



# FCC RADIO TEST REPORT

FCC ID : PY7-26817E  
Equipment : GSM/WCDMA/LTE Phone with BT, DTS/UNII  
a/b/g/n/ac, GPS and NFC  
Brand Name : Sony  
Applicant : Sony Mobile Communications Inc.  
4-12-3 Higashi-Shinagawa, Shinagawa-ku,  
Tokyo, 140-0002, Japan  
Manufacturer : Sony Mobile Communications Inc.  
4-12-3 Higashi-Shinagawa, Shinagawa-ku,  
Tokyo, 140-0002, Japan  
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 25, 2019 and testing was started from May 30, 2019 and completed on Jun. 19, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

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

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



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## History of this test report

| Report No.   | Version | Description                   | Issued Date   |
|--------------|---------|-------------------------------|---------------|
| FR932517-01F | 01      | Initial issue of report       | Jun. 26, 2019 |
| FR932517-01F | 02      | Revising applicable standard. | Jul. 03, 2019 |
|              |         |                               |               |
|              |         |                               |               |
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|              |         |                               |               |
|              |         |                               |               |
|              |         |                               |               |

## Summary of Test Result

| Report Clause | Ref Std. Clause        | Test Items                             | Result (PASS/FAIL) | Remark                                  |
|---------------|------------------------|----------------------------------------|--------------------|-----------------------------------------|
| 3.1           | 15.403 (i)             | 6dB & 26dB Bandwidth                   | Pass               | -                                       |
| 3.1           | 2.1049                 | 99% Occupied Bandwidth                 | Reporting only     | -                                       |
| 3.2           | 15.407 (a)             | Maximum Conducted Output Power         | Pass               | -                                       |
| 3.3           | 15.407 (a)             | Power Spectral Density                 | Pass               | -                                       |
| 3.4           | 15.407(b)              | Unwanted Emissions                     | Pass               | Under limit<br>9.44 dB at<br>36.560 MHz |
| 3.5           | 15.207                 | AC Conducted Emission                  | Pass               | Under limit<br>16.34 dB at<br>0.467 MHz |
| 3.6           | 15.407 (c)             | Automatically Discontinue Transmission | Pass               | -                                       |
| 3.7           | 15.203 &<br>15.407 (a) | Antenna Requirement                    | Pass               | -                                       |

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Wii Chang**

**Report Producer: Yimin Ho**

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac, NFC, and GNSS.

| Standards-related Product Specification |                              |
|-----------------------------------------|------------------------------|
| Antenna Type / Gain                     | Inverted-F Antenna: -3.4 dBi |

| EUT Information List |            |            |                            |
|----------------------|------------|------------|----------------------------|
| HW Version           | SW Version | S/N        | Performed Test Item        |
| A                    | 0.96       | BH9300YUGP | RF conducted measurement   |
|                      |            | BH9301C2GP | Radiated Spurious Emission |
|                      |            | BH9300ZHGP | AC Conducted Emission      |

| Accessory List |                     |
|----------------|---------------------|
| AC Adapter     | Model Name : UCH20  |
|                | S/N: 1116W37712433  |
| Earphone       | Model Name.: STH40D |
|                | S/N : N/A           |
| USB Cable      | Model Name.: UCB20  |
|                | S/N : N/A           |

**Note:**

1. Above EUT list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test, and the serial number of each type of accessories is listed in each section of this report. .
3. For other wireless features of this EUT, test report will be issued separately.
4. The firmware installed in the EUT during testing was 0\_30089\_A\_69\_7\_IETS-5102.

## 1.2 Modification of EUT

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



### 1.3 Testing Location

|                           |                                                                                                                       |         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------|---------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory                                                   |         |
| <b>Test Site Location</b> | No.52, Huaya 1st Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>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. EMC & Wireless Communications Laboratory                                                                       |  |
| <b>Test Site Location</b> | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |  |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                                                                                   |  |
|                           | 03CH15-HY                                                                                                                                 |  |

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

FCC Designation No.: TW1190 and TW0007

### 1.4 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 v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ 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 with Accessory. The worst cases (X plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

### 2.1 Carrier Frequency and Channel

| Frequency Band                       | Channel          | Freq.<br>(MHz) | Channel | Freq.<br>(MHz) |
|--------------------------------------|------------------|----------------|---------|----------------|
| 5725-5850 MHz<br>Band 4<br>(U-NII-3) | 149              | 5745           | 157     | 5785           |
|                                      | 151*             | 5755           | 159*    | 5795           |
|                                      | 153              | 5765           | 161     | 5805           |
|                                      | 155 <sup>#</sup> | 5775           | 165     | 5825           |

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

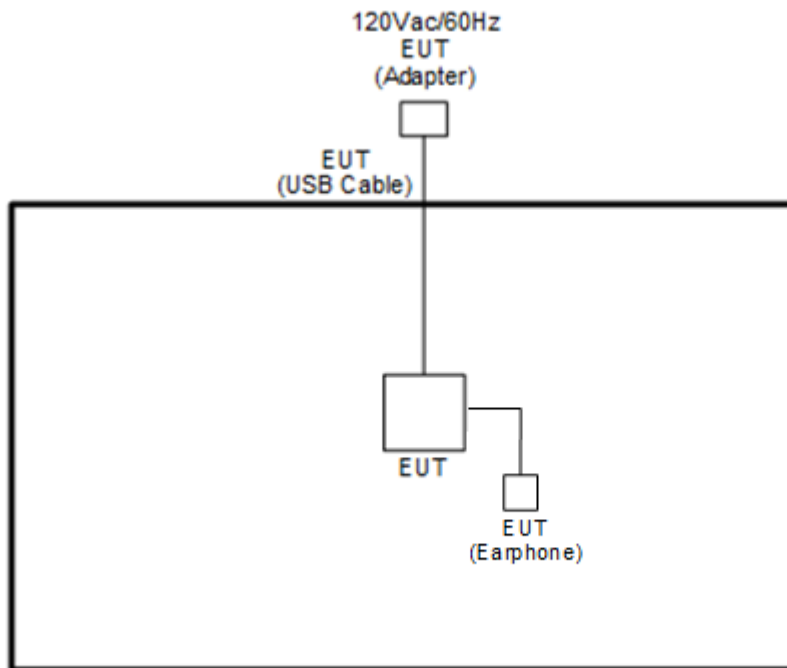
| Modulation                       | Data Rate |
|----------------------------------|-----------|
| 802.11a                          | 6 Mbps    |
| 802.11n HT20                     | MCS0      |
| 802.11n HT40                     | MCS0      |
| 802.11ac VHT20 (Covered by HT20) | MCS0      |
| 802.11ac VHT40 (Covered by HT40) | MCS0      |
| 802.11ac VHT80                   | MCS0      |

| Test Cases                  |                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------|
| AC<br>Conducted<br>Emission | Mode 1 : Bluetooth Link + WLAN (5GHz) Link + MP3 + USB Cable (Charging from Adapter) + Battery + Earphone |

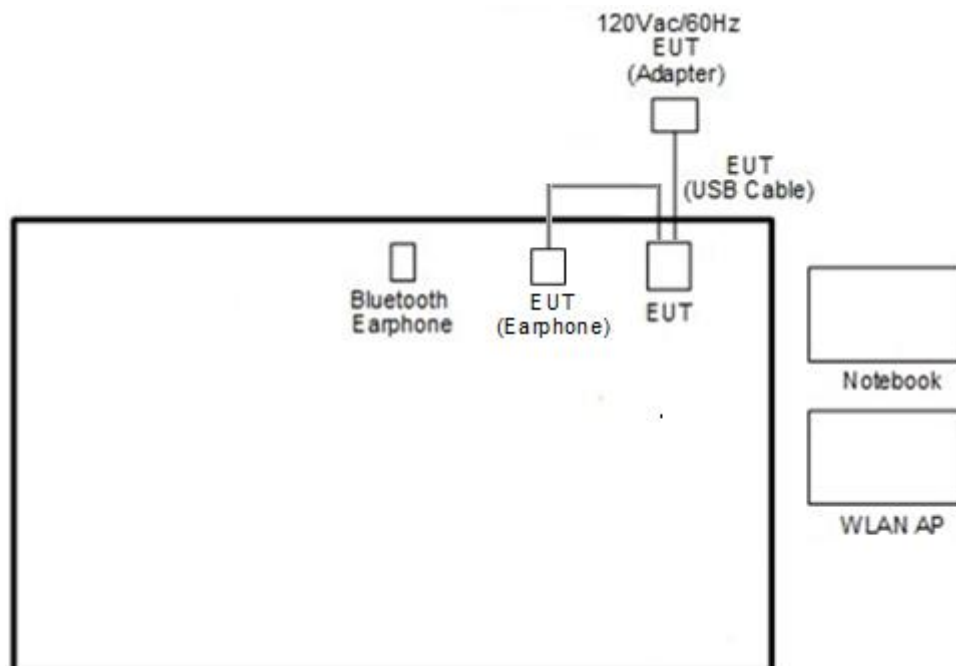
| Ch. # |        | Band IV : 5725-5850 MHz |              |              |                |
|-------|--------|-------------------------|--------------|--------------|----------------|
|       |        | 802.11a                 | 802.11n HT20 | 802.11n HT40 | 802.11ac VHT80 |
| L     | Low    | 149                     | 149          | 151          | -              |
| M     | Middle | 157                     | 157          | -            | 155            |
| H     | High   | 165                     | 165          | 159          | -              |

## 2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



## 2.4 Support Unit used in test configuration and system

| Item | Equipment          | Trade Name | Model Name     | FCC ID                                       | Data Cable | Power Cord                                                 |
|------|--------------------|------------|----------------|----------------------------------------------|------------|------------------------------------------------------------|
| 1.   | Bluetooth Earphone | Sony       | SBH82D         | PY7-RD0010                                   | N/A        | N/A                                                        |
| 2.   | WLAN AP            | ASUS       | RT-AC66U       | MSQ-RTAC66U                                  | N/A        | Unshielded, 1.8 m                                          |
| 3.   | Notebook           | DELL       | Latitude E6320 | FCC DoC/<br>Contains FCC ID:<br>QDS-BRCM1054 | N/A        | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 4.   | SD Card            | SanDisk    | MicroSD HC     | FCC DoC                                      | N/A        | N/A                                                        |

## 2.5 EUT Operation Test Setup

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

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

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

Example :

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

*Offset = RF cable loss + attenuator factor.*

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

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

### 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

See list of measuring equipment of this test report.

##### 3.1.3 Test Procedures

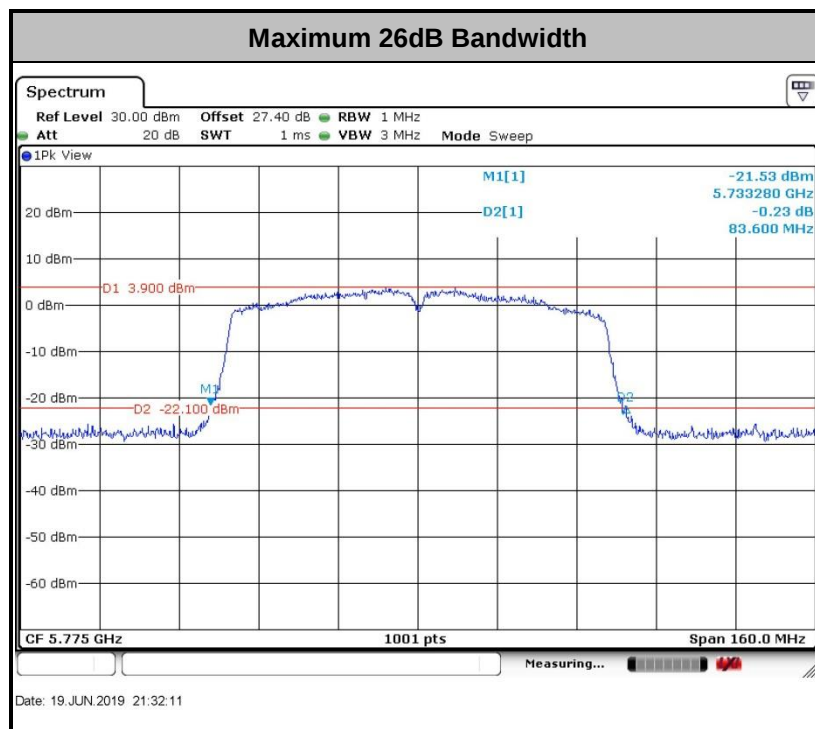
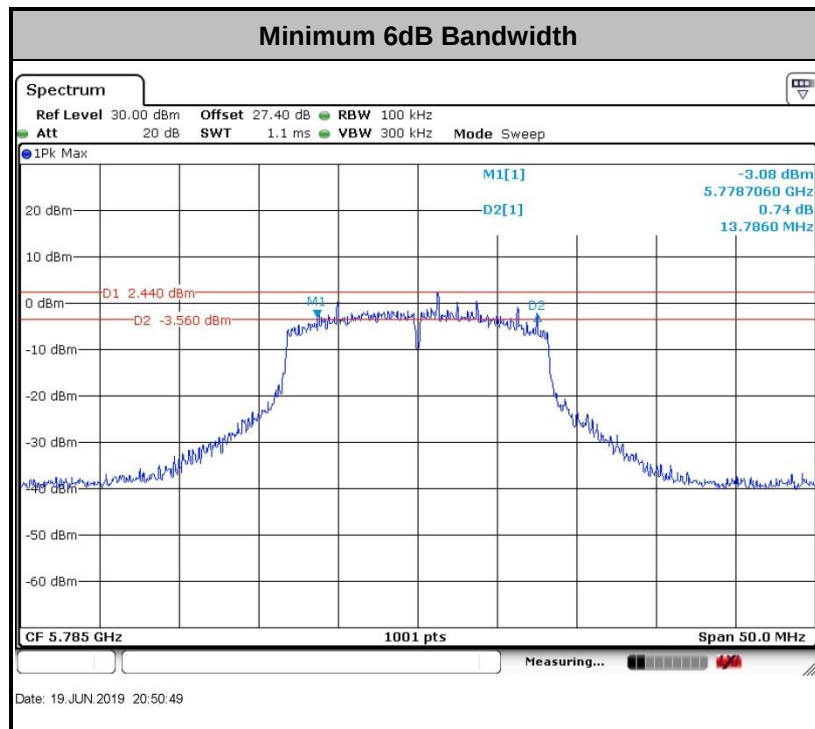
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.  
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW  $\geq 3 \times$  RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

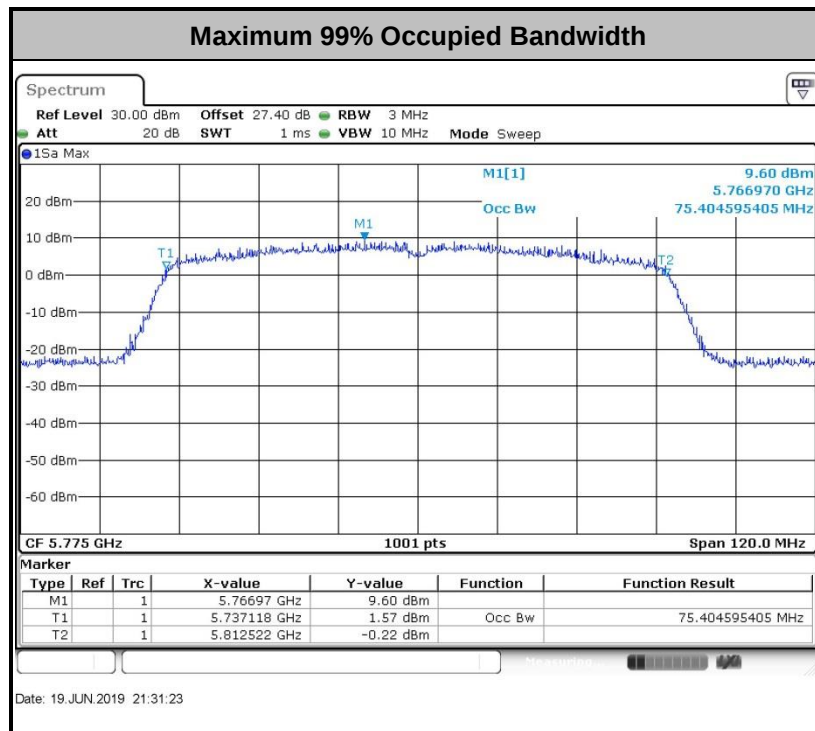
##### 3.1.4 Test Setup



##### 3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.





**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

See list of measuring equipment of this test report.

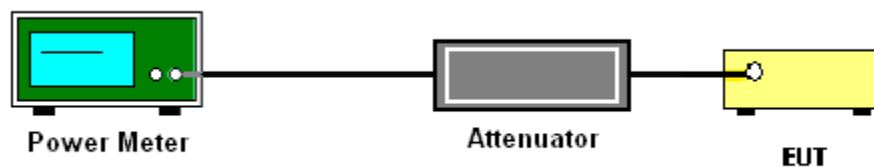
### 3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously at its maximum power control level.
3. Measure the average power of the transmitter.

