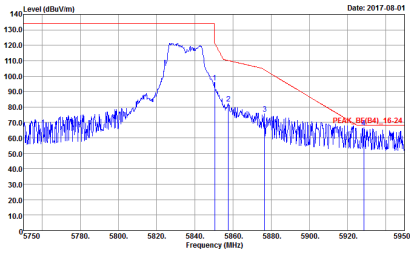


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-02 PEAK(UWB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UWB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH158 5790MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UWB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



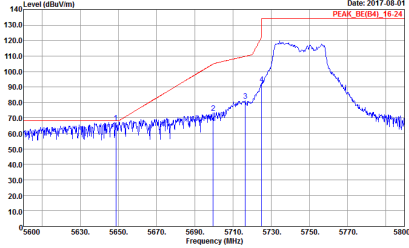
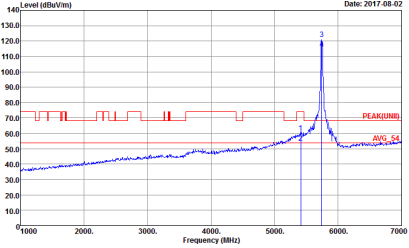
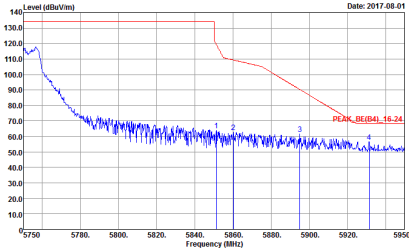
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH167 5840MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017.08.02 PEAK_UNB1 AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK_UNB1 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH167 5840MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



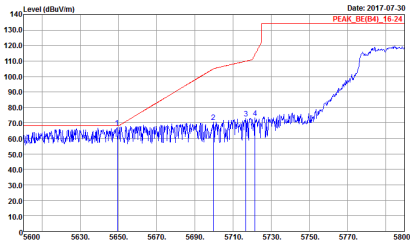
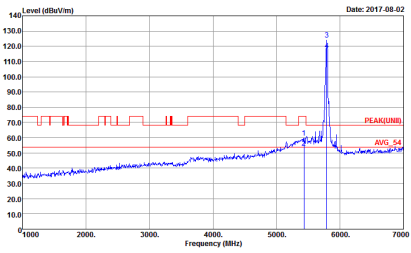
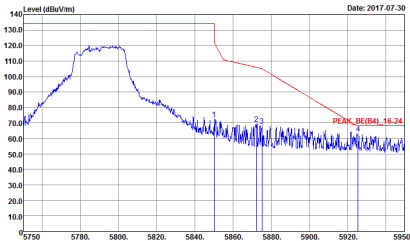
WIFI 802.11ac VHT30 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH149 5745MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017.08.01</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017.08.02</p> <p>Site : 03CH13-HY Condition : PEAK(UWB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017.08.01</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

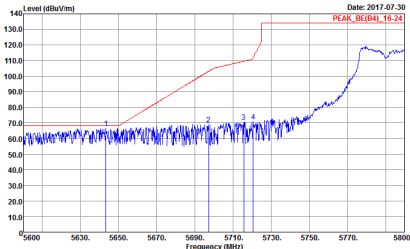
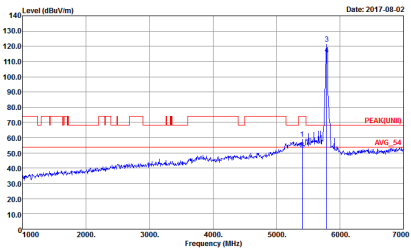
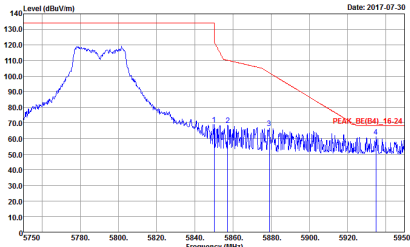


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH149 5745MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



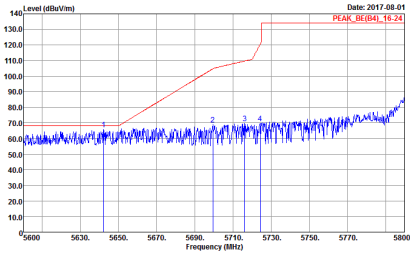
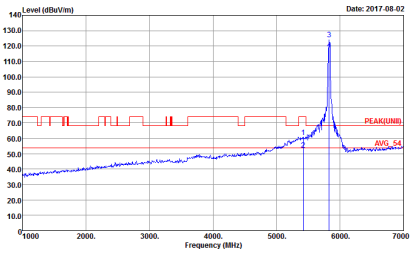
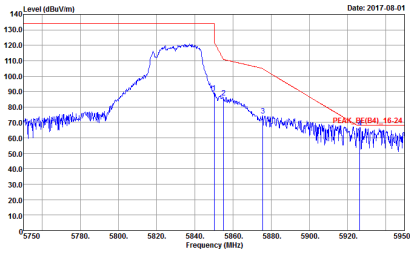
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-02 PEAK(UM)</p> <p>Site : 03CH13-HY Condition : PEAK(UM) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH158 5790MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UM)</p> <p>Site : 03CH13-HY Condition : PEAK(UM) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-07-30 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank





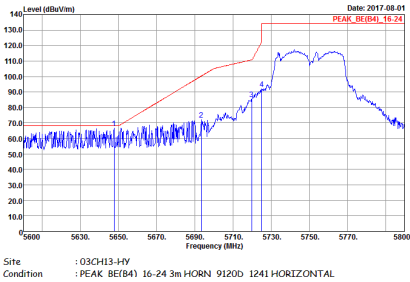
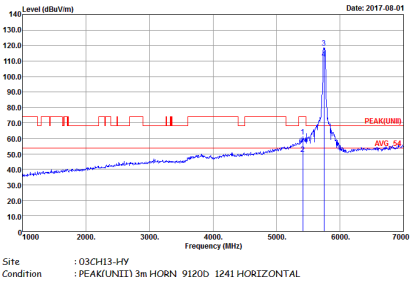
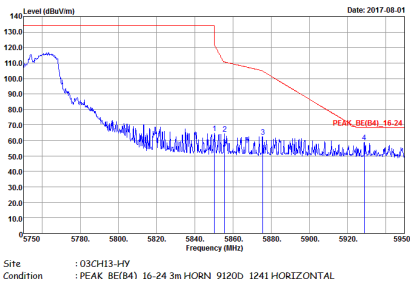
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH166 5830MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017.08.02 PEAKUNB1 AVG_54</p> <p>Site : 03CH13-HY Condition : PEAKUNB1 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