### 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**

See list of measuring equipment of this test report.

#### **3.3.3 Test Procedures**

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.  
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).

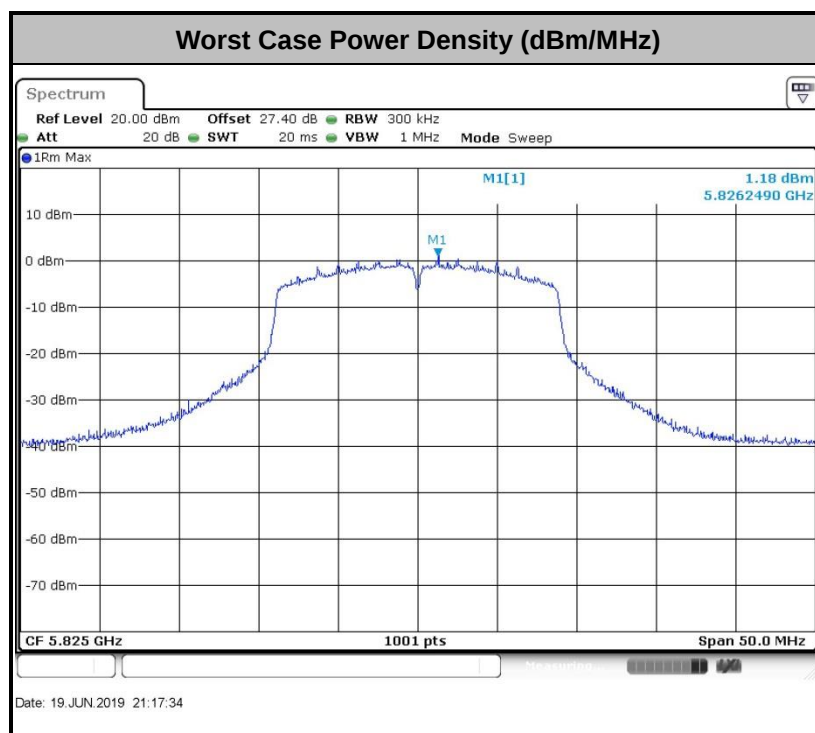
- Measure the duty cycle.
  - Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 300 kHz.
  - Set VBW  $\geq$  1 MHz.
  - Number of points in sweep  $\geq$  2 Span / RBW.
  - Sweep time = auto.
  - Detector = RMS
  - Trace average at least 100 traces in power averaging 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.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



### 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 shall comply with the general field strength limits as below table,

| Frequency<br>(MHz) | Field Strength<br>(microvolts/meter) | Measurement Distance<br>(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.

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

| EIRP (dBm) | Field Strength at 3m (dBμV/m) |
|------------|-------------------------------|
| - 27       | 68.3                          |

(3) KDB789033 D02 v02r01 G)2)c)

- (i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-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.<sup>3</sup>
- (ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. 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 devices using the alternative limit.<sup>4</sup>

**Note 3:** 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 peak emission limit.

**Note 4:** Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

### 3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. 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

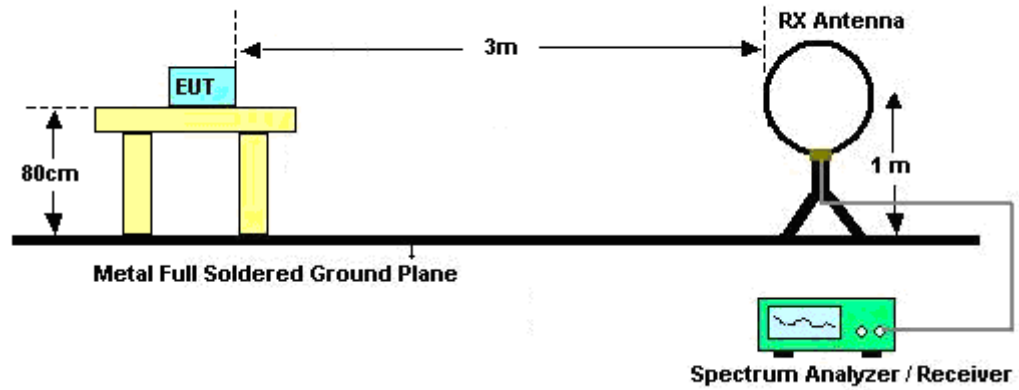
- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

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

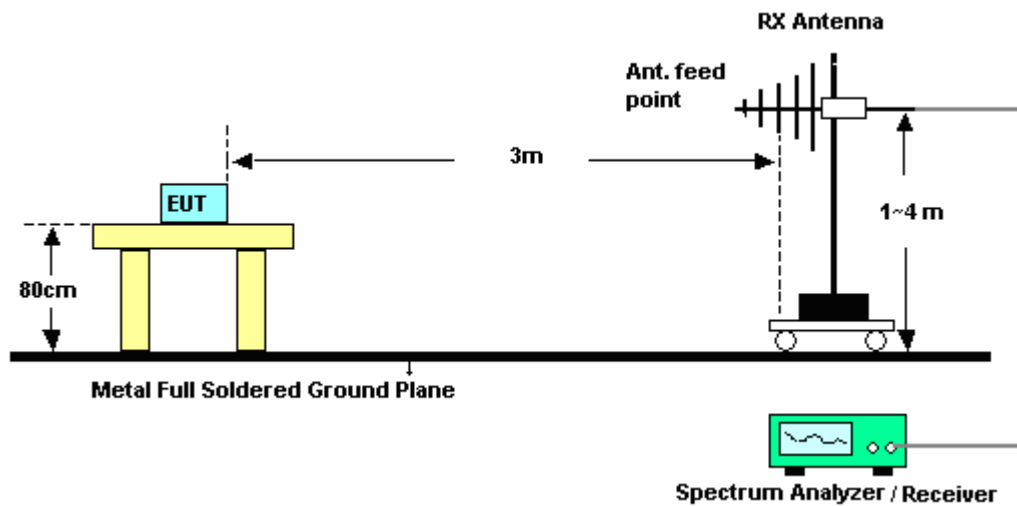
- RBW = 1 MHz
  - VBW = 10 Hz, when duty cycle is no less than 98 percent.
  - $VBW \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.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

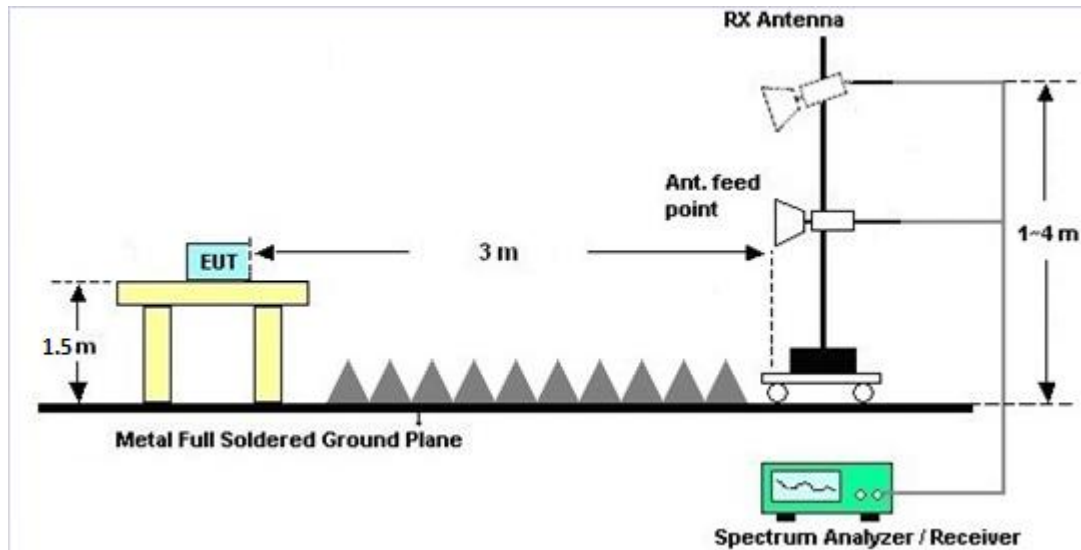
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



### 3.4.5 Test Results of Radiated 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.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

### 3.4.6 Test Result of Radiated 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 Unwanted Radiated Emission (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.

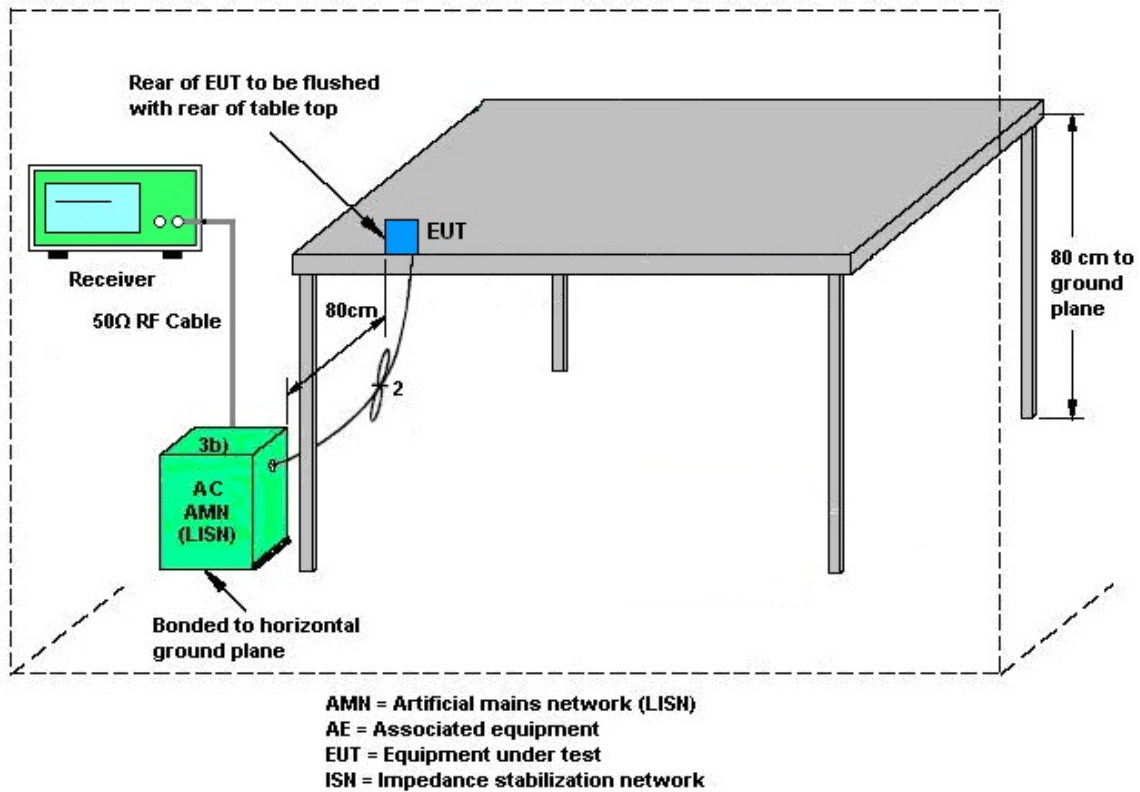
#### 3.5.2 Measuring Instruments

See list of measuring equipment 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



### 3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

## 3.6 Automatically Discontinue Transmission

### 3.6.1 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.

### 3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

### 3.6.3 Test Result of Automatically Discontinue Transmission

EUT is verified this characteristic during the function check of normal sample associated with an access point:

- A. Information start: make EUT supply information to the access point.
- B. Information stop: stop supplying information to the access point.

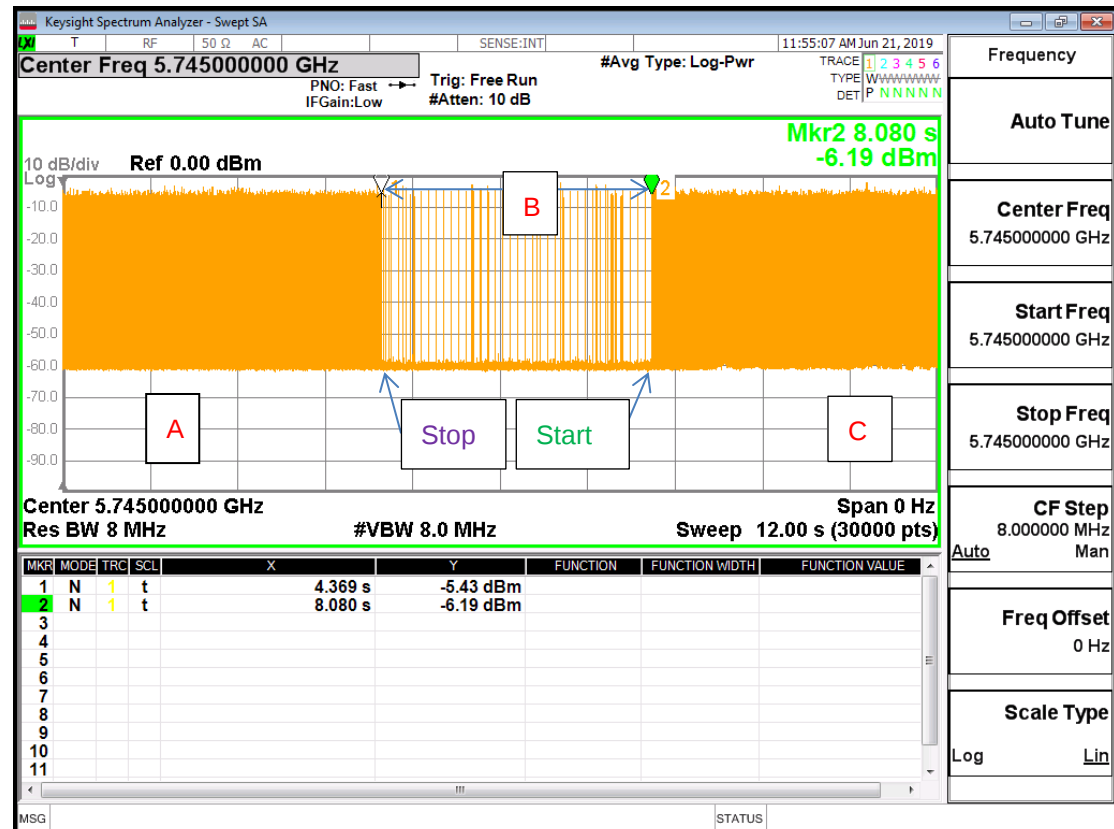
While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

- C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



5745MHz



**Note:** The control / signalling information during the period B is precluded.



## **3.7 Antenna Requirements**

### **3.7.1 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.

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

An embedded-in antenna design is used.