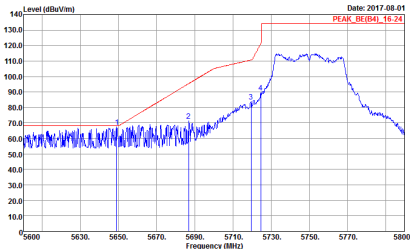
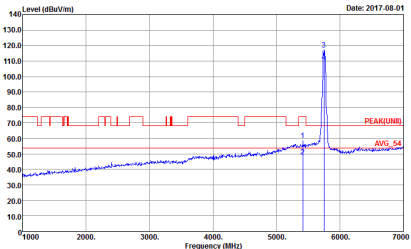
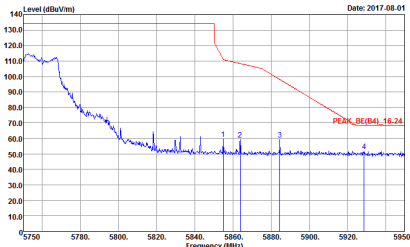
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT30 CH166 5830MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank



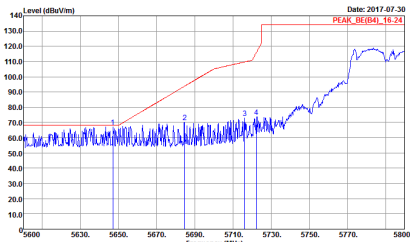
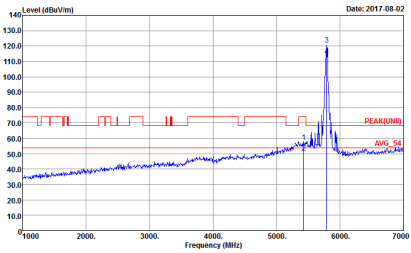
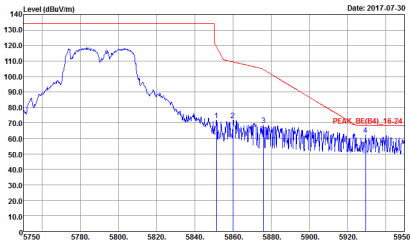
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH150 5750MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UNB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH150 5750MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017.08.01 PEAK(UM)</p> <p>Site : 03CH13-HY Condition : PEAK(UM) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017.07.20 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017.08.02 PEAK(UMB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017.07.20 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

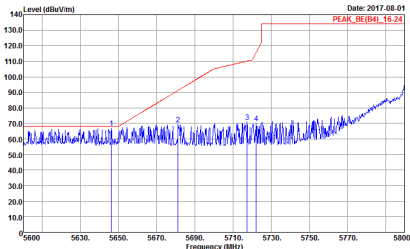
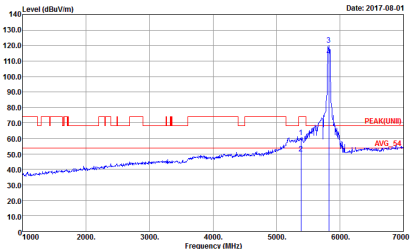
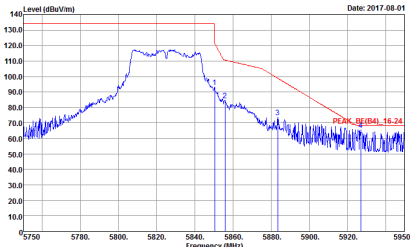


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH158 5790MHz	
1	Vertical	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH165 5825MHz	
1	Horizontal	Fundamental
Peak	<p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Date: 2017-08-01 PEAK(UMB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB)_3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH165 5825MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UWB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank

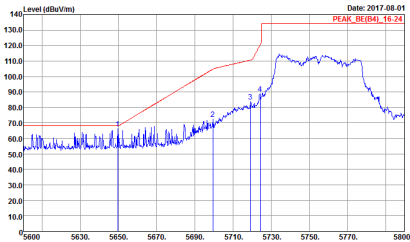
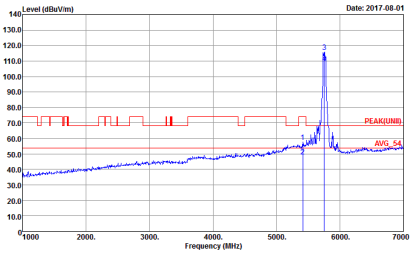
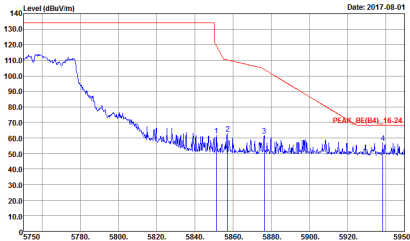




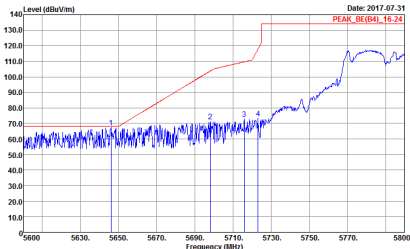
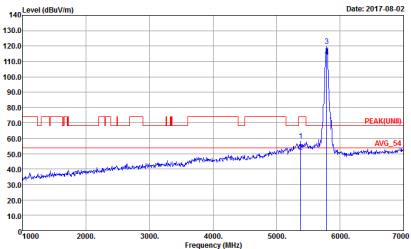
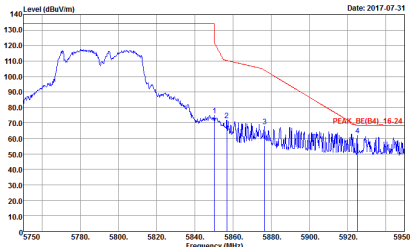
WIFI 802.11ac VHT50 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH151 5755MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNIT) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

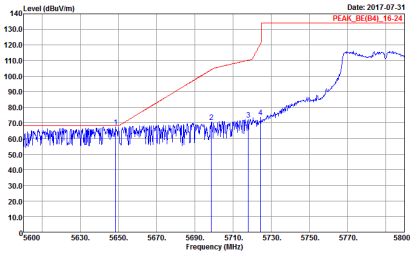
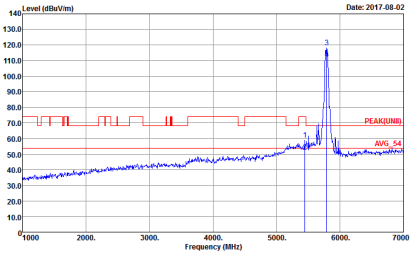
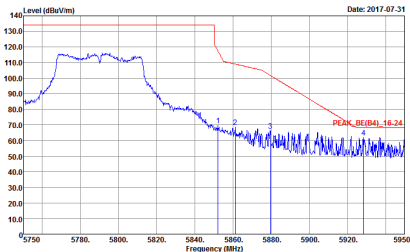


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH151 5755MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-01 PEAK(UMB) AVG 54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank

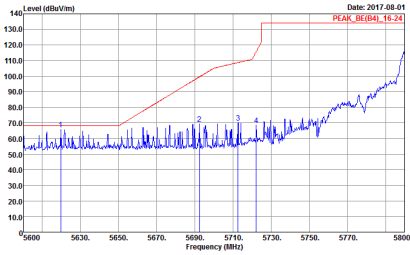
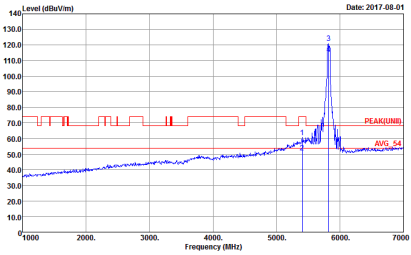
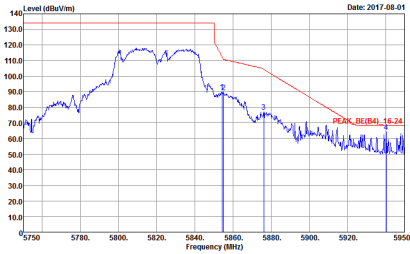


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017.07.31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017.08.02</p> <p>Site : 03CH13-HY Condition : PEAKUNIEI 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017.07.31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

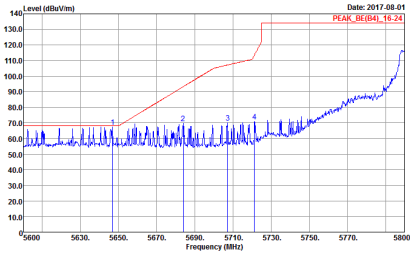
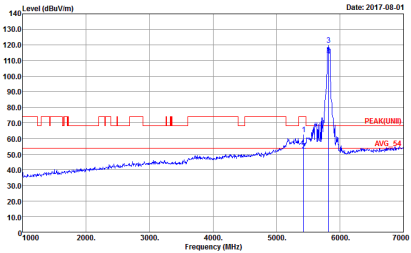
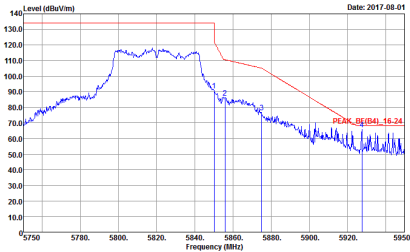


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH158 5790MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UMB) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH164 5820MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-01 PEAK(UMB) AVG 54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



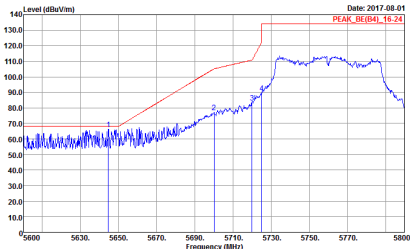
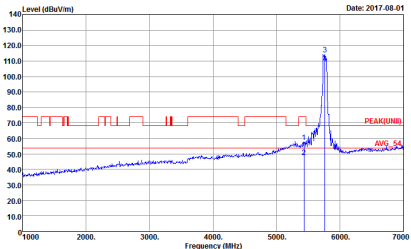
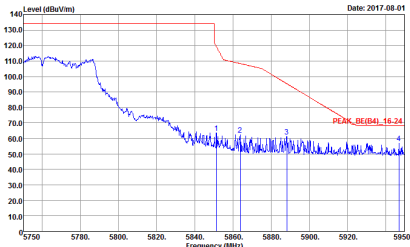
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT50 CH164 5820MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-01 PEAK(UM) AVG 54</p> <p>Site : 03CH13-HY Condition : PEAK(UM) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-08-01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI 802.11ac VHT60 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH152 5760MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



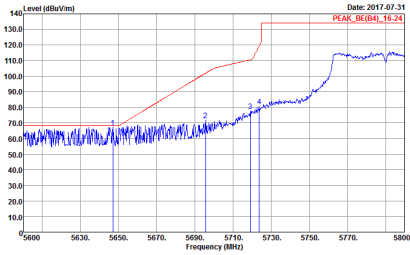
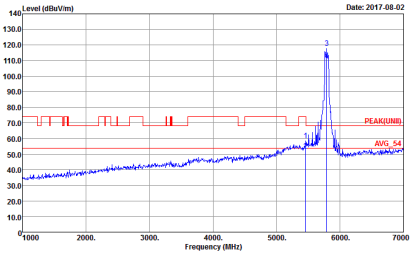
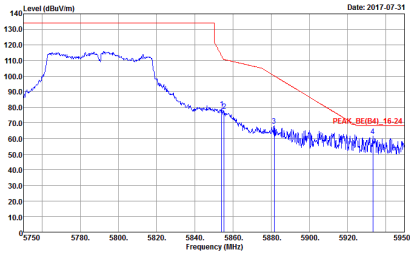
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH152 5760MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017.08.01 PEAK_UNI(B) AVG_50</p> <p>Site : 03CH13-HY Condition : PEAK_UNI(B) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017.08.01 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



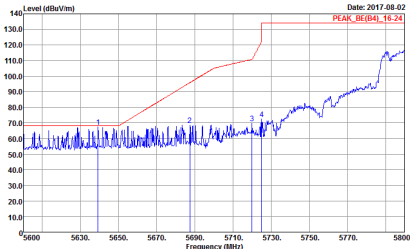
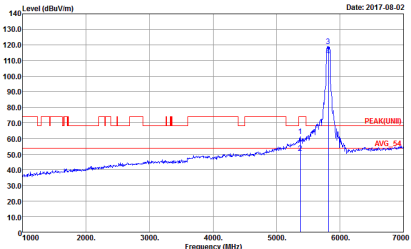
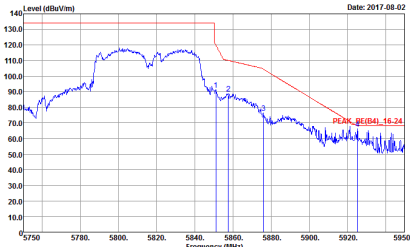


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

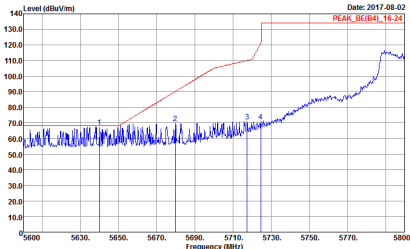
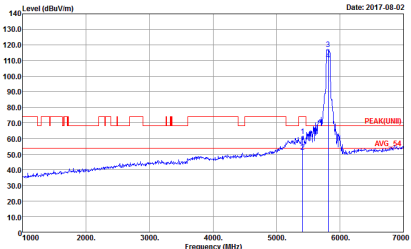
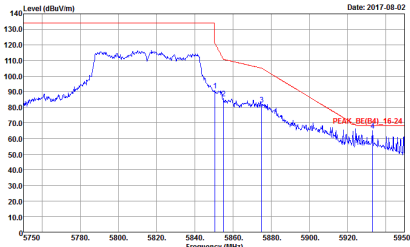