### **3.7.3 Antenna Gain**

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



## 4 List of Measuring Equipment

| Instrument            | Manufacturer      | Model No.                       | Serial No.           | Characteristics | Calibration Date | Test Date                       | Due Date      | Remark                   |
|-----------------------|-------------------|---------------------------------|----------------------|-----------------|------------------|---------------------------------|---------------|--------------------------|
| Hygrometer            | Testo             | DTM-303A                        | TP157075             | N/A             | Nov. 05, 2018    | May 30, 2019~<br>Jun. 19, 2019  | Nov. 04, 2019 | Conducted<br>(TH05-HY)   |
| Power Sensor          | DARE              | RPR3006W                        | 16I00054SN<br>O10    | 10MHz~6GHz      | Dec. 19, 2018    | May 30, 2019~<br>Jun. 19, 2019  | Dec. 18, 2019 | Conducted<br>(TH05-HY)   |
| Signal Analyzer       | Rohde & Schwarz   | FSV40                           | 101397               | 10Hz~40GHz      | Nov. 13, 2018    | May 30, 2019~<br>Jun. 19, 2019  | Nov. 12, 2019 | Conducted<br>(TH05-HY)   |
| Switch Box & RF Cable | Burgeon           | ETF-058                         | EC1208382            | N/A             | Mar. 27, 2019    | May 30, 2019~<br>Jun. 19, 2019  | Mar. 26, 2020 | Conducted<br>(TH05-HY)   |
| AC Power Source       | ChainTek          | APC-1000W                       | N/A                  | N/A             | N/A              | Jun. 13, 2019                   | N/A           | Conduction<br>(CO05-HY)  |
| EMI Test Receiver     | Rohde & Schwarz   | ESR3                            | 102388               | 9kHz~3.6GHz     | Nov. 12, 2018    | Jun. 13, 2019                   | Nov. 11, 2019 | Conduction<br>(CO05-HY)  |
| Hygrometer            | Testo             | 608-H1                          | 34913912             | N/A             | Mar. 19, 2019    | Jun. 13, 2019                   | Mar. 18, 2020 | Conduction<br>(CO05-HY)  |
| LISN                  | Rohde & Schwarz   | ENV216                          | 100080               | 9kHz~30MHz      | Nov. 14, 2018    | Jun. 13, 2019                   | Nov. 13, 2019 | Conduction<br>(CO05-HY)  |
| LISN                  | Rohde & Schwarz   | ENV216                          | 100081               | 9kHz~30MHz      | Nov. 09, 2018    | Jun. 13, 2019                   | Nov. 08, 2019 | Conduction<br>(CO05-HY)  |
| Software              | Rohde & Schwarz   | EMC32<br>V10.30                 | N/A                  | N/A             | N/A              | Jun. 13, 2019                   | N/A           | Conduction<br>(CO05-HY)  |
| LF Cable              | HUBER +<br>SUHNER | RG-214/U                        | LF01                 | N/A             | Dec. 31, 2018    | Jun. 13, 2019                   | Dec. 30, 2019 | Conduction<br>(CO05-HY)  |
| Pulse Limiter         | Rohde & Schwarz   | ESH3-Z2                         | 100851               | N/A             | Dec. 31, 2018    | Jun. 13, 2019                   | Dec. 30, 2019 | Conduction<br>(CO05-HY)  |
| Loop Antenna          | Rohde & Schwarz   | HFH2-Z2                         | 100488               | 9 kHz~30 MHz    | Jan. 07, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Jan. 06, 2020 | Radiation<br>(03CH15-HY) |
| Bilog Antenna         | TESEQ             | CBL6111D&<br>00800N1D0<br>1N-06 | 41912&05             | 30MHz to 1GHz   | Feb. 12, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Feb. 11, 2020 | Radiation<br>(03CH15-HY) |
| Horn Antenna          | SCHWARZBE<br>CK   | BBHA<br>9120D                   | 9120D-1620           | 1G~18GHz        | Oct. 17, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Oct. 16, 2019 | Radiation<br>(03CH15-HY) |
| SHF-EHF Horn Antenna  | SCHWARZBE<br>CK   | BBHA 9170                       | BBHA91705<br>84      | 18GHz- 40GHz    | Dec. 05, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Dec. 04, 2019 | Radiation<br>(03CH15-HY) |
| Amplifier             | SONOMA            | 310N                            | 363440               | 9kHz~1GHz       | Dec. 28, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Dec. 27, 2019 | Radiation<br>(03CH15-HY) |
| Preamplifier          | Jet-Power         | JPA0118-55-<br>303              | 1710001800<br>055007 | 1GHz~18GHz      | Apr. 01, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Apr. 31, 2020 | Radiation<br>(03CH15-HY) |
| Preamplifier          | Keysight          | 83017A                          | MY5327019<br>5       | 1GHz~26.5GHz    | Aug. 23, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Aug. 22, 2019 | Radiation<br>(03CH15-HY) |
| Preamplifier          | EMEC              | EM18G40G                        | 060715               | 18GHz ~ 40GHz   | Dec. 06, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Dec. 05, 2019 | Radiation<br>(03CH15-HY) |
| EMI Test Receiver     | Keysight          | N9038A<br>(MXE)                 | MY5413008<br>5       | 20Hz ~ 8.4GHz   | Nov. 01, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Oct. 31, 2019 | Radiation<br>(03CH15-HY) |



| Instrument   | Manufacturer      | Model No.                            | Serial No. | Characteristics                  | Calibration Date | Test Date                       | Due Date      | Remark                   |
|--------------|-------------------|--------------------------------------|------------|----------------------------------|------------------|---------------------------------|---------------|--------------------------|
| Hygrometer   | TECEPEL           | DTM-302                              | SN1        | N/A                              | Jul. 22, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Jul. 21, 2019 | Radiation<br>(03CH15-HY) |
| Filter       | Wainwright        | WLK4-1000-<br>1530-8000-4<br>0SS     | SN11       | 1G Low Pass                      | Sep. 16, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Sep. 15, 2019 | Radiation<br>(03CH15-HY) |
| Filter       | Wainwright        | WHKX8-587<br>2.5-6750-18<br>000-40ST | SN3        | 6.75 GHz<br>Highpass             | Sep. 16, 2018    | Jun. 11, 2019~<br>Jun. 19, 2019 | Sep. 15, 2019 | Radiation<br>(03CH15-HY) |
| RF Cable     | HUBER +<br>SUHNER | SUCOFLEX<br>104                      | MY36980/4  | 30M-18G                          | Apr. 15, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Apr. 14, 2020 | Radiation<br>(03CH15-HY) |
| RF Cable     | HUBER +<br>SUHNER | SUCOFLEX<br>104                      | MY9838/4   | 30M-18G                          | Apr. 15, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Apr. 14, 2020 | Radiation<br>(03CH15-HY) |
| RF Cable     | HUBER +<br>SUHNER | SUCOFLEX<br>104                      | MY802430/4 | 30M~18GHz                        | May 13, 2019     | Jun. 11, 2019~<br>Jun. 19, 2019 | May 12, 2020  | Radiation<br>(03CH15-HY) |
| RF Cable     | HUBER +<br>SUHNER | SUCOFLEX<br>102                      | MY2859/2   | 30MHz-40GHz                      | Mar. 13, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Mar. 12, 2020 | Radiation<br>(03CH15-HY) |
| RF Cable     | HUBER +<br>SUHNER | SUCOFLEX<br>102                      | MY4274/2   | 30MHz-40GHz                      | Mar. 13, 2019    | Jun. 11, 2019~<br>Jun. 19, 2019 | Mar. 12, 2020 | Radiation<br>(03CH15-HY) |
| Controller   | ChainTek          | 3000-1                               | N/A        | Control Turn<br>table & Ant Mast | N/A              | Jun. 11, 2019~<br>Jun. 19, 2019 | N/A           | Radiation<br>(03CH15-HY) |
| Antenna Mast | ChainTek          | MBS-520-1                            | N/A        | 1m~4m                            | N/A              | Jun. 11, 2019~<br>Jun. 19, 2019 | N/A           | Radiation<br>(03CH15-HY) |
| Turn Table   | ChainTek          | T-200-S-1                            | N/A        | 0~360 Degree                     | N/A              | Jun. 11, 2019~<br>Jun. 19, 2019 | N/A           | Radiation<br>(03CH15-HY) |
| Software     | Audix             | E3<br>6.2009-8-24(<br>k5)            | RK-000451  | N/A                              | N/A              | Jun. 11, 2019~<br>Jun. 19, 2019 | N/A           | Radiation<br>(03CH15-HY) |



## 5 Uncertainty of Evaluation

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

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.20 |
|-------------------------------------------------------------------------|------|

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

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.20 |
|-------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.50 |
|-------------------------------------------------------------------------|------|

### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.20 |
|-------------------------------------------------------------------------|------|

**Appendix A. Test Result of Conducted Test Items**

|                |                     |                    |       |    |
|----------------|---------------------|--------------------|-------|----|
| Test Engineer: | Howard Lin          | Temperature:       | 21~25 | °C |
| Test Date:     | 2019/5/30~2019/6/19 | 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 |                                 |           |
| 11a     | 6Mbps     | 1   | 149 | 5745        | 16.63               | -     | 24.68                | -     | 15.14                | -     | 0.5                             | Pass      |
| 11a     | 6Mbps     | 1   | 157 | 5785        | 16.63               | -     | 24.88                | -     | 13.79                | -     | 0.5                             | Pass      |
| 11a     | 6Mbps     | 1   | 165 | 5825        | 16.63               | -     | 24.68                | -     | 15.04                | -     | 0.5                             | Pass      |
| HT20    | MCS0      | 1   | 149 | 5745        | 17.73               | -     | 25.23                | -     | 16.28                | -     | 0.5                             | Pass      |
| HT20    | MCS0      | 1   | 157 | 5785        | 17.68               | -     | 25.67                | -     | 13.79                | -     | 0.5                             | Pass      |
| HT20    | MCS0      | 1   | 165 | 5825        | 17.88               | -     | 24.88                | -     | 14.44                | -     | 0.5                             | Pass      |
| HT40    | MCS0      | 1   | 151 | 5755        | 36.16               | -     | 41.54                | -     | 33.81                | -     | 0.5                             | Pass      |
| HT40    | MCS0      | 1   | 159 | 5795        | 36.06               | -     | 41.45                | -     | 33.81                | -     | 0.5                             | Pass      |
| VHT80   | MCS0      | 1   | 155 | 5775        | 75.40               | -     | 83.60                | -     | 71.29                | -     | 0.5                             | Pass      |

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

| Band IV |           |     |     |             |                               |       |     |                                 |       |          |       |           |
|---------|-----------|-----|-----|-------------|-------------------------------|-------|-----|---------------------------------|-------|----------|-------|-----------|
| Mod.    | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) |       |     | FCC Conducted Power Limit (dBm) |       | DG (dBi) |       | Pass/Fail |
|         |           |     |     |             | Ant 1                         | Ant 2 | SUM | Ant 1                           | Ant 2 | Ant 1    | Ant 2 |           |
| 11a     | 6Mbps     | 1   | 149 | 5745        | 13.50                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| 11a     | 6Mbps     | 1   | 157 | 5785        | 13.30                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| 11a     | 6Mbps     | 1   | 165 | 5825        | 13.40                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| HT20    | MCS0      | 1   | 149 | 5745        | 13.40                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| HT20    | MCS0      | 1   | 157 | 5785        | 13.40                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| HT20    | MCS0      | 1   | 165 | 5825        | 13.50                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| HT40    | MCS0      | 1   | 151 | 5755        | 12.90                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| HT40    | MCS0      | 1   | 159 | 5795        | 13.50                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT20   | MCS0      | 1   | 149 | 5745        | 13.30                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT20   | MCS0      | 1   | 157 | 5785        | 13.30                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT20   | MCS0      | 1   | 165 | 5825        | 13.40                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT40   | MCS0      | 1   | 151 | 5755        | 12.80                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT40   | MCS0      | 1   | 159 | 5795        | 13.40                         | -     |     | 30.00                           | -     | -3.40    | -     | Pass      |
| VHT80   | MCS0      | 1   | 155 | 5775        | 12.20                         | -     |     | 30.00                           | -     | -3.40    | -     | 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 |            |
| 11a     | 6Mbps     | 1   | 149 | 5745        | 0.00             | -     | 2.22                            | -     | 2.76                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| 11a     | 6Mbps     | 1   | 157 | 5785        | 0.00             | -     | 2.22                            | -     | 2.75                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| 11a     | 6Mbps     | 1   | 165 | 5825        | 0.00             | -     | 2.22                            | -     | 3.25                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| HT20    | MCS0      | 1   | 149 | 5745        | 0.00             | -     | 2.22                            | -     | 2.78                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| HT20    | MCS0      | 1   | 157 | 5785        | 0.00             | -     | 2.22                            | -     | 3.38                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| HT20    | MCS0      | 1   | 165 | 5825        | 0.00             | -     | 2.22                            | -     | 3.40                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| HT40    | MCS0      | 1   | 151 | 5755        | 0.00             | -     | 2.22                            | -     | -1.15                              | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| HT40    | MCS0      | 1   | 159 | 5795        | 0.00             | -     | 2.22                            | -     | 0.00                               | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |
| VHT80   | MCS0      | 1   | 155 | 5775        | 0.00             | -     | 2.22                            | -     | -3.40                              | -     |     | 30.00                          | -     | -3.40    | -     | Pass       |



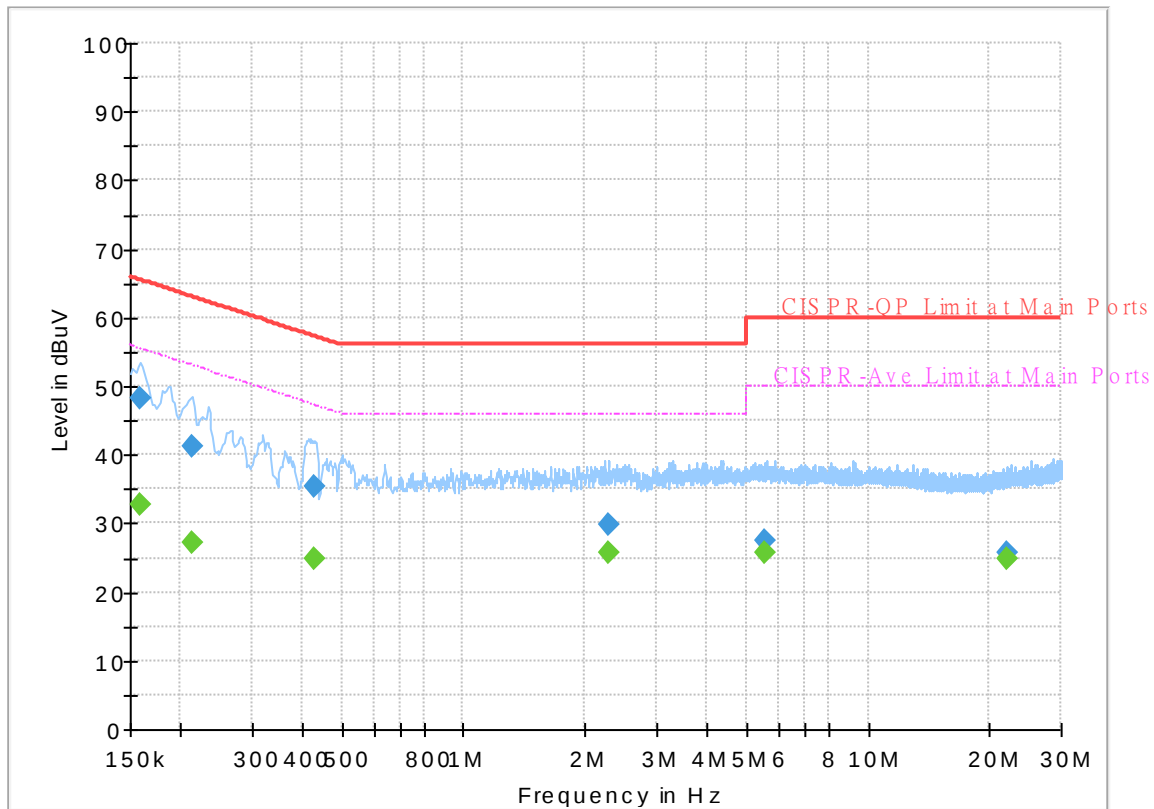
## **Appendix B. AC Conducted Emission Test Results**

|                        |             |                            |        |
|------------------------|-------------|----------------------------|--------|
| <b>Test Engineer :</b> | Jimmy Chang | <b>Temperature :</b>       | 24~26℃ |
|                        |             | <b>Relative Humidity :</b> | 53~55% |

## EUT Information

Report NO : 932517-01  
Test Mode : Mode 1  
Test Voltage : 120Vac/60Hz  
Phase : Line