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH158 5790MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UMBI) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMBI) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH163 5820MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-02 PEAK(UMB) AVG 54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



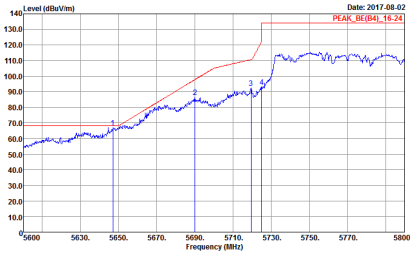
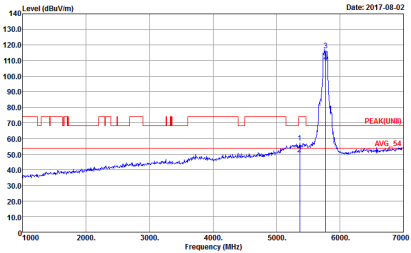
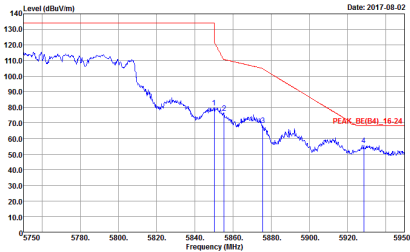
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT60 CH163 5820MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UMB) AVG_24</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



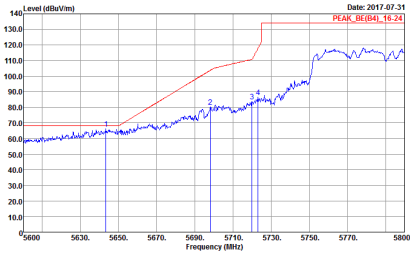
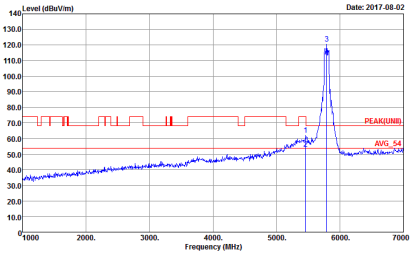
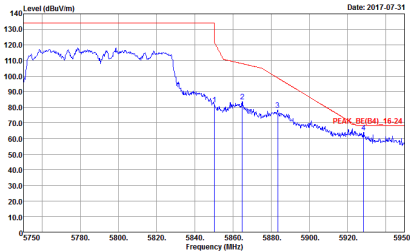
**Band 4 5725~5850MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH154 5770MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH13-HY            Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	<p>Site : 03CH13-HY            Condition : PEAK(U)N1 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	<p>Site : 03CH13-HY            Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

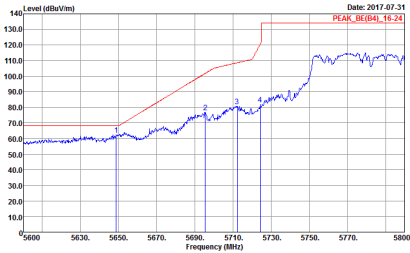
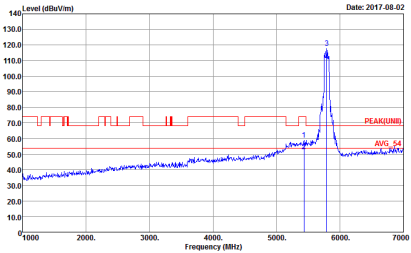
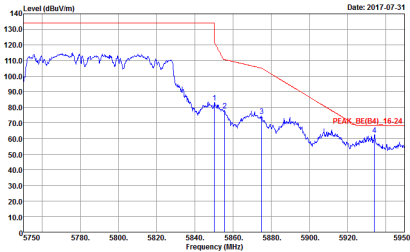


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH154 5770MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UMB) AVG 54</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



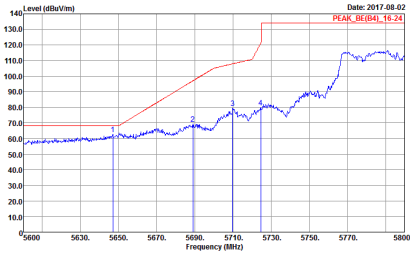
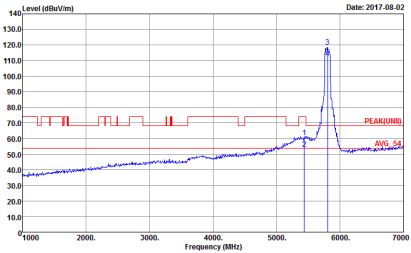
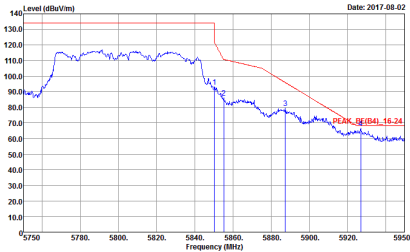
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH158 5790MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-02 PEAK(UMBI) AVG_54</p> <p>Site : 03CH13-HY Condition : PEAK(UMBI) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank



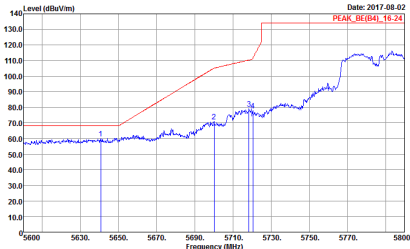
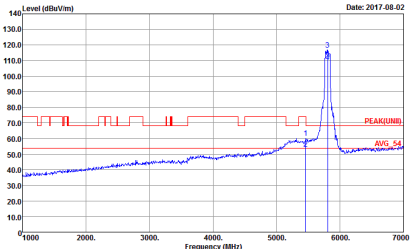
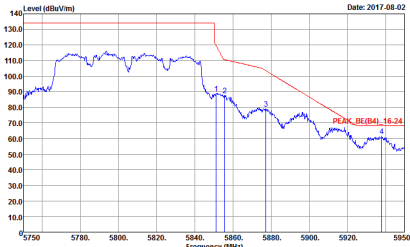
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH158 5790MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UIN1)</p> <p>Site : 03CH13-HY Condition : PEAK(UIN1) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-07-31 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank





WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH161 5805MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2017-08-02 PEAK BE(B4) 16-24</p> <p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	 <p>Date: 2017-08-02 PEAK(UIN1) AVG 52</p> <p>Site : 03CH13-HY Condition : PEAK(UIN1) 3m HORN 9120D 1241 HORIZONTAL</p>
Peak	 <p>Date: 2017-08-02 PEAK BE(B4) 16-24</p> <p>Site : 03CH13-HY Condition : PEAK BE(B4) 16-24 3m HORN 9120D 1241 HORIZONTAL</p>	Left blank

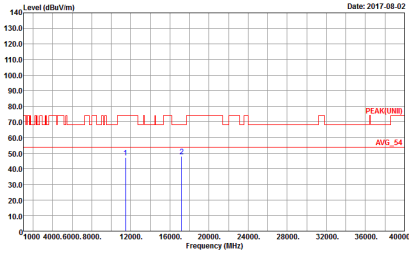
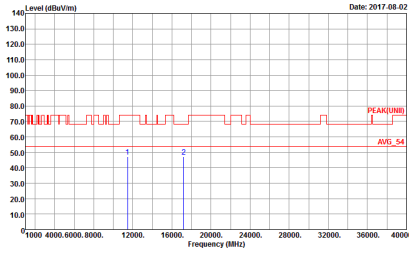


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH161 5805MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	 <p>Date: 2017-08-02 PEAK(UMB)</p> <p>Site : 03CH13-HY Condition : PEAK(UMB) 3m HORN 9120D 1241 VERTICAL</p>
Peak	 <p>Date: 2017-08-02 PEAK_BE(B4)_16-24</p> <p>Site : 03CH13-HY Condition : PEAK_BE(B4) 16-24 3m HORN 9120D 1241 VERTICAL</p>	Left blank



Band 4 - 5725~5850MHz

WIFI 802.11ac VHT10 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT10 CH147 5735MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>	 <p>Site : 03CH13-HY Condition : PEAKUNITEI 3m SHF HORN 584 HORIZONTAL</p>	 <p>Site : 03CH13-HY Condition : PEAKUNITEI 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT10 CH157 5790MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNITEI 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNITEI 3m SHF HORN 584 VERTICAL</p>



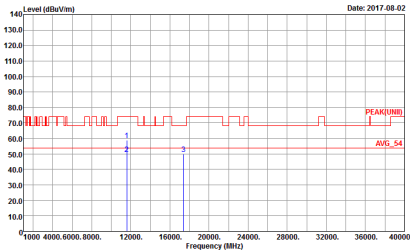
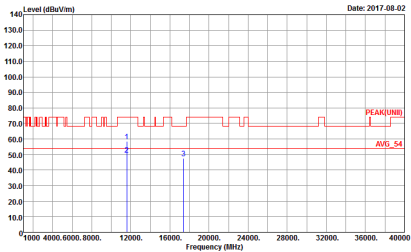
WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT10 CH168 5840MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UN)I 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UN)I 3m SHF HORN 584 VERTICAL</p>



WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH148 5740MHz	
1	Horizontal	Vertical
<p>Peak Avg.</p>	<p>Date: 2017-08-02</p> <p>Site : 03CH13-14Y Condition : PEAK(UNII) 3m SHF HORN 584 HORIZONTAL</p>	<p>Date: 2017-08-02</p> <p>Site : 03CH13-14Y Condition : PEAK(UNII) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH158 5790MHz	
1	Horizontal	Vertical
<p><b>Peak</b></p> <p><b>Avg.</b></p>	 <p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 HORIZONTAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH167 5835MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNIEI 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNIEI 3m SHF HORN 584 VERTICAL</p>

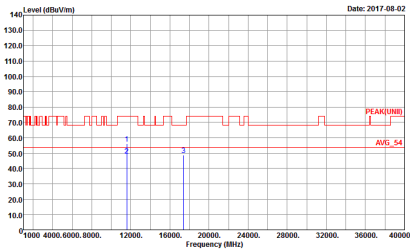
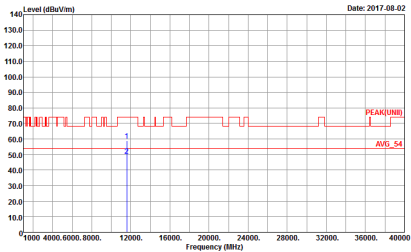




WIFI 802.11ac VHT30 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT30 CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UWB) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UWB) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT30 CH158 5790MHz	
1	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH13-HY Condition : PEAK(UNB) 3m SHF HORN 584 HORIZONTAL</p>	 <p>Site : 03CH13-HY Condition : PEAK(UNB) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT30 CH166 5830MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 VERTICAL</p>



Band 4 5725~5850MHz  
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH150 5750MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH158 5790MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNIEI 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNIEI 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH165 5825MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 VERTICAL</p>



**Band 4 5725~5850MHz**  
**WIFI 802.11ac VHT50 (Harmonic @ 3m)**

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT50 CH151 5755MHz	
1	Horizontal	Vertical
<p><b>Peak</b> <b>Avg.</b></p>	<p>Date: 2017.08.02</p> <p>Site : 03CH13-HY            Condition : PEAK(UNIE1) 3m SHF HORN 584 HORIZONTAL</p>	<p>Date: 2017.08.02</p> <p>Site : 03CH13-HY            Condition : PEAK(UNIE1) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT50 CH158 5790MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UWB) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UWB) 3m SHF HORN 584 VERTICAL</p>





WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT50 CH164 5820MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNIID 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNIID 3m SHF HORN 584 VERTICAL</p>



Band 4 5725~5850MHz
WIFI 802.11ac VHT60 (Harmonic @ 3m)

Table with 3 columns: WIFI, ANT, and measurement results for Horizontal and Vertical orientations. Includes spectral plots and site/condition details.



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT60 CH158 5790MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNID) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT60 CH163 5815MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNIII 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNIII 3m SHF HORN 584 VERTICAL</p>



Band 4 5725~5850MHz  
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH154 5770MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UNII) 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH158 5790MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAKUNII 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAKUNII 3m SHF HORN 584 VERTICAL</p>



WIFI	Band 4 5725-5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH161 5805MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH13-HY Condition : PEAK(UN)E1 3m SHF HORN 584 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : PEAK(UN)E1 3m SHF HORN 584 VERTICAL</p>



Emission below 1GHz  
5GHz WIFI 802.11ac VHT20 (LF)

WIFI	5GHz 5725~5850MHz	
ANT	802.11ac VHT20 LF	
1	Horizontal	Vertical
QP / Peak	<p>Site : 03CH13-HY Condition : QP 3m 81LO6 40103 HORIZONTAL</p>	<p>Site : 03CH13-HY Condition : QP 3m 81LO6 40103 VERTICAL</p>