Full Spectrum



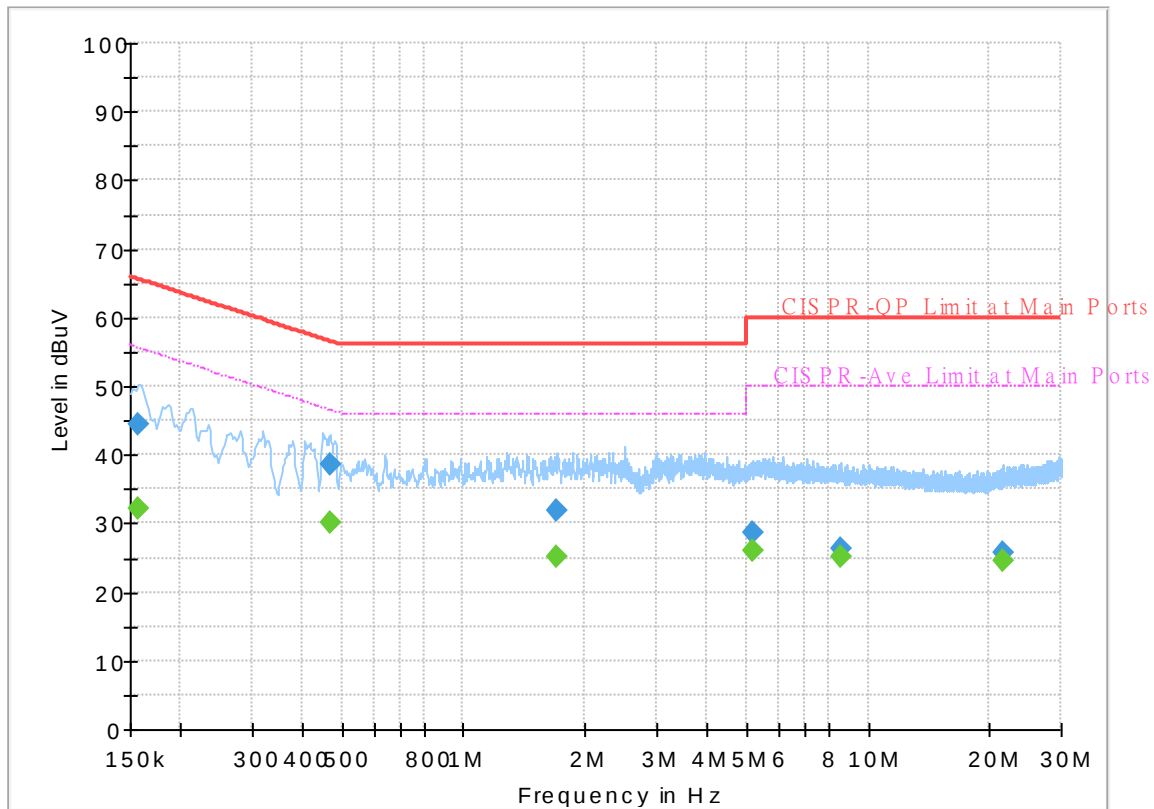
## Final\_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.159000        | ---              | 32.74           | 55.52        | 22.78       | L1   | OFF    | 19.5       |
| 0.159000        | 48.25            | ---             | 65.52        | 17.27       | L1   | OFF    | 19.5       |
| 0.213000        | ---              | 27.33           | 53.09        | 25.76       | L1   | OFF    | 19.5       |
| 0.213000        | 41.12            | ---             | 63.09        | 21.97       | L1   | OFF    | 19.5       |
| 0.429000        | ---              | 24.77           | 47.27        | 22.50       | L1   | OFF    | 19.5       |
| 0.429000        | 35.36            | ---             | 57.27        | 21.91       | L1   | OFF    | 19.5       |
| 2.280750        | ---              | 25.77           | 46.00        | 20.23       | L1   | OFF    | 19.5       |
| 2.280750        | 29.78            | ---             | 56.00        | 26.22       | L1   | OFF    | 19.5       |
| 5.577000        | ---              | 25.70           | 50.00        | 24.30       | L1   | OFF    | 19.7       |
| 5.577000        | 27.50            | ---             | 60.00        | 32.50       | L1   | OFF    | 19.7       |
| 22.146000       | ---              | 24.74           | 50.00        | 25.26       | L1   | OFF    | 20.3       |
| 22.146000       | 25.83            | ---             | 60.00        | 34.17       | L1   | OFF    | 20.3       |

## EUT Information

Report NO : 932517-01  
Test Mode : Mode 1  
Test Voltage : 120Vac/60Hz  
Phase : Neutral

Full Spectrum



## Final\_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.156750        | ---              | 32.05           | 55.63        | 23.58       | N    | OFF    | 19.5       |
| 0.156750        | 44.51            | ---             | 65.63        | 21.12       | N    | OFF    | 19.5       |
| 0.467250        | ---              | 30.22           | 46.56        | 16.34       | N    | OFF    | 19.5       |
| 0.467250        | 38.59            | ---             | 56.56        | 17.97       | N    | OFF    | 19.5       |
| 1.698000        | ---              | 25.25           | 46.00        | 20.75       | N    | OFF    | 19.6       |
| 1.698000        | 31.92            | ---             | 56.00        | 24.08       | N    | OFF    | 19.6       |
| 5.178750        | ---              | 25.91           | 50.00        | 24.09       | N    | OFF    | 19.7       |
| 5.178750        | 28.76            | ---             | 60.00        | 31.24       | N    | OFF    | 19.7       |
| 8.524500        | ---              | 25.13           | 50.00        | 24.87       | N    | OFF    | 19.9       |
| 8.524500        | 26.27            | ---             | 60.00        | 33.73       | N    | OFF    | 19.9       |
| 21.482250       | ---              | 24.68           | 50.00        | 25.32       | N    | OFF    | 20.4       |
| 21.482250       | 25.62            | ---             | 60.00        | 34.38       | N    | OFF    | 20.4       |



## Appendix C. Radiated Spurious Emission

|                 |                           |                     |         |
|-----------------|---------------------------|---------------------|---------|
| Test Engineer : | Karl Hou and BigShow Wang | Temperature :       | 24~26°C |
|                 |                           | Relative Humidity : | 45~65%  |

### Band 4 - 5725~5850MHz

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

| WIFI<br>Ant.<br>1            | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11a<br>CH 149<br>5745MHz |      | 5611.8               | 51.28               | -16.92                  | 68.2                        | 39.95                     | 31.8                          | 9.85                   | 30.32                      | 100                  | 29                      | P                       | H               |
|                              |      | 5696.2               | 51.53               | -50.87                  | 102.4                       | 40.23                     | 31.8                          | 9.86                   | 30.36                      | 100                  | 29                      | P                       | H               |
|                              |      | 5714.4               | 52.72               | -56.51                  | 109.23                      | 41.36                     | 31.87                         | 9.86                   | 30.37                      | 100                  | 29                      | P                       | H               |
|                              |      | 5724                 | 55.45               | -64.47                  | 119.92                      | 44.04                     | 31.93                         | 9.86                   | 30.38                      | 100                  | 29                      | P                       | H               |
|                              | *    | 5745                 | 102.18              | -                       | -                           | 90.71                     | 32                            | 9.86                   | 30.39                      | 100                  | 29                      | P                       | H               |
|                              | *    | 5745                 | 94.33               | -                       | -                           | 82.86                     | 32                            | 9.86                   | 30.39                      | 100                  | 29                      | A                       | H               |
|                              |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                              |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                              |      | 5605.8               | 51.27               | -16.93                  | 68.2                        | 39.94                     | 31.8                          | 9.85                   | 30.32                      | 334                  | 256                     | P                       | V               |
|                              |      | 5689.2               | 50.75               | -46.49                  | 97.24                       | 39.45                     | 31.8                          | 9.86                   | 30.36                      | 334                  | 256                     | P                       | V               |
|                              |      | 5708.8               | 52.31               | -55.36                  | 107.67                      | 40.95                     | 31.87                         | 9.86                   | 30.37                      | 334                  | 256                     | P                       | V               |
|                              |      | 5724.2               | 56                  | -64.38                  | 120.38                      | 44.59                     | 31.93                         | 9.86                   | 30.38                      | 334                  | 256                     | P                       | V               |
|                              | *    | 5745                 | 103.42              | -                       | -                           | 91.95                     | 32                            | 9.86                   | 30.39                      | 334                  | 256                     | P                       | V               |
|                              | *    | 5745                 | 95.44               | -                       | -                           | 83.97                     | 32                            | 9.86                   | 30.39                      | 334                  | 256                     | A                       | V               |
|                              |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                              |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |



| WIFI                         | Note | Frequency | Level      | Over            | Limit              | Read              | Antenna            | Path           | Preamp           | Ant           | Table          | Peak            | Pol.    |
|------------------------------|------|-----------|------------|-----------------|--------------------|-------------------|--------------------|----------------|------------------|---------------|----------------|-----------------|---------|
| Ant.<br>1                    |      | ( MHz )   | ( dBμV/m ) | Limit<br>( dB ) | Line<br>( dBμV/m ) | Level<br>( dBμV ) | Factor<br>( dB/m ) | Loss<br>( dB ) | Factor<br>( dB ) | Pos<br>( cm ) | Pos<br>( deg ) | Avg.<br>( P/A ) | ( H/V ) |
| 802.11a<br>CH 157<br>5785MHz |      | 5607.4    | 50.9       | -17.3           | 68.2               | 39.57             | 31.8               | 9.85           | 30.32            | 100           | 28             | P               | H       |
|                              |      | 5681.4    | 50.92      | -40.55          | 91.47              | 39.66             | 31.75              | 9.86           | 30.35            | 100           | 28             | P               | H       |
|                              |      | 5706.6    | 50.42      | -56.63          | 107.05             | 39.06             | 31.87              | 9.86           | 30.37            | 100           | 28             | P               | H       |
|                              |      | 5724.8    | 49.68      | -72.06          | 121.74             | 38.27             | 31.93              | 9.86           | 30.38            | 100           | 28             | P               | H       |
|                              | *    | 5785      | 101.43     | -               | -                  | 89.84             | 32.13              | 9.87           | 30.41            | 100           | 28             | P               | H       |
|                              | *    | 5785      | 93.41      | -               | -                  | 81.82             | 32.13              | 9.87           | 30.41            | 100           | 28             | A               | H       |
|                              |      | 5850.6    | 50.89      | -69.94          | 120.83             | 39.2              | 32.2               | 9.93           | 30.44            | 100           | 28             | P               | H       |
|                              |      | 5866.4    | 50.65      | -56.96          | 107.61             | 38.92             | 32.23              | 9.95           | 30.45            | 100           | 28             | P               | H       |
|                              |      | 5878.6    | 51.64      | -50.89          | 102.53             | 39.86             | 32.27              | 9.97           | 30.46            | 100           | 28             | P               | H       |
|                              |      | 5927.2    | 50.76      | -17.44          | 68.2               | 38.84             | 32.37              | 10.03          | 30.48            | 100           | 28             | P               | H       |
|                              |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                              |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                              |      | 5646.6    | 50.7       | -17.5           | 68.2               | 39.46             | 31.73              | 9.85           | 30.34            | 329           | 257            | P               | V       |
|                              |      | 5661.2    | 49.82      | -26.7           | 76.52              | 38.6              | 31.7               | 9.86           | 30.34            | 329           | 257            | P               | V       |
|                              |      | 5714.8    | 50.49      | -58.86          | 109.35             | 39.13             | 31.87              | 9.86           | 30.37            | 329           | 257            | P               | V       |
|                              |      | 5721.8    | 49.62      | -65.28          | 114.9              | 38.21             | 31.93              | 9.86           | 30.38            | 329           | 257            | P               | V       |
|                              | *    | 5785      | 103.03     | -               | -                  | 91.44             | 32.13              | 9.87           | 30.41            | 329           | 257            | P               | V       |
|                              | *    | 5785      | 94.86      | -               | -                  | 83.27             | 32.13              | 9.87           | 30.41            | 329           | 257            | A               | V       |
|                              |      | 5852      | 50.63      | -67.01          | 117.64             | 38.94             | 32.2               | 9.93           | 30.44            | 329           | 257            | P               | V       |
|                              |      | 5869.2    | 51.28      | -55.54          | 106.82             | 39.54             | 32.23              | 9.96           | 30.45            | 329           | 257            | P               | V       |
|                              |      | 5908.8    | 51.24      | -28.91          | 80.15              | 39.37             | 32.33              | 10.01          | 30.47            | 329           | 257            | P               | V       |
|                              |      | 5942.6    | 51.05      | -17.15          | 68.2               | 39.09             | 32.4               | 10.05          | 30.49            | 329           | 257            | P               | V       |
|                              |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                              |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |

| WIFI           | Note                                                                                        | Frequency | Level      | Over            | Limit              | Read              | Antenna            | Path           | Preamplifier     | Ant           | Table          | Peak            | Pol.    |
|----------------|---------------------------------------------------------------------------------------------|-----------|------------|-----------------|--------------------|-------------------|--------------------|----------------|------------------|---------------|----------------|-----------------|---------|
| Ant.<br>1      |                                                                                             | ( MHz )   | ( dBμV/m ) | Limit<br>( dB ) | Line<br>( dBμV/m ) | Level<br>( dBμV ) | Factor<br>( dB/m ) | Loss<br>( dB ) | Factor<br>( dB ) | Pos<br>( cm ) | Pos<br>( deg ) | Avg.<br>( P/A ) | ( H/V ) |
| <b>802.11a</b> | *                                                                                           | 5825      | 101.75     | -               | -                  | 90.08             | 32.2               | 9.9            | 30.43            | 100           | 29             | P               | H       |
|                | *                                                                                           | 5825      | 93.57      | -               | -                  | 81.9              | 32.2               | 9.9            | 30.43            | 100           | 29             | A               | H       |
|                |                                                                                             | 5853      | 52.82      | -62.54          | 115.36             | 41.12             | 32.2               | 9.94           | 30.44            | 100           | 29             | P               | H       |
|                |                                                                                             | 5857      | 54.93      | -55.31          | 110.24             | 43.21             | 32.23              | 9.94           | 30.45            | 100           | 29             | P               | H       |
|                |                                                                                             | 5882.8    | 51.61      | -47.8           | 99.41              | 39.83             | 32.27              | 9.97           | 30.46            | 100           | 29             | P               | H       |
|                |                                                                                             | 5935.4    | 50.87      | -17.33          | 68.2               | 38.95             | 32.37              | 10.04          | 30.49            | 100           | 29             | P               | H       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 |         |
| <b>CH 165</b>  | *                                                                                           | 5825      | 102.74     | -               | -                  | 91.07             | 32.2               | 9.9            | 30.43            | 324           | 263            | P               | V       |
|                | *                                                                                           | 5825      | 94.73      | -               | -                  | 83.06             | 32.2               | 9.9            | 30.43            | 324           | 263            | A               | V       |
|                |                                                                                             | 5852.6    | 51.33      | -64.94          | 116.27             | 39.63             | 32.2               | 9.94           | 30.44            | 324           | 263            | P               | V       |
|                |                                                                                             | 5868      | 52.01      | -55.15          | 107.16             | 40.28             | 32.23              | 9.95           | 30.45            | 324           | 263            | P               | V       |
|                |                                                                                             | 5876.8    | 51.26      | -52.6           | 103.86             | 39.48             | 32.27              | 9.97           | 30.46            | 324           | 263            | P               | V       |
|                |                                                                                             | 5930.6    | 51.63      | -16.57          | 68.2               | 39.71             | 32.37              | 10.03          | 30.48            | 324           | 263            | P               | V       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                |                                                                                             |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
| <b>Remark</b>  | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |                 |                    |                   |                    |                |                  |               |                |                 |         |



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

| WIFI Ant.                    | Note                                                                                        | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|------------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                            |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11a<br>CH 149<br>5745MHz |                                                                                             | 11490     | 47.92      | -26.08     | 74         | 55.44      | 40.17          | 14.5      | 62.19         | 100     | 0         | P         | H       |
|                              |                                                                                             | 17235     | 48.65      | -19.55     | 68.2       | 48.52      | 40.7           | 18.51     | 59.08         | 100     | 0         | P         | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             | 11490     | 47.1       | -26.9      | 74         | 54.62      | 40.17          | 14.5      | 62.19         | 100     | 0         | P         | V       |
|                              |                                                                                             | 17235     | 49.18      | -19.02     | 68.2       | 49.05      | 40.7           | 18.51     | 59.08         | 100     | 0         | P         | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| 802.11a<br>CH 157<br>5785MHz |                                                                                             | 11570     | 47.29      | -26.71     | 74         | 54.99      | 40             | 14.56     | 62.26         | 100     | 0         | P         | H       |
|                              |                                                                                             | 17355     | 49.46      | -18.74     | 68.2       | 48.16      | 41.4           | 18.72     | 58.82         | 100     | 0         | P         | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             | 11570     | 46.63      | -27.37     | 74         | 54.33      | 40             | 14.56     | 62.26         | 100     | 0         | P         | V       |
|                              |                                                                                             | 17355     | 49.54      | -18.66     | 68.2       | 48.24      | 41.4           | 18.72     | 58.82         | 100     | 0         | P         | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| 802.11a<br>CH 165<br>5825MHz |                                                                                             | 11650     | 46.38      | -27.62     | 74         | 54.42      | 39.66          | 14.62     | 62.32         | 100     | 0         | P         | H       |
|                              |                                                                                             | 17475     | 50.7       | -17.5      | 68.2       | 47.95      | 42.43          | 18.88     | 58.56         | 100     | 0         | P         | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                              |                                                                                             | 11650     | 45.31      | -28.69     | 74         | 53.35      | 39.66          | 14.62     | 62.32         | 100     | 0         | P         | V       |
|                              |                                                                                             | 17475     | 50.32      | -17.88     | 68.2       | 47.57      | 42.43          | 18.88     | 58.56         | 100     | 0         | P         | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                              |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |            |            |            |                |           |               |         |           |           |         |