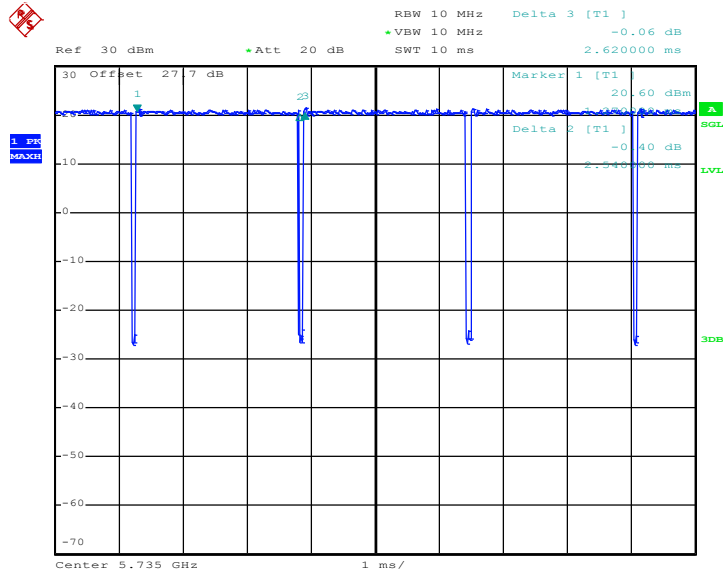
## Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1+2	5GHz 802.11ac10 for Ant. 1	96.95	2540	0.393700787	1kHz
1+2	5GHz 802.11ac20 for Ant. 1	95.49	1270	0.787401575	1kHz
1+2	5GHz 802.11ac30 for Ant. 1	93.33	840	1.19047619	3kHz
1+2	5GHz 802.11ac40 for Ant. 1	91.43	640	1.5625	3kHz
1+2	5GHz 802.11ac50 for Ant. 1	90.21	516	1.937984496	3kHz
1+2	5GHz 802.11ac60 for Ant. 1	88.98	420	2.380952381	3kHz
1+2	5GHz 802.11ac80 for Ant. 1	83.87	312	3.205128205	10kHz
1+2	5GHz 802.11ac10 for Ant. 2	96.95	2540	0.393700787	1kHz
1+2	5GHz 802.11ac20 for Ant. 2	95.49	1270	0.787401575	1kHz
1+2	5GHz 802.11ac30 for Ant. 2	92.22	830	1.204819277	3kHz
1+2	5GHz 802.11ac40 for Ant. 2	90.00	630	1.587301587	3kHz
1+2	5GHz 802.11ac50 for Ant. 2	90.21	516	1.937984496	3kHz
1+2	5GHz 802.11ac60 for Ant. 2	87.40	416	2.403846154	3kHz
1+2	5GHz 802.11ac80 for Ant. 2	83.87	312	3.205128205	10kHz



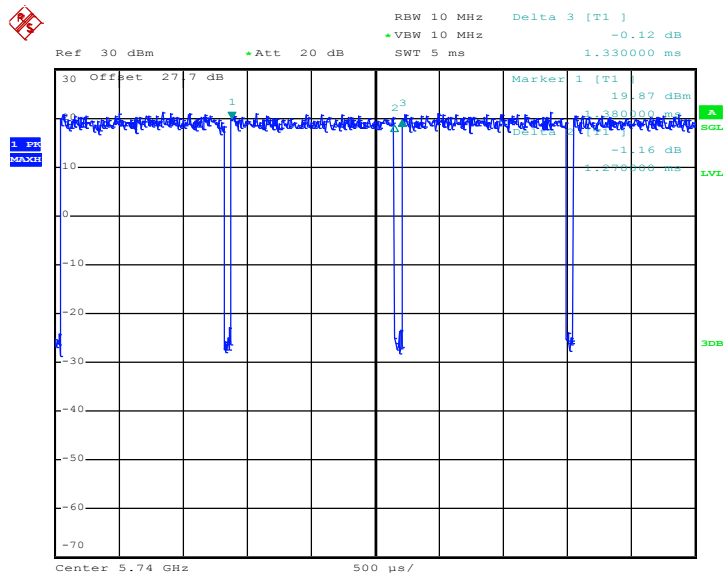
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802.11ac VHT10



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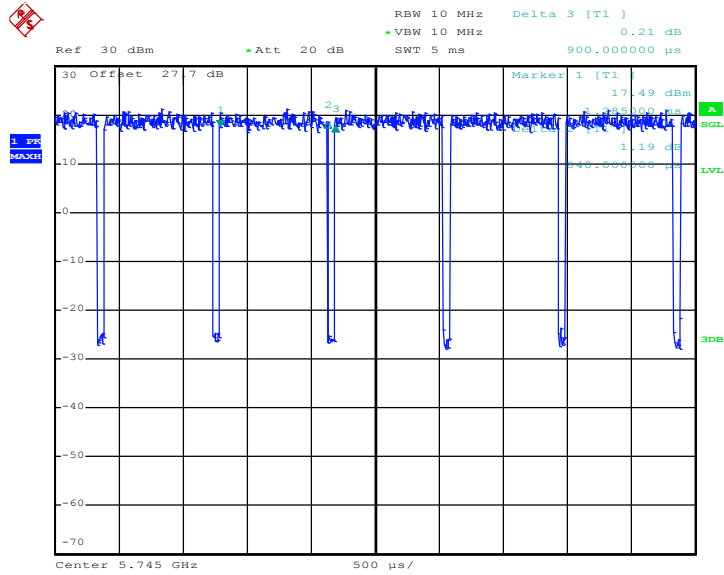
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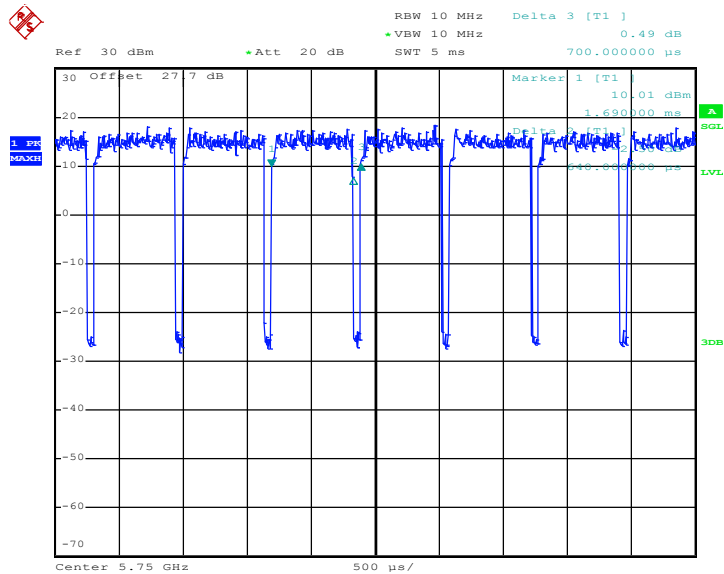