## Band 4 5725~5850MHz

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

| WIFI<br>Ant.<br>1                    | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 149<br>5745MHz |      | 5621.6               | 50.96               | -17.24                  | 68.2                        | 39.66                     | 31.77                         | 9.85                   | 30.32                      | 100                  | 29                      | P                       | H               |
|                                      |      | 5686.4               | 50.6                | -44.57                  | 95.17                       | 39.3                      | 31.8                          | 9.86                   | 30.36                      | 100                  | 29                      | P                       | H               |
|                                      |      | 5714.2               | 51.84               | -57.34                  | 109.18                      | 40.48                     | 31.87                         | 9.86                   | 30.37                      | 100                  | 29                      | P                       | H               |
|                                      |      | 5724.6               | 55.5                | -65.79                  | 121.29                      | 44.09                     | 31.93                         | 9.86                   | 30.38                      | 100                  | 29                      | P                       | H               |
|                                      | *    | 5745                 | 101.7               | -                       | -                           | 90.23                     | 32                            | 9.86                   | 30.39                      | 100                  | 29                      | P                       | H               |
|                                      | *    | 5745                 | 93.69               | -                       | -                           | 82.22                     | 32                            | 9.86                   | 30.39                      | 100                  | 29                      | A                       | H               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                      |      | 5619.2               | 52.04               | -16.16                  | 68.2                        | 40.74                     | 31.77                         | 9.85                   | 30.32                      | 319                  | 256                     | P                       | V               |
|                                      |      | 5664.6               | 50.67               | -28.37                  | 79.04                       | 39.46                     | 31.7                          | 9.86                   | 30.35                      | 319                  | 256                     | P                       | V               |
|                                      |      | 5718.8               | 51.65               | -58.81                  | 110.46                      | 40.23                     | 31.93                         | 9.86                   | 30.37                      | 319                  | 256                     | P                       | V               |
|                                      |      | 5725                 | 55.04               | -67.16                  | 122.2                       | 43.63                     | 31.93                         | 9.86                   | 30.38                      | 319                  | 256                     | P                       | V               |
|                                      | *    | 5745                 | 102.78              | -                       | -                           | 91.31                     | 32                            | 9.86                   | 30.39                      | 319                  | 256                     | P                       | V               |
|                                      | *    | 5745                 | 94.6                | -                       | -                           | 83.13                     | 32                            | 9.86                   | 30.39                      | 319                  | 256                     | A                       | V               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |



| WIFI                                           | Note | Frequency | Level      | Over            | Limit              | Read              | Antenna            | Path           | Preamp           | Ant           | Table          | Peak            | Pol.    |
|------------------------------------------------|------|-----------|------------|-----------------|--------------------|-------------------|--------------------|----------------|------------------|---------------|----------------|-----------------|---------|
| Ant.<br>1                                      |      | ( MHz )   | ( dBμV/m ) | Limit<br>( dB ) | Line<br>( dBμV/m ) | Level<br>( dBμV ) | Factor<br>( dB/m ) | Loss<br>( dB ) | Factor<br>( dB ) | Pos<br>( cm ) | Pos<br>( deg ) | Avg.<br>( P/A ) | ( H/V ) |
| <b>802.11n<br/>HT20<br/>CH 157<br/>5785MHz</b> |      | 5601.8    | 50.98      | -17.22          | 68.2               | 39.64             | 31.8               | 9.85           | 30.31            | 100           | 29             | P               | H       |
|                                                |      | 5656.8    | 50.14      | -23.11          | 73.25              | 38.92             | 31.7               | 9.86           | 30.34            | 100           | 29             | P               | H       |
|                                                |      | 5712      | 51.17      | -57.39          | 108.56             | 39.81             | 31.87              | 9.86           | 30.37            | 100           | 29             | P               | H       |
|                                                |      | 5720.4    | 50.77      | -60.94          | 111.71             | 39.35             | 31.93              | 9.86           | 30.37            | 100           | 29             | P               | H       |
|                                                | *    | 5785      | 101.61     | -               | -                  | 90.02             | 32.13              | 9.87           | 30.41            | 100           | 29             | P               | H       |
|                                                | *    | 5785      | 93.42      | -               | -                  | 81.83             | 32.13              | 9.87           | 30.41            | 100           | 29             | A               | H       |
|                                                |      | 5850.4    | 50.12      | -71.17          | 121.29             | 38.43             | 32.2               | 9.93           | 30.44            | 100           | 29             | P               | H       |
|                                                |      | 5865.6    | 51.49      | -56.34          | 107.83             | 39.76             | 32.23              | 9.95           | 30.45            | 100           | 29             | P               | H       |
|                                                |      | 5881.4    | 51.27      | -49.18          | 100.45             | 39.49             | 32.27              | 9.97           | 30.46            | 100           | 29             | P               | H       |
|                                                |      | 5941.8    | 51.48      | -16.72          | 68.2               | 39.52             | 32.4               | 10.05          | 30.49            | 100           | 29             | P               | H       |
|                                                |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                                |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                                |      | 5648.2    | 51.03      | -17.17          | 68.2               | 39.79             | 31.73              | 9.85           | 30.34            | 330           | 257            | P               | V       |
|                                                |      | 5690.8    | 51.22      | -47.2           | 98.42              | 39.92             | 31.8               | 9.86           | 30.36            | 330           | 257            | P               | V       |
|                                                |      | 5718.6    | 50.22      | -60.19          | 110.41             | 38.8              | 31.93              | 9.86           | 30.37            | 330           | 257            | P               | V       |
|                                                |      | 5722.8    | 49.86      | -67.32          | 117.18             | 38.45             | 31.93              | 9.86           | 30.38            | 330           | 257            | P               | V       |
|                                                | *    | 5785      | 102.65     | -               | -                  | 91.06             | 32.13              | 9.87           | 30.41            | 330           | 257            | P               | V       |
|                                                | *    | 5785      | 94.6       | -               | -                  | 83.01             | 32.13              | 9.87           | 30.41            | 330           | 257            | A               | V       |
|                                                |      | 5853.8    | 49.78      | -63.76          | 113.54             | 38.05             | 32.23              | 9.94           | 30.44            | 330           | 257            | P               | V       |
|                                                |      | 5855.8    | 50.48      | -60.1           | 110.58             | 38.76             | 32.23              | 9.94           | 30.45            | 330           | 257            | P               | V       |
|                                                |      | 5916.2    | 51.24      | -23.45          | 74.69              | 39.37             | 32.33              | 10.02          | 30.48            | 330           | 257            | P               | V       |
|                                                |      | 5926.2    | 51.45      | -16.75          | 68.2               | 39.53             | 32.37              | 10.03          | 30.48            | 330           | 257            | P               | V       |
|                                                |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                                                |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |



| WIFI                                                                                                                                                        | Note | Frequency | Level      | Over            | Limit              | Read              | Antenna            | Path           | Preamp           | Ant           | Table          | Peak            | Pol.    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|------------|-----------------|--------------------|-------------------|--------------------|----------------|------------------|---------------|----------------|-----------------|---------|
| Ant.<br>1                                                                                                                                                   |      | ( MHz )   | ( dBμV/m ) | Limit<br>( dB ) | Line<br>( dBμV/m ) | Level<br>( dBμV ) | Factor<br>( dB/m ) | Loss<br>( dB ) | Factor<br>( dB ) | Pos<br>( cm ) | Pos<br>( deg ) | Avg.<br>( P/A ) | ( H/V ) |
| 802.11n<br>HT20<br>CH 165<br>5825MHz                                                                                                                        | *    | 5825      | 101.91     | -               | -                  | 90.24             | 32.2               | 9.9            | 30.43            | 100           | 31             | P               | H       |
|                                                                                                                                                             | *    | 5825      | 93.26      | -               | -                  | 81.59             | 32.2               | 9.9            | 30.43            | 100           | 31             | A               | H       |
|                                                                                                                                                             |      | 5853.8    | 52.05      | -61.49          | 113.54             | 40.32             | 32.23              | 9.94           | 30.44            | 100           | 31             | P               | H       |
|                                                                                                                                                             |      | 5871.4    | 51.69      | -54.52          | 106.21             | 39.91             | 32.27              | 9.96           | 30.45            | 100           | 31             | P               | H       |
|                                                                                                                                                             |      | 5920.4    | 51.85      | -19.74          | 71.59              | 39.98             | 32.33              | 10.02          | 30.48            | 100           | 31             | P               | H       |
|                                                                                                                                                             |      | 5925      | 51.09      | -17.11          | 68.2               | 39.17             | 32.37              | 10.03          | 30.48            | 100           | 31             | P               | H       |
|                                                                                                                                                             |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                                                                                                                                             |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                                                                                                                                             | *    | 5825      | 103.25     | -               | -                  | 91.58             | 32.2               | 9.9            | 30.43            | 324           | 257            | P               | V       |
|                                                                                                                                                             | *    | 5825      | 95.19      | -               | -                  | 83.52             | 32.2               | 9.9            | 30.43            | 324           | 257            | A               | V       |
|                                                                                                                                                             |      | 5850      | 52.65      | -69.55          | 122.2              | 40.96             | 32.2               | 9.93           | 30.44            | 324           | 257            | P               | V       |
|                                                                                                                                                             |      | 5855.2    | 51.44      | -59.3           | 110.74             | 39.71             | 32.23              | 9.94           | 30.44            | 324           | 257            | P               | V       |
|                                                                                                                                                             |      | 5898.8    | 52.32      | -35.23          | 87.55              | 40.5              | 32.3               | 9.99           | 30.47            | 324           | 257            | P               | V       |
|                                                                                                                                                             |      | 5943      | 51.83      | -16.37          | 68.2               | 39.87             | 32.4               | 10.05          | 30.49            | 324           | 257            | P               | V       |
|                                                                                                                                                             |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                                                                                                                                                             |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
| <b>Remark</b> <ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> </ol> |      |           |            |                 |                    |                   |                    |                |                  |               |                |                 |         |



**Band 4 5725~5850MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI Ant.                            | Note                                                                                        | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|--------------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|------------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                                    |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11n<br>HT20<br>CH 149<br>5745MHz |                                                                                             | 11490     | 46.41      | -27.59     | 74         | 53.93      | 40.17          | 14.5      | 62.19         | 100     | 0         | P         | H       |
|                                      |                                                                                             | 17235     | 48.91      | -19.29     | 68.2       | 48.78      | 40.7           | 18.51     | 59.08         | 100     | 0         | P         | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             | 11490     | 46.61      | -27.39     | 74         | 54.13      | 40.17          | 14.5      | 62.19         | 100     | 0         | P         | V       |
|                                      |                                                                                             | 17235     | 49         | -19.2      | 68.2       | 48.87      | 40.7           | 18.51     | 59.08         | 100     | 0         | P         | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| 802.11n<br>HT20<br>CH 157<br>5785MHz |                                                                                             | 11570     | 46.23      | -27.77     | 74         | 53.93      | 40             | 14.56     | 62.26         | 100     | 0         | P         | H       |
|                                      |                                                                                             | 17355     | 50         | -18.2      | 68.2       | 48.7       | 41.4           | 18.72     | 58.82         | 100     | 0         | P         | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             | 11570     | 46.28      | -27.72     | 74         | 53.98      | 40             | 14.56     | 62.26         | 100     | 0         | P         | V       |
|                                      |                                                                                             | 17355     | 49.11      | -19.09     | 68.2       | 47.81      | 41.4           | 18.72     | 58.82         | 100     | 0         | P         | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| 802.11n<br>HT20<br>CH 165<br>5825MHz |                                                                                             | 11650     | 45.48      | -28.52     | 74         | 53.52      | 39.66          | 14.62     | 62.32         | 100     | 0         | P         | H       |
|                                      |                                                                                             | 17475     | 50.25      | -17.95     | 68.2       | 47.5       | 42.43          | 18.88     | 58.56         | 100     | 0         | P         | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                                                             | 11650     | 45.21      | -28.79     | 74         | 53.25      | 39.66          | 14.62     | 62.32         | 100     | 0         | P         | V       |
|                                      |                                                                                             | 17475     | 49.72      | -18.48     | 68.2       | 46.97      | 42.43          | 18.88     | 58.56         | 100     | 0         | P         | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
|                                      |                                                                                             |           |            |            |            |            |                |           |               |         |           |           | V       |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |            |            |            |                |           |               |         |           |           |         |



## Band 4 5725~5850MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                    | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 151<br>5755MHz |      | 5631.4               | 52.2                | -16                     | 68.2                        | 40.91                     | 31.77                         | 9.85                   | 30.33                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5686                 | 51.73               | -43.14                  | 94.87                       | 40.43                     | 31.8                          | 9.86                   | 30.36                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5717.6               | 58.02               | -52.11                  | 110.13                      | 46.6                      | 31.93                         | 9.86                   | 30.37                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5722                 | 59.3                | -56.06                  | 115.36                      | 47.89                     | 31.93                         | 9.86                   | 30.38                      | 100                  | 32                      | P                       | H               |
|                                      | *    | 5755                 | 98.18               | -                       | -                           | 86.63                     | 32.07                         | 9.87                   | 30.39                      | 100                  | 32                      | P                       | H               |
|                                      | *    | 5755                 | 90.17               | -                       | -                           | 78.62                     | 32.07                         | 9.87                   | 30.39                      | 100                  | 32                      | A                       | H               |
|                                      |      | 5852.8               | 49.51               | -66.31                  | 115.82                      | 37.81                     | 32.2                          | 9.94                   | 30.44                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5867.6               | 50.95               | -56.32                  | 107.27                      | 39.22                     | 32.23                         | 9.95                   | 30.45                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5892.6               | 51.2                | -40.94                  | 92.14                       | 39.37                     | 32.3                          | 9.99                   | 30.46                      | 100                  | 32                      | P                       | H               |
|                                      |      | 5937                 | 51.82               | -16.38                  | 68.2                        | 39.9                      | 32.37                         | 10.04                  | 30.49                      | 100                  | 32                      | P                       | H               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                      |      | 5625.2               | 52.65               | -15.55                  | 68.2                        | 41.36                     | 31.77                         | 9.85                   | 30.33                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5698.8               | 51.24               | -53.08                  | 104.32                      | 39.94                     | 31.8                          | 9.86                   | 30.36                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5719.2               | 56.05               | -54.53                  | 110.58                      | 44.63                     | 31.93                         | 9.86                   | 30.37                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5723                 | 58.43               | -59.21                  | 117.64                      | 47.02                     | 31.93                         | 9.86                   | 30.38                      | 331                  | 257                     | P                       | V               |
|                                      | *    | 5755                 | 99.32               | -                       | -                           | 87.77                     | 32.07                         | 9.87                   | 30.39                      | 331                  | 257                     | P                       | V               |
|                                      | *    | 5755                 | 91.17               | -                       | -                           | 79.62                     | 32.07                         | 9.87                   | 30.39                      | 331                  | 257                     | A                       | V               |
|                                      |      | 5852.2               | 49.63               | -67.55                  | 117.18                      | 37.93                     | 32.2                          | 9.94                   | 30.44                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5867.2               | 51.29               | -56.09                  | 107.38                      | 39.56                     | 32.23                         | 9.95                   | 30.45                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5886.2               | 52.04               | -44.84                  | 96.88                       | 40.25                     | 32.27                         | 9.98                   | 30.46                      | 331                  | 257                     | P                       | V               |
|                                      |      | 5936                 | 51.24               | -16.96                  | 68.2                        | 39.32                     | 32.37                         | 10.04                  | 30.49                      | 331                  | 257                     | P                       | V               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                      |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |



| WIFI                                 | Note                                                         | Frequency | Level      | Over            | Limit              | Read              | Antenna            | Path           | Preamp           | Ant           | Table          | Peak            | Pol.    |
|--------------------------------------|--------------------------------------------------------------|-----------|------------|-----------------|--------------------|-------------------|--------------------|----------------|------------------|---------------|----------------|-----------------|---------|
| Ant.<br>1                            |                                                              | ( MHz )   | ( dBμV/m ) | Limit<br>( dB ) | Line<br>( dBμV/m ) | Level<br>( dBμV ) | Factor<br>( dB/m ) | Loss<br>( dB ) | Factor<br>( dB ) | Pos<br>( cm ) | Pos<br>( deg ) | Avg.<br>( P/A ) | ( H/V ) |
| 802.11n<br>HT40<br>CH 159<br>5795MHz |                                                              | 5608.4    | 50.96      | -17.24          | 68.2               | 39.63             | 31.8               | 9.85           | 30.32            | 100           | 32             | P               | H       |
|                                      |                                                              | 5697.4    | 51.26      | -52.02          | 103.28             | 39.96             | 31.8               | 9.86           | 30.36            | 100           | 32             | P               | H       |
|                                      |                                                              | 5700      | 51.74      | -53.46          | 105.2              | 40.44             | 31.8               | 9.86           | 30.36            | 100           | 32             | P               | H       |
|                                      |                                                              | 5722.6    | 51.16      | -65.57          | 116.73             | 39.75             | 31.93              | 9.86           | 30.38            | 100           | 32             | P               | H       |
|                                      | *                                                            | 5795      | 98.6       | -               | -                  | 86.94             | 32.2               | 9.87           | 30.41            | 100           | 32             | P               | H       |
|                                      | *                                                            | 5795      | 91.08      | -               | -                  | 79.42             | 32.2               | 9.87           | 30.41            | 100           | 32             | A               | H       |
|                                      |                                                              | 5850.8    | 50.94      | -69.44          | 120.38             | 39.25             | 32.2               | 9.93           | 30.44            | 100           | 32             | P               | H       |
|                                      |                                                              | 5863.6    | 50.75      | -57.64          | 108.39             | 39.02             | 32.23              | 9.95           | 30.45            | 100           | 32             | P               | H       |
|                                      |                                                              | 5915.2    | 51.46      | -23.97          | 75.43              | 39.6              | 32.33              | 10.01          | 30.48            | 100           | 32             | P               | H       |
|                                      |                                                              | 5932.2    | 51.74      | -16.46          | 68.2               | 39.81             | 32.37              | 10.04          | 30.48            | 100           | 32             | P               | H       |
|                                      |                                                              |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                      |                                                              |           |            |                 |                    |                   |                    |                |                  |               |                |                 | H       |
|                                      |                                                              | 5611.4    | 51.12      | -17.08          | 68.2               | 39.79             | 31.8               | 9.85           | 30.32            | 328           | 255            | P               | V       |
|                                      |                                                              | 5679.4    | 52.12      | -37.88          | 90                 | 40.86             | 31.75              | 9.86           | 30.35            | 328           | 255            | P               | V       |
|                                      |                                                              | 5700.2    | 51.07      | -54.19          | 105.26             | 39.77             | 31.8               | 9.86           | 30.36            | 328           | 255            | P               | V       |
|                                      |                                                              | 5724.8    | 50.52      | -71.22          | 121.74             | 39.11             | 31.93              | 9.86           | 30.38            | 328           | 255            | P               | V       |
|                                      | *                                                            | 5795      | 99.88      | -               | -                  | 88.22             | 32.2               | 9.87           | 30.41            | 328           | 255            | P               | V       |
|                                      | *                                                            | 5795      | 92.12      | -               | -                  | 80.46             | 32.2               | 9.87           | 30.41            | 328           | 255            | A               | V       |
|                                      |                                                              | 5853.4    | 55.18      | -59.27          | 114.45             | 43.48             | 32.2               | 9.94           | 30.44            | 328           | 255            | P               | V       |
|                                      |                                                              | 5872.6    | 51.96      | -53.91          | 105.87             | 40.18             | 32.27              | 9.96           | 30.45            | 328           | 255            | P               | V       |
|                                      |                                                              | 5917.8    | 51.35      | -22.16          | 73.51              | 39.48             | 32.33              | 10.02          | 30.48            | 328           | 255            | P               | V       |
|                                      |                                                              | 5945.2    | 51.69      | -16.51          | 68.2               | 39.73             | 32.4               | 10.05          | 30.49            | 328           | 255            | P               | V       |
|                                      |                                                              |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
|                                      |                                                              |           |            |                 |                    |                   |                    |                |                  |               |                |                 | V       |
| Remark                               | 1. No other spurious found.                                  |           |            |                 |                    |                   |                    |                |                  |               |                |                 |         |
|                                      | 2. All results are PASS against Peak and Average limit line. |           |            |                 |                    |                   |                    |                |                  |               |                |                 |         |



**Band 4 5725~5850MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI Ant.                            | Note                                                         | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|--------------------------------------|--------------------------------------------------------------|-----------|------------|------------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                                    |                                                              | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11n<br>HT40<br>CH 151<br>5755MHz |                                                              | 11510     | 46.2       | -27.8      | 74         | 53.69      | 40.2           | 14.52     | 62.21         | 100     | 0         | P         | H       |
|                                      |                                                              | 17265     | 49.2       | -19        | 68.2       | 48.86      | 40.8           | 18.56     | 59.02         | 100     | 0         | P         | H       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                              | 11510     | 46.44      | -27.56     | 74         | 53.93      | 40.2           | 14.52     | 62.21         | 100     | 0         | P         | V       |
|                                      |                                                              | 17265     | 49.06      | -19.14     | 68.2       | 48.72      | 40.8           | 18.56     | 59.02         | 100     | 0         | P         | V       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | V       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | V       |
| 802.11n<br>HT40<br>CH 159<br>5795MHz |                                                              | 11590     | 46.91      | -27.09     | 74         | 54.66      | 39.95          | 14.57     | 62.27         | 100     | 0         | P         | H       |
|                                      |                                                              | 17385     | 50.56      | -17.64     | 68.2       | 48.83      | 41.73          | 18.75     | 58.75         | 100     | 0         | P         | H       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | H       |
|                                      |                                                              | 11590     | 46.2       | -27.8      | 74         | 53.95      | 39.95          | 14.57     | 62.27         | 100     | 0         | P         | V       |
|                                      |                                                              | 17385     | 49.98      | -18.22     | 68.2       | 48.25      | 41.73          | 18.75     | 58.75         | 100     | 0         | P         | V       |
|                                      |                                                              |           |            |            |            |            |                |           |               |         |           |           | 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 VHT80 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT80<br>CH 155<br>5775MHz |                                                                                             | 5617.6               | 51.4                | -16.8                   | 68.2                        | 40.1                      | 31.77                         | 9.85                   | 30.32                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5692                 | 52.79               | -46.51                  | 99.3                        | 41.49                     | 31.8                          | 9.86                   | 30.36                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5718                 | 55.67               | -54.57                  | 110.24                      | 44.25                     | 31.93                         | 9.86                   | 30.37                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5723                 | 55.61               | -62.03                  | 117.64                      | 44.2                      | 31.93                         | 9.86                   | 30.38                      | 100                  | 272                     | P                       | H               |
|                                        | *                                                                                           | 5775                 | 93.62               | -                       | -                           | 82.02                     | 32.13                         | 9.87                   | 30.4                       | 100                  | 272                     | P                       | H               |
|                                        | *                                                                                           | 5775                 | 85.75               | -                       | -                           | 74.15                     | 32.13                         | 9.87                   | 30.4                       | 100                  | 272                     | A                       | H               |
|                                        |                                                                                             | 5852.8               | 50.07               | -65.75                  | 115.82                      | 38.37                     | 32.2                          | 9.94                   | 30.44                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5860.8               | 51.95               | -57.22                  | 109.17                      | 40.22                     | 32.23                         | 9.95                   | 30.45                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5888.4               | 51.06               | -44.19                  | 95.25                       | 39.24                     | 32.3                          | 9.98                   | 30.46                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             | 5943.6               | 50.74               | -17.46                  | 68.2                        | 38.78                     | 32.4                          | 10.05                  | 30.49                      | 100                  | 272                     | P                       | H               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                        |                                                                                             | 5613.2               | 50.51               | -17.69                  | 68.2                        | 39.18                     | 31.8                          | 9.85                   | 30.32                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5699.6               | 54.52               | -50.39                  | 104.91                      | 43.22                     | 31.8                          | 9.86                   | 30.36                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5718.6               | 55.78               | -54.63                  | 110.41                      | 44.36                     | 31.93                         | 9.86                   | 30.37                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5722.4               | 56.56               | -59.71                  | 116.27                      | 45.15                     | 31.93                         | 9.86                   | 30.38                      | 313                  | 257                     | P                       | V               |
|                                        | *                                                                                           | 5775                 | 94.98               | -                       | -                           | 83.39                     | 32.13                         | 9.87                   | 30.41                      | 313                  | 257                     | P                       | V               |
|                                        | *                                                                                           | 5775                 | 86.94               | -                       | -                           | 75.35                     | 32.13                         | 9.87                   | 30.41                      | 313                  | 257                     | A                       | V               |
|                                        |                                                                                             | 5852.4               | 50.42               | -66.31                  | 116.73                      | 38.72                     | 32.2                          | 9.94                   | 30.44                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5861.6               | 50.81               | -58.14                  | 108.95                      | 39.08                     | 32.23                         | 9.95                   | 30.45                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5909.6               | 51.37               | -28.19                  | 79.56                       | 39.5                      | 32.33                         | 10.01                  | 30.47                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             | 5949.8               | 51.9                | -16.3                   | 68.2                        | 39.93                     | 32.4                          | 10.06                  | 30.49                      | 313                  | 257                     | P                       | V               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                        |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         |                 |



## Band 4 5725~5850MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI Ant.                              | Note | Frequency                                                                                   | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|----------------------------------------|------|---------------------------------------------------------------------------------------------|------------|------------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                                      |      | ( MHz )                                                                                     | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11ac<br>VHT80<br>CH 155<br>5775MHz |      | 11550                                                                                       | 46.43      | -27.57     | 74         | 54.07      | 40.05          | 14.55     | 62.24         | 100     | 0         | P         | H       |
|                                        |      | 17325                                                                                       | 50.46      | -17.74     | 68.2       | 49.6       | 41.07          | 18.67     | 58.88         | 100     | 0         | P         | H       |
|                                        |      |                                                                                             |            |            |            |            |                |           |               |         |           |           | H       |
|                                        |      |                                                                                             |            |            |            |            |                |           |               |         |           |           | H       |
|                                        |      | 11550                                                                                       | 46.35      | -27.65     | 74         | 53.99      | 40.05          | 14.55     | 62.24         | 100     | 0         | P         | V       |
|                                        |      | 17325                                                                                       | 49.96      | -18.24     | 68.2       | 49.1       | 41.07          | 18.67     | 58.88         | 100     | 0         | P         | V       |
|                                        |      |                                                                                             |            |            |            |            |                |           |               |         |           |           | V       |
|                                        |      |                                                                                             |            |            |            |            |                |           |               |         |           |           | V       |
| Remark                                 |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |            |            |            |            |                |           |               |         |           |           |         |

**Emission below 1GHz**  
**5GHz WIFI 802.11n HT40 (LF @ 3m)**

| WIFI<br>Ant.<br>1             | Note                                                                       | Frequency<br><br>( MHz ) | Level<br><br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------------------|----------------------------------------------------------------------------|--------------------------|-------------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 5GHz<br>802.11n<br>HT40<br>LF |                                                                            | 30.97                    | 24.3                    | -15.7                   | 40                          | 31.4                    | 24.81                         | 0.71                   | 32.62                      | -                    | -                       | P                     | H             |
|                               |                                                                            | 109.54                   | 22.57                   | -20.93                  | 43.5                        | 36.75                   | 16.95                         | 1.38                   | 32.51                      | -                    | -                       | P                     | H             |
|                               |                                                                            | 124.09                   | 24.05                   | -19.45                  | 43.5                        | 37.51                   | 17.6                          | 1.45                   | 32.51                      | -                    | -                       | P                     | H             |
|                               |                                                                            | 282.2                    | 22.9                    | -23.1                   | 46                          | 34.26                   | 18.89                         | 2.28                   | 32.53                      | -                    | -                       | P                     | H             |
|                               |                                                                            | 630.43                   | 29.02                   | -16.98                  | 46                          | 31.85                   | 26.42                         | 3.29                   | 32.54                      | -                    | -                       | P                     | H             |
|                               |                                                                            | 914.64                   | 36.56                   | -9.44                   | 46                          | 34.71                   | 29.39                         | 3.98                   | 31.52                      | 100                  | 0                       | P                     | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                               |                                                                            | 30                       | 29.63                   | -10.37                  | 40                          | 36.35                   | 25.2                          | 0.7                    | 32.62                      | -                    | -                       | P                     | V             |
|                               |                                                                            | 85.29                    | 23                      | -17                     | 40                          | 40.13                   | 14.13                         | 1.27                   | 32.53                      | -                    | -                       | P                     | V             |
|                               |                                                                            | 107.6                    | 23.69                   | -19.81                  | 43.5                        | 38.13                   | 16.7                          | 1.37                   | 32.51                      | -                    | -                       | P                     | V             |
|                               |                                                                            | 122.15                   | 25.69                   | -17.81                  | 43.5                        | 39.16                   | 17.6                          | 1.44                   | 32.51                      | -                    | -                       | P                     | V             |
|                               |                                                                            | 282.2                    | 21.3                    | -24.7                   | 46                          | 32.66                   | 18.89                         | 2.28                   | 32.53                      | -                    | -                       | P                     | V             |
|                               |                                                                            | 910.76                   | 36.03                   | -9.97                   | 46                          | 34.3                    | 29.32                         | 3.97                   | 31.56                      | 100                  | 0                       | P                     | V             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | V             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         |                       | V             |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         | V                     |               |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         | V                     |               |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         | V                     |               |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         | V                     |               |
|                               |                                                                            |                          |                         |                         |                             |                         |                               |                        |                            |                      |                         | V                     |               |
| Remark                        | 1. No other spurious found.<br>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>P</b> eak or <b>A</b> verage                                                                                                                          |
| H/V | <b>H</b> orizontal or <b>V</b> ertical                                                                                                                   |



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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

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

**For Average Limit @ 2390MHz:**

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

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



## Appendix D. Radiated Spurious Emission Plots

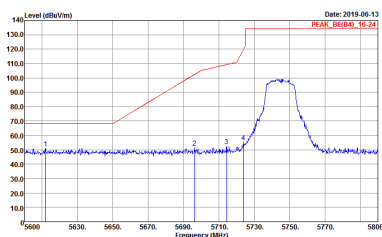
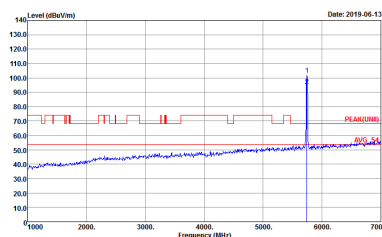
|                 |                           |                     |         |
|-----------------|---------------------------|---------------------|---------|
| Test Engineer : | Karl Hou and BigShow Wang | Temperature :       | 24~26°C |
|                 |                           | Relative Humidity : | 45~65%  |

### Note symbol

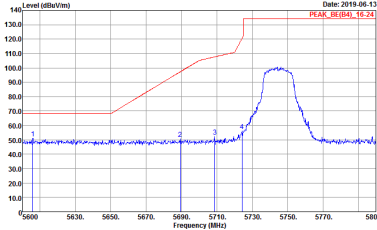
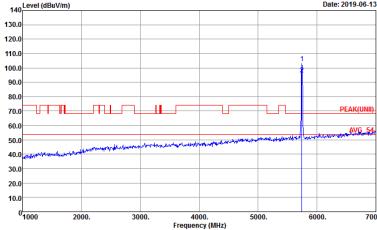
|    |                       |
|----|-----------------------|
| -L | Low channel location  |
| -R | High channel location |



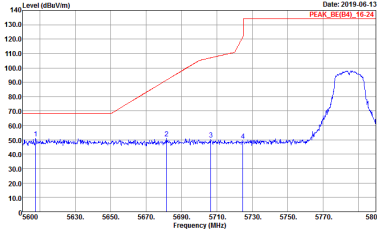
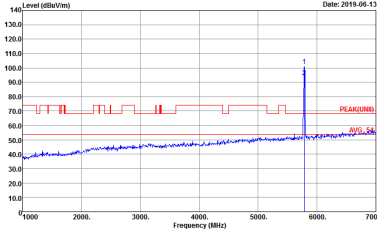
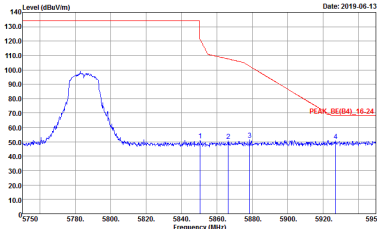
**Band 4 - 5725~5850MHz**  
**WIFI 802.11a (Band Edge @ 3m)**

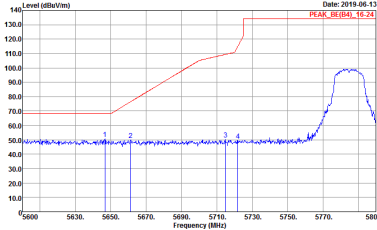
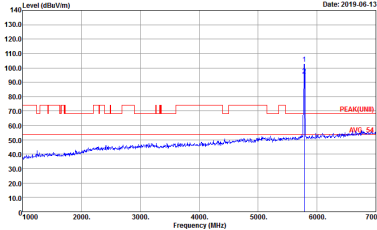
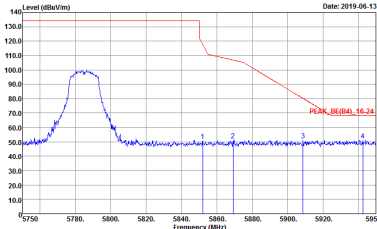
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                           |                                                                                                                                                                                                                                        |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11a CH149 5745MHz                                                                                                                                                                                                                        |                                                                                                                                                                                                                                        |
| 1    | Horizontal                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                            |
| Peak | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 35</p></div> | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 35</p></div> |



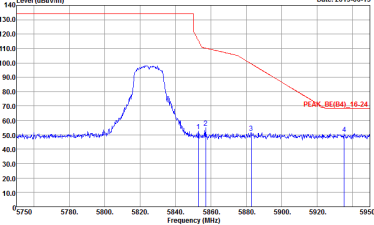
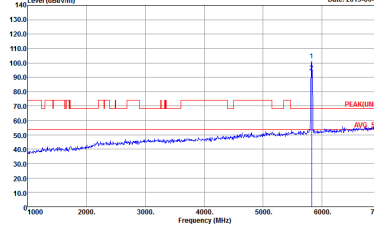
|      |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                          |
| ANT  | 802.11a CH149 5745MHz                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                          |
| 1    | Vertical                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                              |
| Peak | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 35</p></div> | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 35</p></div> |



| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                  |                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11a CH157 5785MHz                                                                                                                                                                                                               |                                                                                                                                                                                                                             |
| 1    | Horizontal                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                                 |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p> | Left blank                                                                                                                                                                                                                  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                |                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11a CH157 5785MHz                                                                                                                                                                                                             |                                                                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                               |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p> | Left blank                                                                                                                                                                                                                |