802.11ac VHT30



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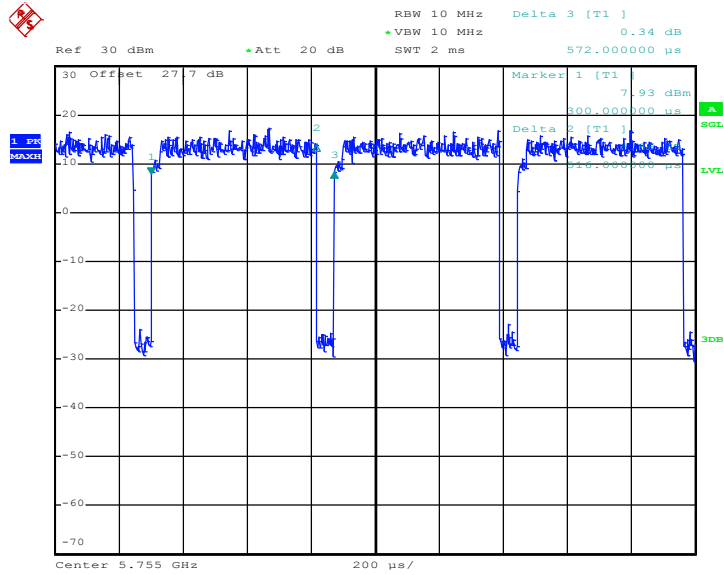
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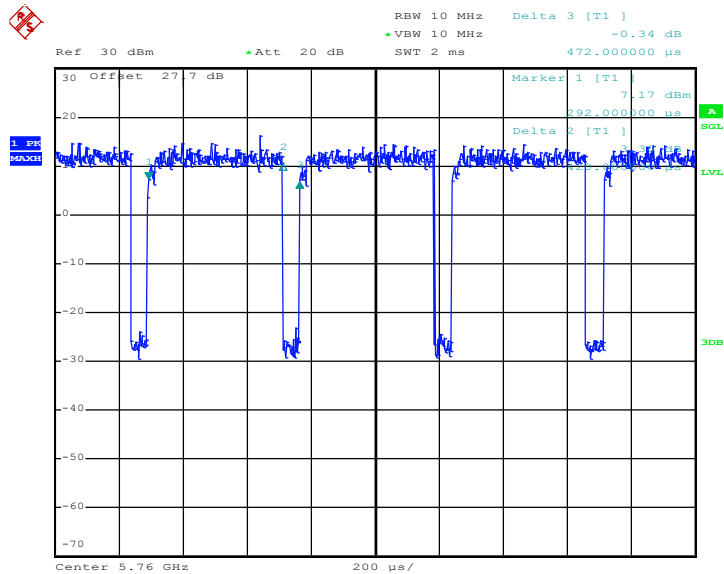


802.11ac VHT50



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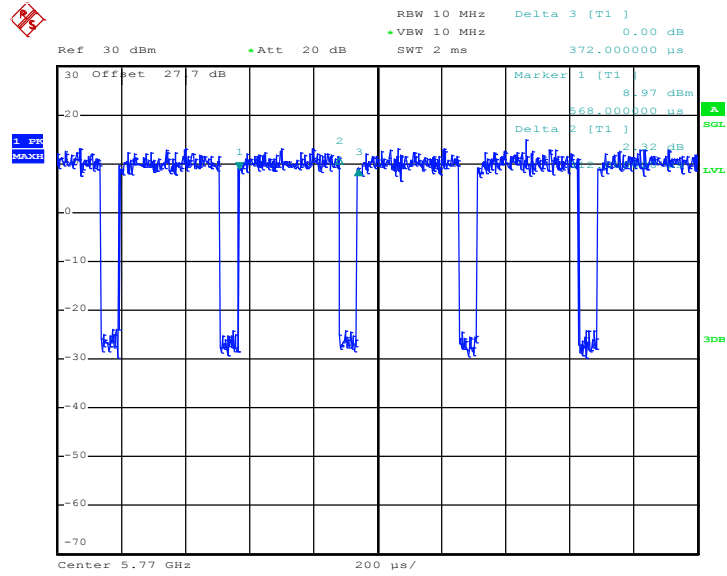
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Date: 5.AUG.2017 00:56:06



802.11ac VHT80

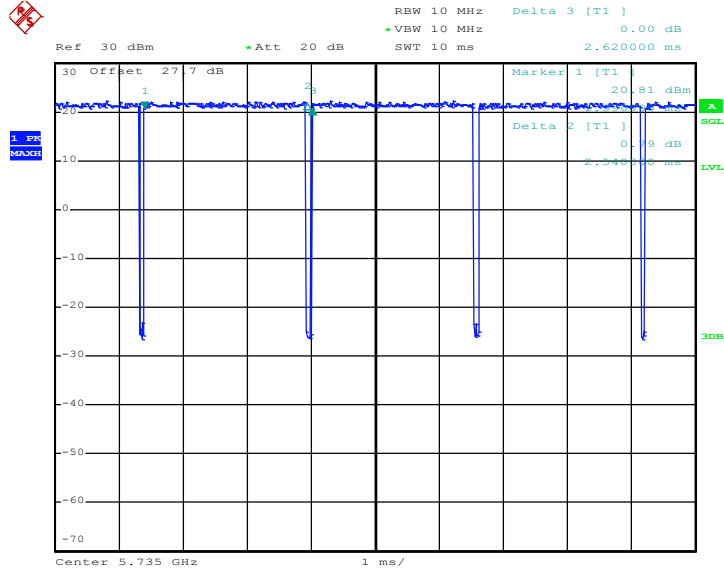


Date: 5.AUG.2017 01:00:54



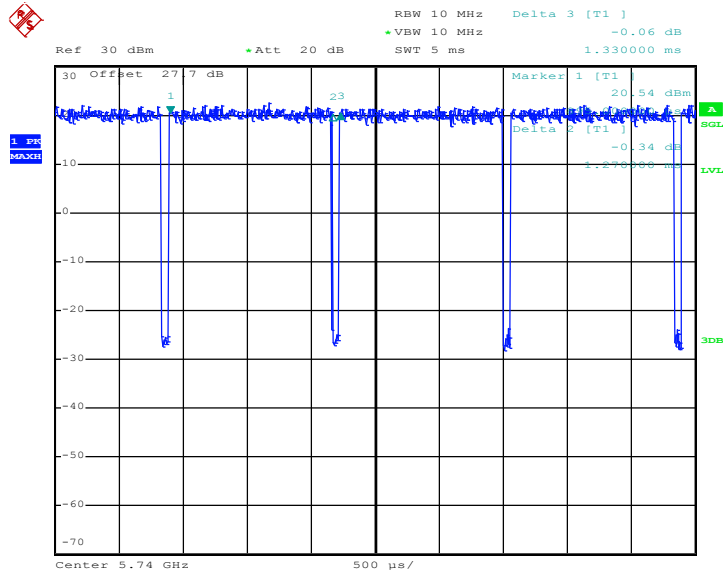
MIMO <Ant. 1+2(2)>

802.11ac VHT10



Date: 5.AUG.2017 00:24:07

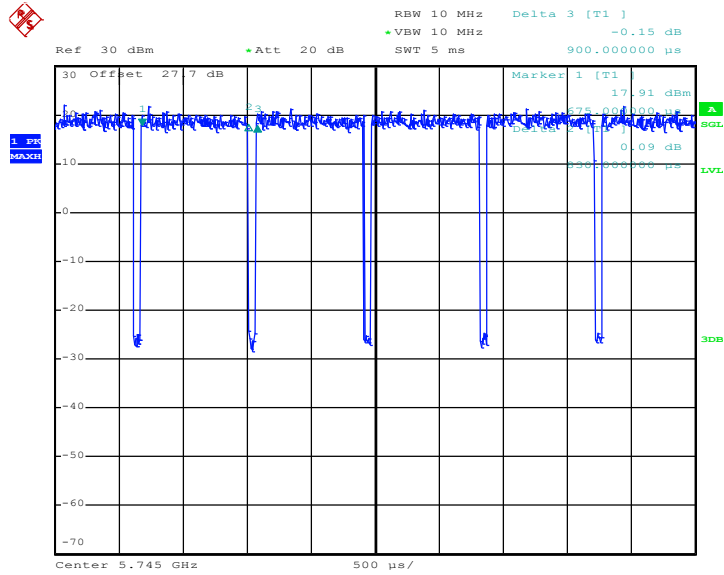
802.11ac VHT20



Date: 5.AUG.2017 00:29:25

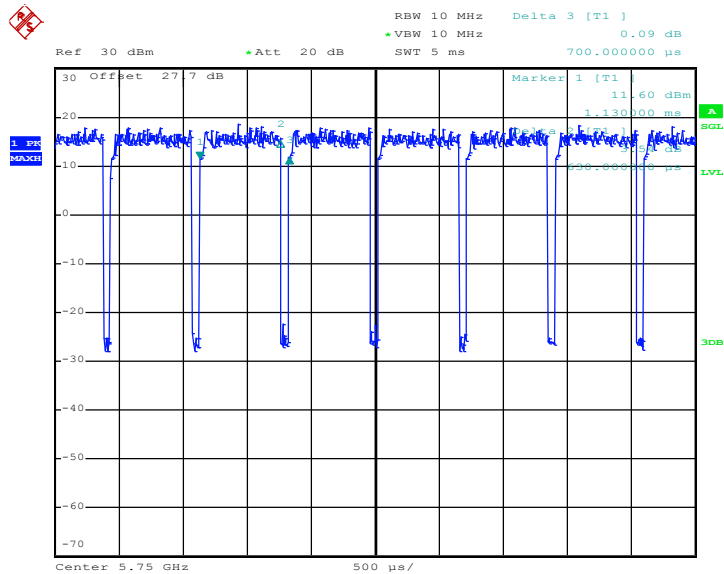


### 802.11ac VHT30



Date: 5.AUG.2017 00:36:53

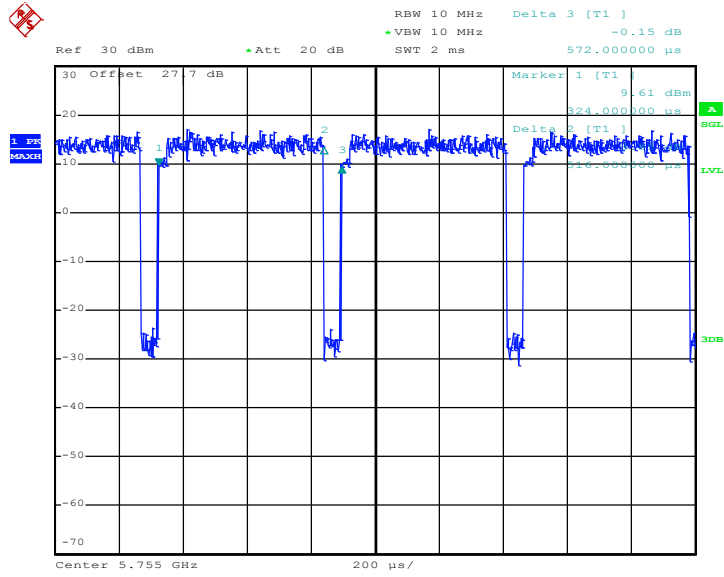
### 802.11ac VHT40



Date: 5.AUG.2017 00:45:38

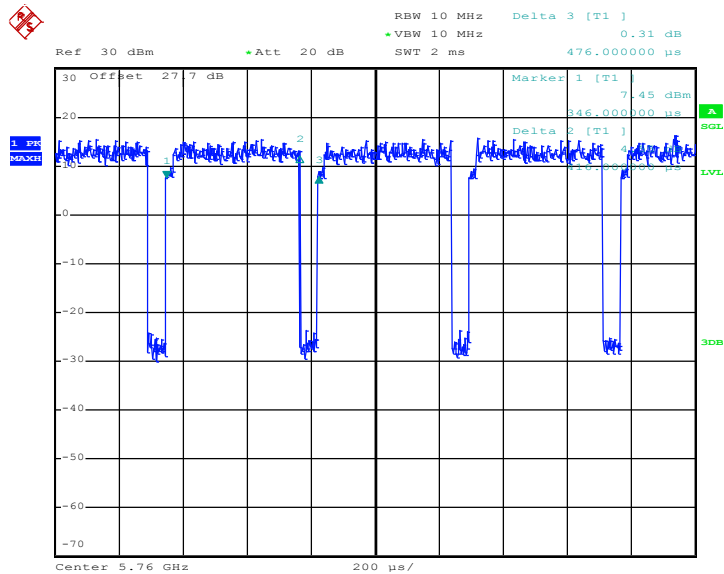


802.11ac VHT50



Date: 5.AUG.2017 00:51:18

802.11ac VHT60

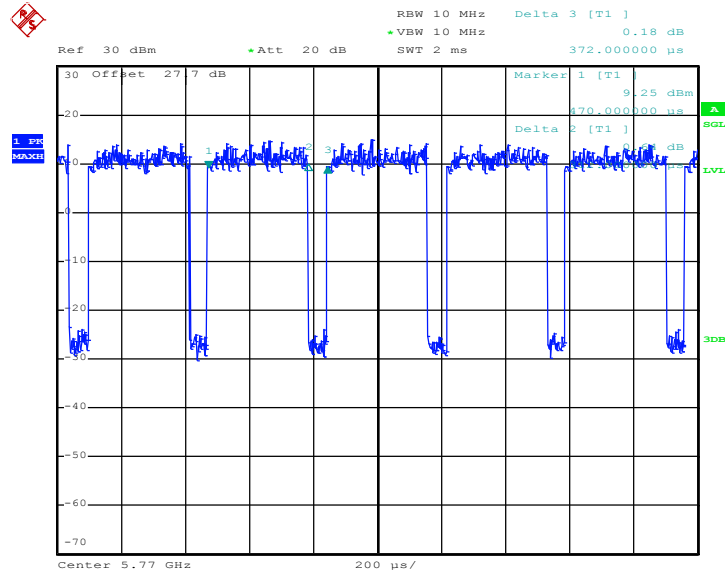


Date: 5.AUG.2017 00:53:15





802.11ac VHT80



Date: 5.AUG.2017 01:02:08