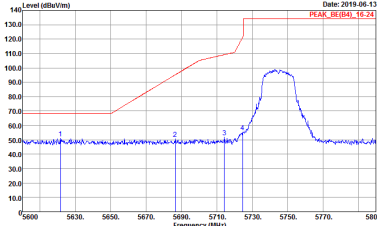
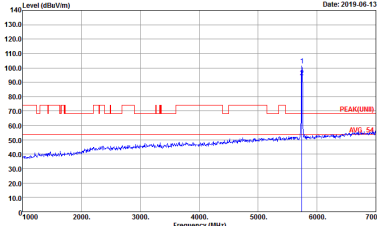
|      |                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                            |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                            |
| ANT  | 802.11a CH165 5825MHz                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                            |
| 1    | Horizontal                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                                |
| Peak | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 37</p></div> | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 37</p></div> |



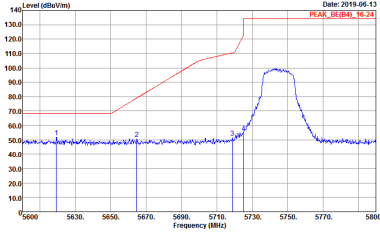
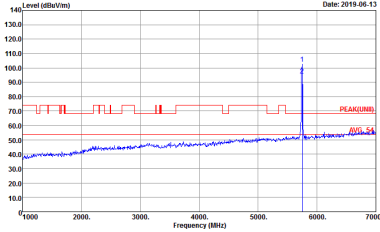
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11a CH165 5825MHz                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                             |
| 1    | Vertical                                                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                                                                 |
| Peak | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-13</p><p>PEAK: 86.04, 16.24</p><p>Site : 03CH15-14Y<br/>Condition : PEAK_86.04_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 37</p></div> | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-13</p><p>PEAK: 86.04, 16.24</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 37</p></div> |



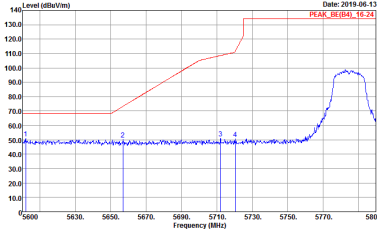
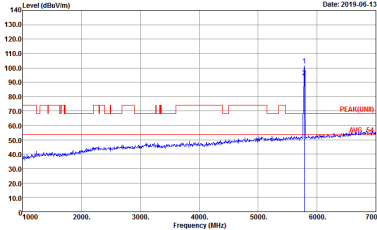
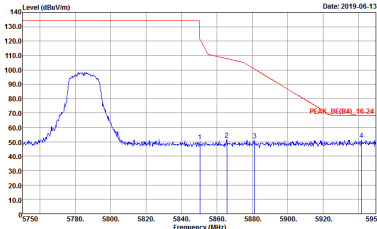
Band 4 5725~5850MHz  
WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                 |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT20 CH149 5745MHz                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                 |
| 1    | Horizontal                                                                                                                                                                                                                                                                      | Fundamental                                                                                                                                                                                                                                                                     |
| Peak | <div><p>Site : 03CH15-HY<br/>Condition : PEAK_BE(84)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 38</p></div> | <div><p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 38</p></div> |

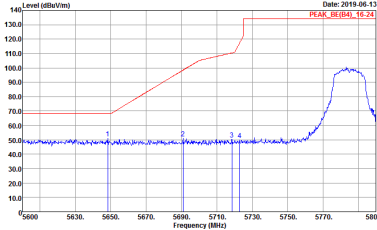
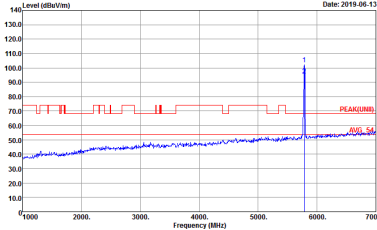
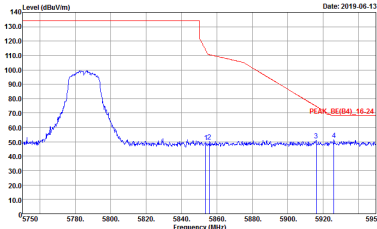


|      |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                      |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| ANT  | 802.11n HT20 CH149 5745MHz                                                                                                                                                                                                                 |                                                                                                                                                                                                                                      |
| 1    | Vertical                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                          |
| Peak | <div><p>Site : 03CH15-11Y<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 38</p></div> | <div><p>Site : 03CH15-11Y<br/>Condition : PEAK(FUND) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 38</p></div> |

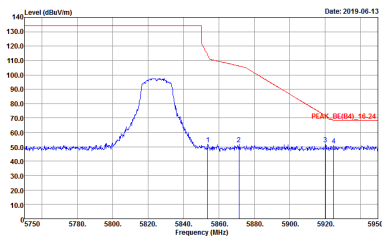
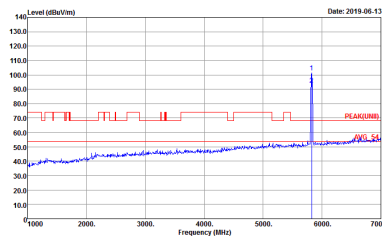


| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                  |                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT20 CH157 5785MHz                                                                                                                                                                                                          |                                                                                                                                                                                                                             |
| 1    | Horizontal                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                                 |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p> | Left blank                                                                                                                                                                                                                  |



| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                |                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT20 CH157 5785MHz                                                                                                                                                                                                        |                                                                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                               |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p> | Left blank                                                                                                                                                                                                                |

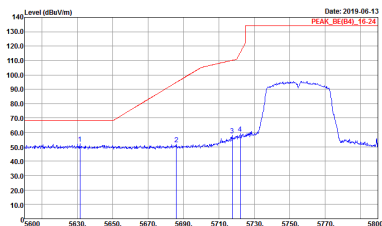
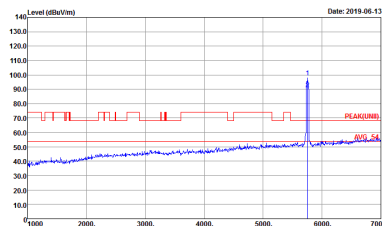
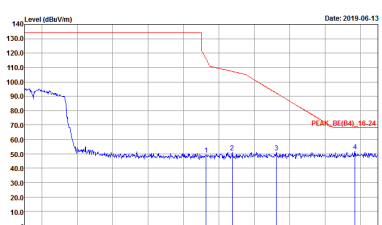


|      |                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                           |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                           |
| ANT  | 802.11n HT20 CH165 5825MHz                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                           |
| 1    | Horizontal                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                               |
| Peak | <div><p>Site : 03CH15-11Y<br/>Condition : PEAK_B4(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 40</p></div> | <div><p>Site : 03CH15-11Y<br/>Condition : PEAK_UNI1 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 40</p></div> |

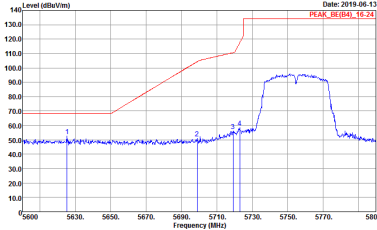
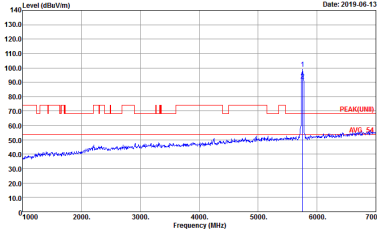
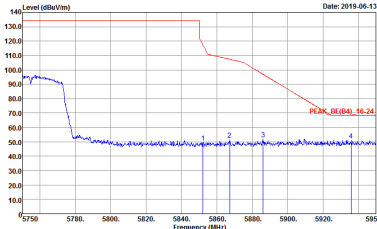


| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                          |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT20 CH165 5825MHz                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                          |
| 1    | Vertical                                                                                                                                                                                                                                                        | Fundamental                                                                                                                                                                                                                                              |
| Peak | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-13</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK_8E(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 40</p></div> | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-13</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : 932517-01<br/>Mode : 40</p></div> |

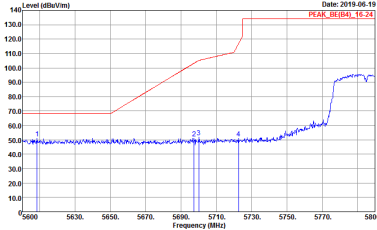
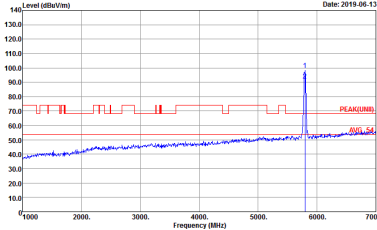
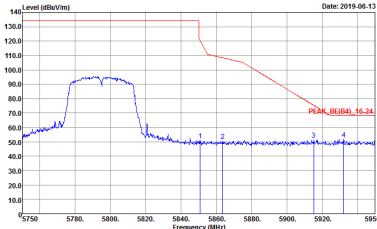
**Band 4 5725~5850MHz**  
**WIFI 802.11n HT40 (Band Edge @ 3m)**

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                     |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT40 CH151 5755MHz                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                     |
| 1    | Horizontal                                                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                                                         |
| Peak |  <p>Site : 03CH15-HY<br/> Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/> Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/> Project : 932517-01<br/> Mode : 41</p>   |  <p>Site : 03CH15-HY<br/> Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/> Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/> Project : 932517-01<br/> Mode : 41</p> |
| Peak |  <p>Site : 03CH15-HY<br/> Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/> Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/> Project : 932517-01<br/> Mode : 41</p> | Left blank                                                                                                                                                                                                                                                          |

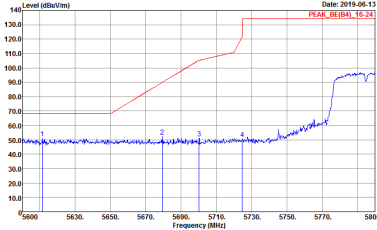
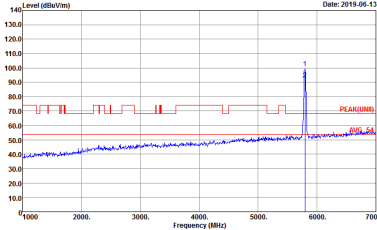
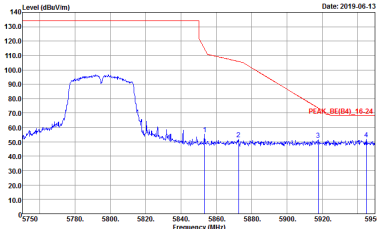


| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                |                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT40 CH151 5755MHz                                                                                                                                                                                                        |                                                                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                               |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 41</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 41</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 41</p> | Left blank                                                                                                                                                                                                                |



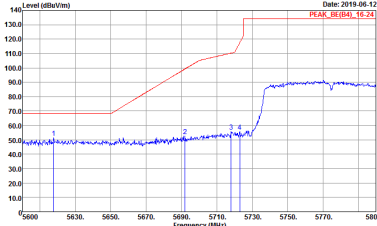
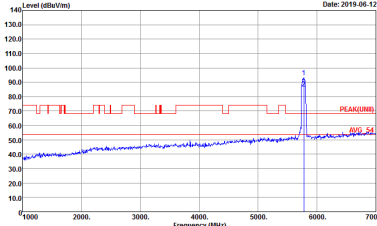
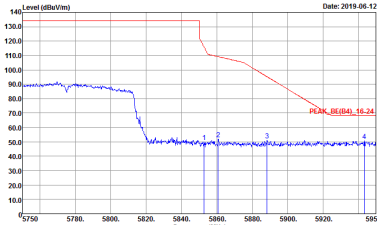
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT40 CH159 5795MHz                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                          |
| 1    | Horizontal                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                              |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p> | Left blank                                                                                                                                                                                                                                                               |



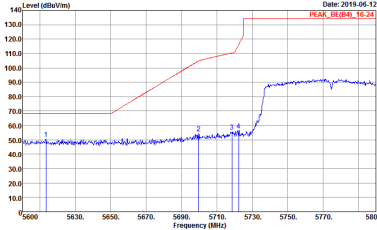
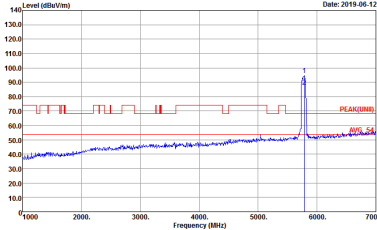
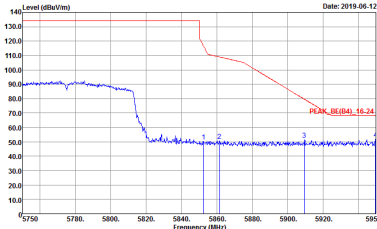
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                |                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11n HT40 CH159 5795MHz                                                                                                                                                                                                        |                                                                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                               |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 42</p> | Left blank                                                                                                                                                                                                                |



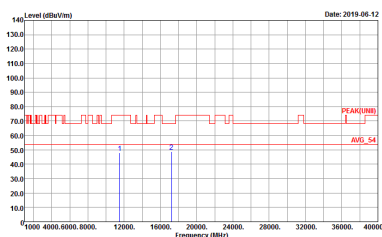
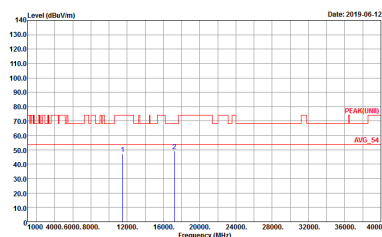
**Band 4 5725~5850MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT80 CH155 5775MHz                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                          |
| 1    | Horizontal                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                              |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 932517-01<br/>43</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 932517-01<br/>43</p> |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 HORIZONTAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 932517-01<br/>43</p> | Left blank                                                                                                                                                                                                                                                               |



| WIFI | Band 4 5725~5850MHz Band Edge @ 3m                                                                                                                                                                                                |                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT  | 802.11ac VHT80 CH155 5775MHz                                                                                                                                                                                                      |                                                                                                                                                                                                                           |
| 1    | Vertical                                                                                                                                                                                                                          | Fundamental                                                                                                                                                                                                               |
| Peak |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 43</p>   |  <p>Site : 03CH15-HY<br/>Condition : PEAK(FUND) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 43</p> |
|      |  <p>Site : 03CH15-HY<br/>Condition : PEAK_BE(B4)_16-24 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 43</p> | Left blank                                                                                                                                                                                                                |

**Band 4 - 5725~5850MHz**  
**WIFI 802.11a (Harmonic @ 3m)**

| WIFI                           | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                                 |                                                                                                                                                                                                                                  |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                            | 802.11a CH149 5745MHz                                                                                                                                                                                                             |                                                                                                                                                                                                                                  |
| 1                              | Horizontal                                                                                                                                                                                                                        | Vertical                                                                                                                                                                                                                         |
| <b>Peak</b><br><br><b>Avg.</b> |  <p> Site : 03CH15-149<br/> Condition : PEAK(UNII) 3m 91200_15_1620 HORIZONTAL<br/> Detector : Peak<br/> Project : 932517-01<br/> Mode : 35 </p> |  <p> Site : 03CH15-149<br/> Condition : PEAK(UNII) 3m 91200_15_1620 VERTICAL<br/> Detector : Peak<br/> Project : 932517-01<br/> Mode : 35 </p> |



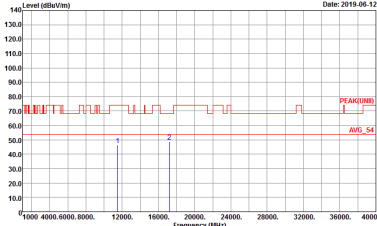
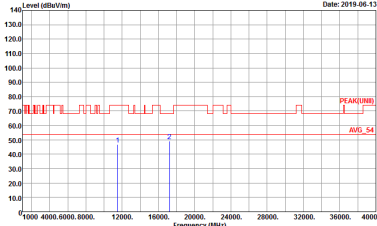
|              |                                                                                                                                                                                                                        |                                                                                                                                                                                                                      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                      |                                                                                                                                                                                                                      |
| ANT          | 802.11a CH157 5785MHz                                                                                                                                                                                                  |                                                                                                                                                                                                                      |
| 1            | Horizontal                                                                                                                                                                                                             | Vertical                                                                                                                                                                                                             |
| Peak<br>Avg. | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-12</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p></div> | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-12</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 36</p></div> |



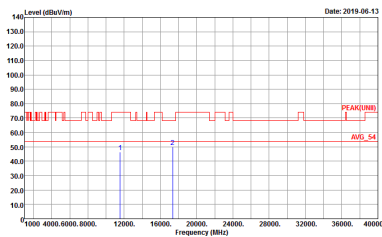
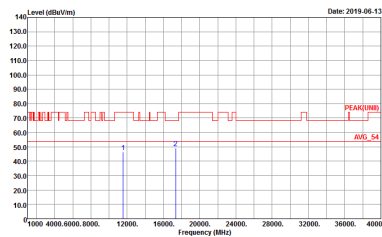
|              |                                                                                                                                                                                                                        |                                                                                                                                                                                                                      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                      |                                                                                                                                                                                                                      |
| ANT          | 802.11a CH165 5825MHz                                                                                                                                                                                                  |                                                                                                                                                                                                                      |
| 1            | Horizontal                                                                                                                                                                                                             | Vertical                                                                                                                                                                                                             |
| Peak<br>Avg. | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-12</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 37</p></div> | <div><p>Level (dBuV/m)</p><p>Date: 2019-06-12</p><p>Frequency (MHz)</p><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 37</p></div> |



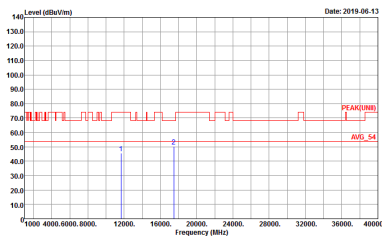
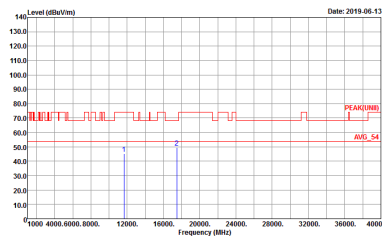
Band 4 5725~5850MHz  
WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                          |                                                                                                                                                                                                                           |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH149 5745MHz                                                                                                                                                                                                 |                                                                                                                                                                                                                           |
| 1            | Horizontal                                                                                                                                                                                                                 | Vertical                                                                                                                                                                                                                  |
| Peak<br>Avg. |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 38</p> |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 38</p> |



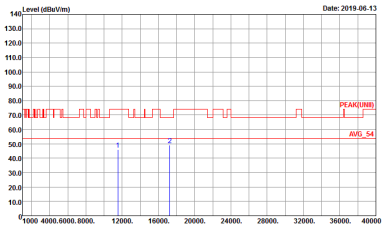
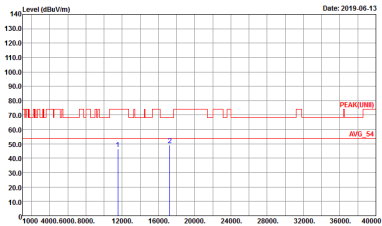
| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                                     |                                                                                                                                                                                                                                      |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH157 5785MHz                                                                                                                                                                                                            |                                                                                                                                                                                                                                      |
| 1            | Horizontal                                                                                                                                                                                                                            | Vertical                                                                                                                                                                                                                             |
| Peak<br>Avg. | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p></div> | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNII) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 39</p></div> |



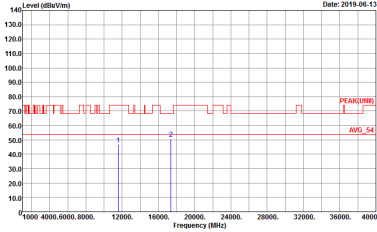
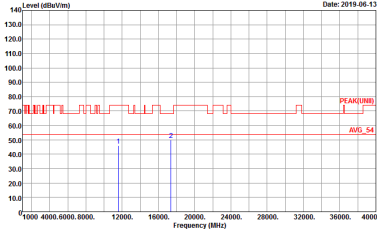
| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                           |                                                                                                                                                                                                                            |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH165 5825MHz                                                                                                                                                                                                  |                                                                                                                                                                                                                            |
| 1            | Horizontal                                                                                                                                                                                                                  | Vertical                                                                                                                                                                                                                   |
| Peak<br>Avg. |  <p>Site : 03CH15-14Y<br/>Condition : PEAK(UNB) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : -40</p> |  <p>Site : 03CH15-14Y<br/>Condition : PEAK(UNB) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : -40</p> |
|              |                                                                                                                                                                                                                             |                                                                                                                                                                                                                            |



**Band 4 5725~5850MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                          |                                                                                                                                                                                                                           |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT40 CH151 5755MHz                                                                                                                                                                                                 |                                                                                                                                                                                                                           |
| 1            | Horizontal                                                                                                                                                                                                                 | Vertical                                                                                                                                                                                                                  |
| Peak<br>Avg. |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 41</p> |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 41</p> |



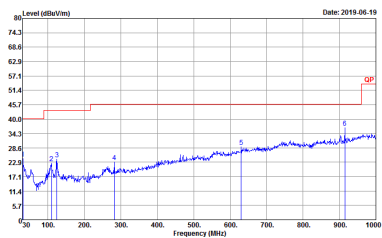
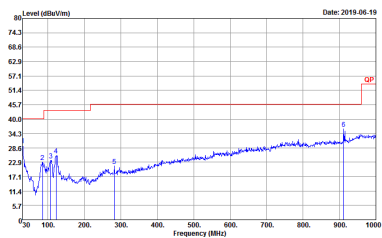
|              |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                      |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                                     |                                                                                                                                                                                                                                      |
| ANT          | 802.11n HT40 CH159 5795MHz                                                                                                                                                                                                            |                                                                                                                                                                                                                                      |
| 1            | Horizontal                                                                                                                                                                                                                            | Vertical                                                                                                                                                                                                                             |
| Peak<br>Avg. | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNB) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : -42</p></div> | <div><p>Site : 03CH15-14Y<br/>Condition : PEAK(UNB) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : -42</p></div> |



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

| WIFI         | Band 4 5725~5850MHz Harmonic @ 3m                                                                                                                                                                                          |                                                                                                                                                                                                                           |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT80 CH155 5775MHz                                                                                                                                                                                               |                                                                                                                                                                                                                           |
| 1            | Horizontal                                                                                                                                                                                                                 | Vertical                                                                                                                                                                                                                  |
| Peak<br>Avg. |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 43</p> |  <p>Site : 03CH15-HY<br/>Condition : PEAK(UNIT) 3m 91200_15_1620 VERTICAL<br/>Detector : Peak<br/>Project : 932517-01<br/>Mode : 43</p> |

**Emission below 1GHz**  
**5GHz WIFI 802.11n HT40 (LF)**

| WIFI                 | 5GHz 5725~5850MHz                                                                                                                                                                                                        |                                                                                                                                                                                                                         |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                  | 802.11n HT40 LF                                                                                                                                                                                                          |                                                                                                                                                                                                                         |
| 1                    | Horizontal                                                                                                                                                                                                               | Vertical                                                                                                                                                                                                                |
| <b>QP /<br/>Peak</b> |  <p>Site : 03CH15-14V<br/> Condition : QP 3m BIL06_15_41912 HORIZONTAL<br/> Detector : Peak<br/> Project : 932517-01<br/> Mode : 44</p> |  <p>Site : 03CH15-14V<br/> Condition : QP 3m BIL06_15_41912 VERTICAL<br/> Detector : Peak<br/> Project : 932517-01<br/> Mode : 44</p> |
|                      |                                                                                                                                                                                                                          |                                                                                                                                                                                                                         |

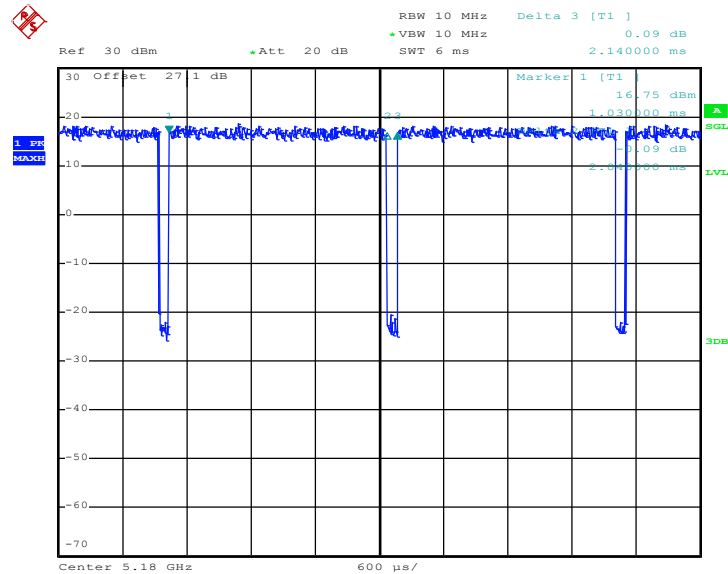


## Appendix E. Duty Cycle Plots

| Band                | Duty Cycle(%) | T(us) | 1/T(kHz) | VBW Setting | Duty Factor(dB) |
|---------------------|---------------|-------|----------|-------------|-----------------|
| 802.11a             | 95.33         | 2040  | 0.49     | 1kHz        | 0.21            |
| 5GHz 802.11n HT20   | 97.53         | 4935  | 0.20     | 300Hz       | 0.11            |
| 5GHz 802.11n HT40   | 94.83         | 2405  | 0.42     | 1kHz        | 0.23            |
| 5GHz 802.11ac VHT20 | 98.02         | -     | -        | 10Hz        | 0.09            |
| 5GHz 802.11ac VHT40 | 95.04         | 2415  | 0.41     | 1kHz        | 0.22            |
| 5GHz 802.11ac VHT80 | 91.56         | 1120  | 0.89     | 1kHz        | 0.38            |

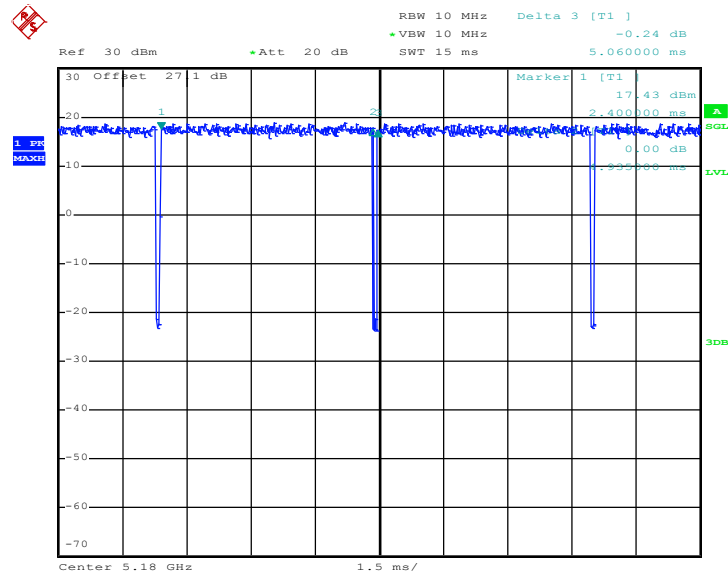


802.11a



Date: 30.MAY.2019 10:09:58

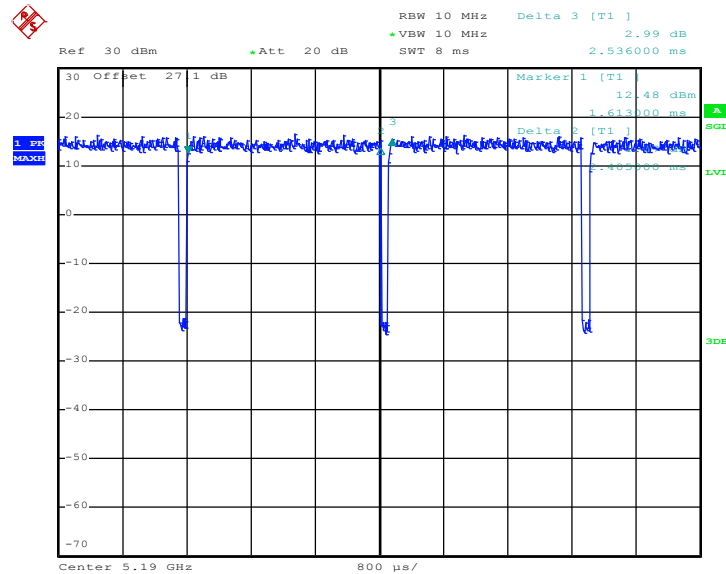
802.11n HT20



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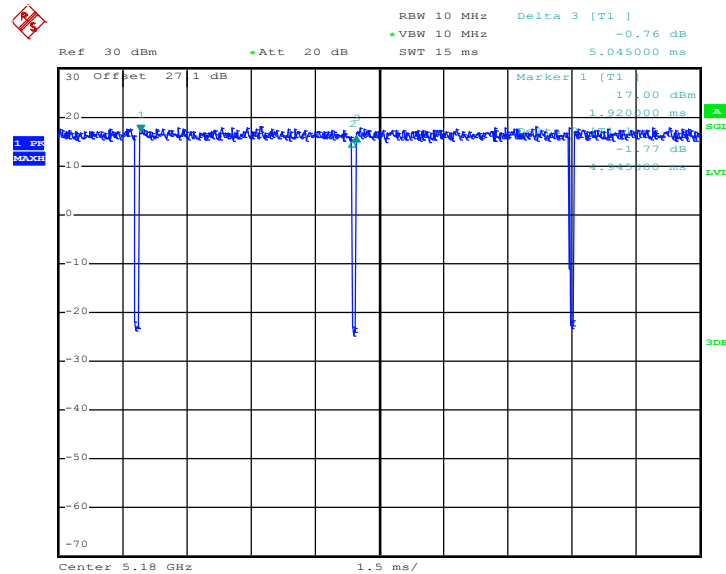


## 802.11n HT40



Date: 30.MAY.2019 10:46:51

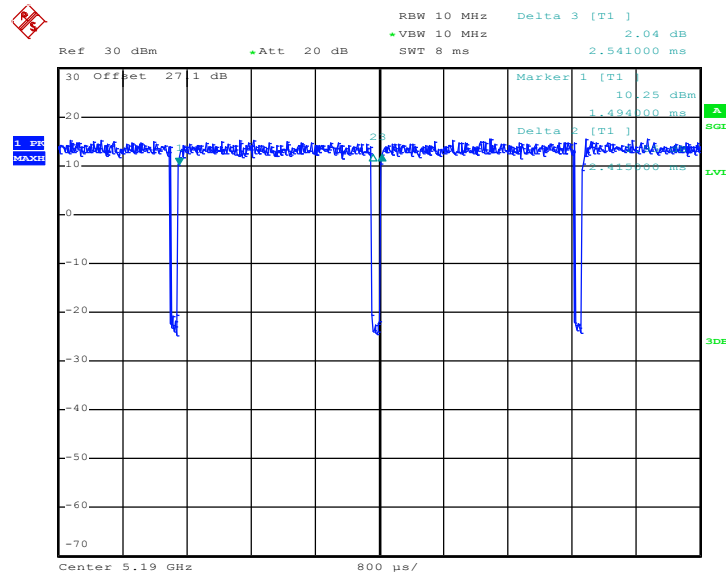
## 802.11ac VHT20



Date: 30.MAY.2019 11:16:37

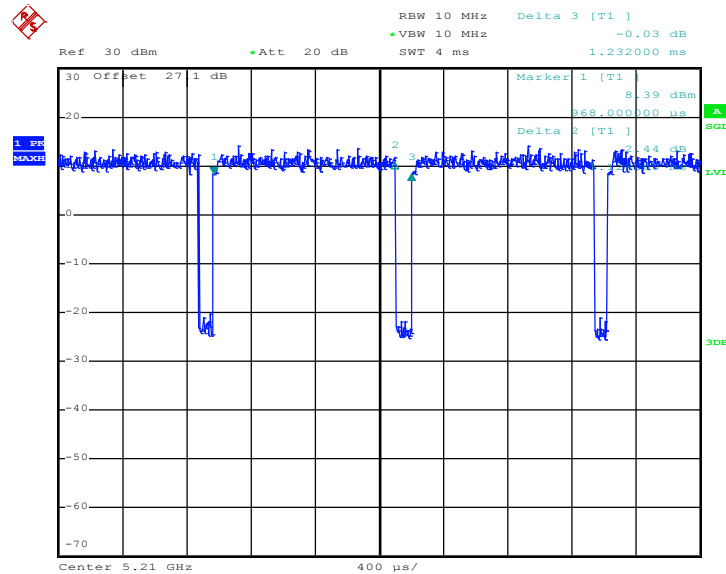


802.11ac VHT40



Date: 30.MAY.2019 11:22:41

802.11ac VHT80



Date: 30.MAY.2019 11:26:01

THE END